

ภาคผนวก ค

ใบรับรองผลการตรวจวิเคราะห์

ภาคผนวก ค-1

คุณภาพอากาศในบรรยากาศโดยทั่วไป



Analysis / Test Report

Lot ID: 2473609
Date Received : Aug 16, 2024
Date Reported : Aug 20, 2024
Report Number: 3037293-1

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Page 1 of 1

Sample Description Air Quality

Location บ้านฉนวน (GPS 47° 07'28.177", 161°19'18.8")

Parameter Nitrogen dioxide (ppm)

Measurement Date Aug 06, 2024 - Aug 13, 2024

Measurement by Teeravut Sukdee

Time	2473609-1	2473609-2	2473609-3	2473609-4	2473609-5	2473609-6	2473609-7
	Aug 06, 2024	Aug 07, 2024	Aug 08, 2024	Aug 09, 2024	Aug 10, 2024	Aug 11, 2024	Aug 12, 2024
01:00 PM - 02:00 PM	0.013	0.016	0.008	0.014	0.021	0.014	0.006
02:00 PM - 03:00 PM	0.012	0.012	0.020	0.019	0.014	0.008	0.015
03:00 PM - 04:00 PM	0.013	0.012	0.010	0.024	0.009	0.006	0.012
04:00 PM - 05:00 PM	0.013	0.011	0.004	0.017	0.012	0.010	0.006
05:00 PM - 06:00 PM	0.012	0.011	0.007	0.006	0.004	0.011	0.005
06:00 PM - 07:00 PM	0.009	0.018	0.006	0.006	0.006	0.006	0.005
07:00 PM - 08:00 PM	0.010	0.006	0.004	0.004	0.007	0.004	0.021
08:00 PM - 09:00 PM	0.011	0.005	0.003	0.005	0.003	0.003	0.028
09:00 PM - 10:00 PM	0.012	0.004	0.004	0.003	0.004	0.008	0.022
10:00 PM - 11:00 PM	0.019	0.005	0.005	0.003	0.007	0.010	0.017
11:00 PM - 12:00 AM	0.014	0.004	0.004	0.006	0.013	0.008	0.015
12:00 AM - 01:00 AM	0.012	0.004	0.007	0.018	0.021	0.007	0.015
01:00 AM - 02:00 AM	0.005	0.004	0.007	0.018	0.023	0.016	0.017
02:00 AM - 03:00 AM	0.003	0.004	0.006	0.018	0.024	0.013	0.017
03:00 AM - 04:00 AM	0.011	0.012	0.006	0.012	0.014	0.009	0.015
04:00 AM - 05:00 AM	0.016	0.012	0.006	0.014	0.015	0.009	0.015
05:00 AM - 06:00 AM	0.009	0.020	0.006	0.029	0.012	0.009	0.017
06:00 AM - 07:00 AM	0.016	0.016	0.006	0.015	0.013	0.018	0.014
07:00 AM - 08:00 AM	0.015	0.014	0.006	0.015	0.015	0.016	0.014
08:00 AM - 09:00 AM	0.010	0.012	0.006	0.018	0.015	0.015	0.012
09:00 AM - 10:00 AM	0.007	0.014	0.006	0.017	0.010	0.015	0.013
10:00 AM - 11:00 AM	0.014	0.013	0.009	0.021	0.009	0.017	0.006
11:00 AM - 12:00 PM	0.015	0.012	0.007	0.014	0.012	0.013	0.015
12:00 PM - 01:00 PM	0.019	0.011	0.008	0.010	0.012	0.014	0.013
Average	0.012	0.011	0.007	0.013	0.012	0.011	0.014
1hr - Maximum	0.019	0.020	0.020	0.029	0.024	0.018	0.028
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170
Standard	: Notification of the National Environment Board No. 33, 2009 (B.E. 2552).						
Reference Method	: US EPA Method Part 50 App. F (Chemiluminescence)						

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

Approved by

Orawan R.
Orawan Rakyong
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Analysis / Test Report

TESTING
No.0009
Lot ID: 2473616

Date Received : Aug 16, 2024
Date Reported : Aug 24, 2024
Report Number: 3037421-1

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi,
Saraburi Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Page 1 of 1

Sample Description Air Quality

Location บ้านฉนวน (GPS 47° 07'28.177", 161°19'18.8")

Date Analysis Commenced Aug 20, 2024

Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2473616-1	Aug 06 - Aug 07, 2024	0.044	0.025	753	34
2473616-2	Aug 07 - Aug 08, 2024	0.056	0.028	753	33
2473616-3	Aug 08 - Aug 09, 2024	0.051	0.034	753	35
2473616-4	Aug 09 - Aug 10, 2024	0.040	0.022	753	34
2473616-5	Aug 10 - Aug 11, 2024	0.051	0.026	753	34
2473616-6	Aug 11 - Aug 12, 2024	0.034	0.022	753	34
2473616-7	Aug 12 - Aug 13, 2024	0.085	0.033	753	33
Guideline		0.33	0.12	-	-

Reference Method

Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B

Particulate Matter (PM-10) : US EPA 40 CFR Part 50 Appendix J

Guideline : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004

Sampled By : Teeravut Sukdee

Remark :

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

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99/219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhohi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2473615

Date Received : Aug 16, 2024
Date Reported : Aug 21, 2024
Report Number: 3037386-1

Page 1 of 1

Sample Description	Air Quality
Location	ฟาร์มบ้าน (GPS 47P 0728177, 1619188)
Parameter	Sulfur Dioxide (ppm)
Measurement Date	Aug 06, 2024 - Aug 13, 2024
Measurement by	Teeravit Sukdee

Time	2473615-1 Aug 06, 2024	2473615-2 Aug 07, 2024	2473615-3 Aug 08, 2024	2473615-4 Aug 09, 2024	2473615-5 Aug 10, 2024	2473615-6 Aug 11, 2024	2473615-7 Aug 12, 2024
01:00 PM - 02:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
02:00 PM - 03:00 PM	0.001	0.002	0.002	0.002	0.002	0.002	0.002
03:00 PM - 04:00 PM	0.001	0.002	0.002	0.002	0.002	0.002	0.002
04:00 PM - 05:00 PM	0.001	0.002	0.002	0.002	0.002	0.002	0.002
05:00 PM - 06:00 PM	0.001	0.002	0.002	0.002	0.002	0.002	0.002
06:00 PM - 07:00 PM	0.001	0.002	0.002	0.002	0.002	0.002	0.002
07:00 PM - 08:00 PM	0.001	0.002	0.002	0.002	0.002	0.002	0.002
08:00 PM - 09:00 PM	0.001	0.001	0.002	0.002	0.002	0.002	0.002
09:00 PM - 10:00 PM	0.001	0.001	0.002	0.002	0.002	0.002	0.002
10:00 PM - 11:00 PM	0.001	0.001	0.002	0.002	0.002	0.002	0.002
11:00 PM - 12:00 AM	0.001	0.002	0.002	0.002	0.002	0.002	0.002
12:00 AM - 01:00 AM	0.001	0.002	0.002	0.002	0.002	0.002	0.002
01:00 AM - 02:00 AM	0.001	0.002	0.002	0.002	0.002	0.002	0.002
02:00 AM - 03:00 AM	0.001	0.002	0.002	0.002	0.002	0.002	0.002
03:00 AM - 04:00 AM	0.001	0.002	0.002	0.002	0.002	0.002	0.002
04:00 AM - 05:00 AM	0.001	0.002	0.002	0.002	0.002	0.002	0.002
05:00 AM - 06:00 AM	0.001	0.002	0.002	0.002	0.002	0.002	0.002
06:00 AM - 07:00 AM	0.001	0.002	0.002	0.002	0.002	0.002	0.002
07:00 AM - 08:00 AM	0.001	0.002	0.002	0.002	0.002	0.002	0.002
08:00 AM - 09:00 AM	0.001	0.001	0.002	0.002	0.002	0.002	0.002
09:00 AM - 10:00 AM	0.001	0.001	0.002	0.002	0.002	0.002	0.002
10:00 AM - 11:00 AM	0.001	0.002	0.002	0.002	0.002	0.002	0.002
11:00 AM - 12:00 PM	0.001	0.002	0.002	0.002	0.002	0.002	0.002
12:00 PM - 01:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Average	0.001	0.001	0.002	0.002	0.002	0.002	0.002
1hr - Maximum	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Standard							

Reference Method : US EPA Method Part 53 and 58

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS Laboratory Group (Thailand) Co., Ltd. and the report is not reproduced except in full.

Approved by

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S:Raporia, Air SONOX (pi (7-474M))



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99/219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhohi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2473595

Date Received : Aug 16, 2024
Date Reported : Aug 21, 2024
Report Number: 3037163-1

Page 1 of 2

Sample Number	2473595-1 to 7
Parameter	Wind Speed / Wind Direction
Location	ฟาร์มบ้าน (GPS 47P 0728177, 1619188)
Sampling Date	Aug 06 - Aug 13, 2024
Sampling by	Teeravit Sukdee

Time	Aug 06 - Aug 07, 2024	Aug 07 - Aug 08, 2024	Aug 08 - Aug 09, 2024	Aug 09 - Aug 10, 2024	Aug 10 - Aug 11, 2024	Aug 11 - Aug 12, 2024	Aug 12 - Aug 13, 2024
	WS (m/s)	WS (m/s)	WS (m/s)	WS (m/s)	WS (m/s)	WS (m/s)	WS (m/s)
	WD (deg)	WD (deg)	WD (deg)	WD (deg)	WD (deg)	WD (deg)	WD (deg)
01:00 PM - 02:00 PM	0.5	278.0 W	3.3	234.0 SW	0.0	-	-
02:00 PM - 03:00 PM	0.2	-	0.0	-	0.0	-	-
03:00 PM - 04:00 PM	0.0	-	0.0	-	1.8	236.0 SW	0.6
04:00 PM - 05:00 PM	0.0	-	0.0	-	0.0	-	0.0
05:00 PM - 06:00 PM	0.0	-	0.0	-	0.0	-	0.0
06:00 PM - 07:00 PM	0.0	-	0.0	-	0.0	-	0.0
07:00 PM - 08:00 PM	0.0	-	3.2	298.0 WNW	0.0	-	0.0
08:00 PM - 09:00 PM	0.0	-	0.0	-	0.0	-	0.0
09:00 PM - 10:00 PM	0.0	-	0.0	-	0.4	266.0 W	0.0
10:00 PM - 11:00 PM	1.1	266.0 W	0.0	-	0.0	-	0.0
11:00 PM - 12:00 AM	0.6	276.0 W	0.0	-	1.2	236.0 SW	0.0
12:00 AM - 01:00 AM	0.0	-	0.0	-	0.0	-	0.0
01:00 AM - 02:00 AM	0.0	-	0.0	-	0.9	231.0 SW	1.3
02:00 AM - 03:00 AM	0.0	-	0.0	-	0.5	103.0 ESE	1.7
03:00 AM - 04:00 AM	0.0	-	0.0	-	1.3	220.0 SW	0.3
04:00 AM - 05:00 AM	0.0	-	0.0	-	2.7	305.0 NW	0.7
05:00 AM - 06:00 AM	0.0	-	0.0	-	0.0	-	2.1
06:00 AM - 07:00 AM	0.0	-	0.0	-	0.6	286.0 WNW	0.0
07:00 AM - 08:00 AM	0.0	-	0.0	-	0.2	-	0.0
08:00 AM - 09:00 AM	0.0	-	0.0	-	0.0	-	0.0
09:00 AM - 10:00 AM	2.4	230.0 SW	0.0	-	1.8	218.0 SW	0.9
10:00 AM - 11:00 AM	1.3	301.0 WNW	0.5	267.0 W	0.7	208.0 SSW	1.1
11:00 AM - 12:00 PM	1.4	291.0 WNW	0.6	198.0 SSW	0.7	233.0 SW	0.0
12:00 PM - 01:00 PM	0.0	-	0.5	254.0 WSW	0.0	-	1.2

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

The above results are valid only for the analyzed sample(s) as indicated in the report. They are not to be used for any other purpose without the written consent of ALS Laboratory Group (Thailand) Co., Ltd. and the report is not reproduced except in full.

Approved by

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Sarayu Jitranont
Assistant General Manager

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99/219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kengkhoi, Saraburi
Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2473595

Date Received : Aug 16, 2024

Date Reported : Aug 21, 2024

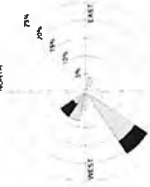
Report Number : 3037163-1

Page 2 of 2

Wind Rose



Date : Aug 06-07, 2024



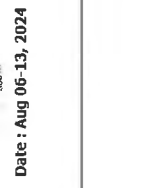
Date : Aug 09-10, 2024



Date : Aug 11-12, 2024



Date : Aug 12-13, 2024



Date : Aug 13-14, 2024

WS (m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	0.60
1.7-3.3	11.31
0.3-1.7	25.60
Calm	62.50

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Approved by

Sarayuth Jitranont
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Analysis / Test Report

Client : Siam City Cement Public Company Limited

99/219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kengkhoi, Saraburi, Thailand 18260

P/O : 4100119854

Project Name : Saraburi Factory Plant

Project Location :

TESTING
No.0009

Lot ID: 2473653

Date Received : Oct 29, 2024

Date Reported : Nov 05, 2024

Report Number: 3037423-1

Page 1 of 1

Sample Description Air Quality

Location โรงงานปูนซีเมนต์ (GPS 47P 0722982, 1616353)

Date Analysis Commenced Oct 30, 2024

Condition of Sample Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2473653-1	Oct 18 - Oct 19, 2024	0.027	0.017	751	30
2473653-2	Oct 19 - Oct 20, 2024	0.052	0.028	751	26
2473653-3	Oct 20 - Oct 21, 2024	0.044	0.027	751	26
2473653-4	Oct 21 - Oct 22, 2024	0.097	0.045	751	32
2473653-5	Oct 22 - Oct 23, 2024	0.083	0.040	751	34
2473653-6	Oct 23 - Oct 24, 2024	0.088	0.040	751	35
2473653-7	Oct 24 - Oct 25, 2024	0.154	0.062	751	35
Guideline		0.33	0.12		

Reference Method

Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B

Particulate Matter (PM-10) : US EPA 40 CFR Part 50 Appendix J

Guideline : Notification of the National Environmental Board, No.24, 2004 (B.E.2547) dated September 22, 2004

Sampled By : Prommee Sripanet

Remark :

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

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhloi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2473618
Date Received : Oct 29, 2024
Date Reported : Nov 01, 2024
Report Number: 3037303-1

Page 1 of 1

Sample Description Location	Air Quality		Air Quality		Air Quality		Air Quality		Air Quality		Air Quality		Air Quality		Air Quality		Air Quality		Air Quality	
	Air Quality		Air Quality		Air Quality		Air Quality		Air Quality		Air Quality		Air Quality		Air Quality		Air Quality		Air Quality	
	Air Quality		Air Quality		Air Quality		Air Quality		Air Quality		Air Quality		Air Quality		Air Quality		Air Quality		Air Quality	
	Air Quality		Air Quality		Air Quality		Air Quality		Air Quality		Air Quality		Air Quality		Air Quality		Air Quality		Air Quality	
Parameter	Nitrogen dioxide (ppm)		Nitrogen dioxide (ppm)		Nitrogen dioxide (ppm)		Nitrogen dioxide (ppm)		Nitrogen dioxide (ppm)		Nitrogen dioxide (ppm)		Nitrogen dioxide (ppm)		Nitrogen dioxide (ppm)		Nitrogen dioxide (ppm)		Nitrogen dioxide (ppm)	
Measurement Date	Oct 18, 2024 - Oct 25, 2024		Oct 18, 2024 - Oct 25, 2024		Oct 18, 2024 - Oct 25, 2024		Oct 18, 2024 - Oct 25, 2024		Oct 18, 2024 - Oct 25, 2024		Oct 18, 2024 - Oct 25, 2024		Oct 18, 2024 - Oct 25, 2024		Oct 18, 2024 - Oct 25, 2024		Oct 18, 2024 - Oct 25, 2024		Oct 18, 2024 - Oct 25, 2024	
Measurement by	Prommee Siripatnet		Prommee Siripatnet		Prommee Siripatnet		Prommee Siripatnet		Prommee Siripatnet		Prommee Siripatnet		Prommee Siripatnet		Prommee Siripatnet		Prommee Siripatnet		Prommee Siripatnet	
Time	Oct 18, 2024		Oct 19, 2024		Oct 20, 2024		Oct 21, 2024		Oct 22, 2024		Oct 23, 2024		Oct 24, 2024		Oct 25, 2024		Oct 26, 2024		Oct 27, 2024	
01:00 PM - 02:00 PM	0.0100		0.0053		0.0244		0.0133		0.0050		0.0032		0.0143		0.0176		0.0176		0.0176	
02:00 PM - 03:00 PM	0.0101		0.0071		0.0102		0.0126		0.0016		0.0024		0.0145		0.0176		0.0176		0.0176	
03:00 PM - 04:00 PM	0.0097		0.0075		0.0113		0.0061		0.0024		0.0020		0.0145		0.0176		0.0176		0.0176	
04:00 PM - 05:00 PM	0.0095		0.0100		0.0143		0.0061		0.0028		0.0035		0.0171		0.0176		0.0176		0.0176	
05:00 PM - 06:00 PM	0.0167		0.0128		0.0231		0.0084		0.0047		0.0043		0.0218		0.0176		0.0176		0.0176	
06:00 PM - 07:00 PM	0.0251		0.0152		0.0370		0.0067		0.0134		0.0082		0.0127		0.0176		0.0176		0.0176	
07:00 PM - 08:00 PM	0.0394		0.0127		0.0369		0.0055		0.0166		0.0098		0.0070		0.0176		0.0176		0.0176	
08:00 PM - 09:00 PM	0.0261		0.0088		0.0301		0.0073		0.0099		0.0124		0.0126		0.0176		0.0176		0.0176	
09:00 PM - 10:00 PM	0.0135		0.0063		0.0223		0.0127		0.0028		0.0109		0.0082		0.0176		0.0176		0.0176	
10:00 PM - 11:00 PM	0.0101		0.0064		0.0187		0.0102		0.0055		0.0117		0.0118		0.0176		0.0176		0.0176	
11:00 PM - 12:00 AM	0.0126		0.0067		0.0178		0.0093		0.0067		0.0117		0.0085		0.0176		0.0176		0.0176	
12:00 AM - 01:00 AM	0.0129		0.0063		0.0155		0.0089		0.0094		0.0095		0.0060		0.0176		0.0176		0.0176	
01:00 AM - 02:00 AM	0.0101		0.0058		0.0117		0.0065		0.0079		0.0061		0.0054		0.0176		0.0176		0.0176	
02:00 AM - 03:00 AM	0.0188		0.0057		0.0108		0.0075		0.0105		0.0073		0.0053		0.0176		0.0176		0.0176	
03:00 AM - 04:00 AM	0.0145		0.0059		0.0099		0.0123		0.0100		0.0066		0.0044		0.0176		0.0176		0.0176	
04:00 AM - 05:00 AM	0.0228		0.0062		0.0102		0.0093		0.0093		0.0057		0.0047		0.0176		0.0176		0.0176	
05:00 AM - 06:00 AM	0.0167		0.0065		0.0097		0.0102		0.0093		0.0089		0.0079		0.0176		0.0176		0.0176	
06:00 AM - 07:00 AM	0.0153		0.0056		0.0076		0.0098		0.0089		0.0091		0.0146		0.0176		0.0176		0.0176	
07:00 AM - 08:00 AM	0.0198		0.0058		0.0074		0.0146		0.0116		0.0069		0.0180		0.0176		0.0176		0.0176	
08:00 AM - 09:00 AM	0.0382		0.0071		0.0071		0.0178		0.0131		0.0071		0.0071		0.0176		0.0176		0.0176	
09:00 AM - 10:00 AM	0.0254		0.0041		0.0080		0.0088		0.0127		0.0089		0.0155		0.0176		0.0176		0.0176	
10:00 AM - 11:00 AM	0.0091		0.0038		0.0103		0.0070		0.0135		0.0070		0.0142		0.0176		0.0176		0.0176	
11:00 AM - 12:00 PM	0.0074		0.0061		0.0108		0.0035		0.0129		0.0088		0.0116		0.0176		0.0176		0.0176	
12:00 PM - 01:00 PM	0.0076		0.0075		0.0139		0.0027		0.0130		0.0073		0.0106		0.0176		0.0176		0.0176	
Average	0.0167		0.0072		0.0158		0.0091		0.0089		0.0075		0.0118		0.0176		0.0176		0.0176	
1hr - Maximum	0.0394		0.0152		0.0370		0.0200		0.0166		0.0124		0.0218		0.0176		0.0176		0.0176	
Standard 1hr - Average	0.170		0.170		0.170		0.170		0.170		0.170		0.170		0.170		0.170		0.170	
Standard	0.170		0.170		0.170		0.170		0.170		0.170		0.170		0.170		0.170		0.170	
Reference Method	: Notification of the National Environment Board No. 33, 2009 (B.E. 2552).		: US EPA Method Part 50 App. F (Chemiluminescence)																	

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Orawan Rakyong
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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhloi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkueung, Amphur Kankhohi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :
Sample Number : 2473598-1 to 7
Parameter : Wind Speed / Wind Direction
Location : ตำบลท่าช้าง อำเภอบางบาล จังหวัดพระนครศรีอยุธยา 1616353
Sampling Date : Oct 18 - Oct 25, 2024
Sampling by : Prommee Sriprabnet

Page 1 of 2

Time	Oct 18 - Oct 19, 2024	Oct 19 - Oct 20, 2024	Oct 20 - Oct 21, 2024	Oct 21 - Oct 22, 2024	Oct 22 - Oct 23, 2024	Oct 23 - Oct 24, 2024	Oct 24 - Oct 25, 2024
WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)
01:00 PM - 02:00 PM	0.8 280.0 W	0.2 -	0.9 241.0 WSW	0.7 350.0 N	1.9 350.0 N	2.8 77.0 ENE	0.5 3.0 N
02:00 PM - 03:00 PM	1.7 301.0 WNW	0.6 210.0 SSW	1.5 329.0 NNW	1.4 14.0 NNE	1.1 330.0 NNW	3.7 59.0 ENE	1.2 27.0 NNE
03:00 PM - 04:00 PM	0.0 -	0.5 320.0 NW	1.0 42.0 NE	0.7 335.0 NNW	0.8 33.0 NNE	1.7 85.0 E	0.6 27.0 NNE
04:00 PM - 05:00 PM	0.0 -	0.2 -	1.4 28.0 NNE	0.4 62.0 NNE	1.3 34.0 NE	1.5 64.0 ENE	1.8 33.0 NNW
05:00 PM - 06:00 PM	2.5 187.0 S	1.0 24.0 NNE	1.1 156.0 SSE	1.2 130.0 SE	0.3 36.0 NE	0.0 -	1.6 302.0 WNW
06:00 PM - 07:00 PM	1.0 71.0 ENE	0.6 52.0 NE	0.1 -	1.5 123.0 ESE	0.0 -	2.6 71.0 ENE	1.3 61.0 ENE
07:00 PM - 08:00 PM	0.0 -	1.2 0.0 N	0.0 -	0.9 69.0 ENE	1.7 36.0 NE	0.4 63.0 ENE	0.0 -
08:00 PM - 09:00 PM	0.6 142.0 SE	1.3 102.0 ESE	0.0 -	0.9 72.0 ENE	1.0 78.0 ENE	1.1 130.0 SE	0.3 63.0 ENE
09:00 PM - 10:00 PM	0.2 -	1.2 74.0 ENE	0.0 -	0.0 -	0.1 -	1.2 88.0 E	0.5 73.0 ENE
10:00 PM - 11:00 PM	0.0 -	1.1 48.0 NE	0.5 40.0 NE	0.5 53.0 NE	2.2 102.0 ESE	0.9 76.0 ENE	0.0 -
11:00 PM - 12:00 AM	0.3 173.0 S	0.0 -	0.3 57.0 ENE	0.6 130.0 SE	1.3 81.0 E	2.3 71.0 ENE	0.6 74.0 ENE
12:00 AM - 01:00 AM	0.0 -	0.0 -	1.1 70.0 ENE	0.5 63.0 ENE	0.6 33.0 NNE	0.0 -	1.0 86.0 E
01:00 AM - 02:00 AM	0.5 289.0 WNW	0.8 310.0 NW	0.8 29.0 NNE	0.3 25.0 NNE	2.3 80.0 E	1.2 87.0 E	1.9 73.0 ENE
02:00 AM - 03:00 AM	0.0 -	0.9 95.0 E	0.6 66.0 ENE	0.0 -	2.5 52.0 NE	0.5 296.0 WNW	0.9 40.0 NE
03:00 AM - 04:00 AM	0.0 -	0.5 68.0 ENE	0.7 180.0 S	0.0 -	0.5 33.0 NNE	0.4 54.0 NE	0.0 -
04:00 AM - 05:00 AM	0.3 290.0 WNW	0.0 -	0.8 116.0 ESE	0.0 -	0.1 -	1.6 30.0 NNE	0.0 -
05:00 AM - 06:00 AM	0.0 -	0.8 56.0 NE	0.1 -	0.0 -	2.8 60.0 ENE	1.8 73.0 ENE	0.9 72.0 ENE
06:00 AM - 07:00 AM	0.0 -	1.0 72.0 ENE	0.0 -	1.4 100.0 E	1.5 27.0 NNE	1.3 18.0 NNE	0.0 -
07:00 AM - 08:00 AM	0.4 266.0 W	1.2 51.0 NE	0.7 287.0 WNW	1.0 24.0 NNE	1.1 102.0 ESE	1.1 93.0 E	0.0 -
08:00 AM - 09:00 AM	0.8 321.0 NW	2.7 20.0 NNE	0.9 253.0 WSW	0.8 68.0 ENE	4.4 71.0 ENE	2.4 48.0 NE	0.0 -
09:00 AM - 10:00 AM	0.8 70.0 ENE	2.0 63.0 ENE	0.0 -	4.6 100.0 E	1.3 62.0 ENE	5.2 78.0 ENE	1.2 294.0 WNW
10:00 AM - 11:00 AM	1.2 165.0 SSE	1.4 259.0 W	0.5 294.0 WNW	2.1 7.0 N	3.8 51.0 NE	0.4 20.0 NNE	1.1 347.0 NNW
11:00 AM - 12:00 PM	2.2 130.0 SE	0.5 241.0 WSW	0.6 52.0 NE	3.8 39.0 NE	5.3 49.0 NE	1.9 105.0 ESE	3.1 277.0 W
12:00 PM - 01:00 PM	1.9 139.0 SE	0.7 256.0 WSW	1.2 72.0 ENE	1.0 82.0 E	2.3 90.0 E	2.2 79.0 E	1.6 58.0 ENE

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Approved by
Sarayuth Jitranont
Assistant General Manager

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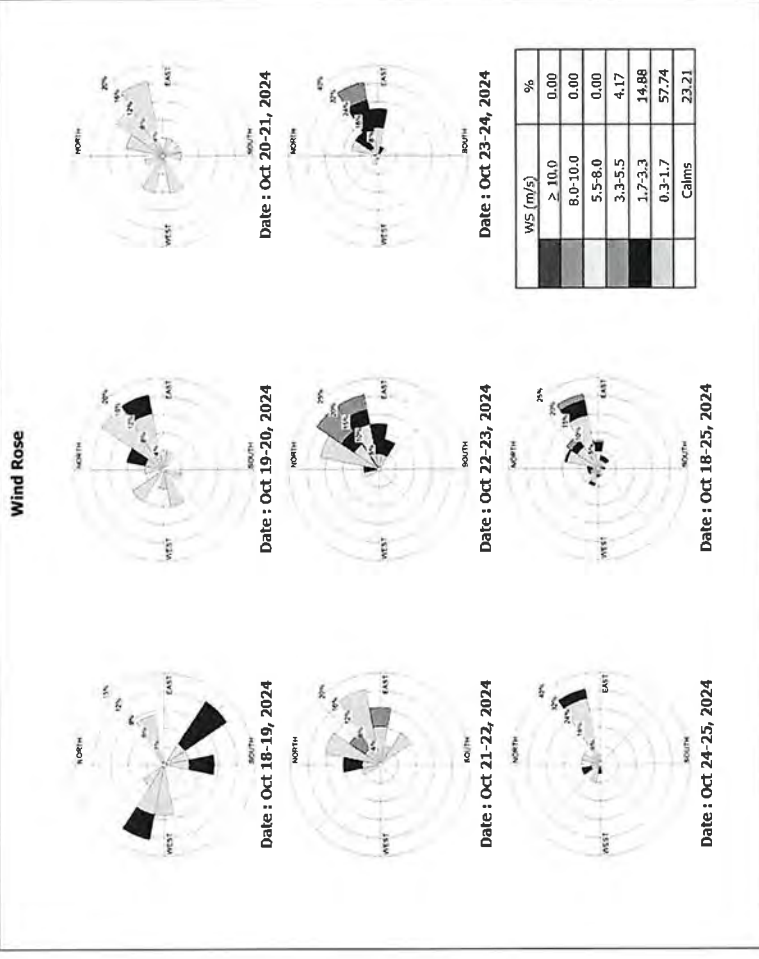
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ALS LABORATORY GROUP (THAI) AND CO., LTD. An ALS Limited Company



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkueung, Amphur Kankhohi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :
Lot ID: 2473598
Date Received : Oct 29, 2024
Date Reported : Nov 05, 2024
Report Number : 3037165-1

Page 2 of 2



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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tan
Thailand 18260

Lot ID: 2473619
Date Received : Sep 04, 2024
Date Reported : Sep 09, 2024
Report Number: 3037311-1

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Page 1 of 1

Sample Description		Air Quality	
Location	Parameter	Nitrogen dioxide (ppm)	
Measurement Date	Measurement by	Aug 23, 2024 - Aug 30, 2024	
Measurement by		Paramet Sakdayakun	
Time		2473619-1	2473619-2
11:00 AM - 12:00 PM		0.006	0.013
12:00 PM - 01:00 PM		0.008	0.015
01:00 PM - 02:00 PM		0.009	0.015
02:00 PM - 03:00 PM		0.008	0.010
03:00 PM - 04:00 PM		0.007	0.007
04:00 PM - 05:00 PM		0.006	0.009
05:00 PM - 06:00 PM		0.005	0.006
06:00 PM - 07:00 PM		0.005	0.007
07:00 PM - 08:00 PM		0.004	0.006
08:00 PM - 09:00 PM		0.004	0.005
09:00 PM - 10:00 PM		0.003	0.004
10:00 PM - 11:00 PM		0.004	0.003
11:00 PM - 12:00 AM		0.004	0.002
12:00 AM - 01:00 AM		0.007	0.004
01:00 AM - 02:00 AM		0.009	0.020
02:00 AM - 03:00 AM		0.009	0.014
03:00 AM - 04:00 AM		0.008	0.012
04:00 AM - 05:00 AM		0.008	0.011
05:00 AM - 06:00 AM		0.009	0.011
06:00 AM - 07:00 AM		0.009	0.013
07:00 AM - 08:00 AM		0.010	0.014
08:00 AM - 09:00 AM		0.010	0.013
09:00 AM - 10:00 AM		0.008	0.010
10:00 AM - 11:00 AM		0.014	0.009
Average		0.007	0.010
1hr - Maximum		0.014	0.020
Standard 1hr - Average		0.170	0.170
Standard		0.170	0.170

Particulate Matter (PM-10) : US EPA 40 CFR Part 50 Appendix J

Guideline: Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004

Sampled By : Prommee Sripatnet

- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025;

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Scientist (3)

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New Orleans, LA 70112

ADDITIONAL INFORMATION

S:\Borden\ Air SO₂NO_x.m (9:40 AM)



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkroi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2473640
Date Received : Sep 04, 2024
Date Reported : Sep 09, 2024
Report Number: 3037402-1

Page 1 of 1

Sample Description	Air Quality			
Location	โรงงานปูนซีเมนต์ท่าหลวง (GPS 47P 0725095, 1614326)			
Parameter	Sulfur Dioxide (ppm)			
Measurement Date	Aug 23, 2024 - Aug 30, 2024			
Measurement by	Prommee Sipatmet			

Time	2473640-1		2473640-2		2473640-3		2473640-4		2473640-5		2473640-6		2473640-7	
	Aug 23, 2024	Aug 24, 2024	Aug 24, 2024	Aug 25, 2024	Aug 25, 2024	Aug 26, 2024	Aug 26, 2024	Aug 27, 2024	Aug 27, 2024	Aug 28, 2024	Aug 28, 2024	Aug 29, 2024	Aug 29, 2024	Aug 29, 2024
11:00 AM - 12:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
12:00 PM - 01:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
01:00 PM - 02:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
02:00 PM - 03:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
03:00 PM - 04:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
04:00 PM - 05:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
05:00 PM - 06:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
06:00 PM - 07:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
07:00 PM - 08:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
08:00 PM - 09:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
09:00 PM - 10:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
10:00 PM - 11:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
11:00 PM - 12:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
12:00 AM - 01:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
01:00 AM - 02:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
02:00 AM - 03:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
03:00 AM - 04:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
04:00 AM - 05:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
05:00 AM - 06:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
06:00 AM - 07:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
07:00 AM - 08:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
08:00 AM - 09:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
09:00 AM - 10:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
10:00 AM - 11:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Average	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1hr - Maximum	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Standard	Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).													
Reference Method	US EPA Method Part 53 and 56													

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Scientist (4)

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Assistant General Manager

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2695-714 EMAIL

S: Reports, Air SONOX rpt (9:45AM)



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkroi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2473599
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number: 3037169-1

Sample Number	2473599-1 to 7			
Parameter	Wind Speed / Wind Direction			
Location	โรงงานปูนซีเมนต์ท่าหลวง (GPS 47P 0725095, 1614326)			
Sampling Date	Aug 23 - Aug 30, 2024			
Sampling by	Prommee Sipatmet			

Time	Aug 23 - Aug 24, 2024		Aug 24 - Aug 25, 2024		Aug 25 - Aug 26, 2024		Aug 26 - Aug 27, 2024		Aug 27 - Aug 28, 2024		Aug 28 - Aug 29, 2024		Aug 29 - Aug 30, 2024	
	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)
11:00 AM - 12:00 PM	1.3	104.0 ESE	1.6	234.0 SW	1.5	208.0 SSW	1.0	325.0 NW	0.4	185.0 S	0.0	-	0.6	228.0 SW
12:00 PM - 01:00 PM	0.5	208.0 SSW	0.5	304.0 NW	1.1	211.0 SSW	0.2	-	0.0	-	0.4	194.0 SSW	1.7	182.0 S
01:00 PM - 02:00 PM	1.7	195.0 SSW	0.0	-	1.5	137.0 SE	1.6	176.0 S	1.1	220.0 SW	1.0	260.0 W	0.6	46.0 NE
02:00 PM - 03:00 PM	0.7	255.0 WSW	0.7	172.0 S	0.8	175.0 S	0.0	-	0.0	-	0.0	-	0.0	-
03:00 PM - 04:00 PM	0.3	223.0 SW	0.8	266.0 W	0.8	174.0 S	0.3	203.0 SSW	0.0	-	0.4	170.0 S	0.0	-
04:00 PM - 05:00 PM	0.0	-	0.4	231.0 SW	0.3	214.0 SW	0.0	-	0.0	-	1.8	151.0 SSE	0.0	-
05:00 PM - 06:00 PM	0.0	-	0.3	102.0 ESE	0.2	-	0.0	-	0.0	-	1.1	194.0 SSW	0.3	179.0 S
06:00 PM - 07:00 PM	0.2	-	0.8	254.0 WSW	0.0	-	0.0	-	0.0	-	0.0	-	0.7	203.0 SSW
07:00 PM - 08:00 PM	0.7	80.0 E	1.0	61.0 ENE	0.0	-	0.0	-	0.0	-	0.0	-	1.3	203.0 SSW
08:00 PM - 09:00 PM	0.6	27.0 NNE	3.1	112.0 ESE	0.0	-	0.0	-	0.0	-	0.2	-	0.6	240.0 WSW
09:00 PM - 10:00 PM	0.0	-	0.2	-	0.9	221.0 SW	0.0	-	1.0	210.0 SSW	1.4	222.0 SW	0.0	-
10:00 PM - 11:00 PM	0.0	-	0.8	298.0 WNW	0.0	-	0.1	-	1.0	184.0 S	0.0	-	0.0	-
11:00 PM - 12:00 AM	0.0	-	0.0	-	0.0	-	0.0	-	1.4	242.0 WSW	0.0	-	0.0	-
12:00 AM - 01:00 AM	0.0	-	0.8	43.0 NE	0.0	-	0.0	-	0.6	359.0 N	0.0	-	0.0	-
01:00 AM - 02:00 AM	0.0	-	1.8	48.0 NE	0.2	-	0.2	-	0.0	-	0.0	-	0.0	-
02:00 AM - 03:00 AM	0.0	-	1.2	58.0 ENE	0.0	-	0.3	225.0 SW	0.4	254.0 WSW	0.0	-	0.0	-
03:00 AM - 04:00 AM	0.2	-	0.5	1.0 N	0.0	-	0.0	-	0.5	286.0 WNW	0.0	-	0.0	-
04:00 AM - 05:00 AM	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
05:00 AM - 06:00 AM	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.2	-	0.0	-
06:00 AM - 07:00 AM	0.0	-	0.9	68.0 ENE	0.9	296.0 WNW	1.1	163.0 SSE	0.0	-	0.0	-	0.0	-
07:00 AM - 08:00 AM	0.8	334.0 NWW	0.0	-	0.0	-	1.4	150.0 SSE	0.0	-	0.7	192.0 SSW	0.0	-
08:00 AM - 09:00 AM	0.1	-	0.2	-	0.5	271.0 W	0.3	148.0 SSE	0.0	-	1.2	212.0 SSW	0.4	202.0 SSW
09:00 AM - 10:00 AM	1.0	210.0 SSW	1.0	154.0 SSE	1.0	195.0 SSW	0.9	121.0 ESE	0.0	-	0.0	-	0.5	169.0 S
10:00 AM - 11:00 AM	0.5	141.0 SE	1.1	217.0 SW	0.0	-	0.0	-	0.0	-	0.0	-	1.1	242.0 WSW

Reference Method : Cup Anemometer & Anodized Aluminum Vane Method

This above results are valid only for the use and conditions specified (s) as indicated in the report. No part of this report may be reproduced in any form without written consent from the laboratory. This report is not reproduced except in full.

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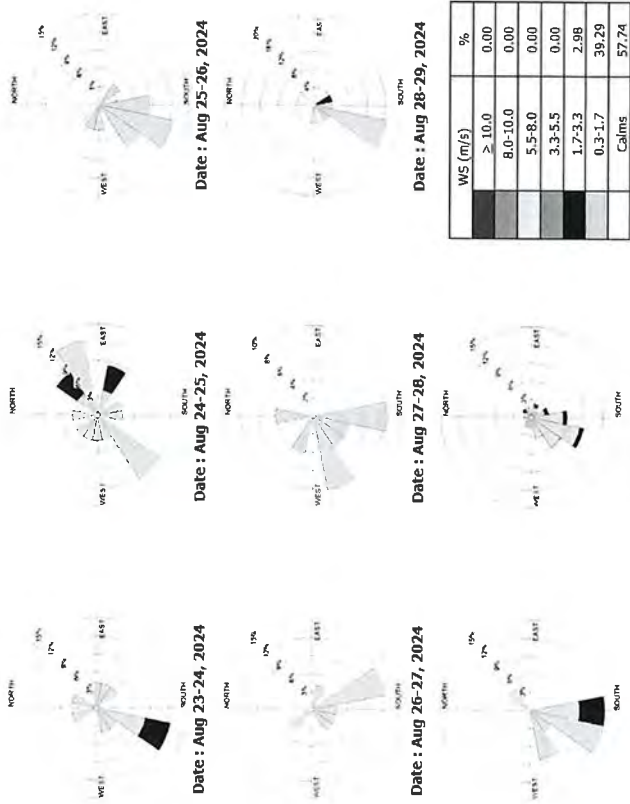
Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhroi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2473599
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3037169-1

Wind Rose



The above results are valid only for the wind period (see date(s)) as indicated in this report. This report is for reference only and should not be used for any other purpose. ALS Laboratory Group (Thailand) strongly recommends that the report is not to be used as evidence in a court of law.

Approved by

Sarayuth Jitranont
Assistant General Manager

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | TEL: 02-2760 3000 | FAX: 02-2760 3197
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Life Sciences



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhroi, Saraburi Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

TESTING
No.0009
Lot ID: 2473655
Date Received : Aug 16, 2024
Date Reported : Aug 24, 2024
Report Number: 3037427-1



Page 1 of 1

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2473655-1	Aug 06 - Aug 07, 2024	0.258	0.069	753	34
2473655-2	Aug 07 - Aug 08, 2024	0.189	0.053	753	33
2473655-3	Aug 08 - Aug 09, 2024	0.203	0.067	753	35
2473655-4	Aug 09 - Aug 10, 2024	0.275	0.082	753	34
2473655-5	Aug 10 - Aug 11, 2024	0.134	0.047	753	34
2473655-6	Aug 11 - Aug 12, 2024	0.127	0.041	753	34
2473655-7	Aug 12 - Aug 13, 2024	0.143	0.043	753	33
Guideline		0.33	0.12		

Reference Method

Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B
Particulate Matter (PM-10) : US EPA 40 CFR Part 50 Appendix J

Guideline : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004

Sampled By : Teeravut Sukdee

Remark :

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

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

Approved by

Orawan R.
Orawan Rakyong
Scientist (3)

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Life Sciences

2005-21 / EMAIL

S:\Reports_Air Ambient\Days gpi (8 394M)



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99/213/301 Moo 9,5,5, Mikaparb Road, Tambon Tapkwung, Amphur Kangkhai, Saraburi
Thailand 18260

P/O :

Lot ID: 2473641

Date Received : Aug 16, 2024
Date Reported : Aug 21, 2024
Report Number: 3037406-1

P/O :

Project Name	Sarahini Factory Plant
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Project Location

Page 1 of 1

Sample Description		Air Quality							
Location	15x15m ² 1# (GPS 47P 0720136, 1616520)								
Parameter	Sulfur Dioxide (ppm)								
Measurement Date	Aug 06, 2024 - Aug 13, 2024								
Measurement by	Teeerawat Sukdee								
	2473641-1	2473641-2	2473641-3	2473641-4	2473641-5	2473641-6	2473641-7		
Time	Aug 06, 2024	Aug 07, 2024	Aug 08, 2024	Aug 09, 2024	Aug 10, 2024	Aug 11, 2024	Aug 12, 2024		
10:00 AM - 11:00 AM	<0.001	<0.001	0.001	0.001	0.001	0.001	0.001		
11:00 AM - 12:00 PM	<0.001	<0.001	0.001	<0.001	0.001	0.001	0.001		
12:00 PM - 01:00 PM	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001		
01:00 PM - 02:00 PM	<0.001	0.001	0.001	0.001	0.001	0.001	0.001		
02:00 PM - 03:00 PM	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001		
03:00 PM - 04:00 PM	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001		
04:00 PM - 05:00 PM	<0.001	<0.001	0.001	0.001	0.001	0.001	0.001		
05:00 PM - 06:00 PM	0.001	<0.001	0.001	0.001	0.001	0.001	0.001		
06:00 PM - 07:00 PM	0.001	<0.001	0.001	0.001	0.001	0.001	0.001		
07:00 PM - 08:00 PM	0.001	0.001	0.001	0.001	0.001	0.001	0.001		
08:00 PM - 09:00 PM	<0.001	0.001	0.001	0.001	0.001	0.001	0.001		
09:00 PM - 10:00 PM	<0.001	0.001	0.001	0.001	0.001	0.001	0.001		
10:00 PM - 11:00 PM	0.001	0.001	0.001	0.001	0.001	0.001	0.001		
11:00 PM - 12:00 AM	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001		
12:00 AM - 01:00 AM	<0.001	0.001	0.001	0.001	0.001	0.001	0.001		
01:00 AM - 02:00 AM	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001		
02:00 AM - 03:00 AM	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001		
03:00 AM - 04:00 AM	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001		
04:00 AM - 05:00 AM	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001		
05:00 AM - 06:00 AM	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001		
06:00 AM - 07:00 AM	<0.001	<0.001	0.001	<0.001	0.001	0.001	0.001		
07:00 AM - 08:00 AM	<0.001	<0.001	<0.001	<0.001	0.001	0.001	0.001		
08:00 AM - 09:00 AM	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001		
09:00 AM - 10:00 AM	<0.001	<0.001	0.001	0.001	0.001	0.001	0.001		
Average	<0.001	<0.001	0.001	0.001	0.001	0.001	0.001		
1hr - Maximum	0.001	0.001	0.001	0.001	0.001	0.001	0.001		
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3		
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12		
Standard	: Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).								
Reference Method	: US EPA Method Part 53 and 58								

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Approved by

Orawan Rakyong
Scientist (3)

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S:\Reports\ Air SoxNOx rpt (9:37AM)



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhot, Saraburi
Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2473600

Date Received :Aug 16, 2024

Date Reported :Aug 21, 2024

Report Number :3037179-1

Sample Number 2473600-1 to 7

Parameter Wind Speed / Wind Direction

Location ตำบลนาโพธิ์ (GPS 47° 07'20.136, 161°6'52.0)

Sampling Date Aug 06 - Aug 13, 2024

Sampling by เติรวิฑูรย์ สุกดี

Page 1 of 2

Time	Aug 06 - Aug 07, 2024		Aug 07 - Aug 08, 2024		Aug 08 - Aug 09, 2024		Aug 09 - Aug 10, 2024		Aug 10 - Aug 11, 2024		Aug 11 - Aug 12, 2024		Aug 12 - Aug 13, 2024	
	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)
10:00 AM - 11:00 AM	0.8	159.0 SSE	1.9	183.0 S	0.1	-	1.4	232.0 SW	2.0	164.0 SSE	1.0	209.0 SSW	0.8	180.0 S
11:00 AM - 12:00 PM	1.3	206.0 SSW	0.5	189.0 S	0.6	234.0 SW	1.4	209.0 SSW	1.7	213.0 SSW	1.8	195.0 SSW	1.3	194.0 SSW
12:00 PM - 01:00 PM	1.4	318.0 NW	0.2	-	2.0	210.0 SSW	0.4	193.0 SSW	2.1	213.0 SSW	0.0	-	1.4	176.0 S
01:00 PM - 02:00 PM	2.1	264.0 W	0.5	184.0 S	0.0	-	1.1	209.0 SSW	1.0	253.0 WSW	1.6	233.0 SW	1.1	197.0 SSW
02:00 PM - 03:00 PM	1.2	198.0 SSW	1.0	181.0 S	0.8	191.0 S	0.0	-	1.0	202.0 SSW	3.0	196.0 SSW	1.2	209.0 SSW
03:00 PM - 04:00 PM	0.3	323.0 NW	0.8	145.0 SE	0.0	-	0.2	-	0.0	-	1.2	138.0 SE	1.0	239.0 WSW
04:00 PM - 05:00 PM	0.9	221.0 SW	0.2	-	0.0	-	0.3	135.0 SE	0.0	-	0.0	-	0.0	-
05:00 PM - 06:00 PM	0.5	183.0 S	0.0	-	0.0	-	1.0	202.0 SSW	0.0	-	0.0	-	0.0	-
06:00 PM - 07:00 PM	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.9	228.0 SW
07:00 PM - 08:00 PM	0.0	-	1.3	206.0 SSW	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
08:00 PM - 09:00 PM	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.1	-
09:00 PM - 10:00 PM	0.0	-	0.0	-	0.0	-	0.0	-	2.0	152.0 SSE	0.0	-	0.0	-
10:00 PM - 11:00 PM	1.0	213.0 SSW	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
11:00 PM - 12:00 AM	0.0	-	0.0	-	0.0	-	0.0	-	0.3	72.0 ENE	0.0	-	0.0	-
12:00 AM - 01:00 AM	0.0	-	0.0	-	0.0	-	0.3	150.0 SSE	0.0	-	0.9	123.0 ESE	0.0	-
01:00 AM - 02:00 AM	1.0	165.0 SSE	0.0	-	0.0	-	0.0	-	0.0	-	1.0	118.0 ESE	0.0	-
02:00 AM - 03:00 AM	0.0	-	0.0	-	0.0	-	0.0	-	0.2	-	0.5	191.0 S	0.0	-
03:00 AM - 04:00 AM	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
04:00 AM - 05:00 AM	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
05:00 AM - 06:00 AM	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
06:00 AM - 07:00 AM	0.0	-	0.0	-	0.0	-	0.2	-	0.0	-	0.0	-	0.2	-
07:00 AM - 08:00 AM	0.4	146.0 SE	0.1	-	0.0	-	1.1	209.0 SSW	0.0	-	0.5	177.0 S	0.0	-
08:00 AM - 09:00 AM	0.6	197.0 SSW	0.3	207.0 SSW	0.9	178.0 S	2.1	193.0 SSW	0.9	159.0 SSE	0.6	173.0 S	2.1	117.0 ESE
09:00 AM - 10:00 AM	1.9	237.0 WSW	0.5	204.0 SSW	0.3	114.0 ESE	0.4	281.0 W	2.3	183.0 S	0.6	103.0 ESE	2.4	205.0 SSW

Reference Method : Cup Anemometer & Anodized Aluminum Vane Method

The above results are valid only for the wind speed and direction (WS and WD) as indicated in this report. No part of this report or test results may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) and strong recommends that this report is not reproduced except in full.

Approved by

Sarayuht Jitranont
Assistant General Manager

The above results are valid only for the wind speed and direction (WS and WD) as indicated in this report. No part of this report or test results may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) and strong recommends that this report is not reproduced except in full.

Approved by

Sarayuht Jitranont
Assistant General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhot, Saraburi
Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2473600

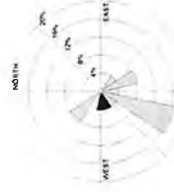
Date Received :Aug 16, 2024

Date Reported :Aug 21, 2024

Report Number :3037179-1

Page 2 of 2

Wind Rose



Date : Aug 06-07, 2024



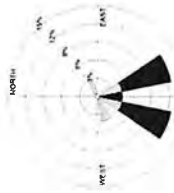
Date : Aug 07-08, 2024



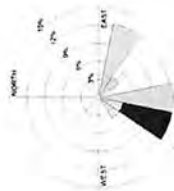
Date : Aug 08-09, 2024



Date : Aug 09-10, 2024



Date : Aug 10-11, 2024



Date : Aug 11-12, 2024

WS (m/s)	%
> 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	0.00
1.7-3.3	8.33
0.3-1.7	30.36
Calms	61.31



Analysis / Test Report

Lot ID: 2473621
Date Received : Sep 04, 2024
Date Reported : Sep 09, 2024
Report Number: 3037340-1

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhroi, Saraburi
Thailand 18260
P/O :
Project Name : Saraburi Factory Plant
Project Location :

Sample Description		Air Quality											
Location		โรงงานปูน (โรงงานปูน) (GPS 47P 0720392, 1613911)											
Parameter		Nitrogen dioxide (ppm)											
Measurement Date		Aug 23, 2024 - Aug 30, 2024											
Measurement by		Prommee Sripalnet											
Time		2473621-1		2473621-2		2473621-3		2473621-4		2473621-5		2473621-6	
		Aug 23, 2024	Aug 24, 2024	Aug 24, 2024	Aug 25, 2024	Aug 25, 2024	Aug 26, 2024	Aug 26, 2024	Aug 27, 2024	Aug 27, 2024	Aug 28, 2024	Aug 29, 2024	Aug 29, 2024
12:00 PM - 01:00 PM		0.007	0.016	0.006	0.006	0.006	0.001	0.006	0.005	0.006	0.007	0.006	0.008
01:00 PM - 02:00 PM		0.006	0.005	0.006	0.006	0.006	0.003	0.003	0.009	0.006	0.007	0.007	0.003
02:00 PM - 03:00 PM		0.006	0.004	0.004	0.003	0.003	0.004	0.003	0.005	0.005	0.004	0.004	0.003
03:00 PM - 04:00 PM		0.003	0.003	0.004	0.004	0.004	0.004	0.003	0.005	0.005	0.003	0.003	0.003
04:00 PM - 05:00 PM		0.002	0.004	0.004	0.004	0.004	0.004	0.005	0.007	0.007	0.003	0.003	0.003
05:00 PM - 06:00 PM		0.003	0.004	0.004	0.008	0.008	0.005	0.005	0.006	0.006	0.005	0.003	0.003
06:00 PM - 07:00 PM		0.004	0.006	0.006	0.015	0.015	0.004	0.004	0.007	0.007	0.004	0.004	0.004
07:00 PM - 08:00 PM		0.003	0.010	0.010	0.012	0.012	0.006	0.006	0.011	0.011	0.007	0.007	0.003
08:00 PM - 09:00 PM		0.004	0.009	0.009	0.012	0.012	0.008	0.011	0.013	0.013	0.011	0.004	0.004
09:00 PM - 10:00 PM		0.007	0.012	0.012	0.012	0.012	0.014	0.013	0.012	0.012	0.013	0.013	0.008
10:00 PM - 11:00 PM		0.010	0.010	0.010	0.015	0.015	0.017	0.013	0.013	0.013	0.009	0.008	0.008
11:00 PM - 12:00 AM		0.012	0.010	0.010	0.011	0.011	0.017	0.017	0.013	0.009	0.009	0.010	0.010
12:00 AM - 01:00 AM		0.013	0.013	0.013	0.013	0.013	0.012	0.014	0.014	0.009	0.014	0.009	0.014
01:00 AM - 02:00 AM		0.012	0.015	0.015	0.011	0.011	0.010	0.010	0.012	0.010	0.010	0.015	0.015
02:00 AM - 03:00 AM		0.008	0.014	0.014	0.008	0.008	0.008	0.008	0.012	0.012	0.012	0.008	0.008
03:00 AM - 04:00 AM		0.006	0.006	0.006	0.007	0.007	0.007	0.007	0.016	0.016	0.016	0.002	0.002
04:00 AM - 05:00 AM		0.005	0.005	0.005	0.008	0.008	0.009	0.009	0.010	0.010	0.016	0.003	0.003
05:00 AM - 06:00 AM		0.007	0.005	0.005	0.005	0.005	0.008	0.008	0.011	0.011	0.017	0.004	0.004
06:00 AM - 07:00 AM		0.006	0.005	0.005	0.006	0.006	0.006	0.008	0.016	0.016	0.016	0.006	0.006
07:00 AM - 08:00 AM		0.007	0.013	0.013	0.007	0.007	0.014	0.012	0.006	0.012	0.012	0.012	0.012
08:00 AM - 09:00 AM		0.007	0.008	0.008	0.009	0.009	0.007	0.007	0.013	0.013	0.013	0.016	0.016
09:00 AM - 10:00 AM		0.006	0.013	0.013	0.015	0.015	0.004	0.004	0.008	0.008	0.013	0.012	0.012
10:00 AM - 11:00 AM		0.006	0.011	0.011	0.011	0.011	0.004	0.004	0.011	0.011	0.013	0.006	0.006
11:00 AM - 12:00 PM		0.004	0.008	0.008	0.008	0.008	0.003	0.003	0.014	0.014	0.006	0.004	0.004
Average		0.006	0.009	0.009	0.009	0.009	0.007	0.007	0.010	0.010	0.017	0.007	0.007
1hr - Maximum		0.013	0.016	0.016	0.015	0.015	0.017	0.017	0.015	0.015	0.017	0.016	0.016
Standard 1hr - Average		0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170
Standard		: Notification of the National Environment Board No. 33, 2009 (B.E. 2552).											
Reference Method		: US EPA Method Part 50 App. F (Chemiluminescence)											

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. All findings comply with the accuracy and precision requirements that the laboratory has set for itself and are not to be used for legal proceedings.

Approved by

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Analysis / Test Report

Lot ID: 2473656
Date Received : Sep 04, 2024
Date Reported : Sep 10, 2024
Report Number: 3037432-1

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhroi, Saraburi Thailand 18260
P/O :
Project Name : Saraburi Factory Plant
Project Location :

Sample Description		Air Quality			
Location		โรงงานปูน (โรงงานปูน) (GPS 47P 0720392, 1613911)			
Date Analysis Commenced		Sep 05, 2024			
Condition of Sample		Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag			
Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2473656-1	Aug 23 - Aug 24, 2024	0.027	0.019	753	33
2473656-2	Aug 24 - Aug 25, 2024	0.071	0.038	753	34
2473656-3	Aug 25 - Aug 26, 2024	0.023	0.015	753	34
2473656-4	Aug 26 - Aug 27, 2024	0.024	0.016	753	35
2473656-5	Aug 27 - Aug 28, 2024	0.028	0.020	753	34
2473656-6	Aug 28 - Aug 29, 2024	0.024	0.016	753	34
2473656-7	Aug 29 - Aug 30, 2024	0.021	0.014	753	34
Guideline		0.33	0.12	-	-

Reference Method
Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B
Particulate Matter (PM-10) : US EPA 40 CFR Part 50 Appendix J

Guideline : Notification of the National Environmental Board, No.24, 2004 (B.E.2547) dated September 22, 2004

Sampled By : Prommee Sripalnet

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

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. All findings comply with the accuracy and precision requirements that the laboratory has set for itself and are not to be used for legal proceedings.

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99/219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi
Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Page 1 of 1

Sample Description	Air Quality
Location	ท่าอากาศยาน (สนามบิน) (GPS 47P 0720392, 1613911)
Parameter	Sulfur Dioxide (ppm)
Measurement Date	Aug 23, 2024 - Aug 30, 2024
Measurement by	Prommee Sirapattet

Time	2473642-1	2473642-2	2473642-3	2473642-4	2473642-5	2473642-6	2473642-7
12:00 PM - 01:00 PM	0.002	0.002	0.003	0.002	0.002	0.002	0.002
01:00 PM - 02:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
02:00 PM - 03:00 PM	0.002	0.002	0.003	0.002	0.002	0.002	0.002
03:00 PM - 04:00 PM	0.002	0.002	0.003	0.002	0.002	0.002	0.002
04:00 PM - 05:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
05:00 PM - 06:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
06:00 PM - 07:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
07:00 PM - 08:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
08:00 PM - 09:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
09:00 PM - 10:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
10:00 PM - 11:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
11:00 PM - 12:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
12:00 AM - 01:00 AM	0.001	0.002	0.002	0.002	0.002	0.002	0.002
01:00 AM - 02:00 AM	0.001	0.002	0.002	0.002	0.002	0.002	0.002
02:00 AM - 03:00 AM	0.001	0.002	0.002	0.002	0.002	0.002	0.002
03:00 AM - 04:00 AM	0.001	0.002	0.002	0.002	0.002	0.002	0.002
04:00 AM - 05:00 AM	0.001	0.002	0.002	0.002	0.002	0.002	0.002
05:00 AM - 06:00 AM	0.001	0.002	0.002	0.002	0.002	0.002	0.002
06:00 AM - 07:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
07:00 AM - 08:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
08:00 AM - 09:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
09:00 AM - 10:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
10:00 AM - 11:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
11:00 AM - 12:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Average	0.002	0.002	0.002	0.002	0.002	0.002	0.002
1hr - Maximum	0.002	0.003	0.003	0.002	0.002	0.002	0.002
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hr - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Standard	Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).						
Reference Method	US EPA Method Part 53 and 59						

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from ALS. This report is not to be used for any purpose other than that intended. This report is not reproduced except in full.

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2025-7/1 EMAH

S:Report_Air_SO2NOx rpt (8-0AM)



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99/219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi
Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Page 1 of 2

Sample Number	2473601-1 to 7
Parameter	Wind Speed / Wind Direction
Location	ท่าอากาศยาน (สนามบิน) (GPS 47P 0720392, 1613911)
Sampling Date	Aug 23 - Aug 30, 2024
Sampling by	Prommee Sirapattet

Time	Aug 23 - Aug 24, 2024	Aug 24 - Aug 25, 2024	Aug 25 - Aug 26, 2024	Aug 26 - Aug 27, 2024	Aug 27 - Aug 28, 2024	Aug 28 - Aug 29, 2024	Aug 29 - Aug 30, 2024
12:00 PM - 01:00 PM	WS (m/s) 0.5 WD (deg) 13.7 NNE	WS (m/s) 1.7 WD (deg) 297.0 WNW	WS (m/s) 0.4 WD (deg) 247.0 WSW	WS (m/s) 0.7 WD (deg) 247.0 WSW	WS (m/s) 0.2 WD (deg) 247.0 WSW	WS (m/s) 1.4 WD (deg) 285.0 WNW	WS (m/s) 0.2 WD (deg) 0.0
01:00 PM - 02:00 PM	WS (m/s) 1.4 WD (deg) 13.7 NNE	WS (m/s) 0.5 WD (deg) 197.0 SSW	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.4 WD (deg) 228.0 SW	WS (m/s) 0.0 WD (deg) 0.0
02:00 PM - 03:00 PM	WS (m/s) 0.3 WD (deg) 13.7 NNE	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0
03:00 PM - 04:00 PM	WS (m/s) 0.4 WD (deg) 13.7 NNE	WS (m/s) 1.2 WD (deg) 187.0 S	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.6 WD (deg) 196.0 SSW	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 1.3 WD (deg) 162.0 SSE
04:00 PM - 05:00 PM	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.4 WD (deg) 141.0 SE	WS (m/s) 0.2 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0
05:00 PM - 06:00 PM	WS (m/s) 0.4 WD (deg) 13.7 NNE	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.8 WD (deg) 188.0 S	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.5 WD (deg) 208.0 SSW	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0
06:00 PM - 07:00 PM	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.2 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0
07:00 PM - 08:00 PM	WS (m/s) 0.7 WD (deg) 13.7 NNE	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0
08:00 PM - 09:00 PM	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.8 WD (deg) 170.0 S	WS (m/s) 1.5 WD (deg) 337.0 NNW	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.4 WD (deg) 181.0 S
09:00 PM - 10:00 PM	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 3.4 WD (deg) 219.0 SW	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0
10:00 PM - 11:00 PM	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.2 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.6 WD (deg) 0.0 N	WS (m/s) 0.0 WD (deg) 0.0
11:00 PM - 12:00 AM	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.2 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 1.2 WD (deg) 175.0 S	WS (m/s) 0.0 WD (deg) 0.0
01:00 AM - 02:00 AM	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.4 WD (deg) 343.0 NNW	WS (m/s) 0.0 WD (deg) 0.0
02:00 AM - 03:00 AM	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0
03:00 AM - 04:00 AM	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0
04:00 AM - 05:00 AM	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0
05:00 AM - 06:00 AM	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0
06:00 AM - 07:00 AM	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0
07:00 AM - 08:00 AM	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.6 WD (deg) 315.0 NW	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0
08:00 AM - 09:00 AM	WS (m/s) 1.4 WD (deg) 177.0 S	WS (m/s) 1.4 WD (deg) 221.0 SW	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 1.7 WD (deg) 255.0 WSW	WS (m/s) 1.8 WD (deg) 209.0 SSW
09:00 AM - 10:00 AM	WS (m/s) 2.2 WD (deg) 210.0 SSW	WS (m/s) 0.2 WD (deg) 0.0 -	WS (m/s) 2.5 WD (deg) 215.0 SW	WS (m/s) 0.8 WD (deg) 211.0 SSW	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.6 WD (deg) 260.0 W
10:00 AM - 11:00 AM	WS (m/s) 1.6 WD (deg) 149.0 SE	WS (m/s) 0.8 WD (deg) 178.0 S	WS (m/s) 0.2 WD (deg) 0.0 -	WS (m/s) 1.2 WD (deg) 144.0 SE	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0
11:00 AM - 12:00 PM	WS (m/s) 0.8 WD (deg) 152.0 SSE	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.0 WD (deg) 0.0 -	WS (m/s) 0.7 WD (deg) 288.0 WNW	WS (m/s) 1.4 WD (deg) 195.0 SSW

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

The above results are valid only for the analyzed sample(s) and are not to be used for any other purpose. ALS is not responsible for any errors or omissions in this report. This report is not reproduced except in full.

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhloi, Saraburi
Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

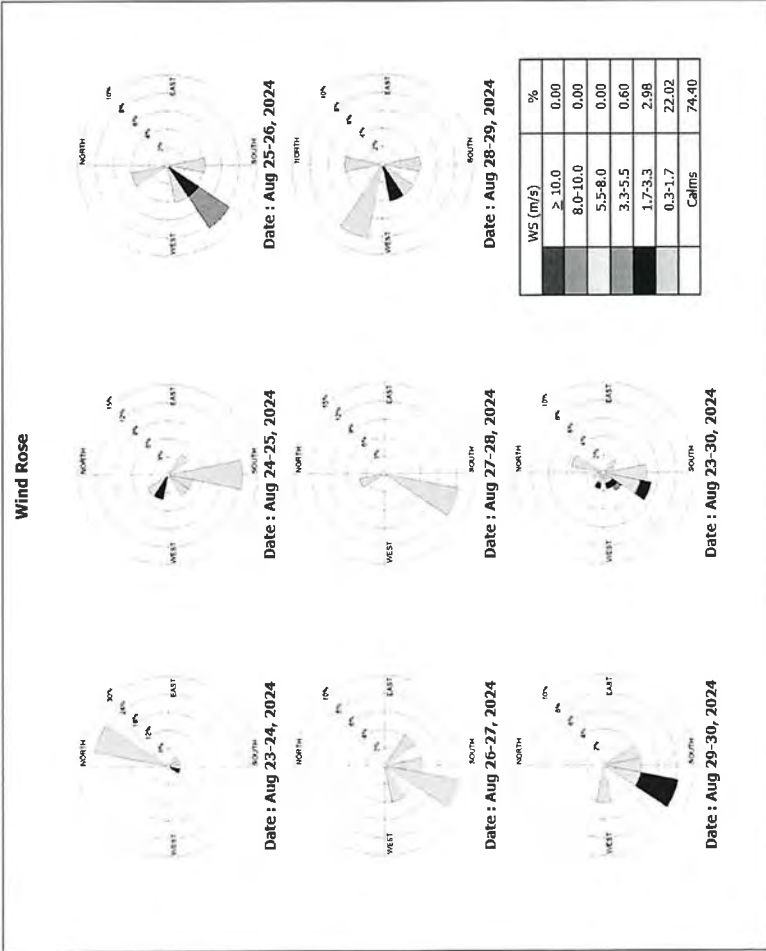
Lot ID: 2473601

Date Received : Sep 04, 2024

Date Reported : Sep 11, 2024

Report Number : 3037181-1

Page 2 of 2



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Approved by

Saranyuth Titranont

Assistant General Manager

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Analysis / Test Report

Client : Siam City Cement Public Company Limited

99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhloi,

Saraburi Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

TESTING

No.0009

Lot ID: 2473657

Date Received : Aug 16, 2024

Date Reported : Aug 24, 2024

Report Number: 3037434-1

Page 1 of 1

Sample Description	Air Quality	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
Location	จังหวัดสระบุรี (GPS 47P 0721959, 1616035)					
Date Analysis Commenced	Aug 20, 2024					
Condition of Sample	Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag					
Sample Number						
2473657-1		Aug 06 - Aug 07, 2024	0.058	0.032	753	34
2473657-2		Aug 07 - Aug 08, 2024	0.044	0.026	753	33
2473657-3		Aug 08 - Aug 09, 2024	0.052	0.033	753	35
2473657-4		Aug 09 - Aug 10, 2024	0.061	0.036	753	34
2473657-5		Aug 10 - Aug 11, 2024	0.052	0.028	753	34
2473657-6		Aug 11 - Aug 12, 2024	0.048	0.027	753	34
2473657-7		Aug 12 - Aug 13, 2024	0.040	0.024	753	33
Guideline			0.33	0.12	-	-

Reference Method

Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B

Particulate Matter (PM-10) : US EPA 40 CFR Part 50 Appendix J

Guideline : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004

Sampled By : Teeravut Sukdee

Remark :

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

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

Approved by

Orawan R.

Scientist (3)

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2095-71 / DMAL

S:\Reports_Air Ambient\Days ppt (8-2024)



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoh, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2473622

Date Received : Aug 16, 2024
Date Reported : Aug 21, 2024
Report Number: 3037367-1

Page 1 of 1

Sample Description	Air Quality	
Location	ตำบลบาง (GPS 47P 0721959, 1616035)	
Parameter	Nitrogen dioxide (ppm)	
Measurement Date	Aug 06, 2024 - Aug 13, 2024	
Measurement by	Teeravut Sukdee	

Time	2473622-1 Aug 06, 2024	2473622-2 Aug 07, 2024	2473622-3 Aug 08, 2024	2473622-4 Aug 09, 2024	2473622-5 Aug 10, 2024	2473622-6 Aug 11, 2024	2473622-7 Aug 12, 2024
11:00 AM - 12:00 PM	0.004	0.006	0.003	0.005	0.006	0.005	0.006
12:00 PM - 01:00 PM	0.004	0.005	0.005	0.007	0.005	0.005	0.008
01:00 PM - 02:00 PM	0.006	0.006	0.009	0.010	0.004	0.005	0.008
02:00 PM - 03:00 PM	0.010	0.008	0.017	0.020	0.008	0.007	0.008
03:00 PM - 04:00 PM	0.012	0.012	0.015	0.015	0.022	0.008	0.012
04:00 PM - 05:00 PM	0.021	0.018	0.006	0.019	0.021	0.008	0.018
05:00 PM - 06:00 PM	0.029	0.027	0.006	0.044	0.024	0.023	0.022
06:00 PM - 07:00 PM	0.029	0.017	0.011	0.031	0.024	0.022	0.011
07:00 PM - 08:00 PM	0.025	0.004	0.018	0.024	0.026	0.013	0.009
08:00 PM - 09:00 PM	0.021	0.014	0.020	0.020	0.022	0.008	0.008
09:00 PM - 10:00 PM	0.012	0.015	0.018	0.016	0.009	0.014	0.008
10:00 PM - 11:00 PM	0.010	0.012	0.014	0.016	0.010	0.011	0.007
11:00 PM - 12:00 AM	0.010	0.010	0.012	0.015	0.012	0.006	0.006
12:00 AM - 01:00 AM	0.008	0.008	0.008	0.015	0.010	0.006	0.005
01:00 AM - 02:00 AM	0.008	0.007	0.010	0.014	0.007	0.006	0.005
02:00 AM - 03:00 AM	0.008	0.006	0.013	0.010	0.006	0.006	0.004
03:00 AM - 04:00 AM	0.007	0.005	0.010	0.010	0.006	0.006	0.003
04:00 AM - 05:00 AM	0.006	0.004	0.010	0.010	0.006	0.006	0.003
05:00 AM - 06:00 AM	0.006	0.005	0.010	0.009	0.005	0.005	0.004
06:00 AM - 07:00 AM	0.006	0.005	0.007	0.007	0.004	0.005	0.005
07:00 AM - 08:00 AM	0.003	0.004	0.006	0.006	0.004	0.004	0.004
08:00 AM - 09:00 AM	0.004	0.004	0.005	0.005	0.004	0.004	0.004
09:00 AM - 10:00 AM	0.004	0.004	0.005	0.005	0.004	0.003	0.003
10:00 AM - 11:00 AM	0.005	0.003	0.005	0.005	0.006	0.006	0.004
Average	0.011	0.009	0.010	0.014	0.011	0.008	0.007
1hr - Maximum	0.029	0.027	0.020	0.044	0.026	0.023	0.022
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170

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

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

Approved by
Orawan R.
Orawan Rakying
Scientist (3)

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoh, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2473643

Date Received : Aug 16, 2024
Date Reported : Aug 21, 2024
Report Number: 3037409-1

Page 1 of 1

Sample Description	Air Quality	
Location	ตำบลบาง (GPS 47P 0721959, 1616035)	
Parameter	Sulfur Dioxide (ppm)	
Measurement Date	Aug 06, 2024 - Aug 13, 2024	
Measurement by	Teeravut Sukdee	

Time	2473643-1 Aug 06, 2024	2473643-2 Aug 07, 2024	2473643-3 Aug 08, 2024	2473643-4 Aug 09, 2024	2473643-5 Aug 10, 2024	2473643-6 Aug 11, 2024	2473643-7 Aug 12, 2024
11:00 AM - 12:00 PM	0.001	0.001	0.001	0.001	0.001	0.001	0.001
12:00 PM - 01:00 PM	0.001	0.001	0.002	0.001	0.001	0.002	0.001
01:00 PM - 02:00 PM	0.001	0.001	0.001	0.001	0.001	0.002	0.001
02:00 PM - 03:00 PM	0.001	0.001	0.001	0.001	0.002	0.001	0.001
03:00 PM - 04:00 PM	0.002	0.001	0.001	0.001	0.001	0.002	0.001
04:00 PM - 05:00 PM	0.002	0.001	<0.001	0.001	0.001	0.002	0.001
05:00 PM - 06:00 PM	0.002	0.001	<0.001	0.001	0.001	0.001	0.001
06:00 PM - 07:00 PM	0.001	0.001	<0.001	0.001	0.001	0.001	0.001
07:00 PM - 08:00 PM	0.001	0.001	0.001	0.001	0.001	0.001	0.001
08:00 PM - 09:00 PM	0.001	0.001	<0.001	0.001	0.001	0.001	0.001
09:00 PM - 10:00 PM	0.001	0.001	0.002	0.001	0.001	0.001	0.001
10:00 PM - 11:00 PM	0.001	0.001	0.001	0.001	0.001	0.001	0.001
11:00 PM - 12:00 AM	0.001	0.001	0.001	0.001	0.001	0.001	0.001
12:00 AM - 01:00 AM	0.001	0.001	0.002	0.001	0.001	0.001	0.001
01:00 AM - 02:00 AM	0.001	0.002	0.002	0.001	0.002	0.001	0.001
02:00 AM - 03:00 AM	0.001	0.002	0.002	0.002	0.002	0.001	0.001
03:00 AM - 04:00 AM	0.001	0.002	0.002	0.001	0.001	0.001	0.001
04:00 AM - 05:00 AM	0.001	0.002	0.002	0.001	0.001	0.001	0.002
05:00 AM - 06:00 AM	0.001	0.002	0.002	0.001	0.002	0.001	0.001
06:00 AM - 07:00 AM	0.001	0.002	0.002	0.001	0.002	0.001	<0.001
07:00 AM - 08:00 AM	0.001	0.002	0.002	0.001	0.002	0.001	<0.001
08:00 AM - 09:00 AM	0.001	0.002	0.002	0.002	0.001	0.001	<0.001
09:00 AM - 10:00 AM	0.001	0.001	0.002	0.002	0.001	0.001	<0.001
10:00 AM - 11:00 AM	0.001	0.001	0.002	0.001	0.001	0.001	<0.001
Average	0.001	0.001	0.001	0.001	0.001	0.001	0.001
1hr - Maximum	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Standard	: Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).						
Reference Method	: US EPA Method Part 53 and 58						

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhloi, Saraburi
Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2473602
Date Received :Aug 16, 2024
Date Reported :Aug 21, 2024
Report Number :3037235-1

Page 1 of 2

Sample Number 2473602-1 to 7
Parameter Wind Speed / Wind Direction
Location ตำบลท่ากุ่ม (GPS 47P 0721959, 1616035)
Sampling Date Aug 06 - Aug 13, 2024
Sampling by Teeravit Sukdee

Time	Aug 06 - Aug 07, 2024		Aug 07 - Aug 08, 2024		Aug 08 - Aug 09, 2024		Aug 09 - Aug 10, 2024		Aug 10 - Aug 11, 2024		Aug 11 - Aug 12, 2024		Aug 12 - Aug 13, 2024	
	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)
11:00 AM - 12:00 PM	0.4	205.0 SSW	2.3	202.0 SSW	1.7	195.0 SSW	0.3	228.0 SW	0.0	-	1.3	230.0 SW	1.9	261.0 W
12:00 PM - 01:00 PM	1.4	171.0 S	0.0	-	0.8	274.0 W	2.0	243.0 WSW	0.4	253.0 WSW	1.3	171.0 S	1.8	228.0 SW
01:00 PM - 02:00 PM	1.3	226.0 SW	0.0	-	0.4	224.0 SW	1.7	239.0 WSW	2.8	273.0 W	0.2	-	0.5	243.0 WSW
02:00 PM - 03:00 PM	0.5	249.0 WSW	1.9	231.0 SW	0.6	246.0 WSW	0.5	198.0 SSW	0.3	246.0 WSW	1.7	211.0 SSW	1.4	230.0 SW
03:00 PM - 04:00 PM	0.1	-	1.5	233.0 SW	0.2	-	0.0	-	0.0	-	1.5	214.0 SW	1.4	213.0 SSW
04:00 PM - 05:00 PM	3.7	228.0 SW	1.4	176.0 S	0.0	-	2.1	151.0 SSE	0.0	-	0.0	-	0.9	239.0 WSW
05:00 PM - 06:00 PM	1.9	190.0 S	1.9	189.0 S	0.0	-	0.0	-	0.0	-	0.0	-	0.9	182.0 S
06:00 PM - 07:00 PM	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.6	185.0 S
07:00 PM - 08:00 PM	0.0	-	2.5	252.0 WSW	0.0	-	0.0	-	0.0	-	0.0	-	0.6	113.0 ESE
08:00 PM - 09:00 PM	0.0	-	0.0	-	0.0	-	1.5	183.0 S	0.0	-	2.2	164.0 SSE	0.0	-
09:00 PM - 10:00 PM	0.0	-	0.0	-	0.0	-	1.5	157.0 SSE	0.0	-	0.3	60.0 ENE	0.8	152.0 SSE
10:00 PM - 11:00 PM	0.5	229.0 SW	0.0	-	0.0	-	0.3	261.0 W	1.8	206.0 SSW	0.0	-	0.0	-
11:00 PM - 12:00 AM	0.0	-	0.4	150.0 SSE	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
12:00 AM - 01:00 AM	0.0	-	0.0	-	0.0	-	1.6	152.0 SSE	0.0	-	0.0	-	0.0	-
01:00 AM - 02:00 AM	0.3	186.0 S	0.0	-	0.0	-	1.8	181.0 S	0.0	-	0.0	-	0.0	-
02:00 AM - 03:00 AM	0.0	-	0.0	-	0.0	-	1.6	168.0 SSE	0.0	-	1.4	227.0 SW	0.0	-
03:00 AM - 04:00 AM	0.0	-	0.0	-	0.0	-	0.8	174.0 S	0.0	-	0.6	211.0 SSW	0.0	-
04:00 AM - 05:00 AM	0.0	-	0.0	-	0.0	-	0.6	165.0 SSE	0.0	-	0.4	182.0 S	0.0	-
05:00 AM - 06:00 AM	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.8	199.0 SSW	0.0	-
06:00 AM - 07:00 AM	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
07:00 AM - 08:00 AM	0.0	-	0.0	-	1.4	197.0 SSW	0.9	193.0 SSW	0.6	186.0 S	1.0	165.0 SSE	1.6	203.0 SSW
08:00 AM - 09:00 AM	0.6	215.0 SW	0.2	-	0.8	240.0 WSW	0.5	212.0 SSW	1.9	172.0 S	1.3	189.0 S	0.5	213.0 SSW
09:00 AM - 10:00 AM	0.8	184.0 S	0.2	-	1.0	227.0 SW	0.9	236.0 SW	1.0	263.0 W	0.0	-	0.9	191.0 S
10:00 AM - 11:00 AM	0.4	241.0 WSW	0.8	263.0 W	0.7	107.0 ESE	0.5	212.0 SSW	0.4	298.0 WNW	0.0	-	2.8	233.0 SW

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Sarayuth Jitranont

Assistant General Manager

Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhloi, Saraburi
Thailand 18260

P/O :

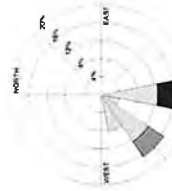
Project Name : Saraburi Factory Plant

Project Location :

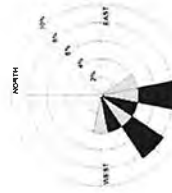
Lot ID: 2473602
Date Received :Aug 16, 2024
Date Reported :Aug 21, 2024
Report Number :3037235-1

Page 2 of 2

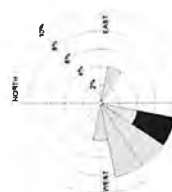
Wind Rose



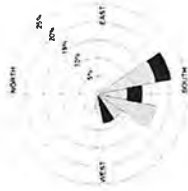
Date : Aug 06-07, 2024



Date : Aug 07-08, 2024



Date : Aug 08-09, 2024



Date : Aug 09-10, 2024



Date : Aug 10-11, 2024



Date : Aug 11-12, 2024

WS (m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.00
3.3-5.5	0.60
1.7-3.3	10.71
0.3-1.7	35.12
Calm	53.57

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Approved by

Sarayuth Jitranont

Assistant General Manager



Analysis / Test Report

Lot ID: 2473623
Date Received : Sep 04, 2024
Date Reported : Sep 09, 2024
Report Number: 3037371-1

Client : Siam City Cement Public Company Limited
99,219/301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhohi, Saraburi
Thailand 18260
P/O :
Project Name : Saraburi Factory Plant
Project Location :

Page 1 of 1

Sample Description		Air Quality		2473623-1		2473623-2		2473623-3		2473623-4		2473623-5		2473623-6	
Location	amduaythudaei (GPS 47P 0722144, 1617155)	Parameter	Nitrogen dioxide (ppm)	Measurement Date	Aug 23, 2024 - Aug 30, 2024	Measurement by	Prommee Sripatnet	Time	Aug 23, 2024	Aug 24, 2024	Aug 25, 2024	Aug 26, 2024	Aug 27, 2024	Aug 28, 2024	Aug 29, 2024
09:00 AM - 10:00 AM			0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.004
10:00 AM - 11:00 AM			0.002	0.002	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.005	0.004
11:00 AM - 12:00 PM			0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.009	0.003
12:00 PM - 01:00 PM			0.001	0.001	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.008	0.003
01:00 PM - 02:00 PM			0.005	0.005	0.005	0.005	0.005	0.007	0.007	0.007	0.007	0.002	0.002	0.009	0.002
02:00 PM - 03:00 PM			0.003	0.003	0.007	0.007	0.007	0.006	0.006	0.006	0.006	0.002	0.002	0.010	0.002
03:00 PM - 04:00 PM			0.005	0.005	0.006	0.006	0.006	0.020	0.020	0.008	0.008	0.001	0.001	0.006	0.002
04:00 PM - 05:00 PM			0.002	0.002	0.003	0.003	0.002	0.012	0.012	0.003	0.003	0.001	0.001	0.004	0.001
05:00 PM - 06:00 PM			0.002	0.002	0.002	0.002	0.002	0.011	0.011	0.001	0.001	0.001	0.001	0.001	0.001
06:00 PM - 07:00 PM			0.002	0.002	0.002	0.002	0.002	0.012	0.012	0.001	0.001	0.001	0.001	0.001	0.001
07:00 PM - 08:00 PM			0.002	0.002	0.002	0.002	0.002	0.010	0.010	0.002	0.002	0.001	0.001	0.001	0.002
08:00 PM - 09:00 PM			0.001	0.001	0.002	0.002	0.001	0.004	0.004	<0.001	<0.001	0.001	0.001	<0.001	0.001
09:00 PM - 10:00 PM			<0.001	<0.001	0.002	0.002	0.002	0.002	0.002	<0.001	<0.001	0.004	0.004	<0.001	0.001
10:00 PM - 11:00 PM			0.001	0.001	0.001	0.001	0.001	0.001	0.001	<0.001	<0.001	0.001	0.001	0.001	<0.001
11:00 PM - 12:00 AM			0.001	0.001	0.005	0.005	0.001	0.001	0.001	<0.001	<0.001	0.002	0.002	0.001	0.001
12:00 AM - 01:00 AM			0.002	0.002	0.008	0.008	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
01:00 AM - 02:00 AM			0.004	0.004	0.016	0.016	0.002	0.002	0.002	<0.001	<0.001	0.001	0.001	0.002	0.001
02:00 AM - 03:00 AM			0.006	0.006	0.024	0.024	0.002	0.002	0.002	0.003	0.003	0.002	0.002	0.001	0.002
03:00 AM - 04:00 AM			0.005	0.005	0.016	0.016	0.003	0.003	0.003	0.004	0.004	0.004	0.004	0.003	0.001
04:00 AM - 05:00 AM			0.010	0.010	0.003	0.003	0.003	0.005	0.005	0.003	0.003	0.002	0.002	<0.001	<0.001
05:00 AM - 06:00 AM			0.006	0.006	0.003	0.003	0.006	0.006	0.006	0.007	0.007	0.003	0.003	0.004	<0.001
06:00 AM - 07:00 AM			0.003	0.003	0.004	0.004	0.003	0.002	0.002	0.005	0.005	0.003	0.003	0.004	0.001
07:00 AM - 08:00 AM			0.007	0.007	0.004	0.004	0.007	0.004	0.004	0.003	0.003	0.002	0.002	0.005	0.004
08:00 AM - 09:00 AM			0.008	0.008	0.008	0.008	0.008	0.002	0.002	0.002	0.002	0.006	0.006	0.004	0.003
Average			0.003	0.003	0.005	0.005	0.007	0.003	0.003	0.003	0.003	0.002	0.002	0.004	0.002
1hr - Maximum			0.010	0.010	0.024	0.024	0.020	0.020	0.008	0.008	0.008	0.006	0.006	0.010	0.004
Standard 1hr - Average			0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170	0.170
Standard															
Reference Method															
: Notification of the National Environment Board No. 33, 2009 (B.E. 2552).															
Reference Method : US EPA Method Part 50 App. F (Chemiluminescence)															

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Approved by

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S:\Report\Air_SON\Nov.pr (4.03PM)



Analysis / Test Report

Lot ID: 2473658
Date Received : Sep 04, 2024
Date Reported : Sep 10, 2024
Report Number: 3037436-1

Client : Siam City Cement Public Company Limited
99,219/301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhohi, Saraburi Thailand 18260
P/O :
Project Name : Saraburi Factory Plant
Project Location :

Page 1 of 1

Sample Description		Air Quality			
Location	amduaythudaei (GPS 47P 0722144, 1617155)				
Date Analysis Commenced		Sep 05, 2024			
Condition of Sample		Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag			
Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2473658-1	Aug 23 - Aug 24, 2024	0.058	0.027	752	28
2473658-2	Aug 24 - Aug 25, 2024	0.115	0.054	752	32
2473658-3	Aug 25 - Aug 26, 2024	0.054	0.027	752	30
2473658-4	Aug 26 - Aug 27, 2024	0.037	0.020	752	30
2473658-5	Aug 27 - Aug 28, 2024	0.045	0.021	752	30
2473658-6	Aug 28 - Aug 29, 2024	0.028	0.016	752	32
2473658-7	Aug 29 - Aug 30, 2024	0.028	0.016	752	31
Guideline		0.33	0.12	-	-

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Approved by

Orawan R.

Orawan Rakying
Scientist (3)



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi
Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2473644

Date Received : Sep 04, 2024

Date Reported : Sep 09, 2024

Report Number: 3037411-1

Page 1 of 1

Sample Description	2473644-1	2473644-2	2473644-3	2473644-4	2473644-5	2473644-6	2473644-7
Location	สารนิคมซีเมนต์ (GPS 47P 0722144, 1617155)						
Parameter	Sulfur Dioxide (ppm)						
Measurement Date	Aug 23, 2024 - Aug 30, 2024						
Measurement by	Prommee Sipatnet						

Time	Aug 23, 2024	Aug 24, 2024	Aug 25, 2024	Aug 26, 2024	Aug 27, 2024	Aug 28, 2024	Aug 29, 2024
09:00 AM - 10:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
10:00 AM - 11:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
11:00 AM - 12:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
12:00 PM - 01:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
01:00 PM - 02:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
02:00 PM - 03:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
03:00 PM - 04:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
04:00 PM - 05:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
05:00 PM - 06:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
06:00 PM - 07:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
07:00 PM - 08:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
08:00 PM - 09:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
09:00 PM - 10:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
10:00 PM - 11:00 PM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
11:00 PM - 12:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
12:00 AM - 01:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
01:00 AM - 02:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
02:00 AM - 03:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
03:00 AM - 04:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
04:00 AM - 05:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
05:00 AM - 06:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
06:00 AM - 07:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
07:00 AM - 08:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
08:00 AM - 09:00 AM	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Average	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1hr - Maximum	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Standard	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Reference Method	: Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).						

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2995-TH-001

S:\Reports_Air_SON\Ox.rpt (9:45AM)



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi
Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2473603

Date Received : Sep 04, 2024

Date Reported : Sep 11, 2024

Report Number: 3037238-1

Page 1 of 2

Sample Number	2473603-1 to 7
Parameter	Wind Speed / Wind Direction
Location	สารนิคมซีเมนต์ (GPS 47P 0722144, 1617155)
Sampling Date	Aug 23 - Aug 30, 2024
Sampling by	Prommee Sipatnet

Time	Aug 23 - Aug 24, 2024	Aug 24 - Aug 25, 2024	Aug 25 - Aug 26, 2024	Aug 26 - Aug 27, 2024	Aug 27 - Aug 28, 2024	Aug 28 - Aug 29, 2024	Aug 29 - Aug 30, 2024
WS (m/s)	2.3	2.6	0.4	0.8	1.5	1.5	4.8
WD (deg)	172.0	220.0	231.0	281.0	209.0	203.0	152.0
WS (m/s)	0.6	0.3	0.3	2.0	3.1	0.2	1.6
WD (deg)	172.0	175.0	262.0	266.0	129.0	-	177.0
WS (m/s)	0.0	0.0	1.2	0.0	0.8	0.8	0.9
WD (deg)	0.0	0.0	204.0	0.0	189.0	251.0	319.0
WS (m/s)	0.3	0.0	0.6	1.1	1.3	0.0	0.9
WD (deg)	140.0	0.0	118.0	177.0	129.0	-	389.0
WS (m/s)	1.2	0.0	0.0	1.8	2.5	0.0	0.0
WD (deg)	187.0	0.0	0.0	190.0	192.0	-	0.0
WS (m/s)	0.4	1.4	0.0	0.5	1.3	0.2	2.3
WD (deg)	104.0	234.0	0.0	151.0	183.0	-	129.0
WS (m/s)	1.6	0.6	1.5	1.3	1.9	0.6	0.6
WD (deg)	04:00 PM	04:00 PM	186.0	160.0	182.0	146.0	86.0
WS (m/s)	1.8	0.8	0.1	0.0	2.1	0.0	1.2
WD (deg)	64.0	65.0	ENE	-	125.0	-	130.0
WS (m/s)	0.4	2.3	0.0	0.8	1.0	0.0	0.2
WD (deg)	34.0	2.0	N	145.0	97.0	-	-
WS (m/s)	0.0	1.5	0.0	1.6	0.9	0.0	0.0
WD (deg)	-	317.0	NW	57.0	ENE	-	-
WS (m/s)	0.0	0.2	0.0	0.0	0.0	0.0	0.0
WD (deg)	-	0.0	-	-	-	-	-
WS (m/s)	0.0	0.0	0.0	0.0	1.3	0.0	0.0
WD (deg)	-	-	-	-	162.0	-	-
WS (m/s)	0.0	0.0	0.0	0.0	3.1	0.0	0.0
WD (deg)	-	-	-	-	126.0	-	-
WS (m/s)	0.0	0.0	1.1	0.0	0.0	0.0	0.0
WD (deg)	-	-	91.0	-	-	-	-
WS (m/s)	0.0	0.0	0.0	0.4	0.4	2.4	0.0
WD (deg)	-	-	-	219.0	174.0	80.0	-
WS (m/s)	0.0	0.0	0.0	0.0	3.0	0.2	0.0
WD (deg)	-	-	-	-	330.0	NNW	-
WS (m/s)	0.0	0.0	0.0	0.0	0.0	0.6	0.0
WD (deg)	-	-	-	-	-	94.0	-
WS (m/s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WD (deg)	-	-	-	-	-	-	-
WS (m/s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WD (deg)	-	-	-	-	-	-	-
WS (m/s)	1.2	0.0	0.0	0.0	0.0	0.0	0.0
WD (deg)	38.0	NE	-	-	-	-	-
WS (m/s)	0.6	0.6	0.6	0.6	0.0	0.8	1.2
WD (deg)	ENE	279.0	168.0	168.0	-	72.0	ENE
WS (m/s)	0.8	0.3	0.4	0.0	0.0	0.2	0.4
WD (deg)	ENE	37.0	222.0	-	-	-	163.0
WS (m/s)	2.4	354.0	1.3	1.3	0.0	0.4	0.8
WD (deg)	N	200.0	137.0	137.0	SE	165.0	SE
WS (m/s)	0.2	0.0	1.1	2.7	0.6	2.1	0.0
WD (deg)	-	-	197.0	177.0	190.0	184.0	-

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Approved by

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Assistant General Manager

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Analysis / Test Report

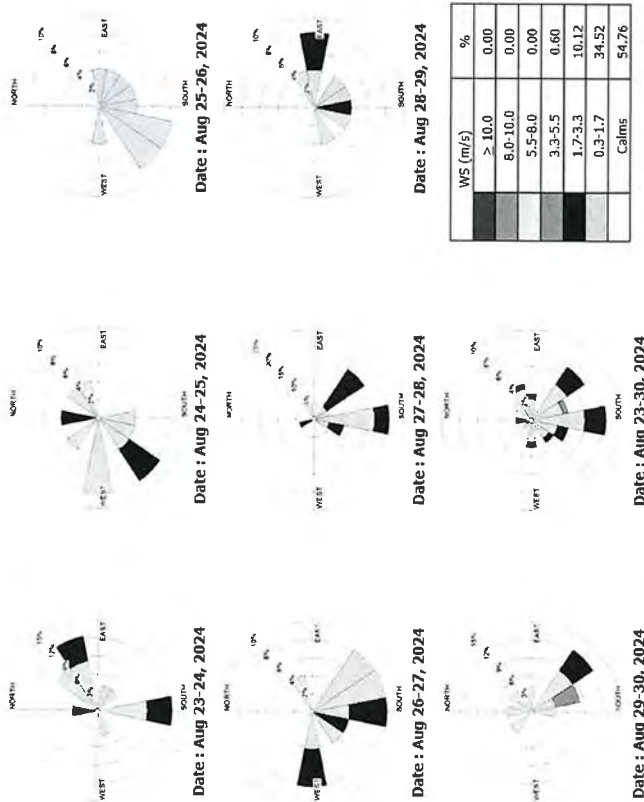
Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhloi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2473603
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3037238-1

Page 2 of 2

Wind Rose



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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhloi, Saraburi Thailand 18260

P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

TESTING
No.0009

Lot ID: 2473659

Date Received : Oct 29, 2024
Date Reported : Nov 05, 2024
Report Number: 3037446-1

Page 1 of 1

Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2473659-1	Oct 18 - Oct 19, 2024	0.068	0.031	750	29
2473659-2	Oct 19 - Oct 20, 2024	0.062	0.030	750	26
2473659-3	Oct 20 - Oct 21, 2024	0.065	0.034	750	25
2473659-4	Oct 21 - Oct 22, 2024	0.107	0.049	750	32
2473659-5	Oct 22 - Oct 23, 2024	0.076	0.038	750	33
2473659-6	Oct 23 - Oct 24, 2024	0.105	0.046	750	33
2473659-7	Oct 24 - Oct 25, 2024	0.208	0.071	750	33
Guideline		0.33	0.12	-	-

Reference Method

Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B
Particulate Matter (PM-10) : US EPA 40 CFR Part 50 Appendix J

Guideline : Notification of the National Environmental Board. No.24, (B.E.2547) dated September 22, 2004

Sampled By : Prommee Sripathet

Remark :

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

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhoh, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2473624
Date Received : Oct 29, 2024
Date Reported : Nov 01, 2024
Report Number: 3037374-1

Page 1 of 1

Sample Description		Air Quality	
Location	am011vhi-xusa8a (asat8)	(GPS 47P 0724357, 1616658)	
Parameter	Nitrogen dioxide (ppm)		
Measurement Date	Oct 18, 2024 - Oct 25, 2024		
Measurement by	Prommee Sripathet		
Time		2473624-1	2473624-2
		Oct 18, 2024	Oct 19, 2024
03:00 PM - 04:00 PM	0.0080	0.0097	0.0055
04:00 PM - 05:00 PM	0.0038	0.0090	0.0054
05:00 PM - 06:00 PM	0.0020	0.0080	0.0118
06:00 PM - 07:00 PM	0.0032	0.0085	0.0101
07:00 PM - 08:00 PM	0.0104	0.0084	0.0090
08:00 PM - 09:00 PM	0.0078	0.0027	0.0067
09:00 PM - 10:00 PM	0.0056	0.0073	0.0091
10:00 PM - 11:00 PM	0.0050	0.0069	0.0083
11:00 PM - 12:00 AM	0.0053	0.0054	0.0041
12:00 AM - 01:00 AM	0.0046	0.0043	0.0036
01:00 AM - 02:00 AM	0.0071	0.0043	0.0033
02:00 AM - 03:00 AM	0.0079	0.0044	0.0059
03:00 AM - 04:00 AM	0.0075	0.0069	0.0071
04:00 AM - 05:00 AM	0.0072	0.0051	0.0076
05:00 AM - 06:00 AM	0.0077	0.0038	0.0045
06:00 AM - 07:00 AM	0.0062	0.0023	0.0033
07:00 AM - 08:00 AM	0.0071	0.0012	0.0039
08:00 AM - 09:00 AM	0.0077	0.0011	0.0020
09:00 AM - 10:00 AM	0.0061	0.0011	0.0042
10:00 AM - 11:00 AM	0.0037	0.0044	0.0045
11:00 AM - 12:00 PM	0.0029	0.0095	0.0044
12:00 PM - 01:00 PM	0.0016	0.0178	0.0042
01:00 PM - 02:00 PM	0.0036	0.0130	0.0039
02:00 PM - 03:00 PM	0.0083	0.0039	0.0013
Average	0.0058	0.0062	0.0059
1hr - Maximum	0.0104	0.0178	0.0118
Standard 1hr - Average	0.170	0.170	0.170
Standard			
Reference Method	: Notification of the National Environment Board No. 33, 2009 (B.E. 2552). US EPA Method Part 50 App. F (Chemiluminescence)		

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S:\Reports_Air_SONOR.rpt (9:48AM)



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhoh, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2473645
Date Received : Oct 29, 2024
Date Reported : Nov 01, 2024
Report Number: 3037414-1

Page 1 of 1

Sample Description		Air Quality	
Location	am011vhi-xusa8a (asat8)	(GPS 47P 0724357, 1616658)	
Parameter	Sulfur Dioxide (ppm)		
Measurement Date	Oct 18, 2024 - Oct 25, 2024		
Measurement by	Prommee Sripathet		
Time		2473645-1	2473645-2
		Oct 18, 2024	Oct 19, 2024
03:00 PM - 04:00 PM	0.0019	0.0019	0.0017
04:00 PM - 05:00 PM	0.0017	0.0018	0.0017
05:00 PM - 06:00 PM	0.0017	0.0018	0.0019
06:00 PM - 07:00 PM	0.0017	0.0018	0.0018
07:00 PM - 08:00 PM	0.0018	0.0019	0.0019
08:00 PM - 09:00 PM	0.0017	0.0017	0.0020
09:00 PM - 10:00 PM	0.0015	0.0019	0.0019
10:00 PM - 11:00 PM	0.0017	0.0018	0.0019
11:00 PM - 12:00 AM	0.0018	0.0017	0.0018
12:00 AM - 01:00 AM	0.0018	0.0017	0.0018
01:00 AM - 02:00 AM	0.0019	0.0018	0.0017
02:00 AM - 03:00 AM	0.0018	0.0018	0.0020
03:00 AM - 04:00 AM	0.0018	0.0019	0.0020
04:00 AM - 05:00 AM	0.0019	0.0017	0.0017
05:00 AM - 06:00 AM	0.0019	0.0018	0.0018
06:00 AM - 07:00 AM	0.0017	0.0018	0.0018
07:00 AM - 08:00 AM	0.0018	0.0018	0.0018
08:00 AM - 09:00 AM	0.0020	0.0017	0.0018
09:00 AM - 10:00 AM	0.0019	0.0018	0.0018
10:00 AM - 11:00 AM	0.0019	0.0018	0.0018
11:00 AM - 12:00 PM	0.0013	0.0018	0.0018
12:00 PM - 01:00 PM	0.0018	0.0018	0.0018
01:00 PM - 02:00 PM	0.0015	0.0018	0.0018
02:00 PM - 03:00 PM	0.0019	0.0017	0.0018
Average	0.0017	0.0018	0.0018
1hr - Maximum	0.0020	0.0022	0.0021
Standard 1hr - Average	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12
Standard			
Reference Method	: Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547). US EPA Method Part 53 and 58		

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

Approved by

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S:\Reports_Air_SONOR.rpt (10:04AM)



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhai, Saraburi
Thailand,18260

P/O : 4100119554

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2473604

Date Received :Oct 29, 2024

Date Reported :Nov 05, 2024

Report Number :3037244-1

Sample Number 2473604-1 to 7

Parameter Wind Speed / Wind Direction

Location อำเภอวังน้อย (suzur) (GPS 47P 0724357, 1616658)

Sampling Date Oct 18 - Oct 25, 2024

Sampling by Prommee Sripanet

Time	Oct 18 - Oct 19, 2024		Oct 19 - Oct 20, 2024		Oct 20 - Oct 21, 2024		Oct 21 - Oct 22, 2024		Oct 22 - Oct 23, 2024		Oct 23 - Oct 24, 2024		Oct 24 - Oct 25, 2024	
	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)
03:00 PM - 04:00 PM	1.5	266.0 W	1.8	338.0 NNW	1.0	77.0 ENE	2.4	30.0 NNE	4.0	60.0 ENE	1.9	92.0 E	1.7	329.0 NNW
04:00 PM - 05:00 PM	0.0	-	0.4	180.0 S	0.6	99.0 E	2.3	88.0 E	0.7	44.0 NE	1.1	112.0 ESE	1.4	339.0 NNW
05:00 PM - 06:00 PM	0.0	-	3.7	182.0 S	1.0	17.0 NNE	0.0	-	1.5	92.0 E	5.0	51.0 NE	1.3	340.0 NNW
06:00 PM - 07:00 PM	0.6	26.0 NNE	0.0	-	0.1	-	0.9	78.0 ENE	0.7	27.0 NNE	0.6	142.0 SE	0.7	30.0 NNE
07:00 PM - 08:00 PM	0.0	-	0.0	-	0.8	16.0 NNE	0.0	-	1.0	3.0 N	0.9	85.0 E	1.4	62.0 ENE
08:00 PM - 09:00 PM	1.1	17.0 NNE	0.0	-	1.1	4.0 N	0.0	-	0.0	-	1.1	104.0 ESE	1.3	72.0 NNE
09:00 PM - 10:00 PM	0.0	-	0.0	-	3.4	19.0 NNE	0.5	64.0 ENE	2.4	43.0 NE	1.5	36.0 NE	0.3	95.0 E
10:00 PM - 11:00 PM	3.4	159.0 SSE	0.0	-	0.0	-	0.9	67.0 ENE	3.2	13.0 NNE	0.1	-	0.5	163.0 SSE
11:00 PM - 12:00 AM	0.0	-	0.0	-	1.2	99.0 E	0.0	-	1.5	27.0 NNE	0.6	32.0 NNE	1.2	41.0 NE
12:00 AM - 01:00 AM	0.0	-	0.0	-	0.0	-	0.2	-	1.7	9.0 N	0.5	30.0 NNE	0.7	32.0 NNE
01:00 AM - 02:00 AM	0.0	-	0.0	-	0.0	-	0.0	-	1.9	3.0 N	2.3	43.0 NE	1.4	0.0 N
02:00 AM - 03:00 AM	0.3	0.0 N	0.0	-	0.0	-	0.0	-	2.2	2.0 N	1.4	16.0 NNE	1.2	51.0 NE
03:00 AM - 04:00 AM	0.5	37.0 NE	0.0	-	0.0	-	0.0	-	1.8	49.0 NE	1.3	4.0 N	0.6	8.0 N
04:00 AM - 05:00 AM	0.0	-	0.0	-	0.0	-	0.0	-	2.6	49.0 NE	1.5	13.0 NNE	1.2	1.0 N
05:00 AM - 06:00 AM	0.0	-	0.0	-	0.0	-	0.0	-	0.3	140.0 SE	0.7	323.0 NW	1.8	52.0 NE
06:00 AM - 07:00 AM	0.6	356.0 NNW	0.0	-	0.0	-	0.5	322.0 NW	3.6	25.0 NNE	2.8	31.0 NNE	0.5	47.0 NE
07:00 AM - 08:00 AM	0.0	-	0.1	-	1.5	7.0 N	1.2	143.0 SE	3.3	46.0 NE	0.6	61.0 ENE	0.7	50.0 NE
08:00 AM - 09:00 AM	0.8	178.0 S	0.0	-	2.1	11.0 N	0.7	293.0 WNW	3.1	56.0 NE	2.2	65.0 ENE	2.4	394.0 N
09:00 AM - 10:00 AM	1.6	171.0 S	1.9	314.0 NW	1.7	61.0 ENE	1.8	63.0 ENE	2.0	25.0 NNE	3.0	56.0 NE	1.8	110.0 ESE
10:00 AM - 11:00 AM	0.5	201.0 SSW	2.2	161.0 SSE	2.0	82.0 E	1.2	296.0 WNW	3.4	81.0 E	2.5	47.0 E	3.1	354.0 N
11:00 AM - 12:00 PM	0.0	-	1.6	202.0 SSW	2.0	214.0 SW	4.6	311.0 NW	3.2	51.0 NE	3.4	80.0 E	1.9	359.0 N
12:00 PM - 01:00 PM	1.7	312.0 NW	2.4	234.0 SW	1.7	153.0 SSE	6.0	35.0 NE	2.2	47.0 NE	2.7	76.0 ENE	3.2	287.0 WNW
01:00 PM - 02:00 PM	0.5	322.0 NW	1.0	205.0 SSW	1.3	216.0 SW	1.9	61.0 ENE	2.0	75.0 ENE	1.0	359.0 N	1.5	331.0 NNW
02:00 PM - 03:00 PM	1.9	326.0 NW	0.0	-	0.6	199.0 SSW	0.0	-	1.5	67.0 ENE	1.7	1.0 N	1.0	282.0 WNW

Reference Method : Cup Anemometer & Anodised Aluminium Vane Method

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Approved by

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhai, Saraburi
Thailand,18260

P/O : 4100119554

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2473604

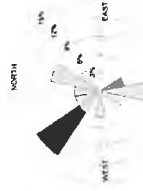
Date Received :Oct 29, 2024

Date Reported :Nov 05, 2024

Report Number :3037244-1

Page 2 of 2

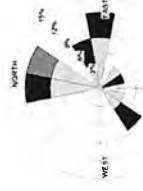
Wind Rose



Date : Oct 18-19, 2024



Date : Oct 19-20, 2024



Date : Oct 20-21, 2024



Date : Oct 21-22, 2024



Date : Oct 22-23, 2024



Date : Oct 23-24, 2024

WS (m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.60
3.3-5.5	5.95
1.7-3.3	25.00
0.3-1.7	41.07
Calms	27.38

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9-5.5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhloi, Saraburi
Thailand 18260
Lot ID: 2473626
Date Received : Oct 29, 2024
Date Reported : Nov 01, 2024
Report Number: 3037376-1
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Page 1 of 1

Sample Description	Air Quality
Location	พื้นที่หน้า (GPS 47° 07'26.598", 161°09'44")
Parameter	Nitrogen dioxide (ppm)
Measurement Date	Oct 18, 2024 - Oct 25, 2024
Measurement by	Prommee Siripatnet

Time	2473626-1	2473626-2	2473626-3	2473626-4	2473626-5	2473626-6	2473626-7
02:00 PM - 03:00 PM	0.0037	0.0039	0.0034	0.0026	0.0029	0.0060	0.0054
03:00 PM - 04:00 PM	0.0034	0.0077	0.0059	0.0022	0.0057	0.0137	0.0036
04:00 PM - 05:00 PM	0.0063	0.0095	0.0074	0.0019	0.0035	0.0092	0.0048
05:00 PM - 06:00 PM	0.0069	0.0087	0.0090	0.0019	0.0027	0.0050	0.0037
06:00 PM - 07:00 PM	0.0073	0.0071	0.0089	0.0063	0.0023	0.0064	0.0025
07:00 PM - 08:00 PM	0.0072	0.0031	0.0094	0.0052	0.0030	0.0075	0.0020
08:00 PM - 09:00 PM	0.0036	0.0028	0.0085	0.0048	0.0028	0.0109	0.0022
09:00 PM - 10:00 PM	0.0062	0.0022	0.0072	0.0035	0.0103	0.0090	0.0058
10:00 PM - 11:00 PM	0.0061	0.0056	0.0046	0.0033	0.0116	0.0078	0.0065
11:00 PM - 12:00 AM	0.0059	0.0065	0.0028	0.0032	0.0106	0.0067	0.0062
12:00 AM - 01:00 AM	0.0057	0.0050	0.0048	0.0031	0.0076	0.0057	0.0058
01:00 AM - 02:00 AM	0.0053	0.0036	0.0035	0.0039	0.0048	0.0027	0.0060
02:00 AM - 03:00 AM	0.0050	0.0019	0.0022	0.0027	0.0052	0.0021	0.0062
03:00 AM - 04:00 AM	0.0037	0.0011	0.0025	0.0019	0.0124	0.0029	0.0063
04:00 AM - 05:00 AM	0.0035	0.0011	0.0025	0.0015	0.0070	0.0046	0.0053
05:00 AM - 06:00 AM	0.0026	0.0022	0.0019	0.0035	0.0050	0.0150	0.0047
06:00 AM - 07:00 AM	0.0024	0.0019	0.0024	0.0028	0.0073	0.0158	0.0031
07:00 AM - 08:00 AM	0.0036	0.0028	0.0034	0.0077	0.0083	0.0438	0.0040
08:00 AM - 09:00 AM	0.0034	0.0118	0.0030	0.0214	0.0140	0.0189	0.0259
09:00 AM - 10:00 AM	0.0028	0.0088	0.0036	0.0097	0.0177	0.0124	0.0043
10:00 AM - 11:00 AM	0.0140	0.0127	0.0209	0.0074	0.0145	0.0090	0.0036
11:00 AM - 12:00 PM	0.0068	0.0044	0.0073	0.0047	0.0125	0.0067	0.0034
12:00 PM - 01:00 PM	0.0262	0.0051	0.0183	0.0031	0.0100	0.0044	0.0028
01:00 PM - 02:00 PM	0.0066	0.0073	0.0030	0.0029	0.0083	0.0038	0.0025
Average	0.0062	0.0053	0.0061	0.0046	0.0077	0.0098	0.0053
1hr - Maximum	0.0262	0.0127	0.0209	0.0214	0.0145	0.0438	0.0259
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170
Standard	: Notification of the National Environment Board No. 33, 2009 (B.E. 2552).						
Reference Method	: US EPA Method Part 50 App. F (Chemiluminescence)						

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. All data are subject to the terms and conditions of the agreement. This report is not reproduced except in full.

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S:\Report\Air_Ambient\TDaye.pr (10:24AM)



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9-5.5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhloi,
Saraburi, Thailand 18260
Lot ID: 2473660
Date Received : Oct 29, 2024
Date Reported : Nov 06, 2024
Report Number: 3037447-1
TESTING
No.0009
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Page 1 of 1

Sample Description	Air Quality				
Location	พื้นที่หน้า (GPS 47° 07'26.598", 161°09'44")				
Date Analysis Commenced	Oct 30, 2024				
Condition of Sample	Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag				
Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2473660-1	Oct 18 - Oct 19, 2024	0.046	0.021	744	30
2473660-2	Oct 19 - Oct 20, 2024	0.045	0.022	744	26
2473660-3	Oct 20 - Oct 21, 2024	0.052	0.025	744	26
2473660-4	Oct 21 - Oct 22, 2024	0.115	0.048	744	32
2473660-5	Oct 22 - Oct 23, 2024	0.081	0.037	744	33
2473660-6	Oct 23 - Oct 24, 2024	0.111	0.050	744	34
2473660-7	Oct 24 - Oct 25, 2024	0.084	0.043	744	33
Guideline		0.33	0.12	-	-

Reference Method

Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B
Particulate Matter (PM-10) : US EPA 40 CFR Part 50 Appendix J

Guideline : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004

Sampled By : Prommee Siripatnet

Remark :

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

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. All data are subject to the terms and conditions of the agreement. This report is not reproduced except in full.

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2095-71 / EMAIL

S:\Report\Air_Ambient\TDaye.pr (10:24AM)



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99/219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2473646
Date Received : Oct 29, 2024
Date Reported : Nov 01, 2024
Report Number: 3037416-1

Page 1 of 1

Sample Description
Location
Parameter
Measurement Date
Measurement by

Air Quality
ในอากาศ (GPS 47P 0726598, 1619844)
Sulfur Dioxide (ppm)
Oct 18, 2024 - Oct 25, 2024
Prommee Siripatnet

Time	2473646-1	2473646-2	2473646-3	2473646-4	2473646-5	2473646-6	2473646-7
02:00 PM - 03:00 PM	0.0017	0.0013	0.0014	0.0014	0.0012	0.0014	0.0013
03:00 PM - 04:00 PM	0.0016	0.0014	0.0015	0.0014	0.0012	0.0013	0.0015
04:00 PM - 05:00 PM	0.0016	0.0014	0.0015	0.0013	0.0012	0.0013	0.0014
05:00 PM - 06:00 PM	0.0015	0.0015	0.0016	0.0013	0.0012	0.0013	0.0014
06:00 PM - 07:00 PM	0.0015	0.0014	0.0015	0.0013	0.0012	0.0013	0.0015
07:00 PM - 08:00 PM	0.0015	0.0013	0.0015	0.0013	0.0013	0.0016	0.0016
08:00 PM - 09:00 PM	0.0015	0.0014	0.0014	0.0013	0.0013	0.0016	0.0015
09:00 PM - 10:00 PM	0.0015	0.0014	0.0015	0.0013	0.0013	0.0016	0.0015
10:00 PM - 11:00 PM	0.0015	0.0014	0.0015	0.0014	0.0013	0.0015	0.0016
11:00 PM - 12:00 AM	0.0015	0.0014	0.0014	0.0014	0.0013	0.0015	0.0015
12:00 AM - 01:00 AM	0.0016	0.0014	0.0014	0.0012	0.0013	0.0014	0.0015
01:00 AM - 02:00 AM	0.0017	0.0014	0.0012	0.0011	0.0011	0.0014	0.0013
02:00 AM - 03:00 AM	0.0017	0.0014	0.0013	0.0012	0.0012	0.0014	0.0013
03:00 AM - 04:00 AM	0.0016	0.0014	0.0014	0.0009	0.0012	0.0014	0.0014
04:00 AM - 05:00 AM	0.0015	0.0014	0.0014	0.0009	0.0012	0.0014	0.0014
05:00 AM - 06:00 AM	0.0015	0.0013	0.0015	0.0010	0.0012	0.0013	0.0014
06:00 AM - 07:00 AM	0.0014	0.0015	0.0015	0.0009	0.0012	0.0014	0.0013
07:00 AM - 08:00 AM	0.0014	0.0014	0.0014	0.0009	0.0012	0.0015	0.0014
08:00 AM - 09:00 AM	0.0013	0.0014	0.0014	0.0010	0.0013	0.0015	0.0012
09:00 AM - 10:00 AM	0.0013	0.0015	0.0014	0.0013	0.0013	0.0016	0.0011
10:00 AM - 11:00 AM	0.0013	0.0014	0.0014	0.0011	0.0013	0.0016	0.0013
11:00 AM - 12:00 PM	0.0014	0.0015	0.0014	0.0012	0.0014	0.0010	0.0014
12:00 PM - 01:00 PM	0.0014	0.0014	0.0013	0.0012	0.0014	0.0008	0.0013
01:00 PM - 02:00 PM	0.0014	0.0015	0.0013	0.0012	0.0014	0.0011	0.0012
Average	0.0015	0.0014	0.0014	0.0012	0.0013	0.0014	0.0014
1hr - Maximum	0.0017	0.0015	0.0016	0.0014	0.0014	0.0016	0.0016
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Standard							

Reference Method : US EPA Method Part 53 and 56

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. This report is not to be used for any other purpose than that recommended by the laboratory.

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99/219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2473605
Date Received : Oct 29, 2024
Date Reported : Nov 05, 2024
Report Number: 3037260-1

Page 1 of 2

Sample Number
Parameter
Location
Sampling Date
Sampling by

2473605-1 to 7
Wind Speed / Wind Direction
ในอากาศ (GPS 47P 0726598, 1619844)
Oct 18 - Oct 25, 2024
Prommee Siripatnet

Time	Oct 18 - Oct 19, 2024	Oct 19 - Oct 20, 2024	Oct 20 - Oct 21, 2024	Oct 21 - Oct 22, 2024	Oct 22 - Oct 23, 2024	Oct 23 - Oct 24, 2024	Oct 24 - Oct 25, 2024
02:00 PM - 03:00 PM	WS (m/s) 1.3 WD (deg) 322.0 NW	WS (m/s) 1.7 WD (deg) 302.0 NW	WS (m/s) 1.2 WD (deg) 205.0 SSW	WS (m/s) 2.6 WD (deg) 170.0 NNE	WS (m/s) 2.3 WD (deg) 160.0 NNE	WS (m/s) 1.6 WD (deg) 213.0 SSW	WS (m/s) 1.3 WD (deg) 247.0 WSW
03:00 PM - 04:00 PM	WS (m/s) 0.7 WD (deg) 313.0 NW	WS (m/s) 0.6 WD (deg) 260.0 W	WS (m/s) 0.6 WD (deg) 310.0 NW	WS (m/s) 1.6 WD (deg) 359.0 N	WS (m/s) 1.3 WD (deg) 321.0 NW	WS (m/s) 0.8 WD (deg) 180.0 SSE	WS (m/s) 1.7 WD (deg) 339.0 NNW
04:00 PM - 05:00 PM	WS (m/s) 0.6 WD (deg) 231.0 SW	WS (m/s) 2.3 WD (deg) 153.0 SSE	WS (m/s) 0.4 WD (deg) 321.0 NW	WS (m/s) 0.8 WD (deg) 8.0 N	WS (m/s) 0.7 WD (deg) 333.0 NNW	WS (m/s) 0.4 WD (deg) 61.0 ENE	WS (m/s) 2.4 WD (deg) 346.0 NNW
05:00 PM - 06:00 PM	WS (m/s) 1.2 WD (deg) 78.0 ENE	WS (m/s) 0.6 WD (deg) 153.0 SSE	WS (m/s) 2.3 WD (deg) 183.0 S	WS (m/s) 0.6 WD (deg) 34.0 NE	WS (m/s) 0.6 WD (deg) 318.0 NW	WS (m/s) 2.3 WD (deg) 140.0 NNE	WS (m/s) 0.6 WD (deg) 33.0 NNE
06:00 PM - 07:00 PM	WS (m/s) 2.1 WD (deg) 100.0 E	WS (m/s) 0.4 WD (deg) 343.0 NNW	WS (m/s) 1.2 WD (deg) 183.0 S	WS (m/s) 1.2 WD (deg) 331.0 NNW	WS (m/s) 0.3 WD (deg) 337.0 NNW	WS (m/s) 1.3 WD (deg) 357.0 N	WS (m/s) 0.2 WD (deg) -
07:00 PM - 08:00 PM	WS (m/s) 0.6 WD (deg) 191.0 S	WS (m/s) - WD (deg) -	WS (m/s) - WD (deg) -	WS (m/s) - WD (deg) -	WS (m/s) - WD (deg) -	WS (m/s) - WD (deg) -	WS (m/s) - WD (deg) -
08:00 PM - 09:00 PM	WS (m/s) 0.2 WD (deg) -	WS (m/s) 0.3 WD (deg) 103.0 ESE	WS (m/s) 0.0 WD (deg) -	WS (m/s) 0.0 WD (deg) -	WS (m/s) 3.0 WD (deg) 157.0 SSE	WS (m/s) 0.4 WD (deg) 29.0 NNE	WS (m/s) 0.0 WD (deg) -
09:00 PM - 10:00 PM	WS (m/s) 0.7 WD (deg) 338.0 NNW	WS (m/s) 0.7 WD (deg) 46.0 NE	WS (m/s) 0.0 WD (deg) -	WS (m/s) 0.0 WD (deg) -	WS (m/s) 1.4 WD (deg) 357.0 N	WS (m/s) 0.2 WD (deg) -	WS (m/s) 0.0 WD (deg) -
10:00 PM - 11:00 PM	WS (m/s) 0.0 WD (deg) -	WS (m/s) 0.6 WD (deg) 70.0 ENE	WS (m/s) 0.0 WD (deg) -	WS (m/s) 0.6 WD (deg) 4.0 N	WS (m/s) 1.3 WD (deg) 260.0 NNE	WS (m/s) 0.2 WD (deg) -	WS (m/s) 0.0 WD (deg) -
11:00 PM - 12:00 AM	WS (m/s) 0.0 WD (deg) -	WS (m/s) 0.2 WD (deg) -	WS (m/s) 0.0 WD (deg) -	WS (m/s) 0.6 WD (deg) 3.0 N	WS (m/s) 0.6 WD (deg) 359.0 N	WS (m/s) 0.2 WD (deg) -	WS (m/s) 0.0 WD (deg) -
12:00 AM - 01:00 AM	WS (m/s) 0.0 WD (deg) -	WS (m/s) 0.0 WD (deg) -	WS (m/s) 0.0 WD (deg) -	WS (m/s) 0.3 WD (deg) 369.0 N	WS (m/s) 0.6 WD (deg) 355.0 N	WS (m/s) 0.0 WD (deg) -	WS (m/s) 0.0 WD (deg) -
01:00 AM - 02:00 AM	WS (m/s) 0.0 WD (deg) -	WS (m/s) 0.0 WD (deg) -	WS (m/s) 0.0 WD (deg) -	WS (m/s) 0.2 WD (deg) -	WS (m/s) 0.4 WD (deg) 112.0 ESE	WS (m/s) 0.4 WD (deg) 10.0 N	WS (m/s) 0.4 WD (deg) 376.0 NW
02:00 AM - 03:00 AM	WS (m/s) 0.8 WD (deg) 204.0 SSW	WS (m/s) 0.0 WD (deg) -	WS (m/s) 0.0 WD (deg) -	WS (m/s) 0.3 WD (deg) 156.0 SSE	WS (m/s) 0.8 WD (deg) 202.0 SSW	WS (m/s) 0.2 WD (deg) -	WS (m/s) 0.8 WD (deg) 73.0 ENE
03:00 AM - 04:00 AM	WS (m/s) 0.6 WD (deg) 337.0 NNW	WS (m/s) 0.0 WD (deg) -	WS (m/s) 0.6 WD (deg) 236.0 SW	WS (m/s) 0.4 WD (deg) 3.0 N	WS (m/s) 0.4 WD (deg) 49.0 NE	WS (m/s) 0.1 WD (deg) -	WS (m/s) 0.0 WD (deg) -
04:00 AM - 05:00 AM	WS (m/s) 0.2 WD (deg) -	WS (m/s) 0.0 WD (deg) -	WS (m/s) 0.4 WD (deg) 265.0 W	WS (m/s) 1.6 WD (deg) 2.0 N	WS (m/s) 0.6 WD (deg) 60.0 ENE	WS (m/s) 0.7 WD (deg) 83.0 E	WS (m/s) 0.0 WD (deg) -
05:00 AM - 06:00 AM	WS (m/s) 0.0 WD (deg) -	WS (m/s) 0.6 WD (deg) 46.0 NE	WS (m/s) 1.2 WD (deg) 148.0 SSE	WS (m/s) 2.3 WD (deg) 125.0 SE	WS (m/s) 2.3 WD (deg) 312.0 NW	WS (m/s) 1.4 WD (deg) 235.0 SW	WS (m/s) 0.0 WD (deg) -
06:00 AM - 07:00 AM	WS (m/s) 2.4 WD (deg) 233.0 SW	WS (m/s) 2.4 WD (deg) 93.0 E	WS (m/s) 0.3 WD (deg) 176.0 S	WS (m/s) 1.0 WD (deg) 115.0 ESE	WS (m/s) 0.4 WD (deg) 239.0 WSW	WS (m/s) 2.2 WD (deg) 29.0 NNE	WS (m/s) 2.7 WD (deg) 139.0 SE
07:00 AM - 08:00 AM	WS (m/s) 2.6 WD (deg) 63.0 ENE	WS (m/s) 0.6 WD (deg) 147.0 SSE	WS (m/s) 0.6 WD (deg) 183.0 S	WS (m/s) 0.6 WD (deg) 27.0 NNE	WS (m/s) 1.9 WD (deg) 56.0 NE	WS (m/s) 0.6 WD (deg) 56.0 NE	WS (m/s) 0.5 WD (deg) 52.0 NE
08:00 AM - 09:00 AM	WS (m/s) 0.6 WD (deg) 2.0 N	WS (m/s) 1.2 WD (deg) 176.0 S	WS (m/s) 0.4 WD (deg) 183.0 S	WS (m/s) 0.4 WD (deg) 132.0 SE	WS (m/s) 0.8 WD (deg) 399.0 NNW	WS (m/s) 1.6 WD (deg) 104.0 ESE	WS (m/s) 1.8 WD (deg) 70.0 ENE
09:00 AM - 10:00 AM	WS (m/s) 0.7 WD (deg) 316.0 NW	WS (m/s) 0.2 WD (deg) -	WS (m/s) 1.2 WD (deg) 132.0 SE	WS (m/s) 0.8 WD (deg) 39.0 NNE	WS (m/s) 2.4 WD (deg) 20.0 NNE	WS (m/s) 0.9 WD (deg) 197.0 SSW	WS (m/s) 1.2 WD (deg) 313.0 NW
10:00 AM - 11:00 AM	WS (m/s) 0.9 WD (deg) 217.0 SW	WS (m/s) 0.7 WD (deg) 161.0 SSE	WS (m/s) 0.6 WD (deg) 26.0 NNE	WS (m/s) 2.4 WD (deg) 20.0 NNE	WS (m/s) 0.9 WD (deg) 197.0 SSW	WS (m/s) 1.2 WD (deg) 313.0 NW	WS (m/s) 0.4 WD (deg) 146.0 SE
11:00 AM - 12:00 PM	WS (m/s) 1.3 WD (deg) 313.0 NW	WS (m/s) 0.6 WD (deg) 284.0 WNW	WS (m/s) 0.9 WD (deg) 21.0 NNE	WS (m/s) 1.7 WD (deg) 126.0 SE	WS (m/s) 0.4 WD (deg) 113.0 ESE	WS (m/s) 0.6 WD (deg) 399.0 N	WS (m/s) 3.0 WD (deg) 186.0 S
12:00 PM - 01:00 PM	WS (m/s) 0.8 WD (deg) 327.0 NNW	WS (m/s) 1.7 WD (deg) 232.0 SW	WS (m/s) 1.7 WD (deg) 1.0 N	WS (m/s) 0.5 WD (deg) 65.0 ENE	WS (m/s) 0.6 WD (deg) 34.0 NE	WS (m/s) 0.4 WD (deg) 263.0 W	WS (m/s) 1.3 WD (deg) 175.0 S

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

The above results are valid only for the analyzed sample(s) as indicated in this report. No part of this report or its contents may be reproduced in any form without written consent from the laboratory. This report is not to be used for any other purpose than that recommended by the laboratory.

Approved by

Saranyuth Jitranont

Saranyuth Jitranont
Assistant General Manager

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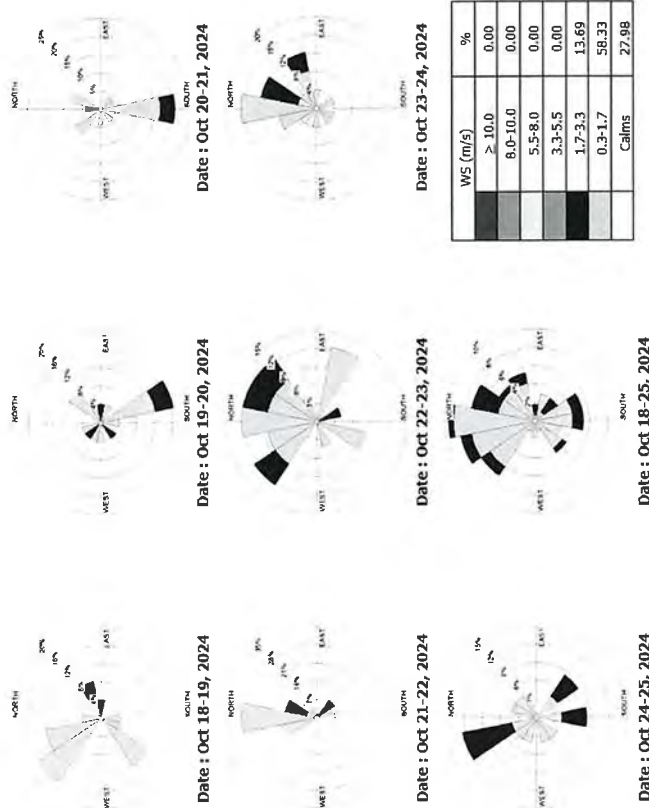
Analysis / Test Report

Client : Siam City Cement Public Company Limited
99/219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhol, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2473605
Date Received : Oct 29, 2024
Date Reported : Nov 05, 2024
Report Number : 3037260-1

Page 2 of 2

Wind Rose



The data results are valid only for the wind speed range (0) are indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Sareyuth Jitranont

Sareyuth Jitranont
Assistant General Manager

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99/219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhol, Saraburi Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2473661
Date Received : Oct 29, 2024
Date Reported : Nov 06, 2024
Report Number : 3037449-1



TESTING
No.0009

Page 1 of 1

Sample Number	Sample Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2473661-1	Oct 18 - Oct 19, 2024	0.083	0.033	741	33
2473661-2	Oct 19 - Oct 20, 2024	0.018	0.014	741	26
2473661-3	Oct 20 - Oct 21, 2024	0.034	0.020	741	26
2473661-4	Oct 21 - Oct 22, 2024	0.087	0.037	741	31
2473661-5	Oct 22 - Oct 23, 2024	0.017	0.012	741	33
2473661-6	Oct 23 - Oct 24, 2024	0.166	0.020	741	33
2473661-7	Oct 24 - Oct 25, 2024	0.036	0.022	741	34
Guideline		0.33	0.12		

Reference Method

Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B

Particulate Matter (PM-10) : US EPA 40 CFR Part 50 Appendix J

Guideline : Notification of the National Environmental Board, No.24, 2004 (B.E.2547) dated September 22, 2004

Sampled By : Prommee Sripanet

Remark :

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

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

Approved by

Orawan R.

Orawan Rakpong
Scientist (3)

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S:\Report\Air Ambient\Days.pr (10/7AM)



Analysis / Test Report

Lot ID: 2473647
Date Received : Oct 29, 2024
Date Reported : Nov 01, 2024
Report Number: 3037417-1

Page 1 of 1

Sample Description		Air Quality	
Location	Location	Year	Year
Parameter	Parameter	Year	Year
Measurement Date	Measurement Date	Year	Year
Measurement by	Measurement by	Year	Year
		2473647-1	2473647-2
		Oct 18, 2024	Oct 19, 2024
		02:00 PM - 03:00 PM	02:00 PM - 03:00 PM
		03:00 PM - 04:00 PM	03:00 PM - 04:00 PM
		04:00 PM - 05:00 PM	04:00 PM - 05:00 PM
		05:00 PM - 06:00 PM	05:00 PM - 06:00 PM
		06:00 PM - 07:00 PM	06:00 PM - 07:00 PM
		07:00 PM - 08:00 PM	07:00 PM - 08:00 PM
		08:00 PM - 09:00 PM	08:00 PM - 09:00 PM
		09:00 PM - 10:00 PM	09:00 PM - 10:00 PM
		10:00 PM - 11:00 PM	10:00 PM - 11:00 PM
		11:00 PM - 12:00 AM	11:00 PM - 12:00 AM
		12:00 AM - 01:00 AM	12:00 AM - 01:00 AM
		01:00 AM - 02:00 AM	01:00 AM - 02:00 AM
		02:00 AM - 03:00 AM	02:00 AM - 03:00 AM
		03:00 AM - 04:00 AM	03:00 AM - 04:00 AM
		04:00 AM - 05:00 AM	04:00 AM - 05:00 AM
		05:00 AM - 06:00 AM	05:00 AM - 06:00 AM
		06:00 AM - 07:00 AM	06:00 AM - 07:00 AM
		07:00 AM - 08:00 AM	07:00 AM - 08:00 AM
		08:00 AM - 09:00 AM	08:00 AM - 09:00 AM
		09:00 AM - 10:00 AM	09:00 AM - 10:00 AM
		10:00 AM - 11:00 AM	10:00 AM - 11:00 AM
		11:00 AM - 12:00 PM	11:00 AM - 12:00 PM
		12:00 PM - 01:00 PM	12:00 PM - 01:00 PM
		01:00 PM - 02:00 PM	01:00 PM - 02:00 PM
		Average	Average
		1hr - Maximum	1hr - Maximum
		Standard 1hr - Average	Standard 1hr - Average
		Standard 24 hrs - Average	Standard 24 hrs - Average
		Standard	Standard
		Reference Method	Reference Method
		Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).	Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).

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

Approved by _____

Orawan Rakyong
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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhro, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :
Sample Number 2473606-1 to 7
Parameter Wind Speed / Wind Direction
Location ฟ้าผ่า (GPS 47P 0729470, 1622879)
Sampling Date Oct 18 - Oct 25, 2024
Sampling by Prommee Sriprattet

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhro, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2473606
Date Received :Oct 29, 2024
Date Reported :Nov 05, 2024
Report Number :3037264-1

Page 1 of 2

Time	Oct 18 - Oct 19, 2024	Oct 19 - Oct 20, 2024	Oct 20 - Oct 21, 2024	Oct 21 - Oct 22, 2024	Oct 22 - Oct 23, 2024	Oct 23 - Oct 24, 2024	Oct 24 - Oct 25, 2024
WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)
02:00 PM - 03:00 PM	1.1 254.0 WSW	0.2 - -	- -	1.2 129.0 SE	0.6 122.0 ESE	0.9 72.0 ENE	0.2 - -
03:00 PM - 04:00 PM	0.3 324.0 NW	0.0 - -	0.2 - -	- -	2.4 82.0 E	1.1 51.0 NE	0.3 355.0 N
04:00 PM - 05:00 PM	0.0 - -	0.1 - -	0.7 248.0 WSW	1.4 83.0 E	0.9 101.0 E	1.3 75.0 ENE	1.0 4.0 N
05:00 PM - 06:00 PM	0.6 195.0 SW	0.0 - -	- -	- -	0.5 88.0 E	0.5 202.0 SSW	0.3 238.0 WSW
06:00 PM - 07:00 PM	0.3 74.0 ENE	2.3 27.0 NNE	0.0 - -	0.6 98.0 E	1.0 103.0 ESE	0.4 56.0 NE	1.1 92.0 E
07:00 PM - 08:00 PM	0.0 - -	0.5 20.0 NNE	0.0 - -	- -	0.0 - -	1.1 103.0 ESE	0.0 - -
08:00 PM - 09:00 PM	0.0 - -	0.0 - -	1.0 91.0 E	0.0 - -	0.1 - -	0.0 - -	0.0 - -
09:00 PM - 10:00 PM	0.0 - -	0.9 60.0 ENE	0.1 - -	- -	1.5 46.0 NE	0.2 - -	0.0 - -
10:00 PM - 11:00 PM	0.0 - -	1.2 91.0 E	0.8 72.0 ENE	0.0 - -	1.6 35.0 NE	1.1 98.0 E	0.0 - -
11:00 PM - 12:00 AM	0.0 - -	0.4 171.0 S	1.8 59.0 ENE	0.0 - -	- -	0.9 85.0 E	0.0 - -
12:00 AM - 01:00 AM	0.0 - -	0.0 - -	0.0 - -	0.3 65.0 ENE	0.0 - -	0.5 118.0 ESE	0.5 107.0 ESE
01:00 AM - 02:00 AM	0.0 - -	0.0 - -	0.0 - -	- -	1.0 47.0 NE	0.8 111.0 ESE	0.0 - -
02:00 AM - 03:00 AM	0.0 - -	0.0 - -	0.0 - -	0.0 - -	1.3 49.0 NE	0.4 75.0 ENE	0.0 - -
03:00 AM - 04:00 AM	0.0 - -	1.0 260.0 W	0.0 - -	0.7 88.0 E	1.3 17.0 NNE	0.0 - -	0.0 - -
04:00 AM - 05:00 AM	0.0 - -	0.0 - -	0.0 - -	0.0 - -	0.3 81.0 E	0.0 - -	1.1 116.0 ESE
05:00 AM - 06:00 AM	0.0 - -	1.0 33.0 NNE	0.0 - -	0.0 - -	- -	1.1 114.0 ESE	0.0 - -
06:00 AM - 07:00 AM	0.0 - -	1.1 64.0 NNE	0.0 - -	0.0 - -	0.2 - -	3.8 44.0 NE	0.0 - -
07:00 AM - 08:00 AM	0.0 - -	1.9 32.0 NNE	0.0 - -	1.1 13.0 NNE	1.2 79.0 E	3.9 49.0 NE	0.2 - -
08:00 AM - 09:00 AM	0.0 - -	2.5 35.0 NE	0.0 - -	4.3 56.0 NE	1.5 3.0 N	3.8 92.0 E	0.0 - -
09:00 AM - 10:00 AM	1.6 14.0 NNE	2.2 19.0 NNE	0.0 - -	2.2 55.0 NE	2.1 103.0 ESE	4.4 66.0 ENE	1.7 2.0 N
10:00 AM - 11:00 AM	1.2 263.0 W	1.3 108.0 ESE	0.3 21.0 NNE	2.3 120.0 ESE	2.9 35.0 NE	2.7 309.0 NW	2.0 254.0 WSW
11:00 AM - 12:00 PM	0.3 252.0 WSW	1.9 75.0 ENE	0.1 - -	4.0 78.0 ENE	1.0 131.0 SE	2.5 51.0 NE	1.8 266.0 W
12:00 PM - 01:00 PM	0.4 304.0 NW	2.2 41.0 NE	0.6 37.0 NE	2.8 54.0 NE	3.5 85.0 E	1.5 54.0 NE	1.0 221.0 SW
01:00 PM - 02:00 PM	0.4 216.0 SW	0.8 333.0 NNW	1.1 35.0 NE	0.9 91.0 E	1.2 103.0 ESE	0.5 214.0 SW	1.4 7.0 N

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

The above results are valid only for the wind speed and direction (as indicated in this report). The rest of the report for certification is for reference only and is not intended to be used for any other purpose. It is recommended that this report is not reproduced except in full.

Approved by

Sarayuth Jitranont
Assistant General Manager

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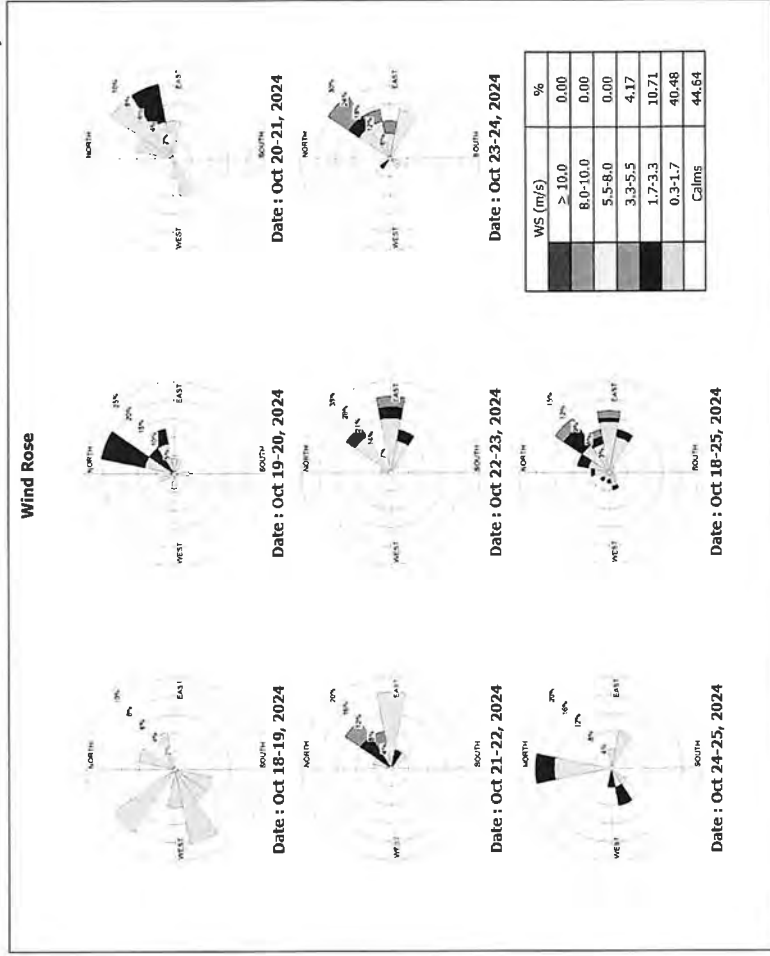
Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhro, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhro, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2473606
Date Received :Oct 29, 2024
Date Reported :Nov 05, 2024
Report Number :3037264-1

Page 2 of 2



The above results are valid only for the wind speed and direction (as indicated in this report). The rest of the report for certification is for reference only and is not intended to be used for any other purpose. It is recommended that this report is not reproduced except in full.

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Sarayuth Jitranont
Assistant General Manager

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhloi, Saraburi
Thailand 18260
P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2473662
Date Received : Sep 04, 2024
Date Reported : Sep 10, 2024
Report Number: 3037450-1

Page 1 of 1

Sample Description		Air Quality	
Location	พิกัดพื้นที่ (GPS 47P 0731396, 1624428)	Parameter	Measurement Date
Date Analysis Commenced		Aug 23, 2024 - Aug 30, 2024	
Condition of Sample		Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag	
Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)
2473662-1	Aug 23 - Aug 24, 2024	0.062	0.028
2473662-2	Aug 24 - Aug 25, 2024	0.054	0.026
2473662-3	Aug 25 - Aug 26, 2024	0.075	0.032
2473662-4	Aug 26 - Aug 27, 2024	0.057	0.030
2473662-5	Aug 27 - Aug 28, 2024	0.040	0.033
2473662-6	Aug 28 - Aug 29, 2024	0.069	0.026
2473662-7	Aug 29 - Aug 30, 2024	0.082	0.031
Guideline		0.33	0.12

Reference Method

Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B
Particulate Matter (PM-10) : US EPA 40 CFR Part 50 Appendix J

Guideline : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004

Sampled By : Prommee Sripatnet

Remark :

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

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS is not responsible for any errors or omissions. This report is not reproduced except in full.

Approved by
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208571 / ENWL

S:\Report\Air Ambient\Days.pr (12.20PM)



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhloi, Saraburi
Thailand 18260
P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2473628
Date Received : Sep 04, 2024
Date Reported : Sep 09, 2024
Report Number: 3037383-1

Page 1 of 1

Sample Description		Air Quality	
Location	พิกัดพื้นที่ (GPS 47P 0731396, 1624428)	Parameter	Measurement Date
Date Analysis Commenced		Aug 23, 2024 - Aug 30, 2024	
Condition of Sample		Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag	
Sample Number	Sampled Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)
2473628-1	Aug 23 - Aug 24, 2024	0.007	0.008
2473628-2	Aug 24 - Aug 25, 2024	0.009	0.009
2473628-3	Aug 25 - Aug 26, 2024	0.009	0.009
2473628-4	Aug 26 - Aug 27, 2024	0.011	0.011
2473628-5	Aug 27 - Aug 28, 2024	0.005	0.005
2473628-6	Aug 28 - Aug 29, 2024	0.005	0.005
2473628-7	Aug 29 - Aug 30, 2024	0.005	0.005
2473628-8	Aug 30 - Sep 01, 2024	0.005	0.005
2473628-9	Sep 01 - Sep 02, 2024	0.005	0.005
2473628-10	Sep 02 - Sep 03, 2024	0.005	0.005
2473628-11	Sep 03 - Sep 04, 2024	0.005	0.005
2473628-12	Sep 04 - Sep 05, 2024	0.005	0.005
2473628-13	Sep 05 - Sep 06, 2024	0.005	0.005
2473628-14	Sep 06 - Sep 07, 2024	0.005	0.005
2473628-15	Sep 07 - Sep 08, 2024	0.005	0.005
2473628-16	Sep 08 - Sep 09, 2024	0.005	0.005
2473628-17	Sep 09 - Sep 10, 2024	0.005	0.005
2473628-18	Sep 10 - Sep 11, 2024	0.005	0.005
2473628-19	Sep 11 - Sep 12, 2024	0.005	0.005
2473628-20	Sep 12 - Sep 13, 2024	0.005	0.005
2473628-21	Sep 13 - Sep 14, 2024	0.005	0.005
2473628-22	Sep 14 - Sep 15, 2024	0.005	0.005
2473628-23	Sep 15 - Sep 16, 2024	0.005	0.005
2473628-24	Sep 16 - Sep 17, 2024	0.005	0.005
2473628-25	Sep 17 - Sep 18, 2024	0.005	0.005
2473628-26	Sep 18 - Sep 19, 2024	0.005	0.005
2473628-27	Sep 19 - Sep 20, 2024	0.005	0.005
2473628-28	Sep 20 - Sep 21, 2024	0.005	0.005
2473628-29	Sep 21 - Sep 22, 2024	0.005	0.005
2473628-30	Sep 22 - Sep 23, 2024	0.005	0.005
2473628-31	Sep 23 - Sep 24, 2024	0.005	0.005
2473628-32	Sep 24 - Sep 25, 2024	0.005	0.005
2473628-33	Sep 25 - Sep 26, 2024	0.005	0.005
2473628-34	Sep 26 - Sep 27, 2024	0.005	0.005
2473628-35	Sep 27 - Sep 28, 2024	0.005	0.005
2473628-36	Sep 28 - Sep 29, 2024	0.005	0.005
2473628-37	Sep 29 - Sep 30, 2024	0.005	0.005
2473628-38	Sep 30 - Oct 01, 2024	0.005	0.005
2473628-39	Oct 01 - Oct 02, 2024	0.005	0.005
2473628-40	Oct 02 - Oct 03, 2024	0.005	0.005
2473628-41	Oct 03 - Oct 04, 2024	0.005	0.005
2473628-42	Oct 04 - Oct 05, 2024	0.005	0.005
2473628-43	Oct 05 - Oct 06, 2024	0.005	0.005
2473628-44	Oct 06 - Oct 07, 2024	0.005	0.005
2473628-45	Oct 07 - Oct 08, 2024	0.005	0.005
2473628-46	Oct 08 - Oct 09, 2024	0.005	0.005
2473628-47	Oct 09 - Oct 10, 2024	0.005	0.005
2473628-48	Oct 10 - Oct 11, 2024	0.005	0.005
2473628-49	Oct 11 - Oct 12, 2024	0.005	0.005
2473628-50	Oct 12 - Oct 13, 2024	0.005	0.005
2473628-51	Oct 13 - Oct 14, 2024	0.005	0.005
2473628-52	Oct 14 - Oct 15, 2024	0.005	0.005
2473628-53	Oct 15 - Oct 16, 2024	0.005	0.005
2473628-54	Oct 16 - Oct 17, 2024	0.005	0.005
2473628-55	Oct 17 - Oct 18, 2024	0.005	0.005
2473628-56	Oct 18 - Oct 19, 2024	0.005	0.005
2473628-57	Oct 19 - Oct 20, 2024	0.005	0.005
2473628-58	Oct 20 - Oct 21, 2024	0.005	0.005
2473628-59	Oct 21 - Oct 22, 2024	0.005	0.005
2473628-60	Oct 22 - Oct 23, 2024	0.005	0.005
2473628-61	Oct 23 - Oct 24, 2024	0.005	0.005
2473628-62	Oct 24 - Oct 25, 2024	0.005	0.005
2473628-63	Oct 25 - Oct 26, 2024	0.005	0.005
2473628-64	Oct 26 - Oct 27, 2024	0.005	0.005
2473628-65	Oct 27 - Oct 28, 2024	0.005	0.005
2473628-66	Oct 28 - Oct 29, 2024	0.005	0.005
2473628-67	Oct 29 - Oct 30, 2024	0.005	0.005
2473628-68	Oct 30 - Oct 31, 2024	0.005	0.005
2473628-69	Nov 01 - Nov 02, 2024	0.005	0.005
2473628-70	Nov 02 - Nov 03, 2024	0.005	0.005
2473628-71	Nov 03 - Nov 04, 2024	0.005	0.005
2473628-72	Nov 04 - Nov 05, 2024	0.005	0.005
2473628-73	Nov 05 - Nov 06, 2024	0.005	0.005
2473628-74	Nov 06 - Nov 07, 2024	0.005	0.005
2473628-75	Nov 07 - Nov 08, 2024	0.005	0.005
2473628-76	Nov 08 - Nov 09, 2024	0.005	0.005
2473628-77	Nov 09 - Nov 10, 2024	0.005	0.005
2473628-78	Nov 10 - Nov 11, 2024	0.005	0.005
2473628-79	Nov 11 - Nov 12, 2024	0.005	0.005
2473628-80	Nov 12 - Nov 13, 2024	0.005	0.005
2473628-81	Nov 13 - Nov 14, 2024	0.005	0.005
2473628-82	Nov 14 - Nov 15, 2024	0.005	0.005
2473628-83	Nov 15 - Nov 16, 2024	0.005	0.005
2473628-84	Nov 16 - Nov 17, 2024	0.005	0.005
2473628-85	Nov 17 - Nov 18, 2024	0.005	0.005
2473628-86	Nov 18 - Nov 19, 2024	0.005	0.005
2473628-87	Nov 19 - Nov 20, 2024	0.005	0.005
2473628-88	Nov 20 - Nov 21, 2024	0.005	0.005
2473628-89	Nov 21 - Nov 22, 2024	0.005	0.005
2473628-90	Nov 22 - Nov 23, 2024	0.005	0.005
2473628-91	Nov 23 - Nov 24, 2024	0.005	0.005
2473628-92	Nov 24 - Nov 25, 2024	0.005	0.005
2473628-93	Nov 25 - Nov 26, 2024	0.005	0.005
2473628-94	Nov 26 - Nov 27, 2024	0.005	0.005
2473628-95	Nov 27 - Nov 28, 2024	0.005	0.005
2473628-96	Nov 28 - Nov 29, 2024	0.005	0.005
2473628-97	Nov 29 - Nov 30, 2024	0.005	0.005
2473628-98	Dec 01 - Dec 02, 2024	0.005	0.005
2473628-99	Dec 02 - Dec 03, 2024	0.005	0.005
2473628-100	Dec 03 - Dec 04, 2024	0.005	0.005

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

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

Approved by

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S:\Report\Air Ambient\Days.pr (12.20PM)



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2473648

Date Received : Sep 04, 2024

Date Reported : Sep 09, 2024

Report Number: 3037418-1

Page 1 of 1

Sample Description	Air Quality
Location	๓๑๒๒๒๒๒๒ (GPS 47P 0731396, 1624428)
Parameter	Sulfur Dioxide (ppm)
Measurement Date	Aug 23, 2024 - Aug 30, 2024
Measurement by	Prommee Sipatnet

Time	2473648-1	2473648-2	2473648-3	2473648-4	2473648-5	2473648-6	2473648-7
10:00 AM - 11:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.003
11:00 AM - 12:00 PM	0.001	0.001	0.002	0.003	0.003	0.002	0.002
12:00 PM - 01:00 PM	0.002	0.001	0.002	0.002	0.002	0.002	0.002
01:00 PM - 02:00 PM	0.002	0.001	0.003	0.003	0.002	0.002	0.002
02:00 PM - 03:00 PM	0.002	0.001	0.004	0.003	0.001	0.002	0.001
03:00 PM - 04:00 PM	0.002	0.002	0.003	0.002	0.002	0.001	0.002
04:00 PM - 05:00 PM	0.002	0.001	0.002	0.003	0.002	0.002	0.002
05:00 PM - 06:00 PM	0.001	0.002	0.002	0.002	0.001	0.002	0.002
06:00 PM - 07:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
07:00 PM - 08:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.001
08:00 PM - 09:00 PM	0.002	0.002	0.002	0.002	0.001	0.002	0.002
09:00 PM - 10:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
10:00 PM - 11:00 PM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
11:00 PM - 12:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
12:00 AM - 01:00 AM	0.002	0.002	0.003	0.002	0.002	0.002	0.003
01:00 AM - 02:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.003
02:00 AM - 03:00 AM	0.002	0.001	0.002	0.002	0.001	0.002	0.002
03:00 AM - 04:00 AM	0.002	0.002	0.002	0.001	0.002	0.002	0.002
04:00 AM - 05:00 AM	0.002	0.002	0.002	0.002	0.002	0.002	0.002
05:00 AM - 06:00 AM	0.002	0.002	0.002	0.001	0.002	0.002	0.003
06:00 AM - 07:00 AM	0.003	0.002	0.002	0.002	0.002	0.002	0.002
07:00 AM - 08:00 AM	0.003	0.002	0.002	0.003	0.002	0.002	0.002
08:00 AM - 09:00 AM	0.003	0.004	0.002	0.003	0.002	0.002	0.002
09:00 AM - 10:00 AM	0.003	0.003	0.003	0.003	0.002	0.002	0.002
Average	0.002	0.002	0.002	0.002	0.002	0.002	0.002
1hr - Maximum	0.003	0.004	0.004	0.003	0.003	0.002	0.003
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Standard							
Reference Method	: Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).						
Reference Method	: US EPA Method Part 53 and 56						

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

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2005-10-10

S (Report)_AU SONOX rpt (8:46AM)



Analysis / Test Report

Client : Siam City Cement Public Company Limited

99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2473607

Date Received : Sep 04, 2024

Date Reported : Sep 11, 2024

Report Number: 3037268-1

Page 1 of 2

Sample Number	2473607-1 to 7
Parameter	Wind Speed / Wind Direction
Location	๓๑๒๒๒๒๒๒ (GPS 47P 0731396, 1624428)
Sampling Date	Aug 23 - Aug 30, 2024
Sampling by	Prommee Sipatnet

Time	Aug 23 - Aug 24, 2024		Aug 24 - Aug 25, 2024		Aug 25 - Aug 26, 2024		Aug 26 - Aug 27, 2024		Aug 27 - Aug 28, 2024		Aug 28 - Aug 29, 2024		Aug 29 - Aug 30, 2024	
	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)
10:00 AM - 11:00 AM	0.2	-	0.9	241.0 WSW	1.2	192.0 SSW	0.0	-	0.7	278.0 W	0.0	-	0.5	194.0 SSW
11:00 AM - 12:00 PM	0.0	-	0.0	-	0.5	285.0 WNW	0.0	-	1.5	220.0 SW	0.3	356.0 N	0.9	226.0 SW
12:00 PM - 01:00 PM	1.1	351.0 N	1.7	231.0 SW	0.0	-	0.8	229.0 SW	0.0	-	0.0	-	0.1	-
01:00 PM - 02:00 PM	0.0	-	0.5	335.0 NNW	0.0	-	1.1	233.0 SW	0.0	-	0.0	-	0.0	-
02:00 PM - 03:00 PM	1.2	359.0 N	0.0	-	0.0	-	0.5	225.0 SW	0.7	267.0 W	0.0	-	0.0	-
03:00 PM - 04:00 PM	0.0	-	0.4	221.0 SW	0.0	-	0.0	-	2.4	217.0 SW	0.0	-	0.0	-
04:00 PM - 05:00 PM	0.6	228.0 SW	1.3	313.0 NW	0.0	-	0.0	-	0.0	-	0.8	159.0 SSE	0.0	-
05:00 PM - 06:00 PM	0.4	171.0 S	0.6	206.0 SSW	0.0	-	0.0	-	0.0	-	1.4	273.0 W	0.0	-
06:00 PM - 07:00 PM	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	2.3	207.0 SSW
07:00 PM - 08:00 PM	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
08:00 PM - 09:00 PM	0.0	-	0.4	153.0 SSE	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
09:00 PM - 10:00 PM	1.6	28.0 NNE	0.8	13.0 NNE	0.0	-	0.0	-	0.5	215.0 SW	0.2	-	0.0	-
10:00 PM - 11:00 PM	0.3	31.0 NNE	0.0	-	0.3	360.0 N	0.0	-	0.0	-	0.0	-	0.0	-
11:00 PM - 12:00 AM	0.6	232.0 SW	0.0	-	0.6	212.0 SSW	0.0	-	0.0	-	0.0	-	0.0	-
12:00 AM - 01:00 AM	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
01:00 AM - 02:00 AM	0.0	-	0.0	-	0.0	-	0.4	234.0 SW	0.0	-	0.0	-	0.5	327.0 NNW
02:00 AM - 03:00 AM	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
03:00 AM - 04:00 AM	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
04:00 AM - 05:00 AM	0.8	16.0 NNE	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
05:00 AM - 06:00 AM	2.4	119.0 ESE	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
06:00 AM - 07:00 AM	0.0	-	0.0	-	1.4	297.0 WNW	0.0	-	0.0	-	0.3	218.0 SW	0.9	214.0 SW
07:00 AM - 08:00 AM	0.0	-	0.8	182.0 S	0.8	338.0 NNW	0.1	-	2.3	211.0 SSW	0.7	235.0 SW	3.4	201.0 SSW
08:00 AM - 09:00 AM	0.5	350.0 N	0.4	283.0 WNW	1.2	216.0 SW	1.1	219.0 SW	0.6	279.0 W	0.8	275.0 W	0.8	281.0 W
09:00 AM - 10:00 AM	0.0	-	0.3	212.0 SSW	0.9	346.0 NNW	0.6	302.0 WNW	0.1	-	0.7	197.0 SSW	0.0	-

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

The above results are valid only for the analyzed sample(s) and do not constitute a guarantee of accuracy or a statement of fitness for any purpose other than that for which they were intended. ALS Laboratory Group (Thailand) strongly recommends that this report be not re-used except in full.

Approved by

Saranyu C.

Saranyu Jitraront
Assistant General Manager

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhoh, Saraburi Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2473607

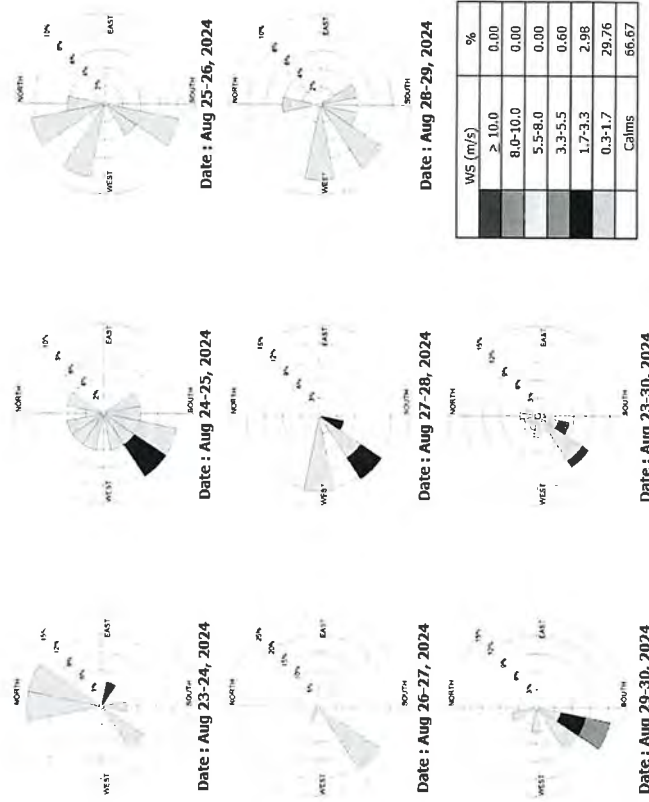
Date Received : Sep 04, 2024

Date Reported : Sep 11, 2024

Report Number : 3037269-1

Page 2 of 2

Wind Rose



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Approved by

Sarayuth Uthairont
Assistant General Manager

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Analysis / Test Report

Client : Siam City Cement Public Company Limited

99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhoh, Saraburi Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

TESTING
No. 0009

Lot ID: 2473663

Date Received : Aug 16, 2024

Date Reported : Aug 26, 2024

Report Number : 3037451-1

Page 1 of 1

Sample Number	Sample Date	Total Suspended Particulate (mg/m3)	Particulate Matter (PM-10) (mg/m3)	Barometric Pressure (mm Hg)	Atmospheric Temperature (°C)
2473663-1	Aug 06 - Aug 07, 2024	0.035	0.030	753	34
2473663-2	Aug 07 - Aug 08, 2024	0.041	0.028	753	33
2473663-3	Aug 08 - Aug 09, 2024	0.042	0.031	753	35
2473663-4	Aug 09 - Aug 10, 2024	0.056	0.036	753	34
2473663-5	Aug 10 - Aug 11, 2024	0.058	0.034	753	34
2473663-6	Aug 11 - Aug 12, 2024	0.051	0.031	753	34
2473663-7	Aug 12 - Aug 13, 2024	0.053	0.034	753	33
Guideline		0.33	0.12	-	-

Reference Method

Total Suspended Particulate : US EPA 40 CFR Part 50 Appendix B

Particulate Matter (PM-10) : US EPA 40 CFR Part 50 Appendix J

Guideline : Notification of the National Environmental Board, No.24, 2004 (B.E.2547) dated September 22, 2004

Sampled By : Teeravut Sukdee

Remark :

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

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

Approved by

Saranya Chalerthamrong
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2995-71 / BMCL

S:\Reports_Air Ambient\Days rpt (8.23AM)



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kengkhoi, Saraburi
Thailand 18260
P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2473629

Date Received : Aug 16, 2024
Date Reported : Aug 21, 2024
Report Number: 3037384-1

Page 1 of 1

Sample Description		Air Quality	
Location	พิกัด (GPS 47° 07'25.385", 16°25'568")	Nitrogen dioxide (ppm)	
Parameter		Aug 06, 2024 - Aug 13, 2024	
Measurement Date		Teeravut Sukdee	
Measurement by			

Time	2473629-1	2473629-2	2473629-3	2473629-4	2473629-5	2473629-6	2473629-7
	Aug 06, 2024	Aug 07, 2024	Aug 08, 2024	Aug 09, 2024	Aug 10, 2024	Aug 11, 2024	Aug 12, 2024
12:00 PM - 01:00 PM	0.007	0.012	0.005	0.003	0.004	0.004	0.003
01:00 PM - 02:00 PM	0.007	0.008	0.006	0.003	0.005	0.004	0.003
02:00 PM - 03:00 PM	0.006	0.010	0.006	0.011	0.008	0.004	0.003
03:00 PM - 04:00 PM	0.007	0.010	0.010	0.010	0.010	0.004	0.002
04:00 PM - 05:00 PM	0.004	0.011	0.010	0.005	0.006	0.003	0.005
05:00 PM - 06:00 PM	0.004	0.014	0.011	0.003	0.006	0.004	0.004
06:00 PM - 07:00 PM	0.008	0.015	0.013	0.003	0.013	0.004	0.004
07:00 PM - 08:00 PM	0.006	0.011	0.013	0.007	0.016	0.003	0.003
08:00 PM - 09:00 PM	0.007	0.008	0.012	0.007	0.007	0.003	0.003
09:00 PM - 10:00 PM	0.007	0.008	0.012	0.003	0.009	0.004	0.002
10:00 PM - 11:00 PM	0.008	0.010	0.009	0.003	0.005	0.005	0.006
11:00 PM - 12:00 AM	0.007	0.011	0.010	0.004	0.007	0.003	0.007
12:00 AM - 01:00 AM	0.008	0.007	0.008	0.003	0.006	0.003	0.007
01:00 AM - 02:00 AM	0.008	0.004	0.009	0.005	0.006	0.003	0.006
02:00 AM - 03:00 AM	0.013	0.005	0.010	0.004	0.004	0.003	0.005
03:00 AM - 04:00 AM	0.013	0.006	0.006	0.005	0.007	0.006	0.006
04:00 AM - 05:00 AM	0.015	0.012	0.006	0.004	0.009	0.006	0.007
05:00 AM - 06:00 AM	0.007	0.013	0.005	0.004	0.009	0.004	0.006
06:00 AM - 07:00 AM	0.007	0.018	0.004	0.004	0.005	0.006	0.006
07:00 AM - 08:00 AM	0.008	0.015	0.004	0.004	0.005	0.009	0.007
08:00 AM - 09:00 AM	0.007	0.007	0.004	0.003	0.004	0.006	0.011
09:00 AM - 10:00 AM	0.010	0.005	0.004	0.003	0.004	0.004	0.012
10:00 AM - 11:00 AM	0.012	0.004	0.003	0.004	0.004	0.003	0.004
11:00 AM - 12:00 PM	0.011	0.005	0.003	0.004	0.005	0.002	0.005
Average	0.008	0.010	0.008	0.005	0.007	0.004	0.005
1hr - Maximum	0.015	0.018	0.013	0.011	0.016	0.009	0.012
Standard 1hr - Average	0.170	0.170	0.170	0.170	0.170	0.170	0.170
Standard	: Notification of the National Environment Board No. 33, 2009 (B.E. 2552).						
Reference Method	: US EPA Method Part 50 App. F (Chemiluminescence)						

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Approved by

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S:\Reports_Air_SONON\pr (9:36AM)



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kengkhoi, Saraburi
Thailand 18260
P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2473649

Date Received : Aug 16, 2024
Date Reported : Aug 21, 2024
Report Number: 3037419-1

Page 1 of 1

Sample Description		Air Quality	
Location	พิกัด (GPS 47° 07'25.385", 16°25'568")	Sulfur Dioxide (ppm)	
Parameter		Aug 06, 2024 - Aug 13, 2024	
Measurement Date		Teeravut Sukdee	
Measurement by			

Time	2473649-1	2473649-2	2473649-3	2473649-4	2473649-5	2473649-6	2473649-7
	Aug 06, 2024	Aug 07, 2024	Aug 08, 2024	Aug 09, 2024	Aug 10, 2024	Aug 11, 2024	Aug 12, 2024
12:00 PM - 01:00 PM	0.001	0.001	<0.001	<0.001	0.001	0.001	0.001
01:00 PM - 02:00 PM	0.001	0.001	<0.001	0.001	0.001	0.001	0.001
02:00 PM - 03:00 PM	0.001	0.001	<0.001	0.001	0.001	0.001	0.001
03:00 PM - 04:00 PM	0.001	0.001	<0.001	0.001	0.001	0.001	0.001
04:00 PM - 05:00 PM	0.001	0.001	<0.001	0.001	0.001	0.001	0.001
05:00 PM - 06:00 PM	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001
06:00 PM - 07:00 PM	<0.001	<0.001	<0.001	0.001	0.001	0.001	0.001
07:00 PM - 08:00 PM	<0.001	0.001	<0.001	0.001	0.001	0.001	0.001
08:00 PM - 09:00 PM	0.001	0.001	<0.001	0.001	0.001	0.001	0.001
09:00 PM - 10:00 PM	0.001	0.001	<0.001	0.001	0.001	0.001	0.001
10:00 PM - 11:00 PM	0.002	0.001	0.001	0.001	<0.001	0.001	0.002
11:00 PM - 12:00 AM	0.002	0.001	0.001	0.001	0.001	0.001	0.002
12:00 AM - 01:00 AM	0.002	0.001	0.001	0.001	0.002	0.001	0.002
01:00 AM - 02:00 AM	0.002	0.001	0.001	0.001	0.002	0.001	0.002
02:00 AM - 03:00 AM	0.001	0.001	0.001	0.002	0.002	0.001	0.002
03:00 AM - 04:00 AM	0.001	0.001	0.001	0.001	0.002	0.001	0.002
04:00 AM - 05:00 AM	0.001	0.001	0.001	0.001	0.002	0.001	0.002
05:00 AM - 06:00 AM	0.001	0.001	0.001	0.002	0.002	0.002	0.002
06:00 AM - 07:00 AM	0.001	0.002	0.002	0.002	0.002	0.002	0.002
07:00 AM - 08:00 AM	0.001	0.001	0.002	0.002	0.002	0.002	0.001
08:00 AM - 09:00 AM	0.001	0.001	0.002	0.002	0.002	0.002	0.001
09:00 AM - 10:00 AM	0.001	<0.001	0.001	0.001	0.002	0.002	0.002
10:00 AM - 11:00 AM	0.002	<0.001	0.001	0.001	0.001	0.001	0.001
11:00 AM - 12:00 PM	0.002	<0.001	<0.001	0.001	0.001	0.001	0.001
Average	0.001	0.001	0.001	0.001	0.001	0.001	0.001
1hr - Maximum	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Standard 1hr - Average	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Standard 24 hrs - Average	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Standard	: Notification of the National Environment Board No.10, 1995 (B.E.2538), No. 21, 2001 (B.E.2544) and No.24, 2004 (B.E.2547).						
Reference Method	: US EPA Method Part 53 and 58						

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

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S:\Reports_Air_SONON\pr (9:39AM)



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhon, Saraburi
Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2473608

Date Received : Aug 16, 2024

Date Reported : Aug 21, 2024

Report Number : 3037286-1

Page 1 of 2

Sample Number 2473608-1 to 7

Parameter Wind Speed / Wind Direction

Location ทิวหิน (GPS 47P 0725385, 1625968)

Sampling Date Aug 06 - Aug 13, 2024

Sampling by Tetravit Sukdee

Time	Aug 06 - Aug 07, 2024		Aug 07 - Aug 08, 2024		Aug 08 - Aug 09, 2024		Aug 09 - Aug 10, 2024		Aug 10 - Aug 11, 2024		Aug 11 - Aug 12, 2024		Aug 12 - Aug 13, 2024	
	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)	WS (m/s)	WD (deg)
12:00 PM - 01:00 PM	1.8	254.0 WSW	0.5	206.0 SSW	3.1	286.0 WNW	2.2	258.0 WSW	2.6	228.0 SW	2.0	238.0 WSW	1.3	229.0 SW
01:00 PM - 02:00 PM	3.1	232.0 SW	1.0	242.0 WSW	0.7	207.0 SSW	1.3	208.0 SSW	2.1	219.0 SW	0.7	250.0 WSW	1.9	241.0 WSW
02:00 PM - 03:00 PM	4.2	176.0 S	1.0	172.0 S	0.0	-	-	2.3 188.0 S	0.9	264.0 W	1.8	275.0 W	1.7	225.0 SW
03:00 PM - 04:00 PM	3.1	255.0 WSW	1.3	209.0 SSW	0.0	-	-	1.4 279.0 W	0.0	-	1.3	278.0 W	1.4	240.0 WSW
04:00 PM - 05:00 PM	1.1	213.0 SSW	0.6	169.0 S	0.0	-	0.0	-	0.8	178.0 S	0.0	-	0.0	-
05:00 PM - 06:00 PM	0.0	-	0.0	-	0.7	194.0 SSW	0.3	182.0 S	0.6	182.0 S	0.0	-	0.0	-
06:00 PM - 07:00 PM	0.0	-	4.7	239.0 WSW	0.3	157.0 SSE	0.0	-	0.0	-	0.0	-	0.0	-
07:00 PM - 08:00 PM	0.0	-	3.0	230.0 SW	0.0	-	0.1	-	0.6	173.0 S	0.0	-	1.6	243.0 WSW
08:00 PM - 09:00 PM	0.0	-	0.6	137.0 SE	0.0	-	0.2	-	0.0	-	2.8	187.0 S	0.6	170.0 E
09:00 PM - 10:00 AM	3.5	259.0 W	0.2	-	0.0	-	1.7	231.0 SW	2.7	218.0 SW	0.9	94.0 E	1.3	176.0 S
10:00 PM - 11:00 PM	3.6	187.0 S	0.5	172.0 S	0.0	-	1.1	178.0 S	1.2	188.0 S	1.2	119.0 ESE	2.6	272.0 W
11:00 PM - 12:00 AM	1.1	219.0 SW	0.6	116.0 ESE	0.0	-	1.1	198.0 SSW	0.4	182.0 S	0.3	230.0 SW	0.9	258.0 WSW
12:00 AM - 01:00 AM	1.4	211.0 SSW	0.2	-	0.0	-	2.1	223.0 SW	0.8	312.0 NW	3.7	187.0 S	3.3	233.0 SW
01:00 AM - 02:00 AM	0.0	-	0.2	-	0.0	-	0.0	-	0.0	-	1.4	149.0 SSE	0.4	330.0 NNW
02:00 AM - 03:00 AM	0.0	-	0.3	175.0 S	0.2	-	0.0	-	0.4	295.0 WNW	1.0	273.0 W	0.3	338.0 NNW
03:00 AM - 04:00 AM	0.0	-	0.0	-	0.1	-	3.4	198.0 SSW	0.0	-	2.0	195.0 SSW	0.4	204.0 SSW
04:00 AM - 05:00 AM	0.0	-	0.5	98.0 E	1.4	214.0 SW	0.0	-	0.2	-	0.6	185.0 S	0.3	251.0 WSW
05:00 AM - 06:00 AM	0.0	-	0.0	-	2.3	257.0 WSW	0.0	-	0.0	-	0.5	209.0 SSW	0.0	-
06:00 AM - 07:00 AM	0.0	-	0.7	350.0 N	2.4	226.0 SW	0.7	193.0 SSW	0.3	183.0 S	2.1	179.0 S	1.7	191.0 S
07:00 AM - 08:00 AM	0.0	-	2.3	206.0 SSW	2.6	165.0 SSE	0.7	165.0 SSE	0.6	205.0 SSW	0.2	-	2.0	183.0 S
08:00 AM - 09:00 AM	1.4	179.0 S	2.8	247.0 WSW	2.6	216.0 SW	0.9	237.0 WSW	3.1	202.0 SSW	2.5	195.0 SSW	1.3	187.0 S
09:00 AM - 10:00 AM	1.7	201.0 SSW	2.1	267.0 W	0.4	191.0 S	1.7	185.0 S	2.5	253.0 WSW	1.5	193.0 SSW	1.1	193.0 SSW
10:00 AM - 11:00 AM	1.5	300.0 NNW	2.2	298.0 NNW	3.6	204.0 SSW	3.0	250.0 WSW	3.8	256.0 WSW	0.9	272.0 W	5.8	248.0 WSW
11:00 AM - 12:00 PM	1.7	217.0 SW	2.1	294.0 NNW	3.4	251.0 WSW	0.9	229.0 SW	2.6	268.0 W	2.3	176.0 S	1.4	210.0 SSW

Reference Method : Cup Anemometer & Anemometer Vane Method

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Approved by

Sarayuth Jitranont
Assistant General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhon, Saraburi
Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2473608

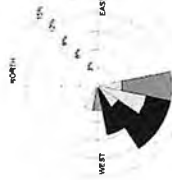
Date Received : Aug 16, 2024

Date Reported : Aug 21, 2024

Report Number : 3037286-1

Page 2 of 2

Wind Rose



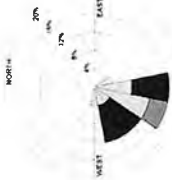
Date : Aug 06-07, 2024



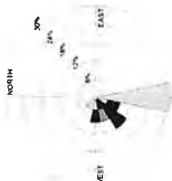
Date : Aug 07-08, 2024



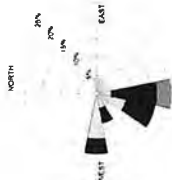
Date : Aug 08-09, 2024



Date : Aug 09-10, 2024



Date : Aug 10-11, 2024



Date : Aug 11-12, 2024

WS (m/s)	%
≥ 10.0	0.00
8.0-10.0	0.00
5.5-8.0	0.60
3.3-5.5	5.95
1.7-3.3	23.81
0.3-1.7	38.10
Calms	31.55

Date : Aug 06-13, 2024

Date : Aug 12-13, 2024

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Approved by

Sarayuth Jitranont
Assistant General Manager

ภาคผนวก ค-2

ระดับเสียงโดยทั่วไป



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhohi, Saraburi Thailand
18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494229

Date Received : Sep 04, 2024
Date Reported : Sep 10, 2024
Report Number: 3106900-1

Page 1 of 1

Sample Number	2494229-1
Parameter	Noise (Leq 24 hrs.)
Location	บ้านขี้หมู (GPS 47P 0728156, 1619149)
Measurement Date	Aug 23 - Aug 24, 2024
Measurement by	Prommee Sripabnet
Sound Level meter	Serial No. 859520

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	59.1	78.5	57.9
09:00 AM - 10:00 AM	58.4	70.5	57.6
10:00 AM - 11:00 AM	59.6	76.7	57.9
11:00 AM - 12:00 PM	59.4	77.2	58.0
12:00 PM - 01:00 PM	60.1	73.7	58.8
01:00 PM - 02:00 PM	59.7	75.8	58.9
02:00 PM - 03:00 PM	60.4	72.0	59.7
03:00 PM - 04:00 PM	60.1	68.7	59.5
04:00 PM - 05:00 PM	60.1	76.3	59.3
05:00 PM - 06:00 PM	60.1	77.0	59.4
06:00 PM - 07:00 PM	59.7	79.5	58.9
07:00 PM - 08:00 PM	59.2	81.8	58.3
08:00 PM - 09:00 PM	59.6	70.7	58.9
09:00 PM - 10:00 PM	59.6	80.6	58.8
10:00 PM - 11:00 PM	58.9	79.6	58.2
11:00 PM - 12:00 AM	58.8	77.5	58.1
12:00 AM - 01:00 AM	59.2	71.9	58.4
01:00 AM - 02:00 AM	60.1	79.6	58.9
02:00 AM - 03:00 AM	61.1	77.7	59.6
03:00 AM - 04:00 AM	60.3	80.2	59.4
04:00 AM - 05:00 AM	59.9	79.4	58.9
05:00 AM - 06:00 AM	60.1	82.7	58.1
06:00 AM - 07:00 AM	59.4	83.5	57.9
07:00 AM - 08:00 AM	58.7	76.8	57.6
Leq Average 24 hrs. (dB(A))	59.7	83.5	58.8
Lmax (dB(A))			
L90 (dB(A))			
Ldn (dB(A))	66.2		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่ปลอดภัยจากผลกระทบ
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่ปลอดภัยจากผลกระทบ
3. ประกาศ พ.ศ. 2548

Technical Management
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Orawan Rakhyong
Scientist (3)

Approved by

Supt S.

Supot Salamteah
Section Head

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhohi, Saraburi Thailand
18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494229

Date Received : Sep 04, 2024
Date Reported : Sep 10, 2024
Report Number: 3106900-1

Page 1 of 1

Sample Number	2494229-2
Parameter	Noise (Leq 24 hrs.)
Location	บ้านขี้หมู (GPS 47P 0728156, 1619149)
Measurement Date	Aug 24 - Aug 25, 2024
Measurement by	Prommee Sripabnet
Sound Level meter	Serial No. 859520

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	58.3	78.0	57.4
09:00 AM - 10:00 AM	59.3	83.6	58.4
10:00 AM - 11:00 AM	58.9	74.4	58.2
11:00 AM - 12:00 PM	58.7	75.7	57.7
12:00 PM - 01:00 PM	60.1	82.9	58.6
01:00 PM - 02:00 PM	60.2	70.9	59.5
02:00 PM - 03:00 PM	61.4	77.0	60.7
03:00 PM - 04:00 PM	62.4	79.7	61.3
04:00 PM - 05:00 PM	60.9	76.7	60.1
05:00 PM - 06:00 PM	61.2	81.7	60.3
06:00 PM - 07:00 PM	62.2	73.5	61.4
07:00 PM - 08:00 PM	60.9	80.1	60.2
08:00 PM - 09:00 PM	60.0	70.8	59.4
09:00 PM - 10:00 PM	60.1	78.3	59.6
10:00 PM - 11:00 PM	59.8	74.0	59.1
11:00 PM - 12:00 AM	59.5	82.0	58.7
12:00 AM - 01:00 AM	59.6	73.5	58.8
01:00 AM - 02:00 AM	60.1	76.6	59.1
02:00 AM - 03:00 AM	60.8	75.7	59.3
03:00 AM - 04:00 AM	60.4	81.9	59.1
04:00 AM - 05:00 AM	59.8	75.7	58.6
05:00 AM - 06:00 AM	59.2	79.0	58.2
06:00 AM - 07:00 AM	60.5	83.6	57.9
07:00 AM - 08:00 AM	58.8	77.4	57.8
Leq Average 24 hrs. (dB(A))	60.3	83.6	59.1
Lmax (dB(A))			
L90 (dB(A))			
Ldn (dB(A))	66.5	115	
Standard (dB(A))	70		

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่ปลอดภัยจากผลกระทบ
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่ปลอดภัยจากผลกระทบ
3. ประกาศ พ.ศ. 2548

Technical Management
Orawan R.

Orawan Rakhyong
Scientist (3)

Approved by

Supt S.

Supot Salamteah
Section Head

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhol, Saraburi Thailand
18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2494229

Date Received : Sep 04, 2024

Date Reported : Sep 10, 2024

Report Number: 3106902-1

Page 1 of 1

Sample Number 2494229-3
Parameter Noise (Leq 24 hrs.)
Location ทุ่งขี้หมู (GPS 47P 0728156, 1619149)
Measurement Date Aug 25 - Aug 26, 2024
Measurement by Promnee Sripanet
Sound Level meter Serial No. 858520

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	58.9	70.7	58.1
09:00 AM - 10:00 AM	59.1	76.4	58.1
10:00 AM - 11:00 AM	59.6	81.4	57.8
11:00 AM - 12:00 PM	58.2	78.2	57.4
12:00 PM - 01:00 PM	58.5	79.1	57.7
01:00 PM - 02:00 PM	58.8	72.4	57.9
02:00 PM - 03:00 PM	59.9	70.8	58.7
03:00 PM - 04:00 PM	59.5	66.5	58.8
04:00 PM - 05:00 PM	59.9	74.8	59.2
05:00 PM - 06:00 PM	59.8	78.1	59.1
06:00 PM - 07:00 PM	59.3	79.6	58.3
07:00 PM - 08:00 PM	59.0	84.8	58.2
08:00 PM - 09:00 PM	59.2	75.9	58.5
09:00 PM - 10:00 PM	59.5	82.0	58.7
10:00 PM - 11:00 PM	59.6	77.0	58.9
11:00 PM - 12:00 AM	59.6	75.7	58.9
12:00 AM - 01:00 AM	59.6	80.2	58.8
01:00 AM - 02:00 AM	59.8	77.2	59.1
02:00 AM - 03:00 AM	60.6	73.6	59.5
03:00 AM - 04:00 AM	60.2	73.2	59.3
04:00 AM - 05:00 AM	59.5	79.5	58.4
05:00 AM - 06:00 AM	59.2	82.1	58.1
06:00 AM - 07:00 AM	58.6	80.5	57.9
07:00 AM - 08:00 AM	58.7	79.4	57.7

Leq Average 24 hrs. (dB(A))

Lmax (dB(A))

L90 (dB(A))

L10 (dB(A))

Standard (dB(A))

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดมาตรฐานสิ่งแวดล้อมทางอากาศ พ.ศ. 2540 (พ.ศ. 2540) สำหรับเขตโรงงานอุตสาหกรรม

2. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการวัด และระดับเสียงค่าการประเมินผลกระทบ

ตาม พ.ศ. 2548

59.4

84.8

58.4

58.4

115

115

Technical Management

Orawan R.

Orawan Rakying

Scientist (3)

Approved by

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S:Report_Air Noise pr (3:18PM)



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhol, Saraburi Thailand
18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2494229

Date Received : Sep 04, 2024

Date Reported : Sep 10, 2024

Report Number: 3106903-1

Page 1 of 1

Sample Number 2494229-4
Parameter Noise (Leq 24 hrs.)
Location ทุ่งขี้หมู (GPS 47P 0728156, 1619149)
Measurement Date Aug 26 - Aug 27, 2024
Measurement by Promnee Sripanet
Sound Level meter Serial No. 858520

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	59.2	80.2	58.0
09:00 AM - 10:00 AM	59.0	76.1	58.1
10:00 AM - 11:00 AM	59.4	78.7	58.6
11:00 AM - 12:00 PM	59.1	74.7	58.2
12:00 PM - 01:00 PM	59.6	71.6	58.4
01:00 PM - 02:00 PM	59.9	78.3	58.9
02:00 PM - 03:00 PM	60.7	75.1	59.5
03:00 PM - 04:00 PM	60.2	78.7	59.4
04:00 PM - 05:00 PM	60.3	74.4	59.5
05:00 PM - 06:00 PM	60.2	79.2	59.4
06:00 PM - 07:00 PM	60.2	74.0	59.4
07:00 PM - 08:00 PM	59.7	71.0	58.9
08:00 PM - 09:00 PM	59.1	78.5	58.3
09:00 PM - 10:00 PM	58.7	76.1	57.9
10:00 PM - 11:00 PM	58.8	79.9	57.9
11:00 PM - 12:00 AM	58.5	68.5	57.9
12:00 AM - 01:00 AM	58.7	67.7	58.0
01:00 AM - 02:00 AM	59.5	76.2	58.4
02:00 AM - 03:00 AM	60.3	72.6	58.8
03:00 AM - 04:00 AM	61.3	79.7	59.5
04:00 AM - 05:00 AM	59.7	77.6	58.4
05:00 AM - 06:00 AM	58.7	72.0	58.0
06:00 AM - 07:00 AM	58.7	78.9	57.9
07:00 AM - 08:00 AM	58.7	78.3	57.7

Leq Average 24 hrs. (dB(A))

Lmax (dB(A))

L90 (dB(A))

L10 (dB(A))

Standard (dB(A))

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดมาตรฐานสิ่งแวดล้อมทางอากาศ พ.ศ. 2540 (พ.ศ. 2540) สำหรับเขตโรงงานอุตสาหกรรม

2. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการวัด และระดับเสียงค่าการประเมินผลกระทบ

ตาม พ.ศ. 2548

59.6

80.2

65.9

70

115

115

Technical Management

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Scientist (3)

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S:Report_Air Noise pr (3:18PM)



Analysis / Test Report

Client : Siam City Cement Public Company Limited

99/219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2494229

Date Received : Sep 04, 2024

Date Reported : Sep 10, 2024

Report Number: 3106904-1

Page 1 of 1

Sample Number	2494229-5
Parameter	Noise (Leq 24 hrs.)
Location	บ้านขี้หมู (GPS 47P 0728156, 1619149)
Measurement Date	Aug 27 - Aug 28, 2024
Measurement by	Prommee Sripabnet
Sound Level meter	Serial No. 858520

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	59.5	78.9	58.1
09:00 AM - 10:00 AM	58.2	78.9	57.3
10:00 AM - 11:00 AM	58.1	77.6	57.3
11:00 AM - 12:00 PM	59.1	70.7	57.4
12:00 PM - 01:00 PM	58.0	77.6	58.0
01:00 PM - 02:00 PM	59.3	81.7	58.2
02:00 PM - 03:00 PM	58.9	70.3	58.1
03:00 PM - 04:00 PM	59.3	73.9	58.5
04:00 PM - 05:00 PM	59.5	73.3	58.7
05:00 PM - 06:00 PM	59.2	74.7	58.4
06:00 PM - 07:00 PM	56.8	79.3	57.9
07:00 PM - 08:00 PM	56.8	76.0	56.0
08:00 PM - 09:00 PM	56.8	79.7	57.8
09:00 PM - 10:00 PM	59.9	83.1	58.0
10:00 PM - 11:00 PM	59.0	80.3	58.3
11:00 PM - 12:00 AM	59.3	78.5	58.6
12:00 AM - 01:00 AM	59.1	74.3	58.4
01:00 AM - 02:00 AM	59.7	72.4	58.6
02:00 AM - 03:00 AM	60.8	74.7	59.3
03:00 AM - 04:00 AM	62.0	72.9	59.9
04:00 AM - 05:00 AM	59.9	77.4	58.5
05:00 AM - 06:00 AM	56.8	78.1	57.7
06:00 AM - 07:00 AM	56.6	79.6	57.7
07:00 AM - 08:00 AM	58.4	79.7	57.5
Leq Average 24 hrs. (dB(A))	59.3	83.1	58.1
Lmax (dB(A))			
L90 (dB(A))			
Ldn (dB(A))	66.1	115	
Standard (dB(A))	70		
Reference Method : ISO1996-1 and 1996-2			
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป			
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดระดับเสียงการรบกวน และระดับเสียงที่อาจก่อให้เกิดการรบกวน			
พ.ศ. 2548			

Orawan R.

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Orawan Rakying
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Section Head

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S:\Reports_Air Noise rpt (319PM)

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company



Analysis / Test Report

Client : Siam City Cement Public Company Limited

99/219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2494229

Date Received : Sep 04, 2024

Date Reported : Sep 10, 2024

Report Number: 3106905-1

Page 1 of 1

Sample Number	2494229-6
Parameter	Noise (Leq 24 hrs.)
Location	บ้านขี้หมู (GPS 47P 0728156, 1619149)
Measurement Date	Aug 28 - Aug 29, 2024
Measurement by	Prommee Sripabnet
Sound Level meter	Serial No. 858520

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	59.0	75.9	57.6
09:00 AM - 10:00 AM	58.3	78.8	57.5
10:00 AM - 11:00 AM	58.9	81.7	57.8
11:00 AM - 12:00 PM	59.6	92.4	58.1
12:00 PM - 01:00 PM	60.2	75.9	58.7
01:00 PM - 02:00 PM	59.9	79.4	58.5
02:00 PM - 03:00 PM	59.7	81.6	58.7
03:00 PM - 04:00 PM	60.7	80.8	59.4
04:00 PM - 05:00 PM	59.8	78.3	58.9
05:00 PM - 06:00 PM	59.3	78.6	58.4
06:00 PM - 07:00 PM	59.5	80.6	58.4
07:00 PM - 08:00 PM	59.3	73.4	58.2
08:00 PM - 09:00 PM	59.5	73.4	58.7
09:00 PM - 10:00 PM	61.4	74.5	60.3
10:00 PM - 11:00 PM	59.4	73.9	58.6
11:00 PM - 12:00 AM	59.1	81.2	58.3
12:00 AM - 01:00 AM	59.1	79.0	58.3
01:00 AM - 02:00 AM	59.6	78.1	58.4
02:00 AM - 03:00 AM	60.3	79.6	58.9
03:00 AM - 04:00 AM	59.9	80.9	58.6
04:00 AM - 05:00 AM	59.3	80.6	58.2
05:00 AM - 06:00 AM	59.8	81.7	57.8
06:00 AM - 07:00 AM	59.6	81.9	57.6
07:00 AM - 08:00 AM	58.5	82.7	57.4
Leq Average 24 hrs. (dB(A))	59.6	92.4	58.4
Lmax (dB(A))			
L90 (dB(A))			
Ldn (dB(A))	66.0	115	
Standard (dB(A))	70		
Reference Method : ISO1996-1 and 1996-2			
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป			
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดระดับเสียงการรบกวน และระดับเสียงที่อาจก่อให้เกิดการรบกวน			
พ.ศ. 2548			

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S:\Reports_Air Noise rpt (319PM)

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi Thailand
18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494229

Date Received : Sep 04, 2024
Date Reported : Sep 10, 2024
Report Number: 3106906-1

Page 1 of 1

Sample Number	2494229-7
Parameter	Noise (Leq 24 hrs.)
Location	โรงงานปูนซีเมนต์ (GPS 47P 0728156, 1619149)
Measurement Date	Aug 29 - Aug 30, 2024
Measurement by	Prommee Sripatnet
Sound Level meter	Serial No. 858520

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	58.2	78.8	57.3
09:00 AM - 10:00 AM	59.4	84.1	57.7
10:00 AM - 11:00 AM	59.3	80.1	58.3
11:00 AM - 12:00 PM	59.2	76.4	58.2
12:00 PM - 01:00 PM	59.3	71.6	58.2
01:00 PM - 02:00 PM	59.3	73.4	58.3
02:00 PM - 03:00 PM	62.7	76.7	59.3
03:00 PM - 04:00 PM	58.9	79.1	58.0
04:00 PM - 05:00 PM	58.9	81.5	58.0
05:00 PM - 06:00 PM	59.5	78.7	58.6
06:00 PM - 07:00 PM	59.4	77.7	58.6
07:00 PM - 08:00 PM	59.5	67.8	58.3
08:00 PM - 09:00 PM	59.5	77.5	58.0
09:00 PM - 10:00 PM	58.6	81.5	57.8
10:00 PM - 11:00 PM	58.7	81.9	57.8
11:00 PM - 12:00 AM	58.6	77.5	57.8
12:00 AM - 01:00 AM	59.0	70.1	58.1
01:00 AM - 02:00 AM	59.7	74.2	58.3
02:00 AM - 03:00 AM	60.3	82.2	58.8
03:00 AM - 04:00 AM	59.6	71.9	58.6
04:00 AM - 05:00 AM	58.9	80.6	57.7
05:00 AM - 06:00 AM	59.3	80.6	57.9
06:00 AM - 07:00 AM	59.5	81.5	57.6
07:00 AM - 08:00 AM	58.8	76.2	57.9

Leq Average 24 hrs. (dB(A))	59.4
Lmax (dB(A))	84.1
L90 (dB(A))	58.0
Ldn (dB(A))	65.7
Standard (dB(A))	70

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงมาตรฐาน และระดับเสียงที่อาจก่อให้เกิดการรบกวน
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงมาตรฐาน และระดับเสียงที่อาจก่อให้เกิดการรบกวน
พ.ร.บ. พ.ศ. 2548

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S:Reports_Air Noise pr (3 19PM)



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi Thailand
18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494229

Date Received : Sep 04, 2024
Date Reported : Sep 10, 2024
Report Number: 3106907-1

Page 1 of 1

Sample Number	2494229-8
Parameter	Noise (Leq 24 hrs.)
Location	โรงงานปูนซีเมนต์ (GPS 47P 0722987, 1616402)
Measurement Date	Aug 23 - Aug 24, 2024
Measurement by	Prommee Sripatnet
Sound Level meter	Serial No. 1022261

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	51.8	71.7	47.8
09:00 AM - 10:00 AM	53.6	76.1	47.6
10:00 AM - 11:00 AM	52.9	83.4	45.9
11:00 AM - 12:00 PM	46.8	67.5	44.1
12:00 PM - 01:00 PM	52.2	81.3	44.9
01:00 PM - 02:00 PM	48.3	66.1	45.6
02:00 PM - 03:00 PM	51.7	78.1	45.7
03:00 PM - 04:00 PM	51.1	80.3	46.9
04:00 PM - 05:00 PM	51.2	72.3	49.1
05:00 PM - 06:00 PM	52.3	61.6	51.0
06:00 PM - 07:00 PM	55.4	66.4	53.7
07:00 PM - 08:00 PM	56.6	61.0	55.7
08:00 PM - 09:00 PM	55.5	72.5	54.5
09:00 PM - 10:00 PM	54.9	68.8	53.8
10:00 PM - 11:00 PM	53.0	66.0	51.7
11:00 PM - 12:00 AM	54.2	88.8	50.4
12:00 AM - 01:00 AM	51.7	58.4	49.9
01:00 AM - 02:00 AM	56.3	79.5	49.1
02:00 AM - 03:00 AM	48.9	54.5	46.8
03:00 AM - 04:00 AM	47.9	55.4	46.3
04:00 AM - 05:00 AM	47.6	59.0	46.4
05:00 AM - 06:00 AM	50.8	81.2	48.0
06:00 AM - 07:00 AM	53.7	82.6	49.5
07:00 AM - 08:00 AM	49.3	69.3	47.0

Leq Average 24 hrs. (dB(A))	52.8
Lmax (dB(A))	83.8
L90 (dB(A))	47.8
Ldn (dB(A))	58.9
Standard (dB(A))	70

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงมาตรฐาน และระดับเสียงที่อาจก่อให้เกิดการรบกวน
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงมาตรฐาน และระดับเสียงที่อาจก่อให้เกิดการรบกวน
พ.ร.บ. พ.ศ. 2548

Orawan R.

Orawan Rakyong
Scientist (3)

Approved by

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2995-71/BMAL

S:Reports_Air Noise pr (3 20PM)



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitapara Road, Tambon Tapkwung, Amphur Kankhohi, Saraburi Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24942229
Date Received : Sep 04, 2024
Date Reported : Sep 10, 2024
Report Number: 3106908-1

Page 1 of 1

Sample Number	2494229-9
Parameter	Noise (Leq 24 hrs.)
Location	โรงงานปูนซีเมนต์ (GPS 47P 0722987, 1616402)
Measurement Date	Aug 24 - Aug 25, 2024
Measurement by	Prommee Sripaibnet
Sound Level meter	Serial No. 1022261

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	46.9	69.8	44.3
09:00 AM - 10:00 AM	50.2	71.5	45.1
10:00 AM - 11:00 AM	47.3	65.5	45.6
11:00 AM - 12:00 PM	47.0	77.6	44.9
12:00 PM - 01:00 PM	47.8	74.8	45.1
01:00 PM - 02:00 PM	57.1	90.0	45.0
02:00 PM - 03:00 PM	50.3	72.0	44.8
03:00 PM - 04:00 PM	49.3	66.6	46.8
04:00 PM - 05:00 PM	50.4	67.6	48.2
05:00 PM - 06:00 PM	51.0	64.0	49.0
06:00 PM - 07:00 PM	50.5	64.6	48.8
07:00 PM - 08:00 PM	58.6	72.9	55.7
08:00 PM - 09:00 PM	58.2	80.7	54.2
09:00 PM - 10:00 PM	56.6	70.5	55.3
10:00 PM - 11:00 PM	55.6	70.4	54.6
11:00 PM - 12:00 AM	53.7	66.5	52.5
12:00 AM - 01:00 AM	52.7	58.3	50.8
01:00 AM - 02:00 AM	55.1	81.0	49.8
02:00 AM - 03:00 AM	49.6	64.8	48.0
03:00 AM - 04:00 AM	48.9	65.0	46.9
04:00 AM - 05:00 AM	48.3	61.9	46.3
05:00 AM - 06:00 AM	50.9	73.1	47.4
06:00 AM - 07:00 AM	52.4	83.7	47.2
07:00 AM - 08:00 AM	50.9	71.6	47.1
Leq Average 24 hrs. (dB(A))	53.2	90.0	
Lmax (dB(A))			47.2
L90 (dB(A))			
Ldn (dB(A))	59.2		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงที่โรงงาน และสถานประกอบการตามกฎหมาย
2. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงที่โรงงาน และสถานประกอบการตามกฎหมาย
โรงงาน พ.ศ. 2548

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S:Reports_Air Noise pr (3:20PM)

2995-71/ ENAIL



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitapara Road, Tambon Tapkwung, Amphur Kankhohi, Saraburi Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24942229
Date Received : Sep 04, 2024
Date Reported : Sep 10, 2024
Report Number: 3106909-1

Page 1 of 1

Sample Number	2494229-10
Parameter	Noise (Leq 24 hrs.)
Location	โรงงานปูนซีเมนต์ (GPS 47P 0722987, 1616402)
Measurement Date	Aug 25 - Aug 26, 2024
Measurement by	Prommee Sripaibnet
Sound Level meter	Serial No. 1022261

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	49.3	72.8	44.5
09:00 AM - 10:00 AM	52.0	76.4	45.1
10:00 AM - 11:00 AM	49.0	70.3	45.4
11:00 AM - 12:00 PM	53.9	74.7	50.2
12:00 PM - 01:00 PM	50.0	82.0	44.2
01:00 PM - 02:00 PM	45.4	60.5	44.0
02:00 PM - 03:00 PM	50.7	72.8	44.2
03:00 PM - 04:00 PM	49.3	74.0	45.6
04:00 PM - 05:00 PM	53.0	84.4	46.1
05:00 PM - 06:00 PM	49.5	73.1	46.3
06:00 PM - 07:00 PM	51.4	83.1	48.1
07:00 PM - 08:00 PM	55.4	62.1	53.7
08:00 PM - 09:00 PM	54.3	62.0	52.9
09:00 PM - 10:00 PM	51.4	69.1	49.4
10:00 PM - 11:00 PM	50.6	67.6	48.4
11:00 PM - 12:00 AM	49.3	55.6	47.7
12:00 AM - 01:00 AM	47.7	53.7	46.4
01:00 AM - 02:00 AM	48.9	73.1	45.2
02:00 AM - 03:00 AM	47.0	63.1	45.5
03:00 AM - 04:00 AM	55.0	79.5	44.8
04:00 AM - 05:00 AM	47.2	64.3	45.0
05:00 AM - 06:00 AM	51.3	74.1	44.8
06:00 AM - 07:00 AM	48.5	69.0	46.0
07:00 AM - 08:00 AM	48.3	73.6	45.0
Leq Average 24 hrs. (dB(A))	51.1		
Lmax (dB(A))		84.4	45.5
L90 (dB(A))			
Ldn (dB(A))	56.9		
Standard (dB(A))	70	115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงที่โรงงาน และสถานประกอบการตามกฎหมาย
2. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงที่โรงงาน และสถานประกอบการตามกฎหมาย
โรงงาน พ.ศ. 2548

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2995-71/ ENAIL

S:Reports_Air Noise pr (3:20PM)



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhoh, Saraburi Thailand 18260
P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494229
Date Received : Sep 04, 2024
Date Reported : Sep 10, 2024
Report Number: 3106910-1

Page 1 of 1

Sample Number 2494229-11
Parameter Noise (Leq 24 hrs.)
Location โรงโม่ปูนท่าหินหวด (GPS 47P 0722987, 1616402)
Measurement Date Aug 26 - Aug 27, 2024
Measurement by Prommee Sripabnet
Sound Level meter Serial No. 1022261

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	47.8	68.9	45.1
09:00 AM - 10:00 AM	48.9	67.9	45.5
10:00 AM - 11:00 AM	49.1	72.0	45.9
11:00 AM - 12:00 PM	48.2	73.8	45.0
12:00 PM - 01:00 PM	48.4	62.8	46.2
01:00 PM - 02:00 PM	50.2	78.7	46.4
02:00 PM - 03:00 PM	52.1	74.1	46.7
03:00 PM - 04:00 PM	48.9	63.4	46.2
04:00 PM - 05:00 PM	50.4	82.2	45.7
05:00 PM - 06:00 PM	53.6	69.7	48.8
06:00 PM - 07:00 PM	48.0	58.5	46.7
07:00 PM - 08:00 PM	52.5	61.9	50.8
08:00 PM - 09:00 PM	53.3	69.3	51.3
09:00 PM - 10:00 PM	53.5	67.8	51.9
10:00 PM - 11:00 PM	53.0	65.4	50.9
11:00 PM - 12:00 AM	51.0	76.0	48.6
12:00 AM - 01:00 AM	50.8	59.6	49.2
01:00 AM - 02:00 AM	52.6	76.0	47.8
02:00 AM - 03:00 AM	48.6	59.5	47.4
03:00 AM - 04:00 AM	48.3	66.1	46.0
04:00 AM - 05:00 AM	47.0	60.3	45.3
05:00 AM - 06:00 AM	52.5	75.0	47.2
06:00 AM - 07:00 AM	52.0	72.6	48.5
07:00 AM - 08:00 AM	50.4	69.6	46.9

Leq Average 24 hrs. (dB(A)) 50.9
Lmax (dB(A)) 82.2
L90 (dB(A)) 46.7
Ldn (dB(A))
Standard (dB(A)) 70
Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงมาตรฐาน และระดับเสียงที่อาจก่อให้เกิดผลกระทบต่อสุขภาพ
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงมาตรฐาน และระดับเสียงที่อาจก่อให้เกิดผลกระทบต่อสุขภาพ
พ.ร.บ. พ.ศ. 2548

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhoh, Saraburi Thailand 18260
P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494229
Date Received : Sep 04, 2024
Date Reported : Sep 10, 2024
Report Number: 3106911-1

Page 1 of 1

Sample Number 2494229-12
Parameter Noise (Leq 24 hrs.)
Location โรงโม่ปูนท่าหินหวด (GPS 47P 0722987, 1616402)
Measurement Date Aug 27 - Aug 28, 2024
Measurement by Prommee Sripabnet
Sound Level meter Serial No. 1022261

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	49.2	65.9	46.3
09:00 AM - 10:00 AM	50.3	69.9	46.6
10:00 AM - 11:00 AM	49.9	71.4	46.7
11:00 AM - 12:00 PM	48.8	66.1	45.7
12:00 PM - 01:00 PM	49.4	73.5	46.2
01:00 PM - 02:00 PM	50.0	78.2	46.6
02:00 PM - 03:00 PM	50.4	72.9	45.8
03:00 PM - 04:00 PM	49.6	71.1	46.0
04:00 PM - 05:00 PM	52.6	67.4	48.1
05:00 PM - 06:00 PM	50.9	79.9	48.9
06:00 PM - 07:00 PM	49.4	63.9	47.6
07:00 PM - 08:00 PM	53.2	62.3	51.6
08:00 PM - 09:00 PM	53.1	59.1	51.7
09:00 PM - 10:00 PM	52.4	69.4	50.5
10:00 PM - 11:00 PM	52.0	61.9	50.4
11:00 PM - 12:00 AM	51.1	69.3	48.6
12:00 AM - 01:00 AM	49.4	60.9	47.0
01:00 AM - 02:00 AM	59.1	78.0	50.2
02:00 AM - 03:00 AM	51.4	74.6	47.3
03:00 AM - 04:00 AM	47.7	65.1	45.7
04:00 AM - 05:00 AM	50.7	62.0	46.7
05:00 AM - 06:00 AM	52.8	68.4	48.5
06:00 AM - 07:00 AM	53.7	80.0	49.1
07:00 AM - 08:00 AM	52.4	78.4	46.8

Leq Average 24 hrs. (dB(A)) 52.0
Lmax (dB(A)) 80.0
L90 (dB(A))
Ldn (dB(A)) 59.4
Standard (dB(A)) 70
Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงมาตรฐาน และระดับเสียงที่อาจก่อให้เกิดผลกระทบต่อสุขภาพ
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงมาตรฐาน และระดับเสียงที่อาจก่อให้เกิดผลกระทบต่อสุขภาพ
พ.ร.บ. พ.ศ. 2548

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkroi, Saraburi Thailand 18260
Lot ID: 2494229
Date Received : Sep 04, 2024
Date Reported : Sep 10, 2024
Report Number: 3106912-1

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Page 1 of 1

Sample Number	2494229-13
Parameter	Noise (Leq 24 hrs.)
Location	โรงงานปูนซีเมนต์ทาง (GPS 47P 0722987, 1616402)
Measurement Date	Aug 28 - Aug 29, 2024
Measurement by	Prommee Sripabnet
Sound Level meter	Serial No. 1022261

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	49.1	69.2	44.7
09:00 AM - 10:00 AM	49.5	71.6	45.0
10:00 AM - 11:00 AM	47.5	75.1	45.0
11:00 AM - 12:00 PM	49.1	75.8	45.5
12:00 PM - 01:00 PM	49.2	70.1	45.1
01:00 PM - 02:00 PM	48.9	68.4	45.0
02:00 PM - 03:00 PM	52.6	75.3	46.6
03:00 PM - 04:00 PM	49.0	78.0	45.3
04:00 PM - 05:00 PM	50.9	72.7	48.6
05:00 PM - 06:00 PM	51.5	73.0	49.6
06:00 PM - 07:00 PM	56.6	63.3	51.9
07:00 PM - 08:00 PM	56.0	80.1	53.2
08:00 PM - 09:00 PM	55.2	71.8	52.1
09:00 PM - 10:00 PM	54.5	67.3	51.1
10:00 PM - 11:00 PM	51.0	65.1	48.5
11:00 PM - 12:00 AM	52.1	64.3	49.4
12:00 AM - 01:00 AM	50.9	55.7	49.0
01:00 AM - 02:00 AM	50.7	70.4	48.0
02:00 AM - 03:00 AM	49.8	60.5	47.6
03:00 AM - 04:00 AM	48.4	65.7	46.0
04:00 AM - 05:00 AM	48.5	68.0	45.9
05:00 AM - 06:00 AM	53.4	70.2	49.5
06:00 AM - 07:00 AM	54.9	70.9	51.4
07:00 AM - 08:00 AM	53.3	85.3	46.5

Leq Average 24 hrs. (dB(A))	52.2
Lmax (dB(A))	85.3
L90 (dB(A))	47.6
Ldn (dB(A))	58.1
Standard (dB(A))	70

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานสิ่งแวดล้อมทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดระดับเสียงการรบกวน และระดับเสียงที่โผลาการรบกวน
โรงงาน พ.ศ. 2548

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkroi, Saraburi Thailand 18260
Lot ID: 2494229
Date Received : Sep 04, 2024
Date Reported : Sep 10, 2024
Report Number: 3106913-1

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Page 1 of 1

Sample Number	2494229-14
Parameter	Noise (Leq 24 hrs.)
Location	โรงงานปูนซีเมนต์ทาง (GPS 47P 0722987, 1616402)
Measurement Date	Aug 29 - Aug 30, 2024
Measurement by	Prommee Sripabnet
Sound Level meter	Serial No. 1022261

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	52.3	77.9	47.6
09:00 AM - 10:00 AM	52.2	68.3	49.4
10:00 AM - 11:00 AM	52.3	72.5	48.9
11:00 AM - 12:00 PM	50.6	73.1	47.5
12:00 PM - 01:00 PM	49.9	72.6	47.1
01:00 PM - 02:00 PM	56.9	88.1	51.5
02:00 PM - 03:00 PM	54.8	76.4	50.7
03:00 PM - 04:00 PM	54.1	82.9	51.1
04:00 PM - 05:00 PM	52.8	79.5	49.0
05:00 PM - 06:00 PM	51.9	59.1	50.3
06:00 PM - 07:00 PM	53.1	60.4	50.9
07:00 PM - 08:00 PM	55.3	62.5	53.3
08:00 PM - 09:00 PM	53.4	73.8	51.5
09:00 PM - 10:00 PM	52.5	68.7	50.1
10:00 PM - 11:00 PM	52.0	58.1	50.0
11:00 PM - 12:00 AM	52.6	69.8	48.7
12:00 AM - 01:00 AM	51.2	59.6	48.3
01:00 AM - 02:00 AM	54.4	78.4	48.0
02:00 AM - 03:00 AM	49.4	60.1	47.4
03:00 AM - 04:00 AM	54.2	76.2	48.0
04:00 AM - 05:00 AM	49.3	58.8	47.6
05:00 AM - 06:00 AM	52.0	70.3	48.7
06:00 AM - 07:00 AM	52.2	75.4	48.4
07:00 AM - 08:00 AM	50.4	69.8	47.0

Leq Average 24 hrs. (dB(A))	52.9
Lmax (dB(A))	88.1
L90 (dB(A))	48.7
Ldn (dB(A))	58.8
Standard (dB(A))	115

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานสิ่งแวดล้อมทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดระดับเสียงการรบกวน และระดับเสียงที่โผลาการรบกวน
โรงงาน พ.ศ. 2548

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company



Analysis / Test Report

Client : Siam City Cement Public Company Limited

99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhroi, Saraburi Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2494229

Date Received : Sep 04, 2024
Date Reported : Sep 10, 2024
Report Number: 3106914-1

Page 1 of 1

Sample Number	2494229-15
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณใกล้ (GPS 47P 0726659, 1619824)
Measurement Date	Aug 23 - Aug 24, 2024
Measurement by	Prommee Sripabnet
Sound Level meter	Serial No. 623381

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	56.2	80.7	41.2
09:00 AM - 10:00 AM	57.1	83.9	41.5
10:00 AM - 11:00 AM	53.8	77.1	42.5
11:00 AM - 12:00 PM	52.6	77.6	41.1
12:00 PM - 01:00 PM	56.7	81.7	41.0
01:00 PM - 02:00 PM	47.7	73.6	41.3
02:00 PM - 03:00 PM	46.0	66.1	40.0
03:00 PM - 04:00 PM	54.2	77.6	42.6
04:00 PM - 05:00 PM	57.2	83.2	42.2
05:00 PM - 06:00 PM	56.2	80.4	39.2
06:00 PM - 07:00 PM	55.7	69.2	48.2
07:00 PM - 08:00 PM	62.2	77.4	52.7
08:00 PM - 09:00 PM	57.1	72.1	45.8
09:00 PM - 10:00 PM	51.1	64.1	44.1
10:00 PM - 11:00 PM	56.9	81.3	46.4
11:00 PM - 12:00 AM	60.4	87.3	42.2
12:00 AM - 01:00 AM	59.4	71.2	39.6
01:00 AM - 02:00 AM	60.9	87.9	38.8
02:00 AM - 03:00 AM	50.9	71.3	37.5
03:00 AM - 04:00 AM	52.4	70.2	37.0
04:00 AM - 05:00 AM	50.8	75.8	40.3
05:00 AM - 06:00 AM	58.9	84.6	43.6
06:00 AM - 07:00 AM	57.4	87.8	43.8
07:00 AM - 08:00 AM	49.7	75.7	43.9

Leq Average 24 hrs. (dB(A))	56.7
Lmax (dB(A))	87.9
L90 (dB(A))	41.5
Ldn (dB(A))	
Standard (dB(A))	70

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศกระทรวงมหาดไทย เรื่อง กำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดระดับเสียงการรบกวน และระดับเสียงที่ได้จากการประกอบกิจการ
โรงงาน พ.ศ. 2548

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Analysis / Test Report

Client : Siam City Cement Public Company Limited

99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhroi, Saraburi Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2494229

Date Received : Sep 04, 2024
Date Reported : Sep 10, 2024
Report Number: 3106915-1

Page 1 of 1

Sample Number	2494229-16
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณใกล้ (GPS 47P 0726659, 1619824)
Measurement Date	Aug 24 - Aug 25, 2024
Measurement by	Prommee Sripabnet
Sound Level meter	Serial No. 623381

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	55.8	88.5	41.4
09:00 AM - 10:00 AM	57.2	79.3	38.9
10:00 AM - 11:00 AM	56.5	91.0	36.4
11:00 AM - 12:00 PM	44.9	73.6	37.8
12:00 PM - 01:00 PM	55.1	78.5	36.4
01:00 PM - 02:00 PM	58.2	84.6	36.2
02:00 PM - 03:00 PM	55.6	91.7	35.8
03:00 PM - 04:00 PM	54.0	79.3	38.0
04:00 PM - 05:00 PM	57.6	81.4	39.4
05:00 PM - 06:00 PM	47.7	71.0	36.4
06:00 PM - 07:00 PM	57.5	78.3	48.0
07:00 PM - 08:00 PM	59.8	69.8	52.4
08:00 PM - 09:00 PM	57.7	80.9	50.8
09:00 PM - 10:00 PM	62.8	82.4	57.7
10:00 PM - 11:00 PM	66.1	78.2	62.8
11:00 PM - 12:00 AM	62.1	81.8	53.2
12:00 AM - 01:00 AM	55.8	77.0	45.2
01:00 AM - 02:00 AM	58.3	86.0	39.9
02:00 AM - 03:00 AM	57.2	90.3	35.9
03:00 AM - 04:00 AM	59.2	89.2	34.7
04:00 AM - 05:00 AM	58.8	84.7	34.7
05:00 AM - 06:00 AM	60.4	84.9	39.2
06:00 AM - 07:00 AM	55.2	76.8	43.3
07:00 AM - 08:00 AM	52.6	84.3	42.9

Leq Average 24 hrs. (dB(A))	58.8
Lmax (dB(A))	91.7
L90 (dB(A))	66.6
Ldn (dB(A))	70
Standard (dB(A))	115

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศกระทรวงมหาดไทย เรื่อง กำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดระดับเสียงการรบกวน และระดับเสียงที่ได้จากการประกอบกิจการ
โรงงาน พ.ศ. 2548

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhohi, Saraburi Thailand 18260
P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494229
Date Received : Sep 04, 2024
Date Reported : Sep 10, 2024
Report Number: 3106916-1

Page 1 of 1

Sample Number	2494229-17
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณใกล้ (GPS 47P 0726659, 16.9824)
Measurement Date	Aug 25 - Aug 26, 2024
Measurement by	Prommee Sripatnet
Sound Level meter	Serial No. 623381

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	60.0	91.2	38.3
09:00 AM - 10:00 AM	63.8	92.1	36.0
10:00 AM - 11:00 AM	54.9	81.4	36.1
11:00 AM - 12:00 PM	54.8	77.3	43.2
12:00 PM - 01:00 PM	53.8	78.0	43.9
01:00 PM - 02:00 PM	56.8	82.2	44.1
02:00 PM - 03:00 PM	50.1	72.9	46.1
03:00 PM - 04:00 PM	53.5	73.9	47.1
04:00 PM - 05:00 PM	63.9	90.9	61.7
05:00 PM - 06:00 PM	66.1	86.7	65.0
06:00 PM - 07:00 PM	47.4	70.6	45.4
07:00 PM - 08:00 PM	48.0	67.7	46.6
08:00 PM - 09:00 PM	52.1	65.3	50.7
09:00 PM - 10:00 PM	54.4	70.3	52.4
10:00 PM - 11:00 PM	55.3	67.9	52.7
11:00 PM - 12:00 AM	52.1	67.2	49.4
12:00 AM - 01:00 AM	52.5	63.8	50.2
01:00 AM - 02:00 AM	49.8	60.4	47.7
02:00 AM - 03:00 AM	51.2	67.4	49.4
03:00 AM - 04:00 AM	53.1	72.6	52.2
04:00 AM - 05:00 AM	54.0	69.2	52.7
05:00 AM - 06:00 AM	53.2	67.0	50.9
06:00 AM - 07:00 AM	58.0	88.5	51.6
07:00 AM - 08:00 AM	54.3	68.2	52.0
Leq Average 24 hrs. (dB(A))	57.8		
Lmax (dB(A))	92.1		
L90 (dB(A))		61.6	49.4
Ldn (dB(A))		70	
Standard (dB(A))		115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดวิธีวัดและประเมินเสียงในโรงงาน
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดวิธีวัดและประเมินเสียงในกิจการโรงงาน
โรงงาน พ.ศ. 2548

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS United Company



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhohi, Saraburi Thailand 18260
P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494229
Date Received : Sep 04, 2024
Date Reported : Sep 10, 2024
Report Number: 3106917-1

Page 1 of 1

Sample Number	2494229-18
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณใกล้ (GPS 47P 0726659, 16.9824)
Measurement Date	Aug 26 - Aug 27, 2024
Measurement by	Prommee Sripatnet
Sound Level meter	Serial No. 623381

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	53.1	68.5	51.3
09:00 AM - 10:00 AM	51.2	66.6	48.9
10:00 AM - 11:00 AM	48.9	69.9	46.5
11:00 AM - 12:00 PM	54.3	78.6	51.5
12:00 PM - 01:00 PM	54.2	83.7	49.3
01:00 PM - 02:00 PM	55.3	77.7	51.6
02:00 PM - 03:00 PM	51.1	66.8	47.3
03:00 PM - 04:00 PM	52.9	69.7	50.3
04:00 PM - 05:00 PM	55.4	74.9	53.2
05:00 PM - 06:00 PM	55.2	69.4	53.0
06:00 PM - 07:00 PM	55.3	73.3	52.9
07:00 PM - 08:00 PM	56.4	69.9	53.6
08:00 PM - 09:00 PM	56.7	71.9	54.0
09:00 PM - 10:00 PM	55.8	70.2	53.2
10:00 PM - 11:00 PM	57.1	75.1	55.8
11:00 PM - 12:00 AM	55.8	75.0	53.4
12:00 AM - 01:00 AM	56.5	69.6	52.7
01:00 AM - 02:00 AM	55.4	72.8	51.5
02:00 AM - 03:00 AM	57.8	83.6	50.5
03:00 AM - 04:00 AM	54.7	75.8	47.8
04:00 AM - 05:00 AM	55.4	78.1	50.2
05:00 AM - 06:00 AM	57.9	77.2	51.5
06:00 AM - 07:00 AM	57.3	79.2	53.7
07:00 AM - 08:00 AM	54.7	78.3	51.5
Leq Average 24 hrs. (dB(A))	55.4		
Lmax (dB(A))	83.7		51.5
L90 (dB(A))		62.7	
Ldn (dB(A))		70	
Standard (dB(A))		115	

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดวิธีวัดและประเมินเสียงในโรงงาน
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดวิธีวัดและประเมินเสียงในกิจการโรงงาน
โรงงาน พ.ศ. 2548

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi Thailand
18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 24942229

Date Received : Sep 04, 2024

Date Reported : Sep 10, 2024

Report Number: 3106918-1

Page 1 of 1

Sample Number	2494229-19
Parameter	Noise (Leq 24 hrs.)
Location	พื้นที่วัด (GPS 47P 0726659, 1619824)
Measurement Date	Aug 27 - Aug 28, 2024
Measurement by	Prommee Sripabnet
Sound Level meter	Serial No. 623381

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	53.7	73.2	50.5
09:00 AM - 10:00 AM	55.7	83.0	50.5
10:00 AM - 11:00 AM	53.6	67.4	51.2
11:00 AM - 12:00 PM	51.9	71.5	49.3
12:00 PM - 01:00 PM	48.8	72.5	45.6
01:00 PM - 02:00 PM	55.1	84.2	46.6
02:00 PM - 03:00 PM	66.2	87.6	52.0
03:00 PM - 04:00 PM	68.7	89.0	54.1
04:00 PM - 05:00 PM	60.4	77.6	41.8
05:00 PM - 06:00 PM	58.2	87.3	44.2
06:00 PM - 07:00 PM	53.1	82.9	46.7
07:00 PM - 08:00 PM	52.1	75.9	50.1
08:00 PM - 09:00 PM	52.7	71.6	50.8
09:00 PM - 10:00 PM	53.1	75.2	50.2
10:00 PM - 11:00 PM	52.5	64.2	50.1
11:00 PM - 12:00 AM	52.9	69.8	50.6
01:00 AM - 02:00 AM	54.2	75.6	52.1
02:00 AM - 03:00 AM	52.8	81.5	49.3
03:00 AM - 04:00 AM	51.8	61.6	49.7
04:00 AM - 05:00 AM	51.9	79.9	49.6
05:00 AM - 06:00 AM	54.0	65.0	51.9
06:00 AM - 07:00 AM	56.0	78.4	53.3
07:00 AM - 08:00 AM	54.3	72.3	52.0

Leq Average 24 hrs. (dB(A))	58.7
Lmax (dB(A))	89.0
L90 (dB(A))	50.1
Ldn (dB(A))	61.7
Standard (dB(A))	70

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดการสัมผัสนอกเขตอาศัย 15 (พ.ศ. 2540) (กำหนดการสัมผัสนอกเขตอาศัย)
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดการสัมผัสนอกเขตอาศัย และระดับเสียงที่อาจก่อให้เกิดผลกระทบ
พ.ศ. 2548

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LIFE SCIENCES

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RIGHT SOLUTIONS RIGHT PARTNER

2995-71J BMAIL

S.Reports_Air Noise pr (323PM)



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi Thailand
18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 24942229

Date Received : Sep 04, 2024

Date Reported : Sep 10, 2024

Report Number: 3106919-1

Page 1 of 1

Sample Number	2494229-20
Parameter	Noise (Leq 24 hrs.)
Location	พื้นที่วัด (GPS 47P 0726659, 1619824)
Measurement Date	Aug 28 - Aug 29, 2024
Measurement by	Prommee Sripabnet
Sound Level meter	Serial No. 623381

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	53.1	74.7	50.6
09:00 AM - 10:00 AM	54.2	74.8	49.5
10:00 AM - 11:00 AM	54.8	80.0	39.2
11:00 AM - 12:00 PM	48.8	72.8	43.0
12:00 PM - 01:00 PM	50.0	71.6	42.5
01:00 PM - 02:00 PM	59.1	90.1	43.5
02:00 PM - 03:00 PM	57.5	81.9	46.5
03:00 PM - 04:00 PM	57.3	83.3	42.7
04:00 PM - 05:00 PM	52.2	80.2	39.6
05:00 PM - 06:00 PM	61.7	91.7	46.3
06:00 PM - 07:00 PM	57.2	75.7	44.4
07:00 PM - 08:00 PM	59.1	77.7	46.4
08:00 PM - 09:00 PM	63.4	75.8	60.2
09:00 PM - 10:00 PM	65.3	82.2	58.7
10:00 PM - 11:00 PM	66.0	73.5	59.7
11:00 PM - 12:00 AM	59.1	81.6	47.3
12:00 AM - 01:00 AM	57.1	79.7	40.3
01:00 AM - 02:00 AM	58.6	83.6	39.0
02:00 AM - 03:00 AM	55.4	77.4	36.0
03:00 AM - 04:00 AM	57.1	80.9	39.2
04:00 AM - 05:00 AM	55.7	80.3	43.5
05:00 AM - 06:00 AM	56.8	87.5	42.6
06:00 AM - 07:00 AM	55.8	91.6	38.1
07:00 AM - 08:00 AM	50.4	79.3	35.9

Leq Average 24 hrs. (dB(A))	59.1
Lmax (dB(A))	91.7
L90 (dB(A))	43.0
Ldn (dB(A))	65.9
Standard (dB(A))	70

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดการสัมผัสนอกเขตอาศัย 15 (พ.ศ. 2540) (กำหนดการสัมผัสนอกเขตอาศัย)
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดการสัมผัสนอกเขตอาศัย และระดับเสียงที่อาจก่อให้เกิดผลกระทบ
พ.ศ. 2548

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RIGHT SOLUTIONS RIGHT PARTNER

2995-71J BMAIL

S.Reports_Air Noise pr (3:23PM)



Analysis / Test Report

Client : Siam City Cement Public Company Limited

99,219,301 Moo 9,5,5, Milaparb Road, Tambon Tapkwung, Amphur Kankhroi, Saraburi Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2494229

Date Received : Sep 04, 2024

Date Reported : Sep 10, 2024

Report Number: 3106920-1

Page 1 of 1

Sample Number	2494229-21
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณหน้าโรงงาน (ระยะห่าง 161.9824)
Measurement Date	Aug 29 - Aug 30, 2024
Measurement by	Prommee Sripaibnet
Sound Level meter	Serial No. 623381

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	57.1	84.1	35.0
09:00 AM - 10:00 AM	56.7	84.5	35.7
10:00 AM - 11:00 AM	56.4	84.8	34.7
11:00 AM - 12:00 PM	57.1	80.1	36.6
12:00 PM - 01:00 PM	55.6	79.3	35.3
01:00 PM - 02:00 PM	63.6	88.9	39.1
02:00 PM - 03:00 PM	63.0	87.2	41.5
03:00 PM - 04:00 PM	54.2	80.6	39.4
04:00 PM - 05:00 PM	54.3	87.6	40.2
05:00 PM - 06:00 PM	62.7	77.2	47.9
06:00 PM - 07:00 PM	60.4	90.8	48.1
07:00 PM - 08:00 PM	60.4	79.9	53.5
08:00 PM - 09:00 PM	60.2	70.7	57.0
09:00 PM - 10:00 PM	57.1	82.7	50.2
10:00 PM - 11:00 PM	50.4	68.6	40.0
11:00 PM - 12:00 AM	56.0	84.8	43.7
12:00 AM - 01:00 AM	54.4	81.8	39.8
01:00 AM - 02:00 AM	56.2	81.4	37.5
02:00 AM - 03:00 AM	57.1	82.9	38.5
03:00 AM - 04:00 AM	59.6	83.5	38.3
04:00 AM - 05:00 AM	59.7	82.6	43.9
05:00 AM - 06:00 AM	58.3	83.2	43.9
06:00 AM - 07:00 AM	56.9	79.9	42.6
07:00 AM - 08:00 AM	59.0	86.4	43.5

Leq Average 24 hrs. (dB(A))	58.8
Lmax (dB(A))	94.5
L90 (dB(A))	40.2
Ldn (dB(A))	

Standard (dB(A)) 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่คิดจากการรบกวนทางอากาศ พ.ศ. 2540

2. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่คิดจากการรบกวนทางอากาศ พ.ศ. 2548

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2995-71/BMAL

S:\Reports_Air Noise rpt (3.27PM)



Analysis / Test Report

Client : Siam City Cement Public Company Limited

99,219,301 Moo 9,5,5, Milaparb Road, Tambon Tapkwung, Amphur Kankhroi, Saraburi Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2494229

Date Received : Sep 04, 2024

Date Reported : Sep 10, 2024

Report Number: 3106921-1

Page 1 of 1

Sample Number	2494229-22
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณหน้าโรงงาน (ระยะห่าง 161.7923)
Measurement Date	Aug 23 - Aug 24, 2024
Measurement by	Prommee Sripaibnet
Sound Level meter	Serial No. 572562

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	61.7	79.9	59.5
09:00 AM - 10:00 AM	63.3	86.4	61.1
10:00 AM - 11:00 AM	63.0	83.6	60.3
11:00 AM - 12:00 PM	62.9	84.5	60.6
12:00 PM - 01:00 PM	62.9	80.5	60.8
01:00 PM - 02:00 PM	62.7	77.9	60.6
02:00 PM - 03:00 PM	61.8	78.4	59.8
03:00 PM - 04:00 PM	62.4	80.8	60.2
04:00 PM - 05:00 PM	61.9	81.5	60.0
05:00 PM - 06:00 PM	63.8	86.0	61.3
06:00 PM - 07:00 PM	63.4	83.3	60.9
07:00 PM - 08:00 PM	63.6	80.9	61.0
08:00 PM - 09:00 PM	62.8	80.8	60.8
09:00 PM - 10:00 PM	62.6	82.9	60.0
10:00 PM - 11:00 PM	62.5	86.9	59.3
11:00 PM - 12:00 AM	61.5	78.2	58.1
12:00 AM - 01:00 AM	60.2	76.2	57.2
01:00 AM - 02:00 AM	61.1	78.3	58.7
02:00 AM - 03:00 AM	61.4	80.6	59.1
03:00 AM - 04:00 AM	61.2	79.1	58.8
04:00 AM - 05:00 AM	61.4	78.4	58.9
05:00 AM - 06:00 AM	61.6	77.4	58.8
06:00 AM - 07:00 AM	62.4	77.9	59.9
07:00 AM - 08:00 AM	61.9	76.7	59.8

Leq Average 24 hrs. (dB(A))	62.3
Lmax (dB(A))	86.9
L90 (dB(A))	59.9
Ldn (dB(A))	

Standard (dB(A)) 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่คิดจากการรบกวนทางอากาศ พ.ศ. 2540

2. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่คิดจากการรบกวนทางอากาศ พ.ศ. 2548

Orawan R.

Technical Management

Orawan Rakyong

Scientist (3)

Approved by

Supt S.

Supot Salameeh

Section Head

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2995-71/BMAL

S:\Reports_Air Noise rpt (3.27PM)



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapiwung, Amphur Kangkhoi, Saraburi Thailand
18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2494229

Date Received : Sep 04, 2024

Date Reported : Sep 10, 2024

Report Number: 3106922-1

Page 1 of 1

Sample Number	2494229-23
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณหน้าโรงงาน (ระหว่างถนน) (GPS 47P 0726066, 1617923)
Measurement Date	Aug 24 - Aug 25, 2024
Measurement by	Prommee Sripabnet
Sound Level meter	Serial No. 572562

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	64.1	80.1	60.4
09:00 AM - 10:00 AM	64.4	80.8	61.6
10:00 AM - 11:00 AM	64.4	80.7	62.0
11:00 AM - 12:00 PM	64.0	81.6	61.3
12:00 PM - 01:00 PM	62.6	80.5	60.6
01:00 PM - 02:00 PM	63.4	81.0	61.1
02:00 PM - 03:00 PM	62.3	77.0	60.7
03:00 PM - 04:00 PM	62.2	75.6	60.5
04:00 PM - 05:00 PM	62.9	82.1	60.8
05:00 PM - 06:00 PM	63.3	82.5	61.2
06:00 PM - 07:00 PM	62.8	78.2	60.5
07:00 PM - 08:00 PM	61.5	76.4	59.6
08:00 PM - 09:00 PM	62.0	82.8	59.8
09:00 PM - 10:00 PM	62.8	91.5	59.8
10:00 PM - 11:00 PM	61.9	83.6	59.6
11:00 PM - 12:00 AM	60.1	77.9	57.9
12:00 AM - 01:00 AM	60.4	80.5	58.2
01:00 AM - 02:00 AM	60.2	81.4	58.6
02:00 AM - 03:00 AM	60.5	71.1	58.9
03:00 AM - 04:00 AM	60.6	80.6	58.8
04:00 AM - 05:00 AM	60.9	78.1	58.4
05:00 AM - 06:00 AM	60.8	79.6	58.1
06:00 AM - 07:00 AM	61.1	76.1	58.5
07:00 AM - 08:00 AM	61.1	84.2	58.3

Leq Average 24 hrs. (dB(A))	62.3
Lmax (dB(A))	91.5
L90 (dB(A))	59.8
Ldn (dB(A))	67.6
Standard (dB(A))	70

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงรบกวน ณพื้นที่ 15 (พ.ศ. 2540) ซึ่งกำหนดค่าระดับเสียงรบกวนที่แสดงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงรบกวน ณพื้นที่ 15 (พ.ศ. 2540) ซึ่งกำหนดค่าระดับเสียงรบกวนที่แสดงโดยทั่วไป
3. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงรบกวน ณพื้นที่ 15 (พ.ศ. 2540) ซึ่งกำหนดค่าระดับเสียงรบกวนที่แสดงโดยทั่วไป

รายงาน พ.ศ. 2548

Orawan R.

Orawan Rakying
Scientist (3)

Approved by

Supt S.

Supot Salameh
Section Head

Technical Management

Orawan R.

Orawan Rakying
Scientist (3)

Approved by

Supt S.

Supot Salameh
Section Head

Technical Management



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapiwung, Amphur Kangkhoi, Saraburi Thailand
18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2494229

Date Received : Sep 04, 2024

Date Reported : Sep 10, 2024

Report Number: 3106923-1

Page 1 of 1

Sample Number	2494229-24
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณหน้าโรงงาน (ระหว่างถนน) (GPS 47P 0726066, 1617923)
Measurement Date	Aug 25 - Aug 26, 2024
Measurement by	Prommee Sripabnet
Sound Level meter	Serial No. 572562

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	62.1	77.1	59.6
09:00 AM - 10:00 AM	62.7	78.0	60.4
10:00 AM - 11:00 AM	64.0	87.5	61.2
11:00 AM - 12:00 PM	62.7	78.5	60.5
12:00 PM - 01:00 PM	62.4	80.2	60.0
01:00 PM - 02:00 PM	62.9	83.7	60.2
02:00 PM - 03:00 PM	63.5	79.1	60.1
03:00 PM - 04:00 PM	62.5	81.8	60.7
04:00 PM - 05:00 PM	62.5	80.3	60.5
05:00 PM - 06:00 PM	62.1	77.8	60.1
06:00 PM - 07:00 PM	62.5	81.7	59.8
07:00 PM - 08:00 PM	61.5	80.1	58.5
08:00 PM - 09:00 PM	60.4	73.7	58.0
09:00 PM - 10:00 PM	59.9	78.7	57.3
10:00 PM - 11:00 PM	60.6	75.8	57.5
11:00 PM - 12:00 AM	58.7	68.2	55.9
12:00 AM - 01:00 AM	59.2	76.4	56.6
01:00 AM - 02:00 AM	60.3	75.7	56.3
02:00 AM - 03:00 AM	60.0	69.8	58.3
03:00 AM - 04:00 AM	59.9	79.2	58.4
04:00 AM - 05:00 AM	60.1	72.9	58.0
05:00 AM - 06:00 AM	60.9	79.0	58.8
06:00 AM - 07:00 AM	62.0	76.0	59.8
07:00 AM - 08:00 AM	61.9	76.8	59.8

Leq Average 24 hrs. (dB(A))	61.7
Lmax (dB(A))	87.5
L90 (dB(A))	59.6
Ldn (dB(A))	67.0
Standard (dB(A))	70

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงรบกวน ณพื้นที่ 15 (พ.ศ. 2540) ซึ่งกำหนดค่าระดับเสียงรบกวนที่แสดงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงรบกวน ณพื้นที่ 15 (พ.ศ. 2540) ซึ่งกำหนดค่าระดับเสียงรบกวนที่แสดงโดยทั่วไป
3. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงรบกวน ณพื้นที่ 15 (พ.ศ. 2540) ซึ่งกำหนดค่าระดับเสียงรบกวนที่แสดงโดยทั่วไป

รายงาน พ.ศ. 2548

Orawan R.

Orawan Rakying
Scientist (3)

Approved by

Supt S.

Supot Salameh
Section Head

Technical Management



Analysis / Test Report

Client : Siam City Cement Public Company Limited

99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhohi, Saraburi Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2494229

Date Received : Sep 04, 2024

Date Reported : Sep 10, 2024

Report Number: 3106924-1

Page 1 of 1

Sample Number	2494229-25
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณหน้าโรงงาน (ระหว่างถนน) (GPS 47P 0726066, 1617923)
Measurement Date	Aug 26 - Aug 27, 2024
Measurement by	Prommee Sripatnet
Sound Level meter	Serial No. 572562

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	61.0	81.0	58.6
09:00 AM - 10:00 AM	62.0	79.8	59.7
10:00 AM - 11:00 AM	62.6	80.0	60.1
11:00 AM - 12:00 PM	61.9	80.8	59.5
12:00 PM - 01:00 PM	61.8	78.7	59.2
01:00 PM - 02:00 PM	61.6	79.4	59.4
02:00 PM - 03:00 PM	64.0	87.8	59.7
03:00 PM - 04:00 PM	61.9	87.0	59.6
04:00 PM - 05:00 PM	62.8	79.2	59.9
05:00 PM - 06:00 PM	62.6	80.8	60.2
06:00 PM - 07:00 PM	63.3	79.2	60.8
07:00 PM - 08:00 PM	62.9	77.9	60.5
08:00 PM - 09:00 PM	62.4	83.9	60.0
09:00 PM - 10:00 PM	62.6	83.6	60.1
10:00 PM - 11:00 PM	61.9	77.6	58.8
11:00 PM - 12:00 AM	60.5	83.6	57.5
12:00 AM - 01:00 AM	60.9	81.1	58.0
01:00 AM - 02:00 AM	60.9	78.5	58.1
02:00 AM - 03:00 AM	61.9	83.4	58.7
03:00 AM - 04:00 AM	62.1	82.4	59.1
04:00 AM - 05:00 AM	61.3	81.3	59.0
05:00 AM - 06:00 AM	61.5	81.5	59.0
06:00 AM - 07:00 AM	62.1	77.3	59.7
07:00 AM - 08:00 AM	61.9	77.0	59.4

Leq Average 24 hrs. (dB(A))	62.1
Lmax (dB(A))	87.8
L90 (dB(A))	59.4
Ldn (dB(A))	68.0
Standard (dB(A))	70

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศกระทรวงมหาดไทย เรื่องเสียงรบกวน ฉบับที่ 15 (พ.ศ. 2540) กำหนดค่ามาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่อาจก่อให้เกิดการรบกวน
โรงงาน พ.ศ. 2548

Technical Management
Orawan R.

Orawan Rakhyong
Scientist (3)

Approved by

Supt S.

Supot Salameeh
Section Head

www.alsglobal.com

NIGHT SOLUTIONS RIGHT PARTNER

S:\Reports_Air Noise rpt (327PM)

2995-711 EMAIL



Analysis / Test Report

Client : Siam City Cement Public Company Limited

99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhohi, Saraburi Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2494229

Date Received : Sep 04, 2024

Date Reported : Sep 10, 2024

Report Number: 3106925-1

Page 1 of 1

Sample Number	2494229-26
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณหน้าโรงงาน (ระหว่างถนน) (GPS 47P 0726066, 1617923)
Measurement Date	Aug 27 - Aug 28, 2024
Measurement by	Prommee Sripatnet
Sound Level meter	Serial No. 572562

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	61.7	80.7	59.5
09:00 AM - 10:00 AM	64.1	78.8	61.1
10:00 AM - 11:00 AM	62.5	77.8	60.1
11:00 AM - 12:00 PM	63.4	86.0	60.5
12:00 PM - 01:00 PM	62.8	79.6	59.9
01:00 PM - 02:00 PM	63.3	79.2	60.8
02:00 PM - 03:00 PM	64.2	82.5	60.6
03:00 PM - 04:00 PM	61.9	80.7	60.6
04:00 PM - 05:00 PM	62.7	80.2	60.9
05:00 PM - 06:00 PM	62.6	76.9	60.4
06:00 PM - 07:00 PM	62.6	80.3	60.3
07:00 PM - 08:00 PM	63.0	92.7	60.0
08:00 PM - 09:00 PM	63.5	82.1	61.0
09:00 PM - 10:00 PM	62.6	79.5	60.3
10:00 PM - 11:00 PM	61.5	85.0	58.6
11:00 PM - 12:00 AM	60.1	80.9	57.1
12:00 AM - 01:00 AM	60.4	81.4	57.7
01:00 AM - 02:00 AM	61.3	78.9	58.4
02:00 AM - 03:00 AM	61.9	78.2	58.7
03:00 AM - 04:00 AM	61.2	78.8	59.3
04:00 AM - 05:00 AM	60.2	79.9	58.2
05:00 AM - 06:00 AM	61.2	77.7	59.0
06:00 AM - 07:00 AM	61.5	76.9	59.3
07:00 AM - 08:00 AM	61.3	76.8	59.3

Leq Average 24 hrs. (dB(A))	62.3
Lmax (dB(A))	92.7
L90 (dB(A))	59.9
Ldn (dB(A))	67.8
Standard (dB(A))	70

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศกระทรวงมหาดไทย เรื่องเสียงรบกวน ฉบับที่ 15 (พ.ศ. 2540) กำหนดค่ามาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่อาจก่อให้เกิดการรบกวน
โรงงาน พ.ศ. 2548

Technical Management
Orawan R.

Orawan Rakhyong
Scientist (3)

Approved by

Supt S.

Supot Salameeh
Section Head

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NIGHT SOLUTIONS RIGHT PARTNER

S:\Reports_Air Noise rpt (328PM)



Analysis / Test Report

Client : Siam City Cement Public Company Limited

99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2494229

Date Received : Sep 04, 2024

Date Reported : Sep 10, 2024

Report Number: 3106926-1

Page 1 of 1

Sample Number	2494229-27
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณหน้าโรงงาน (ระยะห่างถนน) (GPS 47P 0726066, 1617923)
Measurement Date	Aug 28 - Aug 29, 2024
Measurement by	Prommee Sripatmet
Sound Level meter	Serial No. 572562

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	62.2	79.8	58.8
09:00 AM - 10:00 AM	62.7	80.1	60.4
10:00 AM - 11:00 AM	62.9	80.9	60.6
11:00 AM - 12:00 PM	63.2	81.7	61.0
12:00 PM - 01:00 PM	61.9	77.2	59.9
01:00 PM - 02:00 PM	62.0	81.3	60.0
02:00 PM - 03:00 PM	62.9	86.3	59.9
03:00 PM - 04:00 PM	61.3	75.9	59.4
04:00 PM - 05:00 PM	62.4	78.9	59.9
05:00 PM - 06:00 PM	63.6	83.6	61.0
06:00 PM - 07:00 PM	63.7	89.0	60.5
07:00 PM - 08:00 PM	62.9	80.7	60.3
08:00 PM - 09:00 PM	62.5	81.5	60.2
09:00 PM - 10:00 PM	62.2	79.1	60.0
10:00 PM - 11:00 PM	62.2	80.3	59.5
11:00 PM - 12:00 AM	61.0	77.6	58.0
12:00 AM - 01:00 AM	59.5	75.6	56.8
01:00 AM - 02:00 AM	61.0	77.8	58.4
02:00 AM - 03:00 AM	61.6	80.5	59.1
03:00 AM - 04:00 AM	60.2	77.0	58.3
04:00 AM - 05:00 AM	60.6	79.8	58.4
05:00 AM - 06:00 AM	61.2	75.9	59.1
06:00 AM - 07:00 AM	62.0	82.1	59.8
07:00 AM - 08:00 AM	61.7	77.4	59.3

Leq Average 24 hrs. (dB(A))	62.1
Lmax (dB(A))	89.0
L90 (dB(A))	59.8
Ldn (dB(A))	115
Standard (dB(A))	70

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศกระทรวงมหาดไทย เรื่องวัดระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงสาธารณสุข เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่ปลอดภัยจากการรบกวน
พ.ร.บ. พ.ศ. 2548

Orawan R.

Technical Management

Orawan Rakhyong
Scientist (3)

Approved by

Supt S.

Supot Salameeh
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2995-71/ EMAIL

S:\Reports_Air Noise pr (3 28PM)



Analysis / Test Report

Client : Siam City Cement Public Company Limited

99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2494229

Date Received : Sep 04, 2024

Date Reported : Sep 10, 2024

Report Number: 3106927-1

Page 1 of 1

Sample Number	2494229-28
Parameter	Noise (Leq 24 hrs.)
Location	บริเวณหน้าโรงงาน (ระยะห่างถนน) (GPS 47P 0726066, 1617923)
Measurement Date	Aug 29 - Aug 30, 2024
Measurement by	Prommee Sripatmet
Sound Level meter	Serial No. 572562

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	62.7	78.1	59.8
09:00 AM - 10:00 AM	64.0	85.7	60.9
10:00 AM - 11:00 AM	62.7	78.2	60.2
11:00 AM - 12:00 PM	62.8	79.9	60.7
12:00 PM - 01:00 PM	62.5	79.3	60.1
01:00 PM - 02:00 PM	64.5	91.9	61.4
02:00 PM - 03:00 PM	69.3	81.8	65.6
03:00 PM - 04:00 PM	62.5	81.7	60.3
04:00 PM - 05:00 PM	63.1	78.7	61.1
05:00 PM - 06:00 PM	63.6	79.7	61.5
06:00 PM - 07:00 PM	63.6	79.7	61.3
07:00 PM - 08:00 PM	62.2	78.9	60.4
08:00 PM - 09:00 PM	61.8	75.3	59.9
09:00 PM - 10:00 PM	61.9	78.5	59.6
10:00 PM - 11:00 PM	61.9	80.6	58.6
11:00 PM - 12:00 AM	60.5	75.8	57.7
12:00 AM - 01:00 AM	60.1	76.0	57.4
01:00 AM - 02:00 AM	61.4	78.3	58.4
02:00 AM - 03:00 AM	61.0	77.5	58.7
03:00 AM - 04:00 AM	60.7	78.3	58.7
04:00 AM - 05:00 AM	60.5	74.5	58.6
05:00 AM - 06:00 AM	61.0	76.6	58.8
06:00 AM - 07:00 AM	62.7	87.8	60.1
07:00 AM - 08:00 AM	62.0	80.8	59.7

Leq Average 24 hrs. (dB(A))	63.0
Lmax (dB(A))	91.9
L90 (dB(A))	59.9
Ldn (dB(A))	115
Standard (dB(A))	70

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศกระทรวงมหาดไทย เรื่องวัดระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงสาธารณสุข เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่ปลอดภัยจากการรบกวน
พ.ร.บ. พ.ศ. 2548

Orawan R.

Technical Management

Orawan Rakhyong
Scientist (3)

Approved by

Supt S.

Supot Salameeh
Section Head

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S:\Reports_Air Noise pr (3 28PM)



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhol, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107781-1

Page 1 of 3

Sample No. 2494231-1
Parameter เสียงรบกวน
Location ทุ่งหินปูน (GPS 47° 07'28.156, 161°19'149)
Measurement Date Aug 23 - Aug 24, 2024
Measurement by Prommee Sripatrat
Sound Level Meter 00858520

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะปฏิบัติการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่ารวม
			กลางคืน	กลางวัน		
08:00 AM - 09:00 AM	59.1	57.3	54.4	-	53.7	0.7
09:00 AM - 10:00 AM	58.4	56.4	54.1	-	54.4	-0.3
10:00 AM - 11:00 AM	59.6	56.2	56.9	-	53.8	3.1
11:00 AM - 12:00 PM	59.4	56.9	55.8	-	54.6	1.2
12:00 PM - 01:00 PM	60.1	56.0	58.0	-	53.7	4.3
01:00 PM - 02:00 PM	59.7	56.1	57.2	-	54.0	3.2
02:00 PM - 03:00 PM	60.4	56.8	57.9	-	54.5	3.4
03:00 PM - 04:00 PM	60.1	56.8	57.4	-	54.4	3.0
04:00 PM - 05:00 PM	60.1	57.9	56.1	-	56.1	0.0
05:00 PM - 06:00 PM	60.1	59.7	49.5	-	57.9	-4.4
06:00 PM - 07:00 PM	59.7	59.7	n/a	-	57.7	-
07:00 PM - 08:00 PM	59.2	60.0	n/a	-	58.0	-
08:00 PM - 09:00 PM	59.6	59.5	43.2	-	57.5	-14.3
09:00 PM - 10:00 PM	59.6	59.5	43.2	-	57.4	-14.2
10:00 PM - 10:05 PM	58.4	60.1	-	n/a	57.6	-
10:05 PM - 10:10 PM	58.8	59.1	-	n/a	57.3	-
10:10 PM - 10:15 PM	59.0	58.8	-	48.5	56.5	-8.0
10:15 PM - 10:20 PM	59.1	59.2	-	n/a	57.7	-
10:20 PM - 10:25 PM	58.5	59.1	-	57.1	57.1	-
10:25 PM - 10:30 PM	58.8	59.8	-	n/a	57.3	-
10:30 PM - 10:35 PM	59.1	58.7	-	51.5	56.4	-4.9
10:35 PM - 10:40 PM	58.7	56.3	-	58.0	54.2	3.8
10:40 PM - 10:45 PM	58.8	55.8	-	58.8	53.8	5.0
10:45 PM - 10:50 PM	58.8	55.6	-	59.0	54.2	4.8
10:50 PM - 10:55 PM	59.4	56.1	-	59.7	53.7	6.0
10:55 PM - 11:00 PM	59.2	56.3	-	59.1	54.0	5.1
11:00 PM - 11:05 PM	59.3	57.6	-	57.4	55.6	3.8
11:05 PM - 11:10 PM	58.7	57.9	-	57.4	54.7	-0.7
11:10 PM - 11:15 PM	58.7	56.7	-	57.4	54.7	2.7
11:15 PM - 11:20 PM	58.5	56.6	-	57.0	55.0	2.0
11:20 PM - 11:25 PM	58.6	56.3	-	56.7	54.4	2.3
11:25 PM - 11:30 PM	59.1	56.1	-	52.0	56.1	-4.1
11:30 PM - 11:35 PM	59.1	56.1	-	59.1	53.4	5.7
11:35 PM - 11:40 PM	58.5	57.2	-	55.6	54.1	1.5
11:40 PM - 11:45 PM	58.5	58.0	-	51.9	55.1	-3.2
11:45 PM - 11:50 PM	58.5	56.8	-	56.6	54.6	2.0
11:50 PM - 11:55 PM	58.9	56.1	-	58.7	53.6	5.1
11:55 PM - 12:00 AM	59.2	56.6	-	58.7	52.8	5.9
12:00 AM - 12:05 AM	58.6	57.4	-	55.4	54.7	0.7
12:05 AM - 12:10 AM	58.7	59.0	-	n/a	56.2	-

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Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhol, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107781-1

Page 2 of 3

Sample No. 2494231-1
Parameter เสียงรบกวน
Location ทุ่งหินปูน (GPS 47° 07'28.156, 161°19'149)
Measurement Date Aug 23 - Aug 24, 2024
Measurement by Prommee Sripatrat
Sound Level Meter 00858520

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะปฏิบัติการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่ารวม
			กลางคืน	กลางวัน		
12:10 AM - 12:15 AM	59.0	58.5	-	52.4	56.6	-4.2
12:15 AM - 12:20 AM	60.2	58.0	-	59.2	55.6	3.6
12:20 AM - 12:25 AM	59.2	56.8	-	58.5	55.2	3.3
12:25 AM - 12:30 AM	59.5	57.3	-	58.5	54.8	3.7
12:30 AM - 12:35 AM	59.4	57.1	-	58.5	54.0	4.5
12:35 AM - 12:40 AM	59.1	56.2	-	59.0	54.3	4.7
12:40 AM - 12:45 AM	59.1	56.8	-	58.2	54.4	3.8
12:45 AM - 12:50 AM	59.2	57.9	-	56.3	54.2	4.1
12:50 AM - 12:55 AM	59.4	56.1	-	59.7	54.0	5.7
12:55 AM - 01:00 AM	59.1	55.5	-	59.6	52.7	6.9
01:00 AM - 01:05 AM	59.4	56.4	-	59.4	54.4	5.0
01:05 AM - 01:10 AM	59.7	56.2	-	60.1	53.5	6.6
01:10 AM - 01:15 AM	59.7	55.8	-	60.4	53.6	6.8
01:15 AM - 01:20 AM	61.7	55.2	-	63.6	53.0	10.6
01:20 AM - 01:25 AM	60.0	55.5	-	61.1	53.6	7.5
01:25 AM - 01:30 AM	59.9	54.9	-	61.2	52.8	8.4
01:30 AM - 01:35 AM	60.3	55.2	-	61.7	53.1	8.6
01:35 AM - 01:40 AM	59.6	55.3	-	61.3	53.2	8.1
01:40 AM - 01:45 AM	59.6	55.3	-	60.6	53.0	7.6
01:45 AM - 01:50 AM	59.9	54.9	-	61.2	53.2	8.0
01:50 AM - 02:00 AM	61.6	55.6	-	63.3	53.5	9.8
02:00 AM - 02:05 AM	61.9	55.1	-	63.9	53.1	10.8
02:05 AM - 02:10 AM	61.1	55.0	-	62.9	52.3	10.6
02:10 AM - 02:15 AM	61.2	54.9	-	63.0	52.9	10.1
02:15 AM - 02:20 AM	61.5	55.2	-	63.3	52.9	10.4
02:20 AM - 02:25 AM	61.1	55.5	-	62.7	53.4	9.3
02:25 AM - 02:30 AM	60.8	56.0	-	62.1	53.2	8.9
02:30 AM - 02:35 AM	61.2	55.6	-	62.8	53.2	9.6
02:35 AM - 02:40 AM	61.5	55.7	-	63.2	53.0	10.2
02:40 AM - 02:45 AM	60.7	55.2	-	62.3	53.3	9.0
02:45 AM - 02:50 AM	60.8	56.2	-	62.6	53.7	8.3
02:50 AM - 02:55 AM	60.9	55.1	-	62.6	52.9	9.7
02:55 AM - 03:00 AM	60.9	55.1	-	62.6	52.8	9.8
03:00 AM - 03:05 AM	60.3	56.1	-	61.2	53.6	7.6
03:05 AM - 03:10 AM	60.8	54.6	-	62.6	52.6	10.0
03:10 AM - 03:15 AM	60.4	54.7	-	62.0	52.7	9.3
03:15 AM - 03:20 AM	60.0	58.4	-	57.9	52.9	5.0
03:20 AM - 03:25 AM	61.2	56.6	-	62.4	52.0	10.4
03:25 AM - 03:30 AM	60.4	56.7	-	61.0	52.8	8.2

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Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhol, Saraburi
Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2494231

Date Received : Sep 04, 2024

Date Reported : Sep 11, 2024

Report Number : 3107781-1

Page 3 of 3

Page 3 of 3

Sample No. 2494231-1

Parameter เสียงรบกวน

Location ทุ่งหินปูน (GPS 47P 0728156, 1619149)

Measurement Date Aug 24 - Aug 24, 2024

Measurement by Prommee Sripaet

Sound Level Meter 00858520

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางคืน	กลางวัน		
03:30 AM - 03:35 AM	60.4	56.9	-	60.8	53.6	7.2
03:35 AM - 03:40 AM	59.9	56.2	-	60.5	53.4	7.1
03:40 AM - 03:45 AM	60.8	56.9	-	61.5	54.1	7.4
03:45 AM - 03:50 AM	59.6	56.4	-	59.8	53.3	6.5
03:50 AM - 03:55 AM	60.4	56.5	-	61.1	53.1	8.0
03:55 AM - 04:00 AM	59.7	56.8	-	59.6	52.9	6.7
04:00 AM - 04:05 AM	60.1	55.7	-	61.1	53.8	7.3
04:05 AM - 04:10 AM	60.2	56.9	-	60.5	54.0	6.5
04:10 AM - 04:15 AM	60.0	56.8	-	60.2	54.8	5.4
04:15 AM - 04:20 AM	60.1	57.4	-	59.8	54.7	5.1
04:20 AM - 04:25 AM	60.4	56.8	-	60.6	54.3	6.3
04:25 AM - 04:30 AM	59.8	57.2	-	59.8	54.6	5.2
04:30 AM - 04:35 AM	59.8	57.0	-	59.6	54.5	5.1
04:35 AM - 04:40 AM	59.5	57.6	-	58.0	54.9	3.1
04:40 AM - 04:45 AM	60.9	57.6	-	61.2	55.4	5.8
04:45 AM - 04:50 AM	59.4	58.3	-	55.9	55.2	0.7
04:50 AM - 04:55 AM	59.7	57.9	-	58.0	55.0	3.0
04:55 AM - 05:00 AM	58.1	54.7	-	54.7	55.6	-0.9
05:00 AM - 05:05 AM	58.9	58.0	-	54.6	55.5	-0.9
05:05 AM - 05:10 AM	59.7	57.9	-	58.0	54.8	3.2
05:10 AM - 05:15 AM	59.3	58.2	-	51.4	56.2	-4.8
05:15 AM - 05:20 AM	59.0	58.6	-	55.8	56.0	-0.2
05:20 AM - 05:25 AM	58.6	57.4	-	55.4	54.8	0.6
05:25 AM - 05:30 AM	58.8	58.0	-	54.1	55.3	-1.2
05:30 AM - 05:35 AM	59.4	58.3	-	55.9	55.5	0.4
05:35 AM - 05:40 AM	60.8	59.6	-	59.8	55.8	4.2
05:40 AM - 05:45 AM	60.2	58.9	-	59.6	55.8	3.8
05:45 AM - 05:50 AM	59.6	58.6	-	55.7	56.1	-0.4
05:50 AM - 05:55 AM	58.8	56.4	-	51.2	55.9	-4.7
05:55 AM - 06:00 AM	63.9	59.2	-	65.1	56.5	8.6
06:00 AM - 07:00 AM	59.4	60.0	n/a	-	57.6	-
07:00 AM - 08:00 AM	58.7	59.4	n/a	-	57.2	± 10

ค่ามาตรฐาน

Reference Method : 1. In-house method : STM 06-001 based on ISO 1996-1 : 2016

2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่อาจก่อให้เกิดการรบกวนการประกอบกิจการโรงงาน พ.ศ. 2567

มาตรฐาน 1. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่อาจก่อให้เกิดการรบกวนการประกอบกิจการโรงงาน พ.ศ. 2567

2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่อาจก่อให้เกิดการรบกวนการประกอบกิจการโรงงาน พ.ศ. 2567

3. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่อาจก่อให้เกิดการรบกวนการประกอบกิจการโรงงาน พ.ศ. 2567

4. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่อาจก่อให้เกิดการรบกวนการประกอบกิจการโรงงาน พ.ศ. 2567

5. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่อาจก่อให้เกิดการรบกวนการประกอบกิจการโรงงาน พ.ศ. 2567

6. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่อาจก่อให้เกิดการรบกวนการประกอบกิจการโรงงาน พ.ศ. 2567

7. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่อาจก่อให้เกิดการรบกวนการประกอบกิจการโรงงาน พ.ศ. 2567

8. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่อาจก่อให้เกิดการรบกวนการประกอบกิจการโรงงาน พ.ศ. 2567

9. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่อาจก่อให้เกิดการรบกวนการประกอบกิจการโรงงาน พ.ศ. 2567

10. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่อาจก่อให้เกิดการรบกวนการประกอบกิจการโรงงาน พ.ศ. 2567

11. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่อาจก่อให้เกิดการรบกวนการประกอบกิจการโรงงาน พ.ศ. 2567

12. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่อาจก่อให้เกิดการรบกวนการประกอบกิจการโรงงาน พ.ศ. 2567

13. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่อาจก่อให้เกิดการรบกวนการประกอบกิจการโรงงาน พ.ศ. 2567

14. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่อาจก่อให้เกิดการรบกวนการประกอบกิจการโรงงาน พ.ศ. 2567

15. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่อาจก่อให้เกิดการรบกวนการประกอบกิจการโรงงาน พ.ศ. 2567

16. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่อาจก่อให้เกิดการรบกวนการประกอบกิจการโรงงาน พ.ศ. 2567

17. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่อาจก่อให้เกิดการรบกวนการประกอบกิจการโรงงาน พ.ศ. 2567

18. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่อาจก่อให้เกิดการรบกวนการประกอบกิจการโรงงาน พ.ศ. 2567

19. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่อาจก่อให้เกิดการรบกวนการประกอบกิจการโรงงาน พ.ศ. 2567

20. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่อาจก่อให้เกิดการรบกวนการประกอบกิจการโรงงาน พ.ศ. 2567

21. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่อาจก่อให้เกิดการรบกวนการประกอบกิจการโรงงาน พ.ศ. 2567

22. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่อาจก่อให้เกิดการรบกวนการประกอบกิจการโรงงาน พ.ศ. 2567

23. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่อาจก่อให้เกิดการรบกวนการประกอบกิจการโรงงาน พ.ศ. 2567

24. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่อาจก่อให้เกิดการรบกวนการประกอบกิจการโรงงาน พ.ศ. 2567

25. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่อาจก่อให้เกิดการรบกวนการประกอบกิจการโรงงาน พ.ศ. 2567



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhol, Saraburi
Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2494231

Date Received : Sep 04, 2024

Date Reported : Sep 11, 2024

Report Number : 3107782-1

Page 1 of 3

Page 1 of 3

Sample No. 2494231-2

Parameter เสียงรบกวน

Location ทุ่งหินปูน (GPS 47P 0728156, 1619149)

Measurement Date Aug 24 - Aug 25, 2024

Measurement by Prommee Sripaet

Sound Level Meter 00858520

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางคืน	กลางวัน		
08:00 AM - 09:00 AM	58.3	58.6	n/a	-	55.7	-
09:00 AM - 10:00 AM	59.3	56.6	-	56.0	54.3	1.7
10:00 AM - 11:00 AM	58.9	57.0	-	54.4	54.9	-0.5
11:00 AM - 12:00 PM	58.7	56.3	-	55.0	54.0	1.0
12:00 PM - 01:00 PM	60.1	56.4	-	57.7	54.0	3.7
01:00 PM - 02:00 PM	60.2	56.7	-	57.6	54.5	3.1
02:00 PM - 03:00 PM	61.4	56.6	-	58.7	54.2	5.5
03:00 PM - 04:00 PM	62.4	56.9	-	61.0	54.6	6.4
04:00 PM - 05:00 PM	60.9	58.6	-	57.0	56.5	0.3
05:00 PM - 06:00 PM	61.2	59.4	-	56.5	57.3	-0.8
06:00 PM - 07:00 PM	62.2	60.1	-	58.0	58.2	-0.2
07:00 PM - 08:00 PM	60.9	59.3	-	55.8	57.4	-1.6
08:00 PM - 09:00 PM	60.0	55.9	-	57.9	53.9	4.0
09:00 PM - 10:00 PM	60.1	57.5	-	58.6	54.4	2.2
10:00 PM - 10:05 PM	59.5	57.2	-	58.6	55.2	3.4
10:05 PM - 10:10 PM	59.9	57.8	-	58.7	55.4	3.3
10:10 PM - 10:15 PM	59.9	58.0	-	58.1	56.2	1.9
10:15 PM - 10:20 PM	59.9	56.6	-	60.2	54.5	5.7
10:20 PM - 10:25 PM	59.9	57.1	-	59.7	55.4	4.3
10:25 PM - 10:30 PM	59.8	57.2	-	59.3	54.9	4.4
10:30 PM - 10:35 PM	60.1	57.2	-	60.0	54.7	5.3
10:35 PM - 10:40 PM	59.5	57.2	-	58.6	55.0	3.6
10:40 PM - 10:45 PM	60.1	56.7	-	60.4	54.8	5.6
10:45 PM - 10:50 PM	59.7	56.8	-	59.6	54.8	4.8
10:50 PM - 10:55 PM	59.6	56.8	-	59.4	54.1	5.3
10:55 PM - 11:00 PM	59.8	57.3	-	59.2	54.9	4.3
11:00 PM - 11:05 PM	59.6	57.8	-	57.9	55.9	2.0
11:05 PM - 11:10 PM	59.7	56.8	-	59.6	54.5	5.1
11:10 PM - 11:15 PM	59.5	56.1	-	59.8	54.1	5.7
11:15 PM - 11:20 PM	59.2	55.4	-	59.6	53.6	6.3
11:20 PM - 11:25 PM	59.0	56.1	-	58.9	54.2	4.7
11:25 PM - 11:30 PM	59.4	59.3	-	46.0	55.6	-9.6
11:30 PM - 11:35 PM	59.0	61.8	-	n/a	55.6	-
11:35 PM - 11:40 PM	59.4	57.0	-	58.7	54.7	4.0
11:40 PM - 11:45 PM	59.4	55.1	-	59.4	53.5	6.9
11:45 PM - 11:50 PM	60.3	56.2	-	61.2	53.2	8.0
11:50 PM - 11:55 PM	60.0	55.1	-	61.3	53.4	7.9
11:55 PM - 12:00 AM	59.6	55.5	-	60.5	53.3	7.2
12:00 AM - 12:05 AM	59.5	54.4	-	60.9	51.9	9.0
12:05 AM - 12:10 AM	59.5	55.7	-	60.2	53.0	7.2

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Approved by

Kanokkom Anek

Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhai, Saraburi
Thailand 18260

P/O :

Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107782-1

Sample No.

Parameter

Location : Saraburi (GPS 97P 0728156, 1619149)
Aug 24 - Aug 25, 2024

Measurement Date

Measurement by

Sound Level Meter

Page 2 of 3

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางคืน	กลางวัน		
12:10 AM - 12:15 AM	59.5	55.4	-	60.4	53.2	7.2
12:15 AM - 12:20 AM	59.5	56.2	-	59.8	54.0	5.8
12:20 AM - 12:25 AM	59.6	56.3	-	59.9	54.3	5.6
12:25 AM - 12:30 AM	59.5	56.0	-	59.7	54.2	5.7
12:30 AM - 12:35 AM	59.8	56.5	-	60.1	54.8	5.4
12:35 AM - 12:40 AM	60.0	56.8	-	60.2	54.8	5.4
12:40 AM - 12:45 AM	59.7	56.9	-	59.5	55.2	4.3
12:45 AM - 12:50 AM	59.2	56.9	-	59.3	54.8	3.5
12:50 AM - 12:55 AM	59.7	57.0	-	59.4	54.8	4.6
12:55 AM - 01:00 AM	59.3	57.0	-	58.4	54.0	3.4
01:00 AM - 01:05 AM	59.4	57.4	-	58.1	54.8	3.3
01:05 AM - 01:10 AM	59.6	57.2	-	58.9	55.3	3.6
01:10 AM - 01:15 AM	61.0	57.0	-	61.8	54.7	7.1
01:15 AM - 01:20 AM	59.8	57.1	-	59.5	55.6	3.9
01:20 AM - 01:25 AM	59.7	57.6	-	58.5	56.0	2.5
01:25 AM - 01:30 AM	59.7	56.6	-	59.8	55.1	4.7
01:30 AM - 01:35 AM	59.5	57.1	-	58.8	55.6	3.2
01:35 AM - 01:40 AM	60.5	57.9	-	60.0	56.1	3.9
01:40 AM - 01:45 AM	59.7	57.5	-	58.7	55.7	3.0
01:45 AM - 01:50 AM	59.9	57.8	-	58.7	55.8	2.9
01:50 AM - 01:55 AM	59.8	57.8	-	58.5	56.1	2.4
01:55 AM - 02:00 AM	61.6	58.4	-	61.8	55.7	6.1
02:00 AM - 02:05 AM	61.2	57.7	-	61.6	55.8	5.8
02:05 AM - 02:10 AM	60.7	58.2	-	60.1	55.8	4.3
02:10 AM - 02:15 AM	61.2	58.1	-	61.3	55.2	6.1
02:15 AM - 02:20 AM	60.7	58.9	-	59.0	56.4	2.6
02:20 AM - 02:25 AM	60.8	58.7	-	59.6	56.3	3.3
02:25 AM - 02:30 AM	61.1	58.4	-	60.8	56.7	4.1
02:30 AM - 02:35 AM	61.6	57.8	-	62.3	56.0	6.2
02:35 AM - 02:40 AM	60.7	58.2	-	60.1	55.7	4.4
02:40 AM - 02:45 AM	60.1	57.6	-	59.5	54.9	4.6
02:45 AM - 02:50 AM	60.7	57.9	-	60.5	55.6	4.9
02:50 AM - 02:55 AM	60.4	58.1	-	59.5	55.9	3.6
02:55 AM - 03:00 AM	60.5	58.0	-	59.9	54.8	5.1
03:00 AM - 03:05 AM	60.4	57.8	-	59.9	55.3	4.6
03:05 AM - 03:10 AM	60.6	57.9	-	60.3	55.5	4.8
03:10 AM - 03:15 AM	60.0	57.4	-	59.5	55.6	3.9
03:15 AM - 03:20 AM	60.1	57.4	-	59.8	55.0	4.8
03:20 AM - 03:25 AM	60.6	58.0	-	60.1	55.5	4.6
03:25 AM - 03:30 AM	60.7	57.5	-	60.9	54.9	6.0

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Approved by

Kanokkorn Anek

Asst. General Manager

Kanokkorn Anek

Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhai, Saraburi
Thailand 18260

P/O :

Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107782-1

Sample No.

Parameter

Location : Saraburi (GPS 97P 0728156, 1619149)
Aug 24 - Aug 25, 2024

Measurement Date

Measurement by

Sound Level Meter

Page 3 of 3

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางคืน	กลางวัน		
03:30 AM - 03:35 AM	60.1	57.9	-	58.1	55.4	3.7
03:35 AM - 03:40 AM	59.9	57.1	-	59.1	55.2	4.5
03:40 AM - 03:45 AM	61.7	57.7	-	62.3	54.8	7.7
03:45 AM - 03:50 AM	60.6	57.1	-	61.0	54.9	6.1
03:50 AM - 03:55 AM	59.8	57.1	-	59.3	55.3	4.2
03:55 AM - 04:00 AM	59.8	57.9	-	58.3	55.6	2.7
04:00 AM - 04:05 AM	60.1	57.8	-	59.2	54.9	4.3
04:05 AM - 04:10 AM	59.9	56.9	-	59.9	54.6	5.3
04:10 AM - 04:15 AM	59.5	58.0	-	57.2	54.9	2.3
04:15 AM - 04:20 AM	59.5	58.5	-	55.6	54.0	1.6
04:20 AM - 04:25 AM	60.2	57.0	-	60.4	54.5	5.9
04:25 AM - 04:30 AM	60.2	56.7	-	60.6	54.4	6.2
04:30 AM - 04:35 AM	59.4	57.4	-	58.1	54.2	3.9
04:35 AM - 04:40 AM	59.2	56.6	-	58.7	53.7	5.0
04:40 AM - 04:45 AM	59.2	56.7	-	58.6	54.1	4.5
04:45 AM - 04:50 AM	61.0	56.5	-	62.1	53.9	8.2
04:50 AM - 04:55 AM	59.3	57.3	-	58.0	54.2	3.8
04:55 AM - 05:00 AM	59.4	58.9	-	52.8	55.7	-2.9
05:00 AM - 05:05 AM	59.6	57.2	-	58.9	54.3	4.6
05:05 AM - 05:10 AM	59.1	57.3	-	57.4	54.7	2.7
05:10 AM - 05:15 AM	59.2	60.3	-	n/a	56.0	-
05:15 AM - 05:20 AM	59.3	58.4	-	55.0	54.9	0.1
05:20 AM - 05:25 AM	58.9	58.6	-	55.1	55.1	-
05:25 AM - 05:30 AM	58.8	58.8	-	n/a	54.8	-
05:30 AM - 05:35 AM	59.7	57.8	-	58.2	55.5	2.7
05:35 AM - 05:40 AM	59.1	58.0	-	55.6	55.0	0.6
05:40 AM - 05:45 AM	59.3	58.6	-	54.0	55.4	-1.4
05:45 AM - 05:50 AM	58.8	58.3	-	52.2	55.4	-3.2
05:50 AM - 05:55 AM	59.6	58.0	-	57.5	55.4	2.1
05:55 AM - 06:00 AM	58.9	58.7	-	48.4	55.9	-7.5
06:00 AM - 07:00 AM	60.5	59.0	55.2	-	56.4	-1.2
07:00 AM - 08:00 AM	58.8	62.3	n/a	-	56.7	≤ 10

Reference Method :

1. In-house method : STM 06-001 based on ISO 1996-1 : 2016

2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการวัดระดับเสียงและการประเมินผลกระทบจากเสียงรบกวน พ.ศ. 2567

หมายเหตุ : 1. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง ค่าเกณฑ์ระดับเสียงการรบกวนและระดับเสียงที่ได้จากการประเมินผลกระทบจากเสียงรบกวน พ.ศ. 2568

2. ประกาศกระทรวงสาธารณสุข เรื่อง ค่าเกณฑ์มาตรฐานของระดับเสียงที่ได้จากการประเมินผลกระทบจากเสียงรบกวน พ.ศ. 2561

Remark :

1. ระดับเสียงจากแหล่งกำเนิด ที่ทำการวัด วันที่ 24-25 สิงหาคม 2567

2. ระดับเสียงพื้นฐนและระดับเสียงขณะไม่มีการรบกวน (Sample No.2494233-2, ชุดตรวจวัด 24-25 สิงหาคม 2567)

3. หมายเหตุ : ผลการประเมินเสียงจากการรบกวนจากการประเมินเสียงที่ได้จากการประเมินผลกระทบจากเสียงรบกวน พ.ศ. 2561

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Approved by

Kanokkorn Anek

Asst. General Manager

Kanokkorn Anek

Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5/5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhol, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107783-1

Page 1 of 3

Sample No. 2494231-3
Parameter เสียงรบกวน
Location ฐานปูน (GPS 47P 0728156, 1619149)
Measurement Date Aug 25 - Aug 26, 2024
Measurement by Prommee Sripatmet
Sound Level Meter 00858520

เวลา	เสียงจากแหล่งกำเนิด	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่ารวม
		เสียงขณะปฏิบัติงาน	ค่าเฉลี่ย		
08:00 AM - 09:00 AM	58.9	61.0	-	57.4	-
09:00 AM - 10:00 AM	59.1	56.8	55.2	54.6	0.6
10:00 AM - 11:00 AM	59.6	56.2	56.9	54.2	2.7
11:00 AM - 12:00 PM	58.2	59.9	n/a	55.4	-
12:00 PM - 01:00 PM	58.5	56.8	53.6	54.2	-0.6
01:00 PM - 02:00 PM	58.8	56.8	54.5	54.8	-0.3
02:00 PM - 03:00 PM	59.9	56.3	57.4	54.3	3.1
03:00 PM - 04:00 PM	59.5	57.1	55.8	55.3	0.5
04:00 PM - 05:00 PM	59.4	57.3	56.4	55.4	1.0
05:00 PM - 06:00 PM	59.8	57.6	55.8	55.4	0.4
06:00 PM - 07:00 PM	59.3	57.8	54.0	55.4	-1.4
07:00 PM - 08:00 PM	59.0	57.4	53.9	55.5	-1.6
08:00 PM - 09:00 PM	59.2	59.1	52.8	56.7	-13.9
09:00 PM - 10:00 PM	59.5	58.5	-	55.9	-4.3
10:00 PM - 10:05 PM	59.7	57.4	58.8	55.2	3.6
10:05 PM - 10:10 PM	59.6	58.5	56.1	55.2	0.9
10:10 PM - 10:15 PM	59.6	56.7	54.5	54.5	5.0
10:15 PM - 10:20 PM	59.4	57.2	58.4	55.2	3.2
10:20 PM - 10:25 PM	59.2	57.1	58.0	55.2	2.8
10:25 PM - 10:30 PM	59.0	55.1	59.7	53.0	6.7
10:30 PM - 10:35 PM	59.4	54.7	60.6	53.1	7.5
10:35 PM - 10:40 PM	59.6	55.3	-	53.9	6.7
10:40 PM - 10:45 PM	59.4	54.2	60.8	52.3	8.5
10:45 PM - 10:50 PM	59.5	55.2	60.5	52.6	7.9
10:50 PM - 10:55 PM	59.6	54.5	61.0	52.8	8.2
10:55 PM - 11:00 PM	59.6	54.8	60.9	52.6	8.3
11:00 PM - 11:05 PM	59.8	54.0	61.5	51.3	10.2
11:05 PM - 11:10 PM	59.5	54.9	60.7	52.4	8.3
11:10 PM - 11:15 PM	59.4	54.7	60.6	51.7	8.9
11:15 PM - 11:20 PM	60.0	53.9	61.8	51.8	10.0
11:20 PM - 11:25 PM	59.7	55.3	60.7	52.9	7.8
11:25 PM - 11:30 PM	59.5	56.1	59.8	53.7	6.1
11:30 PM - 11:35 PM	59.6	56.3	59.9	53.8	6.1
11:35 PM - 11:40 PM	59.6	56.5	59.7	54.4	5.3
11:40 PM - 11:45 PM	59.4	56.8	58.9	53.6	5.3
11:45 PM - 11:50 PM	59.4	57.4	58.1	54.9	3.2
11:50 PM - 11:55 PM	59.8	58.7	56.3	53.9	2.4
11:55 PM - 12:00 AM	59.1	62.3	n/a	54.4	-
12:00 AM - 12:05 AM	59.6	57.2	58.9	54.6	4.3
12:05 AM - 12:10 AM	59.2	57.3	57.7	55.2	2.5

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Approved by

Kanokorn Anek

Asst. General Manager

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Approved by

Kanokorn Anek

Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5/5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhol, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107783-1

Page 2 of 3

Sample No. 2494231-3
Parameter เสียงรบกวน
Location ฐานปูน (GPS 47P 0728156, 1619149)
Measurement Date Aug 25 - Aug 26, 2024
Measurement by Prommee Sripatmet
Sound Level Meter 00858520

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะปฏิบัติงาน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่ารวม
			ค่าจริง	ค่าเฉลี่ย		
12:10 AM - 12:15 AM	59.5	59.1	-	51.9	56.2	4.3
12:15 AM - 12:20 AM	59.2	58.8	-	51.6	56.9	-5.3
12:20 AM - 12:25 AM	59.4	57.9	-	57.1	55.7	1.4
12:25 AM - 12:30 AM	59.3	57.1	-	58.3	55.0	3.3
12:30 AM - 12:35 AM	59.5	57.9	-	57.4	55.4	2.0
12:35 AM - 12:40 AM	59.8	56.7	-	59.9	53.6	6.3
12:40 AM - 12:45 AM	59.6	56.6	-	59.6	53.7	5.9
12:45 AM - 12:50 AM	59.5	56.5	-	59.5	54.4	5.1
12:50 AM - 12:55 AM	60.1	57.1	-	60.1	53.9	6.2
12:55 AM - 01:00 AM	59.9	56.9	-	59.9	54.3	5.6
01:00 AM - 01:05 AM	59.3	56.6	-	59.0	53.9	5.1
01:05 AM - 01:10 AM	59.5	57.1	-	58.8	54.2	4.6
01:10 AM - 01:15 AM	59.3	56.8	-	58.7	54.0	4.7
01:15 AM - 01:20 AM	59.5	58.1	-	56.9	55.2	1.7
01:20 AM - 01:25 AM	59.7	57.2	-	59.1	54.2	4.9
01:25 AM - 01:30 AM	60.1	56.3	-	60.8	54.1	6.7
01:30 AM - 01:35 AM	59.9	56.5	-	60.2	54.2	6.0
01:35 AM - 01:40 AM	60.0	57.3	-	59.7	54.6	5.1
01:40 AM - 01:45 AM	59.9	56.9	-	59.9	54.4	3.5
01:45 AM - 01:50 AM	60.0	57.7	-	59.1	54.7	4.4
01:50 AM - 01:55 AM	60.1	57.3	-	59.9	54.0	5.9
01:55 AM - 02:00 AM	60.5	58.1	-	59.8	55.1	4.7
02:00 AM - 02:05 AM	60.5	57.3	-	60.7	54.5	6.2
02:05 AM - 02:10 AM	60.9	57.2	-	61.5	54.5	7.0
02:10 AM - 02:15 AM	60.6	58.6	-	59.3	55.5	3.8
02:15 AM - 02:20 AM	60.6	56.8	-	61.3	54.7	6.6
02:20 AM - 02:25 AM	60.3	58.3	-	59.0	55.6	3.4
02:25 AM - 02:30 AM	61.4	57.0	-	62.4	54.2	8.2
02:30 AM - 02:35 AM	60.8	56.1	-	62.0	53.6	8.4
02:35 AM - 02:40 AM	60.4	58.4	-	59.1	55.4	3.7
02:40 AM - 02:45 AM	60.4	57.6	-	60.2	54.4	5.8
02:45 AM - 02:50 AM	60.3	57.2	-	60.4	54.1	6.3
02:50 AM - 02:55 AM	61.0	55.9	-	62.4	53.5	8.9
02:55 AM - 03:00 AM	60.0	56.5	-	60.4	54.1	6.3
03:00 AM - 03:05 AM	60.0	57.4	-	59.5	55.4	4.1
03:05 AM - 03:10 AM	61.0	57.3	-	61.6	55.5	6.1
03:10 AM - 03:15 AM	59.8	58.0	-	58.1	55.4	2.7
03:15 AM - 03:20 AM	60.1	57.4	-	59.8	54.2	5.6
03:20 AM - 03:25 AM	60.3	56.9	-	60.6	54.8	5.8
03:25 AM - 03:30 AM	60.3	57.2	-	60.4	54.7	5.7

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Approved by

Kanokorn Anek

Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhohi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231-3
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107783-1

Page 3 of 3

Sample No. 2494231-3
Parameter เสียงรบกวน
Location บ้านจันทน์ (GPS 47P 0728156, 1619149)
Measurement Date Aug 25 - Aug 26, 2024
Measurement by Prommee Sipatnet
Sound Level Meter 00858520

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะปฏิบัติการ	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			ค่าจริง	ค่าเฉลี่ย		
03:30 AM - 03:35 AM	60.3	57.6	-	60.0	54.4	5.6
03:35 AM - 03:40 AM	61.0	57.1	-	61.0	54.9	6.8
03:40 AM - 03:45 AM	60.0	56.5	-	60.4	54.5	5.9
03:45 AM - 03:50 AM	60.6	57.3	-	60.7	54.8	5.9
03:50 AM - 03:55 AM	59.7	57.4	-	59.8	54.8	4.0
03:55 AM - 04:00 AM	59.6	56.7	-	59.5	54.4	5.1
04:00 AM - 04:05 AM	62.0	57.6	-	63.0	54.7	8.3
04:05 AM - 04:10 AM	59.5	57.0	-	59.9	54.5	4.4
04:10 AM - 04:15 AM	59.7	57.8	-	59.2	55.3	2.9
04:15 AM - 04:20 AM	59.1	57.8	-	58.2	55.0	1.2
04:20 AM - 04:25 AM	59.5	57.6	-	58.0	54.6	3.4
04:25 AM - 04:30 AM	59.0	57.0	-	57.7	54.3	3.4
04:30 AM - 04:35 AM	59.2	56.6	-	58.7	54.2	4.5
04:35 AM - 04:40 AM	59.0	56.1	-	58.1	54.1	4.0
04:40 AM - 04:45 AM	58.5	55.1	-	58.8	52.3	6.5
04:45 AM - 04:50 AM	59.4	55.2	-	60.3	53.2	7.1
04:50 AM - 04:55 AM	59.4	56.3	-	59.5	54.6	4.9
04:55 AM - 05:00 AM	59.0	56.4	-	56.4	54.2	2.2
05:00 AM - 05:05 AM	59.2	55.8	-	59.5	53.5	6.0
05:05 AM - 05:10 AM	58.8	58.3	-	52.2	55.1	-2.9
05:10 AM - 05:15 AM	60.8	57.4	-	61.1	54.9	6.2
05:15 AM - 05:20 AM	58.6	56.5	-	57.4	54.8	2.6
05:20 AM - 05:25 AM	59.2	56.9	-	58.4	54.8	5.0
05:25 AM - 05:30 AM	58.7	56.9	-	57.0	54.8	2.2
05:30 AM - 05:35 AM	58.8	57.3	-	56.5	55.5	1.0
05:35 AM - 05:40 AM	59.3	58.8	-	60.1	54.2	5.9
05:40 AM - 05:45 AM	59.0	56.4	-	59.3	54.3	4.2
05:45 AM - 05:50 AM	59.9	56.2	-	59.3	53.2	6.1
05:50 AM - 05:55 AM	59.1	57.9	-	55.6	54.3	6.3
05:55 AM - 06:00 AM	58.6	57.3	-	55.9	55.6	0.3
06:00 AM - 07:00 AM	58.6	57.3	52.7	54.9	54.9	-2.2
07:00 AM - 08:00 AM	58.7	57.3	53.1	55.2	55.2	-2.1

หมายเหตุ

1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. วิธีการวัดเสียงและประเมินเสียง : ใช้วิธีการวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดตลอดการปฏิบัติการโรงงาน พ.ศ. 2567

3. ค่าเฉลี่ยเสียงรบกวน : ค่าเฉลี่ยเสียงรบกวนระดับเสียงรบกวน (Sample No. 2494231-3) วันที่ตรวจวัด 25-26 สิงหาคม 2567

4. ค่าเฉลี่ยเสียงรบกวน : ค่าเฉลี่ยเสียงรบกวนระดับเสียงรบกวน (Sample No. 2494231-3) วันที่ตรวจวัด 25-26 สิงหาคม 2567

5. ค่าเฉลี่ยเสียงรบกวน : ค่าเฉลี่ยเสียงรบกวนระดับเสียงรบกวน (Sample No. 2494231-3) วันที่ตรวจวัด 25-26 สิงหาคม 2567

6. ค่าเฉลี่ยเสียงรบกวน : ค่าเฉลี่ยเสียงรบกวนระดับเสียงรบกวน (Sample No. 2494231-3) วันที่ตรวจวัด 25-26 สิงหาคม 2567

7. ค่าเฉลี่ยเสียงรบกวน : ค่าเฉลี่ยเสียงรบกวนระดับเสียงรบกวน (Sample No. 2494231-3) วันที่ตรวจวัด 25-26 สิงหาคม 2567

8. ค่าเฉลี่ยเสียงรบกวน : ค่าเฉลี่ยเสียงรบกวนระดับเสียงรบกวน (Sample No. 2494231-3) วันที่ตรวจวัด 25-26 สิงหาคม 2567

9. ค่าเฉลี่ยเสียงรบกวน : ค่าเฉลี่ยเสียงรบกวนระดับเสียงรบกวน (Sample No. 2494231-3) วันที่ตรวจวัด 25-26 สิงหาคม 2567

10. ค่าเฉลี่ยเสียงรบกวน : ค่าเฉลี่ยเสียงรบกวนระดับเสียงรบกวน (Sample No. 2494231-3) วันที่ตรวจวัด 25-26 สิงหาคม 2567

11. ค่าเฉลี่ยเสียงรบกวน : ค่าเฉลี่ยเสียงรบกวนระดับเสียงรบกวน (Sample No. 2494231-3) วันที่ตรวจวัด 25-26 สิงหาคม 2567

12. ค่าเฉลี่ยเสียงรบกวน : ค่าเฉลี่ยเสียงรบกวนระดับเสียงรบกวน (Sample No. 2494231-3) วันที่ตรวจวัด 25-26 สิงหาคม 2567

13. ค่าเฉลี่ยเสียงรบกวน : ค่าเฉลี่ยเสียงรบกวนระดับเสียงรบกวน (Sample No. 2494231-3) วันที่ตรวจวัด 25-26 สิงหาคม 2567

14. ค่าเฉลี่ยเสียงรบกวน : ค่าเฉลี่ยเสียงรบกวนระดับเสียงรบกวน (Sample No. 2494231-3) วันที่ตรวจวัด 25-26 สิงหาคม 2567

15. ค่าเฉลี่ยเสียงรบกวน : ค่าเฉลี่ยเสียงรบกวนระดับเสียงรบกวน (Sample No. 2494231-3) วันที่ตรวจวัด 25-26 สิงหาคม 2567

16. ค่าเฉลี่ยเสียงรบกวน : ค่าเฉลี่ยเสียงรบกวนระดับเสียงรบกวน (Sample No. 2494231-3) วันที่ตรวจวัด 25-26 สิงหาคม 2567

17. ค่าเฉลี่ยเสียงรบกวน : ค่าเฉลี่ยเสียงรบกวนระดับเสียงรบกวน (Sample No. 2494231-3) วันที่ตรวจวัด 25-26 สิงหาคม 2567

18. ค่าเฉลี่ยเสียงรบกวน : ค่าเฉลี่ยเสียงรบกวนระดับเสียงรบกวน (Sample No. 2494231-3) วันที่ตรวจวัด 25-26 สิงหาคม 2567

19. ค่าเฉลี่ยเสียงรบกวน : ค่าเฉลี่ยเสียงรบกวนระดับเสียงรบกวน (Sample No. 2494231-3) วันที่ตรวจวัด 25-26 สิงหาคม 2567

20. ค่าเฉลี่ยเสียงรบกวน : ค่าเฉลี่ยเสียงรบกวนระดับเสียงรบกวน (Sample No. 2494231-3) วันที่ตรวจวัด 25-26 สิงหาคม 2567

21. ค่าเฉลี่ยเสียงรบกวน : ค่าเฉลี่ยเสียงรบกวนระดับเสียงรบกวน (Sample No. 2494231-3) วันที่ตรวจวัด 25-26 สิงหาคม 2567

22. ค่าเฉลี่ยเสียงรบกวน : ค่าเฉลี่ยเสียงรบกวนระดับเสียงรบกวน (Sample No. 2494231-3) วันที่ตรวจวัด 25-26 สิงหาคม 2567

23. ค่าเฉลี่ยเสียงรบกวน : ค่าเฉลี่ยเสียงรบกวนระดับเสียงรบกวน (Sample No. 2494231-3) วันที่ตรวจวัด 25-26 สิงหาคม 2567

24. ค่าเฉลี่ยเสียงรบกวน : ค่าเฉลี่ยเสียงรบกวนระดับเสียงรบกวน (Sample No. 2494231-3) วันที่ตรวจวัด 25-26 สิงหาคม 2567

25. ค่าเฉลี่ยเสียงรบกวน : ค่าเฉลี่ยเสียงรบกวนระดับเสียงรบกวน (Sample No. 2494231-3) วันที่ตรวจวัด 25-26 สิงหาคม 2567

26. ค่าเฉลี่ยเสียงรบกวน : ค่าเฉลี่ยเสียงรบกวนระดับเสียงรบกวน (Sample No. 2494231-3) วันที่ตรวจวัด 25-26 สิงหาคม 2567

27. ค่าเฉลี่ยเสียงรบกวน : ค่าเฉลี่ยเสียงรบกวนระดับเสียงรบกวน (Sample No. 2494231-3) วันที่ตรวจวัด 25-26 สิงหาคม 2567

28. ค่าเฉลี่ยเสียงรบกวน : ค่าเฉลี่ยเสียงรบกวนระดับเสียงรบกวน (Sample No. 2494231-3) วันที่ตรวจวัด 25-26 สิงหาคม 2567

29. ค่าเฉลี่ยเสียงรบกวน : ค่าเฉลี่ยเสียงรบกวนระดับเสียงรบกวน (Sample No. 2494231-3) วันที่ตรวจวัด 25-26 สิงหาคม 2567

30. ค่าเฉลี่ยเสียงรบกวน : ค่าเฉลี่ยเสียงรบกวนระดับเสียงรบกวน (Sample No. 2494231-3) วันที่ตรวจวัด 25-26 สิงหาคม 2567



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhohi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231-4
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107784-1

Page 1 of 3

Sample No. 2494231-4
Parameter เสียงรบกวน
Location บ้านจันทน์ (GPS 47P 0728156, 1619149)
Measurement Date Aug 26 - Aug 27, 2024
Measurement by Prommee Sipatnet
Sound Level Meter 00858520

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะปฏิบัติการ	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			ค่าจริง	ค่าเฉลี่ย		
08:00 AM - 09:00 AM	59.2	56.7	-	55.6	57.4	-1.8
09:00 AM - 10:00 AM	59.0	56.3	-	55.7	54.0	1.7
10:00 AM - 11:00 AM	59.4	56.5	-	56.3	54.1	2.2
11:00 AM - 12:00 PM	59.1	57.1	-	54.8	53.7	1.1
12:00 PM - 01:00 PM	59.6	59.6	n/a	n/a	53.8	-
01:00 PM - 02:00 PM	59.9	56.4	-	57.3	54.3	3.0
02:00 PM - 03:00 PM	60.7	57.2	-	58.1	54.7	3.4
03:00 PM - 04:00 PM	60.2	56.8	-	57.5	54.5	3.0
04:00 PM - 05:00 PM	60.3	57.5	-	57.1	55.3	1.8
05:00 PM - 06:00 PM	60.2	58.5	-	55.3	55.3	-1.2
06:00 PM - 07:00 PM	60.2	58.9	-	54.3	56.7	-2.4
07:00 PM - 08:00 PM	59.7	59.6	-	43.3	57.3	-14.0
08:00 PM - 09:00 PM	59.1	59.3	-	n/a	57.0	-
09:00 PM - 10:00 PM	58.7	58.8	-	n/a	56.5	-
10:00 PM - 10:05 PM	58.4	58.5	-	-	56.1	-
10:05 PM - 10:10 PM	59.3	57.9	-	56.7	56.1	0.6
10:10 PM - 10:15 PM	59.0	59.2	-	n/a	56.7	-
10:15 PM - 10:20 PM	60.1	60.2	-	n/a	57.7	-
10:20 PM - 10:25 PM	59.3	58.9	-	n/a	56.8	-
10:25 PM - 10:30 PM	59.0	59.0	-	n/a	56.5	-
10:30 PM - 10:35 PM	58.4	57.8	-	52.5	55.7	-3.2
10:35 PM - 10:40 PM	58.3	57.7	-	52.4	55.8	-3.4
10:40 PM - 10:45 PM	58.5	57.0	-	56.2	55.4	0.8
10:45 PM - 10:50 PM	59.1	58.0	-	55.6	56.4	-0.8
10:50 PM - 10:55 PM	58.2	58.2	-	n/a	55.4	-
10:55 PM - 11:00 PM	58.5	65.6	-	n/a	54.7	-
11:00 PM - 11:05 PM	58.7	58.3	-	51.1	56.5	-5.4
11:05 PM - 11:10 PM	58.5	58.9	-	n/a	56.8	-
11:10 PM - 11:15 PM	58.8	57.2	-	55.3	56.2	-0.9
11:15 PM - 11:20 PM	58.7	60.0	-	n/a	57.3	-
11:20 PM - 11:25 PM	58.5	59.1	-	n/a	57.4	-
11:25 PM - 11:30 PM	58.5	58.3	-	48.0	56.6	-8.6
11:30 PM - 11:35 PM	58.4	57.4	-	54.0	55.3	-0.8
11:35 PM - 11:40 PM	58.4	57.6	-	53.7	55.3	-1.8
11:40 PM - 11:45 PM	58.5	58.0	-	51.9	56.0	-4.1
11:45 PM - 11:50 PM	58.5	58.5	-	n/a	56.3	-
11:50 PM - 11:55 PM	58.2	55.1	-	58.3	52.4	5.9
11:55 PM - 12:00 AM	58.2	54.5	-	58.8	52.6	6.2
12:00 AM - 12:05 AM	58.3	54.4	-	59.0	52.3	6.7
12:05 AM - 12:10 AM	58.7	55.3	-	59.0	53.3	5.7

Approved by

Kanokkorn Anek

Asst. General Manager

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99/219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhol, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107784-1

Page 2 of 3

Sample No. : 2494231-4
Parameter : เลี้ยงปูน
Location : บ้านฉนวน (GPS 47P 0728156, 1619149)
Measurement Date : Aug 26 - Aug 27, 2024
Measurement by : Prommee Sripatnet
Sound Level Meter : 00898520

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:10 AM - 12:15 AM	58.5	55.5	-	-	53.2	5.3
12:15 AM - 12:20 AM	58.4	55.5	58.3	-	52.5	5.8
12:20 AM - 12:25 AM	58.6	54.6	59.4	-	52.6	6.8
12:25 AM - 12:30 AM	58.9	53.8	60.3	-	51.6	8.7
12:30 AM - 12:35 AM	58.9	54.2	59.2	-	52.1	6.9
12:35 AM - 12:40 AM	58.8	54.7	59.2	-	51.7	7.5
12:40 AM - 12:45 AM	58.5	54.7	59.0	-	52.3	6.5
12:45 AM - 12:50 AM	58.6	55.1	59.0	-	52.7	6.3
12:50 AM - 12:55 AM	58.7	53.7	60.0	-	51.7	8.3
12:55 AM - 01:00 AM	58.5	54.9	59.0	-	52.7	6.3
01:00 AM - 01:05 AM	59.2	54.8	60.2	-	52.1	8.1
01:05 AM - 01:10 AM	61.1	54.1	63.1	-	51.6	11.5
01:10 AM - 01:15 AM	58.8	54.8	59.6	-	51.4	8.2
01:15 AM - 01:20 AM	58.8	55.8	58.8	-	53.4	5.4
01:20 AM - 01:25 AM	58.7	55.5	58.9	-	53.2	5.7
01:25 AM - 01:30 AM	59.3	54.6	60.5	-	52.1	8.4
01:30 AM - 01:35 AM	59.3	54.2	60.7	-	52.4	8.3
01:35 AM - 01:40 AM	58.8	54.6	59.7	-	52.7	7.0
01:40 AM - 01:45 AM	59.9	54.6	61.2	-	52.6	8.6
01:45 AM - 01:50 AM	59.8	54.9	61.2	-	52.7	8.5
01:50 AM - 01:55 AM	59.6	54.5	61.0	-	52.2	8.8
01:55 AM - 02:00 AM	60.1	55.1	61.4	-	52.6	8.8
02:00 AM - 02:05 AM	60.5	55.7	61.8	-	52.4	9.4
02:05 AM - 02:10 AM	60.4	54.1	62.2	-	52.1	10.1
02:10 AM - 02:15 AM	61.0	54.8	62.8	-	51.9	10.9
02:15 AM - 02:20 AM	60.1	55.1	61.4	-	52.7	8.7
02:20 AM - 02:25 AM	59.9	54.4	62.5	-	52.1	9.4
02:25 AM - 02:30 AM	60.6	54.3	62.4	-	52.1	10.3
02:30 AM - 02:35 AM	60.6	54.5	61.5	-	51.4	10.1
02:35 AM - 02:40 AM	59.8	54.0	61.5	-	51.2	11.1
02:40 AM - 02:45 AM	60.2	53.0	62.3	-	51.2	10.3
02:45 AM - 02:50 AM	59.6	53.1	61.5	-	51.2	10.3
02:50 AM - 02:55 AM	60.1	53.8	61.9	-	51.4	10.5
02:55 AM - 03:00 AM	60.2	52.8	62.3	-	50.4	11.9
03:00 AM - 03:05 AM	59.9	53.9	61.6	-	51.1	10.5
03:05 AM - 03:10 AM	61.3	53.7	63.5	-	51.9	11.6
03:10 AM - 03:15 AM	61.7	55.1	63.6	-	50.9	12.7
03:15 AM - 03:20 AM	62.3	55.1	64.4	-	52.3	12.1
03:20 AM - 03:25 AM	61.7	55.5	63.5	-	53.1	10.4
03:25 AM - 03:30 AM	61.5	54.6	63.5	-	52.4	11.1

This document is valid only for the analyzed sample(s) as indicated in this report. It is not valid for any other sample(s) or for any other purpose without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not misused except in full.

Approved by

Kanokkom Anek

Asst. General Manager

This document is valid only for the analyzed sample(s) as indicated in this report. It is not valid for any other sample(s) or for any other purpose without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not misused except in full.

Approved by

Kanokkom Anek

Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99/219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhol, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107784-1

Page 3 of 3

Sample No. : 2494231-4
Parameter : เลี้ยงปูน
Location : บ้านฉนวน (GPS 47P 0728156, 1619149)
Measurement Date : Aug 26 - Aug 27, 2024
Measurement by : Prommee Sripatnet
Sound Level Meter : 00898520

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
03:30 AM - 03:35 AM	60.9	55.2	-	-	52.1	10.4
03:35 AM - 03:40 AM	62.0	53.9	64.5	-	51.9	12.4
03:40 AM - 03:45 AM	61.1	55.4	62.7	-	52.6	10.1
03:45 AM - 03:50 AM	60.8	54.1	62.8	-	52.2	10.6
03:50 AM - 03:55 AM	61.2	55.3	62.9	-	52.6	10.3
03:55 AM - 04:00 AM	61.2	55.0	63.0	-	52.6	10.4
04:00 AM - 04:05 AM	62.0	56.3	63.6	-	52.8	10.8
04:05 AM - 04:10 AM	61.1	54.9	62.9	-	52.4	10.5
04:10 AM - 04:15 AM	60.3	55.3	61.6	-	52.3	9.3
04:15 AM - 04:20 AM	58.9	54.9	59.7	-	52.2	7.5
04:20 AM - 04:25 AM	59.4	56.0	59.7	-	52.0	7.7
04:25 AM - 04:30 AM	59.3	55.6	59.9	-	53.0	6.9
04:30 AM - 04:35 AM	59.7	55.0	60.9	-	52.0	8.9
04:35 AM - 04:40 AM	58.9	55.2	59.5	-	52.4	7.1
04:40 AM - 04:45 AM	59.0	54.2	60.3	-	51.5	8.8
04:45 AM - 04:50 AM	59.0	55.7	59.3	-	52.6	6.7
04:50 AM - 04:55 AM	59.0	56.2	58.8	-	52.1	6.7
04:55 AM - 05:00 AM	58.9	53.6	60.4	-	50.6	9.8
05:00 AM - 05:05 AM	58.7	54.0	59.9	-	51.4	8.5
05:05 AM - 05:10 AM	58.7	54.3	59.7	-	51.2	8.5
05:10 AM - 05:15 AM	59.1	53.7	60.6	-	51.3	9.3
05:15 AM - 05:20 AM	58.5	54.5	59.3	-	52.3	8.8
05:20 AM - 05:25 AM	58.7	54.5	59.6	-	51.6	8.0
05:25 AM - 05:30 AM	58.5	55.4	58.6	-	52.4	6.2
05:30 AM - 05:35 AM	58.8	57.6	55.6	-	52.5	3.1
05:35 AM - 05:40 AM	58.6	55.6	58.6	-	52.7	5.9
05:40 AM - 05:45 AM	58.9	56.0	57.2	-	52.8	6.0
05:45 AM - 05:50 AM	58.7	56.8	57.9	-	53.6	3.6
05:50 AM - 05:55 AM	58.8	56.5	57.2	-	53.9	4.0
05:55 AM - 06:00 AM	58.7	56.5	57.7	-	54.0	3.7
06:00 AM - 07:00 AM	58.7	58.0	50.4	-	55.1	-4.7
07:00 AM - 08:00 AM	58.7	59.8	n/a	-	55.3	-

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการวัดระดับเสียงการรบกวน ระดับเสียงไม่เกิน 24 ดีบีเอ และระดับเสียงสูงสุดที่ได้จากการประกอบกิจการโรงงาน พ.ศ. 2567

หมายเหตุ
1. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่ได้จากการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่ได้จากการประกอบกิจการโรงงาน พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด จากการตรวจวัด วันที่ 26-27 สิงหาคม 2567
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.2494233-4 ตรวจวัดวันที่ 26-27 สิงหาคม 2567)
3. n/a: ไม่สามารถคำนวณระดับเสียงขณะไม่มีการรบกวนเนื่องจากแหล่งกำเนิดการรบกวนมีลักษณะเป็นเสียงต่อเนื่องและไม่มีการรบกวน



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219/301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kancholoi, Saraburi
Thailand 18260

P/O :

Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107785-1

Page 1 of 3

Sample No. 2494231-5
Parameter เลื่อนรบกวน
Location บ้านฉนวน (GPS 47P 0728156, 1619149)
Measurement Date Aug 27 - Aug 28, 2024
Measurement by Prommee Sipatnet
Sound Level Meter 00858520

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะบันทึกการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่ารวม
			ค่าจริง	ค่าเฉลี่ย		
08:00 AM - 09:00 AM	59.5	57.4	55.3	-	54.2	1.1
09:00 AM - 10:00 AM	58.2	56.2	53.9	-	53.5	0.4
10:00 AM - 11:00 AM	58.1	56.0	53.9	0.6	53.4	-
11:00 AM - 12:00 PM	58.1	56.0	53.9	-	53.6	0.3
12:00 PM - 01:00 PM	59.1	55.2	56.8	-	52.8	4.0
01:00 PM - 02:00 PM	59.3	55.0	57.3	-	52.8	4.5
02:00 PM - 03:00 PM	58.9	56.1	55.7	-	54.0	1.7
03:00 PM - 04:00 PM	59.3	56.5	56.1	-	53.9	2.2
04:00 PM - 05:00 PM	59.2	56.4	56.6	-	54.0	2.6
05:00 PM - 06:00 PM	59.2	57.4	54.5	-	54.9	-0.4
06:00 PM - 07:00 PM	58.8	57.7	52.3	-	55.4	-3.1
07:00 PM - 08:00 PM	58.8	57.4	53.2	-	55.2	-2.0
08:00 PM - 09:00 PM	58.8	59.2	56.8	-	56.6	-
09:00 PM - 10:00 PM	59.9	55.7	57.8	-	53.7	4.1
10:00 PM - 10:05 PM	58.9	55.5	59.2	58.8	53.3	5.9
10:05 PM - 10:10 PM	58.8	55.8	54.0	58.8	54.0	4.8
10:10 PM - 10:15 PM	58.7	54.8	59.4	59.4	52.8	6.6
10:15 PM - 10:20 PM	58.6	55.3	53.1	58.9	53.1	5.8
10:20 PM - 10:25 PM	58.9	55.3	60.1	60.1	53.3	6.8
10:25 PM - 10:30 PM	58.9	55.1	59.6	59.6	52.9	6.7
10:30 PM - 10:35 PM	59.3	54.7	60.5	60.5	52.7	7.8
10:35 PM - 10:40 PM	58.6	54.4	59.5	59.5	52.4	7.1
10:40 PM - 10:45 PM	59.2	55.7	59.6	59.6	51.6	8.0
10:45 PM - 10:50 PM	58.9	55.0	59.6	59.6	52.3	7.3
10:50 PM - 10:55 PM	59.0	53.7	60.5	60.5	51.6	8.9
10:55 PM - 11:00 PM	59.6	54.2	61.1	61.1	51.4	9.7
11:00 PM - 11:05 PM	59.1	54.4	60.3	60.3	52.2	8.1
11:05 PM - 11:10 PM	59.1	54.0	60.5	60.5	51.4	9.1
11:10 PM - 11:15 PM	59.4	54.1	60.9	60.9	51.7	9.2
11:15 PM - 11:20 PM	59.2	54.9	60.2	60.2	52.5	7.7
11:20 PM - 11:25 PM	59.5	54.1	61.0	61.0	51.7	9.3
11:25 PM - 11:30 PM	59.4	54.4	60.7	60.7	51.9	8.8
11:30 PM - 11:35 PM	59.3	54.2	60.7	60.7	52.0	8.7
11:35 PM - 11:40 PM	59.4	55.5	60.1	60.1	53.4	6.7
11:40 PM - 11:45 PM	59.4	55.6	60.1	60.1	53.2	6.9
11:45 PM - 11:50 PM	59.4	55.4	60.2	60.2	53.4	6.8
11:50 PM - 11:55 PM	59.1	57.2	57.6	57.6	54.5	3.1
11:55 PM - 12:00 AM	59.4	56.8	59.3	59.3	53.5	5.8
12:00 AM - 12:05 AM	59.1	56.5	58.2	58.2	54.9	3.3
12:05 AM - 12:10 AM	59.0	56.3	58.7	58.7	54.1	4.6

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Approved by

Kanokkorn Anek
Asst. General Manager

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107785-1

Project Name : Saraburi Factory Plant
Project Location :

Approved by

Kanokkorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219/301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kancholoi, Saraburi
Thailand 18260

P/O :

Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107785-1

Page 2 of 3

Sample No. 2494231-5
Parameter เลื่อนรบกวน
Location บ้านฉนวน (GPS 47P 0728156, 1619149)
Measurement Date Aug 27 - Aug 28, 2024
Measurement by Prommee Sipatnet
Sound Level Meter 00858520

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะบันทึกการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่ารวม
			ค่าจริง	ค่าเฉลี่ย		
12:10 AM - 12:15 AM	59.2	57.7	56.9	-	54.4	2.5
12:15 AM - 12:20 AM	58.9	57.7	55.7	-	53.9	1.8
12:20 AM - 12:25 AM	59.5	67.5	-	-	54.8	-
12:25 AM - 12:30 AM	58.8	65.0	-	-	54.8	-
12:30 AM - 12:35 AM	58.9	59.8	-	-	53.6	-
12:35 AM - 12:40 AM	59.5	56.2	-	-	53.8	6.0
12:40 AM - 12:45 AM	59.0	55.5	-	-	53.5	5.9
12:45 AM - 12:50 AM	58.7	57.4	59.4	59.4	54.9	0.9
12:50 AM - 12:55 AM	59.2	58.9	56.4	56.4	54.0	5.6
12:55 AM - 01:00 AM	59.1	58.7	51.5	51.5	56.6	-5.1
01:00 AM - 01:05 AM	58.8	57.5	55.9	55.9	55.3	0.6
01:05 AM - 01:10 AM	58.9	57.6	56.0	56.0	54.7	1.3
01:10 AM - 01:15 AM	59.7	57.4	58.8	58.8	55.0	3.8
01:15 AM - 01:20 AM	59.5	57.5	58.2	58.2	54.6	3.6
01:20 AM - 01:25 AM	59.6	57.1	59.0	59.0	54.9	4.1
01:25 AM - 01:30 AM	59.6	56.3	59.9	59.9	53.5	6.4
01:30 AM - 01:35 AM	59.1	54.3	60.4	60.4	52.4	8.0
01:35 AM - 01:40 AM	59.3	56.1	59.5	59.5	53.4	6.1
01:40 AM - 01:45 AM	60.8	55.2	62.4	62.4	52.4	10.0
01:45 AM - 01:50 AM	60.0	60.6	-	-	51.9	-
01:50 AM - 01:55 AM	60.7	60.4	51.9	51.9	54.1	-2.2
01:55 AM - 02:00 AM	60.2	55.6	61.4	61.4	52.8	8.6
02:00 AM - 02:05 AM	60.6	69.0	-	-	54.6	-
02:05 AM - 02:10 AM	61.0	63.2	-	-	53.8	-
02:10 AM - 02:15 AM	61.1	62.1	-	-	52.4	-
02:15 AM - 02:20 AM	60.3	55.2	61.7	61.7	52.7	9.0
02:20 AM - 02:25 AM	60.7	55.8	62.0	62.0	53.3	8.7
02:25 AM - 02:30 AM	60.5	56.5	61.3	61.3	53.8	7.5
02:30 AM - 02:35 AM	60.5	55.9	61.7	61.7	53.7	8.0
02:35 AM - 02:40 AM	61.4	57.9	61.8	61.8	55.3	6.5
02:40 AM - 02:45 AM	60.5	57.1	60.8	60.8	53.7	7.1
02:45 AM - 02:50 AM	61.1	57.3	61.8	61.8	54.5	7.3
02:50 AM - 02:55 AM	61.3	56.2	62.7	62.7	53.8	8.9
02:55 AM - 03:00 AM	60.3	56.3	61.1	61.1	53.7	7.4
03:00 AM - 03:05 AM	60.1	57.1	60.1	60.1	54.3	5.8
03:05 AM - 03:10 AM	61.3	56.2	62.7	62.7	54.0	8.7
03:10 AM - 03:15 AM	61.6	56.8	62.9	62.9	54.6	8.3
03:15 AM - 03:20 AM	62.4	57.0	63.9	63.9	53.8	10.1
03:20 AM - 03:25 AM	61.9	57.1	64.2	64.2	54.8	8.4
03:25 AM - 03:30 AM	61.9	56.7	63.3	63.3	54.2	9.1

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Approved by

Kanokkorn Anek
Asst. General Manager

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107785-1

Project Name : Saraburi Factory Plant
Project Location :

Approved by

Kanokkorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhol, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107785-1

Page 3 of 3

Sample No. 2494231-5
Parameter เลื่อนกรวย
Location บ้านฉิมบ่อ (GPS 47° 07'28.156", 161°19'149")
Measurement Date Aug 27 - Aug 28, 2024
Measurement by Prommee Sripatnet
Sound Level Meter 00858520

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะปฏิบัติงาน	เสียงพื้นฐาน	ค่าระดับการรบกวน
		ค่าจริง	ค่าเฉลี่ย	
03:30 AM - 03:35 AM	61.5	56.8	54.4	8.3
03:35 AM - 03:40 AM	61.4	57.1	54.6	7.8
03:40 AM - 03:45 AM	63.2	57.2	54.5	10.4
03:45 AM - 03:50 AM	63.1	56.8	54.3	10.6
03:50 AM - 03:55 AM	61.9	55.5	52.4	11.4
03:55 AM - 04:00 AM	62.5	56.3	53.0	11.3
04:00 AM - 04:05 AM	62.6	56.8	53.4	10.9
04:05 AM - 04:10 AM	62.1	56.3	53.0	7.3
04:10 AM - 04:15 AM	59.8	56.3	52.9	4.1
04:15 AM - 04:20 AM	58.9	56.6	53.9	6.4
04:20 AM - 04:25 AM	59.3	56.2	53.0	6.1
04:25 AM - 04:30 AM	59.2	55.7	52.9	5.9
04:30 AM - 04:35 AM	59.1	55.9	52.9	5.4
04:35 AM - 04:40 AM	59.3	56.6	51.0	-3.9
04:40 AM - 04:45 AM	58.6	56.2	54.9	4.1
04:45 AM - 04:50 AM	59.3	57.1	54.2	3.4
04:50 AM - 04:55 AM	59.5	57.3	55.1	3.9
04:55 AM - 05:00 AM	58.7	56.5	53.8	3.3
05:00 AM - 05:05 AM	58.5	56.7	53.5	5.0
05:05 AM - 05:10 AM	58.4	55.7	53.1	7.9
05:10 AM - 05:15 AM	60.1	55.7	53.2	6.1
05:15 AM - 05:20 AM	58.7	56.8	53.6	-0.3
05:20 AM - 05:25 AM	58.3	57.3	54.5	6.3
05:25 AM - 05:30 AM	60.0	56.4	54.2	55.3
05:30 AM - 05:35 AM	58.4	58.4	54.6	-9.5
05:35 AM - 05:40 AM	58.5	58.4	54.6	6.5
05:40 AM - 05:45 AM	59.0	56.0	52.5	3.9
05:45 AM - 05:50 AM	58.4	56.1	53.6	1.1
05:50 AM - 05:55 AM	58.1	56.8	54.1	54.4
05:55 AM - 06:00 AM	58.3	57.3	53.3	54.9
06:00 AM - 07:00 AM	58.6	60.4	-	-
07:00 AM - 08:00 AM	58.4	61.3	-	57.8

Reference Method :

1. In-house method : STM 06-001, based on ISO 9966-1 : 2016

2. ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่ได้จากการประกอบกิจการโรงงาน พ.ศ. 2567

หมายเหตุ

1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงรบกวนและระดับเสียงที่ได้จากการประกอบกิจการโรงงาน พ.ศ. 2548

2. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่ามาตรฐานและค่าเสียงที่ได้จากการประกอบกิจการโรงงานในชั้นบรรยากาศ พ.ศ. 2561


Remark:

1. ระดับเสียงจากแหล่งกำเนิด ทิศทางวัดที่ 27-28 สิงหาคม 2567

2. ระดับเสียงที่ฐานและระดับเสียงขณะปฏิบัติงาน (Sample No.2494231-5) วันที่ตรวจวัด 27-28 สิงหาคม 2567

3. n/a: ไม่สามารถคำนวณระดับเสียงรบกวนได้เนื่องจากระดับเสียงจากแหล่งกำเนิดเกินขีดจำกัดการวัดระดับเสียงขณะปฏิบัติงาน

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Approved by 
Kanokkom Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhol, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :


Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107786-1

Page 1 of 3

Sample No. 2494231-6
Parameter เลื่อนกรวย
Location บ้านฉิมบ่อ (GPS 47° 07'28.156", 161°19'149")
Measurement Date Aug 28 - Aug 29, 2024
Measurement by Prommee Sripatnet
Sound Level Meter 00858520

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะปฏิบัติงาน	เสียงพื้นฐาน	ค่าระดับการรบกวน
		ค่าจริง	ค่าเฉลี่ย	
08:00 AM - 09:00 AM	59.0	56.2	55.8	54.0
09:00 AM - 10:00 AM	58.3	56.1	54.3	53.7
10:00 AM - 11:00 AM	58.9	56.1	55.7	53.9
11:00 AM - 12:00 PM	59.6	56.8	52.7	-1.4
12:00 PM - 01:00 PM	60.2	56.8	52.5	54.1
01:00 PM - 02:00 PM	59.9	56.9	56.9	54.2
02:00 PM - 03:00 PM	59.7	57.2	56.1	55.1
03:00 PM - 04:00 PM	60.7	57.7	57.7	57.2
04:00 PM - 05:00 PM	59.8	57.7	55.6	54.5
05:00 PM - 06:00 PM	59.3	58.4	52.0	55.8
06:00 PM - 07:00 PM	59.5	57.9	53.7	55.0
07:00 PM - 08:00 PM	59.5	57.9	53.7	54.9
08:00 PM - 09:00 PM	61.4	56.4	56.6	-1.2
09:00 PM - 10:00 PM	61.4	56.6	59.7	54.3
10:00 PM - 10:05 PM	59.0	62.1	-	54.4
10:05 PM - 10:10 PM	59.4	58.7	-	55.5
10:10 PM - 10:15 PM	59.5	59.7	-	56.1
10:15 PM - 10:20 PM	59.5	59.2	-	56.4
10:20 PM - 10:25 PM	59.2	58.5	-	50.7
10:25 PM - 10:30 PM	59.2	58.1	-	53.9
10:30 PM - 10:35 PM	59.1	57.1	-	57.4
10:35 PM - 10:40 PM	59.4	57.3	-	56.4
10:40 PM - 10:45 PM	59.5	55.9	-	58.2
10:45 PM - 10:50 PM	59.9	55.7	-	54.7
10:50 PM - 10:55 PM	59.3	56.0	-	54.5
10:55 PM - 11:00 PM	59.2	56.4	-	59.6
11:00 PM - 11:05 PM	59.2	55.8	-	53.7
11:05 PM - 11:10 PM	59.0	56.5	-	54.4
11:10 PM - 11:15 PM	58.8	55.9	-	53.5
11:15 PM - 11:20 PM	59.0	55.3	-	58.4
11:20 PM - 11:25 PM	58.9	56.4	-	58.7
11:25 PM - 11:30 PM	59.0	56.0	-	59.6
11:30 PM - 11:35 PM	59.7	56.6	-	53.1
11:35 PM - 11:40 PM	59.9	56.8	-	53.5
11:40 PM - 11:45 PM	59.1	55.8	-	53.9
11:45 PM - 11:50 PM	58.7	55.8	-	54.1
11:50 PM - 11:55 PM	59.1	55.4	-	54.5
11:55 PM - 12:00 AM	58.8	55.4	-	53.5
12:00 AM - 12:05 AM	58.8	56.4	-	52.4
12:05 AM - 12:10 AM	58.9	56.1	-	53.3
12:10 AM - 12:15 AM	58.9	56.1	-	53.8

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Approved by 
Kanokkom Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kanchhol, Saraburi
Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Page 2 of 3

Sample No. 2494231-6
Parameter เสียงรบกวน
Location บ้านเลขที่ 47P 0728156, 1619149)
Measurement Date Aug 28 - Aug 29, 2024
Measurement by Prommee Sirapatnet
Sound Level Meter 00858520

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะปฏิบัติการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			ค่าจริง	ค่าเฉลี่ย		
12:10 AM - 12:15 AM	59.1	55.9	-	59.3	53.5	5.8
12:15 AM - 12:20 AM	59.4	55.2	-	60.3	52.9	7.4
12:20 AM - 12:25 AM	59.1	55.8	-	59.4	53.9	5.5
12:25 AM - 12:30 AM	58.5	55.8	-	60.1	53.1	7.0
12:30 AM - 12:35 AM	58.7	56.4	-	57.8	53.9	3.9
12:35 AM - 12:40 AM	59.4	56.0	-	58.7	53.3	6.4
12:40 AM - 12:45 AM	59.2	55.0	-	60.1	52.7	7.4
12:45 AM - 12:50 AM	58.7	55.9	-	58.5	53.6	4.9
12:50 AM - 12:55 AM	58.8	56.6	-	57.8	53.9	3.9
12:55 AM - 01:00 AM	58.9	57.1	-	57.2	54.4	2.8
01:00 AM - 01:05 AM	58.8	56.6	-	57.8	54.2	3.6
01:05 AM - 01:10 AM	59.3	55.6	-	59.9	52.9	7.0
01:10 AM - 01:15 AM	58.8	55.7	-	58.9	53.5	5.4
01:15 AM - 01:20 AM	60.4	55.8	-	61.6	53.6	8.0
01:20 AM - 01:25 AM	59.1	55.4	-	59.7	53.4	6.3
01:25 AM - 01:30 AM	58.8	55.6	-	59.0	54.0	5.0
01:30 AM - 01:35 AM	59.2	57.5	-	57.3	54.2	3.1
01:35 AM - 01:40 AM	59.7	57.4	-	58.8	54.7	4.1
01:40 AM - 01:45 AM	59.6	57.1	-	59.0	54.8	4.2
01:45 AM - 01:50 AM	59.4	57.3	-	58.2	53.9	4.3
01:50 AM - 01:55 AM	61.0	57.7	-	61.3	55.7	5.6
01:55 AM - 02:00 AM	60.5	56.4	-	61.4	53.9	7.5
02:00 AM - 02:05 AM	61.3	56.5	-	62.6	54.3	8.3
02:05 AM - 02:10 AM	60.7	56.5	-	61.6	54.9	6.7
02:10 AM - 02:15 AM	59.8	55.8	-	60.6	54.7	6.9
02:15 AM - 02:20 AM	59.6	56.8	-	59.4	54.8	4.6
02:20 AM - 02:25 AM	60.2	57.3	-	60.1	54.7	5.4
02:25 AM - 02:30 AM	60.5	57.7	-	60.3	55.4	4.9
02:30 AM - 02:35 AM	59.8	56.9	-	59.7	54.4	5.3
02:35 AM - 02:40 AM	60.0	56.0	-	60.8	54.3	6.5
02:40 AM - 02:45 AM	60.3	56.1	-	61.2	54.0	7.2
02:45 AM - 02:50 AM	60.4	55.1	-	61.9	52.5	9.4
02:50 AM - 02:55 AM	61.0	55.6	-	62.5	53.5	9.0
02:55 AM - 03:00 AM	60.1	56.1	-	60.9	53.0	7.9
03:00 AM - 03:05 AM	60.3	56.8	-	60.7	53.8	6.9
03:05 AM - 03:10 AM	60.6	55.7	-	61.9	53.1	8.8
03:10 AM - 03:15 AM	59.7	56.8	-	59.6	53.8	5.8
03:15 AM - 03:20 AM	60.4	56.1	-	61.4	53.8	7.6
03:20 AM - 03:25 AM	60.0	56.2	-	60.7	53.0	7.7
03:25 AM - 03:30 AM	59.0	55.6	-	59.3	52.7	6.6

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Kanokkom Anek

Asst. General Manager

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kanchhol, Saraburi
Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Page 3 of 3

Sample No. 2494231-6
Parameter เสียงรบกวน
Location บ้านเลขที่ 47P 0728156, 1619149)
Measurement Date Aug 28 - Aug 29, 2024
Measurement by Prommee Sirapatnet
Sound Level Meter 00858520

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะปฏิบัติการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			ค่าจริง	ค่าเฉลี่ย		
03:30 AM - 03:35 AM	59.4	55.5	-	60.1	53.3	6.8
03:35 AM - 03:40 AM	59.6	55.5	-	60.5	53.1	7.4
03:40 AM - 03:45 AM	59.2	55.6	-	59.7	53.0	6.7
03:45 AM - 03:50 AM	60.2	55.5	-	61.4	53.4	8.0
03:50 AM - 03:55 AM	60.3	56.3	-	61.1	53.3	7.8
03:55 AM - 04:00 AM	60.0	56.9	-	60.1	53.4	6.7
04:00 AM - 04:05 AM	59.1	56.4	-	58.8	53.1	5.7
04:05 AM - 04:10 AM	59.8	56.1	-	60.4	53.4	7.0
04:10 AM - 04:15 AM	59.2	56.2	-	59.2	53.8	5.4
04:15 AM - 04:20 AM	59.5	54.5	-	60.8	52.8	8.0
04:20 AM - 04:25 AM	59.2	55.7	-	59.6	53.6	6.0
04:25 AM - 04:30 AM	59.0	55.6	-	59.3	53.4	5.9
04:30 AM - 04:35 AM	58.9	55.0	-	59.6	53.2	6.4
04:35 AM - 04:40 AM	59.0	55.2	-	59.7	53.3	6.4
04:40 AM - 04:45 AM	59.0	55.2	-	59.7	53.0	6.7
04:45 AM - 04:50 AM	61.0	55.0	-	62.7	53.0	9.7
04:50 AM - 04:55 AM	58.6	55.3	-	58.9	53.2	5.7
04:55 AM - 05:00 AM	58.8	55.8	-	58.8	52.8	6.0
05:00 AM - 05:05 AM	59.5	55.5	-	60.3	53.0	7.3
05:05 AM - 05:10 AM	58.7	54.6	-	59.6	52.6	7.0
05:10 AM - 05:15 AM	58.7	55.1	-	58.6	52.6	7.0
05:15 AM - 05:20 AM	58.8	55.7	-	58.9	52.8	6.0
05:20 AM - 05:25 AM	60.3	55.6	-	61.5	53.1	8.4
05:25 AM - 05:30 AM	59.5	55.9	-	60.0	53.5	6.5
05:30 AM - 05:35 AM	59.2	56.4	-	59.0	53.8	5.2
05:35 AM - 05:40 AM	58.8	57.2	-	56.7	54.6	2.1
05:40 AM - 05:45 AM	58.9	56.7	-	59.1	54.1	5.0
05:45 AM - 05:50 AM	61.4	57.7	-	62.4	54.7	1.0
05:50 AM - 05:55 AM	60.7	57.5	-	60.9	54.8	7.6
05:55 AM - 06:00 AM	59.8	57.8	-	55.5	54.5	6.4
06:00 AM - 07:00 AM	58.5	61.4	-	-	56.8	-
07:00 AM - 08:00 AM	58.5	61.4	-	-	56.8	-

Reference Method :

- In-house method : STM 06-001 based on ISO 1996-1 : 2016
- ประเภทของโรงงานอุตสาหกรรม คือ โรงการจะระดับเสียงการรบกวน ระดับเสียง 24 ชั่วโมง และระดับเสียงสูงสุด(ค่าจากการประกอบกิจการโรงงาน พ.ศ. 2567)

หมายเหตุ

- ประเภทของโรงงานอุตสาหกรรม คือ โรงการจะระดับเสียงการรบกวน ระดับเสียง 24 ชั่วโมง และระดับเสียงสูงสุด(ค่าจากการประกอบกิจการโรงงาน พ.ศ. 2567)

หมายเหตุ

- ประเภทของโรงงานอุตสาหกรรม คือ โรงการจะระดับเสียงการรบกวน ระดับเสียง 24 ชั่วโมง และระดับเสียงสูงสุด(ค่าจากการประกอบกิจการโรงงาน พ.ศ. 2567)

หมายเหตุ

- ประเภทของโรงงานอุตสาหกรรม คือ โรงการจะระดับเสียงการรบกวน ระดับเสียง 24 ชั่วโมง และระดับเสียงสูงสุด(ค่าจากการประกอบกิจการโรงงาน พ.ศ. 2567)

หมายเหตุ

- ประเภทของโรงงานอุตสาหกรรม คือ โรงการจะระดับเสียงการรบกวน ระดับเสียง 24 ชั่วโมง และระดับเสียงสูงสุด(ค่าจากการประกอบกิจการโรงงาน พ.ศ. 2567)

หมายเหตุ

- ประเภทของโรงงานอุตสาหกรรม คือ โรงการจะระดับเสียงการรบกวน ระดับเสียง 24 ชั่วโมง และระดับเสียงสูงสุด(ค่าจากการประกอบกิจการโรงงาน พ.ศ. 2567)

หมายเหตุ

- ประเภทของโรงงานอุตสาหกรรม คือ โรงการจะระดับเสียงการรบกวน ระดับเสียง 24 ชั่วโมง และระดับเสียงสูงสุด(ค่าจากการประกอบกิจการโรงงาน พ.ศ. 2567)

หมายเหตุ

- ประเภทของโรงงานอุตสาหกรรม คือ โรงการจะระดับเสียงการรบกวน ระดับเสียง 24 ชั่วโมง และระดับเสียงสูงสุด(ค่าจากการประกอบกิจการโรงงาน พ.ศ. 2567)

หมายเหตุ

- ประเภทของโรงงานอุตสาหกรรม คือ โรงการจะระดับเสียงการรบกวน ระดับเสียง 24 ชั่วโมง และระดับเสียงสูงสุด(ค่าจากการประกอบกิจการโรงงาน พ.ศ. 2567)

หมายเหตุ

- ประเภทของโรงงานอุตสาหกรรม คือ โรงการจะระดับเสียงการรบกวน ระดับเสียง 24 ชั่วโมง และระดับเสียงสูงสุด(ค่าจากการประกอบกิจการโรงงาน พ.ศ. 2567)

หมายเหตุ

- ประเภทของโรงงานอุตสาหกรรม คือ โรงการจะระดับเสียงการรบกวน ระดับเสียง 24 ชั่วโมง และระดับเสียงสูงสุด(ค่าจากการประกอบกิจการโรงงาน พ.ศ. 2567)

หมายเหตุ

- ประเภทของโรงงานอุตสาหกรรม คือ โรงการจะระดับเสียงการรบกวน ระดับเสียง 24 ชั่วโมง และระดับเสียงสูงสุด(ค่าจากการประกอบกิจการโรงงาน พ.ศ. 2567)

หมายเหตุ

- ประเภทของโรงงานอุตสาหกรรม คือ โรงการจะระดับเสียงการรบกวน ระดับเสียง 24 ชั่วโมง และระดับเสียงสูงสุด(ค่าจากการประกอบกิจการโรงงาน พ.ศ. 2567)

หมายเหตุ

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Approved by

Kanokkom Anek

Asst. General Manager

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

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RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107787-1

Page 1 of 3

Sample No. 2494231-7
Parameter เสียงรบกวน
Location บ้านฉิมบ่อ (GPS 47P 0728156, 1619149)
Measurement Date Aug 29 - Aug 30, 2024
Measurement by Prommee Sripatmet
Sound Level Meter 00858520

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะวัดการรบกวน	ระดับเสียง (dB(A))		ค่าระดับการรบกวน
			กลางคืน	กลางวัน	
08:00 AM - 09:00 AM	58.2	61.0	n/a	-	54.0
09:00 AM - 10:00 AM	59.4	56.6	56.2	-	53.7
10:00 AM - 11:00 AM	59.3	58.1	53.1	-	53.9
11:00 AM - 12:00 PM	59.2	56.4	56.7	-	54.1
12:00 PM - 01:00 PM	59.3	55.8	56.7	-	54.2
01:00 PM - 02:00 PM	58.3	59.8	n/a	-	54.9
02:00 PM - 03:00 PM	62.7	46.3	55.1	-	55.1
03:00 PM - 04:00 PM	58.9	58.2	55.2	-	55.2
04:00 PM - 05:00 PM	58.9	57.6	53.0	-	54.5
05:00 PM - 06:00 PM	59.5	59.2	47.7	-	55.8
06:00 PM - 07:00 PM	59.4	56.9	55.8	-	55.0
07:00 PM - 08:00 PM	59.0	56.9	54.8	-	54.9
08:00 PM - 09:00 PM	59.5	56.2	56.8	-	54.3
09:00 PM - 10:00 PM	58.6	56.4	54.6	-	54.4
10:00 PM - 10:05 PM	58.4	57.1	-	55.5	53.5
10:05 PM - 10:10 PM	58.5	57.4	-	55.0	56.1
10:10 PM - 10:15 PM	58.3	57.8	-	54.5	56.4
10:15 PM - 10:20 PM	59.2	58.4	-	54.5	57.3
10:20 PM - 10:25 PM	58.1	58.1	-	n/a	57.1
10:25 PM - 10:30 PM	58.7	57.8	-	54.4	56.4
10:30 PM - 10:35 PM	58.8	56.6	-	57.8	55.2
10:35 PM - 10:40 PM	59.4	57.7	-	57.5	54.7
10:40 PM - 10:45 PM	59.4	57.6	-	57.7	54.5
10:45 PM - 10:50 PM	58.3	57.5	-	53.6	53.9
10:50 PM - 10:55 PM	58.5	57.2	-	55.6	53.7
10:55 PM - 11:00 PM	58.5	57.6	-	54.2	54.4
11:00 PM - 11:05 PM	58.7	58.2	-	52.1	53.5
11:05 PM - 11:10 PM	58.5	57.8	-	53.2	54.0
11:10 PM - 11:15 PM	58.7	56.2	-	58.1	54.0
11:15 PM - 11:20 PM	58.7	56.7	-	57.4	53.1
11:20 PM - 11:25 PM	58.5	56.1	-	57.8	53.5
11:25 PM - 11:30 PM	58.4	57.2	-	55.2	53.9
11:30 PM - 11:35 PM	58.8	55.7	-	58.3	54.1
11:35 PM - 11:40 PM	58.4	56.8	-	56.9	54.5
11:40 PM - 11:45 PM	58.6	57.3	-	55.7	53.4
11:45 PM - 11:50 PM	58.4	57.7	-	53.1	53.5
11:50 PM - 11:55 PM	58.9	58.4	-	52.3	52.4
11:55 PM - 12:00 AM	58.8	57.1	-	56.9	53.3
12:00 AM - 12:05 AM	58.4	57.1	-	55.5	53.8
12:05 AM - 12:10 AM	59.2	58.3	-	54.9	53.8

Approved by

Kanokkorn Anek
Asst. General Manager

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107787-1

Page 2 of 3

Sample No. 2494231-7
Parameter เสียงรบกวน
Location บ้านฉิมบ่อ (GPS 47P 0728156, 1619149)
Measurement Date Aug 29 - Aug 30, 2024
Measurement by Prommee Sripatmet
Sound Level Meter 00858520

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะวัดการรบกวน	ระดับเสียง (dB(A))		ค่าระดับการรบกวน
			กลางคืน	กลางวัน	
12:10 AM - 12:15 AM	58.4	57.5	-	57.9	53.5
12:15 AM - 12:20 AM	58.6	55.4	-	58.8	52.9
12:20 AM - 12:25 AM	58.8	54.5	-	59.8	53.9
12:25 AM - 12:30 AM	58.8	54.7	-	59.7	53.1
12:30 AM - 12:35 AM	58.8	54.4	-	59.8	53.9
12:35 AM - 12:40 AM	58.7	54.3	-	59.7	53.3
12:40 AM - 12:45 AM	59.0	55.2	-	59.7	52.7
12:45 AM - 12:50 AM	59.2	55.9	-	60.4	53.6
12:50 AM - 12:55 AM	59.7	54.8	-	60.2	53.9
12:55 AM - 01:00 AM	58.7	55.0	-	59.3	54.4
01:00 AM - 01:05 AM	59.1	54.5	-	60.4	54.2
01:05 AM - 01:10 AM	59.1	53.4	-	60.7	52.9
01:10 AM - 01:15 AM	59.1	53.5	-	61.5	53.5
01:15 AM - 01:20 AM	59.1	53.5	-	60.7	53.6
01:20 AM - 01:25 AM	58.9	54.3	-	60.1	53.4
01:25 AM - 01:30 AM	59.6	55.2	-	60.6	54.0
01:30 AM - 01:35 AM	60.7	55.8	-	62.0	54.2
01:35 AM - 01:40 AM	61.0	63.7	-	n/a	54.7
01:40 AM - 01:45 AM	60.0	64.1	-	n/a	54.8
01:45 AM - 01:50 AM	59.2	61.1	-	n/a	53.9
01:50 AM - 01:55 AM	59.1	58.3	-	54.4	55.7
01:55 AM - 02:00 AM	59.9	63.6	-	n/a	53.9
02:00 AM - 02:05 AM	59.7	60.0	-	n/a	54.3
02:05 AM - 02:10 AM	59.9	59.2	-	54.6	54.9
02:10 AM - 02:15 AM	60.0	66.4	-	n/a	53.7
02:15 AM - 02:20 AM	59.4	59.9	-	n/a	54.8
02:20 AM - 02:25 AM	61.4	59.4	-	59.3	54.7
02:25 AM - 02:30 AM	58.8	57.2	-	61.5	55.4
02:30 AM - 02:35 AM	60.2	55.2	-	61.7	54.4
02:35 AM - 02:40 AM	60.1	54.5	-	61.7	54.3
02:40 AM - 02:45 AM	61.1	54.4	-	62.1	54.0
02:45 AM - 02:50 AM	60.5	54.9	-	62.1	52.5
02:50 AM - 02:55 AM	60.5	54.8	-	62.1	52.5
02:55 AM - 03:00 AM	60.1	55.1	-	61.4	53.0
03:00 AM - 03:05 AM	60.2	54.5	-	61.8	53.8
03:05 AM - 03:10 AM	59.7	55.5	-	60.6	53.1
03:10 AM - 03:15 AM	59.6	55.2	-	60.6	53.8
03:15 AM - 03:20 AM	59.7	54.9	-	61.0	53.8
03:20 AM - 03:25 AM	59.8	56.1	-	60.4	53.0
03:25 AM - 03:30 AM	60.0	55.0	-	61.3	52.7

Approved by

Kanokkorn Anek
Asst. General Manager

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhol, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Sample No. 2494231-7
Parameter เ็น้รบกวน
Location โรงเ็น้รบกวน (GPS 47P 0728156, 1619149)
Measurement Date Aug 29 - Aug 30, 2024
Measurement by Prommee Sripaniet
Sound Level Meter 00858520

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะปฏิบัติการ	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางคืน	กลางวัน		
03:30 AM - 03:35 AM	59.3	54.4	-	60.6	53.3	7.3
03:35 AM - 03:40 AM	59.5	56.7	-	59.3	53.1	6.2
03:40 AM - 03:45 AM	58.8	56.2	-	58.3	53.0	5.3
03:45 AM - 03:50 AM	59.1	55.3	-	59.8	53.4	6.4
03:50 AM - 03:55 AM	59.2	55.3	-	59.9	53.3	6.6
03:55 AM - 04:00 AM	59.6	56.6	-	59.6	53.4	6.2
04:00 AM - 04:05 AM	59.2	55.9	-	59.5	53.1	6.4
04:05 AM - 04:10 AM	59.2	55.6	-	59.7	53.4	6.3
04:10 AM - 04:15 AM	58.4	56.0	-	57.7	53.8	3.9
04:15 AM - 04:20 AM	58.5	55.4	-	58.6	52.8	5.8
04:20 AM - 04:25 AM	59.0	55.1	-	59.7	53.6	6.1
04:25 AM - 04:30 AM	59.2	55.6	-	59.7	53.4	6.1
04:30 AM - 04:35 AM	58.4	55.5	-	58.3	53.2	5.1
04:35 AM - 04:40 AM	58.8	54.8	-	59.6	53.3	6.3
04:40 AM - 04:45 AM	59.1	54.6	-	60.2	53.0	7.2
04:45 AM - 04:50 AM	59.4	55.7	-	60.0	53.0	7.0
04:50 AM - 04:55 AM	59.3	55.9	-	59.6	53.2	6.4
04:55 AM - 05:00 AM	58.4	56.2	-	57.4	52.8	4.6
05:00 AM - 05:05 AM	58.3	55.0	-	58.6	53.0	5.6
05:05 AM - 05:10 AM	60.2	55.6	-	61.4	52.6	8.6
05:10 AM - 05:15 AM	59.5	55.8	-	60.1	52.8	7.3
05:15 AM - 05:20 AM	59.3	55.8	-	59.7	53.5	6.2
05:20 AM - 05:25 AM	60.3	56.5	-	61.0	53.1	7.9
05:25 AM - 05:30 AM	58.8	56.5	-	57.9	53.5	4.4
05:30 AM - 05:35 AM	58.5	57.4	-	58.2	53.8	2.4
05:35 AM - 05:40 AM	59.5	57.0	-	56.2	54.6	1.6
05:40 AM - 05:45 AM	58.4	57.8	-	57.6	54.1	3.5
05:45 AM - 05:50 AM	59.0	57.6	-	58.4	54.7	-2.2
05:50 AM - 05:55 AM	60.4	58.9	-	58.1	54.8	1.6
05:55 AM - 06:00 AM	59.5	58.2	-	55.4	54.5	3.6
06:00 AM - 07:00 AM	58.8	57.5	-	53.6	55.4	-1.8
07:00 AM - 08:00 AM	58.8	57.5	-	52.9	56.8	-3.9
ค่าเฉลี่ย						≤ 10

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประกาศกระทรวงสาธารณสุข เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุด (โดยการประมาณการ) พ.ศ. 2567
หมายเหตุ
1. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงรบกวนและระดับเสียงที่ได้จากอุปกรณ์/เครื่องจักร พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงรบกวนและระดับเสียงที่ได้จากอุปกรณ์/เครื่องจักรที่ใช้ในครัวเรือน พ.ศ. 2561
3. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงรบกวนและระดับเสียงที่ได้จากอุปกรณ์/เครื่องจักรที่ใช้ในสถานประกอบการ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ตรวจวัดด้วยวิธี 29-30 ชั่วโมง 2567
2. ระดับเสียงที่ตรวจวัดและระดับเสียงที่ได้จากการประมาณ (Sample No. 2494233-7) ตรวจวัดด้วยวิธี 29-30 ชั่วโมง 2567
3. หมายเหตุ: ใบตรวจวัดระดับเสียงรบกวนเป็นเอกสารต้นฉบับที่ออกโดยห้องปฏิบัติการระดับเสียงรบกวน

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Approved by

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhol, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Sample No. 2494231-8
Parameter เ็น้รบกวน
Location โรงเ็น้รบกวน (GPS 47P 0722987, 1616402)
Measurement Date Aug 23 - Aug 24, 2024
Measurement by Prommee Sripaniet
Sound Level Meter 01022261

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะปฏิบัติการ	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางคืน	กลางวัน		
08:00 AM - 09:00 AM	51.8	53.6	-	n/a	49.2	-
09:00 AM - 10:00 AM	53.6	56.3	-	n/a	53.3	-
10:00 AM - 11:00 AM	52.9	55.1	-	n/a	52.7	-
11:00 AM - 12:00 PM	46.8	59.4	-	n/a	52.2	-
12:00 PM - 01:00 PM	52.2	53.8	-	n/a	51.5	-
01:00 PM - 02:00 PM	48.3	54.2	-	n/a	51.6	-
02:00 PM - 03:00 PM	51.7	56.4	-	n/a	52.7	-
03:00 PM - 04:00 PM	51.1	58.4	-	n/a	53.5	-
04:00 PM - 05:00 PM	51.2	56.8	-	n/a	53.5	-
05:00 PM - 06:00 PM	52.3	59.1	-	n/a	53.7	-
06:00 PM - 07:00 PM	55.4	60.3	-	n/a	56.6	-
07:00 PM - 08:00 PM	56.6	55.7	-	49.3	53.7	-4.4
08:00 PM - 09:00 PM	55.5	54.9	-	46.6	53.3	-6.7
09:00 PM - 10:00 PM	54.9	56.5	-	n/a	54.2	-
10:00 PM - 10:05 PM	54.8	55.2	-	n/a	53.6	-
10:05 PM - 10:10 PM	54.8	56.0	-	n/a	53.9	-
10:10 PM - 10:15 PM	54.2	56.9	-	n/a	54.7	-
10:15 PM - 10:20 PM	52.0	56.7	-	n/a	55.0	-
10:20 PM - 10:25 PM	51.5	56.9	-	n/a	55.3	-
10:25 PM - 10:30 PM	52.4	56.7	-	n/a	55.3	-
10:30 PM - 10:35 PM	51.7	57.5	-	n/a	55.4	-
10:35 PM - 10:40 PM	52.1	56.9	-	n/a	55.0	-
10:40 PM - 10:45 PM	53.1	56.7	-	n/a	55.0	-
10:45 PM - 10:50 PM	53.0	56.0	-	n/a	54.1	-
10:50 PM - 10:55 PM	52.6	55.7	-	n/a	54.4	-
10:55 PM - 11:00 PM	52.2	56.3	-	n/a	53.5	-
11:00 PM - 11:05 PM	52.3	55.1	-	n/a	54.3	-
11:05 PM - 11:10 PM	52.6	55.7	-	n/a	54.2	-
11:10 PM - 11:15 PM	54.4	56.4	-	n/a	54.2	-
11:15 PM - 11:20 PM	51.3	55.7	-	n/a	54.4	-
11:20 PM - 11:25 PM	51.7	56.6	-	n/a	53.3	-
11:25 PM - 11:30 PM	51.6	54.8	-	n/a	53.5	-
11:30 PM - 11:35 PM	51.4	55.4	-	n/a	53.9	-
11:35 PM - 11:40 PM	51.1	55.6	-	n/a	52.9	-
11:40 PM - 11:45 PM	61.2	54.8	-	63.1	53.1	-
11:45 PM - 11:50 PM	51.9	54.8	-	n/a	51.7	-
11:50 PM - 11:55 PM	52.4	55.2	-	n/a	51.8	-
11:55 PM - 12:00 AM	51.9	53.5	-	n/a	51.5	-
12:00 AM - 12:05 AM	51.7	53.8	-	n/a	51.2	-
12:05 AM - 12:10 AM	51.8	53.9	-	n/a	-	-

This document is valid only for the analyzed item (sample(s)) and not valid for other items. It is not valid for the analyzed item (sample(s)) in other cases without written consent from the Laboratory (A.S. Laboratory Group (Thailand))

Approved by

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tan
Thailand 18260

Date Reported : Sep 11, 2024
Report Number : 3107788-1

2

: Saraburi Factory Plant

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466
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Sample No. 2494231-8

Parameter	Location
เสียงรบกวน	วัด ณ สถานีรถไฟกรุงเทพ - เชียงใหม่ (CRS 170 0733007 1515403)

Location	Measurement Date
MAHARAJAH INDIAN (GPS 47° 07' 22.50" N, 101° 04' 02" W)	Aug 23 - Aug 24 2024

Measurement Date
Measurement by
Aug 23 - Aug 24, 2024
Prommee Siripatnet

Sound Level Meter
01022261

เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ขับเครื่อง	เสียงขณะมีการรบกวน		เสียงพื้นฐาน	ค่าระดับ การรบกวน
			กลางวัน	กลางคืน		
03:30 AM - 03:35 AM	47.8	51.4	-	n/a	48.9	-
03:35 AM - 03:40 AM	47.9	52.7	-	n/a	49.6	-
03:40 AM - 03:45 AM	47.7	54.8	-	n/a	50.9	-
03:45 AM - 03:50 AM	48.2	53.4	-	n/a	48.9	-
03:50 AM - 03:55 AM	48.4	55.3	-	n/a	50.2	-
03:55 AM - 04:00 AM	48.0	55.1	-	n/a	51.0	-
04:00 AM - 04:05 AM	47.5	54.7	-	n/a	51.0	-
04:05 AM - 04:10 AM	46.7	56.5	-	n/a	53.2	-
04:10 AM - 04:15 AM	48.6	57.6	-	n/a	54.6	-
04:15 AM - 04:20 AM	46.9	54.0	-	n/a	47.8	-
04:20 AM - 04:25 AM	47.1	56.2	-	n/a	51.8	-
04:25 AM - 04:30 AM	47.0	53.3	-	n/a	48.2	-
04:30 AM - 04:35 AM	47.2	60.1	-	n/a	54.5	-
04:35 AM - 04:40 AM	47.8	62.5	-	n/a	57.2	-
04:40 AM - 04:45 AM	47.7	62.8	-	n/a	59.9	-
04:45 AM - 04:50 AM	48.2	62.9	-	n/a	59.6	-
04:50 AM - 04:55 AM	48.4	63.6	-	n/a	60.3	-
04:55 AM - 05:00 AM	47.9	63.7	-	n/a	60.8	-
05:00 AM - 05:05 AM	56.5	63.9	-	n/a	61.1	-
05:05 AM - 05:10 AM	47.5	63.6	-	n/a	60.4	-
05:10 AM - 05:15 AM	48.5	63.4	-	n/a	58.5	-
05:15 AM - 05:20 AM	50.2	62.4	-	n/a	60.0	-
05:20 AM - 05:25 AM	49.3	58.2	-	n/a	52.4	-
05:25 AM - 05:30 AM	50.3	52.3	-	n/a	49.4	-
05:30 AM - 05:35 AM	49.1	53.3	-	n/a	50.1	-
05:35 AM - 05:40 AM	48.6	53.1	-	n/a	50.6	-
05:40 AM - 05:45 AM	49.9	53.2	-	n/a	50.6	-
05:45 AM - 05:50 AM	50.0	53.2	-	n/a	49.7	-
05:50 AM - 05:55 AM	51.1	68.9	-	n/a	53.4	-
05:55 AM - 06:00 AM	50.2	55.3	-	n/a	53.1	-
06:00 AM - 07:00 AM	53.7	55.3	n/a	n/a	51.3	-
07:00 AM - 08:00 AM	49.3	55.1	n/a	-	52.1	-
ค่าเฉลี่ยรวม						≤ 10

Reference Method :

1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประกาศกระทรวงมหาดไทย เรื่อง วิธีการตรวจประเมินเสียงการปนเปื้อนจากโรงงานและสถานประกอบการ 24 ชั่วโมง และประเมินเสียงรบกวนจากยานพาหนะทางบก พ.ศ. 2567

11,550.00

1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าประเมินสิทธิการขนานและระดับที่เกิดจากประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานเลขทางเสียงอันเกิดจากประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2551

1. ระดับเสียงจากแหล่งกำเนิด ฟังก์ชันการวัด วันที่ 23-24 สิงหาคม 2567
2. ระดับเสียงที่ตรวจพบและระดับเสียงมาตรฐานที่ตรวจสอบ (Sample No. 7404933 วรรคที่ ๓๖๔, ๓๖๕ และ ๓๖๖ หน้า ๗)

3. กษ. ไม่สามารถคำนวณระดับเสียงของการรวมกันเนื่องจากแหล่งกำเนิดเสียงขณะไปกับการรวมกัน

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the laboratory. At CIL Laboratories (Pty) Ltd we

who does not wish to be contacted, please do not include a return address. If you do not wish to be contacted, please do not include a return address.

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www.alsglobal.com

RIGHT SOLUTIONS NIGHT PARTNER



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhot, Saraburi
Thailand 18260

P/O :

Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231

Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107789-1

Page 1 of 3

Sample No. : 2494231-9
Parameter : เสียงรบกวน
Location : โรงเรือนแยกฟลักกรว (GPS 47P 0722987, 1616402)
Measurement Date : Aug 24 - Aug 25, 2024
Measurement by : Prommee Siriphatet
Sound Level Meter : 01022261

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ระดับเสียง (dB(A))		เสียงที่รบกวน	ค่ารวมการรบกวน
			ค่าจริง	ค่าเฉลี่ย		
08:00 AM - 09:00 AM	46.9	57.0	n/a	n/a	52.6	-
09:00 AM - 10:00 AM	50.2	59.1	n/a	n/a	55.0	-
10:00 AM - 11:00 AM	47.3	62.6	n/a	n/a	55.0	-
11:00 AM - 12:00 PM	47.0	62.5	n/a	n/a	54.8	-
12:00 PM - 01:00 PM	47.8	64.5	n/a	n/a	52.2	-
01:00 PM - 02:00 PM	57.1	57.3	n/a	n/a	52.0	-
02:00 PM - 03:00 PM	50.3	63.7	n/a	n/a	54.9	-
03:00 PM - 04:00 PM	49.3	60.8	n/a	n/a	55.6	-
04:00 PM - 05:00 PM	50.4	60.1	n/a	n/a	56.7	-
05:00 PM - 06:00 PM	51.0	60.7	n/a	n/a	56.4	-
06:00 PM - 07:00 PM	50.5	62.0	n/a	n/a	58.1	-
07:00 PM - 08:00 PM	58.6	61.2	n/a	n/a	57.8	-
08:00 PM - 09:00 PM	58.2	61.0	n/a	n/a	59.4	-
09:00 PM - 10:00 PM	56.6	57.8	n/a	n/a	56.4	-
10:00 PM - 10:05 PM	56.7	60.1	n/a	n/a	55.8	-
10:05 PM - 10:10 PM	55.4	62.2	n/a	n/a	61.4	-
10:10 PM - 10:15 PM	54.7	61.4	n/a	n/a	60.3	-
10:15 PM - 10:20 PM	55.1	60.6	n/a	n/a	60.2	-
10:20 PM - 10:25 PM	55.3	59.6	n/a	n/a	59.9	-
10:25 PM - 10:30 PM	56.9	60.6	n/a	n/a	57.9	-
10:30 PM - 10:35 PM	55.8	57.7	n/a	n/a	55.4	-
10:35 PM - 10:40 PM	55.3	54.8	n/a	n/a	53.6	-4.9
10:40 PM - 10:45 PM	55.2	53.3	n/a	n/a	51.1	2.6
10:45 PM - 10:50 PM	55.3	54.7	n/a	n/a	53.0	-3.6
10:50 PM - 10:55 PM	55.2	53.7	n/a	n/a	52.9	0.9
10:55 PM - 11:00 PM	56.1	55.0	n/a	n/a	52.7	-0.1
11:00 PM - 11:05 PM	54.7	56.5	n/a	n/a	54.1	-
11:05 PM - 11:10 PM	54.0	54.8	n/a	n/a	52.7	-
11:10 PM - 11:15 PM	54.0	54.0	n/a	n/a	52.6	-
11:15 PM - 11:20 PM	53.9	54.7	n/a	n/a	52.0	-
11:20 PM - 11:25 PM	53.3	53.1	n/a	n/a	51.7	-8.9
11:25 PM - 11:30 PM	52.9	53.3	n/a	n/a	51.3	-
11:30 PM - 11:35 PM	53.4	53.8	n/a	n/a	52.3	-
11:35 PM - 11:40 PM	53.3	54.9	n/a	n/a	52.1	-
11:40 PM - 11:45 PM	52.8	54.3	n/a	n/a	52.4	-
11:45 PM - 11:50 PM	53.9	55.0	n/a	n/a	51.7	-
11:50 PM - 11:55 PM	54.4	54.3	n/a	n/a	51.8	-10.8
11:55 PM - 12:00 AM	53.4	52.8	n/a	n/a	50.7	-3.2
12:00 AM - 12:05 AM	53.4	52.8	n/a	n/a	51.1	-3.6
12:05 AM - 12:10 AM	51.7	52.4	n/a	n/a	50.5	-

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Approved by

Kanokkorn Anek

Asst. General Manager

Kanokkorn Anek

Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhot, Saraburi
Thailand 18260

P/O :

Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231

Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107789-1

Page 2 of 3

Sample No. : 2494231-9
Parameter : เสียงรบกวน
Location : โรงเรือนแยกฟลักกรว (GPS 47P 0722987, 1616402)
Measurement Date : Aug 24 - Aug 25, 2024
Measurement by : Prommee Siriphatet
Sound Level Meter : 01022261

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ระดับเสียง (dB(A))		เสียงที่รบกวน	ค่ารวมการรบกวน
			ค่าจริง	ค่าเฉลี่ย		
12:10 AM - 12:15 AM	53.4	53.5	n/a	n/a	50.4	-
12:15 AM - 12:20 AM	53.2	52.4	n/a	n/a	50.1	-2.2
12:20 AM - 12:25 AM	53.9	52.4	n/a	n/a	50.0	1.6
12:25 AM - 12:30 AM	51.8	51.9	n/a	n/a	48.9	-10.5
12:30 AM - 12:35 AM	51.8	51.7	n/a	n/a	48.7	-
12:35 AM - 12:40 AM	53.3	51.7	n/a	n/a	48.6	2.6
12:40 AM - 12:45 AM	53.1	51.3	n/a	n/a	49.1	2.3
12:45 AM - 12:50 AM	51.4	50.3	n/a	n/a	47.2	0.7
12:50 AM - 12:55 AM	52.3	51.7	n/a	n/a	46.4	-1.7
12:55 AM - 01:00 AM	51.5	52.5	n/a	n/a	49.6	-
01:00 AM - 01:05 AM	52.3	52.5	n/a	n/a	48.8	-
01:05 AM - 01:10 AM	52.2	51.2	n/a	n/a	48.0	0.3
01:10 AM - 01:15 AM	52.8	52.2	n/a	n/a	49.2	-2.3
01:15 AM - 01:20 AM	63.6	51.8	n/a	n/a	47.8	18.5
01:20 AM - 01:25 AM	53.9	61.0	n/a	n/a	48.5	-
01:25 AM - 01:30 AM	51.8	52.5	n/a	n/a	48.8	-
01:30 AM - 01:35 AM	53.0	50.4	n/a	n/a	47.0	5.5
01:35 AM - 01:40 AM	51.8	51.1	n/a	n/a	47.8	-1.3
01:40 AM - 01:45 AM	48.7	50.2	n/a	n/a	46.4	-
01:45 AM - 01:50 AM	49.5	49.7	n/a	n/a	46.8	-
01:50 AM - 01:55 AM	49.3	50.4	n/a	n/a	47.7	-
01:55 AM - 02:00 AM	50.4	50.5	n/a	n/a	46.8	-
02:00 AM - 02:05 AM	49.7	52.7	n/a	n/a	48.3	-
02:05 AM - 02:10 AM	49.7	51.1	n/a	n/a	47.9	-
02:10 AM - 02:15 AM	50.1	51.1	n/a	n/a	48.0	-
02:15 AM - 02:20 AM	50.1	52.1	n/a	n/a	47.8	-
02:20 AM - 02:25 AM	49.8	51.2	n/a	n/a	48.1	-
02:25 AM - 02:30 AM	50.5	49.8	n/a	n/a	47.1	-
02:30 AM - 02:35 AM	48.7	50.0	n/a	n/a	46.4	-1.7
02:35 AM - 02:40 AM	48.6	52.1	n/a	n/a	45.8	-
02:40 AM - 02:45 AM	48.7	50.0	n/a	n/a	46.4	-
02:45 AM - 02:50 AM	49.4	50.5	n/a	n/a	46.5	-
02:50 AM - 02:55 AM	49.3	49.5	n/a	n/a	45.9	-
02:55 AM - 03:00 AM	48.9	50.9	n/a	n/a	47.3	-
03:00 AM - 03:05 AM	48.4	51.3	n/a	n/a	46.7	-
03:05 AM - 03:10 AM	48.7	50.2	n/a	n/a	45.9	-
03:10 AM - 03:15 AM	48.6	50.3	n/a	n/a	47.1	-
03:15 AM - 03:20 AM	48.7	50.5	n/a	n/a	48.2	-
03:20 AM - 03:25 AM	48.5	50.5	n/a	n/a	47.5	-
03:25 AM - 03:30 AM	48.5	50.5	n/a	n/a	47.5	-

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Approved by

Kanokkorn Anek

Asst. General Manager

Kanokkorn Anek

Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhol, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107789-1

Page 3 of 3

Sample No. 2494231-9
Parameter เสียงรบกวน
Location โรงโม่ปูนลูกบาศก์ (GPS 47P 0722987, 1616402)
Measurement Date Aug. 24 - Aug. 25, 2024
Measurement by Prommee Sipatnet
Sound Level Meter 01022261

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะปฏิบัติการรบกวน	ระดับเสียง (dB(A))		ค่าระดับการรบกวน
			กลางคืน	กลางวัน	
03:30 AM - 03:35 AM	48.8	50.4	n/a	48.2	-
03:35 AM - 03:40 AM	48.5	51.4	n/a	49.0	-
03:40 AM - 03:45 AM	48.0	50.9	n/a	47.3	-
03:45 AM - 03:50 AM	47.4	50.6	n/a	48.2	-
03:50 AM - 03:55 AM	50.1	51.6	n/a	48.0	-
03:55 AM - 04:00 AM	51.3	51.8	n/a	47.2	-
04:00 AM - 04:05 AM	47.5	52.5	n/a	47.4	-
04:05 AM - 04:10 AM	48.5	52.4	n/a	48.7	-
04:10 AM - 04:15 AM	48.1	51.9	n/a	49.3	-
04:15 AM - 04:20 AM	49.4	51.3	n/a	49.2	-
04:20 AM - 04:25 AM	47.5	52.3	n/a	47.8	-
04:25 AM - 04:30 AM	47.7	49.2	n/a	46.5	-
04:30 AM - 04:35 AM	48.3	58.1	n/a	47.8	-
04:35 AM - 04:40 AM	48.9	60.7	n/a	56.7	-
04:40 AM - 04:45 AM	48.4	60.6	n/a	57.8	-
04:45 AM - 04:50 AM	47.9	60.2	n/a	57.8	-
04:50 AM - 04:55 AM	48.5	60.5	n/a	58.0	-
04:55 AM - 05:00 AM	48.6	60.8	n/a	58.3	-
05:00 AM - 05:05 AM	57.2	61.0	n/a	58.3	-
05:05 AM - 05:10 AM	49.5	62.6	n/a	59.1	-
05:10 AM - 05:15 AM	49.0	61.7	n/a	58.9	-
05:15 AM - 05:20 AM	49.1	61.6	n/a	58.6	-
05:20 AM - 05:25 AM	49.5	58.0	n/a	53.7	-
05:25 AM - 05:30 AM	50.2	56.7	n/a	51.4	-
05:30 AM - 05:35 AM	49.3	53.0	n/a	50.1	-
05:35 AM - 05:40 AM	48.6	52.5	n/a	50.1	-
05:40 AM - 05:45 AM	49.6	53.3	n/a	50.4	-
05:45 AM - 05:50 AM	49.8	51.9	n/a	49.4	-
05:50 AM - 05:55 AM	49.2	53.5	n/a	49.7	-
05:55 AM - 06:00 AM	48.5	57.3	n/a	55.7	-
06:00 AM - 07:00 AM	52.4	55.2	n/a	51.8	-
07:00 AM - 08:00 AM	50.9	62.1	n/a	53.6	≤ 10

Reference Method :

1. In-house method : STM 06-001 based on ISO 1996-1 : 2016

2. ประกาศกระทรวงสาธารณสุข เรื่อง มาตรการควบคุมเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่โครงการประกอบกิจการโรงงาน พ.ศ. 2567

หมายเหตุ

1. ประกาศกระทรวงสาธารณสุข เรื่อง มาตรการควบคุมเสียงรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่โครงการประกอบกิจการโรงงาน พ.ศ. 2568

2. ประกาศกระทรวงสาธารณสุข เรื่อง มาตรการควบคุมเสียงรบกวนระดับเสียงที่โครงการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561


Remark:

1. ระดับเสียงจากแหล่งกำเนิด วัดที่ 24-25 สิงหาคม 2567

2. ระดับเสียงที่วัดและระดับเสียงขณะปฏิบัติการรบกวน (Sample No 2494233-23 วันที่ตรวจวัด 24-25 สิงหาคม 2567)

3. n/a: ไม่สามารถคำนวณระดับเสียงขณะปฏิบัติการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดเกินกว่าระดับเสียงขณะปฏิบัติการรบกวน

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Approved by 
Kanokkorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhol, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :


Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107790-1

Page 1 of 3

Sample No. 2494231-10
Parameter เสียงรบกวน
Location โรงโม่ปูนลูกบาศก์ (GPS 47P 0722987, 1616402)
Measurement Date Aug. 25 - Aug. 26, 2024
Measurement by Prommee Sipatnet
Sound Level Meter 01022261

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะปฏิบัติการรบกวน	ระดับเสียง (dB(A))		ค่าระดับการรบกวน
			กลางคืน	กลางวัน	
08:00 AM - 09:00 AM	49.3	62.3	n/a	54.1	-
09:00 AM - 10:00 AM	52.0	56.5	n/a	51.2	-
10:00 AM - 11:00 AM	49.0	54.5	n/a	52.2	-
11:00 AM - 12:00 PM	53.9	59.0	n/a	52.3	-
12:00 PM - 01:00 PM	50.0	53.3	n/a	50.0	-
01:00 PM - 02:00 PM	45.4	53.7	n/a	51.3	-
02:00 PM - 03:00 PM	50.7	62.3	n/a	53.7	-
03:00 PM - 04:00 PM	49.3	60.6	n/a	55.7	-
04:00 PM - 05:00 PM	53.0	62.8	n/a	55.4	-
05:00 PM - 06:00 PM	49.5	61.7	n/a	54.5	-
06:00 PM - 07:00 PM	51.4	61.2	n/a	55.5	-
07:00 PM - 08:00 PM	55.4	57.2	n/a	54.6	-
08:00 PM - 09:00 PM	54.3	54.9	n/a	52.5	-
09:00 PM - 10:00 PM	51.4	53.3	n/a	51.2	-
10:00 PM - 10:05 PM	50.0	51.1	-	n/a	48.2
10:05 PM - 10:10 PM	50.1	52.9	-	n/a	50.0
10:10 PM - 10:15 PM	50.8	53.4	-	n/a	50.2
10:15 PM - 10:20 PM	50.7	51.7	-	n/a	50.2
10:20 PM - 10:25 PM	48.9	52.6	-	n/a	50.7
10:25 PM - 10:30 PM	51.5	55.3	-	n/a	52.5
10:30 PM - 10:35 PM	49.3	57.0	-	n/a	55.0
10:35 PM - 10:40 PM	49.6	57.8	-	n/a	54.6
10:40 PM - 10:45 PM	51.1	57.5	-	n/a	55.0
10:45 PM - 10:50 PM	49.5	58.1	-	n/a	55.9
10:50 PM - 10:55 PM	53.7	57.1	-	n/a	54.4
10:55 PM - 11:00 PM	49.4	55.6	-	n/a	52.5
11:00 PM - 11:05 PM	48.8	54.4	-	n/a	52.6
11:05 PM - 11:10 PM	49.3	53.9	-	n/a	51.9
11:10 PM - 11:15 PM	49.3	52.1	-	n/a	49.9
11:15 PM - 11:20 PM	49.8	53.7	-	n/a	50.6
11:20 PM - 11:25 PM	49.8	53.1	-	n/a	51.2
11:25 PM - 11:30 PM	49.6	54.0	-	n/a	50.6
11:30 PM - 11:35 PM	48.9	53.8	-	n/a	49.4
11:35 PM - 11:40 PM	49.4	51.4	-	n/a	48.4
11:40 PM - 11:45 PM	49.3	52.2	-	n/a	48.9
11:45 PM - 11:50 PM	49.5	52.5	-	n/a	49.4
11:50 PM - 11:55 PM	49.3	51.6	-	n/a	48.6
11:55 PM - 12:00 AM	48.6	51.5	-	n/a	48.3
12:00 AM - 12:05 AM	48.6	50.9	-	n/a	48.3
12:05 AM - 12:10 AM	47.9	52.2	-	n/a	48.2

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Approved by 
Kanokkorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhol, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107790-1

Page 2 of 3

Sample No. 2494231-10
Parameter เสียงรบกวน
Location โรงเรือนปูนหล่อทาง (GPS 47P 0722987, 1616402)
Measurement Date Aug 25 - Aug 26, 2024
Measurement by Prommee Siripatnet
Sound Level Meter 01022261

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			ค่าจริง	ค่าเฉลี่ย		
12:10 AM - 12:15 AM	47.2	51.3	-	-	48.9	-
12:15 AM - 12:20 AM	47.3	50.1	-	-	47.6	-
12:20 AM - 12:25 AM	46.9	51.9	-	-	48.0	-
12:25 AM - 12:30 AM	47.9	51.8	-	-	49.5	-
12:30 AM - 12:35 AM	47.5	53.3	-	-	49.6	-
12:35 AM - 12:40 AM	47.6	52.3	-	-	48.7	-
12:40 AM - 12:45 AM	48.0	52.0	-	-	48.4	-
12:45 AM - 12:50 AM	48.0	51.8	-	-	49.2	-
12:50 AM - 12:55 AM	48.1	51.6	-	-	48.6	-
12:55 AM - 01:00 AM	47.5	51.4	-	-	48.2	-
01:00 AM - 01:05 AM	47.3	51.5	-	-	48.1	-
01:05 AM - 01:10 AM	47.6	50.8	-	-	47.6	-
01:10 AM - 01:15 AM	47.3	51.4	-	-	48.5	-
01:15 AM - 01:20 AM	56.3	51.4	-	-	48.4	9.2
01:20 AM - 01:25 AM	47.0	54.7	-	-	49.0	-
01:25 AM - 01:30 AM	46.6	52.2	-	-	48.7	-
01:30 AM - 01:35 AM	46.5	51.2	-	-	48.2	-
01:35 AM - 01:40 AM	46.2	51.9	-	-	48.2	-
01:40 AM - 01:45 AM	45.9	51.0	-	-	47.9	-
01:45 AM - 01:50 AM	45.8	50.5	-	-	47.5	-
01:50 AM - 01:55 AM	46.3	51.2	-	-	45.8	-
01:55 AM - 02:00 AM	46.1	51.4	-	-	47.4	-
02:00 AM - 02:05 AM	45.4	50.2	-	-	47.4	-
02:05 AM - 02:10 AM	46.6	51.1	-	-	48.2	-
02:10 AM - 02:15 AM	47.1	50.9	-	-	47.8	-
02:15 AM - 02:20 AM	48.5	52.0	-	-	48.0	-
02:20 AM - 02:25 AM	47.4	51.6	-	-	48.1	-
02:25 AM - 02:30 AM	46.5	50.0	-	-	48.8	-
02:30 AM - 02:35 AM	48.9	50.2	-	-	47.9	-
02:35 AM - 02:40 AM	46.8	49.8	-	-	47.3	-
02:40 AM - 02:45 AM	46.1	52.7	-	-	49.0	-
02:45 AM - 02:50 AM	45.5	50.0	-	-	48.2	-
02:50 AM - 02:55 AM	46.5	50.3	-	-	47.5	-
02:55 AM - 03:00 AM	47.3	50.7	-	-	49.1	-
03:00 AM - 03:05 AM	55.7	51.9	-	-	48.6	7.8
03:05 AM - 03:10 AM	48.6	51.6	-	-	47.1	-
03:10 AM - 03:15 AM	45.2	50.1	-	-	46.6	-
03:15 AM - 03:20 AM	45.1	50.5	-	-	47.5	-
03:20 AM - 03:25 AM	64.7	58.7	-	-	48.8	17.6
03:25 AM - 03:30 AM	45.7	50.6	-	-	47.5	-

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Approved by

Kanokkorn Anek

Asst. General Manager

Kanokkorn Anek

Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhol, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107790-1

Page 3 of 3

Sample No. 2494231-10
Parameter เสียงรบกวน
Location โรงเรือนปูนหล่อทาง (GPS 47P 0722987, 1616402)
Measurement Date Aug 25 - Aug 26, 2024
Measurement by Prommee Siripatnet
Sound Level Meter 01022261

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			ค่าจริง	ค่าเฉลี่ย		
03:30 AM - 03:35 AM	45.3	50.9	-	-	47.5	-
03:35 AM - 03:40 AM	45.7	49.6	-	-	46.7	-
03:40 AM - 03:45 AM	45.5	50.2	-	-	46.5	-
03:45 AM - 03:50 AM	44.9	51.1	-	-	47.9	-
03:50 AM - 03:55 AM	45.9	50.2	-	-	47.4	-
03:55 AM - 04:00 AM	49.8	53.0	-	-	48.3	-
04:00 AM - 04:05 AM	49.5	51.3	-	-	47.9	-
04:05 AM - 04:10 AM	45.5	51.2	-	-	48.3	-
04:10 AM - 04:15 AM	49.7	53.2	-	-	46.8	-
04:15 AM - 04:20 AM	47.8	58.4	-	-	47.8	-
04:20 AM - 04:25 AM	44.8	50.3	-	-	47.1	-
04:25 AM - 04:30 AM	46.0	50.7	-	-	47.6	-
04:30 AM - 04:35 AM	45.6	57.6	-	-	47.5	-
04:35 AM - 04:40 AM	46.8	60.5	-	-	55.5	-
04:40 AM - 04:45 AM	47.3	60.7	-	-	57.6	-
04:45 AM - 04:50 AM	46.2	60.6	-	-	57.9	-
04:50 AM - 04:55 AM	46.8	61.4	-	-	58.4	-
04:55 AM - 05:00 AM	47.1	62.2	-	-	59.0	-
05:00 AM - 05:05 AM	46.7	61.3	-	-	58.3	-
05:05 AM - 05:10 AM	60.3	62.2	-	-	58.3	-
05:10 AM - 05:15 AM	46.0	60.5	-	-	57.4	-
05:15 AM - 05:20 AM	46.4	60.2	-	-	57.1	-
05:20 AM - 05:25 AM	48.8	57.4	-	-	53.5	-
05:25 AM - 05:30 AM	46.7	55.4	-	-	49.5	-
05:30 AM - 05:35 AM	47.9	50.7	-	-	48.8	-
05:35 AM - 05:40 AM	46.7	51.5	-	-	48.7	-
05:40 AM - 05:45 AM	46.8	51.0	-	-	48.9	-
05:45 AM - 05:50 AM	46.7	52.7	-	-	49.3	-
05:50 AM - 05:55 AM	46.4	52.8	-	-	54.7	-
05:55 AM - 06:00 AM	49.2	56.8	-	-	52.2	-
06:00 AM - 07:00 AM	48.5	55.8	-	-	53.2	-
07:00 AM - 08:00 AM	48.3	56.5	-	-	53.2	≤ 10

Reference Method :

- In-house method : STM 06-001 based on ISO 1996-1 : 2016
- ประเทศไทยโรงงานอุตสาหกรรม ต้อง ใช้มาตรฐานระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุด(ค่าจากการประมวลผลการโรงงาน พ.ศ. 2567)

หมายเหตุ

- ประเภทเครื่องวัดเสียงที่ใช้ คือ ก้านวัดระดับเสียงการรบกวนและระดับเสียงที่ได้จากการประมวลผลการโรงงาน พ.ศ. 2548
- ประเภทเครื่องมือวัดเสียงที่ใช้ คือ ก้านวัดระดับเสียงการรบกวนและระดับเสียงที่ได้จากการประมวลผลการโรงงาน พ.ศ. 2561

Remark:

- ระดับเสียงจากแหล่งกำเนิด ค่าการวัดจริง วันที่ 25-26 สิงหาคม 2567
- ระดับเสียงที่คำนวณและระดับเสียงขณะไม่มีการรบกวน (Sample No.2494233-24 วันที่ตรวจวัด 25-26 สิงหาคม 2567)
- ก/บ: ไม่สามารถคำนวณระดับเสียงขณะไม่มีการรบกวนเนื่องจากมีเสียงรบกวนจากแหล่งกำเนิดการรบกวนอื่นที่เกินกว่าค่าที่กำหนดไว้

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Approved by

Kanokkorn Anek

Asst. General Manager

Kanokkorn Anek

Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhon, Saraburi
Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2494231

Date Received : Sep 04, 2024

Date Reported : Sep 11, 2024

Report Number : 3107791-1

Sample No.

Parameter

Location

Measurement Date

Measurement by

Sound Level Meter

2494231-11

เสียงรบกวน

โรงโม่ปูนท่าหลวง (GPS 47P 0722987, 1616402)

Aug 26 - Aug 27, 2024

Prommee Siripatnet

01022261

Page 1 of 3



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhon, Saraburi
Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2494231

Date Received : Sep 04, 2024

Date Reported : Sep 11, 2024

Report Number : 3107791-1

Sample No.

Parameter

Location

Measurement Date

Measurement by

Sound Level Meter

2494231-11

เสียงรบกวน

โรงโม่ปูนท่าหลวง (GPS 47P 0722987, 1616402)

Aug 26 - Aug 27, 2024

Prommee Siripatnet

01022261

Page 2 of 3

เวลา	เสียงจากแหล่งกำเนิด	ระดับเสียง (dB(A))		เสียงรบกวน	ค่าระดับการรบกวน
		เสียงรบกวน	ค่าระดับ		
08:00 AM - 09:00 AM	59.7	n/a	-	54.1	-
09:00 AM - 10:00 AM	48.9	n/a	-	53.4	-
10:00 AM - 11:00 AM	49.1	n/a	-	53.0	-
11:00 AM - 12:00 PM	54.4	n/a	-	51.8	-
12:00 PM - 01:00 PM	55.2	n/a	-	52.7	-
01:00 PM - 02:00 PM	54.9	n/a	-	52.5	-
02:00 PM - 03:00 PM	60.6	n/a	-	54.2	-
03:00 PM - 04:00 PM	62.1	n/a	-	55.0	-
04:00 PM - 05:00 PM	50.4	n/a	-	54.5	-
05:00 PM - 06:00 PM	53.6	n/a	-	54.3	-
06:00 PM - 07:00 PM	57.2	n/a	-	56.5	-
07:00 PM - 08:00 PM	54.8	n/a	-	52.7	-
08:00 PM - 09:00 PM	53.3	n/a	-	52.3	-
09:00 PM - 10:00 PM	54.5	n/a	-	52.2	-
10:00 PM - 10:05 PM	53.6	n/a	-	52.1	-
10:05 PM - 10:10 PM	52.9	n/a	-	50.8	-
10:10 PM - 10:15 PM	53.4	n/a	-	52.5	-
10:15 PM - 10:20 PM	56.2	n/a	-	51.7	-
10:20 PM - 10:25 PM	53.6	n/a	-	50.7	-
10:25 PM - 10:30 PM	54.3	n/a	-	51.4	-
10:30 PM - 10:35 PM	52.7	n/a	-	51.3	-
10:35 PM - 10:40 PM	53.3	n/a	-	53.0	-
10:40 PM - 10:45 PM	52.7	n/a	-	52.1	-
10:45 PM - 10:50 PM	51.8	n/a	-	50.8	-
10:50 PM - 10:55 PM	51.4	n/a	-	53.5	-
10:55 PM - 11:00 PM	51.6	n/a	-	53.1	-
11:00 PM - 11:05 PM	55.0	n/a	-	53.2	-
11:05 PM - 11:10 PM	50.9	n/a	-	52.5	-
11:10 PM - 11:15 PM	51.6	n/a	-	51.5	-
11:15 PM - 11:20 PM	53.7	n/a	-	52.1	-
11:20 PM - 11:25 PM	50.5	n/a	-	52.6	-
11:25 PM - 11:30 PM	50.5	n/a	-	52.5	-
11:30 PM - 11:35 PM	54.6	n/a	-	52.5	-
11:35 PM - 11:40 PM	49.8	n/a	-	51.4	-
11:40 PM - 11:45 PM	48.9	n/a	-	52.9	-
11:45 PM - 11:50 PM	49.1	n/a	-	52.4	-
11:50 PM - 11:55 PM	49.5	n/a	-	52.9	-
11:55 PM - 12:00 AM	50.9	n/a	-	52.4	-
12:00 AM - 12:05 AM	51.0	n/a	-	51.5	-
12:05 AM - 12:10 AM	51.9	n/a	-	51.5	-

The above results are valid only for the measurement sample(s) as indicated in this report. The rest of the report for non-measured sample(s) is not valid. This report is not valid for use as evidence in any legal proceedings. It is recommended that this report is not reproduced except in full.

Approved by

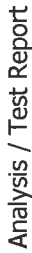
Kanokkorn Anek

Asst. General Manager

Approved by

Kanokkorn Anek

Asst. General Manager



P/O :
Project Name : Saraburi Factory Plant
Project Location :

Page 3 of 3

เวลา	เสียงจาก แป้นกดปุ่มเปิด	เสียงขณะ ไขปิดการรวม	รหัสเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับ การรวม
			กลางวัน	กลางคืน		
03:30 AM - 03:35 AM	46.9	52.4	-	n/a	49.7	-
03:35 AM - 03:40 AM	46.3	51.3	-	n/a	47.9	-
03:40 AM - 03:45 AM	49.7	53.3	-	n/a	48.4	-
03:45 AM - 03:50 AM	50.7	55.5	-	n/a	50.7	-
03:50 AM - 03:55 AM	48.9	52.1	-	n/a	49.8	-
03:55 AM - 04:00 AM	46.7	53.8	-	n/a	51.0	-
04:00 AM - 04:05 AM	46.5	53.8	-	n/a	52.0	-
04:05 AM - 04:10 AM	45.8	54.8	-	n/a	51.3	-
04:10 AM - 04:15 AM	45.9	54.5	-	n/a	50.7	-
04:15 AM - 04:20 AM	49.0	52.5	-	n/a	49.1	-
04:20 AM - 04:25 AM	47.1	51.4	-	n/a	48.9	-
04:25 AM - 04:30 AM	45.8	54.9	-	n/a	50.7	-
04:30 AM - 04:35 AM	47.1	58.8	-	n/a	56.7	-
04:35 AM - 04:40 AM	48.7	61.4	-	n/a	58.1	-
04:40 AM - 04:45 AM	48.4	61.9	-	n/a	57.6	-
04:45 AM - 04:50 AM	46.3	61.2	-	n/a	58.4	-
04:50 AM - 04:55 AM	45.7	61.7	-	n/a	58.4	-
04:55 AM - 05:00 AM	45.5	61.9	-	n/a	58.0	-
05:00 AM - 05:05 AM	48.1	61.6	-	n/a	57.5	-
05:05 AM - 05:10 AM	54.4	61.3	-	n/a	56.5	-
05:10 AM - 05:15 AM	48.4	61.0	-	n/a	54.8	-
05:15 AM - 05:20 AM	59.9	59.6	-	51.1	50.6	-3.7
05:20 AM - 05:25 AM	46.8	54.2	-	n/a	51.8	-
05:25 AM - 05:30 AM	47.1	54.9	-	n/a	51.1	-
05:30 AM - 05:35 AM	46.4	54.6	-	n/a	52.2	-
05:35 AM - 05:40 AM	46.3	54.9	-	n/a	51.5	-
05:40 AM - 05:45 AM	49.3	55.1	-	n/a	51.7	-
05:45 AM - 05:50 AM	51.3	55.0	-	n/a	53.1	-
05:50 AM - 05:55 AM	52.1	56.4	-	n/a	52.4	-
05:55 AM - 06:00 AM	52.8	56.0	-	n/a	53.5	-
06:00 AM - 07:00 AM	52.0	56.9	n/a	-	55.4	-
07:00 AM - 08:00 AM	50.4	58.5	n/a	-	-	-

2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงที่ก่อให้เกิดการประกอบกิจการโรงงาน พ.ศ. 2548

Remark:

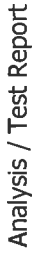
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.2494233-25 วันที่ตรวจวัด 26-27 สิงหาคม 2567)

in that we have not been able to reproduce the results of the other studies. A. S. Laboratory Group (Third and Fourth sessions) from the Laboratory.

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand (PH) 02-11-1111

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P/O :
Project Name : Saraburi Factory Plant
Project Location :

Page 1 of 3

รายละเอียดการดำเนินงาน (dB(A))					ผลการดำเนินงาน	
เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะปฏิบัติงาน		เสียงขณะพัก	เสียงขณะปฏิบัติงาน	ค่าการคำนวณ
		กลางวัน	กลางคืน		กลางคืน	
08:00 AM - 09:00 AM	49.2	58.8	n/a	-	54.5	-
09:00 AM - 10:00 AM	50.3	59.3	n/a	-	54.5	-
10:00 AM - 11:00 AM	49.9	57.8	n/a	-	53.6	-
11:00 AM - 12:00 PM	48.8	54.5	n/a	-	52.5	-
12:00 PM - 01:00 PM	49.4	54.4	n/a	-	52.2	-
01:00 PM - 02:00 PM	50.0	54.8	n/a	-	52.8	-
02:00 PM - 03:00 PM	50.4	58.3	n/a	-	53.2	-
03:00 PM - 04:00 PM	49.6	59.8	n/a	-	53.6	-
04:00 PM - 05:00 PM	52.6	57.4	n/a	-	54.2	-
05:00 PM - 06:00 PM	50.9	59.5	n/a	-	54.2	-
06:00 PM - 07:00 PM	49.4	59.7	n/a	-	55.3	-
07:00 PM - 08:00 PM	53.2	57.8	n/a	-	54.9	-
08:00 PM - 09:00 PM	53.1	55.0	n/a	-	53.0	-
09:00 PM - 10:00 PM	52.4	57.2	n/a	-	54.9	-
10:00 PM - 10:05 PM	53.1	57.0	-	n/a	55.4	-
10:05 PM - 10:10 PM	51.7	55.9	-	n/a	53.4	-
10:10 PM - 10:15 PM	52.5	56.4	-	n/a	54.7	-
10:15 PM - 10:20 PM	51.6	56.1	-	n/a	54.4	-
10:20 PM - 10:25 PM	52.2	58.0	-	n/a	54.9	-
10:25 PM - 10:30 PM	52.0	56.5	-	n/a	54.9	-
10:30 PM - 10:35 PM	51.6	57.2	-	n/a	54.6	-
10:35 PM - 10:40 PM	50.9	55.4	-	n/a	53.5	-
10:40 PM - 10:45 PM	51.3	54.2	-	n/a	52.2	-
10:45 PM - 10:50 PM	51.7	55.1	-	n/a	53.2	-
10:50 PM - 10:55 PM	53.0	54.7	-	n/a	52.3	-
10:55 PM - 11:00 PM	52.1	55.5	-	n/a	53.5	-
11:00 PM - 11:05 PM	52.2	54.1	-	n/a	51.8	-
11:05 PM - 11:10 PM	55.0	55.6	-	n/a	52.8	-
11:10 PM - 11:15 PM	50.4	54.7	-	n/a	52.0	-
11:15 PM - 11:20 PM	51.2	54.7	-	n/a	51.8	-
11:20 PM - 11:25 PM	50.4	55.9	-	n/a	51.7	-
11:25 PM - 11:30 PM	50.1	54.5	-	n/a	52.2	-
11:30 PM - 11:35 PM	51.0	54.2	-	n/a	50.5	-
11:35 PM - 11:40 PM	49.9	55.4	-	n/a	53.6	-
11:40 PM - 11:45 PM	49.9	56.8	-	n/a	53.3	-
11:45 PM - 11:50 PM	50.5	55.0	-	n/a	53.1	-
11:50 PM - 11:55 PM	49.5	56.6	-	n/a	52.8	-
11:55 PM - 12:00 AM	49.7	53.8	-	n/a	51.3	-
12:00 AM - 12:05 AM	50.2	52.7	-	n/a	50.4	-
12:05 AM - 12:10 AM	49.7	53.6	-	n/a	50.3	-

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11



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5/5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107792-1

Page 2 of 3

Sample No. 2494231-12
Parameter เสียงรบกวน
Location โรงโม่ปูนบดฟลักทวน (GPS 47P 0722987, 1616402)
Measurement Date Aug 27 - Aug 28, 2024
Measurement by Promnee Sripaniet
Sound Level Meter 01022261

เวลา	ระดับเสียง (dB(A))			เสียงพื้นฐาน	ค่าระดับการรบกวน
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		
12:10 AM - 12:15 AM	49.7	54.1	n/a	51.8	-
12:15 AM - 12:20 AM	48.9	54.4	n/a	52.5	-
12:20 AM - 12:25 AM	49.3	54.7	n/a	52.0	-
12:25 AM - 12:30 AM	48.6	54.6	n/a	52.0	-
12:30 AM - 12:35 AM	47.6	53.2	n/a	51.6	-
12:35 AM - 12:40 AM	48.2	52.8	n/a	49.8	-
12:40 AM - 12:45 AM	48.4	52.9	n/a	50.3	-
12:45 AM - 12:50 AM	51.5	52.1	n/a	49.5	-
12:50 AM - 12:55 AM	50.5	52.4	n/a	49.3	-
12:55 AM - 01:00 AM	48.0	51.8	n/a	48.4	-
01:00 AM - 01:05 AM	47.0	53.3	n/a	48.7	-
01:05 AM - 01:10 AM	46.1	50.9	n/a	48.0	-
01:10 AM - 01:15 AM	61.3	59.6	n/a	48.2	-
01:15 AM - 01:20 AM	48.2	56.1	59.4	49.4	12.8
01:20 AM - 01:25 AM	50.9	55.9	n/a	54.2	-
01:25 AM - 01:30 AM	51.1	55.2	n/a	53.3	-
01:30 AM - 01:35 AM	44.8	51.9	n/a	49.5	-
01:35 AM - 01:40 AM	64.8	55.9	67.2	49.5	-
01:40 AM - 01:45 AM	65.6	56.6	68.0	54.2	17.7
01:45 AM - 01:50 AM	59.0	58.7	50.2	54.3	-1.8
01:50 AM - 01:55 AM	55.8	55.8	n/a	53.4	-4.1
01:55 AM - 02:00 AM	48.2	58.2	n/a	53.7	-
02:00 AM - 02:05 AM	49.2	54.0	n/a	51.9	-
02:05 AM - 02:10 AM	48.4	52.9	n/a	50.6	-
02:10 AM - 02:15 AM	48.0	53.1	n/a	49.9	-
02:15 AM - 02:20 AM	48.2	52.4	n/a	49.4	-
02:20 AM - 02:25 AM	59.4	53.4	61.1	50.1	-
02:25 AM - 02:30 AM	48.4	53.3	n/a	51.1	11.0
02:30 AM - 02:35 AM	49.9	53.3	n/a	50.1	-
02:35 AM - 02:40 AM	48.4	51.6	n/a	49.3	-
02:40 AM - 02:45 AM	48.9	52.1	n/a	49.1	-
02:45 AM - 02:50 AM	48.9	52.4	n/a	48.9	-
02:50 AM - 02:55 AM	47.5	50.9	n/a	48.5	-
02:55 AM - 03:00 AM	47.9	51.8	n/a	48.4	-
03:00 AM - 03:05 AM	48.2	50.6	n/a	48.2	-
03:05 AM - 03:10 AM	51.8	53.7	n/a	48.3	-
03:10 AM - 03:15 AM	47.5	49.7	n/a	46.9	-
03:15 AM - 03:20 AM	47.5	50.3	n/a	47.3	-
03:20 AM - 03:25 AM	47.5	50.3	n/a	47.3	-
03:25 AM - 03:30 AM	46.6	49.7	n/a	46.5	-

Approved by
Kanokkorn Anek
Asst. General Manager

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5/5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107792-1

Page 3 of 3

Sample No. 2494231-12
Parameter เสียงรบกวน
Location โรงโม่ปูนบดฟลักทวน (GPS 47P 0722987, 1616402)
Measurement Date Aug 27 - Aug 28, 2024
Measurement by Promnee Sripaniet
Sound Level Meter 01022261

เวลา	ระดับเสียง (dB(A))			เสียงพื้นฐาน	ค่าระดับการรบกวน
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน		
03:30 AM - 03:35 AM	45.9	49.8	n/a	47.2	-
03:35 AM - 03:40 AM	47.8	51.4	n/a	47.5	-
03:40 AM - 03:45 AM	46.3	51.1	n/a	46.4	-
03:45 AM - 03:50 AM	46.4	49.3	n/a	46.9	-
03:50 AM - 03:55 AM	45.9	49.2	n/a	46.5	-
03:55 AM - 04:00 AM	46.2	49.7	n/a	46.2	-
04:00 AM - 04:05 AM	46.3	49.3	n/a	45.4	-
04:05 AM - 04:10 AM	55.3	50.2	n/a	56.7	9.0
04:10 AM - 04:15 AM	46.5	52.3	n/a	47.6	-
04:15 AM - 04:20 AM	46.4	50.9	n/a	47.3	-
04:20 AM - 04:25 AM	48.4	50.6	n/a	47.5	-
04:25 AM - 04:30 AM	49.6	49.8	n/a	46.7	-
04:30 AM - 04:35 AM	50.3	55.8	n/a	53.2	-
04:35 AM - 04:40 AM	50.8	54.2	n/a	52.4	-
04:40 AM - 04:45 AM	50.5	54.1	n/a	52.6	-
04:45 AM - 04:50 AM	51.3	54.1	n/a	52.5	-
04:50 AM - 04:55 AM	51.7	55.1	n/a	51.9	-
04:55 AM - 05:00 AM	51.3	55.3	n/a	52.2	-
05:00 AM - 05:05 AM	55.5	55.5	n/a	53.0	-
05:05 AM - 05:10 AM	52.1	55.5	n/a	53.9	-
05:10 AM - 05:15 AM	52.7	56.9	n/a	54.5	-
05:15 AM - 05:20 AM	52.8	60.9	n/a	57.1	-
05:20 AM - 05:25 AM	52.9	56.9	n/a	53.1	-
05:25 AM - 05:30 AM	52.5	54.0	n/a	49.1	-0.9
05:30 AM - 05:35 AM	53.4	52.5	49.1	48.4	-2.2
05:35 AM - 05:40 AM	52.7	51.7	43.9	49.8	-
05:40 AM - 05:45 AM	52.4	52.4	n/a	51.8	-
05:45 AM - 05:50 AM	51.8	52.0	n/a	51.8	-
05:50 AM - 05:55 AM	51.9	53.5	n/a	53.1	-
05:55 AM - 06:00 AM	51.9	55.2	n/a	50.6	-
06:00 AM - 07:00 AM	53.7	54.1	n/a	53.7	-
07:00 AM - 08:00 AM	52.4	58.9	n/a	53.7	≤ 10

หมายเหตุ :
Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการวัดระดับเสียงและการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่โครงการประกอบกิจการโรงงาน พ.ศ. 2557

มาตรฐาน
1. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าระดับเสียงที่โครงการประกอบกิจการโรงงาน พ.ศ. 2548
2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานค่าเสียงระดับเสียงที่โครงการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

หมายเหตุ :
1. ระดับเสียงจากแหล่งกำเนิด ฟลักทวนวัด ณ วันที่ 27-28 สิงหาคม 2567
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.2494233-26 วันเสาร์ที่ 27-28 สิงหาคม 2567)
3. ค่า : ค่าการคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากเสียงจากแหล่งกำเนิดจากเสียงรบกวนพื้นฐานเสียงรบกวนขณะไม่มีการรบกวน

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ฟลักทวนวัด ณ วันที่ 27-28 สิงหาคม 2567
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.2494233-26 วันเสาร์ที่ 27-28 สิงหาคม 2567)
3. ค่า : ค่าการคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากเสียงจากแหล่งกำเนิดจากเสียงรบกวนพื้นฐานเสียงรบกวนขณะไม่มีการรบกวน

หมายเหตุ :
1. ระดับเสียงจากแหล่งกำเนิด ฟลักทวนวัด ณ วันที่ 27-28 สิงหาคม 2567
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.2494233-26 วันเสาร์ที่ 27-28 สิงหาคม 2567)
3. ค่า : ค่าการคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากเสียงจากแหล่งกำเนิดจากเสียงรบกวนพื้นฐานเสียงรบกวนขณะไม่มีการรบกวน

หมายเหตุ :
1. ระดับเสียงจากแหล่งกำเนิด ฟลักทวนวัด ณ วันที่ 27-28 สิงหาคม 2567
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.2494233-26 วันเสาร์ที่ 27-28 สิงหาคม 2567)
3. ค่า : ค่าการคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากเสียงจากแหล่งกำเนิดจากเสียงรบกวนพื้นฐานเสียงรบกวนขณะไม่มีการรบกวน

หมายเหตุ :
1. ระดับเสียงจากแหล่งกำเนิด ฟลักทวนวัด ณ วันที่ 27-28 สิงหาคม 2567
2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No.2494233-26 วันเสาร์ที่ 27-28 สิงหาคม 2567)
3. ค่า : ค่าการคำนวณระดับเสียงขณะมีการรบกวนเนื่องจากเสียงจากแหล่งกำเนิดจากเสียงรบกวนพื้นฐานเสียงรบกวนขณะไม่มีการรบกวน

Approved by
Kanokkorn Anek
Asst. General Manager

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhohi, Saraburi
Thailand 18260

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107793-1

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Page 1 of 3

Sample No. 2494231-13
Parameter เสียงรบกวน
Location โรงเรือนแยกปูน (GPS 47P 0722987, 1616402)
Measurement Date Aug 28 - Aug 29, 2024
Measurement by Prinnicee Sripaet
Sound Level Meter 01022261

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะปฏิบัติการ	ระดับเสียง (dB(A))		เสียงรบกวน	ค่าระดับการรบกวน
			ค่าจริง	ค่าเฉลี่ย		
08:00 AM - 09:00 AM	49.1	60.1	n/a	-	53.8	-
09:00 AM - 10:00 AM	48.5	57.2	n/a	-	54.7	-
10:00 AM - 11:00 AM	47.5	60.9	n/a	-	55.3	-
11:00 AM - 12:00 PM	49.1	57.1	n/a	-	53.2	-
12:00 PM - 01:00 PM	48.2	54.5	n/a	-	51.7	-
01:00 PM - 02:00 PM	48.9	55.6	n/a	-	52.0	-
02:00 PM - 03:00 PM	52.6	57.3	n/a	-	53.2	-
03:00 PM - 04:00 PM	49.0	57.3	n/a	-	53.6	-
04:00 PM - 05:00 PM	50.9	60.5	n/a	-	55.6	-
05:00 PM - 06:00 PM	51.5	57.6	n/a	-	54.8	-
06:00 PM - 07:00 PM	56.0	55.1	51.3	-	53.0	-1.7
07:00 PM - 08:00 PM	56.6	55.8	42.5	-	53.8	-11.3
08:00 PM - 09:00 PM	55.2	56.9	n/a	-	55.6	-
09:00 PM - 10:00 PM	54.5	54.9	n/a	-	52.3	-
10:00 PM - 10:05 PM	52.6	59.8	-	n/a	57.9	-
10:05 PM - 10:10 PM	51.6	59.5	-	n/a	55.2	-
10:10 PM - 10:15 PM	52.4	57.9	-	n/a	55.5	-
10:15 PM - 10:20 PM	51.7	57.4	-	n/a	54.9	-
10:20 PM - 10:25 PM	51.9	54.5	-	n/a	52.2	-
10:25 PM - 10:30 PM	49.7	53.8	-	n/a	52.2	-
10:30 PM - 10:35 PM	49.0	53.5	-	n/a	50.9	-
10:35 PM - 10:40 PM	50.1	53.0	-	n/a	50.5	-
10:40 PM - 10:45 PM	50.3	51.4	-	n/a	51.4	-
10:45 PM - 10:50 PM	50.2	53.9	-	n/a	51.8	-
10:50 PM - 10:55 PM	50.4	53.8	-	n/a	52.1	-
10:55 PM - 11:00 PM	51.0	53.5	-	n/a	51.4	-
11:00 PM - 11:05 PM	53.0	53.6	-	n/a	51.4	-
11:05 PM - 11:10 PM	51.2	54.1	-	n/a	52.2	-
11:10 PM - 11:15 PM	50.6	52.4	-	n/a	51.8	-
11:15 PM - 11:20 PM	51.1	52.9	-	n/a	51.1	-
11:20 PM - 11:25 PM	51.2	53.5	-	n/a	51.2	-
11:25 PM - 11:30 PM	51.5	53.5	-	n/a	51.5	-
11:30 PM - 11:35 PM	51.6	53.3	-	n/a	50.8	-
11:35 PM - 11:40 PM	53.3	52.8	-	n/a	50.7	-4.0
11:40 PM - 11:45 PM	53.6	52.8	-	n/a	48.9	0.3
11:45 PM - 11:50 PM	53.3	52.8	-	n/a	45.7	-5.2
11:50 PM - 11:55 PM	52.7	52.8	-	n/a	51.2	-
11:55 PM - 12:00 AM	50.8	52.6	-	n/a	50.7	-
12:00 AM - 12:05 AM	51.2	53.9	-	n/a	51.8	-
12:05 AM - 12:10 AM	50.2	52.9	-	n/a	51.1	-

The above results are valid only for the analyzed samples (s) as presented in without written consent from the Laboratory. A.S. Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Kankhohi Anek

Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhohi, Saraburi
Thailand 18260

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107793-1

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Page 2 of 3

Sample No. 2494231-13
Parameter เสียงรบกวน
Location โรงเรือนแยกปูน (GPS 47P 0722987, 1616402)
Measurement Date Aug 28 - Aug 29, 2024
Measurement by Prinnicee Sripaet
Sound Level Meter 01022261

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะปฏิบัติการ	ระดับเสียง (dB(A))		เสียงรบกวน	ค่าระดับการรบกวน
			ค่าจริง	ค่าเฉลี่ย		
12:10 AM - 12:15 AM	50.7	53.2	-	n/a	50.9	-
12:15 AM - 12:20 AM	50.3	53.4	-	n/a	51.1	-
12:20 AM - 12:25 AM	50.3	53.3	-	n/a	50.4	-
12:25 AM - 12:30 AM	51.0	53.9	-	n/a	50.5	-
12:30 AM - 12:35 AM	50.7	53.3	-	n/a	51.2	-
12:35 AM - 12:40 AM	51.7	53.7	-	n/a	51.2	-
12:40 AM - 12:45 AM	51.5	52.2	-	n/a	48.7	-
12:45 AM - 12:50 AM	51.3	52.0	-	n/a	49.1	-
12:50 AM - 12:55 AM	50.8	50.8	-	n/a	47.8	-
12:55 AM - 01:00 AM	50.5	50.5	-	n/a	46.9	-
01:00 AM - 01:05 AM	50.3	50.3	-	n/a	47.4	-
01:05 AM - 01:10 AM	50.1	52.0	-	n/a	47.5	-
01:10 AM - 01:15 AM	49.0	51.3	-	n/a	47.2	-
01:15 AM - 01:20 AM	53.5	50.9	-	53.0	47.6	5.4
01:20 AM - 01:25 AM	49.5	52.4	-	n/a	47.8	-
01:25 AM - 01:30 AM	50.0	51.6	-	n/a	48.1	-
01:30 AM - 01:35 AM	48.9	51.0	-	n/a	48.1	-
01:35 AM - 01:40 AM	50.6	50.6	-	n/a	47.3	-
01:40 AM - 01:45 AM	51.4	50.8	-	47.9	45.6	2.3
01:45 AM - 01:50 AM	51.5	50.3	-	46.2	47.3	-1.1
01:50 AM - 01:55 AM	51.9	49.9	-	50.6	46.6	4.0
01:55 AM - 02:00 AM	49.0	49.6	-	n/a	46.4	-
02:00 AM - 02:05 AM	50.2	49.7	-	43.6	47.2	-3.6
02:05 AM - 02:10 AM	49.0	51.1	-	n/a	47.9	-
02:10 AM - 02:15 AM	48.2	51.2	-	n/a	46.8	-
02:15 AM - 02:20 AM	49.5	52.0	-	n/a	48.7	-
02:20 AM - 02:25 AM	50.8	50.2	-	44.9	45.8	-0.9
02:25 AM - 02:30 AM	51.6	50.5	-	48.1	47.7	0.4
02:30 AM - 02:35 AM	49.8	50.1	-	n/a	45.8	-
02:35 AM - 02:40 AM	49.7	48.9	-	45.0	45.2	-0.2
02:40 AM - 02:45 AM	48.3	52.6	-	n/a	48.0	-
02:45 AM - 02:50 AM	48.3	49.7	-	n/a	47.2	-
02:50 AM - 02:55 AM	50.0	52.9	-	n/a	49.2	-
02:55 AM - 03:00 AM	48.9	50.4	-	n/a	47.5	-
03:00 AM - 03:05 AM	48.4	50.0	-	n/a	46.4	-
03:05 AM - 03:10 AM	48.4	49.7	-	n/a	47.2	-
03:10 AM - 03:15 AM	51.9	52.6	-	n/a	48.4	-
03:15 AM - 03:20 AM	48.2	50.2	-	n/a	46.8	-
03:20 AM - 03:25 AM	47.7	51.8	-	n/a	49.2	-
03:25 AM - 03:30 AM	47.3	52.8	-	n/a	48.6	-

Approved by

Kankhohi Anek

Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99/219/301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107793-1

Page 3 of 3

Sample No. 2494231-13
Parameter เสียงรบกวน
Location โรงโม่ปูนสุรนบุรี (GPS 47P 0722987, 1616402)
Measurement Date Aug. 28 - Aug. 29, 2024
Measurement by Prommee Sripaetnet
Sound Level Meter 01022261

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะปฏิบัติการรบกวน	ระดับเสียง (dB(A))		ค่าระดับการรบกวน
			ค่าจริง	ค่าเฉลี่ย	
03:30 AM - 03:35 AM	47.0	50.1	-	n/a	-
03:35 AM - 03:40 AM	47.2	49.3	-	n/a	-
03:40 AM - 03:45 AM	48.3	50.2	-	n/a	-
03:45 AM - 03:50 AM	48.2	50.1	-	n/a	-
03:50 AM - 03:55 AM	47.7	50.5	-	n/a	-
03:55 AM - 04:00 AM	48.2	51.4	-	n/a	-
04:00 AM - 04:05 AM	47.7	50.8	-	n/a	-
04:05 AM - 04:10 AM	52.4	50.2	-	51.4	3.6
04:10 AM - 04:15 AM	47.1	50.9	-	n/a	-
04:15 AM - 04:20 AM	46.9	54.1	-	n/a	-
04:20 AM - 04:25 AM	47.2	50.9	-	n/a	-
04:25 AM - 04:30 AM	49.6	51.1	-	n/a	-
04:30 AM - 04:35 AM	46.8	56.5	-	n/a	-
04:35 AM - 04:40 AM	47.2	60.5	-	n/a	-
04:40 AM - 04:45 AM	47.5	60.4	-	n/a	-
04:45 AM - 04:50 AM	47.6	60.8	-	n/a	-
04:50 AM - 04:55 AM	47.7	61.1	-	n/a	-
04:55 AM - 05:00 AM	48.0	61.6	-	n/a	-
05:00 AM - 05:05 AM	55.9	62.1	-	n/a	-
05:05 AM - 05:10 AM	49.1	62.0	-	n/a	-
05:10 AM - 05:15 AM	50.7	61.7	-	n/a	-
05:15 AM - 05:20 AM	51.7	59.4	-	n/a	-
05:20 AM - 05:25 AM	50.4	56.3	-	n/a	-
05:25 AM - 05:30 AM	52.6	52.6	-	n/a	-
05:30 AM - 05:35 AM	52.8	53.6	-	n/a	-
05:35 AM - 05:40 AM	54.1	54.3	-	43.0	-7.9
05:40 AM - 05:45 AM	54.3	53.6	-	49.0	-2.2
05:45 AM - 05:50 AM	54.3	53.6	-	50.2	-0.7
05:50 AM - 05:55 AM	55.5	54.8	-	41.6	-10.3
05:55 AM - 06:00 AM	55.0	54.9	-	n/a	-
06:00 AM - 07:00 AM	54.9	55.7	-	n/a	-
07:00 AM - 08:00 AM	53.3	59.0	-	n/a	≤ 10

Reference Method :

1. In-house method : STM 06-001 based on ISO 1996-1 : 2016

2. ประกาศกระทรวงสาธารณสุข เรื่อง วิธีการวัดระดับเสียงรบกวน และระดับเสียงสูงสุดที่ปลอดภัยจากการประกอบกิจการโรงงาน พ.ศ. 2557

หมายเหตุ

1. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดระดับเสียงรบกวนและระดับเสียงที่ปลอดภัยจากการประกอบกิจการโรงงาน พ.ศ. 2548

2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานของแหล่งกำเนิดเสียงจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:

1. ระดับเสียงจากแหล่งกำเนิด พิกัดตารางที่ 28-29 สิงหาคม 2567

2. ระดับเสียงที่ระบุและระดับเสียงขณะปฏิบัติการรบกวน (Sample No.2494233-27 วันที่ตรวจวัด 28-29 สิงหาคม 2567)

3. n/a: ไม่สามารถคำนวณระดับเสียงรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดจากการระบุเสียงขณะปฏิบัติการรบกวน

The above results are valid only for the specified period (sample(s) are indicated in this report). No new test report or certificate may be reproduced in any form without written consent from the Laboratory. A/S Laboratory Group (Thailand) as body recommends that this report is not reproduced except in full.

Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager

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Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99/219/301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107794-1

Page 1 of 3

Sample No. 2494231-14
Parameter เสียงรบกวน
Location โรงโม่ปูนสุรนบุรี (GPS 47P 0722987, 1616402)
Measurement Date Aug. 29 - Aug. 30, 2024
Measurement by Prommee Sripaetnet
Sound Level Meter 01022261

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะปฏิบัติการรบกวน	ระดับเสียง (dB(A))		ค่าระดับการรบกวน
			ค่าจริง	ค่าเฉลี่ย	
08:00 AM - 09:00 AM	52.3	58.9	-	n/a	-
09:00 AM - 10:00 AM	52.2	60.0	-	n/a	-
10:00 AM - 11:00 AM	52.3	57.5	-	n/a	-
11:00 AM - 12:00 PM	50.6	59.8	-	n/a	-
12:00 PM - 01:00 PM	49.9	56.5	-	n/a	-
01:00 PM - 02:00 PM	56.9	57.9	-	n/a	-
02:00 PM - 03:00 PM	54.8	58.7	-	n/a	-
03:00 PM - 04:00 PM	54.1	61.2	-	n/a	-
04:00 PM - 05:00 PM	52.8	61.0	-	n/a	-
05:00 PM - 06:00 PM	51.9	58.3	-	n/a	-
06:00 PM - 07:00 PM	53.1	55.5	-	n/a	-
07:00 PM - 08:00 PM	55.3	54.0	-	49.4	-4.4
08:00 PM - 09:00 PM	53.4	54.0	-	n/a	-
09:00 PM - 10:00 PM	52.5	52.8	-	n/a	-
10:00 PM - 10:05 PM	52.5	52.0	-	45.9	-12.0
10:05 PM - 10:10 PM	52.2	52.5	-	55.2	-
10:10 PM - 10:15 PM	52.1	51.1	-	48.2	-
10:15 PM - 10:20 PM	53.0	52.6	-	45.4	-
10:20 PM - 10:25 PM	52.6	56.1	-	n/a	-
10:25 PM - 10:30 PM	52.0	57.4	-	n/a	-
10:30 PM - 10:35 PM	51.4	56.8	-	n/a	-
10:35 PM - 10:40 PM	51.6	57.2	-	n/a	-
10:40 PM - 10:45 PM	51.0	59.6	-	n/a	-
10:45 PM - 10:50 PM	51.5	59.4	-	n/a	-
10:50 PM - 10:55 PM	52.1	63.9	-	n/a	-
10:55 PM - 11:00 PM	52.2	64.3	-	n/a	-
11:00 PM - 11:05 PM	54.8	62.4	-	n/a	-
11:05 PM - 11:10 PM	52.0	60.1	-	n/a	-
11:10 PM - 11:15 PM	51.4	61.6	-	n/a	-
11:15 PM - 11:20 PM	52.1	62.8	-	n/a	-
11:20 PM - 11:25 PM	52.2	57.3	-	n/a	-
11:25 PM - 11:30 PM	52.4	55.7	-	n/a	-
11:30 PM - 11:35 PM	52.5	55.6	-	n/a	-
11:35 PM - 11:40 PM	52.3	56.6	-	n/a	-
11:40 PM - 11:45 PM	52.6	57.2	-	n/a	-
11:45 PM - 11:50 PM	52.5	59.6	-	n/a	-
11:50 PM - 11:55 PM	52.5	57.0	-	n/a	-
11:55 PM - 12:00 AM	53.0	53.0	-	n/a	-
12:00 AM - 12:05 AM	52.5	59.7	-	n/a	-
12:05 AM - 12:10 AM	52.0	56.8	-	n/a	-

The above results are valid only for the specified period (sample(s) are indicated in this report). No new test report or certificate may be reproduced in any form without written consent from the Laboratory. A/S Laboratory Group (Thailand) as body recommends that this report is not reproduced except in full.

Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219/301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107794-1

Page 2 of 3

Sample No. 2494231-14
Parameter เลื่อนฐาน
Location โรงโม่ปูนท่าหลวง (GPS 47P 0722987, 1616402)
Measurement Date Aug 29 - Aug 30, 2024
Measurement by Prommee Sipatnet
Sound Level Meter 01022261

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			ค่าจริง	เสียงขณะไม่มีการรบกวน	ค่าจริง	
12:10 AM - 12:15 AM	50.6	58.3	-	n/a	50.9	-
12:15 AM - 12:20 AM	51.0	55.8	-	n/a	51.1	-
12:20 AM - 12:25 AM	50.5	55.2	-	n/a	50.4	-
12:25 AM - 12:30 AM	52.0	55.9	-	n/a	50.5	-
12:30 AM - 12:35 AM	51.1	57.6	-	n/a	51.2	-
12:35 AM - 12:40 AM	50.4	54.9	-	n/a	51.2	-
12:40 AM - 12:45 AM	50.6	58.3	-	n/a	48.7	-
12:45 AM - 12:50 AM	50.5	58.9	-	n/a	48.1	-
12:50 AM - 12:55 AM	51.5	58.8	-	n/a	47.8	-
12:55 AM - 01:00 AM	50.5	55.8	-	n/a	46.9	-
01:00 AM - 01:05 AM	51.3	57.6	-	n/a	47.4	-
01:05 AM - 01:10 AM	51.2	54.7	-	n/a	47.5	-
01:10 AM - 01:15 AM	50.0	54.6	-	n/a	47.6	-
01:15 AM - 01:20 AM	50.3	54.7	-	n/a	47.8	-
01:20 AM - 01:25 AM	63.2	56.6	-	65.1	47.8	17.3
01:25 AM - 01:30 AM	51.1	54.6	-	n/a	48.1	-
01:30 AM - 01:35 AM	50.6	55.8	-	n/a	48.1	-
01:35 AM - 01:40 AM	50.2	56.9	-	n/a	47.3	-
01:40 AM - 01:45 AM	50.4	56.0	-	n/a	45.6	-
01:45 AM - 01:50 AM	50.4	55.5	-	n/a	47.3	-
01:50 AM - 01:55 AM	50.3	56.3	-	n/a	46.6	-
01:55 AM - 02:00 AM	49.4	54.3	-	n/a	46.4	-
02:00 AM - 02:05 AM	49.5	56.1	-	n/a	47.2	-
02:05 AM - 02:10 AM	49.9	54.7	-	n/a	47.9	-
02:10 AM - 02:15 AM	50.6	56.0	-	n/a	46.8	-
02:15 AM - 02:20 AM	49.0	57.4	-	n/a	48.7	-
02:20 AM - 02:25 AM	49.0	56.0	-	n/a	45.8	-
02:25 AM - 02:30 AM	49.1	54.5	-	n/a	47.7	-
02:30 AM - 02:35 AM	48.8	56.0	-	n/a	45.8	-
02:35 AM - 02:40 AM	49.7	56.8	-	n/a	45.2	-
02:40 AM - 02:45 AM	49.0	56.1	-	n/a	48.0	-
02:45 AM - 02:50 AM	48.9	57.9	-	n/a	47.2	-
02:50 AM - 02:55 AM	49.5	55.0	-	n/a	49.2	-
02:55 AM - 03:00 AM	49.1	54.1	-	n/a	47.5	-
03:00 AM - 03:05 AM	49.7	53.4	-	n/a	46.4	-
03:05 AM - 03:10 AM	50.5	58.2	-	n/a	47.2	-
03:10 AM - 03:15 AM	57.4	57.1	-	48.6	48.4	0.2
03:15 AM - 03:20 AM	50.9	56.4	-	n/a	46.8	-
03:20 AM - 03:25 AM	50.5	56.0	-	n/a	49.2	-
03:25 AM - 03:30 AM	61.8	55.6	-	63.6	48.6	15.0

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Approved by

Kanokkom Anek

Asst. General Manager

Kanokkom Anek

Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219/301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107794-1

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Sample No. 2494231-14
Parameter เลื่อนฐาน
Location โรงโม่ปูนท่าหลวง (GPS 47P 0722987, 1616402)
Measurement Date Aug 29 - Aug 30, 2024
Measurement by Prommee Sipatnet
Sound Level Meter 01022261

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			ค่าจริง	เสียงขณะไม่มีการรบกวน	ค่าจริง	
03:30 AM - 03:35 AM	49.4	57.2	-	n/a	47.4	-
03:35 AM - 03:40 AM	49.4	59.1	-	n/a	47.1	-
03:40 AM - 03:45 AM	50.4	59.3	-	n/a	47.5	-
03:45 AM - 03:50 AM	53.1	59.6	-	n/a	47.7	-
03:50 AM - 03:55 AM	49.4	59.4	-	n/a	48.6	-
03:55 AM - 04:00 AM	49.5	59.9	-	n/a	48.8	-
04:00 AM - 04:05 AM	52.3	58.9	-	n/a	49.2	-
04:05 AM - 04:10 AM	49.6	58.2	-	n/a	47.8	-
04:10 AM - 04:15 AM	49.3	57.3	-	n/a	49.0	-
04:15 AM - 04:20 AM	48.5	58.6	-	n/a	49.3	-
04:20 AM - 04:25 AM	48.7	59.3	-	n/a	49.3	-
04:25 AM - 04:30 AM	48.5	59.7	-	n/a	48.1	-
04:30 AM - 04:35 AM	48.2	59.0	-	n/a	48.4	-
04:35 AM - 04:40 AM	48.9	58.4	-	n/a	56.2	-
04:40 AM - 04:45 AM	49.6	58.5	-	n/a	56.9	-
04:45 AM - 04:50 AM	48.9	59.2	-	n/a	57.5	-
04:50 AM - 04:55 AM	48.9	60.2	-	n/a	58.4	-
04:55 AM - 05:00 AM	48.6	60.5	-	n/a	58.7	-
05:00 AM - 05:05 AM	55.9	60.0	-	n/a	58.6	-
05:05 AM - 05:10 AM	49.0	59.0	-	n/a	57.2	-
05:10 AM - 05:15 AM	49.8	58.9	-	n/a	58.1	-
05:15 AM - 05:20 AM	53.7	55.9	-	n/a	55.2	-
05:20 AM - 05:25 AM	51.3	55.7	-	n/a	51.9	-
05:25 AM - 05:30 AM	50.6	56.9	-	n/a	50.9	-
05:30 AM - 05:35 AM	50.3	56.5	-	n/a	50.8	-
05:35 AM - 05:40 AM	51.0	57.0	-	n/a	50.9	-
05:40 AM - 05:45 AM	51.6	56.3	-	n/a	51.8	-
05:45 AM - 05:50 AM	52.3	59.3	-	n/a	51.2	-
05:50 AM - 05:55 AM	51.7	56.9	-	n/a	50.9	-
05:55 AM - 06:00 AM	52.0	55.4	-	n/a	51.9	-
06:00 AM - 07:00 AM	52.2	58.7	-	n/a	52.7	-
07:00 AM - 08:00 AM	50.4	61.0	-	n/a	54.6	-
ค่าเฉลี่ย					54.6	≤ 10

Reference Method : STM 06-001 based on ISO 1996-1 : 2016

1. In-house method : 2. ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการตรวจวัดเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดในการประกอบกิจการโรงงาน พ.ศ. 2567

หมายเหตุ : 1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เฝ้าระวังในการประกอบกิจการโรงงาน พ.ศ. 2548

2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่าพารามิเตอร์ทางเสียงในการประกอบกิจการในสถานประกอบการ พ.ศ. 2561

Remark : 1. ระดับเสียงจากแหล่งกำเนิด ค่าการวัดจริง วันที่ 29-30 สิงหาคม 2567

2. ระดับเสียงขณะไม่มีการรบกวน (Sample No. 2494233-28 ชุดตรวจวัด 29-30 สิงหาคม 2567)

3. n/a : ไม่สามารถคำนวณระดับเสียงขณะไม่มีการรบกวนได้จากข้อมูลเสียงที่เฝ้าระวังในการประกอบกิจการได้เนื่องจากเสียงขณะไม่มีการรบกวน

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Approved by

Kanokkom Anek

Asst. General Manager

Kanokkom Anek

Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5/5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhol, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107795-1

Page 1 of 3

Sample No. 2494231-15
Parameter เสียงรบกวน
Location บริเวณเสา (GPS 47P 0726659, 1619824)
Measurement Date Aug 23 - Aug 24, 2024
Measurement by Prommee Sripatnet
Sound Level Meter 623381

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะปฏิบัติการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			ค่าจริง	ค่าเฉลี่ย		
08:00 AM - 09:00 AM	56.2	45.4	55.8	-	40.8	15.0
09:00 AM - 10:00 AM	57.1	44.3	56.9	-	39.6	17.3
10:00 AM - 11:00 AM	53.8	46.0	53.0	-	41.2	11.8
11:00 AM - 12:00 PM	52.6	48.2	50.6	-	38.8	11.8
12:00 PM - 01:00 PM	56.7	46.5	56.3	-	35.2	21.1
01:00 PM - 02:00 PM	47.7	39.3	47.0	-	36.0	11.0
02:00 PM - 03:00 PM	46.0	49.7	n/a	-	36.9	-
03:00 PM - 04:00 PM	54.2	43.7	53.8	-	39.0	14.8
04:00 PM - 05:00 PM	57.2	47.7	56.7	-	38.9	17.8
05:00 PM - 06:00 PM	56.2	45.5	55.8	-	40.3	15.5
06:00 PM - 07:00 PM	55.7	49.1	54.6	-	42.5	12.1
07:00 PM - 08:00 PM	62.2	51.5	61.8	-	50.3	11.5
08:00 PM - 09:00 PM	57.1	48.4	56.5	-	47.0	9.5
09:00 PM - 10:00 PM	51.1	46.9	49.0	-	45.6	3.4
10:00 PM - 10:05 PM	48.9	45.9	-	48.9	44.2	4.7
10:05 PM - 10:10 PM	46.9	45.0	-	45.4	43.6	1.8
10:10 PM - 10:15 PM	55.5	47.6	57.7	-	44.7	13.0
10:15 PM - 10:20 PM	48.9	47.3	46.8	-	45.0	1.8
10:20 PM - 10:25 PM	56.2	45.4	58.8	-	44.1	14.7
10:25 PM - 10:30 PM	46.7	45.8	42.4	-	44.5	-2.1
10:30 PM - 10:35 PM	44.8	45.7	n/a	-	44.6	-
10:35 PM - 10:40 PM	56.1	45.8	58.7	-	44.6	14.1
10:40 PM - 10:45 PM	51.7	45.2	53.6	-	44.2	9.4
10:45 PM - 10:50 PM	65.7	45.1	68.7	-	43.9	24.8
10:50 PM - 10:55 PM	56.2	45.2	58.8	-	43.1	15.7
10:55 PM - 11:00 PM	49.6	43.3	51.4	-	42.0	9.4
11:00 PM - 11:05 PM	55.9	43.3	58.7	-	41.6	17.1
11:05 PM - 11:10 PM	49.7	44.7	51.0	-	42.8	8.2
11:10 PM - 11:15 PM	48.7	44.8	49.4	-	42.4	2.0
11:15 PM - 11:20 PM	46.8	44.5	45.9	-	41.8	4.1
11:20 PM - 11:25 PM	64.2	44.9	67.1	-	41.0	26.1
11:25 PM - 11:30 PM	51.1	44.4	53.1	-	42.2	29.2
11:30 PM - 11:35 PM	56.4	44.7	59.1	-	41.6	11.5
11:35 PM - 11:40 PM	51.1	44.4	51.1	-	42.5	16.6
11:40 PM - 11:45 PM	43.2	43.6	n/a	-	42.1	-
11:45 PM - 11:50 PM	62.5	43.6	65.4	-	43.3	22.1
11:50 PM - 11:55 PM	52.8	43.7	55.2	-	42.9	12.3
11:55 PM - 12:00 AM	56.5	43.9	59.3	-	42.2	17.1
12:00 AM - 12:05 AM	59.7	42.5	62.6	-	40.8	21.8
12:05 AM - 12:10 AM	62.5	43.8	65.4	-	42.4	23.0

The above results are valid only for the test method (sample(s) as indicated in this report. Report of the results or certificate may be introduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Kanokkorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5/5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhol, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107795-1

Page 2 of 3

Sample No. 2494231-15
Parameter เสียงรบกวน
Location บริเวณเสา (GPS 47P 0726659, 1619824)
Measurement Date Aug 23 - Aug 24, 2024
Measurement by Prommee Sripatnet
Sound Level Meter 623381

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะปฏิบัติการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			ค่าจริง	ค่าเฉลี่ย		
12:10 AM - 12:15 AM	62.2	43.9	65.1	-	42.2	22.9
12:15 AM - 12:20 AM	64.0	45.5	66.9	-	41.8	25.1
12:20 AM - 12:25 AM	51.1	49.3	49.3	-	40.8	8.6
12:25 AM - 12:30 AM	56.8	42.2	59.6	-	40.2	19.4
12:30 AM - 12:35 AM	56.3	41.6	59.8	-	40.2	19.8
12:35 AM - 12:40 AM	48.9	41.2	51.1	-	39.8	11.3
12:40 AM - 12:45 AM	41.2	41.5	n/a	-	40.1	-
12:45 AM - 12:50 AM	61.5	42.7	64.4	-	39.6	24.8
12:50 AM - 12:55 AM	42.8	41.5	39.9	-	39.7	0.2
12:55 AM - 01:00 AM	59.3	41.8	62.2	-	40.0	22.2
01:00 AM - 01:05 AM	61.5	46.9	64.3	-	40.6	23.7
01:05 AM - 01:10 AM	42.7	42.3	35.1	-	40.5	-5.4
01:10 AM - 01:15 AM	61.4	42.0	64.3	-	40.1	24.2
01:15 AM - 01:20 AM	62.9	42.6	65.9	-	39.9	26.0
01:20 AM - 01:25 AM	59.0	42.1	61.9	-	38.7	23.2
01:25 AM - 01:30 AM	53.0	45.3	55.2	-	38.5	16.7
01:30 AM - 01:35 AM	66.8	41.4	69.8	-	39.1	30.7
01:35 AM - 01:40 AM	56.7	40.9	59.6	-	38.0	21.6
01:40 AM - 01:45 AM	41.4	43.7	n/a	-	41.6	-
01:45 AM - 01:50 AM	57.6	44.7	60.4	-	42.4	18.0
01:50 AM - 01:55 AM	52.5	44.2	54.8	-	42.2	12.6
01:55 AM - 02:00 AM	64.9	44.1	67.9	-	41.8	26.1
02:00 AM - 02:05 AM	55.8	43.4	58.5	-	41.8	16.7
02:05 AM - 02:10 AM	53.0	42.3	55.6	-	39.9	15.7
02:10 AM - 02:15 AM	50.1	41.7	52.4	-	39.5	12.9
02:15 AM - 02:20 AM	45.9	42.7	46.1	-	40.1	6.0
02:20 AM - 02:25 AM	46.6	44.3	45.7	-	39.8	5.9
02:25 AM - 02:30 AM	49.6	43.1	51.7	-	38.8	12.9
02:30 AM - 02:35 AM	48.4	42.6	50.1	-	39.8	10.3
02:35 AM - 02:40 AM	47.0	43.5	47.6	-	40.9	6.7
02:40 AM - 02:45 AM	54.5	43.1	57.2	-	41.0	16.2
02:45 AM - 02:50 AM	48.3	43.7	49.5	-	41.7	7.8
02:50 AM - 02:55 AM	49.8	44.2	51.4	-	41.4	10.0
02:55 AM - 03:00 AM	45.9	42.5	46.2	-	39.7	6.5
03:00 AM - 03:05 AM	45.2	41.5	45.8	-	38.6	7.2
03:05 AM - 03:10 AM	53.0	41.0	55.7	-	38.2	17.5
03:10 AM - 03:15 AM	47.4	40.6	49.4	-	37.8	11.6
03:15 AM - 03:20 AM	54.7	40.2	57.5	-	38.3	19.2
03:20 AM - 03:25 AM	51.7	41.4	54.3	-	39.4	14.9
03:25 AM - 03:30 AM	52.0	42.4	54.5	-	40.2	14.3

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Approved by

Kanokkorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99/219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhoh, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107795-1

Page 3 of 3

Sample No. 2494231-15
Parameter เสียงรบกวน
Location บ้านนาเหล็ก (GPS 47P 0726659, 1619824)
Measurement Date Aug 23 - Aug 24, 2024
Measurement by Prommee Sipatnet
Sound Level Meter 623381

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะปฏิบัติการ	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางคืน	กลางวัน		
03:30 AM - 03:35 AM	58.0	44.8	60.8	-	42.2	18.6
03:35 AM - 03:40 AM	46.1	45.1	42.2	-	42.0	0.2
03:40 AM - 03:45 AM	50.1	45.8	50.9	-	42.1	8.8
03:45 AM - 03:50 AM	53.2	45.1	55.5	-	41.3	14.2
03:50 AM - 03:55 AM	52.6	44.1	54.9	-	41.0	13.9
03:55 AM - 04:00 AM	45.2	43.9	42.3	-	41.3	1.0
04:00 AM - 04:05 AM	54.1	45.0	56.5	-	41.8	14.7
04:05 AM - 04:10 AM	50.8	44.0	52.8	-	39.9	12.9
04:10 AM - 04:15 AM	46.6	45.2	44.0	-	40.7	3.3
04:15 AM - 04:20 AM	47.7	44.6	47.8	-	39.6	8.2
04:20 AM - 04:25 AM	55.0	44.8	57.6	-	39.6	18.0
04:25 AM - 04:30 AM	48.4	44.6	49.1	-	39.9	9.2
04:30 AM - 04:35 AM	48.8	45.4	49.1	-	42.0	9.4
04:35 AM - 04:40 AM	48.9	45.4	n/a	-	42.0	-
04:40 AM - 04:45 AM	46.4	47.4	n/a	-	42.2	-
04:45 AM - 04:50 AM	47.3	49.3	n/a	-	43.8	-
04:50 AM - 04:55 AM	53.9	48.5	55.4	-	42.8	12.6
04:55 AM - 05:00 AM	65.9	48.7	68.8	-	44.3	24.5
05:00 AM - 05:05 AM	49.1	48.3	44.4	-	44.2	0.2
05:05 AM - 05:10 AM	58.6	49.7	61.0	-	44.6	16.4
05:10 AM - 05:15 AM	51.5	49.9	49.4	-	45.0	4.4
05:15 AM - 05:20 AM	48.6	49.9	n/a	-	44.0	-
05:20 AM - 05:25 AM	48.6	51.1	n/a	-	45.4	-
05:25 AM - 05:30 AM	50.4	55.4	n/a	-	46.6	-
05:30 AM - 05:35 AM	51.9	52.8	n/a	-	46.1	-
05:35 AM - 05:40 AM	57.2	52.2	58.5	-	48.2	10.3
05:40 AM - 05:45 AM	60.9	51.7	63.3	-	47.1	16.2
05:45 AM - 05:50 AM	61.4	52.1	63.9	-	47.2	16.7
05:50 AM - 05:55 AM	59.3	51.0	61.6	-	47.3	14.3
05:55 AM - 06:00 AM	57.4	49.1	56.7	-	44.6	12.1
06:00 AM - 07:00 AM	49.7	52.0	n/a	-	44.0	-
07:00 AM - 08:00 AM	-	-	-	-	-	≤ 10

Reference Method :

1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการตรวจวัดเสียงรบกวน ระดับเสียงต่อเนื่อง 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

หมายเหตุ : 1. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

2. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานเสียงที่เกิดจากการประกอบกิจการในชุมชน พ.ศ. 2561
3. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานเสียงที่เกิดจากการประกอบกิจการในชุมชน พ.ศ. 2561

Remark : 1. ระดับเสียงต่อเนื่องค่าวัด พิกัดเวลา 23:30 - 23:45 น. 2567

2. ระดับเสียงค่าวัดต่อเนื่องค่าวัดการรบกวน (Sample No. 2494233-15) พิกัดเวลา 23:34 น. 2567

3. N/A : ไม่สามารถคำนวณระดับเสียงรบกวนได้เนื่องจากไม่มีค่าการวัดเสียงรบกวน

Approved by

Kankorn Anek

Asst. General Manager

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without the original report (S) or not signed in the Laboratory (S) or not signed in the Laboratory (S)
without the original report (S) or not signed in the Laboratory (S) or not signed in the Laboratory (S)

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99/219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhoh, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107795-1

Page 1 of 3

Sample No. 2494231-16
Parameter เสียงรบกวน
Location บ้านนาเหล็ก (GPS 47P 0726659, 1619824)
Measurement Date Aug 24 - Aug 25, 2024
Measurement by Prommee Sipatnet
Sound Level Meter 623381

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะปฏิบัติการ	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางคืน	กลางวัน		
08:00 AM - 09:00 AM	55.8	50.3	54.4	-	42.4	12.0
09:00 AM - 10:00 AM	57.2	47.1	56.8	-	40.0	16.8
10:00 AM - 11:00 AM	56.5	42.9	56.3	-	38.4	17.9
11:00 AM - 12:00 PM	44.9	44.9	n/a	-	39.5	-
12:00 PM - 01:00 PM	55.1	48.2	54.1	-	38.2	15.9
01:00 PM - 02:00 PM	58.2	41.8	58.1	-	38.3	19.8
02:00 PM - 03:00 PM	55.6	42.3	55.4	-	38.1	17.3
03:00 PM - 04:00 PM	54.0	48.7	52.5	-	40.2	12.3
04:00 PM - 05:00 PM	57.6	46.7	57.2	-	40.7	16.5
05:00 PM - 06:00 PM	47.7	64.3	n/a	-	41.6	-
06:00 PM - 07:00 PM	57.5	44.7	57.3	-	42.0	15.3
07:00 PM - 08:00 PM	59.8	49.8	59.3	-	47.0	12.3
08:00 PM - 09:00 PM	57.7	55.5	53.7	-	53.1	0.6
09:00 PM - 10:00 PM	62.8	52.9	62.3	-	50.7	11.6
10:00 PM - 10:05 PM	65.9	53.0	-	68.7	49.8	18.9
10:05 PM - 10:10 PM	66.8	54.4	-	69.5	53.4	16.1
10:10 PM - 10:15 PM	67.3	54.0	-	70.1	51.9	18.2
10:15 PM - 10:20 PM	68.1	52.6	-	70.3	50.6	20.4
10:20 PM - 10:25 PM	67.4	51.8	-	70.9	50.6	19.7
10:25 PM - 10:30 PM	68.0	51.6	-	70.9	50.3	20.6
10:30 PM - 10:35 PM	65.6	53.3	-	68.3	51.5	16.8
10:35 PM - 10:40 PM	65.9	51.9	-	68.7	48.8	19.9
10:40 PM - 10:45 PM	64.0	51.9	-	66.7	49.0	17.7
10:45 PM - 10:50 PM	65.4	50.4	-	68.3	46.4	21.9
10:50 PM - 10:55 PM	61.1	52.1	-	63.5	48.9	14.6
10:55 PM - 11:00 PM	62.7	51.6	-	65.3	48.1	17.2
11:00 PM - 11:05 PM	64.0	48.6	-	66.9	47.3	19.6
11:05 PM - 11:10 PM	57.2	48.3	-	59.6	47.1	12.5
11:10 PM - 11:15 PM	59.6	51.2	-	61.9	47.6	14.3
11:15 PM - 11:20 PM	62.9	52.0	-	70.8	48.0	22.8
11:20 PM - 11:25 PM	62.6	50.9	-	65.3	47.7	17.6
11:25 PM - 11:30 PM	63.3	50.5	-	65.0	46.8	18.2
11:30 PM - 11:35 PM	55.5	51.1	-	56.5	45.6	10.9
11:35 PM - 11:40 PM	65.0	45.4	-	68.0	43.0	25.0
11:40 PM - 11:45 PM	59.1	45.9	-	61.9	43.7	18.2
11:45 PM - 11:50 PM	58.4	46.3	-	61.1	44.6	16.5
11:50 PM - 11:55 PM	56.3	45.1	-	59.0	43.9	15.1
11:55 PM - 12:00 AM	56.0	45.3	-	58.6	43.8	14.8
12:00 AM - 12:05 AM	56.0	45.6	-	58.6	43.8	14.8
12:05 AM - 12:10 AM	54.4	46.5	-	56.6	42.8	13.8

Approved by

Kankorn Anek

Asst. General Manager

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without the original report (S) or not signed in the Laboratory (S) or not signed in the Laboratory (S)
without the original report (S) or not signed in the Laboratory (S) or not signed in the Laboratory (S)

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Sample No. 2494231-16

Parameter
Location : 16.9824 (GPS 47P 0726659, 16.9824)

Measurement Date Aug 24 - Aug 25, 2024

Measurement by Prommee Sripaniet

Sound Level Meter 623381

Lot ID: 2494231

Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107796-1

Page 2 of 3

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
12:10 AM - 12:15 AM	55.5	49.8	-	57.1	44.2	12.9
12:15 AM - 12:20 AM	51.4	49.3	-	50.2	44.2	6.0
12:20 AM - 12:25 AM	49.1	50.0	-	n/a	45.0	-
12:25 AM - 12:30 AM	52.2	44.5	-	54.4	41.8	12.6
12:30 AM - 12:35 AM	45.7	45.0	-	40.4	43.0	-2.6
12:35 AM - 12:40 AM	47.0	44.6	-	46.3	41.9	3.2
12:40 AM - 12:45 AM	64.3	44.5	-	67.3	43.1	25.4
12:45 AM - 12:50 AM	54.5	44.8	-	57.0	41.9	15.1
12:50 AM - 12:55 AM	48.3	45.1	-	48.5	43.2	5.3
12:55 AM - 01:00 AM	43.6	45.3	-	43.6	43.1	-
01:00 AM - 01:05 AM	57.4	45.5	-	60.1	43.6	16.5
01:05 AM - 01:10 AM	57.8	45.4	-	60.5	43.3	17.2
01:10 AM - 01:15 AM	49.7	44.4	-	51.2	41.5	9.7
01:15 AM - 01:20 AM	52.0	44.5	-	59.7	39.7	19.6
01:20 AM - 01:25 AM	57.8	43.6	-	55.2	38.3	15.5
01:25 AM - 01:30 AM	45.8	42.8	-	45.8	38.3	7.5
01:30 AM - 01:35 AM	45.7	44.8	-	41.4	40.6	0.8
01:35 AM - 01:40 AM	46.9	44.4	-	46.3	38.7	7.6
01:40 AM - 01:45 AM	45.7	42.5	-	45.9	37.3	8.6
01:45 AM - 01:50 AM	47.6	46.9	-	42.3	40.5	1.8
01:50 AM - 01:55 AM	43.5	48.2	-	n/a	39.9	-
01:55 AM - 02:00 AM	67.7	44.0	-	70.7	38.7	32.0
02:00 AM - 02:05 AM	48.5	43.3	-	49.9	37.8	12.1
02:05 AM - 02:10 AM	44.1	41.7	-	43.4	37.1	6.3
02:10 AM - 02:15 AM	44.1	47.3	-	n/a	37.8	-
02:15 AM - 02:20 AM	53.8	44.2	-	56.3	38.4	17.9
02:20 AM - 02:25 AM	44.2	45.0	-	n/a	39.6	-
02:25 AM - 02:30 AM	67.2	44.1	-	70.2	38.3	31.9
02:30 AM - 02:35 AM	50.7	44.1	-	52.6	38.4	14.2
02:35 AM - 02:40 AM	49.3	44.8	-	50.4	38.0	12.4
02:40 AM - 02:45 AM	56.0	44.0	-	58.7	37.3	21.4
02:45 AM - 02:50 AM	42.1	44.7	-	n/a	37.6	-
02:50 AM - 02:55 AM	49.2	44.6	-	50.4	37.4	13.0
02:55 AM - 03:00 AM	43.8	45.2	-	n/a	37.6	-
03:00 AM - 03:05 AM	40.5	44.9	-	n/a	37.7	-
03:05 AM - 03:10 AM	50.4	44.9	-	52.0	38.1	13.9
03:10 AM - 03:15 AM	35.8	45.8	-	n/a	38.0	-
03:15 AM - 03:20 AM	44.1	44.7	-	n/a	37.8	-
03:20 AM - 03:25 AM	36.7	47.3	-	n/a	37.8	-
03:25 AM - 03:30 AM	46.5	44.8	-	44.6	38.3	6.3

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Approved by

Kanokorn Anek

Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Sample No. 2494231-16

Parameter
Location : 16.9824 (GPS 47P 0726659, 16.9824)

Measurement Date Aug 24 - Aug 25, 2024

Measurement by Prommee Sripaniet

Sound Level Meter 623381

Lot ID: 2494231

Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107796-1

Page 3 of 3

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางวัน	กลางคืน		
03:30 AM - 03:35 AM	42.7	43.9	-	n/a	38.0	-
03:35 AM - 03:40 AM	41.7	44.9	-	n/a	38.2	-
03:40 AM - 03:45 AM	43.3	43.4	-	n/a	37.1	-
03:45 AM - 03:50 AM	69.8	44.1	-	72.8	37.4	35.4
03:50 AM - 03:55 AM	37.7	45.1	-	48.4	38.3	-
03:55 AM - 04:00 AM	35.9	45.2	-	45.1	38.3	10.4
04:00 AM - 04:05 AM	61.6	43.0	-	64.5	37.3	27.2
04:05 AM - 04:10 AM	57.3	44.6	-	60.1	37.2	22.9
04:10 AM - 04:15 AM	40.2	45.3	-	n/a	37.8	-
04:15 AM - 04:20 AM	37.4	45.2	-	n/a	37.8	-
04:20 AM - 04:25 AM	37.1	43.8	-	n/a	36.7	-
04:25 AM - 04:30 AM	68.3	44.1	-	71.3	37.9	35.0
04:30 AM - 04:35 AM	50.9	71.6	-	n/a	36.9	-
04:35 AM - 04:40 AM	43.9	69.4	-	n/a	37.5	11.6
04:40 AM - 04:45 AM	47.8	42.8	-	49.1	37.5	15.4
04:45 AM - 04:50 AM	50.7	41.9	-	53.1	37.8	2.6
04:50 AM - 05:00 AM	43.6	42.4	-	40.4	37.8	1.7
05:00 AM - 05:05 AM	40.0	41.2	-	n/a	38.0	-
05:05 AM - 05:10 AM	42.6	41.3	-	39.7	38.0	1.7
05:10 AM - 05:15 AM	50.3	41.7	-	52.7	38.2	14.5
05:15 AM - 05:20 AM	45.5	43.9	-	43.4	38.2	5.4
05:20 AM - 05:25 AM	69.2	41.4	-	72.2	38.8	33.4
05:25 AM - 05:30 AM	52.8	45.2	-	55.0	39.3	15.7
05:30 AM - 05:35 AM	47.7	43.0	-	48.9	40.0	8.9
05:35 AM - 05:40 AM	51.5	43.8	-	53.7	40.3	13.4
05:40 AM - 05:45 AM	54.3	43.6	-	57.1	40.3	16.8
05:45 AM - 05:50 AM	59.6	49.0	-	62.2	41.4	20.8
05:50 AM - 05:55 AM	61.9	46.9	-	64.8	41.9	22.9
05:55 AM - 06:00 AM	62.2	46.3	-	65.1	42.7	22.4
06:00 AM - 07:00 AM	55.2	50.3	-	53.5	41.7	11.8
07:00 AM - 08:00 AM	52.6	46.0	-	51.5	40.1	5.0

Reference Method : STM 06-001 based on ISO 1996-1 : 2016

- In-house method : 2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง การควบคุมมาตรฐานและค่าเสียงที่เกิดจากการประกอบกิจการที่เป็นอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:

- ระดับเสียงจากแหล่งกำเนิด ยานพาหนะ 24-25 สิงหาคม 2567
- ระดับเสียงจากแหล่งกำเนิดเสียงการรบกวน (Sample No. 2494231-16) วันที่ตรวจวัด 24-25 สิงหาคม 2567
- n/a: ไม่สามารถคำนวณระดับเสียงการรบกวนเนื่องจากระดับเสียงจากแหล่งกำเนิดเสียงการรบกวนต่ำกว่าระดับเสียงพื้นฐาน

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Approved by

Kanokorn Anek

Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhohi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107797-1

Page 1 of 3

Sample No. 2494231-17
Parameter เลือกรับ
Location บ้านนาเกลือ (GPS 47P 0726659, 1619824)
Measurement Date Aug 25 - Aug 26, 2024
Measurement by Prommee Siripattet
Sound Level Meter 623381

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			ค่าจริง	ค่าปรับ		
08:00 AM - 09:00 AM	60.0	48.5	59.7	-	38.5	21.2
09:00 AM - 10:00 AM	63.8	51.3	63.5	-	37.8	25.7
10:00 AM - 11:00 AM	54.9	47.7	54.0	-	37.1	16.9
11:00 AM - 12:00 PM	54.8	47.6	53.9	-	37.9	16.0
12:00 PM - 01:00 PM	53.8	40.2	53.6	-	36.4	17.2
01:00 PM - 02:00 PM	56.8	44.9	56.5	-	37.0	19.5
02:00 PM - 03:00 PM	50.1	47.3	46.9	-	36.5	10.4
03:00 PM - 04:00 PM	53.5	42.8	53.1	-	38.4	14.7
04:00 PM - 05:00 PM	63.9	43.1	63.9	-	39.1	24.8
05:00 PM - 06:00 PM	66.1	50.7	66.0	-	40.0	26.0
06:00 PM - 07:00 PM	47.4	45.1	43.5	-	39.5	4.0
07:00 PM - 08:00 PM	48.0	48.6	n/a	-	47.4	-
08:00 PM - 09:00 PM	52.1	48.2	49.8	-	47.0	2.8
09:00 PM - 10:00 PM	54.4	45.2	53.8	-	44.0	9.8
10:00 PM - 10:05 PM	56.2	42.7	59.0	59.0	41.8	17.2
10:05 PM - 10:10 PM	56.2	42.9	56.2	56.2	40.8	18.2
10:10 PM - 10:15 PM	56.3	42.2	59.1	59.1	41.3	17.8
10:15 PM - 10:20 PM	54.5	43.6	57.1	57.1	41.2	15.9
10:20 PM - 10:25 PM	55.4	42.3	58.2	58.2	41.4	16.8
10:25 PM - 10:30 PM	55.0	42.8	57.2	57.2	41.8	15.9
10:30 PM - 10:35 PM	56.0	42.5	58.8	58.8	41.5	17.3
10:35 PM - 10:40 PM	55.4	42.2	58.2	58.2	41.3	16.9
10:40 PM - 10:45 PM	53.8	42.5	56.5	56.5	41.2	15.3
10:45 PM - 10:50 PM	53.7	47.1	55.6	43.6	42.0	12.0
10:50 PM - 10:55 PM	54.6	48.7	56.3	44.2	44.2	12.1
10:55 PM - 11:00 PM	54.9	45.7	57.3	43.9	43.9	13.4
11:00 PM - 11:05 PM	53.6	44.5	56.0	42.7	42.7	13.3
11:05 PM - 11:10 PM	54.0	43.6	56.6	42.2	42.2	14.4
11:10 PM - 11:15 PM	51.7	43.0	54.6	41.6	41.2	14.4
11:15 PM - 11:20 PM	51.0	44.1	51.0	41.4	41.4	11.6
11:20 PM - 11:25 PM	49.3	42.3	51.3	40.9	40.9	10.4
11:25 PM - 11:30 PM	52.6	42.6	51.1	41.3	41.3	13.8
11:30 PM - 11:35 PM	51.9	42.7	54.3	41.2	41.2	13.1
11:35 PM - 11:40 PM	52.1	41.7	54.7	40.4	40.4	14.3
11:40 PM - 11:45 PM	50.2	41.3	52.6	40.1	40.1	12.5
11:45 PM - 11:50 PM	53.6	42.4	56.3	40.6	40.6	15.7
11:50 PM - 11:55 PM	51.4	42.0	53.9	40.6	40.6	13.3
11:55 PM - 12:00 AM	52.0	41.5	54.6	40.3	40.3	14.3
12:00 AM - 12:05 AM	51.9	41.6	54.5	40.2	40.2	14.3
12:05 AM - 12:10 AM	53.0	43.0	55.5	41.2	41.2	14.3

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Approved by

Kate Anek

Kanokkorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhohi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107797-1

Page 2 of 3

Sample No. 2494231-17
Parameter เลือกรับ
Location บ้านนาเกลือ (GPS 47P 0726659, 1619824)
Measurement Date Aug 25 - Aug 26, 2024
Measurement by Prommee Siripattet
Sound Level Meter 623381

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			ค่าจริง	ค่าปรับ		
12:10 AM - 12:15 AM	52.7	43.2	-	55.2	41.1	14.1
12:15 AM - 12:20 AM	52.3	42.5	-	54.8	41.2	13.6
12:20 AM - 12:25 AM	53.0	40.8	-	55.7	39.4	16.3
12:25 AM - 12:30 AM	54.0	41.2	-	56.8	39.0	17.8
12:30 AM - 12:35 AM	53.6	39.9	-	56.4	38.2	18.2
12:35 AM - 12:40 AM	51.7	40.3	-	54.4	38.0	16.4
12:40 AM - 12:45 AM	52.0	40.0	-	54.7	38.6	16.1
12:45 AM - 12:50 AM	50.3	40.6	-	52.8	38.3	14.5
12:50 AM - 12:55 AM	51.5	42.5	-	53.9	39.9	14.0
12:55 AM - 01:00 AM	52.7	44.0	-	51.9	40.1	14.4
01:00 AM - 01:05 AM	49.9	43.2	-	50.6	39.7	10.9
01:05 AM - 01:10 AM	49.0	43.5	-	49.2	39.4	9.8
01:10 AM - 01:15 AM	47.8	42.6	-	51.0	39.2	11.8
01:15 AM - 01:20 AM	49.0	42.1	-	52.5	41.0	11.5
01:20 AM - 01:25 AM	50.5	43.6	-	52.0	40.7	11.3
01:25 AM - 01:30 AM	50.1	43.6	-	50.3	40.5	9.8
01:30 AM - 01:35 AM	49.1	44.5	-	49.5	45.1	4.4
01:35 AM - 01:40 AM	50.0	47.4	-	51.2	43.0	8.2
01:40 AM - 01:45 AM	50.1	45.6	-	53.0	42.7	10.3
01:45 AM - 01:50 AM	51.0	44.2	-	51.8	41.0	10.0
01:50 AM - 01:55 AM	49.9	43.4	-	52.3	41.3	11.3
01:55 AM - 02:00 AM	50.1	42.4	-	50.0	40.0	10.0
02:00 AM - 02:05 AM	49.4	45.7	-	53.5	40.4	13.1
02:05 AM - 02:10 AM	51.1	42.1	-	54.0	40.9	13.1
02:10 AM - 02:15 AM	51.6	42.5	-	53.9	42.2	11.7
02:15 AM - 02:20 AM	50.1	43.6	-	51.9	42.4	9.5
02:20 AM - 02:25 AM	50.5	43.8	-	52.8	40.8	12.0
02:25 AM - 02:30 AM	50.5	42.0	-	53.0	39.7	11.3
02:30 AM - 02:35 AM	50.5	41.2	-	52.6	40.8	11.8
02:35 AM - 02:40 AM	50.7	44.1	-	50.9	41.4	9.5
02:40 AM - 02:45 AM	50.4	43.6	-	51.8	43.3	8.5
02:45 AM - 02:50 AM	53.3	45.2	-	55.7	43.2	12.5
02:50 AM - 02:55 AM	53.3	44.6	-	55.6	42.1	13.6
02:55 AM - 03:00 AM	53.3	44.3	-	55.5	41.8	13.8
03:00 AM - 03:05 AM	53.1	43.5	-	56.5	40.9	13.7
03:05 AM - 03:10 AM	53.0	43.5	-	56.5	41.5	13.5
03:10 AM - 03:15 AM	53.8	42.4	-	54.7	42.5	12.5
03:15 AM - 03:20 AM	52.5	42.8	-	54.0	41.5	12.5
03:20 AM - 03:25 AM	52.4	44.3	-	54.3	41.5	12.8
03:25 AM - 03:30 AM	52.9	47.8	-	54.3	41.5	12.8

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Approved by

Kate Anek

Kanokkorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparo Road, Tambon Tapkwung, Amphur Kangkhai, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107797-1

Page 3 of 3

Sample No. 2494231-17
Parameter เลื่อนรอก
Location บ้านเลี้ยว (GPS 47P 0726659, 1619824)
Measurement Date Aug 25 - Aug 26, 2024
Measurement by Prommee Sripaibet
Sound Level Meter 623381

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะปฏิบัติงาน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางคืน	กลางวัน		
03:30 AM - 03:35 AM	53.2	44.2	-	55.6	42.0	13.6
03:35 AM - 03:40 AM	53.4	44.2	-	55.8	42.0	13.8
03:40 AM - 03:45 AM	53.3	44.3	-	55.7	42.4	13.3
03:45 AM - 03:50 AM	52.7	45.5	-	54.8	43.2	11.6
03:50 AM - 03:55 AM	53.1	49.7	-	53.4	44.7	8.7
03:55 AM - 04:00 AM	53.2	42.5	-	55.8	40.3	15.5
04:00 AM - 04:05 AM	53.6	40.4	-	56.0	38.9	17.5
04:05 AM - 04:10 AM	54.1	45.3	-	56.5	39.7	16.8
04:10 AM - 04:15 AM	53.8	46.8	-	55.8	41.9	13.9
04:15 AM - 04:20 AM	55.1	44.2	-	57.1	42.5	15.2
04:20 AM - 04:25 AM	54.5	44.1	-	57.1	42.2	14.9
04:25 AM - 04:30 AM	54.3	41.8	-	57.0	40.1	16.9
04:30 AM - 04:35 AM	55.0	42.2	-	57.8	40.1	17.7
04:35 AM - 04:40 AM	51.7	42.1	-	n/a	42.0	-
04:40 AM - 04:45 AM	54.0	41.3	-	56.5	41.5	15.0
04:45 AM - 04:50 AM	52.8	42.2	-	56.5	40.4	16.1
04:50 AM - 04:55 AM	51.3	42.4	-	55.9	41.0	14.9
04:55 AM - 05:00 AM	51.4	43.9	-	53.5	42.0	11.5
05:00 AM - 05:05 AM	52.5	44.3	-	54.8	42.2	12.6
05:05 AM - 05:10 AM	51.9	43.7	-	54.2	41.0	13.2
05:10 AM - 05:15 AM	53.1	44.0	-	55.5	41.3	14.2
05:15 AM - 05:20 AM	55.6	43.6	-	58.3	41.9	16.4
05:20 AM - 05:25 AM	52.6	44.5	-	54.9	42.7	12.2
05:25 AM - 05:30 AM	52.2	45.5	-	54.2	43.0	11.2
05:30 AM - 05:35 AM	52.4	54.9	-	n/a	43.5	-
05:35 AM - 05:40 AM	53.2	52.6	-	47.3	43.0	4.3
05:40 AM - 05:45 AM	52.7	43.7	-	55.1	41.2	13.9
05:45 AM - 05:50 AM	53.8	42.0	-	56.5	40.5	16.0
05:50 AM - 05:55 AM	53.1	51.6	-	50.8	42.1	8.7
05:55 AM - 06:00 AM	53.5	42.5	-	56.1	39.2	16.9
06:00 AM - 07:00 AM	58.0	47.4	-	57.6	41.4	16.2
07:00 AM - 08:00 AM	54.3	46.3	-	53.6	41.8	11.8

Reference Method :

1. In-house method : STM 06-001 based on ISO 1996-1 : 2016

2. หน่วยงานโรงงานอุตสาหกรรม เรื่อง วิธีการวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

หมายเหตุ

1. ปรากฏผลการตรวจวัดตามรูป เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2568

2. ปรากฏผลการตรวจวัดตามรูป เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2561

Remark:

1. ระดับเสียงจากแหล่งกำเนิด จากการวัด ณ วันที่ 25-26 สิงหาคม 2567

2. ระดับเสียงพื้นฐานและระดับเสียงขณะปฏิบัติงาน (Sample No. 2494233-17 วันที่ตรวจวัด 25-26 สิงหาคม 2567)

3. n/a: เป็นการคำนวณระดับเสียงการรบกวนโดยการเฉลี่ยระดับเสียงจากแหล่งกำเนิดโดยการหารระดับเสียงและเป็นการรบกวน

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Approved by

Kanokorn Anek

Asst. General Manager

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Approved by

Kanokorn Anek

Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparo Road, Tambon Tapkwung, Amphur Kangkhai, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107798-1

Page 1 of 3

Sample No. 2494231-18
Parameter เลื่อนรอก
Location บ้านเลี้ยว (GPS 47P 0726659, 1619824)
Measurement Date Aug 26 - Aug 27, 2024
Measurement by Prommee Sripaibet
Sound Level Meter 623381

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะปฏิบัติงาน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางคืน	กลางวัน		
08:00 AM - 09:00 AM	53.1	45.9	-	52.2	38.5	13.7
09:00 AM - 10:00 AM	51.2	51.6	-	n/a	40.4	-
10:00 AM - 11:00 AM	48.9	44.2	-	47.1	37.0	10.1
11:00 AM - 12:00 PM	54.3	44.0	-	53.9	37.8	16.1
12:00 PM - 01:00 PM	54.2	43.2	-	53.8	37.8	16.0
01:00 PM - 02:00 PM	55.3	43.2	-	55.0	39.4	15.6
02:00 PM - 03:00 PM	51.1	42.8	-	50.4	38.6	11.8
03:00 PM - 04:00 PM	52.9	44.4	-	52.2	37.4	14.8
04:00 PM - 05:00 PM	55.4	47.9	-	54.5	37.9	16.6
05:00 PM - 06:00 PM	55.2	63.3	-	n/a	39.7	-
06:00 PM - 07:00 PM	55.3	49.1	-	49.1	41.2	12.9
07:00 PM - 08:00 PM	56.4	49.4	-	54.1	47.2	8.2
08:00 PM - 09:00 PM	56.7	47.3	-	56.2	44.5	11.7
09:00 PM - 10:00 PM	55.8	46.6	-	55.2	44.4	10.8
10:00 PM - 10:05 PM	57.0	45.8	-	59.7	43.2	16.5
10:05 PM - 10:10 PM	57.7	43.5	-	60.5	41.6	18.9
10:10 PM - 10:15 PM	57.0	44.6	-	59.7	42.7	17.0
10:15 PM - 10:20 PM	57.5	44.5	-	60.3	43.3	17.0
10:20 PM - 10:25 PM	56.6	43.4	-	59.4	42.3	17.1
10:25 PM - 10:30 PM	57.3	44.1	-	60.1	42.4	17.7
10:30 PM - 10:35 PM	57.0	44.3	-	59.8	42.4	17.4
10:35 PM - 10:40 PM	57.8	46.6	-	60.5	43.5	17.0
10:40 PM - 10:45 PM	57.1	45.0	-	59.8	42.0	17.8
10:45 PM - 10:50 PM	56.5	45.5	-	59.1	42.9	16.2
10:50 PM - 10:55 PM	56.4	46.0	-	59.0	43.1	15.9
10:55 PM - 11:00 PM	57.0	48.6	-	59.3	44.6	14.7
11:00 PM - 11:05 PM	57.6	47.2	-	60.2	43.8	16.4
11:05 PM - 11:10 PM	56.2	45.0	-	58.9	42.8	16.1
11:10 PM - 11:15 PM	57.6	45.7	-	60.3	43.4	16.9
11:15 PM - 11:20 PM	56.0	45.7	-	58.6	42.0	16.6
11:20 PM - 11:25 PM	56.6	45.5	-	59.2	41.9	17.2
11:25 PM - 11:30 PM	55.9	43.8	-	58.3	41.4	16.4
11:30 PM - 11:35 PM	55.9	43.9	-	57.2	41.4	15.8
11:35 PM - 11:40 PM	54.6	44.1	-	56.5	42.6	15.3
11:40 PM - 11:45 PM	55.3	41.7	-	57.9	42.0	14.5
11:45 PM - 11:50 PM	54.0	44.6	-	56.8	41.3	15.5
11:50 PM - 11:55 PM	54.2	44.0	-	56.4	42.0	14.4
11:55 PM - 12:00 AM	54.0	45.1	-	55.7	41.3	14.4
12:00 AM - 12:05 AM	53.3	44.5	-	55.7	41.3	14.4
12:05 AM - 12:10 AM	57.0	44.1	-	59.8	41.6	18.2

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Approved by

Kanokorn Anek

Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219/301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhon, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107799-1

Page 1 of 3

Sample No. 2494231-19
Parameter เสียงรบกวน
Location บ้านนาเส็ก (GPS 47P 0726659, 1619824)
Measurement Date Aug 27 - Aug 28, 2024
Measurement by Prommee Sripatnet
Sound Level Meter 623381

เวลา	ระดับเสียง (dB(A))				ค่าระดับการรบกวน
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน	เสียงพื้นฐาน	
08:00 AM - 09:00 AM	53.7	46.7	52.7	42.6	10.1
09:00 AM - 10:00 AM	55.7	47.1	55.1	42.8	12.3
10:00 AM - 11:00 AM	53.6	46.9	52.6	39.6	13.0
11:00 AM - 12:00 PM	51.9	47.2	50.1	39.6	10.5
12:00 PM - 01:00 PM	48.8	43.3	47.4	39.1	8.3
01:00 PM - 02:00 PM	55.1	43.3	54.8	40.1	14.7
02:00 PM - 03:00 PM	66.2	45.2	66.2	39.4	26.8
03:00 PM - 04:00 PM	68.7	45.3	66.7	40.6	28.1
04:00 PM - 05:00 PM	60.3	43.0	60.3	39.1	21.2
05:00 PM - 06:00 PM	58.2	45.9	57.9	42.3	15.6
06:00 PM - 07:00 PM	53.1	46.5	52.0	42.3	9.7
07:00 PM - 08:00 PM	52.1	49.6	48.5	47.8	0.7
08:00 PM - 09:00 PM	52.7	47.4	51.2	45.6	3.6
09:00 PM - 10:00 PM	53.1	46.5	52.0	43.8	8.2
10:00 PM - 10:05 PM	53.5	47.0	55.4	45.0	10.4
10:05 PM - 10:10 PM	51.6	46.0	44.1	44.1	9.1
10:10 PM - 10:15 PM	53.4	44.8	55.8	43.2	12.6
10:15 PM - 10:20 PM	52.3	44.8	54.4	43.8	10.6
10:20 PM - 10:25 PM	52.9	44.4	55.2	43.1	12.1
10:25 PM - 10:30 PM	52.3	44.3	54.6	43.1	11.5
10:30 PM - 10:35 PM	52.1	45.3	54.1	44.0	10.1
10:35 PM - 10:40 PM	52.9	43.8	55.3	42.6	12.7
10:40 PM - 10:45 PM	52.5	43.8	54.9	42.6	12.3
10:45 PM - 10:50 PM	52.0	43.1	54.4	41.1	13.3
10:50 PM - 10:55 PM	52.7	44.9	54.9	41.7	13.2
10:55 PM - 11:00 PM	51.8	44.3	54.0	42.8	10.9
11:00 PM - 11:05 PM	51.5	43.6	53.7	42.8	12.3
11:05 PM - 11:10 PM	52.7	43.6	55.1	42.8	11.8
11:10 PM - 11:15 PM	52.4	44.3	54.7	42.9	11.0
11:15 PM - 11:20 PM	51.5	43.9	53.7	42.7	15.0
11:20 PM - 11:25 PM	54.4	43.8	57.0	42.0	11.9
11:25 PM - 11:30 PM	52.3	44.2	54.6	42.7	12.0
11:30 PM - 11:35 PM	52.1	44.0	54.4	42.4	12.0
11:35 PM - 11:40 PM	51.6	43.4	53.9	41.9	12.5
11:40 PM - 11:45 PM	51.5	42.5	53.9	41.4	14.9
11:45 PM - 11:50 PM	54.3	43.1	57.0	42.1	12.6
11:50 PM - 11:55 PM	52.3	43.4	54.7	42.5	12.3
11:55 PM - 12:00 AM	52.4	43.7	54.8	42.5	14.2
12:00 AM - 12:05 AM	53.6	43.6	56.1	41.9	15.9
12:05 AM - 12:10 AM	55.2	43.6	57.9	42.0	15.9

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Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager

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Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219/301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhon, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107799-1

Page 2 of 3

Sample No. 2494231-19
Parameter เสียงรบกวน
Location บ้านนาเส็ก (GPS 47P 0726659, 1619824)
Measurement Date Aug 27 - Aug 28, 2024
Measurement by Prommee Sripatnet
Sound Level Meter 623381

เวลา	ระดับเสียง (dB(A))				ค่าระดับการรบกวน
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน	เสียงพื้นฐาน	
12:10 AM - 12:15 AM	52.4	43.5	54.8	42.1	12.7
12:15 AM - 12:20 AM	50.1	44.6	51.7	43.1	8.6
12:20 AM - 12:25 AM	50.8	46.4	51.8	43.9	7.9
12:25 AM - 12:30 AM	53.3	47.1	55.1	43.7	11.4
12:30 AM - 12:35 AM	52.5	45.7	54.5	43.9	10.6
12:35 AM - 12:40 AM	49.9	47.2	49.6	43.7	3.9
12:40 AM - 12:45 AM	52.1	45.8	53.9	43.7	10.2
12:45 AM - 12:50 AM	53.1	45.6	55.5	43.3	12.2
12:50 AM - 12:55 AM	53.2	44.0	55.6	41.3	14.3
12:55 AM - 01:00 AM	53.6	47.3	57.3	40.4	16.9
01:00 AM - 01:05 AM	54.3	55.5	55.4	41.4	14.0
01:05 AM - 01:10 AM	54.5	57.1	n/a	49.7	-
01:10 AM - 01:15 AM	54.9	51.4	55.3	49.2	-
01:15 AM - 01:20 AM	53.4	46.9	55.3	47.1	8.2
01:20 AM - 01:25 AM	53.5	46.0	55.6	43.8	11.5
01:25 AM - 01:30 AM	53.5	41.0	56.2	39.5	16.1
01:30 AM - 01:35 AM	54.0	40.1	56.8	38.1	18.1
01:35 AM - 01:40 AM	53.5	42.9	56.1	37.8	19.0
01:40 AM - 01:45 AM	53.7	41.3	56.4	39.3	16.8
01:45 AM - 01:50 AM	52.9	47.5	54.4	39.3	17.1
01:50 AM - 01:55 AM	52.9	41.8	60.1	40.9	13.5
01:55 AM - 02:00 AM	57.2	42.8	57.6	39.4	20.7
02:00 AM - 02:05 AM	54.9	44.5	52.8	40.5	17.1
02:05 AM - 02:10 AM	50.9	44.5	53.4	41.4	11.4
02:10 AM - 02:15 AM	51.3	43.2	53.2	41.2	12.2
02:15 AM - 02:20 AM	51.0	44.1	53.8	41.3	11.9
02:20 AM - 02:25 AM	51.5	43.1	55.2	39.2	14.8
02:25 AM - 02:30 AM	52.6	41.5	54.5	39.2	16.0
02:30 AM - 02:35 AM	51.9	41.5	56.1	39.7	14.8
02:35 AM - 02:40 AM	56.1	42.6	56.9	40.0	18.9
02:40 AM - 02:45 AM	54.0	42.3	53.9	39.6	14.9
02:45 AM - 02:50 AM	51.4	41.8	53.9	38.2	15.6
02:50 AM - 02:55 AM	53.8	41.2	56.6	38.2	18.4
02:55 AM - 03:00 AM	52.0	42.9	54.4	38.0	16.4
03:00 AM - 03:05 AM	53.4	42.8	56.0	39.9	16.1
03:05 AM - 03:10 AM	52.0	45.7	53.8	43.5	10.3
03:10 AM - 03:15 AM	51.9	44.2	54.1	41.3	12.8
03:15 AM - 03:20 AM	51.9	43.7	54.2	41.0	13.2
03:20 AM - 03:25 AM	52.1	45.8	52.9	42.9	11.0
03:25 AM - 03:30 AM	52.1	46.5	53.7	44.1	9.6

The above results are valid only for the test conditions specified in this report. In part of the report for the test may be important in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwang, Amphur Kangkhot, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Sample No. 2494231-19
Parameter เลือกรูบ
Location บ้านนาเกตุ (GPS 47P 0726659, 1619824)
Measurement Date Aug 27 - Aug 28, 2024
Measurement by Prommee Sripanet
Sound Level Meter 623381


เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			ค่าจริง	ค่าเฉลี่ย		
03:30 AM - 03:35 AM	50.4	46.8	-	-	44.1	6.8
03:35 AM - 03:40 AM	52.5	44.9	-	-	42.2	12.5
03:40 AM - 03:45 AM	51.6	47.9	-	-	44.8	7.4
03:45 AM - 03:50 AM	51.1	46.2	-	-	43.6	8.8
03:50 AM - 03:55 AM	51.4	46.4	-	-	43.6	9.1
03:55 AM - 04:00 AM	50.9	42.2	-	-	39.6	13.7
04:00 AM - 04:05 AM	49.8	42.6	-	-	40.9	11.0
04:05 AM - 04:10 AM	50.1	42.4	-	-	40.5	11.8
04:10 AM - 04:15 AM	51.6	41.7	-	-	39.9	14.2
04:15 AM - 04:20 AM	52.0	42.0	-	-	40.0	14.5
04:20 AM - 04:25 AM	55.4	41.8	-	-	39.6	18.6
04:25 AM - 04:30 AM	50.9	43.1	-	-	39.7	13.4
04:30 AM - 04:35 AM	50.7	43.4	-	-	42.0	10.8
04:35 AM - 04:40 AM	49.7	72.5	-	-	42.8	-
04:40 AM - 04:45 AM	52.5	40.9	-	-	39.3	15.9
04:45 AM - 04:50 AM	51.9	40.7	-	-	38.1	16.5
04:50 AM - 04:55 AM	52.0	41.3	-	-	38.0	17.6
04:55 AM - 05:00 AM	52.9	41.5	-	-	38.0	17.6
05:00 AM - 05:05 AM	52.3	42.2	-	-	39.6	15.3
05:05 AM - 05:10 AM	52.6	41.1	-	-	38.3	17.0
05:10 AM - 05:15 AM	52.7	42.0	-	-	39.9	15.4
05:15 AM - 05:20 AM	53.1	43.9	-	-	41.6	13.9
05:20 AM - 05:25 AM	53.5	42.8	-	-	40.6	15.5
05:25 AM - 05:30 AM	53.7	42.4	-	-	40.2	16.2
05:30 AM - 05:35 AM	54.3	46.1	-	-	41.6	15.0
05:35 AM - 05:40 AM	55.3	44.5	-	-	41.8	16.1
05:40 AM - 05:45 AM	54.1	47.4	-	-	42.3	13.8
05:45 AM - 05:50 AM	54.3	50.0	-	-	43.2	12.2
05:50 AM - 05:55 AM	55.7	47.4	-	-	44.5	11.8
05:55 AM - 06:00 AM	55.7	46.4	-	-	44.2	14.0
06:00 AM - 07:00 AM	56.0	46.8	55.4	55.4	43.0	12.4
07:00 AM - 08:00 AM	54.3	49.4	52.6	52.6	42.1	10.5

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. วิธีการวัดระดับเสียงการรบกวน : ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่ได้จากการประเมินการรบกวน พ.ศ. 2567

หมายเหตุ
1. ผลการตรวจวิเคราะห์ตามวิธีนี้ ใช้สำหรับประเมินเสียงการรบกวนและระดับเสียงที่ได้จากการประเมินการรบกวน พ.ศ. 2568
2. ผลการตรวจวิเคราะห์ตามวิธีนี้ ใช้สำหรับประเมินเสียงการรบกวนและระดับเสียงที่ได้จากการประเมินการรบกวน พ.ศ. 2561

Remark :
1. ระดับเสียงการรบกวนที่วัดได้ทั้งหมด มีค่าเฉลี่ยเท่ากับ 42.1 dB(A) และค่าสูงสุดเท่ากับ 55.4 dB(A)
2. ระดับเสียงการรบกวนและระดับเสียงที่ได้จากการประเมินการรบกวน (Sample No. 2494231-19) มีค่าเฉลี่ยเท่ากับ 42.1 dB(A) และค่าสูงสุดเท่ากับ 55.4 dB(A)
3. หมายเหตุ : ผลการตรวจวิเคราะห์ตามวิธีนี้ ใช้สำหรับประเมินเสียงการรบกวนและระดับเสียงที่ได้จากการประเมินการรบกวน พ.ศ. 2561

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Approved by 
Kanokkorn Anek
Asst. General Manager




Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwang, Amphur Kangkhot, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Sample No. 2494231-20
Parameter เลือกรูบ
Location บ้านนาเกตุ (GPS 47P 0726659, 1619824)
Measurement Date Aug 28 - Aug 29, 2024
Measurement by Prommee Sripanet
Sound Level Meter 623381

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			ค่าจริง	ค่าเฉลี่ย		
08:00 AM - 09:00 AM	53.1	48.6	-	-	39.7	11.5
09:00 AM - 10:00 AM	54.2	41.7	-	-	37.3	16.6
10:00 AM - 11:00 AM	54.8	43.4	-	-	38.2	16.3
11:00 AM - 12:00 PM	48.8	44.9	-	-	37.7	8.8
12:00 PM - 01:00 PM	50.0	44.1	-	-	36.7	12.0
01:00 PM - 02:00 PM	59.1	44.8	-	-	37.4	21.5
02:00 PM - 03:00 PM	57.5	48.5	-	-	38.7	18.2
03:00 PM - 04:00 PM	57.3	49.6	-	-	38.0	18.5
04:00 PM - 05:00 PM	52.2	43.6	-	-	39.5	13.1
05:00 PM - 06:00 PM	61.7	50.2	-	-	41.9	19.5
06:00 PM - 07:00 PM	57.2	45.8	-	-	42.5	14.4
07:00 PM - 08:00 PM	59.1	49.0	-	-	46.9	11.8
08:00 PM - 09:00 PM	63.4	48.7	-	-	47.3	16.0
09:00 PM - 10:00 PM	65.3	47.7	-	-	46.6	18.6
10:00 PM - 10:05 PM	61.5	47.1	-	-	45.8	18.5
10:05 PM - 10:10 PM	61.6	46.9	-	-	45.9	18.6
10:10 PM - 10:15 PM	67.8	46.8	-	-	70.8	26.0
10:15 PM - 10:20 PM	66.4	47.4	-	-	69.3	23.5
10:20 PM - 10:25 PM	65.2	47.8	-	-	68.1	23.1
10:25 PM - 10:30 PM	65.7	45.7	-	-	68.7	26.4
10:30 PM - 10:35 PM	65.6	44.9	-	-	68.6	27.0
10:35 PM - 10:40 PM	68.1	43.2	-	-	71.1	30.6
10:40 PM - 10:45 PM	67.0	43.6	-	-	70.0	28.0
10:45 PM - 10:50 PM	67.5	44.1	-	-	70.5	28.3
10:50 PM - 10:55 PM	67.0	45.2	-	-	70.0	43.9
10:55 PM - 11:00 PM	61.0	46.5	-	-	63.8	19.3
11:00 PM - 11:05 PM	52.7	46.4	-	-	54.5	9.0
11:05 PM - 11:10 PM	57.9	47.9	-	-	59.4	14.6
11:10 PM - 11:15 PM	56.8	46.6	-	-	58.7	13.7
11:15 PM - 11:20 PM	56.2	46.6	-	-	60.5	15.1
11:20 PM - 11:25 PM	57.8	46.3	-	-	54.2	8.7
11:25 PM - 11:30 PM	52.5	46.5	-	-	49.9	19.9
11:30 PM - 11:35 PM	46.1	46.4	-	-	59.4	14.8
11:35 PM - 11:40 PM	62.4	46.4	-	-	53.2	44.7
11:40 PM - 11:45 PM	56.8	45.7	-	-	69.7	24.9
11:45 PM - 11:50 PM	51.5	45.6	-	-	44.8	10.7
11:50 PM - 11:55 PM	66.7	45.7	-	-	50.4	10.4
11:55 PM - 12:00 AM	52.5	46.3	-	-	62.4	22.0
12:00 AM - 12:05 AM	48.6	42.5	-	-	40.4	8.7
12:05 AM - 12:10 AM	59.5	42.2	-	-	45.4	15.1

Approved by 
Kanokkorn Anek
Asst. General Manager

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219/301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107800-1

Page 2 of 3

Sample No. 2494231-20
Parameter
Location บ้านนาคล้า (GPS 47P 0726659, 1619824)
Measurement Date Aug 28 - Aug 29, 2024
Measurement by Prommee Sripaniet
Sound Level Meter 623381

เวลา	ระดับเสียง (dB(A))			ค่าระดับ การรบกวน
	เสียงจาก แหล่งกำเนิด	เสียงขณะ ปฏิบัติการ	เสียงพื้นฐาน	
12:10 AM - 12:15 AM	62.9	42.4	40.3	25.6
12:15 AM - 12:20 AM	55.4	42.1	39.9	18.3
12:20 AM - 12:25 AM	44.6	42.0	39.5	4.6
12:25 AM - 12:30 AM	57.2	42.2	38.6	21.5
12:30 AM - 12:35 AM	48.2	42.9	39.6	10.1
12:35 AM - 12:40 AM	46.5	43.9	41.6	4.4
12:40 AM - 12:45 AM	62.8	47.3	43.2	22.5
12:45 AM - 12:50 AM	54.9	45.2	43.1	14.3
12:50 AM - 12:55 AM	44.8	47.7	44.5	-
12:55 AM - 01:00 AM	43.8	54.0	49.1	-
01:00 AM - 01:05 AM	55.5	48.3	44.7	12.9
01:05 AM - 01:10 AM	49.6	48.0	44.2	2.5
01:10 AM - 01:15 AM	48.8	48.0	44.7	3.4
01:15 AM - 01:20 AM	46.2	49.5	45.8	-
01:20 AM - 01:25 AM	56.0	46.7	44.9	13.6
01:25 AM - 01:30 AM	45.2	46.1	42.1	-
01:30 AM - 01:35 AM	44.4	42.1	41.0	2.5
01:35 AM - 01:40 AM	56.4	42.0	40.6	18.6
01:40 AM - 01:45 AM	40.1	43.4	42.3	-
01:45 AM - 01:50 AM	66.6	43.9	42.8	28.8
01:50 AM - 01:55 AM	43.2	43.6	41.8	-
01:55 AM - 02:00 AM	40.6	42.1	40.8	-
02:00 AM - 02:05 AM	51.8	41.6	40.3	14.1
02:05 AM - 02:10 AM	52.1	40.0	38.6	16.2
02:10 AM - 02:15 AM	62.6	39.8	38.5	27.1
02:15 AM - 02:20 AM	60.9	40.2	38.5	25.4
02:20 AM - 02:25 AM	39.5	41.2	38.1	-
02:25 AM - 02:30 AM	38.2	42.6	39.6	-
02:30 AM - 02:35 AM	52.0	41.4	39.5	15.1
02:35 AM - 02:40 AM	44.4	40.9	39.2	5.6
02:40 AM - 02:45 AM	52.2	54.9	38.2	16.7
02:45 AM - 02:50 AM	50.1	41.3	39.3	13.2
02:50 AM - 02:55 AM	53.5	40.4	38.3	18.0
02:55 AM - 03:00 AM	50.9	41.1	38.6	14.8
03:00 AM - 03:05 AM	40.6	40.4	38.1	4.0
03:05 AM - 03:10 AM	49.3	40.6	38.5	13.2
03:10 AM - 03:15 AM	49.1	41.9	38.8	12.4
03:15 AM - 03:20 AM	46.8	40.9	37.8	10.7
03:20 AM - 03:25 AM	51.0	41.8	38.0	14.6
03:25 AM - 03:30 AM	48.3	48.5	38.4	-

The above results are valid only for the test method specified and are not to be used for any other purpose. The results are not to be used for any other purpose without written consent from the laboratory. ALS Laboratory Group (Thailand) Ltd. is not responsible for the results of the test if the test is not performed in full.

Approved by
Kankorn Anek
Asst. General Manager

Kankorn Anek



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219/301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107800-1

Page 3 of 3

Sample No. 2494231-20
Parameter
Location บ้านนาคล้า (GPS 47P 0726659, 1619824)
Measurement Date Aug 28 - Aug 29, 2024
Measurement by Prommee Sripaniet
Sound Level Meter 623381

เวลา	เสียงจาก แหล่งกำเนิด	เสียงขณะ ปฏิบัติการ	ระดับเสียง (dB(A))		ค่าระดับ การรบกวน
			เสียงพื้นฐาน	เสียงขณะ ปฏิบัติการ	
03:30 AM - 03:35 AM	57.9	43.4	40.7	38.8	21.9
03:35 AM - 03:40 AM	65.8	41.8	39.2	39.2	20.6
03:40 AM - 03:45 AM	53.3	43.1	35.9	39.6	16.3
03:45 AM - 03:50 AM	53.4	42.3	36.0	38.6	17.4
03:50 AM - 03:55 AM	55.9	44.0	38.4	39.5	20.2
03:55 AM - 04:00 AM	56.8	46.6	38.4	39.5	19.9
04:00 AM - 04:05 AM	60.6	43.1	38.4	39.0	24.5
04:05 AM - 04:10 AM	61.5	44.9	38.2	38.8	25.6
04:10 AM - 04:15 AM	57.4	44.9	38.2	38.2	21.9
04:15 AM - 04:20 AM	57.0	45.6	38.9	39.5	20.8
04:20 AM - 04:25 AM	50.7	47.2	39.5	39.5	11.6
04:25 AM - 04:30 AM	50.7	47.2	40.0	39.9	10.6
04:30 AM - 04:35 AM	49.7	48.1	41.8	39.8	7.7
04:35 AM - 04:40 AM	52.1	70.7	n/a	41.8	-
04:40 AM - 04:45 AM	50.9	66.2	n/a	39.8	-
04:45 AM - 04:50 AM	44.9	47.7	n/a	39.4	-
04:50 AM - 04:55 AM	47.9	48.0	n/a	39.5	-
04:55 AM - 05:00 AM	51.7	47.0	52.9	40.1	12.8
05:00 AM - 05:05 AM	54.1	48.3	55.8	40.6	15.8
05:05 AM - 05:10 AM	59.4	49.3	62.0	41.4	21.4
05:10 AM - 05:15 AM	56.0	50.6	57.5	41.4	16.1
05:15 AM - 05:20 AM	53.7	50.9	53.5	41.1	12.4
05:20 AM - 05:25 AM	49.6	49.8	n/a	41.2	-
05:25 AM - 05:30 AM	48.4	50.3	42.0	44.4	23.3
05:30 AM - 05:35 AM	64.9	51.7	44.3	44.1	4.2
05:35 AM - 05:40 AM	52.6	51.7	45.0	44.8	6.8
05:40 AM - 05:45 AM	49.3	52.0	51.6	44.8	-
05:45 AM - 05:50 AM	53.9	52.4	43.8	44.7	-
05:50 AM - 05:55 AM	50.6	51.2	43.8	42.7	-
05:55 AM - 06:00 AM	51.4	51.0	55.2	42.7	-
06:00 AM - 07:00 AM	55.8	47.2	48.0	41.8	6.2
07:00 AM - 08:00 AM	50.4	46.7	-	41.8	≤ 10

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดในการประเมินการรบกวน พ.ศ. 2567

มาตรฐาน

1. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงสูงสุดในการประเมินการรบกวน พ.ศ. 2568
2. ประกาศกรมโรงงานอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงสูงสุดในการประเมินการรบกวน พ.ศ. 2568

Remark:
1. ระดับเสียงตามข้อกำหนด ค่าการวัดระดับเสียง 28-29 สิงหาคม 2567
2. ระดับเสียงตามข้อกำหนด ค่าการวัดระดับเสียง 28-29 สิงหาคม 2567 (Sample No. 2494233-20 วันที่ตรวจวัด 28-29 สิงหาคม 2567)
3. n/a: ไม่สามารถดำเนินการวัดระดับเสียงการรบกวนเนื่องจากระดับเสียงการรบกวนเกินค่าขีดจำกัดการวัดระดับเสียงตามข้อกำหนด

The above results are valid only for the test method specified and are not to be used for any other purpose. The results are not to be used for any other purpose without written consent from the laboratory. ALS Laboratory Group (Thailand) Ltd. is not responsible for the results of the test if the test is not performed in full.

Approved by
Kankorn Anek
Asst. General Manager

Kankorn Anek



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhohi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107801-1

Page 1 of 3

Sample No. 2494231-21
Parameter เลือกรูปแบบ
Location บ้านนาอู่ (GPS 47P 0726559, 1619824)
Measurement Date Aug 29 - Aug 30, 2024
Measurement by Prommee Sirapattet
Sound Level Meter 623381

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นรบกวน	ค่ารวมการรบกวน
			ค่าจริง	ค่าเฉลี่ย		
08:00 AM - 09:00 AM	57.1	48.6	56.4	-	39.7	16.7
09:00 AM - 10:00 AM	56.7	48.3	56.0	-	37.3	18.7
10:00 AM - 11:00 AM	56.4	47.2	55.8	-	38.2	17.6
11:00 AM - 12:00 PM	57.1	47.3	56.6	-	37.7	18.9
12:00 PM - 01:00 PM	55.6	46.1	55.1	-	36.7	18.4
01:00 PM - 02:00 PM	63.6	49.1	63.4	-	37.4	26.0
02:00 PM - 03:00 PM	63.0	51.7	62.7	-	38.7	24.0
03:00 PM - 04:00 PM	54.2	47.6	53.1	-	38.0	15.1
04:00 PM - 05:00 PM	54.3	50.6	51.9	-	39.5	12.4
05:00 PM - 06:00 PM	62.7	46.4	62.6	-	41.9	20.7
06:00 PM - 07:00 PM	60.4	53.6	59.4	-	42.5	16.9
07:00 PM - 08:00 PM	60.4	57.7	57.1	-	46.9	10.2
08:00 PM - 09:00 PM	60.2	46.8	60.0	-	47.3	12.7
09:00 PM - 10:00 PM	57.1	43.4	56.9	-	46.6	10.3
10:00 PM - 10:05 PM	55.7	44.2	55.4	58.4	45.8	12.6
10:05 PM - 10:10 PM	52.3	43.7	52.3	54.3	45.9	8.8
10:10 PM - 10:15 PM	47.1	43.8	47.1	44.8	44.8	2.6
10:15 PM - 10:20 PM	52.0	43.8	51.3	54.3	45.8	8.5
10:20 PM - 10:25 PM	48.2	44.3	48.9	48.9	45.0	3.9
10:25 PM - 10:30 PM	48.4	44.1	49.4	49.4	42.3	7.1
10:30 PM - 10:35 PM	46.9	45.4	46.6	44.6	41.6	3.0
10:35 PM - 10:40 PM	51.4	43.8	53.6	53.6	40.5	13.1
10:40 PM - 10:45 PM	48.8	43.5	50.3	50.3	42.0	8.3
10:45 PM - 10:50 PM	49.3	43.6	50.9	50.9	42.2	8.7
10:50 PM - 10:55 PM	46.2	44.8	43.9	43.9	41.9	-0.3
10:55 PM - 11:00 PM	47.0	44.7	46.1	46.1	44.5	1.6
11:00 PM - 11:05 PM	45.1	45.8	n/a	n/a	45.5	-
11:05 PM - 11:10 PM	50.6	45.5	51.9	51.9	45.8	6.1
11:10 PM - 11:15 PM	47.0	44.5	48.7	48.7	45.7	0.7
11:15 PM - 11:20 PM	48.1	44.6	44.9	44.9	44.9	3.6
11:20 PM - 11:25 PM	48.0	44.3	48.6	48.6	45.4	3.2
11:25 PM - 11:30 PM	46.8	44.1	46.5	46.5	45.5	1.0
11:30 PM - 11:35 PM	49.0	44.0	50.3	50.3	45.7	4.6
11:35 PM - 11:40 PM	52.7	44.7	55.0	55.0	45.4	9.6
11:40 PM - 11:45 PM	42.5	42.5	n/a	n/a	44.6	-
11:45 PM - 11:50 PM	66.1	42.3	69.1	69.1	44.7	24.4
11:50 PM - 11:55 PM	44.2	42.6	44.8	44.8	44.8	-2.7
11:55 PM - 12:00 AM	43.4	43.6	n/a	n/a	43.6	-
12:00 AM - 12:05 AM	45.0	43.9	45.0	41.5	40.0	1.5
12:05 AM - 12:10 AM	45.7	43.1	-	45.2	40.4	4.8

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Approved by

Kanokkorn Anek

Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhohi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107801-1

Page 2 of 3

Sample No. 2494231-21
Parameter เลือกรูปแบบ
Location บ้านนาอู่ (GPS 47P 0726559, 1619824)
Measurement Date Aug 29 - Aug 30, 2024
Measurement by Prommee Sirapattet
Sound Level Meter 623381

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นรบกวน	ค่ารวมการรบกวน
			ค่าจริง	ค่าเฉลี่ย		
12:10 AM - 12:15 AM	50.3	41.8	-	52.6	40.3	12.3
12:15 AM - 12:20 AM	46.4	43.2	-	46.6	39.9	6.7
12:20 AM - 12:25 AM	46.4	43.5	-	46.3	39.5	6.8
12:25 AM - 12:30 AM	44.1	43.7	-	36.5	38.6	-2.1
12:30 AM - 12:35 AM	46.5	44.5	-	45.2	39.6	5.6
12:35 AM - 12:40 AM	49.3	45.5	-	50.0	41.6	8.4
12:40 AM - 12:45 AM	43.1	45.7	-	n/a	43.2	-
12:45 AM - 12:50 AM	64.5	46.0	-	67.4	43.1	24.3
12:50 AM - 12:55 AM	44.3	45.2	-	n/a	44.3	-
12:55 AM - 01:00 AM	42.0	45.6	-	n/a	49.1	-
01:00 AM - 01:05 AM	43.5	46.4	-	n/a	44.7	-
01:05 AM - 01:10 AM	43.8	46.6	-	n/a	44.2	-
01:10 AM - 01:15 AM	46.8	46.5	-	38.0	44.7	-6.7
01:15 AM - 01:20 AM	44.7	45.8	-	n/a	45.8	-
01:20 AM - 01:25 AM	43.6	45.5	-	n/a	44.9	-
01:25 AM - 01:30 AM	43.3	45.4	-	n/a	42.1	-
01:30 AM - 01:35 AM	47.7	45.5	-	46.7	41.0	5.7
01:35 AM - 01:40 AM	43.6	45.9	-	n/a	40.6	-
01:40 AM - 01:45 AM	66.7	46.2	-	69.7	42.3	27.4
01:45 AM - 01:50 AM	42.2	45.3	-	n/a	42.8	-
01:50 AM - 01:55 AM	42.7	45.6	-	n/a	41.8	-
01:55 AM - 02:00 AM	43.1	46.0	-	n/a	40.8	-
02:00 AM - 02:05 AM	47.6	46.8	-	42.9	40.3	2.6
02:05 AM - 02:10 AM	43.6	47.9	-	n/a	38.6	-
02:10 AM - 02:15 AM	44.0	47.4	-	n/a	38.5	-
02:15 AM - 02:20 AM	67.7	47.3	-	70.7	38.5	32.2
02:20 AM - 02:25 AM	43.3	47.7	-	n/a	38.1	-
02:25 AM - 02:30 AM	47.2	47.6	-	n/a	39.6	-
02:30 AM - 02:35 AM	43.8	47.0	-	n/a	39.5	-
02:35 AM - 02:40 AM	44.9	47.2	-	n/a	39.2	-
02:40 AM - 02:45 AM	40.4	47.4	-	n/a	38.2	-
02:45 AM - 02:50 AM	41.5	46.5	-	n/a	39.3	-
02:50 AM - 02:55 AM	46.5	46.4	-	33.1	38.3	-5.2
02:55 AM - 03:00 AM	43.4	46.9	-	n/a	38.6	-
03:00 AM - 03:05 AM	50.1	47.0	-	50.2	38.1	17.1
03:05 AM - 03:10 AM	49.2	46.2	-	49.2	38.5	10.7
03:10 AM - 03:15 AM	42.2	45.9	-	n/a	38.8	-
03:15 AM - 03:20 AM	46.8	46.5	-	38.0	37.8	0.2
03:20 AM - 03:25 AM	50.4	46.0	-	51.4	38.8	12.6
03:25 AM - 03:30 AM	46.2	45.2	-	42.3	38.4	3.9

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Approved by

Kanokkorn Anek

Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwang, Amphur Kangkhai, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107801-1

Page 3 of 3

Sample No. 2494231-21
Parameter เลื่อนฐาน
Location บ้านนาเหล็ก (GPS 47P 0726659, 1619824)
Measurement Date Aug 29 - Aug 30, 2024
Measurement by Prommee Siripatnet
Sound Level Meter 623381

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะปฏิบัติการ	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			ค่าจริง	ค่าเฉลี่ย		
03:30 AM - 03:35 AM	49.5	45.6	50.2	38.8	11.4	
03:35 AM - 03:40 AM	66.7	44.8	69.7	39.2	30.5	
03:40 AM - 03:45 AM	51.6	44.7	53.6	39.6	14.0	
03:45 AM - 03:50 AM	50.0	45.0	51.3	38.6	12.7	
03:50 AM - 03:55 AM	65.1	46.5	68.0	38.4	29.6	
03:55 AM - 04:00 AM	63.8	45.3	66.7	39.5	27.2	
04:00 AM - 04:05 AM	60.6	45.3	63.5	39.0	24.5	
04:05 AM - 04:10 AM	63.2	44.6	66.1	38.6	27.3	
04:10 AM - 04:15 AM	62.4	46.9	65.3	38.2	27.1	
04:15 AM - 04:20 AM	61.4	43.4	64.3	38.9	25.4	
04:20 AM - 04:25 AM	61.7	43.0	64.6	39.5	25.1	
04:25 AM - 04:30 AM	58.1	42.7	61.0	40.0	21.0	
04:30 AM - 04:35 AM	54.7	67.3	61.0	39.9	-	
04:35 AM - 04:40 AM	53.9	44.3	56.4	41.8	14.6	
04:40 AM - 04:45 AM	52.1	46.0	53.9	39.8	14.1	
04:45 AM - 04:50 AM	56.8	44.9	59.5	39.4	20.1	
04:50 AM - 04:55 AM	58.2	44.4	61.0	39.5	21.5	
04:55 AM - 05:00 AM	59.2	43.6	62.1	40.1	22.0	
05:00 AM - 05:05 AM	57.9	45.0	60.7	40.0	20.7	
05:05 AM - 05:10 AM	59.8	44.9	62.7	40.6	22.1	
05:10 AM - 05:15 AM	58.2	44.9	61.0	41.4	19.6	
05:15 AM - 05:20 AM	59.5	45.3	62.3	41.1	21.2	
05:20 AM - 05:25 AM	59.3	45.2	62.1	41.2	20.9	
05:25 AM - 05:30 AM	63.8	49.8	62.0	42.0	24.6	
05:30 AM - 05:35 AM	58.6	46.4	61.3	44.4	16.9	
05:35 AM - 05:40 AM	51.4	48.6	51.2	44.1	7.1	
05:40 AM - 05:45 AM	51.7	46.0	53.3	45.0	8.3	
05:45 AM - 05:50 AM	50.1	46.9	50.3	44.8	5.5	
05:50 AM - 05:55 AM	54.1	46.6	56.2	44.8	11.4	
05:55 AM - 06:00 AM	56.5	45.3	59.2	44.7	14.5	
06:00 AM - 07:00 AM	56.9	46.6	56.5	42.7	13.8	
07:00 AM - 08:00 AM	59.0	46.6	58.7	41.8	5.10	

หมายเหตุ:

1. In-house method: STM 06-001 based on ISO 1996-1 : 2016

2. วิธีการวัดระดับเสียงและคำนวณค่าเฉลี่ยใช้วิธีคำนวณระดับเสียงตามมาตรฐานระดับเสียงตามข้อกำหนดของกรมโรงงาน พ.ศ. 2567

3. วิธีการคำนวณระดับเสียงและคำนวณค่าเฉลี่ยใช้วิธีคำนวณระดับเสียงตามข้อกำหนดของกรมโรงงาน พ.ศ. 2567

4. วิธีการคำนวณระดับเสียงและคำนวณค่าเฉลี่ยใช้วิธีคำนวณระดับเสียงตามข้อกำหนดของกรมโรงงาน พ.ศ. 2567

5. วิธีการคำนวณระดับเสียงและคำนวณค่าเฉลี่ยใช้วิธีคำนวณระดับเสียงตามข้อกำหนดของกรมโรงงาน พ.ศ. 2567

6. วิธีการคำนวณระดับเสียงและคำนวณค่าเฉลี่ยใช้วิธีคำนวณระดับเสียงตามข้อกำหนดของกรมโรงงาน พ.ศ. 2567

7. วิธีการคำนวณระดับเสียงและคำนวณค่าเฉลี่ยใช้วิธีคำนวณระดับเสียงตามข้อกำหนดของกรมโรงงาน พ.ศ. 2567

8. วิธีการคำนวณระดับเสียงและคำนวณค่าเฉลี่ยใช้วิธีคำนวณระดับเสียงตามข้อกำหนดของกรมโรงงาน พ.ศ. 2567

9. วิธีการคำนวณระดับเสียงและคำนวณค่าเฉลี่ยใช้วิธีคำนวณระดับเสียงตามข้อกำหนดของกรมโรงงาน พ.ศ. 2567

10. วิธีการคำนวณระดับเสียงและคำนวณค่าเฉลี่ยใช้วิธีคำนวณระดับเสียงตามข้อกำหนดของกรมโรงงาน พ.ศ. 2567

11. วิธีการคำนวณระดับเสียงและคำนวณค่าเฉลี่ยใช้วิธีคำนวณระดับเสียงตามข้อกำหนดของกรมโรงงาน พ.ศ. 2567

12. วิธีการคำนวณระดับเสียงและคำนวณค่าเฉลี่ยใช้วิธีคำนวณระดับเสียงตามข้อกำหนดของกรมโรงงาน พ.ศ. 2567

13. วิธีการคำนวณระดับเสียงและคำนวณค่าเฉลี่ยใช้วิธีคำนวณระดับเสียงตามข้อกำหนดของกรมโรงงาน พ.ศ. 2567

14. วิธีการคำนวณระดับเสียงและคำนวณค่าเฉลี่ยใช้วิธีคำนวณระดับเสียงตามข้อกำหนดของกรมโรงงาน พ.ศ. 2567

15. วิธีการคำนวณระดับเสียงและคำนวณค่าเฉลี่ยใช้วิธีคำนวณระดับเสียงตามข้อกำหนดของกรมโรงงาน พ.ศ. 2567

16. วิธีการคำนวณระดับเสียงและคำนวณค่าเฉลี่ยใช้วิธีคำนวณระดับเสียงตามข้อกำหนดของกรมโรงงาน พ.ศ. 2567

17. วิธีการคำนวณระดับเสียงและคำนวณค่าเฉลี่ยใช้วิธีคำนวณระดับเสียงตามข้อกำหนดของกรมโรงงาน พ.ศ. 2567

18. วิธีการคำนวณระดับเสียงและคำนวณค่าเฉลี่ยใช้วิธีคำนวณระดับเสียงตามข้อกำหนดของกรมโรงงาน พ.ศ. 2567

19. วิธีการคำนวณระดับเสียงและคำนวณค่าเฉลี่ยใช้วิธีคำนวณระดับเสียงตามข้อกำหนดของกรมโรงงาน พ.ศ. 2567

20. วิธีการคำนวณระดับเสียงและคำนวณค่าเฉลี่ยใช้วิธีคำนวณระดับเสียงตามข้อกำหนดของกรมโรงงาน พ.ศ. 2567

21. วิธีการคำนวณระดับเสียงและคำนวณค่าเฉลี่ยใช้วิธีคำนวณระดับเสียงตามข้อกำหนดของกรมโรงงาน พ.ศ. 2567

22. วิธีการคำนวณระดับเสียงและคำนวณค่าเฉลี่ยใช้วิธีคำนวณระดับเสียงตามข้อกำหนดของกรมโรงงาน พ.ศ. 2567

23. วิธีการคำนวณระดับเสียงและคำนวณค่าเฉลี่ยใช้วิธีคำนวณระดับเสียงตามข้อกำหนดของกรมโรงงาน พ.ศ. 2567

24. วิธีการคำนวณระดับเสียงและคำนวณค่าเฉลี่ยใช้วิธีคำนวณระดับเสียงตามข้อกำหนดของกรมโรงงาน พ.ศ. 2567

25. วิธีการคำนวณระดับเสียงและคำนวณค่าเฉลี่ยใช้วิธีคำนวณระดับเสียงตามข้อกำหนดของกรมโรงงาน พ.ศ. 2567

26. วิธีการคำนวณระดับเสียงและคำนวณค่าเฉลี่ยใช้วิธีคำนวณระดับเสียงตามข้อกำหนดของกรมโรงงาน พ.ศ. 2567

27. วิธีการคำนวณระดับเสียงและคำนวณค่าเฉลี่ยใช้วิธีคำนวณระดับเสียงตามข้อกำหนดของกรมโรงงาน พ.ศ. 2567



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwang, Amphur Kangkhai, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107802-1

Page 1 of 3

Sample No. 2494231-22
Parameter เลื่อนฐาน
Location บ้านนาเหล็ก (GPS 47P 0726066, 1617923)
Measurement Date Aug 23 - Aug 24, 2024
Measurement by Prommee Siripatnet
Sound Level Meter 00572562

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะปฏิบัติการ	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			ค่าจริง	ค่าเฉลี่ย		
08:00 AM - 09:00 AM	61.7	57.3	59.7	-	53.7	6.0
09:00 AM - 10:00 AM	63.3	56.4	62.3	-	54.4	7.9
10:00 AM - 11:00 AM	63.0	56.2	62.0	-	53.8	8.2
11:00 AM - 12:00 PM	62.9	56.9	61.6	-	54.6	7.0
12:00 PM - 01:00 PM	62.9	56.0	61.9	-	53.7	8.2
01:00 PM - 02:00 PM	62.7	56.1	61.6	-	54.0	7.6
02:00 PM - 03:00 PM	61.8	56.8	60.1	-	54.5	5.6
03:00 PM - 04:00 PM	62.4	56.8	61.0	-	54.4	6.6
04:00 PM - 05:00 PM	61.9	57.9	59.7	-	55.1	3.8
05:00 PM - 06:00 PM	63.8	59.7	61.7	-	57.9	3.8
06:00 PM - 07:00 PM	63.4	60.0	61.1	-	58.0	3.1
07:00 PM - 08:00 PM	62.8	59.5	60.1	-	57.5	2.6
08:00 PM - 09:00 PM	62.6	59.5	59.7	-	57.4	2.3
09:00 PM - 10:00 PM	62.2	60.1	62.2	-	57.6	3.4
10:00 PM - 11:00 PM	62.7	59.1	62.7	-	57.3	5.9
11:00 PM - 12:00 AM	65.1	58.8	64.1	-	56.5	10.4
12:00 AM - 01:00 AM	63.6	59.1	64.1	-	57.7	7.7
01:00 AM - 02:00 AM	61.8	59.8	61.8	-	57.1	7.6
02:00 AM - 03:00 AM	61.9	58.7	61.9	-	57.3	3.2
03:00 AM - 04:00 AM	61.5	56.3	61.5	-	56.4	5.7
04:00 AM - 05:00 AM	61.2	55.8	61.2	-	54.2	8.7
05:00 AM - 06:00 AM	60.5	55.6	60.5	-	53.8	8.9
06:00 AM - 07:00 AM	61.1	56.1	61.1	-	54.2	7.6
07:00 AM - 08:00 AM	61.4	56.3	61.4	-	53.7	8.7
08:00 AM - 09:00 AM	65.0	57.6	65.0	-	54.0	8.8
09:00 AM - 10:00 AM	63.3	57.9	63.3	-	55.6	11.5
10:00 AM - 11:00 AM	62.8	56.7	62.8	-	54.7	10.1
11:00 AM - 12:00 PM	61.7	56.6	61.7	-	55.0	9.9
12:00 PM - 01:00 PM	61.6	56.9	61.6	-	54.4	8.1
01:00 PM - 02:00 PM	60.9	58.1	60.9	-	56.1	4.6
02:00 PM - 03:00 PM	60.1	56.1	60.1	-	55.1	4.8
03:00 PM - 04:00 PM	59.8	57.2	59.8	-	53.4	7.5
04:00 PM - 05:00 PM	59.7	58.0	59.7	-	54.1	5.2
05:00 PM - 06:00 PM	58.9	56.8	58.9	-	55.1	2.7
06:00 PM - 07:00 AM	59.7	56.1	59.7	-	54.6	5.0
07:00 AM - 08:00 AM	60.0	56.6	60.0	-	55.8	5.1
08:00 AM - 09:00 AM	60.7	59.0	60.7	-	57.4	7.0
09:00 AM - 10:00 AM	60.7	59.0	60.7	-	57.4	4.8
10:00 AM - 11:00 AM	60.7	59.0	60.7	-	56.2	2.6

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Approved by

Kanokorn Anek

Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhol, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107802-1

Page 2 of 3

Sample No. 2494231-22
Parameter เสียงรบกวน
Location ริมด้านหน้าโรงงาน (รอบสำนักงาน) (GPS 47P 0726066, 1617923)
Measurement Date Aug 23 - Aug 24, 2024
Measurement by Prommee Sripanet
Sound Level Meter 00572562

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะปฏิบัติการ	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่ารวมการรบกวน
			กลางวัน	กลางคืน		
12:10 AM - 12:15 AM	61.5	58.5	-	61.5	56.6	4.9
12:15 AM - 12:20 AM	62.2	58.0	-	63.1	55.6	7.5
12:20 AM - 12:25 AM	59.0	56.8	-	58.0	55.2	2.8
12:25 AM - 12:30 AM	60.0	57.3	-	59.7	54.8	4.9
12:30 AM - 12:35 AM	59.0	57.1	-	57.5	54.0	3.5
12:35 AM - 12:40 AM	60.0	56.2	-	60.7	54.3	6.4
12:40 AM - 12:45 AM	59.1	56.8	-	58.2	54.4	3.8
12:45 AM - 12:50 AM	59.2	57.9	-	56.3	54.2	2.1
12:50 AM - 12:55 AM	60.3	57.9	-	60.9	54.7	6.2
12:55 AM - 01:00 AM	59.9	55.1	-	58.7	54.0	4.7
01:00 AM - 01:05 AM	59.9	55.5	-	60.9	54.7	8.2
01:05 AM - 01:10 AM	60.4	56.4	-	61.2	54.4	6.8
01:10 AM - 01:15 AM	60.9	56.2	-	62.1	53.5	8.6
01:15 AM - 01:20 AM	61.7	55.8	-	63.4	53.6	9.8
01:20 AM - 01:25 AM	59.7	55.2	-	60.8	53.0	7.8
01:25 AM - 01:30 AM	61.7	55.5	-	63.5	53.6	9.9
01:30 AM - 01:35 AM	60.7	54.9	-	62.4	52.8	9.6
01:35 AM - 01:40 AM	60.7	55.2	-	62.3	53.1	9.2
01:40 AM - 01:45 AM	59.9	55.1	-	61.2	53.2	8.0
01:45 AM - 01:50 AM	61.2	55.3	-	62.9	53.0	9.9
01:50 AM - 01:55 AM	61.9	54.9	-	63.9	53.2	10.7
01:55 AM - 02:00 AM	62.8	55.6	-	64.9	53.5	11.4
02:00 AM - 02:05 AM	61.8	55.1	-	63.8	53.1	10.7
02:05 AM - 02:10 AM	62.1	55.0	-	64.2	52.3	11.9
02:10 AM - 02:15 AM	62.6	54.9	-	64.8	52.9	11.9
02:15 AM - 02:20 AM	61.1	55.2	-	62.8	52.9	9.9
02:20 AM - 02:25 AM	61.1	55.3	-	62.7	53.4	9.3
02:25 AM - 02:30 AM	61.7	55.0	-	63.3	53.2	10.1
02:30 AM - 02:35 AM	60.4	55.6	-	61.7	53.2	8.5
02:35 AM - 02:40 AM	60.5	55.7	-	61.8	53.0	8.8
02:40 AM - 02:45 AM	60.8	55.2	-	62.1	53.3	9.1
02:45 AM - 02:50 AM	62.4	56.2	-	64.2	53.7	10.5
02:50 AM - 02:55 AM	61.8	55.1	-	63.8	52.9	10.9
02:55 AM - 03:00 AM	60.3	55.1	-	61.7	52.8	8.9
03:00 AM - 03:05 AM	60.9	56.1	-	62.2	53.6	8.6
03:05 AM - 03:10 AM	61.9	54.6	-	64.0	52.6	11.4
03:10 AM - 03:15 AM	59.9	54.7	-	61.3	52.7	8.6
03:15 AM - 03:20 AM	60.3	58.4	-	58.8	52.9	5.9
03:20 AM - 03:25 AM	62.3	56.6	-	63.9	52.0	11.9
03:25 AM - 03:30 AM	60.3	56.7	-	60.8	52.8	8.0

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Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager

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ALS LABORATORY GROUP (THAILAND) CO., LTD. ANS Limited Company

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhol, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107802-1

Page 3 of 3

Sample No. 2494231-22
Parameter เสียงรบกวน
Location ริมด้านหน้าโรงงาน (รอบสำนักงาน) (GPS 47P 0726066, 1617923)
Measurement Date Aug 23 - Aug 24, 2024
Measurement by Prommee Sripanet
Sound Level Meter 00572562

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะปฏิบัติการ	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่ารวมการรบกวน
			กลางวัน	กลางคืน		
03:30 AM - 03:35 AM	61.7	56.9	-	63.0	53.6	9.4
03:35 AM - 03:40 AM	60.5	56.2	-	61.5	53.4	8.1
03:40 AM - 03:45 AM	61.4	56.9	-	62.5	54.1	8.4
03:45 AM - 03:50 AM	61.2	56.4	-	63.5	53.3	9.2
03:50 AM - 03:55 AM	62.2	56.5	-	63.8	53.1	10.7
03:55 AM - 04:00 AM	60.6	56.8	-	61.3	52.9	8.4
04:00 AM - 04:05 AM	61.5	55.7	-	63.2	53.8	9.4
04:05 AM - 04:10 AM	61.3	56.9	-	62.3	54.0	8.3
04:10 AM - 04:15 AM	61.7	56.8	-	63.9	54.8	8.2
04:15 AM - 04:20 AM	62.5	57.4	-	63.9	54.7	9.2
04:20 AM - 04:25 AM	60.8	57.2	-	61.3	54.3	7.0
04:25 AM - 04:30 AM	61.5	56.8	-	62.7	54.6	8.1
04:30 AM - 04:35 AM	60.5	57.0	-	60.9	54.5	6.4
04:35 AM - 04:40 AM	61.4	57.6	-	62.1	54.9	7.2
04:40 AM - 04:45 AM	60.3	57.6	-	60.4	55.4	4.6
04:45 AM - 04:50 AM	61.5	58.3	-	60.4	55.2	5.2
04:50 AM - 04:55 AM	61.9	57.9	-	62.6	55.6	7.0
04:55 AM - 05:00 AM	61.1	58.0	-	61.2	55.5	5.7
05:00 AM - 05:05 AM	61.7	57.9	-	62.4	54.8	7.6
05:05 AM - 05:10 AM	61.6	58.6	-	61.6	56.2	5.4
05:10 AM - 05:15 AM	61.6	58.2	-	61.9	56.0	5.9
05:15 AM - 05:20 AM	61.6	57.4	-	60.4	56.6	5.6
05:20 AM - 05:25 AM	60.4	57.4	-	60.4	54.8	7.0
05:25 AM - 05:30 AM	61.7	58.0	-	62.2	55.5	6.7
05:30 AM - 05:35 AM	61.8	58.3	-	61.0	55.6	5.4
05:35 AM - 05:40 AM	61.3	58.6	-	63.0	55.8	7.2
05:40 AM - 05:45 AM	62.5	58.9	-	60.0	56.1	3.9
05:45 AM - 05:50 AM	60.9	58.6	-	59.6	55.9	3.7
05:50 AM - 05:55 AM	60.6	58.4	-	61.3	56.5	6.8
05:55 AM - 06:00 AM	62.8	59.2	-	-	57.6	1.1
06:00 AM - 07:00 AM	62.4	60.0	-	-	-	-
07:00 AM - 08:00 AM	61.9	59.4	58.3	-	57.2	≤ 10

คำนวณจาก
Reference Method :

1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประเภทโรงงานอุตสาหกรรม ใช้วิธีการวัดระดับเสียงรบกวน ระดับเสียง 24 ชั่วโมง และระดับเสียงสูงสุดโดยการประกอบเสียงจากโรงงาน พ.ศ. 2567

- หมายเหตุ
1. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานของเสียงรบกวนในสถานที่ประกอบการประกอบกิจการในอาคาร พ.ศ. 2548
 2. ระดับเสียงพื้นฐานและระดับเสียงขณะปฏิบัติการ (Sample No.2494233-1) วัดครั้งที่ 23-24 สิงหาคม 2567
 3. r/a: ไม่สามารถคำนวณระดับเสียงรบกวนเนื่องจากเสียงรบกวนพื้นฐานสูงกว่าระดับเสียงรบกวนขณะปฏิบัติการ

Remark:

1. ระดับเสียงพื้นฐานวัดที่ 23-24 สิงหาคม 2567
2. ระดับเสียงพื้นฐานและระดับเสียงขณะปฏิบัติการ (Sample No.2494233-1) วัดครั้งที่ 23-24 สิงหาคม 2567
3. r/a: ไม่สามารถคำนวณระดับเสียงรบกวนเนื่องจากเสียงรบกวนพื้นฐานสูงกว่าระดับเสียงรบกวนขณะปฏิบัติการ

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Approved by

Kanokorn Anek

Kanokorn Anek
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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219/301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107803-1

Page 1 of 3

Sample No. 2494231-23
Parameter เสียงรบกวน
Location บริเวณพื้นที่โรงงาน (ระยะห่างอาคาร) (GPS 47P 0726066, 1617923)
Measurement Date Aug 24 - Aug 25, 2024
Measurement by Prommee Sripalnet
Sound Level Meter 00572562

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะปฏิบัติการรบกวน	ระดับเสียง (dB(A))		ค่าระดับการรบกวน
			กลางคืน	กลางวัน	
08:00 AM - 09:00 AM	64.1	58.6	-	62.7	7.0
09:00 AM - 10:00 AM	64.4	56.6	-	63.6	9.3
10:00 AM - 11:00 AM	64.4	57.0	-	63.5	8.6
11:00 AM - 12:00 PM	64.0	56.3	-	63.2	9.2
12:00 PM - 01:00 PM	62.6	56.4	-	61.4	7.4
01:00 PM - 02:00 PM	63.4	56.7	-	62.4	7.9
02:00 PM - 03:00 PM	62.3	56.6	-	60.9	6.7
03:00 PM - 04:00 PM	62.2	56.9	-	60.7	6.4
04:00 PM - 05:00 PM	62.9	58.6	-	60.9	4.4
05:00 PM - 06:00 PM	63.3	59.4	-	61.0	3.7
06:00 PM - 07:00 PM	62.8	60.1	-	59.5	1.3
07:00 PM - 08:00 PM	61.5	59.3	-	57.5	0.1
08:00 PM - 09:00 PM	62.0	59.9	-	60.8	6.9
09:00 PM - 10:00 PM	62.4	57.5	-	61.3	8.6
10:00 PM - 10:05 PM	62.4	57.2	-	63.8	7.8
10:05 PM - 10:10 PM	62.2	57.8	-	63.0	6.8
10:10 PM - 10:15 PM	60.8	56.6	-	61.7	5.4
10:15 PM - 10:20 PM	61.5	57.1	-	62.5	7.2
10:20 PM - 10:25 PM	61.8	57.1	-	62.5	8.1
10:25 PM - 10:30 PM	61.5	57.1	-	63.0	7.1
10:30 PM - 10:35 PM	63.4	57.2	-	63.8	9.1
10:35 PM - 10:40 PM	62.8	57.2	-	64.4	9.4
10:40 PM - 10:45 PM	62.9	56.7	-	64.7	9.9
10:45 PM - 10:50 PM	60.8	56.8	-	61.6	6.8
10:50 PM - 10:55 PM	61.2	56.8	-	62.2	8.1
10:55 PM - 11:00 PM	61.6	57.3	-	62.6	7.7
11:00 PM - 11:05 PM	61.1	57.8	-	61.4	5.5
11:05 PM - 11:10 PM	60.3	56.8	-	60.7	6.2
11:10 PM - 11:15 PM	59.9	56.1	-	60.6	6.5
11:15 PM - 11:20 PM	59.5	55.4	-	60.4	6.8
11:20 PM - 11:25 PM	61.2	56.1	-	62.6	8.4
11:25 PM - 11:30 PM	59.3	59.3	-	54.0	-1.6
11:30 PM - 11:35 PM	59.2	61.8	-	58.6	3.5
11:35 PM - 11:40 PM	59.2	57.0	-	58.2	3.5
11:40 PM - 11:45 PM	59.2	55.1	-	60.1	6.6
11:45 PM - 11:50 PM	60.4	56.2	-	61.3	8.1
11:50 PM - 11:55 PM	59.8	55.1	-	61.0	7.6
11:55 PM - 12:00 AM	61.2	55.5	-	62.8	9.5
12:00 AM - 12:05 AM	60.0	54.4	-	61.6	9.7
12:05 AM - 12:10 AM	60.3	55.7	-	61.5	8.5

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Approved by

Kanokkom Anek

Kanokkom Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219/301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107803-1

Page 2 of 3

Sample No. 2494231-23
Parameter เสียงรบกวน
Location บริเวณพื้นที่โรงงาน (ระยะห่างอาคาร) (GPS 47P 0726066, 1617923)
Measurement Date Aug 24 - Aug 25, 2024
Measurement by Prommee Sripalnet
Sound Level Meter 00572562

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะปฏิบัติการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางคืน	กลางวัน		
12:10 AM - 12:15 AM	59.7	55.4	-	60.7	53.2	7.5
12:15 AM - 12:20 AM	61.5	56.2	-	63.0	54.0	9.0
12:20 AM - 12:25 AM	59.5	56.3	-	59.7	54.3	5.4
12:25 AM - 12:30 AM	60.5	56.0	-	61.6	54.2	7.4
12:30 AM - 12:35 AM	59.8	56.5	-	60.1	54.8	5.3
12:35 AM - 12:40 AM	61.0	56.8	-	61.9	54.8	7.1
12:40 AM - 12:45 AM	60.9	56.9	-	61.7	55.2	6.5
12:45 AM - 12:50 AM	60.0	56.9	-	60.1	54.8	5.3
12:50 AM - 12:55 AM	61.0	57.0	-	61.8	54.8	7.0
12:55 AM - 01:00 AM	60.5	57.0	-	60.9	55.0	5.9
01:00 AM - 01:05 AM	59.3	57.4	-	57.8	54.8	3.0
01:05 AM - 01:10 AM	60.9	57.2	-	61.5	55.3	6.2
01:10 AM - 01:15 AM	60.5	57.0	-	60.9	54.7	6.2
01:15 AM - 01:20 AM	60.1	57.1	-	60.1	55.6	4.5
01:20 AM - 01:25 AM	60.0	57.6	-	59.3	56.0	3.3
01:25 AM - 01:30 AM	60.5	56.6	-	61.2	55.1	6.1
01:30 AM - 01:35 AM	60.0	57.1	-	59.9	55.6	4.3
01:35 AM - 01:40 AM	60.3	57.9	-	59.6	56.1	3.5
01:40 AM - 01:45 AM	60.3	57.5	-	60.1	55.7	4.4
01:45 AM - 01:50 AM	59.9	57.8	-	58.7	55.6	2.9
01:50 AM - 01:55 AM	60.4	57.8	-	58.7	56.1	3.8
01:55 AM - 02:00 AM	60.4	58.4	-	59.1	55.7	3.4
02:00 AM - 02:05 AM	60.9	57.7	-	61.1	55.8	5.3
02:05 AM - 02:10 AM	60.4	58.2	-	59.4	55.8	3.6
02:10 AM - 02:15 AM	60.4	58.1	-	59.5	55.2	4.3
02:15 AM - 02:20 AM	60.9	58.9	-	59.6	56.4	3.2
02:20 AM - 02:25 AM	60.8	58.7	-	59.6	56.3	3.3
02:25 AM - 02:30 AM	61.0	58.4	-	60.5	56.7	3.8
02:30 AM - 02:35 AM	60.1	57.8	-	59.2	56.0	3.2
02:35 AM - 02:40 AM	60.9	58.2	-	60.6	55.7	4.9
02:40 AM - 02:45 AM	60.6	57.6	-	60.6	54.9	5.7
02:45 AM - 02:50 AM	59.9	57.9	-	58.6	55.6	3.0
02:50 AM - 02:55 AM	60.1	58.1	-	58.8	55.9	2.9
02:55 AM - 03:00 AM	60.0	58.0	-	58.7	54.8	3.9
03:00 AM - 03:05 AM	61.8	57.8	-	62.6	55.3	7.3
03:05 AM - 03:10 AM	60.5	57.9	-	60.0	55.5	4.5
03:10 AM - 03:15 AM	60.0	57.4	-	59.5	55.6	3.9
03:15 AM - 03:20 AM	60.0	57.4	-	59.5	55.0	4.5
03:20 AM - 03:25 AM	60.3	58.0	-	59.4	55.5	3.9
03:25 AM - 03:30 AM	59.8	57.5	-	58.9	54.8	4.9



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhol, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Sample No. 2494231-23
Parameter เสียงรบกวน
Location บริเวณหน้าโรงงาน (ระบุตำแหน่ง) (GPS 47P 0726066, 1617923)
Measurement Date Aug 24 - Aug 25, 2024
Measurement by Prommee Sripattet
Sound Level Meter 00572562

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107803-1

Page 3 of 3

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นโรงงาน	ค่าระดับการรบกวน
			ค่าจริง	ค่าเฉลี่ย		
03:30 AM - 03:35 AM	60.0	57.9	58.8	58.8	55.4	3.4
03:35 AM - 03:40 AM	60.5	57.1	60.8	60.8	55.2	5.6
03:40 AM - 03:45 AM	60.9	57.7	61.1	61.1	54.8	6.3
03:45 AM - 03:50 AM	60.6	57.1	61.0	61.0	54.9	6.1
03:50 AM - 03:55 AM	60.9	57.1	61.6	61.6	55.3	6.3
03:55 AM - 04:00 AM	61.2	57.9	61.5	61.5	55.6	5.9
04:00 AM - 04:05 AM	60.3	57.8	59.7	59.7	54.9	4.8
04:05 AM - 04:10 AM	61.8	56.9	63.1	63.1	54.6	8.5
04:10 AM - 04:15 AM	62.5	58.0	63.6	63.6	54.9	8.7
04:15 AM - 04:20 AM	60.7	58.5	59.7	59.7	54.0	5.7
04:20 AM - 04:25 AM	61.1	57.0	62.0	62.0	54.5	7.5
04:25 AM - 04:30 AM	59.4	56.7	59.1	59.1	54.4	4.7
04:30 AM - 04:35 AM	59.4	57.4	58.1	58.1	54.2	3.9
04:35 AM - 04:40 AM	59.9	56.6	60.2	60.2	53.7	6.5
04:40 AM - 04:45 AM	62.0	57.1	63.5	63.5	54.1	9.4
04:45 AM - 04:50 AM	60.1	56.5	60.6	60.6	53.9	6.7
04:50 AM - 04:55 AM	61.6	57.3	62.6	62.6	54.2	8.4
04:55 AM - 05:00 AM	60.6	58.9	58.7	58.7	55.7	3.0
05:00 AM - 05:05 AM	60.1	57.2	60.0	60.0	54.3	5.7
05:05 AM - 05:10 AM	60.9	57.3	61.4	61.4	54.7	6.7
05:10 AM - 05:15 AM	61.5	60.3	58.3	58.3	56.0	2.3
05:15 AM - 05:20 AM	59.6	58.4	56.4	56.4	54.9	1.5
05:20 AM - 05:25 AM	62.4	59.6	62.3	62.3	55.1	7.1
05:25 AM - 05:30 AM	60.5	58.8	58.6	58.6	54.8	3.8
05:30 AM - 05:35 AM	60.3	57.8	59.7	59.7	55.5	4.2
05:35 AM - 05:40 AM	62.1	58.0	63.0	63.0	55.0	8.0
05:40 AM - 05:45 AM	61.5	58.6	61.4	61.4	55.4	6.0
05:45 AM - 05:50 AM	59.8	58.3	57.5	57.5	55.4	2.1
05:50 AM - 05:55 AM	59.9	58.4	58.4	58.4	55.4	3.0
05:55 AM - 06:00 AM	60.1	58.7	57.5	57.5	55.9	1.6
06:00 AM - 07:00 AM	61.1	59.0	56.9	56.9	56.4	0.5
07:00 AM - 08:00 AM	61.1	62.3	n/a	n/a	56.7	≤ 10

Reference Method :

1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. มาตรฐานโรงงานอุตสาหกรรม เรื่อง วิธีการวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่ได้จากการประเมินการรบกวน พ.ศ. 2567

หมายเหตุ : 1. ผลการตรวจวัดเสียงรบกวน จะคำนวณค่าเฉลี่ยเสียงรบกวนและระดับเสียงที่ได้จากการประเมินการรบกวน พ.ศ. 2568

2. ผลการตรวจวัดเสียงรบกวนจะแสดงเป็นค่าเฉลี่ยเสียงรบกวนที่ได้จากการประเมินการรบกวน พ.ศ. 2561

Remark :

1. ผลการตรวจวัดเสียงรบกวน จะคำนวณค่าเฉลี่ยเสียงรบกวนและระดับเสียงที่ได้จากการประเมินการรบกวน พ.ศ. 2568

2. ผลการตรวจวัดเสียงรบกวนจะแสดงเป็นค่าเฉลี่ยเสียงรบกวนที่ได้จากการประเมินการรบกวน พ.ศ. 2561

3. ก/ล : ผลการตรวจวัดเสียงรบกวนจะแสดงเป็นค่าเฉลี่ยเสียงรบกวนที่ได้จากการประเมินการรบกวน พ.ศ. 2561

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Approved by

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhol, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Sample No. 2494231-24
Parameter เสียงรบกวน
Location บริเวณหน้าโรงงาน (ระบุตำแหน่ง) (GPS 47P 0726066, 1617923)
Measurement Date Aug 25 - Aug 26, 2024
Measurement by Prommee Sripattet
Sound Level Meter 00572562

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107804-1

Page 1 of 3

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นโรงงาน	ค่าระดับการรบกวน
			ค่าจริง	ค่าเฉลี่ย		
08:00 AM - 09:00 AM	62.1	61.0	55.6	55.6	57.4	-1.8
09:00 AM - 10:00 AM	62.7	56.8	62.7	62.7	54.6	6.8
10:00 AM - 11:00 AM	64.0	56.2	61.4	61.4	54.2	9.0
11:00 AM - 12:00 PM	62.7	59.9	59.5	59.5	55.4	4.1
12:00 PM - 01:00 PM	62.4	56.8	61.0	61.0	54.2	6.8
01:00 PM - 02:00 PM	62.9	56.8	61.7	61.7	54.8	6.9
02:00 PM - 03:00 PM	63.5	56.3	62.6	62.6	54.3	8.3
03:00 PM - 04:00 PM	61.9	57.1	61.0	61.0	55.3	5.7
04:00 PM - 05:00 PM	62.5	57.3	60.9	60.9	55.4	5.5
05:00 PM - 06:00 PM	62.1	57.6	60.2	60.2	55.4	4.8
06:00 PM - 07:00 PM	62.5	57.8	60.7	60.7	55.4	5.3
07:00 PM - 08:00 PM	61.5	57.4	59.4	59.4	55.5	3.9
08:00 PM - 09:00 PM	60.4	59.1	54.5	54.5	56.7	-4.2
09:00 PM - 10:00 PM	59.9	58.5	54.3	54.3	55.9	-1.6
10:00 PM - 10:05 PM	59.8	57.4	-	-	55.2	3.9
10:05 PM - 10:10 PM	60.5	58.5	-	-	59.1	59.1
10:10 PM - 10:15 PM	59.3	56.7	-	-	59.2	59.2
10:15 PM - 10:20 PM	60.0	57.2	-	-	58.8	58.8
10:20 PM - 10:25 PM	59.4	57.1	-	-	55.2	4.6
10:25 PM - 10:30 PM	58.9	55.1	-	-	55.2	3.3
10:30 PM - 10:35 PM	59.9	54.7	-	-	53.0	6.6
10:35 PM - 10:40 PM	59.8	55.3	-	-	61.3	53.1
10:40 PM - 10:45 PM	60.4	54.2	-	-	60.9	7.0
10:45 PM - 10:50 PM	63.6	55.2	-	-	62.2	52.3
10:50 PM - 10:55 PM	62.8	54.5	-	-	65.9	52.6
10:55 PM - 11:00 PM	59.5	54.8	-	-	65.1	52.8
11:00 PM - 11:05 PM	58.5	54.0	-	-	60.7	52.6
11:05 PM - 11:10 PM	59.7	54.9	-	-	51.3	8.3
11:10 PM - 11:15 PM	58.2	54.7	-	-	52.4	8.6
11:15 PM - 11:20 PM	58.9	53.9	-	-	51.7	6.9
11:20 PM - 11:25 PM	58.9	55.3	-	-	51.8	8.4
11:25 PM - 11:30 PM	59.6	56.1	-	-	52.9	6.5
11:30 PM - 11:35 PM	58.3	56.3	-	-	53.7	6.3
11:35 PM - 11:40 PM	57.3	56.5	-	-	53.8	3.2
11:40 PM - 11:45 PM	58.7	56.8	-	-	52.6	-1.8
11:45 PM - 11:50 PM	58.1	57.4	-	-	53.6	3.6
11:50 PM - 11:55 PM	58.8	58.7	-	-	52.8	-2.1
11:55 PM - 12:00 AM	58.8	62.3	-	-	53.9	-4.5
12:00 AM - 12:05 AM	59.6	57.2	-	-	54.4	-
12:05 AM - 12:10 AM	58.3	57.3	-	-	54.6	4.3

Approved by

Kanokorn Anek
Asst. General Manager

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219/301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhohi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107804-1

Sample No. 2494231-24
Parameter Location : Saraburi
Measurement Date : Aug 25 - Aug 26, 2024
Measurement by : Prommee Sripaniet
Sound Level Meter : 00572562

Page 2 of 3

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			ค่าจริง	เสียงขณะไม่มีการรบกวน		
12:10 AM - 12:15 AM	61.8	59.1	-	61.5	56.2	5.3
12:15 AM - 12:20 AM	58.3	58.8	-	n/a	56.9	-
12:20 AM - 12:25 AM	59.3	57.9	-	56.7	55.7	1.0
12:25 AM - 12:30 AM	58.4	57.1	-	55.5	55.0	0.5
12:30 AM - 12:35 AM	58.2	57.9	-	55.4	55.4	-0.0
12:35 AM - 12:40 AM	58.1	56.7	-	55.5	53.6	1.9
12:40 AM - 12:45 AM	59.0	56.6	-	58.3	53.7	4.6
12:45 AM - 12:50 AM	59.3	56.5	-	59.1	54.4	4.9
12:50 AM - 12:55 AM	59.1	57.1	-	57.8	53.9	5.2
12:55 AM - 01:00 AM	59.6	56.9	-	59.3	54.3	5.0
01:00 AM - 01:05 AM	60.9	56.6	-	61.9	53.9	8.0
01:05 AM - 01:10 AM	60.0	57.1	-	59.9	54.2	5.7
01:10 AM - 01:15 AM	59.6	56.8	-	59.4	54.0	5.4
01:15 AM - 01:20 AM	60.3	58.1	-	59.3	55.2	4.1
01:20 AM - 01:25 AM	59.6	57.2	-	58.9	54.2	4.7
01:25 AM - 01:30 AM	60.1	56.3	-	60.8	54.1	6.7
01:30 AM - 01:35 AM	60.7	56.5	-	61.6	54.2	7.4
01:35 AM - 01:40 AM	60.3	57.3	-	60.3	54.6	5.7
01:40 AM - 01:45 AM	60.2	56.9	-	60.5	54.4	6.1
01:45 AM - 01:50 AM	60.4	57.7	-	60.1	54.7	5.4
01:50 AM - 01:55 AM	60.7	57.3	-	61.0	54.0	7.0
01:55 AM - 02:00 AM	60.9	58.1	-	60.7	55.1	5.6
02:00 AM - 02:05 AM	61.0	57.3	-	61.6	54.5	7.1
02:05 AM - 02:10 AM	60.0	57.2	-	59.8	54.5	5.3
02:10 AM - 02:15 AM	61.2	58.6	-	62.2	54.7	7.5
02:15 AM - 02:20 AM	61.2	56.8	-	58.7	55.6	3.1
02:20 AM - 02:25 AM	60.2	58.3	-	58.9	54.2	4.7
02:25 AM - 02:30 AM	59.5	57.0	-	60.2	53.6	6.6
02:30 AM - 02:35 AM	59.7	56.1	-	58.9	55.4	-0.4
02:35 AM - 02:40 AM	59.3	58.4	-	55.0	54.4	3.3
02:40 AM - 02:45 AM	59.4	57.6	-	57.7	54.1	4.0
02:45 AM - 02:50 AM	59.3	57.2	-	58.1	54.1	4.0
02:50 AM - 02:55 AM	59.1	55.9	-	59.3	53.5	5.6
02:55 AM - 03:00 AM	59.5	56.5	-	59.5	54.1	5.4
03:00 AM - 03:05 AM	59.8	57.4	-	59.1	55.4	3.7
03:05 AM - 03:10 AM	59.3	57.3	-	58.0	55.5	2.5
03:10 AM - 03:15 AM	59.1	58.0	-	55.6	55.4	0.2
03:15 AM - 03:20 AM	59.0	56.9	-	56.9	54.2	2.7
03:20 AM - 03:25 AM	59.5	56.9	-	59.0	54.8	4.2
03:25 AM - 03:30 AM	59.7	57.2	-	59.1	54.7	4.4

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Approved by
Kanokkorn Anek
Asst. General Manager

Kanokkorn Anek

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RIGHT SOLUTIONS HIGHLY PRACTICE



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219/301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhohi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107804-1

Sample No. 2494231-24
Parameter Location : Saraburi
Measurement Date : Aug 25 - Aug 26, 2024
Measurement by : Prommee Sripaniet
Sound Level Meter : 00572562

Page 3 of 3

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			ค่าจริง	เสียงขณะไม่มีการรบกวน		
03:30 AM - 03:35 AM	60.0	57.6	-	59.3	54.4	4.9
03:35 AM - 03:40 AM	59.7	57.1	-	59.2	54.9	4.3
03:40 AM - 03:45 AM	59.9	56.5	-	60.2	54.5	5.7
03:45 AM - 03:50 AM	61.5	57.5	-	61.3	54.8	7.5
03:50 AM - 03:55 AM	60.9	57.4	-	61.3	54.8	6.5
03:55 AM - 04:00 AM	60.3	56.7	-	59.3	54.4	6.4
04:00 AM - 04:05 AM	59.2	57.6	-	59.3	54.7	4.6
04:05 AM - 04:10 AM	59.2	57.0	-	58.2	54.5	3.7
04:10 AM - 04:15 AM	59.9	57.8	-	58.7	55.3	3.4
04:15 AM - 04:20 AM	59.5	57.8	-	57.6	55.0	2.6
04:20 AM - 04:25 AM	60.2	57.6	-	58.4	54.6	5.1
04:25 AM - 04:30 AM	59.3	57.0	-	58.4	54.3	4.1
04:30 AM - 04:35 AM	59.5	56.6	-	59.4	54.2	5.2
04:35 AM - 04:40 AM	60.7	56.7	-	61.5	54.1	7.4
04:40 AM - 04:45 AM	60.2	55.1	-	61.6	52.3	9.3
04:45 AM - 04:50 AM	60.7	55.2	-	60.4	53.2	9.1
04:50 AM - 04:55 AM	59.9	56.3	-	61.7	54.6	5.8
04:55 AM - 05:00 AM	61.2	57.6	-	58.7	55.1	8.1
05:00 AM - 05:05 AM	60.4	55.8	-	61.6	54.2	7.5
05:05 AM - 05:10 AM	60.2	58.3	-	59.3	53.5	3.6
05:10 AM - 05:15 AM	59.9	57.4	-	60.2	54.9	4.4
05:15 AM - 05:20 AM	59.9	56.5	-	60.2	54.8	5.4
05:20 AM - 05:25 AM	60.3	56.0	-	61.6	54.4	6.9
05:25 AM - 05:30 AM	61.4	56.9	-	62.3	54.8	5.8
05:30 AM - 05:35 AM	61.4	57.3	-	64.5	55.5	6.8
05:35 AM - 05:40 AM	61.5	55.8	-	62.9	54.2	10.3
05:40 AM - 05:45 AM	61.5	56.4	-	63.2	54.3	8.6
05:45 AM - 05:50 AM	60.7	55.2	-	60.7	53.2	9.1
05:50 AM - 05:55 AM	61.6	56.0	-	60.7	54.3	8.9
05:55 AM - 06:00 AM	60.8	57.9	-	60.7	55.6	5.1
06:00 AM - 07:00 AM	62.0	57.3	60.2	-	54.9	5.3
07:00 AM - 08:00 AM	61.9	57.3	60.1	-	55.2	≤ 10

ค่ามาตรฐาน

Reference Method : STM 06-001 based on ISO 1996-1 : 2016

- In-house method : 1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
- ประกาศกรมอุตุนิยมวิทยา เรื่อง ค่ามาตรฐานเสียงขณะไม่มีการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

หมายเหตุ

- ประกาศกรมอุตุนิยมวิทยา เรื่อง ค่ามาตรฐานเสียงขณะไม่มีการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548
- ประกาศกรมอุตุนิยมวิทยา เรื่อง ค่ามาตรฐานเสียงขณะไม่มีการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2561

Remarks:

- ระดับเสียงขณะไม่มีการรบกวน ค่ามาตรฐาน 55-57 dB(A) (Sample No. 2494231-24)
- ระดับเสียงขณะไม่มีการรบกวน ค่ามาตรฐาน 55-57 dB(A) (Sample No. 2494231-24)
- หมายเหตุ : ค่ามาตรฐานเสียงขณะไม่มีการรบกวน ค่ามาตรฐาน 55-57 dB(A) (Sample No. 2494231-24)

The above results are valid only for the specified method and conditions. No part of this report or its contents may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) Ltd. strongly recommends that its report is not reproduced except in full.

Approved by
Kanokkorn Anek
Asst. General Manager

Kanokkorn Anek

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

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RIGHT SOLUTIONS HIGHLY PRACTICE



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhohi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107805-1

Page 1 of 3

Sample No. 2494231-25
Parameter เลือกรบกวน
Location รังสีจากแท่งโสราน (ระบบอัตโนมัติ) (GPS 47P 0726066, 1617923)
Measurement Date Aug 26 - Aug 27, 2024
Measurement by Prommee Sirapahet
Sound Level Meter 00572562

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่ารวมการรบกวน
			ค่าจริง	ค่าเฉลี่ย		
08:00 AM - 09:00 AM	61.0	56.7	59.0	-	57.4	1.6
09:00 AM - 10:00 AM	62.0	60.6	60.6	-	54.0	6.6
10:00 AM - 11:00 AM	62.6	56.5	61.4	-	54.1	7.3
11:00 AM - 12:00 PM	61.9	57.1	60.2	-	53.7	6.5
12:00 PM - 01:00 PM	61.8	59.6	57.8	-	53.8	4.0
01:00 PM - 02:00 PM	61.6	56.4	60.0	-	54.3	5.7
02:00 PM - 03:00 PM	64.0	57.2	63.0	-	54.7	8.3
03:00 PM - 04:00 PM	61.9	56.8	60.3	-	54.5	5.8
04:00 PM - 05:00 PM	62.8	57.5	61.3	-	54.3	6.0
05:00 PM - 06:00 PM	62.6	58.5	60.5	-	56.3	4.0
06:00 PM - 07:00 PM	63.3	58.9	61.3	-	56.7	4.6
07:00 PM - 08:00 PM	62.9	59.6	60.2	-	57.3	2.9
08:00 PM - 09:00 PM	62.4	59.3	59.5	-	57.0	2.5
09:00 PM - 10:00 PM	62.6	58.8	60.3	-	56.5	3.8
10:00 PM - 10:05 PM	62.8	58.5	-	63.8	56.1	7.7
10:05 PM - 10:10 PM	63.0	57.9	-	64.4	56.1	8.3
10:10 PM - 10:15 PM	62.1	59.2	-	62.0	56.7	5.3
10:15 PM - 10:20 PM	62.5	60.2	-	61.6	57.7	3.9
10:20 PM - 10:25 PM	62.6	58.9	-	63.2	56.8	6.4
10:25 PM - 10:30 PM	61.9	59.0	-	61.8	56.5	5.3
10:30 PM - 10:35 PM	61.0	57.8	-	61.2	55.7	5.5
10:35 PM - 10:40 PM	60.7	57.7	-	60.7	55.8	4.9
10:40 PM - 10:45 PM	61.7	57.0	-	62.9	55.4	7.5
10:45 PM - 10:50 PM	62.4	58.0	-	63.4	56.4	7.0
10:50 PM - 10:55 PM	61.4	58.2	-	61.6	55.4	6.2
10:55 PM - 11:00 PM	59.6	65.6	-	n/a	54.7	-
11:00 PM - 11:05 PM	61.3	58.3	-	61.3	56.5	4.8
11:05 PM - 11:10 PM	61.6	58.9	-	61.3	55.8	5.5
11:10 PM - 11:15 PM	60.3	57.7	-	59.8	56.2	3.6
11:15 PM - 11:20 PM	60.2	60.0	-	49.7	57.3	7.6
11:20 PM - 11:25 PM	60.8	59.1	-	58.9	57.4	1.5
11:25 PM - 11:30 PM	60.9	58.3	-	60.4	56.6	3.8
11:30 PM - 11:35 PM	60.3	57.4	-	60.2	55.3	4.9
11:35 PM - 11:40 PM	61.8	57.6	-	62.7	55.5	7.2
11:40 PM - 11:45 PM	60.2	58.0	-	59.2	56.0	3.2
11:45 PM - 11:50 PM	59.5	58.5	-	55.6	56.3	-0.7
11:50 PM - 11:55 PM	59.1	55.1	-	59.9	52.4	7.5
11:55 PM - 12:00 AM	58.2	54.5	-	58.8	52.6	6.2
12:00 AM - 12:05 AM	60.1	54.4	-	61.7	52.3	9.4
12:05 AM - 12:10 AM	59.5	55.3	-	60.4	53.3	7.1

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Approved by
Kanokkorn Anek
Asst. General Manager

Kanokkorn Anek

Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhohi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107805-1

Page 2 of 3

Sample No. 2494231-25
Parameter เลือกรบกวน
Location รังสีจากแท่งโสราน (ระบบอัตโนมัติ) (GPS 47P 0726066, 1617923)
Measurement Date Aug 26 - Aug 27, 2024
Measurement by Prommee Sirapahet
Sound Level Meter 00572562

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่ารวมการรบกวน
			ค่าจริง	ค่าเฉลี่ย		
12:10 AM - 12:15 AM	61.1	55.5	-	62.7	53.2	9.5
12:15 AM - 12:20 AM	60.4	55.5	-	61.7	52.5	9.2
12:20 AM - 12:25 AM	61.1	54.6	-	63.0	52.6	10.4
12:25 AM - 12:30 AM	61.8	53.8	-	64.1	51.6	12.5
12:30 AM - 12:35 AM	61.1	54.2	-	63.1	52.1	11.0
12:35 AM - 12:40 AM	60.4	55.3	-	61.8	51.7	10.1
12:40 AM - 12:45 AM	61.9	54.7	-	64.0	52.3	11.7
12:45 AM - 12:50 AM	62.6	55.1	-	64.7	52.7	12.0
12:50 AM - 12:55 AM	60.1	53.7	-	62.0	51.7	10.3
12:55 AM - 01:00 AM	58.7	54.9	-	59.4	52.7	6.7
01:00 AM - 01:05 AM	59.7	54.6	-	61.0	52.1	8.9
01:05 AM - 01:10 AM	60.4	54.1	-	62.2	51.6	10.6
01:10 AM - 01:15 AM	59.9	54.8	-	61.3	51.4	9.9
01:15 AM - 01:20 AM	61.4	55.8	-	63.0	53.4	9.6
01:20 AM - 01:25 AM	62.0	55.5	-	63.9	53.2	10.7
01:25 AM - 01:30 AM	60.1	54.6	-	61.7	52.1	9.6
01:30 AM - 01:35 AM	60.9	54.2	-	62.9	52.4	10.5
01:35 AM - 01:40 AM	61.2	54.6	-	63.1	52.7	10.4
01:40 AM - 01:45 AM	60.8	54.6	-	62.6	52.6	10.0
01:45 AM - 01:50 AM	62.2	54.9	-	64.3	52.7	11.6
01:50 AM - 01:55 AM	61.1	54.5	-	63.0	52.2	10.8
01:55 AM - 02:00 AM	60.4	55.1	-	61.9	52.6	9.3
02:00 AM - 02:05 AM	61.6	55.7	-	63.3	52.4	10.9
02:05 AM - 02:10 AM	61.1	54.1	-	63.1	52.1	11.0
02:10 AM - 02:15 AM	64.2	54.8	-	66.7	51.9	14.8
02:15 AM - 02:20 AM	62.8	55.1	-	65.0	52.7	12.3
02:20 AM - 02:25 AM	62.2	54.4	-	64.4	52.1	12.3
02:25 AM - 02:30 AM	62.6	54.3	-	64.9	52.1	12.8
02:30 AM - 02:35 AM	61.2	54.5	-	63.2	52.1	11.1
02:35 AM - 02:40 AM	60.1	54.0	-	61.9	51.4	10.5
02:40 AM - 02:45 AM	61.6	53.0	-	64.0	51.2	12.8
02:45 AM - 02:50 AM	62.1	53.1	-	64.9	51.2	13.3
02:50 AM - 02:55 AM	61.7	53.8	-	63.9	51.4	12.5
02:55 AM - 03:00 AM	60.4	52.8	-	62.6	50.4	12.2
03:00 AM - 03:05 AM	59.7	53.9	-	61.4	51.1	10.3
03:05 AM - 03:10 AM	61.0	53.7	-	63.1	51.9	11.2
03:10 AM - 03:15 AM	62.0	55.1	-	64.0	50.9	13.1
03:15 AM - 03:20 AM	60.1	55.1	-	61.4	52.3	9.1
03:20 AM - 03:25 AM	61.2	55.5	-	62.8	53.1	9.7
03:25 AM - 03:30 AM	61.0	54.6	-	62.9	52.4	10.5

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Approved by
Kanokkorn Anek
Asst. General Manager

Kanokkorn Anek

Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhloi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107806-1

Page 2 of 3

Sample No. 2494231-26
Parameter เสียงรบกวน
Location ริมถนนหน้าโรงงาน (ระนาบในแนว) (GPS 47P 0726066, 1617923)
Measurement Date Aug 27 - Aug 28, 2024
Measurement by Prommee Sipatnet
Sound Level Meter 00572562

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะปฏิบัติการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			ค่าจริง	ค่าเฉลี่ย		
12:10 AM - 12:15 AM	59.9	57.7	58.9	-	54.4	4.5
12:15 AM - 12:20 AM	62.1	57.7	63.1	-	53.9	9.2
12:20 AM - 12:25 AM	59.3	67.5	67.5	-	54.8	-
12:25 AM - 12:30 AM	59.2	65.0	67.5	-	58.9	-
12:30 AM - 12:35 AM	60.7	59.8	56.4	-	53.6	2.8
12:35 AM - 12:40 AM	59.1	56.2	59.0	-	53.8	5.2
12:40 AM - 12:45 AM	59.2	55.5	59.8	-	53.5	6.3
12:45 AM - 12:50 AM	61.3	57.4	62.0	-	54.9	7.1
12:50 AM - 12:55 AM	61.4	58.9	60.8	-	56.0	4.8
12:55 AM - 01:00 AM	61.9	58.7	62.1	-	56.6	5.5
01:00 AM - 01:05 AM	61.2	57.5	61.8	-	55.3	6.5
01:05 AM - 01:10 AM	61.7	57.6	62.6	-	54.7	7.9
01:10 AM - 01:15 AM	59.8	57.4	62.1	-	55.0	4.1
01:15 AM - 01:20 AM	61.4	57.5	62.1	-	54.6	7.5
01:20 AM - 01:25 AM	60.5	57.1	60.8	-	54.9	5.9
01:25 AM - 01:30 AM	62.4	56.3	64.2	-	53.5	10.7
01:30 AM - 01:35 AM	60.6	54.3	62.4	-	52.4	10.0
01:35 AM - 01:40 AM	59.4	56.1	59.7	-	53.4	6.3
01:40 AM - 01:45 AM	59.7	55.2	60.8	-	52.4	8.4
01:45 AM - 01:50 AM	61.2	60.6	55.3	-	51.9	3.4
01:50 AM - 01:55 AM	61.3	60.4	57.0	-	54.1	2.9
01:55 AM - 02:00 AM	64.1	55.6	66.4	-	52.8	13.6
02:00 AM - 02:05 AM	63.6	69.0	64.2	-	54.6	-
02:05 AM - 02:10 AM	60.9	63.2	61.4	-	53.8	-
02:10 AM - 02:15 AM	61.2	55.2	61.4	-	52.4	-
02:15 AM - 02:20 AM	60.8	55.2	62.4	-	52.7	9.7
02:20 AM - 02:25 AM	62.9	53.8	65.0	-	53.3	11.7
02:25 AM - 02:30 AM	63.7	56.5	65.8	-	53.8	12.0
02:30 AM - 02:35 AM	60.9	55.9	62.2	-	53.7	8.5
02:35 AM - 02:40 AM	60.2	57.9	59.3	-	55.3	4.0
02:40 AM - 02:45 AM	60.8	57.1	61.4	-	53.7	7.7
02:45 AM - 02:50 AM	62.0	57.3	63.2	-	54.5	8.7
02:50 AM - 02:55 AM	62.2	56.2	63.9	-	53.8	10.1
02:55 AM - 03:00 AM	61.4	56.3	62.8	-	53.7	9.1
03:00 AM - 03:05 AM	61.7	57.1	62.9	-	54.3	8.6
03:05 AM - 03:10 AM	60.1	56.8	60.8	-	54.0	6.8
03:10 AM - 03:15 AM	61.2	56.2	62.2	-	54.6	7.6
03:15 AM - 03:20 AM	61.2	57.0	62.1	-	53.8	8.3
03:20 AM - 03:25 AM	61.5	57.1	62.5	-	54.8	7.7
03:25 AM - 03:30 AM	61.4	56.7	62.6	-	54.2	8.4

The above results are valid only for the analyzed material (sample) as indicated in the report. The results are not valid for other materials or conditions without written consent from the Laboratory. ALS Laboratory Group (Thailand) Ltd. does not recommend that this report is not reproduced except in full.

Approved by

Kanokkom Anek

Asst. General Manager

Kanokkom Anek

Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhloi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107806-1

Page 3 of 3

Sample No. 2494231-26
Parameter เสียงรบกวน
Location ริมถนนหน้าโรงงาน (ระนาบในแนว) (GPS 47P 0726066, 1617923)
Measurement Date Aug 27 - Aug 28, 2024
Measurement by Prommee Sipatnet
Sound Level Meter 00572562

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะปฏิบัติการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			ค่าจริง	ค่าเฉลี่ย		
03:30 AM - 03:35 AM	60.8	56.8	-	-	54.4	7.2
03:35 AM - 03:40 AM	60.2	57.1	-	-	54.6	5.7
03:40 AM - 03:45 AM	61.1	57.2	-	-	54.8	7.3
03:45 AM - 03:50 AM	61.5	56.8	-	-	54.3	8.4
03:50 AM - 03:55 AM	61.7	55.5	-	-	52.4	11.1
03:55 AM - 04:00 AM	61.3	56.3	-	-	53.0	9.6
04:00 AM - 04:05 AM	60.7	56.8	-	-	53.4	8.0
04:05 AM - 04:10 AM	60.1	56.3	-	-	53.0	7.8
04:10 AM - 04:15 AM	59.5	56.3	-	-	52.9	6.8
04:15 AM - 04:20 AM	61.0	56.6	-	-	53.9	8.1
04:20 AM - 04:25 AM	61.0	56.2	-	-	53.0	9.3
04:25 AM - 04:30 AM	60.3	55.7	-	-	53.5	8.0
04:30 AM - 04:35 AM	60.4	55.9	-	-	52.9	8.6
04:35 AM - 04:40 AM	60.6	56.6	-	-	53.1	8.3
04:40 AM - 04:45 AM	59.9	58.2	-	-	54.9	3.1
04:45 AM - 04:50 AM	59.9	57.1	-	-	54.2	5.5
04:50 AM - 04:55 AM	59.7	57.3	-	-	55.1	3.9
04:55 AM - 05:00 AM	59.0	56.5	-	-	53.8	4.6
05:00 AM - 05:05 AM	60.0	56.7	-	-	53.5	6.8
05:05 AM - 05:10 AM	60.7	55.7	-	-	53.1	8.9
05:10 AM - 05:15 AM	61.2	55.7	-	-	52.8	9.6
05:15 AM - 05:20 AM	60.6	56.8	-	-	53.2	7.7
05:20 AM - 05:25 AM	63.1	57.3	-	-	53.6	10.3
05:25 AM - 05:30 AM	63.0	56.4	-	-	54.5	10.7
05:30 AM - 05:35 AM	61.4	58.4	-	-	54.2	6.1
05:35 AM - 05:40 AM	60.9	58.4	-	-	54.6	5.7
05:40 AM - 05:45 AM	60.2	56.0	-	-	52.5	8.6
05:45 AM - 05:50 AM	60.5	56.1	-	-	53.6	7.9
05:50 AM - 05:55 AM	60.7	56.8	-	-	54.1	7.3
05:55 AM - 06:00 AM	60.6	57.3	-	-	53.3	7.6
06:00 AM - 07:00 AM	61.5	60.4	55.0	-	54.9	0.1
07:00 AM - 08:00 AM	61.3	61.3	61.3	61.3	57.8	5.10

Reference Method :

- In-house method : STM 06-001 based on ISO 1996-1 : 2016
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง วิธีการวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่ได้จากการรบกวนการรบกวน พ.ศ. 2567

หมายเหตุ

- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง กำหนดค่ามาตรฐานเสียงระดับเสียงที่ได้จากการรบกวนการรบกวน พ.ศ. 2548
- ประกาศกรมโรงงานอุตสาหกรรม เรื่อง กำหนดค่ามาตรฐานเสียงระดับเสียงที่ได้จากการรบกวนการรบกวน พ.ศ. 2561

Remark:

- ระดับเสียงจากแหล่งกำเนิด ที่ทำการวัด ณ วันที่ 27-28 สิงหาคม 2567
- ระดับเสียงที่วัดและระดับเสียงขณะปฏิบัติการรบกวน (Sample No. 2494231-5) พบว่าระดับเสียงที่วัดได้เกินค่ามาตรฐาน พ.ศ. 2561
- หมายเหตุ: ไม่สามารถวัดระดับเสียงขณะปฏิบัติการรบกวนได้เนื่องจากระดับเสียงจากแหล่งกำเนิดเกินค่ามาตรฐานเสียงขณะปฏิบัติการรบกวน

The above results are valid only for the analyzed material (sample) as indicated in the report. The results are not valid for other materials or conditions without written consent from the Laboratory. ALS Laboratory Group (Thailand) Ltd. does not recommend that this report is not reproduced except in full.

Approved by

Kanokkom Anek

Asst. General Manager

Kanokkom Anek

Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99/219/301 Moo 9,5/5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhoh, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107807-1

Page 1 of 3

Sample No. 2494231-27
Parameter เสียงรบกวน
Location โรงคัดแยกปูนซีเมนต์ (รวมสถานีตรวจ) (GPS 47P 0726066, 1617923)
Measurement Date Aug 28 - Aug 29, 2024
Measurement by Prommee Sripradnet
Sound Level Meter 00572562

เวลา	ระดับเสียง (dB(A))			ค่าระดับการรบกวน
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน	
08:00 AM - 09:00 AM	62.2	56.2	60.9	6.9
09:00 AM - 10:00 AM	62.7	56.1	61.6	7.9
10:00 AM - 11:00 AM	62.9	56.1	61.9	8.0
11:00 AM - 12:00 PM	63.2	56.6	61.4	7.3
12:00 PM - 01:00 PM	61.9	56.8	60.3	6.1
01:00 PM - 02:00 PM	62.0	56.9	60.4	5.5
02:00 PM - 03:00 PM	62.9	57.2	61.5	6.4
03:00 PM - 04:00 PM	61.3	57.7	58.8	3.6
04:00 PM - 05:00 PM	62.4	57.7	60.6	6.1
05:00 PM - 06:00 PM	63.6	58.4	62.0	6.2
06:00 PM - 07:00 PM	63.7	59.4	61.7	6.7
07:00 PM - 08:00 PM	62.9	57.9	61.2	6.3
08:00 PM - 09:00 PM	62.5	56.4	61.3	7.0
09:00 PM - 10:00 PM	62.2	56.6	60.8	6.4
10:00 PM - 10:05 PM	62.7	62.1	56.8	1.3
10:05 PM - 10:10 PM	62.9	58.7	56.1	7.7
10:10 PM - 10:15 PM	61.5	59.7	56.4	3.4
10:15 PM - 10:20 PM	64.3	59.2	57.3	8.4
10:20 PM - 10:25 PM	63.9	58.5	57.1	8.3
10:25 PM - 10:30 PM	61.5	58.1	56.4	5.4
10:30 PM - 10:35 PM	62.0	57.1	55.2	8.1
10:35 PM - 10:40 PM	62.2	57.3	55.2	8.8
10:40 PM - 10:45 PM	60.0	55.9	54.5	6.4
10:45 PM - 10:50 PM	61.5	55.7	53.9	9.3
10:50 PM - 10:55 PM	60.3	56.0	53.7	7.6
10:55 PM - 11:00 PM	60.8	56.4	54.4	7.4
11:00 PM - 11:05 PM	60.3	55.8	53.5	7.9
11:05 PM - 11:10 PM	59.8	56.5	54.0	6.1
11:10 PM - 11:15 PM	65.0	55.9	54.0	13.4
11:15 PM - 11:20 PM	60.4	56.4	53.1	8.0
11:20 PM - 11:25 PM	60.1	56.0	53.9	7.7
11:25 PM - 11:30 PM	60.2	56.6	54.1	6.6
11:30 PM - 11:35 PM	60.3	56.8	54.5	6.2
11:35 PM - 11:40 PM	60.8	55.8	53.4	8.7
11:40 PM - 11:45 PM	61.1	55.8	53.5	9.1
11:45 PM - 11:50 PM	61.8	55.4	52.4	11.3
11:50 PM - 12:00 AM	59.4	55.4	53.3	6.9
12:00 AM - 12:05 AM	59.6	56.4	53.8	6.0
12:05 AM - 12:10 AM	60.1	56.1	53.8	7.1

The above results are valid only for the analytical method specified in the standard.
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Approved by

Kanokkorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99/219/301 Moo 9,5/5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhoh, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107807-1

Page 2 of 3

Sample No. 2494231-27
Parameter เสียงรบกวน
Location โรงคัดแยกปูนซีเมนต์ (รวมสถานีตรวจ) (GPS 47P 0726066, 1617923)
Measurement Date Aug 28 - Aug 29, 2024
Measurement by Prommee Sripradnet
Sound Level Meter 00572562

เวลา	ระดับเสียง (dB(A))			ค่าระดับการรบกวน
	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	เสียงขณะมีการรบกวน	
12:10 AM - 12:15 AM	58.8	55.9	58.7	5.2
12:15 AM - 12:20 AM	59.4	55.2	60.3	7.4
12:20 AM - 12:25 AM	61.1	55.8	62.6	8.7
12:25 AM - 12:30 AM	61.0	55.8	62.4	9.3
12:30 AM - 12:35 AM	59.4	56.4	59.4	5.5
12:35 AM - 12:40 AM	59.0	56.0	59.0	5.7
12:40 AM - 12:45 AM	59.2	55.0	60.1	7.4
12:45 AM - 12:50 AM	57.6	55.9	55.7	2.1
12:50 AM - 12:55 AM	58.3	56.6	56.4	2.5
12:55 AM - 01:00 AM	59.2	57.1	58.0	3.6
01:00 AM - 01:05 AM	60.8	56.6	61.7	7.5
01:05 AM - 01:10 AM	60.9	55.6	62.4	9.5
01:10 AM - 01:15 AM	61.3	55.7	62.9	9.4
01:15 AM - 01:20 AM	60.6	55.8	61.9	8.3
01:20 AM - 01:25 AM	61.2	55.4	62.9	9.5
01:25 AM - 01:30 AM	60.0	55.6	61.0	7.0
01:30 AM - 01:35 AM	60.4	57.4	60.3	5.2
01:35 AM - 01:40 AM	61.8	57.1	62.8	8.1
01:40 AM - 01:45 AM	61.9	57.1	63.2	8.4
01:45 AM - 01:50 AM	60.6	57.3	60.9	7.0
01:50 AM - 01:55 AM	62.0	57.7	63.0	7.3
01:55 AM - 02:00 AM	60.5	56.4	61.4	7.5
02:00 AM - 02:05 AM	61.0	56.5	62.1	7.8
02:05 AM - 02:10 AM	62.9	56.5	64.8	9.9
02:10 AM - 02:15 AM	61.2	55.8	62.7	9.0
02:15 AM - 02:20 AM	60.7	56.8	61.4	6.6
02:20 AM - 02:25 AM	60.5	57.3	60.7	6.0
02:25 AM - 02:30 AM	61.3	57.7	61.8	5.4
02:30 AM - 02:35 AM	60.7	56.9	61.4	5.4
02:35 AM - 02:40 AM	60.9	56.0	62.2	7.9
02:40 AM - 02:45 AM	60.8	56.1	62.0	8.0
02:45 AM - 02:50 AM	61.6	55.1	63.5	11.0
02:50 AM - 02:55 AM	64.0	55.6	66.3	12.8
02:55 AM - 03:00 AM	61.8	56.1	63.4	10.4
03:00 AM - 03:05 AM	60.8	56.8	61.6	7.8
03:05 AM - 03:10 AM	60.0	55.7	61.0	5.3
03:10 AM - 03:15 AM	60.2	56.8	60.5	6.7
03:15 AM - 03:20 AM	60.1	56.1	60.9	7.1
03:20 AM - 03:25 AM	60.3	56.2	61.2	8.2
03:25 AM - 03:30 AM	60.5	55.6	61.8	9.1

The above results are valid only for the analytical method specified in the standard.
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Approved by

Kanokkorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kanchhol, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107807-1

Page 3 of 3

Sample No. 2494231-27
Parameter เสียงรบกวน
Location ไร่หินปูนโรงงาน (ระแวกเนินทราย) (GPS 47P 0726066, 1617923)
Measurement Date Aug 28 - Aug 29, 2024
Measurement by Prommee Sipatnet
Sound Level Meter 00572562

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			ค่าจริง	ค่าเฉลี่ย		
03:30 AM - 03:35 AM	59.5	55.5	-	60.3	53.3	7.0
03:35 AM - 03:40 AM	59.8	55.5	-	60.8	55.1	7.7
03:40 AM - 03:45 AM	59.4	55.6	-	60.1	53.0	7.1
03:45 AM - 03:50 AM	59.5	55.5	-	60.3	53.4	6.9
03:50 AM - 03:55 AM	60.6	56.3	-	61.6	53.3	8.3
03:55 AM - 04:00 AM	61.3	56.9	-	62.3	53.4	8.9
04:00 AM - 04:05 AM	59.9	56.4	-	60.3	53.1	7.2
04:05 AM - 04:10 AM	59.6	56.1	-	60.0	53.4	6.6
04:10 AM - 04:15 AM	59.9	56.2	-	60.5	53.8	6.7
04:15 AM - 04:20 AM	60.6	56.7	-	62.4	52.8	9.6
04:20 AM - 04:25 AM	60.6	55.7	-	61.9	53.6	8.3
04:25 AM - 04:30 AM	61.9	55.6	-	63.7	53.4	10.3
04:30 AM - 04:35 AM	59.8	55.0	-	61.1	53.2	7.9
04:35 AM - 04:40 AM	59.7	55.2	-	60.8	53.3	7.5
04:40 AM - 04:45 AM	60.4	55.2	-	61.8	53.0	8.8
04:45 AM - 04:50 AM	60.9	55.0	-	62.6	53.0	9.6
04:50 AM - 04:55 AM	62.6	55.3	-	64.7	53.2	11.5
04:55 AM - 05:00 AM	59.7	55.8	-	60.4	52.8	7.6
05:00 AM - 05:05 AM	60.0	55.5	-	61.1	53.0	8.1
05:05 AM - 05:10 AM	59.4	54.6	-	60.7	52.6	8.1
05:10 AM - 05:15 AM	59.5	55.1	-	60.5	52.8	7.7
05:15 AM - 05:20 AM	61.2	55.7	-	62.8	53.5	9.3
05:20 AM - 05:25 AM	61.6	55.6	-	63.3	53.1	10.2
05:25 AM - 05:30 AM	61.1	55.9	-	62.5	53.5	9.0
05:30 AM - 05:35 AM	61.8	56.4	-	63.3	53.8	9.5
05:35 AM - 05:40 AM	60.9	57.2	-	61.5	54.6	6.9
05:40 AM - 05:45 AM	63.1	56.7	-	65.0	54.1	10.9
05:45 AM - 05:50 AM	62.1	57.7	-	63.1	54.7	8.4
05:50 AM - 05:55 AM	60.8	57.1	-	61.4	54.8	6.6
05:55 AM - 06:00 AM	61.2	57.5	-	61.8	54.5	7.3
06:00 AM - 07:00 AM	62.0	57.8	59.9	-	55.4	4.5
07:00 AM - 08:00 AM	61.7	61.4	49.9	-	56.8	5.0

Reference Method :

1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดในการการรบกวนการโรงงาน พ.ศ. 2567

หมายเหตุ : 1. ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดในการการรบกวนการโรงงาน พ.ศ. 2567

2. ประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่อาจก่อให้เกิดผลกระทบต่อสุขภาพของประชาชน พ.ศ. 2548

3. ประกาศกระทรวงสาธารณสุข เรื่อง กำหนดค่ามาตรฐานและค่าพิกัดเสียงจากการประกอบกิจการในสิ่งแวดล้อม พ.ศ. 2561

Remark : 1. ระดับเสียงจากแหล่งกำเนิด ที่ทำการวัด วันที่ 28-29 สิงหาคม 2567

2. ระดับเสียงพื้นฐานและระดับเสียงการรบกวน (Sample No. 2494231-27) วันที่ 28-29 สิงหาคม 2567

3. หมายเหตุ : ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดในการการรบกวนการโรงงาน พ.ศ. 2567

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Approved by
Kankom Anek
Asst. General Manager

Signature

Approved by

Kankom Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kanchhol, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107808-1

Page 1 of 3

Sample No. 2494231-28
Parameter เสียงรบกวน
Location ไร่หินปูนโรงงาน (ระแวกเนินทราย) (GPS 47P 0726066, 1617923)
Measurement Date Aug 29 - Aug 30, 2024
Measurement by Prommee Sipatnet
Sound Level Meter 00572562

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			ค่าจริง	ค่าเฉลี่ย		
08:00 AM - 09:00 AM	62.7	61.0	57.8	-	54.0	3.8
09:00 AM - 10:00 AM	64.0	56.6	63.1	-	53.7	9.4
10:00 AM - 11:00 AM	62.7	58.1	60.9	-	53.9	7.0
11:00 AM - 12:00 PM	62.8	56.0	61.8	-	54.1	7.7
12:00 PM - 01:00 PM	62.5	55.8	61.5	-	54.2	7.3
01:00 PM - 02:00 PM	64.5	59.8	62.7	-	54.9	7.8
02:00 PM - 03:00 PM	69.3	62.6	68.3	-	55.1	13.2
03:00 PM - 04:00 PM	62.5	58.2	60.5	-	55.2	5.3
04:00 PM - 05:00 PM	63.1	57.6	61.7	-	54.5	7.2
05:00 PM - 06:00 PM	63.6	59.2	62.6	-	55.8	5.8
06:00 PM - 07:00 PM	62.2	56.9	60.7	-	54.9	7.8
07:00 PM - 08:00 PM	61.8	56.2	60.4	-	54.3	6.1
08:00 PM - 09:00 PM	61.9	56.4	60.5	-	54.4	6.1
09:00 PM - 10:00 PM	62.0	57.1	-	63.3	55.5	7.8
10:00 PM - 10:10 PM	61.0	57.4	-	61.5	56.1	5.4
10:10 PM - 10:15 PM	63.0	57.8	-	61.4	56.4	8.0
10:15 PM - 10:20 PM	61.4	58.4	-	61.4	57.3	4.1
10:20 PM - 10:25 PM	61.9	58.1	-	61.5	57.1	4.7
10:25 PM - 10:30 PM	61.9	57.8	-	61.8	56.4	6.4
10:30 PM - 10:35 PM	60.6	56.6	-	61.4	55.2	6.2
10:35 PM - 10:40 PM	65.1	57.7	-	62.2	54.7	12.5
10:40 PM - 10:45 PM	61.7	57.6	-	62.6	54.5	8.1
10:45 PM - 10:50 PM	61.6	57.5	-	62.5	53.9	8.6
10:50 PM - 10:55 PM	60.4	57.2	-	60.6	53.7	6.9
10:55 PM - 11:00 PM	60.0	57.6	-	59.3	54.4	4.9
11:00 PM - 11:05 PM	62.4	58.2	-	63.3	53.5	9.8
11:05 PM - 11:10 PM	60.8	57.8	-	60.8	54.0	6.8
11:10 PM - 11:15 PM	59.6	56.2	-	59.9	54.0	5.9
11:15 PM - 11:20 PM	60.5	56.7	-	61.2	53.1	8.1
11:20 PM - 11:25 PM	60.4	56.1	-	61.4	53.5	7.9
11:25 PM - 11:30 PM	61.1	57.2	-	61.8	53.9	7.9
11:30 PM - 11:35 PM	60.1	55.7	-	61.1	54.1	7.0
11:35 PM - 11:40 PM	59.9	56.8	-	60.0	54.5	5.5
11:40 PM - 11:45 PM	61.1	57.3	-	61.8	53.4	8.4
11:45 PM - 11:50 PM	59.1	57.7	-	56.5	53.5	3.0
11:50 PM - 11:55 PM	59.9	58.4	-	57.6	52.4	5.2
11:55 PM - 12:00 AM	60.1	57.1	-	60.1	53.3	6.8
12:00 AM - 12:05 AM	60.7	57.1	-	61.2	53.8	7.4
12:05 AM - 12:10 AM	60.8	58.3	-	60.2	53.8	6.4

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Approved by

Kankom Anek
Asst. General Manager

Signature



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99/219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoh, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107808-1

Page 2 of 3

Sample No. 2494231-28
Parameter เสียงรบกวน
Location บริเวณหน้าโรงงาน (ระหว่างถนน) (GPS 47P 0726066, 1617923)
Measurement Date Aug 29 - Aug 30, 2024
Measurement by Prommee Sripalnet
Sound Level Meter 00572562

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางคืน	กลางวัน		
12:10 AM - 12:15 AM	62.8	57.5	64.3	-	53.5	10.8
12:15 AM - 12:20 AM	60.6	55.4	62.0	-	52.9	9.1
12:20 AM - 12:25 AM	59.0	54.5	60.1	-	53.9	6.2
12:25 AM - 12:30 AM	59.4	54.7	60.6	-	53.1	7.5
12:30 AM - 12:35 AM	58.9	54.4	60.0	-	53.9	6.1
12:35 AM - 12:40 AM	60.0	54.3	61.6	-	53.3	8.3
12:40 AM - 12:45 AM	58.6	55.2	58.9	-	52.7	6.2
12:45 AM - 12:50 AM	59.9	55.9	60.2	-	53.6	5.3
12:50 AM - 12:55 AM	59.2	54.8	60.2	-	53.9	6.3
12:55 AM - 01:00 AM	60.0	55.0	61.3	-	54.4	6.9
01:00 AM - 01:05 AM	62.1	54.5	64.3	-	54.2	10.1
01:05 AM - 01:10 AM	61.0	53.4	63.2	-	52.9	10.3
01:10 AM - 01:15 AM	59.5	53.5	61.2	-	53.5	7.7
01:15 AM - 01:20 AM	59.7	53.5	61.5	-	53.6	7.9
01:20 AM - 01:25 AM	60.7	54.3	62.6	-	53.4	9.2
01:25 AM - 01:30 AM	62.2	55.2	64.2	-	54.0	10.2
01:30 AM - 01:35 AM	63.0	55.8	65.1	-	54.2	10.9
01:35 AM - 01:40 AM	63.3	63.7	n/a	-	54.7	-
01:40 AM - 01:45 AM	60.3	64.1	n/a	-	54.8	-
01:45 AM - 01:50 AM	60.7	61.1	n/a	-	53.9	-
01:50 AM - 01:55 AM	60.5	58.3	59.5	-	55.7	3.8
01:55 AM - 02:00 AM	61.7	63.6	55.4	-	53.9	-
02:00 AM - 02:05 AM	60.7	60.0	55.4	-	54.3	1.1
02:05 AM - 02:10 AM	61.1	59.2	59.6	-	54.9	4.7
02:10 AM - 02:15 AM	60.5	66.4	n/a	-	53.7	-
02:15 AM - 02:20 AM	62.3	59.9	61.6	-	54.8	6.8
02:20 AM - 02:25 AM	60.3	59.4	56.0	-	54.7	1.3
02:25 AM - 02:30 AM	60.0	57.2	61.5	-	55.4	4.4
02:30 AM - 02:35 AM	60.2	55.2	62.0	-	54.3	7.1
02:35 AM - 02:40 AM	60.8	54.5	62.7	-	54.0	8.7
02:40 AM - 02:45 AM	61.5	54.9	63.4	-	52.5	10.9
02:45 AM - 02:50 AM	61.6	54.8	63.6	-	53.5	10.1
02:50 AM - 03:00 AM	62.2	55.1	64.3	-	53.0	11.3
03:00 AM - 03:05 AM	63.2	54.3	65.6	-	53.8	11.8
03:05 AM - 03:10 AM	60.9	55.5	62.4	-	53.1	9.3
03:10 AM - 03:15 AM	60.3	55.2	61.7	-	53.8	7.9
03:15 AM - 03:20 AM	59.9	54.9	61.2	-	53.8	7.4
03:20 AM - 03:25 AM	60.1	56.1	60.9	-	53.0	7.9
03:25 AM - 03:30 AM	59.7	55.0	60.9	-	52.7	8.2

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Approved by

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99/219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoh, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494231
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report Number : 3107808-1

Page 3 of 3

Sample No. 2494231-28
Parameter เสียงรบกวน
Location บริเวณหน้าโรงงาน (ระหว่างถนน) (GPS 47P 0726066, 1617923)
Measurement Date Aug 29 - Aug 30, 2024
Measurement by Prommee Sripalnet
Sound Level Meter 00572562

เวลา	เสียงจากแหล่งกำเนิด	เสียงขณะไม่มีการรบกวน	ระดับเสียง (dB(A))		เสียงพื้นฐาน	ค่าระดับการรบกวน
			กลางคืน	กลางวัน		
03:30 AM - 03:35 AM	59.8	54.4	-	61.3	53.3	8.0
03:35 AM - 03:40 AM	60.9	56.7	-	61.8	53.1	8.7
03:40 AM - 03:45 AM	60.2	56.2	-	61.0	53.0	8.0
03:45 AM - 03:50 AM	60.5	55.3	-	61.9	53.4	8.5
03:50 AM - 03:55 AM	61.4	55.3	-	63.2	53.3	9.9
03:55 AM - 04:00 AM	60.3	56.6	-	60.9	53.4	7.5
04:00 AM - 04:05 AM	61.1	55.9	-	62.5	53.1	9.4
04:05 AM - 04:10 AM	60.5	55.6	-	61.8	53.4	8.4
04:10 AM - 04:15 AM	60.3	56.0	-	61.3	53.8	7.5
04:15 AM - 04:20 AM	59.4	55.4	-	61.7	52.8	8.9
04:20 AM - 04:25 AM	59.9	55.1	-	61.2	53.6	7.6
04:25 AM - 04:30 AM	61.3	55.6	-	62.9	53.4	9.5
04:30 AM - 04:35 AM	60.0	55.5	-	61.1	53.2	7.9
04:35 AM - 04:40 AM	60.3	54.8	-	61.9	53.3	8.6
04:40 AM - 04:45 AM	60.4	54.6	-	62.1	53.0	9.1
04:45 AM - 04:50 AM	61.1	55.7	-	62.6	53.0	9.6
04:50 AM - 04:55 AM	60.6	55.9	-	61.8	53.2	8.6
04:55 AM - 05:00 AM	60.3	56.2	-	61.2	52.8	8.4
05:00 AM - 05:05 AM	61.2	55.0	-	63.0	53.0	10.0
05:05 AM - 05:10 AM	60.0	55.6	-	61.0	52.6	8.4
05:10 AM - 05:15 AM	60.4	55.8	-	61.6	52.8	8.8
05:15 AM - 05:20 AM	60.1	55.8	-	61.1	53.5	7.6
05:20 AM - 05:25 AM	61.0	56.5	-	62.1	53.1	9.0
05:25 AM - 05:30 AM	60.9	56.5	-	61.9	53.5	8.4
05:30 AM - 05:35 AM	61.1	57.4	-	61.7	53.8	7.9
05:35 AM - 05:40 AM	61.1	57.0	-	62.0	54.6	7.4
05:40 AM - 05:45 AM	61.3	57.8	-	61.7	54.7	7.6
05:45 AM - 05:50 AM	60.4	57.8	-	59.9	54.7	5.2
05:50 AM - 05:55 AM	62.4	57.6	-	63.7	54.8	8.9
05:55 AM - 06:00 AM	61.7	58.9	-	61.5	54.5	7.0
06:00 AM - 07:00 AM	62.7	58.2	60.8	-	55.4	5.4
07:00 AM - 08:00 AM	62.0	57.5	60.1	-	56.8	3.3
ค่าเฉลี่ย						≤ 10

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประกาศกระทรวงมหาดไทย เรื่อง วิธีการวัดระดับเสียงการรบกวน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2567

หมายเหตุ
1. ประกาศกระทรวงมหาดไทย เรื่อง กำหนดค่าระดับเสียงการรบกวนและระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

2. ประกาศกระทรวงมหาดไทย เรื่อง กำหนดค่ามาตรฐานเสียงที่เกิดจากการประกอบกิจการที่มีอันตรายต่อสุขภาพ พ.ศ. 2561

Remark:
1. ระดับเสียงจากแหล่งกำเนิด ช่วงเวลาวัด วันที่ 29-30 สิงหาคม 2567

2. ระดับเสียงพื้นฐานและระดับเสียงขณะไม่มีการรบกวน (Sample No. 2494233-7) วัดเวลาวัด วันที่ 29-30 สิงหาคม 2567

3. หมายเหตุ: ค่าระดับเสียงการรบกวนที่เกินจากค่ามาตรฐานที่กำหนดในประกาศกระทรวงมหาดไทยฉบับนี้ จะไม่มีการคำนวณค่าเฉลี่ย

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Approved by

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107822-1

Page 1 of 3

Sample No. : 2494233-1
Parameter : Noise
Location : หมู่บ้าน (บ้าน) (GPS 47P 0726183, 1617728) (Shut down)
Measurement Date : Aug 23 - Aug 24, 2024
Measurement by : Prommee Sripanet
Sound Level Meter : 623382

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	57.3	79.2	53.7
09:00 AM - 10:00 AM	56.4	75.0	54.4
10:00 AM - 11:00 AM	56.2	72.4	53.8
11:00 AM - 12:00 PM	56.9	70.7	54.6
12:00 PM - 01:00 PM	56.0	75.1	53.7
01:00 PM - 02:00 PM	56.1	69.8	54.0
02:00 PM - 03:00 PM	56.8	75.9	54.5
03:00 PM - 04:00 PM	56.8	74.2	54.4
04:00 PM - 05:00 PM	57.9	70.7	56.1
05:00 PM - 06:00 PM	59.7	72.4	57.9
06:00 PM - 07:00 PM	59.7	74.6	57.7
07:00 PM - 08:00 PM	60.0	76.4	58.0
08:00 PM - 09:00 PM	59.5	71.7	57.5
09:00 PM - 10:00 PM	59.5	70.2	57.4
10:00 PM - 10:05 PM	60.1	66.1	57.6
10:05 PM - 10:10 PM	59.1	72.1	57.3
10:10 PM - 10:15 PM	58.8	67.3	56.5
10:15 PM - 10:20 PM	59.2	66.5	57.7
10:20 PM - 10:25 PM	59.1	65.2	57.1
10:25 PM - 10:30 PM	59.8	66.6	57.3
10:30 PM - 10:35 PM	58.7	66.1	56.4
10:35 PM - 10:40 PM	56.3	61.4	54.2
10:40 PM - 10:45 PM	55.8	63.0	53.8
10:45 PM - 10:50 PM	55.6	61.0	54.2
10:50 PM - 10:55 PM	56.1	62.9	53.7
10:55 PM - 11:00 PM	56.3	62.8	54.0
11:00 PM - 11:05 PM	57.6	61.6	55.6
11:05 PM - 11:10 PM	57.9	69.0	54.7
11:10 PM - 11:15 PM	56.7	63.9	54.7
11:15 PM - 11:20 PM	56.6	59.9	55.0
11:20 PM - 11:25 PM	56.9	63.7	54.4
11:25 PM - 11:30 PM	58.1	64.8	56.1
11:30 PM - 11:35 PM	56.1	64.7	53.4
11:35 PM - 11:40 PM	57.2	64.8	54.1
11:40 PM - 11:45 PM	58.0	67.6	55.1
11:45 PM - 11:50 PM	56.8	63.0	54.6
11:50 PM - 11:55 PM	56.1	61.5	53.6
11:55 PM - 12:00 AM	56.6	64.7	52.8
12:00 AM - 12:05 AM	57.4	64.3	54.7
12:05 AM - 12:10 AM	59.0	65.7	56.2

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Approved by

Kanokorn Anek
Asst. General Manager

Kanokorn Anek



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107822-1

Page 2 of 3

Sample No. : 2494233-1
Parameter : Noise
Location : หมู่บ้าน (บ้าน) (GPS 47P 0726183, 1617728) (Shut down)
Measurement Date : Aug 23 - Aug 24, 2024
Measurement by : Prommee Sripanet
Sound Level Meter : 623382

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:10 AM - 12:15 AM	58.5	64.8	56.6
12:15 AM - 12:20 AM	58.0	67.0	55.6
12:20 AM - 12:25 AM	56.8	63.9	55.2
12:25 AM - 12:30 AM	57.3	62.3	54.8
12:30 AM - 12:35 AM	57.1	64.9	54.0
12:35 AM - 12:40 AM	56.2	62.2	54.3
12:40 AM - 12:45 AM	56.8	62.4	54.4
12:45 AM - 12:50 AM	57.9	64.2	54.2
12:50 AM - 12:55 AM	57.9	69.8	54.7
12:55 AM - 01:00 AM	56.1	62.1	54.0
01:00 AM - 01:05 AM	55.5	61.2	52.7
01:05 AM - 01:10 AM	56.4	63.5	54.4
01:10 AM - 01:15 AM	56.2	63.0	53.5
01:15 AM - 01:20 AM	55.8	60.7	53.6
01:20 AM - 01:25 AM	55.2	63.3	53.0
01:25 AM - 01:30 AM	55.5	62.7	53.6
01:30 AM - 01:35 AM	54.9	64.6	53.8
01:35 AM - 01:40 AM	55.2	62.2	53.1
01:40 AM - 01:45 AM	55.1	62.0	53.2
01:45 AM - 01:50 AM	55.3	74.6	53.0
01:50 AM - 01:55 AM	54.9	58.8	53.2
01:55 AM - 02:00 AM	55.6	65.1	53.5
02:00 AM - 02:05 AM	55.1	60.7	53.1
02:05 AM - 02:10 AM	55.0	67.1	52.3
02:10 AM - 02:15 AM	54.9	61.4	52.9
02:15 AM - 02:20 AM	55.2	59.2	52.9
02:20 AM - 02:25 AM	55.5	61.8	53.4
02:25 AM - 02:30 AM	56.0	61.9	53.2
02:30 AM - 02:35 AM	55.6	62.3	53.2
02:35 AM - 02:40 AM	55.7	62.8	53.0
02:40 AM - 02:45 AM	55.2	61.9	53.3
02:45 AM - 02:50 AM	56.2	65.4	53.7
02:50 AM - 02:55 AM	55.1	61.5	52.9
02:55 AM - 03:00 AM	55.1	61.0	52.8
03:00 AM - 03:05 AM	56.1	66.5	53.6
03:05 AM - 03:10 AM	54.6	60.9	52.6
03:10 AM - 03:15 AM	54.7	60.3	52.7
03:15 AM - 03:20 AM	58.4	70.4	52.9
03:20 AM - 03:25 AM	56.6	70.7	52.0
03:25 AM - 03:30 AM	56.7	71.1	52.8

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Approved by

Kanokorn Anek
Asst. General Manager

Kanokorn Anek



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kengkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received :Sep 04, 2024
Date Reported :Sep 11, 2024
Report No. : 3107822-1

Page 3 of 3

Sample No. 2494233-1
Parameter Noise
Location บ้านสวนป่า (ใกล้บ่อ) (GPS 47P 0726183, 1617728) (Shut down)
Measurement Date Aug 23 - Aug 24, 2024
Measurement by Prommee Sripaniet
Sound Level Meter 623382

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:30 AM - 03:35 AM	56.9	71.6	53.6
03:35 AM - 03:40 AM	56.2	64.9	53.4
03:40 AM - 03:45 AM	56.9	64.8	54.1
03:45 AM - 03:50 AM	56.4	65.7	53.3
03:50 AM - 03:55 AM	56.5	67.4	53.1
03:55 AM - 04:00 AM	56.8	68.5	52.9
04:00 AM - 04:05 AM	55.7	69.0	53.8
04:05 AM - 04:10 AM	56.9	70.6	54.0
04:10 AM - 04:15 AM	56.8	66.7	54.8
04:15 AM - 04:20 AM	57.4	67.2	54.7
04:20 AM - 04:25 AM	57.2	65.6	54.3
04:25 AM - 04:30 AM	56.8	67.4	54.6
04:30 AM - 04:35 AM	57.0	71.0	54.5
04:35 AM - 04:40 AM	57.6	72.7	54.9
04:40 AM - 04:45 AM	57.6	69.0	55.4
04:45 AM - 04:50 AM	58.3	65.7	55.2
04:50 AM - 04:55 AM	57.9	68.2	55.0
04:55 AM - 05:00 AM	58.1	68.4	55.6
05:00 AM - 05:05 AM	58.0	68.0	55.5
05:05 AM - 05:10 AM	57.9	65.8	54.8
05:10 AM - 05:15 AM	58.6	67.4	56.2
05:15 AM - 05:20 AM	58.2	66.2	56.0
05:20 AM - 05:25 AM	57.4	66.9	54.8
05:25 AM - 05:30 AM	58.0	66.3	55.3
05:30 AM - 05:35 AM	58.3	64.8	55.5
05:35 AM - 05:40 AM	58.6	66.6	55.6
05:40 AM - 05:45 AM	58.9	68.9	55.8
05:45 AM - 05:50 AM	58.6	68.0	56.1
05:50 AM - 05:55 AM	58.4	66.8	55.9
05:55 AM - 06:00 AM	59.2	71.0	56.5
06:00 AM - 07:00 AM	60.0	73.0	57.6
07:00 AM - 08:00 AM	59.4	72.6	57.2

Reference Method :

1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. วิธีการวัดและประเมินค่าเสียงตามระบบเสียงวัด 24 ชั่วโมง และระดับเสียงเฉลี่ยค่าการถ่วงระดับการถ่วงตามมาตรฐาน พ.ร.บ. 2567

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Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager

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Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kengkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received :Sep 04, 2024
Date Reported :Sep 11, 2024
Report No. : 3107823-1

Page 1 of 3

Sample No. 2494233-2
Parameter Noise
Location บ้านสวนป่า (ใกล้บ่อ) (GPS 47P 0726183, 1617728) (Shut down)
Measurement Date Aug 24 - Aug 25, 2024
Measurement by Prommee Sripaniet
Sound Level Meter 623382

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	58.6	79.6	55.7
09:00 AM - 10:00 AM	56.6	76.6	54.3
10:00 AM - 11:00 AM	57.0	76.0	54.9
11:00 AM - 12:00 PM	56.3	74.8	54.0
12:00 PM - 01:00 PM	56.4	71.5	54.0
01:00 PM - 02:00 PM	56.7	73.1	54.2
02:00 PM - 03:00 PM	56.6	70.2	54.2
03:00 PM - 04:00 PM	56.9	73.8	54.6
04:00 PM - 05:00 PM	58.6	79.0	56.5
05:00 PM - 06:00 PM	59.4	77.4	57.3
06:00 PM - 07:00 PM	60.1	76.0	58.2
07:00 PM - 08:00 PM	59.3	73.9	57.4
08:00 PM - 09:00 PM	55.9	72.3	53.9
09:00 PM - 10:00 PM	57.5	83.8	54.4
10:00 PM - 10:05 PM	57.2	78.4	55.2
10:05 PM - 10:10 PM	57.8	66.9	55.4
10:10 PM - 10:15 PM	58.0	67.6	56.2
10:15 PM - 10:20 PM	56.6	62.9	54.5
10:20 PM - 10:25 PM	57.1	64.2	55.4
10:25 PM - 10:30 PM	57.2	66.8	54.9
10:30 PM - 10:35 PM	57.2	63.6	54.7
10:35 PM - 10:40 PM	57.2	69.3	55.0
10:40 PM - 10:45 PM	56.7	60.9	54.8
10:45 PM - 10:50 PM	56.8	64.8	54.8
10:50 PM - 10:55 PM	56.8	67.4	54.1
10:55 PM - 11:00 PM	57.3	63.3	54.9
11:00 PM - 11:05 PM	57.8	64.8	55.9
11:05 PM - 11:10 PM	56.8	66.7	54.5
11:10 PM - 11:15 PM	56.1	64.3	54.1
11:15 PM - 11:20 PM	55.4	61.8	53.6
11:20 PM - 11:25 PM	56.1	76.0	54.2
11:25 PM - 11:30 PM	59.3	81.5	55.6
11:30 PM - 11:35 PM	61.8	88.3	55.6
11:35 PM - 11:40 PM	57.0	76.3	54.7
11:40 PM - 11:45 PM	55.1	59.6	53.5
11:45 PM - 11:50 PM	56.2	71.0	53.2
11:50 PM - 11:55 PM	55.1	63.8	53.4
11:55 PM - 12:00 AM	55.5	61.1	53.3
12:00 AM - 12:05 AM	54.4	58.3	51.9
12:05 AM - 12:10 AM	55.7	63.3	53.0



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kengkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3.107823-1

Page 2 of 3

Sample No. 2494233-2
Parameter Noise
Location บ้านสวนปรีดา (จ.สุพรรณบุรี) (GPS 47P 0726183, 1617728) (Shut down)
Measurement Date Aug 24 - Aug 25, 2024
Measurement by Prommee Sripatnet
Sound Level Meter 623382

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:10 AM - 12:15 AM	55.4	59.4	53.2
12:15 AM - 12:20 AM	56.2	63.0	54.0
12:20 AM - 12:25 AM	56.3	63.7	54.3
12:25 AM - 12:30 AM	56.0	60.6	54.2
12:30 AM - 12:35 AM	56.5	63.7	54.8
12:35 AM - 12:40 AM	56.8	63.2	54.8
12:40 AM - 12:45 AM	56.5	61.6	55.2
12:45 AM - 12:50 AM	56.9	62.7	54.8
12:50 AM - 12:55 AM	57.0	62.0	54.8
12:55 AM - 01:00 AM	57.0	62.0	55.0
01:00 AM - 01:05 AM	57.4	62.3	54.8
01:05 AM - 01:10 AM	57.2	63.0	55.3
01:10 AM - 01:15 AM	57.0	67.5	54.7
01:15 AM - 01:20 AM	57.1	63.5	55.6
01:20 AM - 01:25 AM	57.6	62.7	56.0
01:25 AM - 01:30 AM	56.6	61.9	55.1
01:30 AM - 01:35 AM	57.1	63.5	55.6
01:35 AM - 01:40 AM	57.9	64.0	56.1
01:40 AM - 01:45 AM	57.5	62.3	55.7
01:45 AM - 01:50 AM	57.8	67.6	55.8
01:50 AM - 01:55 AM	57.8	64.6	56.1
01:55 AM - 02:00 AM	58.4	63.7	55.7
02:00 AM - 02:05 AM	57.7	63.2	55.8
02:05 AM - 02:10 AM	58.2	64.1	55.8
02:10 AM - 02:15 AM	58.1	68.9	55.2
02:15 AM - 02:20 AM	58.9	63.7	56.4
02:20 AM - 02:25 AM	58.7	64.8	56.3
02:25 AM - 02:30 AM	58.4	68.5	56.7
02:30 AM - 02:35 AM	57.8	64.5	56.0
02:35 AM - 02:40 AM	58.2	67.6	55.7
02:40 AM - 02:45 AM	57.6	63.3	54.9
02:45 AM - 02:50 AM	57.9	68.3	55.6
02:50 AM - 02:55 AM	58.1	62.6	55.9
02:55 AM - 03:00 AM	58.0	63.3	54.8
03:00 AM - 03:05 AM	57.8	63.3	55.3
03:05 AM - 03:10 AM	57.9	65.6	55.5
03:10 AM - 03:15 AM	57.4	62.5	55.6
03:15 AM - 03:20 AM	57.4	70.4	55.0
03:20 AM - 03:25 AM	58.0	65.2	55.5
03:25 AM - 03:30 AM	57.5	65.1	54.9

The above results are valid only for the equipment/parameter name(s) as indicated in the report. Any other use of the results without written consent from the Laboratory, ALS Laboratory Group (Thailand) Ltd., is not recommended. This report is not reproduced except in full.

Approved by

Kat-An

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kengkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3.107823-1

Page 3 of 3

Sample No. 2494233-2
Parameter Noise
Location บ้านสวนปรีดา (จ.สุพรรณบุรี) (GPS 47P 0726183, 1617728) (Shut down)
Measurement Date Aug 24 - Aug 25, 2024
Measurement by Prommee Sripatnet
Sound Level Meter 623382

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:30 AM - 03:35 AM	57.9	69.3	55.4
03:35 AM - 03:40 AM	57.1	63.8	55.2
03:40 AM - 03:45 AM	57.7	70.3	54.8
03:45 AM - 03:50 AM	57.1	67.0	54.9
03:50 AM - 03:55 AM	57.1	66.1	55.3
03:55 AM - 04:00 AM	57.9	69.2	55.6
04:00 AM - 04:05 AM	57.8	69.9	54.9
04:05 AM - 04:10 AM	56.9	69.7	54.6
04:10 AM - 04:15 AM	58.0	74.0	54.9
04:15 AM - 04:20 AM	58.5	70.5	54.0
04:20 AM - 04:25 AM	57.0	68.0	54.5
04:25 AM - 04:30 AM	56.7	66.9	54.2
04:30 AM - 04:35 AM	57.4	67.5	54.2
04:35 AM - 04:40 AM	56.6	66.7	53.7
04:40 AM - 04:45 AM	56.7	61.8	54.1
04:45 AM - 04:50 AM	56.5	64.0	53.9
04:50 AM - 04:55 AM	57.3	65.3	54.2
04:55 AM - 05:00 AM	58.9	67.6	55.7
05:00 AM - 05:05 AM	57.2	65.8	54.3
05:05 AM - 05:10 AM	57.3	66.8	54.7
05:10 AM - 05:15 AM	60.3	75.4	56.0
05:15 AM - 05:20 AM	58.4	68.5	54.9
05:20 AM - 05:25 AM	59.6	73.4	55.1
05:25 AM - 05:30 AM	58.8	75.9	54.8
05:30 AM - 05:35 AM	57.8	67.0	55.5
05:35 AM - 05:40 AM	59.0	68.1	55.0
05:40 AM - 05:45 AM	58.6	66.9	55.4
05:45 AM - 05:50 AM	58.3	67.9	55.4
05:50 AM - 05:55 AM	58.0	66.2	55.4
05:55 AM - 06:00 AM	58.7	68.1	55.9
06:00 AM - 07:00 AM	59.0	72.3	56.4
07:00 AM - 08:00 AM	62.3	80.7	56.7

Reference Method :

- In-house method : STM 06-001 based on ISO 1996-1 : 2016
- In-house method : ใช้วิธีการวัดระดับเสียงตามมาตรฐานฉบับของอุตสาหกรรม และระดับเสียงสูง/ต่ำจากการแปลผลตามพ.ร.บ. 2567

The above results are valid only for the equipment/parameter name(s) as indicated in the report. Any other use of the results without written consent from the Laboratory, ALS Laboratory Group (Thailand) Ltd., is not recommended. This report is not reproduced except in full.

Approved by

Kat-An

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhloi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107824-1

Page 1 of 3

Sample No. 2494233-3
Parameter Noise
Location บ้านสวนดอกไม้ (จันทนา) (GPS 47P 0726183, 1617728) (Shut down)
Measurement Date Aug 25 - Aug 26, 2024
Measurement by Prommee Siripatnet
Sound Level Meter 623382

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	61.0	73.5	57.4
09:00 AM - 10:00 AM	56.8	74.9	54.6
10:00 AM - 11:00 AM	56.2	68.5	54.2
11:00 AM - 12:00 PM	59.9	85.7	55.4
12:00 PM - 01:00 PM	56.8	78.0	54.2
01:00 PM - 02:00 PM	56.8	71.9	54.8
02:00 PM - 03:00 PM	56.3	69.4	54.3
03:00 PM - 04:00 PM	57.1	69.8	55.3
04:00 PM - 05:00 PM	57.3	72.7	55.4
05:00 PM - 06:00 PM	57.6	74.9	55.4
06:00 PM - 07:00 PM	57.8	78.8	55.4
07:00 PM - 08:00 PM	57.4	74.1	55.5
08:00 PM - 09:00 PM	59.1	68.9	56.7
09:00 PM - 10:00 PM	58.5	79.7	55.9
10:00 PM - 10:05 PM	57.4	75.9	55.2
10:05 PM - 10:10 PM	58.5	77.9	55.2
10:10 PM - 10:15 PM	56.7	61.7	54.5
10:15 PM - 10:20 PM	62.5	62.5	55.2
10:20 PM - 10:25 PM	57.1	63.4	55.2
10:25 PM - 10:30 PM	55.1	59.0	53.0
10:30 PM - 10:35 PM	54.7	59.9	53.1
10:35 PM - 10:40 PM	55.3	59.4	53.9
10:40 PM - 10:45 PM	54.2	59.4	52.3
10:45 PM - 10:50 PM	55.2	73.2	52.6
10:50 PM - 10:55 PM	54.5	67.1	52.8
10:55 PM - 11:00 PM	54.8	63.5	52.6
11:00 PM - 11:05 PM	54.0	67.9	51.3
11:05 PM - 11:10 PM	54.9	65.5	52.4
11:10 PM - 11:15 PM	54.7	61.2	51.7
11:15 PM - 11:20 PM	53.9	58.4	51.8
11:20 PM - 11:25 PM	55.3	62.6	52.9
11:25 PM - 11:30 PM	56.1	66.3	53.7
11:30 PM - 11:35 PM	56.3	61.6	53.8
11:35 PM - 11:40 PM	56.5	66.0	54.4
11:40 PM - 11:45 PM	56.8	65.4	53.6
11:45 PM - 11:50 PM	57.4	62.3	54.9
11:50 PM - 11:55 PM	58.7	74.6	53.9
11:55 PM - 12:00 AM	62.3	75.6	54.4
12:00 AM - 12:05 AM	57.2	62.2	54.6
12:05 AM - 12:10 AM	57.3	62.3	55.2

The above results are valid only for the indicated period (24 hours) and are not intended to be used for any other purpose. The results are based on the data collected during the measurement period and are not intended to be used for any other purpose.

Approved by

Kate Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhloi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107824-1

Page 2 of 3

Sample No. 2494233-3
Parameter Noise
Location บ้านสวนดอกไม้ (จันทนา) (GPS 47P 0726183, 1617728) (Shut down)
Measurement Date Aug 25 - Aug 26, 2024
Measurement by Prommee Siripatnet
Sound Level Meter 623382

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:10 AM - 12:15 AM	59.1	72.2	56.2
12:15 AM - 12:20 AM	58.8	65.6	56.9
12:20 AM - 12:25 AM	57.9	63.2	55.7
12:25 AM - 12:30 AM	57.1	64.2	55.0
12:30 AM - 12:35 AM	57.9	67.2	55.4
12:35 AM - 12:40 AM	56.7	63.4	53.6
12:40 AM - 12:45 AM	56.6	63.3	53.7
12:45 AM - 12:50 AM	56.5	60.2	54.4
12:50 AM - 12:55 AM	57.1	64.2	53.9
12:55 AM - 01:00 AM	56.9	66.5	54.3
01:00 AM - 01:05 AM	56.6	60.9	53.9
01:05 AM - 01:10 AM	57.1	64.4	54.2
01:10 AM - 01:15 AM	56.8	62.0	54.0
01:15 AM - 01:20 AM	58.1	65.1	55.2
01:20 AM - 01:25 AM	57.2	63.0	54.2
01:25 AM - 01:30 AM	56.3	61.1	54.1
01:30 AM - 01:35 AM	56.5	63.9	54.2
01:35 AM - 01:40 AM	57.3	63.3	54.6
01:40 AM - 01:45 AM	56.9	62.1	54.4
01:45 AM - 01:50 AM	57.7	66.2	54.7
01:50 AM - 01:55 AM	57.3	65.3	54.0
01:55 AM - 02:00 AM	58.1	63.3	55.1
02:00 AM - 02:05 AM	57.3	69.5	54.5
02:05 AM - 02:10 AM	57.2	65.8	54.5
02:10 AM - 02:15 AM	58.6	79.0	55.5
02:15 AM - 02:20 AM	56.8	63.6	54.7
02:20 AM - 02:25 AM	58.3	77.6	55.6
02:25 AM - 02:30 AM	57.0	64.5	54.2
02:30 AM - 02:35 AM	56.1	63.4	53.6
02:35 AM - 02:40 AM	58.4	65.9	55.4
02:40 AM - 02:45 AM	57.6	63.3	54.4
02:45 AM - 02:50 AM	57.2	64.0	54.1
02:50 AM - 02:55 AM	55.9	63.0	53.5
02:55 AM - 03:00 AM	56.5	61.6	54.1
03:00 AM - 03:05 AM	57.4	63.8	55.4
03:05 AM - 03:10 AM	57.3	65.3	55.5
03:10 AM - 03:15 AM	58.0	67.5	55.4
03:15 AM - 03:20 AM	57.4	65.4	54.2
03:20 AM - 03:25 AM	56.9	66.5	54.8
03:25 AM - 03:30 AM	57.2	67.5	54.7

The above results are valid only for the indicated period (24 hours) and are not intended to be used for any other purpose. The results are based on the data collected during the measurement period and are not intended to be used for any other purpose.

Approved by

Kate Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kengkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107824-1

Page 3 of 3

Sample No. 2494233-3
Parameter Noise
Location ทุ่งนาบ้านคู (ทุ่งนาบ้านคู) (GPS 47P 0726183, 1617728) (Shut down)
Measurement Date Aug 25 - Aug 26, 2024
Measurement by Prommee Sripanet
Sound Level Meter 623382

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:30 AM - 03:35 AM	57.6	64.4	54.4
03:35 AM - 03:40 AM	57.1	64.7	54.9
03:40 AM - 03:45 AM	56.3	63.1	54.5
03:45 AM - 03:50 AM	57.5	65.6	54.8
03:50 AM - 03:55 AM	57.4	69.7	54.8
03:55 AM - 04:00 AM	56.7	68.0	54.4
04:00 AM - 04:05 AM	57.6	65.6	54.7
04:05 AM - 04:10 AM	57.0	71.3	54.5
04:10 AM - 04:15 AM	57.8	63.7	55.3
04:15 AM - 04:20 AM	55.0	66.0	55.0
04:20 AM - 04:25 AM	57.6	64.8	54.6
04:25 AM - 04:30 AM	57.0	72.3	54.3
04:30 AM - 04:35 AM	56.6	64.1	54.2
04:35 AM - 04:40 AM	56.7	66.5	54.1
04:40 AM - 04:45 AM	55.1	61.8	52.3
04:45 AM - 04:50 AM	55.2	63.7	53.2
04:50 AM - 04:55 AM	56.3	63.1	54.6
04:55 AM - 05:00 AM	57.6	71.1	54.2
05:00 AM - 05:05 AM	55.8	62.5	53.5
05:05 AM - 05:10 AM	57.3	67.6	55.1
05:10 AM - 05:15 AM	57.4	64.5	54.9
05:15 AM - 05:20 AM	56.5	63.8	54.8
05:20 AM - 05:25 AM	56.0	62.3	54.4
05:25 AM - 05:30 AM	56.9	61.9	54.8
05:30 AM - 05:35 AM	57.3	63.0	55.5
05:35 AM - 05:40 AM	55.8	63.3	54.2
05:40 AM - 05:45 AM	56.4	67.4	54.3
05:45 AM - 05:50 AM	55.2	61.2	53.2
05:50 AM - 05:55 AM	56.0	68.5	54.3
05:55 AM - 06:00 AM	57.9	65.5	55.6
06:00 AM - 07:00 AM	57.3	82.3	54.9
07:00 AM - 08:00 AM	57.3	76.4	55.2

Reference Method :

1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. วิธีการวัดและคำนวณหาผลรวมค่าเสียงตามมาตรฐานวิธีมาตรฐาน 24 ชั่วโมง และระดับเสียงสูงสุดค่าเสียงจากการทำงานของเครื่องจักรภายในพื้นที่ 2567

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Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kengkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107825-1

Page 1 of 3

Sample No. 2494233-4
Parameter Noise
Location ทุ่งนาบ้านคู (ทุ่งนาบ้านคู) (GPS 47P 0726183, 1617728) (Shut down)
Measurement Date Aug 26 - Aug 27, 2024
Measurement by Prommee Sripanet
Sound Level Meter 623382

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	56.7	65.4	54.9
09:00 AM - 10:00 AM	56.3	73.6	54.0
10:00 AM - 11:00 AM	56.5	75.6	54.1
11:00 AM - 12:00 PM	57.1	76.6	53.7
12:00 PM - 01:00 PM	59.6	87.4	53.8
01:00 PM - 02:00 PM	56.4	69.7	54.3
02:00 PM - 03:00 PM	57.2	71.9	54.7
03:00 PM - 04:00 PM	56.8	71.3	54.5
04:00 PM - 05:00 PM	57.5	70.6	55.3
05:00 PM - 06:00 PM	58.5	70.4	56.5
06:00 PM - 07:00 PM	58.9	73.8	56.7
07:00 PM - 08:00 PM	59.6	71.8	57.3
08:00 PM - 09:00 PM	59.3	76.3	57.0
09:00 PM - 10:00 PM	58.8	72.3	56.5
10:00 PM - 10:05 PM	58.5	65.0	56.1
10:05 PM - 10:10 PM	57.9	63.3	56.1
10:10 PM - 10:15 PM	59.2	65.4	56.7
10:15 PM - 10:20 PM	60.2	70.8	57.7
10:20 PM - 10:25 PM	58.9	64.1	56.8
10:25 PM - 10:30 PM	59.0	64.4	56.5
10:30 PM - 10:35 PM	57.8	71.2	55.7
10:35 PM - 10:40 PM	57.7	64.6	55.8
10:40 PM - 10:45 PM	57.0	63.5	55.4
10:45 PM - 10:50 PM	58.0	64.2	56.4
10:50 PM - 10:55 PM	58.2	74.2	55.4
10:55 PM - 11:00 PM	65.6	86.9	54.7
11:00 PM - 11:05 PM	58.3	66.1	56.5
11:05 PM - 11:10 PM	58.9	75.2	55.8
11:10 PM - 11:15 PM	57.7	62.3	56.2
11:15 PM - 11:20 PM	60.0	70.7	57.3
11:20 PM - 11:25 PM	59.1	67.7	57.4
11:25 PM - 11:30 PM	58.3	72.6	56.6
11:30 PM - 11:35 PM	57.4	67.7	55.3
11:35 PM - 11:40 PM	57.6	65.1	55.5
11:40 PM - 11:45 PM	58.0	67.3	56.0
11:45 PM - 11:50 PM	58.5	65.8	56.3
11:50 PM - 11:55 PM	55.1	63.4	52.4
11:55 PM - 12:00 AM	54.5	59.9	52.6
12:00 AM - 12:05 AM	54.4	64.8	52.3
12:05 AM - 12:10 AM	55.3	60.0	53.3

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Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kengkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107825-1

Page 2 of 3

Sample No. 2494233-4
Parameter Noise
Location บ้านนาบด (หน้าห้อง) (GPS 47P 0726183, 1617728) (Shut down)
Measurement Date Aug 26 - Aug 27, 2024
Measurement by Prommee Sripanet
Sound Level Meter 623382

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:10 AM - 12:15 AM	55.5	63.0	53.2
12:15 AM - 12:20 AM	55.5	67.7	52.5
12:20 AM - 12:25 AM	54.6	59.8	52.6
12:25 AM - 12:30 AM	53.8	61.1	51.6
12:30 AM - 12:35 AM	54.2	58.5	52.1
12:35 AM - 12:40 AM	55.3	63.8	51.7
12:40 AM - 12:45 AM	54.7	59.9	52.3
12:45 AM - 12:50 AM	55.1	59.2	52.7
12:50 AM - 12:55 AM	53.7	60.5	51.7
12:55 AM - 01:00 AM	54.9	61.1	52.7
01:00 AM - 01:05 AM	54.8	62.0	52.1
01:05 AM - 01:10 AM	54.1	60.2	51.6
01:10 AM - 01:15 AM	54.8	60.0	51.4
01:15 AM - 01:20 AM	55.5	63.7	53.4
01:20 AM - 01:25 AM	54.6	60.9	53.2
01:25 AM - 01:30 AM	54.2	59.0	52.4
01:30 AM - 01:35 AM	54.6	60.8	52.7
01:35 AM - 01:40 AM	54.6	59.7	52.6
01:40 AM - 01:45 AM	54.9	60.2	52.7
01:45 AM - 01:50 AM	54.5	60.4	52.2
01:50 AM - 01:55 AM	55.1	60.2	52.6
01:55 AM - 02:00 AM	55.7	62.5	52.4
02:00 AM - 02:05 AM	54.1	71.5	52.1
02:05 AM - 02:10 AM	54.8	72.1	51.9
02:10 AM - 02:15 AM	54.8	66.5	52.9
02:15 AM - 02:20 AM	55.1	59.9	52.1
02:20 AM - 02:25 AM	54.4	61.3	52.1
02:25 AM - 02:30 AM	54.3	61.1	52.1
02:30 AM - 02:35 AM	54.5	64.1	52.1
02:35 AM - 02:40 AM	54.0	67.6	51.4
02:40 AM - 02:45 AM	53.0	72.6	51.2
02:45 AM - 02:50 AM	53.1	60.4	51.2
02:50 AM - 02:55 AM	53.8	69.8	51.4
02:55 AM - 03:00 AM	52.8	61.3	50.4
03:00 AM - 03:05 AM	53.9	60.8	51.1
03:05 AM - 03:10 AM	53.7	58.6	51.9
03:10 AM - 03:15 AM	55.1	65.9	50.9
03:15 AM - 03:20 AM	55.1	65.5	52.3
03:20 AM - 03:25 AM	55.5	65.1	53.1
03:25 AM - 03:30 AM	54.6	63.4	52.4

The above results are valid only for the indicated measurement purpose(s) and shall not be used for any other purpose without written consent from the Laboratory. A/S Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kengkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107825-1

Page 3 of 3

Sample No. 2494233-4
Parameter Noise
Location บ้านนาบด (หน้าห้อง) (GPS 47P 0726183, 1617728) (Shut down)
Measurement Date Aug 26 - Aug 27, 2024
Measurement by Prommee Sripanet
Sound Level Meter 623382

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:30 AM - 03:35 AM	55.2	73.1	52.1
03:35 AM - 03:40 AM	53.9	61.7	51.9
03:40 AM - 03:45 AM	55.4	64.5	52.6
03:45 AM - 03:50 AM	54.1	64.1	52.2
03:50 AM - 03:55 AM	55.3	64.1	52.6
03:55 AM - 04:00 AM	55.0	64.3	52.6
04:00 AM - 04:05 AM	56.3	71.1	52.8
04:05 AM - 04:10 AM	54.9	70.6	52.4
04:10 AM - 04:15 AM	55.3	65.4	52.3
04:15 AM - 04:20 AM	56.0	68.1	52.2
04:20 AM - 04:25 AM	55.6	65.3	52.0
04:25 AM - 04:30 AM	55.0	66.3	53.0
04:30 AM - 04:35 AM	55.2	66.2	52.0
04:35 AM - 04:40 AM	54.2	63.4	51.5
04:40 AM - 04:45 AM	55.7	66.1	52.6
04:45 AM - 04:50 AM	56.2	67.8	52.1
04:50 AM - 04:55 AM	53.6	64.0	50.6
04:55 AM - 05:00 AM	54.0	60.9	51.4
05:00 AM - 05:05 AM	54.3	60.2	51.2
05:05 AM - 05:10 AM	53.7	57.9	51.3
05:10 AM - 05:15 AM	54.5	64.0	52.5
05:15 AM - 05:20 AM	54.5	62.5	51.6
05:20 AM - 05:25 AM	55.4	64.9	52.4
05:25 AM - 05:30 AM	57.6	72.0	52.5
05:30 AM - 05:35 AM	55.6	66.1	52.7
05:35 AM - 05:40 AM	56.0	67.7	52.8
05:40 AM - 05:45 AM	56.8	67.3	53.6
05:45 AM - 05:50 AM	56.5	65.3	53.9
05:50 AM - 05:55 AM	56.5	63.4	54.0
05:55 AM - 06:00 AM	58.0	75.4	55.1
06:00 AM - 07:00 AM	59.8	77.1	55.3

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. กรมควบคุมมลพิษ (กรมควบคุมมลพิษ) : มาตรฐานการวัดระดับเสียงในชุมชน พ.ศ. 2567

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Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhot, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107826-1

Page 1 of 3

Sample No. 2494233-5
Parameter Noise
Location ทุ่งหินปูน (ทุ่งหินปูน) (GPS 47P 0726183, 1617728) (Shut down)
Measurement Date Aug 27 - Aug 28, 2024
Measurement by Prommee Sripatret
Sound Level Meter 623382

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	57.4	69.8	54.2
09:00 AM - 10:00 AM	56.2	77.4	53.5
10:00 AM - 11:00 AM	59.0	85.4	53.4
11:00 AM - 12:00 PM	56.0	73.4	53.6
12:00 PM - 01:00 PM	55.2	68.1	52.8
01:00 PM - 02:00 PM	55.0	69.0	52.8
02:00 PM - 03:00 PM	56.1	69.3	54.0
03:00 PM - 04:00 PM	56.5	73.8	53.9
04:00 PM - 05:00 PM	56.4	74.7	54.0
05:00 PM - 06:00 PM	57.4	74.4	54.9
06:00 PM - 07:00 PM	57.7	73.3	55.4
07:00 PM - 08:00 PM	57.4	74.7	55.2
08:00 PM - 09:00 PM	59.2	75.1	56.6
09:00 PM - 10:00 PM	55.7	71.9	53.7
10:00 PM - 10:05 PM	55.5	62.1	53.3
10:05 PM - 10:10 PM	55.8	60.0	54.0
10:10 PM - 10:15 PM	54.8	59.0	52.8
10:15 PM - 10:20 PM	55.3	62.2	53.1
10:20 PM - 10:25 PM	55.3	61.0	53.3
10:25 PM - 10:30 PM	55.1	62.0	52.9
10:30 PM - 10:35 PM	54.7	59.6	52.7
10:35 PM - 10:40 PM	54.4	61.8	52.4
10:40 PM - 10:45 PM	55.7	78.3	51.6
10:45 PM - 10:50 PM	55.0	67.9	52.3
10:50 PM - 10:55 PM	53.7	60.1	51.6
10:55 PM - 11:00 PM	54.2	66.8	51.4
11:00 PM - 11:05 PM	54.4	69.1	52.2
11:05 PM - 11:10 PM	54.0	59.6	51.4
11:10 PM - 11:15 PM	54.1	60.2	51.7
11:15 PM - 11:20 PM	54.9	62.0	52.5
11:20 PM - 11:25 PM	54.1	71.9	51.7
11:25 PM - 11:30 PM	54.4	62.6	51.9
11:30 PM - 11:35 PM	54.3	62.9	52.0
11:35 PM - 11:40 PM	55.5	62.2	53.4
11:40 PM - 11:45 PM	55.6	60.3	53.2
11:45 PM - 11:50 PM	55.4	60.4	53.4
11:50 PM - 11:55 PM	57.2	67.5	54.5
11:55 PM - 12:00 AM	56.5	71.3	53.5
12:00 AM - 12:05 AM	56.8	64.1	54.9
12:05 AM - 12:10 AM	56.3	63.5	54.1

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

Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhot, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107826-1

Page 2 of 3

Sample No. 2494233-5
Parameter Noise
Location ทุ่งหินปูน (ทุ่งหินปูน) (GPS 47P 0726183, 1617728) (Shut down)
Measurement Date Aug 27 - Aug 28, 2024
Measurement by Prommee Sripatret
Sound Level Meter 623382

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:10 AM - 12:15 AM	57.7	72.6	54.4
12:15 AM - 12:20 AM	57.7	72.4	53.9
12:20 AM - 12:25 AM	67.5	78.3	54.8
12:25 AM - 12:30 AM	65.0	71.2	58.9
12:30 AM - 12:35 AM	59.8	72.0	53.6
12:35 AM - 12:40 AM	56.2	70.8	53.8
12:40 AM - 12:45 AM	55.5	62.1	53.5
12:45 AM - 12:50 AM	57.4	64.5	54.9
12:50 AM - 12:55 AM	58.9	76.4	56.0
12:55 AM - 01:00 AM	58.7	71.1	56.6
01:00 AM - 01:05 AM	57.5	62.3	55.3
01:05 AM - 01:10 AM	57.6	66.3	54.7
01:10 AM - 01:15 AM	57.4	63.6	55.0
01:15 AM - 01:20 AM	57.5	65.1	54.6
01:20 AM - 01:25 AM	57.1	67.3	54.9
01:25 AM - 01:30 AM	56.3	65.1	53.5
01:30 AM - 01:35 AM	54.3	62.1	52.4
01:35 AM - 01:40 AM	56.1	70.1	53.4
01:40 AM - 01:45 AM	55.2	78.2	52.4
01:45 AM - 01:50 AM	60.6	73.1	51.9
01:50 AM - 01:55 AM	60.4	76.7	54.1
01:55 AM - 02:00 AM	55.6	61.0	52.8
02:00 AM - 02:05 AM	59.0	77.6	54.6
02:05 AM - 02:10 AM	63.2	78.3	53.8
02:10 AM - 02:15 AM	62.1	86.1	52.4
02:15 AM - 02:20 AM	55.2	63.5	52.7
02:20 AM - 02:25 AM	55.8	68.4	53.3
02:25 AM - 02:30 AM	56.5	66.7	53.7
02:30 AM - 02:35 AM	55.9	64.8	53.7
02:35 AM - 02:40 AM	57.9	66.1	55.3
02:40 AM - 02:45 AM	57.1	64.0	53.7
02:45 AM - 02:50 AM	57.3	62.7	54.5
02:50 AM - 02:55 AM	56.2	61.5	53.8
02:55 AM - 03:00 AM	56.3	60.9	53.7
03:00 AM - 03:05 AM	57.1	63.7	54.3
03:05 AM - 03:10 AM	56.2	62.7	54.0
03:10 AM - 03:15 AM	56.8	62.7	54.6
03:15 AM - 03:20 AM	57.0	66.0	53.8
03:20 AM - 03:25 AM	57.1	64.8	54.8
03:25 AM - 03:30 AM	56.7	64.8	54.2

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Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoh, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107826-1

Page 3 of 3

Sample No. 2494233-5
Parameter Noise
Location ฝั่งวัดนาเกลือ (หน้าวัดนาเกลือ) (GPS 47P 0726183, 1617728) (Shut down)
Measurement Date Aug 27 - Aug 28, 2024
Measurement by Prommee Sripathet
Sound Level Meter 623382

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:30 AM - 03:35 AM	56.8	63.3	54.4
03:35 AM - 03:40 AM	57.1	66.4	54.6
03:40 AM - 03:45 AM	57.2	64.2	54.5
03:45 AM - 03:50 AM	56.8	64.8	54.3
03:50 AM - 03:55 AM	55.5	64.2	52.4
03:55 AM - 04:00 AM	56.3	70.9	53.0
04:00 AM - 04:05 AM	56.8	73.9	53.4
04:05 AM - 04:10 AM	56.3	65.9	53.0
04:10 AM - 04:15 AM	56.3	68.8	52.9
04:15 AM - 04:20 AM	56.6	65.1	53.9
04:20 AM - 04:25 AM	56.2	65.4	53.0
04:25 AM - 04:30 AM	55.7	64.9	53.5
04:30 AM - 04:35 AM	55.9	64.6	52.9
04:35 AM - 04:40 AM	56.6	66.1	53.1
04:40 AM - 04:45 AM	58.2	67.3	54.9
04:45 AM - 04:50 AM	57.1	66.0	54.2
04:50 AM - 04:55 AM	57.3	65.7	55.1
04:55 AM - 05:00 AM	56.5	66.6	53.8
05:00 AM - 05:05 AM	56.7	68.2	53.5
05:05 AM - 05:10 AM	55.7	67.3	53.1
05:10 AM - 05:15 AM	55.7	61.0	53.2
05:15 AM - 05:20 AM	56.8	66.3	53.6
05:20 AM - 05:25 AM	57.3	65.1	54.5
05:25 AM - 05:30 AM	56.4	65.0	54.2
05:30 AM - 05:35 AM	58.4	68.6	55.3
05:35 AM - 05:40 AM	58.4	70.1	54.6
05:40 AM - 05:45 AM	56.1	74.1	53.6
05:45 AM - 05:50 AM	56.8	72.7	54.1
05:50 AM - 05:55 AM	57.3	67.8	53.3
05:55 AM - 06:00 AM	60.4	81.1	54.9
06:00 AM - 07:00 AM	61.3	75.7	57.8

Reference Method : 1. In-house method : STM 06-001 based on ISO 1996-1 : 2016

2. กรมควบคุมมลพิษ (สำหรับวัดระดับเสียง) : 24 ชั่วโมง และระดับเสียงสูงสุด/ต่ำสุดจากการบันทึกการจราจร พ.ร. 2567

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Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoh, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107827-1

Page 1 of 3

Sample No. 2494233-6
Parameter Noise
Location ฝั่งวัดนาเกลือ (หน้าวัดนาเกลือ) (GPS 47P 0726183, 1617728) (Shut down)
Measurement Date Aug 28 - Aug 29, 2024
Measurement by Prommee Sripathet
Sound Level Meter 623382

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	56.2	66.8	54.0
09:00 AM - 10:00 AM	56.1	72.4	53.7
10:00 AM - 11:00 AM	56.1	68.5	53.9
11:00 AM - 12:00 PM	58.6	83.7	54.1
12:00 PM - 01:00 PM	56.8	76.8	54.2
01:00 PM - 02:00 PM	56.9	70.6	54.9
02:00 PM - 03:00 PM	57.2	73.2	55.1
03:00 PM - 04:00 PM	57.7	78.2	55.2
04:00 PM - 05:00 PM	57.7	77.7	54.5
05:00 PM - 06:00 PM	58.4	74.6	55.8
06:00 PM - 07:00 PM	59.4	89.1	55.0
07:00 PM - 08:00 PM	57.9	85.9	54.9
08:00 PM - 09:00 PM	56.4	75.6	54.3
09:00 PM - 10:00 PM	56.6	78.4	54.4
10:00 PM - 10:05 PM	62.1	83.2	55.5
10:05 PM - 10:10 PM	58.7	76.5	56.1
10:10 PM - 10:15 PM	59.2	68.7	56.4
10:15 PM - 10:20 PM	58.5	71.0	57.1
10:20 PM - 10:25 PM	58.1	67.9	56.4
10:25 PM - 10:30 PM	57.1	62.0	55.2
10:30 PM - 10:35 PM	57.3	65.0	54.7
10:35 PM - 10:40 PM	55.9	60.2	54.5
10:40 PM - 10:45 PM	55.7	63.8	53.9
10:45 PM - 10:50 PM	56.0	62.1	53.7
10:50 PM - 10:55 PM	56.4	63.6	54.4
11:00 PM - 11:05 PM	55.8	66.0	53.5
11:05 PM - 11:10 PM	56.5	64.8	54.0
11:10 PM - 11:15 PM	55.9	61.9	54.0
11:15 PM - 11:20 PM	55.3	60.2	53.1
11:20 PM - 11:25 PM	56.4	77.0	53.5
11:25 PM - 11:30 PM	56.6	61.5	53.9
11:30 PM - 11:35 PM	56.6	61.8	54.1
11:35 PM - 11:40 PM	56.8	64.3	54.5
11:40 PM - 11:45 PM	55.8	62.2	53.4
11:45 PM - 11:50 PM	55.8	61.2	53.5
11:50 PM - 11:55 PM	55.4	62.8	52.4
11:55 PM - 12:00 AM	55.4	60.7	53.3
12:00 AM - 12:05 AM	56.4	63.4	53.8
12:05 AM - 12:10 AM	56.1	61.8	53.8

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Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107827-1

Page 2 of 3

Sample No. 2494233-6
Parameter Noise
Location บ้านสวนพริก (พริกแดง) (GPS 47P 0726183, 1617728) (Shut down)
Measurement Date Aug 28 - Aug 29, 2024
Measurement by Prommee Sripathet
Sound Level Meter 623382

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:10 AM - 12:15 AM	55.9	63.0	53.5
12:15 AM - 12:20 AM	55.2	58.9	52.9
12:20 AM - 12:25 AM	55.8	63.5	53.9
12:25 AM - 12:30 AM	55.8	60.7	53.1
12:30 AM - 12:35 AM	56.4	63.7	53.9
12:35 AM - 12:40 AM	56.0	62.4	53.3
12:40 AM - 12:45 AM	55.0	60.8	52.7
12:45 AM - 12:50 AM	55.9	63.0	53.6
12:50 AM - 12:55 AM	56.6	62.2	53.9
12:55 AM - 01:00 AM	57.1	68.0	54.4
01:00 AM - 01:05 AM	56.6	75.2	54.2
01:05 AM - 01:10 AM	55.6	59.9	52.9
01:10 AM - 01:15 AM	55.7	59.9	53.5
01:15 AM - 01:20 AM	55.8	61.9	53.6
01:20 AM - 01:25 AM	55.4	61.8	53.4
01:25 AM - 01:30 AM	55.6	60.0	54.0
01:30 AM - 01:35 AM	57.5	73.8	54.2
01:35 AM - 01:40 AM	57.4	62.0	54.7
01:40 AM - 01:45 AM	57.1	66.9	54.8
01:45 AM - 01:50 AM	57.3	65.5	53.9
01:50 AM - 01:55 AM	57.7	68.4	55.7
01:55 AM - 02:00 AM	56.4	63.8	53.9
02:00 AM - 02:05 AM	56.5	62.8	54.3
02:05 AM - 02:10 AM	56.5	63.9	54.9
02:10 AM - 02:15 AM	55.8	62.8	53.7
02:15 AM - 02:20 AM	56.8	62.2	54.8
02:20 AM - 02:25 AM	57.3	63.0	54.7
02:25 AM - 02:30 AM	57.7	63.1	55.4
02:30 AM - 02:35 AM	56.9	64.5	54.4
02:35 AM - 02:40 AM	56.0	65.4	54.3
02:40 AM - 02:45 AM	56.1	61.1	54.0
02:45 AM - 02:50 AM	55.1	63.5	52.5
02:50 AM - 02:55 AM	55.6	60.0	53.5
02:55 AM - 03:00 AM	56.1	64.7	53.0
03:00 AM - 03:05 AM	56.8	72.3	53.8
03:05 AM - 03:10 AM	55.7	65.3	53.1
03:10 AM - 03:15 AM	56.8	66.7	53.8
03:15 AM - 03:20 AM	56.1	63.9	53.8
03:20 AM - 03:25 AM	56.2	63.9	53.0
03:25 AM - 03:30 AM	55.6	64.3	52.7

The above results are valid only for the measurement period(s) indicated in the report. They are not to be used for any other purpose. A full and complete report will be issued from the Laboratory. A full and complete report will be issued from the Laboratory. A full and complete report will be issued from the Laboratory. A full and complete report will be issued from the Laboratory.

Approved by

Kanokorn Anek

Asst. General Manager

Kanokorn Anek

Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107827-1

Page 3 of 3

Sample No. 2494233-6
Parameter Noise
Location บ้านสวนพริก (พริกแดง) (GPS 47P 0726183, 1617728) (Shut down)
Measurement Date Aug 28 - Aug 29, 2024
Measurement by Prommee Sripathet
Sound Level Meter 623382

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:30 AM - 03:35 AM	55.5	65.6	53.3
03:35 AM - 03:40 AM	55.5	68.4	53.1
03:40 AM - 03:45 AM	55.6	65.3	53.0
03:45 AM - 03:50 AM	55.5	64.5	53.4
03:50 AM - 03:55 AM	56.3	64.5	53.3
03:55 AM - 04:00 AM	56.9	65.4	53.4
04:00 AM - 04:05 AM	56.4	70.9	53.1
04:05 AM - 04:10 AM	56.1	65.0	52.4
04:10 AM - 04:15 AM	56.2	65.2	52.8
04:15 AM - 04:20 AM	54.5	58.8	52.6
04:20 AM - 04:25 AM	55.7	61.7	52.8
04:25 AM - 04:30 AM	55.6	65.4	53.4
04:30 AM - 04:35 AM	55.0	61.3	53.2
04:35 AM - 04:40 AM	55.2	62.6	53.3
04:40 AM - 04:45 AM	55.2	62.9	53.0
04:45 AM - 04:50 AM	55.0	60.9	53.0
04:50 AM - 04:55 AM	55.3	66.5	53.2
04:55 AM - 05:00 AM	55.8	65.8	52.8
05:00 AM - 05:05 AM	55.5	62.6	53.0
05:05 AM - 05:10 AM	54.6	63.0	52.6
05:10 AM - 05:15 AM	55.1	63.0	52.8
05:15 AM - 05:20 AM	55.7	61.9	53.5
05:20 AM - 05:25 AM	55.6	63.5	53.1
05:25 AM - 05:30 AM	55.9	63.1	53.5
05:30 AM - 05:35 AM	56.4	68.4	53.8
05:35 AM - 05:40 AM	57.2	62.9	54.6
05:40 AM - 05:45 AM	56.7	63.2	54.1
05:45 AM - 05:50 AM	57.7	65.4	54.7
05:50 AM - 05:55 AM	57.1	64.2	54.8
05:55 AM - 06:00 AM	57.5	63.6	54.8
06:00 AM - 07:00 AM	57.8	71.4	55.8
07:00 AM - 08:00 AM	61.4	87.7	58.8

Reference Method :

- In-house method : STM 06-001 based on ISO 1996-1 : 2016
- Instrumentation : เครื่องวัดเสียงแบบเคลื่อนที่แบบพกพา รุ่น 2430 และเครื่องวัดเสียงแบบเคลื่อนที่แบบพกพา รุ่น 2567

The above results are valid only for the measurement period(s) indicated in the report. They are not to be used for any other purpose. A full and complete report will be issued from the Laboratory. A full and complete report will be issued from the Laboratory. A full and complete report will be issued from the Laboratory. A full and complete report will be issued from the Laboratory.

Approved by

Kanokorn Anek

Asst. General Manager

Kanokorn Anek

Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoh, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107828-1

Page 1 of 3

Sample No. 2494233-7
Parameter Noise
Location บ้านขุนน้ำคาง (น้ำคางน้ำ) (GPS 47P 0726183, 1617728) (Shut down)
Measurement Date Aug 29 - Aug 30, 2024
Measurement by Prommee Sripanet
Sound Level Meter 623382

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	61.0	75.3	57.1
09:00 AM - 10:00 AM	56.6	76.1	53.5
10:00 AM - 11:00 AM	58.1	83.5	53.1
11:00 AM - 12:00 PM	56.0	70.3	53.5
12:00 PM - 01:00 PM	55.8	73.2	53.7
01:00 PM - 02:00 PM	59.8	92.7	53.9
02:00 PM - 03:00 PM	62.6	81.7	54.3
03:00 PM - 04:00 PM	58.2	76.4	55.3
04:00 PM - 05:00 PM	57.6	80.9	55.3
05:00 PM - 06:00 PM	59.2	78.4	54.9
06:00 PM - 07:00 PM	56.9	77.1	53.9
07:00 PM - 08:00 PM	56.2	76.3	53.4
08:00 PM - 09:00 PM	56.4	75.4	54.4
09:00 PM - 10:00 PM	57.1	61.0	55.2
10:00 PM - 10:05 PM	57.4	64.3	54.9
10:10 PM - 10:15 PM	57.8	65.5	54.8
10:15 PM - 10:20 PM	58.4	70.0	56.4
10:20 PM - 10:25 PM	58.1	65.1	55.9
10:25 PM - 10:30 PM	57.8	67.6	55.1
10:30 PM - 10:35 PM	56.6	62.6	53.9
10:35 PM - 10:40 PM	57.7	67.7	55.0
10:40 PM - 10:45 PM	57.6	66.3	55.1
10:45 PM - 10:50 PM	57.5	64.9	55.2
10:50 PM - 10:55 PM	57.2	64.5	54.7
10:55 PM - 11:00 PM	57.6	64.0	54.9
11:00 PM - 11:05 PM	58.2	65.2	55.8
11:05 PM - 11:10 PM	57.8	65.3	55.2
11:10 PM - 11:15 PM	56.2	61.8	53.7
11:15 PM - 11:20 PM	56.7	67.1	53.9
11:20 PM - 11:25 PM	56.1	62.3	53.8
11:25 PM - 11:30 PM	54.7	54.7	54.7
11:30 PM - 11:35 PM	55.7	59.6	53.8
11:35 PM - 11:40 PM	56.8	68.4	54.0
11:40 PM - 11:45 PM	57.3	62.4	55.0
11:45 PM - 11:50 PM	57.7	63.7	55.5
11:50 PM - 11:55 PM	58.4	65.9	54.9
11:55 PM - 12:00 AM	57.1	64.5	54.6
12:00 AM - 12:05 AM	57.1	63.2	55.2
12:05 AM - 12:10 AM	58.3	70.1	55.2

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Kanokkorn Anek

Asst. General Manager

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Kanokkorn Anek

Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoh, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107828-1

Page 2 of 3

Sample No. 2494233-7
Parameter Noise
Location บ้านขุนน้ำคาง (น้ำคางน้ำ) (GPS 47P 0726183, 1617728) (Shut down)
Measurement Date Aug 29 - Aug 30, 2024
Measurement by Prommee Sripanet
Sound Level Meter 623382

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:10 AM - 12:15 AM	57.5	68.2	54.8
12:15 AM - 12:20 AM	55.4	61.1	52.5
12:20 AM - 12:25 AM	54.5	61.7	52.4
12:25 AM - 12:30 AM	54.7	66.1	52.7
12:30 AM - 12:35 AM	54.4	72.9	52.3
12:35 AM - 12:40 AM	54.3	65.1	52.2
12:40 AM - 12:45 AM	55.2	71.2	52.3
12:45 AM - 12:50 AM	55.9	73.9	52.2
12:50 AM - 12:55 AM	54.8	63.1	52.5
12:55 AM - 01:00 AM	55.0	60.5	53.0
01:00 AM - 01:05 AM	54.5	64.4	51.8
01:05 AM - 01:10 AM	53.4	57.2	51.6
01:10 AM - 01:15 AM	53.5	58.1	51.4
01:15 AM - 01:20 AM	53.5	61.4	51.9
01:20 AM - 01:25 AM	54.3	61.4	51.7
01:25 AM - 01:30 AM	55.2	59.5	53.5
01:30 AM - 01:35 AM	55.8	61.1	53.7
01:35 AM - 01:40 AM	63.7	76.5	54.2
01:40 AM - 01:45 AM	64.1	75.0	53.9
01:45 AM - 01:50 AM	61.1	76.3	54.4
01:50 AM - 01:55 AM	58.3	75.0	53.6
01:55 AM - 02:00 AM	63.6	75.7	54.3
02:00 AM - 02:05 AM	60.0	74.4	53.2
02:05 AM - 02:10 AM	59.2	71.3	53.2
02:10 AM - 02:15 AM	66.4	76.9	54.0
02:15 AM - 02:20 AM	59.9	70.5	53.7
02:20 AM - 02:25 AM	59.4	69.2	53.4
02:25 AM - 02:30 AM	57.2	71.8	53.5
02:30 AM - 02:35 AM	55.2	72.1	53.3
02:35 AM - 02:40 AM	54.5	62.7	52.5
02:40 AM - 02:45 AM	54.9	62.5	52.0
02:45 AM - 02:50 AM	54.8	59.6	52.7
02:50 AM - 02:55 AM	54.8	59.7	52.7
02:55 AM - 03:00 AM	55.1	59.8	52.7
03:00 AM - 03:05 AM	54.5	60.3	52.4
03:05 AM - 03:10 AM	55.5	69.2	52.6
03:10 AM - 03:15 AM	55.2	67.5	52.3
03:15 AM - 03:20 AM	54.9	63.5	52.5
03:20 AM - 03:25 AM	56.1	69.1	53.8
03:25 AM - 03:30 AM	55.0	63.4	52.8

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Kanokkorn Anek

Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107828-1

Page 3 of 3

Sample No. : 2494233-7
Parameter : Noise
Location : โรงงานปูนซีเมนต์ (ภายใน) (GPS 47P 07261.83, 1617728) (Shut down)
Measurement Date : Aug 29 - Aug 30, 2024
Measurement by : Prommee Sripathet
Sound Level Meter : 623382

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:30 AM - 03:35 AM	54.4	65.5	52.0
03:35 AM - 03:40 AM	56.7	72.0	54.0
03:40 AM - 03:45 AM	56.2	74.1	53.4
03:45 AM - 03:50 AM	55.3	63.1	53.0
03:50 AM - 03:55 AM	55.3	63.4	52.9
03:55 AM - 04:00 AM	56.6	67.9	53.9
04:00 AM - 04:05 AM	55.9	79.7	52.5
04:05 AM - 04:10 AM	55.6	63.9	52.3
04:10 AM - 04:15 AM	56.0	64.5	53.4
04:15 AM - 04:20 AM	55.4	65.5	53.0
04:20 AM - 04:25 AM	55.1	64.8	52.0
04:25 AM - 04:30 AM	55.6	64.4	53.1
04:30 AM - 04:35 AM	55.5	67.1	53.4
04:35 AM - 04:40 AM	54.8	66.7	52.5
04:40 AM - 04:45 AM	54.6	64.3	52.3
04:45 AM - 04:50 AM	55.7	63.4	53.0
04:50 AM - 04:55 AM	55.9	62.1	53.3
04:55 AM - 05:00 AM	56.2	64.1	53.6
05:00 AM - 05:05 AM	55.0	62.9	52.8
05:05 AM - 05:10 AM	55.6	61.3	53.3
05:10 AM - 05:15 AM	55.8	64.3	53.8
05:15 AM - 05:20 AM	55.8	65.6	53.2
05:20 AM - 05:25 AM	56.5	65.5	53.5
05:25 AM - 05:30 AM	56.5	65.2	53.8
05:30 AM - 05:35 AM	57.4	64.8	55.0
05:35 AM - 05:40 AM	57.0	65.9	54.5
05:40 AM - 05:45 AM	57.8	65.1	55.5
05:45 AM - 05:50 AM	57.8	74.2	54.8
05:50 AM - 05:55 AM	57.6	63.8	55.3
05:55 AM - 06:00 AM	58.9	68.0	56.3
06:00 AM - 07:00 AM	58.2	78.7	55.7
07:00 AM - 08:00 AM	57.5	75.4	54.1

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. วิธีการวัด : ใช้วิธีวัดแบบเคลื่อนที่ตามรอบๆ โรงงานปูนซีเมนต์ 24 ชั่วโมง และระดับเสียงสูงสุดที่ได้จากการประเมินค่าตาม พ.ร.บ. 2567

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Kanokkorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107836-1

Page 1 of 3

Sample No. : 2494233-15
Parameter : Noise
Location : โรงงานปูนซีเมนต์ (ภายใน) (GPS 47P 0729508, 1622765) (Shut down)
Measurement Date : Aug 23 - Aug 24, 2024
Measurement by : Prommee Sripathet
Sound Level Meter : 597164

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	45.4	63.7	40.8
09:00 AM - 10:00 AM	44.3	67.6	39.6
10:00 AM - 11:00 AM	46.0	68.5	41.2
11:00 AM - 12:00 PM	48.2	79.0	38.8
12:00 PM - 01:00 PM	46.5	74.4	35.2
01:00 PM - 02:00 PM	39.3	60.0	36.0
02:00 PM - 03:00 PM	49.7	79.2	36.9
03:00 PM - 04:00 PM	43.7	64.9	39.0
04:00 PM - 05:00 PM	47.7	74.4	38.9
05:00 PM - 06:00 PM	45.5	68.9	40.3
06:00 PM - 07:00 PM	49.1	78.7	42.5
07:00 PM - 08:00 PM	51.5	65.5	50.3
08:00 PM - 09:00 PM	48.4	61.8	47.0
09:00 PM - 10:00 PM	46.9	59.3	45.6
10:00 PM - 10:05 PM	45.9	56.4	44.2
10:05 PM - 10:10 PM	45.0	54.5	43.6
10:10 PM - 10:15 PM	47.6	55.9	44.7
10:15 PM - 10:20 PM	47.3	55.9	45.0
10:20 PM - 10:25 PM	45.4	53.0	44.1
10:25 PM - 10:30 PM	45.8	49.6	44.5
10:30 PM - 10:35 PM	45.7	49.1	44.7
10:35 PM - 10:40 PM	45.8	54.4	44.6
10:40 PM - 10:45 PM	45.2	53.7	44.2
10:45 PM - 10:50 PM	45.1	48.9	43.9
10:50 PM - 10:55 PM	45.2	54.9	43.1
10:55 PM - 11:00 PM	43.3	47.2	42.0
11:00 PM - 11:05 PM	43.3	50.4	41.6
11:05 PM - 11:10 PM	44.7	51.5	42.8
11:10 PM - 11:15 PM	44.8	56.0	42.4
11:15 PM - 11:20 PM	44.5	52.4	41.8
11:20 PM - 11:25 PM	44.9	59.9	41.0
11:25 PM - 11:30 PM	46.6	59.2	42.2
11:30 PM - 11:35 PM	44.4	59.2	41.6
11:35 PM - 11:40 PM	44.7	51.9	42.5
11:40 PM - 11:45 PM	43.6	48.9	42.1
11:45 PM - 11:50 PM	44.6	49.6	43.3
11:50 PM - 11:55 PM	43.7	46.0	42.9
11:55 PM - 12:00 AM	43.9	48.6	42.2
12:00 AM - 12:05 AM	42.5	48.2	40.8
12:05 AM - 12:10 AM	43.8	47.4	42.4

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

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Kanokkorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhloi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107836-1

Page 2 of 2

Sample No. : 2494233-15
Parameter : Noise
Location : โรงปูน (จุดวัด) (GPS 47P 0729508, 1622765) (Shut down)
Measurement Date : Aug 23 - Aug 24, 2024
Measurement by : Prommee Sripatnet
Sound Level Meter : 597164

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:10 AM - 12:15 AM	43.9	48.4	42.2
12:15 AM - 12:20 AM	45.5	63.1	41.8
12:20 AM - 12:25 AM	49.3	63.5	40.8
12:25 AM - 12:30 AM	42.2	49.1	40.2
12:30 AM - 12:35 AM	41.6	48.5	40.0
12:35 AM - 12:40 AM	41.2	46.4	39.8
12:40 AM - 12:45 AM	41.5	48.1	40.1
12:45 AM - 12:50 AM	42.7	64.6	39.6
12:50 AM - 12:55 AM	41.5	48.6	39.7
12:55 AM - 01:00 AM	41.8	49.4	40.0
01:00 AM - 01:05 AM	46.9	64.1	40.6
01:05 AM - 01:10 AM	42.3	48.5	40.5
01:10 AM - 01:15 AM	42.0	48.2	40.1
01:15 AM - 01:20 AM	42.6	49.6	39.9
01:20 AM - 01:25 AM	42.1	56.8	38.7
01:25 AM - 01:30 AM	45.3	62.4	38.5
01:30 AM - 01:35 AM	41.4	48.0	39.1
01:35 AM - 01:40 AM	40.9	47.9	38.0
01:40 AM - 01:45 AM	43.7	49.1	41.6
01:45 AM - 01:50 AM	44.7	52.4	42.4
01:50 AM - 01:55 AM	44.2	51.8	42.2
01:55 AM - 02:00 AM	44.1	50.1	41.8
02:00 AM - 02:05 AM	43.4	55.5	41.8
02:05 AM - 02:10 AM	42.3	48.4	39.9
02:10 AM - 02:15 AM	41.7	49.9	39.5
02:15 AM - 02:20 AM	42.7	49.1	40.1
02:20 AM - 02:25 AM	44.3	53.0	39.8
02:25 AM - 02:30 AM	42.1	56.3	38.8
02:30 AM - 02:35 AM	42.6	49.3	39.8
02:35 AM - 02:40 AM	43.3	49.0	40.9
02:40 AM - 02:45 AM	43.1	49.6	41.0
02:45 AM - 02:50 AM	43.7	49.2	41.7
02:50 AM - 02:55 AM	44.2	51.9	41.4
02:55 AM - 03:00 AM	42.5	51.8	39.7
03:00 AM - 03:05 AM	41.5	51.8	38.6
03:05 AM - 03:10 AM	41.0	51.8	38.2
03:10 AM - 03:15 AM	40.6	37.8	37.8
03:15 AM - 03:20 AM	40.2	46.9	38.3
03:20 AM - 03:25 AM	41.4	51.0	39.4
03:25 AM - 03:30 AM	42.4	50.8	40.2

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Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhloi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107836-1

Page 3 of 3

Sample No. : 2494233-15
Parameter : Noise
Location : โรงปูน (จุดวัด) (GPS 47P 0729508, 1622765) (Shut down)
Measurement Date : Aug 23 - Aug 24, 2024
Measurement by : Prommee Sripatnet
Sound Level Meter : 597164

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:30 AM - 03:35 AM	44.8	51.1	42.2
03:35 AM - 03:40 AM	45.1	51.8	42.0
03:40 AM - 03:45 AM	46.8	60.3	42.1
03:45 AM - 03:50 AM	45.1	52.7	41.3
03:50 AM - 03:55 AM	44.4	53.0	41.0
03:55 AM - 04:00 AM	43.9	52.5	41.3
04:00 AM - 04:05 AM	45.0	52.5	41.8
04:05 AM - 04:10 AM	44.0	52.9	39.9
04:10 AM - 04:15 AM	45.2	53.4	40.7
04:15 AM - 04:20 AM	44.6	52.4	39.6
04:20 AM - 04:25 AM	44.8	52.5	39.6
04:25 AM - 04:30 AM	44.6	52.9	39.9
04:30 AM - 04:35 AM	45.4	52.7	39.7
04:35 AM - 04:40 AM	58.4	75.7	42.0
04:40 AM - 04:45 AM	58.6	76.1	42.2
04:45 AM - 04:50 AM	47.4	53.5	42.8
04:50 AM - 04:55 AM	49.3	57.8	43.8
04:55 AM - 05:00 AM	48.5	62.0	42.8
05:00 AM - 05:05 AM	48.7	62.6	44.3
05:05 AM - 05:10 AM	48.3	55.0	44.2
05:10 AM - 05:15 AM	49.7	55.1	44.6
05:15 AM - 05:20 AM	49.9	55.4	45.0
05:20 AM - 05:25 AM	49.9	55.0	44.0
05:25 AM - 05:30 AM	51.1	57.7	45.4
05:30 AM - 05:35 AM	55.4	70.3	46.6
05:35 AM - 05:40 AM	52.8	66.5	46.1
05:40 AM - 05:45 AM	52.2	61.8	48.2
05:45 AM - 05:50 AM	51.7	62.9	47.1
05:50 AM - 05:55 AM	52.1	63.2	47.2
05:55 AM - 06:00 AM	51.0	57.2	47.3
06:00 AM - 07:00 AM	49.1	74.1	44.6
07:00 AM - 08:00 AM	52.0	77.5	44.0

Reference Method :

- In-House method : STM 06-001 based on ISO 1996-1 : 2016
- ปริมาณการจราจรทางถนน วัดได้จากการสังเกตการณ์การจราจรบนถนนเส้นถนน 24 ชั่วโมง และบันทึกเสียงลงคอมพิวเตอร์เพื่อการประมวลผลรายงาน พ.ม. 2567

Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107837-1

Page 1 of 3

Sample No. 2494233-15
Parameter Noise
Location บ้านหูกูด (บ้านหูกูด) (GPS 47P 0729508, 1622765) (Shut down)
Measurement Date Aug 24 - Aug 25, 2024
Measurement by Prommee Sripalnet
Sound Level Meter 597164

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	50.3	75.9	42.4
09:00 AM - 10:00 AM	47.1	74.6	40.0
10:00 AM - 11:00 AM	42.9	70.6	38.4
11:00 AM - 12:00 PM	44.9	78.1	39.5
12:00 PM - 01:00 PM	48.2	80.0	38.2
01:00 PM - 02:00 PM	41.8	72.0	38.3
02:00 PM - 03:00 PM	42.3	64.8	38.1
03:00 PM - 04:00 PM	48.7	79.9	40.2
04:00 PM - 05:00 PM	46.7	78.0	40.7
05:00 PM - 06:00 PM	64.3	88.5	41.6
06:00 PM - 07:00 PM	44.7	63.8	42.0
07:00 PM - 08:00 PM	49.8	76.7	42.0
08:00 PM - 09:00 PM	55.5	69.2	53.1
09:00 PM - 10:00 PM	52.9	75.4	50.7
10:00 PM - 10:05 PM	53.0	57.0	49.8
10:05 PM - 10:10 PM	54.4	56.9	53.4
10:10 PM - 10:15 PM	54.0	56.8	51.9
10:15 PM - 10:20 PM	52.6	56.4	50.6
10:20 PM - 10:25 PM	51.8	55.7	50.6
10:25 PM - 10:30 PM	51.6	55.7	50.3
10:30 PM - 10:35 PM	53.3	57.3	51.5
10:35 PM - 10:40 PM	51.9	55.9	48.8
10:40 PM - 10:45 PM	51.9	54.8	49.0
10:45 PM - 10:50 PM	50.4	54.6	46.4
10:50 PM - 10:55 PM	52.1	57.5	48.9
10:55 PM - 11:00 PM	51.6	54.5	48.1
11:00 PM - 11:05 PM	48.6	54.1	47.3
11:05 PM - 11:10 PM	48.3	52.6	47.1
11:10 PM - 11:15 PM	51.2	54.7	47.6
11:15 PM - 11:20 PM	52.0	55.0	48.0
11:20 PM - 11:25 PM	50.9	55.5	47.7
11:25 PM - 11:30 PM	50.5	55.0	46.8
11:30 PM - 11:35 PM	51.1	54.9	45.6
11:35 PM - 11:40 PM	45.4	52.2	43.0
11:40 PM - 11:45 PM	45.9	59.7	43.7
11:45 PM - 11:50 PM	46.3	52.7	44.6
11:50 PM - 11:55 PM	45.1	52.5	43.9
11:55 PM - 12:00 AM	45.3	52.1	43.8
12:00 AM - 12:05 AM	45.6	54.5	43.8
12:05 AM - 12:10 AM	46.5	58.8	42.8

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Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107837-1

Page 2 of 3

Sample No. 2494233-16
Parameter Noise
Location บ้านหูกูด (บ้านหูกูด) (GPS 47P 0729508, 1622765) (Shut down)
Measurement Date Aug 24 - Aug 25, 2024
Measurement by Prommee Sripalnet
Sound Level Meter 597164

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:10 AM - 12:15 AM	49.8	54.8	44.2
12:15 AM - 12:20 AM	49.3	55.1	44.2
12:20 AM - 12:25 AM	50.0	55.6	45.0
12:25 AM - 12:30 AM	44.5	52.9	41.8
12:30 AM - 12:35 AM	45.0	51.5	43.0
12:35 AM - 12:40 AM	44.6	51.8	43.1
12:40 AM - 12:45 AM	44.5	51.8	41.9
12:45 AM - 12:50 AM	44.8	51.8	41.9
12:50 AM - 12:55 AM	45.1	51.8	43.2
12:55 AM - 01:00 AM	45.3	52.3	43.1
01:00 AM - 01:05 AM	45.5	51.8	43.6
01:05 AM - 01:10 AM	45.4	53.2	43.3
01:10 AM - 01:15 AM	44.4	52.4	41.5
01:15 AM - 01:20 AM	44.5	54.8	40.1
01:20 AM - 01:25 AM	43.6	52.9	39.7
01:25 AM - 01:30 AM	42.8	51.4	38.3
01:30 AM - 01:35 AM	44.8	60.3	40.6
01:35 AM - 01:40 AM	44.4	59.1	38.7
01:40 AM - 01:45 AM	42.5	52.8	37.3
01:45 AM - 01:50 AM	46.9	55.2	40.5
01:50 AM - 01:55 AM	48.2	59.1	39.9
01:55 AM - 02:00 AM	44.0	52.9	38.7
02:00 AM - 02:05 AM	43.3	53.1	37.8
02:05 AM - 02:10 AM	41.7	53.3	37.1
02:10 AM - 02:15 AM	47.3	73.2	37.8
02:15 AM - 02:20 AM	44.2	53.9	38.4
02:20 AM - 02:25 AM	45.0	54.0	39.6
02:25 AM - 02:30 AM	44.1	54.3	38.6
02:30 AM - 02:35 AM	44.1	56.2	38.4
02:35 AM - 02:40 AM	44.8	55.0	38.0
02:40 AM - 02:45 AM	44.0	54.3	37.3
02:45 AM - 02:50 AM	44.6	54.9	37.6
02:50 AM - 02:55 AM	44.7	54.8	37.4
02:55 AM - 03:00 AM	45.2	54.6	37.6
03:00 AM - 03:05 AM	44.9	54.9	37.7
03:05 AM - 03:10 AM	44.9	54.4	38.1
03:10 AM - 03:15 AM	45.8	59.4	38.0
03:15 AM - 03:20 AM	44.7	59.7	37.8
03:20 AM - 03:25 AM	47.3	63.2	37.8
03:25 AM - 03:30 AM	44.8	54.6	38.3

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Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhohi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107837-1

Page 3 of 3

Sample No. 2494233-16
Parameter Noise
Location ไร่หินปูน (เขาหินปูน) (GPS 47P 0729508, 1622765) (Shut down)
Measurement Date Aug 24 - Aug 25, 2024
Measurement by Prommee Sripathet
Sound Level Meter 597164

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:30 AM - 03:35 AM	43.9	54.1	38.0
03:35 AM - 03:40 AM	44.9	54.2	38.2
03:40 AM - 03:45 AM	43.4	53.9	37.1
03:45 AM - 03:50 AM	44.4	54.7	37.4
03:50 AM - 03:55 AM	45.1	54.6	38.3
03:55 AM - 04:00 AM	45.1	55.1	38.3
04:00 AM - 04:05 AM	45.2	54.4	38.2
04:05 AM - 04:10 AM	43.0	53.8	37.3
04:10 AM - 04:15 AM	44.6	55.1	37.2
04:15 AM - 04:20 AM	45.3	55.4	37.8
04:20 AM - 04:25 AM	45.2	54.8	37.8
04:25 AM - 04:30 AM	43.8	53.5	36.7
04:30 AM - 04:35 AM	44.1	53.6	36.3
04:35 AM - 04:40 AM	71.6	86.9	37.9
04:40 AM - 04:45 AM	69.4	87.6	36.9
04:45 AM - 04:50 AM	42.8	52.9	37.5
04:50 AM - 04:55 AM	41.9	52.7	37.7
04:55 AM - 05:00 AM	42.4	51.7	37.8
05:00 AM - 05:05 AM	41.2	51.2	37.8
05:05 AM - 05:10 AM	41.3	52.1	38.0
05:10 AM - 05:15 AM	41.7	52.6	38.2
05:15 AM - 05:20 AM	43.9	60.8	38.0
05:20 AM - 05:25 AM	41.4	49.8	38.8
05:25 AM - 05:30 AM	45.2	55.1	39.3
05:30 AM - 05:35 AM	43.0	51.2	40.0
05:35 AM - 05:40 AM	43.8	53.0	40.3
05:40 AM - 05:45 AM	43.6	54.3	40.3
05:45 AM - 05:50 AM	49.0	64.0	41.4
05:50 AM - 05:55 AM	46.9	60.7	41.9
05:55 AM - 06:00 AM	46.3	62.9	42.7
06:00 AM - 07:00 AM	50.3	74.3	41.7
07:00 AM - 08:00 AM	46.0	67.4	40.1

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016

2. ใช้มาตรฐานวิธีมาตรฐาน (เรื่อง วิธีการตรวจวัดเสียงในอาคารตาม ระบุในข้อ 24 แห่งกฎกระทรวงกำหนดมาตรฐานในการบริหารราชการแผ่นดิน พ.ศ. 2567)

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Approved by

Kanokkorn Anek

Kanokkorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhohi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107838-1

Page 1 of 3

Sample No. 2494233-17
Parameter Noise
Location ไร่หินปูน (เขาหินปูน) (GPS 47P 0729508, 1622765) (Shut down)
Measurement Date Aug 25 - Aug 26, 2024
Measurement by Prommee Sripathet
Sound Level Meter 597164

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	48.5	77.8	38.5
09:00 AM - 10:00 AM	51.3	78.1	37.8
10:00 AM - 11:00 AM	47.7	77.0	37.1
11:00 AM - 12:00 PM	47.6	76.7	37.9
12:00 PM - 01:00 PM	40.2	58.4	36.4
01:00 PM - 02:00 PM	44.9	73.2	37.0
02:00 PM - 03:00 PM	47.3	74.4	36.5
03:00 PM - 04:00 PM	42.8	61.7	38.4
04:00 PM - 05:00 PM	43.1	64.2	39.1
05:00 PM - 06:00 PM	50.7	76.7	40.0
06:00 PM - 07:00 PM	45.1	75.0	39.5
07:00 PM - 08:00 PM	48.6	66.2	47.4
08:00 PM - 09:00 PM	48.2	59.6	47.0
09:00 PM - 10:00 PM	45.2	63.5	44.0
10:00 PM - 10:05 PM	42.7	54.2	41.8
10:05 PM - 10:10 PM	43.9	54.2	40.8
10:10 PM - 10:15 PM	42.2	46.0	41.3
10:15 PM - 10:20 PM	43.6	55.4	41.2
10:20 PM - 10:25 PM	42.3	46.0	41.4
10:25 PM - 10:30 PM	42.8	49.5	41.8
10:30 PM - 10:35 PM	42.5	48.6	41.5
10:35 PM - 10:40 PM	42.2	44.9	41.3
10:40 PM - 10:45 PM	42.5	46.6	41.2
10:45 PM - 10:50 PM	47.1	52.8	43.6
10:50 PM - 10:55 PM	48.7	54.5	44.2
10:55 PM - 11:00 PM	45.7	50.9	43.9
11:00 PM - 11:05 PM	44.5	49.9	42.7
11:05 PM - 11:10 PM	43.6	49.3	42.2
11:10 PM - 11:15 PM	43.0	47.7	41.2
11:15 PM - 11:20 PM	44.1	51.6	41.4
11:20 PM - 11:25 PM	42.3	49.0	40.9
11:25 PM - 11:30 PM	42.6	52.5	41.3
11:30 PM - 11:35 PM	42.7	46.3	41.2
11:35 PM - 11:40 PM	41.7	45.6	40.4
11:40 PM - 11:45 PM	41.3	48.9	40.1
11:45 PM - 11:50 PM	42.4	47.3	40.6
11:50 PM - 11:55 PM	42.0	49.2	40.6
11:55 PM - 12:00 AM	41.5	48.7	40.3
12:00 AM - 12:05 AM	41.6	47.3	40.2
12:05 AM - 12:10 AM	43.0	47.8	41.2

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

Approved by

Kanokkorn Anek

Kanokkorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kengkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107838-1

Page 2 of 3

Sample No. 2494233-17
Parameter Noise
Location ไร่หินปูน (เขาชะง่า) (GPS 47P 0729508, 1622765) (Shut down)
Measurement Date Aug 25 - Aug 26, 2024
Measurement by Prommee Sripatriet
Sound Level Meter 597164

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:10 AM - 12:15 AM	43.2	47.3	41.1
12:15 AM - 12:20 AM	42.5	46.6	41.2
12:20 AM - 12:25 AM	40.8	45.7	39.4
12:25 AM - 12:30 AM	41.2	51.4	39.0
12:30 AM - 12:35 AM	39.9	49.3	38.2
12:35 AM - 12:40 AM	40.1	50.4	38.0
12:40 AM - 12:45 AM	40.6	44.3	38.6
12:45 AM - 12:50 AM	40.6	48.6	38.3
12:50 AM - 12:55 AM	42.5	57.8	39.9
12:55 AM - 01:00 AM	44.0	52.3	40.7
01:00 AM - 01:05 AM	43.2	52.5	40.1
01:05 AM - 01:10 AM	43.5	53.2	39.7
01:10 AM - 01:15 AM	42.6	51.9	39.4
01:15 AM - 01:20 AM	42.1	51.5	39.2
01:20 AM - 01:25 AM	43.6	51.9	41.0
01:25 AM - 01:30 AM	43.6	51.8	40.7
01:30 AM - 01:35 AM	44.5	53.1	40.5
01:35 AM - 01:40 AM	47.4	53.5	45.1
01:40 AM - 01:45 AM	45.6	52.9	43.0
01:45 AM - 01:50 AM	44.2	57.4	42.7
01:50 AM - 01:55 AM	43.4	48.0	41.8
01:55 AM - 02:00 AM	42.4	48.2	41.0
02:00 AM - 02:05 AM	45.7	54.6	40.0
02:05 AM - 02:10 AM	42.1	51.4	40.4
02:10 AM - 02:15 AM	42.5	45.9	40.9
02:15 AM - 02:20 AM	43.6	48.0	42.2
02:20 AM - 02:25 AM	43.8	48.1	42.4
02:25 AM - 02:30 AM	42.0	45.9	40.8
02:30 AM - 02:35 AM	41.2	43.8	39.7
02:35 AM - 02:40 AM	44.1	57.5	40.8
02:40 AM - 02:45 AM	43.6	57.4	41.4
02:45 AM - 02:50 AM	45.2	52.7	41.3
02:50 AM - 02:55 AM	44.6	50.0	43.2
02:55 AM - 03:00 AM	44.3	55.8	42.1
03:00 AM - 03:05 AM	43.5	50.2	41.8
03:05 AM - 03:10 AM	43.5	51.2	41.8
03:10 AM - 03:15 AM	42.4	47.2	40.9
03:15 AM - 03:20 AM	42.8	47.8	41.5
03:20 AM - 03:25 AM	44.3	56.6	42.2
03:25 AM - 03:30 AM	47.8	67.1	41.5

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Approved by

Kanokorn Anek

Kanokorn Anek
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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kengkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107838-1

Page 3 of 3

Sample No. 2494233-17
Parameter Noise
Location ไร่หินปูน (เขาชะง่า) (GPS 47P 0729508, 1622765) (Shut down)
Measurement Date Aug 25 - Aug 26, 2024
Measurement by Prommee Sripatriet
Sound Level Meter 597164

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:30 AM - 03:35 AM	44.2	64.8	42.0
03:35 AM - 03:40 AM	44.2	47.8	42.0
03:40 AM - 03:45 AM	44.5	48.3	42.4
03:45 AM - 03:50 AM	45.5	50.2	43.2
03:50 AM - 03:55 AM	49.7	58.7	44.7
03:55 AM - 04:00 AM	42.5	48.1	40.3
04:00 AM - 04:05 AM	40.4	46.1	38.9
04:05 AM - 04:10 AM	45.3	60.2	35.7
04:10 AM - 04:15 AM	46.8	54.7	41.9
04:15 AM - 04:20 AM	44.2	48.5	42.5
04:20 AM - 04:25 AM	44.1	48.3	42.2
04:25 AM - 04:30 AM	41.8	46.8	40.1
04:30 AM - 04:35 AM	42.2	47.7	40.1
04:35 AM - 04:40 AM	72.1	85.5	42.0
04:40 AM - 04:45 AM	44.3	53.1	41.5
04:45 AM - 04:50 AM	42.2	47.8	40.4
04:50 AM - 04:55 AM	42.4	46.9	41.0
04:55 AM - 05:00 AM	43.9	51.4	42.0
05:00 AM - 05:05 AM	44.3	53.6	42.2
05:05 AM - 05:10 AM	43.7	54.4	41.0
05:10 AM - 05:15 AM	44.0	54.9	41.3
05:15 AM - 05:20 AM	43.6	50.4	41.9
05:20 AM - 05:25 AM	44.5	51.0	42.7
05:25 AM - 05:30 AM	45.5	54.6	43.0
05:30 AM - 05:35 AM	54.9	68.8	43.5
05:35 AM - 05:40 AM	52.6	69.1	43.0
05:40 AM - 05:45 AM	43.7	51.4	41.2
05:45 AM - 05:50 AM	42.0	49.5	40.5
05:50 AM - 05:55 AM	51.6	71.3	42.1
05:55 AM - 06:00 AM	42.5	55.2	39.2
06:00 AM - 07:00 AM	47.4	77.9	41.4
07:00 AM - 08:00 AM	46.3	69.1	41.8

Reference Method :

- In-house method : STM 06-001 based on ISO 1996-1 : 2016
- ใช้มาตรฐานภายในของห้องปฏิบัติการ (อ้างอิงตาม STM 06-001) ที่ได้รับการรับรองจากกรมการมาตรฐานแห่งชาติ 24 ชั่วโมง และระบบข้อมูลจากกรมการมาตรฐาน พ.ศ. 2567

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Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107839-1

Page 1 of 3

Sample No. 2494233-18
Parameter Noise
Location วัดห้วย (วัดห้วย) (GPS 47P 0729508, 1622765) (Shut down)
Measurement Date Aug 26 - Aug 27, 2024
Measurement by Prommee Sripathet
Sound Level Meter 597164

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	45.9	65.6	39.4
09:00 AM - 10:00 AM	51.6	78.4	40.4
10:00 AM - 11:00 AM	44.2	69.7	37.0
11:00 AM - 12:00 PM	44.0	77.8	37.8
12:00 PM - 01:00 PM	43.2	71.4	37.8
01:00 PM - 02:00 PM	43.2	69.7	39.4
02:00 PM - 03:00 PM	42.8	70.4	38.6
03:00 PM - 04:00 PM	44.4	73.7	37.4
04:00 PM - 05:00 PM	47.9	77.9	37.9
05:00 PM - 06:00 PM	63.3	88.4	39.7
06:00 PM - 07:00 PM	49.1	76.1	41.2
07:00 PM - 08:00 PM	49.4	76.7	47.2
08:00 PM - 09:00 PM	47.3	59.7	44.5
09:00 PM - 10:00 PM	46.6	61.1	44.4
10:00 PM - 10:05 PM	45.8	52.5	43.3
10:05 PM - 10:10 PM	43.5	53.9	41.6
10:10 PM - 10:15 PM	44.6	50.6	42.7
10:15 PM - 10:20 PM	44.5	53.3	43.3
10:20 PM - 10:25 PM	43.4	50.6	42.3
10:25 PM - 10:30 PM	44.1	56.3	42.4
10:30 PM - 10:35 PM	44.3	56.7	42.4
10:35 PM - 10:40 PM	46.6	57.0	43.5
10:40 PM - 10:45 PM	45.0	56.8	42.0
10:45 PM - 10:50 PM	45.5	56.8	42.9
10:50 PM - 10:55 PM	46.0	58.1	43.1
10:55 PM - 11:00 PM	48.6	58.9	44.6
11:00 PM - 11:05 PM	47.2	57.3	43.8
11:05 PM - 11:10 PM	45.0	57.0	42.8
11:10 PM - 11:15 PM	45.7	57.2	43.4
11:15 PM - 11:20 PM	45.7	57.2	42.0
11:20 PM - 11:25 PM	45.5	57.3	42.1
11:25 PM - 11:30 PM	43.8	54.5	41.9
11:30 PM - 11:35 PM	43.9	54.7	41.4
11:35 PM - 11:40 PM	44.1	54.6	41.4
11:40 PM - 11:45 PM	44.7	54.8	42.6
11:45 PM - 11:50 PM	44.6	56.1	42.0
11:50 PM - 11:55 PM	44.0	53.9	41.3
11:55 PM - 12:00 AM	45.1	54.1	42.0
12:00 AM - 12:05 AM	44.5	54.1	41.3
12:05 AM - 12:10 AM	44.1	56.2	41.6

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

Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107839-1

Page 2 of 3

Sample No. 2494233-18
Parameter Noise
Location วัดห้วย (วัดห้วย) (GPS 47P 0729508, 1622765) (Shut down)
Measurement Date Aug 26 - Aug 27, 2024
Measurement by Prommee Sripathet
Sound Level Meter 597164

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:10 AM - 12:15 AM	43.5	57.0	41.3
12:15 AM - 12:20 AM	44.2	57.2	41.9
12:20 AM - 12:25 AM	44.0	56.7	41.3
12:25 AM - 12:30 AM	44.4	57.7	41.5
12:30 AM - 12:35 AM	44.6	56.9	41.4
12:35 AM - 12:40 AM	44.8	57.2	41.8
12:40 AM - 12:45 AM	44.6	57.5	41.4
12:45 AM - 12:50 AM	44.0	56.9	40.7
12:50 AM - 12:55 AM	44.6	56.9	41.0
12:55 AM - 01:00 AM	44.3	56.5	41.9
01:00 AM - 01:05 AM	44.0	54.0	41.8
01:05 AM - 01:10 AM	43.3	49.6	41.1
01:10 AM - 01:15 AM	42.6	48.0	40.9
01:15 AM - 01:20 AM	43.2	47.4	41.7
01:20 AM - 01:25 AM	42.1	45.8	41.0
01:25 AM - 01:30 AM	41.5	46.5	40.0
01:30 AM - 01:35 AM	44.2	51.6	41.8
01:35 AM - 01:40 AM	43.3	50.9	41.0
01:40 AM - 01:45 AM	44.7	52.3	42.5
01:45 AM - 01:50 AM	44.5	60.2	41.6
01:50 AM - 01:55 AM	48.2	72.5	42.7
01:55 AM - 02:00 AM	47.0	60.6	43.3
02:00 AM - 02:05 AM	42.7	50.5	40.6
02:05 AM - 02:10 AM	43.5	50.9	41.2
02:10 AM - 02:15 AM	43.1	50.5	40.9
02:15 AM - 02:20 AM	45.6	52.6	42.2
02:20 AM - 02:25 AM	45.0	52.4	42.7
02:25 AM - 02:30 AM	45.1	51.7	42.7
02:30 AM - 02:35 AM	44.8	51.2	41.8
02:35 AM - 02:40 AM	45.2	54.9	42.2
02:40 AM - 02:45 AM	45.5	52.5	42.2
02:45 AM - 02:50 AM	45.4	53.4	42.9
02:50 AM - 02:55 AM	44.0	53.8	41.5
02:55 AM - 03:00 AM	42.0	39.6	39.6
03:00 AM - 03:05 AM	41.5	55.3	38.5
03:05 AM - 03:10 AM	43.1	54.1	40.0
03:10 AM - 03:15 AM	41.2	52.5	38.4
03:15 AM - 03:20 AM	42.6	52.6	38.9
03:20 AM - 03:25 AM	42.7	52.8	39.6
03:25 AM - 03:30 AM	41.9	52.6	37.2

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Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kengkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received :Sep 04, 2024
Date Reported :Sep 11, 2024
Report No. : 3107839-1

Page 3 of 3

Sample No. 2494233-18
Parameter Noise
Location โรงปูน (พูนปูน) (GPS 47P 0729508, 1622765) (Shut down)
Measurement Date Aug 26 - Aug 27, 2024
Measurement by Prommee Sripanet
Sound Level Meter 597164

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:30 AM - 03:35 AM	40.7	53.7	37.3
03:35 AM - 03:40 AM	42.6	54.1	38.1
03:40 AM - 03:45 AM	42.6	53.8	38.3
03:45 AM - 03:50 AM	43.5	54.3	39.3
03:50 AM - 03:55 AM	44.3	58.5	39.7
03:55 AM - 04:00 AM	44.2	53.8	39.7
04:00 AM - 04:05 AM	47.2	62.2	42.0
04:05 AM - 04:10 AM	44.5	55.6	40.3
04:10 AM - 04:15 AM	44.0	54.0	41.6
04:15 AM - 04:20 AM	43.7	54.2	40.8
04:20 AM - 04:25 AM	43.8	52.9	41.5
04:25 AM - 04:30 AM	43.4	52.6	40.4
04:30 AM - 04:35 AM	42.7	52.9	39.6
04:35 AM - 04:40 AM	42.0	86.1	42.0
04:40 AM - 04:45 AM	50.9	81.3	39.6
04:45 AM - 04:50 AM	42.5	52.6	39.8
04:50 AM - 04:55 AM	43.3	52.7	39.1
04:55 AM - 05:00 AM	44.2	53.6	40.2
05:00 AM - 05:05 AM	43.1	53.5	40.4
05:05 AM - 05:10 AM	42.4	55.3	40.1
05:10 AM - 05:15 AM	42.8	52.5	40.2
05:15 AM - 05:20 AM	42.6	57.3	38.9
05:20 AM - 05:25 AM	43.1	57.6	39.7
05:25 AM - 05:30 AM	41.3	46.2	39.7
05:30 AM - 05:35 AM	44.7	53.9	42.1
05:35 AM - 05:40 AM	47.3	59.2	43.3
05:40 AM - 05:45 AM	45.3	53.8	42.8
05:45 AM - 05:50 AM	45.9	55.2	43.0
05:50 AM - 05:55 AM	49.9	65.7	43.0
05:55 AM - 06:00 AM	48.3	56.3	45.3
06:00 AM - 07:00 AM	52.0	66.5	47.2
07:00 AM - 08:00 AM	51.3	72.6	44.8

Reference Method :

1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ใช้งานมาตรฐานกรมโรงงาน (สำหรับโรงงานอุตสาหกรรม) 24 ชั่วโมง และระดับเสียงสูงสุด/ค่าการถ่วงน้ำหนักการสั่นไหว พ.ร. 2567

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Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kengkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received :Sep 04, 2024
Date Reported :Sep 11, 2024
Report No. : 3107840-1

Page 1 of 3

Sample No. 2494233-19
Parameter Noise
Location โรงปูน (พูนปูน) (GPS 47P 0729508, 1622765) (Shut down)
Measurement Date Aug 27 - Aug 28, 2024
Measurement by Prommee Sripanet
Sound Level Meter 597164

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	46.7	67.1	42.6
09:00 AM - 10:00 AM	47.1	63.1	42.8
10:00 AM - 11:00 AM	46.9	70.1	39.6
11:00 AM - 12:00 PM	47.2	78.1	39.6
12:00 PM - 01:00 PM	43.3	55.9	39.1
01:00 PM - 02:00 PM	43.3	64.3	40.1
02:00 PM - 03:00 PM	45.2	71.3	39.4
03:00 PM - 04:00 PM	45.3	65.0	40.6
04:00 PM - 05:00 PM	43.0	69.0	39.1
05:00 PM - 06:00 PM	45.9	64.4	42.3
06:00 PM - 07:00 PM	46.5	70.3	42.3
07:00 PM - 08:00 PM	49.6	63.7	47.8
08:00 PM - 09:00 PM	47.4	65.2	45.6
09:00 PM - 10:00 PM	46.5	59.2	43.8
10:00 PM - 10:05 PM	47.0	52.6	45.0
10:05 PM - 10:10 PM	46.0	50.7	44.1
10:10 PM - 10:15 PM	44.8	51.6	43.2
10:15 PM - 10:20 PM	44.8	49.3	43.8
10:20 PM - 10:25 PM	44.4	48.3	43.1
10:25 PM - 10:30 PM	44.3	48.6	44.0
10:30 PM - 10:35 PM	45.3	50.5	42.6
10:35 PM - 10:40 PM	43.8	49.1	42.6
10:40 PM - 10:45 PM	43.8	51.4	41.1
10:45 PM - 10:50 PM	43.1	58.0	41.7
10:50 PM - 10:55 PM	44.9	49.0	42.8
10:55 PM - 11:00 PM	43.9	52.7	42.8
11:00 PM - 11:05 PM	43.9	52.4	42.8
11:05 PM - 11:10 PM	44.3	52.6	42.9
11:10 PM - 11:15 PM	44.3	52.4	42.7
11:15 PM - 11:20 PM	43.9	52.4	42.0
11:20 PM - 11:25 PM	43.8	52.1	42.7
11:25 PM - 11:30 PM	44.2	48.1	42.4
11:30 PM - 11:35 PM	44.0	47.9	41.9
11:35 PM - 11:40 PM	43.4	46.2	41.4
11:40 PM - 11:45 PM	42.5	46.2	43.1
11:45 PM - 11:50 PM	43.1	47.4	42.1
11:50 PM - 11:55 PM	43.4	47.8	42.5
11:55 PM - 12:00 AM	43.7	47.0	41.9
12:00 AM - 12:05 AM	43.6	51.3	42.0
12:05 AM - 12:10 AM	43.6		

The above results are valid only for the analyzed sample(s) as indicated in this report. No part of this report for any future use may be reproduced in any form without written consent from the laboratory. At ALS Laboratory Group (Thailand) Ltd., we recommend that this report is not reproduced except in full.

Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhol, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107840-1

Page 2 of 3

Sample No. 2494233-19
Parameter Noise
Location ไร่พันล้าน (จันทบุรี) (GPS 47P 0729508, 1622765) (Shut down)
Measurement Date Aug 27 - Aug 28, 2024
Measurement by Prommee Sripradret
Sound Level Meter 597164

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:10 AM - 12:15 AM	43.5	49.2	42.1
12:15 AM - 12:20 AM	44.6	51.8	43.1
12:20 AM - 12:25 AM	46.4	52.4	43.9
12:25 AM - 12:30 AM	47.1	55.7	43.7
12:30 AM - 12:35 AM	45.7	49.9	43.9
12:35 AM - 12:40 AM	47.2	55.6	43.7
12:40 AM - 12:45 AM	45.8	51.5	43.7
12:45 AM - 12:50 AM	45.6	52.7	43.3
12:50 AM - 12:55 AM	43.8	54.4	40.4
01:00 AM - 01:05 AM	47.3	55.3	41.4
01:05 AM - 01:10 AM	55.3	63.0	49.7
01:10 AM - 01:15 AM	57.1	66.3	49.2
01:15 AM - 01:20 AM	51.4	57.8	47.1
01:20 AM - 01:25 AM	46.9	55.1	43.8
01:25 AM - 01:30 AM	46.0	53.0	39.5
01:30 AM - 01:35 AM	41.0	45.9	38.1
01:35 AM - 01:40 AM	40.1	45.0	37.8
01:40 AM - 01:45 AM	42.9	62.0	39.3
01:45 AM - 01:50 AM	41.3	46.7	39.3
01:50 AM - 01:55 AM	47.5	72.5	40.9
01:55 AM - 02:00 AM	41.8	49.9	39.4
02:00 AM - 02:05 AM	42.8	48.5	40.5
02:05 AM - 02:10 AM	44.5	49.4	41.4
02:10 AM - 02:15 AM	44.1	55.3	41.2
02:15 AM - 02:20 AM	43.2	49.6	41.3
02:20 AM - 02:25 AM	43.1	49.9	39.2
02:25 AM - 02:30 AM	41.5	48.4	39.2
02:30 AM - 02:35 AM	41.5	51.4	39.7
02:35 AM - 02:40 AM	42.6	51.9	40.0
02:40 AM - 02:45 AM	42.3	51.8	39.6
02:45 AM - 02:50 AM	41.8	52.0	38.3
02:50 AM - 02:55 AM	41.2	52.1	38.2
02:55 AM - 03:00 AM	42.9	56.9	38.0
03:00 AM - 03:05 AM	42.8	53.3	39.9
03:05 AM - 03:10 AM	45.7	53.3	43.5
03:10 AM - 03:15 AM	44.2	53.1	41.3
03:15 AM - 03:20 AM	43.7	53.2	41.0
03:20 AM - 03:25 AM	45.8	53.9	42.9
03:25 AM - 03:30 AM	46.5	54.3	44.1

The above results are valid only for the unreflected noise (A) as indicated in the report. If the noise is reflected, the results may be different. The results are not valid for the noise level in the background. ALS Laboratory Group (Thailand) Ltd. strongly recommends that this report is not reproduced except in full.

Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhol, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107840-1

Page 3 of 3

Sample No. 2494233-19
Parameter Noise
Location ไร่พันล้าน (จันทบุรี) (GPS 47P 0729508, 1622765) (Shut down)
Measurement Date Aug 27 - Aug 28, 2024
Measurement by Prommee Sripradret
Sound Level Meter 597164

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:30 AM - 03:35 AM	46.8	53.8	44.1
03:35 AM - 03:40 AM	44.9	53.5	42.2
03:40 AM - 03:45 AM	47.9	54.7	44.8
03:45 AM - 03:50 AM	46.2	54.1	43.6
03:50 AM - 03:55 AM	46.4	54.1	43.6
03:55 AM - 04:00 AM	42.2	52.4	39.6
04:00 AM - 04:05 AM	42.6	47.4	40.9
04:05 AM - 04:10 AM	42.4	54.4	40.5
04:10 AM - 04:15 AM	41.7	46.7	39.9
04:15 AM - 04:20 AM	42.0	47.9	40.0
04:20 AM - 04:25 AM	41.8	48.7	39.6
04:25 AM - 04:30 AM	43.1	54.6	39.7
04:30 AM - 04:35 AM	43.4	47.4	42.0
04:35 AM - 04:40 AM	72.5	87.5	42.8
04:40 AM - 04:45 AM	40.9	51.3	39.3
04:45 AM - 04:50 AM	40.7	49.3	38.1
04:50 AM - 04:55 AM	41.3	50.1	38.0
04:55 AM - 05:00 AM	41.5	49.7	38.0
05:00 AM - 05:05 AM	42.2	49.6	39.6
05:05 AM - 05:10 AM	41.1	49.4	38.3
05:10 AM - 05:15 AM	42.0	50.0	39.9
05:15 AM - 05:20 AM	43.9	49.8	41.6
05:20 AM - 05:25 AM	42.8	50.2	40.6
05:25 AM - 05:30 AM	42.4	49.5	40.2
05:30 AM - 05:35 AM	46.1	62.8	41.6
05:35 AM - 05:40 AM	44.5	59.2	41.8
05:40 AM - 05:45 AM	47.4	64.6	42.3
05:45 AM - 05:50 AM	50.0	69.3	43.2
05:50 AM - 05:55 AM	47.4	56.6	44.5
05:55 AM - 06:00 AM	46.4	51.5	44.2
06:00 AM - 07:00 AM	46.8	63.9	43.0
07:00 AM - 08:00 AM	49.4	75.6	42.1

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. In-house method : ตามมาตรฐานกรมโรงงานอุตสาหกรรม ฉบับปรับปรุงครั้งที่ 24 สำหรับ และระดับเสียงสูงส่ง (สำหรับการประเมินการโรงงาน พ.ศ. 2557)

The above results are valid only for the unreflected noise (A) as indicated in the report. If the noise is reflected, the results may be different. The results are not valid for the noise level in the background. ALS Laboratory Group (Thailand) Ltd. strongly recommends that this report is not reproduced except in full.

Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107841-1

Page 1 of 3

Sample No. : 2494233-20
Parameter : Noise
Location : บ้านห้วย (บ้านห้วย) (GPS 47P 0729508, 1622765) (Shut down)
Measurement Date : Aug 28 - Aug 29, 2024
Measurement by : Prommee Sripaniet
Sound Level Meter : 597164

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	48.6	77.4	39.7
09:00 AM - 10:00 AM	41.7	69.4	37.3
10:00 AM - 11:00 AM	43.4	71.8	38.2
11:00 AM - 12:00 PM	44.9	78.1	37.7
12:00 PM - 01:00 PM	44.1	69.2	36.7
01:00 PM - 02:00 PM	44.8	74.1	37.4
02:00 PM - 03:00 PM	48.5	76.8	38.7
03:00 PM - 04:00 PM	49.6	75.8	38.0
04:00 PM - 05:00 PM	43.6	64.3	39.5
05:00 PM - 06:00 PM	50.2	78.4	41.9
06:00 PM - 07:00 PM	45.8	66.2	42.5
07:00 PM - 08:00 PM	49.0	60.3	46.9
08:00 PM - 09:00 PM	48.7	57.2	47.3
09:00 PM - 10:00 PM	47.7	59.7	46.6
10:00 PM - 10:05 PM	47.1	50.5	45.8
10:05 PM - 10:10 PM	46.9	51.6	45.9
10:10 PM - 10:15 PM	46.8	57.3	44.8
10:15 PM - 10:20 PM	47.4	52.0	45.8
10:20 PM - 10:25 PM	47.8	53.0	45.0
10:25 PM - 10:30 PM	45.7	51.4	42.3
10:30 PM - 10:35 PM	44.9	49.9	41.6
10:35 PM - 10:40 PM	43.2	49.3	40.5
10:40 PM - 10:45 PM	43.6	55.7	42.0
10:45 PM - 10:50 PM	47.4	47.4	42.2
10:50 PM - 10:55 PM	45.2	49.3	43.9
10:55 PM - 11:00 PM	46.5	52.5	44.5
11:00 PM - 11:05 PM	46.4	50.0	45.5
11:05 PM - 11:10 PM	47.9	60.2	45.8
11:10 PM - 11:15 PM	46.6	48.9	45.7
11:15 PM - 11:20 PM	46.6	49.1	44.9
11:20 PM - 11:25 PM	46.3	48.6	45.4
11:25 PM - 11:30 PM	46.6	49.3	45.5
11:30 PM - 11:35 PM	46.5	48.8	45.7
11:35 PM - 11:40 PM	46.4	49.0	45.4
11:40 PM - 11:45 PM	45.7	48.5	44.6
11:45 PM - 11:50 PM	45.6	48.5	43.7
11:50 PM - 11:55 PM	45.7	48.0	44.8
11:55 PM - 12:00 AM	46.3	49.2	43.6
12:00 AM - 12:05 AM	42.5	47.3	40.0
12:05 AM - 12:10 AM	42.2	53.2	40.4

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

Approved by

Kanokkorn Anek

Kanokkorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107841-1

Page 2 of 3

Sample No. : 2494233-20
Parameter : Noise
Location : บ้านห้วย (บ้านห้วย) (GPS 47P 0729508, 1622765) (Shut down)
Measurement Date : Aug 28 - Aug 29, 2024
Measurement by : Prommee Sripaniet
Sound Level Meter : 597164

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:10 AM - 12:15 AM	42.4	47.8	40.3
12:15 AM - 12:20 AM	42.1	48.3	39.9
12:20 AM - 12:25 AM	42.0	48.9	39.5
12:25 AM - 12:30 AM	42.2	48.4	38.6
12:30 AM - 12:35 AM	42.9	47.9	39.6
12:35 AM - 12:40 AM	43.9	48.7	41.6
12:40 AM - 12:45 AM	47.3	61.9	43.2
12:45 AM - 12:50 AM	45.2	58.1	43.1
12:50 AM - 12:55 AM	47.7	55.8	44.5
12:55 AM - 01:00 AM	54.0	63.3	49.1
01:00 AM - 01:05 AM	48.3	55.6	44.7
01:05 AM - 01:10 AM	48.3	57.1	44.2
01:10 AM - 01:15 AM	48.0	59.1	45.8
01:15 AM - 01:20 AM	49.5	52.2	44.9
01:20 AM - 01:25 AM	46.7	52.6	42.1
01:25 AM - 01:30 AM	46.1	46.1	41.0
01:30 AM - 01:35 AM	42.1	46.6	40.6
01:35 AM - 01:40 AM	42.0	46.0	42.3
01:40 AM - 01:45 AM	43.4	46.7	42.8
01:45 AM - 01:50 AM	43.9	47.9	42.8
01:50 AM - 01:55 AM	43.6	61.6	41.8
01:55 AM - 02:00 AM	42.1	46.6	40.8
02:00 AM - 02:05 AM	41.6	45.5	40.3
02:05 AM - 02:10 AM	40.0	45.6	38.6
02:10 AM - 02:15 AM	39.8	44.8	38.5
02:15 AM - 02:20 AM	40.2	48.5	38.5
02:20 AM - 02:25 AM	41.2	50.9	38.1
02:25 AM - 02:30 AM	42.6	49.2	39.6
02:30 AM - 02:35 AM	41.4	46.9	39.5
02:35 AM - 02:40 AM	40.9	46.3	39.2
02:40 AM - 02:45 AM	40.4	47.5	39.2
02:45 AM - 02:50 AM	41.3	47.9	39.3
02:50 AM - 02:55 AM	40.4	49.7	38.3
02:55 AM - 03:00 AM	41.1	49.9	38.6
03:00 AM - 03:05 AM	40.4	49.4	38.1
03:05 AM - 03:10 AM	40.6	46.0	38.5
03:10 AM - 03:15 AM	41.9	48.6	37.8
03:15 AM - 03:20 AM	40.9	46.4	37.8
03:20 AM - 03:25 AM	41.8	49.4	38.8
03:25 AM - 03:30 AM	48.5	57.6	38.4

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Approved by

Kanokkorn Anek

Kanokkorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhol, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107841-1

Page 3 of 3

Sample No. 2494233-20
Parameter Noise
Location โรงปูน (พลาตัน) (GPS 47P 0729508, 1622765) (Shut down)
Measurement Date Aug 28 - Aug 29, 2024
Measurement by Prommee Sripatret
Sound Level Meter 597164

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:30 AM - 03:35 AM	43.4	57.8	38.8
03:35 AM - 03:40 AM	41.8	53.4	39.2
03:40 AM - 03:45 AM	43.1	55.5	39.6
03:45 AM - 03:50 AM	42.3	54.2	38.6
03:50 AM - 03:55 AM	44.0	54.8	38.4
03:55 AM - 04:00 AM	46.6	61.3	39.5
04:00 AM - 04:05 AM	43.1	55.6	39.0
04:05 AM - 04:10 AM	44.9	55.7	38.8
04:10 AM - 04:15 AM	44.9	56.1	38.2
04:15 AM - 04:20 AM	45.6	58.1	38.9
04:20 AM - 04:25 AM	47.2	58.4	39.5
04:25 AM - 04:30 AM	47.8	58.5	40.0
04:30 AM - 04:35 AM	46.1	58.5	39.9
04:35 AM - 04:40 AM	70.7	86.0	41.8
04:40 AM - 04:45 AM	66.2	84.8	39.8
04:45 AM - 04:50 AM	47.7	56.9	39.4
04:50 AM - 04:55 AM	48.0	57.0	39.5
04:55 AM - 05:00 AM	47.0	56.3	40.1
05:00 AM - 05:05 AM	48.3	56.4	40.0
05:05 AM - 05:10 AM	49.3	56.6	40.6
05:10 AM - 05:15 AM	50.6	62.5	41.4
05:15 AM - 05:20 AM	50.9	65.0	41.1
05:20 AM - 05:25 AM	49.8	56.3	41.2
05:25 AM - 05:30 AM	50.3	56.6	42.0
05:30 AM - 05:35 AM	51.7	58.2	44.4
05:35 AM - 05:40 AM	51.7	56.5	44.1
05:40 AM - 05:45 AM	52.0	56.4	45.0
05:45 AM - 05:50 AM	52.4	56.7	44.8
05:50 AM - 05:55 AM	51.2	57.3	44.8
05:55 AM - 06:00 AM	51.0	57.1	44.7
06:00 AM - 07:00 AM	47.2	61.5	42.7
07:00 AM - 08:00 AM	46.7	66.3	41.8

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016

2. In-house method : STW 06-001 based on ISO 1996-1 : 2016
1. เครื่องวัดระดับเสียงแบบเคลื่อนที่แบบพกพา รุ่นเสียงสูง 24 ชั่วโมง และระดับเสียงสูงสุดที่ค่าการประเมินการรบกวน พ.ศ. 2567

The above results are valid only for the test method specified (as indicated in this report). No part of this report for certification may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) Ltd. strongly recommends that this report is used in accordance with its terms.

Approved by

Kanokkorn Anek

Asst. General Manager

Kanokkorn Anek

Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhol, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107842-1

Page 1 of 3

Sample No. 2494233-21
Parameter Noise
Location โรงปูน (พลาตัน) (GPS 47P 0729508, 1622765) (Shut down)
Measurement Date Aug 29 - Aug 30, 2024
Measurement by Prommee Sripatret
Sound Level Meter 597164

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
06:00 AM - 09:00 AM	48.6	73.0	41.8
09:00 AM - 10:00 AM	48.3	70.8	43.6
10:00 AM - 11:00 AM	47.2	61.6	43.8
11:00 AM - 12:00 PM	47.3	69.1	42.3
12:00 PM - 01:00 PM	46.1	76.9	40.0
01:00 PM - 02:00 PM	49.1	74.5	41.4
02:00 PM - 03:00 PM	51.7	79.3	47.5
03:00 PM - 04:00 PM	47.6	71.7	43.2
04:00 PM - 05:00 PM	50.6	77.9	41.6
05:00 PM - 06:00 PM	46.4	68.1	41.5
06:00 PM - 07:00 PM	53.6	80.6	42.5
07:00 PM - 08:00 PM	52.7	84.0	48.6
08:00 PM - 09:00 PM	46.8	56.6	45.3
09:00 PM - 10:00 PM	43.4	59.9	41.4
10:00 PM - 10:05 PM	44.2	55.0	42.1
10:05 PM - 10:10 PM	43.7	52.4	42.2
10:10 PM - 10:15 PM	43.8	52.3	42.0
10:15 PM - 10:20 PM	43.8	52.2	41.8
10:20 PM - 10:25 PM	44.3	49.1	43.0
10:25 PM - 10:30 PM	44.1	51.8	42.7
10:30 PM - 10:35 PM	45.4	56.3	42.8
10:35 PM - 10:40 PM	43.8	63.5	41.9
10:40 PM - 10:45 PM	43.5	49.9	42.2
10:45 PM - 10:50 PM	43.6	50.2	42.2
10:50 PM - 10:55 PM	44.8	50.4	43.2
10:55 PM - 11:00 PM	44.7	51.8	43.3
11:00 PM - 11:05 PM	45.5	51.1	43.9
11:05 PM - 11:10 PM	45.8	52.4	44.3
11:10 PM - 11:15 PM	44.5	52.4	43.3
11:15 PM - 11:20 PM	44.6	54.8	42.5
11:20 PM - 11:25 PM	44.3	55.0	41.4
11:25 PM - 11:30 PM	44.1	55.1	41.2
11:30 PM - 11:35 PM	44.0	54.7	41.0
11:35 PM - 11:40 PM	44.7	50.9	41.6
11:40 PM - 11:45 PM	42.5	50.4	40.8
11:45 PM - 11:50 PM	42.3	50.4	40.6
11:50 PM - 11:55 PM	42.6	50.4	40.9
11:55 PM - 12:00 AM	43.6	51.3	41.1
12:00 AM - 12:05 AM	43.9	55.5	41.7
12:05 AM - 12:10 AM	43.1	50.5	41.1

The above results are valid only for the test method specified (as indicated in this report). No part of this report for certification may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) Ltd. strongly recommends that this report is used in accordance with its terms.

Approved by

Kanokkorn Anek

Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhol, Saraburi
Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Sample No. 2494233-21

Parameter Noise

Location 101Hu (พลาซ่า) (GPS 47P 0729508, 1622765) (Shut down)

Measurement Date Aug 29 - Aug 30, 2024

Measurement by Prommee Sipatnet

Sound Level Meter 597164

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107842-1

Page 2 of 3

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:10 AM - 12:15 AM	41.8	50.1	40.2
12:15 AM - 12:20 AM	43.2	50.5	41.7
12:20 AM - 12:25 AM	43.5	52.2	41.9
12:25 AM - 12:30 AM	43.7	50.1	42.5
12:30 AM - 12:35 AM	44.5	51.4	42.7
12:35 AM - 12:40 AM	45.5	50.8	42.9
12:40 AM - 12:45 AM	45.7	58.7	44.0
12:45 AM - 12:50 AM	46.0	59.7	43.7
12:50 AM - 12:55 AM	45.2	51.5	43.4
12:55 AM - 01:00 AM	45.6	51.2	43.9
01:00 AM - 01:05 AM	46.4	52.9	44.1
01:05 AM - 01:10 AM	46.6	62.5	45.1
01:10 AM - 01:15 AM	46.5	55.3	44.8
01:15 AM - 01:20 AM	45.8	52.2	44.4
01:20 AM - 01:25 AM	45.5	51.5	44.4
01:25 AM - 01:30 AM	45.4	51.2	44.2
01:30 AM - 01:35 AM	45.5	52.3	43.2
01:35 AM - 01:40 AM	45.9	53.2	44.4
01:40 AM - 01:45 AM	46.2	53.7	44.8
01:45 AM - 01:50 AM	45.3	54.2	43.4
01:50 AM - 01:55 AM	45.6	53.9	43.7
01:55 AM - 02:00 AM	46.0	54.2	44.0
02:00 AM - 02:05 AM	46.8	58.1	44.7
02:05 AM - 02:10 AM	47.9	54.8	46.1
02:10 AM - 02:15 AM	47.4	54.7	45.6
02:15 AM - 02:20 AM	47.3	54.3	45.7
02:20 AM - 02:25 AM	47.7	54.3	45.8
02:25 AM - 02:30 AM	47.6	55.4	44.5
02:30 AM - 02:35 AM	47.0	55.0	45.6
02:35 AM - 02:40 AM	47.2	51.8	45.4
02:40 AM - 02:45 AM	47.4	53.1	45.6
02:45 AM - 02:50 AM	46.5	52.1	44.9
02:50 AM - 02:55 AM	46.4	55.0	44.9
02:55 AM - 03:00 AM	46.9	53.1	45.2
03:00 AM - 03:05 AM	47.0	54.6	45.1
03:05 AM - 03:10 AM	46.2	53.1	44.7
03:10 AM - 03:15 AM	45.9	52.1	44.5
03:15 AM - 03:20 AM	46.5	53.1	44.9
03:20 AM - 03:25 AM	46.0	52.8	44.0
03:25 AM - 03:30 AM	45.2	57.7	42.7

The above results are valid only for the analyzed/measured parameter(s) as indicated in the report. They are not valid for other parameters or locations without written consent from the Laboratory. A.S. Laboratory Group (Thailand) strong recommends that this report is not reproduced except in full.

Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhol, Saraburi
Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Sample No. 2494233-21

Parameter Noise

Location 101Hu (พลาซ่า) (GPS 47P 0729508, 1622765) (Shut down)

Measurement Date Aug 29 - Aug 30, 2024

Measurement by Prommee Sipatnet

Sound Level Meter 597164

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107842-1

Page 3 of 3

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:30 AM - 03:35 AM	45.6	53.8	43.4
03:35 AM - 03:40 AM	44.8	53.5	42.0
03:40 AM - 03:45 AM	44.7	56.9	42.2
03:45 AM - 03:50 AM	45.0	53.3	42.5
03:50 AM - 03:55 AM	46.5	56.0	42.5
03:55 AM - 04:00 AM	45.8	54.3	41.9
04:00 AM - 04:05 AM	45.3	54.5	41.6
04:05 AM - 04:10 AM	44.6	52.4	41.6
04:10 AM - 04:15 AM	46.9	61.3	41.2
04:15 AM - 04:20 AM	43.4	56.6	39.9
04:20 AM - 04:25 AM	43.0	50.2	40.5
04:25 AM - 04:30 AM	42.7	55.9	39.7
04:30 AM - 04:35 AM	67.3	82.4	40.9
04:35 AM - 04:40 AM	44.3	56.2	41.8
04:40 AM - 04:45 AM	46.0	57.5	41.0
04:45 AM - 04:50 AM	44.9	56.4	40.2
04:50 AM - 04:55 AM	44.4	57.2	40.2
04:55 AM - 05:00 AM	43.6	50.1	40.1
05:00 AM - 05:05 AM	45.0	56.4	41.5
05:05 AM - 05:10 AM	44.9	52.0	42.6
05:10 AM - 05:15 AM	44.9	50.1	42.4
05:15 AM - 05:20 AM	45.3	53.6	42.5
05:20 AM - 05:25 AM	45.2	55.5	42.7
05:25 AM - 05:30 AM	49.8	67.7	44.1
05:30 AM - 05:35 AM	46.4	53.9	43.8
05:35 AM - 05:40 AM	48.6	68.4	43.6
05:40 AM - 05:45 AM	46.0	55.6	43.3
05:45 AM - 05:50 AM	46.9	56.5	44.6
05:50 AM - 05:55 AM	46.6	64.4	43.8
05:55 AM - 06:00 AM	45.3	49.5	43.6
06:00 AM - 07:00 AM	46.6	62.8	43.1
07:00 AM - 08:00 AM	46.6	68.6	42.4

Reference Method :

- In-house method : STM 08-001 based on ISO 1996-1 : 2016
- ใช้มาตรฐานโรงงานอุตสาหกรรม เรื่อง วิธีการตรวจวัดระดับเสียงรบกวน ระดับเสียงต่อ 24 ชั่วโมง และระดับเสียงเฉลี่ยโดยการถ่วงน้ำหนักตาม พ.ร.บ. 2567

The above results are valid only for the analyzed/measured parameter(s) as indicated in the report. They are not valid for other parameters or locations without written consent from the Laboratory. A.S. Laboratory Group (Thailand) strong recommends that this report is not reproduced except in full.

Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kengkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107843-1

Page 1 of 3

Sample No. : 2494233-22
Parameter : Noise
Location : โรงผลิตปูน (สถานี) (GPS 47P 071941.1, 1614715) (Shut down)
Measurement Date : Aug 23 - Aug 24, 2024
Measurement by : Prommee Sripatnet
Sound Level Meter : 00572566

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	53.6	74.4	49.2
09:00 AM - 10:00 AM	56.3	71.7	53.3
10:00 AM - 11:00 AM	55.1	65.2	52.7
11:00 AM - 12:00 PM	59.4	79.3	52.2
12:00 PM - 01:00 PM	53.8	68.5	51.5
01:00 PM - 02:00 PM	54.2	77.8	51.6
02:00 PM - 03:00 PM	56.4	74.1	52.7
03:00 PM - 04:00 PM	58.4	76.3	53.5
04:00 PM - 05:00 PM	56.8	77.3	53.5
05:00 PM - 06:00 PM	59.1	78.0	53.7
06:00 PM - 07:00 PM	60.3	71.6	56.6
07:00 PM - 08:00 PM	55.7	67.9	53.7
08:00 PM - 09:00 PM	54.9	74.8	53.3
09:00 PM - 10:00 PM	56.5	67.3	54.2
10:00 PM - 10:05 PM	55.2	58.6	53.6
10:05 PM - 10:10 PM	56.0	64.4	53.9
10:10 PM - 10:15 PM	56.9	68.8	54.7
10:15 PM - 10:20 PM	56.7	63.3	55.0
10:20 PM - 10:25 PM	56.9	62.2	55.3
10:25 PM - 10:30 PM	56.7	65.0	55.3
10:30 PM - 10:35 PM	57.5	66.1	55.3
10:35 PM - 10:40 PM	56.9	64.3	55.4
10:40 PM - 10:45 PM	56.7	63.4	55.0
10:45 PM - 10:50 PM	56.0	60.7	55.0
10:50 PM - 10:55 PM	55.7	60.7	54.1
10:55 PM - 11:00 PM	56.3	63.9	54.4
11:00 PM - 11:05 PM	55.1	61.3	53.5
11:05 PM - 11:10 PM	55.7	62.4	54.3
11:10 PM - 11:15 PM	56.4	67.0	54.2
11:15 PM - 11:20 PM	55.7	60.9	54.2
11:20 PM - 11:25 PM	56.6	61.7	54.4
11:25 PM - 11:30 PM	54.8	59.5	53.3
11:30 PM - 11:35 PM	55.4	60.9	53.5
11:35 PM - 11:40 PM	55.6	59.1	53.9
11:40 PM - 11:45 PM	54.6	62.8	52.9
11:45 PM - 11:50 PM	54.8	62.1	53.1
11:50 PM - 11:55 PM	55.2	65.3	51.7
11:55 PM - 12:00 AM	53.5	69.3	51.8
12:00 AM - 12:05 AM	53.8	60.4	51.5
12:05 AM - 12:10 AM	53.9	61.3	51.2

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Approved by

Kanokkorn Anek

Kanokkorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kengkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107843-1

Page 2 of 3

Sample No. : 2494233-22
Parameter : Noise
Location : โรงผลิตปูน (สถานี) (GPS 47P 071941.1, 1614715) (Shut down)
Measurement Date : Aug 23 - Aug 24, 2024
Measurement by : Prommee Sripatnet
Sound Level Meter : 00572566

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:10 AM - 12:15 AM	53.8	58.7	51.9
12:15 AM - 12:20 AM	52.7	56.3	51.4
12:20 AM - 12:25 AM	52.4	59.5	50.1
12:25 AM - 12:30 AM	51.8	62.2	49.1
12:30 AM - 12:35 AM	52.3	59.4	49.9
12:35 AM - 12:40 AM	52.4	58.5	50.4
12:40 AM - 12:45 AM	53.2	60.1	49.9
12:45 AM - 12:50 AM	52.8	58.0	50.0
12:50 AM - 12:55 AM	53.1	58.0	50.9
12:55 AM - 01:00 AM	53.2	58.1	50.8
01:00 AM - 01:05 AM	52.9	59.8	50.6
01:05 AM - 01:10 AM	51.8	57.4	49.0
01:10 AM - 01:15 AM	51.4	59.8	49.4
01:15 AM - 01:20 AM	52.7	60.6	49.1
01:20 AM - 01:25 AM	53.9	66.0	50.1
01:25 AM - 01:30 AM	53.4	64.5	50.2
01:30 AM - 01:35 AM	54.6	63.5	51.0
01:35 AM - 01:40 AM	54.2	63.6	50.0
01:40 AM - 01:45 AM	51.1	60.6	47.9
01:45 AM - 01:50 AM	52.6	59.3	48.8
01:50 AM - 01:55 AM	59.0	75.0	49.5
01:55 AM - 02:00 AM	51.0	55.7	48.0
02:00 AM - 02:05 AM	53.6	66.0	48.5
02:05 AM - 02:10 AM	56.1	71.5	50.9
02:10 AM - 02:15 AM	53.4	70.7	49.8
02:15 AM - 02:20 AM	51.3	59.8	48.1
02:20 AM - 02:25 AM	52.1	59.1	47.7
02:25 AM - 02:30 AM	53.0	60.0	49.2
02:30 AM - 02:35 AM	52.6	70.9	49.0
02:35 AM - 02:40 AM	53.3	74.2	48.9
02:40 AM - 02:45 AM	52.7	59.7	48.9
02:45 AM - 02:50 AM	53.0	60.1	50.2
02:50 AM - 02:55 AM	53.9	61.8	49.1
02:55 AM - 03:00 AM	51.3	56.2	48.1
03:00 AM - 03:05 AM	51.9	59.2	49.4
03:05 AM - 03:10 AM	53.9	60.0	50.0
03:10 AM - 03:15 AM	52.8	60.2	49.3
03:15 AM - 03:20 AM	51.6	57.7	47.5
03:20 AM - 03:25 AM	50.6	58.4	47.9
03:25 AM - 03:30 AM	52.2	60.9	49.8

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Approved by

Kanokkorn Anek

Kanokkorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99/219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhai, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107843-1

Page 3 of 3

Sample No. 2494233-22
Parameter Noise
Location ตำบลท่าทราย (จ.ลพบุรี) (GPS 47P 0719411, 1614715) (Shut down)
Measurement Date Aug 23 - Aug 24, 2024
Measurement by Prommee Siripatnet
Sound Level Meter 00572566

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:30 AM - 03:35 AM	51.4	56.6	48.9
03:35 AM - 03:40 AM	52.7	63.6	49.6
03:40 AM - 03:45 AM	54.8	63.2	50.9
03:45 AM - 03:50 AM	53.4	59.7	48.9
03:50 AM - 03:55 AM	55.3	60.1	50.2
03:55 AM - 04:00 AM	55.1	65.6	51.0
04:00 AM - 04:05 AM	54.7	59.6	51.0
04:05 AM - 04:10 AM	56.5	61.4	53.2
04:10 AM - 04:15 AM	57.6	62.4	54.6
04:15 AM - 04:20 AM	54.0	60.4	47.8
04:20 AM - 04:25 AM	56.2	61.5	51.8
04:25 AM - 04:30 AM	53.3	59.9	48.2
04:30 AM - 04:35 AM	60.1	68.7	54.5
04:35 AM - 04:40 AM	62.5	69.2	57.2
04:40 AM - 04:45 AM	62.8	68.3	59.9
04:45 AM - 04:50 AM	62.9	69.2	59.6
04:50 AM - 04:55 AM	63.6	69.9	60.3
04:55 AM - 05:00 AM	63.7	70.6	60.8
05:00 AM - 05:05 AM	63.9	71.2	61.1
05:05 AM - 05:10 AM	63.6	70.7	60.4
05:10 AM - 05:15 AM	63.4	70.1	60.0
05:15 AM - 05:20 AM	62.4	68.8	58.5
05:20 AM - 05:25 AM	58.2	66.3	52.4
05:25 AM - 05:30 AM	52.3	60.0	49.4
05:30 AM - 05:35 AM	53.3	60.8	50.1
05:35 AM - 05:40 AM	53.1	57.2	50.6
05:40 AM - 05:45 AM	53.2	60.9	50.6
05:45 AM - 05:50 AM	53.2	65.0	49.7
05:50 AM - 05:55 AM	68.9	86.4	53.4
05:55 AM - 06:00 AM	55.4	64.0	53.1
06:00 AM - 07:00 AM	55.3	79.7	51.3
07:00 AM - 08:00 AM	55.1	70.5	52.1

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. วิธีการวัด : ใช้เครื่องวัดระดับเสียงแบบถาวร ระดับต่อเนื่อง 24 ชั่วโมง และคำนวณค่าเฉลี่ยทางคณิตศาสตร์ตาม พ.ร.บ. 2567

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Approved by
Kanokorn Anek
Asst. General Manager

Kanokorn Anek



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99/219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhai, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107844-1

Page 1 of 3

Sample No. 2494233-23
Parameter Noise
Location ตำบลท่าทราย (จ.ลพบุรี) (GPS 47P 0719411, 1614715) (Shut down)
Measurement Date Aug 24 - Aug 25, 2024
Measurement by Prommee Siripatnet
Sound Level Meter 00572566

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	57.0	75.5	52.6
09:00 AM - 10:00 AM	59.1	78.3	55.0
10:00 AM - 11:00 AM	62.6	79.9	55.0
11:00 AM - 12:00 PM	62.5	82.9	54.8
12:00 PM - 01:00 PM	54.5	66.4	52.2
01:00 PM - 02:00 PM	57.3	75.5	52.0
02:00 PM - 03:00 PM	63.7	77.8	54.9
03:00 PM - 04:00 PM	60.8	82.2	55.6
04:00 PM - 05:00 PM	60.1	79.4	56.7
05:00 PM - 06:00 PM	60.7	75.1	56.4
06:00 PM - 07:00 PM	62.0	77.5	58.1
07:00 PM - 08:00 PM	61.2	82.9	57.8
08:00 PM - 09:00 PM	61.0	71.9	59.4
09:00 PM - 10:00 PM	57.8	71.1	56.4
10:00 PM - 10:05 PM	60.1	69.6	55.8
10:05 PM - 10:10 PM	62.2	64.4	61.4
10:10 PM - 10:15 PM	61.4	64.2	60.3
10:15 PM - 10:20 PM	60.6	65.8	60.2
10:20 PM - 10:25 PM	60.6	72.7	59.9
10:25 PM - 10:30 PM	59.6	71.9	57.9
10:30 PM - 10:35 PM	57.7	72.3	55.4
10:35 PM - 10:40 PM	54.8	63.9	53.6
10:40 PM - 10:45 PM	53.3	64.7	51.1
10:45 PM - 10:50 PM	54.7	74.5	53.0
10:50 PM - 10:55 PM	53.7	58.6	52.0
10:55 PM - 11:00 PM	55.0	65.2	52.7
11:00 PM - 11:05 PM	56.5	64.0	54.1
11:05 PM - 11:10 PM	54.8	60.4	52.7
11:10 PM - 11:15 PM	54.0	59.3	52.6
11:15 PM - 11:20 PM	54.7	63.6	52.0
11:20 PM - 11:25 PM	53.1	59.1	51.7
11:25 PM - 11:30 PM	53.3	57.5	51.3
11:30 PM - 11:35 PM	53.8	59.9	52.3
11:35 PM - 11:40 PM	53.9	57.8	52.1
11:40 PM - 11:45 PM	54.3	59.7	52.4
11:45 PM - 11:50 PM	55.0	64.0	51.7
11:50 PM - 11:55 PM	54.3	63.2	51.8
11:55 PM - 12:00 AM	52.8	60.5	50.7
12:00 AM - 12:05 AM	52.8	59.6	51.1
12:05 AM - 12:10 AM	52.4	56.3	50.5

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Approved by
Kanokorn Anek
Asst. General Manager

Kanokorn Anek



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107844-1

Page 2 of 2

Sample No. : 2494233-23
Parameter : Noise
Location : หน้าวัดโคกกรวด (จุดล่าง) (GPS 47° 07'19.411, 161°47'15) (Shut down)
Measurement Date : Aug 24 - Aug 25, 2024
Measurement by : Prommee Sripatnet
Sound Level Meter : 00572566

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:10 AM - 12:15 AM	53.5	61.1	50.4
12:15 AM - 12:20 AM	52.5	59.2	50.1
12:20 AM - 12:25 AM	52.4	59.4	50.0
12:25 AM - 12:30 AM	51.7	59.5	48.9
12:30 AM - 12:35 AM	51.9	62.5	48.7
12:35 AM - 12:40 AM	51.7	58.9	48.6
12:40 AM - 12:45 AM	51.3	63.0	49.1
12:45 AM - 12:50 AM	50.3	58.9	47.2
12:50 AM - 12:55 AM	51.7	65.3	48.1
12:55 AM - 01:00 AM	52.5	58.5	49.6
01:00 AM - 01:05 AM	52.5	61.8	48.8
01:05 AM - 01:10 AM	51.2	57.5	48.0
01:10 AM - 01:15 AM	52.2	61.6	49.2
01:15 AM - 01:20 AM	51.8	64.0	47.8
01:20 AM - 01:25 AM	61.0	76.7	48.5
01:25 AM - 01:30 AM	52.5	62.4	48.8
01:30 AM - 01:35 AM	50.4	58.3	47.0
01:35 AM - 01:40 AM	51.1	60.2	47.8
01:40 AM - 01:45 AM	50.2	58.0	46.4
01:45 AM - 01:50 AM	49.7	59.3	46.8
01:50 AM - 01:55 AM	50.4	57.2	47.7
01:55 AM - 02:00 AM	50.5	60.1	46.8
02:00 AM - 02:05 AM	57.4	62.5	48.3
02:05 AM - 02:10 AM	52.7	62.5	47.9
02:10 AM - 02:15 AM	58.4	62.5	48.0
02:15 AM - 02:20 AM	51.1	59.3	47.8
02:20 AM - 02:25 AM	52.1	62.4	47.1
02:25 AM - 02:30 AM	51.2	61.8	47.1
02:30 AM - 02:35 AM	49.8	58.2	46.9
02:35 AM - 02:40 AM	50.0	57.4	46.4
02:40 AM - 02:45 AM	52.1	66.1	45.8
02:45 AM - 02:50 AM	50.5	60.5	46.5
02:50 AM - 02:55 AM	50.5	60.1	46.5
02:55 AM - 03:00 AM	49.5	57.1	45.9
03:00 AM - 03:05 AM	50.9	60.8	47.3
03:05 AM - 03:10 AM	51.3	61.6	48.7
03:10 AM - 03:15 AM	50.2	57.4	45.9
03:15 AM - 03:20 AM	50.3	58.4	47.1
03:20 AM - 03:25 AM	50.5	56.4	48.2
03:25 AM - 03:30 AM	50.5	60.2	47.5

The above results are valid only for the and verification sample(s) as indicated in the report. This report is not valid for any other sample(s) or for any other purpose without written consent from the Laboratory. ALS Laboratory Group (Thailand) Ltd. is not responsible for the results of this report if it is used for any other purpose except as indicated.

Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107844-1

Page 3 of 3

Sample No. : 2494233-23
Parameter : Noise
Location : หน้าวัดโคกกรวด (จุดล่าง) (GPS 47° 07'19.411, 161°47'15) (Shut down)
Measurement Date : Aug 24 - Aug 25, 2024
Measurement by : Prommee Sripatnet
Sound Level Meter : 00572566

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:30 AM - 03:35 AM	50.4	54.6	48.2
03:35 AM - 03:40 AM	51.4	57.5	49.0
03:40 AM - 03:45 AM	50.9	58.8	47.3
03:45 AM - 03:50 AM	50.6	56.0	48.2
03:50 AM - 03:55 AM	51.6	58.9	49.0
03:55 AM - 04:00 AM	51.8	61.5	47.2
04:00 AM - 04:05 AM	52.5	61.2	47.4
04:05 AM - 04:10 AM	52.4	64.2	46.7
04:10 AM - 04:15 AM	51.9	60.2	49.3
04:15 AM - 04:20 AM	51.3	56.5	49.2
04:20 AM - 04:25 AM	52.3	61.4	47.8
04:25 AM - 04:30 AM	49.2	55.5	46.5
04:30 AM - 04:35 AM	58.1	66.8	47.8
04:35 AM - 04:40 AM	60.7	66.1	56.7
04:40 AM - 04:45 AM	60.6	65.7	57.8
04:45 AM - 04:50 AM	60.2	66.2	57.8
04:50 AM - 04:55 AM	60.5	66.6	58.0
04:55 AM - 05:00 AM	60.8	65.7	58.3
05:00 AM - 05:05 AM	61.0	67.2	58.3
05:05 AM - 05:10 AM	62.6	69.5	59.1
05:10 AM - 05:15 AM	61.7	71.3	58.9
05:15 AM - 05:20 AM	61.6	66.8	58.6
05:20 AM - 05:25 AM	58.0	65.0	53.7
05:25 AM - 05:30 AM	56.7	69.8	51.4
05:30 AM - 05:35 AM	53.0	67.9	50.1
05:35 AM - 05:40 AM	52.5	60.0	50.1
05:40 AM - 05:45 AM	53.3	61.3	50.4
05:45 AM - 05:50 AM	51.9	58.3	49.4
05:50 AM - 05:55 AM	53.5	69.0	49.7
05:55 AM - 06:00 AM	57.3	61.4	55.7
06:00 AM - 07:00 AM	55.2	71.1	51.8
07:00 AM - 08:00 AM	62.1	79.5	53.6

Reference Method :

- In-house method : STM 06-001 based on ISO 1996-1 : 2016
- ใช้มาตรฐานวิธีทดสอบภายในห้องปฏิบัติการของ ALS Laboratory Group (Thailand) Co., Ltd. อ้างอิงตามมาตรฐาน ISO 1996-1 : 2016

Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kengkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received :Sep 04, 2024
Date Reported :Sep 11, 2024
Report No. : 3107845-1

Page 1 of 3

Sample No. 2494233-24
Parameter Noise
Location ฐานเครื่องปั่น (จุดวัด) (GPS 47P 0719411, 1614715) (Shut down)
Measurement Date Aug 25 - Aug 26, 2024
Measurement by Prommee Sripathet
Sound Level Meter 00572566

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	62.3	80.8	54.1
09:00 AM - 10:00 AM	56.5	79.5	51.2
10:00 AM - 11:00 AM	54.5	72.4	52.2
11:00 AM - 12:00 PM	59.0	80.8	52.3
12:00 PM - 01:00 PM	53.3	69.4	50.0
01:00 PM - 02:00 PM	53.7	72.4	51.3
02:00 PM - 03:00 PM	62.3	82.3	53.7
03:00 PM - 04:00 PM	60.6	84.2	55.7
04:00 PM - 05:00 PM	62.8	83.1	55.4
05:00 PM - 06:00 PM	61.7	82.8	54.5
06:00 PM - 07:00 PM	61.2	84.3	55.5
07:00 PM - 08:00 PM	57.2	71.3	54.6
08:00 PM - 09:00 PM	54.9	70.5	52.5
09:00 PM - 10:00 PM	53.3	67.2	51.2
10:00 PM - 10:05 PM	51.1	57.0	48.2
10:05 PM - 10:10 PM	52.9	59.8	50.0
10:10 PM - 10:15 PM	53.4	62.6	50.2
10:15 PM - 10:20 PM	51.7	55.8	50.2
10:20 PM - 10:25 PM	52.6	59.9	50.7
10:25 PM - 10:30 PM	55.3	65.4	52.5
10:30 PM - 10:35 PM	57.0	61.9	55.0
10:35 PM - 10:40 PM	57.8	66.9	54.6
10:40 PM - 10:45 PM	57.5	66.1	55.0
10:45 PM - 10:50 PM	58.1	66.5	55.9
10:50 PM - 10:55 PM	57.1	68.5	54.4
10:55 PM - 11:00 PM	55.6	67.7	52.5
11:00 PM - 11:05 PM	54.4	64.6	52.6
11:05 PM - 11:10 PM	53.9	59.3	51.9
11:10 PM - 11:15 PM	52.1	56.9	49.9
11:15 PM - 11:20 PM	53.7	61.6	50.6
11:20 PM - 11:25 PM	53.1	60.8	51.2
11:25 PM - 11:30 PM	54.0	67.9	50.6
11:30 PM - 11:35 PM	53.8	77.6	49.4
11:35 PM - 11:40 PM	51.4	57.9	48.4
11:40 PM - 11:45 PM	52.2	59.9	48.9
11:45 PM - 11:50 PM	52.3	62.1	49.3
11:50 PM - 11:55 PM	51.6	59.4	48.6
11:55 PM - 12:00 AM	51.5	61.3	48.3
12:00 AM - 12:05 AM	50.9	57.3	48.3
12:05 AM - 12:10 AM	52.2	65.0	48.2

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Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kengkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received :Sep 04, 2024
Date Reported :Sep 11, 2024
Report No. : 3107845-1

Page 2 of 3

Sample No. 2494233-24
Parameter Noise
Location ฐานเครื่องปั่น (จุดวัด) (GPS 47P 0719411, 1614715) (Shut down)
Measurement Date Aug 25 - Aug 26, 2024
Measurement by Prommee Sripathet
Sound Level Meter 00572566

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:10 AM - 12:15 AM	51.3	57.7	48.9
12:15 AM - 12:20 AM	50.1	66.0	47.6
12:20 AM - 12:25 AM	51.9	61.8	48.0
12:25 AM - 12:30 AM	51.8	59.9	49.5
12:30 AM - 12:35 AM	53.3	63.4	49.6
12:35 AM - 12:40 AM	52.3	64.2	48.7
12:40 AM - 12:45 AM	52.0	58.7	48.4
12:45 AM - 12:50 AM	51.8	59.2	49.2
12:50 AM - 12:55 AM	51.6	59.5	48.6
12:55 AM - 01:00 AM	51.4	59.2	48.2
01:00 AM - 01:05 AM	51.5	59.2	48.1
01:05 AM - 01:10 AM	50.8	58.9	47.6
01:10 AM - 01:15 AM	51.4	62.5	48.5
01:15 AM - 01:20 AM	51.4	62.4	48.4
01:20 AM - 01:25 AM	54.7	66.8	49.0
01:25 AM - 01:30 AM	52.2	60.1	48.7
01:30 AM - 01:35 AM	51.2	69.4	48.2
01:35 AM - 01:40 AM	51.9	60.2	48.2
01:40 AM - 01:45 AM	51.0	58.3	47.9
01:45 AM - 01:50 AM	50.5	56.5	47.5
01:50 AM - 01:55 AM	51.2	59.5	45.8
01:55 AM - 02:00 AM	51.4	57.4	47.4
02:00 AM - 02:05 AM	50.2	57.4	47.4
02:05 AM - 02:10 AM	51.1	60.9	48.2
02:10 AM - 02:15 AM	50.9	58.6	47.8
02:15 AM - 02:20 AM	52.0	61.6	48.0
02:20 AM - 02:25 AM	51.6	60.5	48.1
02:25 AM - 02:30 AM	50.0	58.2	46.8
02:30 AM - 02:35 AM	50.2	56.5	47.9
02:35 AM - 02:40 AM	49.8	55.6	47.3
02:40 AM - 02:45 AM	52.7	63.2	48.0
02:45 AM - 02:50 AM	50.0	55.5	48.2
02:50 AM - 02:55 AM	50.3	60.9	47.5
02:55 AM - 03:00 AM	50.7	57.9	49.1
03:00 AM - 03:05 AM	51.9	66.1	49.6
03:05 AM - 03:10 AM	51.6	63.5	47.1
03:10 AM - 03:15 AM	50.1	61.7	46.6
03:15 AM - 03:20 AM	50.5	56.7	47.5
03:20 AM - 03:25 AM	58.7	72.1	48.8
03:25 AM - 03:30 AM	50.6	60.4	47.5

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Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kengkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107845-1

Page 3 of 3

Sample No. : 2494233-24
Parameter : Noise
Location : โรงงานซีเมนต์ (ใกล้ถัง) (GPS 47P 0719411, 1614715) (Shut down)
Measurement Date : Aug 25 - Aug 26, 2024
Measurement by : Prommee Sripathet
Sound Level Meter : 00572566

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:30 AM - 03:35 AM	50.9	63.5	47.5
03:35 AM - 03:40 AM	49.6	59.7	46.7
03:40 AM - 03:45 AM	50.2	60.7	46.5
03:45 AM - 03:50 AM	51.1	65.6	47.9
03:50 AM - 03:55 AM	50.2	57.9	47.4
03:55 AM - 04:00 AM	51.0	69.7	48.3
04:00 AM - 04:05 AM	51.3	59.9	47.9
04:05 AM - 04:10 AM	51.2	57.0	48.3
04:10 AM - 04:15 AM	51.2	68.4	46.8
04:15 AM - 04:20 AM	58.4	76.8	47.8
04:20 AM - 04:25 AM	50.3	58.1	47.1
04:25 AM - 04:30 AM	50.7	57.2	47.6
04:30 AM - 04:35 AM	57.6	65.1	47.5
04:35 AM - 04:40 AM	60.5	66.6	55.5
04:40 AM - 04:45 AM	60.7	65.9	57.6
04:45 AM - 04:50 AM	60.6	70.4	57.9
04:50 AM - 04:55 AM	61.4	66.7	58.4
04:55 AM - 05:00 AM	62.2	75.7	59.0
05:00 AM - 05:05 AM	61.3	68.0	58.3
05:05 AM - 05:10 AM	62.2	69.6	58.3
05:10 AM - 05:15 AM	60.5	66.8	57.4
05:15 AM - 05:20 AM	60.2	68.1	57.1
05:20 AM - 05:25 AM	57.4	66.0	53.5
05:25 AM - 05:30 AM	55.4	63.1	49.5
05:30 AM - 05:35 AM	50.7	57.4	47.8
05:35 AM - 05:40 AM	51.5	56.5	49.8
05:40 AM - 05:45 AM	51.0	58.4	48.7
05:45 AM - 05:50 AM	52.7	68.7	48.9
05:50 AM - 05:55 AM	52.8	72.6	49.3
05:55 AM - 06:00 AM	56.8	69.2	54.7
06:00 AM - 07:00 AM	55.8	74.7	52.2
07:00 AM - 08:00 AM	56.5	77.1	53.2

Reference Method : 1. In-house method : STM 06-001 based on ISO 1996-1 : 2016

2. In-house method : ตามมาตรฐานวิธีวัดระดับเสียงตามระบบวิธีมาตรฐาน 24 ชั่วโมง และระดับเสียงเฉลี่ยค่าจากตารางผลการตรวจวัด ม.ป.ช. 2567

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Approved by

Kanokkorn Anek

Kanokkorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kengkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107846-1

Page 1 of 3

Sample No. : 2494233-25
Parameter : Noise
Location : โรงงานซีเมนต์ (ใกล้ถัง) (GPS 47P 0719411, 1614715) (Shut down)
Measurement Date : Aug 26 - Aug 27, 2024
Measurement by : Prommee Sripathet
Sound Level Meter : 00572566

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	59.7	81.5	54.0
09:00 AM - 10:00 AM	56.2	75.9	53.4
10:00 AM - 11:00 AM	56.0	69.7	53.0
11:00 AM - 12:00 PM	54.4	67.9	51.8
12:00 PM - 01:00 PM	55.2	71.5	52.7
01:00 PM - 02:00 PM	54.9	70.1	52.5
02:00 PM - 03:00 PM	60.6	80.9	54.2
03:00 PM - 04:00 PM	62.1	82.0	55.0
04:00 PM - 05:00 PM	61.1	81.2	54.5
05:00 PM - 06:00 PM	57.2	73.5	54.3
06:00 PM - 07:00 PM	61.0	80.2	56.5
07:00 PM - 08:00 PM	54.8	67.1	52.7
08:00 PM - 09:00 PM	54.5	75.6	52.3
09:00 PM - 10:00 PM	53.6	65.1	52.2
10:00 PM - 10:05 PM	52.8	59.9	52.1
10:05 PM - 10:10 PM	52.8	59.9	50.8
10:10 PM - 10:15 PM	56.2	64.7	52.5
10:15 PM - 10:20 PM	54.2	62.8	51.7
10:20 PM - 10:25 PM	53.6	65.7	51.7
10:25 PM - 10:30 PM	53.3	61.7	50.7
10:30 PM - 10:35 PM	54.8	62.5	51.4
10:35 PM - 10:40 PM	54.0	60.1	51.3
10:40 PM - 10:45 PM	55.0	63.5	53.0
10:45 PM - 10:50 PM	54.3	61.3	52.1
10:50 PM - 10:55 PM	53.5	62.4	50.8
10:55 PM - 11:00 PM	55.3	62.5	53.5
11:00 PM - 11:05 PM	54.7	59.2	53.1
11:05 PM - 11:10 PM	55.6	62.4	53.2
11:10 PM - 11:15 PM	54.8	64.5	52.5
11:15 PM - 11:20 PM	53.7	60.3	51.5
11:20 PM - 11:25 PM	54.0	57.4	52.5
11:25 PM - 11:30 PM	53.7	59.9	52.1
11:30 PM - 11:35 PM	54.6	60.4	52.6
11:35 PM - 11:40 PM	54.8	59.9	53.2
11:40 PM - 11:45 PM	54.6	63.4	52.5
11:45 PM - 11:50 PM	54.2	62.6	51.4
11:50 PM - 11:55 PM	54.2	62.8	52.0
11:55 PM - 12:00 AM	54.9	63.2	52.9
12:00 AM - 12:05 AM	54.7	63.5	52.4
12:05 AM - 12:10 AM	53.9	61.4	51.5

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Approved by

Kanokkorn Anek

Kanokkorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107846-1

Page 2 of 3

Sample No. 2494233-25
Parameter Noise
Location ไร่สามชัยวน (จุดวัด) (GPS 47P 0719411, 1614715) (Shut down)
Measurement Date Aug 26 - Aug 27, 2024
Measurement by Prommee Sripatnet
Sound Level Meter 00572566

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:10 AM - 12:15 AM	55.2	81.4	50.8
12:15 AM - 12:20 AM	53.5	61.3	50.9
12:20 AM - 12:25 AM	52.3	60.5	49.3
12:25 AM - 12:30 AM	52.1	56.9	50.1
12:30 AM - 12:35 AM	51.9	60.7	48.9
12:35 AM - 12:40 AM	52.1	61.4	49.2
12:40 AM - 12:45 AM	51.5	61.2	48.5
12:45 AM - 12:50 AM	52.0	69.1	47.3
12:50 AM - 12:55 AM	49.5	57.6	46.0
12:55 AM - 01:00 AM	50.9	59.3	48.3
01:00 AM - 01:05 AM	51.6	59.3	49.1
01:05 AM - 01:10 AM	51.8	60.4	48.9
01:10 AM - 01:15 AM	52.3	65.4	47.9
01:15 AM - 01:20 AM	50.7	62.1	47.3
01:20 AM - 01:25 AM	59.4	72.4	48.4
01:25 AM - 01:30 AM	49.7	57.8	46.5
01:30 AM - 01:35 AM	52.4	64.2	49.7
01:35 AM - 01:40 AM	52.5	58.3	50.4
01:40 AM - 01:45 AM	53.5	59.6	51.0
01:45 AM - 01:50 AM	54.5	62.4	51.7
01:50 AM - 01:55 AM	55.2	66.4	51.1
01:55 AM - 02:00 AM	53.1	60.6	48.9
02:00 AM - 02:05 AM	52.4	64.6	49.1
02:05 AM - 02:10 AM	52.2	60.6	49.7
02:10 AM - 02:15 AM	52.5	64.2	49.0
02:15 AM - 02:20 AM	52.1	59.6	49.1
02:20 AM - 02:25 AM	53.3	65.0	49.8
02:25 AM - 02:30 AM	53.1	66.1	50.0
02:30 AM - 02:35 AM	53.8	60.9	50.1
02:35 AM - 02:40 AM	53.3	58.3	49.7
02:40 AM - 02:45 AM	54.9	65.4	51.5
02:45 AM - 02:50 AM	54.4	61.8	50.6
02:50 AM - 03:00 AM	53.3	59.2	49.9
03:00 AM - 03:05 AM	56.3	68.0	51.5
03:05 AM - 03:10 AM	52.3	60.5	49.1
03:10 AM - 03:15 AM	51.9	63.3	49.5
03:15 AM - 03:20 AM	51.7	60.4	49.2
03:20 AM - 03:25 AM	51.9	61.1	49.1
03:25 AM - 03:30 AM	52.4	64.2	48.1
03:30 AM - 03:35 AM	52.4	59.7	49.3

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Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107846-1

Page 3 of 3

Sample No. 2494233-25
Parameter Noise
Location ไร่สามชัยวน (จุดวัด) (GPS 47P 0719411, 1614715) (Shut down)
Measurement Date Aug 26 - Aug 27, 2024
Measurement by Prommee Sripatnet
Sound Level Meter 00572566

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:30 AM - 03:35 AM	52.4	61.9	49.7
03:35 AM - 03:40 AM	51.3	57.0	47.9
03:40 AM - 03:45 AM	52.3	61.4	48.4
03:45 AM - 03:50 AM	53.5	60.9	50.7
03:50 AM - 03:55 AM	52.1	56.0	49.8
03:55 AM - 04:00 AM	53.8	60.5	51.0
04:00 AM - 04:05 AM	53.8	62.8	51.0
04:05 AM - 04:10 AM	54.8	62.5	52.0
04:10 AM - 04:15 AM	53.5	60.5	51.3
04:15 AM - 04:20 AM	52.5	57.4	50.7
04:20 AM - 04:25 AM	51.4	58.0	49.1
04:25 AM - 04:30 AM	54.9	68.6	48.9
04:30 AM - 04:35 AM	58.8	65.9	50.7
04:35 AM - 04:40 AM	61.4	68.2	56.7
04:40 AM - 04:45 AM	61.9	71.3	58.1
04:45 AM - 04:50 AM	61.2	67.3	57.6
04:50 AM - 04:55 AM	61.7	67.3	58.4
04:55 AM - 05:00 AM	61.9	67.4	58.4
05:00 AM - 05:05 AM	61.6	67.7	58.0
05:05 AM - 05:10 AM	61.3	68.3	57.5
05:10 AM - 05:15 AM	61.0	67.8	56.5
05:15 AM - 05:20 AM	59.6	70.3	54.8
05:20 AM - 05:25 AM	54.2	62.5	50.6
05:25 AM - 05:30 AM	54.9	61.3	51.8
05:30 AM - 05:35 AM	54.6	62.6	51.1
05:35 AM - 05:40 AM	54.9	60.2	52.2
05:40 AM - 05:45 AM	55.1	71.6	51.5
05:45 AM - 05:50 AM	55.0	60.4	51.7
05:50 AM - 05:55 AM	56.4	67.8	53.1
05:55 AM - 06:00 AM	56.0	65.3	52.4
06:00 AM - 07:00 AM	56.9	56.9	53.5
07:00 AM - 08:00 AM	58.5	74.0	55.4

Reference Method :

- In-house method : STM 06-001 based on ISO 1996-1 : 2016
- Use of the method : 24 ชั่วโมง และระดับเสียงสูงสุดในการตรวจรอบการตรวจรอบ 24 ชั่วโมง

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Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99/219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107847-1

Page 1 of 3

Sample No. : 2494233-26
Parameter : Noise
Location : โรงงานซีเมนต์ (ภาคเหนือ) (GPS 47P 0719411, 1614715) (Shut down)
Measurement Date : Aug 27 - Aug 28, 2024
Measurement by : Prommee Sriprabhet
Sound Level Meter : 00572566

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	58.8	84.4	54.5
09:00 AM - 10:00 AM	59.3	78.1	54.5
10:00 AM - 11:00 AM	57.8	78.8	53.6
11:00 AM - 12:00 PM	54.5	67.5	52.5
12:00 PM - 01:00 PM	54.4	74.1	52.2
01:00 PM - 02:00 PM	54.8	67.2	52.8
02:00 PM - 03:00 PM	58.3	71.4	53.2
03:00 PM - 04:00 PM	59.8	78.7	53.6
04:00 PM - 05:00 PM	57.4	76.2	54.2
05:00 PM - 06:00 PM	59.5	79.3	54.2
06:00 PM - 07:00 PM	59.7	76.9	55.3
07:00 PM - 08:00 PM	57.8	75.1	54.9
08:00 PM - 09:00 PM	55.0	68.0	53.0
09:00 PM - 10:00 PM	57.2	66.4	54.9
10:00 PM - 10:05 PM	57.0	62.3	55.4
10:05 PM - 10:10 PM	55.9	60.3	53.4
10:10 PM - 10:15 PM	56.4	61.2	54.7
10:15 PM - 10:20 PM	56.1	59.5	54.4
10:20 PM - 10:25 PM	58.0	68.1	54.9
10:25 PM - 10:30 PM	56.5	60.7	54.9
10:30 PM - 10:35 PM	57.2	63.5	54.6
10:35 PM - 10:40 PM	58.4	62.2	53.5
10:40 PM - 10:45 PM	54.2	59.9	52.2
10:45 PM - 10:50 PM	55.1	62.2	52.3
10:50 PM - 10:55 PM	54.7	64.0	52.3
10:55 PM - 11:00 PM	55.5	61.1	53.5
11:00 PM - 11:05 PM	54.1	58.8	51.8
11:05 PM - 11:10 PM	55.6	63.8	52.8
11:10 PM - 11:15 PM	54.7	62.8	52.0
11:15 PM - 11:20 PM	54.7	63.8	51.8
11:20 PM - 11:25 PM	55.9	69.9	51.7
11:25 PM - 11:30 PM	54.5	60.7	52.2
11:30 PM - 11:35 PM	54.2	60.3	50.5
11:35 PM - 11:40 PM	55.4	62.7	53.6
11:40 PM - 11:45 PM	56.8	65.5	53.3
11:45 PM - 11:50 PM	55.0	60.1	53.1
11:50 PM - 11:55 PM	56.6	70.0	52.8
11:55 PM - 12:00 AM	53.8	61.3	53.8
12:00 AM - 12:05 AM	52.7	58.6	50.4
12:05 AM - 12:10 AM	53.6	62.1	50.3

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Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99/219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107847-1

Page 2 of 3

Sample No. : 2494233-26
Parameter : Noise
Location : โรงงานซีเมนต์ (ภาคเหนือ) (GPS 47P 0719411, 1614715) (Shut down)
Measurement Date : Aug 27 - Aug 28, 2024
Measurement by : Prommee Sriprabhet
Sound Level Meter : 00572566

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:10 AM - 12:15 AM	54.1	60.0	51.8
12:15 AM - 12:20 AM	54.4	58.8	52.5
12:20 AM - 12:25 AM	54.7	64.5	52.0
12:25 AM - 12:30 AM	54.6	63.7	52.0
12:30 AM - 12:35 AM	53.2	57.4	51.6
12:35 AM - 12:40 AM	52.8	58.4	49.8
12:40 AM - 12:45 AM	52.9	58.3	50.3
12:45 AM - 12:50 AM	52.1	61.3	49.5
12:50 AM - 12:55 AM	52.4	64.8	49.3
12:55 AM - 01:00 AM	53.3	62.5	48.4
01:00 AM - 01:05 AM	50.9	59.8	48.0
01:05 AM - 01:10 AM	50.5	66.7	48.2
01:10 AM - 01:15 AM	50.5	73.3	46.6
01:15 AM - 01:20 AM	56.1	65.9	49.4
01:20 AM - 01:25 AM	55.2	66.3	54.2
01:25 AM - 01:30 AM	55.9	62.1	53.3
01:30 AM - 01:35 AM	55.2	61.8	49.5
01:35 AM - 01:40 AM	51.9	68.3	49.5
01:40 AM - 01:45 AM	55.9	65.6	54.2
01:45 AM - 01:50 AM	56.6	72.0	54.3
01:50 AM - 01:55 AM	58.7	64.8	53.4
01:55 AM - 02:00 AM	55.8	66.5	53.7
02:00 AM - 02:05 AM	58.2	61.2	51.9
02:05 AM - 02:10 AM	54.0	57.3	50.6
02:10 AM - 02:15 AM	52.9	60.2	49.9
02:15 AM - 02:20 AM	53.1	63.1	49.4
02:20 AM - 02:25 AM	52.4	62.8	50.1
02:25 AM - 02:30 AM	53.4	62.7	51.1
02:30 AM - 02:35 AM	53.3	63.4	50.1
02:35 AM - 02:40 AM	51.6	59.5	49.3
02:40 AM - 02:45 AM	52.1	61.3	49.1
02:45 AM - 02:50 AM	52.4	60.1	48.9
02:50 AM - 02:55 AM	50.9	59.2	48.5
02:55 AM - 03:00 AM	51.8	61.8	48.4
03:00 AM - 03:05 AM	50.6	55.0	48.2
03:05 AM - 03:10 AM	53.7	66.3	48.3
03:10 AM - 03:15 AM	49.7	57.6	46.9
03:15 AM - 03:20 AM	50.3	60.2	47.3
03:20 AM - 03:25 AM	49.7	59.6	46.5
03:25 AM - 03:30 AM	49.7		

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Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107847-1

Page 3 of 3

Sample No. 2494233-26
Parameter Noise
Location โรงงานปูนซีเมนต์ (จุดวัดค่า) (GPS 47P 0719411, 1614715) (Shut down)
Measurement Date Aug 27 - Aug 28, 2024
Measurement by Prommee Sripatmet
Sound Level Meter 00572566

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:30 AM - 03:35 AM	49.8	57.3	47.2
03:35 AM - 03:40 AM	51.4	62.7	47.5
03:40 AM - 03:45 AM	51.1	61.4	46.4
03:45 AM - 03:50 AM	49.3	58.4	46.9
03:50 AM - 03:55 AM	49.2	58.6	46.5
03:55 AM - 04:00 AM	49.7	55.6	46.2
04:00 AM - 04:05 AM	49.3	55.0	45.4
04:05 AM - 04:10 AM	50.2	56.3	47.7
04:10 AM - 04:15 AM	52.3	63.3	47.6
04:15 AM - 04:20 AM	50.9	59.2	47.3
04:20 AM - 04:25 AM	50.6	61.4	47.5
04:25 AM - 04:30 AM	49.8	56.2	46.7
04:30 AM - 04:35 AM	55.8	64.9	53.2
04:35 AM - 04:40 AM	54.2	61.7	52.4
04:40 AM - 04:45 AM	54.1	61.7	52.6
04:45 AM - 04:50 AM	54.1	61.0	52.5
04:50 AM - 04:55 AM	55.1	67.9	51.9
04:55 AM - 05:00 AM	55.3	70.2	52.2
05:00 AM - 05:05 AM	55.5	65.0	53.0
05:05 AM - 05:10 AM	55.5	62.2	53.9
05:10 AM - 05:15 AM	56.9	64.3	54.5
05:15 AM - 05:20 AM	60.9	67.1	57.1
05:20 AM - 05:25 AM	56.9	64.8	53.1
05:25 AM - 05:30 AM	54.0	63.6	49.4
05:30 AM - 05:35 AM	52.5	61.1	50.0
05:35 AM - 05:40 AM	51.7	61.7	48.6
05:40 AM - 05:45 AM	52.4	62.0	49.8
05:45 AM - 05:50 AM	52.0	59.4	49.8
05:50 AM - 05:55 AM	53.5	58.2	51.8
05:55 AM - 06:00 AM	55.2	62.7	53.1
06:00 AM - 07:00 AM	54.1	73.8	50.6
07:00 AM - 08:00 AM	58.9	78.5	53.7

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ใช้มาตรฐานจากกรมโรงงาน เรื่อง วิธีการตรวจวัดผลกระทบจากเสียงและสั่นสะเทือน 24 ชั่วโมง และระบบการสุ่มค่าเสียงและสั่นสะเทือนจากโรงงาน พ.ศ. 2567

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Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9/5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107848-1

Page 1 of 3

Sample No. 2494233-27
Parameter Noise
Location โรงงานปูนซีเมนต์ (จุดวัดค่า) (GPS 47P 0719411, 1614715) (Shut down)
Measurement Date Aug 28 - Aug 29, 2024
Measurement by Prommee Sripatmet
Sound Level Meter 00572566

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	60.1	77.1	53.8
09:00 AM - 10:00 AM	57.2	73.9	54.7
10:00 AM - 11:00 AM	60.9	76.7	55.3
11:00 AM - 12:00 PM	57.1	73.7	53.2
12:00 PM - 01:00 PM	54.5	71.3	51.7
01:00 PM - 02:00 PM	55.6	75.0	52.0
02:00 PM - 03:00 PM	57.3	74.2	53.2
03:00 PM - 04:00 PM	57.3	76.3	53.6
04:00 PM - 05:00 PM	60.5	73.6	55.6
05:00 PM - 06:00 PM	57.6	72.6	54.8
06:00 PM - 07:00 PM	55.1	69.1	53.0
07:00 PM - 08:00 PM	55.8	71.6	53.8
08:00 PM - 09:00 PM	56.9	65.8	55.6
09:00 PM - 10:00 PM	54.9	77.9	52.3
10:00 PM - 10:05 PM	59.8	66.0	57.9
10:05 PM - 10:10 PM	59.5	78.9	55.2
10:10 PM - 10:15 PM	57.9	68.5	54.9
10:15 PM - 10:20 PM	57.4	65.5	55.5
10:20 PM - 10:25 PM	54.5	65.0	52.2
10:25 PM - 10:30 PM	53.8	59.4	52.2
10:30 PM - 10:35 PM	53.5	63.4	50.9
10:35 PM - 10:40 PM	53.0	68.6	50.5
10:40 PM - 10:45 PM	53.4	62.7	51.4
10:45 PM - 10:50 PM	53.9	61.6	51.8
10:50 PM - 10:55 PM	53.8	58.0	52.1
10:55 PM - 11:00 PM	53.5	61.1	51.4
11:00 PM - 11:05 PM	53.6	61.3	51.4
11:05 PM - 11:10 PM	54.1	62.0	52.2
11:10 PM - 11:15 PM	53.4	63.2	51.8
11:15 PM - 11:20 PM	52.9	58.9	51.1
11:20 PM - 11:25 PM	53.5	62.8	51.2
11:25 PM - 11:30 PM	53.5	64.4	51.5
11:30 PM - 11:35 PM	53.3	61.9	50.8
11:35 PM - 11:40 PM	52.8	63.3	50.7
11:40 PM - 11:45 PM	52.8	65.9	48.6
11:45 PM - 11:50 PM	52.9	60.0	50.9
11:50 PM - 11:55 PM	52.8	56.9	51.2
11:55 PM - 12:00 AM	52.6	56.7	50.7
12:00 AM - 12:05 AM	53.9	61.5	51.6
12:05 AM - 12:10 AM	52.9	58.0	51.1

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Approved by

Kanokorn Anek

Kanokorn Anek
Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kengkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107848-1

Page 2 of 3

Sample No. : 2494233-27
Parameter : Noise
Location : โรงงานซีเมนต์ (จุดวัด) (GPS 47° 07'19.411, 161°47'15) (Shut down)
Measurement Date : Aug 28 - Aug 29, 2024
Measurement by : Prommee Sirapattret
Sound Level Meter : 00572566

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:10 AM - 12:15 AM	53.2	63.8	50.9
12:15 AM - 12:20 AM	53.4	62.3	51.1
12:20 AM - 12:25 AM	53.3	63.8	50.4
12:25 AM - 12:30 AM	53.9	60.4	50.5
12:30 AM - 12:35 AM	53.3	60.5	51.2
12:35 AM - 12:40 AM	53.7	60.2	51.2
12:40 AM - 12:45 AM	52.2	59.4	48.7
12:45 AM - 12:50 AM	52.0	61.0	49.1
12:50 AM - 12:55 AM	50.9	57.6	47.8
12:55 AM - 01:00 AM	50.5	60.8	46.9
01:00 AM - 01:05 AM	50.3	59.1	47.4
01:05 AM - 01:10 AM	52.0	64.0	47.5
01:10 AM - 01:15 AM	51.3	61.4	47.2
01:15 AM - 01:20 AM	50.9	58.4	47.6
01:20 AM - 01:25 AM	52.4	62.3	47.8
01:25 AM - 01:30 AM	51.6	61.7	48.1
01:30 AM - 01:35 AM	51.0	64.1	48.1
01:35 AM - 01:40 AM	50.8	59.6	47.3
01:40 AM - 01:45 AM	50.8	60.6	45.6
01:45 AM - 01:50 AM	50.8	58.7	47.3
01:50 AM - 01:55 AM	49.9	58.8	46.6
01:55 AM - 02:00 AM	49.6	55.0	46.4
02:00 AM - 02:05 AM	49.7	56.0	47.2
02:05 AM - 02:10 AM	51.1	58.4	47.9
02:10 AM - 02:15 AM	51.2	60.9	46.8
02:15 AM - 02:20 AM	52.0	62.5	48.7
02:20 AM - 02:25 AM	50.2	61.5	45.8
02:25 AM - 02:30 AM	50.5	57.0	47.7
02:30 AM - 02:35 AM	50.1	57.7	45.8
02:35 AM - 02:40 AM	48.9	54.6	45.2
02:40 AM - 02:45 AM	52.6	67.3	48.0
02:45 AM - 02:50 AM	49.7	57.2	47.2
02:50 AM - 02:55 AM	52.9	65.0	49.2
02:55 AM - 03:00 AM	50.4	66.0	47.5
03:00 AM - 03:05 AM	50.0	60.2	46.4
03:05 AM - 03:10 AM	49.7	57.2	47.2
03:10 AM - 03:15 AM	52.6	63.8	48.4
03:15 AM - 03:20 AM	50.2	61.2	46.8
03:20 AM - 03:25 AM	51.8	63.7	49.2
03:25 AM - 03:30 AM	52.8	62.8	48.6

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Approved by

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Kanokkorn Anek
Asst. General Manager

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RIGHT SOLUTIONS RIGHT PARTNER



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kengkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107848-1

Page 3 of 3

Sample No. : 2494233-27
Parameter : Noise
Location : โรงงานซีเมนต์ (จุดวัด) (GPS 47° 07'19.411, 161°47'15) (Shut down)
Measurement Date : Aug 28 - Aug 29, 2024
Measurement by : Prommee Sirapattret
Sound Level Meter : 00572566

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
03:30 AM - 03:35 AM	50.1	55.6	47.4
03:35 AM - 03:40 AM	49.3	56.3	47.1
03:40 AM - 03:45 AM	50.2	55.9	47.5
03:45 AM - 03:50 AM	50.1	58.0	47.7
03:50 AM - 03:55 AM	50.5	56.3	48.6
03:55 AM - 04:00 AM	51.4	61.4	48.8
04:00 AM - 04:05 AM	50.8	58.5	49.2
04:05 AM - 04:10 AM	50.2	55.1	47.8
04:10 AM - 04:15 AM	50.9	58.9	49.0
04:15 AM - 04:20 AM	54.1	65.3	49.3
04:20 AM - 04:25 AM	50.9	57.4	49.3
04:25 AM - 04:30 AM	51.1	59.3	48.1
04:30 AM - 04:35 AM	56.5	64.9	48.4
04:35 AM - 04:40 AM	60.5	67.8	56.2
04:40 AM - 04:45 AM	60.4	65.7	56.9
04:45 AM - 04:50 AM	60.8	66.0	57.5
04:50 AM - 04:55 AM	61.1	68.2	58.4
04:55 AM - 05:00 AM	61.6	68.3	58.7
05:00 AM - 05:05 AM	62.1	68.1	58.6
05:05 AM - 05:10 AM	62.0	67.4	57.2
05:10 AM - 05:15 AM	61.7	67.5	58.1
05:15 AM - 05:20 AM	59.4	65.3	55.2
05:20 AM - 05:25 AM	56.3	62.2	51.9
05:25 AM - 05:30 AM	52.6	59.5	50.9
05:30 AM - 05:35 AM	53.6	67.1	50.8
05:35 AM - 05:40 AM	53.3	60.1	50.9
05:40 AM - 05:45 AM	54.3	61.7	51.8
05:45 AM - 05:50 AM	53.6	61.2	51.2
05:50 AM - 05:55 AM	54.8	62.2	50.9
05:55 AM - 06:00 AM	54.9	62.4	51.9
06:00 AM - 07:00 AM	55.7	73.8	52.7
07:00 AM - 08:00 AM	59.0	78.2	54.6

Reference Method :

1. In-house method : STM 06-001, based on ISO 1996-1 : 2016
2. ประกาศกระทรวงอุตสาหกรรม เรื่อง วิธีการวัดระดับเสียงและเกณฑ์มาตรฐาน ระดับเสียงเฉลี่ย 24 ชั่วโมง และระดับเสียงสูงสุดที่ได้จากการประกอบกิจการโรงงาน พ.ร.บ. 2557

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Approved by

Kanokkorn Anek

Kanokkorn Anek
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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107849-1

Page 1 of 3

Sample No. 2494233-28
Parameter Noise
Location ฐานผลิตปูน (หน้าห้อง) (GPS 47° 07'19.41", 161°47'15") (Shut down)
Measurement Date Aug 29 - Aug 30, 2024
Measurement by Prommee Sipatnet
Sound Level Meter 00572566

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
08:00 AM - 09:00 AM	58.9	73.5	54.7
09:00 AM - 10:00 AM	60.0	72.9	56.0
10:00 AM - 11:00 AM	57.5	85.1	55.3
11:00 AM - 12:00 PM	59.8	74.7	55.1
12:00 PM - 01:00 PM	56.5	74.5	54.1
01:00 PM - 02:00 PM	57.9	84.3	55.1
02:00 PM - 03:00 PM	58.7	70.1	56.7
03:00 PM - 04:00 PM	61.2	75.8	56.5
04:00 PM - 05:00 PM	61.0	79.1	57.1
05:00 PM - 06:00 PM	58.3	78.8	56.0
06:00 PM - 07:00 PM	55.5	68.6	53.1
07:00 PM - 08:00 PM	54.0	65.8	52.1
08:00 PM - 09:00 PM	54.0	74.9	50.7
09:00 PM - 10:00 PM	52.8	70.3	50.5
10:00 PM - 10:05 PM	52.0	71.2	49.9
10:05 PM - 10:10 PM	52.5	57.4	50.2
10:10 PM - 10:15 PM	51.1	58.3	48.7
10:15 PM - 10:20 PM	52.6	59.7	50.3
10:20 PM - 10:25 PM	56.1	64.6	54.2
10:25 PM - 10:30 PM	57.4	66.3	54.8
10:30 PM - 10:35 PM	56.8	63.8	54.8
10:35 PM - 10:40 PM	57.2	67.9	54.5
10:40 PM - 10:45 PM	59.6	64.7	58.6
10:45 PM - 10:50 PM	59.4	64.6	57.8
10:50 PM - 10:55 PM	63.9	73.4	58.1
10:55 PM - 11:00 PM	64.3	70.7	60.8
11:00 PM - 11:05 PM	62.4	66.3	59.2
11:05 PM - 11:10 PM	60.1	63.7	58.9
11:10 PM - 11:15 PM	61.6	69.6	59.7
11:15 PM - 11:20 PM	67.8	76.2	64.0
11:20 PM - 11:25 PM	57.3	74.5	54.2
11:25 PM - 11:30 PM	55.7	63.4	52.8
11:30 PM - 11:35 PM	55.6	64.9	53.2
11:35 PM - 11:40 PM	56.6	65.6	53.5
11:40 PM - 11:45 PM	57.2	68.7	53.3
11:45 PM - 11:50 PM	59.6	72.8	53.6
11:50 PM - 11:55 PM	57.0	72.4	53.9
11:55 PM - 12:00 AM	57.0	68.6	53.5
12:00 AM - 12:05 AM	59.7	72.5	54.6
12:05 AM - 12:10 AM	58.8	71.7	54.1

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

Approved by

Kanokkorn Anek

Asst. General Manager



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhoi, Saraburi
Thailand 18260

P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2494233
Date Received : Sep 04, 2024
Date Reported : Sep 11, 2024
Report No. : 3107849-1

Page 2 of 3

Sample No. 2494233-28
Parameter Noise
Location ฐานผลิตปูน (หน้าห้อง) (GPS 47° 07'19.41", 161°47'15") (Shut down)
Measurement Date Aug 29 - Aug 30, 2024
Measurement by Prommee Sipatnet
Sound Level Meter 00572566

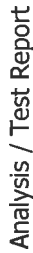
Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:10 AM - 12:15 AM	58.3	64.5	54.4
12:15 AM - 12:20 AM	55.8	64.3	53.9
12:20 AM - 12:25 AM	55.2	60.7	53.5
12:25 AM - 12:30 AM	55.9	64.5	53.7
12:30 AM - 12:35 AM	57.6	67.5	53.9
12:35 AM - 12:40 AM	54.9	68.7	52.4
12:40 AM - 12:45 AM	58.3	71.3	54.1
12:45 AM - 12:50 AM	58.9	71.1	52.3
12:50 AM - 12:55 AM	58.6	72.9	53.1
12:55 AM - 01:00 AM	55.8	64.9	53.3
01:00 AM - 01:05 AM	57.6	72.2	53.4
01:05 AM - 01:10 AM	54.7	64.7	51.8
01:10 AM - 01:15 AM	54.6	61.1	52.2
01:15 AM - 01:20 AM	54.7	68.2	51.9
01:20 AM - 01:25 AM	56.6	72.8	53.2
01:25 AM - 01:30 AM	54.6	62.0	52.6
01:30 AM - 01:35 AM	55.8	65.1	53.5
01:35 AM - 01:40 AM	56.9	65.1	55.0
01:40 AM - 01:45 AM	56.0	64.8	53.7
01:45 AM - 01:50 AM	55.5	68.8	53.1
01:50 AM - 01:55 AM	56.3	70.3	54.1
01:55 AM - 02:00 AM	54.3	61.9	52.4
02:00 AM - 02:05 AM	56.1	67.8	53.6
02:05 AM - 02:10 AM	54.7	65.7	52.7
02:10 AM - 02:15 AM	56.0	65.9	52.7
02:15 AM - 02:20 AM	57.4	66.3	53.5
02:20 AM - 02:25 AM	56.0	66.2	53.0
02:25 AM - 02:30 AM	54.5	59.3	52.8
02:30 AM - 02:35 AM	56.0	65.4	52.7
02:35 AM - 02:40 AM	56.8	65.9	53.9
02:40 AM - 02:45 AM	56.1	70.4	52.4
02:45 AM - 02:50 AM	57.9	69.8	53.0
02:50 AM - 02:55 AM	55.0	63.7	52.6
02:55 AM - 03:00 AM	54.1	58.7	52.5
03:00 AM - 03:05 AM	53.4	61.3	51.8
03:05 AM - 03:10 AM	58.2	66.6	56.0
03:10 AM - 03:15 AM	57.1	61.5	55.3
03:15 AM - 03:20 AM	56.4	60.7	54.3
03:20 AM - 03:25 AM	56.0	54.2	54.2
03:25 AM - 03:30 AM	55.6	62.3	53.5

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

Approved by

Kanokkorn Anek

Asst. General Manager



Project Name : Saraburi Factory Plant
Project Location :

Sample No. 2494233-28

Measurement by Prommee Sripatnet

Country	Year	Value
China	2000	1.00
China	2001	1.00
China	2002	1.00
China	2003	1.00
China	2004	1.00
China	2005	1.00
China	2006	1.00
China	2007	1.00
China	2008	1.00
China	2009	1.00
China	2010	1.00
China	2011	1.00
China	2012	1.00
China	2013	1.00
China	2014	1.00
China	2015	1.00
China	2016	1.00
China	2017	1.00
China	2018	1.00
China	2019	1.00
China	2020	1.00
China	2021	1.00
China	2022	1.00
China	2023	1.00
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China	2030	1.00
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China	2090	1.00
China	2091	1.00
China	2092	1.00
China	2093	1.00
China	2094	1.00
China	2095	1.00
China	2096	1.00
China	2097	1.00
China	2098	1.00
China	2099	1.00
China	2100	1.00

Reference Method :
1. In-house method : STM 06-001 based on ISO 1996-1 : 2016
2. ประกาศกรมอุตุนิยมวิทยา เรื่อง "ฝนตกชุกหนาแน่นและมีฝนตกหนักถึงหนักมากบางพื้นที่" ฉบับที่ 24 พายุ และระดับน้ำสูงผิดปกติ (สถานการณ์ผลกระทบพายุ) พ.ศ. 2567

The above results are valid only for the individualised sample(s) as indicated in this report. No part of this report or its findings may be reproduced in any form without written consent from the Laboratory. A.S. Laboratory Group (Thailand) strongly recommends that this report is not reproduced elsewhere in full.

ภาคผนวก ค-3

คุณภาพน้ำ



Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhloi, Saraburi
Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

TESTING
No.0009

Lot ID: 2472467

Date Received :Jul 09, 2024
Date Reported :Jul 16, 2024

Report Number :3056683-1

Page 1 of 1

Sample Number	2472467-3
Sampled Date	Jul 09, 2024 10:40 AM
Sample Description	น้ำทิ้งจากอาคารผู้โดยสาร
Location	อาคารผู้โดยสาร 2 (CCR building Plant 2)
Date Analysis Commenced	Jul 10, 2024
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 degree C)	mg/L	-	2.0	18.8	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Bangkok
COD	mg/L	-	25	74	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Bangkok
Oil & Grease *	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Bangkok
pH at 25 degree C *	-	-	-	7.8	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (6)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	23	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Bangkok

Sampling By : Teerawat Puangsuk วนิดานนท์ 7-204-3-0058

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

Technical Management

Siriluk P.
Siriluk Burnak
Section Head
วนิดานนท์ 7-204-3-0013

Approved by

Kanokkom Anek
Assistant General Manager
วนิดานนท์ 7-204-3-0004

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhloi, Saraburi
Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

TESTING
No.0009

Lot ID: 2472467

Date Received :Jul 09, 2024
Date Reported :Jul 16, 2024

Report Number :3056684-1

Page 1 of 1

Sample Number	2472467-4
Sampled Date	Jul 09, 2024 10:50 AM
Sample Description	น้ำทิ้งจากอาคารผู้โดยสาร
Location	อาคารผู้โดยสาร 2 (Workshop Plant 2)
Date Analysis Commenced	Jul 10, 2024
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 degree C)	mg/L	-	2.0	19.6	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Bangkok
COD	mg/L	-	25	111	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Bangkok
Oil & Grease *	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Bangkok
pH at 25 degree C *	-	-	-	7.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (6)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	25	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Bangkok

Sampling By : Teerawat Puangsuk วนิดานนท์ 7-204-3-0058

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

Technical Management

Siriluk P.
Siriluk Burnak
Section Head
วนิดานนท์ 7-204-3-0013

Approved by

Kanokkom Anek
Assistant General Manager
วนิดานนท์ 7-204-3-0004

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kengkhoi, Saraburi
Thailand 18260

P/O :

Project Name : Air & Water Testing (Saraburi Factory Plant)

Project Location :

TESTING
No.0009

Lot ID: 2472467

Date Received : Jul 09, 2024

Date Reported : Jul 16, 2024

Report Number : 3055685-1 C1

Page 1 of 1

Sample Number	2472467-5
Sample Date	Jul 09, 2024 9:50 AM
Sample Description	น้ำทิ้งจากกระบวนการผลิต
Location	บ่อกักเก็บน้ำทิ้งโรงงาน (หลังหลุมถลุง SCP)
Date Analysis Commenced	Jul 10, 2024
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 degree C)	mg/L	-	2.0	17.2	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Bangkok
COD	mg/L	-	25	80	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Bangkok
Oil & Grease *	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Bangkok
pH at 25 degree C *	-	-	-	7.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	16	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Bangkok

Sampled By : Teerawat Puangsuk รหัสประจำตัว 2-204-4-0058

Remark :

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Technical Management

Siriluk P.

Siriluk Bunrak
Section Head
รหัสประจำตัว 2-204-4-0013

Approved by

Kanokorn Anek

Kanokorn Anek
Assistant General Manager
รหัสประจำตัว 2-204-4-0004

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kengkhoi, Saraburi
Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

TESTING
No.0009

Lot ID: 2482172

Date Received : Aug 07, 2024

Date Reported : Aug 16, 2024

Report Number : 3084699-1

Page 1 of 1

Sample Number	2482172-3
Sample Date	Aug 07, 2024 8:55 AM
Sample Description	น้ำทิ้งจากกระบวนการผลิต
Location	บ่อกักเก็บน้ำทิ้งโรงงาน 2 (CCR building Plant 2)
Date Analysis Commenced	Aug 08, 2024
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 degree C)	mg/L	-	2.0	4.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Bangkok
COD	mg/L	-	25	28	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Bangkok
Oil & Grease *	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Bangkok
pH at 25 degree C *	-	-	-	8.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	14	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Bangkok

Sampled By : Teerawat Puangsuk รหัสประจำตัว 2-204-4-0058

Remark :

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Technical Management

Siriluk P.

Siriluk Bunrak
Section Head
รหัสประจำตัว 2-204-4-0013

Approved by

Kanokorn Anek

Kanokorn Anek
Assistant General Manager
รหัสประจำตัว 2-204-4-0004

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99/219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi
Thailand 18260
P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2482172
Date Received : Aug 07, 2024
Date Reported : Aug 16, 2024
Report Number : 3094700-1

TESTING
No.0009

Page 1 of 1

Sample Number	2482172-4
Sampled Date	Aug 07, 2024 9:20 AM
Sample Description	น้ำทิ้งจากอาคารโรงปูน
Location	อาคารปูนโรงปูน โรงงาน 2 (Workshop Plant 2)
Date Analysis Commenced	Aug 08, 2024
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 degree C)	mg/L	-	2.0	4.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Bangkok
COD	mg/L	-	25	35	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Bangkok
Oil & Grease *	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Bangkok
pH at 25 degree C *		-	-	8.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (5)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	9	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Bangkok

Sampling By : Teerawat Puangsuksat รหัสประจำตัว 7-204-3-0058

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Technical Management

Siriluk P.

Siriluk Burnak
Section Head
รหัสประจำตัว 7-204-3-0013

Approved by

Kanokkom Anek

Kanokkom Anek
Assistant General Manager
รหัสประจำตัว 7-204-3-0004

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99/219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi
Thailand 18260
P/O :
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 2488665
Date Received : Sep 02, 2024
Date Reported : Sep 09, 2024
Report Number : 3105500-1

TESTING
No.0009

Page 1 of 1

Sample Number	2488665-3
Sampled Date	Sep 02, 2024 9:30 AM
Sample Description	น้ำทิ้งจากอาคารโรงปูน
Location	อาคารปูนโรงปูน โรงงาน 2 (CCR building Plant 2)
Date Analysis Commenced	Sep 03, 2024
Condition of Sample	Contained in three plastic bottles and one amber glass bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 degree C)	mg/L	-	2.0	6.3	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Bangkok
COD	mg/L	-	25	51	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Bangkok
Oil & Grease *	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Bangkok
pH at 25 degree C *		-	-	8.1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (5)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	43	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Bangkok

Sampling By : Teerawat Puangsuksat รหัสประจำตัว 7-204-3-0058

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Technical Management

Siriluk P.

Siriluk Burnak
Section Head
รหัสประจำตัว 7-204-3-0013

Approved by

Kanokkom Anek

Kanokkom Anek
Assistant General Manager
รหัสประจำตัว 7-204-3-0004

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Analysis / Test Report

TESTING
No. 0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kengkhoi, Saraburi
Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 2488665

Date Received : Sep 02, 2024

Date Reported : Sep 05, 2024

Report Number : 3105501-1

Page 1 of 1

Sample Number	2488665-4
Sample Date	Sep 02, 2024 9:35 AM
Sample Description	น้ำทิ้งจากกระบวนการผลิต
Location	อาคารโรงงาน 2 (Workshop Plant 2)
Date Analysis Commenced	Sep 03, 2024
Condition of Sample	Contained in three plastic bottles and one amber glass bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 degree C)	mg/L	-	2.0	4.2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Bangkok
COD	mg/L	-	25	49	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Bangkok
Oil & Grease *	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Bangkok
pH at 25 degree C *		-	-	8.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	6	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Bangkok

Sampling By : Teerawat Puangsuk รหัสประจำตัว 7-204-3-0058

Remark :

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

Technical Management

Siriluk P.

Siriluk Burnak

Section Head

รหัสประจำตัว 7-204-3-0013

Approved by

Kanokkorn Anek.

Kanokkorn Anek

Assistant General Manager

รหัสประจำตัว 7-204-3-0004

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Analysis / Test Report

TESTING
No. 0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kengkhoi, Saraburi
Thailand 18260

P/O :

Project Name : Saraburi Factory Plant

Project Location :

Lot ID: 24109720

Date Received : Oct 01, 2024

Date Reported : Oct 08, 2024

Report Number : 313274-1

Page 1 of 1

Sample Number	24109720-3
Sample Date	Oct 01, 2024 11:03 AM
Sample Description	น้ำทิ้งจากกระบวนการผลิต
Location	อาคารโรงงาน 2 (CCR building Plant 2)
Date Analysis Commenced	Oct 02, 2024
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 degree C)	mg/L	-	2.0	6.6	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Bangkok
COD	mg/L	-	25	47	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Bangkok
Oil & Grease	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Bangkok
pH at 25 degree C		-	-	8.2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	8	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Bangkok

Sampling By : Teerawat Puangsuk รหัสประจำตัว 7-204-3-0058

Remark :

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

Technical Management

Siriluk P.

Siriluk Burnak

Section Head

รหัสประจำตัว 7-204-3-0013

Approved by

Kanokkorn Anek.

Kanokkorn Anek

Assistant General Manager

รหัสประจำตัว 7-204-3-0004

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5/5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24109720
Date Received :Oct 01, 2024
Date Reported :Oct 08, 2024
Report Number :3132275-1

Page 1 of 1

Sample Number	24109720-4
Sampled Date	Oct 01, 2024 11:07 AM
Sample Description	น้ำทิ้งจากกระบวนการผลิต
Location	อาคารผลิตปูน โรงงาน 2 (Workshop Plant 2)
Date Analysis Commenced	Oct 02, 2024
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 degree C)	mg/L	-	2.0	2.1	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Bangkok
COD	mg/L	-	25	28	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Bangkok
Oil & Grease	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Bangkok
pH at 25 degree C	-	-	-	8.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Bangkok

Sampling By : Teerawat Puangsuk รหัสประจำตัว 7-204-3-0058

Remark :
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Technical Management

Siriluk P.

Siriluk Bunrak
Section Head
รหัสประจำตัว 7-204-3-0013

Approved by

Kanokkom Anek

Kanokkom Anek
Assistant General Manager
รหัสประจำตัว 7-204-3-0004

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5/5, Mitaparb Road, Tambon Tapkwung, Amphur Kangkhroi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24113744
Date Received :Oct 01, 2024
Date Reported :Oct 08, 2024
Report Number :3132264-1

Page 1 of 1

Sample Number	24113744-1
Sampled Date	Oct 01, 2024 10:00 AM
Sample Description	น้ำทิ้งจากกระบวนการผลิต
Location	โรงหล่อปูน SCP K5, K6
Date Analysis Commenced	Oct 01, 2024
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 degree C)	mg/L	-	2.0	<2.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Bangkok
COD	mg/L	-	25	29	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Bangkok
Oil & Grease	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Bangkok
pH at 25 degree C	-	-	-	7.8	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	6	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Bangkok

Sampling By : Teerawat Puangsuk รหัสประจำตัว 7-204-3-0058

Remark :
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Technical Management

Siriluk P.

Siriluk Bunrak
Section Head
รหัสประจำตัว 7-204-3-0013

Approved by

Kanokkom Anek

Kanokkom Anek
Assistant General Manager
รหัสประจำตัว 7-204-3-0004

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kengkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

TESTING
No.0009
Lot ID: 24121300
Date Received :Nov 06, 2024
Date Reported :Nov 13, 2024
Report Number :3145241-1

Page 1 of 4

Sample Number	24121300-3
Sample Date	Nov 05, 2024 9:20 AM
Sample Description	น้ำทิ้งจากอาคารโถงน้ำดิบ
Location	อาคารระดมทุนโรงงาน 2 (CCR building Plant 2)
Date Analysis Commenced	Nov 07, 2024
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 degree C)	mg/L	-	2.0	4.6	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Bangkok
COD	mg/L	-	25	30	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Bangkok
Oil & Grease	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Bangkok
pH at 25 degree C		-	-	8.1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Bangkok

Sampling By : Teerawat Puangsuksat รหัสประจำตัว 7-204-a-0058

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Technical Management
Siriluk P.
Siriluk Bunrak
Section Head
รหัสประจำตัว 7-204-a-0013

Approved by
Kanokkorn Anek
Assistant General Manager
รหัสประจำตัว 7-204-a-0004

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kengkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

TESTING
No.0009
Lot ID: 24121300
Date Received :Nov 06, 2024
Date Reported :Nov 13, 2024
Report Number :3145241-1

Page 2 of 4

Sample Number	24121300-4
Sample Date	Nov 05, 2024 9:26 AM
Sample Description	น้ำทิ้งจากอาคารโถงน้ำดิบ
Location	อาคารระดมทุนโรงงาน 2 (Workshop Plant 2)
Date Analysis Commenced	Nov 07, 2024
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 degree C)	mg/L	-	2.0	6.2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Bangkok
COD	mg/L	-	25	42	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Bangkok
Oil & Grease	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Bangkok
pH at 25 degree C		-	-	7.8	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	7	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Bangkok

Sampling By : Teerawat Puangsuksat รหัสประจำตัว 7-204-a-0058

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Technical Management
Siriluk P.
Siriluk Bunrak
Section Head
รหัสประจำตัว 7-204-a-0013

Approved by
Kanokkorn Anek
Assistant General Manager
รหัสประจำตัว 7-204-a-0004

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhohi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24129552
Date Received : Dec 11, 2024
Date Reported : Dec 18, 2024
Report Number : 3196628-1

Page 1 of 1

Sample Number	24129552-3
Sampled Date	Dec 11, 2024 11:30 AM
Sample Description	น้ำทิ้งจากอาคารโรงงาน
Location	อาคารโรงงาน/ห้อง โรงงาน 2 (CCR building Plant 2)
Date Analysis Commenced	Dec 12, 2024
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 degree C)	mg/L	-	2.0	5.4	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Bangkok
COD	mg/L	-	25	31	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Bangkok
Oil & Grease	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Bangkok
pH at 25 degree C		-	-	8.3	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (6)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	8	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Bangkok

Sampling By : Teerawat Puangsuks วนิดานานท์ 7-204-a-0058

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Technical Management

Siriluk P.

Siriluk Bunnak
Section Head
วนิดานานท์ 7-204-a-0013

Approved by

Kankom Anek

Kankom Anek
Assistant General Manager
วนิดานานท์ 7-204-a-0004

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Analysis / Test Report

TESTING
No.0009

Client : Siam City Cement Public Company Limited
99,219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kankhohi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

Lot ID: 24129552
Date Received : Dec 11, 2024
Date Reported : Dec 18, 2024
Report Number : 3196629-1

Page 1 of 1

Sample Number	24129552-4
Sampled Date	Dec 11, 2024 11:40 AM
Sample Description	น้ำทิ้งจากอาคารโรงงาน
Location	อาคารโรงงาน/ห้อง โรงงาน 2 (Workshop Plant 2)
Date Analysis Commenced	Dec 12, 2024
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 degree C)	mg/L	-	2.0	<2.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Bangkok
COD	mg/L	-	25	<25	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Bangkok
Oil & Grease	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Bangkok
pH at 25 degree C		-	-	7.9	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (6)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Bangkok

Sampling By : Teerawat Puangsuks วนิดานานท์ 7-204-a-0058

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

Siriluk P.

Siriluk Bunnak
Section Head
วนิดานานท์ 7-204-a-0013

Approved by

Kankom Anek

Kankom Anek
Assistant General Manager
วนิดานานท์ 7-204-a-0004

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Analysis / Test Report

Client : Siam City Cement Public Company Limited
99/219,301 Moo 9,5,5, Mitaparb Road, Tambon Tapkwung, Amphur Kengkhoi, Saraburi
Thailand 18260
P/O : 4100119854
Project Name : Saraburi Factory Plant
Project Location :

TESTING
No.0009
Lot ID: 24129552
Date Received :Dec 11, 2024
Date Reported :Dec 18, 2024
Report Number :3196632-1

Page 1 of 1

Sample Number	24129552-7
Sampled Date	Dec 11, 2024 10:50 AM
Sample Description	น้ำทิ้งจากกระบวนการผลิต
Location	หน่วยผลิตงาน KS, K6
Date Analysis Commenced	Dec 12, 2024
Condition of Sample	Contained in one amber glass bottle and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Method	Testing Location
Water Testing						
BOD (5 days at 20 degree C)	mg/L	-	2.0	<2.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G	Bangkok
COD	mg/L	-	25	<25	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D	Bangkok
Oil & Grease	mg/L	-	3	<3	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5520 B	Bangkok
pH at 25 degree C		-	-	8.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Bangkok
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D	Bangkok

Sampling By : Teerawat Puangsuks ๖204-๐058

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

Technical Management
Siriluk P.
Siriluk Bumak
Section Head
๖204-๐013
Approved by
Kanokkorn Anek
Assistant General Manager
๖204-๐004

ภาคผนวก ค-4

คุณภาพสิ่งแวดล้อมในสถานประกอบการ

Analysis Report



Client Information
Company: Siam City Cement Public Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 219 Moo 5 Mitraparb Road, Tabkwaeng, Khaengko, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com
Tel: 08 8594 1565

Sample Information
Description: Noise exposure of employee
Location: Siam City Power K3

Page 1 of 2

Date	Lot No.	Reference No.	Sample	Lmax (dB(A))	TWA (dB(A))	TWA PPE Used (dB(A))
28 Aug	H0140081	H0140081-1	Mr.Nakanin Onsang Position: Field Operator Working area: WHR Fac 2	110.1	82.6	82.1
Standard				115		65

Reference Method:

: Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat level, illumination, or noise B.E. 2561, Thailand.

Reference Standard:

1: Ministerial Regulation on the Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E. 2559, Thailand

2: Notifications of the Department of Labor Protection and Welfare on the standard limit for the noise exposure in a daily average basis B.E. 2561, Thailand.

Remark:

3: Notifications of the Department of Labor Protection and Welfare on the calculation method for occupational noise exposure as a personal protective equipment (PPE) used condition B.E. 2561, Thailand

: Earplug brand: 3M, model: 1252/37186, Noise Reduction Rating 25 Decibel.

Approved by

นางสาว พิชญ์พัชร์ พิศนาค (Mrs.Pimnonpan Puchay)

Compliance specialist

Analyzed by

นางสาว พิชญ์พัชร์ พิศนาค (Mrs.Thanasak Kongdara)

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Siam City Cement Public Company Limited
99,219,301 Moo 9.5.5, Mitaparb Road, Tabkwaeng, Khaengko, Saraburi 18260, Telephone:036-240-930 EXT.4672

Analysis Report



Client Information
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Tel: 08 8594 1565

Sample Information
Description: Noise exposure of employee
Location: Siam City Power K3

Page 2 of 2

Monitoring device / Calibrator Information

Equipment	Sound Calibrator	Please scan QR Code for the certificate	Sample Reference No.
Approved standard:	IEC 60942		H0140081
Code:	E-EN-179		
serial No.:	19003471		
Brand / Model:	DellaOHM / HD 2020		
Calibration date:	4 July 2024		
expire date:	3 July 2025		

Equipment	Noise Dosimeter	Please scan QR Code for the certificate	Sample Reference No.
Approved standard:	IEC 61252		H0140081-1
Code:	E-EN-181		
serial No.:	200300089		
Brand / Model:	EXTECH/SL400		
Calibration date:	4 July 2024		
expire date:	3 July 2025		

Analyzed by

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Analysis Report



Client information
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Tel: 08 8594 1565

Sample information
Description: Sound level measurement in workplace
Location: Siam City Power K3

Date	Lot No.	Reference No.	Location	L _{eq} 8 hr (dB(A))	L _{max} (dB(A))
22 Aug	H0140082	H0140082-1	Turbine and Generator	91	92
			Standard	-	115 ¹

Reference Method:
: Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat level, illumination, or noise B.E. 2561, Thailand.

Reference Standard:
: Ministerial Regulation on the Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E. 2559, Thailand.

Analized by

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Analysis Report



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Tel: 08 8594 1565

Sample information
Description: Sound level measurement in workplace
Location: Siam City Power K3

Monitoring device / Calibrator information			
Equipment:	Sound Calibrator	Please scan QR Code for the certificate	Sample Reference No.
Approved standard:	IEC 60942		H0140082
serial No.:	E-EN-179		
Brand / Model:	18003471		
Calibration date:	DellaOHM / HD 2020		
expires date:	4 July 2024		
	3 July 2025		
Equipment:	Digital Sound Level Meter	Please scan QR Code for the certificate	Sample Reference No.
Approved standard:	IEC 61672		H0140082-1
serial No.:	E-EN-075		
Brand / Model:	00865779		
Calibration date:	RION / NL-21		
expires date:	4 September 2024		
	3 September 2025		

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Compliance specialist



Analysis Report

Client information: Siam City Cement Public Company Limited
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Tel: 08 5007 8600

Sample information: Heat stress measurement in working area.
Description: Heat stress measurement in working area.
Location: Siam City Power K3

Page 1 of 2

Date	LOT no.	Reference No.	Location	Temperature [°C]			Working condition	WBGT [°C]
				Wet Bulb	Dry Bulb	Globe		
22 Aug	H0120079	H0120079-1	Turbine and Generator	26.6	31.9	35.9		30.8
		H0120079-2	Control room	22.3	26.7	27.8	Indoor	24.0
23 Aug	H0120080	H0120080-1	Preheater Boiler	26.7	30.7	30.7		27.3
		H0120080-2	Air Quenching Cooler Boiler	26.3	31.5	31.9		26.0

Reference Method:
Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat, light and noise B.E.2561, Thailand

Reference Standard:

Approved by

Analyzed by

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Analysis Report

Client information: Siam City Cement Public Company Limited
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E-mail: thanasak.kongdara@siamcitycement.com
Tel: 08 5007 8600

Sample information: Heat stress measurement in working area.
Description: Heat stress measurement in working area.
Location: Siam City Power K3

Page 2 of 2

Monitoring device / Calibrator Information			
Equipment:	Thermal Environment Monitor		Sample Reference No.
Approved standard:	ISO 7243		H0120079-1
Code:	E-EN-187	Please scan QR Code for the certificate	H0120079-2
serial No.:	19028482		H0120080-1
Brand / Model:	Delta OHM / HD32.2R		H0120080-2
Calibration date:	14 March 2024		
expire date:	13 March 2025		

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Analysis Report

Client information
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Tel: 08 8594 1565

Sample information
Description: Illumination level measurement at working area.
Location: Siam City Power K3
Measurement date: 30 August 2024
Sample Lot ID: H0130019

Page 1 of 2

Reference number	Location	Work type / Area	Illumination [Lux]			Standard [Lux]	
			Average	Min	Max	Average	Min
H0130019-1	Turbine and Generator	Boiler building	402	285	515	200	100
H0130019-2	Air Quenching Cooler Boiler	Boiler building	515	381	764	200	100
H0130019-3	Preheater Boiler	Boiler building	764	619	964	200	100
H0130019-4	Control room	Control room	964	950		200	100

Reference Method:
Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat level, illumination, or noise B.E. 2581, Thailand.

Reference Standard:
Notifications of the Department of Labor Protection and Welfare on the Illumination standard B.E. 2581, Thailand.

Remark: dayshift

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Analysis Report

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Sample information
Description: Illumination level measurement at working area.
Location: Siam City Power K3
Measurement date: 30 August 2024
Sample Lot ID: H0130019

Page 2 of 2

Monitoring device / Calibrator information

Equipment: Digital Light Meter	Please scan QR Code for the certificate	Sample Reference No.
Code: E-EN-184		H0130019-1
serial No.: A.043049		H0130019-2
Brand / Model: EXTECH / 407028		H0130019-3
Calibration date: 10 August 2024		H0130019-4
expire date: 9 August 2025		

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Analysis Report



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Sample Information
Description: Sound level measurement in workplace
Location: Siam City Power K3-K6

Page 1 of 2

Date	Lot No.	Reference No.	Location	L _{eq} 8 hr (dB(A))	L _{max} (dB(A))
25 Jul	H0140061	H0140061-1	Turbine and Generator	87	89
			Standard	-	115 ¹

Reference Method:
: Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat level, illumination, or noise B.E. 2561, Thailand.

Reference Standard:
: Ministerial Regulation on the Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E. 2559, Thailand.

Approved by

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Compliance specialist

Analyzed by

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Analysis Report



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Tel: 08 8594 1565

Sample Information
Description: Sound level measurement in workplace
Location: Siam City Power K5-K6

Page 2 of 2

Monitoring device / Calibrator Information			
Equipment: Sound Calibrator	Approved standard: IEC 60942	Please scan QR Code for the certificate	Sample Reference No. H0140061
Code: E-EN-179	serial No.: 19003471		
Brand / Model: DeltaCHM / HD 2020	Calibration date: 4 July 2024		
expire date: 3 July 2025			
Equipment: Sound Level Meter	Approved standard: IEC 61672	Please scan QR Code for the certificate	Sample Reference No. H0140061-1
Code: E-EN-200	serial No.: 00730560		
Brand / Model: RION / NL-43	Calibration date: 26 March 2024		
expire date: 25 March 2025			

Approved by

(Mr.Thanasak Kongdara)
nat.vl.7. 219-001712

Approved by

(Mrs.Pimnpan Putchay)
Compliance specialist

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Analysis Report

Client information
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E-mail: thanasak.kongdara@siamcitycement.com
Tel: 08 8594 1565

Sample information
Description: Sound level measurement in workplace
Location: Siam City Power K5-K6

Date	Lot No.	Reference No.	Location	Leq 8 hr (dB(A))	Lmax (dB(A))
29 Aug	H0140067	H0140067-1	Turbine and Generator	85	88
			Standard	-	115'

Reference Method:
: Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat level, illumination, or noise B.E. 2551, Thailand.

Reference Standard:
: Ministerial Regulation on the Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E. 2559, Thailand.

Analysed by

(Mr.Thanasak Kongdara)
นาง.ศุภ.จ. 219-001712

Approved by

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Analysis Report

Client information
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Tel: 08 8594 1565

Sample information
Description: Sound level measurement in workplace
Location: Siam City Power K5-K6

Monitoring device / Callibrator Information			
Equipment: Sound Callibrator	Please scan QR Code for the certificate		Sample Reference No. H0140067
Approved standard: IEC 60942			
Code: E-EN-179			
serial No.: 19003471			
Brand / Model: DeltaOHM / HD 2020			
Calibration date: 4 July 2024			
expire date: 3 July 2025			
Equipment: Sound Level Meter	Please scan QR Code for the certificate		Sample Reference No. H0140067-1
Approved standard: IEC 61672			
Code: E-EN-200			
serial No.: 00730560			
Brand / Model: RION / NL-43			
Calibration date: 26 March 2024			
expire date: 25 March 2025			

Analysed by

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INSEE Analysis Report

Client information
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Tel: 08 8594 1565

Sample information
Description: Sound level measurement in workplace
Location: Siam City Power K5-K6

Page 1 of 2

Date	Lot No.	Reference No.	Location	Leq 8 hr (dB(A))	Lmax (dB(A))
30 Sep	H0140101	H0140101-1	Turbine and Generator	86	89
			Standard	-	115'

Reference Method:
: Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat level, illumination, or noise B.E. 2561, Thailand.

Reference Standard:
: Ministerial Regulation on the Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E. 2559, Thailand.

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Compliance specialist

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INSEE Analysis Report

Client information
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E-mail: thanasak.kongdara@siamcitycement.com
Tel: 08 8594 1565

Sample information
Description: Sound level measurement in workplace
Location: Siam City Power K5-K6

Page 2 of 2

Monitoring device / Calibrator Information

Equipment: Approved standard: Code: Serial No.: Brand / Model: Calibration date: expire date:	Sound Calibrator IEC 60942 E-EN-179 19003471 DeltaOHM / HD 2020 4 July 2024 3 July 2025	Please scan QR Code for the certificate 	Sample Reference No. H0140101
Equipment: Approved standard: Code: Serial No.: Brand / Model: Calibration date: expire date:	Sound Level Meter IEC 61672 E-EN-200 00730560 RION / NL-43 26 March 2024 25 March 2025	Please scan QR Code for the certificate 	Sample Reference No. H0140101-1

Analyzed by

(Mr.Thanasak Kongdara)
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(Mrs.Pimnapan Pulchay)
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Analysis Report



Client information
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Tel: 08 8594 1565

Sample information
Description: Sound level measurement in workplace
Location: Siam City Power KG+K6

Date	Lot No.	Reference No.	Location	Leq 8 hr (dB(A))	Lmax (dB(A))
31 Oct	H0140104	H0140104-1	Turbine and Generator	87	89
			Standard	-	115*

Reference Method:
: Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat level, illumination, or noise B.E. 2561, Thailand.

Reference Standard:
: Ministerial Regulation on the Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E. 2559, Thailand.

Analized by

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Analysis Report



Client information
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Tel: 08 8594 1565

Sample information
Description: Sound level measurement in workplace
Location: Siam City Power KG+K6

Monitoring device / Calibrator information			
Equipment: Sound Calibrator	Please scan QR Code for the certificate		Sample Reference No. H0140104
Approved standard: IEC 60942			
Code: E-EN-179			
serial No.: 19003471			
Brand / Model: DeltaOHM / HD 2020			
Calibration date: 4 July 2024			
expire date: 3 July 2025			
Equipment: Sound Level Meter	Please scan QR Code for the certificate		Sample Reference No. H0140104-1
Approved standard: IEC 61672			
Code: E-EN-200			
serial No.: 00730560			
Brand / Model: RION / NL-43			
Calibration date: 28 March 2024			
expire date: 25 March 2025			

Analized by

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Analysis Report



Client Information
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Tel: 08 8594 1565

Simple Information
Description: Sound level measurement in workplace
Location: Siam City Power K5+K6

Page 1 of 2

Date	Lot No.	Reference No.	Location	Leq 8 hr (dB(A))	Lmax (dB(A))
28 Nov	H0140112	H0140112-1	Turbine and Generator	87	89
			Standard	-	115 ¹

Reference Method:
: Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat level, illumination, or noise B.E. 2561, Thailand.

Reference Standard:
: Ministerial Regulation on the Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E. 2559, Thailand.

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Analysis Report



Client Information
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Tel: 08 8594 1565

Simple Information
Description: Sound level measurement in workplace
Location: Siam City Power K5+K6

Page 2 of 2

Monitoring device / Calibrator Information			
Equipment:	Sound Calibrator	Please scan QR Code for the certificate	Sample Reference No.
Approved standard:	IEC 60942		H0140112
Code:	E-EN-179		
serial No.:	19003471		
Brand / Model:	DelloOHM / HD 2020		
Calibration date:	4 July 2024		
expire date:	3 July 2025		
Equipment:	Sound Level Meter	Please scan QR Code for the certificate	Sample Reference No.
Approved standard:	IEC 61672		H0140112-1
Code:	E-EN-200		
serial No.:	00730560		
Brand / Model:	RION / NL-43		
Calibration date:	26 March 2024		
expire date:	25 March 2025		

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Analysis Report



Client information
Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
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E-mail: thanasak.kongdara@siamcitycement.com
Tel: 08 8594 1565

Sample information
Description: Sound level measurement in workplace
Location: Siam City Power K5-K6

Page 1 of 2

Date	Lot No.	Reference No.	Location	L _{eq} 8 hr (dB(A))	L _{max} (dB(A))
17 Dec	H0140117	H0140117-1	Turbine and Generator	87	96
			Standard	-	115'

Reference Method:
: Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat level, illumination, or noise B.E. 2561, Thailand.

Reference Standard:
: Ministerial Regulation on the Prescribing of Standard for Administration and Management of Occupational Safety, Health and Environment in relation to Heat, Light and Noise, B.E. 2559, Thailand.

Analysed by

Approved by

(Mr.Thanasak Kongdara)
nr.1. 2. 219-001712
Compliance specialist

(Mrs.Pimponan Puchay)
nr.1. 2. 219-001712
Compliance specialist

Siam City Cement Public Company Limited
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Analysis Report



Client information
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Tel: 08 8594 1565

Sample information
Description: Sound level measurement in workplace
Location: Siam City Power K5-K6

Page 2 of 2

Monitoring device / Calibrator information

Equipment: Sound Calibrator	Please scan QR Code for the certificate	Sample Reference No.
Approved standard: IEC 60942		H0140117
Code: E-EN-179		
serial No.: 19003471		
Brand / Model: DeltaOHM / HD 2020		
Calibration date: 4 July 2024		
expire date: 3 July 2025		

Equipment: Sound Level Meter	Please scan QR Code for the certificate	Sample Reference No.
Approved standard: IEC 61672		H0140117-1
Code: E-EN-200		
serial No.: 00730560		
Brand / Model: RION / NL-43		
Calibration date: 28 March 2024		
expire date: 25 March 2025		

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Analysis Report

Client information
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Sample information
Description: Heat stress measurement in working area.
Location: Siam City Power K5,K6

Page 1 of 2

Date	LOT no.	Reference No.	Location	Temperature [°C]			Working condition	WBGT [°C]
				Wet Bulb	Dry Bulb	Globe		
25 Jul	H0120053	H0120053-1	Turbine and Generator	29.5	39.1	39.0		32.4
		H0120053-2	Control room	19.6	22.8	23.2		20.7
26 Jul	H0120054	H0120054-1	Preheater Boller K5	26.4	29.7	29.6	Indoor	27.4
		H0120054-2	Air Quenching Cooler Boller K5	27.4	30.2	30.3		28.3
30 Jul	H0120055	H0120055-1	Air Quenching Cooler Boller K6	26.1	29.8	29.9		27.2
		H0120055-2	Preheater Boller K6	25.6	29.0	28.9		26.6

Reference Method:
Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat, light and noise BE 2561, Thailand

Reference Standard:



Analysis Report

Client information
Company: Siam City Power Company Limited
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Tel: 08 8594 1565

Sample information
Description: Heat stress measurement in working area.
Location: Siam City Power K5,K6

Page 2 of 2

Monitoring device / Calibrator information	
Equipment: Thermal Environment Monitor	Please scan QR Code for the certificate
Approved standard: ISO 7243	
Code: E-EN-187	
serial No.: 19028482	
Brand / Model: Delta OHM / HD32.2R	
Calibration date: 14 March 2024	
expire date: 13 March 2025	



Sample Reference No.
H0120053-1
H0120053-2
H0120054-1
H0120054-2
H0120055-1
H0120055-2

Approved by

Signature of Mrs. Pimnapan Puchay
(Mrs. Pimnapan Puchay)
Compliance specialist

Analyzed by

Signature of Mr. Thanasak Kongdara
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Analysis Report



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Sample information
Description: Heat stress measurement in working area.
Location: Siam City Power K5, K6

Page 1 of 2

Date	LOT no.	Reference No.	Location	Temperature [°C]			Working condition	WBGT [°C]
				Wet Bulb	Dry Bulb	Globe		
28 Aug	H0120059	H0120059-1	Turbine and Generator	29.7	39.7	39.8	Indoor	32.8
		H0120059-2	Control room	21.2	24.3	24.4		22.2
29 Aug	H0120060	H0120060-1	Preheater Boiler K5	25.8	30.2	30.3		27.1
		H0120060-2	Air Quenching Cooler Boiler K5	26.1	31.1	31.1		27.6
30 Aug	H0120061	H0120061-1	Air Quenching Cooler Boiler K6	25.6	30.6	30.8		27.2
		H0120061-2	Preheater Boiler K6	25.8	31.5	31.6		27.5

Reference Method:
Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat, light and noise B.E. 2561, Thailand

Reference Standard:

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Analysis Report



Client information
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Sample information
Description: Heat stress measurement in working area.
Location: Siam City Power K5, K6

Page 2 of 2

Monitoring device / Calibrator information		Sample Reference No.
Equipment:	Thermal Environment Monitor	
Approved standard:	ISO 7243	H0120059-1
Code:	E-EN-187	H0120059-2
serial No.:	19028482	H0120060-1
Brand / Model:	Della OHM / HD32.2R	H0120060-2
Calibration date:	14 March 2024	H0120061-1
expire date:	13 March 2025	H0120061-2



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Analysis Report



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Sample information
Description: Heat stress measurement in working area.
Location: Siam City Power K5, K6

Page 1 of 2

Date	LOT no.	Reference No.	Location	Temperature [°C]			Working condition	WBGT [°C]
				Wet Bulb	Dry Bulb	Globe		
26 Sep	H0120081	H0120081-1	Preheater Boiler K5	25.8	29.9	30.1	Indoor	27.1
		H0120081-2	Air Quenching Cooler Boiler K5	26.3	29.8	30.1		27.4
27 Sep	H0120082	H0120082-1	Air Quenching Cooler Boiler K6	26.1	29.8	29.8		27.2
		H0120082-2	Preheater Boiler K6	25.7	28.8	29.0		26.7
30 Sep	H0120083	H0120083-1	Turbine and Generator	29.5	38.6	38.8		32.3
		H0120083-2	Control room	20.1	23.2	23.1		21.0

Reference Method:
Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat, light and noise B.E.2561, Thailand

Reference Standard:

Analysis Report



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Sample information
Description: Heat stress measurement in working area.
Location: Siam City Power K5, K6

Page 2 of 2

Monitoring device / Calibrator Information		
Equipment: Thermal Environment Monitor	Please scan QR Code for the certificate	Sample Reference No.
Approved standard: ISO 7243		H0120081-1
Code: E-EN-170		H0120081-2
serial No.: TPQ040016		H0120082-1
Brand / Model: 3M / QUESTemp 32		H0120082-2
Calibration date: 4 July 2024		H0120083-1
expire date: 3 July 2025		H0120083-2

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Analysis Report



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Sample information
Description: Heat stress measurement in working area.
Location: Siam City Power K5, K6

Page 1 of 2

Date	LOT no.	Reference No.	Location	Temperature [°C]			Working condition	WBGT [°C]
				Wet Bulb	Dry Bulb	Globe		
29 Oct	H0120086	H0120086-1	Preheater Boiler K5	25.6	28.9	28.1		26.7
		H0120086-2	Air Quenching Cooler Boiler K5	26.0	29.2	28.1		26.9
30 Oct	H0120087	H0120087-1	Air Quenching Cooler Boiler K6	26.1	28.8	28.8	Indoor	26.9
		H0120087-2	Preheater Boiler K6	25.6	29.1	29.0		27.3
31 Oct	H0120088	H0120088-1	Turbine and Generator	26.7	37.8	38.1		31.5
		H0120088-2	Control room	20.2	22.2	22.4		20.9

Reference Method:
Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat, light and noise B.E. 2561, Thailand.

Reference Standard:

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Analysis Report



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Sample information
Description: Heat stress measurement in working area.
Location: Siam City Power K5, K6

Page 2 of 2

Monitoring device / Calibrator Information		Sample Reference No.
Equipment: Thermal Environment Monitor	Please scan QR Code for the certificate	
Approved standard: ISO 7243		
Code: E-EN-187		
serial No.: 19028462		
Brand / Model: Delta OHM / H032.2R		
Calibration date: 14 March 2024		
expire date: 13 March 2025		
Sample Reference No.		
H0120086-1		
H0120086-2		
H0120087-1		
H0120087-2		
H0120088-1		
H0120088-2		

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Analysis Report

Client information

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Sample information

Description: Heat stress measurement in working area.
Location: Siam City Power K5, K6

Page 1 of 2

Date	LOT no.	Reference No.	Location	Temperature [°C]			Working condition	WBGT [°C]
				Wet Bulb	Dry Bulb	Globe		
27 Nov	H0120094	H0120094-1	Preheater Boller K5	25.2	30.9	30.7		26.9
		H0120094-2	Air Quenching Cooler Boller K5	26.4	31.4	31.4		27.9
28 Nov	H0120095	H0120095-1	Turbine and Generator	28.4	38.0	40.1	Indoor	31.9
		H0120095-2	Control room	19.7	22.6	23.1		20.7
29 Nov	H0120096	H0120096-1	Air Quenching Cooler Boller K6	26.1	28.8	28.7		27.2
		H0120096-2	Preheater Boller K6	25.6	29.9	30.3		27.0

Reference Method:

Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat, light and noise BE 2561, Thailand.

Reference Standard:



Analysis Report

Client information

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Sample information

Description: Heat stress measurement in working area.
Location: Siam City Power K5, K6

Page 2 of 2

Monitoring device / Calibrator information		Sample Reference No.
Equipment:	Thermal Environment Monitor	
Approved standard:	ISO 7243	H0120094-1
Code:	E-EN-187	H0120094-2
serial No.:	19028482	H0120095-1
Brand / Model:	Delta OHM / HD32.2R	H0120095-2
Calibration date:	14 March 2024	H0120096-1
expire date:	13 March 2025	H0120096-2



Analyzed by

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(Mrs. Pimorpan Putchay)

(Mr. Thanasak Kongdara)

(Mrs. Pimorpan Putchay)

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Analysis Report



Client Information
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Sample Information
Description: Heat stress measurement in working area.
Location: Siam City Power K5, K6

Page 1 of 2

Date	LOT no.	Reference No.	Location	Temperature [°C]			Working condition	WGBT [°C]
				Wet Bulb	Dry Bulb	Globe		
17 Dec	H0120089	H0120099-1	Turbine and Generator	27.5	36.2	39.6		30.8
		H0120099-2	Control room	20.6	27.8	28.5		23.0
18 Dec	H0120100	H0120100-1	Preheater Boller K5	22.0	27.0	27.2	Indoor	23.6
		H0120100-2	Air Quenching Cooler Boller K5	22.6	28.0	28.4		24.3
19 Dec	H0120101	H0120101-1	Air Quenching Cooler Boller K6	20.9	27.9	28.0		23.0
		H0120101-2	Preheater Boller K6	21.7	29.8	29.8		24.1

Reference Method:
Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat, light and noise B E 2561, Thailand

Reference Standard:

Approved by

(Mrs. Pimnapan Putchay)
Compliance specialist

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Analysis Report



Client Information
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Sample Information
Description: Heat stress measurement in working area.
Location: Siam City Power K5, K6

Page 2 of 2

Monitoring device / Calibrator Information	
Equipment: Thermal Environment Monitor	Please scan QR Code for the certificate
Approved standard: ISO 7243	
Code: E-EN-187	
serial No.: 19028482	
Brand / Model: Delta OHM / HD32.2R	
Calibration date: 14 March 2024	
expire date: 13 March 2025	

Sample Reference No.

H0120099-1
H0120099-2
H0120100-1
H0120100-2
H0120101-1
H0120101-2

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Analysis Report



Client information
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Sample information
Description: Illumination level measurement at working area.
Location: Siam City Power K5-K6
Measurement date: 25 July 2024
Sample Lot ID: H0130013
Page 1 of 2

Reference number	Location	Work type / Area	Illumination [Lux]			Standard [Lux]	
			Average	Min	Max	Average	Min
H0130013-1	Turbine and Generator	Boiler building	210	166	200	200	100
H0130013-2	Air Quenching Cooler Boiler K5	Boiler building	342	151	200	200	100
H0130013-3	Air Quenching Cooler Boiler K6	Boiler building	218	142	200	200	100
H0130013-4	Preheater Boiler K5	Boiler building	204	147	200	200	100
H0130013-5	Preheater Boiler K6	Boiler building	253	174	200	200	100
H0130013-6	Control room	Control room	628	558	200	200	100

Reference Method:
Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat level, illumination, or noise B.E. 2561, Thailand.

Reference Standard:
Notifications of the Department of Labor Protection and Welfare on the illumination standard B.E. 2561, Thailand.

Remark: dayshift

Approved by

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Analyzed by

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Analysis Report



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Sample information
Description: Illumination level measurement at working area.
Location: Siam City Power K5-K6
Measurement date: 25 July 2024
Sample Lot ID: H0130013
Page 2 of 2

Monitoring device / Calibrator information

Equipment:	Digital Light Meter	Sample Reference No.
Code:	E-EN-183	H0130013-1
serial No.:	A.043068	H0130013-2
Brand / Model:	EXTECH / 407026	H0130013-3
Calibration date:	10 August 2024	H0130013-4
expire date:	9 August 2025	H0130013-5
		H0130013-6

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Analysis Report



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Sample information
Description: Illumination level measurement at working area.
Location: Siam City Power K5-K6
Measurement date: 29 August 2024
Sample Lot. ID: H0130016
Page 1 of 2

Area measurement					
Reference number	Location	Work type / Area	Illumination [Lux]		Standard [Lux]
			Average	Min	Max
H0130016-1	Turbine and Generator	Boiler building	274	167	200
H0130016-2	Air Quenching Cooler Boiler K5	Boiler building	298	152	200
H0130016-3	Air Quenching Cooler Boiler K6	Boiler building	209	133	200
H0130016-4	Preheater Boiler K5	Boiler building	207	148	200
H0130016-5	Preheater Boiler K6	Boiler building	255	164	200
H0130016-6	Control room	Control room	612	566	200

Reference Method:
Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat level, illumination, or noise B.E. 2561, Thailand.

Reference Standard:
Notifications of the Department of Labor Protection and Welfare on the Illumination standard B.E. 2561, Thailand.

Remark: dayshift

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Approved by

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Analysis Report



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Sample information
Description: Illumination level measurement at working area.
Location: Siam City Power K5-K6
Measurement date: 29 August 2024
Sample Lot. ID: H0130016
Page 2 of 2

Monitoring device / Calibrator Information

Equipment:	Digital Light Meter	Sample Reference No.
Code:	E-EN-183	H0130016-1
serial No.:	A.043068	H0130016-2
Brand / Model:	EXTECH / 407026	H0130016-3
Calibration date:	10 August 2024	H0130016-4
expire date:	9 August 2025	H0130016-5
		H0130016-6

Please scan QR Code for the certificate

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Analysis Report



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Sample information
Description: Illumination level measurement at working area.
Location: Siam City Power K5-K6
Measurement date: 30 September 2024
Sample Lot ID: H0130023

Area measurement					
Reference number	Location	Work type / Area	Illumination [Lux]		Standard [Lux]
			Average	Min	Max
H0130023-1	Turbine and Generator	Boiler building	219	128	200
H0130023-2	Air Quenching Cooler Boiler K5	Boiler building	288	171	200
H0130023-3	Air Quenching Cooler Boiler K6	Boiler building	212	140	200
H0130023-4	Preheater Boiler K5	Boiler building	209	153	200
H0130023-5	Preheater Boiler K6	Boiler building	238	165	200
H0130023-6	Control room	Control room	626	574	200

Reference Method:
Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat level, illumination, or noise B.E. 2561, Thailand.

Reference Standard:
Notifications of the Department of Labor Protection and Welfare on the Illumination standard B.E. 2561, Thailand.

Remark: dayshift

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Analysis Report



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Tel: 08 8594 1565

Sample information
Description: Illumination level measurement at working area.
Location: Siam City Power K5-K6
Measurement date: 30 September 2024
Sample Lot ID: H0130023

Monitoring device / Calibrator Information

Equipment: Digital Light Meter	Please scan QR Code for the certificate	Sample Reference No.
Code: E-EN-183		H0130023-1
serial No.: A043068		H0130023-2
Brand / Model: EXTECH / 407026		H0130023-3
Calibration date: 10 August 2024		H0130023-4
expire date: 9 August 2025		H0130023-5
		H0130023-6

Analyzed by

(Mr. Thanasak Kongdara)
nat.sil.2.219-001712

Approved by

(Mrs. Pimonpan Puchay)
Compliance specialist

Analysis Report



Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwaeng, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com
Tel: 08 8594 1565

Sample information

Description: Illumination level measurement at working area.
Location: Siam City Power K5-K6
Measurement date: 31 October 2024
Sample Lot ID: H0130025

Area measurement					
Reference number	Location	Work type / Area	Illumination [Lux]		Standard [Lux]
			Average	Min	
H0130025-1	Turbine and Generator	Boiler building	223	132	200
H0130025-2	Air Quenching Cooler Boiler K5	Boiler building	279	161	200
H0130025-3	Air Quenching Cooler Boiler K6	Boiler building	211	143	200
H0130025-4	Preheater Boiler K5	Boiler building	205	120	200
H0130025-5	Preheater Boiler K6	Boiler building	264	156	200
H0130025-6	Control room	Control room	588	546	200

Reference Method:
Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat level, illumination, or noise B.E. 2561, Thailand.

Reference Standard:
Notifications of the Department of Labor Protection and Welfare on the illumination standard B.E. 2561, Thailand.

Remark: dayshift

Analyzed by


(Mr. Thanasak Kongdara)
nat.sul.7. 219-001712

Approved by


(Mrs.Pinonpan Puchay)
Compliance specialist

Analysis Report



Client information

Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparp Road, Tabkwaeng, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com
Tel: 08 8594 1565

Sample information

Description: Illumination level measurement at working area.
Location: Siam City Power K5-K6
Measurement date: 31 October 2024
Sample Lot ID: H0130025

Monitoring device / Calibrator Information

Equipment: Digital Light Meter
Code: E-EN-183
serial No.: A.043068
Brand / Model: EXTECH / 407026
Calibration date: 10 August 2024
expire date: 9 August 2025

Please scan QR code for the certificate


Sample Reference No.
H0130025-1
H0130025-2
H0130025-3
H0130025-4
H0130025-5
H0130025-6

Analyzed by


(Mr. Thanasak Kongdara)
nat.sul.7. 219-001712

Approved by


(Mrs.Pinonpan Puchay)
Compliance specialist

Analysis Report



Client information
Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparb Road, Tabkhwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com
Tel: 08 8594 1565

Sample information
Description: Illumination level measurement at working area.
Location: Siam City Power K5-H6
Measurement date: 28 November 2024
Sample Lot ID: H0130026
Page 1 of 2

Reference number	Location	Work type / Area	Illumination [Lux]			Standard [Lux]	
			Average	Min	Max	Average	Min
H0130026-1	Turbine and Generator	Boiler building	217	141	200	200	100
H0130026-2	Air Quenching Cooler Boiler K5	Boiler building	319	175	200	200	100
H0130026-3	Air Quenching Cooler Boiler K6	Boiler building	208	153	200	200	100
H0130026-4	Preheater Boiler K5	Boiler building	202	164	200	200	100
H0130026-5	Preheater Boiler K6	Boiler building	288	177	200	200	100
H0130026-6	Control room	Control room	576	550	200	200	100

Reference Method:
Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat level, illumination, or noise B.E. 2561, Thailand.

Reference Standard:
Notifications of the Department of Labor Protection and Welfare on the Illumination standard B.E. 2561, Thailand.
Remark: dayshift

Approved by

(Mrs.Pimnapan Puchay)
Compliance specialist

Analyzed by

(Mr.Thanasak Kongdara)
Tel. 311.2. 219-001712

Analysis Report



Client information
Company: Siam City Power Company Limited
Contact Person: Mr.Thanasak Kongdara
Address: 99 Moo 9 Mitraparb Road, Tabkhwang, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com
Tel: 08 8594 1565

Sample information
Description: Illumination level measurement at working area.
Location: Siam City Power K5-H6
Measurement date: 28 November 2024
Sample Lot ID: H0130026
Page 2 of 2

Monitoring device / Calibrator information

Equipment: Digital Light Meter
Code: E-EN-183
serial No.: A.043068
Brand / Model: EXTECH / 407026
Calibration date: 10 August 2024
expire date: 9 August 2025

Please scan QR Code for the certificate

Sample Reference No.
H0130026-1
H0130026-2
H0130026-3
H0130026-4
H0130026-5
H0130026-6

Approved by

(Mrs.Pimnapan Puchay)
Compliance specialist

Analyzed by

(Mr.Thanasak Kongdara)
Tel. 311.2. 219-001712

Analysis Report



Client information
Company: Siam City Power Company Limited
Contact Person: Mr. Thanasak Kongdara
Address: 99 Moo 9 Mitraparb Road, Tabkwaeng, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com
Tel: 08 8594 1565

Sample information
Description: Illumination level measurement at working area.
Location: Siam City Power K6-H6
Measurement date: 17 December 2024
Sample Lot ID: H0130031

Page 1 of 2

Reference number	Location	Work type /Area	Illumination [Lux]		Standard [Lux]	
			Average	Min	Average	Min
H0130031-1	Turbine and Generator	Boiler building	205	126	200	100
H0130031-2	Air Quenching Cooler Boiler K5	Boiler building	320	167	200	100
H0130031-3	Air Quenching Cooler Boiler K6	Boiler building	209	148	200	100
H0130031-4	Preheater Boiler K5	Boiler building	204	151	200	100
H0130031-5	Preheater Boiler K6	Boiler building	276	168	200	100
H0130031-6	Control room	Control room	567	556	200	100

Reference Method:
Notifications of the Department of Labor Protection and Welfare on principle, measurement method and analysis of the working condition on heat level, illumination, or noise B.E. 2561, Thailand.

Reference Standard:
Notifications of the Department of Labor Protection and Welfare on the illumination standard B.E. 2561, Thailand.

Remark: dayshift

Analyzed by

(Mr. Thanasak Kongdara)
nat. sri. 2. 219-001712

Approved by

(Mrs. Pimontpan Pulchay)
Compliance specialist

Analysis Report



Client information
Company: Siam City Power Company Limited
Contact Person: Mr. Thanasak Kongdara
Address: 99 Moo 9 Mitraparb Road, Tabkwaeng, Khaengkoi, Saraburi 18260
E-mail: thanasak.kongdara@siamcitycement.com
Tel: 08 8594 1565

Sample information
Description: Illumination level measurement at working area.
Location: Siam City Power K6-H6
Measurement date: 17 December 2024
Sample Lot ID: H0130031

Page 2 of 2

Monitoring device / Calibrator information

Equipment:	Digital Light Meter	Please scan QR Code for the certificate	Sample Reference No.
Code:	E-EN-183		H0130031-1
serial No.:	A.043088		H0130031-2
Brand / Model:	EXTECH / 407026		H0130031-3
Calibration date:	10 August 2024		H0130031-4
expire date:	9 August 2025		H0130031-5
			H0130031-6

Analyzed by

(Mr. Thanasak Kongdara)
nat. sri. 2. 219-001712

Approved by

(Mrs. Pimontpan Pulchay)
Compliance specialist

ภาคผนวก ง

ใบรับรองการสอบเทียบเครื่องมือ



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รายการเครื่องมือที่ใช้ในการวิเคราะห์ / ทดสอบ

Sample Name	Parameter	Equipment Name	ID No.	Calibrated Date	Next Cal	Freq. Calibrate (Months)
Ambient	Particulate Matter (PM-10)	High Volume	BKK_FS0374	-	-	On site Calibration
Ambient	Particulate Matter (PM-10)	High Volume	BKK_FS1378	-	-	On site Calibration
Ambient	Particulate Matter (PM-10)	High Volume	BKK_FS0385	-	-	On site Calibration
Ambient	Particulate Matter (PM-10)	High Volume	BKK_FS1061	-	-	On site Calibration
Ambient	Particulate Matter (PM-10)	High Volume	BKK_FS0378	-	-	On site Calibration
Ambient	Particulate Matter (PM-10)	High Volume	BKK_FS1378	-	-	On site Calibration
Ambient	Particulate Matter (PM-10)	High Volume	BKK_FS0383	-	-	On site Calibration
Ambient	Particulate Matter (PM-10)	High Volume	BKK_FS0385	-	-	On site Calibration
Ambient	Particulate Matter (PM-10)	High Volume	BKK_FS0388	-	-	On site Calibration
Ambient	Particulate Matter (PM-10)	High Volume	BKK_FS0383	-	-	On site Calibration
Ambient	Particulate Matter (PM-10)	High Volume	BKK_FS1377	-	-	On site Calibration
Ambient	Particulate Matter (PM-10)	High Volume	BKK_FS1062	-	-	On site Calibration
Ambient	Particulate Matter (PM-10)	Digital Balance	BKK_EN0403	3-Jun-24	3-Jun-25	12
Ambient	Total Suspended Particulate	High Volume	BKK_FS1057	-	-	On site Calibration
Ambient	Total Suspended Particulate	High Volume	BKK_FS1376	-	-	On site Calibration
Ambient	Total Suspended Particulate	High Volume	BKK_FS0373	-	-	On site Calibration
Ambient	Total Suspended Particulate	High Volume	BKK_FS0368	-	-	On site Calibration
Ambient	Total Suspended Particulate	High Volume	BKK_FS0365	-	-	On site Calibration
Ambient	Total Suspended Particulate	High Volume	BKK_FS0372	-	-	On site Calibration
Ambient	Total Suspended Particulate	High Volume	BKK_FS1056	-	-	On site Calibration
Ambient	Total Suspended Particulate	High Volume	BKK_FS0373	-	-	On site Calibration
Ambient	Total Suspended Particulate	High Volume	BKK_FS1375	-	-	On site Calibration
Ambient	Total Suspended Particulate	High Volume	BKK_FS0367	-	-	On site Calibration
Ambient	Total Suspended Particulate	High Volume	BKK_FS1057	-	-	On site Calibration
Ambient	Total Suspended Particulate	High Volume	BKK_FS1376	-	-	On site Calibration
Ambient	Total Suspended Particulate	Digital Balance	BKK_EN0403	3-Jun-24	3-Jun-25	12
Ambient	Nitrogen Dioxide	NO ₂ Analyzer	BKK_FS0803	3-Jul-24	3-Jan-25	6
Ambient	Nitrogen Dioxide	NO ₂ Analyzer	BKK_FS0779	2-Jul-24	2-Jan-25	6
Ambient	Nitrogen Dioxide	NO ₂ Analyzer	BKK_FS0800	2-Jul-24	2-Jan-25	6
Ambient	Nitrogen Dioxide	NO ₂ Analyzer	BKK_FS0785	2-Jul-24	2-Jan-25	6
Ambient	Nitrogen Dioxide	NO ₂ Analyzer	BKK_FS1406	2-Jul-24	2-Jan-25	6
Ambient	Nitrogen Dioxide	NO ₂ Analyzer	BKK_FS0803	3-Jul-24	3-Jan-25	6
Ambient	Nitrogen Dioxide	NO ₂ Analyzer	BKK_FS1098	3-Jul-24	3-Jan-25	6
Ambient	Nitrogen Dioxide	NO ₂ Analyzer	BKK_FS0800	2-Jul-24	2-Jan-25	6
Ambient	Nitrogen Dioxide	NO ₂ Analyzer	BKK_FS0803	3-Jul-24	3-Jan-25	6
Ambient	Nitrogen Dioxide	NO ₂ Analyzer	BKK_FS1086	3-Jul-24	3-Jan-25	6
Ambient	Nitrogen Dioxide	NO ₂ Analyzer	BKK_FS1072	3-Jul-24	3-Jan-25	6
Ambient	Nitrogen Dioxide	NO ₂ Analyzer	BKK_FS0794	2-Jul-24	2-Jan-25	6
Ambient	Sulfur Dioxide	SO ₂ Analyzer	BKK_FS0802	5-Jul-24	5-Jan-25	6
Ambient	Sulfur Dioxide	SO ₂ Analyzer	BKK_FS0778	4-Jul-24	4-Jan-25	6
Ambient	Sulfur Dioxide	SO ₂ Analyzer	BKK_FS0799	4-Jul-24	4-Jan-25	6
Ambient	Sulfur Dioxide	SO ₂ Analyzer	BKK_FS0784	4-Jul-24	4-Jan-25	6
Ambient	Sulfur Dioxide	SO ₂ Analyzer	BKK_FS1408	5-Jul-24	5-Jan-25	6
Ambient	Sulfur Dioxide	SO ₂ Analyzer	BKK_FS0802	5-Jul-24	5-Jan-25	6
Ambient	Sulfur Dioxide	SO ₂ Analyzer	BKK_FS1097	5-Jul-24	5-Jan-25	6
Ambient	Sulfur Dioxide	SO ₂ Analyzer	BKK_FS0799	4-Jul-24	4-Jan-25	6
Ambient	Sulfur Dioxide	SO ₂ Analyzer	BKK_FS0802	5-Jul-24	5-Jan-25	6
Ambient	Sulfur Dioxide	SO ₂ Analyzer	BKK_FS1085	5-Jul-24	5-Jan-25	6
Ambient	Sulfur Dioxide	SO ₂ Analyzer	BKK_FS1071	5-Jul-24	5-Jan-25	6
Ambient	Sulfur Dioxide	SO ₂ Analyzer	BKK_FS0793	4-Jul-24	4-Jan-25	6
Ambient	Wind Speed / Wind Direction	Wind Speed / Wind Direction	BKK_FS1371	19-Jun-23	19-Dec-24	18
Ambient	Wind Speed / Wind Direction	Wind Speed / Wind Direction	BKK_FS1370	30-May-23	30-Nov-24	18
Ambient	Wind Speed / Wind Direction	Wind Speed / Wind Direction	BKK_FS1369	30-May-23	30-Nov-24	18
Ambient	Wind Speed / Wind Direction	Wind Speed / Wind Direction	BKK_FS1213	21-May-24	21-Nov-25	18
Ambient	Wind Speed / Wind Direction	Wind Speed / Wind Direction	BKK_FS1373	19-Jun-23	19-Dec-24	18
Ambient	Wind Speed / Wind Direction	Wind Speed / Wind Direction	BKK_FS1372	19-Jun-23	19-Dec-24	18
Ambient	Wind Speed / Wind Direction	Wind Speed / Wind Direction	BKK_FS0165	4-Jan-24	4-Jul-25	18
Ambient	Wind Speed / Wind Direction	Wind Speed / Wind Direction	BKK_FS1369	30-May-23	30-Nov-24	18



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รายการเครื่องมือที่ใช้ในการวิเคราะห์ / ทดสอบ

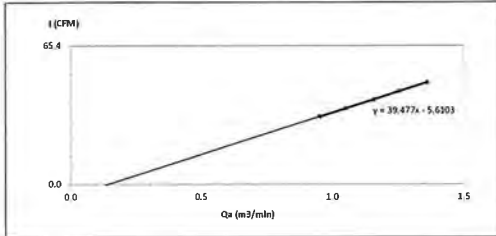
Sample Name	Parameter	Equipment Name	ID No.	Calibrated Date	Next Cal	Freq. Calibrate (Months)
Ambient	Wind Speed / Wind Direction	Wind Speed / Wind Direction	BKK_FS1213	21-May-24	21-Nov-25	18
Ambient	Wind Speed / Wind Direction	Wind Speed / Wind Direction	SGK_FS0039	19-Dec-23	18-Dec-24	12
Ambient	Wind Speed / Wind Direction	Wind Speed / Wind Direction	BKK_FS0888	4-Jan-24	4-Jul-25	18
Ambient	Wind Speed / Wind Direction	Wind Speed / Wind Direction	RYG_FS0436	19-Dec-23	18-Dec-24	12
Ambient	Wind Speed / Wind Direction	Wind Speed / Wind Direction	SGK_FS0039	19-Dec-23	18-Dec-24	12
Ambient	Wind Speed / Wind Direction	Wind Speed / Wind Direction	RYG_FS0435	19-Dec-23	18-Dec-24	12
Ambient	Wind Speed / Wind Direction	Wind Speed / Wind Direction	BKK_FS1369	30-May-23	30-Nov-24	18
Ambient	Wind Speed / Wind Direction	Wind Speed / Wind Direction	BKK_FS0887	4-Jan-24	4-Jul-25	18
Ambient	Wind Speed / Wind Direction	Wind Speed / Wind Direction	BKK_FS1370	30-May-23	30-Nov-24	18
Ambient	Wind Speed / Wind Direction	Wind Speed / Wind Direction	BKK_FS0157	14-Jun-23	14-Dec-24	18
Noise	Leq 24 hrs	Sound Calibrator	BKK_FS1221	19-Dec-23	18-Dec-24	12
Noise	Leq 24 hrs	Sound Level Meter	BKK_FS0110	10-Jan-24	9-Jan-25	12
Noise	Leq 24 hrs	Sound Level Meter	BKK_FS0030	29-Jan-24	28-Jan-25	12
Noise	Leq 24 hrs	Sound Level Meter	BKK_FS1214	7-Nov-23	7-Nov-24	12
Noise	Leq 24 hrs	Sound Level Meter	BKK_FS0878	5-Jan-24	4-Jan-25	12
Noise	Noise Annoyance	Sound Calibrator	BKK_FS1221	19-Dec-23	18-Dec-24	12
Noise	Noise Annoyance	Sound Level Meter	BKK_FS0110	10-Jan-24	9-Jan-25	12
Noise	Noise Annoyance	Sound Level Meter	BKK_FS0030	29-Jan-24	28-Jan-25	12
Noise	Noise Annoyance	Sound Level Meter	BKK_FS1214	7-Nov-23	7-Nov-24	12
Noise	Noise Annoyance	Sound Level Meter	BKK_FS0878	5-Jan-24	4-Jan-25	12
Noise	Noise Annoyance	Sound Level Meter	BKK_FS1215	7-Nov-23	7-Nov-24	12
Noise	Noise Annoyance	Sound Level Meter	BKK_FS0999	16-Oct-23	16-Oct-24	12
Noise	Noise Annoyance	Sound Level Meter	BKK_FS0875	10-Jan-24	9-Jan-25	12
Water Lab	pH at 25 °C	pH meter	BKK_EN0342	17-Oct-24	17-Oct-25	12
Water Lab	Conductivity	Conductivity meter	BKK_EN0373	25-Dec-23	25-Dec-24	12
Water Lab	BOD	DO Meter	BKK_EN0017	16-Nov-23	16-May-25	18
Water Lab	BOD	Incubator	BKK_EN0304	20-Mar-24	20-Mar-25	12
Water Lab	BOD	Burette	BKK_EN0171	27-Feb-24	27-Aug-25	18
Water Lab	COD	Hot Block	BKK_EN0222	22-Apr-24	22-Apr-25	12
Water Lab	COD	Spectrophotometer	BKK_EN0018	13-Sep-24	13-Sep-25	12
Water Lab	Total Suspended Solids	Electronic Top-Loading Balance	BKK_EN0003	2-Aug-24	2-Aug-25	12
Water Lab	Total Suspended Solids	Oven	BKK_EN0273	14-May-24	14-Nov-25	18
Water Lab	Oil & Grease	Electronic Top-Loading Balance	BKK_EN0003	2-Aug-24	2-Aug-25	12
Water Lab	Oil & Grease	Water Bath	BKK_EN0148	4-Jul-23	4-Jan-25	18



High Volume Air Sampler Calibration Worksheet

Project Site : Siam City Cement Public Company Limited
Calibrate Location : โรงปูนขาว
Calibrate Date : 6-Aug-24
CalibrationSheet No.: C-060824-BKK-FS0374
Calibrator ID: BKK-FS0624
Calibrator Model: TE-5028A
Calibrator S/N: 2584
Barometric Pressure (mm Hg) : 753.3
Temperature (°C): 34
High Volume ID : BKK-FS0374
High Volume Model: TE-5009X
High Volume S/N: 5195
Calibrator Slope : 1.0268
Calibrator Intercept : -0.01116

Test No.	Delta H ₂ O (inch)	Qa (m ³ /min)	I : Chart (CFM)	Linear Regression
1	2.3	0.954	32	Slope: 39.4774 Intercept: -5.6103 Correlation Coefficient: 0.9999
2	2.8	1.052	36	
3	3.4	1.158	40	
4	4.0	1.255	44	
5	4.7	1.359	48	



Calibrated by : [Signature]
(Mr. Teeravut Sukdee)
Field Scientist(2)

Approved by : [Signature]
(Mr. Noppong Juntarupan)
Enviro Field Coordinator Scientist (3)

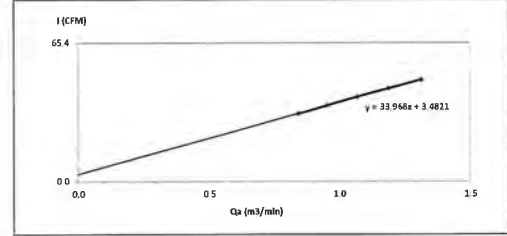
FORM NO.: F 06-074 REVISION NO.: ISSUE DATE: 14/03/16



High Volume Air Sampler Calibration Worksheet

Project Site : Siam City Cement Public Company Limited
Calibrate Location : โรงปูนขาว
Calibrate Date : 6-Aug-24
CalibrationSheet No.: C-060824-BKK-FS1378
Calibrator ID: BKK-FS0624
Calibrator Model: TE-5028A
Calibrator S/N: 2584
Barometric Pressure (mm Hg) : 753.3
Temperature (°C): 34
High Volume ID : BKK-FS1378
High Volume Model: TE-5009X
High Volume S/N: 6263
Calibrator Slope : 1.0268
Calibrator Intercept : -0.01116

Test No.	Delta H ₂ O (inch)	Qa (m ³ /min)	I : Chart (CFM)	Linear Regression
1	1.8	0.845	32	Slope: 33.9677 Intercept: 3.4821 Correlation Coefficient: 0.9997
2	2.3	0.954	36	
3	2.9	1.070	40	
4	3.6	1.191	44	
5	4.4	1.315	48	



Calibrated by : [Signature]
(Mr. Teeravut Sukdee)
Field Scientist(2)

Approved by : [Signature]
(Mr. Noppong Juntarupan)
Enviro Field Coordinator Scientist (3)

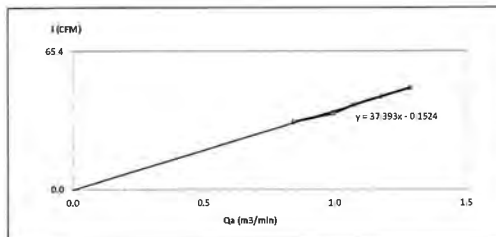
FORM NO.: F 06-074 REVISION NO.: ISSUE DATE: 14/03/16



High Volume Air Sampler Calibration Worksheet

Project Site : Siam City Cement Public Company Limited
Calibrate Location : โรงปูนขาว
Calibrate Date : 6-Aug-24
CalibrationSheet No.: C-060824-BKK-FS0385
Calibrator ID: BKK-FS0624
Calibrator Model: TE-5028A
Calibrator S/N: 2584
Barometric Pressure (mm Hg) : 753.3
Temperature (°C): 34
High Volume ID : BKK-FS0385
High Volume Model: TE-5009X
High Volume S/N: 4789
Calibrator Slope : 1.0268
Calibrator Intercept : -0.01116

Test No.	Delta H ₂ O (inch)	Qa (m ³ /min)	I : Chart (CFM)	Linear Regression
1	1.8	0.845	32	Slope: 37.3925 Intercept: -0.1524 Correlation Coefficient: 0.9955
2	2.5	0.994	36	
3	2.9	1.070	40	
4	3.5	1.174	44	
5	4.2	1.285	48	



Calibrated by : [Signature]
(Mr. Teeravut Sukdee)
Field Scientist(2)

Approved by : [Signature]
(Mr. Noppong Juntarupan)
Enviro Field Coordinator Scientist (3)

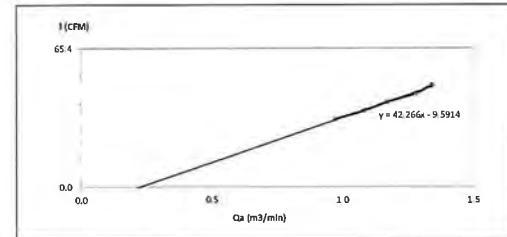
FORM NO.: F 06-074 REVISION NO.: ISSUE DATE: 14/03/16



High Volume Air Sampler Calibration Worksheet

Project Site : Siam City Cement Public Company Limited
Calibrate Location : โรงปูนขาว
Calibrate Date : 6-Aug-24
CalibrationSheet No.: C-060824-BKK-FS1061
Calibrator ID: BKK-FS0624
Calibrator Model: TE-5028A
Calibrator S/N: 2584
Barometric Pressure (mm Hg) : 753.3
Temperature (°C): 34
High Volume ID : BKK-FS1061
High Volume Model: TE-5009X
High Volume S/N: 5584
Calibrator Slope : 1.0268
Calibrator Intercept : -0.01116

Test No.	Delta H ₂ O (inch)	Qa (m ³ /min)	I : Chart (CFM)	Linear Regression
1	2.4	0.974	32	Slope: 42.2659 Intercept: -9.5914 Correlation Coefficient: 0.9955
2	3.0	1.088	36	
3	3.5	1.174	40	
4	4.2	1.285	44	
5	4.6	1.345	48	



Calibrated by : [Signature]
(Mr. Teeravut Sukdee)
Field Scientist(2)

Approved by : [Signature]
(Mr. Noppong Juntarupan)
Enviro Field Coordinator Scientist (3)

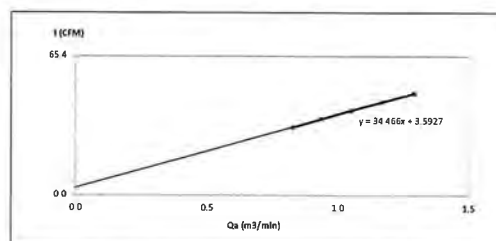
FORM NO.: F 06-074 REVISION NO.: ISSUE DATE: 14/03/16




High Volume Air Sampler Calibration Worksheet


Project Site :	Slam City Cement Public Company Limited	Barometric Pressure (mm Hg) :	753.5
Calibrate Location :	เทศบาลนครเชียงใหม่	Temperature (°C) :	33.6
Calibrate Date :	21-Aug-24	High Volume ID :	BKK FS1370
CalibrateSheet No#	C-210824-BKK FS1378	High Volume Model :	TE-500V
Calibrator ID:	BKK FS0625	High Volume S/N :	6263
Calibrator Model :	TE-S020A	Calibrator Slope :	1.04104
Calibrator S/N :	2585	Calibrator Intercept :	-0.00779

Test No.	Delta H ₂ O (inches)	Qa (m ³ /min)	I: Chart (CFM)	Linear Regression	
1	1.8	0.830	32	Slope:	34.4658
2	2.3	0.937	36	Intercept:	3.5927
3	2.9	1.051	40	Correlation Coefficient:	0.9997
4	3.6	1.170	44		
5	4.4	1.293	48		



Approved by: 
(Mr. Noppong Juntarup)
Enviro Field Coordinator Scientist (3)

Calibrated by Promee
(Mr. Promnee Sripatnet)
Field Scientist(2)

Approved by: 
(Mr. Noppong Juntarupan)
Enviro Field Coordinator Scientist (3)

FORM NO.: F 06-074 REVISION NO.:2 ISSUE DATE: 20/11/23

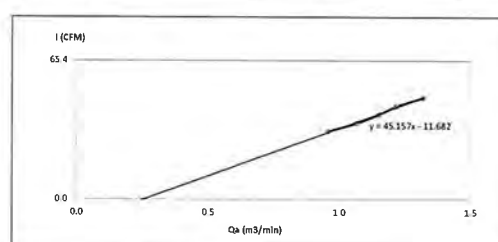
FORM NO.: F 06-074 REVISION NO.:2 ISSUE DATE: 20/11/23




High Volume Air Sampler Calibration Worksheet


Project Site :	Slam City Cement Public Company Limited	Barometric Pressure (mm Hg) :	747.7
Calibrate Location :	๓๖๖๖๖๖	Temperature (°C) :	31.5
Calibrate Date :	21-Aug-24	High Volume ID :	BKK-F50385
Calibrate Sheet No.:	C-218924-BKK-F50385	High Volume Model :	TE-5009X
Calibrator ID:	BKK-F50675	High Volume S/N:	4789
Calibrator Model :	TE-5028A	Calibrator Slope :	1.04104
Calibrator S/N :	2585	Calibrator Intercept :	-0.00779

Test No.	Drift H_2O (in/h)	Qa (m^3/min)	I: Chart (CFM)	Linear Regression	
1	2.4	0.957	32	Slope:	45.1567
2	3.0	1.070	36	Intercept:	-11.6919
3	3.5	1.155	40	Correlation Coefficient:	0.9962
4	3.9	1.218	44		
5	4.6	1.323	48		



Approved by: 
(Mr. Noppong Juntarup)
Enviro Field Coordinator Scientist (3)

Calibrated by Prom Sr
(Mr.Prommee Sripanet)
Field Scientist(?)

Approved by: 
(Mr. Noppong Juntarup)
Enviro Field Coordinator Scientist (3)

FORM NO.: F 06-074 REVISION NO.:2 ISSUE DATE: 20/11/23

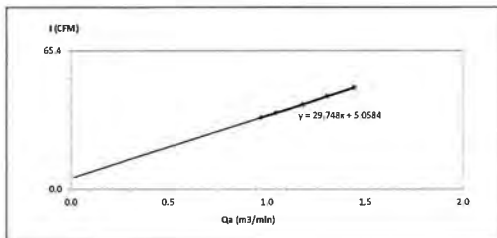
FORM NO.: F 06-074 REVISION NO.:2 ISSUE DATE: 20/11/23



High Volume Air Sampler Calibration Worksheet

Project Site : Slam City Cement Public Company Limited Barometric Pressure (mm Hg) : 756.5
Calibrate Location : โรงโม่ปูนซีเมนต์ Temperature (°C) : 29.1
Calibrate Date : 18-Oct-24 High Volume ID : BKK-FS0388
CalibrationSheet No.: C-181024-BKK-FS0388 High Volume Model : TE-5009X
Calibrator ID : BKK-FS0624 High Volume S/N : 5328
Calibrator Model : TE-5028A Calibrator Slope : 1.03303
Calibrator S/N : 2584 Calibrator Intercept : -0.01606

Test No.	Delta H ₂ O (inch)	Qa (m ³ /min)	I : Chart (CFM)	Linear Regression
1	2.4	0.968	34	Slope: 29.7476 Intercept: 5.0584 Correlation Coefficient: 0.9996
2	2.8	1.044	36	
3	3.6	1.181	40	
4	4.4	1.304	44	
5	5.4	1.443	48	



Calibrated by: Prommee
(Mr. Prommee Sripatnet)
Field Scientist(2)

Approved by: N. Noppong
(Mr. Noppong Juntarupun)
Enviro Field Coordinator Scientist (3)

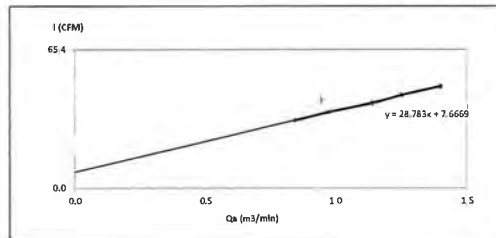
FORM NO.: F-06-074 REVISION NO.: 2 ISSUE DATE: 28/11/23



High Volume Air Sampler Calibration Worksheet

Project Site : Slam City Cement Public Company Limited Barometric Pressure (mm Hg) : 750.2
Calibrate Location : สถานีโม่ปูนซีเมนต์ (สถานี) Temperature (°C) : 33.8
Calibrate Date : 18-Oct-24 High Volume ID : BKK-FS0383
CalibrationSheet No.: C-181024-BKK-FS0383 High Volume Model : TE-5009X
Calibrator ID : BKK-FS0624 High Volume S/N : 4787
Calibrator Model : TE-5028A Calibrator Slope : 1.03303
Calibrator S/N : 2584 Calibrator Intercept : -0.01606

Test No.	Delta H ₂ O (inch)	Qa (m ³ /min)	I : Chart (CFM)	Linear Regression
1	1.8	0.847	32	Slope: 28.7826 Intercept: 7.6669 Correlation Coefficient: 0.9988
2	2.4	0.975	36	
3	3.3	1.141	40	
4	4.0	1.254	44	
5	5.0	1.400	48	



Calibrated by: Prommee
(Mr. Prommee Sripatnet)
Field Scientist(2)

Approved by: N. Noppong
(Mr. Noppong Juntarupun)
Enviro Field Coordinator Scientist (3)

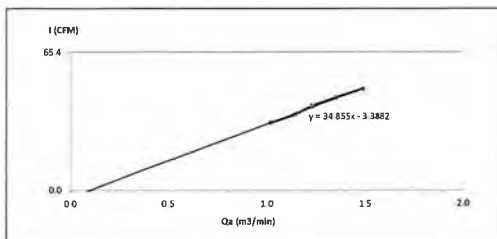
FORM NO.: F-06-074 REVISION NO.: 2 ISSUE DATE: 28/11/23



High Volume Air Sampler Calibration Worksheet

Project Site : Slam City Cement Public Company Limited Barometric Pressure (mm Hg) : 744.2
Calibrate Location : สถานีโม่ปูนซีเมนต์ Temperature (°C) : 33.5
Calibrate Date : 18-Oct-24 High Volume ID : BKK-FS1377
CalibrationSheet No.: C-181024-BKK-FS1377 High Volume Model : TE-5009X
Calibrator ID : BKK-FS0624 High Volume S/N : 6762
Calibrator Model : TE-5028A Calibrator Slope : 1.03303
Calibrator S/N : 2584 Calibrator Intercept : -0.01606

Test No.	Delta H ₂ O (inch)	Qa (m ³ /min)	I : Chart (CFM)	Linear Regression
1	2.6	1.018	32	Slope: 34.8551 Intercept: -3.3002 Correlation Coefficient: 0.9970
2	3.3	1.145	36	
3	3.8	1.227	40	
4	4.6	1.348	44	
5	5.6	1.486	48	



Calibrated by: Prommee
(Mr. Prommee Sripatnet)
Field Scientist(2)

Approved by: N. Noppong
(Mr. Noppong Juntarupun)
Enviro Field Coordinator Scientist (3)

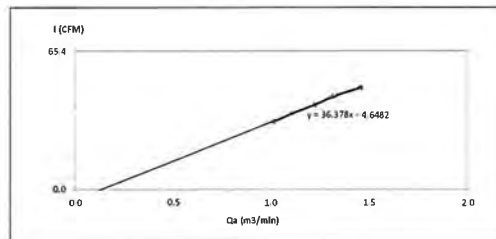
FORM NO.: F-06-074 REVISION NO.: 2 ISSUE DATE: 28/11/23



High Volume Air Sampler Calibration Worksheet

Project Site : Slam City Cement Public Company Limited Barometric Pressure (mm Hg) : 740.5
Calibrate Location : โรงโม่ปูนซีเมนต์ Temperature (°C) : 32.3
Calibrate Date : 18-Oct-24 High Volume ID : BKK-FS1062
CalibrationSheet No.: C-181024-BKK-FS1062 High Volume Model : TE-5009X
Calibrator ID : BKK-FS0624 High Volume S/N : 5686
Calibrator Model : TE-5028A Calibrator Slope : 1.03303
Calibrator S/N : 2584 Calibrator Intercept : -0.01606

Test No.	Delta H ₂ O (inch)	Qa (m ³ /min)	I : Chart (CFM)	Linear Regression
1	2.6	1.018	32	Slope: 36.3775 Intercept: -4.6482 Correlation Coefficient: 0.9973
2	3.1	1.110	36	
3	3.8	1.228	40	
4	4.4	1.320	44	
5	5.4	1.460	48	



Calibrated by: Prommee
(Mr. Prommee Sripatnet)
Field Scientist(2)

Approved by: N. Noppong
(Mr. Noppong Juntarupun)
Enviro Field Coordinator Scientist (3)

FORM NO.: F-06-074 REVISION NO.: 2 ISSUE DATE: 28/11/23



PLAY SOLUTION TECHNOLOGY COMPANY LIMITED
179/75 Nawong Pracha Pattana Road, Sihan, Donmuang, Bangkok 10210
Tel: +66 2 011 0505, Fax: +66 2 010 7700
www.playstec.com



CERTIFICATE OF CALIBRATION

Certificate No.: PST-0126-24

W/O No.: WO-0051-24

Customer

Company: ALS LABORATORY GROUP (THAILAND) CO., LTD.
Address: 304 Phuttharakon 40, Phuttharakon Road, Khwaeng Phuttharakon,
City / Province: Khet Suan Luang, Bangkok
Zip/Postal: 10250

Page no: 1 of 3

Device

Equipment: Electronic Balance Capacity: 120 / 220 g
Manufacturer: OHAUS Readability: 0.0001 / 0.001 g
Model: EX225D/AD ID No.: BKK-EN0403
Serial No: C30974648
Condition: Normal

Environment Conditions

Location of Calibration: Environment Lab
Ambient Temperature: 20.1 (°C) ± 0.5 °C
Relative Humidity: 70.3 (RH) ± 15 %RH
Barometric Pressure: 1011.1 (mba) ± 10 hPa
Comment:

REVIEW BY: Junda K
APPROVED BY: Sinluk P.
NEXT CAL. DATE: 05/04/25

Date of Receipt: June 3, 2024
Date of Calibration: June 3, 2024
Issue Date: June 5, 2024

Calibrated by: Mr. Kittichai Rattanasutham
Calibrator

Approved by: (Mr. Kittichai Rattanasutham)
Approved Signature

The reported measurement result relates only to the measurand and applies only at the time of measurement.

This Certificate is issued in accordance with the conditions of accreditation granted by Thai Laboratory Accreditation scheme which has assessed the measurement capability of the laboratory and is traceability to recognize national standards and to the unit of measurement realized at the corresponding national standard laboratory. This certificate may not be reproduced other than in full except with the prior written approval prior written approval of the calibration center, Play Solution Technology Co., Ltd.

F-038

REV 03 30/09/16



PLAY SOLUTION TECHNOLOGY COMPANY LIMITED
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Tel: +66 2 011 0505, Fax: +66 2 010 7700
www.playstec.com



CERTIFICATE OF CALIBRATION

Certificate No.: PST-0126-24

W/O No.: WO-0051-24

Result of Calibration: Without Adjustment

Page no: 2 of 3

1. Repeatability

Weighting Range	g	Nominal Value	g	Standard Deviation	g
Max capacity	220	50	200	0.000012	0.000048

2. Linearity, Departure of Indication from nominal value

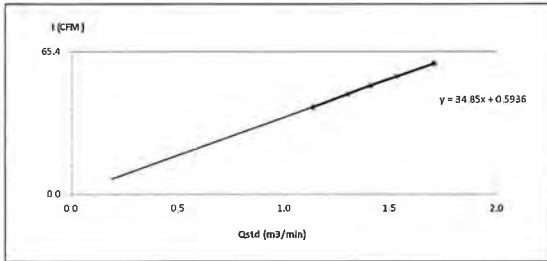
Weighting Range 1									
Nominal Value	Standard Value	Indication	Error of Indication	Expanded Uncertainty	Factor k				
g	g	g	g	g					
0.01	0.010000	0.010000	-0.000001	0.000082	2.87				
0.1	0.100001	0.100001	0.000004	0.000082	2.87				
0.5	0.500000	0.500000	0.000001	0.000082	2.87				
1	1.000001	1.000000	0.000003	0.000082	2.87				
5	5.000002	5.000000	0.000009	0.000082	2.87				
10	9.999999	9.999999	-0.000003	0.000082	2.87				
50	50.000001	49.999998	-0.000007	0.000082	2.87				
100	100.000000	100.000000	0.000004	0.000082	2.87				
150	150.000002	150.000001	0.000007	0.000082	2.87				
200	200.000001	200.000001	0.000008	0.000082	2.87				



High Volume Air Sampler Calibration Worksheet

Project Site: Siam City Cement Public Company Limited
 Barometric Pressure (mm Hg): 753.3
 Calibrate Location: โรงปูนลำไย
 Temperature (°C): 34
 Calibrate Date: 6-Aug-24
 High Volume ID: BKK_FS1376
 CalibrationSheet No.: C-060824-BKK_FS1376
 High Volume Model: TE-5009X
 Calibrator ID: BKK_FS0624
 High Volume S/N: 6257
 Calibrator Model: TE-5028A
 Calibrator Slope: 1.63932
 Calibrator S/N: 2584
 Calibrator Intercept: -0.01785

Test No.	Delta H ₂ O (Inch)	Q _{std} (m ³ /min)	I : Chart (CFM)	Linear Regression
1	3.5	1.1372	40	Slope: 34.8500 Intercept: 0.5936 Correlation Coefficient: 0.9996
2	4.6	1.3012	46	
3	5.4	1.4083	50	
4	6.4	1.5315	54	
5	8.0	1.7102	60	



Calibrated by:
 (Mr. Teeravut Sukdee)
 Field Scientist(2)

Approved by:
 (Mr. Noppong Juntarupan)
 Enviro Field Coordinator Scientist (3)

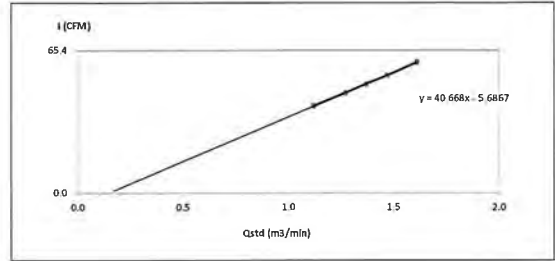
FORM NO.: F 06-073 REVISION NO.: - ISSUE DATE: 14/03/16



High Volume Air Sampler Calibration Worksheet

Project Site: Siam City Cement Public Company Limited
 Barometric Pressure (mm Hg): 753.3
 Calibrate Location: โรงปูนลำไย
 Temperature (°C): 34
 Calibrate Date: 6-Aug-24
 High Volume ID: BKK_FS0373
 CalibrationSheet No.: C-060824-BKK_FS0373
 High Volume Model: G1051
 Calibrator ID: BKK_FS0624
 High Volume S/N: 1330
 Calibrator Model: TE-5028A
 Calibrator Slope: 1.63932
 Calibrator S/N: 2584
 Calibrator Intercept: -0.01785

Test No.	Delta H ₂ O (Inch)	Q _{std} (m ³ /min)	I : Chart (CFM)	Linear Regression
1	3.4	1.1211	40	Slope: 40.6676 Intercept: -5.6867 Correlation Coefficient: 0.9999
2	4.4	1.2729	46	
3	5.1	1.3691	50	
4	5.9	1.4712	54	
5	7.1	1.6122	60	



Calibrated by:
 (Mr. Teeravut Sukdee)
 Field Scientist(2)

Approved by:
 (Mr. Noppong Juntarupan)
 Enviro Field Coordinator Scientist (3)

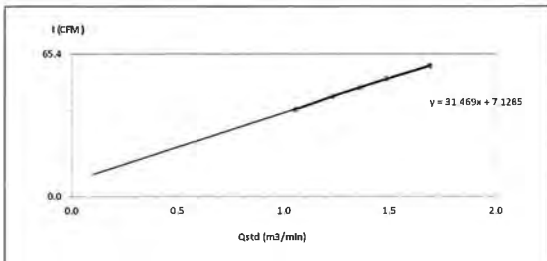
FORM NO.: F 06-073 REVISION NO.: - ISSUE DATE: 14/03/16



High Volume Air Sampler Calibration Worksheet

Project Site: Siam City Cement Public Company Limited
 Barometric Pressure (mm Hg): 753.3
 Calibrate Location: โรงปูนลำไย
 Temperature (°C): 34
 Calibrate Date: 6-Aug-24
 High Volume ID: BKK_FS0368
 CalibrationSheet No.: C-060824-BKK_FS0368
 High Volume Model: TE-5009X
 Calibrator ID: BKK_FS0624
 High Volume S/N: 4165
 Calibrator Model: TE-5028A
 Calibrator Slope: 1.63932
 Calibrator S/N: 2584
 Calibrator Intercept: -0.01785

Test No.	Delta H ₂ O (Inch)	Q _{std} (m ³ /min)	I : Chart (CFM)	Linear Regression
1	3.0	1.0542	40	Slope: 31.4686 Intercept: 7.1285 Correlation Coefficient: 0.9994
2	4.1	1.2294	46	
3	5.0	1.3558	50	
4	6.0	1.4835	54	
5	7.8	1.6889	60	



Calibrated by:
 (Mr. Teeravut Sukdee)
 Field Scientist(2)

Approved by:
 (Mr. Noppong Juntarupan)
 Enviro Field Coordinator Scientist (3)

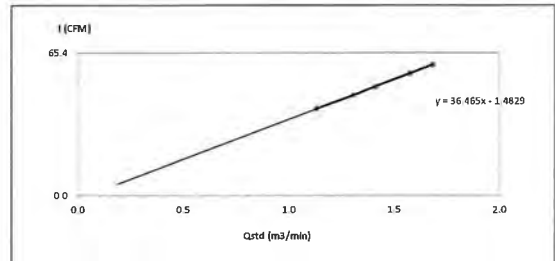
FORM NO.: F 06-073 REVISION NO.: - ISSUE DATE: 14/03/16



High Volume Air Sampler Calibration Worksheet

Project Site: Siam City Cement Public Company Limited
 Barometric Pressure (mm Hg): 751
 Calibrate Location: โรงปูนขนานมิตรพัฒนาจังหวัดนครราชสีมา
 Temperature (°C): 32
 Calibrate Date: 21-Aug-24
 High Volume ID: BKK_FS0365
 CalibrationSheet No.: C-210824-BKK_FS0365
 High Volume Model: TE-5009X
 Calibrator ID: BKK_FS0625
 High Volume S/N: 4164
 Calibrator Model: TE-5028A
 Calibrator Slope: 1.66209
 Calibrator S/N: 2585
 Calibrator Intercept: -0.01241

Test No.	Delta H ₂ O (Inch)	Q _{std} (m ³ /min)	I : Chart (CFM)	Linear Regression
1	3.6	1.1341	40	Slope: 36.4650 Intercept: -1.4829 Correlation Coefficient: 0.9999
2	4.8	1.3076	46	
3	5.6	1.4114	50	
4	7.0	1.5765	56	
5	8.0	1.6845	60	



Calibrated by:
 (Mr. Prommee Sripradet)
 Field Scientist(2)

Approved by:
 (Mr. Noppong Juntarupan)
 Enviro Field Coordinator Scientist (3)

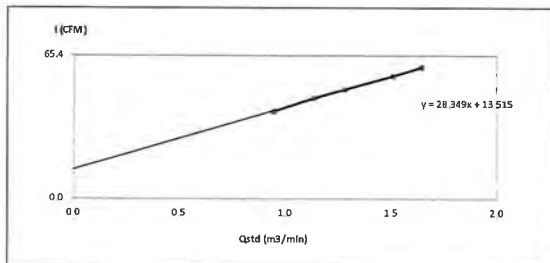
FORM NO.: F 06-073 REVISION NO.: 2 ISSUE DATE: 20/11/23



High Volume Air Sampler Calibration Worksheet

Project Site : Siam City Cement Public Company Limited. Barometric Pressure (mm Hg) : 753.5
Calibrate Location : โรงบำบัดน้ำเสีย (หนองจอก) Temperature (°C) : 33.6
Calibrate Date : 21-Aug-24 High Volume ID : BKK_FS0372
CalibrationSheet No. : C-210824-BKK_FS0372 High Volume Model : TE-5009X
Calibrator ID : BKK_FS0625 High Volume S/N : 5332
Calibrator Model : TE-5028A Calibrator Slope : 1.66209
Calibrator S/N : 2585 Calibrator Intercept : -0.01241

Test No.	Delta H ₂ O (Inch)	Q _{std} (m ³ /min)	I : Chart (CFM)	Linear Regression
1	2.5	0.9462	40	Slope : 28.3491 Intercept : 13.5148 Correlation Coefficient : 0.9993
2	3.6	1.1330	46	
3	4.6	1.2791	50	
4	6.4	1.5065	56	
5	7.6	1.6406	60	



Calibrated by :
(Mr.Prommee Sripanet)
Field Scientist(2)

Approved by :
(Mr. Noppong Juntarupan)
Enviro Field Coordinator Scientist (3)

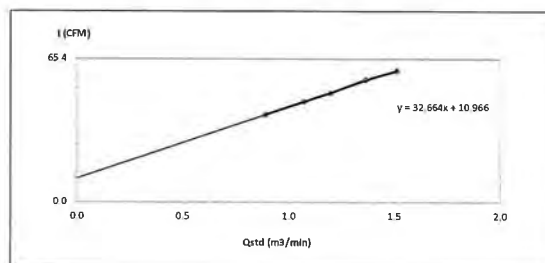
FORM NO: F 06-073 REVISION NO:2 ISSUE DATE: 20/11/23



High Volume Air Sampler Calibration Worksheet

Project Site : Siam City Cement Public Company Limited. Barometric Pressure (mm Hg) : 752
Calibrate Location : สถานีจ่ายน้ำดิบ Temperature (°C) : 31
Calibrate Date : 21-Aug-24 High Volume ID : BKK_FS1056
CalibrationSheet No. : C-210824-BKK_FS1056 High Volume Model : TE-5009X
Calibrator ID : BKK_FS0625 High Volume S/N : 5499
Calibrator Model : TE-5028A Calibrator Slope : 1.66209
Calibrator S/N : 2585 Calibrator Intercept : -0.01241

Test No.	Delta H ₂ O (Inch)	Q _{std} (m ³ /min)	I : Chart (CFM)	Linear Regression
1	2.2	0.8913	40	Slope : 32.6644 Intercept : 10.9664 Correlation Coefficient : 0.9993
2	3.2	1.0724	46	
3	4.0	1.1975	50	
4	5.2	1.3636	56	
5	6.4	1.5114	60	



Calibrated by :
(Mr.Prommee Sripanet)
Field Scientist(2)

Approved by :
(Mr. Noppong Juntarupan)
Enviro Field Coordinator Scientist (3)

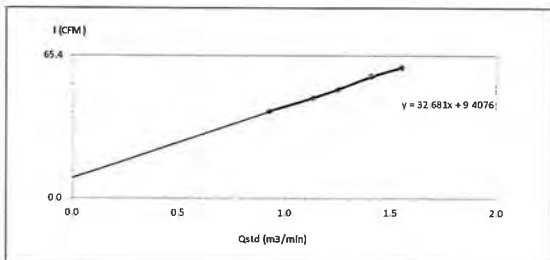
FORM NO: F 06-073 REVISION NO:2 ISSUE DATE: 20/11/23



High Volume Air Sampler Calibration Worksheet

Project Site : Siam City Cement Public Company Limited. Barometric Pressure (mm Hg) : 747.7
Calibrate Location : โรงบำบัดน้ำเสีย Temperature (°C) : 31.5
Calibrate Date : 21-Aug-24 High Volume ID : BKK_FS0373
CalibrationSheet No. : C-210824-BKK_FS0373 High Volume Model : G1051
Calibrator ID : BKK_FS0625 High Volume S/N : 1330
Calibrator Model : TE-5028A Calibrator Slope : 1.66209
Calibrator S/N : 2585 Calibrator Intercept : -0.01241

Test No.	Delta H ₂ O (Inch)	Q _{std} (m ³ /min)	I : Chart (CFM)	Linear Regression
1	2.4	0.9270	40	Slope : 32.6811 Intercept : 9.4076 Correlation Coefficient : 0.9987
2	3.6	1.1325	46	
3	4.4	1.2508	50	
4	5.6	1.4094	56	
5	6.8	1.5519	60	



Calibrated by :
(Mr.Prommee Sripanet)
Field Scientist(2)

Approved by :
(Mr. Noppong Juntarupan)
Enviro Field Coordinator Scientist (3)

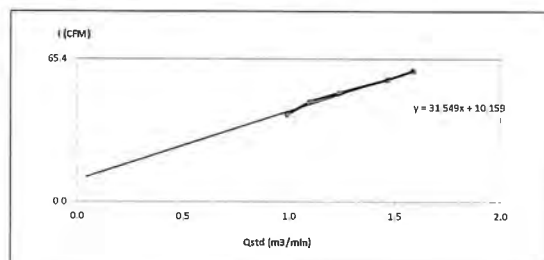
FORM NO: F 06-073 REVISION NO:2 ISSUE DATE: 20/11/23



High Volume Air Sampler Calibration Worksheet

Project Site : Siam City Cement Public Company Limited. Barometric Pressure (mm Hg) : 750.5
Calibrate Location : โรงบำบัดน้ำเสีย Temperature (°C) : 29.1
Calibrate Date : 18-Oct-24 High Volume ID : BKK_FS1375
CalibrationSheet No. : C-181024-BKK_FS1375 High Volume Model : TE-5009X
Calibrator ID : BKK_FS0624 High Volume S/N : 6256
Calibrator Model : TE-5028A Calibrator Slope : 1.64931
Calibrator S/N : 2584 Calibrator Intercept : -0.02579

Test No.	Delta H ₂ O (Inch)	Q _{std} (m ³ /min)	I : Chart (CFM)	Linear Regression
1	2.6	0.9907	40	Slope : 31.5490 Intercept : 10.1586 Correlation Coefficient : 0.9911
2	3.2	1.0963	46	
3	4.1	1.2375	50	
4	5.8	1.4669	56	
5	6.8	1.5862	60	



Calibrated by :
(Mr.Prommee Sripanet)
Field Scientist(2)

Approved by :
(Mr. Noppong Juntarupan)
Enviro Field Coordinator Scientist (3)

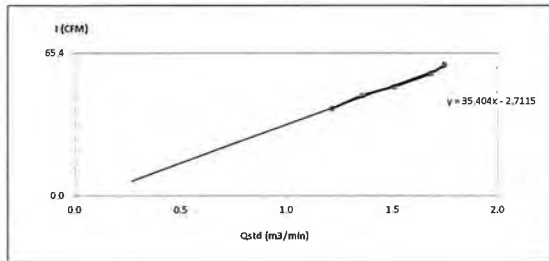
FORM NO: F 06-073 REVISION NO:2 ISSUE DATE: 20/11/23



High Volume Air Sampler Calibration Worksheet

Project Site: Siam City Cement Public Company Limited
Calibrate Location: สถานีไฟฟ้ายานยนต์ (สถานี 3)
Calibrate Date: 18-Oct-24
Calibration Sheet No.: C-181024-BKK_FS0367
Calibrator ID: BKK_FS0624
Calibrator Model: TE-5028A
Calibrator S/N: 2584
Barometric Pressure (mm Hg): 750.2
Temperature (°C): 33.8
High Volume ID: BKK_FS0367
High Volume Model: TE-5009X
High Volume S/N: 4162
Calibrator Slope: 1.64931
Calibrator Intercept: -0.02579

Test No.	Delta H ₂ O (Inch)	Q _{std} (m ³ /min)	I : Chart (CFM)	Linear Regression
1	4.0	1.2132	40	Slope: 35.4036 Intercept: -2.7115 Correlation Coefficient: 0.9949
2	5.0	1.3533	46	
3	6.2	1.5041	50	
4	7.8	1.6839	56	
5	8.4	1.7465	60	



Calibrated by: Prommee
(Mr. Prommee Sripanet)
Field Scientist (2)

Approved by: N. Noppong Juntarupan
(Mr. Noppong Juntarupan)
Enviro Field Coordinator Scientist (3)

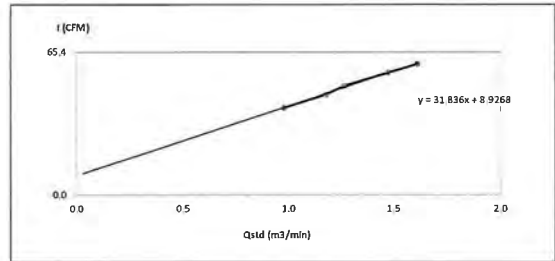
FORM NO: F 06-073 REVISION NO:2 ISSUE DATE: 20/11/23



High Volume Air Sampler Calibration Worksheet

Project Site: Siam City Cement Public Company Limited
Calibrate Location: สถานีไฟฟ้ายานยนต์
Calibrate Date: 18-Oct-24
Calibration Sheet No.: C-181024-BKK_FS1057
Calibrator ID: BKK_FS0624
Calibrator Model: TE-5028A
Calibrator S/N: 2584
Barometric Pressure (mm Hg): 744.2
Temperature (°C): 33.5
High Volume ID: BKK_FS1057
High Volume Model: TE-5009X
High Volume S/N: 5500
Calibrator Slope: 1.64931
Calibrator Intercept: -0.02579

Test No.	Delta H ₂ O (Inch)	Q _{std} (m ³ /min)	I : Chart (CFM)	Linear Regression
1	2.6	0.9797	40	Slope: 31.8359 Intercept: 8.9268 Correlation Coefficient: 0.9983
2	3.8	1.1790	46	
3	4.4	1.2667	50	
4	6.0	1.4749	56	
5	7.2	1.6132	60	



Calibrated by: Prommee
(Mr. Prommee Sripanet)
Field Scientist (2)

Approved by: N. Noppong Juntarupan
(Mr. Noppong Juntarupan)
Enviro Field Coordinator Scientist (3)

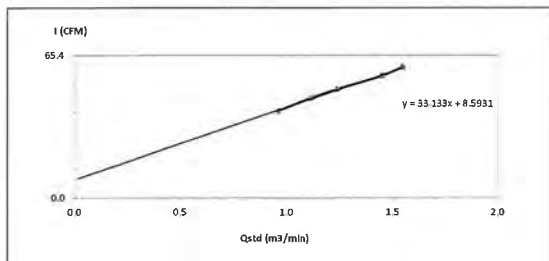
FORM NO: F 06-073 REVISION NO:2 ISSUE DATE: 20/11/23



High Volume Air Sampler Calibration Worksheet

Project Site: Siam City Cement Public Company Limited
Calibrate Location: วัดถนนหิน
Calibrate Date: 18-Oct-24
Calibration Sheet No.: C-181024-BKK_FS1376
Calibrator ID: BKK_FS0624
Calibrator Model: TE-5028A
Calibrator S/N: 2584
Barometric Pressure (mm Hg): 740.5
Temperature (°C): 32.3
High Volume ID: BKK_FS1376
High Volume Model: TE-5009X
High Volume S/N: 6257
Calibrator Slope: 1.64931
Calibrator Intercept: -0.02579

Test No.	Delta H ₂ O (Inch)	Q _{std} (m ³ /min)	I : Chart (CFM)	Linear Regression
1	2.5	0.9607	40	Slope: 33.1332 Intercept: 8.5931 Correlation Coefficient: 0.9981
2	3.4	1.1161	46	
3	4.2	1.2376	50	
4	5.8	1.4498	56	
5	6.6	1.5448	60	



Calibrated by: Prommee
(Mr. Prommee Sripanet)
Field Scientist (2)

Approved by: N. Noppong Juntarupan
(Mr. Noppong Juntarupan)
Enviro Field Coordinator Scientist (3)

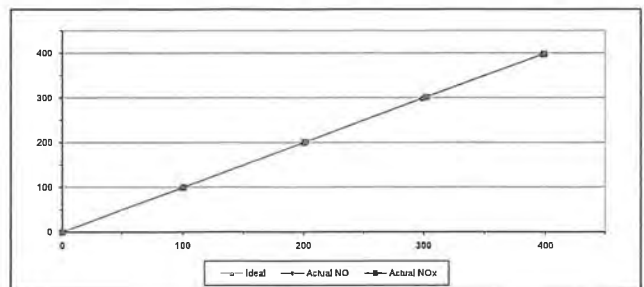
FORM NO: F 06-073 REVISION NO:2 ISSUE DATE: 20/11/23



MULTIPOINT CALIBRATION REPORT

Calibration Date: 3-Jul-24
Manufacturer: HORIBA
Serial No.: X6RAXH0D
Calibrator Manufacturer: Teledyne API
Serial No.: 847
Std. Gas Concentration (PPM): 55.88
Cylinder Pressure (psi): 1800
Certified Date: 9-Feb-22
Equipment Name: NOx Analyzer
Model: APNA-370
Equipment ID: BKK_FS0803
Model: 700
Cylinder No.: GN0027222
Certified By: Airgas Inc.
Expired Date: 9-Feb-30

Point	CALIBRATION RESULTS						
	Ideal	Actual NO	Error NO	%Error NO	Actual NOx	Error NOx	%Error NOx
ZERO	0.00	0.10	0.10	0.10	0.10	0.10	0.10
1	100.00	98.80	-1.20	-1.20	100.50	0.50	0.50
2	200.00	201.50	1.50	0.75	201.20	1.20	0.60
3	300.00	298.40	-1.60	-0.53	302.10	2.10	0.70
4	400.00	396.50	-3.50	-0.88	398.50	-1.50	-0.38
AVERAGE (%)				-0.36			0.31



Calibrated By

Approved By

(Mr. Jirawat Sakam)
Field Environmental Scientist (3)

(Mr. Sarayuth Jittrantong)
Assistant General Manager

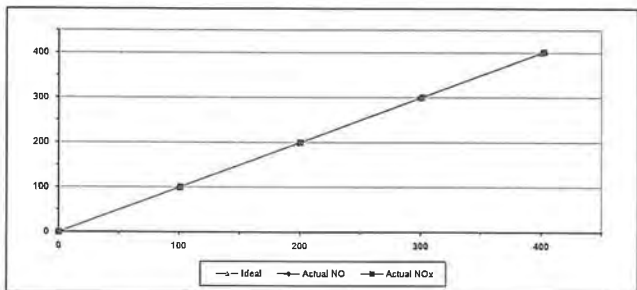
ALS Laboratory Group
FORM NO: F 06-056 REVISION NO:1 ISSUE DATE: 02/04/12



MULTIPOINT CALIBRATION REPORT

Calibration Date 2-Jul-24 Equipment Name NOx Analyzer
 Manufacturer HORIBA Model APNA-370
 Serial No. VJVBGEPP Equipment ID BKK_FS0779
 Calibrator Manufacturer Teledyne API Model 700
 Serial No. 947
 Std. Gas Concentration (PPM) 55.88 Cylinder No. GN0027222
 Cylinder Pressure (psi) 1800 Certified By Airgas Inc.
 Certified Date 9-Feb-22 Expired Date 9-Feb-30

Point	CALIBRATION RESULTS						
	Ideal	Actual NO	Error NO	%Error NO	Actual NOx	Error NOx	%Error NOx
ZERO	0.00	0.10	0.10	0.10	0.10	0.10	0.10
1	100.00	100.10	0.10	0.10	101.00	1.00	1.00
2	200.00	199.50	-0.50	-0.25	200.30	0.30	0.15
3	300.00	299.50	-0.50	-0.17	301.20	1.20	0.40
4	400.00	400.20	0.20	0.05	402.30	2.30	0.58
AVERAGE (%)				-0.03			0.45



Calibrated By

(Mr. Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

(Mr. Sarayuth Jittrantont)
Assistant General Manager

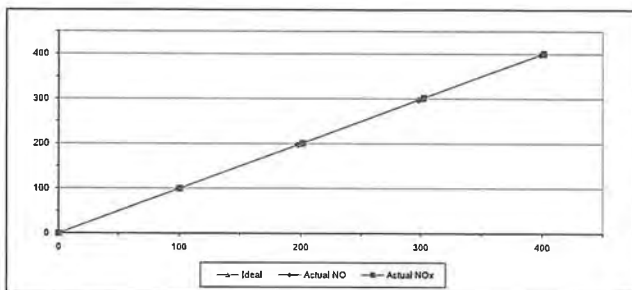
ALS Laboratory Group
FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12



MULTIPOINT CALIBRATION REPORT

Calibration Date 2-Jul-24 Equipment Name NOx Analyzer
 Manufacturer HORIBA Model APNA-370
 Serial No. HCWSR881 Equipment ID BKK_FS0800
 Calibrator Manufacturer Teledyne API Model 700
 Serial No. 947
 Std. Gas Concentration (PPM) 55.88 Cylinder No. GN0027222
 Cylinder Pressure (psi) 1800 Certified By Airgas Inc.
 Certified Date 9-Feb-22 Expired Date 9-Feb-30

Point	CALIBRATION RESULTS						
	Ideal	Actual NO	Error NO	%Error NO	Actual NOx	Error NOx	%Error NOx
ZERO	0.00	0.10	0.10	0.10	0.10	0.10	0.10
1	100.00	99.10	-0.90	-0.90	100.50	0.50	0.50
2	200.00	197.60	-2.40	-1.20	201.40	1.40	0.70
3	300.00	298.00	-2.00	-0.67	302.40	2.40	0.80
4	400.00	398.70	-1.30	-0.33	401.30	1.30	0.33
AVERAGE (%)				-0.80			0.49



Calibrated By

(Mr. Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

(Mr. Sarayuth Jittrantont)
Assistant General Manager

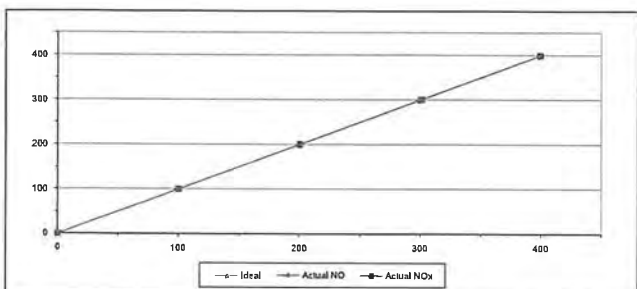
ALS Laboratory Group
FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12



MULTIPOINT CALIBRATION REPORT

Calibration Date 2-Jul-24 Equipment Name NOx Analyzer
 Manufacturer HORIBA Model APNA-370
 Serial No. TLTATGDW Equipment ID BKK_FS0785
 Calibrator Manufacturer Teledyne API Model 700
 Serial No. 947
 Std. Gas Concentration (PPM) 55.88 Cylinder No. GN0027222
 Cylinder Pressure (psi) 1800 Certified By Airgas Inc.
 Certified Date 9-Feb-22 Expired Date 9-Feb-30

Point	CALIBRATION RESULTS						
	Ideal	Actual NO	Error NO	%Error NO	Actual NOx	Error NOx	%Error NOx
ZERO	0.00	0.10	0.10	0.10	0.10	0.10	0.10
1	100.00	99.00	-1.00	-1.00	100.30	0.30	0.30
2	200.00	199.40	-0.60	-0.30	200.50	0.50	0.25
3	300.00	299.00	-1.00	-0.33	301.10	1.10	0.37
4	400.00	398.60	-1.40	-0.35	399.30	-0.70	-0.17
AVERAGE (%)				-0.38			0.17



Calibrated By

(Mr. Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

(Mr. Sarayuth Jittrantont)
Assistant General Manager

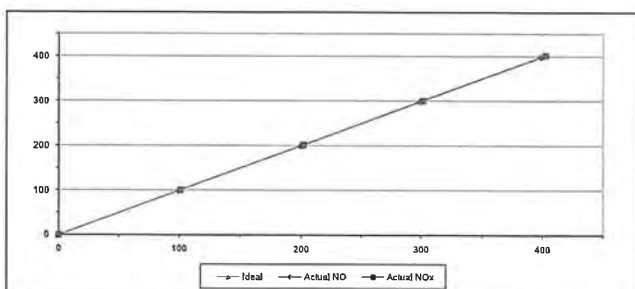
ALS Laboratory Group
FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12



MULTIPOINT CALIBRATION REPORT

Calibration Date 2-Jul-24 Equipment Name NOx Analyzer
 Manufacturer Teledyne API Model N200
 Serial No. 90 Equipment ID BKK_FS1406
 Calibrator Manufacturer Teledyne API Model 700
 Serial No. 947
 Std. Gas Concentration (PPM) 55.88 Cylinder No. GN0027222
 Cylinder Pressure (psi) 1800 Certified By Airgas Inc.
 Certified Date 9-Feb-22 Expired Date 9-Feb-30

Point	CALIBRATION RESULTS						
	Ideal	Actual NO	Error NO	%Error NO	Actual NOx	Error NOx	%Error NOx
ZERO	0.00	0.10	0.10	0.10	0.10	0.10	0.10
1	100.00	99.30	-0.70	-0.70	101.00	1.00	1.00
2	200.00	199.50	-0.50	-0.25	201.70	1.70	0.85
3	300.00	298.80	-1.20	-0.40	301.50	1.50	0.50
4	400.00	398.50	-1.50	-0.38	402.30	2.30	0.58
AVERAGE (%)				-0.33			0.60



Calibrated By

(Mr. Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

(Mr. Sarayuth Jittrantont)
Assistant General Manager

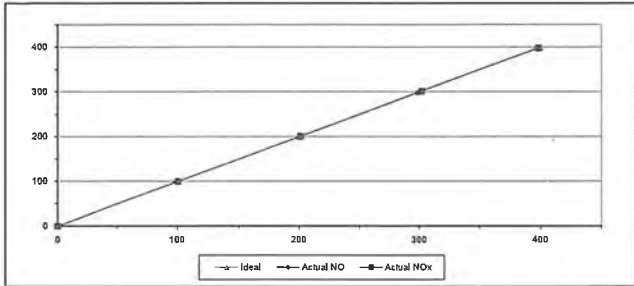
ALS Laboratory Group
FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12



MULTIPOINT CALIBRATION REPORT

Calibration Date 3-Jul-24 Equipment Name NOx Analyzer
 Manufacturer HORIBA Model APNA-370
 Serial No. X9RAXH0D Equipment ID BKK_FS0803
 Calibrator Manufacturer Teledyne API Model 700
 Serial No. 947
 Std. Gas Concentration (PPM) 55.88 Cylinder No. GN0027222
 Cylinder Pressure (psi) 1800 Certified By Airgas Inc.
 Certified Date 9-Feb-22 Expired Date 9-Feb-30

Point	CALIBRATION RESULTS						
	Ideal	Actual NO	Error NO	%Error NO	Actual NOx	Error NOx	%Error NOx
ZERO	0.00	0.10	0.10	0.10	0.10	0.10	0.10
1	100.00	98.80	-1.20	-1.20	100.50	0.50	0.50
2	200.00	201.50	1.50	0.75	201.20	1.20	0.60
3	300.00	298.40	-1.60	-0.53	302.10	2.10	0.70
4	400.00	396.50	-3.50	-0.88	398.50	-1.50	-0.38
AVERAGE (%)				-0.35			0.31



Calibrated By

(Signature)
 (Mr. Jirawut Sakam)
 Field Environmental Scientist (3)

Approved By

(Signature)
 (Mr. Sarayuth Jitranont)
 Assistant General Manager

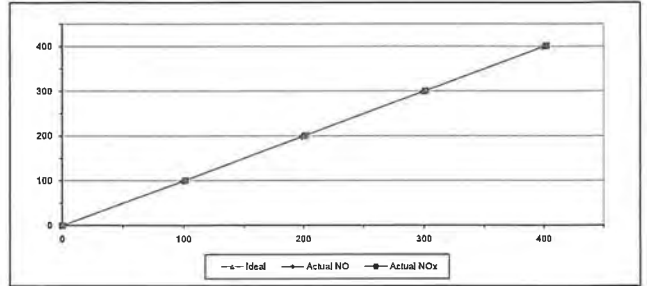
ALS Laboratory Group
 FORM NO.: F 05-056 REVISION NO.: - ISSUE DATE: 02/04/12



MULTIPOINT CALIBRATION REPORT

Calibration Date 3-Jul-24 Equipment Name NOx Analyzer
 Manufacturer Teledyne API Model T200
 Serial No. 6305 Equipment ID BKK_FS1098
 Calibrator Manufacturer Teledyne API Model 700
 Serial No. 947
 Std. Gas Concentration (PPM) 55.88 Cylinder No. GN0027222
 Cylinder Pressure (psi) 1800 Certified By Airgas Inc.
 Certified Date 9-Feb-22 Expired Date 9-Feb-30

Point	CALIBRATION RESULTS						
	Ideal	Actual NO	Error NO	%Error NO	Actual NOx	Error NOx	%Error NOx
ZERO	0.00	0.10	0.10	0.10	0.10	0.10	0.10
1	100.00	99.40	-0.60	-0.60	101.20	1.20	1.20
2	200.00	198.50	-1.50	-0.75	201.40	1.40	0.70
3	300.00	298.50	-1.50	-0.50	301.10	1.10	0.37
4	400.00	398.50	-1.50	-0.38	402.00	2.00	0.50
AVERAGE (%)				-0.42			0.57



Calibrated By

(Signature)
 (Mr. Jirawut Sakam)
 Field Environmental Scientist (3)

Approved By

(Signature)
 (Mr. Sarayuth Jitranont)
 Assistant General Manager

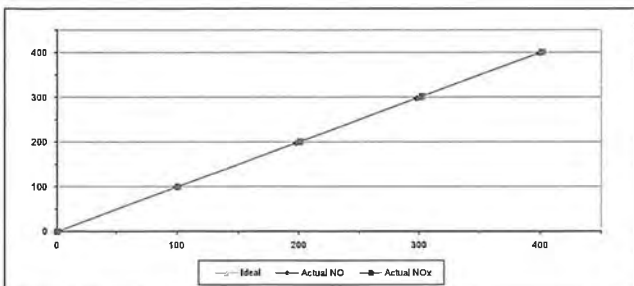
ALS Laboratory Group
 FORM NO.: F 05-056 REVISION NO.: - ISSUE DATE: 02/04/12



MULTIPOINT CALIBRATION REPORT

Calibration Date 2-Jul-24 Equipment Name NOx Analyzer
 Manufacturer HORIBA Model APNA-370
 Serial No. HCWSR681 Equipment ID BKK_FS0800
 Calibrator Manufacturer Teledyne API Model 700
 Serial No. 947
 Std. Gas Concentration (PPM) 55.88 Cylinder No. GN0027222
 Cylinder Pressure (psi) 1800 Certified By Airgas Inc.
 Certified Date 9-Feb-22 Expired Date 9-Feb-30

Point	CALIBRATION RESULTS						
	Ideal	Actual NO	Error NO	%Error NO	Actual NOx	Error NOx	%Error NOx
ZERO	0.00	0.10	0.10	0.10	0.10	0.10	0.10
1	100.00	99.10	-0.90	-0.90	100.50	0.50	0.50
2	200.00	197.60	-2.40	-1.20	201.40	1.40	0.70
3	300.00	298.00	-2.00	-0.67	302.40	2.40	0.80
4	400.00	398.70	-1.30	-0.33	401.30	1.30	0.33
AVERAGE (%)				-0.60			0.49



Calibrated By

(Signature)
 (Mr. Jirawut Sakam)
 Field Environmental Scientist (3)

Approved By

(Signature)
 (Mr. Sarayuth Jitranont)
 Assistant General Manager

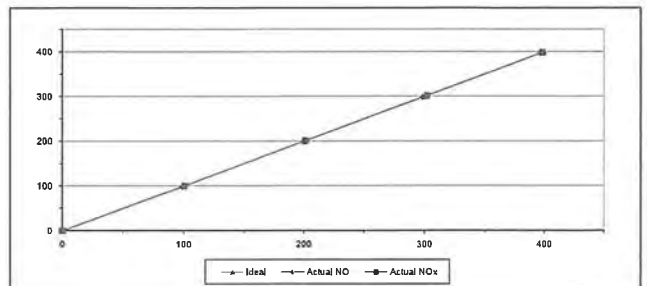
ALS Laboratory Group
 FORM NO.: F 05-056 REVISION NO.: - ISSUE DATE: 02/04/12



MULTIPOINT CALIBRATION REPORT

Calibration Date 3-Jul-24 Equipment Name NOx Analyzer
 Manufacturer HORIBA Model APNA-370
 Serial No. X9RAXH0D Equipment ID BKK_FS0803
 Calibrator Manufacturer Teledyne API Model 700
 Serial No. 947
 Std. Gas Concentration (PPM) 55.88 Cylinder No. GN0027222
 Cylinder Pressure (psi) 1800 Certified By Airgas Inc.
 Certified Date 9-Feb-22 Expired Date 9-Feb-30

Point	CALIBRATION RESULTS						
	Ideal	Actual NO	Error NO	%Error NO	Actual NOx	Error NOx	%Error NOx
ZERO	0.00	0.10	0.10	0.10	0.10	0.10	0.10
1	100.00	98.80	-1.20	-1.20	100.50	0.50	0.50
2	200.00	201.50	1.50	0.75	201.20	1.20	0.60
3	300.00	298.40	-1.60	-0.53	302.10	2.10	0.70
4	400.00	396.50	-3.50	-0.88	398.50	-1.50	-0.38
AVERAGE (%)				-0.35			0.31



Calibrated By

(Signature)
 (Mr. Jirawut Sakam)
 Field Environmental Scientist (3)

Approved By

(Signature)
 (Mr. Sarayuth Jitranont)
 Assistant General Manager

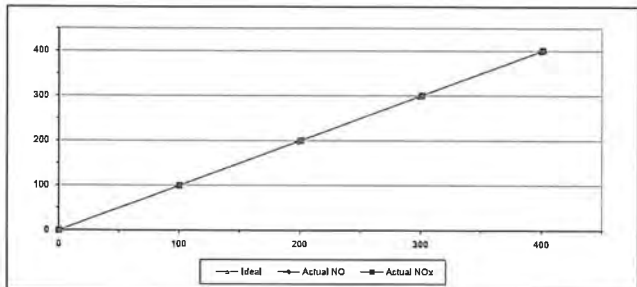
ALS Laboratory Group
 FORM NO.: F 05-056 REVISION NO.: - ISSUE DATE: 02/04/12



MULTIPOINT CALIBRATION REPORT

Calibration Date 3-Jul-24 Equipment Name NOx Analyzer
 Manufacturer HORIBA Model APNA-370
 Serial No. 30K18RHM Equipment ID BKK_FS1086
 Calibrator Manufacturer Teledyne API Model 700
 Serial No. 947
 Std. Gas Concentration (PPM) 55.88 Cylinder No. GN0027222
 Cylinder Pressure (psi) 1800 Certified By Airgas Inc.
 Certified Date 9-Feb-22 Expired Date 9-Feb-30

Point	CALIBRATION RESULTS						
	Ideal	Actual NO	Error NO	%Error NO	Actual NOx	Error NOx	%Error NOx
ZERO	0.00	0.05	0.05	0.05	0.10	0.10	0.10
1	100.00	99.50	-0.50	-0.50	100.20	0.20	0.20
2	200.00	198.30	-1.70	-0.85	201.10	1.10	0.55
3	300.00	298.10	-1.90	-0.63	301.10	1.10	0.37
4	400.00	398.60	-1.40	-0.35	401.20	1.20	0.30
AVERAGE (%)				-0.48			0.30



Calibrated By

(Mr. Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

(Mr. Sarayuth Jitranont)
Assistant General Manager

ALS Laboratory Group

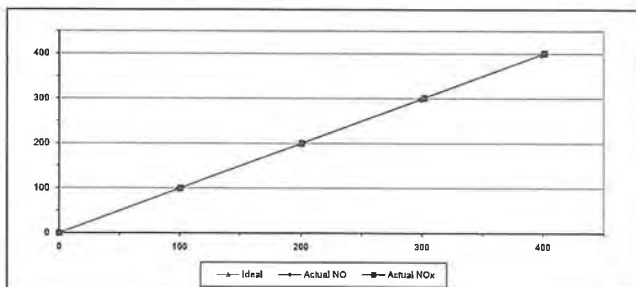
FORM NO.: F 05-056 REVISION NO.: - ISSUE DATE: 02/04/12



MULTIPOINT CALIBRATION REPORT

Calibration Date 3-Jul-24 Equipment Name NOx Analyzer
 Manufacturer HORIBA Model APNA-370
 Serial No. PHD13MC7 Equipment ID BKK_FS1072
 Calibrator Manufacturer Teledyne API Model 700
 Serial No. 947
 Std. Gas Concentration (PPM) 55.88 Cylinder No. GN0027222
 Cylinder Pressure (psi) 1800 Certified By Airgas Inc.
 Certified Date 9-Feb-22 Expired Date 9-Feb-30

Point	CALIBRATION RESULTS						
	Ideal	Actual NO	Error NO	%Error NO	Actual NOx	Error NOx	%Error NOx
ZERO	0.00	0.10	0.10	0.10	0.10	0.10	0.10
1	100.00	98.80	-1.20	-1.20	100.50	0.50	0.50
2	200.00	201.40	1.40	0.70	200.50	0.50	0.25
3	300.00	298.30	-1.70	-0.57	302.00	2.00	0.67
4	400.00	398.50	-1.50	-0.38	401.40	1.40	0.35
AVERAGE (%)				-0.27			0.37



Calibrated By

(Mr. Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

(Mr. Sarayuth Jitranont)
Assistant General Manager

ALS Laboratory Group

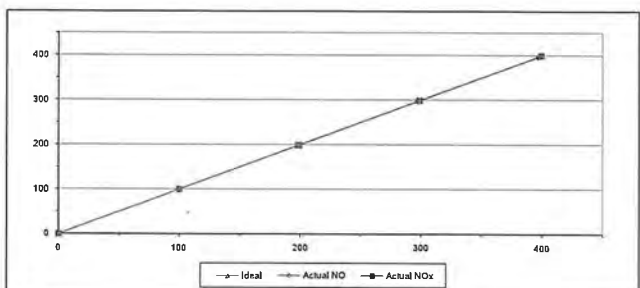
FORM NO.: F 05-056 REVISION NO.: - ISSUE DATE: 02/04/12



MULTIPOINT CALIBRATION REPORT

Calibration Date 2-Jul-24 Equipment Name NOx Analyzer
 Manufacturer HORIBA Model APNA-370
 Serial No. ROADGWJC Equipment ID BKK_FS0794
 Calibrator Manufacturer Teledyne API Model 700
 Serial No. 947
 Std. Gas Concentration (PPM) 55.88 Cylinder No. GN0027222
 Cylinder Pressure (psi) 1800 Certified By Airgas Inc.
 Certified Date 9-Feb-22 Expired Date 9-Feb-30

Point	CALIBRATION RESULTS						
	Ideal	Actual NO	Error NO	%Error NO	Actual NOx	Error NOx	%Error NOx
ZERO	0.00	0.10	0.10	0.10	0.10	0.10	0.10
1	100.00	99.40	-0.60	-0.60	100.20	0.20	0.20
2	200.00	198.50	-1.50	-0.75	198.80	-1.20	-0.60
3	300.00	297.50	-2.50	-0.83	298.80	-1.20	-0.40
4	400.00	396.70	-3.30	-0.83	399.50	-0.50	-0.13
AVERAGE (%)				-0.58			-0.18



Calibrated By

(Mr. Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

(Mr. Sarayuth Jitranont)
Assistant General Manager

ALS Laboratory Group

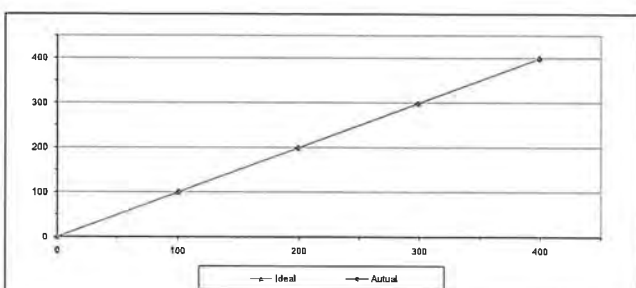
FORM NO.: F 05-056 REVISION NO.: - ISSUE DATE: 02/04/12



MULTIPOINT CALIBRATION REPORT

Calibration Date 5-Jul-24 Equipment Name SO2 Analyzer
 Manufacturer HORIBA Model APSA-370
 Serial No. 2SSLA8G8 Equipment ID BKK_FS0802
 Calibrator Manufacturer Teledyne API Model 700
 Serial No. 947
 Std. Gas Concentration (PPM) 56.3 Cylinder No. GN0027222
 Cylinder Pressure (psi) 1800 Certified By Airgas Inc.
 Certified Date 9-Feb-22 Expired Date 9-Feb-30

Point	CALIBRATION RESULTS			
	Ideal	Actual	Error	%Error
ZERO	0.00	0.10	0.10	0.10
1	100.00	101.00	1.00	1.00
2	200.00	199.40	-0.60	-0.30
3	300.00	298.30	-1.70	-0.57
4	400.00	398.20	-1.80	-0.45
AVERAGE (%)				0.01



Calibrated By

(Mr. Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

(Mr. Sarayuth Jitranont)
Assistant General Manager

ALS Laboratory Group

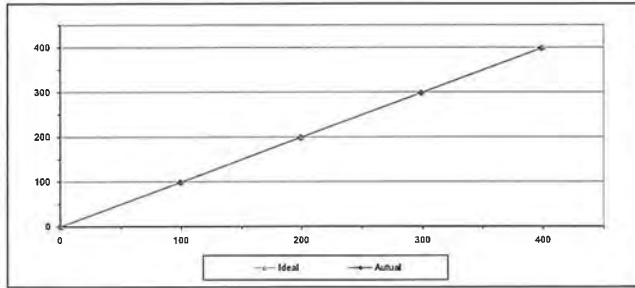
FORM NO.: F 05-056 REVISION NO.: - ISSUE DATE: 02/04/12



MULTIPOINT CALIBRATION REPORT

Calibration Date 4-Jul-24 Equipment Name SO2 Analyzer
 Manufacturer HORIBA Model APSA-370
 Serial No. VXABVTRT Equipment ID BKK_FS0778
 Calibrator Manufacturer Teledyne API Model 700
 Serial No. 947
 Std. Gas Concentration (PPM) 56.3 Cylinder No. GN0027222
 Cylinder Pressure (psi) 1800 Certified By Airgas Inc.
 Certified Date 9-Feb-22 Expiry Date 9-Feb-30

Point	CALIBRATION RESULTS			
	Ideal	Actual	Error	%Error
ZERO	0.00	0.10	0.10	0.10
1	100.00	99.00	-1.00	-1.00
2	200.00	198.80	-1.20	-0.60
3	300.00	298.50	-1.50	-0.50
4	400.00	398.00	-2.00	-0.50
AVERAGE (%)				-0.50



Calibrated By

(Mr. Jirawut Sakam)
 Field Environmental Scientist (3)

Approved By

(Mr. Sarayuth Jittrantorn)
 Assistant General Manager

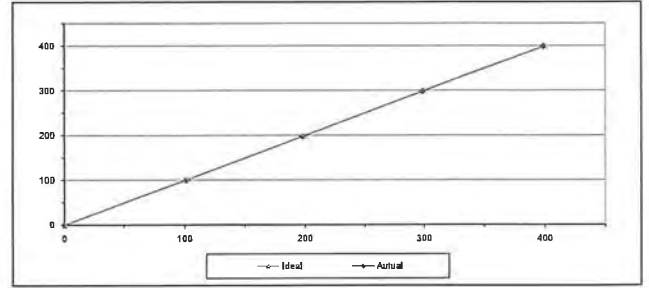
ALS Laboratory Group
 FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12



MULTIPOINT CALIBRATION REPORT

Calibration Date 4-Jul-24 Equipment Name SO2 Analyzer
 Manufacturer HORIBA Model APSA-370
 Serial No. YU8BY9F8 Equipment ID BKK_FS0788
 Calibrator Manufacturer Teledyne API Model 700
 Serial No. 947
 Std. Gas Concentration (PPM) 56.3 Cylinder No. GN0027222
 Cylinder Pressure (psi) 1800 Certified By Airgas Inc.
 Certified Date 9-Feb-22 Expiry Date 9-Feb-30

Point	CALIBRATION RESULTS			
	Ideal	Actual	Error	%Error
ZERO	0.00	0.10	0.10	0.10
1	100.00	101.30	1.30	1.30
2	200.00	198.00	-2.00	-1.00
3	300.00	298.50	-1.50	-0.50
4	400.00	398.70	-1.30	-0.33
AVERAGE (%)				-0.09



Calibrated By

(Mr. Jirawut Sakam)
 Field Environmental Scientist (3)

Approved By

(Mr. Sarayuth Jittrantorn)
 Assistant General Manager

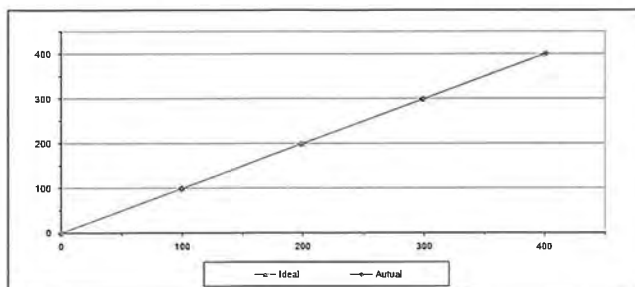
ALS Laboratory Group
 FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12



MULTIPOINT CALIBRATION REPORT

Calibration Date 4-Jul-24 Equipment Name SO2 Analyzer
 Manufacturer HORIBA Model APSA-370
 Serial No. 3072K8HB Equipment ID BKK_FS0784
 Calibrator Manufacturer Teledyne API Model 700
 Serial No. 947
 Std. Gas Concentration (PPM) 56.3 Cylinder No. GN0027222
 Cylinder Pressure (psi) 1800 Certified By Airgas Inc.
 Certified Date 9-Feb-22 Expiry Date 9-Feb-30

Point	CALIBRATION RESULTS			
	Ideal	Actual	Error	%Error
ZERO	0.00	0.10	0.10	0.10
1	100.00	99.60	-0.40	-0.40
2	200.00	198.50	-1.50	-0.75
3	300.00	298.80	-1.20	-0.40
4	400.00	401.50	1.50	0.38
AVERAGE (%)				-0.22



Calibrated By

(Mr. Jirawut Sakam)
 Field Environmental Scientist (3)

Approved By

(Mr. Sarayuth Jittrantorn)
 Assistant General Manager

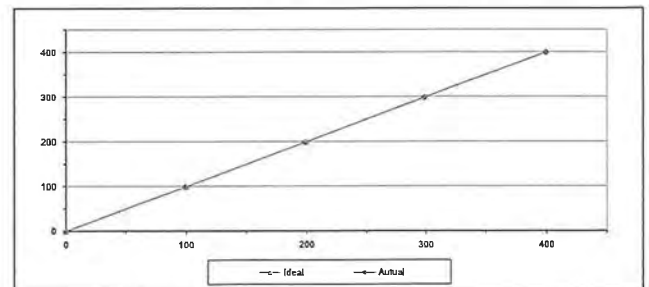
ALS Laboratory Group
 FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12



MULTIPOINT CALIBRATION REPORT

Calibration Date 5-Jul-24 Equipment Name SO2 Analyzer
 Manufacturer Teledyne API Model N100
 Serial No. 88 Equipment ID BKK_FS1408
 Calibrator Manufacturer Teledyne API Model 700
 Serial No. 947
 Std. Gas Concentration (PPM) 56.3 Cylinder No. GN0027222
 Cylinder Pressure (psi) 1800 Certified By Airgas Inc.
 Certified Date 9-Feb-22 Expiry Date 9-Feb-30

Point	CALIBRATION RESULTS			
	Ideal	Actual	Error	%Error
ZERO	0.00	0.10	0.10	0.10
1	100.00	98.90	-1.10	-1.10
2	200.00	198.50	-1.50	-0.75
3	300.00	298.50	-1.50	-0.50
4	400.00	399.20	-0.80	-0.20
AVERAGE (%)				-0.48



Calibrated By

(Mr. Jirawut Sakam)
 Field Environmental Scientist (3)

Approved By

(Mr. Sarayuth Jittrantorn)
 Assistant General Manager

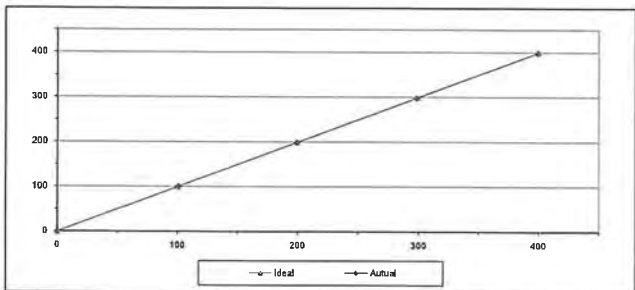
ALS Laboratory Group
 FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12



MULTIPOINT CALIBRATION REPORT

Calibration Date 5-Jul-24 Equipment Name SO2 Analyzer
 Manufacturer HORIBA Model APSA-370
 Serial No. 2SSLA690 Equipment ID BKK_FS0802
 Calibrator Manufacturer Teledyne API Model 700
 Serial No. 947
 Std. Gas Concentration (PPM) 56.3 Cylinder No. GN0027222
 Cylinder Pressure (psi) 1800 Certified By Alrgas Inc.
 Certified Date 9-Feb-22 Expired Date 9-Feb-30

Point	CALIBRATION RESULTS			
	Ideal	Actual	Error	%Error
ZERO	0.00	0.10	0.10	0.10
1	100.00	101.00	1.00	1.00
2	200.00	199.40	-0.60	-0.30
3	300.00	298.30	-1.70	-0.57
4	400.00	398.20	-0.80	-0.20
AVERAGE (%)				0.01



Calibrated By

(Signature)
 (Mr.Jirawut Sakorn)
 Field Environmental Scientist (3)

Approved By

(Signature)
 (Mr.Sarayuth Jittranont)
 Assistant General Manager

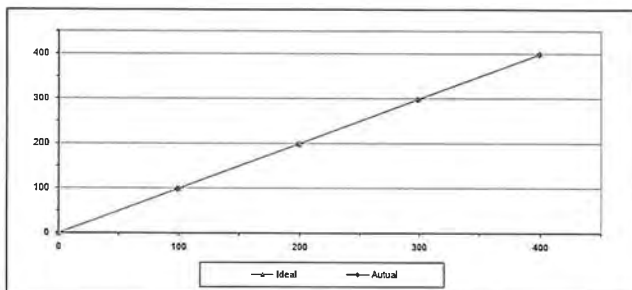
ALS Laboratory Group
 FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12



MULTIPOINT CALIBRATION REPORT

Calibration Date 5-Jul-24 Equipment Name SO2 Analyzer
 Manufacturer Teledyne API Model T100
 Serial No. 5345 Equipment ID BKK_FS1097
 Calibrator Manufacturer Teledyne API Model 700
 Serial No. 947
 Std. Gas Concentration (PPM) 56.3 Cylinder No. GN0027222
 Cylinder Pressure (psi) 1800 Certified By Alrgas Inc.
 Certified Date 9-Feb-22 Expired Date 9-Feb-30

Point	CALIBRATION RESULTS			
	Ideal	Actual	Error	%Error
ZERO	0.00	0.10	0.10	0.10
1	100.00	98.60	-1.40	-1.40
2	200.00	198.80	-1.20	-0.60
3	300.00	298.40	-1.60	-0.53
4	400.00	398.70	-1.30	-0.33
AVERAGE (%)				-0.65



Calibrated By

(Signature)
 (Mr.Jirawut Sakorn)
 Field Environmental Scientist (3)

Approved By

(Signature)
 (Mr.Sarayuth Jittranont)
 Assistant General Manager

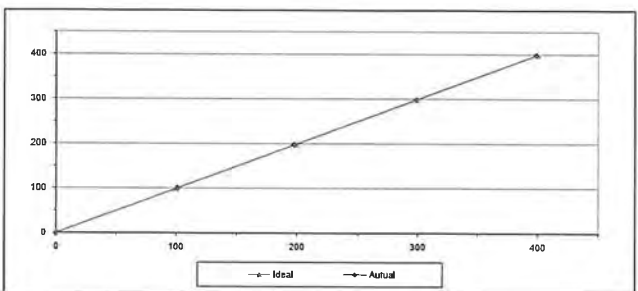
ALS Laboratory Group
 FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12



MULTIPOINT CALIBRATION REPORT

Calibration Date 4-Jul-24 Equipment Name SO2 Analyzer
 Manufacturer HORIBA Model APSA-370
 Serial No. YU8BY9F9 Equipment ID BKK_FS0789
 Calibrator Manufacturer Teledyne API Model 700
 Serial No. 947
 Std. Gas Concentration (PPM) 56.3 Cylinder No. GN0027222
 Cylinder Pressure (psi) 1800 Certified By Alrgas Inc.
 Certified Date 9-Feb-22 Expired Date 9-Feb-30

Point	CALIBRATION RESULTS			
	Ideal	Actual	Error	%Error
ZERO	0.00	0.10	0.10	0.10
1	100.00	101.30	1.30	1.30
2	200.00	198.00	-2.00	-1.00
3	300.00	298.50	-1.50	-0.50
4	400.00	398.70	-1.30	-0.33
AVERAGE (%)				-0.09



Calibrated By

(Signature)
 (Mr.Jirawut Sakorn)
 Field Environmental Scientist (3)

Approved By

(Signature)
 (Mr.Sarayuth Jittranont)
 Assistant General Manager

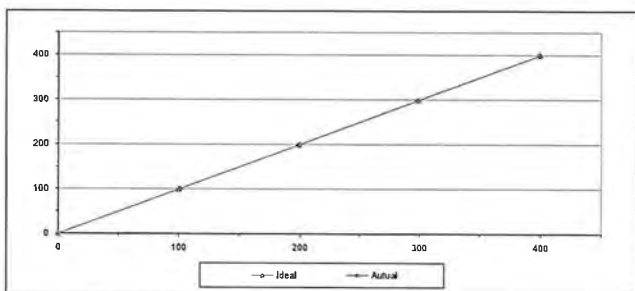
ALS Laboratory Group
 FORM NO.: F 06-056 REVISION NO.: - ISSUE DATE: 02/04/12



MULTIPOINT CALIBRATION REPORT

Calibration Date 5-Jul-24 Equipment Name SO2 Analyzer
 Manufacturer HORIBA Model APSA-370
 Serial No. 2SSLA690 Equipment ID BKK_FS0802
 Calibrator Manufacturer Teledyne API Model 700
 Serial No. 947
 Std. Gas Concentration (PPM) 56.3 Cylinder No. GN0027222
 Cylinder Pressure (psi) 1800 Certified By Alrgas Inc.
 Certified Date 9-Feb-22 Expired Date 9-Feb-30

Point	CALIBRATION RESULTS			
	Ideal	Actual	Error	%Error
ZERO	0.00	0.10	0.10	0.10
1	100.00	101.00	1.00	1.00
2	200.00	199.40	-0.60	-0.30
3	300.00	298.30	-1.70	-0.57
4	400.00	398.20	-0.80	-0.20
AVERAGE (%)				0.01



Calibrated By

(Signature)
 (Mr.Jirawut Sakorn)
 Field Environmental Scientist (3)

Approved By

(Signature)
 (Mr.Sarayuth Jittranont)
 Assistant General Manager

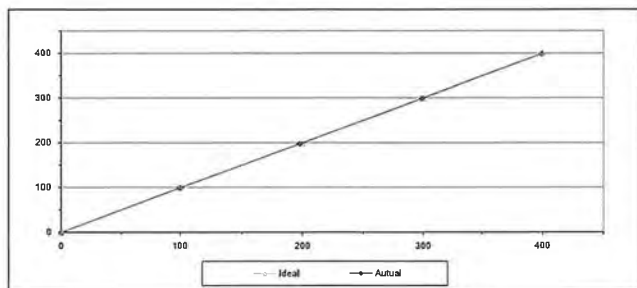
ALS Laboratory Group
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MULTIPOINT CALIBRATION REPORT

Calibration Date	5-Jul-24	Equipment Name	SO2 Analyzer
Manufacturer	HORIBA	Model	APSA-370
Serial No.	42B578RC	Equipment ID	BKK_FS1085
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	56.3	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Alrgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS			
	Ideal	Actual	Error	%Error
ZERO	0.00	0.10	0.10	0.10
1	100.00	99.50	-0.50	-0.50
2	200.00	197.90	-2.10	-1.05
3	300.00	299.10	-0.90	-0.30
4	400.00	399.50	-0.50	-0.13
AVERAGE (%)				-0.37



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

(Mr.Sarayuth Jitranont)
Assistant General Manager

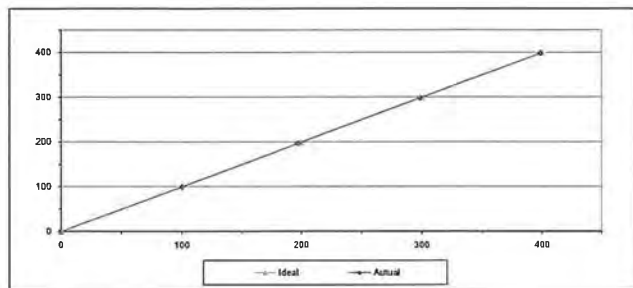
ALS Laboratory Group
FORM NO.: F 05-056 REVISION NO.: - ISSUE DATE: 02/04/12



MULTIPOINT CALIBRATION REPORT

Calibration Date	5-Jul-24	Equipment Name	SO2 Analyzer
Manufacturer	HORIBA	Model	APSA-370
Serial No.	R0H40S60	Equipment ID	BKK_FS1071
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	56.3	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Alrgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS			
	Ideal	Actual	Error	%Error
ZERO	0.00	0.10	0.10	0.10
1	100.00	100.30	0.30	0.30
2	200.00	197.30	-2.70	-1.35
3	300.00	298.40	-1.60	-0.53
4	400.00	398.50	-1.50	-0.38
AVERAGE (%)				-0.37



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

(Mr.Sarayuth Jitranont)
Assistant General Manager

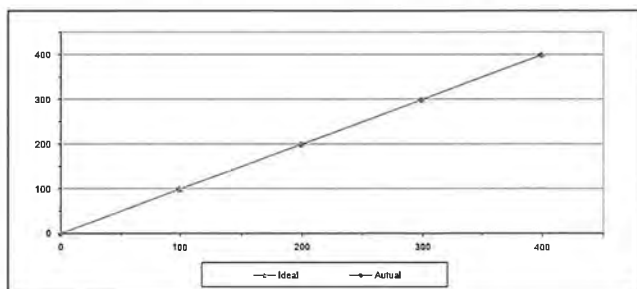
ALS Laboratory Group
FORM NO.: F 05-056 REVISION NO.: - ISSUE DATE: 02/04/12



MULTIPOINT CALIBRATION REPORT

Calibration Date	4-Jul-24	Equipment Name	SO2 Analyzer
Manufacturer	HORIBA	Model	APSA-370
Serial No.	2BGDABSF	Equipment ID	BKK_FS0783
Calibrator Manufacturer	Teledyne API	Model	700
Serial No.	947		
Std. Gas Concentration (PPM)	56.3	Cylinder No.	GN0027222
Cylinder Pressure (psi)	1800	Certified By	Alrgas Inc.
Certified Date	9-Feb-22	Expired Date	9-Feb-30

Point	CALIBRATION RESULTS			
	Ideal	Actual	Error	%Error
ZERO	0.00	0.10	0.10	0.10
1	100.00	99.10	-0.90	-0.90
2	200.00	198.80	-1.20	-0.60
3	300.00	298.50	-1.50	-0.50
4	400.00	398.50	-1.50	-0.38
AVERAGE (%)				-0.48



Calibrated By

(Mr.Jirawut Sakam)
Field Environmental Scientist (3)

Approved By

(Mr.Sarayuth Jitranont)
Assistant General Manager

ALS Laboratory Group
FORM NO.: F 05-056 REVISION NO.: - ISSUE DATE: 02/04/12



JIRANATE ASSOCIATES CO., LTD.

Instrument Associates Co., Ltd.
6/29-33, 42/39-46
Pattana 7/71, Rd. Watthap 4 Bangkok,
Bangkok 10011(Thailand)
Tel: +66-2-644-3122
Mobile: +66-9-0994-53
E-mail: jnac calibration@iranate.com
Web site: www.jiranate.com

Accredited calibration laboratory
ISO/IEC 17025:2017
NAC-TSI-75 17025
CALIBRATION 0367

Air speed measurement laboratory
Calibration services department

REVIEW BY	<i>Mr. Jirawut Sakam</i>
APPROVED BY	<i>Mr. Sarayuth Jitranont</i>
CERTIFICATE DATE	19/12/24
Certificate Number	CC 009 66

CERTIFICATE OF CALIBRATION

Page 1 of 2 Pages

MEASUREMENT ITEM	Cup anemometer
MANUFACTURER	Novelins
MODEL/TYPE	: Sensor: WS-02FA Data logger: 110-WS-25DL-D
SERIAL NUMBER	: Sensor: WSD-AS966 Data logger: AS966
ID NUMBER	BKK_FS1371
CONDITION AS RECEIVED	: New item
CUSTOMER	: ALS laboratory group (Thailand) Co., Ltd. 104 Phatthanasukan Rd, Phatthanasukan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand.
RECEIVED DATE	: 16 Jun 2023
MEASUREMENT DATE	: 19 Jun 2023
ISSUE DATE	: 19 Jun 2023
ENVIRONMENTAL CONDITIONS:	
Ambient condition in the laboratory are as follows:	
Temperature	: 23.0 ± 3.0 °C
Relative Humidity	: 55.0 ± 15.0 %RH
Atmospheric Pressure	: 1010 ± 10 hPa
PLACE OF CALIBRATION	: Efflu-type wind tunnel of Jiranate Associates Co., Ltd.
CALIBRATION CONDITIONS	: Wind tunnel cross section area* 900 cm ² Win direction frontal area* 100 cm ² Diameter of mounting pipe* - mm Blockage ratio of test object* 0.11 [-]
Preconditioning	: 24 hours at ambient conditions
Measurement Condition	: The average values during measurement are (23.9) °C, (45.2) %RH and (1008.6) hPa

TABULATION OF RESULTS:
The table on next page give the measured values.

Calibrated by:
Mr. Sarawut Thachulad
[Signature]



Approved signature:
Mr. Pariny Booncharon
Calibration Department Manager

Remark:
* Available cross-section area of the wind tunnel.
* Properties cross-section area of the tested object include mounting pipe.
* Diameter of mounting pipe.
* Ratio 1:1

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

CERTIFICATE OF CALIBRATION

Page 1 of 2 Pages

MEASUREMENT ITEM

MANUFACTURER

MODEL/TYPE

SERIAL NUMBER

ID NUMBER

CONDITION AS-RECEIVED

CUSTOMER

Wind Direction Sensor

Novallix

Sensor: WS-02FA

Data logger: 110-WS-25DL-D

Sensor: WS0-A5966

Data logger: A5966

BAK_FS1371

New item

ALS laboratory group (Thailand) Co., Ltd.

104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Suan Luang,

Khet Suan Luang, Bangkok 10250 Thailand

Calibration procedure:

The wind direction sensor was calibrated against Standard Rotary Encoder model: #X800015-DIM04-P3-5110 in an enclosed laboratory of Effel-type wind tunnel with 500 cm² open jet section area. The WI-CL-008 based on IEC 61400-12-3, Wind energy generation systems - Part 12-3, Power performance measurements of electricity producing wind turbines, March 2017 was used as a calibration guideline.

Traceability:

This certificate provides a traceability of the measurement to the realization of the international system of units (SI) through the National Metrology Institute of Thailand (NIMT) via Certificate number: TA 0043 22

Uncertainty of Measurement:

The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2. Which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM 'Evaluation of measurement data - Guide to the expression of uncertainty in measurement'

RECEIVED DATE

MEASUREMENT DATE

ISSUE DATE

15 Jun 2023

19 Jun 2023

19 Jun 2023

ENVIRONMENTAL CONDITIONS:

Ambient condition in the laboratory are as follow:

Temperature: 23.0 ± 3.0 °C
Relative Humidity: 55.0 ± 15.0 %RH
Atmospheric Pressure: 1010 ± 10 hPa

PLACE OF CALIBRATION

Effel-type wind tunnel of Jirantee Associates Co., Ltd.

CALIBRATION CONDITION

Wind tunnel cross section area¹ 900 cm²

Win direction frontal area² 129 cm²

Diameter of mounting pipe³ mm

Blockage ratio of test object⁴ 0.143 [-]

Preconditioning

24 hours at ambient conditions

Measurement Condition

The average values during measurement are: 24.3°C, (44.7) %RH and (1010.1) hPa

TABULATION OF RESULTS:

The table on next page give the measured values

Calibrated by:

Mr. Sorawit Thachalad

Miss Jitraporn Lertsamphol

Approved signatory

Mr. Parinya Booncharoen

Calibration Department Manager

Remarks:

¹ Available cross-section area of the wind tunnel

² Perpendicular cross-section area of the tested object include mounting pipe

³ Diameter of mounting pipe

⁴ Ratio $\frac{A_2}{A_1}$

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

Certificate Number

CD-009-66

Page 2 of 2 Pages

MEASUREMENT RESULTS⁵

The wind direction sensor was calibrated against standard rotary encoder by comparison method. During calibration, the measurement was carried out at 45° intervals in clockwise and counterclockwise directions after offset adjustment has been made. The flow speed of wind tunnel (usually 5 m/s) is kept constant while the sensor is rotated around its vertical axis. The results of calibration and associated measurement uncertainties are reported in the table below.

Air speed	D _{ref}	D _{meas}	Error	U (k=2)
m/s	Degree (°)	Degree (°)	Degree (°)	Degree (°)
0.000	0	0	0	1.0
45.000	43	43	-2	1.0
90.000	87	87	-3	1.0
135.000	132	132	-3	1.0
180.000	182	182	2	1.0
225.000	228	228	3	1.0
270.000	273	273	3	1.0
315.000	318	318	3	1.0

Remark:

⁵ Calibration results only count for the tested circumstances and environmental conditions during which calibration took place

⁶ Direction of standard

⁷ Direction of Unit Under Calibration

End of Certificate of Calibration



CERTIFICATE OF CALIBRATION

Certificate No.: CT-019-66
Page 1 of 2

Equipment Name: Data Logger with Temperature sensor

Manufacturer: Novallix

Model: 110-WS-25DL-D

Serial No: A5966

ID No: BAK_FS1371

Customer

Name: ALS laboratory group (Thailand) Co., Ltd.
Address: 104 Phatthanakan 40, Phatthanakan Rd.,
Khwaeng Suan Luang, Khet Suan Luang, Bangkok
10250 Thailand.

Received date: 16 Jun 2023

Calibration date: 19 Jun 2023

Issue date: 22 Jun 2023

Reference Used During Calibration

1 Standard Temperature Probe Model: STS-100 A500,
Serial No: 667682-09, Due date: 28 Mar 2024
2 Digital Temperature Indicator Model: DTI-1000A MK
II, Serial No: 671407-00591 Due date: 22 Jul 2023

Calibration Condition

Temperature: (23±3) °C
Relative Humidity: (55±15) %

Calibration Procedure

The temperature calibration was done by In House calibration method as WI-CL-001 according to comparison method with standard digital temperature indicator and standard temperature probe. The temperature scale use was based on ITS-90.

Traceability

The measurement results are traceable to the international system of units (SI) through National Institute of Metrology Thailand (NIMT) Certificate number: TT-0038 23, Certificate number: ER-0092 22

Notes: The certificate is valid only to the item calibrated on date and place of calibration

Calibrated by

Mr. Sorawit Thachalad

Miss Jitraporn Lertsamphol

Miss Ruangsri Poommit

Approved Signatory:

Mr. Parinya Booncharoen
Calibration Department Manager

Certificate No.: CT-019-66
Page: 2 of 2

Result of Calibration: ☒ Without Adjustment ☐ With Adjustment

Calibration Range: 20-40 °C

Function:

This equipment was connected with temperature sensor Model: HMP60 S/N: V1920207.

Dimension: Diameter 12 mm, Length 80 mm.

Immersion Depth (mm)	Standard Reading (°C)	UUC Reading (°C)	Error (°C)	Uncertainty (°C)
70	20.058	20.0	-0.1	0.099
70	25.051	24.9	-0.2	0.099
70	30.044	29.9	-0.1	0.099
70	35.040	34.9	-0.1	0.099
70	40.034	39.8	-0.2	0.099

UUC*: Unit Under Calibration

The reported expanded uncertainty is based on standard uncertainty multiplied by a coverage factor k=2 providing a level of confidence of approximately 95%.

*** End of Certificate ***





63/14-15,67/35-36, Soi Petchhasem 7/71, Petchhasem Rd,
Wathapra, Bangkokyai, Bangkok 10600 Thailand.
Tel: (66) 02-8680812#13 Fax: (66) 02-8680860 www.jiranatee.com

CERTIFICATE OF CALIBRATION

Calibration No : RH-02062023
Page 1 of 1 Pages

Measurement Item : Relative humidity with data logger
Manufacturer : Novalyne
Model/Type : 110-WS-25DL-D
Serial Number : A5966
ID No : BKK_F51371
Customer : ALS laboratory group (Thailand) Co., Ltd
Unit Under Calibration (UUC) : 104 Phatthakan 40, Phatthakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand

Environmental Condition:

The measurement was carried out in an ambient temperature of (25±3)°C, and relative humidity of (50±15)%.

Measurement Method:

Unit Under Calibration (UUC) was calibrated by comparison method with standard chilled mirror hygrometer model: 1860-3 in the humidity generator chamber to determine the errors.

Traceability:

This instrument was calibrated using standard equipment whose accuracy is traceability through National Institute of Standards and Technology to the international system of units (SI) via MCS Calibration, Inc. Certificate number: 20926-601. Due date: Sep 26, 2024.

Measurement Date : Jun 19, 2023
Issued Date : Jun 22, 2023

Measurement Results:

This equipment was connected with Indoor air quality probe and Displayed (UI) on display, Model: HMP60, Serial number: V1920207.

Calibration was performed in the range of 20%RH to 80%RH

The results of calibration are reported in table below.

Determined (%RH)	Standard (%RH)	UUC (%RH)	Error (%RH)	Uncertainty (%RH)
20	20.06	19.5	-0.6	0.53
50	50.22	50.4	0.2	0.53
80	80.21	81.5	1.3	0.53

Performed by

- ☐ Mr. Sorawit Thachalead
☒ Miss Jitraporn Lertsomphol
☐ Miss Ruangrui Phoommit



Approved Signatory:

Mr. Parinye Booncharoen
Calibration Department Manager

THIS CALIBRATION REPORT MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY.



JIRANATE ASSOCIATES CO., LTD.
Jiranate Associates Co., Ltd.
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Web site: www.jiranate.com

Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI TIS 17025
CALIBRATION 0367

Pressure measurement laboratory
Calibration services department



NSC-TISI-TIS 17025
CALIBRATION 0367

CERTIFICATE OF CALIBRATION

Certificate No. : CP-003-86

Page 1 of 2 Pages

MEASUREMENT ITEM : Digital barometer
MANUFACTURER : Novalyne
MODEL/TYPE : Sensor: 110-WS-25BP
Data logger: 110-WS-25DL-D
SERIAL NUMBER : Sensor: BP-A5966
Data logger: A5966
ID NUMBER : BKK_F51371
CONDITION AS-RECEIVED : New item
CUSTOMER : ALS laboratory group (Thailand) Co., Ltd
104 Phatthakan 40, Phatthakan Rd,
Khwaeng Suan Luang, Khet Suan Luang,
Bangkok 10250 Thailand

RECEIVED DATE : 16 Jun 2023
MEASUREMENT DATE : 19 Jun 2023
ISSUE DATE : 19 Jun 2023

CONDITION OF THIS RESULT OF CALIBRATION:

1. Reference Standard Instrument:

Instrument	Model	Serial No.	Certificate No.	Due Date
Absolute Pressure Transducer	CPG2500	4100126P	MP-0205-22	02 Dec 2023
1. Calibration effort for calibration sequence C				
2. The UUC* was installed in vertical orientation above reference standard instrument and center of UUC* was used as the reference level				
3. Calibration conditions				
4. Condition				
Pressure transmitting medium				
Pn (20°C, 1 bar)				
Pn				
Pn				
5. The certificate is valid only to the item calibrated on date and place of calibration				

Calibrated by:

- ☒ Mr. Sorawit Thachalead
☐ Miss Jitraporn Lertsomphol



Approved signatory:

Mr. Parinye Booncharoen
Calibration Department Manager

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Pressure measurement laboratory
Calibration services department



NSC-TISI-TIS 17025
CALIBRATION 0367

CERTIFICATE OF CALIBRATION

Certificate No. : CP 003 66

Page 2 of 2 Pages

MEASUREMENT RESULTS : ☒ Without adjustment ☐ With adjustment
CALIBRATION IN THE RANGE OF : 950 mbar to 1050 mbar

The results of calibration and associated measurement uncertainties are reported in the table below

STD (mbar)	UUC* (mbar)	Error (mbar)	Uncertainty (k=2) (mbar)
950.03	950.6	0.6	0.77
970.14	970.4	0.3	0.51
990.04	990.1	0.1	0.39
1010.12	1010.1	-0.1	0.38
1030.09	1025.2	-4.9	0.50
1050.07	1049.6	-5.5	0.70

Note: UUC* Unit Under Calibration

To convert the result in report unit to Pa should be multiply by 100

End of certificate



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Air speed measurement laboratory
Calibration services department

CERTIFICATE OF CALIBRATION

Page 1 of 2 Pages

MEASUREMENT ITEM : Cup anemometer
MANUFACTURER : Novalyne
MODEL/TYPE : Sensor: WS-02F
Data logger: 110-WS-25DL-D
SERIAL NUMBER : Sensor: WS0-A5966
Data logger: A5966
ID NUMBER : BKK_F51370
CONDITION AS-RECEIVED : New item
CUSTOMER : ALS laboratory group (Thailand) Co., Ltd
104 Phatthakan 40, Phatthakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand

RECEIVED DATE : 19 May 2023
MEASUREMENT DATE : 30 May 2023
ISSUE DATE : 31 May 2023

ENVIRONMENTAL CONDITIONS:

Ambient condition in the laboratory are as follows:

Temperature	23.0 ± 0.0 °C
Relative Humidity	55.0 ± 15.0 %RH
Atmospheric Pressure	1010.0 ± 0.0 hPa

PLACE OF CALIBRATION

Effect type wind tunnel at Jiranate Associates Co., Ltd

CALIBRATION CONDITIONS

Wind tunnel cross section area ¹	900 cm ²
Wind direction frontal area ²	100 cm ²
Diameter of mounting pipe ³	mm
Blockage ratio of test object ⁴	0.11 [-]

Preconditioning

Measurement Condition

- 24 hours at ambient conditions
• The average values during measurement are (25.0) °C, (46.9) %RH and (1005.9) hPa

TABULATION OF RESULTS:

The table on next page give the measured values

Calibrated by:

- ☒ Mr. Sorawit Thachalead
☐ Miss Jitraporn Lertsomphol



Approved signatory:

Mr. Parinye Booncharoen
Calibration Department Manager

Remark:

- ¹ Inside cross-section area of the wind tunnel
² Projected cross-section area of the tested object include mounting pipe
³ Diameter of mounting pipe
⁴ Ratio to

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Certificate Number
CC-005-66

Page 2 of 2 Pages

MEASUREMENT RESULTS⁵

The cup anemometer, Unit Under Calibration (UUC) was exercised at 10 m/s for 5 minutes prior to calibration being performed. The standard air velocity 0.5 m/s to 5 m/s was calculated by a standard air velocity transducer and above 5 m/s to 30 m/s was calculated by a pitot tube with precision differential pressure meter which was installed 40 mm and 300 mm respectively away from wind tunnel nozzle. UUC was installed at center of the test section. The calibration was carried out under both rising and falling air velocity in the range of 1 m/s to 15 m/s at calibration interval of 1 m/s. The results of calibration and associated measurement uncertainties are reported in the table below.

V_{ref} (m/s)	Temp. wind tunnel (°C)	Temp. room (°C)	V_{uc} (m/s)	Error (m/s)	U (k=2) (m/s)
1.046	25.06	25.00	0.9	-0.1	0.31
2.049	24.90	25.00	1.9	-0.1	0.31
3.029	25.14	25.00	2.9	-0.1	0.31
4.175	25.00	25.03	3.9	-0.3	0.31
5.00	25.00	25.00	4.9	-0.1	0.31
5.99	24.80	25.00	5.9	-0.1	0.31
7.05	24.96	25.03	6.9	0.2	0.31
8.18	24.70	25.00	8.0	-0.2	0.31
9.38	25.06	25.00	8.9	-0.1	0.31
10.08	24.70	25.00	10.0	-0.1	0.31
11.15	25.10	25.00	11.0	-0.2	0.31
12.12	24.72	25.00	12.0	-0.1	0.31
13.18	25.08	25.00	13.1	-0.1	0.31
14.22	24.80	25.00	14.1	-0.1	0.31
15.21	25.00	25.00	15.1	-0.1	0.31
16.26	24.90	25.00	16.1	-0.2	0.31

Remark:

⁵ Calibration results only count for the tested circumstances and environmental conditions during which calibration took place

⁶ Velocity of standard

⁷ Velocity of Unit Under Calibration

PHOTO OF CALIBRATION SET-UP



Calibration set up of the cup anemometer calibration in the wind tunnel of Jiranatee Associates Co., Ltd. The cup anemometer shown may differ from the calibrated one. Remark: The proportion of the set-up is not true to scale due to image distortion.



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CALIBRATION 0367

An speed measurement laboratory
Calibration services department

Certificate Number
CD-005-66

CERTIFICATE OF CALIBRATION

Page 1 of 2 Pages

MEASUREMENT ITEM

: Wind Direction Sensor

MANUFACTURER

: Novallinx

MODEL/TYPE

: Sensor: WS-02F

SERIAL NUMBER

: Data logger: 110-WS-250L-D

ID NUMBER

: Sensor: WSD-AS965

CONDITION AS-RECEIVED

: Data logger: AS965

CUSTOMER

: BOK_F51370

RECEIVED DATE

: New Item

MEASUREMENT DATE

: ALS laboratory group (Thailand) Co., Ltd

ISSUE DATE

: 104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang,
Khet Suan Luang, Bangkok 10250 Thailand

ENVIRONMENTAL CONDITIONS:

Ambient condition in the laboratory are as follow:

Temperature : 23.0 ± 3.0 °C

Relative Humidity : 55.0 ± 15.0 %RH

Atmospheric Pressure : 1010 ± 10 hPa

PLACE OF CALIBRATION

: Cifet type wind tunnel of Jiranatee Associates Co., Ltd

CALIBRATION CONDITION

: Wind tunnel cross section area¹ : 900 cm²

: Wind direction frontal area² : 129 cm²

: Diameter of mounting pipe³ : mm

: Blockage ratio of test object⁴ : 0.143 [-]

Preconditioning

: 24 hours at ambient conditions

Measurement Condition

: 14 average values during measurement are (24.57°C, (45.8) %RH and (1005.8) hPa

TABULATION OF RESULTS:

The table on next page give the measured values

Calibrated by:

☒ Mr. Sorawit Thichsalai

☒ Miss Jiraporn Terabompol



Approved signatory

Mr. Panyo Booncharoen
Calibration Department Manager

Remark:

¹ Larger cross-section area of the wind tunnel

² Rectified cross-section area of the tested object include mounting pipe

³ Diameter of mounting pipe

⁴ k=2

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Certificate Number
CD-005-66

Page 2 of 2 Pages

MEASUREMENT RESULTS²

The wind direction sensor was calibrated against standard rotary encoder by comparison method. During calibration, the measurement was carried out at 45° intervals in clockwise and counterclockwise directions after offset adjustment has been made. The flow speed of wind tunnel (usually 5 m/s) is kept constant while the sensor is rotated around its vertical axis. The results of calibration and associated measurement uncertainties are reported in the table below.

Air speed m/s	D ¹ _{uc} Degree (°)	D ² _{uc} Degree (°)	Error Degree (°)	U (k=2) Degree (°)
	0.000	0	0	1.0
	45.000	43	-2	1.0
	90.000	89	-1	1.0
	135.000	135	0	1.0
5.00	180.000	182	2	1.0
	225.000	228	3	1.0
	270.000	273	3	1.0
	315.000	317	2	1.0

Remark:

Calibration results only count for the tested circumstances and environmental conditions during which calibration took place

¹ Direction of standard

² Direction of Unit Under Calibration



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CALIBRATION 0367

Pressure measurement laboratory
Calibration services department



CERTIFICATE OF CALIBRATION

Certificate No. : CP 002-66

Page 1 of 2 Pages

MEASUREMENT ITEM

: Digital barometer

MANUFACTURER

: Novallinx

MODEL/TYPE

: 110 WS-25BP

SERIAL NUMBER

: BP-AS965

ID NUMBER

: BK_F51370

CONDITION AS-RECEIVED

: New Item

CUSTOMER

: ALS laboratory group (Thailand) Co., Ltd

: 104 Phatthanakan 40, Phatthanakan Rd,

Khwaeng Suan Luang, Khet Suan Luang,

Bangkok 10250 Thailand

RECEIVED DATE

: 19 May 2023

MEASUREMENT DATE

: 31 May 2023

ISSUE DATE

: 31 May 2023

CONDITION OF THIS RESULT OF CALIBRATION:

1. Reference Standard instrument:

Instrument

Model

Serial No.

Certificate No.

Due Date

Absolute Pressure Transducer

CPG2500

410012GP

MP 0205-22

02 Dec 2023

1. Calibration effort for calibration sequence A

2. The UUC¹ was installed in vertical orientation above reference standard instrument and center of UUC² was used as the reference level³

3. Calibration conditions

4. Condition

Pressure transmitting medium

☒ Normal ☐ Abnormal

Air

P_{ref} (20°C 1 bar)

: 1.15 kg/m³

H_{ref}

: (55±15) %

T_{ref}

: (23±3) °C

P_{atm}

: (1010±10) mbar

5. The certificate is valid only to the item calibrated on date and place of calibration

Calibration procedure:

The pressure calibration was done by in-house calibration method as WI-PL-003 according to comparison method with Digital pressure calibrator based on OGD P 6.1

Traceability:

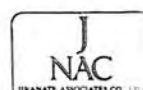
The measurement results are traceable to the international system of units (SI) through the NIMT (National Metrology Institute of Thailand) which complies with the requirements of ISO/IEC 17025:2017, ANSI/NCSL 2540-3 Wa Certificate number MP-0205-22

The reported uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%

Calibrated by:

☒ Mr. Sorawit Thichsalai

☒ Miss Jiraporn Terabompol



Approved signatory

Mr. Panyo Booncharoen
Calibration Department Manager

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Certificate Number

CC-004-66

CERTIFICATE OF CALIBRATION

Page 1 of 2 Pages

MEASUREMENT ITEM : Cup anemometer
MANUFACTURER : Navalytic
MODEL/TYPE : Sensor: WS-02F
Data logger: 110-WS-25DL-0
SERIAL NUMBER : Sensor: WSD-AS964
Data logger: AS964
ID NUMBER : BKK-FS1369
CONDITION AS-RECEIVED : New Item
CUSTOMER : ALS laboratory group (Thailand) Co., Ltd.
104 Phatthanakan 43, Phatthanakan Rd, Khwaeng Suan Luang,
Khet Suan Luang, Bangkok 10250 Thailand

RECEIVED DATE : 19 May 2023
MEASUREMENT DATE : 30 May 2023
ISSUE DATE : 31 May 2023

ENVIRONMENTAL CONDITIONS:

Ambient condition in the laboratory are as follows:

Temperature : 23.0 ± 0.5 °C
Relative Humidity : 55.0 ± 15.0 %RH
Atmospheric Pressure : 1010 ± 10 hPa

PLACE OF CALIBRATION

Effel type wind tunnel of Jirantee Associates Co., Ltd.

CALIBRATION CONDITIONS

Wind tunnel cross section area¹ : 900 cm²
Win direction frontal area² : 100 cm²
Diameter of mounting pipe³ : mm
Blockage ratio of test object⁴ : 0.111 [-]

Preconditioning

24 hours at ambient conditions

Measurement Condition

The average values during measurement are 25.0 °C, (42.7) %RH and (1007.4) hPa.

TABULATION OF RESULTS:

The table on next page give the measured values.

Calibrated by:

☐ Mr. Sorawit Thachakul
☐ Miss Jiraporn Levisomphol



Approved Signatory

Mr. Pariny Booncharoen
Calibration Department Manager

Remarks:

¹ Net cross-section area of the wind tunnel
² Projected cross-section area of the tested object include mounting pipe
³ Diameter of mounting pipe
⁴ Ratio = $\frac{A_2}{A_1}$

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Page 2 of 2 Pages

MEASUREMENT RESULTS⁵

The cup anemometer, Unit Under Calibration (UUC) was exercise at 10 m/s for 5 minutes prior to calibration being performed. The standard air velocity 0.5 m/s to 5 m/s was calculated by a standard air velocity transducer and above 5 m/s to 30 m/s was calculated by a pitot tube with precision differential pressure meter which was installed 40 mm and 300 mm respectively away from wind tunnel nozzle. UUC was installed at center of the test section. The calibration was carried out under both rising and falling air velocity in the range of 3 m/s to 16 m/s at calibration interval of 1 m/s. The results of calibration and associated measurement uncertainties are reported in the table below.

V_{ref} (m/s)	Temp. wind tunnel (°C)	Temp. room (°C)	V_{UUC} (m/s)	Error (m/s)	U (m/s) (m/s)
1.049	24.90	25.03	0.9	-0.1	0.31
2.048	25.10	25.00	1.8	-0.2	0.31
3.044	24.92	25.00	2.9	-0.1	0.31
4.170	24.58	25.00	3.9	-0.3	0.31
5.00	25.10	25.00	4.8	-0.2	0.31
6.00	24.50	25.00	5.9	-0.1	0.31
7.04	25.20	25.00	6.9	-0.2	0.31
8.17	24.60	25.00	8.0	-0.3	0.31
9.09	25.28	25.00	8.9	-0.4	0.31
10.09	24.60	25.00	10.0	-0.1	0.31
11.13	25.30	25.00	11.0	-0.2	0.31
12.11	24.64	25.00	11.9	-0.2	0.31
13.18	25.16	25.00	13.0	-0.2	0.31
14.24	24.72	25.00	14.0	-0.2	0.31
15.22	25.02	25.00	15.1	-0.1	0.31
16.28	24.88	25.00	16.0	0.3	0.31

Remarks:

⁵ Calibration results only count for the tested circumstances and environmental conditions during which calibration took place

⁶ Velocity of standard

⁷ Velocity of Unit Under Calibration

PHOTO OF CALIBRATION SET-UP



Calibration set up of the cup anemometer calibration in the wind tunnel of Jirantee Associates Co., Ltd. The cup anemometer shown may differ from the calibrated one. Remark: The proportion of the set-up is not the same as the actual size.



Certificate Number

CC-004-66

CERTIFICATE OF CALIBRATION

Page 1 of 2 Pages

MEASUREMENT ITEM : Wind Direction Sensor
MANUFACTURER : Navalytic
MODEL/TYPE : Sensor: WS-02F
Data logger: 110-WS-25DL-0
SERIAL NUMBER : Sensor: WSD-AS964
Data logger: AS964
ID NUMBER : BKK-FS1369
CONDITION AS-RECEIVED : New Item
CUSTOMER : ALS laboratory group (Thailand) Co., Ltd.
104 Phatthanakan 43, Phatthanakan Rd, Khwaeng Suan Luang,
Khet Suan Luang, Bangkok 10250 Thailand

RECEIVED DATE : 19 May 2023
MEASUREMENT DATE : 30 May 2023
ISSUE DATE : 31 May 2023

ENVIRONMENTAL CONDITIONS:

Ambient condition in the laboratory are as follows:

Temperature : 23.0 ± 0.5 °C
Relative Humidity : 55.0 ± 15.0 %RH
Atmospheric Pressure : 1010 ± 10 hPa

PLACE OF CALIBRATION

Effel type wind tunnel of Jirantee Associates Co., Ltd.

CALIBRATION CONDITION

Wind tunnel cross section area¹ : 930 cm²
Win direction frontal area² : 129 cm²
Diameter of mounting pipe³ : mm
Blockage ratio of test object⁴ : 0.143 [-]

Preconditioning

24 hours at ambient conditions

Measurement Condition

The average values during measurement are 24.0 °C, (45.3) %RH and (1005.8) hPa.

TABULATION OF RESULTS:

The table on next page give the measured values.

Calibrated by:

☐ Mr. Sorawit Thachakul
☐ Miss Jiraporn Levisomphol



Approved Signatory

Mr. Pariny Booncharoen
Calibration Department Manager

Remarks:

¹ Net cross-section area of the wind tunnel
² Projected cross-section area of the tested object include mounting pipe
³ Diameter of mounting pipe
⁴ Ratio = $\frac{A_2}{A_1}$

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Certificate Number

CC-004-66

Page 2 of 2 Pages

MEASUREMENT RESULTS⁵

The wind direction sensor was calibrated against standard rotary encoder by comparison method. During calibration, the measurement was carried out at 45° intervals in clockwise and counter-clockwise directions after offset adjustment has been made. The flow speed of wind tunnel (usually 5 m/s) is kept constant while the sensor is rotated around its vertical axis. The results of calibration and associated measurement uncertainties are reported in the table below.

Air speed m/s	D°_{ref} Degree (°)	D°_{UUC} Degree (°)	Error Degree (°)	U (°) Degree (°)
5.00	0.000	0	0	1.0
	45.000	42	-3	1.0
	90.000	86	-2	1.0
	135.000	133	-2	1.0
	180.000	180	0	1.0
	225.000	227	2	1.0
	270.000	272	2	1.0
	315.000	318	3	1.0

Remarks:

⁵ Calibration results only count for the tested circumstances and environmental conditions during which calibration took place

⁶ Direction of standard

⁷ Direction of Unit Under Calibration





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CERTIFICATE OF CALIBRATION

Certificate No : CT-005-66
Page 1 of 2

Equipment Name: Data Logger with Temperature
Sensor
Manufacturer: Novolynx
Model: 110-WS-25DL-D
Serial No : A5964
ID No: BKK_FS1369

Customer
Name: ALS laboratory group (Thailand) Co., Ltd.
Address: 104 Phatthanakan 40, Phatthanakan Rd.,
Khwaeng Suan Luang, Khet Suan Luang, Bangkok
10250 Thailand

Received date: 19 May 2023
Calibration date: 31 May 2023
Issue date: 31 May 2023

Reference Used During Calibration
1 Standard Temperature Probe Model: STS-100 A500,
Serial No : 667692-09, Due date: 28 Mar 2024
2 Digital Temperature Indicator Model: DTI-1000-A MK
II, Serial No : 671407-00591 Due date: 22 July 2023

Calibration Condition
Temperature: (23±3) °C
Relative Humidity: (55±15)%

Calibration Procedure

The temperature calibration was done by In-House
calibration method as WI CL-001 according to
comparison method with standard digital temperature
indicator and standard temperature probe. The
temperature source used was based on ITS 90.

Traceability

The measurement results are traceable to the
international system of units (SI) through National
Institute of Metrology Thailand (NIMT) Certificate
number: TT 003-8-23, Certificate number: ER 0092
22

Noted: The certificate is valid only to the item calibrated on date and place of calibration

Calibrated by
☐ Mr. Sorawit Thachalad
☒ Miss Jittrapon Lertsomphol



Approved Signatory:
Mr. Pannya Booncharoen
Calibration Department Manager

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BEEN OBTAINED IN WRITING FROM THE LABORATORY.



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Tel: (66) 02-8680812#13 Fax: (66) 02-8680860 www.jiranatee.com



Certificate No : CT 005 66
Page 2 of 2

Result of Calibration: ☒ Without Adjustment ☐ With Adjustment
Calibration Range: 20-40 °C

Function:

This equipment was connected with temperature sensor Model: HMP60 S/N: U3911251.

Dimension : Diameter 12 mm, Length 80 mm.

Immersion Depth (mm)	Standard Reading (°C)	UUC Reading (°C)	Error (°C)	Uncertainty (°C)
60	20.001	19.9	-0.1	0.099
60	25.004	24.6	-0.2	0.099
60	30.005	29.8	-0.2	0.099
60	35.002	34.8	-0.2	0.099
60	40.001	39.7	-0.3	0.099

UUC* : Unit Under Calibration

The reported expanded uncertainty is based on standard uncertainty multiplied by a coverage factor k=2
providing a level of confidence of approximately 95%.

★ End of Certificate ★



63/14-15,67/35-36, Soi Petchkasem 7,7/1, Petchkasem Rd,
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CERTIFICATE OF CALIBRATION

Calibration No : RH 02052023
Page 1 of 1 Pages

Measurement Item : Relative humidity with data logger
Manufacturer : Novolynx
Model/Type : 110-WS-25DL-D
Serial Number : A5964
ID No : BKK_FS1369
Customer : ALS laboratory group (Thailand) Co., Ltd
104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Suan Luang, Khet Suan Luang, Bangkok
10250 Thailand.

Environmental Condition:

The measurement was carried out in an ambient temperature of (25±3)°C, and relative humidity of (50±15)%.

Measurement Method:

Unit Under Calibration (UUC) was calibrated by comparison method with standard chilled mirror hygrometer model: 1060-3 in the humidity generator chamber to determine the errors.

Traceability:

This instrument was calibrated using standard equipment whose accuracy is traceability through National Institute of Standards and Technology to the international system of units (SI) via MCS Calibration, Inc. Certificate number: 20926 601. Due date: Sep 26, 2024.

Measurement Date : May 31, 2023
Issued Date : May 31, 2023

Measurement Results:

This equipment was connected with Indoor air quality probe and Displayed (UR) on display Model HMP60 Serial number: U3911251.

Calibration was performed in the range of 20%RH to 80%RH

The results of calibration are reported in table below:

Determined (%RH)	Standard (%RH)	UUC (%RH)	Error (%RH)	Uncertainty (%RH)
20	20.06	19.2	-0.8	0.62
50	50.28	49.3	-0.9	0.61
80	80.30	79.7	-0.6	0.61

Performed by
☐ Mr. Sorawit Thachalad
☒ Miss Jittrapon Lertsomphol



Approved Signatory:
Mr. Pannya Booncharoen
Calibration Department Manager

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BEEN OBTAINED IN WRITING FROM THE LABORATORY.



JIRANATE ASSOCIATES CO., LTD.
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Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TIS-TIS 17025
CALIBRATION 0367

Pressure measurement laboratory
Calibration services department



NSC - TIS - TIS 17025
CALIBRATION 0367

CERTIFICATE OF CALIBRATION

Certificate No. : CP-001-66

Page 1 of 2 Pages

MEASUREMENT ITEM : Digital barometer
MANUFACTURER : Novolynx
MODEL/TYPE : 110 WS 25BP
SERIAL NUMBER : BP-A5964
ID NUMBER : BKK_FS1369
CONDITION AS-RECEIVED : New item
CUSTOMER : ALS laboratory group (Thailand) Co., Ltd.
104 Phatthanakan 40, Phatthanakan Rd.,
Khwaeng Suan Luang, Khet Suan Luang,
Bangkok 10250 Thailand.

RECEIVED DATE : 19 May 2023
MEASUREMENT DATE : 31 May 2023
ISSUE DATE : 31 May 2023

CONDITION OF THIS RESULT OF CALIBRATION:

1. Reference Standard Instrument:

Instrument	Model	Serial No.	Certificate No.	Due Date
Absolute Pressure Transducer	CPG2500	4100126P	MP-0305-22	02 Dec 2023

2. Calibration effort for calibration sequence A

3. The UUC* was installed in vertical orientation above reference standard instrument and center of UUC* was used as the reference level

3. Calibration conditions

4. Condition : ☒ Normal ☐ Abnormal
Pressure transmitting medium : Air
At (20°C, 1 bar) : 1.19 kg/m³
P_{nom} : (59415) %
(2345) °C
P_{max} : (10100) mbar
5. The certificate is valid only to the item calibrated on date and place of calibration

Calibrated by
☐ Mr. Sorawit Thachalad
☒ Miss Jittrapon Lertsomphol



Approved signatory:
Mr. Pannya Booncharoen
Calibration Department Manager

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IN WRITING FROM THE LABORATORY

Continuation of Certificate of Calibration Number: CRT-010-67

Page 2 of 2 Pages

Measurement Results

The results of calibration and associated measurement uncertainties are reported in the table below.

Result of Calibration: ☒ Without Adjustment ☐ With Adjustment

Table 1: The results of calibration of relative humidity at 30 °C are reported in table below
Calibration Range : 20% RH to 80% RH

Air Temperature (°C)	Standard Reading (%RH)	UUC Reading (%RH)	Error (%RH)	Uncertainty (%RH)
29.50	45.81	47.5	-1.7	0.27
29.64	54.03	47.0	7.0	1.1
29.63	62.05	76.5	-14.5	1.7

UUC*, Unit Under Calibration

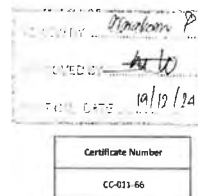
End of Certificate of Calibration



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ISO/IEC 17025:2017
MSC 154-15 17025
CALIBRATION 0367

Air speed measurement laboratory
Calibration services department



CERTIFICATE OF CALIBRATION

Page 1 of 2 Pages

MEASUREMENT ITEM MANUFACTURER MODEL/TYPE

: Cup anemometer
: Novalyte
: Sensor: WS-02FA
Data logger: 110-WS-250L-D

SERIAL NUMBER

: Sensor: WSD-A5970
Data logger: A5970

ID NUMBER

: BKK_FS1373

CONDITION AS-RECEIVED

: New Item

CUSTOMER

: ALS laboratory group (Thailand) Co., Ltd.
104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang,
Khet Suan Luang, Bangkok 10250 Thailand.

Calibration procedure:

The cup anemometer was calibrated against Standard air velocity transducer model #455-32 and pitot tube with precision differential pressure meter model DP42500 in an open fresh-section of Effel-type wind tunnel with 300 cm² cross test section area. The W1-CI-007 based on IEC 61400-12-1, Wind energy generation systems - Part 12-1: Power performance measurements of electricity producing wind turbines, March 2017 was used as a calibration guideline.

Traceability:

This certificate provides a traceability of the measurement to recognized the national standards, and to realization of the international system of units (SI) through the NIMT (National Metrology Institute of Thailand) via Certificate number: MW-0057-21 and MW-0066-22

Uncertainty of Measurement:

The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM "Evaluation of measurement data - Guide to the expression of uncertainty in measurement"

RECEIVED DATE

: 16 Jun 2023

MEASUREMENT DATE

: 19 Jun 2023

ISSUE DATE

: 19 Jun 2023

ENVIRONMENTAL CONDITIONS:

Ambient condition in the laboratory are as follow:

: 23.0 ± 3.0 °C

: 55.0 ± 15.0 %RH

: 1010 ± 10 hPa

PLACE OF CALIBRATION

: Effel-type wind tunnel of Jiranate Associates Co., Ltd

CALIBRATION CONDITIONS

: Wind tunnel cross-section area¹ 900 cm²
Win direction frontal area² 100 cm²
Diameter of mounting pipe³ - mm
Blockage ratio of test object⁴ 0.111 [-]

Preconditioning

: 24 hours at ambient conditions

Measurement Condition

: The average values during measurement are (24.0) °C, (43.4) %RH and (1007.9) hPa

TABULATION OF RESULTS:

The table on next page give the measured values

Calibrated by:

☒ Mr. Sorawit Thadadad
☐ Miss Nitiporn Lertwongthol



Approved signature:

Mr. Pannya Booncharoen
Calibration Department Manager

Remarks

¹ Nominal cross-section area of the wind tunnel
² Projected cross-section area of the tested object include mounting pipe
³ Diameter of mounting pipe
⁴ Ratio of test object

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Page 2 of 2 Pages

MEASUREMENT RESULTS¹

The cup anemometer, Unit Under Calibration (UUC) was exercise at 10 m/s for 5 minutes prior to calibration being performed. The standard air velocity 0.5 m/s to 5 m/s was calculated by a standard air velocity transducer and above 5 m/s to 30 m/s was calculated by a pitot tube with precision differential pressure meter which was installed 40 mm and 300 mm respectively away from wind tunnel nozzle, UUC was installed at center of the test section. The calibration was carried out under both rising and falling air velocity in the range of 1 m/s to 16 m/s at calibration interval of 1 m/s. The results of calibration and associated measurement uncertainties are reported in the table below.

V _{ref} (m/s)	Temp. wind tunnel (°C)	Temp. room (°C)	V _{meas} (m/s)	Error (m/s)	U (m/s)
2.024	23.96	24.00	0.8	-0.1	0.31
2.021	24.00	24.00	1.8	-0.1	0.31
3.019	23.82	24.00	2.9	-0.1	0.31
4.124	24.00	24.00	4.0	-0.1	0.31
5.02	23.62	24.00	4.9	-0.1	0.31
5.99	24.06	24.00	5.9	-0.1	0.31
7.05	23.58	24.00	7.0	-0.1	0.31
8.17	24.04	24.00	8.0	-0.2	0.31
9.09	23.56	24.00	9.0	-0.1	0.31
10.08	23.92	24.00	10.0	-0.1	0.31
11.14	23.56	24.00	11.0	-0.1	0.31
12.14	23.72	24.00	12.1	-0.1	0.31
13.19	23.50	24.00	13.2	0.0	0.31
14.25	23.68	24.00	14.3	0.0	0.30
15.24	23.50	24.00	15.1	-0.1	0.31
16.29	23.52	24.00	16.2	-0.1	0.33

Remarks:

¹ Calibration results only apply for the tested conditions and environmental conditions during which calibration was done

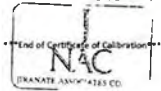
² Velocity of standard

³ Velocity of Unit Under Calibration

PHOTO OF CALIBRATION SET-UP



Calibration set up of the cup anemometer calibration in the wind tunnel of Jiranate Associates Co., Ltd. The cup anemometer shown may differ from the calibrated one. Remark: The group down of the set up is not true to scale due to imaging geometry



End of Certificate of Calibration

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ISO/IEC 17025:2017
MSC 154-15 17025
CALIBRATION 0367

Air speed measurement laboratory
Calibration services department

Certificate Number

CD-011-66

CERTIFICATE OF CALIBRATION

Page 1 of 2 Pages

MEASUREMENT ITEM MANUFACTURER MODEL/TYPE

: Wind Direction Sensor
: Novalyte
: Sensor: WS-02FA
Data logger: 110-WS-250L-D

SERIAL NUMBER

: Sensor: WSD-A5970
Data logger: A5970

ID NUMBER

: BKK_FS1373

CONDITION AS-RECEIVED

: New Item

CUSTOMER

: ALS laboratory group (Thailand) Co., Ltd.
104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang,
Khet Suan Luang, Bangkok 10250 Thailand.

Calibration procedure:

The wind direction sensor was calibrated against Standard Rotary Encoder model #4400-RTS-D400-PS-5-020 in an open fresh-section of Effel-type wind tunnel with 300 cm² cross test section area. The W1-CI-008 based on IEC 61400-12-1, Wind energy generation systems - Part 12-1: Power performance measurements of electricity producing wind turbines, March 2017 was used as a calibration guideline.

Traceability:

This certificate provides a traceability of the measurement to recognized the national standards, and to realization of the international system of units (SI) through the NIMT (National Metrology Institute of Thailand) via Certificate number: DA-6043-22

Uncertainty of Measurement:

The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM "Evaluation of measurement data - Guide to the expression of uncertainty in measurement"

RECEIVED DATE

: 16 Jun 2023

MEASUREMENT DATE

: 19 Jun 2023

ISSUE DATE

: 19 Jun 2023

ENVIRONMENTAL CONDITIONS:

Ambient condition in the laboratory are as follow:

: 23.0 ± 3.0 °C

: 55.0 ± 15.0 %RH

: 1010 ± 10 hPa

PLACE OF CALIBRATION

: Effel-type wind tunnel of Jiranate Associates Co., Ltd

CALIBRATION CONDITION

: Wind tunnel cross-section area¹ 900 cm²
Win direction frontal area² 129 cm²
Diameter of mounting pipe³ - mm
Blockage ratio of test object⁴ 0.143 [-]

Preconditioning

: 24 hours at ambient conditions

Measurement Condition

: The average values during measurement are (24.1) °C, (48.7) %RH and (1013.3) hPa

TABULATION OF RESULTS:

The table on next page give the measured values

Calibrated by:

☒ Mr. Sorawit Thadadad
☐ Miss Nitiporn Lertwongthol



Approved signature:

Mr. Pannya Booncharoen
Calibration Department Manager

Remarks

¹ Nominal cross-section area of the wind tunnel
² Projected cross-section area of the tested object include mounting pipe
³ Diameter of mounting pipe
⁴ Ratio of test object

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Certificate Number
CD-011-66

Page 2 of 2 Pages

MEASUREMENT RESULTS¹

The wind direction sensor was calibrated against standard rotary encoder by comparison method. During calibration, the measurement was carried out at 45° intervals in clockwise and counterclockwise directions after other adjustment has been made. The flow speed of wind tunnel (usually 5 m/s) is kept constant while the sensor is rotated around its vertical axis. The results of calibration and associated measurement uncertainties are reported in the table below.

Air speed m/s	D ⁺ ₉₀ Degree (°)	D ⁻ ₉₀ Degree (°)	Error Degree (°)	U (k=2) Degree (°)
5.06	0.000	0	0	1.0
	45.000	42	-3	1.0
	90.000	87	-3	1.0
	135.000	133	-2	1.0
	180.000	181	1	1.0
	225.001	228	3	1.0
	270.000	273	3	1.0
	315.000	318	3	1.0

Remarks:

¹ Calibration result only count for the tested circumstances and environmental conditions during which calibration took place.

² Direction of standard

³ Direction of Unit Under Calibration

End of Certificate of Calibration



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Walthapra, Bangkokhyai, Bangkok 10600 Thailand.

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CERTIFICATE OF CALIBRATION

Certificate No.: CT-021-66
Page: 1 of 2

Equipment Name: Data Logger with Temperature sensor

Manufacturer: Novalynx

Model: 110 WS 25DL-D

Serial No.: A5970

ID No.: BKK_FS1373

Customer

Name: ALS laboratory group (Thailand) Co., Ltd.
Address: 104 Phatthanakan 40, Phatthanakan Rd.,
Khwang Suan Luang, Khiet Suan Luang, Bangkok
10250 Thailand.

Received date: 16 Jun 2023

Calibration date: 19 Jun 2023

Issue date: 22 Jun 2023

Reference Used During Calibration

1. Standard Temperature Probe Model: STS 100 A500.

Serial No.: 667082-09, Due date: 28 Mar 2024

2. Digital Temperature Indicator Model: DTI-1000A MK II.

Serial No.: 671407-00591 Due date: 22 July 2023

Calibration Condition

Temperature: (23±3) °C

Relative Humidity: (55±15)%

Calibration Procedure

The temperature calibration was done by in-house calibration method as WCI 001 according to comparison method with standard digital temperature indicator and standard temperature probe. The temperature scale use was based on ITS-90.

Traceability

The measurement results are traceable to the international system of units (SI) through National Institute of Metrology Thailand (NIMT). Certificate number: TT-0038-23. Certificate number: EIT 0092-22.

Noted: The certificate is valid only to the item calibrated on date and place of calibration.

Calibrated by

☐ Mr. Sorawit Thachalai
☒ Miss Jittaporn Lertsomphol
☐ Miss Ruangrumpai Phoommit



Approved Signatory:

Mr. Paninya Booncharoen
Calibration Department Manager

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Certificate No.: CT-021-66
Page: 2 of 2

Result of Calibration: ☒ Without Adjustment ☐ With Adjustment

Calibration Range: 20~40 °C

Function:

This equipment was connected with temperature sensor Model: HMP60 S/N: V1920209.

Dimension : Diameter 12 mm. Length 80 mm.

Immersion Depth (mm)	Standard Reading (°C)	UUC Reading (°C)	Error (°C)	Uncertainty (°C)
70	20.057	20.0	-0.1	0.099
70	25.052	25.0	-0.1	0.099
70	30.044	29.6	-0.2	0.099
70	35.040	34.8	-0.2	0.099
70	40.034	39.7	-0.3	0.099

UUC*: Unit Under Calibration

The reported expanded uncertainty is based on standard uncertainty multiplied by a coverage factor k=2 providing a level of confidence of approximately 95%.

★ End of Certificate ★



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CERTIFICATE OF CALIBRATION

Calibration No.: RH-04062023
Page 1 of 1 Pages

Measurement Item : Relative humidity with data logger

Manufacturer : Novalynx

Model/Type : 110 WS 25DL-D

Serial Number : A5970

ID No : BKK_FS1373

Customer : ALS laboratory group (Thailand) Co., Ltd.
: 104 Phatthanakan 40, Phatthanakan Rd., Khwang Suan Luang, Khiet Suan Luang Bangkok
10250 Thailand

Environmental Condition:

The measurement was carried out in an ambient temperature of (25±3)°C, and relative humidity of (50±15)%.

Measurement Method:

Unit Under Calibration (UUC) was calibrated by comparison method with standard chilled mirror hygrometer model: 1860-3 in the humidity generator chamber to determine the errors.

Traceability:

This instrument was calibrated using standard equipment whose accuracy is traceability through National Institute of Standards and Technology to the international system of units (SI) via MCS Calibration Inc. Certificate number: 20926-001 Due date: Sep 26, 2024.

Measurement Date : Jun 19, 2023

Issued Date : Jun 22, 2023

Measurement Result:

This equipment was connected with indoor air quality probe and Displayed (UR) on display Model: HMP60, Serial number: V1920209.

Calibration was performed in the range of 20%RH to 60%RH.

The results of calibration are reported in table below.

Determined (%RH)	Standard (%RH)	UUC (%RH)	Error (%RH)	Uncertainty (%RH)
20	20.07	19.2	-0.9	0.52
50	50.23	49.2	-1.0	0.61
60	60.24	59.5	-0.8	0.52

Performed by

☐ Mr. Sorawit Thachalai
☒ Miss Jittaporn Lertsomphol
☐ Miss Ruangrumpai Phoommit



Approved Signatory:

Mr. Paninya Booncharoen
Calibration Department Manager

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CALIBRATION 0367

Pressure measurement laboratory
Calibration services department



CERTIFICATE OF CALIBRATION

Certificate No. : CP-005-66

Page 1 of 2 Pages

MEASUREMENT ITEM : Digital barometer
MANUFACTURER : Novallux
MODEL/TYPE : Sensor: 110-WS-250P
Data logger: 110-WS-250L-D
SERIAL NUMBER : Sensor: BP-A5970
Data logger: A5970
ID NUMBER : BKK_F31373
CONDITION AS-RECEIVED : New Item
CUSTOMER : ALS laboratory group (Thailand) Co., Ltd
104 Phatthanakan 40, Phatthanakan Rd,
Khwaeng Suan Luang, Khet Suan Luang,
Bangkok 10250 Thailand

RECEIVED DATE : 16 Jun 2023
MEASUREMENT DATE : 19 Jun 2023
ISSUE DATE : 19 Jun 2023

Calibration procedure:
The pressure calibration was done by in-house calibration method as WI CL-003 according to comparison method with Digital pressure calibrator based on DKD-P 6-2

Traceability:
The measurement results are traceable to the international system of units (SI) through the NIMT (National Metrology Institute of Thailand) via Certificate number: MP-0205-22

The reported uncertainty is based on a standard uncertainty multiplied by a coverage factor $k=2$, providing a level of confidence of approximately 95%.

CONDITION OF THIS RESULT OF CALIBRATION:

1. Reference Standard Instrument:

Instrument	Model	Serial No.	Certificate No.	Due Date
Absolute Pressure Transducer	CPG2500	4100126P	MP-0205-22	02 Dec 2023

- Calibration effort for calibration sequence C
- The UUC* was installed in vertical orientation above reference standard instrument and center of UUC* was used as the reference level
- Calibration conditions:
- Condition : ☒ Normal ☐ Abnormal
Pressure transmitting medium : Air
 p_{ref} (20°C, 1 bar) : 1.01325 kg/m³
 p_{ref} : (55±15) %
 p_{ref} : (23±3) °C
 p_{ref} : (1010±10) mbar
- The certificate is valid only to the item calibrated on date and place of calibration



Approved signature:

Mr. Patinya Booncharoen
Calibration Department Manager

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CALIBRATION 0367

Pressure measurement laboratory
Calibration services department



CERTIFICATE OF CALIBRATION

Certificate No. : CP-005-66

Page 2 of 2 Pages

MEASUREMENT RESULTS : ☒ Without adjustment ☐ With adjustment

CALIBRATION IN THE RANGE OF : 950 mbar to 1050 mbar

The results of calibration and associated measurement uncertainties are reported in the table below:

STD (mbar)	UUC* (mbar)	Error (mbar)	Uncertainty (k=2) (mbar)
950.05	950.9	0.8	1.0
970.11	970.7	0.6	0.79
990.07	990.4	0.3	0.50
1010.10	1010.2	0.1	0.38
1030.06	1029.8	-0.3	0.48
1050.09	1049.6	-0.5	0.65

Note: UUC* Unit Under Calibration

To convert the result in report unit to Pa should be multiply by 100

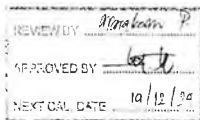
End of certificate



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CALIBRATION 0367

At speed measurement laboratory
Calibration services department



Certificate Number

CC 010-66

CERTIFICATE OF CALIBRATION

Page 1 of 2 Pages

MEASUREMENT ITEM : Cup anemometer
MANUFACTURER : Novallux
MODEL/TYPE : Sensor: WS-02FA
Data logger: 110-WS-250L-D
SERIAL NUMBER : Sensor: WS0-A5969
Data logger: A5969
ID NUMBER : BKK_F31372
CONDITION AS-RECEIVED : New Item
CUSTOMER : ALS laboratory group (Thailand) Co., Ltd
104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang,
Khet Suan Luang, Bangkok 10250 Thailand

RECEIVED DATE : 16 Jun 2023
MEASUREMENT DATE : 19 Jun 2023
ISSUE DATE : 19 Jun 2023

Calibration procedure:
The cup anemometer was calibrated against Standard air velocity transducer model #755-B2 and pilot tube with precision differential pressure meter model DPM2500 in anemometer test section of Effel-type wind tunnel with 900 mm cross section area. The WI CL-002 based on IEC 61400-12-1, Wind energy generation systems - Part 12-1: Power performance measurements of electricity producing wind turbines, March 2017 was used as a calibration guideline.

Traceability:
This certificate provides a traceability of the measurement to recognized the national standards and to realization of the external unit system of units (SI) through the NIMT (National Metrology Institute of Thailand) via Certificate number: MW-0052-21 and MW-0056-22

Uncertainty of Measurement:
The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor $k=2$, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM Evaluation of measurement data: Guide to the expression of uncertainty in measurement

ENVIRONMENTAL CONDITIONS:

Ambient condition in the laboratory are as follow:

Temperature : 23.0 ± 0.3 °C
Relative Humidity : 55.0 ± 15.0 %RH
Atmospheric Pressure : 1010 ± 10 hPa

PLACE OF CALIBRATION : Effel-type wind tunnel of Jiranae Associates Co., Ltd

CALIBRATION CONDITIONS : Wind tunnel cross section area : 900 cm²
Win direction frontal area : 100 cm²
Diameter of mounting pipe : mm
Blockage ratio of test object : 0.11 [-]

Preconditioning : 24 hours at ambient conditions
Measurement Condition : 7 average values during measurement are (24.1) °C, (44.5) %RH and (1008.0) hPa

TABULATION OF RESULTS:
The table on next page give the measured values

Calibrated by:
Mr. Sorawit Thachalad
Miss Jitraporn Lertsompol



Approved signature:

Mr. Patinya Booncharoen
Calibration Department Manager

Remark:
* Inside cross-section area of the wind tunnel
* Outside cross-section area of the tested object include mounting pipe
* Diameter of mounting pipe
* Ratio 1/3

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

Page 2 of 2 Pages

MEASUREMENT RESULTS¹

The cup anemometer, Unit Under Calibration (UUC) was exercised at 10 m/s for 5 minutes prior to calibration being performed. The standard air velocity 0.5 m/s to 5 m/s was calculated by a standard air velocity transducer and above 5 m/s to 10 m/s was calculated by a pilot tube with precision differential pressure meter which was installed 40 mm and 300 mm respectively away from wind tunnel nozzle. UUC was installed at center of the test section. The calibration was carried out under both rising and falling air velocity in the range of 1 m/s to 10 m/s at calibration interval of 1 m/s. The results of calibration and associated measurement uncertainties are reported in the table below:

V_{ref} (m/s)	Temp. wind tunnel (°C)	Temp. room (°C)	V_{UUC} (m/s)	Error (m/s)	U (k=2) (m/s)
1.024	24.04	24.10	0.9	0.1	0.31
2.027	24.10	24.10	1.9	-0.1	0.31
3.017	23.96	24.10	2.9	-0.1	0.31
4.117	24.04	24.10	4.0	-0.1	0.31
5.01	23.90	24.10	4.9	-0.1	0.31
5.99	24.00	24.10	6.0	0.0	0.31
7.05	23.90	24.10	7.0	-0.1	0.31
8.15	24.06	24.10	8.0	-0.1	0.31
9.09	23.94	24.10	9.0	-0.1	0.31
10.06	24.10	24.10	10.0	0.0	0.31
11.15	24.00	24.10	11.1	0.1	0.31
12.12	24.10	24.10	12.0	-0.1	0.31
13.18	23.98	24.10	13.0	-0.2	0.31
14.23	24.04	24.10	14.0	-0.2	0.31
15.22	24.00	24.10	15.1	-0.1	0.31
16.27	23.92	24.10	16.1	-0.2	0.31

Remark:

¹ Calibration results only cover for the tested circumstances and environmental conditions during which calibration took place

² Velocity of standard

³ Velocity of Unit Under Calibration

PHOTO OF CALIBRATION SET-UP



Calibration set-up of the cup anemometer calibration in the wind tunnel of Jiranae Associates Co., Ltd. The cup anemometer shown may differ from the calibrated one. Remark: The proportion of the set-up is not true to scale due to imaging geometry



CERTIFICATE OF CALIBRATION

Page 1 of 2 Pages

MEASUREMENT ITEM : Wind Direction Sensor
MANUFACTURER : Novalynx
MODEL/TYPE : Sensor: WS-02FA
Data logger: 110 WS-25DL-D
SERIAL NUMBER : Sensor: WSD-AS969
Data logger: AS969
ID NUMBER : BKK_FS1372
CONDITION AS-RECEIVED : New item
CUSTOMER : ALS laboratory group (Thailand) Co., Ltd.
204 Phatthanakan Rd, Phatthanakan Rd, Khwaeng Suan Luang,
Khet Suan Luang, Bangkok 10250 Thailand

RECEIVED DATE : 16 Jun 2023
MEASUREMENT DATE : 19 Jun 2023
ISSUE DATE : 19 Jun 2023

ENVIRONMENTAL CONDITIONS:

Ambient condition in the laboratory are as follow:
Temperature : 23.0 ± 1.0 °C
Relative Humidity : 55.0 ± 15.0 %RH
Atmospheric Pressure : 1010 ± 10 hPa

PLACE OF CALIBRATION : Eiffel type wind tunnel of Jirantee Associates Co., Ltd.

CALIBRATION CONDITION : Wind tunnel cross-section area¹ : 900 cm²
Win direction frontal area² : 129 cm²
Diameter of mounting pipe³ : mm
Blockage ratio of test object⁴ : 0.143 [-]

Preconditioning : 24 hours at ambient conditions.

Measurement Condition : The average values during measurement are (24.3)°C, (44.7) %RH and (1010.1) hPa.

TABULATION OF RESULTS:

The table on next page give the measured values

Calibrated by:
☒ Mr. Sorawit Thachalac
☐ Miss Jitraporn Lertsomphol



Approved Signatory

Mr. Pannya Booncharoen
Calibration Department Manager

Remark:
¹ Whole cross-section area of the wind tunnel.
² Mounted cross-section area of the tested object include mounting pipe.
³ Diameter of mounting pipe.
⁴ Ratio $\frac{A_2}{A_1}$

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

Page 2 of 2 Pages

MEASUREMENT RESULTS⁵

The wind direction sensor was calibrated against standard rotary encoder by comparison method. During calibration, the measurement was carried out at 45° intervals in clockwise and counterclockwise directions after offset adjustment has been made. The flow speed of wind tunnel (usually 5 m/s) is kept constant while the sensor is rotated around its vertical axis. The results of calibration and associated measurement uncertainties are reported in the table below.

Air speed m/s	D _{ref} Degree (°)	D _{me} Degree (°)	Error Degree (°)	U (k=2) Degree (°)
5.01	0.000	0	0	1.0
	45.000	42	-3	1.0
	90.000	67	-3	1.0
	135.000	133	-2	1.0
	180.000	181	1	1.0
	225.000	228	3	1.0
	270.001	273	3	1.0
	315.000	318	3	1.0

Remark:

⁵ Calibration results only count for the tested circumstances and environmental conditions during which calibration took place.

¹ Direction of standard.

² Direction of Unit Under Calibration.

End of Certificate of Calibration



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CERTIFICATE OF CALIBRATION

Certificate No : CT-020-66
Page 1 of 2

Equipment Name: Data Logger with Temperature sensor
Manufacturer: Novalynx
Model: 110-WS-25DL-D
Serial No.: AS969
ID No.: BKK_FS1372

Customer
Name: ALS laboratory group (Thailand) Co., Ltd.
Address: 104 Phatthanakan 40, Phatthanakan Rd,
Khwaeng Suan Luang, Khet Suan Luang, Bangkok
10250 Thailand.

Reference Used During Calibration
1. Standard Temperature Probe Model: STS-100 A500
Serial No.: 667642-09, Due date: 28 Mar 2024
2. Digital Temperature Indicator Model: DT11000 A MK
II, Serial No.: 671407-00591 Due date: 22 July 2023

Calibration Procedure
The temperature calibration was done by in-house
calibration method as WI-CL-001 according to
comparison method with standard digital temperature
indicator and standard temperature probe. The
temperature scale use was based on ITS 90.

Received date: 16 Jun 2023
Calibration date: 19 Jun 2023
Issue date: 22 Jun 2023

Calibration Condition
Temperature: (23±3) °C
Relative Humidity: (55±15)%

Traceability
The measurement results are traceable to the
international system of units (SI) through National
Institute of Metrology Thailand (NIMT) Certificate
number: TT-00-8-23, Certificate number: ER 0092
22

Noted: This certificate is valid only to the item calibrated on date and place of calibration

Calibrated by:
☒ Mr. Sorawit Thachalac
☒ Miss Jitraporn Lertsomphol
☐ Miss Ruangrumpi Phoommit



Approved Signatory

Mr. Pannya Booncharoen
Calibration Department Manager

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Certificate No : CT-020-66
Page 2 of 2

Result of Calibration: ☒ Without Adjustment ☐ With Adjustment
Calibration Range: 20-40 °C

Function:

This equipment was connected with temperature sensor Model: HMP60 S/N: V1920208

Dimension : Diameter 12 mm, Length 80 mm.

Immersion Depth (mm)	Standard Reading (°C)	UUC Reading (°C)	Error (°C)	Uncertainty (°C)
70	20.057	20.0	-0.1	0.099
70	25.053	24.9	-0.2	0.099
70	30.045	29.9	-0.1	0.099
70	35.039	34.8	-0.2	0.099
70	40.034	39.7	-0.3	0.099

UUC* : Unit Under Calibration

The reported expanded uncertainty is based on standard uncertainty multiplied by a coverage factor k=2
providing a level of confidence of approximately 95%.

★ End of Certificate ★





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CERTIFICATE OF CALIBRATION

Calibration No : RI-03062023
Page 1 of 1 Pages

Measurement Item : Relative humidity with data logger
Manufacturer : Novalyne
Model/Type : 110 WS-25D-D
Serial Number : A5969
ID No : BKK-F51372
Customer : ALS laboratory group (Thailand) Co. Ltd
104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok
10250 Thailand

Environmental Condition:
The measurement was carried out in an ambient temperature of (25±3)°C and relative humidity of (50±15)%

Measurement Method:
Unit Under Calibration (UUC) was calibrated by comparison method with standard chilled mirror hygrometer model: 1860-3 in the humidity generator chamber to determine the errors.

Traceability:
This instrument was calibrated using standard equipment whose accuracy is traceability through National Institute of Standards and Technology to the International system of units (SI) via MCS Calibration, Inc. Certificate number: 20926-001. Due date: Sep 26, 2024

Measurement Date : Jun 19, 2023
Issued Date : Jun 22, 2023

Measurement Result:
This equipment was connected with indoor air quality probe and Displayed (URI) on display. Model: HMP60, Serial number: V1920208.

Calibration was performed in the range of 20%RH to 80%RH
The results of calibration are reported in table below.

Determined (%RH)	Standard (%RH)	UUC reading (%RH)	Error (%RH)	Uncertainty (%RH)
20	20.05	19.4	-0.7	0.52
50	50.28	49.8	-0.5	0.52
80	80.34	80.4	0.1	0.52

Performed by
☐ Mr. Sorawit Thachalad
☒ Ms. Jitraporn Lerlsonphol
☐ Ms. Ruangsiraporn Phoommi



Approved Signatory:
Mr. Panyia Booncharoen
Calibration Department Manager

THIS CALIBRATION REPORT MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY.



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Accredited calibration laboratory
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CALIBRATION 0367

Pressure measurement laboratory
Calibration services department.



CERTIFICATE OF CALIBRATION

Certificate No : CP-004-66

Page 1 of 2 Pages

MEASUREMENT ITEM : Digital barometer
MANUFACTURER : Novalynx
MODEL/TYPE : Sensor: 110 WS-25BP
Data logger: 110-WS-25DL-D
Sensor: GP-A5969
SERIAL NUMBER : Data logger: A5969
BKK-F51372
ID NUMBER : New item
CONDITION AS-RECEIVED : ALS laboratory group (Thailand) Co., Ltd.
CUSTOMER : 104 Phatthanakan 40, Phatthanakan Rd,
Khwaeng Suan Luang, Khet Suan Luang,
Bangkok 10250 Thailand

RECEIVED DATE : 16 Jun 2023
MEASUREMENT DATE : 19 Jun 2023
ISSUE DATE : 19 Jun 2023

Calibration procedure:
The pressure calibration was done by in-house calibration method as WI-CI-003 according to comparison method with Digital pressure calibrator rated on DWD-6.1

Traceability:
The measurement results are traceable to the international system of units (SI) through the NIMT (National Institute of Metrology of Thailand) via Certificate number: MP-0205-22

The reported uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%

CONDITION OF THIS RESULT OF CALIBRATION:

1. Reference Standard Instrument:

Instrument	Model	Serial No.	Certificate No.	Due Date
Absolute Pressure Transducer	CPG2500	A100126P	MP-0205-22	02 Dec 2023

2. The UUC* was installed in vertical orientation above reference standard instrument and center of UUC* was used as the reference level

3. Calibration conditions:

4. Condition
- | | |
|------------------------------|--|
| Pressure transmitting medium | <input checked="" type="checkbox"/> Normal <input type="checkbox"/> Abnormal |
| Air (20°C, 1 bar) | |
| p_A (20°C, 1 bar) | : 1.19 kg/m ³ |
| p_{std} | : (55±15) % |
| t_{std} | : (23±3) °C |
| p_{std} | : (1010±10) mbar |

5. The certificate is valid only to the item calibrated on date and place of calibration

Calibrated by:
☒ Mr. Sorawit Thachalad
☐ Ms. Jitraporn Lerlsonphol



Approved signatory:
Mr. Panyia Booncharoen
Calibration Department Manager

THIS CERTIFICATE REPORT MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY.



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Pressure measurement laboratory
Calibration services department.



CERTIFICATE OF CALIBRATION

Certificate No : CP-034-66

Page 2 of 2 Pages

MEASUREMENT RESULTS : ☒ Without adjustment ☐ With adjustment
CALIBRATION IN THE RANGE OF : 950 mbar to 1050 mbar

The results of calibration and associated measurement uncertainties are reported in the table below

STD (mbar)	UUC* (mbar)	Error (mbar)	Uncertainty (k=2) (mbar)
950.09	950.5	0.4	0.59
970.06	970.3	0.2	0.45
990.05	990.2	0.1	0.41
1010.07	1010.0	-0.1	0.38
1030.05	1029.8	-0.2	0.46
1050.05	1049.6	-0.4	0.64

Note: UUC* Unit Under Calibration

To convert the result in report unit to Pa should be multiply by 100

End of certificate



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CALIBRATION 0367

Air speed measurement laboratory
Calibration services department.



CERTIFICATE OF CALIBRATION

Page 1 of 2 Pages

MEASUREMENT ITEM : Cup anemometer
MANUFACTURER : Novalynx
MODEL/TYPE : Sensor: WS-02F
Data logger: 200-WS-25DL
Sensor: WSD-A4940
Data logger: A4940
SERIAL NUMBER : BKK-F50165
ID NUMBER : Used item
CONDITION AS-RECEIVED : ALS laboratory group (Thailand) Co., Ltd.
CUSTOMER : 104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand

RECEIVED DATE : 25 Dec 2023
MEASUREMENT DATE : 04 Jan 2024
ISSUE DATE : 05 Jan 2024

ENVIRONMENTAL CONDITIONS:

Ambient condition in the laboratory are as follows:
Temperature : 23.0 ± 3.0 °C
Relative Humidity : 55.0 ± 15.0 %RH
Atmospheric Pressure : 1010 ± 10 hPa

PLACE OF CALIBRATION : I (H) type wind tunnel of Jiranate Associates Co., Ltd

CALIBRATION CONDITIONS

Wind tunnel cross section area	900	cm ²
Wind direction horizontal area	100	cm ²
Diameter of measuring pipe	-	mm
Blockage ratio of test object	0.111	H

Preconditioning : 24 hours at ambient conditions.
Measurement Condition : The average values during measurement are (23.9)°C, (50.5) %RH and (1013.3) hPa

TABULATION OF RESULTS:

The table on next page give the measured values.

Calibrated by:
☒ Mr. Sorawit Thachalad
☐ Ms. Jitraporn Lerlsonphol



Approved signatory:
Mr. Panyia Booncharoen
Calibration Department Manager

Remarks:
*Nuclei cross-section area of the wind tunnel
*Projected cross-section area of the tested object include mounting pipe
*Diameter of measuring pipe
*Ratio: 1/2

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY.

Certificate Number
CWS-003-67

Page 2 of 2 Pages

MEASUREMENT RESULTS³

The Cup anemometer Unit Under Calibration (UUC) was exercised at 10 m/s for 5 min prior to calibration being performed. The standard air velocity 0.5 m/s to 5 m/s was calculated by a standard air velocity transducer which was installed 50 mm away from wind tunnel nozzle and installed 40 mm away from top of the test section and the standard air velocity 5 m/s to 30 m/s was calculated by a pitot tube with precision differential pressure meter which was installed 50 mm away from wind tunnel nozzle and installed 40 mm away from top of the test section. UUC was mounted on a round vertical tube of the lower pile at center of test section. The calibration was carried out under both rising and falling air velocity in the range of 1 m/s to 30 m/s at calibration interval of 1 m/s. The results of calibration and associated measurement uncertainties are reported in the table below.

V_{std} (m/s)	Temp. wind tunnel (°C)	Temp. room (°C)	V_{UUC} (m/s)	Error (m/s)	U (k=2) (m/s)
1.018	23.82	23.85	0.9	-0.1	0.12
2.083	23.80	23.85	1.9	-0.2	0.31
2.993	23.78	23.85	2.9	-0.1	0.31
4.164	23.60	23.85	3.9	-0.2	0.31
5.06	23.44	23.85	5.0	0.0	0.31
6.00	23.98	23.85	6.0	0.0	0.31
7.02	23.30	23.85	7.0	0.0	0.31
7.97	23.88	23.85	8.0	0.0	0.31
8.97	23.20	23.85	9.1	0.1	0.31
10.02	23.50	23.85	10.1	0.1	0.31
11.04	23.30	23.85	11.2	0.2	0.31
12.02	23.60	23.85	12.2	0.2	0.31
13.04	23.40	23.85	13.2	0.2	0.31
14.03	23.64	23.85	14.2	0.2	0.31
15.03	23.50	23.85	15.3	0.3	0.31
16.03	23.60	23.85	16.3	0.3	0.31

Remarks:

¹ Calibration results only count for the tested circumstances and environmental conditions during which calibration took place

² Velocity of standard

³ Velocity of Unit Under Calibration

PHOTO OF CALIBRATION SET UP



Calibration set up of the Cup anemometer calibration in the wind tunnel of Jiranatee Associates Co., Ltd. The Cup anemometer shown may differ from the calibrated one. Remark: The proportion of the set-up is not true to scale due to image compression.



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Certificate Number

CWD-003 67

CERTIFICATE OF CALIBRATION

Page 1 of 2 Pages

MEASUREMENT ITEM

MANUFACTURER

MODEL/TYPE

SERIAL NUMBER

ID NUMBER

CONDITION AS-RECEIVED

CUSTOMER

RECEIVED DATE

MEASUREMENT DATE

ISSUE DATE

ENVIRONMENTAL CONDITIONS:

Ambient condition in the laboratory are as follows:

Temperature : 23.0 ± 3.0 °C
Relative Humidity : 55.0 ± 15.0 %RH
Atmospheric Pressure : 1010 ± 10 hPa

PLACE OF CALIBRATION

Effel-type wind tunnel of Jiranatee Associates Co., Ltd.

CALIBRATION CONDITION

Wind tunnel cross section area¹ : 900 cm²
Wind direction frontal area² : 129 cm²
Diameter of mounting pipe³ : mm
Blockage ratio of test object⁴ : 0.143 [-]

Preconditioning

Measurement Condition

24 hours at ambient conditions.
The average values during measurement are 23 (3) °C, (54.1) %RH and (1010.9) hPa

TABULATION OF RESULTS:

The table on next page give the measured values

Calibrated by:

1) Mr. Sornwut Thachakorn
2) Miss Jitaporn Lertthamphol



Approved signature

Mr. Parinya Booncharoen
Calibration Department Manager

Remarks:

¹ Inside collection area of the wind tunnel

² Projected cross-section area of the tested object include mounting pipe

³ Diameter of mounting pipe

⁴ Ratio (%)

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

Certificate Number
CWD-003-67

Page 2 of 2 Pages

MEASUREMENT RESULTS⁵

The wind direction sensor was calibrated against standard rotary encoder by comparison method. During calibration, the measurement was carried out at 45° intervals in clockwise and counterclockwise directions after offset adjustment has been made. The flow speed of wind tunnel (usually 5 m/s) is kept constant while the sensor is rotated around its vertical axis. The results of calibration and associated measurement uncertainties are reported in the table below.

Air speed m/s	D° _{std} Degree (°)	D° _{UUC} Degree (°)	Error Degree (°)	U (k=2) Degree (°)
5 DA	45.000	41	-4	0.80
	89.999	87	-3	0.80
	135.000	133	-2	0.80
	180.000	182	2	0.80
	225.000	230	5	0.80
	270.000	275	5	0.80
	315.000	320	5	0.80
	360.000	359	-1	0.80

Remark:

¹ Calibration results only count for the tested circumstances and environmental conditions during which calibration took place

² Direction of standard

³ Direction of Unit Under Calibration

End of Certificate of Calibration



J NAC
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Certificate Number

CWS-017-66

CERTIFICATE OF CALIBRATION

Page 1 of 2 Pages

MEASUREMENT ITEM

MANUFACTURER

MODEL/TYPE

SERIAL NUMBER

ID NUMBER

CONDITION AS-RECEIVED

CUSTOMER

RECEIVED DATE

MEASUREMENT DATE

ISSUE DATE

ENVIRONMENTAL CONDITIONS:

Ambient condition in the laboratory are as follows:

Temperature : 23.0 ± 3.0 °C
Relative Humidity : 55.0 ± 15.0 %RH
Atmospheric Pressure : 1010 ± 10 hPa

PLACE OF CALIBRATION

Effel-type wind tunnel of Jiranatee Associates Co., Ltd.

CALIBRATION CONDITIONS

Wind tunnel cross section area¹ : 900 cm²
Wind direction frontal area² : 100 cm²
Diameter of mounting pipe³ : mm
Blockage ratio of test object⁴ : 0.111 [-]

Preconditioning

Measurement Condition

24 hours at ambient conditions.
The average values during measurement are 24 (1) °C, (43.9) %RH and (1014.5) hPa

TABULATION OF RESULTS:

The table on next page give the measured values

Calibrated by:

1) Mr. Sornwut Thachakorn
2) Miss Jitaporn Lertthamphol



Approved signature

Mr. Parinya Booncharoen
Calibration Department Manager

Remarks:

¹ Inside collection area of the wind tunnel

² Projected cross-section area of the tested object include mounting pipe

³ Diameter of mounting pipe

⁴ Ratio (%)

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

Certificate Number

CWS-017-66

Page 2 of 2 Pages

MEASUREMENT RESULTS¹

The Cup anemometer, Unit Under Calibration (UUC) was exercise at 10 m/s for 5 minutes prior to calibration being performed. The standard air velocity 0.5 m/s to 5 m/s was calculated by a standard air velocity transducer which was installed 50 mm away from wind tunnel nozzle and installed 40 mm away from top of the test section and the standard air velocity 5 m/s to 30 m/s was calculated by a pitot tube with precision differential pressure meter which was installed 50 mm away from wind tunnel nozzle and installed 40 mm away from top of the test section. UUC was mounted on a round vertical tube of the lower plate at center of test section. The calibration was carried out under both rising and falling air velocity in the range of 2 m/s to 16 m/s at calibration interval of 2 m/s. The results of calibration and associated measurement uncertainties are reported in the table below

V_{std} (m/s)	Temp. wind tunnel (°C)	Temp. room (°C)	V_{UUC} (m/s)	Error (m/s)	U (k=2) (m/s)
0.978	24.10	24.05	0.8	-0.2	0.33
2.091	24.00	24.05	1.9	-0.2	0.31
3.020	23.90	24.05	2.8	-0.2	0.31
4.145	23.94	24.05	3.9	-0.2	0.31
5.06	23.60	24.05	5.0	-0.1	0.31
6.01	24.30	24.05	5.9	0.1	0.31
7.04	23.67	24.05	7.0	0.0	0.31
7.97	24.24	24.05	8.0	0.0	0.31
8.57	23.70	24.05	9.0	0.0	0.31
10.03	24.08	24.05	10.1	0.1	0.31
11.03	23.70	24.05	11.1	0.1	0.31
12.03	23.01	24.05	12.0	0.0	0.31
13.01	23.20	24.05	13.1	0.1	0.31
14.00	23.82	24.05	14.1	0.1	0.31
15.02	23.70	24.05	15.1	0.1	0.31
16.03	23.74	24.05	16.1	0.1	0.31

Remark:

¹ Calibration results only count for the tested circumstances and environmental conditions during which calibration took place

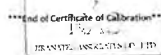
² Velocity of standard

Velocity of Unit Under Calibration

PHOTO OF CALIBRATION SET-UP



Calibration set up of the Cup anemometer calibration in the wind tunnel of Jiranatee Associates Co., Ltd. The Cup anemometer shown may differ from the calibrated one. Remark: The proportion of the set up is not true (scale is not 1:1).



Certificate Number

CWD-017-66

Page 2 of 2 Pages

MEASUREMENT RESULTS¹

The wind direction sensor was calibrated against standard rotary encoder by comparison method. During calibration, the measurement was carried out at 45° intervals in clockwise and counterclockwise directions after slight adjustment has been made. The flow speed of wind tunnel (usually 5 m/s) is kept constant while the sensor is rotated around its vertical axis. The results of calibration and associated measurement uncertainties are reported in the table below.

Air speed m/s	D'_{true} Degree (°)	D'_{UUC} Degree (°)	Error Degree (°)	U (k=2) Degree (°)
5.04	45.000	43	-4	0.80
	90.000	87	-3	0.80
	135.000	132	-3	0.80
	180.000	182	2	0.80
	225.001	229	4	0.80
	270.001	275	5	0.80
	315.000	320	5	0.80
	360.000	359	-1	0.80

Remark:

¹ Calibration results only count for the tested circumstances and environmental conditions during which calibration took place

² Direction of standard

Direction of Unit Under Calibration

End of Certificate of Calibration



JIRANATEE ASSOCIATES CO., LTD.

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NSC-TISI-TIS 17025
CALIBRATION 0367

Wind direction measurement laboratory
Calibration services department



NSC - TISI - TIS 17025
CALIBRATION 0367

Certificate Number

CWD-017-66

CERTIFICATE OF CALIBRATION

Page 1 of 2 Pages

MEASUREMENT ITEM

Wind Direction Sensor

MANUFACTURER

: Navalm

MODEL/TYPE

: Sensor: WS-01F

SERIAL NUMBER

Data logger: 110-WS-250L-D

ID NUMBER

Data logger: AS447

CONDITION AS-RECEIVED

: SGK_F50039

CUSTOMER

: Used item

RECEIVED DATE

: 15 Dec 2023

MEASUREMENT DATE

: 19 Dec 2023

ISSUE DATE

: 20 Dec 2023

ENVIRONMENTAL CONDITIONS:

Air plant condition in the laboratory are as follow:

Temperature : 23.0 ± 3.0 °C

Relative Humidity : 55.0 ± 15.0 %RH

Atmospheric Pressure : 1010 ± 10 hPa

PLACE OF CALIBRATION

: Ellipt type wind tunnel of Jiranatee Associates Co., Ltd.

CALIBRATION CONDITION

Wind tunnel cross-section area¹ : 900 cm²

Wind direction frontal area² : 129 cm²

Diameter of mounting pipe³ : mm

Blockage ratio of first object⁴ : 0.143 [-]

Preconditioning

: 24 hours at ambient conditions

Measurement Condition

: The average values during measurement are $[24.2^\circ \text{C}, (52.6 \pm 10.3) \text{ hPa}]$

TABULATION OF RESULTS:

The table on next page give the measured values



Calibrated by:

☐ Mr. Sorawit Thachalad

☐ Miss Jitraporn Leersomphol

Approved signatory

Mr. Parinya Bouncharoen

Calibration Department Manager

Remark:

¹ Valid cross-section area of the wind tunnel

² Measured cross-section area of the tested object include mounting pipe

³ Diameter of mounting pipe

⁴ Ratio is 1

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JIRANATEE ASSOCIATES CO., LTD.

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CALIBRATION 0367

Temperature measurement laboratory
Calibration services department



NSC - TISI - TIS 17025
CALIBRATION 0367

CERTIFICATE OF CALIBRATION

Certificate No. : CDT-065-66

Page 1 of 2 Pages

MEASUREMENT ITEM

: Data Logger with Temperature sensor

MANUFACTURER

: Navalm

MODEL/TYPE

: 110-WS-250L-D

SERIAL NUMBER

: AS447

ID NUMBER

: SGK_F50039

CONDITION AS-RECEIVED

: Used item

CUSTOMER

: ALS laboratory group (Thailand) Co., Ltd.

: 104 Phatthanakan Rd., Phatthanakan Rd.,

: Khwaeng Suan Luang, Khel Suan Luang,

: Bangkok 10250 Thailand

RECEIVED DATE

: 15 Dec 2023

MEASUREMENT DATE

: 19 Dec 2023

ISSUE DATE

: 20 Dec 2023

ENVIRONMENTAL CONDITIONS:

Ambient condition in the laboratory are as follow

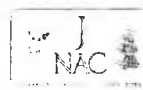
Temperature : 23.0 ± 3.0 °C

Relative Humidity : 55.0 ± 15.0 %RH

NOTE: The certificate is valid only to the item calibrated on date and place of calibration.

TABULATION OF RESULTS:

The table on next page give the measured values



Calibrated by:

☐ Mr. Sorawit Thachalad

☐ Miss Jitraporn Leersomphol

☐ Mr. Ruangrumpai Phoommit

Approved signatory

Mr. Parinya Bouncharoen

Calibration Department Manager

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Continuation of Certificate of Calibration Number CDT-065-66

Page 2 of 2 Pages

Result of Calibration: ☒ Without Adjustment ☐ With Adjustment

Calibration Range: 20 – 40 °C

Function: Table 3. This equipment was connected with temperature sensor Model: HMP60 S/N: R1131114.
Dimension: Diameter 12 mm, Length 80 mm.

Immersion Depth (mm)	Standard Reading (°C)	UUC Reading (°C)	Error (°C)	Uncertainty (°C)
70	20.042	19.5	-0.5	0.099
70	25.047	24.5	-0.5	0.099
70	30.041	29.4	-0.6	0.099
70	35.034	34.3	-0.7	0.099
70	40.030	39.3	-0.7	0.099

UUC*: Unit Under Calibration

End of Certificate of Calibration



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NSC-TISI-TIS 17025
CALIBRATION 0367

Relative humidity measurement laboratory
Calibration services department

CERTIFICATE OF CALIBRATION

Certificate No.: CRH-015-66

Page 1 of 2 Pages

MEASUREMENT ITEM: Relative humidity with data logger
MANUFACTURER: Novalynx
MODEL/TYPE: 1110 WS 25DL D
SERIAL NUMBER: A5447
ID NUMBER: SGK_F50039
CONDITION AS-RECEIVED: Used item
CUSTOMER: ALS laboratory group (Thailand) Co., Ltd.
104 Phraithamken 40, Phatthananakan Rd.,
Khwaeng Suan Luang, Khet Suan Luang,
Bangkok 10250 Thailand

RECEIVED DATE: 15 Dec 2023
MEASUREMENT DATE: 19 Dec 2023
ISSUE DATE: 20 Dec 2023

ENVIRONMENTAL CONDITIONS:
Ambient condition in the laboratory are as follows:
Temperature: 23.0 ± 3.0 °C
Relative Humidity: 55.0 ± 15.0 %RH

NOTED: The certificate is valid only to the item calibrated on date and place of calibration

TABULATION OF RESULTS:
The table on next page give the measured values



Calibrated by:
☒ Mr. Tongsak Thachabai
☒ Miss Jittaporn Lertsomphol
☐ Miss Rungtumporn Phoommet

Approved signatory
Mr. Parinya Booncharoen
Calibration Department Manager

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Continuation of Certificate of Calibration Number: CRH-015-66

Page 2 of 2 Pages

Measurement Results:

This equipment was connected with Relative humidity Sensor on display Model: HMP60. Serial number: R1131114

Result of Calibration: ☒ Without Adjustment ☐ With Adjustment

Calibration Range: 20%RH to 80%RH

The results of calibration of relative humidity are reported in table below

Determined (%RH)	Standard Reading (%RH)	UUC Reading (%RH)	Error (%RH)	Uncertainty (%RH)
20.0	20.06	17.2	-2.9	0.76
50.0	51.40	46.4	-5.0	0.77
80.0	82.75	74.7	-8.1	0.75

UUC*: Unit Under Calibration

End of Certificate of Calibration



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Website: www.jiranatee.com

Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI-TIS 17025
CALIBRATION 0367

Pressure measurement laboratory
Calibration services department



CERTIFICATE OF CALIBRATION

Certificate No.: CPR-015-66

Page 1 of 2 Pages

MEASUREMENT ITEM: Digital barometer
MANUFACTURER: Novalynx
MODEL/TYPE: Sensor 110 WS-25BP
Data logger: 110-WS-25DL-D
SERIAL NUMBER: Sensor: SP-A5447
Data logger: A5447
ID NUMBER: SGK_F50039
CONDITION AS-RECEIVED: Used item
CUSTOMER: ALS laboratory group (Thailand) Co., Ltd.
104 Phraithamken 40, Phatthananakan Rd.,
Khwaeng Suan Luang, Khet Suan Luang,
Bangkok 10250 Thailand

RECEIVED DATE: 15 Dec 2023
MEASUREMENT DATE: 19 Dec 2023
ISSUE DATE: 20 Dec 2023

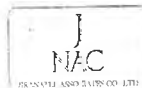
Calibration procedure:
The pressure calibration was done by in-house calibration method as MP-CL-03 according to comparison method with Digital pressure calibrator based on DAQ-8-1

Traceability:
The measurement results are traceable to the international system of units (SI) through the NIMT (National Metrology Institute of Thailand) via Certificate number: MP-0205-22

The reported uncertainty is based on a standard uncertainty multiplied by a coverage $k=2$, providing a level of confidence of approximately 95%

CONDITION OF THIS RESULT OF CALIBRATION:

- Reference Standard Instrument:
- Calibration effort for calibration sequence C
- The UUC* was installed in vertical orientation above reference standard instrument and center of UUC* was used as the reference level
- Calibration conditions
- Condition: ☒ Normal ☐ Abnormal
Pressure transmitting medium: Air
 p_1 (20°C 1 bar): 1.19 kg/m³
 H_{unc} : (55-15) %
 t_{exp} : (23.1, °C)
 p_{unc} : (1010310) mbar
- This certificate is valid only to the item calibrated on date and place of calibration



Calibrated by:
☒ Mr. Sorawit Thachabai
☒ Miss Jittaporn Lertsomphol

Approved signatory
Mr. Parinya Booncharoen
Calibration Department Manager

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N WRITING FROM THE LABORATORY

CERTIFICATE OF CALIBRATION

Certificate No. CPA-015-66

Page 2 of 2 Pages

MEASUREMENT RESULTS : ☒ Without adjustment ☐ With adjustment

CALIBRATION IN THE RANGE OF : 950 mbar to 1050 mbar

The results of calibration and associated measurement uncertainties are reported in the table below

STD (mbar)	UUC* (mbar)	Error (mbar)	Uncertainty (k=2) (mbar)
950.00	951.1	1.1	0.37
970.00	970.8	0.8	0.37
990.00	990.2	0.2	0.37
1009.99	1009.9	0.1	0.37
1030.01	1029.6	-0.4	0.37
1050.00	1049.0	-1.0	0.37

Note: UUC* Unit Under Calibration

To convert the result in report unit to Pa should be multiply by 100

End of certificate



CALIBRATION REPORT

Calibration Number: RQ-06122023
Page 1 of 2 Pages

Measurement Item : Rain gauge with data logger

Manufacturer : Data logger: Novolynx
Rain gauge: Novolynx

Model/Type : Data logger: 110 WS-250L D
Rain gauge: 110 WS-25RG

Serial Number : Data logger: A5447
Rain gauge: RQ A5447

ID NO : SSK-FS0039

Customer : ALS laboratory group (Thailand) Co., Ltd
104 Phatthanasen 40, Phatthanasen Rd, Khwaeng Suan Luang, Khet Suan Luang,
Bangkok 10260, Thailand

Environmental Condition:

The measurement was carried out in an ambient temperature of (25.3)°C and relative humidity of (50±1)%

Measurement Method:

The Rain gauge, Unit Under Calibration (UUC) was calibrated by Precision reference bottle with flow adjuster at low rate 0.6 mm per minute or 1 tipping every 20 seconds. The tipping number was determined by procedures below

- Obtain rain gauge inlet area:
Rain gauge precise diameter in cm = Diameter/2 = R (radius)
Rain gauge area = $\pi R^2 \times 1.4$ (UUC diameter=20.3 cm, UUC radius=10.15 cm)
Rain gauge area = 323.6 cm²
- Obtain theoretical correct rain gauge answer (number of lippings) using 323.6 cm² inlet area and 0.5 L of rain
 - 10,000 cm³ / 32.3 cm² inlet area = 30.90 (rain gauge area = 1/30.90 of square meter)
 - 30.90 * 0.5 L volume = 15.45 mm (mm of rain over 1 m² surface) 500 ml of rain volume on the rain gauge area = 15.45 mm of rain
 - Number of lippings = 15.45 / 0.25 mm = 62 lippings

Note: Rain gauge is fully cleaned and leveling prior the calibration performed.

Measurement Date: Dec 19, 2023
Issued Date: Dec 20, 2023

Performed by
☐ Mr. Sorwut Thachakau
☒ Miss J Jiraporn Lertsinphol



Approved Signature:
Mr. Pinyai Booncharoen
Calibration Department Manager

THIS CALIBRATION REPORT MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

Continuation of Calibration of Calibration Number

Calibration Number: RQ 06122023
Page 2 of 2 Pages

Result of Calibration ☒ Without Adjustment ☐ With Adjustment.
The results of calibration are reported in table below.

Quantity of H ₂ O (ml)	Determined Tipping	Tipping count	Acceptable Tipping count
500	62	60	60 ± 6.4
500	62	60	60 ± 6.4
500	62	60	60 ± 6.4
500	62	60	60 ± 6.4
500	62	60	60 ± 6.4

Remark: The procedure is made to verify the correct reading of the Unit under Calibration rain gauge when a precise volume of water falls into its cone. We suggest that the number of tipping should be within ±2% different from the 62 tipping (correct range: 60-64 tipping) it means that the rain gauge meets the manufacturer acceptable limit

End of calibration report



Certificate Number

CWS-005-67

CERTIFICATE OF CALIBRATION

Page 1 of 2 Pages

MEASUREMENT ITEM

Cup anemometer

MANUFACTURER : Novolynx

MODEL/TYPE : Sensor: WS-02F

Serial Number : Data logger: 200 WS-25RG

Model/Type : Sensor: WS0-A5361

Serial Number : Data logger: A5451

ID NUMBER : RQK-FS0044

CONDITION AS-RECEIVED : Used item

CUSTOMER : ALS laboratory group (Thailand) Co., Ltd

104 Phatthanasen 40, Phatthanasen Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10260 Thailand

RECEIVED DATE : 25 Dec 2023

MEASUREMENT DATE : 04 Jan 2024

ISSUE DATE : 05 Jan 2024

ENVIRONMENTAL CONDITIONS:

Ambient condition in the laboratory are as follows:

Temperature : 23.0 ± 3.0 °C

Relative Humidity : 55.0 ± 15.0 %RH

Atmospheric Pressure : 1010-10 hPa

PLACE OF CALIBRATION

: Effel-type wind tunnel of Jiranatee Associates Co., Ltd

CALIBRATION CONDITIONS

Wind tunnel cross section area¹ : 900 cm²

Wind direction frontal area² : 100 cm²

Diameter of mounting pipe³ : mm

Blockage ratio of test object⁴ : 0.111 [-]

Preconditioning

24 hours at ambient conditions.

Measurement Condition

The average values during measurement are (23.7)°C, (46.6) %RH and (1014.3) hPa.

TABULATION OF RESULTS:

The table on next page gives the measured values.

Calibrated by:
☒ Mr. Sorwut Thachakau
☐ Miss Jiraporn Lertsinphol



Approved signature:
Mr. Pinyai Booncharoen
Calibration Department Manager

Remark:
¹ Notable cross-section area of the wind tunnel
² Projected cross-section area of the tested object include mounting pipe
³ Diameter of mounting pipe
⁴ Ratio of $\frac{A_{obj}}{A_{tunnel}}$

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

Certificate Number

CWS-005-67

Page 2 of 2 Pages

MEASUREMENT RESULTS¹

The Cup anemometer Unit Under Calibration (UUC) was exercised at 10 m/s for 5 minutes prior to calibration being performed. The standard air velocity 0.5 m/s to 5 m/s was calculated by a standard air velocity transducer which was installed 50 mm away from wind tunnel nozzle and installed 40 mm away from top of the test section and the standard air velocity 5 m/s to 30 m/s was calculated by a pitot tube with precision differential pressure meter which was installed 50 mm away from wind tunnel nozzle and installed 40 mm away from top of the test section. UUC was mounted on a round vertical tube of the lower plate at center of test section. The calibration was carried out under both rising and falling air velocity in the range of 1 m/s to 16 m/s at calibration intervals of 1 m/s. The results of calibration and associated measurement uncertainties are reported in the table below.

V_{std} (m/s)	Temp. wind tunnel (°C)	Temp. room (°C)	V_{UUC} (m/s)	Error (m/s)	U (k=2) (m/s)
1.016	23.70	23.65	0.9	-0.1	0.31
2.058	23.50	23.65	1.9	-0.2	0.31
2.998	23.78	23.65	2.9	-0.1	0.31
4.388	23.74	23.65	4.0	-0.2	0.31
5.03	23.60	23.65	5.1	0.1	0.31
5.96	23.84	23.65	6.1	0.1	0.31
7.00	23.38	23.65	7.1	0.1	0.31
7.95	23.83	23.65	8.1	0.1	0.31
8.96	23.36	23.65	9.2	0.3	0.31
10.23	23.76	23.65	10.2	0.2	0.31
11.03	23.40	23.65	11.3	0.3	0.31
12.04	23.60	23.65	12.3	0.2	0.31
13.02	23.40	23.65	13.4	0.4	0.31
14.03	23.54	23.65	14.4	0.3	0.31
15.01	23.40	23.65	15.4	0.4	0.31
16.02	23.44	23.65	16.4	0.3	0.31

Remark:

¹ Calibration results only count for the tested circumstances and environmental conditions during which calibration took place.

² Velocity of standard.

³ Velocity of Unit Under Calibration.

PHOTO OF CALIBRATION SET-UP



Calibration set up of the Cup anemometer calibration in the wind tunnel of Jiranatee Associates Co., Ltd. The Cup anemometer shown may differ from the calibrated one. Remark: The proportion of the set-up is not true to scale due to 3D image geometry.



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Web site: www.jiranatee.com

Accredited calibration laboratory
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NSC-TIS-17025
CALIBRATION 0367

Wind direction measurement laboratory
Calibration services department



NSC-TIS-17025
CALIBRATION 0367

Certificate Number

CWD-005-67

CERTIFICATE OF CALIBRATION

Page 1 of 2 Pages

MEASUREMENT ITEM

Wind Direction Sensor

MANUFACTURER

Novamix

MODEL/TYPE

Sensor: WS-025

SERIAL NUMBER

Data logger: 200-WS-25LB

ID NUMBER

Sensor: WS0 AS261

CONDITION AS RECEIVED

Data logger: AS261

CUSTOMER

BKK_F50888

RECEIVED DATE

Used item

MEASUREMENT DATE

ALS laboratory group (Thailand) Co., Ltd.

ISSUE DATE

104 Phatthanakan Rd, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand.

RECEIVED DATE

25 Dec 2023

MEASUREMENT DATE

04 Jan 2024

ISSUE DATE

05 Jan 2024

ENVIRONMENTAL CONDITIONS:

Ambient condition in the laboratory are as follow:

Temperature: 23.0 ± 3.0 °C

Relative Humidity: 55.0 ± 15.0 %RH

Atmospheric Pressure: 1010 ± 10 hPa

PLACE OF CALIBRATION

Efficient wind tunnel of Jiranatee Associates Co., Ltd.

CALIBRATION CONDITION

Wind tunnel cross section area: 900 cm²Wind direction frontal area: 125 cm²

Diameter of mounting pipe: 1 mm

Blockage ratio of test object: 0.143 [-]

Preconditioning

24 hours at ambient conditions.

Measurement Condition

The average values during measurement are (23.5) °C, (53.5) %RH and (1010.5) hPa

TABULATION OF RESULTS:

The table on next page give the measured values.

Calibrated by:

05 Mr. Sorawit Thuchald

01 Miss Jiraporn Lertsomphol



Approved signature:

Mr. Panyai Booncharoen
Calibration Department Manager

Remark:

¹ Inside cross-section area of the wind tunnel.

² Projected cross-section area of the tested object include mounting pipe.

³ Diameter of mounting pipe.

⁴ Area: 10⁻⁴.

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

Certificate Number

CWD-005-67

Page 2 of 2 Pages

MEASUREMENT RESULTS¹

The wind direction sensor was calibrated against standard rotary encoder by comparison method. During calibration, the measurement was carried out at 45° intervals in clockwise and counter-clockwise directions after offset adjustment has been made. The flow speed of wind tunnel (usually 5 m/s) is kept constant while the sensor is rotated around its vertical axis. The results of calibration and associated measurement uncertainties are reported in the table below.

Air speed m/s	D°_{std} Degree (°)	D°_{UUC} Degree (°)	Error Degree (°)	U (k=2) Degree (°)
5.03	45.000	41	-4	0.80
	90.000	87	-3	0.80
	135.001	132	-3	0.80
	180.000	180	0	0.80
	225.000	228	3	0.80
	270.000	274	4	0.80
	315.000	319	4	0.80
	360.000	359	-1	0.80

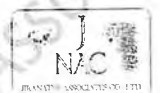
Remark:

¹ Calibration results only count for the tested circumstances and environmental conditions during which calibration took place.

² Direction of standard.

³ Direction of Unit Under Calibration.

End of Certificate of Calibration



Jiranatee Associates Co., Ltd.
63/14-15, 63/25-36
Pattanaum 7/3, 4th Westkap a Bangkok
Bangkok 10600 (Thailand)
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E-mail: info@jiranatee.com
Web site: www.jiranatee.com

Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TIS-17025
CALIBRATION 0367

Temperature measurement laboratory
Calibration services department



NSC-TIS-17025
CALIBRATION 0367

CERTIFICATE OF CALIBRATION

Page 1 of 2 Pages

Certificate No.: COT-003-67

MEASUREMENT ITEM

Data Logger with Temperature sensor

MANUFACTURER

Novamix

MODEL/TYPE

200-WS-25LB

SERIAL NUMBER

AS261

ID NUMBER

BKK_F50888

CONDITION AS RECEIVED

Used item

CUSTOMER

ALS laboratory group (Thailand) Co., Ltd.

104 Phatthanakan Rd, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand

RECEIVED DATE

25 Dec 2023

MEASUREMENT DATE

04 Jan 2024

ISSUE DATE

05 Jan 2024

ENVIRONMENTAL CONDITIONS:

Ambient condition in the laboratory are as follow:

Temperature: 23.0 ± 3.0 °C

Relative Humidity: 55.0 ± 15.0 %RH

NOTED: The certificate is valid only to the item calibrated on date and place of calibration

TABULATION OF RESULTS:

The table on next page give the measured values

Calibration procedure:

The temperature calibration was done by in house calibration method as WH-CL-001 according to comparison method with standard digital temperature indicator and standard temperature probe. The temperature scale use was based on ITS-90.

Traceability:

The measurement results are traceable to the international system of units (SI) through National Institute of Metrology Thailand (NIMT) Certificate number: TT-0038-23, Certificate number: ER-0101-23

Reference Used During Calibration:

1. Standard Temperature Probe

Model: STS-100 AS500, Serial No: 667692-09,

Due date: 28 Mar 2024

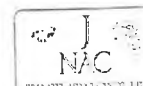
2. Digital Temperature Indicator

Model: DTI-1000 A MK II, Serial No: 071407

00591 Due date: 14 Sep 2024

Uncertainty of Measurement:

The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2, Which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM. Evaluation of measurement data. Guide to the expression of uncertainty in measurement.



Approved signature:

Mr. Panyai Booncharoen
Calibration Department Manager

Calibrated by:

01 Mr. Sorawit Thuchald

02 Miss Jiraporn Lertsomphol

03 Miss Ruangrumpi Phoommit

THIS CERTIFICATE MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

Continuation of Certificate of Calibration Number: CDT-003-67

Page 2 of 2 Pages

Result of Calibration: ☒ Without Adjustment ☐ With Adjustment

Calibration Range: 20 – 40 °C

Function:

Table 3: This equipment was connected with temperature sensor Model: HMP60 S/N: N0330783.
Dimension: Diameter 12 mm. Length 80 mm.

Immersion Depth (mm)	Standard Reading (°C)	UUC Reading (°C)	Error (°C)	Uncertainty (°C)
70	20.054	19.8	-0.3	0.099
70	25.051	24.6	-0.5	0.099
70	30.043	29.5	-0.5	0.099
70	35.035	34.4	-0.6	0.099
70	40.030	39.3	-0.7	0.099

UUC*: Unit Under Calibration

End of Certificate of Calibration



Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI-TIS 17025
CALIBRATION 0367

Relative humidity measurement laboratory
Calibration services department

Certificate No.: CRH-004-67

Page 1 of 2 Pages

MEASUREMENT ITEM

: Relative humidity with data logger

MANUFACTURER

: Novolyne

MODEL/TYPE

: 200 WS 25L8

SERIAL NUMBER

: AS261

ID NUMBER

: 80K 150388

CONDITION AS-RECEIVED

: Used item

CUSTOMER

: ALS Laboratory group (Thailand) Co., Ltd.
104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang,
Khet Suan Luang, Bangkok 10250 Thailand

RECEIVED DATE

: 25 Dec 2023

MEASUREMENT DATE

: 04 Jan 2024

ISSUE DATE

: 05 Jan 2024

ENVIRONMENTAL CONDITIONS:

Ambient condition in the laboratory are as follows:

Temperature: 23.0 ± 3.0 °C
Relative Humidity: 55.0 ± 15.0 %RH

NOTED: The certificate is valid only to the item calibrated on date and place of calibration

TABULATION OF RESULTS:

The table on next page give the measured values

Calibration procedure:

The Relative humidity calibration was done by in-house calibration method as per CL-010 according to comparison method with Standard Calibrated Mirror Hygrometer and Standard Humidity generator chamber.

Traceability:

This instrument was calibrated using standard equipment whose accuracy is traceability through the NIMT (National Metrology Institute of Thailand) to the international system of units (SI) via Certificate number: TH-0079-23.

Uncertainty of Measurement:

The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM Evaluation of measurement data - Guide to the expression of uncertainty in measurement.

Calibrated by:

- ☐ Mr. Sorawat Thachaid
☒ Mr. Siriraporn Lertkumhol
☐ Miss Rungnirapal Phonmit



Approved signatory

Mr. Parinya Booncharoen
Calibration Department Manager

THIS CERTIFICATE REPORT MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

Continuation of Certificate of Calibration Number: CRH-004-67

Page 2 of 2 Pages

Measurement Results:

This equipment was connected with Indoor air quality probe and Displayed (URI) on display Model: HX160 Serial number: N0330783

Result of Calibration: ☒ Without Adjustment ☐ With Adjustment

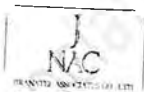
Calibration Range: 20% RH to 80% RH

Table 1: The results of calibration of relative humidity are reported in table below.

Determined (%RH)	Standard Reading (%RH)	UUC Reading (%RH)	Error (%RH)	Uncertainty (%RH)
20.0	20.04	19.6	-1.5	0.40
50.0	51.31	49.7	-2.6	1.0
80.0	82.85	78.9	-4.0	1.6

UUC*: Unit Under Calibration

End of Certificate of Calibration



Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI-TIS 17025
CALIBRATION 0367

Air speed measurement laboratory
Calibration services department



Certificate Number

CWS-016-66

CERTIFICATE OF CALIBRATION

Page 1 of 2 Pages

MEASUREMENT ITEM

: Cup anemometer

MANUFACTURER

: Novolyne

MODEL/TYPE

: Sensor: WS-02F

SERIAL NUMBER

: Data logger: 110-WS-250L D

ID NUMBER

: Sensor: WSD AS445

CONDITION AS-RECEIVED

: Data logger: AS445

CUSTOMER

: RWS JS0436
Used item
ALS Laboratory group (Thailand) Co., Ltd.
104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang,
Khet Suan Luang, Bangkok 10250 Thailand

RECEIVED DATE

: 15 Dec 2023

MEASUREMENT DATE

: 19 Dec 2023

ISSUE DATE

: 20 Dec 2023

ENVIRONMENTAL CONDITIONS:

Ambient condition in the laboratory are as follows:

Temperature: 23.0 ± 3.0 °C
Relative Humidity: 55.0 ± 15.0 %RH
Atmospheric Pressure: 101.01 10 hPa

PLACE OF CALIBRATION

: Eiffel type wind tunnel of Jiranatee Associates Co., Ltd

CALIBRATION CONDITIONS

: Wind tunnel cross section area¹: 900 cm²
Wind direction frontal area²: 100 cm²
Diameter of mounting pipe³: - mm
Blockage ratio of test object⁴: 0.111 [-]

Preconditioning

: 24 hours at ambient conditions

Measurement Condition

: The Average values during measurement are (23.9) °C, (45.2) %RH and (101.9) hPa

TABULATION OF RESULTS:

The table on next page give the measured values.

Calibrated by:

- ☒ Mr. Sorawat Thachaid
☐ Miss Jiraporn Lertkumhol



Approved signatory

Mr. Parinya Booncharoen
Calibration Department Manager

Remarks:

- ¹ Inside cross-section area of the wind tunnel
² Projected cross-section area of the tested object include mounting pipe
³ Diameter of mounting pipe
⁴ Blockage ratio

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Certificate Number
CWS-016-66

Page 2 of 2 Pages

MEASUREMENT RESULTS⁵

The Cup anemometer, Unit Under Calibration (UUC) was exercised at 10 m/s for 5 minutes prior to calibration being performed. The standard air velocity 0.5 m/s to 5 m/s was calculated by a standard air velocity transducer which was installed 50 mm away from wind tunnel nozzle and installed 40 mm away from top of the test section and the standard air velocity 5 m/s to 30 m/s was calculated by a pitot tube with pressure differential pressure meter which was installed 50 mm away from wind tunnel nozzle and installed 40 mm away from top of the test section. UUC was mounted on a round vertical tube of the lower plate at center of test section. The calibration was carried out under both rising and falling air velocity in the range of 1 m/s to 30 m/s at calibration interval of 1 m/s. The results of calibration and associated measurement uncertainties are reported in the table below.

V_{std} (m/s)	Temp. wind tunnel (°C)	Temp. room (°C)	V_{UUC} (m/s)	Error (m/s)	U (k=2) (m/s)
1.039	23.82	23.85	0.9	-0.1	0.31
2.045	23.74	23.85	1.9	-0.1	0.31
3.008	23.60	23.85	2.9	-0.1	0.31
4.133	23.64	23.85	4.0	-0.1	0.31
5.04	23.50	23.85	5.0	0.0	0.31
6.00	24.00	23.85	6.0	0.0	0.31
7.01	23.50	23.85	7.1	0.1	0.31
7.95	23.84	23.85	8.0	0.1	0.31
8.96	23.30	23.85	9.1	0.1	0.31
9.97	23.66	23.85	10.1	0.1	0.31
11.01	23.20	23.85	11.1	0.1	0.31
12.00	23.48	23.85	12.1	0.1	0.31
13.00	23.30	23.85	13.1	0.1	0.42
14.00	23.60	23.85	14.1	0.1	0.51
15.00	23.30	23.85	15.2	0.2	0.31
16.00	23.44	23.85	16.2	0.2	0.40

Remark:

⁵ Calibration results only count for the tested circumstances and environmental conditions during which calibration took place.

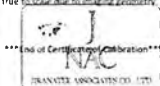
¹ Velocity of standard

² Velocity of Unit Under Calibration

PHOTO OF CALIBRATION SET-UP



Calibration set up of the Cup anemometer calibration in the wind tunnel of Jiranatee Associates Co., Ltd. The Cup anemometer shown may differ from the calibrated one. Remark: The proportion of the set-up is not true to scale due to image proximity.



Certificate Number
CWO-016-66

Page 2 of 2 Pages

MEASUREMENT RESULTS⁵

The wind direction sensor was calibrated against standard rotary encoder by comparison method. During calibration, the measurement was carried out at 45 intervals in clockwise and counterclockwise directions after adjustment has been made. The flow speed of wind tunnel (usually 5 m/s) is kept constant while the sensor is rotated around its vertical axis. The results of calibration and associated measurement uncertainties are reported in the table below.

Air speed m/s	D'_{std} Degree (°)	D'_{UUC} Degree (°)	Error Degree (°)	U (k=2) Degree (°)
	45.000	41	-4	0.83
	90.000	87	-3	0.80
	135.000	132	-3	0.80
	180.000	180	0	0.80
	225.000	228	3	0.80
	270.000	275	5	0.80
	315.000	320	5	0.80
	360.000	359	-1	0.80

Remark:

⁵ Calibration results only count for the tested circumstances and environmental conditions during which calibration took place.

¹ Direction of standard

² Direction of Unit Under Calibration

End of Certificate of Calibration



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Web site: www.jiranatee.com

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NSC-TISI-TIS 17025
CALIBRATION 0367

Wind direction measurement laboratory
Calibration services department



Certificate Number
CWO-016-66

CERTIFICATE OF CALIBRATION

Page 1 of 2 Pages

MEASUREMENT ITEM

: Wind Direction Sensor

MANUFACTURER

: Novallux

MODEL/TYPE

: Sensor: W5-02F

SERIAL NUMBER

: Data logger: 110 WS-25DL-D

ID NUMBER

: Sensor: W50-AS4AS

CONDITION AS-RECEIVED

: Data logger: AS4AS

CUSTOMER

: RYG_F30436

RECEIVED DATE

: Used item

MEASUREMENT DATE

: 15 Dec 2023

ISSUE DATE

: 29 Dec 2023

ENVIRONMENTAL CONDITIONS:

: Ambient condition in the laboratory are as follow.

Temperature : 23.0 ± 3.0 °C

Relative Humidity : 55.0 ± 15.0 %RH

Atmospheric Pressure : 1010.0 hPa

PLACE OF CALIBRATION

: Effel-type wind tunnel of Jiranatee Associates Co., Ltd.

CALIBRATION CONDITION

: Wind tunnel cross-section area¹ : 900 cm²

Win direction frontal area² : 129 cm²

Diameter of mounting pipe³ : - mm

Blockage ratio of test object⁴ : 0.143 [-]

Preconditioning

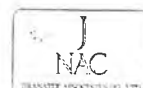
: 24 hours at ambient conditions

Measurement Condition

: The average values during measurement are (23.7)°C, (52.5) %RH and (1019.0) hPa

TABULATION OF RESULTS:

: The table on next page give the measured values.



Approved signatory

Mr. Parinya Booncharoen
Calibration Department Manager

Remark:

¹ Actual cross-section area of the wind tunnel

² Projected cross-section area of the tested object include mounting pipe

³ Diameter of mounting pipe

⁴ Ratio 1 to

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Web site: www.jiranatee.com

Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI-TIS 17025
CALIBRATION 0367

Temperature measurement laboratory
Calibration services department



CERTIFICATE OF CALIBRATION

Certificate No. : CDT-064-66

Page 1 of 2 Pages

MEASUREMENT ITEM

: Data Logger with Temperature sensor

MANUFACTURER

: Novallux

MODEL/TYPE

: 110 WS-25DL-D

SERIAL NUMBER

: AS445

ID NUMBER

: RYG_F30436

CONDITION AS-RECEIVED

: Used item

CUSTOMER

: ALS laboratory group (Thailand) Co., Ltd.

: 104 Phatthanakan 40, Phatthanakan Rd.,

Khwaeng Suan Luang, Khet Suan Luang,

Bangkok 10250 Thailand.

RECEIVED DATE

: 15 Dec 2023

MEASUREMENT DATE

: 19 Dec 2023

ISSUE DATE

: 20 Dec 2023

ENVIRONMENTAL CONDITIONS:

: Ambient condition in the laboratory are as follow.

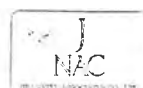
Temperature : 23.0 ± 3.0 °C

Relative Humidity : 55.0 ± 15.0 %RH

NOTED: The certificate is valid only to the item calibrated on date and place of calibration.

TABULATION OF RESULTS:

: The table on next page give the measured values



Approved signatory

Mr. Parinya Booncharoen
Calibration Department Manager

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Result of Calibration: ☒ Without Adjustment ☐ With Adjustment

Calibration Range: 20 ~ 40 °C

Function: Table 3: This equipment was connected with temperature sensor Model: HMP60 5/N: R1131113, Dimension: Diameter 12 mm, Length 80 mm.

Immersion Depth (mm)	Standard Reading (°C)	UUC Reading (°C)	Error (°C)	Uncertainty (°C)
70	20.062	20.0	-0.1	0.099
70	25.051	25.0	-0.1	0.14
70	30.041	30.0	-0.1	0.16
70	35.040	34.8	-0.2	0.099
70	40.026	39.8	-0.2	0.099

UUC*: Unit Under Calibration
Remark: The reported uncertainty of measurement is 0.14, 0.16, based on standard uncertainty multiplied by a coverage factor k=2.21 providing a level of confidence of approximately 95%.

End of Certificate of Calibration



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E-mail : jnac@jiranatee.com
Web site : www.jiranatee.com

Accredited calibration laboratory
ISO/IEC 17025:2017
MSC-TIS-17025
CALIBRATION 0367

Relative humidity measurement laboratory
Calibration services department

CERTIFICATE OF CALIBRATION

Certificate No. : CRH-014-66

Page 1 of 2 Pages

MEASUREMENT ITEM

MANUFACTURER : Novolyne
MODEL/TYPE : 110-WS-25DL-D
SERIAL NUMBER : AS445
ID NUMBER : RYG_FS0436
CONDITION AS-RECEIVED : Used item
CUSTOMER : ALS laboratory group (Thailand) Co., Ltd
104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang,
Khet Suan Luang, Bangkok 10250 Thailand

RECEIVED DATE : 15 Dec 2023
MEASUREMENT DATE : 19 Dec 2023
ISSUE DATE : 20 Dec 2023

ENVIRONMENTAL CONDITIONS:

Ambient condition in the laboratory are as follow:
Temperature : 23.0 ± 3.0 °C
Relative Humidity : 55.0 ± 15.0 %RH

NOTED: The certificate is valid only to the item calibrated on date and place of calibration.

TABULATION OF RESULTS:

The table on next page give the measured values

Calibration procedure:

The Relative humidity calibration was done by in house calibration method as WI-CL-010 according to comparison method with Standard Calibrated Mirror hygrometer and Standard Humidity generator chamber.

Traceability:

This instrument was calibrated using standard equipment whose accuracy is traceability through the NIMT (National Metrology Institute of Thailand) to the International system of units (SI) via Certificate number: TH-0079-23

Uncertainty of Measurement:

The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM "Evaluation of measurement data - Guide to the expression of uncertainty in measurement".

Calibrated by:

☒ Mr. Sorawat Thachachai
☒ Miss Ultraporn Lertsomphol
☐ Miss Ruangtumpai Phoommit



Approved signature:

Mr. Parinya Booncharoen
Calibration Department Manager

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Measurement Results:

This equipment was connected with Relative humidity Sensor on display Model: HMP60, Serial number: R1131113

Result of Calibration: ☒ Without Adjustment ☐ With Adjustment

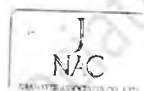
Calibration Range: 20%RH to 80%RH

The results of calibration of relative humidity are reported in table below.

Determined (%RH)	Standard Reading (%RH)	UUC Reading (%RH)	Error (%RH)	Uncertainty (%RH)
20.0	20.15	18.4	-1.8	0.67
50.0	51.51	48.0	-3.5	0.70
80.0	82.80	76.9	-5.9	0.66

UUC*: Unit Under Calibration

End of Certificate of Calibration



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Web site : www.jiranatee.com

Accredited calibration laboratory
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MSC-TIS-17025
CALIBRATION 0367

Pressure measurement laboratory
Calibration services department



MSC-TIS-17025
CALIBRATION 0367

CERTIFICATE OF CALIBRATION

Certificate No. : CPR-014-66

Page 1 of 2 Pages

MEASUREMENT ITEM

MANUFACTURER : Dig tai barometer
MODEL/TYPE : Novolyne
Sensor: 110-WS-25BP
Data logger: 110-WS-25DL-D
SERIAL NUMBER : Sensor: BP-AS445
Data logger: AS445
ID NUMBER : RYG_FS0436
CONDITION AS-RECEIVED : Used item
CUSTOMER : ALS laboratory group (Thailand) Co., Ltd
104 Phatthanakan 40, Phatthanakan Rd,
Khwaeng Suan Luang, Khet Suan Luang,
Bangkok 10250 Thailand

RECEIVED DATE : 15 Dec 2023
MEASUREMENT DATE : 19 Dec 2023
ISSUE DATE : 20 Dec 2023

Calibration procedure:

The pressure calibration was done by in house calibration method as WI-CL-003 according to comparison method with Digital pressure calibrator based on DKD-R K 1

Traceability:

The measurement results are traceable to the international system of units (SI) through the NIMT (National Metrology Institute of Thailand) via Certificate number: MP-0205-22

The reported uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%.

CONDITION OF THIS RESULT OF CALIBRATION:

1 Reference Standard Instrument

Instrument	Model	Serial No.	Certificate No.	Due Date
Absolute Pressure Transducer	CPG2500	4100126P	MP-0205-22	02 Dec 2023

1 Calibration effort for calibration sequence C

2 The UUC* was installed in vertical orientation above reference standard instrument and center of UUC* was used as the reference level

3 Calibration conditions

4 Condition
Pressure transmitting medium : ☒ Normal ☐ Abnormal
P₁ (20°C, 1 bar) : Air
H₂O : 1.19 kg/m³
H₂O : (55-15) %
T_{amb} : (23±5) °C
P_{unc} : (10/10±10) mbar

5 The certificate is valid only to the item calibrated on date and place of calibration

Calibrated by:

☒ Mr. Sorawat Thachachai
☐ Miss Ultraporn Lertsomphol



Approved signature:

Mr. Parinya Booncharoen
Calibration Department Manager

THIS CERTIFICATE REPORT MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

CERTIFICATE OF CALIBRATION

Certificate No. : CPR-014-66

Page 2 of 2 Pages

MEASUREMENT RESULTS : ☒ Without adjustment ☐ With adjustment

MEASUREMENT IN THE RANGE OF : 950 mbar to 1050 mbar

The results of calibration and associated measurement uncertainties are reported in the table below

STD (mbar)	UUC* (mbar)	Error (mbar)	Uncertainty (k=2) (mbar)
950.00	950.8	0.8	0.37
970.00	970.5	0.5	0.37
990.01	990.2	0.2	0.37
1010.00	1009.9	-0.1	0.37
1030.01	1029.6	-0.4	0.57
1050.00	1049.0	-1.0	0.37

Note: UUC* Unit Under Calibration

* To convert the result in report unit to Pa should be multiply by 100

End of certificate



CALIBRATION REPORT

Calibration Number: RG-05122023

Page 1 of 2 Pages

Measurement Item : Rain gauge with data logger

Manufacturer : Data logger: Novelynx
Rain gauge: Novelynx

Model/Type : Data logger: 110-WS 250L D
Rain gauge: 110-WS 25RD

Serial Number : Data logger: A5445
Rain gauge: RG-A5445

ID NO : RYG_P50436

Customer : ALS laboratory group (Thailand) Co., Ltd.
104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang,
Bangkok 10250, Thailand.

Environmental Condition:

The measurement was carried out in an ambient temperature of (26-31°C, and relative humidity of (50-10)%

Measurement Method:

The Rain gauge, Unit Under Calibration (UUC) was calibrated by Precision reference bottle with flow adjuster at low rate 0.0 mm per minute or 1 tipping every 20 seconds. The tipping number was determined by procedures below

- Obtain rain gauge inlet area.
Rain gauge precise diameter in cm = Diameter/P = R (radius)
Rain gauge area = $\pi R^2 \times 14$ (UUC diameter=20.3 cm, UUC radius=10.15 cm)
Rain gauge area = 323.6 cm²
- Obtain theoretical correct rain gauge answer (number of tipplings) using 323.6 cm² inlet area and 0.5 L of rain.
a) 10,000 cm³ / 323.6 cm² inlet area = 30.90 (rain gauge area = 1/30.90 of square meter)
b) 30.90 * 0.5 L volume = 15.45 mm (mm of rain over 1 m² surface) 500 ml of rain volume on the rain gauge area = 15.45 mm of rain.
c) Number of tipping = 15.45 / 0.25 mm = 62 tipplings

Note: Rain gauge is fully cleaned and leveled prior the calibration performed.

Measurement Date : Dec 19, 2023

Issued Date : Dec 20, 2023

Performed by
☒ Mr. Surawit Thachulad
☒ Miss Jiraporn Lertsomplut



Approved Signature:
Mr. Parinya Bancharoen,
Calibration Department Manager

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Continuation of Calibration of Calibration Number

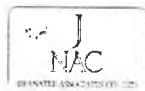
Calibration Number: RG-05122023
Page 2 of 2 Pages

Result of Calibration: ☒ Without Adjustment ☐ With Adjustment
The results of calibration are reported in table below:

Quantity of H ₂ O (ml)	Determined Tipping	Tipping count	Acceptable Tipping count
600	62	60	60 - 64
500	62	60	60 - 64
600	62	60	60 - 64
500	62	60	60 - 64
600	62	60	60 - 64

Remark: The procedure is made to verify the correct reading of the Unit under Calibration rain gauge when a precise volume of water falls into its cone. We suggest that the number of tipping should be within ±2% different from the 62 tipping (correct range = 60-64 tipping) it means that the rain gauge meets the manufacturer acceptable limit

End of calibration report



Certificate Number

CWS 015-65

CERTIFICATE OF CALIBRATION

Page 1 of 2 Pages

MEASUREMENT ITEM

: Cup anemometer

MANUFACTURER

: Novelynx

MODEL/TYPE

: Sensor: WS-03F

SERIAL NUMBER

: Data logger: 110-WS 250L D

ID NUMBER

: Sensor: WSD-A5444

CONDITION AS RECEIVED

: Data logger: A5444

CUSTOMER

: RYG_P50435

RECEIVED DATE

: Used item

MEASUREMENT DATE

: ALS laboratory group (Thailand) Co., Ltd.

ISSUE DATE

: 104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand.

ENVIRONMENTAL CONDITIONS:

: 15 Dec 2023

Ambient condition in the laboratory are as follows:

: 19 Dec 2023

Temperature

: 20 Dec 2023

Relative Humidity

: 23.0 ± 3.0 °C

Atmospheric Pressure

: 55.0 ± 15.0 %RH

PLACE OF CALIBRATION

: 1010 ± 10 hPa

CALIBRATION CONDITIONS

: Effel type wind tunnel of Jirantee Associates Co., Ltd.

Wind tunnel cross-section area¹

: 900 cm²

Wind direction frontal area²

: 100 cm²

Diameter of mounting pipe³

: 10 mm

Blockage ratio of test object⁴

: 0.11 [-]

Preconditioning

: 24 hours at ambient conditions.

Measurement Condition

: The average values during measurement are (23.9) °C, (53.0) %RH and (1010.5) hPa

TABULATION OF RESULTS

: The table on next page give the measured values

Calibrated by:

:

Approved by:

:

Mr. Surawit Thachulad

: Mr. Parinya Bancharoen

Mr. Jiraporn Lertsomplut

: Calibration Department Manager

Remark:

: 1. Nominal cross-section area of the wind tunnel

2. Projected frontal area of the tested object include mounting pipe

: 3. Diameter of mounting pipe

4. Ratio of the

: 10/12/24

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Certificate Number
CWS-015-66

Page 2 of 2 Pages

MEASUREMENT RESULTS⁵

The Cup anemometer, Unit Under Calibration (UUC) was exercised at 10 m/s for 5 minutes prior to calibration being performed. The standard air velocity 0.5 m/s to 5 m/s was calculated by a standard air velocity transducer which was installed 50 mm away from wind tunnel nozzle and installed 40 mm away from top of the test section and the standard air velocity 5 m/s to 30 m/s was calculated by a pitot tube with precision differential pressure meter which was installed 50 mm away from wind tunnel nozzle and installed 40 mm away from top of the test section. UUC was mounted on a round vertical tube of the lower plate at center of test section. The calibration was carried out under both rising and falling air velocity in the range of 1 m/s to 16 m/s at calibration interval of 1 m/s. The results of calibration and associated measurement uncertainties are reported in the table below.

V _{std} (m/s)	Temp. wind tunnel (°C)	Temp. room (°C)	V _{uuc} (m/s)	Error (m/s)	U (k=2) (m/s)
1.015	23.82	23.90	0.8	-0.2	0.31
2.069	23.94	23.90	1.9	-0.2	0.31
3.005	23.76	23.90	2.9	-0.1	0.31
4.155	23.76	23.90	4.0	-0.2	0.31
5.06	23.70	23.90	5.0	-0.1	0.31
6.02	24.08	23.90	6.0	0.0	0.31
7.01	23.68	23.90	7.1	0.0	0.31
7.97	23.98	23.90	8.0	0.1	0.31
8.96	23.54	23.90	9.1	0.1	0.31
10.03	23.86	23.90	10.2	0.1	0.31
11.02	23.44	23.90	11.1	0.1	0.31
12.04	23.80	23.90	12.2	0.1	0.31
13.02	23.44	23.90	13.2	0.2	0.31
14.01	23.72	23.90	14.2	0.1	0.31
15.03	23.50	23.90	15.2	0.2	0.31
16.03	23.52	23.90	16.3	0.2	0.31

Remark:

¹ Calibration results only count for the tested circumstances and environmental conditions during which calibration took place

² Velocity of standard

³ Velocity of Unit Under Calibration

PHOTO OF CALIBRATION SET-UP



Calibration set up of the Cup anemometer calibration in the wind tunnel of Jiranatee Associates Co., Ltd. The Cup anemometer shown may differ from the calibrated one. Remark: The proportion of the set up is not true to scale due to imaging geometry.



Page 2 of 2 Pages

MEASUREMENT RESULTS⁵

The wind direction sensor was calibrated against standard rotary encoder by comparison method. During calibration, the measurement was carried out at 45° intervals in clockwise and counterclockwise directions after offset adjustment has been made. The flow speed of wind tunnel (usually 5 m/s) is kept constant while the sensor is rotated around its vertical axis. The results of calibration and associated measurement uncertainties are reported in the table below.

Air speed m/s	D _{std} Degree (°)	D _{uuc} Degree (°)	Error Degree (°)	U (k=2) Degree (°)
	45.000	42	-3	0.80
	90.000	87	-3	0.80
	135.000	132	-3	0.80
4.98	180.000	180	0	0.80
	225.000	227	2	0.80
	270.000	274	4	0.80
	315.000	320	5	0.80
	360.000	350	-1	0.80

Remark:

Calibration results only count for the tested circumstances and environmental conditions during which calibration took place

¹ Direction of standard

² Direction of Unit Under Calibration

End of Certificate of Calibration



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Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI TIS 17025
CALIBRATION 0367
Wind direction measurement, laboratory
Calibration services department



Certificate Number
CWD-015-66

CERTIFICATE OF CALIBRATION

Page 1 of 2 Pages

MEASUREMENT ITEM : Wind Direction Sensor
MANUFACTURER : Novalyne
MODEL/TYPE : Sensor: WS-02F
Data logger: 110-WS-25DL-D
SERIAL NUMBER : Sensor: WSD A5444
Data logger: A5444
ID NUMBER : RYG_F50435
CONDITION AS-RECEIVED : Use item
CUSTOMER : ALS laboratory group (Thailand) Co., Ltd.
104 Phatthanakan Rd, Phatthanakan Rd, Khwaeng Suan Luang,
Khet Suan Luang, Bangkok 10250 Thailand.

RECEIVED DATE : 15 Dec 2023
MEASUREMENT DATE : 19 Dec 2023
ISSUE DATE : 20 Dec 2023

ENVIRONMENTAL CONDITIONS:

Ambient condition in the laboratory are as follow:

Temperature : 23.0 ± 3.0 °C
Relative Humidity : 55.0 ± 15.0 %RH
Atmospheric Pressure : 1010 ± 10 hPa

PLACE OF CALIBRATION : Effel type wind tunnel of Jiranatee Associates Co., Ltd

CALIBRATION CONDITION : Wind tunnel cross-section area¹ : 900 cm²
Win direction frontal area² : 129 cm²
Diameter of mounting pipe³ : mm
Blockage ratio of test object⁴ : 0.143 [-]

Preconditioning : 24 hours at ambient conditions

Measurement Condition : The average values during measurement are (23 °C, (54.9) %RH and (1013.1) hPa

TABULATION OF RESULTS:
The table on next page give the measured values.

Calibrated by:
☒ Mr. Sorawit Thachalad
☒ Miss Jitraporn Lertrongsom



Approved signatory
Mr. Pannisa Booncharoen
Calibration Department Manager

Remark:

¹ Inside of observation area of the wind tunnel

² Free inlet cross section area of the tested object include mounting pipe

³ Diameter of mounting pipe

⁴ Ratio to

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Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI TIS 17025
CALIBRATION 0367
Temperature measurement laboratory
Calibration services department



CERTIFICATE OF CALIBRATION

Certificate No. : COT-063-66

Page 1 of 2 Pages

MEASUREMENT ITEM : Data Logger with Temperature sensor
MANUFACTURER : Novalyne
MODEL/TYPE : 110-WS-25DL-D
SERIAL NUMBER : A5444
ID NUMBER : RYG_F50435
CONDITION AS-RECEIVED : Use item
CUSTOMER : ALS laboratory group (Thailand) Co., Ltd.
104 Phatthanakan Rd, Phatthanakan Rd, Khwaeng Suan Luang,
Khet Suan Luang, Bangkok 10250 Thailand.

RECEIVED DATE : 15 Dec 2023
MEASUREMENT DATE : 19 Dec 2023
ISSUE DATE : 20 Dec 2023

ENVIRONMENTAL CONDITIONS:

Ambient condition in the laboratory are as follow:

Temperature : 23.0 ± 3.0 °C
Relative Humidity : 55.0 ± 15.0 %RH

NOTED: The certificate is valid only to the item calibrated on date and place of calibration.

TABULATION OF RESULTS:

The table on next page give the measured values.

Calibration procedure:

The temperature calibration was done by In-House calibration method using WP-CI-001 according to comparison method with standard digital temperature indicator and standard temperature probe. The temperature scale use was based on ITS 90.

Traceability:

The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM. Evaluation of measurement data - Guide to the expression of uncertainty in measurement.

Reference Used During Calibration:

1. Standard Temperature Probe
Model: STS 100 A500, Serial No.: 667682 00,
Due date: 28 Mar 2024
2. Digital Temperature Indicator
Model: DTI-1000 A MK II, Serial No.: 671407
05591 Due date: 14 Sep 2024

Uncertainty of Measurement:
The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM. Evaluation of measurement data - Guide to the expression of uncertainty in measurement.

Calibrated by:
☒ Mr. Sorawit Thachalad
☒ Miss Jitraporn Lertrongsom
☒ Miss Rungpram Poommit



Approved signatory
Mr. Pannisa Booncharoen
Calibration Department Manager

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Result of Calibration: ☒ Without Adjustment ☐ With Adjustment

Calibration Range: 20 ~ 40 °C

Function:

Table 3: This equipment was connected with temperature sensor Model: HMP60 S/N: R1131112.
Dimension: Diameter 12 mm. Length 80 mm.

Immersion Depth (mm)	Standard Reading (°C)	UUC Reading (°C)	Error (°C)	Uncertainty (°C)
70	20.054	19.6	-0.5	0.069
70	25.048	24.5	-0.5	0.099
70	30.039	29.4	-0.6	0.099
70	35.033	34.2	-0.8	0.14
70	40.025	39.2	-0.8	0.14

UUC*: Unit Under Calibration

Remark: The reported uncertainty of measurement is 0.14, based on standard uncertainty multiplied by a coverage factor k=2.21 providing a level of confidence of approximately 95%.

End of Certificate of Calibration



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Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TISI-TIS 17025
CALIBRATION 0367

Relative humidity measurement laboratory
Calibration services department

CERTIFICATE OF CALIBRATION

Certificate No. : CRH-013-66

Page 1 of 2 Pages

MEASUREMENT ITEM

MANUFACTURER
MODEL/TYPE
SERIAL NUMBER
ID NUMBER
CONDITION AS-RECEIVED
CUSTOMER

Relative humidity with data logger

: Novalyne
: 110 WS-25DL-D
: AS444
: RYG_FSD435
: Used item
: ALS laboratory group (Thailand) Co., Ltd.
104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang,
Khet Suan Luang, Bangkok 10250 Thailand.

RECEIVED DATE : 15 Dec 2023
MEASUREMENT DATE : 19 Dec 2023
ISSUE DATE : 20 Dec 2023

ENVIRONMENTAL CONDITIONS:

Ambient condition in the laboratory are as follow:

Temperature : 23.0 ± 3.0 °C
Relative Humidity : 55.0 ± 15.0 %RH

NOTED: The certificate is valid only to the item calibrated on date and place of calibration.

TABULATION OF RESULTS:

The table on next page give the measured values

Calibrated by:
☐ Mr. Sorawat Thachalad
☒ Miss. Jiraborn Lensomphol
☐ Miss. Jungsiraporn Phoomin



Approved signatory: Mr. Parinya Booncharoen
Calibration Department Manager

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Measurement Results:

The equipment was connected with Relative humidity Sensor on display. Model: HMP60, Serial number : R1131112

Result of Calibration: ☒ Without Adjustment ☐ With Adjustment

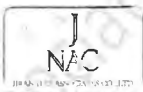
Calibration Range: 20%RH to 80%RH

The results of calibration of relative humidity are reported in table below:

Determined (%RH)	Standard Reading (%RH)	UUC Reading (%RH)	Error (%RH)	Uncertainty (%RH)
20.0	20.07	18.3	-1.8	0.14
50.0	51.41	49.0	-3.4	0.14
80.0	82.86	77.3	-5.5	0.66

UUC*: Unit Under Calibration

End of Certificate of Calibration



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CALIBRATION 0367

Pressure measurement laboratory
Calibration services department



CERTIFICATE OF CALIBRATION

Certificate No. : CPR-013-66

Page 1 of 2 Pages

MEASUREMENT ITEM

MANUFACTURER
MODEL/TYPE
SERIAL NUMBER
ID NUMBER
CONDITION AS-RECEIVED
CUSTOMER

: Digital barometer
: Novalyne
: Sensor: 110-WS-25BP
Data logger: 110-WS-25DL-D
: Sensor: BP-AS444
Data logger: AS444
: RYG_FSD435
: Used item

: ALS laboratory group (Thailand) Co., Ltd.
104 Phatthanakan 40, Phatthanakan Rd,
Khwaeng Suan Luang, Khet Suan Luang,
Bangkok 10250 Thailand

RECEIVED DATE : 15 Dec 2023
MEASUREMENT DATE : 19 Dec 2023
ISSUE DATE : 20 Dec 2023

Calibration procedure:

The pressure calibration was done by in house calibration method as WI CL-003 according to comparison method with Digital pressure calibrator based on DKD-R 6.1

Traceability:

The measurement results are traceable to the international system of units (SI) through the NIMT (National Metrology Institute of Thailand) via Certificate number: MP 0205 22

The reported uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%

CONDITION OF THIS RESULT OF CALIBRATION:

1. Reference Standard Instrument:

Instrument	Model	Serial No.	Certificate No.	Due Date
Absolute Pressure Transducer	CPG2500	4100126P	MP-0205-22	02 Dec 2023

1. Calibration effort for calibration sequence C

2. The UUC* was installed in vertical orientation above reference standard instrument and center of UUC* was used as the reference level

3. Calibration conditions:

4. Condition: ☒ Normal ☐ Abnormal
Pressure transmitting medium : Air
p₁ (20°C, 1 bar) : 1.19 kg/m³
p_{max} : (55±25) %
T_{env} : (23±1) °C
p_{unc} : (1010±10) mbar

5. The certificate is valid only to the item calibrated on date and place of calibration

Calibrated by:
☐ Mr. Sorawat Thachalad
☒ Miss. Jiraborn Lensomphol



Approved signatory: Mr. Parinya Booncharoen
Calibration Department Manager

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Calibration services department



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CALIBRATION 0367

CERTIFICATE OF CALIBRATION

Certificate No. : CPR-013-66

Page 2 of 2 Pages

MEASUREMENT RESULTS : ☒ Without adjustment ☐ With adjustment

CALIBRATION IN THE RANGE OF : 950 mbar to 1050 mbar

The results of calibration and associated measurement uncertainties are reported in the table below

STD (mbar)	UUC* (mbar)	Error (mbar)	Uncertainty (k=2) (mbar)
950.00	950.8	0.8	0.37
970.00	970.5	0.5	0.37
990.01	990.2	0.2	0.37
1010.00	1009.9	-0.1	0.37
1030.02	1029.4	-0.6	0.40
1050.00	1049.0	-1.0	0.37

Note: UUC* Unit Under Calibration

To convert the result in report unit to Pa should be multiply by 100

End of certificate



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CALIBRATION REPORT

Calibration Number : RG-04122023

Page 1 of 2 Pages

Measurement Item : Rain gauge with data logger

Manufacturer : Data logger: Novatlynx
Rain gauge: Novatlynx

Model/Type : Data logger: 110 WS-25DI-D
Rain gauge: 110 WS-25RG

Serial Number : Data logger: A5444
Rain gauge: RG A5444

ID NO : RYG_F50435

Customer : ALS laboratory group (Thailand) Co., Ltd
104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang,
Bangkok 10250, Thailand

Environmental Condition

The measurement was carried out in an ambient temperature of (25±0)°C and relative humidity of (50±15)%

Measurement Method

The Rain gauge, Unit Under Calibration (UUC) was calibrated by Precision reference bottle with flow adjuster at low rate 0.6 mm per minute or 1 lipping every 20 seconds. The lipping number was determined by procedures below

1. Obtain rain gauge inlet area:

Rain gauge precise diameter in cm = Diameter/2 = R (radius)

Rain gauge area= πR^2 (4 UUC diameter=20.3 cm, UUC radius=10.15 cm)

Rain gauge area= 323.6 cm²

2. Obtain theoretical correct rain gauge answer (number of lippings) using 323.6 cm² inlet area and 0.6 L of rain

a) 10,000 cm³ / 323.6 cm² inlet area = 30.90 (rain gauge area = 1/30.90 of square meter)

b) 30.90 * 0.6 L volume=18.45 mm (mm of rain over 1 m² surface) 500 ml of rain volume on the rain gauge area = 15.45 mm of rain

c) Number of lipping=15.45 / 0.25 mm= 62 lippings

Note: Rain gauge is fully cleaned and leveling prior the calibration performed

Measurement Date : Dec 19, 2023

Issued Date : Dec 20, 2023

Performed by

☐ Mr. Sorawit Thachaiad

☒ Miss Jitraporn Lertsomphol



Approved Signature:

Mr. Pannya Booncharoen
Calibration Department Manager

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Continuation of Calibration of Calibration Number

Calibration Number: RG 04122023

Page 2 of 2 Pages

Result of Calibration: ☒ Without Adjustment ☐ With Adjustment

The results of calibration are reported in table below:

Quantity of H ₂ O (ml)	Determined Tipping	Tipping count	Acceptable Tipping count
500	62	64	60 ~ 64
500	62	63	60 ~ 64
500	62	63	60 ~ 64
500	62	64	60 ~ 64
500	62	63	60 ~ 64

Remark: The procedure is made to verify the correct reading of the Unit under Calibration rain gauge when a precise volume of water falls into its cone. We suggest that the number of lipping should be within ±2% different from the 62 lipping (correct range; 60-64 lipping) it means that the rain gauge meets the manufacturer acceptable limit

End of calibration report



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CALIBRATION 0367

Alt speed measurement laboratory
Calibration services department



NSC-TIS1-TIS 17025
CALIBRATION 0367

Certificate Number

CWS 004-67

CERTIFICATE OF CALIBRATION

Page 2 of 2 Pages

MEASUREMENT ITEM : Cup anemometer
MANUFACTURER : Novatlynx
MODEL/TYPE : Sensor: WS-027

SERIAL NUMBER : Data logger: 200 WS 2518

Serial: W50 A5244

Data logger: A5244

ID NUMBER : BKX_F50887

CONDITION AS-RECEIVED : Used item

CUSTOMER : ALS laboratory group (Thailand) Co., Ltd

104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand

RECEIVED DATE : 25 Dec 2023

MEASUREMENT DATE : 04 Jan 2024

ISSUE DATE : 05 Jan 2024

ENVIRONMENTAL CONDITIONS:

Ambient condition in the laboratory are as follows:

Temperature : 23.0 ± 3.0 °C

Relative Humidity : 55.0 ± 15.0 %RH

Atmospheric Pressure : 1010 ± 10 hPa

PLACE OF CALIBRATION

Eiffel type wind tunnel of Jiranatee Associates Co., Ltd

CALIBRATION CONDITIONS

Wind tunnel cross-section area¹ 900 cm²

Wind direction frontal area² 100 cm²

Diameter of mounting plate³ - mm

Blockage ratio of test object⁴ 0.111 %

Preconditioning

24 hours at ambient conditions

Measurement Condition

The average values during measurement are (23.8) °C, (52.2) %RH and (1010.8) hPa

TABULATION OF RESULTS:

The table on next page give the measured values

Calibrated by:

Mr. Sorawit Thachaiad

Miss Jitraporn Lertsomphol



Approved signature:

Mr. Pannya Booncharoen
Calibration Department Manager

Remarks:

¹ Nozzle cross-section area of the wind tunnel

² Projected cross-section area of the tested object include mounting plate

³ Diameter of mounting plate

⁴ Ratio %

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

MEASUREMENT RESULTS³

The Cup anemometer, Unit Under Calibration (UUC) was exercise at 10 m/s for 5 minutes prior to calibration being performed. The standard air velocity 0.5 m/s to 5 m/s was calculated by a standard air velocity transducer which was installed 50 mm away from wind tunnel nozzle and installed 40 mm away from top of the test section and the standard air velocity 5 m/s to 30 m/s was calculated by a pitot tube with precision differential pressure meter which was installed 50 mm away from wind tunnel nozzle and installed 40 mm away from top of the test section. UUC was mounted on a round vertical tube of the lower plate at center of test section. The calibration was carried out under both rising and falling air velocity in the range of 1 m/s to 16 m/s at calibration interval of 1 m/s. The results of calibration and associated measurement uncertainties are reported in the table below.

V_{ref} (m/s)	Temp. wind tunnel (°C)	Temp. room (°C)	V_{uc} (m/s)	Error (m/s)	U (k=2) (m/s)
1.530	23.89	23.75	0.8	-0.2	0.31
2.097	23.64	23.75	1.9	-0.2	0.31
2.598	23.60	23.75	2.9	-0.1	0.31
4.160	23.64	23.75	4.0	-0.2	0.31
5.06	23.40	23.75	5.1	0.0	0.31
6.00	23.80	23.75	6.1	0.0	0.31
7.03	23.34	23.75	7.0	0.0	0.31
7.98	23.62	23.75	8.0	0.0	0.31
8.95	23.15	23.75	9.1	0.1	0.31
10.03	23.50	23.75	10.2	0.2	0.31
11.04	23.10	23.75	11.2	0.2	0.31
12.01	23.50	23.75	12.2	0.2	0.31
13.04	23.18	23.75	13.3	0.3	0.31
14.07	23.50	23.75	14.4	0.3	0.31
15.03	23.22	23.75	15.4	0.3	0.31
16.03	23.48	23.75	16.3	0.3	0.31

Remark:

¹ Calibration results only count for the tested circumstances and environmental conditions during which calibration took place

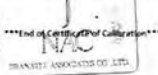
² Velocity of standard

³ Velocity of Unit Under Calibration

PHOTO OF CALIBRATION SET-UP



Calibration set-up of the Cup anemometer calibration in the wind tunnel of Jiranatee Associates Co., Ltd. The Cup anemometer shown may differ from the calibrated one. Remark: The proportion of the set-up is not true, it is only for illustrating purpose.



Certificate Number

CWD-004-67

MEASUREMENT RESULTS⁵

The wind direction sensor was calibrated against standard rotary encoder by comparison method. During calibration, the measurement was carried out at 45° intervals in clockwise and counterclockwise directions after offset adjustment has been made. The flow speed of wind tunnel (usually 5 m/s) is kept constant while the sensor is rotated around its vertical axis. The results of calibration and associated measurement uncertainties are reported in the table below.

Air speed m/s	D'_{me} Degree (°)	D'_{ref} Degree (°)	Error Degree (°)	U (k=2) Degree (°)
45.000	42	42	-3	0.80
90.000	87	87	-3	0.80
135.000	132	132	-3	0.80
180.000	179	179	-1	0.80
225.000	226	226	1	0.80
270.000	273	273	3	0.80
315.000	319	319	4	0.80
360.000	359	359	-1	0.80

Remark:

¹ Calibration results only count for the tested circumstances and environmental conditions during which calibration took place

² Direction of standard

³ Direction of Unit Under Calibration

End of Certificate of Calibration



JIRANATEE ASSOCIATES CO., LTD.

Jiranatee Associates Co., Ltd.
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Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TIS1-TIS 17025
CALIBRATION 0367

Wind direction measurement laboratory
Calibration services department



NSC-TIS1-TIS 17025
CALIBRATION 0367

Certificate Number

CWD-004-67

CERTIFICATE OF CALIBRATION

MEASUREMENT ITEM

Wind Direction Sensor

MANUFACTURER

Novalytx

MODEL/TYPE

Sensor: WS-02F

SERIAL NUMBER

Data logger: 200-WS-25LB

ID NUMBER

Sensor: WS0-AS244

CONDITION AS-RECEIVED

Data logger: AS244

CUSTOMER

BKK_F50887

RECEIVED DATE

Used item

MEASUREMENT DATE

ALS Laboratory group (Thailand) Co., Ltd.

ISSUE DATE

104 Phathanakan 40, Phathanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand

ENVIRONMENTAL CONDITIONS:

Ambient condition in the laboratory are as follows:

Temperature: 23.0 ± 3.0 °C

Relative Humidity: 55.0 ± 15.0 %RH

Atmospheric Pressure: 1010.2 ± 10 hPa

PLACE OF CALIBRATION

Eiffel type wind tunnel of Jiranatee Associates Co., Ltd

CALIBRATION CONDITION

Wind tunnel cross-section area¹: 900 cm²Wind direction frontal area²: 129 cm²Diameter of mounting plate³: - mmBlockage ratio of test object⁴: 0.143 [-]

Preconditioning

28 hours at ambient conditions

Measurement Condition

The average values during measurement are (23.67 °C, (57.5) %RH and (1011.1) hPa

TABULATION OF RESULTS:

The table on next page give the measured values

Calibrated by:

Z. Mr. Sorawit Thuchalad

Miss Jiraporn Lertsomphol



Approved signatory

Mr. Parinya Booncharoen
Calibration Department Manager

Remark:

¹ Possible cross-section area of the wind tunnel² Projected cross-section area of the tested object include mounting plate³ Diameter of mounting plate⁴ Ratio to

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY



JIRANATEE ASSOCIATES CO., LTD.

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Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TIS1-TIS 17025
CALIBRATION 0367

Temperature measurement laboratory
Calibration services department



NSC-TIS1-TIS 17025
CALIBRATION 0367

CERTIFICATE OF CALIBRATION

Certificate No.: CDT-002-67

MEASUREMENT ITEM

Data Logger with Temperature sensor

MANUFACTURER

Novalytx

MODEL/TYPE

200-WS-25LB

SERIAL NUMBER

AS244

ID NUMBER

BKK_F50887

CONDITION AS-RECEIVED

Used item

CUSTOMER

ALS Laboratory group (Thailand) Co., Ltd.

104 Phathanakan 40, Phathanakan Rd, Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250 Thailand

RECEIVED DATE

25 Dec 2023

MEASUREMENT DATE

04 Jan 2024

ISSUE DATE

05 Jan 2024

ENVIRONMENTAL CONDITIONS:

Ambient condition in the laboratory are as follows:

Temperature: 23.0 ± 3.0 °C

Relative Humidity: 55.0 ± 15.0 %RH

NOTED:

The certificate is valid only to the item calibrated on date and place of calibration

TABULATION OF RESULTS:

The table on next page give the measured values

Calibration procedure:

The temperature calibration was done by in-house calibration method as: WH-CL-001 according to comparison method with standard digital temperature indicator and standard temperature probe. The temperature scale was based on ITS 90.

Traceability:

The measurement results are traceable to the international system of units (SI) through National Institute of Metrology Thailand (NIMT). Certificate number: TT-0026-23, Certificate number: LR-0101-23

Reference Used During Calibration:

1. Standard Temperature Probe
Model: STS 100 AS50, Serial No: 667582-09, Due date: 28 Mar 2024
2. Digital Temperature Indicator
Model: DTI 1100-A-1A-1, Serial No: 671407-00501 Due date: 14 Sep 2024

Uncertainty of Measurement:

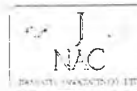
The reported uncertainty of measurement is based on the standard uncertainty multiplied by a coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty has been determined in accordance with the GUM Evaluation of measurement data Guide to the expression of uncertainty in measurement

Calibrated by:

Mr. Sorawit Thuchalad

Miss Jiraporn Lertsomphol

Miss Ruangrumpai Phoommit



Approved signatory

Mr. Parinya Booncharoen
Calibration Department Manager

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Certificate Number

CC-006-66

Page 2 of 2 Pages

MEASUREMENT RESULTS¹

The cup anemometer, Unit Under Calibration (UUC) was exercised at 10 m/s for 5 minutes prior to calibration being performed. The standard air velocity 0.5 m/s to 5 m/s was calculated by a standard air velocity transducer and above 5 m/s to 30 m/s was calculated by a pitot tube with precision differential pressure meter which was installed 40 mm and 300 mm respectively away from wind tunnel nozzle. UUC was installed at center of the test section. The calibration was carried out under both rising and falling air velocity in the range of 1 m/s to 16 m/s at calibration interval of 1 m/s. The results of calibration and associated measurement uncertainties are reported in the table below.

V _{std} (m/s)	Temp. wind tunnel (°C)	Temp. room (°C)	V _{uuc} (m/s)	Error (m/s)	U (k=2) (m/s)
1.037	24.56	24.55	0.9	-0.1	0.31
2.025	24.54	24.55	1.9	-0.1	0.31
3.003	24.38	24.55	3.0	0.0	0.31
4.200	24.32	24.55	4.1	-0.1	0.31
5.02	24.40	24.55	5.0	0.0	0.31
5.99	24.36	24.55	6.0	0.0	0.31
7.05	24.46	24.55	7.0	0.0	0.31
8.15	24.24	24.55	8.0	-0.1	0.31
9.10	24.46	24.55	9.0	-0.1	0.31
10.08	24.18	24.55	10.0	-0.3	0.31
11.16	24.40	24.55	11.1	0.0	0.31
12.13	24.12	24.55	12.0	-0.1	0.31
13.20	24.10	24.55	13.0	-0.2	0.31
14.25	24.20	24.55	14.2	-0.1	0.31
15.25	24.30	24.55	15.2	0.0	0.31
16.31	24.20	24.55	16.1	-0.2	0.34

Remarks:

¹ Calibration results only count for the tested circumstances and environmental conditions during which calibration took place

² Velocity of standard

³ Velocity of Unit Under Calibration

PHOTO OF CALIBRATION SET-UP



Calibration set-up of the cup anemometer calibration in the wind tunnel of Jiranatee Associates Co., Ltd. The cup anemometer shown may differ from the calibrated one. Remark: The proportion of the set-up is not true to scale due to imaging geometry.



J
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JIRANATEE ASSOCIATES CO., LTD.

Jiranatee Associates Co., Ltd.
6/374 15 1/23534
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Residence 104/40 (Thailand)
Tel: 02-2435-8800
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E-mail: jiranatee@jiranatee.com
Web site: www.jiranatee.com

Accredited calibration laboratory
ISO/IEC 17025:2017
NSC-TS1-TS 17025
CALIBRATION 0367

Air speed measurement laboratory
Calibration services department

Certificate Number

CC-006-66

CERTIFICATE OF CALIBRATION

Page 1 of 2 Pages

MEASUREMENT ITEM

: Wind Direction Sensor

MANUFACTURER

: Novallux

MODEL/TYPE

: Sensor, WS-02F

SERIAL NUMBER

: Data logger: 200-WS-25LB

ID NUMBER

: Sensor: WSD A4596

CONDITION AS-RECEIVED

: Data logger: A4596

CUSTOMER

: Used item

ALS Laboratory Group (Thailand) Co., Ltd.
104 Phatthanakan 40, Phatthanakan Rd, Khwaeng Suan Luang,
Khet Suan Luang, Bangkok 10250 Thailand

RECEIVED DATE

: 31 May 2023

MEASUREMENT DATE

: 14 Jun 2023

ISSUE DATE

: 14 Jun 2023

ENVIRONMENTAL CONDITIONS:

Ambient condition in the laboratory are as follows:

Temperature : 23.0 ± 3.0 °C

Relative Humidity : 55.0 ± 15.0 %RH

Atmospheric Pressure : 1010 ± 10 hPa

PLACE OF CALIBRATION

: Eiffel type wind tunnel of Jiranatee Associates Co., Ltd.

CALIBRATION CONDITION

: Wind tunnel cross-section area¹ 900 cm²: Win direction frontal area² 129 cm²: Diameter of mounting pipe³ - mm: Blockage ratio of test object⁴ 0.143 [-]

Preconditioning

: 24 hours at ambient conditions

Measurement Condition

: The average values during measurement are (23.7°C, (46.7) %RH and (1009.2) hPa)

TABULATION OF RESULTS:

The table on next page give the measured values.

Calibrated by:

22 Mr. Sorawit Thairatana
22 Mrs. Jiraporn Jirapornthorn



Approved signature:

Mr. Parinya Booncharom
Calibration Department Manager

Remarks:

¹ Inside cross-section area of the wind tunnel

² Insulated cross-section area of the tested object include mounting pipe

³ Diameter of mounting pipe

⁴ Ratio (%)

THIS CERTIFICATE OF CALIBRATION MAY NOT BE REPRODUCED EXCEPT IN FULL UNLESS PERMISSION FOR REPRODUCTION HAS BEEN OBTAINED IN WRITING FROM THE LABORATORY

SITHIPHORN ASSOCIATES CO.,LTD.

CALIBRATION LABORATORY

451-451/1 Sirinthorn Rd, Bangbunmu, Bangplud Bangkok 10700 THAILAND.
Tel:0-2435-8800 Fax:0-2433-1679 e-mail:cal-center@sithiphorn.com http://www.sithiphorn.com



Cert. No. : ACC23048

Pages : 1 of 3

Calibration Certificate

Equipment :

: SOUND CALIBRATOR

Manufacturer :

: RION

Model :

: NC-75

Serial No.:

: 35024431

ID No.:

: BKK_FS1221

Condition As Found :

: GOOD

Customer :

ALS LABORATORY GROUP (THAILAND) CO., LTD.
104 PHATTHANAKAN 40, PHATTHANAKAN ROAD,
KHAENG PHATTHANAKAN, KHET SUAN LUANG,
BANGKOK, 10250 THAILAND.

Location :

Ambient Temperature : (23.0 ± 3) °C

Pressure : (101.3 ± 3) kPa

Relative Humidity : (50.0 ± 20) %

Received Date :

: 28 NOVEMBER 2023

Calibration Date :

: 19 DECEMBER 2023

Date of Issue :

: 22 DECEMBER 2023

Calibrated by :

: Nathakorn Pisulpaian

Approved by :

Thanakul Petchurai
(Thanakul Petchurai)

This certificate is issued in accordance with the requirements of ISO/IEC 17025 standard, may not be reproduced other than in full, except with the prior written approval of the head of Calibration Laboratory.

QF-TS12-04-04-020664

Continuation of Calibration Certificate

Cert. No. : ACC23048
Job No. : VC67AC0035
Pages : 2 of 3

Calibration Procedure : CP-AC-03

Calibration Method :

This equipment was calibrated by based on IEC-60942-2003 Standard.

The sound pressure level, frequency and total distortion of the sound calibrator was measured using the reference microphone.

Condition of this result of calibration :

1. Reference Standard Instruments :

Instrument	Model	Serial No.	Cert. No.	Due Date
Waveform Generator	33511B	MY52302742	EF-0010-23	07-FEB-24
Digital Multimeter	33461A	MY53220104	EEL-BP 30/0266	13-FEB-24
Digital Multimeter	33461A	MY53220076	EEL-BP 30/0267	13-FEB-24
Digital Multimeter	33461A	MY60024273	EEL-BP 31/0266	14-FEB-24
Programmable Attenuator	MAT-1070	62100114	EF-0011-23	08-FEB-24
Condenser Microphone	4180	2977900	AA-1001-23	14-FEB-24
Measuring Amplifier	NA-42KAI	34560495	AA-3002-23	14-FEB-24
Audio Analyzer	AVR-3360A	V744B6069	EF-0012-23	10-FEB-24

2. This result of calibration was found accurate as shown on date and place of calibration for this calibrated item only.

3. This certificate is traceable to the international system of unit maintained at :

3.1 National Institute of Metrology (Thailand),

3.2 Thailand Institute of Scientific and Technological Research (TISTR).

QI-TS12-04-04-020664

T. Petchur

Continuation of Calibration Certificate

Cert. No. : ACC23048
Job No. : VC67AC0035
Pages : 3 of 3

Result of calibration :

1. Sound pressure level

Specified sound pressure level (dB)	Measured value (dB)	Deviated value (dB)	Uncertainty (dB)	Acceptance limit (dB)
94	93,96	-0.04	0.14	0.40

2. Frequency

Specified Frequency (Hz)	Measured value (Hz)	Deviated value (%)	Uncertainty (%)	Acceptance limit (%)
1000	1000,0	0,0	0,1	1,0

3. Total distortion

Measured value (%)	Uncertainty (%)	Acceptance limit (%)
0.35	0.10	3.0

The reported uncertainty is based on a standard uncertainty multiplied by coverage factor $k = 2$ or any value following calculation, providing a level of confidence of approximately 95 %

End of Calibration Certificate

QI-TS12-04-04-020664

T. Petchur

SITHIPORN ASSOCIATES CO., LTD.
CALIBRATION LABORATORY451-451/1 Sirinthorn Road Bangbunru, Bangpuad, Bangkok 10700 Thailand
Tel : +66 2433 8431 Email : calibration@sithiporn.comSITHIPORN,
ASSOCIATESCert. No. : ACL24019
Pages : 1 of 8

Calibration Certificate

Equipment : SOUND LEVEL METER
Manufacturer : RION
Model : NL-42 / Microphone UC-52 / Preamplifier NH-24
Serial No. : 00858520 / 158771 / 58772
ID No. : BKK_FS0110

Condition As Found : GOOD

Customer : ALS LABORATORY GROUP (THAILAND) CO., LTD.
104 PHATTHANAKAN 40, PHATTHANAKAN ROAD,
KHWAENG PHATTHANAKAN, KHET SUAN LUANG,
BANGKOK, 10250 THAILAND.

Location :

Ambient Temperature : (23.0 ± 3) °C
Pressure : (101.3 ± 3) kPa
Relative Humidity : (50.0 ± 20) %

Received Date : 22 DECEMBER 2023
Calibration Date : 10-11 JANUARY 2024
Date of Issue : 12 JANUARY 2024

Calibrated by : Nathakorn Pisutpaisan

Approved by :

T. Petchur
(Thanakul Petchurai)

This certificate is issued in accordance with the requirements of ISO/IEC 17025 standard, may not be reproduced other than in full, except with the prior written approval of the head of Calibration Laboratory.

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CALIBRATION LABORATORY451-451/1 Sirinthorn Road Bangbunru, Bangpuad, Bangkok 10700 Thailand
Tel : +66 2433 8431 Email : calibration@sithiporn.comSITHIPORN,
ASSOCIATESCert. No. : ACL24019
Job No. : VC67AC0045
Pages : 2 of 8

Calibration Procedure : CP-AC-01

Calibration Method :

This equipment was calibrated by follow on IEC-61672-3 (2013) Standard for sound level meter (SLM).

The SLM had tests to Acoustical and Electrical signal tests of frequency weighting with Anechoic chamber and Reference Standard Instruments.

For tests results of each items were made by observation of each Instruments display and also with SLM's display.

Condition of this result of calibration :

1. Reference Standard Instruments :

Instrument	Model	Serial No.	Cert. No.	Due Date
Waveform Generator	33210A	MY48017076	EF-0009-23	07-FEB-24
Waveform Generator	33511B	MY52302742	EF-0010-23	07-FEB-24
Digital Multimeter	33461A	MY53220104	EEL-BP 30/0266	13-FEB-24
Digital Multimeter	33461A	MY53220076	EEL-BP 29/0266	13-FEB-24
Digital Multimeter	33461A	MY60024273	EEL-BP 31/0266	14-FEB-24
Programmable Attenuator	MAT-1070	62100114	EF-0011-23	08-FEB-24
Condenser Microphone	4180	2977900	AA-1001-23	14-FEB-24
Measuring Amplifier	NA-42KAI	34560495	AA-3002-23	14-FEB-24

2. This result of calibration was found accurate as shown on date and place of calibration for this calibrated item only.

3. This certificate is traceable to the international system of unit maintained at :

3.1 National Institute of Metrology (Thailand),

3.2 Thailand Institute of Scientific and Technological Research (TISTR).

T. Petchur

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CALIBRATION LABORATORY

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Cert. No. : ACL24019
Job No. : VC67AC0045
Pages : 3 of 8

Summary of Measurement Result :

Parameter	Uncertainty (dB)	Maximum-permitted uncertainty of measurement (dB)
1. Absolute sensitivity	0.2	N/A
2. Self-generated noise	0.2	N/A
3. Acoustical signal tests of frequency weightings		
125 Hz	0.3	0.6
1000 Hz	0.3	0.6
8000 Hz	0.3	0.7
4. Electrical signal tests of frequency weightings		
For 10 Hz to 4 kHz	0.3	0.6
For > 4 kHz to 10 kHz	0.3	0.7
For > 10 kHz to 20 kHz	-	1.0
5. Frequency and time weightings at 1 kHz	0.2	0.2
6. Long - term stability	0.1	0.1
7. Level linearity on the reference level range	0.2	0.3
8. Level linearity including the level range control	0.2	0.3
9. Tone burst response	0.2	0.3
10. Peak C sound level	0.2	0.35
11. Overload indication	0.2	0.25
12. High level stability	0.1	0.1

T. Petch

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Cert. No. : ACL24019
Job No. : VC67AC0045
Pages : 4 of 8

Result of calibration :

1. Absolute sensitivity

Reference Acoustic Signal (dB)	Measured Value (dB)	Deviation (dB)	Acceptance Limit (dB)
93.9 (93.98)	93.9	0.0	±0.3

2. Self-generated noise

2.1 Normal test

Measured Value (dB)
16.1

2.2 The microphone of the sound level meter was replaced by electrical signal input device.

Frequency Weighting	Measured value (dB)
A - weight	10.8
C - weight	16.8
Flat	22.6

3. Acoustical signal tests of frequency weightings

Meter free-field acoustic response at a level of 84 dB

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
125	0.3	0.4	0.4	± 1.5
1000	0.0	0.0	0.0	± 1.0
8000	-0.2	-0.2	-0.2	±5.0

T. Petch

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Cert. No. : ACL24019
Job No. : VC67AC0045
Pages : 5 of 8

4. Electrical signal tests of frequency weightings

Weighting network response with relative to 1 kHz.

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
63	0.0	-0.1	-0.1	±2.0
125	0.0	0.0	0.0	±1.5
250	0.0	0.0	-0.1	±1.5
500	0.0	0.0	0.0	±1.5
1000	0.0	0.0	0.0	±1.0
2000	0.0	0.0	0.0	±2.0
4000	0.0	0.0	0.0	±3.0
8000	0.0	0.1	0.1	±5.0

5. Frequency and time weightings at 1 kHz

5.1 Frequency weightings at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.0	0.0	± 0.2
C - weight	94.0	94.0	0.0	± 0.2
Flat	94.0	94.0	0.0	± 0.2

5.2 Time weighting at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	94.0	94.0	0.0	± 0.1
Slow	94.0	94.0	0.0	± 0.1
Leq	94.0	94.0	0.0	± 0.1

6. Long - term stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.0	0.0	± 0.3

T. Petch

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Cert. No. : ACL24019
Job No. : VC67AC0045
Pages : 6 of 8

7. Level linearity on the reference level range

Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
137.0	137.0	0.0	± 1.1
136.0	136.0	0.0	± 1.1
135.0	135.0	0.0	± 1.1
134.0	134.0	0.0	± 1.1
133.0	133.0	0.0	± 1.1
132.0	131.9	-0.1	± 1.1
131.0	130.9	-0.1	± 1.1
129.0	129.0	0.0	± 1.1
124.0	124.0	0.0	± 1.1
119.0	119.0	0.0	± 1.1
114.0	114.0	0.0	± 1.1
109.0	109.0	0.0	± 1.1
104.0	104.0	0.0	± 1.1
99.0	99.0	0.0	± 1.1
94.0	94.0	0.0	± 1.1
89.0	89.0	0.0	± 1.1
84.0	84.0	0.0	± 1.1
79.0	79.0	0.0	± 1.1
74.0	74.0	0.0	± 1.1
69.0	69.0	0.0	± 1.1
64.0	64.0	0.0	± 1.1
59.0	59.0	0.0	± 1.1
54.0	54.0	0.0	± 1.1
49.0	49.0	0.0	± 1.1
44.0	44.0	0.0	± 1.1
39.0	39.0	0.0	± 1.1
34.0	34.0	0.0	± 1.1
30.0	30.0	0.0	± 1.1
29.0	29.0	0.0	± 1.1
28.0	28.0	0.0	± 1.1
27.0	27.1	0.1	± 1.1
26.0	26.1	0.1	± 1.1
25.0	25.1	0.1	± 1.1

T. Petch

SITHIPORN ASSOCIATES CO., LTD. CALIBRATION LABORATORY

451-451/ Srinthorn Road, Bangbunmu, Bangplue, Bangkok, 10700 Thailand
Tel : +66 2433 8331 Email : calibration@sithiporn.com



Cert. No. : ACL24019
Job No. : VC67AC0045
Pages : 7 of 8

8. Level linearity including the level range control

Range	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Auto	94.0	94.0	0.0	±1.1

9. Tone burst response

Time Weighing	Tone burst duration, T _b (ms)	Cycle	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	0.25	1	108.0	107.9	-0.1	1.5 ; -5.0
	2	8	117.0	117.0	0.0	1.0 ; -2.5
	200	800	134.0	134.0	0.0	±1.0
Slow	2	8	108.0	108.0	0.0	1.5 ; -5.0
	200	800	127.6	127.6	0.0	±1.0
	200	800	128.0	128.0	0.0	±1.0

10. Peak C sound level

Number of cycle in test signal	Anticipated Value (dB)	Measured Value, L _{peak} (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	133.0	133.0	0.0	±3.0
One	136.4	135.5	-0.9	±3.0

Number of cycle in test signal	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	133.0	133.0	0.0	±2.0
Positive half cycle	135.4	135.1	-0.3	±2.0
Negative half cycle	135.4	135.2	-0.2	±2.0

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Cert. No. : ACL24019
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Pages : 8 of 8

11. Overload indication

Measured value (dB)		Deviated Value (dB)	Acceptance Limits (dB)
Positive one-half cycle	Negative one-half cycle		
89.6	89.6	0.0	±1.5

12. High level stability

Frequency Weighing	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A-weight	137.0	137.0	0.0	±0.3

The reported uncertainty is based on a standard uncertainty multiplied by coverage factor $k = 2$ or any value following calculation, providing a level of confidence of approximately 95 %

End of Calibration Certificate

T. Petch

INNOVATIVE INSTRUMENT CALIBRATION LAB
INNOVATIVE INSTRUMENT CO., LTD. HEAD OFFICE
713/00011, SOI 11, KINSAKORN 11, BANGKOK, 10140
AMPHOL BANGPHU, SUTTERAKAN PROVINCE, 10140 THAILAND
TEL : +66 2116 2841 FAX : +66 2116 7140



Certificate of Calibration

Customer : AIS Laboratory Group Thailand Co., Ltd.
Name : 104 Soi Phatunakan 40, Phatunakan Road, Suan Luang, Bangkok 10250
Address :
Certificate No : 24-SI-M-018
Request No : Req-2023-2671

Unit Under Calibration Details

Measurement Item : Sound Level Meter
Manufacturer : RION
Model : NT-42
Serial Number : 01022261
ID : BKK-150030
Resolution : 0.1 dB
Microphone Class : 2
Microphone Model : UC-52
Microphone S/N : 180399
Preamplifier Model : NH-24
Preamplifier S/N : R8169
Instrument Status : Used

Calibration Environment and Details

Temperature : 25 °C ± 2 °C
Humidity : 50 % RH ± 20 % RH
Barometric Pressure : 1013 hPa ± 10 hPa
Received Date : 20 December 2023
Calibrated Date : 29 January 2024
Calibration Procedure : In house method CP-SLM-01 based on IEC 61672-3 : 2013 Electroacoustics - Sound level meters - Part 3: Periodic tests
Location of Calibration : Lab Acoustic

Reference Standard

Instrument	Brand	Model	S/N	Date calibration	Traceability
Standard Microphone	GRAS	40AN	19-273	21 August 2024	GRAS
Multi-frequency Calibrator	Quest	Questcal	11A000224	26 July 2024	TSI
Acoustic Generator	Svanick	Scan401	131	9 October 2024	WK Electric

Note

The reported uncertainty is based on standard uncertainty multiplied by the Coverage Factor $k = 2$, providing a level of confidence approximately 95 %

Calibrated By : JirC
Mr. Nopadon Luangrat
Service Calibration Engineer

Approved By : JirC
Mr. Pachi Mathayom
Calibration Engineer Supervisor
Issue Date : 29 January 2024

The results are valid only to the item calibrated. The certificate shall not be reproduced except in full, without written approval of the Innovative Instrument Co., Ltd.

IMP-708-SI-M-01 Rev.02 Issue date: 11-21

INNOVATIVE INSTRUMENT CALIBRATION LAB
INNOVATIVE INSTRUMENT CO., LTD. HEAD OFFICE
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TEL : +66 2116 2841 FAX : +66 2116 7140



Certificate No : 24-SI-M-018
Request No : Req-2023-2671

1. Indication at the calibration check frequency

UUC Setting	Nominal Level (dB)	Before Adjust		After Adjust		UNCERTAINTY (± dB)	Acceptance Limit (± dB)
		UUC (dB)	ERR (dB)	UUC (dB)	ERR (dB)		
FAST / A / 30-130							
Calibrator Setting							
1000 Hz 114 dB	113.78	114.1	-0.32	113.8	0.02	0.20	0.30

Note : Absolute sensitivity was established by the use of Sound Calibrator Brand SVAN 11-K, Model SV 35A, SN 58079

2. Self-generated noise, Microphone installed

UUC Setting	Measured (dB)	UNCERTAINTY (± dB)
FAST / 30-130		
UUC Weighing		
A	16.2	0.10

3. Self-generated noise, Microphone replaced by the electrical input signal device

UUC Setting	Measured (dB)	UNCERTAINTY (± dB)
FAST / 30-130		
UUC Weighing		
A	11.7	0.10
C	16.4	0.10
Z	19.9	0.10

4. Acoustic signal test of frequency weightings (Without Windscreen)

UUC Setting	Deviation from various Frequency Weighting Response curve			UNCERTAINTY (± dB)	Acceptance Limit (± dB)
	A (dB)	C (dB)	Z (dB)		
FAST / 30-130					
STH Setting					
125 Hz	0.2	0.4	0.3	0.60	1.5
1000 Hz	0.0	0.0	0.0	0.60	1.0
4000 Hz	1.0	1.0	1.0	0.60	3.0
8000 Hz	-1.5	-1.4	-1.4	0.70	5.0

The results related only to the item calibrated. The certificate shall not be reproduced except in full, without written approval of the Innovative Instrument Co., Ltd.

IMP-708-SI-M-01 Rev.02 Issue date: 11-21

Certificate No : 24-SLM-018
Request No : Req-2023-2671

5. Electrical signal test of frequency weightings, Weighting network response with relative to 1 kHz

UUC Setting	Deviation from various Frequency Weighting Response curve			UNCERTAINTY (± dB)	Acceptance Limit (± dB)
FAST / 30-130	A (dB)	C (dB)	Z (dB)		
STD Setting					
6.3 Hz	-0.2	0.1	0.0	0.30	2.0
12.5 Hz	-0.1	0.0	0.0		1.5
250 Hz	0.1	0.0	0.0		1.5
300 Hz	0.0	0.0	0.0		1.5
1000 Hz	0.0	0.0	0.0		1.0
2000 Hz	0.0	0.0	0.0		2.0
4000 Hz	0.0	0.0	0.0		3.0
8000 Hz	0.0	0.0	0.0		5.0
16000 Hz	-1.8	-1.4	0.0		>5.1 (N)

6. Frequency and time weightings at 1 kHz

UUC Setting	STD	Measured		UNCERTAINTY (± dB)	Acceptance Limit (± dB)
FAST / 30-130	REF	UUC	ERR		
UUC Weighting					
A	114.00	114.0	0.0	0.30	0.20
C	114.00	114.0	0.0		0.20
Z	114.00	114.0	0.0		0.20

UUC Setting	STD	Measured		UNCERTAINTY (± dB)	Acceptance Limit (± dB)
30-130 / A	REF	UUC	ERR		
UUC Time Response					
Fast	114.00	114.0	0.0	0.30	0.10
Slow	114.00	114.0	0.0		0.10
Eq	114.00	114.0	0.0		0.10

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IM-70-SLM-01 Rev. 02 Issue date: 11/23

Certificate No : 24-SLM-018
Request No : Req-2023-2671

7. Long Term Stability

UUC Setting	Measured	UNCERTAINTY (± dB)	Acceptance Limit (± dB)
FAST / A / 30-130	UUC		
STD Setting			
Initial	114.0	0.10	0.30
Final	114.0		
Deviated	0.0		

8. Level linearity on the reference level range

UUC Setting	Anticipated	Deviation		UNCERTAINTY (± dB)	Acceptance Limit (± dB)
FAST / A / 30-130	REF	UUC	ERR		
STD dB					
138.00	138	138.0	0.0	0.30	1.1
134.00	134	134.0	0.0		1.1
129.00	129	129.0	0.0		1.1
124.00	124	124.0	0.0		1.1
119.00	119	119.0	0.0		1.1
114.00	114	114.0	0.0		1.1
109.00	109	109.0	0.0		1.1
104.00	104	104.0	0.0		1.1
99.00	99	99.0	0.0		1.1
94.00	94	94.0	0.0		1.1
89.00	89	89.0	0.0		1.1
84.00	84	84.0	0.0		1.1
79.00	79	79.0	0.0		1.1
74.00	74	74.0	0.0		1.1
69.00	69	69.0	0.0		1.1
64.00	64	64.0	0.0		1.1
59.00	59	59.0	0.1		1.1
54.00	54	54.0	0.0		1.1
49.00	49	49.0	0.0		1.1
44.00	44	44.0	0.0		1.1
39.00	39	39.0	0.0		1.1
34.00	34	34.0	0.0		1.1
29.00	29	29.0	0.0		0.9
24.00	24	24.0	0.0		1.1

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IM-70-SLM-01 Rev. 02 Issue date: 11/23

Certificate No : 24-SLM-018
Request No : Req-2023-2671

9. Level linearity including the level range control

UUC Setting	STD	Measured		UNCERTAINTY (± dB)	Acceptance Limit (± dB)
FAST / A	REF	UUC	ERR		
UUC Range					
30-130	29.40	29.7	0.1	0.30	1.1
	114	114.0	0.0		1.1

10. Tone burst response

UUC Setting	STD	Anticipated	Measured		UNCERTAINTY (± dB)	Acceptance Limit (± dB)
A / 30-130	Timeburst	Ref	UUC	ERR		
UUC Time Response						
Fast	200	126.0	126.0	0.0	0.20	1.0
	2	109.0	108.9	-0.1		+1.0, -2.5
	0.25	100.0	99.9	-0.1		+1.5, -5.0
Slow	200	119.6	119.6	0.0		1.0
	2	100.0	100.0	0.0		+1.0, -5.0
	200	120.0	120.0	0.0		1.0
SEL	2	100.0	100.0	0.0		+1.0, -2.5
	0.25	91.0	90.8	-0.2		+1.5, 5.0

11. Peak C Sound level

UUC Setting	Anticipated	Measured		UNCERTAINTY (± dB)	Acceptance Limit (± dB)
FAST / C / 55-141	REF	UUC	ERR		
STD Setting					
Complete cycle	136.4	136.3	-0.10	0.20	2.0
Positive half cycle	135.4	135.1	-0.30		2.0
Negative half cycle	135.4	135.1	-0.30		2.0

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IM-70-SLM-01 Rev. 02 Issue date: 11/23

Certificate No : 24-SLM-018
Request No : Req-2023-2671

12. Overload indication

UUC Setting	Measured	UNCERTAINTY (± dB)	Acceptance Limit (± dB)
FAST / A / 30-130	UUC		
STD Setting			
Positive one-half cycle	139.4	0.20	1.5
Negative one-half cycle	139.5		
Deviated	-0.1		

13. High Level Stability

UUC Setting	Measured	UNCERTAINTY (± dB)	Acceptance Limit (± dB)
FAST / A / 30-130	UUC		
STD Setting			
Initial	129.0	0.10	0.30
Final	129.0		
Deviated	0.0		

Note:

Function	Maximum-permitted Uncertainty of measurement
1. Indicators at the calibration check frequency	
2. Self-generated noise: Microphone installed	Not applicable
3. Self-generated noise: Microphone replaced by the electrical input signal device	Not applicable
4. Acoustic signal test of frequency weightings at 10 Hz to 4 kHz	0.60 dB
5. Acoustic signal test of frequency weightings at 4 kHz to 10 kHz	0.70 dB
6. Electrical signal test of frequency weightings, Weighting network response with relative to 1 kHz	0.20 dB
7. Long Term Stability	0.20 dB
8. Level linearity on the reference level range	0.10 dB
9. Level linearity including the level range control	0.20 dB
10. Tone burst response	0.30 dB
11. Peak C Sound level	0.30 dB
12. Overload indication	0.25 dB
13. High Level Stability	0.25 dB

Acceptance Limit and Maximum-permitted Uncertainty was REF 61873-1:2013

End of Certificate

The results related only to the item calibrated. The certificate shall not be reproduced except in full, without written approval of the Innovative Instrument Co., Ltd.

IM-70-SLM-01 Rev. 02 Issue date: 11/23

SITHIPORN ASSOCIATES CO.,LTD. CALIBRATION LABORATORY

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Tel:0-2435-8800 Fax:0-2433-1679 e-mail:cal-center@sithiporn.com http://www.sithiporn.com



Cert. No. : ACL23343
Pages : 1 of 8

Calibration Certificate

Equipment : SOUND LEVEL METER
Manufacturer : RION
Model : NL-42A / Microphone UC-52 / Preamplifier NIT-24
Serial No.: 00623381 / 198627 / 26409
ID No.: BKK_FS1214

Condition As Found : GOOD

Customer : ALS LABORATORY GROUP (THAILAND) CO., LTD.
104 PHATTHANAKAN 40, PHATTHANAKAN ROAD,
KHWAENG PHATTHANAKAN, KHET SUAN LUANG,
BANGKOK, 10250 THAILAND

Location :
Ambient Temperature : (23.0 ± 3) °C
Pressure : (101.3 ± 3) kPa
Relative Humidity : (50.0 ± 20) %

Received Date : 01 NOVEMBER 2023
Calibration Date : 07-08 NOVEMBER 2023
Date of Issue : 14 NOVEMBER 2023

Calibrated by : Nathakorn Pisutpaisan

Approved by : *T. Petchur*
(Thanakul Petchurai)

This certificate is issued in accordance with the requirements of ISO/IEC 17025 standard, may not be reproduced other than in full, except with the prior written approval of the head of Calibration Laboratory.

QF-TS12-04-04-020664

SITHIPORN ASSOCIATES CO.,LTD. CALIBRATION LABORATORY

Continuation of Calibration Certificate

Cert. No. : ACL23343
Job No. : VC67AC0022
Pages : 2 of 8

Calibration Procedure : CP-AC-01

Calibration Method :

This equipment was calibrated by based on IEC-61672-3 (2013) Standard for sound level meter (SLM).
The SLM had tests to Acoustical and Electrical signal tests of frequency weighting with Anechoic chamber and Reference Standard Instruments.

For tests results of each items were made by observation of each Instruments display and also with SLM's display.

Condition of this result of calibration :

1. Reference Standard Instruments :

Instrument	Model	Serial No.	Cert. No.	Exp. Date
Waveform Generator	33210A	MY48017076	EF-0009-23	07-FEB-24
Waveform Generator	33511B	MY52302742	EF-0010-23	07-FEB-24
Digital Multimeter	33461A	MY53220104	EEL-BP 30/0266	13-FEB-24
Digital Multimeter	33461A	MY53220076	EEL-BP 29/0266	13-FEB-24
Digital Multimeter	34461A	MY60024273	EEL-BP 31/0266	14-FEB-24
Programmable Attenuator	MAT-1070	62100114	EF-0011-23	08-FEB-24
Condenser Microphone	4180	2977900	AA-1001-23	14-FEB-24
Measuring Amplifier	NA-42KAI	34560495	AA-3002-23	14-FEB-24

2. This result of calibration was found accurate as shown on date and place of calibration for this calibrated item only.

3. This certificate is traceable to the international system of unit maintained at :

3.1 National Institute of Metrology (Thailand).

3.2 Thailand Institute of Scientific and Technological Research (TISTR).

QF-TS12-04-04-020664

T. Petchur

SITHIPORN ASSOCIATES CO.,LTD. CALIBRATION LABORATORY

Continuation of Calibration Certificate

Cert. No. : ACL23343
Job No. : VC67AC0022
Pages : 3 of 8

Summary of Measurement Result :

Parameter	Pass	Fail	Uncertainty (dB)	Maximum-permitted uncertainty of measurement (dB)
1. Absolute sensitivity	✓	-	0.2	N/A
2. Self-generated noise	✓	-	0.2	N/A
3. Acoustical signal tests of frequency weightings				
125 Hz	✓	-	0.3	0.6
1000 Hz	✓	-	0.3	0.6
8000 Hz	✓	-	0.3	0.7
4. Electrical signal tests of frequency weightings				
For 10 Hz to 4 kHz	✓	-	0.3	0.6
For > 4 kHz to 10 kHz	✓	-	0.3	0.7
For > 10 kHz to 20 kHz	-	-	-	1.0
5. Frequency and time weightings at 1 kHz	✓	-	0.2	0.2
6. Long - term stability	✓	-	0.1	0.1
7. Level linearity on the reference level range	✓	-	0.2	0.3
8. Level linearity including the level range control	✓	-	0.2	0.3
9. Tone burst response	✓	-	0.2	0.3
10. Peak C sound level	✓	-	0.2	0.35
11. Overload indication	✓	-	0.2	0.25
12. High level stability	✓	-	0.1	0.1

Note : Pass/Fail evaluation for each parameter, will be considered together from the acceptance limits and the Maximum-permitted uncertainty of measurement.

QF-TS12-04-04-020664

T. Petchur

SITHIPORN ASSOCIATES CO.,LTD. CALIBRATION LABORATORY

Continuation of Calibration Certificate

Cert. No. : ACL23343
Job No. : VC67AC0022
Pages : 5 of 8

4. Electrical signal tests of frequency weightings

Weighting network response with relative to 1 kHz.

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
63	0.0	0.0	0.0	±2.0
125	0.1	0.1	0.0	±1.5
250	0.0	0.0	0.0	±1.5
500	0.0	0.1	0.0	±1.5
1000	0.0	0.0	0.0	±1.0
2000	0.0	0.1	0.0	±2.0
4000	0.0	0.0	0.0	±3.0
8000	0.0	0.1	0.1	±5.0

5. Frequency and time weightings at 1 kHz

5.1 Frequency weightings at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.0	0.0	± 0.2
C - weight	94.0	94.0	0.0	± 0.2
Flat	94.0	94.0	0.0	± 0.2

5.2 Time weighting at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	94.0	94.0	0.0	± 0.1
Slow	94.0	94.0	0.0	± 0.1
Leq	94.0	94.0	0.0	± 0.1

6. Long - term stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.1	0.1	± 0.3

QF-TS12-04-04-020664

T. Petchur

Continuation of Calibration Certificate

Cert. No. : ACL23343
Job No. : VC67AC0022
Pages : 6 of 8

7. Level linearity on the reference level range

Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
137.0	137.0	0.0	± 1.1
136.0	136.0	0.0	± 1.1
135.0	135.0	0.0	± 1.1
134.0	134.0	0.0	± 1.1
133.0	133.0	0.0	± 1.1
132.0	132.0	0.0	± 1.1
131.0	131.0	0.0	± 1.1
129.0	129.0	0.0	± 1.1
124.0	124.0	0.0	± 1.1
119.0	119.0	0.0	± 1.1
114.0	114.0	0.0	± 1.1
109.0	109.0	0.0	± 1.1
104.0	104.0	0.0	± 1.1
99.0	99.0	0.0	± 1.1
94.0	94.0	0.0	± 1.1
89.0	89.0	0.0	± 1.1
84.0	84.0	0.0	± 1.1
79.0	79.0	0.0	± 1.1
74.0	74.0	0.0	± 1.1
69.0	69.0	0.0	± 1.1
64.0	64.0	0.0	± 1.1
59.0	59.0	0.0	± 1.1
54.0	54.0	0.0	± 1.1
49.0	49.0	0.0	± 1.1
44.0	44.0	0.0	± 1.1
39.0	39.0	0.0	± 1.1
34.0	34.0	0.0	± 1.1
30.0	30.0	0.0	± 1.1
29.0	29.0	0.0	± 1.1
28.0	28.0	0.0	± 1.1
27.0	27.0	0.0	± 1.1
26.0	26.1	0.1	± 1.1
25.0	25.1	0.1	± 1.1

QF-TS12-04-04-020664

7. Petchur

Continuation of Calibration Certificate

Cert. No. : ACL23343
Job No. : VC67AC0022
Pages : 7 of 8

8. Level linearity including the level range control

Range	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Auto	94.0	94.0	0.0	± 1.1

9. Tone burst response

Time Weighting	Tone burst duration, Tb (ms)	Cycle	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	0.25	1	108.0	108.0	0.0	1.5 ; -5.0
	2	8	117.0	117.0	0.0	1.0 ; -2.5
	200	800	134.0	134.1	0.1	± 1.0
Slow	2	8	108.0	108.0	0.0	1.5 ; -5.0
	200	800	127.6	127.6	0.0	± 1.0
SEL	0.25	1	99.0	98.9	-0.1	1.5 ; -5.0
	2	8	108.0	108.0	0.0	1.0 ; -2.5
	200	800	128.0	128.1	0.1	± 1.0

10. Peak C sound level

Number of cycle in test signal	Anticipated Value (dB)	Measured Value, L _{peak} (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	133.0	133.0	0.0	± 3.0
One	136.4	136.3	-0.1	± 3.0

Number of cycle in test signal	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	133.0	133.0	0.0	± 2.0
Positive half cycle	135.4	135.1	-0.3	± 2.0
Negative half cycle	135.4	135.1	-0.3	± 2.0

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Continuation of Calibration Certificate

Cert. No. : ACL23343
Job No. : VC67AC0022
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11. Overload indication

Measured value (dB)		Deviated Value (dB)	Acceptance Limits (dB)
Positive one-half cycle	Negative one-half cycle		
89.5	89.5	0.0	± 1.5

12. High level stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A-weight	137.0	137.0	0.0	± 0.3

The reported uncertainty is based on a standard uncertainty multiplied by coverage factor $k = 2$ or any value following calculation, providing a level of confidence of approximately 95 %

End of Calibration Certificate

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Pages : 1 of 8

Calibration Certificate

Equipment : SOUND LEVEL METER
Manufacturer : RION
Model : NL-42 / Microphone UC-52 / Preamplifier N11-24
Serial No. : 00572562 / 170400 / 72901
ID No. : BKK_FS0878

Condition As Found : GOOD

Customer : ALS LABORATORY GROUP (THAILAND) CO., LTD.
104 PHATTIANAKAN 40, PHATTIANAKAN ROAD,
KHWAENG PHATTIANAKAN, KHUET SUAN LUANG,
BANGKOK, 10250 THAILAND.

Location : -
Ambient Temperature : (23.0 ± 3) °C
Pressure : (101.3 ± 3) kPa
Relative Humidity : (50.0 ± 20) %

Received Date : 19 DECEMBER 2023
Calibration Date : 05-08 JANUARY 2024
Date of Issue : 09 JANUARY 2024

Calibrated by : Nathakorn Pisutpaisan

Approved by :

7. Petchur
(Thanakul Petchursai)

This certificate is issued in accordance with the requirements of ISO/IEC 17025 standard, may not be reproduced other than in full, except with the prior written approval of the head of Calibration Laboratory

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SITHIPORN ASSOCIATES CO., LTD.
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Cert. No. : ACL24003
Job No. : VC67AC0043
Pages : 2 of 8

Calibration Procedure : CP-AC-01

Calibration Method :

This equipment was calibrated by follow on IEC-61672-3 (2013) Standard for sound level meter (SLM).
The SLM had tests to Acoustical and Electrical signal tests of frequency weighting with Anechoic chamber and Reference Standard Instruments.

For tests results of each items were made by observation of each Instruments display and also with SLM's display.

Condition of this result of calibration :

1. Reference Standard Instruments :

Instrument	Model	Serial No.	Cert. No.	Due Date
Waveform Generator	33210A	MY48017076	EF-0009-23	07-FEB-24
Waveform Generator	33511B	MY52302742	EF-0010-23	07-FEB-24
Digital Multimeter	33461A	MY53220104	EEL_BP 30/0266	13-FEB-24
Digital Multimeter	33461A	MY53220076	EEL_BP 29/0266	13-FEB-24
Digital Multimeter	34461A	MY60024273	EEL_BP 31/0266	14-FEB-24
Programmable Attenuator	MAT-1070	62100114	EF-0011-23	08-FEB-24
Condenser Microphone	4180	2977900	AA-1001-23	14-FEB-24
Measuring Amplifier	NA-42KA1	34560495	AA-3002-23	14-FEB-24

2. This result of calibration was found accurate as shown on date and place of calibration for this calibrated item only.

3. This certificate is traceable to the international system of unit maintained at :

3.1 National Institute of Metrology (Thailand).

3.2 Thailand Institute of Scientific and Technological Research (TISTR).

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Cert. No. : ACL24003
Job No. : VC67AC0043
Pages : 3 of 8

Summary of Measurement Result :

Parameter	Uncertainty	Maximum-permitted
	(dB)	uncertainty of measurement (dB)
1. Absolute sensitivity	0.2	N/A
2. Self-generated noise	0.2	N/A
3. Acoustical signal tests of frequency weightings		
125 Hz	0.3	0.6
1000 Hz	0.3	0.6
8000 Hz	0.3	0.7
4. Electrical signal tests of frequency weightings		
For 10 Hz to 4 kHz	0.3	0.6
For > 4 kHz to 10 kHz	0.3	0.7
For > 10 kHz to 20 kHz	-	1.0
5. Frequency and time weightings at 1 kHz	0.2	0.2
6. Long - term stability	0.1	0.1
7. Level linearity on the reference level range	0.2	0.3
8. Level linearity including the level range control	0.2	0.3
9. Tone burst response	0.2	0.3
10. Peak C sound level	0.2	0.35
11. Overload indication	0.2	0.25
12. High level stability	0.1	0.1

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Job No. : VC67AC0043
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Result of calibration :

1. Absolute sensitivity

Reference Acoustic Signal (dB)	Measured Value (dB)	Deviation (dB)	Acceptance Limit (dB)
93.9 (93.98)	93.9	0.0	±0.3

2. Self-generated noise

2.1 Normal test

Measured Value (dB)
15.1

2.2 The microphone of the sound level meter was replaced by electrical signal input device:

Frequency Weighting	Measured value (dB)
A - weight	13.4
C - weight	19.9
Flat	25.5

3. Acoustical signal tests of frequency weightings

Meter free-field acoustic response at a level of 84 dB

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
125	0.1	0.2	0.2	± 1.5
1000	0.0	0.0	0.0	± 1.0
8000	0.1	0.2	0.2	±5.0

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Job No. : VC67AC0043
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4. Electrical signal tests of frequency weightings

Weighting network response with relative to 1 kHz.

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
63	-0.1	-0.1	0.0	±2.0
125	0.0	0.0	-0.1	±1.5
250	0.0	0.0	-0.1	±1.5
500	0.0	0.0	-0.1	±1.5
1000	0.0	0.0	0.0	±1.0
2000	0.0	0.0	0.0	±2.0
4000	0.0	0.0	0.0	±3.0
8000	0.0	0.1	0.1	±5.0

5. Frequency and time weightings at 1 kHz

5.1 Frequency weightings at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.0	0.0	± 0.2
C - weight	94.0	94.0	0.0	± 0.2
Flat	94.0	94.0	0.0	± 0.2

5.2 Time weighting at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	94.0	94.0	0.0	± 0.1
Slow	94.0	94.0	0.0	± 0.1
Leq	94.0	94.0	0.0	± 0.1

6. Long - term stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.0	0.0	± 0.3

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7. Level linearity on the reference level range

Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
137.0	137.0	0.0	±1.1
136.0	136.0	0.0	±1.1
135.0	135.0	0.0	±1.1
134.0	134.0	0.0	±1.1
133.0	133.0	0.0	±1.1
132.0	132.0	0.0	±1.1
131.0	131.0	0.0	±1.1
129.0	129.0	0.0	±1.1
124.0	124.0	0.0	±1.1
119.0	119.0	0.0	±1.1
114.0	114.0	0.0	±1.1
109.0	109.0	0.0	±1.1
104.0	104.0	0.0	±1.1
99.0	99.0	0.0	±1.1
94.0	94.0	0.0	±1.1
89.0	89.0	0.0	±1.1
84.0	84.0	0.0	±1.1
79.0	79.0	0.0	±1.1
74.0	74.0	0.0	±1.1
69.0	69.0	0.0	±1.1
64.0	64.0	0.0	±1.1
59.0	59.0	0.0	±1.1
54.0	54.0	0.0	±1.1
49.0	49.0	0.0	±1.1
44.0	44.0	0.0	±1.1
39.0	39.0	0.0	±1.1
34.0	34.0	0.0	±1.1
30.0	30.0	0.0	±1.1
29.0	29.0	0.0	±1.1
28.0	28.0	0.0	±1.1
27.0	27.0	0.0	±1.1
26.0	26.0	0.0	±1.1
25.0	24.9	-0.1	±1.1

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8. Level linearity including the level range control

Range	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Auto	94.0	93.9	-0.1	±1.1

9. Tone burst response

Time Weighting	Tone burst duration, Tb (ms)	Cycle	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	0.25	1	108.0	107.9	-0.1	1.5 ; -5.0
	2	8	117.0	117.0	0.0	1.0 ; -2.5
	200	800	134.0	134.0	0.0	±1.0
Slow	2	8	108.0	108.0	0.0	1.5 ; -5.0
	200	800	127.6	127.6	0.0	±1.0
SEL	0.25	1	99.0	98.9	-0.1	1.5 ; -5.0
	2	8	108.0	108.0	0.0	1.0 ; -2.5
	200	800	128.0	128.0	0.0	±1.0

10. Peak C sound level

Number of cycle in test signal	Anticipated Value (dB)	Measured Value, Lcpeak (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	133.0	133.0	0.0	±3.0
One	136.4	135.5	-0.9	±3.0

Number of cycle in test signal	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	133.0	133.0	0.0	±2.0
Positive half cycle	135.4	135.1	-0.3	±2.0
Negative half cycle	135.4	135.1	-0.3	±2.0

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Job No. : VC67AC0043
Pages : 8 of 8

11. Overload indication

Measured value (dB)		Deviated Value (dB)	Acceptance Limits (dB)
Positive one-half cycle	Negative one-half cycle		
89.6	89.5	-0.1	±1.5

12. High level stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A-weight	137.0	137.0	0.0	±0.3

The reported uncertainty is based on a standard uncertainty multiplied by coverage factor $k = 2$ or any value following calculation, providing a level of confidence of approximately 95 %

End of Calibration Certificate

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Cert. No. : ACL23344
Pages : 1 of 8

Calibration Certificate

Equipment : SOUND LEVEL METER
Manufacturer : RION
Model : NL-42A / Microphone UC-52 / Pre-amplifier NH-24
Serial No.: 00623382 / 198628 / 26410
ID No.: BKK_FS1215

Condition As Found : GOOD

Customer : ALS LABORATORY GROUP (THAILAND) CO., LTD.
104 PHATTHANAKAN 40, PHATTHANAKAN ROAD,
KHAENG PHATTHANAKAN, KHUET SUAN LUANG,
BANGKOK, 10250 THAILAND.

Location : +
Ambient Temperature : (23.0 ± 3) °C
Pressure : (101.3 ± 3) kPa
Relative Humidity : (50.0 ± 20) %

Received Date : 01 NOVEMBER 2023
Calibration Date : 07-08 NOVEMBER 2023
Date of Issue : 14 NOVEMBER 2023

Calibrated by : Nattakorn Pitsupaisun

Approved by : *T. Petchur*
(Thanakul Petchurai)

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QI-TS12-04-04-020664

Continuation of Calibration Certificate

Cert. No. : ACL23344
Job No. : VC67AC0022
Pages : 2 of 8

Calibration Procedure : CP-AC-01

Calibration Method :

This equipment was calibrated by based on IEC-61672-3 (2013) Standard for sound level meter (SLM).
The SLM had tests to Acoustical and Electrical signal tests of frequency weighting with Anechoic chamber and Reference Standard Instruments.

For tests results of each items were made by observation of each Instruments display and also with SLM's display.

Condition of this result of calibration :

1. Reference Standard Instruments :

Instrument	Model	Serial No.	Cert. No.	Due Date
Waveform Generator	33210A	MY48017076	EF-0009-23	07-FEB-24
Waveform Generator	33511B	MY53202742	EF-0010-23	07-FEB-24
Digital Multimeter	33461A	MY53220104	EEL_BP 30/0266	13-FEB-24
Digital Multimeter	33461A	MY53220076	EEL_BP 29/0266	13-FEB-24
Digital Multimeter	34461A	MY60024273	EEL_BP 31/0266	14-FEB-24
Programmable Attenuator	MAT-1070	62100114	EF-0011-23	08-FEB-24
Condenser Microphone	4180	2977990	AA-1001-23	14-FEB-24
Measuring Amplifier	NA-42KAI	34560495	AA-3002-23	14-FEB-24

2. This result of calibration was found accurate as shown on date and place of calibration for this calibrated item only.

3. This certificate is traceable to the international system of unit maintained at :

3.1 National Institute of Metrology (Thailand).

3.2 Thailand Institute of Scientific and Technological Research (TISTR).

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Continuation of Calibration Certificate

Cert. No. : ACL23344
Job No. : VC67AC0022
Pages : 3 of 8

Summary of Measurement Result :

Parameter	Pass	Fail	Uncertainty (dB)	Maximum-permitted uncertainty of measurement (dB)
1. Absolute sensitivity	✓	-	0.2	N/A
2. Self-generated noise	✓	-	0.2	N/A
3. Acoustical signal tests of frequency weightings				
125 Hz	✓	-	0.3	0.6
1000 Hz	✓	-	0.3	0.6
8000 Hz	✓	-	0.3	0.7
4. Electrical signal tests of frequency weightings				
For 10 Hz to 4 kHz	✓	-	0.3	0.6
For > 4 kHz to 10 kHz	✓	-	0.3	0.7
For > 10 kHz to 20 kHz	-	-	-	1.0
5. Frequency and time weightings at 1 kHz	✓	-	0.2	0.2
6. Long - term stability	✓	-	0.1	0.1
7. Level linearity on the reference level range	✓	-	0.2	0.3
8. Level linearity including the level range control	✓	-	0.2	0.3
9. Tone burst response	✓	-	0.2	0.3
10. Peak C sound level	✓	-	0.2	0.35
11. Overload indication	✓	-	0.2	0.25
12. High level stability	✓	-	0.1	0.1

Note : Pass/Fail evaluation for each parameter,

will be considered together from the acceptance limit and the Maximum-permitted uncertainty of measurement.

Q1-TS12-04-04-020664

7. Petch

Continuation of Calibration Certificate

Cert. No. : ACL23344
Job No. : VC67AC0022
Pages : 4 of 8

Result of calibration :

1. Absolute sensitivity

Reference Acoustic Signal (dB)	Measured Value (dB)	Deviation (dB)	Acceptance Limit (dB)
93.9 (93.98)	93.9	0.0	±0.3

2. Self-generated noise

2.1 Normal test

Measured Value (dB)
14.4

2.2 The microphone of the sound level meter was replaced by electrical signal input device.

Frequency Weighting	Measured value (dB)
A - weight	10.8
C - weight	16.9
Flat	22.7

3. Acoustical signal tests of frequency weightings

Meier free-field acoustic response at a level of 84 dB

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
125	0.3	0.3	0.3	± 1.5
1000	0.0	0.0	0.0	± 1.0
8000	-0.2	-0.1	-0.1	±5.0

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Continuation of Calibration Certificate

Cert. No. : ACL23344
Job No. : VC67AC0022
Pages : 5 of 8

4. Electrical signal tests of frequency weightings

Weighing network response with relative to 1 kHz

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
63	0.0	-0.1	0.0	±2.0
125	0.0	0.0	0.0	±1.5
250	0.0	0.0	0.0	±1.5
500	0.0	0.1	0.0	±1.5
1000	0.0	0.0	0.0	±1.0
2000	0.0	0.1	0.0	±2.0
4000	0.0	0.1	0.0	±3.0
8000	0.0	0.1	0.1	±5.0

5. Frequency and time weightings at 1 kHz

5.1 Frequency weightings at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.0	0.0	±0.2
C - weight	94.0	94.0	0.0	±0.2
Flat	94.0	94.0	0.0	±0.2

5.2 Time weighting at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	94.0	94.0	0.0	±0.1
Slow	94.0	94.0	0.0	±0.1
Lcq	94.0	94.0	0.0	±0.1

6. Long - term stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.1	0.1	±0.3

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Continuation of Calibration Certificate

Cert. No. : ACL23344
Job No. : VC67AC0022
Pages : 6 of 8

7. Level linearity on the reference level range

Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
137.0	137.0	0.0	± 1.1
136.0	136.0	0.0	± 1.1
135.0	135.0	0.0	± 1.1
134.0	134.0	0.0	± 1.1
133.0	133.0	0.0	± 1.1
132.0	132.0	0.0	± 1.1
131.0	131.0	0.0	± 1.1
129.0	129.0	0.0	± 1.1
124.0	124.0	0.0	± 1.1
119.0	119.1	0.1	± 1.1
114.0	114.0	0.0	± 1.1
109.0	109.0	0.0	± 1.1
104.0	104.1	0.1	± 1.1
99.0	99.0	0.0	± 1.1
94.0	94.0	0.0	± 1.1
89.0	89.0	0.0	± 1.1
84.0	84.0	0.0	± 1.1
79.0	79.0	0.0	± 1.1
74.0	74.0	0.0	± 1.1
69.0	69.0	0.0	± 1.1
64.0	64.0	0.0	± 1.1
59.0	59.0	0.0	± 1.1
54.0	54.0	0.0	± 1.1
49.0	49.0	0.0	± 1.1
44.0	44.0	0.0	± 1.1
39.0	39.0	0.0	± 1.1
34.0	34.0	0.0	± 1.1
30.0	29.9	-0.1	± 1.1
29.0	28.9	-0.1	± 1.1
28.0	27.9	-0.1	± 1.1
27.0	26.9	-0.1	± 1.1
26.0	25.9	-0.1	± 1.1
25.0	24.8	-0.2	± 1.1

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Continuation of Calibration Certificate

Cert. No. : ACL23344
Job No. : VC67AC0022
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8. Level linearity including the level range control

Range	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Auto	94.0	94.0	0.0	±1.1

9. Tone burst response

Time Weighting	Tone burst duration, Tb (ms)	Cycle	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	0.25	1	108.0	108.0	0.0	1.5 ; -5.0
	2	8	117.0	117.0	0.0	1.0 ; -2.5
	200	800	134.0	134.1	0.1	±1.0
Slow	2	8	108.0	108.0	0.0	1.5 ; -5.0
	200	800	127.6	127.6	0.0	±1.0
SEL	0.25	1	99.0	98.9	-0.1	1.5 ; -5.0
	2	8	108.0	108.0	0.0	1.0 ; -2.5
	200	800	128.0	128.1	0.1	±1.0

10. Peak C sound level

Number of cycle in test signal	Anticipated Value (dB)	Measured Value, L _{peak} (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	133.0	133.0	0.0	±3.0
One	136.4	136.0	-0.4	±3.0

Number of cycle in test signal	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	133.0	133.1	0.1	±2.0
Positive half cycle	135.4	135.2	-0.2	±2.0
Negative half cycle	135.4	135.2	-0.2	±2.0

QF-TS12-04-04-020664

T. Petchur

Continuation of Calibration Certificate

Cert. No. : ACL23344
Job No. : VC67AC0022
Pages : 8 of 8

11. Overload indication

Measured value (dB)		Deviated Value (dB)	Acceptance Limits (dB)
Positive one-half cycle	Negative one-half cycle	-0.1	±1.5
89.6	89.5		

12. High level stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	137.0	136.9	0.1	±0.3

The reported uncertainty is based on a standard uncertainty multiplied by coverage factor $k = 2$ or any value following calculation, providing a level of confidence of approximately 95 %

End of Calibration Certificate

QF-TS12-04-04-020664

T. Petchur

451-451/1 Sirinthorn Rd, Bangbunru, Banglud Bangkok 10700 THAILAND
Tel:0-2435-8800 Fax:0-2433-1679 e-mail:cal-center@sithiporn.com http://www.sithiporn.comCert. No. : ACL23311
Pages : 1 of 8

Calibration Certificate

Equipment : SOUND LEVEL METER
Manufacturer : RION
Model : NL-42/ Microphone UC-52 / Pre-amplifier NH-24
Serial No.: 00597164 / 180407 / 88177
ID No.: BEK_F80999

Condition As Found : GOOD

Customer : ALS LABORATORY GROUP (THAILAND) CO., LTD.
104 PIATTHANAKAN 40, PHATTHANAKAN ROAD,
KHWAENG PHATTHANAKAN, KHET SUAN LUANG,
BANGKOK, 10250 THAILAND.

Location :
Ambient Temperature : (23.0 ± 3) °C
Pressure : (101.3 ± 3) kPa
Relative Humidity : (50.0 ± 20) %

Received Date : 22 SEPTEMBER 2023
Calibration Date : 16-18 OCTOBER 2023
Date of Issue : 19 OCTOBER 2023

Calibrated by : Nathakorn Pisutpaisan

Approved by : T. Petchur
(Thanakul Petchurai)

This certificate is issued in accordance with the requirements of ISO/IEC 17025 standard, may not be reproduced other than in full, except with the prior written approval of the head of Calibration Laboratory.

QF-TS12-04-04-020664

Continuation of Calibration Certificate

Cert. No. : ACL23311
Job No. : VC66AC0101
Pages : 2 of 8

Calibration Procedure : CP-AC-01

Calibration Method :

This equipment was calibrated by based on IEC-61672-3 (2013) Standard for sound level meter (SLM).
The SLM had tests to Acoustical and Electrical signal tests of frequency weighting with Anechoic chamber and Reference Standard Instruments.
For tests results of each items were made by observation of each Instruments display and also with SLM's display.

Condition of this result of calibration :

1. Reference Standard Instruments :

Instrument	Model	Serial No.	Cert. No.	Due Date
Waveform Generator	33210A	MY48017076	EF-0009-23	07-FEB-24
Waveform Generator	33511B	MY52302742	EF-0010-23	07-FEB-24
Digital Multimeter	33461A	MY53220104	EEL_BP 30/0266	13-FEB-24
Digital Multimeter	33461A	MY53220076	EEL_BP 29/0266	13-FEB-24
Digital Multimeter	34461A	MY60024273	EEL_BP 31/0266	14-FEB-24
Programmable Attenuator	MAT-1070	62100114	EF-0011-23	08-FEB-24
Condenser Microphone	4180	2977900	AA-1001-23	14-FEB-24
Measuring Amplifier	NA-42KA1	34560495	AA-3002-23	14-FEB-24

2. This result of calibration was found accurate as shown on date and place of calibration for this calibrated item only.

3. This certificate is traceable to the international system of unit maintained at :

3.1 National Institute of Metrology (Thailand),

3.2 Thailand Institute of Scientific and Technological Research (TISTR).

QF-TS12-04-04-020664

T. Petch

Continuation of Calibration Certificate

Cert. No. : ACL23311
Job No. : VC66AC0101
Pages : 3 of 8

Summary of Measurement Result :

Parameter	Pass	Fail	Uncertainty (dB)	Maximum-permitted uncertainty of measurement (dB)
1. Absolute sensitivity	✓	-	0.2	N/A
2. Self-generated noise	✓	-	0.2	N/A
3. Acoustical signal tests of frequency weightings				
125 Hz	✓	-	0.3	0.6
1000 Hz	✓	-	0.3	0.6
8000 Hz	✓	-	0.3	0.7
4. Electrical signal tests of frequency weightings				
For 10 Hz to 4 kHz	✓	-	0.3	0.6
For > 4 kHz to 10 kHz	✓	-	0.3	0.7
For > 10 kHz to 20 kHz	-	-	-	1.0
5. Frequency and time weightings at 1 kHz	✓	-	0.2	0.2
6. Long - term stability	✓	-	0.1	0.1
7. Level linearity on the reference level range	✓	-	0.2	0.3
8. Level linearity including the level range control	✓	-	0.2	0.3
9. Tone burst response	✓	-	0.2	0.3
10. Peak C sound level	✓	-	0.2	0.35
11. Overload indication	✓	-	0.2	0.25
12. High level stability	✓	-	0.1	0.1

Note : Pass/Fail evaluation for each parameter,

will be considered together from the acceptance limit and the Maximum-permitted uncertainty of measurement.

QF-TS12-04-04-020664

T. Petch

Continuation of Calibration Certificate

Cert. No. : ACL23311
Job No. : VC66AC0101
Pages : 4 of 8

Result of calibration :

1. Absolute sensitivity

Reference Acoustic Signal (dB)	Measured Value (dB)	Deviation (dB)	Acceptance Limit (dB)
93.9 (93.98)	93.9	0.0	±0.3

2. Self-generated noise

2.1 Normal test

Measured Value (dB)
14.8

2.2 The microphone of the sound level meter was replaced by electrical signal input device.

Frequency Weighting	Measured value (dB)
A - weight	11.6
C - weight	17.6
Flat	23.3

3. Acoustical signal tests of frequency weightings

Meter free-field acoustic response at a level of 84 dB

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
125	0.0	0.0	0.0	± 1.5
1000	0.0	0.0	0.0	± 1.0
8000	1.1	1.1	1.1	±5.0

Continuation of Calibration Certificate

Cert. No. : ACL23311
Job No. : VC66AC0101
Pages : 5 of 8

4. Electrical signal tests of frequency weightings

Weighting network response with relative to 1 kHz.

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
63	0.0	-0.1	0.0	±2.0
125	0.0	0.0	0.0	±1.5
250	0.0	0.0	-0.1	±1.5
500	0.0	0.0	-0.1	±1.5
1000	0.0	0.0	0.0	±1.0
2000	0.0	0.0	0.0	±2.0
4000	0.0	0.0	0.0	±3.0
8000	0.0	0.1	0.1	±5.0

5. Frequency and time weightings at 1 kHz

5.1 Frequency weightings at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.0	0.0	±0.2
C - weight	94.0	94.0	0.0	±0.2
Flat	94.0	94.0	0.0	±0.2

5.2 Time weighting at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	94.0	94.0	0.0	±0.1
Slow	94.0	94.0	0.0	±0.1
Leq	94.0	94.0	0.0	±0.1

6. Long - term stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A - weight	94.0	94.0	0.0	±0.3

QF-TS12-04-04-020664

T. Petch

QF-TS12-04-04-020664

T. Petch

Cert. No. : ACL23311
Job No. : VC66AC0101
Pages : 6 of 8

7. Level linearity on the reference level range

Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
137.0	137.0	0.0	± 1.1
136.0	136.0	0.0	± 1.1
135.0	135.0	0.0	± 1.1
134.0	134.0	0.0	± 1.1
133.0	133.0	0.0	± 1.1
132.0	132.0	0.0	± 1.1
131.0	131.0	0.0	± 1.1
129.0	129.0	0.0	± 1.1
124.0	124.0	0.0	± 1.1
119.0	119.0	0.0	± 1.1
114.0	114.0	0.0	± 1.1
109.0	109.0	0.0	± 1.1
104.0	104.0	0.0	± 1.1
99.0	99.0	0.0	± 1.1
94.0	94.0	0.0	± 1.1
89.0	89.0	0.0	± 1.1
84.0	84.1	0.1	± 1.1
79.0	79.0	0.0	± 1.1
74.0	74.1	0.1	± 1.1
69.0	69.0	0.0	± 1.1
64.0	64.0	0.0	± 1.1
59.0	59.1	0.1	± 1.1
54.0	54.0	0.0	± 1.1
49.0	49.0	0.0	± 1.1
44.0	44.0	0.0	± 1.1
39.0	39.0	0.0	± 1.1
34.0	34.0	0.0	± 1.1
30.0	30.0	0.0	± 1.1
29.0	29.0	0.0	± 1.1
28.0	28.0	0.0	± 1.1
27.0	27.0	0.0	± 1.1
26.0	25.9	-0.1	± 1.1
25.0	25.0	0.0	± 1.1

QF-TS12-04-04-020664

T. Petchur

Cert. No. : ACL23311
Job No. : VC66AC0101
Pages : 7 of 8

8. Level linearity including the level range control

Range	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Auto	94.0	94.0	0.0	± 1.1

9. Tone burst response

Time Weighting	Tone burst duration, Tb (ms)	Cycle	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	0.25	1	108.0	107.9	-0.1	1.5 ; -5.0
	2	8	117.0	117.0	0.0	1.0 ; -2.5
	200	800	134.0	134.0	0.0	± 1.0
Slow	2	8	108.0	108.0	0.0	1.5 ; -5.0
	200	800	127.6	127.6	0.0	± 1.0
SEL	0.25	1	99.0	98.9	-0.1	1.5 ; -5.0
	2	8	108.0	108.0	0.0	1.0 ; -2.5
	200	800	128.0	128.0	0.0	± 1.0

10. Peak C sound level

Number of cycle in test signal	Anticipated Value (dB)	Measured Value, L _{peak} (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	133.0	133.0	0.0	± 3.0
One	136.4	136.4	0.0	± 3.0

Number of cycle in test signal	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Continuous	133.0	133.0	0.0	± 2.0
Positive half cycle	135.4	135.1	-0.3	± 2.0
Negative half cycle	135.4	135.2	-0.2	± 2.0

QF-TS12-04-04-020664

T. Petchur

Cert. No. : ACL23311
Job No. : VC66AC0101
Pages : 8 of 8

11. Overload indication

Measured value (dB)		Deviated Value (dB)	Acceptance Limits (dB)
Positive one-half cycle	Negative one-half cycle		
89.5	89.6	0.1	± 1.5

12. High level stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A-weight	137.0	137.0	0.0	± 0.3

The reported uncertainty is based on a standard uncertainty multiplied by coverage factor $k=2$ or any value following calculation, providing a level of confidence of approximately 95 %

End of Calibration Certificate

QF-TS12-04-04-020664

T. Petchur

451/451/1 Sirinthorn Road, Bangsue, Bangkok 10700 Thailand
Tel : +66 2432 8331 Email : calibration@sithiporn.comCert. No. : ACL24017
Pages : 1 of 8

Calibration Certificate

Equipment : SOUND LEVEL METER
Manufacturer : RION
Model : NL-42 / Microphone UC-52 / Preamplifier NH-24
Serial No. : 00572566 / 142140 / 22309
ID No. : BKK_FS0875

Condition As Found : GOOD

Customer : ALS LABORATORY GROUP (THAILAND) CO., LTD.
104 PHATTHANAKAN 40, PHATTHANAKAN ROAD,
KHWAENG PHATTHANAKAN, KHET SUAN LUANG,
BANGKOK, 10250 THAILAND.

Location :
Ambient Temperature : (23.0 ± 3) °C
Pressure : (101.3 ± 3) kPa
Relative Humidity : (50.0 ± 20) %

Received Date : 22 DECEMBER 2023
Calibration Date : 10-11 JANUARY 2024
Date of Issue : 12 JANUARY 2024

Calibrated by : Natbakorn Pisutpaisan

Approved by :

T. Petchur
(Thanakul Petchurai)

This certificate is issued in accordance with the requirements of ISO/IEC 17025 standard, may not be reproduced other than in full, except with the prior written approval of the head of Calibration Laboratory.

SITHIPORN ASSOCIATES CO., LTD.
CALIBRATION LABORATORY

45F-45J/1 Srinthorn Road Bangburm, Bangkok, 10700 Thailand
Tel : +66 2433 8331 Email : calibration@sithiporn.com



Cert. No. : ACL24017
Job No. : VC67AC0045
Pages : 2 of 8

Calibration Procedure : CP-AC-01

Calibration Method :

This equipment was calibrated by follow on IEC-61672-3 (2013) Standard for sound level meter (SLM).
The SLM had tests to Acoustical and Electrical signal tests of frequency weighting with Anechoic chamber and Reference Standard Instruments.
For tests results of each items were made by observation of each Instruments display and also with SLM's display.

Condition of this result of calibration :

1. Reference Standard Instruments :

Instrument	Model	Serial No.	Cert. No.	Due Date
Waveform Generator	33210A	MY48017076	EF-0009-23	07-FEB-24
Waveform Generator	33511B	MY52302742	EF-0010-23	07-FEB-24
Digital Multimeter	33461A	MY53220104	EEL BP 30/0266	13-FEB-24
Digital Multimeter	33461A	MY53220076	EEL BP 29/0266	13-FEB-24
Digital Multimeter	34461A	MY60024273	EEL BP 31/0266	14-FEB-24
Programmable Attenuator	MAT-1070	62100114	ET-0011-23	08-FEB-24
Condenser Microphone	4180	2977900	AA-1001-23	14-FEB-24
Measuring Amplifier	NA-42KAI	34560495	AA-3002-23	14-FEB-24

2. This result of calibration was found accurate as shown on date and place of calibration for this calibrated item only.

3. This certificate is traceable to the international system of unit maintained at :

3.1 National Institute of Metrology (Thailand).

3.2 Thailand Institute of Scientific and Technological Research (TISTR).

T. Petch

SITHIPORN ASSOCIATES CO., LTD.
CALIBRATION LABORATORY

45F-45J/1 Srinthorn Road Bangburm, Bangkok, 10700 Thailand
Tel : +66 2433 8331 Email : calibration@sithiporn.com



Cert. No. : ACL24017
Job No. : VC67AC0045
Pages : 3 of 8

Summary of Measurement Result :

Parameter	Uncertainty (dB)	Maximum-permitted uncertainty of measurement (dB)
1. Absolute sensitivity	0.2	N/A
2. Self-generated noise	0.2	N/A
3. Acoustical signal tests of frequency weightings		
125 Hz	0.3	0.6
1000 Hz	0.3	0.6
8000 Hz	0.3	0.7
4. Electrical signal tests of frequency weightings		
For 10 Hz to 4 kHz	0.3	0.6
For > 4 kHz to 10 kHz	0.3	0.7
For > 10 kHz to 20 kHz	-	1.0
5. Frequency and time weightings at 1 kHz	0.2	0.2
6. Long-term stability	0.1	0.1
7. Level linearity on the reference level range	0.2	0.3
8. Level linearity including the level range control	0.2	0.3
9. Tone burst response	0.2	0.3
10. Peak C sound level	0.2	0.35
11. Overload indication	0.2	0.25
12. High level stability	0.1	0.1

T. Petch

SITHIPORN ASSOCIATES CO., LTD.
CALIBRATION LABORATORY

45F-45J/1 Srinthorn Road Bangburm, Bangkok, 10700 Thailand
Tel : +66 2433 8331 Email : calibration@sithiporn.com



Cert. No. : ACL24017
Job No. : VC67AC0045
Pages : 4 of 8

Result of calibration :

1. Absolute sensitivity

Reference Acoustic Signal (dB)	Measured Value (dB)	Deviation (dB)	Acceptance Limit (dB)
93.9 (93.98)	93.9	0.0	±0.3

2. Self-generated noise

2.1 Normal test

Measured Value (dB)
16.3

2.2 The microphone of the sound level meter was replaced by electrical signal input device.

Frequency Weighting	Measured value (dB)
A-weight	13.8
C-weight	19.9
Flat	25.8

3. Acoustical signal tests of frequency weightings

Micro free-field acoustic response at a level of 84 dB

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
125	0.3	0.3	0.3	± 1.5
1000	0.0	0.0	0.0	± 1.0
8000	-0.2	-0.2	-0.2	± 5.0

T. Petch

SITHIPORN ASSOCIATES CO., LTD.
CALIBRATION LABORATORY

45F-45J/1 Srinthorn Road Bangburm, Bangkok, 10700 Thailand
Tel : +66 2433 8331 Email : calibration@sithiporn.com



Cert. No. : ACL24017
Job No. : VC67AC0045
Pages : 5 of 8

4. Electrical signal tests of frequency weightings

Weighting network response with relative to 1 kHz.

Frequency (Hz)	Deviation from various frequency weighting response curve (dB)			
	Flat	C-weight	A-weight	Acceptance Limits
63	0.0	0.0	0.0	±2.0
125	0.0	0.1	0.0	±1.5
250	0.0	0.0	0.0	±1.5
500	0.0	0.1	0.0	±1.5
1000	0.0	0.0	0.0	±1.0
2000	0.0	0.1	0.0	±2.0
4000	0.0	0.0	0.0	±3.0
8000	0.0	0.1	0.1	±5.0

5. Frequency and time weightings at 1 kHz

5.1 Frequency weightings at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A-weight	94.0	94.0	0.0	± 0.2
C-weight	94.0	94.0	0.0	± 0.2
Flat	94.0	94.0	0.0	± 0.2

5.2 Time weighting at 1 kHz

Frequency Weighting	Anticipated Value (dB)	Measured Value (dB)	Deviated Value (dB)	Acceptance Limits (dB)
Fast	94.0	94.0	0.0	± 0.1
Slow	94.0	94.0	0.0	± 0.1
Leq	94.0	94.0	0.0	± 0.1

6. Long-term stability

Frequency Weighting	SLM Display at initial (dB)	SLM Display at final (dB)	Deviated Value (dB)	Acceptance Limits (dB)
A-weight	94.0	94.0	0.0	± 0.3

T. Petch



Cert.No.: 23CH1369
Page.: 2 of 3

Condition of this calibration result

1. Reference Standard Instrument :-

Instrument	Serial No.	ID No.	Cert. No.	Due Date
1) Ref. Standard Thermometer	4962054	110RC044	231908	26 Jul 2024

This certification is traceable to the International System of Unit maintained through:-
- Technology Promotion Association (Thailand-Japan)

2. Certified Reference Materials : The measurement results are traceable to SI through CPA chem Ltd.,
ANSI-ASQ National Accreditation Board, Accredited No. AR-1835

Buffer Solution	Manufacturer	Lot No.	Exp. date
pH 4.008	CPA chem	913598	14 July 2025
pH 6.985	CPA chem	913599	14 July 2024
pH 9.997	CPA chem	931961	30 Sep 2024

3. This certificate is valid only to the item calibrated on date and place of calibration.

Calibration Results

Function : pH Measurement

Performing three buffers standard curve by using buffer nominal pH (4,7,10)

Unit Under Calibration	Standard pH Buffer Solution	Actual pH Reading	Actual mV Reading (mV)	Uncertainty of pH measurement (±)	Coverage factor k
pH Electrode S/N.:230473042902	4.008	4.002	156.5	0.0044	2.00
	6.985	6.987	-10.4	0.0084	2.00
	9.997	10.005	-189.3	0.0071	2.00

Remark - Can not connect the BNC because the plug does not match with the socket.

Sathip

a 1187344



Cert.No.: 23CH1369
Page.: 3 of 3

Calibration Results

Function : Temperature Measurement

(*) Without adjustment

This equipment was connected with Temperature Probe;

- Model : PHC281

- Serial No. : 230473042902

Dimension of probe;

- Length : 103 mm

- Diameter : 12 mm

- Immersion Depth : 90 mm

Calibration Point (°C)	Standard Temperature (°C)	UUC* Reading (°C)	Error (°C)	Uncertainty of measurement (± °C)	Coverage factor k
25.0	25.002	25.1	0.098	0.13	2.00

Remark : - UUC* = Unit Under Calibration

The reported uncertainty of measurement was based on a standard uncertainty multiplied by a coverage factor k, providing a level of confidence of approximately 95 %.

-000-

Sathip

a 1187343



TECHNOLOGY PROMOTION ASSOCIATION (THAILAND-JAPAN)
CORPORATE SERVICES 3: EQUIPMENT CALIBRATION AND TESTING SERVICES
53/4 PATTANAKARN ROAD SOI 16, SUANLUANG, SUANLUANG BANGKOK 10250
TEL. 0-2717-3000-29 FAX 0-2719-9484



Certificate of Calibration

Cert.No.: 24CH1295
Page.: 1 of 3

Equipment : pH Meter
Manufacturer : Hach
Model : HQ411d
Serial No. : 200100031163
ID No. : BKK_EN0342
Condition As-Received: Used Item
Received Date : 16 October 2024
Calibration Date : 17 October 2024
Reference : 2410-0548DSC-5
Submitted by : ALS Laboratory Group (Thailand) Co.,Ltd.
104 Phatthanakan 40, Phatthanakan Rd.,
Khwaeng Phatthanakan, Khet Suan Luang,
Bangkok 10250 Thailand

Ambient Temperature : (25 ± 2.5) °C
Relative Humidity : (50 ± 15) %
Calibration Procedure : In - house method :
- CP-CH5 by direct measurement with
certified reference material (CRM)

- CP-CH8 by comparison with temperature standard

Calibrated by : Warakorn Lemgatrakul

Approved by :

Sathip
Approved Signatory

() Unnopphol Harachai
() Ponpan Paipm
(✓) Sathip Meangmai

Issue Date : 21 October 2024

The Uncertainties are for a confidence probability of approximately 95%

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Approval of the head of Corporate Services 3: Equipment Calibration and Testing Services



Cert.No.: 24CH1295
Page.: 2 of 3

Condition of this calibration result

1. Reference Standard Instrument

Instrument	Serial No.	ID No.	Cert. No.	Due Date
1)Ref. Standard Thermometer	2186080	130RC044	2411022	16 Sep 2025

- This Certification is traceable to SI Through Technology Promotion Association (Thailand - Japan)

2. Certified Reference Materials :The measurement results are traceable to SI through Hach Lenge GmbH Ltd.
Deutsche Akkreditierungsstelle, Accredited No.D-RM-15184-01-00
:The measurement results are traceable to SI through CPA chem Ltd.,
ANSI-ASQ National Accreditation Board, Accredited No. AR-1835

Buffer Solution	Manufacturer	Lot No.	Exp. date
pH 4.008	CPA chem	1034203	27 Sep 2026
pH 6.999	Hach Lenge GmbH	C03145	28 Feb 2026
pH 10.010	CPA chem	1034205	27 Sep 2025

3. This certificate is valid only to the item calibrated on date and place of calibration.

Calibration Results

Function : pH Measurement

Performing three buffers standard curve by using buffer nominal pH (4,7,10)

Unit Under Calibration	Standard pH Buffer Solution	Actual pH Reading	Actual mV Reading (mV)	Uncertainty of pH Measurement (±)	Coverage factor k
pH Electrode S/N.: 230473042902	4.008	4.028	174.6	0.0044	2.00
	6.999	7.014	1.4	0.0084	2.05
	10.010	10.018	-172.8	0.0066	2.00

Remark - Can not connect the BNC because the plug does not match with the socket.



Cert.No.: 24CH1295
Page.: 3 of 3

Calibration Results

Function : Temperature Measurement

(*) Without adjustment

This equipment was connected with Temperature Probe;

- Model : PHC281

- Serial No. : 230473042902

Dimension of probe

- Length : 103 mm.

- Diameter : 12 mm.

- Immersion Depth : 90 mm.

Calibration Point (°C)	Standard Temperature (°C)	UUC* Reading (°C)	Error (°C)	Uncertainty of measurement (± °C)	Coverage factor k
25.0	25.002	25.0	-0.002	0.13	2.00

Remark : UUC* = Unit Under Calibration

The reported uncertainty of measurement was based on a standard uncertainty multiplied by a coverage factor k , providing a level of confidence of approximately 95 %.

-000-



Certificate of Calibration

Equipment: CONDUCTIVITY METER
Model: ORION STAR A215
Serial No. (or ID): X58031
Manufacturer: Thermo Scientific
Electrode Serial No: YV1-18416
Condition: In Condition

Certificate No.: C24230292
Issued Date: 25 December 2023
Job No: WO-00012862
Page: 1 of 2
Model: ORION 013005MD
Brand: Thermo Scientific

Customer: ALS Laboratory Group (Thailand) Co., Ltd.
104 Soi Pattanakarn 40, Pattanakarn Rd.,
Suan Luang, Bangkok 10250 Thailand

Environment Condition: Temperature 21.7 °C ± 0.1 °C
Humidity 53.7 %RH ± 0.1 %RH

Calibration Place: ALS Laboratory Group (Thailand) Co., Ltd. (Wet Chemistry Lab 2)
104 Soi Pattanakarn 40, Pattanakarn Rd.,
Suan Luang, Bangkok 10250 Thailand

Calibration By: Mr. Siwapan Srijan

Calibration Date: 25 December 2023

The Method used: In house method, CAL-WI-49, base on ASTM D 1125-14 and D 5391-14

Traceability: This certificate is traceable to the SI Units maintained by CRM of NIST(SRM) through CPA chem Co., Ltd. (ISO/IEC 17034) Certificate No. 890590, 890591, 890592

(Mr. Siwapan Srijan)
Person in charge

(Mr. Nilinun Srihawan)
Authorized signatory

This certificate is issued in accordance with the International System of Units (SI). It provides traceability of measurement to international or national standard or other recognized reference standard laboratory.
The measurement uncertainty stated is the expanded uncertainty which is obtained from the standard uncertainty multiplied by the coverage factor ($k=2$) to provide a level of confidence of approximately 95%. It is determined in accordance with the Guide to Expression of Uncertainty in Measurement (GUM).
These results may be affected by deviations from specified conditions. The results relate only to the items tested, calibrated or sampled. The report shall not be reproduced except in full without approval of DKSH Technology Limited.

บริษัท ดิเคช เทคโนโลยี จำกัด
DKSH Technology Limited
2333 สุขุมวิท 100/1 ถนนสุขุมวิท แขวงคลองเตย เขตคลองเตย กรุงเทพมหานคร 10260
2533 Sukhumvit Road, Bangkok, Prathungthong, Bangkok 10260
Phone: +66 2639 7100 Email: info@calibration@dksh.com Website: www.dksh.com/calibration@thailand

Delivering Growth - in Asia and Beyond

CAL-FM-C24-09 12 Sep 2022



Certificate No.: C24230292
Page: 2 of 2

Calibration Results:

Before Adjustment

Standard Conductivity Solution	Unit Under Calibration Reading	Correction	Coverage Factor (k)	Uncertainty (±)
84.000 µS/cm	92.94 µS/cm	-8.640 µS/cm	2.00	0.68 µS/cm
1413.0 µS/cm	1423 µS/cm	-10.0 µS/cm	2.00	11 µS/cm
12.880 mS/cm	12.81 mS/cm	0.070 mS/cm	2.00	0.10 mS/cm

After Adjustment : at 84.0 µS/cm, 1413 µS/cm, 12.86 mS/cm

Standard Conductivity Solution	Unit Under Calibration Reading	Correction	Coverage Factor (k)	Uncertainty (±)
84.000 µS/cm	84.03 µS/cm	-0.030 µS/cm	2.00	0.68 µS/cm
1413.0 µS/cm	1414 µS/cm	-1.0 µS/cm	2.00	11 µS/cm
12.880 mS/cm	12.86 mS/cm	0.020 mS/cm	2.00	0.098 mS/cm

The End of Certificate



ใบตรวจสอบสภาพเครื่องวัดค่าคลอสม

ชนิดเครื่องมือ: CONDUCTIVITY METER รุ่น: ORION STAR A215 หมายเลขเครื่อง: X58031
เลขที่ใบงาน: WO-00012862

ตรวจสอบ (วัน)	รายการตรวจเช็ค	ตรวจสอบ (ค่า)	หมายเหตุ
25 Dec 2023		25 Dec 2023	
ปกติ	ไม่ปกติ	ปกติ	ไม่ปกติ
General			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. ความสมบูรณ์เครื่อง	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. ความสะอาด (ช่องใส่ตัวอย่าง, ภายในนอกเครื่อง)	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. สวิตช์ ปิด - เปิด เครื่อง (On-Off Switch)	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. ปุ่มกด (Keypad)	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	5. หน้าจอ (Display, Screen Contrast)	<input checked="" type="checkbox"/>
Spectrophotometer			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	6. แบตเตอรี่สำรอง (Battery Backup) >= 2.5 VDC	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. ความแม่นยำความยาวคลื่น (Wavelength Control)	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. ความยาวคลื่น (Wavelength Check)	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	9. แหล่งกำเนิดแสง (UV < 3,000 hour)	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	10. แหล่งกำเนิดแสง (Visible < 5,000 hour)	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	11. ช่องใส่ตัวอย่าง (Cuvette Module)	<input checked="" type="checkbox"/>
pH Meter and Conductivity Meter			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	12. อิเล็กโทรด (Electrode and Connection Cable)	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	13. ระดับสารละลายใน Electrode (Level KCl)	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	14. ฝาปิดกันปลาย Electrode (Dust Protection Hood)	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	15. ขาตั้งอิเล็กโทรด (Stand)	<input checked="" type="checkbox"/>
Turbidimeter			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	16. ค่าความขุ่นที่ต่ำสุด (No Sample)	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	17. ระดับการส่องสว่างของแสง (>= 2.5 ไม่เกิน 3.0)	<input checked="" type="checkbox"/>
Automatic titrator			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	18. สภาพ Piston Burettes	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	19. Function Rinsing and Dosing	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	20. ระบบท่อส่งยาและอุปกรณ์ประกอบ	<input checked="" type="checkbox"/>

ข้อเสนอแนะ:

Mr. Siwapan Srijan
Service Engineer

บริษัท ดิเคช เทคโนโลยี จำกัด
DKSH Technology Limited
2333 สุขุมวิท 100/1 ถนนสุขุมวิท แขวงคลองเตย เขตคลองเตย กรุงเทพมหานคร 10260
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Phone: +66 2639 7100 Email: info@calibration@dksh.com Website: www.dksh.com/calibration@thailand

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CAL-FM-C24-09 17 Sep 2022

บริษัท ดิเคช เทคโนโลยี จำกัด
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Phone: +66 2639 7100 Email: info@calibration@dksh.com Website: www.dksh.com/calibration@thailand

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CAL-FM-R31-03 29 Jul 2022

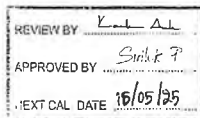


TECHNOLOGY PROMOTION ASSOCIATION (THAILAND-JAPAN)
CORPORATE SERVICES 3 : EQUIPMENT CALIBRATION AND TESTING SERVICES
534/4 PATTANAKARN ROAD SOI 18, SUANLUANG, SUANLUANG BANGKOK 10250
TEL. 0-2717-3000 FAX. 0-2719-9484

Cert.No.: 23TW243
Page.: 1 of 2

Certificate of Testing

Equipment : DO Meter
Manufacturer : YSI
Model : 5000-230V
Serial No. : 09J101147
ID No. : BKK_EN0017
Received Date : 15 November 2023
Test Date : 16 November 2023
Reference : 2311-0505DSC-4
Submitted by : ALS Laboratory Group (Thailand) Co.,Ltd.
104 Phatthanakan 40, Phatthanakan Rd.,
Khwaeng Phatthanakan, Khel Suan Luang,
Bangkok 10250 Thailand
Laboratory Condition : Temperature (25 ± 5) °C
Humidity (50 ± 20) %
Test Procedure : In - house method : CP-CH9
by Comparison Technique with Azide Modification Method
Tested by : Walalak Sirilhean
Approved by :
(✓) Sathip Meangmai
() Warakorn Lemgagtrakul
() Ponpan Paipim
Issue Date : 17 November 2023



B 0328589



Cert.No.: 23TW243
Page.: 2 of 2

Condition of this result of calibration

- Reference Standard Instruments :
This certification is traceable to the International System of Unit through the reference standards laboratory of Industrial Calibration Center, Technology Promotion Association (Thailand-Japan).

Instruments	Serial No.	ID No.	Certificate No.	Due Date
1) Burette	-	130BU10	23CG1172	22 Mar 2025
2) Balance	1124013382	140RC006	23MM18	20 Feb 2024
 - Standard Material :-

Material	Manufacturer	Lot.No.	Assay
Sodium Thiosulfate pentahydrate	Merck	AM1763316	100.2%
- Result :** Dissolved Oxygen Meter Adjustment With Air 100 %
Dissolved Oxygen Probe No.: 16K100498

Titration Method (Azide Modification Method) (mg/L)	DO Meter Reading (mg/L)	Standard Deviation (mg/L)
8.18	8.18	0.0055

This report was certified only for the instrument we tested. It is allowable to use for study the system efficiency. The environmental impact control and present to organization it may concerned. Intend to use for advertising and referral purpose is prohibited. This report may not be reproduced other in full, without written approval of the laboratory.

-o0o-

a 1190297



TECHNOLOGY PROMOTION ASSOCIATION (THAILAND-JAPAN)
CORPORATE SERVICES 3 : EQUIPMENT CALIBRATION AND TESTING SERVICES
534/4 PATTANAKARN ROAD SOI 18, SUANLUANG, SUANLUANG BANGKOK 10250
TEL. 0-2717-3000-29 FAX. 0-2719-9484



Cert. No.: 23LM192
Page.: 1 of 2

Certificate of Calibration

Equipment : DO Meter with Sensor
Manufacturer : YSI
Model : 5000-230V
Serial No. : 09J101147
ID No. : BKK_EN0017
Submitted by : ALS Laboratory Group (Thailand) Co.,Ltd.
104 Phatthanakan 40, Phatthanakan Rd.,
Khwaeng Phatthanakan, Khel Suan Luang,
Bangkok 10250 Thailand
Location : TPA Chemistry Calibration Laboratory
Received Order : 15 November 2023
Calibrated Date : 16 November 2023
Ambient Temperature : (26 ± 10) °C
Relative Humidity : (50 ± 30) %
AC Line Voltage : (220 ± 22) V
Calibrated by : Kunchit Promprat
Approved by :
() Pornthippa Tameyakul
() Ponpan Paipim
(✓) Suwil Imjai
Issue Date : 17 November 2023

The Uncertainties are for a confidence probability of approximately 95%

This certificate may not be reproduced other than in full, except with the prior written approval of the head of Corporate Services 3 : Equipment Calibration and Testing Services

A 0060730



Equipment : DO Meter with Sensor
Condition As-Received : Used Item
Reference : 2311-0505DSC-10
Procedure Used :-
Calibration were conducted using in-house calibration procedure CP-OT01 according to comparison with Industrial Platinum Resistance Thermometer (IPRT) into Temperature Bath.
The temperature scale used was based on ITS-90.

Cert. No.: 23LM192
Page.: 2 of 2

Condition of this result of calibration

- Reference standard instrument:-

Instrument	Serial No.	Cert. No.	Traceable	Due Date
1) Digital Thermometer	3240076	23I305	TPA	15 Mar 2024
 - This certificate is valid only to the item calibrated on date and place of calibration
 - This certification is traceable to the International System of Unit.
- Remark :** TPA : Technology Promotion Association (Thailand - Japan)
Result of Calibration :- (*) Without Adjustment
Function : Temperature measurement.

This instrument was connected with temperature sensor, S/N: 16K100498

Calibration Point (°C)	Immersion Depth (mm)	Standard Temperature (°C)	UUC* Reading (°C)	Error (°C)	Uncertainty (± °C)	Coverage Factor k
20.0	60	19.997	19.93	-0.067	0.15	2.00

UUC* : Unit Under Calibration

The reported uncertainty of measurement was based on a standard uncertainty multiplied by a coverage factor k, providing a level of confidence of approximately 95 %.

-o0o-

a 1190298



CERTIFICATE No : 24T2852
REFERENCE No : 72619-B

PAGE : 1 OF 2

Certificate of Calibration

EQUIPMENT : COOLED INCUBATOR
MANUFACTURER : MEMMERT
MODEL : ICP750
SERIAL No : F819.0021
ID No : BKK_EN0304
CONDITION AS RECEIVED : USED ITEM
SUBMITTED BY : ALS LABORATORY GROUP (THAILAND) CO., LTD.
104 PHATTHANAKAN 40, PHATTHANAKAN
RD., KHWAENG PHATTHANAKAN, KHET SUAN
LUANG, BANGKOK 10250, THAILAND

REVIEW BY : *Sinluk P.*
APPROVED BY : *Sinluk P.*
NEXT CAL DATE : 30/03/25

CALIBRATED BY : CHAICHARN CH.
CALIBRATION DATE : 20-Mar-24

APPROVED BY : *PONGSAK J.*
ISSUED DATE : 21-Mar-24
RECEIVED DATE : 20-Mar-24

THIS CERTIFICATE MAY NOT BE REPRODUCED OTHER THAN IN FULL EXCEPT WITH THE PRIOR WRITTEN APPROVAL OF QUALITY CALIBRATION CO., LTD.

F-G010 REV. 03



CERTIFICATE No : 24T2852

PAGE : 2 OF 2

Calibration Report

EQUIPMENT : COOLED INCUBATOR
MANUFACTURER : MEMMERT
MODEL : ICP750
ID No : BKK_EN0304
RECEIVED DATE : 20-Mar-24
AMBIENT TEMPERATURE : 26 °C ± 1 °C
S/N : F819.0021
CALIBRATION DATE : 20-Mar-24
RELATIVE HUMIDITY : 54 %RH ± 10 %RH

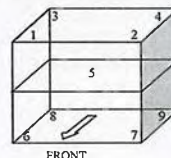
CONDITION OF THIS RESULTS OF CALIBRATION

1. THIS INSTRUMENT WAS CALIBRATED ACCORDING TO TLAS G-20 BY COMPARISON WITH CALIBRATED THERMOCOUPLE TYPE K UNDER NO LOAD CONDITION. THE THERMOCOUPLES WERE PLACED ON NINE POINTS AND LOCATED ONE THERMOCOUPLE IN EACH OF THE EIGHT CORNERS OF THE CHAMBER AND WAS AWAY FROM THE EACH WALL OF 5 cm TO 10 cm AND PLACED THE NINTH THERMOCOUPLE WITHIN 2.5 cm OF THE GEOMETRIC CENTER OF THE CHAMBER. THE UNIFORMITY WAS MEASURED BETWEEN REFERENCE PROBE AND OTHER PROBES AT THE SAME TIME.

REFERENCE STANDARD INSTRUMENTS :-

INSTRUMENT : MODEL : SERIAL No : CERTIFICATE No : DUE DATE
1) DATA LOGGER WITH TC TYPE K : HYDRA 2635A : 7286308 : 23T6641 : 14-Jul-24
2. THE CERTIFICATE IS VALID FOR THE ITEM CALIBRATED AS SHOWN ON THE DATE AND PLACE OF CALIBRATION ONLY
4. THIS RESULT EXCLUDE LONG TERM STABILITY OF THE UNIT UNDER CALIBRATION.
5. THIS CERTIFICATE IS TRACEABLE TO THE INTERNATIONAL SYSTEM OF UNIT MAINTAINED AT:-
- NATIONAL INSTITUTE OF METROLOGY (THAILAND) THROUGH QUALITY CALIBRATION CO., LTD

RESULT OF CALIBRATION :- WITHOUT ADJUSTMENT



GENERAL INFORMATION

Overall Ambient Temperature around the Chamber (°C) variation : 1
Overall Line Voltage (V) variation : 5
Instrument Condition : Normal

CHAMBER PERFORMANCE

Controller Temperature (°C)	Indicating Temperature (°C)	Temperature Stability (±°C)	Temperature Uniformity (°C)	Overall Variation (°C)
20.0	20.0	0.16	0.21	0.41

TEMPERATURE MEASUREMENT ACCURACY TEST

Controller Temp (°C)	Indicating Temp (°C)	#1	#2	#3	#4	Ref. 5	#6	#7	#8	#9	Uncertainty (±°C)
20.0	20.0	19.88	19.93	19.87	19.86	19.98	19.94	19.94	19.89	19.91	0.42

NOTE 1 : THE UNCERTAINTY OF MEASUREMENT EXCLUDED TEMPERATURE UNIFORMITY OF THE CHAMBER.

NOTE 2 : LOCATION 5 WAS REFERENCE LOCATION.

NOTE 3 : THIS CALIBRATION WAS CARRIED OUT AT THE CUSTOMER'S PLACE AT LABORATORY AREA.

THE REPORTED UNCERTAINTY OF MEASUREMENT WAS BASED ON A STANDARD UNCERTAINTY MULTIPLIED BY A COVERAGE FACTOR k = 2, PROVIDING A LEVEL OF CONFIDENCE APPROXIMATELY 95%
END OF CALIBRATION REPORT

F-G010 REV. 03



Certificate of Calibration

Cert.No.: 24CG952
Page.: 1 of 2

Equipment : Burette
Capacity : 50 mL
Serial No. : -
ID. No. : BKK_EN0171
Manufacturer : Witeg
Made in : Germany
Submitted by : ALS Laboratory Group (Thailand) Co.,Ltd.
104 Phatthanakan 40, Phatthanakan Rd.,
Khwaeng Phatthanakan, Khet Suan Luang,
Bangkok 10250 Thailand
Ambient Temperature : (20 ± 2.5) °C
Relative Humidity : (50 ± 10) %
Barometric Pressure : 760 mmHg
Calibration Procedure : ASTM E 542 - 01
Calibrated by : Natcha Chayingchiew
Approved by : *Sinluk P.*
() Unnophol Harachal
(✓) Srisuda Khamtha
() Sa-ngaunkam Wongsa
Issue Date : 27 February 2024

REVIEW BY : *Sinluk P.*
APPROVED BY : *Sinluk P.*
NEXT CAL DATE : 27/08/25

The Uncertainties are for a confidence probability of approximately 95%

This certificate may not be reproduced other than in full, except with the prior written approval of the head of Corporate Services 3: Equipment Calibration and Testing Services.



Equipment : Burette
Received Date : 23 February 2024
Condition As-Received : New Item
Calibration Date : 27 February 2024
Reference : 2402-0757DSC-1

Cert.No.: 24CG952
Page.: 2 of 2

Condition of this result of calibration

1. Reference Standard Instruments :

Instruments	Model	Serial No.	ID. No.	Certificate No.	Traceability	Due date
1) Balance	XP205DR	1126143764	140RC004	23MM538	TPA	15 Sep 2024
2) Thermo-Hygrograph	THDX-CE	00016540	140EC001	23H1275	TPA	09 June 2024
3) Thermometer	-	0834181	140EC005	23J948	TPA	10 Aug 2024

This certification is traceable to SI Unit

2. The certificate is valid only to the item calibrated on date and place of calibration.

3. True value is converted to true volume at the standard temperature of 20 °C

Calibration result :

Nominal capacity (mL)	Reading (mL)	Uncertainty (± mL)	k Factor
50	50.0032	0.010	2.00

Remark mL = cm³

The reported uncertainty of measurement was based on a standard uncertainty multiplied by a coverage factor k, providing a level of confidence of approximately 95 %.


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



Certificate No. T240741

Page 1 of 5

Certificate of Calibration

Equipment : HOT BLOCK
Manufacturer : Environmental Express
Model : B3000-240
Serial No. : 2017CODW116
Customer Code : BKK_EN0222
ID No. : T6769A4
Customer : ALS Laboratory Group (Thailand) Co.,Ltd.
104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan,
Khet Suan Luang, Bangkok 10250
Customer Location : Wet Chemistry Lab2
Date of Receipt : 11 April 2024
Calibrated By : Sance Musikawan (Site Calibration Manager)
Approved By :  / Sujjar Naknakred (Site Calibration Manager)
Date of Issue : 23 APR 2024

REVIEW BY 
APPROVED BY 
NEXT CAL DATE 22/04/25

The uncertainties are for a confidence probability of approximately 95%.

This Certificate is issued in accordance with the conditions of accreditation granted by the Thai Laboratory Accreditation Scheme which has assessed the measurement capability of the laboratory and its traceability to recognized national standards and to the units of measurement realized at the corresponding national standard laboratory. This certificate may not be reproduced other than in full except with the prior written approval of the Metrological Center.

FM-L12 108 30-05-57



Certificate No. T240741

Page 2 of 5

Calibration Report

Equipment : HOT BLOCK
Date of Calibration : 22 April 2024
Environment : Temperature : 22.9-24.4 °C
Line Voltage : 222.7-227.8 V
Relative Humidity : 55 - 65 %RH

Condition of this results of calibration :

- This equipment was calibrated by insert 20 standard thermocouples type T into its chamber, the other one standard thermocouples type T use for ambient temperature measurement. The calibration was done in according to WI-T20 (based on ASTM E145-94 (Reapproved 2001) and AS2853-1986). All data show below were final values and the initial data from customer request. The temperature scale used was based on ITS - 90.
- Reference Standard Instrument:

Instrument	Model	Instrument No.	Certificate No.	Due Date
TC	TYPE T	TN21-TN30	T240235	17 February 2025
TC	TYPE T	TN31-TN40	T240235	17 February 2025
DATA LOGGER	34970A	T195	T240235	17 February 2025
- This certificate is traceable to : National Institute of Metrology (Thailand) through Metrological Center (NSC-TISI-TIS 17025 CALIBRATION 0244)
- Condition of calibrated item : good
Equipment Description :
Time Constant 1 Hour 10 Minute At 150 °C
Fresh Air Damper ☐ Open ☐ Min ☐ Medium ☐ Max
☐ Close
☒ Not Available
- Adjustment :
(X) without adjustment () after adjustment

Approved By 

FM-L13 108 30-05-57



Certificate No. T240741

Page 3 of 5

Calibration Report



Row	Hole															
R7	H49	H50	H51	H52	H53	H54	H55	H56								
R6	H41	H42	H43	H44	H45	H46	H47	H48								
R5	H33	H34	H35	H36	H37	H38	H39	H40								
R4	H25	H26	H27	H28	H29	H30	H31	H32								
R3	H17	H18	H19	H20	H21	H22	H23	H24								
R2	H9	H10	H11	H12	H13	H14	H15	H16								
R1	H1	H2	H3	H4	H5	H6	H7	H8								

II: STANDARD THERMOCOUPLE TYPE 1

H1	=	TN21	H9	=	TN29	H17	=	TN37	H25	=	TN25	H33	=	TN33	H41	=	TN21	H49	=	TN29
H2	=	TN22	H10	=	TN30	H18	=	TN38	H26	=	TN26	H34	=	TN34	H42	=	TN22	H50	=	TN30
H3	=	TN23	H11	=	TN31	H19	=	TN39	H27	=	TN27	H35	=	TN35	H43	=	TN23	H51	=	TN31
H4	=	TN24	H12	=	TN32	H20	=	TN40	H28	=	TN28	H36	=	TN36	H44	=	TN24	H52	=	TN32
H5	=	TN25	H13	=	TN33	H21	=	TN21	H29	=	TN29	H37	=	TN37	H45	=	TN25	H53	=	TN33
H6	=	TN26	H14	=	TN34	H22	=	TN22	H30	=	TN30	H38	=	TN38	H46	=	TN26	H54	=	TN34
H7	=	TN27	H15	=	TN35	H23	=	TN23	H31	=	TN31	H39	=	TN39	H47	=	TN27	H55	=	TN35
H8	=	TN28	H16	=	TN36	H24	=	TN24	H32	=	TN32	H40	=	TN40	H48	=	TN28	H56	=	TN36

Approved By 

FM-L13 108 30-05-57



Certificate No. T240741

Page 4 of 5

Calibration Report

Measurement Results

Calibration Point		Average Standard Reading at each position (°C)															
		TN21	TN22	TN23	TN24	TN25	TN26	TN27	TN28	TN29	TN30						
Point Setting	Max	150.38	149.73	150.12	150.36	150.56	150.00	150.48	150.25	150.56	149.59						
	Min	150.13	149.47	149.87	150.16	150.31	149.77	150.25	150.02	149.41	149.41						
	Average	150.23	149.59	149.96	150.24	150.41	149.87	150.36	150.12	150.45	149.51						
Point Setting	Max	150.17	150.28	150.28	150.37	150.09	149.96	149.86	149.75	150.63	150.11						
	Min	149.94	150.03	150.01	150.18	149.84	149.69	149.68	149.57	150.41	149.96						
	Average	150.04	150.14	150.13	150.27	149.98	149.81	149.77	149.65	150.51	150.03						
Point Setting	Max	150.28	150.18	149.87	149.57	150.18	149.90	150.59	149.66	150.39	150.08						
	Min	150.00	149.94	149.67	149.39	149.88	149.58	150.32	149.34	150.11	149.84						
	Average	150.14	150.07	149.77	149.49	150.04	149.75	150.48	149.52	150.26	149.97						
Point Setting	Max	150.38	149.71	150.18	149.97	150.03	150.05	150.21	150.07	150.02	149.92						
	Min	150.12	149.49	149.87	149.66	149.71	149.71	149.89	149.79	149.76	149.73						
	Average	150.26	149.61	150.04	149.82	149.90	149.89	150.05	149.94	149.91	149.84						
Point Setting	Max	150.37	150.20	150.20	150.44	150.67	149.85	150.21	149.90	150.36	149.62						
	Min	150.11	149.99	150.04	150.26	150.49	149.69	150.12	149.78	150.20	149.40						
	Average	150.25	150.12	150.14	150.31	150.57	149.78	150.20	149.83	150.29	149.52						
Point Setting	Max	150.18	150.02	149.95	150.26	149.92	149.69										
	Min	150.06	149.88	149.79	150.12	149.80	149.58										
	Average	150.13	149.93	149.89	150.18	149.84	149.64										

Approved By 

FM-L13 108 30-05-57



Certificate No. T240741

Page 5 of 5

Calibration Report

Measurement Results

HOT BLOCK			Temperature Distribution	
Setting (°C)	Reading (°C)		Stability (± °C)	Uncertainty (± °C)
	Min, Max	Average		
150.0	150.150.1	150.0	0.20	0.33

The calibration result apply only the above calibrated item.

The result of test was found accurate as shown on date and place of test only.

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95 %.

Approved By

FM-L13 10820-05-57



Bara Scientific Co., Ltd.
968 U Chu Liang Building Floor7 Rama4 Road
Siam Bangkok Bangkok Thailand 10500
Tel : 02-6324300 Fax : 02-6375498-7
www.barscientific.com



Certificate of Calibration

Number of Page(s) 1 of 3

Certificate No. BSCC-UV-374/24
Equipment UV/Vis Spectrophotometer
Model UV-1800
Manufacturer Shimadzu
Serial No. A11454908533 CD
ID No. BKK_EN0018
Date of receipt 13 September 2024
Date of calibration 13 September 2024
Date of issue 13 SEP 2024

REVIEW BY *Juda K*
APPROVED BY *Sonthi P*
NEXT CAL DATE 13/9/2025

Customer name ALS Laboratory Group (Thailand) Co., Ltd

Address 104 Soi Phattananakan 40, Phattananakan Road, Phattananakan, Suan Luang, Bangkok 10250

Temperature (25.3 - 26.7) °C (On site)
Humidity (50.4 - 55.9) %RH (On site)

Equipment condition Good Operation

Calibration Location Organic Preparation Lab

Calibration Procedure In-house method WI-UV-702-01 based on ASTM E275-01

Traceability Wavelength Accuracy is traceable to certificate No. 106372 and 106371
Photometric Accuracy is traceable to certificate No. 106384 and 111398
Stray Light is traceable to certificate No. 106377
The above certificate are traceable to SI unit through NIST through NIST Scientific Ltd
(UKAS accredited calibration laboratory NO. 0659)

Calibrated by Mr. Wanchana Janloy

Approved by

Sonthi
Mr. Sonthi Temboonsakdi
Service Manager

The above results are valid exclusively for the calibrated item(s) as mention in this report / certificate
Advertising the report / Certificate and publicity of the results are prohibited and also shall not be reproduced
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FM-L13 10820-05-57



Bara Scientific Co., Ltd.
968 U Chu Liang Building Floor7 Rama4 Road
Siam Bangkok Bangkok Thailand 10500
Tel : 02-6324300 Fax : 02-6375498-7
www.barscientific.com



Certificate of Calibration

Certificate No. BSCC-UV-374/24

Number of Page(s) 2 of 3

Calibration Results:

1. Wavelength Accuracy

Certified Wavelength (nm)	UUC (nm)	Error (nm)	Uncertainty (±nm)
241.70	241.55	-0.15	0.18
334.02	333.65	-0.17	0.18
418.53	418.57	0.04	0.18
572.69	572.97	-0.02	0.18
878.41	878.17	-0.24	0.18

2. Photometric Accuracy (UV)

Wavelength (nm)	Certified Absorbance (A)	UUC (A)	Error (A)	Uncertainty (±A)
235	0.0000	0.0000	0.0000	0.0075
	0.7171	0.7169	-0.0002	0.0075
257	0.0000	0.0000	0.0000	0.0075
	0.8354	0.8345	-0.0009	0.0075
313	0.0000	0.0000	0.0000	0.0075
	0.2786	0.2781	-0.0005	0.0075
350	0.0000	0.0000	0.0000	0.0075
	0.6189	0.6194	0.0005	0.0075

*CNR = Customer not request

The above results are valid exclusively for the calibrated item(s) as mention in this report / certificate.
Advertising the report / Certificate and publicity of the results are prohibited and also shall not be reproduced
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FM-UV-708-02 Rev.01 (23/01/23)



Bara Scientific Co., Ltd.
968 U Chu Liang Building Floor7 Rama4 Road
Siam Bangkok Bangkok Thailand 10500
Tel : 02-6324300 Fax : 02-6375498-7
www.barscientific.com



Certificate of Calibration

Certificate No. BSCC-UV-374/24

Number of Page(s) 3 of 3

Calibration Results:

3. Photometric Accuracy (Visible)

Wavelength (nm)	Certified Absorbance (A)	UUC (A)	Error (A)	Uncertainty (±A)
420.0	0.0000	0.0000	0.0000	0.0042
	0.5761	0.5765	0.0004	0.0042
	0.7119	0.7105	-0.0014	0.0042
	1.0189	1.0174	-0.0015	0.0042
	0.0000	0.0000	0.0000	0.0042
440.0	0.5610	0.5613	0.0003	0.0042
	0.7001	0.6984	-0.0017	0.0042
	1.0026	1.0011	-0.0015	0.0042
	0.0000	0.0000	0.0000	0.0042
	0.5235	0.5232	-0.0003	0.0042
465.0	0.6614	0.6598	-0.0016	0.0042
	0.9456	0.9444	-0.0012	0.0042
	0.0000	0.0000	0.0000	0.0042
	0.5249	0.5245	-0.0004	0.0042
	0.6975	0.6965	-0.0010	0.0042
546.1	1.0009	0.9994	-0.0015	0.0042
	0.0000	0.0000	0.0000	0.0042
	0.5390	0.5386	-0.0004	0.0042
	0.7725	0.7708	-0.0017	0.0042
	1.1125	1.1114	-0.0011	0.0042
635.0	0.0000	0.0000	0.0000	0.0042
	0.5666	0.5668	0.0002	0.0042
	0.7620	0.7604	-0.0016	0.0042
	1.0882	1.0971	-0.0011	0.0042

*CNR = Customer not request

4. Stray Light*

Standard cut-off wavelength (nm)	Wavelength (nm)	Transmission (1/T)	Absorbance (A)
200.85±0.11nm	199.58	0.8520	2.0217

The Stray light transmission reference is less than 1.0%T and Stray light absorbance reference is greater than 2.00A.

*Stray Light not NIS-ONSC Accredited.

The measurement uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2 providing a level of confidence of approximately 95%.

End of Certificate

The above results are valid exclusively for the calibrated item(s) as mention in this report / certificate.
Advertising the report / Certificate and publicity of the results are prohibited and also shall not be reproduced
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FM-UV-708-02 Rev.01 (23/01/23)

Sartorius (Thailand) Co., Ltd.
128 Rama 9 Road, Huaywong, Huaywong, Bangkok 10210
Tel : +66 2643 8341-6, e-mail: service.thailand@sartorius.com



REVIEW BY: *Junda K*
APPROVED BY: *Siriluk P*
NEXT CAL DATE: 02/08/25

Certificate of Calibration

Model Number: MSE2245-100-DU
Description: Analytical Balance
Serial Number: 0027405555
ID No.: BKK_EN0003
Manufacturer: Sartorius
Customer Name: ALS Laboratory Group (Thailand) Co., Ltd.
104 Phatthanakan 40/Phatthanakan Rd., Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250
Calibrated Place: Lab Room
Calibrated By: Mr Chonchai Intana
Calibration Date: Friday, August 02, 2024
Certificate No.: 24800270
Issued Date: Monday, August 05, 2024
Reference No.: 240942
Page No.: 1 of 2

Customer Name: ALS Laboratory Group (Thailand) Co., Ltd.
104 Phatthanakan 40/Phatthanakan Rd., Khwaeng Suan Luang, Khet Suan Luang, Bangkok 10250

Calibrated Place: Lab Room

Calibrated By: Mr Chonchai Intana
Calibration Date: Friday, August 02, 2024
Calibration Procedure No.: This calibration was conducted by using in-house calibration procedure number (WI-003) Based on UKAS LAB 14: 2019

Metrological data:
Capacity: 220 g Readability: 0.0001 g
Reasons for calibration
☐ New Installation ☐ Service / Required ☐ Re-calibration / Maintenance
Ambient Conditions:
Temperature: 23.0 °C ± 5.0 °C
Humidity: 55.0 % RH ± 10.0 % RH
Pressure:
Equipment Condition: ☒ Good Operate ☐ Fail

Measurement Method UKAS Publication Ref: Lab 14

The measurement uncertainty stated is the expanded uncertainty which is obtained from the standard uncertainty multiplied by the coverage factor (k=2) to provide a level of confidence of approximately 95%. It is determined in accordance with the Guide to Expression of Uncertainty in Measurement (GUM). The calibration certificate documents the traceability to National Standards, which realise the unit of measurement according to the International Standard System of Units (SI). Report of Tolerance came from list of Sartorius Metrological Specifications

Traceability:	Model Number	Description	Traceability	Certificate No.	Due Date
	YCS011-522-00	Sartorius weight set 1mg - 500mg (YCS011-522-00)	TCS	M23081975	23-Aug-2025
	Testo 174 H	Thermo-Hygrometer, Testo 174H	ENTECH	IUT 661303J1661140	12-Nov-2024

This certificate relate and apply this equipment only.
This certificate may not be reproduced other than in full except with the prior written approval of the Verification Operation Manager Sartorius (Thailand) Co., Ltd.

Signature: *Mr Chonchai Intana*
Stamp: SARTORIUS
Text: S T A M P

SCP FM 33 03 February 2022

Sartorius (Thailand) Co., Ltd.
128 Rama 9 Road, Huaywong, Huaywong, Bangkok 10210
Tel : +66 2643 8341-6, e-mail: service.thailand@sartorius.com

SARTORIUS

Certificate of Calibration

Model Number: MSE2245-100-DU
Description: Analytical Balance
Serial Number: 0027405555
ID No.: BKK_EN0003
Manufacturer: Sartorius
Certificate No.: 24800270
Issued Date: Monday, August 05, 2024
Reference No.: 240942
Page No.: 2 of 2

Calibration Results : Without Adjustment

Repeatability		Eccentricity (Off-center loading error)	
<p>The repeatability is the ability of a weighing instrument to display nearly identical results under constant test conditions when the same load within a measurement range is placed repeatedly on the weighing pan or the same material. The standard deviation is used to express repeatability.</p>		<p>The eccentricity loading error is yielded by the difference between the result of the load, in 1/2 or 1/4 of maximum capacity placed on the middle of the weighing pan and between each of four additional measurement points (positions defined according to OIML R113)</p>	
Nominal Value : (Low Load)	20.0000	200.0000	
20 g	20.0000	199.9999	
Tolerance	20.0001	200.0000	
0.0001 g	20.0000	200.0000	
Nominal Value : (High Load)	20.0000	200.0000	
200 g	20.0001	200.0001	
Tolerance	20.0000	200.0000	
0.0001 g	20.0000	199.9999	
	20.0000	200.0000	
Standard Deviation	0.00004	0.00006	

Nominal value:	100 g
Tolerance	0.0004 g
Difference	
1	
2	0.0000
3	0.0000
4	0.0000
5	0.0001
6	

Linearity

The linearity, also called linearity error, describes the deviation of the characteristic curve of a weighing instrument from the linear slope.

Tolerance	0.0002 g			
Nominal Value	Conventional Mass Value	Displayed Value	Deviation	Uncertainty
(g)	(g)	(g)	(g)	(g)
0.01	0.0100	0.0100	0.0000	0.00015
0.1	0.1000	0.1000	0.0000	0.00015
1	1.0000	1.0000	0.0000	0.00015
2	2.0000	2.0000	0.0000	0.00015
5	5.0000	5.0000	0.0000	0.00015
10	10.0000	10.0000	0.0000	0.00015
20	20.0000	20.0000	0.0000	0.00015
50	50.0000	50.0001	0.0001	0.00016
100	100.0000	100.0001	0.0001	0.00019
200	200.0000	200.0003	0.0003	0.00029

End of Report.

SCP FM 33 03 February 2022



Metrology
SCI ECO Services Company Limited
33/2 Moo 3, T.Banpa, A.Kaengkhro, Saraburi 18110, Thailand
Saraburi Tel : +66 3627 3096 Fax : +66 3627 3100
Bangkok Tel : +668 9205 6851, +669 8247 2360
Website : www.scleco.co.th E-Mail : calibrate@scg.com



Certificate No. T240904

Page 1 of 3

Certificate of Calibration

Equipment : Chamber (Oven)
Manufacturer : Memmert
Model : UF 450
Serial No. : B717.0531
Customer Code : BKK_EN0273
ID No. : T8042A4
Customer : ALS Laboratory Group (Thailand) Co.,Ltd.
104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan,
Khet Suan Luang, Bangkok 10250
Customer Location : Laboratory (Oven Room)
Date of Receipt : 08 May 2024
Calibrated By : Preecha Phisassutthikul (Temperature Calibration Manager)
Approved By : *du* / Nuafun Sungchum (Metrology Manager)
Date of Issue : 23 MAY 2024

REVIEW BY: *Junda K*
APPROVED BY: *Siriluk P*
NEXT CAL DATE: 14/11/25

The uncertainties are for a confidence probability of approximately 95%.

This Certificate is issued in accordance with the conditions of accreditation granted by the Thai Laboratory Accreditation Scheme which has assessed the measurement capability of the laboratory and its traceability to recognized national standards and to the units of measurement realized at the corresponding national standard laboratory. This certificate may not be reproduced other than in full except with the prior written approval of the Metrology.

FM-L14 119/18-08-65



Metrology
SCI ECO Services Company Limited
33/2 Moo 3, T.Banpa, A.Kaengkhro, Saraburi 18110, Thailand.



Certificate No. T240904

Page 2 of 3

Calibration Report

Equipment : Chamber (Oven)
Date of Calibration : 14 May 2024
Environment : Temperature : 26.5-28.1 °C
Line Voltage : 226.7-229.8 V
Relative Humidity : 51 - 57 %RH

Condition of this results of calibration :

- This equipment was calibrated by insert nine resistance thermometer detectors into its chamber , the other one resistance thermometer detector use for ambient temperature measurement . The calibration was done in according to WI-T20 (based on ASTM E145-94 (Reapproved 2001) and AS2853-1986). All data show below were final values and the initial data from customer request . The temperature scale used was based on ITS - 90
- Reference Standard Instrument :

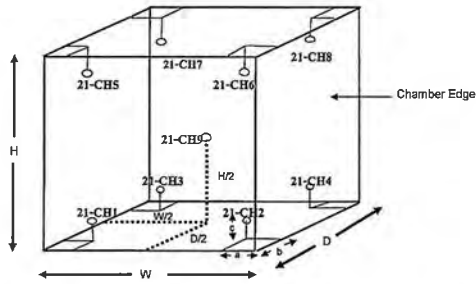
Instrument	Model	Instrument No.	Certificate No.	Due Date
RTD	100 ohm	21-(CH1-10)	T231955	17 November 2024
DATA LOGGER	34970A	T121	T231955	17 November 2024
- This certificate is traceable to : National Institute of Metrology (Thailand) through Metrological Center (NSC-TIS-TIS 17025 CALIBRATION 0244)
- Condition of calibrated item : good
Equipment Description :

Time Constant	1 Hour	30 Minute	At 104 °C
Fresh Air Damper	<input type="checkbox"/> Open <input type="checkbox"/> Min <input type="checkbox"/> Medium <input type="checkbox"/> Max		
	<input type="checkbox"/> Close		
	<input checked="" type="checkbox"/> Not Available		
- Adjustment :
(X) without adjustment () after adjustment

Approved By: *du*

FM-L15 118/18-08-66

Calibration Report



Remark :

Internal Dimensions of Chamber : W (Width) = 104 cm., H (Height) = 72 cm. and D (Depth) = 60 cm.
Size of Installed Standard sensor number 21-CH1 to number 21-CH8 : a = 5 cm., b = 5 cm. and c = 5 cm.
Size of Installed Standard sensor number 21-CH9 : W/2 = 104 cm / 2, H/2 = 72 cm / 2 and D/2 = 60 cm / 2

Measurement Results

Calibration Point	Average Standard Reading at each position (°C)							
	21-CH1	21-CH2	21-CH3	21-CH4	21-CH5	21-CH6	21-CH7	21-CH8
104	103.4	105.0	103.7	103.6	103.3	104.6	103.3	103.9
180	179.5	181.1	179.2	179.5	179.0	181.3	179.8	180.2

Chamber (Oven)			Temperature Distribution				
Setting (°C)	Reading (°C)		Average (°C)	Stability (±°C)	Uniformity (°C)	Uncertainty (±°C)	Coverage Factor k
	Min, Max	Average					
104.0	103.9, 104	104.0	103.85	0.14	1.27	0.44	2.00
180.0	179.9, 180.1	180.0	179.94	0.39	2.29	0.76	2.00

* The quoted uncertainty exclude "uniformity"

The calibration result apply only the above calibrated item.

The result of test was found accurate as shown on date and place of test only.

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k which for a t-distribution, providing a level of confidence of approximately 95 %.

End of Certificate

Approved By:

PM-L15 11/818-08-66

Certificate of Calibration

Equipment : Liquid Bath (Water)

Manufacturer : MEMMERT

Model : WNB29

Serial No. : L611.0135

Customer Code : BKK_EN0148

ID No. : T6455A4

Customer : ALS Laboratory Group (Thailand) Co.,Ltd.

104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan,

Khet Suan Luang, Bangkok 10250

Customer Location : ORGANIC PREPARATION LAB

Date of Receipt : 27 June 2023

Calibrated By : Sujjar Naknakred (Site Calibration Manager)

Approved By : / Boonchai Suriyawong (Site Calibration Manager)

Date of Issue : 11 JUL 2023

The uncertainties are for a confidence probability of approximately 95%.

This Certificate is issued in accordance with the conditions of accreditation granted by the Thai Laboratory Accreditation Scheme which has assessed the measurement capability of the laboratory and its traceability to recognized national standards and to the units of measurement realized at the corresponding national standard laboratory. This certificate may not be reproduced other than in full except with the prior written approval of the Metrological Center.

PM-L15 11/151-08-64

Calibration Report

Equipment : Liquid Bath (Water)
Date of Calibration : 4 July 2023
Environment : Temperature : 22.2-22.5 °C
Line Voltage : 221.6-224.8 V
Relative Humidity : 55 - 65 %RH

Condition of this results of calibration :

- This equipment was calibrated by insert five resistance thermometer detectors into its water bath , the other one thermocouple type T use for ambient temperature measurement . The calibration was done in according to WI-T36 (based on ASTM E715-80 (Recapproved 2001))
All data show below were final values and the initial data from customer request . The temperature scale used was based on ITS - 90 .

2. Reference Standard Instrument :

Instrument	Model	Instrument No.	Certificate No.	Due Date
RTD	100 OHM	M1's (CH1,CH6-CH7,CH9-CH10)	T230545	10 April 2024
DATA LOGGER	34970A	1149	T230545	10 April 2024

3. This certificate is traceable to :

National Institute of Metrology (Thailand) through Metrological Center (NSC-TISI-TIS 17025 CALIBRATION 0244)

4. Condition of calibrated item : good

Equipment Description :
Time Constant : 3 Hour 45 Minute At 60 °C

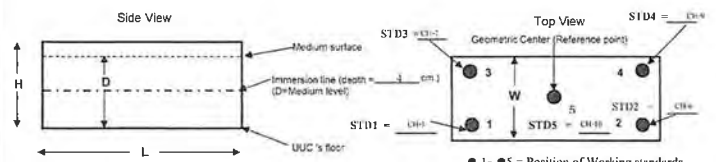
5. Adjustment :

(X) without adjustment () after adjustment

Approved By:

PM-L15 11/151-08-63

Calibration Report



- D = Medium level : 8 cm.
- UUC's medium : Water
- Working standards are located at 2.5 cm. away from each corner and walls

Measurement Results:

Calibration Point	Average Standard Reading at each position (°C)				
	CH-1	CH-6	CH-7	CH-9	CH-10
60	60.03	60.06	60.24	60.11	60.18
85	84.79	84.83	85.42	85.05	85.20
95	93.71	93.83	94.62	94.15	94.42

Liquid Bath (Water)			Temperature Distribution				
Setting (°C)	Reading (°C)		Average (°C)	Stability (±°C)	Uniformity (±°C)	Uncertainty (±°C)	Coverage Factor k
	Min, Max	Average					
61.0	60.9, 61.1	61.0	60.12	0.13	0.19	0.39	2.04
85.0	85.8, 86.2	86.0	85.06	0.19	0.47	0.44	2.17
95.0	94.6, 95	94.9	94.15	0.32	0.65	0.55	2.13

* The quoted uncertainty exclude "uniformity"

The calibration result apply only the above calibrated item.

The result of test was found accurate as shown on date and place of test only.

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k which for a t-distribution, providing a level of confidence of approximately 95 %.

Approved By:

PM-L15 11/151-08-63

ภาคผนวก จ

สำเนาหนังสืออนุญาตขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน

ลำดับที่	สารเคมี	วิธีการวิเคราะห์
19	Copper	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
20	Cyanide	Distillation, Colorimetric Method ⁽⁴⁾
21	2,4'-DDD	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
22	4,4'-DDD	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
23	2,4'-DDE	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
24	4,4'-DDE	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
25	2,4'-DDT	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
26	4,4'-DDT	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
27	Dieldrin	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
28	Endosulfan Sulfate	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
29	Endosulfan I	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
30	Endosulfan II	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
31	Endrin	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
32	Endrin Aldehyde	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
33	Formaldehyde	Distillation, Colorimetric Method ⁽³⁾
34	Free Chlorine	1) DPD Ferrous Titrimetric Method ⁽⁴⁾ 2) DPD Colorimetric Method ⁽⁴⁾
35	Heptachlor	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
36	Heptachlor Epoxide	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
37	Hexavalent Chromium	Colorimetric Method ⁽⁴⁾
38	3-Hydroxycarbofuran	High-Performance Liquid Chromatographic Method ⁽⁴⁾
39	Lead	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾

40 Manganese...

ลำดับที่	สารเคมี	วิธีการวิเคราะห์
40	Manganese	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
41	Mercury	1) Digestion, Cold-Vapor Atomic Absorption Spectrometric Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
42	Methiocarb	High-Performance Liquid Chromatographic Method ⁽⁴⁾
43	Methoxychlor	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
44	Methomyl	High-Performance Liquid Chromatographic Method ⁽⁴⁾
45	Nickel	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
46	Oil & Grease	1) Liquid-Liquid, Partition-Gravimetric Method ⁽⁴⁾ 2) Soxhlet Extraction Method ⁽⁴⁾
47	Oxamyl	High-Performance Liquid Chromatographic Method ⁽⁴⁾
48	Propoxur	High-Performance Liquid Chromatographic Method ⁽⁴⁾
49	pH	Electrometric Method ⁽⁴⁾
50	Phenols	1) Distillation, Chloroform Extraction Method ⁽⁴⁾ 2) Distillation, Direct Photometric Method ⁽⁴⁾
51	Selenium	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
52	Sulfide	Iodometric Method ⁽⁴⁾
53	Temperature	Laboratory and Field Methods ⁽⁴⁾
54	Total Dissolved Solids	Dried at 180 °C ⁽⁴⁾
55	Total Kjeldahl Nitrogen	Semi-Micro Kjeldahl Method ⁽⁴⁾
56	Total Phosphorus	Digestion, Colorimetric Method ⁽⁴⁾
57	Total Suspended Solids	Dried from 103-105 °C ⁽⁴⁾
58	Toxaphene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
59	Trivalent Chromium	1) Digestion, Inductively Coupled Plasma Method; Colorimetric Method; Calculation ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method; Colorimetric Method; Calculation ⁽⁴⁾
60	Zinc	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ⁽⁴⁾

น้ำดื่ม...

น้ำดื่ม จำนวน 126 รายการ

ลำดับที่	สารเคมี	วิธีการวิเคราะห์
1	Acenaphthene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
2	Acetone	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
3	Aldrin	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
4	Anthracene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
5	Antimony	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
6	Arsenic	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
7	Atrazine	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
8	Barium	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
9	Benz(a)anthracene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
10	Benzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
11	Benzo(b)fluoranthene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
12	Benzo(k)fluoranthene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
13	Benzoic Acid	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
14	Benzo(a)pyrene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
15	Benzo(g,h,i)perylene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
16	Beryllium	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
17	Bis(2-chloroethyl)ether	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾

18 Bis(2-ethylhexyl)phthalate...

ลำดับที่	สารเคมี	วิธีการวิเคราะห์
18	Bis(2-ethylhexyl)phthalate	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
19	Bromodichloromethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
20	Bromoform	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
21	Butanol	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
22	Butyl benzyl phthalate	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
23	Cadmium	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
24	Carbazole	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
25	Carbon disulfide	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
26	Carbon tetrachloride	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
27	Chlordane	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
28	p-Chloroaniline	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
29	Chlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
30	Chlorodibromomethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
31	Chloroform	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
32	2-Chlorophenol	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
33	Chromium	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
34	Chromium (III)	1) Digestion, Inductively Coupled Plasma Method; Colorimetric Method; Calculation ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method; Colorimetric Method; Calculation ⁽⁴⁾
35	Chromium (VI)	Colorimetric Method ⁽⁴⁾

36 Chrysene...

ลำดับที่	สารเคมี	วิธีการตรวจ
36	Chrysene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
37	Cyanide	Distillation, Colorimetric Method ⁽⁴⁾
38	2,4-D	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
39	DDD	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
40	DDE	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
41	DDT	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
42	Dibenz(a,h)anthracene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
43	Di-n-Butyl Phthalate	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
44	1,2-Dichlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
45	1,3-Dichlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
46	1,4-Dichlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
47	3,3-Dichlorobenzidine	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
48	1,1-Dichloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
49	1,2-Dichloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
50	1,1-Dichloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
51	cis-1,2-Dichloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
52	trans-1,2-Dichloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
53	2,4-Dichlorophenol	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
54	1,2-Dichloropropane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
55	1,3-Dichloropropane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾

56 1,3-Dichloropropene...

ลำดับที่	สารเคมี	วิธีการตรวจ
56	1,3-Dichloropropene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
57	Dieldrin	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
58	Diethyl Phthalate	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
59	2,4-Dimethylphenol	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
60	2,4-Dinitrophenol	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
61	2,4-Dinitrotoluene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
62	2,6-Dinitrotoluene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
63	Di-n-octyl phthalate	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
64	Endosulfan	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
65	Endrin	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
66	Ethylbenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
67	Fluoranthene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
68	Fluorene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
69	Heptachlor	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
70	Heptachlor epoxide	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
71	Hexachlorobenzene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
72	Hexachloro-1,3-butadiene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
73	n-Hexane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
74	α-HCH	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
75	β-HCH	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾

76 γ-HCH...

ลำดับที่	สารเคมี	วิธีการตรวจ
76	γ-HCH	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
77	Hexachlorocyclopentadiene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
78	Hexachloroethane	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
79	Indeno(1,2,3-cd)pyrene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
80	Isophorone	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
81	Lead	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
82	Manganese	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
83	Mercury	1) Digestion, Cold Vapor Atomic Absorption Spectrometric Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
84	Methanol	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
85	Methoxychlor	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
86	Methyl bromide	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
87	Methylene chloride	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
88	2-Methylphenol	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
89	2-Methylnaphthalene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
90	Methyl tert-butyl Ether	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
91	Naphthalene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
92	Nickel	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
93	Nitrobenzene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾

94 N-Nitrosodiphenylamine...

ลำดับที่	สารเคมี	วิธีการตรวจ
94	N-Nitrosodiphenylamine	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
95	N-Nitrosodi-n-Propylamine	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
96	Polychlorinated Biphenyls - PCB 1016 - PCB 1221 - PCB 1232 - PCB 1242 - PCB 1248 - PCB 1254 - PCB 1260	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
97	Pentachlorophenol	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
98	pH	Electrometric Method ⁽⁴⁾
99	Phenanthrene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
100	Phenol	1) Distillation, Chloroform Extraction Method ⁽⁴⁾ 2) Distillation, Direct Photometric Method ⁽⁴⁾ 3) Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
101	Pyrene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
102	Selenium	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
103	Silver	1) Digestion, Inductively Coupled Plasma Method ⁽⁴⁾ 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ⁽⁴⁾
104	Styrene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
105	1,1,2,2-Tetrachloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
106	Tetrachloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
107	Toluene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
108	Toxaphene	Liquid-Liquid Extraction, Gas Chromatographic/ Mass Spectrometric Method ⁽⁴⁾
109	TPH (C ₈ -C ₆)	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ⁽¹⁾⁽²⁾⁽³⁾

110 TPH (C₈-C₁₆)...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
110	TPH (C ₈ -C ₁₆)	Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method ^{9,22}
111	TPH (C ₁₆ -C ₃₀)	Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic Method ^{9,22}
112	1,2,4-Trichlorobenzene	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ⁶¹
113	1,1,1-Trichloroethane	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ⁶¹
114	1,1,2-Trichloroethane	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ⁶¹
115	Trichloroethylene	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ⁶¹
116	2,4,5-Trichlorophenol	Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method ⁶¹
117	2,4,6-Trichlorophenol	Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method ⁶¹
118	1,3,5-Trimethylbenzene	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ⁶¹
119	Vanadium	1) Digestion, Inductively Coupled Plasma Method ⁶² 2) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ⁶¹
120	Vinyl acetate	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ⁶¹
121	Vinyl chloride	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ⁶¹
122	m-Xylene	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ⁶¹
123	o-Xylene	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ⁶¹
124	p-Xylene	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ⁶¹
125	Xylene (Total)	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ⁶¹
126	Zinc	1) Digestion, Inductively Coupled Plasma Method ⁶² 2) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ⁶¹

ภาคผนวก

ภาคผนวก (ต่อเนื่อง) จำนวน 28 รายการ

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
1	Antimony	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method ⁶¹ 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ⁶¹
2	Arsenic	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method ⁶¹ 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ⁶¹
3	Beryllium	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method ⁶¹ 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ⁶¹
4	Cadmium	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method ⁶¹ 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ⁶¹
5	Carbon Monoxide	1) Instrumental Analyzer Method ⁶¹ 2) Sampling Bag Non-Dispersive Infrared Method ⁶¹
6	Chlorine	1) Absorption Sampling, Ion Chromatographic Method ⁶¹ 2) Isokinetic Sampling, Ion Chromatographic Method ⁶¹
7	Chromium	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method ⁶¹ 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ⁶¹
8	Cobalt	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method ⁶¹ 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ⁶¹
9	Copper	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method ⁶¹ 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ⁶¹
10	Cresol	Absorption Sampling, Gas Chromatographic Method ⁶¹
11	Dioxins	Isokinetic Sampling ⁶¹
12	Hydrogen Chloride	1) Absorption Sampling, Ion Chromatographic Method ⁶¹ 2) Isokinetic Sampling, Ion Chromatographic Method ⁶¹
13	Hydrogen Fluoride	1) Absorption Sampling, Ion Chromatographic Method ⁶¹ 2) Isokinetic Sampling, Ion Chromatographic Method ⁶¹
14	Hydrogen Sulfide	Absorption Sampling, Iodometric Method ⁶¹

15 Lead..

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
15	Lead	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method ⁶¹ 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ⁶¹
16	Manganese	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method ⁶¹ 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ⁶¹
17	Mercury	1) Isokinetic Sampling, Digestion, Cold-Vapor Atomic Absorption Spectrometric Method ⁶¹ 2) Isokinetic Sampling, Digestion, Cold-Vapor Atomic Fluorescence Spectrometric Method ⁶¹
18	Nickel	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method ⁶¹ 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ⁶¹
19	Opacity	Ringelmann's Method ⁶¹
20	Oxides of Nitrogen	1) Absorption Sampling, Phenoldisulfonic Acid Method ⁶¹ 2) Absorption Sampling, Alkaline Permanganate/Colorimetric Method ⁶¹ 3) Instrumental Analyzer Method ⁶¹
21	Selenium	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method ⁶¹ 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ⁶¹
22	Sulfur Dioxide	1) Absorption Sampling, Barium-Thorin Titrimetric Method ⁶¹ 2) Instrumental Analyzer Method ⁶¹
23	Sulfuric Acid	Isokinetic Sampling, Barium-Thorin Titrimetric Method ⁶¹
24	Tellurium	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method ⁶¹ 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ⁶¹
25	Tin	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method ⁶¹ 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ⁶¹
26	Total Suspended Particulate	1) Isokinetic Sampling, Gravimetric Method ⁶¹ 2) Paired Train, Isokinetic Sampling, Gravimetric Method ⁶¹

27 Vanadium..

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
27	Vanadium	1) Isokinetic Sampling, Digestion, Inductively Coupled Plasma Method ⁶¹ 2) Isokinetic Sampling, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ⁶¹
28	Xylene	Absorption Sampling, Gas Chromatographic Method ⁶¹

สิ่งปฏิกูลหรือวัสดุที่ไม่ใช้แล้ว จำนวน 35 รายการ

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
1	Aldrin	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method ^{1,9,24} 2) Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^{10,26} 3) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^{11,24}
2	Antimony	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method ^{1,6,16} 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^{1,6,17} 3) Digestion, Inductively Coupled Plasma Method ^{7,16} 4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^{7,17}
3	Arsenic	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method ^{1,6,16} 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^{1,6,17} 3) Digestion, Inductively Coupled Plasma Method ^{7,16} 4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^{7,17}
4	Barium	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method ^{1,6,16} 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^{1,6,17} 3) Digestion, Inductively Coupled Plasma Method ^{7,16} 4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^{7,17}

5 Beryllium...

ลำดับที่	สารเคมี	วิธีการตรวจ
5	Beryllium	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method ^(1.6.14) 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(1.6.17) 3) Digestion, Inductively Coupled Plasma Method ^(7.14) 4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7.17)
6	Cadmium	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method ^(1.6.14) 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(1.6.17) 3) Digestion, Inductively Coupled Plasma Method ^(7.14) 4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7.17)
7	Chlordane	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method ^(1.9.24) 2) Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(10.24) 3) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(11.24)
8	Chromium	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method ^(1.6.14) 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(1.6.17) 3) Digestion, Inductively Coupled Plasma Method ^(7.14) 4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7.17)
9	Chromium (III)	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method; Waste Extraction, Colorimetric Method; Calculation Method ^(1.6.14,19) 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method; Waste Extraction, Colorimetric Method; Calculation Method ^(1.6.17,19) 3) Digestion, Inductively Coupled Plasma Method; Alkaline Digestion, Colorimetric Method; Calculation Method ^(7.6.19) 4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method; Alkaline Digestion, Colorimetric Method; Calculation Method ^(7.6.17,19)

10 Chromium (VI)...

ลำดับที่	สารเคมี	วิธีการตรวจ
10	Chromium (VI)	1) Waste Extraction, Colorimetric Method ^(1.6.19) 2) Alkaline Digestion, Colorimetric Method ^(8.19)
11	Cobalt	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method ^(1.6.14) 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(1.6.17) 3) Digestion, Inductively Coupled Plasma Method ^(7.14) 4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7.17)
12	Copper	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method ^(1.6.14) 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(1.6.17) 3) Digestion, Inductively Coupled Plasma Method ^(7.14) 4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7.17)
13	2,4-D	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method ^(1.9.24) 2) Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(10.24) 3) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(11.24)
14	DDD	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method ^(1.9.24) 2) Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(10.24) 3) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(11.24)
15	DDE	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method ^(1.9.24) 2) Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(10.24) 3) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(11.24)
16	DDT	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method ^(1.9.24)

2) Soxhlet...

ลำดับที่	สารเคมี	วิธีการตรวจ
17	Dieldrin	2) Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(10.24) 3) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(11.24) 1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method ^(1.9.24) 2) Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(10.24) 3) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(11.24)
18	Endrin	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method ^(1.9.24) 2) Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(10.24) 3) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(11.24)
19	Heptachlor	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method ^(1.9.24) 2) Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(10.24) 3) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(11.24)
20	Lead	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method ^(1.6.14) 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(1.6.17) 3) Digestion, Inductively Coupled Plasma Method ^(7.14) 4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7.17)
21	Lindane	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method ^(1.9.24) 2) Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(10.24) 3) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(11.24)

22 Mercury...

ลำดับที่	สารเคมี	วิธีการตรวจ
22	Mercury	1) Waste Extraction, Digestion, Cold-Vapor Atomic Absorption Spectrometric Method ^(1.6.20) 2) Waste Extraction, Digestion, Cold-Vapor Atomic Fluorescence Spectrometric Method ^(1.6.20) 3) Digestion, Cold-Vapor Atomic Absorption Spectrometric Method ⁽²⁰⁾ 4) Digestion, Cold-Vapor Atomic Fluorescence Spectrometric Method ⁽²⁰⁾ 5) Thermal Decomposition Amalgamation and Atomic Absorption Spectrometric Method ⁽²¹⁾
23	Methoxychlor	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method ^(1.9.24) 2) Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(10.24) 3) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(11.24)
24	Mirex	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method ^(1.9.24) 2) Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(10.24) 3) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(11.24)
25	Molybdenum	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method ^(1.6.14) 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(1.6.17) 3) Digestion, Inductively Coupled Plasma Method ^(7.14) 4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7.17)
26	Nickel	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method ^(1.6.14) 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(1.6.17) 3) Digestion, Inductively Coupled Plasma Method ^(7.14) 4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7.17)
27	Polychlorinated biphenyls (PCBs) - Aroclor 1016 - Aroclor 1221 - Aroclor 1232 - Aroclor 1242 - Aroclor 1248 - Aroclor 1254 - Aroclor 1260	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method ^(1.9.24) 2) Soxhlet Extraction, Gas Chromatographic Method ^(10.24) 3) Automated Soxhlet Extraction, Gas Chromatographic Method ^(11.24)

- 2-Chlorobiphenyl...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
28	- 2-Chlorobiphenyl - 2,3-Dichlorobiphenyl - 2,2',5-Trichlorobiphenyl - 2,4',5-Trichlorobiphenyl - 2,2',3,5'-Tetrachlorobiphenyl - 2,2',5,5'-Tetrachlorobiphenyl - 2,3',4,4'-Tetrachlorobiphenyl - 2,2',3,4,5'-Pentachlorobiphenyl - 2,2',4,5,5'-Pentachlorobiphenyl - 2,3,3',4',6-Pentachlorobiphenyl - 2,2',3,4,4',5'-Hexachlorobiphenyl - 2,2',3,4,5,5'-Hexachlorobiphenyl - 2,2',3,5,5',6-Hexachlorobiphenyl - 2,2',4,4',5,5'-Hexachlorobiphenyl - 2,2',3,3',4,4',5'-Heptachlorobiphenyl - 2,2',3,4,4',5,5'-Heptachlorobiphenyl - 2,2',3,4,4',5',6-Heptachlorobiphenyl - 2,2',3,4',5,5',6-Heptachlorobiphenyl - 2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl Pentachlorophenol	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method ^(1,9,26) 2) Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(10,26) 3) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(11,26) Electrometric Method ^(20,24)
29	pH	Electrometric Method ^(20,24)
30	Selenium	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method ^(1,6,16) 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(1,6,17) 3) Digestion, Inductively Coupled Plasma Method ^(7,16) 4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,17)

31 Silver...

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
31	Silver	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method ^(1,6,16) 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(1,6,17) 3) Digestion, Inductively Coupled Plasma Method ^(7,16) 4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,17)
32	Thallium	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method ^(1,6,16) 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(1,6,17) 3) Digestion, Inductively Coupled Plasma Method ^(7,16) 4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,17)
33	Toxaphene	1) Waste Extraction, Separatory Funnel Liquid-Liquid Extraction, Gas Chromatographic/Mass Spectrometric Method ^(1,9,26) 2) Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(10,26) 3) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(11,26)
34	Vanadium	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method ^(1,6,16) 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(1,6,17) 3) Digestion, Inductively Coupled Plasma Method ^(7,16) 4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,17)
35	Zinc	1) Waste Extraction, Digestion, Inductively Coupled Plasma Method ^(1,6,16) 2) Waste Extraction, Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(1,6,17) 3) Digestion, Inductively Coupled Plasma Method ^(7,16) 4) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,17)

ดิน...

ดิน จำนวน 125 รายการ

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
1	Acenaphthene	1) Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(11,26)
2	Acetone	1) Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ^(15,25) 2) Equilibrium Headspace, Gas Chromatographic/Mass Spectrometric Method ⁽¹³⁾
3	Aldrin	1) Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(11,26)
4	Anthracene	1) Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(11,26)
5	Antimony	1) Digestion, Inductively Coupled Plasma Method ^(7,16) 2) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,17)
6	Arsenic	1) Digestion, Inductively Coupled Plasma Method ^(7,16) 2) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,17)
7	Atrazine	1) Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(11,26)
8	Barium	1) Digestion, Inductively Coupled Plasma Method ^(7,16) 2) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,17)
9	Benz(a)anthracene	1) Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(11,26)
10	Benzene	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ^(15,25)

11 Benzo(b)fluoranthene

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
11	Benzo(b)fluoranthene	1) Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(11,26)
12	Benzo(k)fluoranthene	1) Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(11,26)
13	Benzoic acid	1) Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(11,26)
14	Benzo(a)pyrene	1) Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(11,26)
15	Benzo(g,h,i)perylene	1) Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(11,26)
16	Beryllium	1) Digestion, Inductively Coupled Plasma Method ^(7,16) 2) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,17)
17	Bis(2-chloroethyl)ether	1) Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(11,26)
18	Bis(2-ethylhexyl)phthalate	1) Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(11,26)
19	Bromodichloromethane	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ^(15,25)
20	Bromoform	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ^(15,25)
21	Butanol	Equilibrium Headspace, Gas Chromatographic/Mass Spectrometric Method ^(13,25)
22	Butyl Benzyl Phthalate	1) Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(11,26)

23 Cadmium...

ลำดับที่	สารเคมี	วิธีวิเคราะห์
23	Cadmium	1) Digestion, Inductively Coupled Plasma Method ^(7,14) 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ^(7,17)
24	Carbazole	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,28) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,24)
25	Carbon Disulfide	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(15,25)
26	Carbon tetrachloride	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(15,25)
27	Chlordane	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,28) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,24)
28	p-Chloroaniline	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,28) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,24)
29	Chlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(15,25)
30	Chlorodibromomethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(15,25)
31	Chloroform	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(15,25)
32	2-Chlorophenol	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,28) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,24)
33	Chromium	1) Digestion, Inductively Coupled Plasma Method ^(7,14) 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ^(7,17)
34	Chromium (III)	1) Digestion, Inductively Coupled Plasma Method; Alkaline Digestion, Colorimetric Method; Calculation Method ^(7,8,14,19) 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method; Alkaline Digestion, Colorimetric Method; Calculation Method ^(7,8,17,19)
35	Chromium (VI)	Alkaline Digestion, Colorimetric Method ^(8,19)

36 Chrysene...

ลำดับที่	สารเคมี	วิธีวิเคราะห์
36	Chrysene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,28) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,24)
37	Cyanide	Extraction, Distillation, Colorimetric Method ^(27,28,29)
38	2,4-D	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,28) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,24)
39	DDD	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,28) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,24)
40	DDE	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,28) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,24)
41	DDT	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,28) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,24)
42	Dibenz(a,h)anthracene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,28) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,24)
43	Di-n-Butyl Phthalate	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,28) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,24)
44	1,2-Dichlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(15,25)
45	1,3-Dichlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(15,25)
46	1,4-Dichlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(15,25)
47	3,3-Dichlorobenzidine	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,28) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,24)
48	1,1-Dichloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(15,25)

49 1,2-Dichloroethane...

ลำดับที่	สารเคมี	วิธีวิเคราะห์
49	1,2-Dichloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(15,25)
50	1,1-Dichloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(15,25)
51	cis-1,2-Dichloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(15,25)
52	trans-1,2-Dichloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(15,25)
53	2,4-Dichlorophenol	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,28) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,24)
54	1,2-Dichloropropane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(15,25)
55	1,3-Dichloropropane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(15,25)
56	1,3-Dichloropropene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(15,25)
57	Dieldrin	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,28) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,24)
58	Diethyl Phthalate	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,28) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,24)
59	2,4-Dimethylphenol	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,28) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,24)
60	2,4-Dinitrophenol	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,28) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,24)
61	2,4-Dinitrotoluene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,28) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,24)
62	2,6-Dinitrotoluene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,28) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,24)

63 Di-n-Octyl Phthalate...

ลำดับที่	สารเคมี	วิธีวิเคราะห์
63	Di-n-Octyl Phthalate	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,28) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,24)
64	Endosulfan	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,28) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,24)
65	Endrin	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,28) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,24)
66	Ethylbenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(15,25)
67	Fluoranthene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,28) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,24)
68	Fluorene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,28) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,24)
69	Heptachlor	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,28) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,24)
70	Heptachlor epoxide	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,28) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,24)
71	Hexachlorobenzene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,28) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,24)
72	Hexachloro-1,3-butadiene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(15,25)
73	n-Hexane	1) Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(15,25) 2) Equilibrium Headspace, Gas Chromatographic/ Mass Spectrometric Method ^(11,24)

73 n-Hexane...

ลำดับที่	สารเคมี	วิธีการตรวจ
74	α-HCH	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,26)
75	β-HCH	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,26)
76	γ-HCH	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,26)
77	Hexachlorocyclopentadiene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,26)
78	Hexachloroethane	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,26)
79	Indeno(1,2,3-cd)pyrene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,26)
80	Isophorone	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,26)
81	Lead	1) Digestion, Inductively Coupled Plasma Method ^(7,16) 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ^(7,17)
82	Manganese	1) Digestion, Inductively Coupled Plasma Method ^(7,16) 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ^(7,17)
83	Mercury	1) Digestion, Cold-Vapor Atomic Absorption Spectrometric Method ⁽²⁰⁾ 2) Thermal Decomposition, Amalgamation, and Atomic Absorption Spectrophotometry ⁽²¹⁾ 3) Digestion, Cold-Vapor Atomic Fluorescence Spectrometric Method ⁽³⁰⁾

84 Methanol...

ลำดับที่	สารเคมี	วิธีการตรวจ
84	Methanol	1) Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(15,25) 2) Equilibrium Headspace, Gas Chromatographic/ Mass Spectrometric Method ^(13,25)
85	Methoxychlor	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,26)
86	Methyl Bromide	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(15,25)
87	Methylene Chloride	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(15,25)
88	2-methylphenol	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,26)
89	2-Methylnaphthalene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,26)
90	Methyl tert-Butyl Ether	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(15,25)
91	Naphthalene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,26)
92	Nickel	1) Digestion, Inductively Coupled Plasma Method ^(7,16) 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ^(7,17)
93	Nitrobenzene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,26)
94	N-Nitrosodiphenylamine	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,26)
95	N-Nitrosodi-n-propylamine	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,26)

96 Polychlorinated biphenyls (PCBs)

ลำดับที่	สารเคมี	วิธีการตรวจ
96	Polychlorinated biphenyls (PCBs) - Aroclor 1016 - Aroclor 1221 - Aroclor 1232 - Aroclor 1242 - Aroclor 1248 - Aroclor 1254 - Aroclor 1260 - 2-Chlorobiphenyl - 2,2',3,5'-Tetrachlorobiphenyl - 2,2',5,5'-Tetrachlorobiphenyl - 2,3',4,4'-Tetrachlorobiphenyl - 2,2',3,4,5'-Pentachlorobiphenyl - 2,2',4,5,5'-Pentachlorobiphenyl - 2,3,3',4,6-Pentachlorobiphenyl - 2,2',3,4,4',5'-Hexachlorobiphenyl - 2,2',3,4,5,5'-Hexachlorobiphenyl - 2,2',3,5,5',6'-Hexachlorobiphenyl - 2,2',4,4',5,5'-Hexachlorobiphenyl - 2,2',3,3',4,4',5'-Heptachlorobiphenyl - 2,2',3,4,4',5,5'-Heptachlorobiphenyl - 2,2',3,4,4',5,5',6'-Heptachlorobiphenyl - 2,2',3,3',4,4',5,5',6'-Nonachlorobiphenyl	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,26)
97	Pentachlorophenol	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,26)
98	Phenanthrene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,26)

99 Phenol...

ลำดับที่	สารเคมี	วิธีการตรวจ
99	Phenol	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,26)
100	Pyrene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,26)
101	Selenium	1) Digestion, Inductively Coupled Plasma Method ^(7,16) 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ^(7,17)
102	Silver	1) Digestion, Inductively Coupled Plasma Method ^(7,16) 2) Digestion, Inductively Coupled Plasma/ Mass Spectrometric Method ^(7,17)
103	Styrene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(15,25)
104	1,1,2,2-Tetrachloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(15,25)
105	Tetrachloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(15,25)
106	Toluene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(15,25)
107	Toxaphene	1) Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(10,26) 2) Automated Soxhlet Extraction, Gas Chromatographic/ Mass Spectrometric Method ^(11,26)
108	TPH (C ₉ -C ₈)	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(15,25)
109	TPH (C ₉ -C ₁₆)	1) Automate Extraction, Gas Chromatographic Method ^(12,22) 2) Solvent Extraction, Gas Chromatographic Method ^(12,22) 3) Ultrasonic Extraction, Gas Chromatographic Method ^(22,23)
110	TPH (C ₉ -C ₃₅)	1) Automate Extraction, Gas Chromatographic Method ^(12,22) 2) Solvent Extraction, Gas Chromatographic Method ^(12,22) 3) Ultrasonic Extraction, Gas Chromatographic Method ^(22,23)
111	1,2,4-Trichlorobenzene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(15,25)
112	1,1,1-Trichloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(15,25)
113	1,1,2-Trichloroethane	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(15,25)
114	Trichloroethylene	Purge and Trap, Gas Chromatographic/ Mass Spectrometric Method ^(15,25)

115 2,4,5-Trichlorophenol...

ลำดับที่	สารเคมี	วิธีวิเคราะห์
115	2,4,5-Trichlorophenol	1) Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(10,24) 2) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(11,24)
116	2,4,6-Trichlorophenol	1) Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(10,24) 2) Automated Soxhlet Extraction, Gas Chromatographic/Mass Spectrometric Method ^(11,24)
117	1,3,5-Trimethylbenzene	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ^(15,25)
118	Vanadium	1) Digestion, Inductively Coupled Plasma Method ^(7,14) 2) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,17)
119	Vinyl Acetate	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ^(15,25)
120	Vinyl Chloride	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ^(15,25)
121	m-Xylene	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ^(15,25)
122	o-Xylene	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ^(15,25)
123	p-Xylene	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ^(15,25)
124	Xylene (Total)	Purge and Trap, Gas Chromatographic/Mass Spectrometric Method ^(15,25)
125	Zinc	1) Digestion, Inductively Coupled Plasma Method ^(7,14) 2) Digestion, Inductively Coupled Plasma/Mass Spectrometric Method ^(7,17)

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20. United States...

20. United States...



ที่ อาก ๐๓๔๐(๑)/ ๔ ๑ ๒ ๑

กรมโรงงานอุตสาหกรรม
ถนนพระรามที่ ๖ แขวงทุ่งพญาไท
เขตราชเทวี กรุงเทพฯ ๑๐๕๐๐

๒๕ เมษายน ๒๕๖๗

เรื่อง เปลี่ยนแปลงบุคลากรห้องปฏิบัติการวิเคราะห์

เรียน. กรรมการผู้จัดการ บริษัท เอลแอลเอส แลบบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด

อ้างถึง คำขอขึ้นทะเบียน/ต่ออายุ/เปลี่ยนแปลงบุคลากร และขณิฉาสารมลพิษของห้องปฏิบัติการวิเคราะห์เอกชน
ลงวันที่ ๒๙ มีนาคม ๒๕๖๗

ตามคำขอที่อ้างถึง บริษัท เอลแอลเอส แลบบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด ห้องปฏิบัติการวิเคราะห์เอกชน เลขทะเบียน ๖-๐๐๔ สดวนที่ตั้งแต่ที่ ๑๐๔ ขอพัฒนาการ ๔๐ ถนนพัฒนาการ แขวงพัฒนาการ เขตสวนหลวง กรุงเทพมหานคร ขอเปลี่ยนแปลงบุคลากร ความละเอียดแจ้งแล้ว นั้น

กรมโรงงานอุตสาหกรรมพิจารณาแล้ว มีความเห็นดังนี้

๑. ไม่ยกเลิกเจ้าหน้าที่ประจำห้องปฏิบัติการวิเคราะห์ จำนวน ๓ ราย

๑) นางสาวพรหมธิดา ทุมคง ทะเบียนเลขที่ ๖-๒๐๔-๖-๐๐๖๔

๒) นางสาวชัย สุทธิยะ ทะเบียนเลขที่ ๖-๒๐๔-๖-๐๑๒๑

๓) นางสาวศุภรดา ปิ่นบุญมา ทะเบียนเลขที่ ๖-๒๐๔-๖-๐๑๓๔

๒. ให้เพิ่มเจ้าหน้าที่ห้องปฏิบัติการวิเคราะห์เอกชน จำนวน ๑๒ ราย

๑) นางสาวรวิภา กสินเขียว ทะเบียนเลขที่ ๖-๒๐๔-๖-๐๑๔๐

๒) นางสาวกัญญ์โสภา สายคำ ทะเบียนเลขที่ ๖-๒๐๔-๖-๐๑๔๑

๓) นางสาวณัฐณิชา กับนางวงศ์ ทะเบียนเลขที่ ๖-๒๐๔-๖-๐๑๔๒

๔) นางสาวอานาจ วงศาเคน ทะเบียนเลขที่ ๖-๒๐๔-๖-๐๑๔๓

๕) นายภูษณพล ปัญญาวงศ์ ทะเบียนเลขที่ ๖-๒๐๔-๖-๐๑๔๔

๖) นายเนตรกร หารงา ทะเบียนเลขที่ ๖-๒๐๔-๖-๐๑๔๕

๗) นายวัชรินทร์ ห่อสุมสน ทะเบียนเลขที่ ๖-๒๐๔-๖-๐๑๔๖

๘) นายณัฐพงศ์ โสมา ทะเบียนเลขที่ ๖-๒๐๔-๖-๐๑๔๗

๙) นายศิรินทร์ ปานพึ่ง ทะเบียนเลขที่ ๖-๒๐๔-๖-๐๑๔๘

๑๐) นายณัฐพล ฐะชิน ทะเบียนเลขที่ ๖-๒๐๔-๖-๐๑๔๙

๑๑) นายธนา สุทธิพันธุ์ ทะเบียนเลขที่ ๖-๒๐๔-๖-๐๑๕๐


๑๒) นายบรรณ แก้วระชะชา ทะเบียนเลขที่ ๖-๒๐๔-๖-๐๑๕๑

อนึ่ง: หนังสือฉบับนี้

อนึ่ง หนังสือฉบับนี้ส่งตามสัญญาพร้อมหนังสือต่ออายุไว้ที่หน้าทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน
ในวันที ๒ กันยายน ๒๕๖๓

จึงเรียนมาเพื่อทราบ

ขอแสดงความนับถือ


(นายพรหม กลิ่นทอง)
รองอธิบดี ปฏิบัติราชการแทน
อธิบดีกรมโรงงานอุตสาหกรรม

กองวิจัยและพัฒนาสิ่งแวดล้อมพิษวิทยา
กลุ่มมาตรฐานวิธีการวิเคราะห์ทดสอบและทะเบียนห้องปฏิบัติการ
โทร: ๐ ๒๔๓๐ ๖๓๑๒ ถึง ๒๔๓๐๓๕
โทรสาร: ๐ ๒๔๓๐ ๖๓๑๕ ต่อ ๒๔๓๕
ไปรษณีย์อิเล็กทรอนิกส์ sarabagudw@mail.go.th



ที่ อก ๐๓๑๐(๑)/ ๑๒๓๖ ๘ /

กรมโรงงานอุตสาหกรรม
ถนนพระรามที่ ๖ แขวงทุ่งพญาไท
เขตราชเทวี กรุงเทพฯ ๑๐๔๐๐

๑๘ ธันวาคม ๒๕๖๓

เรื่อง ยกเลิกบุคลากรของห้องปฏิบัติการวิเคราะห์

เรียน กรรมการผู้จัดการ บริษัท เอแอลเอส แลบริทอรี่ กรุ๊ป (ประเทศไทย) จำกัด

อ้างถึง คำขอขึ้นทะเบียน/ต่ออายุ/เปลี่ยนแปลงบุคลากร และชนิดสารเคมีของห้องปฏิบัติการวิเคราะห์เอกชน
ลงวันที่ ๒ ธันวาคม ๒๕๖๓

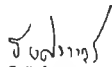
ตามคำขอที่อ้างถึง บริษัท เอแอลเอส แลบริทอรี่ กรุ๊ป (ประเทศไทย) จำกัด ห้องปฏิบัติการ
วิเคราะห์เอกชน เลขทะเบียน ๖-๒๐๔ สดงานที่ตั้งแต่เลขที่ ๑๐๔ ขอพัฒนาการ ๔๐ ตามพัฒนาการ แสงพัฒนาการ
เขตสวนหลวง กรุงเทพมหานคร ขอยกเลิกบุคลากร ความละเอียดดังนี้

กรมโรงงานอุตสาหกรรมพิจารณาแล้ว ให้ออกเลิกเจ้าหน้าที่ประจำห้องปฏิบัติการวิเคราะห์
จำนวน ๘ ราย ได้แก่

- | | |
|-------------------------------|----------------------------|
| ๑) นายประพนธ์ วรรณสุขชัย | ทะเบียนเลขที่ ๖-๒๐๔-๖ ๐๐๖๐ |
| ๒) นายจิรณัฐ ขวาละออ | ทะเบียนเลขที่ ๖-๒๐๔-๖ ๐๐๗๒ |
| ๓) นายศิริพันธ์ ก่ำคำ | ทะเบียนเลขที่ ๖-๒๐๔-๖ ๐๑๑๘ |
| ๔) นางสาวอริยา ศักดิ์ส่อง | ทะเบียนเลขที่ ๖-๒๐๔-๖ ๐๑๓๔ |
| ๕) นายกิตติพงษ์ แซ่ลี | ทะเบียนเลขที่ ๖-๒๐๔-๖ ๐๑๔๔ |
| ๖) นายจิรเมธ ประเสริฐศิริพงษ์ | ทะเบียนเลขที่ ๖-๒๐๔-๖ ๐๑๖๐ |
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จึงเรียนมาเพื่อทราบ

ขอแสดงความนับถือ


(นายศิริพันธ์ อิศรางกูร ณ อยุธยา)
รองอธิบดี ปฏิบัติราชการแทน
อธิบดีกรมโรงงานอุตสาหกรรม

กองวิจัยและพัฒนาสิ่งแวดล้อมพิษวิทยา

กลุ่มมาตรฐานวิธีการวิเคราะห์ทดสอบและทะเบียนห้องปฏิบัติการ

โทร: ๐ ๒๔๓๐ ๖๓๑๒ ถึง ๒๔๓๐๓๕

โทรสาร: ๐ ๒๔๓๐ ๖๓๑๕ ต่อ ๒๔๓๕

ไปรษณีย์อิเล็กทรอนิกส์ sarabagudw@mail.go.th



"อุตสาหกรรมก้าวหน้า ประเทศไทยก้าวหน้า ร่วมกับพัฒนา อุตสาหกรรมสีเขียว"



"อุตสาหกรรมก้าวหน้า ประเทศไทยก้าวหน้า ร่วมกับพัฒนา อุตสาหกรรมสีเขียว"



ที่ อก ๐๓๑๐/ ๑๒๓๖ ๘

กรมโรงงานอุตสาหกรรม
ถนนพระรามที่ ๖ แขวงทุ่งพญาไท
เขตราชเทวี กรุงเทพฯ ๑๐๔๐๐

๑๘ สิงหาคม ๒๕๖๓

เรื่อง คัดค้านหนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน

เรียน กรรมการผู้จัดการ บริษัท เอแอลเอส แลบริทอรี่ กรุ๊ป (ประเทศไทย) จำกัด

อ้างถึง คำขอขึ้นทะเบียน/ต่ออายุ/เปลี่ยนแปลงบุคลากร และชนิดสารเคมีของห้องปฏิบัติการวิเคราะห์
เอกชน ลงวันที่ ๒๓ พฤษภาคม ๒๕๖๓

สิ่งที่ส่งมาด้วย เอกสารแนบท้ายหนังสือต่ออายุขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน
บริษัท เอแอลเอส แลบริทอรี่ กรุ๊ป (ประเทศไทย) จำกัด จำนวน ๓ แผ่น

ตามคำขอที่อ้างถึง บริษัท เอแอลเอส แลบริทอรี่ กรุ๊ป (ประเทศไทย) จำกัด ขอต่ออายุ
หนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน เลขทะเบียน ๖-๓๑๓ สดงานที่ตั้งแต่เลขที่ ๐๑๖/๑๐ หมู่ที่ ๕
ตำบลแม่ไม้คู่ อำเภอบัวทอง จังหวัดระยอง คือกรมโรงงานอุตสาหกรรม, นั้น

กรมโรงงานอุตสาหกรรมพิจารณาแล้ว (บริษัท เอแอลเอส แลบริทอรี่ กรุ๊ป (ประเทศไทย)
จำกัด ต่ออายุหนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน โดยไม่แจ้งประกอบดังนี้

๑) ผู้ควบคุมห้องปฏิบัติการวิเคราะห์เอกชน

- | | |
|------------------------|----------------------------|
| ๑) นายเดช ช้างขุน | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๐๑ |
| ๒) นายสิริวัฒน์ นริวัณ | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๐๒ |
| ๓) นายสุพรรณ สยามดี | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๐๓ |

๒) เจ้าหน้าที่ปฏิบัติการวิเคราะห์เอกชน

- | | |
|-------------------------------|----------------------------|
| ๑) นายณัฐพงษ์ เท้งราวนา | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๐๔ |
| ๒) นางสาวกัญญารัตน์ วัณทิ | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๐๕ |
| ๓) นางสาวจุฑาทิพย์ รามทอง | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๐๖ |
| ๔) นางสาวสุภาภรณ์ ประเทืองสุข | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๐๗ |
| ๕) นายสุรเชษฐ์ คุญะกุล | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๐๘ |
| ๖) นายณัฐวัฒน์ ออมทรัพย์ | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๐๙ |
| ๗) นายจิตรกร สิริขันธ์ | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๑๐ |
| ๘) นายสิริวัฒน์ สุวรรณรัตน์ | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๑๑ |
| ๙) นายสิริวัฒน์ สอนา | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๑๒ |
| ๑๐) นายอนุรัตน์ เสงมา | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๑๓ |
| ๑๑) นายสุวิทย์ นราภรณ์ | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๑๔ |
| ๑๒) นายณัฐพล เรืองวิวัฒน์ | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๑๕ |
| ๑๓) นายชานนท์ บุญชื่น | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๑๖ |
| ๑๔) นายณัฐภรณ์ วงศ์อินทร์ | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๑๗ |
| ๑๕) นายอนันต์ โพธิ์ทอง | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๑๘ |

๑๖) นายณัฐพล...

- | | |
|--------------------------------|----------------------------|
| ๑๖) นายณัฐพล แก้วกลาง | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๑๙ |
| ๑๗) นายสุภาณัฐ พิสัยพันธ์ | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๒๐ |
| ๑๘) นายวสันต์ คันทิ | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๒๑ |
| ๑๙) นายวิญญู นิมาชาติ | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๒๒ |
| ๒๐) นายสุณัฐ สุกกิตติมงคล | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๒๓ |
| ๒๑) นายเอกชัย ถิ่นทอง | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๒๔ |
| ๒๒) นายพงษ์เทพ สิทธิธำ | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๒๕ |
| ๒๓) นายพิชิตกร กุมภาธิ | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๒๖ |
| ๒๔) นางสาวนันทิยา บุญชัย | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๒๗ |
| ๒๕) นายสิทธิชัย อินทนิม | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๒๘ |
| ๒๖) นางสาวปภาณิม หอดทอง | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๒๙ |
| ๒๗) นางสาวพจนนา สิดา | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๓๐ |
| ๒๘) นางสาวอนิศา ศิริวงศ์ | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๓๑ |
| ๒๙) นายพิทยา พงษ์แดง | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๓๒ |
| ๓๐) นางสาวชลธิชา สุนทร | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๓๓ |
| ๓๑) ว่าที่ร้อยตรี รณชัย ม่วงมา | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๓๔ |
| ๓๒) นายวรวิทย์ พันพา | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๓๕ |
| ๓๓) นายศักดิ์รินทร์ จรัสกลาง | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๓๖ |
| ๓๔) นายสุรศักดิ์ สาขิน | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๓๗ |
| ๓๕) นายสราพร ภาแก้ว | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๓๘ |
| ๓๖) นายสุทธิพงษ์ โชคปิตินันท์ | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๓๙ |
| ๓๗) นายวิมล ทัพไชย | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๔๐ |
| ๓๘) นางสาววาสนา เขียวศรีมงคล | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๔๑ |
| ๓๙) นายธนสิทธิ์ วงศ์ไชย | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๔๒ |
| ๔๐) นายชัชวาลย์ เลิศนันทกุลชัย | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๔๓ |
| ๔๑) นายสังข์ เท้งราวนา | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๔๔ |
| ๔๒) นายณัฐพล มณีจันทร์ | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๔๕ |
| ๔๓) นายอรินทร อธิจินดา | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๔๖ |
| ๔๔) นายสุวิทย์ วงศ์สุริยา | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๔๗ |
| ๔๕) นายไสร ทัพไชย | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๔๘ |
| ๔๖) นางสาวกัญญา สันตยาภิรมย์ | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๔๙ |
| ๔๗) นางสาวอริสราพร ศิริมงคล | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๕๐ |
| ๔๘) นายพิพัฒน์ นิพัทธ์เศรษฐ์ | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๕๑ |
| ๔๙) นายศิริวิทย์ เรืองสม | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๕๒ |
| ๕๐) นายปรเมศ สัตยาคุณ | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๕๓ |
| ๕๑) นายณัฐภาณุ ธรรมะโร | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๕๔ |
| ๕๒) นางสาวสุวิมล ใจจันทร์ | ทะเบียนเลขที่ ๖-๓๑๓-๖ ๐๐๕๕ |

๕๓) นายพรกร...

๕๒) นายพรกร เจียงเจริญ ทะเบียนเลขที่ ๖-๒๒๓-๖-๐๐๕๕๕
 ๕๓) นายทิวกร เรืองมาก ทะเบียนเลขที่ ๖-๒๒๓-๖-๐๐๕๕๕
 ๕๔) นายอนุรักษ์ ทองขจรศักดิ์ ทะเบียนเลขที่ ๖-๒๒๓-๖-๐๐๕๖๖
 ๕๕) นายอภิชาติ วิลาศ ทะเบียนเลขที่ ๖-๒๒๓-๖-๐๐๕๖๖
 ๕๖) นายวิเศษ ทรัพย์ชา ทะเบียนเลขที่ ๖-๒๒๓-๖-๐๐๕๖๖
 ๕๗) นายประสพ นิลกร ทะเบียนเลขที่ ๖-๒๒๓-๖-๐๐๕๖๖
 ๕๘) นายภาณุวัฒน์ วัชรัง ทะเบียนเลขที่ ๖-๒๒๓-๖-๐๐๕๖๖
 ๖๐) นายสันติ วัฒนะ ทะเบียนเลขที่ ๖-๒๒๓ ๖ ๐๐๖๐๐
 ๖๑) นายทินกร กุศลชาติ ทะเบียนเลขที่ ๖-๒๒๓ ๖ ๐๐๖๐๐

ค. ขอขานขานมิตสารมลพิษที่ได้รับขึ้นทะเบียนให้วิเคราะห์ในน้ำเสีย น้ำใต้ดิน อากาศเสีย

ตามสิ่งที่ส่งมาด้วย

หนังสือฉบับนี้จะมีผลตั้งแต่วันที่ ๒๕ มิถุนายน ๒๕๖๓ หากประสงค์จะคัดลอกหนังสือ
 รับขึ้นทะเบียนเพื่อปฏิบัติภารกิจวิเคราะห์เอกสาร ให้ยื่นคำขอต่อผู้อำนวยการกองควบคุมมลพิษกรมโรงงาน
 อุตสาหกรรมภายใน ๖๐ วัน ก่อนวันสิ้นอายุของหนังสือรับขึ้นทะเบียนเพื่อปฏิบัติภารกิจวิเคราะห์เอกสาร
 จึงเรียนมาเพื่อทราบ

ขอแสดงความนับถือ

(นายพรกร กลิ่นกรอง)
 รองอธิบดีกรมโรงงาน
 อุตสาหกรรม

ศูนย์วิจัยและประเมินมลพิษโรงงานภาคตะวันออก

โทร: ๐ ๒๓๔๓ ๖๐๕๕-๕๐ ๕๖๐๑-๒

เบอร์แฟกซ์อิเล็กทรอนิกส์ envirodesk@mail.go.th



"อุตสาหกรรมก้าวไกล ประเทศไทยก้าวหน้า ร่วมกันพัฒนา อุตสาหกรรมสีเขียว"



เอกสารแนบท้ายหนังสือเปลี่ยนแปลงสารมลพิษของห้องปฏิบัติการวิเคราะห์เอกชน
 บริษัท แอแอลแอล แลบลอราทอรี กรุ๊ป (ประเทศไทย) จำกัด เลขทะเบียน ๖-๒๒๓
 ที่ กก ๐๓๒๐/ ๗ ๕๓ ๘ ลงวันที่ ๐๘ สิงหาคม ๒๕๖๗

ขอขานขานมิตสารมลพิษที่ได้รับขึ้นทะเบียนจากกรมโรงงานอุตสาหกรรม จำนวน ๒๔ รายการ
 นับเสีย จำนวน 14 รายการ

ลำดับ ที่	สารมลพิษ	วิธีวิเคราะห์
1	Biochemica, Oxygen Demand	1) 5-Day BOD Test, Membrane Electrode Method ²⁾ 2) 5-Day BOD Test, Azide Modification Method ²⁾
2	Chemical Oxygen Demand	1) Open Reflux, Titrimetric Method ¹⁾ 2) Closed Reflux, Colorimetric Method ²⁾ 3) Closed Reflux, Titrimetric Method ²⁾
3	Color	ADM Weighted-Ordinate Spectrophotometric Method ²⁾
4	Cyanide	Distillation, Colorimetric Method ²⁾
5	Formaldehyde	Distillation, Colorimetric Method ¹⁾
6	Free Chlorine	DPD Ferrous Titrimetric Method ²⁾
7	Oil and Grease	Liquid Liquid, Partition Gravimetric Method ²⁾
8	pH	Electrometric Method ²⁾
9	Phenols	1) Distillation, Chloroform Extraction Method ²⁾ 2) Distillation, Direct Photometric Method ²⁾
10	Sulfide	ZnS Precipitation, Iodometric Method ²⁾
11	Temperature	Field Method ²⁾
12	Total Dissolved Solids	Dried at 180 °C ²⁾
13	Total Kjeldahl Nitrogen	Semi-Macro Kjeldahl Method ²⁾
14	Total Suspended Solids	Dried at 103-105 °C ²⁾

นับเสีย จำนวน 3 รายการ

ลำดับ ที่	สารมลพิษ	วิธีวิเคราะห์
1	Cyanide	Distillation, Colorimetric Method ²⁾
2	pH	Electrometric Method ²⁾
3	Phenols	Distillation, Direct Photometric Method ²⁾

อากาศเสีย...

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อากาศเสีย (ปล่องระบาย) จำนวน 7 รายการ

ลำดับ ที่	สารมลพิษ	วิธีวิเคราะห์
1	Carbon Monoxide	1) Sampling Bag, Non-Dispersive Infrared Method ²⁾ 2) Instrumental Analyzer Method ²⁾
2	Hydrogen Sulfide	Absorption Sampling, Iodometric Method ²⁾
3	Opacity	Ringelmann's Method ²⁾
4	Oxide of Nitrogen	1) Absorption Sampling, Phenoldisulfonic Acid Method ²⁾ 2) Instrumental Analyzer Method ²⁾
5	Sulfur Dioxide	1) Absorption Sampling, Barium-Thorin Titrimetric Acid Method ²⁾ 2) Instrumental Analyzer Method ²⁾
6	Sulfuric Acid	Isokinetic Sampling, Barium - Titrimetric Method ²⁾
7	Total Suspended Particulate	Isokinetic Sampling, Gravimetric Method ²⁾

เอกสารอ้างอิง

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ที่ อก ๐๓๒๐/ ๑๐ ๐๙ ๙



กรมโรงงานอุตสาหกรรม
ถนนพระรามที่ ๖ แขวงทุ่งพญาไท
เขตราชเทวี กรุงเทพฯ ๑๐๕๐๐

๑๔ ตุลาคม ๒๕๖๙

เรื่อง แก้ไขรายชื่อเจ้าหน้าที่ห้องปฏิบัติการวิเคราะห์เอกชน

เรียน กรรมการผู้จัดการ บริษัท เอแอลเอส แลบบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด

อ้างถึง หนังสือ บริษัท เอแอลเอส แลบบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด เลขที่ Env 2024/005
ลงวันที่ ๓๐ สิงหาคม ๒๕๖๙

ตามหนังสือที่อ้างถึง บริษัท เอแอลเอส แลบบอราทอรี กรุ๊ป (ประเทศไทย) จำกัด ห้องปฏิบัติการวิเคราะห์เอกชน เลขทะเบียน ว-๓๐๓ สถานที่ตั้งเลขที่ ๖๑๖/๑๐ หมู่ที่ ๕ ตำบลแม่ป่ากู่ อำเภอปลวกแดง จังหวัดระยอง ขอแก้ไขเจ้าหน้าที่ห้องปฏิบัติการวิเคราะห์เอกชน เนื่องจากมีความคลาดเคลื่อน ความสะเพร่า และอื่น ๆ

กรมโรงงานอุตสาหกรรม ได้รับทราบและดำเนินการแก้ไขรายชื่อเจ้าหน้าที่ห้องปฏิบัติการวิเคราะห์เอกชน จำนวน ๕ ราย ตามที่แจ้งเรียบร้อยแล้ว เป็นดังนี้

ลำดับที่ ๒๗ นางพจนา สิตา

ลำดับที่ ๒๘ นางสาวณิศา กุลสุริวงศ์

ลำดับที่ ๓๐ นางชลธิชา อุบงกช

ลำดับที่ ๓๖ นายสุวิธดำรงค์ โชคปิตินันท์

ลำดับที่ ๔๐ นายกันตคุณ มณีสัมพันธ์

จึงเรียนมาเพื่อทราบ

ขอแสดงความนับถือ

ผอ.

(นายพรยศ กสิกรอง)
รองอธิบดี ปฏิบัติราชการแทน
อธิบดีกรมโรงงานอุตสาหกรรม

ศูนย์วิจัยและเฝ้าระวังมลพิษโรงงานภาคตะวันออก

โทร. ๐ ๒๓๑๓ ๖๐๕๔ ต่อ ๕๐๐๑-๒

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"อุตสาหกรรมก้าวไกล ประเทศไทยก้าวหน้า ร่วมกันพัฒนา อุตสาหกรรมสีเขียว"

