

ภาคผนวก ฉ : ผลการตรวจวัดคุณภาพสิ่งแวดล้อม

ภาคผนวก ฉ-1 : ผลการตรวจวัดคุณภาพอากาศ



PACIFIC

LABORATORY CO., LTD.

Pacific Laboratory Co., Ltd.

14/3135 Moo 14 Tambol Bang Bua Thong

Amphoe Bang Bua Thong, Nonthaburi 11110

Tel. : 0-2045-2446-7 Fax. : 0-2045-3991

ANALYSIS REPORT

Analysis No. : Lab-AB 175/2561
Job No. : PCL 1124/61
Report Date : August 29, 2018

Customer Name : โรงแรม S3 CHATEAU
Address : ถนนเพชรเกษม ตำบลหัวหิน อำเภอหัวหิน จังหวัดประจวบคีรีขันธ์
Sampling source : Ambient Air Quality
Sampling Point : บริเวณพื้นที่โครงการ
Sampling Date : August 19-22, 2018/11:00 a.m.
GPS. Coordinate : 47 P 0603480 E, 1390847 N
Sampling Method : US. EPA. 40 CFR 50
Method of Analysis : High-Volume Air Sampler/Gravimetric Method

Received Date : August 23, 2018
Analytical Date : August 24, 2018
Sampling Condition : Good

Item	Measure Date	Unit	Result (mg/m ³)	
			Total Suspended Particulate (TSP) 24 Hours Average	Particulate Matter less than 10 Micrometers (PM 10) 24 Hours Average
1.	19-20/08/18	mg/m ³	0.050	0.023
2.	20-21/08/18		0.054	0.028
3.	21-22/08/18		0.060	0.031
Standard ^{1/}			≤0.33	≤0.12

Remark : 1. ^{1/} Notification of National Environmental Board No. 24 (B.E. 2547) Prescription of Air Quality Standard in General Atmosphere
2. Weather : Raining (Between 19-21 August, 2018)

(Mr. Ocha Booncherd)
Sampling

(Ms. Watsana Charoenta)
Analyst



(Mr. Rnus Fakto)
Lab. Supervisor



PACIFIC

LABORATORY CO., LTD.

Pacific Laboratory Co., Ltd.

14/3135 Moo 14 Tambol Bang Bua Thong

Amphoe Bang Bua Thong, Nonthaburi 11110

Tel. : 0-2045-2446-7 Fax. : 0-2045-3991

ANALYSIS REPORT

Analysis No. : Lab-AB 175/2561

Job No. : PCL 1124/61

Report Date : August 29, 2018

Customer Name : โรงแรม S3 CHATEAU

Address : ถนนเพชรเกษม ตำบลหัวหิน อำเภอหัวหิน จังหวัดประจวบคีรีขันธ์

Sampling source : Ambient Air Quality

Sampling Date : August 19-22, 2018/11:00 a.m.

Received Date : August 23, 2018

GPS. Coordinate : 47 P 0603480 E, 1390847 N

Analytical Date : August 24, 2018

Parameter : Carbon monoxide

Method of Analysis : NDIR Method

Interval Time	Result (ppm)			Standard ^{1/} (ppm)
	19-20/08/18	20-21/08/18	21-22/08/18	
11.00-12.00	0.69	0.60	0.69	
12.00-13.00	0.55	0.59	0.74	
13.00-14.00	0.71	0.52	0.72	
14.00-15.00	0.59	0.71	0.59	
15.00-16.00	0.66	0.59	0.72	
16.00-17.00	0.52	0.76	0.66	
17.00-18.00	0.56	0.78	0.51	
18.00-19.00	0.62	0.52	0.87	
19.00-20.00	0.63	0.68	0.69	
20.00-21.00	0.58	0.79	0.56	
21.00-22.00	0.55	0.53	0.59	
22.00-23.00	0.47	0.67	0.48	
23.00-00.00	0.56	0.53	0.56	
00.00-01.00	0.60	0.63	0.52	
01.00-02.00	0.64	0.78	0.78	
02.00-03.00	0.69	0.61	0.66	
03.00-04.00	0.64	0.69	0.58	
04.00-05.00	0.69	0.73	0.79	
05.00-06.00	0.82	0.81	0.82	
06.00-07.00	0.99	0.77	0.81	
07.00-08.00	0.62	0.87	0.61	
08.00-09.00	0.47	0.90	0.71	
09.00-10.00	1.10	0.97	0.83	
10.00-11.00	0.08	0.84	0.92	
1 Hour Maximum	1.10	0.97	0.92	≤30
8 Hours Average	0.75	0.82	0.76	≤9

Remark : 1. ^{1/} ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 10 (2538) เรื่อง กำหนดมาตรฐานคุณภาพอากาศในบรรยากาศทั่วไป
 2. Weather : Raining (Between 19-21 August, 2018)

Ocha

(Mr. Ocha Booncherd)

Sampling

Watsana

(Ms. Watsana Charoenta)

Analyst



Rnu

(Mr. Rnus Fakto)

Lab. Supervisor

DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL

REPORT ANALYSIS REFERS TO SUBMITTED SAMPLE (S) ONLY

ภาคผนวก ฉ-2 : ผลการตรวจวัดคุณภาพเสียง

ANALYSIS REPORT

Analysis No. : NH 214/2561
Job No. : PCL 1124/61
Report Date : August 29, 2018

Customer Name : โรงแรม S3 CHATEAU
Address : ถนนเพชรเกษม ตำบลหัวหิน อำเภอหัวหิน จังหวัดประจวบคีรีขันธ์
Sampling Location : บริเวณพื้นที่โครงการ
GPS. Coordinate : 47 P 0603462 E, 1390842 N
Measured Date : August 19, 2018
Measured Instrument : ACO Type 6226 S/N 180045
Instrument calibration : TM-100 S/N 07050270

SLM Adjust : 94.0 dB(A)
SLM Reading : 94.1 dB(A), 94.0 dB(A)

Interval Time	Noise Level For			Interval Time	Noise Level For			Interval Time	Noise Level For		
	5 Minutes, dB(A)				5 Minutes, dB(A)				5 Minutes, dB(A)		
	Leq	Lmax	L90		Leq	Lmax	L90		Leq	Lmax	L90
11:00 – 11:05	55.7	71.6	51.3	13:00 – 13:05	56.4	66.1	53.5	15:00 – 15:05	56.3	62.9	52.2
11:05 – 11:10	55.5	68.5	49.7	13:05 – 13:10	56.4	65.8	52.7	15:05 – 15:10	56.4	67.7	52.0
11:10 – 11:15	55.4	66.6	51.7	13:10 – 13:15	55.7	66.0	53.1	15:10 – 15:15	56.0	70.8	51.9
11:15 – 11:20	55.8	63.9	52.4	13:15 – 13:20	57.0	69.7	53.7	15:15 – 15:20	56.8	68.3	52.3
11:20 – 11:25	61.1	77.9	51.0	13:20 – 13:25	55.5	66.8	53.3	15:20 – 15:25	56.9	70.9	52.1
11:25 – 11:30	55.9	69.3	51.9	13:25 – 13:30	57.0	69.1	53.7	15:25 – 15:30	57.7	70.6	53.8
11:30 – 11:35	55.9	63.1	51.9	13:30 – 13:35	58.4	73.3	53.3	15:30 – 15:35	59.3	77.4	52.4
11:35 – 11:40	58.7	76.5	52.0	13:35 – 13:40	56.8	74.1	52.6	15:35 – 15:40	56.9	70.0	51.9
11:40 – 11:45	56.4	65.2	53.0	13:40 – 13:45	56.5	65.1	53.4	15:40 – 15:45	57.0	72.1	51.7
11:45 – 11:50	58.2	77.2	52.6	13:45 – 13:50	58.3	73.4	52.8	15:45 – 15:50	57.7	73.7	52.3
11:50 – 11:55	55.5	68.3	51.1	13:50 – 13:55	56.3	63.1	53.4	15:50 – 15:55	56.9	65.5	52.1
11:55 – 12:00	58.9	80.3	52.4	13:55 – 14:00	55.6	62.2	52.9	15:55 – 16:00	56.6	66.8	51.6
12:00 – 12:05	56.9	68.3	52.8	14:00 – 14:05	61.9	78.6	52.4	16:00 – 16:05	56.2	63.8	52.3
12:05 – 12:10	56.0	64.2	52.6	14:05 – 14:10	56.6	63.5	53.0	16:05 – 16:10	56.3	65.1	52.1
12:10 – 12:15	56.0	64.2	52.7	14:10 – 14:15	61.5	81.1	52.8	16:10 – 16:15	56.6	64.7	52.5
12:15 – 12:20	56.0	61.8	53.4	14:15 – 14:20	57.9	79.4	51.7	16:15 – 16:20	56.4	71.0	52.5
12:20 – 12:25	56.3	66.9	53.3	14:20 – 14:25	56.3	67.3	52.4	16:20 – 16:25	56.7	67.9	51.5
12:25 – 12:30	56.2	68.7	52.7	14:25 – 14:30	58.0	73.3	53.4	16:25 – 16:30	57.4	68.4	51.6
12:30 – 12:35	57.0	66.6	52.9	14:30 – 14:35	58.1	76.6	53.1	16:30 – 16:35	61.9	81.9	52.1
12:35 – 12:40	62.9	86.0	52.0	14:35 – 14:40	57.9	75.6	53.1	16:35 – 16:40	57.2	69.8	53.3
12:40 – 12:45	60.5	77.2	53.9	14:40 – 14:45	57.4	67.3	53.5	16:40 – 16:45	56.6	63.5	52.5
12:45 – 12:50	59.4	74.6	53.2	14:45 – 14:50	58.4	77.9	52.3	16:45 – 16:50	56.6	66.6	52.7
12:50 – 12:55	55.3	65.6	51.6	14:50 – 14:55	57.3	68.8	52.9	16:50 – 16:55	57.0	66.1	53.8
12:55 – 13:00	55.5	66.7	51.9	14:55 – 15:00	56.0	64.1	52.0	16:55 – 17:00	56.3	62.9	52.2


(Mr. Ocha Booncherd)
Sampling


(Ms. Watsana Charoentana)
Analyst


(Mr. Rnus Fakto)
Lab. Supervisor

ANALYSIS REPORT

Analysis No. : NH 214/2561
Job No. : PCL 1124/61
Report Date : August 29, 2018

Customer Name : โรงแรม S3 CHATEAU
Address : ถนนเพชรเกษม ตำบลหัวหิน อำเภอหัวหิน จังหวัดประจวบคีรีขันธ์
Sampling Location : บริเวณพื้นที่โครงการ
GPS. Coordinate : 47 P 0603462 E, 1390842 N
Measured Date : August 19, 2018
Measured Instrument : ACO Type 6226 S/N 180045
Instrument calibration : TM-100 S/N 07050270
SLM Adjust : 94.0 dB(A)
SLM Reading : 94.1 dB(A), 94.0 dB(A)

Interval Time	Noise Level For			Interval Time	Noise Level For			Interval Time	Noise Level For		
	5 Minutes, dB(A)				5 Minutes, dB(A)				5 Minutes, dB(A)		
	Leq	Lmax	L90		Leq	Lmax	L90		Leq	Lmax	L90
17:00 – 17:05	57.6	68.5	54.5	19:00 – 19:05	59.0	70.7	56.9	21:00 – 21:05	61.7	74.2	59.9
17:05 – 17:10	56.2	64.1	53.3	19:05 – 19:10	58.8	67.5	56.6	21:05 – 21:10	60.2	65.1	58.9
17:10 – 17:15	60.2	79.5	52.1	19:10 – 19:15	58.6	71.1	56.4	21:10 – 21:15	60.3	66.8	58.7
17:15 – 17:20	57.4	70.7	54.2	19:15 – 19:20	59.4	69.4	56.5	21:15 – 21:20	61.9	80.1	59.6
17:20 – 17:25	57.1	69.4	54.2	19:20 – 19:25	63.1	69.5	61.8	21:20 – 21:25	63.0	77.6	59.9
17:25 – 17:30	57.0	69.6	54.0	19:25 – 19:30	60.5	72.5	56.4	21:25 – 21:30	60.9	72.7	59.4
17:30 – 17:35	58.4	72.9	54.7	19:30 – 19:35	61.1	63.9	58.2	21:30 – 21:35	60.4	70.2	58.3
17:35 – 17:40	57.8	67.1	54.0	19:35 – 19:40	61.2	66.5	57.6	21:35 – 21:40	60.5	75.9	56.6
17:40 – 17:45	56.8	68.6	54.0	19:40 – 19:45	61.1	66.6	59.4	21:40 – 21:45	63.9	78.2	55.2
17:45 – 17:50	57.7	67.5	54.3	19:45 – 19:50	62.9	79.3	60.0	21:45 – 21:50	59.7	75.3	53.6
17:50 – 17:55	57.8	73.5	54.6	19:50 – 19:55	62.9	78.2	60.3	21:50 – 21:55	58.3	72.4	53.8
17:55 – 18:00	57.4	69.1	55.1	19:55 – 20:00	61.4	72.3	59.9	21:55 – 22:00	60.3	79.3	54.8
18:00 – 18:05	57.8	69.2	54.6	20:00 – 20:05	61.5	68.9	60.2	22:00 – 22:05	59.1	76.1	54.7
18:05 – 18:10	57.4	67.3	55.0	20:05 – 20:10	61.8	70.8	60.1	22:05 – 22:10	57.5	65.3	54.2
18:10 – 18:15	57.0	63.8	55.0	20:10 – 20:15	61.3	66.2	60.1	22:10 – 22:15	60.1	78.6	54.3
18:15 – 18:20	57.3	68.8	55.2	20:15 – 20:20	61.2	67.3	60.0	22:15 – 22:20	57.0	67.3	54.1
18:20 – 18:25	57.2	63.3	55.6	20:20 – 20:25	61.5	71.6	60.1	22:20 – 22:25	62.0	82.0	54.3
18:25 – 18:30	58.7	72.0	55.7	20:25 – 20:30	61.3	67.7	60.0	22:25 – 22:30	57.1	66.5	53.7
18:30 – 18:35	59.0	72.3	56.4	20:30 – 20:35	60.9	75.3	59.0	22:30 – 22:35	58.0	70.2	54.1
18:35 – 18:40	58.8	70.8	57.0	20:35 – 20:40	62.7	77.1	59.9	22:35 – 22:40	58.5	70.8	54.2
18:40 – 18:45	59.1	71.0	56.5	20:40 – 20:45	60.9	71.2	56.0	22:40 – 22:45	57.6	73.2	53.9
18:45 – 18:50	60.0	74.2	56.9	20:45 – 20:50	61.7	73.9	59.5	22:45 – 22:50	57.9	72.1	53.7
18:50 – 18:55	59.0	72.2	57.0	20:50 – 20:55	61.2	66.6	60.2	22:50 – 22:55	61.1	80.1	54.1
18:55 – 19:00	59.2	68.6	57.1	20:55 – 21:00	62.0	70.5	60.1	22:55 – 23:00	61.7	74.2	59.9



(Mr. Ocha Boonchard)

Sampling



(Ms. Watsana Charoenta)

Analyst




(Mr. Rnus Fakto)

Lab. Supervisor

ANALYSIS REPORT

Analysis No. : NH 214/2561
Job No. : PCL 1124/61
Report Date : August 29, 2018

Customer Name : โรงแรม S3 CHATEAU
Address : ถนนเพชรเกษม ตำบลหัวหิน อำเภอหัวหิน จังหวัดประจวบคีรีขันธ์
Sampling Location : บริเวณพื้นที่โครงการ
GPS. Coordinate : 47 P 0603462 E, 1390842 N
Measured Date : August 19-20, 2018
Measured Instrument : ACO Type 6226 S/N 180045
Instrument calibration : TM-100 S/N 07050270
SLM Adjust : 94.0 dB(A)
SLM Reading : 94.1 dB(A), 94.0 dB(A)

Interval Time	Noise Level For			Interval Time	Noise Level For			Interval Time	Noise Level For		
	5 Minutes, dB(A)				5 Minutes, dB(A)				5 Minutes, dB(A)		
	Leq	Lmax	L90		Leq	Lmax	L90		Leq	Lmax	L90
23:00 – 23:05	62.3	85.0	54.5	01:00 – 01:05	53.4	67.3	49.4	03:00 – 03:05	53.2	65.3	47.9
23:05 – 23:10	60.3	80.1	53.8	01:05 – 01:10	57.9	78.6	49.0	03:05 – 03:10	62.1	77.9	48.3
23:10 – 23:15	56.8	65.7	53.7	01:10 – 01:15	57.5	76.0	49.3	03:10 – 03:15	54.1	68.5	47.7
23:15 – 23:20	55.7	69.2	49.8	01:15 – 01:20	56.1	72.2	49.2	03:15 – 03:20	54.9	72.7	48.4
23:20 – 23:25	57.9	77.4	50.0	01:20 – 01:25	53.6	65.6	49.4	03:20 – 03:25	53.4	67.0	46.8
23:25 – 23:30	56.1	72.2	50.1	01:25 – 01:30	56.8	72.3	49.7	03:25 – 03:30	54.4	68.5	48.4
23:30 – 23:35	56.8	71.5	50.5	01:30 – 01:35	54.5	68.3	49.2	03:30 – 03:35	53.9	69.5	48.3
23:35 – 23:40	57.9	75.5	50.9	01:35 – 01:40	56.4	73.0	49.7	03:35 – 03:40	54.0	68.8	48.8
23:40 – 23:45	56.3	74.1	49.3	01:40 – 01:45	54.5	67.8	49.0	03:40 – 03:45	52.1	63.9	47.5
23:45 – 23:50	55.6	69.8	49.7	01:45 – 01:50	60.2	81.0	50.2	03:45 – 03:50	55.5	76.3	47.6
23:50 – 23:55	56.1	71.0	49.9	01:50 – 01:55	61.2	77.6	50.6	03:50 – 03:55	53.5	69.5	47.8
23:55 – 00:00	59.7	77.6	50.0	01:55 – 02:00	57.1	74.5	51.9	03:55 – 04:00	53.3	65.7	48.0
00:00 – 00:05	55.4	66.9	50.5	02:00 – 02:05	55.1	64.6	51.5	04:00 – 04:05	54.1	64.7	48.0
00:05 – 00:10	57.8	77.0	50.9	02:05 – 02:10	58.5	73.8	51.8	04:05 – 04:10	52.8	64.6	47.5
00:10 – 00:15	57.2	67.1	55.3	02:10 – 02:15	56.5	76.8	51.2	04:10 – 04:15	54.9	65.3	47.4
00:15 – 00:20	57.0	66.5	55.3	02:15 – 02:20	56.1	72.1	51.4	04:15 – 04:20	52.4	64.9	47.2
00:20 – 00:25	56.5	66.3	54.3	02:20 – 02:25	64.2	82.7	50.7	04:20 – 04:25	53.5	65.9	47.3
00:25 – 00:30	60.5	82.3	54.9	02:25 – 02:30	54.1	69.2	50.4	04:25 – 04:30	53.3	66.6	47.4
00:30 – 00:35	57.4	70.8	54.9	02:30 – 02:35	55.6	70.0	50.4	04:30 – 04:35	55.2	70.9	48.1
00:35 – 00:40	55.9	64.7	54.2	02:35 – 02:40	53.3	61.7	49.6	04:35 – 04:40	54.2	70.2	47.4
00:40 – 00:45	54.7	65.5	48.9	02:40 – 02:45	52.9	65.0	48.8	04:40 – 04:45	52.5	63.3	47.1
00:45 – 00:50	57.5	66.9	54.7	02:45 – 02:50	53.1	63.9	47.8	04:45 – 04:50	53.9	64.6	47.2
00:50 – 00:55	57.9	70.2	55.6	02:50 – 02:55	54.4	69.2	48.0	04:50 – 04:55	55.1	69.2	48.0
00:55 – 01:00	57.9	66.9	53.1	02:55 – 03:00	53.9	71.3	48.1	04:55 – 05:00	53.1	68.4	48.2



(Mr. Ocha Booncherd)

Sampling



(Ms. Watsana Charoenta)

Analyst




(Mr. Rnus Fakto)

Lab. Supervisor

ANALYSIS REPORT

Analysis No. : NH 214/2561
Job No. : PCL 1124/61
Report Date : August 29, 2018

Customer Name : โรงแรม S3 CHATEAU
Address : ถนนเพชรเกษม ตำบลหัวหิน อำเภอหัวหิน จังหวัดประจวบคีรีขันธ์
Sampling Location : บริเวณพื้นที่โครงการ
GPS. Coordinate : 47 P 0603462 E, 1390842 N
Measured Date : August 20, 2018
Measured Instrument : ACO Type 6226 S/N 180045
Instrument calibration : TM-100 S/N 07050270

SLM Adjust : 94.0 dB(A)
SLM Reading : 94.1 dB(A), 94.0 dB(A)

Interval Time	Noise Level For			Interval Time	Noise Level For			Interval Time	Noise Level For		
	5 Minutes, dB(A)				5 Minutes, dB(A)				5 Minutes, dB(A)		
	Leq	Lmax	L90		Leq	Lmax	L90		Leq	Lmax	L90
05:00 – 05:05	53.5	63.9	47.6	07:00 – 07:05	60.7	76.5	53.5	09:00 – 09:05	56.6	66.2	52.4
05:05 – 05:10	53.3	64.9	47.7	07:05 – 07:10	58.1	70.9	54.6	09:05 – 09:10	55.6	68.1	52.2
05:10 – 05:15	60.7	77.1	48.7	07:10 – 07:15	57.7	69.6	53.8	09:10 – 09:15	56.7	67.8	52.9
05:15 – 05:20	54.9	72.0	47.7	07:15 – 07:20	56.4	68.8	52.9	09:15 – 09:20	56.2	62.8	52.8
05:20 – 05:25	53.2	65.9	46.8	07:20 – 07:25	57.9	69.2	54.4	09:20 – 09:25	56.4	65.3	53.1
05:25 – 05:30	54.7	65.5	47.9	07:25 – 07:30	57.6	71.8	53.7	09:25 – 09:30	56.6	64.7	53.6
05:30 – 05:35	56.4	74.0	47.7	07:30 – 07:35	56.5	64.7	53.6	09:30 – 09:35	56.9	72.3	53.1
05:35 – 05:40	54.9	67.1	49.5	07:35 – 07:40	57.3	67.1	54.1	09:35 – 09:40	56.1	63.4	52.8
05:40 – 05:45	55.0	67.0	48.7	07:40 – 07:45	56.9	67.6	54.2	09:40 – 09:45	56.0	64.2	51.6
05:45 – 05:50	56.5	73.1	48.9	07:45 – 07:50	57.1	68.0	54.7	09:45 – 09:50	56.0	63.7	52.6
05:50 – 05:55	55.9	68.8	48.4	07:50 – 07:55	56.3	66.0	53.7	09:50 – 09:55	57.4	72.8	53.3
05:55 – 06:00	54.6	63.7	48.5	07:55 – 08:00	56.2	64.6	53.7	09:55 – 10:00	55.8	63.1	52.2
06:00 – 06:05	58.6	76.4	51.3	08:00 – 08:05	56.3	66.0	53.4	10:00 – 10:05	56.4	71.1	51.2
06:05 – 06:10	60.5	78.5	48.9	08:05 – 08:10	58.0	73.6	54.1	10:05 – 10:10	56.9	72.0	52.9
06:10 – 06:15	55.1	67.9	48.7	08:10 – 08:15	59.0	77.7	52.9	10:10 – 10:15	56.0	70.2	50.7
06:15 – 06:20	56.5	64.5	50.2	08:15 – 08:20	57.7	69.5	53.8	10:15 – 10:20	53.5	61.0	51.3
06:20 – 06:25	62.5	80.6	51.3	08:20 – 08:25	59.0	76.0	54.0	10:20 – 10:25	57.3	78.6	52.8
06:25 – 06:30	56.8	67.6	50.8	08:25 – 08:30	57.1	64.4	54.0	10:25 – 10:30	56.9	69.9	51.3
06:30 – 06:35	64.1	80.9	51.2	08:30 – 08:35	57.9	74.5	54.1	10:30 – 10:35	56.4	71.6	51.5
06:35 – 06:40	57.3	72.5	52.2	08:35 – 08:40	56.7	67.7	52.6	10:35 – 10:40	57.2	69.6	51.7
06:40 – 06:45	62.9	80.6	52.4	08:40 – 08:45	56.5	67.9	52.0	10:40 – 10:45	57.0	66.8	53.4
06:45 – 06:50	56.5	62.7	53.4	08:45 – 08:50	56.3	69.1	53.0	10:45 – 10:50	57.0	66.9	53.2
06:50 – 06:55	57.5	66.8	54.2	08:50 – 08:55	57.2	71.9	52.3	10:50 – 10:55	55.1	66.7	52.4
06:55 – 07:00	56.1	64.3	53.7	08:55 – 09:00	58.1	68.5	54.0	10:55 – 11:00	56.3	67.3	52.6



(Mr. Ocha Booncherd)

Sampling



(Ms. Watsana Charoenta)

Analyst




(Mr. Rnus Fakto)

Lab. Supervisor

ANALYSIS REPORT

Analysis No. : NH 214/2561
Job No. : PCL 1124/61
Report Date : August 29, 2018

Customer Name : โรงแรม S3 CHATEAU
Address : ถนนเพชรเกษม ตำบลหัวหิน อำเภอหัวหิน จังหวัดประจวบคีรีขันธ์
Sampling Location : บริเวณพื้นที่โครงการ
GPS. Coordinate : 47 P 0603462 E, 1390842 N
Measured Date : August 20, 2018
Measured Instrument : ACO Type 6226 S/N 180045
Instrument calibration : TM-100 S/N 07050270

SLM Adjust : 94.0 dB(A)

SLM Reading : 94.1 dB(A), 94.0 dB(A)

Interval Time	Noise Level For			Interval Time	Noise Level For			Interval Time	Noise Level For		
	5 Minutes, dB(A)				5 Minutes, dB(A)				5 Minutes, dB(A)		
	Leq	Lmax	L90		Leq	Lmax	L90		Leq	Lmax	L90
11:00 – 11:05	56.7	69.9	53.1	13:00 – 13:05	55.7	65.1	53.5	15:00 – 15:05	58.7	71.5	52.2
11:05 – 11:10	56.5	66.8	52.8	13:05 – 13:10	55.1	65.2	52.1	15:05 – 15:10	56.0	66.9	52.3
11:10 – 11:15	59.3	74.6	53.1	13:10 – 13:15	55.8	62.9	52.4	15:10 – 15:15	56.3	68.0	53.1
11:15 – 11:20	57.1	69.5	51.8	13:15 – 13:20	55.4	63.1	53.2	15:15 – 15:20	66.5	75.1	57.8
11:20 – 11:25	57.8	72.0	52.9	13:20 – 13:25	55.0	63.0	52.1	15:20 – 15:25	58.6	65.7	55.3
11:25 – 11:30	56.7	69.5	53.3	13:25 – 13:30	55.0	65.2	52.6	15:25 – 15:30	61.1	74.1	57.6
11:30 – 11:35	58.0	78.6	52.2	13:30 – 13:35	54.1	60.0	50.7	15:30 – 15:35	58.5	71.1	56.6
11:35 – 11:40	58.4	76.8	53.7	13:35 – 13:40	56.1	67.0	53.0	15:35 – 15:40	56.6	62.8	54.7
11:40 – 11:45	57.8	81.0	52.4	13:40 – 13:45	55.0	61.7	51.5	15:40 – 15:45	57.6	72.2	54.3
11:45 – 11:50	56.3	66.8	52.0	13:45 – 13:50	55.3	67.3	51.1	15:45 – 15:50	55.9	62.8	54.1
11:50 – 11:55	57.6	76.1	52.9	13:50 – 13:55	60.4	77.7	52.4	15:50 – 15:55	57.8	72.3	53.3
11:55 – 12:00	56.5	69.1	51.3	13:55 – 14:00	55.5	66.3	51.3	15:55 - 16:00	56.2	71.8	53.3
12:00 – 12:05	55.7	66.6	52.3	14:00 – 14:05	56.3	64.6	53.0	16:00 – 16:05	55.4	64.1	53.1
12:05 – 12:10	58.9	80.1	53.1	14:05 – 14:10	56.8	69.3	52.8	16:05 – 16:10	55.9	66.1	53.3
12:10 – 12:15	69.2	90.3	53.8	14:10 – 14:15	57.6	76.0	52.3	16:10 – 16:15	55.7	64.4	53.2
12:15 – 12:20	56.4	64.5	52.9	14:15 – 14:20	55.3	60.7	51.9	16:15 – 16:20	56.4	69.2	53.1
12:20 – 12:25	55.8	63.9	52.3	14:20 – 14:25	55.9	67.0	52.4	16:20 – 16:25	55.5	61.1	53.0
12:25 – 12:30	56.2	63.8	52.9	14:25 – 14:30	56.5	65.8	52.3	16:25 – 16:30	55.7	70.0	52.4
12:30 – 12:35	56.5	63.4	52.3	14:30 – 14:35	56.1	64.9	51.6	16:30 – 16:35	56.8	71.8	52.7
12:35 – 12:40	56.7	70.6	53.0	14:35 – 14:40	57.4	70.2	53.2	16:35 – 16:40	56.4	69.9	53.0
12:40 – 12:45	62.3	68.9	58.5	14:40 – 14:45	56.7	70.7	52.4	16:40 – 16:45	55.0	67.6	52.0
12:45 – 12:50	57.3	62.4	54.9	14:45 – 14:50	57.6	73.4	52.4	16:45 – 16:50	56.4	68.0	52.2
12:50 – 12:55	55.5	59.1	52.8	14:50 – 14:55	55.3	66.0	52.4	16:50 – 16:55	55.5	66.1	53.0
12:55 – 13:00	55.3	60.2	51.3	14:55 – 15:00	57.7	73.4	52.2	16:55 – 17:00	55.8	66.4	52.2



(Mr. Ocha Booncherd)

Sampling



(Ms. Watsana Charoenta)

Analyst




(Mr. Rnus Fakto)

Lab. Supervisor

ANALYSIS REPORT

Analysis No. : NH 214/2561
Job No. : PCL 1124/61
Report Date : August 29, 2018

Customer Name : โรงแรม S3 CHATEAU
Address : ถนนเพชรเกษม ตำบลหัวหิน อำเภอหัวหิน จังหวัดประจวบคีรีขันธ์
Sampling Location : บริเวณพื้นที่โครงการ
GPS. Coordinate : 47 P 0603462 E, 1390842 N
Measured Date : August 20, 2018
Measured Instrument : ACO Type 6226 S/N 180045
Instrument calibration : TM-100 S/N 07050270

SLM Adjust : 94.0 dB(A)
SLM Reading : 94.1 dB(A), 94.0 dB(A)

Interval Time	Noise Level For			Interval Time	Noise Level For			Interval Time	Noise Level For		
	5 Minutes, dB(A)				5 Minutes, dB(A)				5 Minutes, dB(A)		
	Leq	Lmax	L90		Leq	Lmax	L90		Leq	Lmax	L90
17:00 – 17:05	55.7	67.0	53.1	19:00 – 19:05	58.1	71.5	54.4	21:00 – 21:05	56.2	66.5	53.9
17:05 – 17:10	58.0	74.8	53.3	19:05 – 19:10	57.4	72.6	54.5	21:05 – 21:10	56.1	70.7	50.7
17:10 – 17:15	58.4	76.7	53.9	19:10 – 19:15	57.6	72.8	54.3	21:10 – 21:15	53.9	63.0	49.8
17:15 – 17:20	56.7	66.0	53.4	19:15 – 19:20	57.6	73.0	53.8	21:15 – 21:20	53.0	62.0	49.8
17:20 – 17:25	55.8	61.6	53.7	19:20 – 19:25	57.5	69.7	54.2	21:20 – 21:25	54.8	68.4	50.3
17:25 – 17:30	55.6	70.4	52.5	19:25 – 19:30	57.1	70.9	54.0	21:25 – 21:30	58.5	75.2	51.4
17:30 – 17:35	56.2	69.7	52.9	19:30 – 19:35	60.4	75.4	56.8	21:30 – 21:35	56.5	75.5	50.1
17:35 – 17:40	56.6	66.2	54.0	19:35 – 19:40	58.3	70.0	54.7	21:35 – 21:40	54.7	69.9	51.1
17:40 – 17:45	63.0	80.7	52.8	19:40 – 19:45	63.9	84.3	54.0	21:40 – 21:45	56.8	73.8	50.6
17:45 – 17:50	56.7	75.5	53.2	19:45 – 19:50	57.6	66.6	54.3	21:45 – 21:50	55.4	71.9	50.9
17:50 – 17:55	59.3	72.7	52.7	19:50 – 19:55	56.4	65.1	53.5	21:50 – 21:55	53.4	61.7	50.6
17:55 - 18:00	56.0	68.2	53.6	19:55 - 20:00	61.4	82.1	56.4	21:55 – 22:00	55.9	69.0	50.8
18:00 – 18:05	55.8	65.0	53.4	20:00 – 20:05	55.9	62.8	53.8	22:00 – 22:05	53.7	62.5	50.6
18:05 – 18:10	56.0	62.6	53.1	20:05 – 20:10	55.2	60.9	53.6	22:05 – 22:10	53.0	59.9	50.4
18:10 – 18:15	55.5	61.9	53.1	20:10 – 20:15	56.1	70.7	53.9	22:10 – 22:15	53.5	65.0	50.3
18:15 – 18:20	56.0	64.3	52.9	20:15 – 20:20	55.4	63.5	53.5	22:15 – 22:20	58.0	73.1	51.0
18:20 – 18:25	60.8	78.2	53.8	20:20 – 20:25	53.5	62.8	50.2	22:20 – 22:25	55.9	69.8	50.5
18:25 – 18:30	56.7	68.5	53.9	20:25 – 20:30	53.3	66.0	50.0	22:25 – 22:30	55.3	77.3	50.1
18:30 – 18:35	56.5	65.4	54.1	20:30 – 20:35	54.2	65.1	50.7	22:30 – 22:35	54.6	68.6	49.4
18:35 – 18:40	57.7	63.8	55.9	20:35 – 20:40	55.4	74.1	50.8	22:35 – 22:40	52.5	59.1	49.6
18:40 – 18:45	56.6	67.6	54.4	20:40 – 20:45	55.9	63.5	53.6	22:40 – 22:45	54.7	70.6	50.0
18:45 – 18:50	56.9	68.8	54.7	20:45 – 20:50	57.3	71.5	54.0	22:45 – 22:50	55.6	73.4	50.0
18:50 – 18:55	57.4	66.5	55.0	20:50 – 20:55	56.5	70.0	53.9	22:50 – 22:55	53.9	68.9	50.0
18:55 – 19:00	57.1	67.6	54.3	20:55 – 21:00	55.2	68.3	52.0	22:55 – 23:00	52.8	60.6	49.8



(Mr. Ocha Booncherd)

Sampling



(Ms. Watsana Charoenta)

Analyst




(Mr. Rnus Fakto)

Lab. Supervisor

ANALYSIS REPORT

Analysis No. : NH 214/2561
Job No. : PCL 1124/61
Report Date : August 29, 2018

Customer Name : โรงแรม S3 CHATEAU
Address : ถนนเพชรเกษม ตำบลหัวหิน อำเภอหัวหิน จังหวัดประจวบคีรีขันธ์
Sampling Location : บริเวณพื้นที่โครงการ
GPS. Coordinate : 47 P 0603462 E, 1390842 N
Measured Date : August 20-21, 2018
Measured Instrument : ACO Type 6226 S/N 180045
Instrument calibration : TM-100 S/N 07050270
SLM Adjust : 94.0 dB(A)
SLM Reading : 94.1 dB(A), 94.0 dB(A)

Interval Time	Noise Level For			Interval Time	Noise Level For			Interval Time	Noise Level For		
	5 Minutes, dB(A)				5 Minutes, dB(A)				5 Minutes, dB(A)		
	Leq	Lmax	L90		Leq	Lmax	L90		Leq	Lmax	L90
23:00 – 23:05	53.9	63.8	50.4	01:00 – 01:05	51.7	63.5	47.7	03:00 – 03:05	51.8	62.8	46.4
23:05 – 23:10	54.1	64.9	50.6	01:05 – 01:10	53.3	67.8	45.2	03:05 – 03:10	52.1	65.9	46.8
23:10 – 23:15	54.3	69.0	50.3	01:10 – 01:15	54.2	76.9	44.7	03:10 – 03:15	61.6	79.1	46.6
23:15 – 23:20	55.0	73.4	49.8	01:15 – 01:20	54.4	76.1	46.4	03:15 – 03:20	51.6	63.5	46.1
23:20 – 23:25	54.4	67.2	49.7	01:20 – 01:25	55.4	77.7	46.7	03:20 – 03:25	51.0	63.0	45.9
23:25 – 23:30	56.4	74.4	49.9	01:25 – 01:30	52.4	66.2	46.8	03:25 – 03:30	51.5	63.1	46.0
23:30 – 23:35	53.6	65.5	50.0	01:30 – 01:35	53.8	71.5	47.9	03:30 – 03:35	51.1	60.4	46.2
23:35 – 23:40	52.3	60.5	49.6	01:35 – 01:40	55.0	68.8	47.2	03:35 – 03:40	51.3	61.6	46.0
23:40 – 23:45	57.1	73.4	50.8	01:40 – 01:45	52.2	64.4	46.8	03:40 – 03:45	50.8	64.9	42.8
23:45 – 23:50	56.3	66.4	54.7	01:45 – 01:50	57.9	74.4	47.3	03:45 – 03:50	50.3	61.7	45.4
23:50 – 23:55	56.1	64.1	54.5	01:50 – 01:55	58.5	82.3	47.5	03:50 – 03:55	51.6	66.0	46.2
23:55 – 00:00	55.2	65.7	50.3	01:55 – 02:00	56.4	74.9	47.3	03:55 – 04:00	51.6	65.4	46.0
00:00 – 00:05	54.3	67.3	49.7	02:00 – 02:05	54.3	71.8	47.7	04:00 – 04:05	56.3	74.2	47.1
00:05 – 00:10	52.2	61.7	48.4	02:05 – 02:10	55.8	72.7	47.7	04:05 – 04:10	52.3	63.2	46.1
00:10 – 00:15	54.8	63.5	50.0	02:10 – 02:15	52.4	68.3	44.2	04:10 – 04:15	53.6	71.0	46.6
00:15 – 00:20	56.2	67.1	55.0	02:15 – 02:20	55.8	72.7	45.1	04:15 – 04:20	51.3	62.7	46.0
00:20 – 00:25	56.3	67.5	54.7	02:20 – 02:25	50.3	69.0	44.5	04:20 – 04:25	51.5	65.1	46.4
00:25 – 00:30	56.4	68.5	54.9	02:25 – 02:30	51.0	69.6	44.5	04:25 – 04:30	50.9	60.3	45.8
00:30 – 00:35	54.2	65.2	48.0	02:30 – 02:35	52.1	67.2	44.7	04:30 – 04:35	52.0	66.9	45.9
00:35 – 00:40	51.6	61.6	47.5	02:35 – 02:40	51.6	66.2	43.4	04:35 – 04:40	53.1	71.5	46.9
00:40 – 00:45	60.3	83.7	48.1	02:40 – 02:45	55.9	76.0	46.2	04:40 – 04:45	51.3	64.4	45.6
00:45 – 00:50	57.2	80.4	48.5	02:45 – 02:50	56.8	75.6	47.6	04:45 – 04:50	53.1	71.6	46.8
00:50 – 00:55	54.4	72.7	48.3	02:50 – 02:55	50.5	62.9	45.6	04:50 – 04:55	50.8	61.8	44.8
00:55 – 01:00	52.1	65.2	48.1	02:55 – 03:00	49.2	59.6	44.1	04:55 – 05:00	51.1	60.0	46.3

Ocha
(Mr. Ocha Booncherd)
Sampling

Watsana
(Ms. Watsana Charoenta)
Analyst



Rnus
(Mr. Rnus Fakto)
Lab. Supervisor

ANALYSIS REPORT

Analysis No. : NH 214/2561
Job No. : PCL 1124/61
Report Date : August 29, 2018

Customer Name : โรงแรม S3 CHATEAU
Address : ถนนเพชรเกษม ตำบลหัวหิน อำเภอหัวหิน จังหวัดประจวบคีรีขันธ์
Sampling Location : บริเวณพื้นที่โครงการ
GPS. Coordinate : 47 P 0603462 E, 1390842 N
Measured Date : August 21, 2018
Measured Instrument : ACO Type 6226 S/N 180045
Instrument calibration : TM-100 S/N 07050270
SLM Adjust : 94.0 dB(A)
SLM Reading : 94.1 dB(A), 94.0 dB(A)

Interval Time	Noise Level For			Interval Time	Noise Level For			Interval Time	Noise Level For		
	5 Minutes, dB(A)				5 Minutes, dB(A)				5 Minutes, dB(A)		
	Leq	Lmax	L90		Leq	Lmax	L90		Leq	Lmax	L90
05:00 – 05:05	59.4	80.6	48.4	07:00 – 07:05	60.4	76.5	53.1	09:00 – 09:05	57.4	71.0	53.1
05:05 – 05:10	55.0	65.9	48.8	07:05 – 07:10	58.5	72.9	54.1	09:05 – 09:10	56.8	68.9	53.1
05:10 – 05:15	57.6	75.0	51.9	07:10 – 07:15	57.9	70.6	54.3	09:10 – 09:15	56.2	63.5	51.8
05:15 – 05:20	55.0	64.2	48.3	07:15 – 07:20	58.0	69.3	53.3	09:15 – 09:20	56.4	65.1	52.3
05:20 – 05:25	55.5	64.5	47.0	07:20 – 07:25	57.1	71.5	53.4	09:20 – 09:25	56.1	65.0	51.7
05:25 – 05:30	56.0	64.7	48.9	07:25 – 07:30	57.7	67.0	53.7	09:25 – 09:30	56.2	65.6	51.1
05:30 – 05:35	56.3	64.5	51.1	07:30 – 07:35	56.0	62.6	53.5	09:30 – 09:35	56.9	73.2	51.9
05:35 – 05:40	63.9	80.2	49.8	07:35 – 07:40	58.0	68.8	53.3	09:35 – 09:40	55.7	62.3	51.5
05:40 – 05:45	56.9	76.8	49.0	07:40 – 07:45	57.1	67.0	53.7	09:40 – 09:45	56.0	65.8	52.4
05:45 – 05:50	54.7	66.4	47.9	07:45 – 07:50	58.6	74.2	53.6	09:45 – 09:50	57.4	64.7	54.1
05:50 – 05:55	54.9	68.3	48.7	07:50 – 07:55	56.1	65.0	53.5	09:50 – 09:55	59.9	80.4	53.2
05:55 – 06:00	55.6	66.8	48.0	07:55 – 08:00	57.3	70.0	53.3	09:55 – 10:00	57.7	69.5	52.9
06:00 – 06:05	55.6	65.3	48.5	08:00 – 08:05	56.5	65.1	53.7	10:00 – 10:05	56.4	65.1	52.2
06:05 – 06:10	64.4	82.5	50.0	08:05 – 08:10	57.0	65.1	54.4	10:05 – 10:10	57.7	73.9	52.6
06:10 – 06:15	56.1	67.5	49.5	08:10 – 08:15	56.9	64.9	53.5	10:10 – 10:15	55.8	63.6	51.5
06:15 – 06:20	57.7	69.9	50.5	08:15 – 08:20	58.1	66.1	55.4	10:15 – 10:20	57.9	74.8	53.2
06:20 – 06:25	62.2	78.2	51.8	08:20 – 08:25	57.2	65.6	54.1	10:20 – 10:25	56.0	68.3	51.6
06:25 – 06:30	56.8	72.2	49.3	08:25 – 08:30	59.5	74.4	54.6	10:25 – 10:30	56.9	71.3	52.6
06:30 – 06:35	56.6	64.3	50.4	08:30 – 08:35	57.5	69.5	54.0	10:30 – 10:35	56.3	67.6	52.1
06:35 – 06:40	57.4	67.2	51.8	08:35 – 08:40	57.5	68.4	53.6	10:35 – 10:40	56.6	67.7	51.4
06:40 – 06:45	60.8	78.6	53.8	08:40 – 08:45	57.9	73.5	54.2	10:40 – 10:45	55.6	65.1	51.1
06:45 – 06:50	57.8	68.3	52.9	08:45 – 08:50	56.4	66.9	52.3	10:45 – 10:50	55.9	72.2	50.9
06:50 – 06:55	60.3	65.1	51.2	08:50 – 08:55	56.9	66.5	51.9	10:50 – 10:55	54.3	65.7	50.5
06:55 – 07:00	58.4	63.2	51.7	08:55 – 09:00	57.7	75.4	52.4	10:55 – 11:00	55.1	64.3	51.4



(Mr. Ocha Booncherd)

Sampling



(Ms. Watsana Charoentap)

Analyst




(Mr. Rnus Fakto)

Lab. Supervisor

ANALYSIS REPORT

Analysis No. : NH 214/2561
Job No. : PCL 1124/61
Report Date : August 29, 2018

Customer Name : โรงแรม S3 CHATEAU
Address : ถนนเพชรเกษม ตำบลหัวหิน อำเภอหัวหิน จังหวัดประจวบคีรีขันธ์
Sampling Location : บริเวณพื้นที่โครงการ
GPS. Coordinate : 47 P 0603462 E, 1390842 N
Measured Date : August 21, 2018
Measured Instrument : ACO Type 6226 S/N 180045
Instrument calibration : TM-100 S/N 07050270
SLM Adjust : 94.0 dB(A)
SLM Reading : 94.1 dB(A), 94.0 dB(A)

Interval Time	Noise Level For			Interval Time	Noise Level For			Interval Time	Noise Level For		
	5 Minutes, dB(A)				5 Minutes, dB(A)				5 Minutes, dB(A)		
	Leq	Lmax	L90		Leq	Lmax	L90		Leq	Lmax	L90
11:00 – 11:05	56.0	67.1	51.8	13:00 – 13:05	56.3	71.4	52.2	15:00 – 15:05	57.4	63.5	55.0
11:05 – 11:10	55.5	65.8	51.5	13:05 – 13:10	56.3	65.3	52.4	15:05 – 15:10	57.8	65.9	55.2
11:10 – 11:15	54.9	63.5	51.7	13:10 – 13:15	56.1	66.4	52.1	15:10 – 15:15	56.3	68.4	53.8
11:15 – 11:20	55.2	67.2	50.1	13:15 – 13:20	56.8	70.6	52.0	15:15 – 15:20	55.5	64.9	53.2
11:20 – 11:25	56.0	68.2	52.4	13:20 – 13:25	57.2	76.0	52.1	15:20 – 15:25	57.2	72.4	52.7
11:25 – 11:30	55.8	68.5	52.3	13:25 – 13:30	55.5	70.4	50.9	15:25 – 15:30	58.9	69.3	56.1
11:30 – 11:35	56.4	73.0	52.4	13:30 – 13:35	57.1	67.0	52.2	15:30 – 15:35	56.3	62.8	53.8
11:35 – 11:40	55.5	64.0	52.2	13:35 – 13:40	59.9	76.6	52.2	15:35 – 15:40	55.5	66.0	52.3
11:40 – 11:45	57.2	69.3	51.4	13:40 – 13:45	55.9	65.3	51.8	15:40 – 15:45	55.7	68.0	52.3
11:45 – 11:50	55.9	68.4	52.2	13:45 – 13:50	55.2	65.5	51.7	15:45 – 15:50	56.7	69.9	52.3
11:50 – 11:55	55.2	59.9	52.3	13:50 – 13:55	55.7	66.9	52.3	15:50 – 15:55	55.2	66.5	51.9
11:55 – 12:00	56.9	67.9	53.3	13:55 – 14:00	60.1	71.5	53.3	15:55 – 16:00	55.2	64.8	51.8
12:00 – 12:05	57.2	73.3	52.7	14:00 – 14:05	57.9	69.2	54.0	16:00 – 16:05	56.5	64.2	52.0
12:05 – 12:10	55.4	70.0	52.4	14:05 – 14:10	59.6	77.1	54.5	16:05 – 16:10	55.6	68.4	51.8
12:10 – 12:15	55.5	65.3	52.9	14:10 – 14:15	57.2	65.1	54.5	16:10 – 16:15	56.4	68.7	52.7
12:15 – 12:20	56.0	67.4	52.6	14:15 – 14:20	59.3	72.5	54.3	16:15 – 16:20	58.1	76.3	52.1
12:20 – 12:25	60.9	79.2	53.1	14:20 – 14:25	56.6	63.9	54.1	16:20 – 16:25	56.1	64.7	53.0
12:25 – 12:30	55.1	64.7	50.9	14:25 – 14:30	57.1	71.3	53.2	16:25 – 16:30	55.7	66.4	52.1
12:30 – 12:35	56.5	67.5	53.3	14:30 – 14:35	61.1	79.2	54.6	16:30 – 16:35	60.9	87.6	52.7
12:35 – 12:40	56.8	68.5	52.2	14:35 – 14:40	58.1	74.8	54.4	16:35 – 16:40	55.9	69.5	52.6
12:40 – 12:45	56.0	64.6	51.5	14:40 – 14:45	57.7	65.4	54.9	16:40 – 16:45	55.4	66.1	52.7
12:45 – 12:50	58.8	74.9	52.4	14:45 – 14:50	57.5	74.4	54.7	16:45 – 16:50	56.5	66.6	53.0
12:50 – 12:55	56.1	66.8	51.9	14:50 – 14:55	58.7	74.6	54.3	16:50 – 16:55	57.2	68.0	52.7
12:55 – 13:00	56.0	66.6	52.4	14:55 – 15:00	57.1	66.2	53.9	16:55 – 17:00	55.3	65.8	51.3



(Mr. Ocha Booncherd)
Sampling



(Ms. Watsana Charoenta)
Analyst




(Mr. Rnus Fakto)
Lab. Supervisor

ANALYSIS REPORT

Analysis No. : NH 214/2561
Job No. : PCL 1124/61
Report Date : August 29, 2018

Customer Name : โรงแรม S3 CHATEAU
Address : ถนนเพชรเกษม ตำบลหัวหิน อำเภอหัวหิน จังหวัดประจวบคีรีขันธ์
Sampling Location : บริเวณพื้นที่โครงการ
GPS. Coordinate : 47 P 0603462 E, 1390842 N
Measured Date : August 21, 2018
Measured Instrument : ACO Type 6226 S/N 180045
Instrument calibration : TM-100 S/N 07050270

SLM Adjust : 94.0 dB(A)
SLM Reading : 94.1 dB(A), 94.0 dB(A)

Interval Time	Noise Level For			Interval Time	Noise Level For			Interval Time	Noise Level For		
	5 Minutes, dB(A)				5 Minutes, dB(A)				5 Minutes, dB(A)		
	Leq	Lmax	L90		Leq	Lmax	L90		Leq	Lmax	L90
17:00 – 17:05	55.8	63.4	53.1	19:00 – 19:05	57.1	67.1	54.9	21:00 – 21:05	58.3	68.6	56.0
17:05 – 17:10	55.9	65.3	53.2	19:05 – 19:10	57.1	67.9	54.5	21:05 – 21:10	58.2	72.8	52.8
17:10 – 17:15	57.5	73.9	53.1	19:10 – 19:15	56.5	63.9	54.7	21:10 – 21:15	56.0	65.1	51.9
17:15 – 17:20	55.8	65.5	53.3	19:15 – 19:20	57.7	64.8	54.6	21:15 – 21:20	55.1	64.1	51.9
17:20 – 17:25	57.2	67.9	53.5	19:20 – 19:25	58.1	75.4	54.5	21:20 – 21:25	56.9	70.5	52.4
17:25 – 17:30	60.1	75.7	54.0	19:25 – 19:30	57.4	65.6	54.8	21:25 – 21:30	60.6	77.3	53.5
17:30 – 17:35	61.5	81.2	53.3	19:30 – 19:35	59.2	71.5	57.6	21:30 – 21:35	58.6	77.6	52.2
17:35 – 17:40	56.5	69.9	53.1	19:35 – 19:40	58.5	66.5	57.1	21:35 – 21:40	56.8	72.0	53.2
17:40 – 17:45	57.7	75.0	53.1	19:40 – 19:45	58.4	69.5	57.1	21:40 – 21:45	58.9	75.9	52.7
17:45 – 17:50	57.8	69.3	53.0	19:45 – 19:50	58.3	67.8	56.7	21:45 – 21:50	57.5	74.0	53.0
17:50 – 17:55	58.5	71.2	54.0	19:50 – 19:55	59.2	68.7	57.2	21:50 – 21:55	55.5	63.8	52.7
17:55 - 18:00	58.4	71.5	54.5	19:55 - 20:00	59.1	70.5	56.8	21:55 – 22:00	58.0	71.1	52.9
18:00 – 18:05	58.9	74.7	54.5	20:00 – 20:05	58.0	64.9	55.9	22:00 – 22:05	55.8	64.6	52.7
18:05 – 18:10	56.2	65.1	53.1	20:05 – 20:10	57.3	63.0	55.7	22:05 – 22:10	55.1	62.0	52.5
18:10 – 18:15	56.3	63.9	53.4	20:10 – 20:15	58.2	72.8	56.0	22:10 – 22:15	55.6	67.1	52.4
18:15 – 18:20	57.8	72.4	53.5	20:15 – 20:20	57.5	65.6	55.6	22:15 – 22:20	60.1	75.2	53.1
18:20 – 18:25	58.6	75.5	54.0	20:20 – 20:25	55.6	64.9	52.3	22:20 – 22:25	58.0	71.9	52.6
18:25 – 18:30	56.3	67.6	53.1	20:25 – 20:30	55.4	68.1	52.1	22:25 – 22:30	57.4	79.4	52.2
18:30 – 18:35	58.2	71.9	53.7	20:30 – 20:35	56.3	67.2	52.8	22:30 – 22:35	56.7	70.7	51.5
18:35 – 18:40	58.0	77.2	53.5	20:35 – 20:40	57.5	76.2	52.9	22:35 – 22:40	54.6	61.2	51.7
18:40 – 18:45	57.8	69.4	54.1	20:40 – 20:45	58.0	65.6	55.7	22:40 – 22:45	56.8	72.7	52.1
18:45 – 18:50	57.9	70.3	54.6	20:45 – 20:50	59.4	73.6	56.1	22:45 – 22:50	57.7	75.5	52.1
18:50 – 18:55	57.1	70.2	54.5	20:50 – 20:55	58.6	72.1	56.0	22:50 – 22:55	56.0	71.0	52.1
18:55 – 19:00	57.5	70.0	54.2	20:55 – 21:00	57.3	70.4	54.1	22:55 – 23:00	54.9	62.7	51.9



(Mr. Ocha Booncherd)

Sampling



(Ms. Watsana Charoenta)

Analyst




(Mr. Rnus Fakto)

Lab. Supervisor

ANALYSIS REPORT

Analysis No. : NH 214/2561
Job No. : PCL 1124/61
Report Date : August 29, 2018

Customer Name : โรงแรม S3 CHATEAU
Address : ถนนเพชรเกษม ตำบลหัวหิน อำเภอหัวหิน จังหวัดประจวบคีรีขันธ์
Sampling Location : บริเวณพื้นที่โครงการ
GPS. Coordinate : 47 P 0603462 E, 1390842 N
Measured Date : August 21-22, 2018
Measured Instrument : ACO Type 6226 S/N 180045
Instrument calibration : TM-100 S/N 07050270
SLM Adjust : 94.0 dB(A)
SLM Reading : 94.1 dB(A), 94.0 dB(A)

Interval Time	Noise Level For			Interval Time	Noise Level For			Interval Time	Noise Level For		
	5 Minutes, dB(A)				5 Minutes, dB(A)				5 Minutes, dB(A)		
	Leq	Lmax	L90		Leq	Lmax	L90		Leq	Lmax	L90
23:00 – 23:05	56.0	65.9	52.5	01:00 – 01:05	53.8	65.6	49.8	03:00 – 03:05	53.9	64.9	48.5
23:05 – 23:10	56.2	67.0	52.7	01:05 – 01:10	55.4	69.9	47.3	03:05 – 03:10	54.2	68.0	48.9
23:10 – 23:15	56.4	71.1	52.4	01:10 – 01:15	56.3	79.0	46.8	03:10 – 03:15	63.7	81.2	48.7
23:15 – 23:20	57.1	75.5	51.9	01:15 – 01:20	56.5	78.2	48.5	03:15 – 03:20	53.7	65.6	48.2
23:20 – 23:25	56.5	69.3	51.8	01:20 – 01:25	57.5	79.8	48.8	03:20 – 03:25	53.1	65.1	48.0
23:25 – 23:30	58.5	76.5	52.0	01:25 – 01:30	54.5	68.3	48.9	03:25 – 03:30	53.6	65.2	48.1
23:30 – 23:35	55.7	67.6	52.1	01:30 – 01:35	55.9	73.6	50.0	03:30 – 03:35	53.2	62.5	48.3
23:35 – 23:40	54.4	62.6	51.7	01:35 – 01:40	57.1	70.9	49.3	03:35 – 03:40	53.4	63.7	48.1
23:40 – 23:45	59.2	75.5	52.9	01:40 – 01:45	54.3	66.5	48.9	03:40 – 03:45	52.9	67.0	44.9
23:45 – 23:50	58.4	68.5	56.8	01:45 – 01:50	60.0	76.5	49.4	03:45 – 03:50	52.4	63.8	47.5
23:50 – 23:55	58.2	66.2	56.6	01:50 – 01:55	60.6	84.4	49.6	03:50 – 03:55	53.7	68.1	48.3
23:55 – 00:00	57.3	67.8	52.4	01:55 – 02:00	58.5	77.0	49.4	03:55 – 04:00	53.7	67.5	48.1
00:00 – 00:05	56.4	69.4	51.8	02:00 – 02:05	56.4	73.9	49.8	04:00 – 04:05	58.4	76.3	49.2
00:05 – 00:10	54.3	63.8	50.5	02:05 – 02:10	57.9	74.8	49.8	04:05 – 04:10	54.4	65.3	48.2
00:10 – 00:15	56.9	65.6	52.1	02:10 – 02:15	54.5	70.4	46.3	04:10 – 04:15	55.7	73.1	48.7
00:15 – 00:20	58.3	69.2	57.1	02:15 – 02:20	57.9	74.8	47.2	04:15 – 04:20	53.4	64.8	48.1
00:20 – 00:25	58.4	69.6	56.8	02:20 – 02:25	52.4	71.1	46.6	04:20 – 04:25	53.6	67.2	48.5
00:25 – 00:30	58.5	70.6	57.0	02:25 – 02:30	53.1	71.7	46.6	04:25 – 04:30	53.0	62.4	47.9
00:30 – 00:35	56.3	67.3	50.1	02:30 – 02:35	54.2	69.3	46.8	04:30 – 04:35	54.1	69.0	48.0
00:35 – 00:40	53.7	63.7	49.6	02:35 – 02:40	53.7	68.3	45.5	04:35 – 04:40	55.2	73.6	49.0
00:40 – 00:45	62.4	85.8	50.2	02:40 – 02:45	58.0	78.1	48.3	04:40 – 04:45	53.4	66.5	47.7
00:45 – 00:50	59.3	82.5	50.6	02:45 – 02:50	58.9	77.7	49.7	04:45 – 04:50	55.2	73.7	48.9
00:50 – 00:55	56.5	74.8	50.4	02:50 – 02:55	52.6	65.0	47.7	04:50 – 04:55	52.9	63.9	46.9
00:55 – 01:00	54.2	67.3	50.2	02:55 – 03:00	51.3	61.7	46.2	04:55 – 05:00	53.2	62.1	48.4

Oda

(Mr. Ocha Booncherd)

Sampling

Watsana

(Ms. Watsana Charoenta)

Analyst



Rm

(Mr. Rnus Fakto)

Lab. Supervisor

ANALYSIS REPORT

Analysis No. : NH 214/2561
Job No. : PCL 1124/61
Report Date : August 29, 2018

Customer Name : โรงแรม S3 CHATEAU
Address : ถนนเพชรเกษม ตำบลหัวหิน อำเภอหัวหิน จังหวัดประจวบคีรีขันธ์
Sampling Location : บริเวณพื้นที่โครงการ
GPS. Coordinate : 47 P 0603462 E, 1390842 N
Measured Date : August 22, 2018
Measured Instrument : ACO Type 6226 S/N 180045
Instrument calibration : TM-100 S/N 07050270

SLM Adjust : 94.0 dB(A)
SLM Reading : 94.1 dB(A), 94.0 dB(A)

Interval Time	Noise Level For			Interval Time	Noise Level For			Interval Time	Noise Level For		
	5 Minutes, dB(A)				5 Minutes, dB(A)				5 Minutes, dB(A)		
	Leq	Lmax	L90		Leq	Lmax	L90		Leq	Lmax	L90
05:00 – 05:05	53.4	63.0	48.1	07:00 – 07:05	57.9	69.9	53.7	09:00 – 09:05	56.2	65.1	52.8
05:05 – 05:10	57.0	73.7	48.3	07:05 – 07:10	57.2	66.9	53.0	09:05 – 09:10	55.6	61.3	52.0
05:10 – 05:15	59.5	76.9	44.6	07:10 – 07:15	57.6	68.8	53.6	09:10 – 09:15	55.3	61.0	52.1
05:15 – 05:20	53.7	67.5	44.8	07:15 – 07:20	57.0	67.7	53.5	09:15 – 09:20	56.0	67.6	51.7
05:20 – 05:25	52.8	64.1	44.8	07:20 – 07:25	56.5	64.2	53.5	09:20 – 09:25	55.9	68.0	51.4
05:25 – 05:30	53.7	65.5	45.4	07:25 – 07:30	57.0	67.6	53.6	09:25 – 09:30	56.2	64.6	51.6
05:30 – 05:35	53.8	63.5	45.4	07:30 – 07:35	57.5	67.7	53.9	09:30 – 09:35	55.3	69.0	51.9
05:35 – 05:40	53.0	62.0	46.3	07:35 – 07:40	57.4	66.8	53.6	09:35 – 09:40	56.0	65.8	52.0
05:40 – 05:45	52.5	67.0	45.9	07:40 – 07:45	58.2	66.6	54.7	09:40 – 09:45	54.9	66.6	50.0
05:45 – 05:50	55.6	71.0	48.0	07:45 – 07:50	57.1	64.9	54.5	09:45 – 09:50	56.7	74.6	47.8
05:50 – 05:55	54.3	63.3	47.1	07:50 – 07:55	56.6	68.8	53.2	09:50 – 09:55	47.4	60.4	42.1
05:55 – 06:00	54.8	63.6	46.3	07:55 – 08:00	56.5	64.2	53.0	09:55 – 10:00	50.5	62.5	42.9
06:00 – 06:05	60.4	76.8	48.8	08:00 – 08:05	55.9	63.5	52.5	10:00 – 10:05	55.8	71.1	50.8
06:05 – 06:10	55.6	65.1	49.4	08:05 – 08:10	57.1	75.4	52.5	10:05 – 10:10	54.9	62.6	50.3
06:10 – 06:15	60.6	77.4	48.7	08:10 – 08:15	56.9	67.8	52.6	10:10 – 10:15	54.7	62.6	50.4
06:15 – 06:20	55.0	64.6	48.5	08:15 – 08:20	57.7	66.7	54.8	10:15 – 10:20	57.8	68.4	53.5
06:20 – 06:25	62.7	80.5	50.2	08:20 – 08:25	57.7	68.0	54.0	10:20 – 10:25	65.2	92.6	52.0
06:25 – 06:30	58.6	75.8	49.1	08:25 – 08:30	57.2	63.7	53.9	10:25 – 10:30	62.1	70.2	52.1
06:30 – 06:35	57.0	70.6	50.1	08:30 – 08:35	56.9	66.1	53.6	10:30 – 10:35	57.3	71.3	51.3
06:35 – 06:40	56.9	67.9	50.1	08:35 – 08:40	56.0	62.8	52.8	10:35 – 10:40	57.1	62.3	53.2
06:40 – 06:45	61.1	78.6	51.7	08:40 – 08:45	56.0	62.3	51.6	10:40 – 10:45	56.3	64.9	52.1
06:45 – 06:50	56.7	70.2	51.9	08:45 – 08:50	56.0	63.9	52.3	10:45 – 10:50	57.1	60.2	53.1
06:50 – 06:55	61.9	79.5	53.1	08:50 – 08:55	57.1	69.1	52.7	10:50 – 10:55	55.1	61.1	51.3
06:55 – 07:00	62.1	69.5	51.7	08:55 – 09:00	56.8	66.8	52.9	10:55 – 11:00	57.9	62.7	52.4



(Mr. Ocha Booncherd)
Sampling



(Ms. Watsana Charoenta)
Analyst




(Mr. Rnus Fakto)
Lab. Supervisor

ANALYSIS REPORT

Analysis No. : NH 214/2561
Job No. : PCL 1124/61
Report Date : August 29, 2018

Customer Name : โรงแรม S3 CHATEAU
Address : ถนนเพชรเกษม ตำบลหัวหิน อำเภอหัวหิน จังหวัดประจวบคีรีขันธ์
Sampling Location : บริเวณพื้นที่โครงการ
GPS. Coordinate : 47 P 0603462 E, 1390842 N
Measured Date : August 19-20, 2018
Measured Instrument : ACO Type 6226 S/N 180045
Instrument calibration : TM-100 S/N 07050270
SLM Adjust : 94.0 dB(A)
SLM Reading : 94.1 dB(A), 94.0 dB(A)

Interval Time (hours)	Noise Level (dB(A))		
	Leq	Lmax	L90
11.00-12.00	57.3	80.3	51.8
12.00-13.00	58.1	86.0	52.8
13.00-14.00	56.8	74.1	53.2
14.00-15.00	58.5	81.1	52.7
15.00-16.00	57.1	77.4	52.2
16.00-17.00	57.4	81.9	52.5
17.00-18.00	57.7	79.5	54.1
18.00-19.00	58.5	74.2	56.1
19.00-20.00	61.1	79.3	58.7
20.00-21.00	55.5	74.1	52.8
21.00-22.00	61.2	80.1	58.0
22.00-23.00	59.3	82.0	55.0
23.00-00.00	58.2	85.0	51.4
00.00-01.00	57.4	82.3	54.0
01.00-02.00	57.3	81.0	49.8
02.00-03.00	57.2	82.7	50.2
03.00-04.00	55.6	77.9	48.0
04.00-05.00	53.9	70.9	47.6
05.00-06.00	55.8	77.1	48.2
06.00-07.00	59.8	80.9	51.8
07.00-08.00	57.6	76.5	53.9
08.00-09.00	57.6	77.7	53.4
09.00-10.00	56.4	72.8	52.7
10.00-11.00	56.4	78.6	52.2
24 Hours Measured	58.2	-	54.1
1 Hour Maximum	-	86.0	-
Standard ^{1/}	≤70	≤115	-
Ldn	64.3	-	-

Remark : 1. ^{1/} Notification of National Environmental Board No. 15 (B.E. 2540) It defines the General sound level Standards

2. Weather : Raining (Between 19-21 August, 2018)



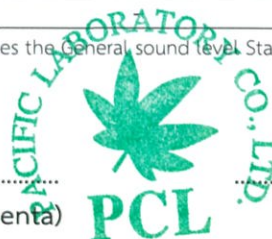
(Mr. Ocha Booncherd)

Sampling



(Ms. Watsana Charoenta)

Analyst




(Mr. Rnus Fakto)

Lab. Supervisor

ANALYSIS REPORT

Analysis No. : NH 214/2561
Job No. : PCL 1124/61
Report Date : August 29, 2018

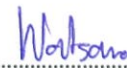
Customer Name : โรงแรม S3 CHATEAU
Address : ถนนเพชรเกษม ตำบลหัวหิน อำเภอหัวหิน จังหวัดประจวบคีรีขันธ์
Sampling Location : บริเวณพื้นที่โครงการ
GPS. Coordinate : 47 P 0603462 E, 1390842 N
Measured Date : August 20-21, 2018
Measured Instrument : ACO Type 6226 S/N 180045
Instrument calibration : TM-100 S/N 07050270

SLM Adjust : 94.0 dB(A)
SLM Reading : 94.1 dB(A), 94.0 dB(A)

Interval Time (hours)	Noise Level (dB(A))		
	Leq	Lmax	L90
11.00-12.00	57.5	81.0	52.7
12.00-13.00	60.8	90.3	53.8
13.00-14.00	56.0	77.7	52.2
14.00-15.00	56.7	76.0	52.4
15.00-16.00	59.7	75.1	55.0
16.00-17.00	55.9	71.8	52.8
17.00-18.00	58.0	80.7	53.3
18.00-19.00	57.2	78.2	54.1
19.00-20.00	59.2	84.3	54.7
20.00-21.00	55.5	74.1	52.8
21.00-22.00	55.7	75.5	51.0
22.00-23.00	54.7	77.3	50.2
23.00-00.00	55.1	74.4	51.3
00.00-01.00	55.7	83.7	51.2
01.00-02.00	55.1	82.3	46.9
02.00-03.00	53.7	76.0	45.7
03.00-04.00	53.9	79.1	46.0
04.00-05.00	52.6	74.2	46.2
05.00-06.00	57.8	80.6	49.2
06.00-07.00	59.6	82.5	51.2
07.00-08.00	57.9	76.5	53.6
08.00-09.00	57.5	75.4	53.8
09.00-10.00	57.0	80.4	52.5
10.00-11.00	56.3	74.8	51.8
24 Hours Measured	57.1	-	52.1
1 Hour Maximum	-	90.3	-
Standard ^{1/}	≤70	≤115	-
Ldn	62.1	-	-

Remark : 1. ^{1/} Notification of National Environmental Board No. 15 (B.E. 2540) It defines the General sound level Standards
2. Weather : Raining (Between 19-21 August, 2018)


(Mr. Ocha Booncherd)
Sampling


(Ms. Watsana Charoenta)
Analyst




(Mr. Rnus Fakto)
Lab. Supervisor

ANALYSIS REPORT

Analysis No. : NH 214/2561
Job No. : PCL 1124/61
Report Date : August 29, 2018

Customer Name : โรงแรม S3 CHATEAU
Address : ถนนเพชรเกษม ตำบลหัวหิน อำเภอหัวหิน จังหวัดประจวบคีรีขันธ์
Sampling Location : บริเวณพื้นที่โครงการ
GPS. Coordinate : 47 P 0603462 E, 1390842 N
Measured Date : August 21-22, 2018
Measured Instrument : ACO Type 6226 S/N 180045
Instrument calibration : TM-100 S/N 07050270
SLM Adjust : 94.0 dB(A)
SLM Reading : 94.1 dB(A), 94.0 dB(A)

Interval Time (hours)	Noise Level (dB(A))		
	Leq	Lmax	L90
11.00-12.00	55.9	73.0	52.0
12.00-13.00	57.0	79.2	52.4
13.00-14.00	57.1	76.6	52.1
14.00-15.00	58.4	79.2	54.3
15.00-16.00	56.6	72.4	53.6
16.00-17.00	57.0	87.6	52.4
17.00-18.00	58.1	81.2	53.5
18.00-19.00	57.6	77.2	53.9
19.00-20.00	58.1	75.4	56.0
20.00-21.00	57.6	76.2	54.9
21.00-22.00	57.8	77.6	53.1
22.00-23.00	56.8	79.4	52.3
23.00-00.00	57.2	76.5	53.4
00.00-01.00	57.8	85.8	53.3
01.00-02.00	57.2	84.4	49.0
02.00-03.00	55.8	78.1	47.8
03.00-04.00	56.0	81.2	48.1
04.00-05.00	54.7	76.3	48.3
05.00-06.00	55.0	76.9	46.4
06.00-07.00	59.8	80.5	50.5
07.00-08.00	57.2	69.9	53.7
08.00-09.00	56.8	75.4	53.1
09.00-10.00	55.2	74.6	50.8
10.00-11.00	59.0	92.6	52.0
24 Hours Measured	57.2	-	52.5
1 Hour Maximum	-	92.6	-
Standard ^{1/}	≤70	≤115	-
Ldn	63.2	-	-

Remark : 1. ^{1/} Notification of National Environmental Board No. 15 (B.E. 2540) It defines the General sound level Standards
2. Weather : Raining (Between 19-21 August, 2018)



(Mr. Ocha Booncherd)

Sampling



(Ms. Watsana Charoenta)

Analyst




(Mr. Rn Fakto)

Lab. Supervisor

ภาคผนวก ฉ-3 : สำเนาหนังสือรับรองการขึ้นทะเบียน
ของบริษัทที่ทำการตรวจวัด



ที่ อก ๐๓๑๐/(๑) ๖ ๘๖ ๕

กรมโรงงานอุตสาหกรรม
ถนนพระรามที่ ๖ เขตราชเทวี
กรุงเทพมหานคร ๑๐๕๐๐

๑๖ พฤศจิกายน ๒๕๖๐

เรื่อง ขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน

เรียน กรรมการผู้จัดการ บริษัท แปซิฟิค แลборาตอรี จำกัด

อ้างถึง ๑. คำขอขึ้นทะเบียน/ต่ออายุหนังสืออนุญาตขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน

ลงวันที่ ๑๐ ตุลาคม ๒๕๖๐

๒. หนังสือบริษัท แปซิฟิค แลборาตอรี จำกัด ที่ LAB No. ๐๑๗/๖๐ ลงวันที่ ๑๐ ตุลาคม ๒๕๖๐

สิ่งที่ส่งมาด้วย เอกสารแบบท้ายหนังสือขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน

บริษัท แปซิฟิค แลборาตอรี จำกัด จำนวน ๑ แผน

ตามหนังสือที่อ้างถึง ๑ และ ๒ บริษัท แปซิฟิค แลборาตอรี จำกัด ขอขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน พร้อมรายชื่อผู้ควบคุมดูแลห้องปฏิบัติการวิเคราะห์ เจ้าหน้าที่ประจำห้องปฏิบัติการวิเคราะห์ และรายการสารเคมีที่จะทำการวิเคราะห์ ต่อกรมโรงงานอุตสาหกรรม นั้น

กรมโรงงานอุตสาหกรรมพิจารณาแล้ว ให้บริษัท แปซิฟิค แลборาตอรี จำกัด ขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน มีเลขทะเบียน ๖-๒๗๒ สถานที่ตั้งเลขที่ ๑๔/๕๓๕ หมู่ที่ ๑๔ ตำบลบางบัวทอง อำเภอบางบัวทอง จังหวัดนนทบุรี โดยมีองค์ประกอบดังนี้

ก. ผู้ควบคุมดูแลห้องปฏิบัติการวิเคราะห์

๑) นางสาวธัญญากร เมธวัชรกุล

๒) นายนักรบ เทพบรรดาล

ข. เจ้าหน้าที่ประจำห้องปฏิบัติการวิเคราะห์

๑) นางนันทนา นาคอ่อน

๒) นางสาวพัชรา สมานันท์

๓) นางสาวชากิยะห์ จินารง

๔) นายธนกรณีย์ นามันท์

๕) นางสาวพลอยไพลิน สมบูรณ์

ค. สารเคมีที่ใช้ในห้องปฏิบัติการให้วิเคราะห์ในน้ำเสีย จำนวน ๑๐ รายการ และอากาศเสีย

จำนวน ๕ รายการ รวมทั้งสิ้นจำนวน ๑๕ รายการ ตามสิ่งที่ส่งมาด้วย

/หนังสือฉบับ...

-๒-

หนังสือฉบับนี้มีอายุครั้งละ ๓ ปี นับจากวันที่กรมโรงงานอุตสาหกรรมออกหนังสือหากประสงค์จะต่ออายุหนังสือขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน ให้ยื่นคำขอต่ออายุพร้อมเอกสารประกอบคำขอต่อกรมโรงงานอุตสาหกรรมภายใน ๓๐ วัน ก่อนวันสิ้นสุดของหนังสือขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน ซึ่งคำขอต่ออายุดังกล่าวขอรับได้ทั้งที่กรมโรงงานอุตสาหกรรม

จึงเรียนมาเพื่อทราบ

ขอแสดงความนับถือ

(นายประกอบ วิวิธจินดา)
รองอธิบดี ปฏิบัติราชการแทน
อธิบดีกรมโรงงานอุตสาหกรรม

เอกสารแนบท้ายหนังสือรับขึ้นทะเบียนห้องปฏิบัติการวิเคราะห์เอกชน
บริษัท แปซิฟิค แลเบอร์ตอรี จำกัด เลขทะเบียน ว-272
ที่ อภ ๐๓๑๐/๑๓ ๑๖๖๖๕ ลงวันที่ ๑๖ พฤศจิกายน ๒๕๖๐

สารมลพิษที่เห็นชอบให้วิเคราะห์ จำนวน 15 รายการ

น้ำเสีย จำนวน 10 รายการ

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
1	Biochemical Oxygen Demand	5-Day BOD Test, Azide Modification Method ⁽¹⁾
2	Chemical Oxygen Demand	Closed Reflux, Colorimetric Method ⁽¹⁾
3	Free Chlorine	Iodometric Method ⁽¹⁾
4	Hexavalent Chromium	Filtration, Colorimetric Method ⁽¹⁾
5	Oil & Grease	Liquid-Liquid, Partition-Gravimetric Method ⁽¹⁾
6	pH	Electrometric Method ⁽¹⁾
7	Sulfide	ZnS Precipitation, Iodometric Method ⁽¹⁾
8	Suspended Solids	Dried at 103-105 ⁰ C ⁽¹⁾
9	Temperature	Laboratory and Field Methods ⁽¹⁾
10	Total Dissolved Solids	Dried at 180 ⁰ C ⁽¹⁾

อากาศเสีย (ปล่อยระบาย) จำนวน 5 รายการ

ลำดับที่	สารมลพิษ	วิธีวิเคราะห์
1	Hydrogen Sulfide	Absorption, Iodometric Method ⁽²⁾
2	Oxides of Nitrogen	Absorption, Phenoldisulfonic Acid Method ⁽²⁾
3	Sulfur Dioxide	Absorption, Barium-Thorin Titrimetric Method ⁽²⁾
4	Sulfuric Acid	Isokinetic, Barium-Thorin Titrimetric Method ⁽²⁾
5	Total Suspended Particulate	Isokinetic, Gravimetric Method ⁽²⁾

เอกสารอ้างอิง

1. APHA, AWWA, WEF. Standard Methods for the Examination of Water and Wastewater. 22nd ed. Washington, DC: APHA, 2012.
2. United States Environmental Protection Agency. Standard of Performance for New Stationary Sources. 40 CER 60, Appendix A, 2010.



ภาคผนวก ฉ-4 : สำเนาหนังสือรับรอง
เครื่องมือที่ใช้ในการตรวจวัด



ORIFICE TRANSFER STANDARD CERTIFICATION WORKSHEET TE-5025A

Date - Jan 26, 2017 Rootmeter S/N 0438320 Ta (K) - 293
Operator Tisch Orifice I.D. - 710725 Pa (mm) - 746.76

PLATE OR Run #	VOLUME START (m3)	VOLUME STOP (m3)	DIFF VOLUME (m3)	DIFF TIME (min)	METER DIFF Hg (mm)	ORFICE DIFF H2O (in.)
1	NA	NA	1.00	1.3970	3.2	2.00
2	NA	NA	1.00	0.9890	6.4	4.00
3	NA	NA	1.00	0.8810	7.9	5.00
4	NA	NA	1.00	0.8400	8.7	5.50
5	NA	NA	1.00	0.6920	12.7	8.00

DATA TABULATION

Vstd	(x axis) Qstd	(y axis)		Va	(x axis) Qa	(y axis)
0.9950	0.7123	1.4138		0.9957	0.7127	0.8858
0.9908	1.0018	1.9993		0.9914	1.0025	1.2528
0.9887	1.1222	2.2353		0.9893	1.1230	1.4006
0.9877	1.1758	2.3444		0.9883	1.1766	1.4690
0.9823	1.4195	2.8275		0.9829	1.4205	1.7717

Qstd slope (m) = 1.99839
intercept (b) = -0.00693
coefficient (r) = 0.99997

Qa slope (m) = 1.25136
intercept (b) = -0.00434
coefficient (r) = 0.99997

y axis = $\text{SQRT}[\text{H2O}(\text{Pa}/760)(298/\text{Ta})]$

y axis = $\text{SQRT}[\text{H2O}(\text{Ta}/\text{Pa})]$

CALCULATIONS

Vstd = Diff. Vol [(Pa-Diff. Hg)/760] (298/Ta)
Qstd = Vstd/Time

Va = Diff Vol [(Pa-Diff Hg)/Pa]
Qa = Va/Time

For subsequent flow rate calculations:

Qstd = $1/m\{[\text{SQRT}(\text{H2O}(\text{Pa}/760)(298/\text{Ta}))] - b\}$
Qa = $1/m\{[\text{SQRT}(\text{H2O}(\text{Ta}/\text{Pa}))] - b\}$



Crystal Calibration
Sales and Service co.,Ltd.



CERTIFICATE OF CALIBRATION

Issue Date : 8 September 2017
Certificate No. : 17-SB-520
Work Order No. : 17/386

Customer Name : Pacific Laboratory Co., Ltd.
14/5358 Moo 14, T. Bangbuathong,
A. Bangbuathong, Nonthaburi 11110
Date of Recived : 4 September 2017

Instrument Details : Description : Electronic Balance
Manufacturer : METTLER TOLEDO
Model : DRAGON 204
Serial No. : 1200500387
ID No. : LAB-BL-002
Resolution : 0.0001 g
Capacity : 210 g
Location : Laboratory

Calibration Method : This calibration was conducted by using in-house method according to calibration procedure no. CWI-B-01 based on UKAS LAB14 edition 05 July 2015

Environmental Condition

Temperature	: Minimum	23.9 °C	Maximum	25.1 °C
Humidity	: Minimum	54.0 %	Maximum	59.0 %
Air Pressure	: Minimum	1000.1 mbar	Maximum	1000.2 mbar

Traceability of Measurement

: This certificate of calibration documents the traceability to national standard, which realize the unit of measurement according to the International system of Units (SI)

Calibrated by : Mr. Thichakorn Srisupob
Calibration Engineer
Approved by : 
(Mr. Anuwat Yaklermjit)
Laboratory Manager

This certificate may not be reproduced other than in full except with the prior written approval of Crystal Calibration Sales and Service co., Ltd.

Crystal Calibration Sales and Service Co., Ltd.

45/48 Salathommasop 31, Salathommasop Rd., Salathommasop, Thawewatthana, Bangkok 10170

Phone : 0-2408-8474 Fax : 0-2408-8477 <http://www.crystalcal.com> Email : info@crystalcal.com



PAGE 1/3



CERTIFICATE OF CALIBRATION

Issue Date : 8 September 2017

Certificate No. : 17 SB 520

Work Order No. : 17/386

Details of Calibration :

1. Reference Standards Instrument :

Instrument	Capacity of Weight	Serial No. / ID No.	Certificate No.	Due date
Weight Set E2	1mg to 1kg	B440106986	23-59/0019	27 October 2017

2. Certificate traceable : This certificate traceable to The International System of Unit refer to
Thailand Institute of Science and Technological Research. , NAC Calibration No. 0015
3. Condition of item : Used
4. Calibration site : On-site
5. Date of Calibration : 4 September 2017

Result of Calibration :

1. Calibration result : Check performance before calibration

Applied Weight	Balance Reading	Correction Value	Uncertainty	Coverage Factor
g	g	g	(±) g	(k)
100.0001	99.9995	0.0006	0.00024	2.05
200.0002	199.9985	0.0017	0.00034	2.00

2. The result of check performance in first step has to Reset span

3. Calibration result : After set span by External Reset span by weight 200 g ID No. 200 None

3.1 Repeatability number of repeatability is 10 times

Normal Value (g)	Standard Deviation of Reading (g)
100	0.0001269
200	0.0001033

This result of calibration was found accurate as shown on date and place of calibration only.

The reported uncertainty of measurement was based on a standard uncertainty multiplied by a coverage factor $k=2$ providing a level of confidence of approximately 95%.



CERTIFICATE OF CALIBRATION

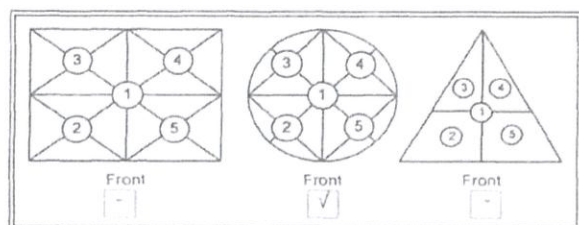
Certificate No. : 17-SB-520

Issue Date : 8 September 2017

Work Order No. : 17/386

Result of calibration :

3.2 Eccentric or Off-center Error A mass of 50 g was placed and moved to various position on pan.



Result of Eccentric Error		
Position 1	50.0001	g
Position 2	50.0000	g
Position 3	50.0003	g
Position 4	50.0004	g
Position 5	50.0001	g
(Maximum Difference)	0.0003	g

3.3 Departure of indication from nominal value

Applied Weight g	Balance Reading g	Correction Value g	Uncertainty ($\pm$) g	Coverage Factor (k)
Unload	0.0000	0.0000	0.00019	2.18
0.0100	0.0100	0.0000	0.00019	2.18
0.0500	0.0500	0.0000	0.00019	2.18
0.1000	0.1000	0.0000	0.00019	2.18
1.0000	1.0000	0.0000	0.00019	2.18
2.0000	2.0001	-0.0001	0.00019	2.18
5.0000	5.0001	-0.0001	0.00019	2.18
20.0000	20.0003	-0.0003	0.00019	2.15
50.0000	50.0004	-0.0004	0.00020	2.13
100.0001	100.0004	-0.0003	0.00024	2.05
150.0001	150.0004	-0.0003	0.00028	2.00
200.0002	200.0009	-0.0007	0.00034	2.00

This result of calibration was found accurate as shown on date and place of calibration only.

The reported uncertainty of measurement was based on a standard uncertainty multiplied by a coverage factor $k=2$ providing a level of confidence of approximately 95%.

—END—

PAGE 3/3



บริษัท เอ็นไวร์ เซอร์วิส จำกัด

42 ถนนพหลโยธิน 14 แขวง 9 เขตจตุจักร กรุงเทพมหานคร 10230 โทรศัพท์ 02-9435812-3 โทรสาร 02-94358201
 บริษัท เอ็นไวร์ เซอร์วิส จำกัด
 ENVIR SERVICE CO., LTD. 42 Ramathin 14 Subk 9, Tho Rang, BangEhen, Bangkok 10230 Tel: 02-9435812-3 Fax: 02-94358201

Analyzer Performance Test

Calibrated Date: 26 January 2018

Instruments Information

Analyzer Type: CO Analyzer Model: 48C	Manufacturer: Thermo Environmental S/N: 48C-65774-350
--	--

Calibration System

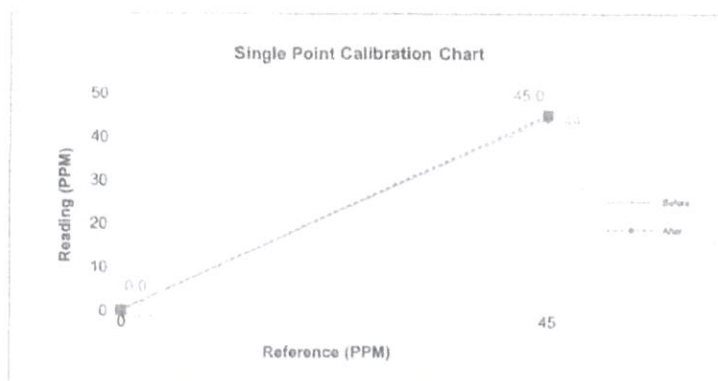
Calibrator Unit	Standard Gas
Dilutor Model Dasibi Model 5008 S/N: 705 ZERO AIR Generator API MODEL 701 S/N: 1924	NO Conc 45.2 PPM SO2 Conc 44.9 PPM CO Conc 4,490 PPM Expire Date: 6 Jun. 2018

Environment: Temperature 25.5 °C

Humidity: 51 %RH

Calibration Report

Status	Zero			Span		
	Reference (PPM)	Reading (PPM)	Drift (PPM)	Reference (PPM)	Reading (PPM)	Drift%
Before	0.0	0.1	0.1	45.0	44.3	-1.7
After	0.0	0.0	0.0	45.0	45.0	0.0



Calibrate By:

Mr. PASAGORN SAMOL





ELECTRICAL AND ELECTRONICS INSTITUTE
FOUNDATION FOR INDUSTRIAL DEVELOPMENT

975 Moo 4, Bangpoo Industrial Estate, Soi 8, Sukhumvit Road km. 37

Phraek Sa, Mueang Samut Prakan, Samut Prakan 10280

Tel. +66 2709 4860-8 Fax +66 2324 0917-8



Certificate No.: 0374SV17
Operation No.: 6011ACSV0044

Certificate of Calibration

Equipment: Sound Calibrator
Manufacturer: TENMARS
Model/Type: TM-100
Serial No.: 07050270
ID No.: -
Customer: Pacific Laboratory Co., Ltd.
Address: 14/5358 Moo 14 T. Bang Bua Thong
A. Bang Bua Thong, Nonthaburi 11110
Received Date: 10 November 2017
Calibrated Date: 20 November 2017
Issued Date: 21 November 2017
Calibrated by: Ms. Juntaporn Kunhakom

Approved by:


(Mr. Pongpat Phanbean)
กลุ่มผู้จัดการ (Group Manager)
สถาบันไฟฟ้าและอิเล็กทรอนิกส์ (Electrical and Electronics Institute)

The reported uncertainty of measurement was based on standard uncertainty multiplied by a coverage factor $k = 2.00$, providing a level of confidence of approximately 95%. This certificate may not be reproduced other than in full except with the prior written approval of the Electrical and Electronics Institute, Foundation for Industrial Development.

Certificate No.: 0374SV17

Calibration Report

Equipment: Sound Calibrator
Manufacturer: TENMARS
Model/Type: TM-100
Serial No.: 07050270
ID No.: -
Ambient Temperature: (23 ± 2) °C
Relative Humidity: (50 ± 15) %
Pressure: (101.3 ± 1.5) kPa

Method of Calibration :-

In-house method : CC-SV003 based on IEC60942:2003.

Condition of this result of calibration

1. Reference standards instrument :-

Instrument	Model	Serial No.	Cert. No.	Due Date
1) Standard microphone	4180	2661000	AA-1006-17	30 April 2018
2) Waveform Generator	33511B	MY52302264	512200812892800	18 June 2018
3) Audio Analyzing DMM	2015-P	000136E	512200813018560	11 September 2018
4) Pressure humidity and Temperature Transmitter	PTU301	F0640002	512200812818208	27 April 2018

2. This result of calibration was found accurate as shown on date and place of calibration only.

3. This certification is traceable to the international system of unit maintained at :-

Reference standards instrument for Acoustic function

- National Institute of Metrology (Thailand)

Reference standards instrument for Electrical function

- Micro Precision Calibration Laboratory (Thailand); A2LA Accredited Calibration No.935.06

Result of Calibration:-

1. Function : Sound pressure level

Specified sound Pressure level (dB)	Measured value (dB)	Deviated value (dB)	Uncertainty (dB)	Tolerance limit (dB)
94	96.07	2.07	±0.10	±0.75
114	116.03	2.03	±0.10	±0.75

2. Function : Frequency

Specified Frequency (Hz)	Measured value (Hz)	Deviated value (%)	Uncertainty (%)	Tolerance limit (%)
At the sound pressure level of 94 dB				
1000	1018.1	1.8	±0.1	±2.0
At the sound pressure level of 114 dB				
1000	1016.1	1.6	±0.1	±2.0

Certificate No.: 0374SV17

Calibration Report

3. Function : Total harmonic distortion

Measured value (%)	Uncertainty (%)	Tolerance limit (%)
At the sound pressure level of 94 dB		
2.3 *	±0.4	±4.0
At the sound pressure level of 114 dB		
2.0 *	±0.4	±4.0

Remarks:

1. * Calibration marked " Not Accredited" in this Certificate have been included for completeness.
2. Total harmonic distortion function was measured by total harmonic distortion plus noise.
3. Tolerance limit was IEC60942:2003 Class 2.

- - End of Report - -

Calibration Report

Sound Level Meter Model 6226

Instrument : Sound Level Meter

Manufacturer : ACO CO., LTD.

Model : 6226

Date of Calibrate : August 1, 2018

Calibrator

Instrument : Sound Calibrator

Manufacturer : Tenmars Electronics Co., Ltd.

Model : TM-100

Serial Number : 07050270

Range of Calibrator

Sound Pressure Level : 94.0 ± 0.50 dBFrequency : 1 kHz $\pm$ 4%

Calibration Report

Serial No.	Before Adjust	After Adjust	Inspection Result
180045	94.1	94.0	Pass

Calibrated By

Sak S.

(Ms. Sakuna Supparot)



Approved By

R. Fakto

(Mr. Rnus Fakto)