

ภาคผนวก 68

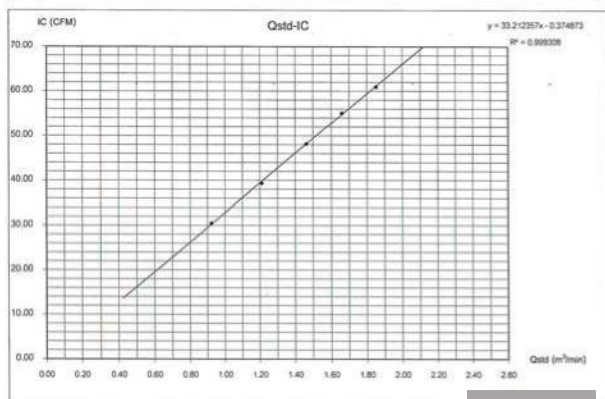
การสอบเทียบเครื่องมือตรวจวัดและวิเคราะห์

PM10 HIGH VOLUME AIR SAMPLER CALIBRATION REPORT

Quotation	2024-01649	Date	November 1, 2024
Sampler Location	Quakerini	Start Time	10:54 AM
Sampler Number	PM10 HQ.31	Stop Time	10:14 AM
Instrument Model	HVCL-8808E	Transfer Standard Type	Office
Motor Serial Number	437-432	Calibrator Model	TS-5025A
Recorder Serial Number	527-008	Calibrator Serial Number	2915
		Calibrated By	Mr. Aukaravit Boonring

Pass	(Delta H)	(A)	(K)	(I)	(Y)	Temperature	Barometric	Start	Stop
No.	Pressure Drop Across Orifice (mmHg)	Δh_o (mmHg)	$Q_{std} = (136)(\Delta h_o)^{0.5}$	Single Flow Rate Indicator	$IC = (Q_{std}/P_{std})T_{std}/T_{amb}$	$T_K = T_C + 273.15$	Pressure	Motor	Motor
	Positive	Negative	Δh_o	L^3/min	L^3/min	$^{\circ}K$	(mmHg)		
5	1.5	1.5	3.0	1.70383	0.95474	31.0	30.49	300.0	750.0
7	2.4	2.4	4.8	2.15494	1.20964	40.0	39.34	300.0	750.0
10	3.5	3.5	7.0	2.60233	1.46232	50.0	49.18	300.0	750.0
13	4.5	4.5	9.0	2.91785	1.64049	55.0	54.10	300.0	750.0
18	5.5	5.5	11.0	3.26220	1.83000	62.0	60.98	300.0	750.0
Linear Regression: $Y = aX + b$						Average	306.0	750.0	
1	Slope (m)	1.77059	Linear Equation			r^2	0.99939	Passing	750.0
2	Intercept (b)	0.01317	Set Point Flow Rate (X) (m ³ /min)	1.133		r	0.9999341	T_{amb}	298.0
3	Correlation Coefficient (r)	0.99974	Final Set Flow Rate = (1)	0	$(P_{std}/T_{std})/T_{amb}$		0.96744026		
Result						$C = (P_{std}/T_{std})/T_{amb} \times 0.5$			
						0.96358995			

COMMENT
Andersen Instruments, Inc.



Checked By (Mr. Prayun Detkla) Technician
Approved By (Mr. Panupon Podang) Environmental Scientist

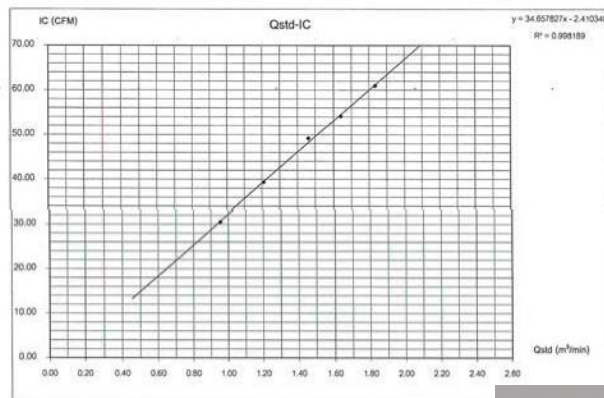


TSP HIGH VOLUME AIR SAMPLER CALIBRATION REPORT

Quotation	2024-01649	Date	November 1, 2024
Sampler Location	Quakerini	Start Time	9:54 AM
Sampler Number	TSP HQ.A19	Stop Time	10:04 AM
Instrument Model	HVCL-8808E	Transfer Standard Type	Office
Motor Serial Number	8-0702	Calibrator Model	TS-5025A
Recorder Serial Number	7372	Calibrator Serial Number	2915
		Calibrated By	Mr. Aukaravit Boonring

Pass	(Delta H)	(A)	(K)	(I)	(Y)	Temperature	Barometric	Start	Stop
No.	Pressure Drop Across Orifice (mmHg)	Δh_o (mmHg)	$Q_{std} = (136)(\Delta h_o)^{0.5}$	Single Flow Rate Indicator	$IC = (Q_{std}/P_{std})T_{std}/T_{amb}$	$T_K = T_C + 273.15$	Pressure	Motor	Motor
	Positive	Negative	Δh_o	L^3/min	L^3/min	$^{\circ}K$	(mmHg)		
5	1.5	1.5	3.0	1.70383	0.95474	31.0	30.49	300.0	750.0
7	2.4	2.4	4.8	2.15494	1.20964	40.0	39.34	300.0	750.0
10	3.5	3.5	7.0	2.60233	1.46232	50.0	49.18	300.0	750.0
13	4.4	4.4	8.8	2.91785	1.64049	55.0	54.10	300.0	750.0
18	5.5	5.5	11.0	3.26220	1.83000	62.0	60.98	300.0	750.0
Linear Regression: $Y = aX + b$						Average	306.0	750.0	
1	Slope (m)	1.77059	Linear Equation			r^2	0.999189	Passing	750.0
2	Intercept (b)	0.01317	Set Point Flow Rate (X) (m ³ /min)	1.133		r	0.9999341	T_{amb}	298.0
3	Correlation Coefficient (r)	0.99974	Final Set Flow Rate = (1)	0	$(P_{std}/T_{std})/T_{amb}$		0.96744026		
Result						$C = (P_{std}/T_{std})/T_{amb} \times 0.5$			
						0.96358995			

COMMENT
Andersen Instruments, Inc.



Checked By (Mr. Prayun Detkla) Technician
Approved By (Mr. Panupon Podang) Environmental Scientist

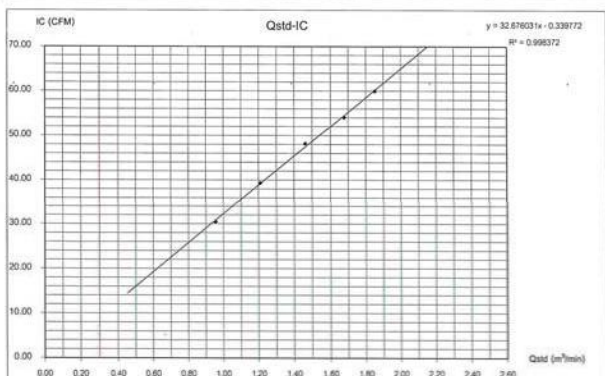


PM10 HIGH VOLUME AIR SAMPLER CALIBRATION REPORT

Quotation	2024-01649	Date	November 1, 2024
Sampler Location	Thung Song Hong, Lat Su, Bangkok 10210	Start Time	9:05 AM
Sampler Number	PM10 HQ.12	Stop Time	9:12 AM
Instrument Model	HVCL-8808E	Transfer Standard Type	Office
Motor Serial Number	2012-10	Calibrator Model	TS-5025A
Recorder Serial Number	4650	Calibrator Serial Number	2915
		Calibrated By	Mr. Aukaravit Boonring

Pass	(Delta H)	(A)	(K)	(I)	(Y)	Temperature	Barometric	Start	Stop
No.	Pressure Drop Across Orifice (mmHg)	Δh_o (mmHg)	$Q_{std} = (136)(\Delta h_o)^{0.5}$	Single Flow Rate Indicator	$IC = (Q_{std}/P_{std})T_{std}/T_{amb}$	$T_K = T_C + 273.15$	Pressure	Motor	Motor
	Positive	Negative	Δh_o	L^3/min	L^3/min	$^{\circ}K$	(mmHg)		
5	1.5	1.5	3.0	1.70383	0.95474	31.0	30.49	300.0	750.0
7	2.4	2.4	4.8	2.15494	1.20964	40.0	39.34	300.0	750.0
10	3.5	3.5	7.0	2.60233	1.46232	50.0	49.18	300.0	750.0
13	4.6	4.6	9.2	2.96338	1.67752	55.0	54.10	300.0	750.0
18	5.6	5.6	11.2	3.26172	1.85167	61.0	60.00	300.0	750.0
Linear Regression: $Y = aX + b$						Average	306.0	750.0	
1	Slope (m)	1.77059	Linear Equation			r^2	0.996372	Passing	750.0
2	Intercept (b)	0.01317	Set Point Flow Rate (X) (m ³ /min)	1.133		r	0.999479	T_{amb}	298.0
3	Correlation Coefficient (r)	0.99974	Final Set Flow Rate = (1)	0	$(P_{std}/T_{std})/T_{amb}$		0.96744026		
Result						$C = (P_{std}/T_{std})/T_{amb} \times 0.5$			
						0.96358995			

COMMENT
Andersen Instruments, Inc.



Checked By (Mr. Prayun Detkla) Technician
Approved By (Mr. Panupon Podang) Environmental Scientist

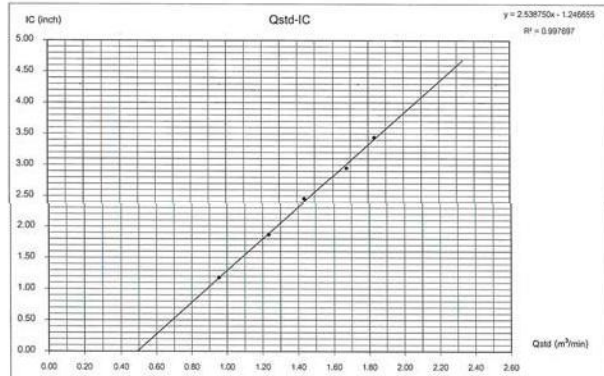


TSP HIGH VOLUME AIR SAMPLER CALIBRATION REPORT

Quotation	2024-01649	Date	November 1, 2024
Sampler Location	Thung Song Hong, Lat Su, Bangkok 10210	Start Time	9:15 AM
Sampler Number	TSP HQ.C21	Stop Time	9:25 AM
Instrument Model	HVCL-8808E	Transfer Standard Type	Office
Motor Serial Number	610-632	Calibrator Model	TS-5025A
Recorder Serial Number		Calibrator Serial Number	2915
		Calibrated By	Mr. Aukaravit Boonring

Pass	(Delta H)	(A)	(K)	(I)	(Y)	Temperature	Barometric	Start	Stop
No.	Pressure Drop Across Orifice (mmHg)	Δh_o (mmHg)	$Q_{std} = (136)(\Delta h_o)^{0.5}$	Single Flow Rate Indicator	$IC = (Q_{std}/P_{std})T_{std}/T_{amb}$	$T_K = T_C + 273.15$	Pressure	Motor	Motor
	Positive	Negative	Δh_o	L^3/min	L^3/min	$^{\circ}K$	(mmHg)		
5	1.5	1.5	3.0	1.70383	0.95474	31.0	30.49	300.0	750.0
7	2.5	2.5	5.0	2.18607	1.22473	40.0	39.34	300.0	750.0
10	3.4	3.4	6.8	2.56489	1.44117	50.0	49.18	300.0	750.0
13	4.6	4.6	9.2	2.96338	1.67752	55.0	54.10	300.0	750.0
18	5.5	5.5	11.0	3.26220	1.83000	62.0	60.98	300.0	750.0
Linear Regression: $Y = aX + b$						Average	306.0	750.0	
1	Slope (m)	1.77059	Linear Equation			r^2	0.997887	Passing	750.0
2	Intercept (b)	0.01317	Set Point Flow Rate (X) (m ³ /min)	1.133		r	0.998479	T_{amb}	298.0
3	Correlation Coefficient (r)	0.99974	Final Set Flow Rate = (1)	0	$(P_{std}/T_{std})/T_{amb}$		0.96744026		
Result						$C = (P_{std}/T_{std})/T_{amb} \times 0.5$			
						0.96358995			

COMMENT
Andersen Instruments, Inc.



Checked By (Mr. Prayun Detkla) Technician
Approved By (Mr. Panupon Podang) Environmental Scientist



CERTIFICATE OF CALIBRATION

Certificate No. : COF-001-67

Page 1 of 2 Pages

MEASUREMENT ITEM
MANUFACTURER : TSCN
MODEL/TYPE : TE-5025A
SERIAL NUMBER : 2915
ID NUMBER : -
CONDITION AS-RECEIVED : Used item
CUSTOMER : Environment Research & Technology Co., Ltd.
25/114 Moo 6 Soi Chinakiet 1, Ngamwongwan Road,
Toongsoenghong, Laksi, Bangkok 10220

RECEIVED DATE : 04 Jan 2024
MEASUREMENT DATE : 29 Jan 2024
ISSUE DATE : 30 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

CALIBRATION CONDITION:
Preconditioning : 24 hours at ambient conditions.
Measurement Condition : The average values during measurement are 23.9 °C and 63.8 %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 Orifice gas flow device was calibrated against Standard Rotary Displacement Meter (Roots Meter) Model G65/MC/W2-dp. The W-CL-004 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: NMW-0063-23.

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 Thachalad
☒ Miss Jittaporn Lertsomphol



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 COF-001-67

Page 2 of 2 Pages

MEASUREMENT RESULTS:

The Orifice gas flow device was calibrated by direct comparison method with the Standard Rotary Displacement Meter (Roots Meter). The Humid air was used as a medium in the system. The standard conditions are 25°C (298.15 K) and 760 mmHg for standard temperature and standard pressure respectively.

Table 1: The results of Q Standard calibration data

Plate	Flow rate m ³ /min	Pressure (Pa) mmHg	Temperature (Ta) °C	Temperature (Tm) °C	Δp _{meter} mmHg	Δp _{Orifice} inH ₂ O	Y	Standard Flow [Q _s] m ³ /min
1	0.696	761.303	23.97	23.42	53.502	1.358	1.169	0.652
2	1.001	761.260	23.59	23.04	58.300	2.755	1.665	0.932
3	1.111	761.216	23.70	23.27	39.578	3.557	1.892	1.062
4	1.165	761.175	23.82	23.34	28.812	4.010	2.008	1.129
5	1.416	761.184	23.58	23.16	27.005	5.983	2.454	1.377

Slope (a): 1.77059
Intercept (b): 0.01317
Correlation coefficient (r): 0.99974
Uncertainty (k=2): 0.015 m³/min

Table 2: The results of Q actual calibration data

Plate	Flow rate m ³ /min	Pressure (Pa) mmHg	Temperature (Ta) °C	Temperature (Tm) °C	Δp _{meter} mmHg	Δp _{Orifice} inH ₂ O	Y	Standard Flow [Q _a] m ³ /min
1	0.696	761.303	23.97	23.42	53.502	1.358	0.728	0.649
2	1.001	761.260	23.59	23.04	58.300	2.755	1.036	0.926
3	1.111	761.216	23.70	23.27	39.578	3.557	1.178	1.055
4	1.165	761.175	23.82	23.34	28.812	4.010	1.251	1.123
5	1.416	761.184	23.58	23.16	27.005	5.983	1.527	1.368

Slope (a): 1.10898
Intercept (b): 0.00822
Correlation coefficient (r): 0.99973
Uncertainty (k=2): 0.015 m³/min

End of Certificate of Calibration



Calibration Certificate ID
TH3067-067-011524-ACC-TH

METTLER TOLEDO

Mettler-Toledo (Thailand) Ltd.
846/4 - 846/5 Lasalle Rd., Bangna Tai Sub-District
Bangna District, Bangkok 10260
+662 723 0382
MT-TH.ServiceSupport@mt.com



Accuracy Calibration Certificate

Customer

Company: Environment Research & Technology Co., Ltd.
Address: 25/114 Moo 6, Soi Chinakiet 1, Ngamwongwan Rd., Toongsoenghong
City: Laksi Contact: Ramita Taengthai
Zip / Postal: 10210
State / Province: Bangkok
Order Number:

Weighing Device

Manufacturer: Mettler Toledo Instrument Type: Weighing Instrument
Model: AB204-S Asset Number: ERTC-LIN-0048
Serial No.: 1123103723 Terminal Model: N/A
Building: N/A Terminal Serial No.: N/A
Floor: 4 Terminal Asset No.: N/A
Room: 406

Range	Max. Capacity	Readability (d)
1	220 g	0.0001 g

Procedure

Calibration Guideline: EURAMET cg-18 v. 4.0 (11/2015)
Mettler-Toledo Work Instruction: CPW002/20

This calibration certificate contains measurements for As Found and As Left calibrations.

The sensitivity/span of the weighing instrument was adjusted before As Found and As Left calibrations with a built-in weight.

In accordance with EURAMET cg-18 (11/2015), the test loads were selected to reflect the specific use of the weighing device or to accommodate specific calibration conditions.

	Temperature	Humidity
As Found	Start: 26.4 °C End: 25.3 °C	Start: 36.4 % End: 34.9 %
As Left	Start: 26.3 °C End: 25.2 °C	Start: 34.9 % End: 34.1 %

As Found Calibration Date: 15-Jan-2024
As Left Calibration Date: 15-Jan-2024
Issue Date: 15-Jan-2024
Calibrator: Nithit Jongkrod
Approved Signatory: Technical Manager / Head of Calibration Center

Calibration Certificate ID
TH3067-067-011524-ACC-TH

METTLER TOLEDO Service

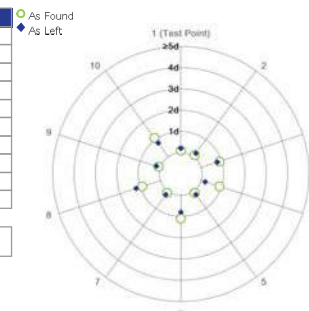
Measurement Results

Repeatability

Test Load 100 g

	As Found	As Left
1	99.9993 g	100.0002 g
2	99.9993 g	100.0002 g
3	99.9992 g	100.0003 g
4	99.9992 g	100.0002 g
5	99.9993 g	100.0002 g
6	99.9994 g	100.0003 g
7	99.9993 g	100.0002 g
8	99.9992 g	100.0001 g
9	99.9993 g	100.0002 g
10	99.9994 g	100.0003 g

Standard Deviation	0.00007 g	0.00006 g
--------------------	-----------	-----------



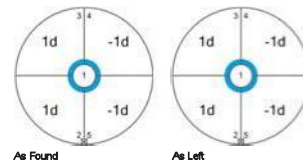
The "d" in the graph represents the readability of the range/interval in which the test was performed.
The results of this graph are based upon the absolute values of the differences from the mean value.

Eccentricity

Test Load 100 g

Position	As Found	As Left
1	99.9993 g	100.0002 g
2	99.9994 g	100.0003 g
3	99.9994 g	100.0003 g
4	99.9992 g	100.0001 g
5	99.9992 g	100.0001 g

Maximum Deviation	0.0001 g	0.0001 g
-------------------	----------	----------



The "d" in the graph represents the readability of the range/interval in which the test was performed.

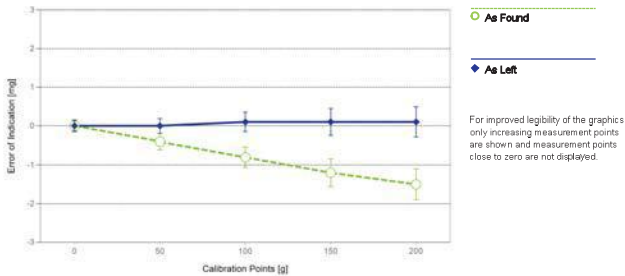
Error of Indication

As Found

	Reference Value	Indication	Error of Indication	Expanded Uncertainty	k
1	0.0000 g	0.0000 g	0.0000 g	0.16 mg	2
2	0.0500 g	0.0501 g	0.0001 g	0.17 mg	2
3	0.1000 g	0.1000 g	0.0000 g	0.17 mg	2
4	0.5000 g	0.5001 g	0.0001 g	0.17 mg	2
5	1.0000 g	1.0000 g	0.0000 g	0.17 mg	2
6	5.0000 g	4.9999 g	-0.0001 g	0.17 mg	2
7	10.0000 g	9.9998 g	-0.0002 g	0.18 mg	2
8	50.0000 g	49.9996 g	-0.0004 g	0.21 mg	2
9	100.0001 g	99.9993 g	-0.0008 g	0.26 mg	2
10	150.0001 g	149.9989 g	-0.0012 g	0.36 mg	2
11	200.0000 g	199.9985 g	-0.0015 g	0.40 mg	2

As Left

	Reference Value	Indication	Error of Indication	Expanded Uncertainty	k
1	0.0000 g	0.0000 g	0.0000 g	0.14 mg	2
2	0.0500 g	0.0500 g	0.0000 g	0.15 mg	2
3	0.1000 g	0.1000 g	0.0000 g	0.15 mg	2
4	0.5000 g	0.5000 g	0.0000 g	0.15 mg	2
5	1.0000 g	1.0000 g	0.0000 g	0.15 mg	2
6	5.0000 g	5.0000 g	0.0000 g	0.16 mg	2
7	10.0000 g	10.0000 g	0.0000 g	0.16 mg	2
8	50.0000 g	50.0000 g	0.0000 g	0.19 mg	2
9	100.0001 g	100.0002 g	0.0001 g	0.25 mg	2
10	150.0001 g	150.0002 g	0.0001 g	0.35 mg	2
11	200.0000 g	200.0001 g	0.0001 g	0.39 mg	2



The uncertainty stated is the expanded uncertainty at calibration obtained by multiplying the standard combined uncertainty by the coverage factor k – which can be larger than 2 according to EURAMET cg-18. The value of the measurand lies within the assigned range of values with a probability of approximately 95%.

The user is responsible for maintaining environmental conditions and the settings of the weighing instrument when it was calibrated. The results of this calibration certificate relate only to the calibrated item.

Test Equipment

All weights used for metrological testing are traceable to national or international standards. The weights were calibrated and certified by an accredited calibration laboratory.

Weight Set 1: OIML E2

Weight Set No.: WS52 Date of Issue: 22-Nov-2022
Certificate Number: 182272 Calibration Due Date: 21-May-2024

Thermo Hygrometer

Equipment No.: IN302 Date of Issue: 11-Oct-2023
Certificate Number: SG-H-00656/66 Calibration Due Date: 08-Oct-2024

Remarks

Value of the built-in weight adjusted
Equipment condition: Good
Next calibration according to customer's procedure
Calibration data not decide by calibration laboratory

End of Accredited Section

The information below and any attachments to this calibration certificate are not part of the accredited calibration.

Measurement Uncertainty of the Weighing Instrument in Use

Stated is the expanded uncertainty with $k=2$ in use. The formula shall be used for the estimation of the uncertainty under consideration of the errors of indication. The value R represents the net load indication in the unit of measure of the device.

Temperature coefficient for the evaluation of the measurement uncertainty in use: $3.0 \cdot 10^{-6} / K$
Temperature range on site for the evaluation of the measurement uncertainty in use: 3 K

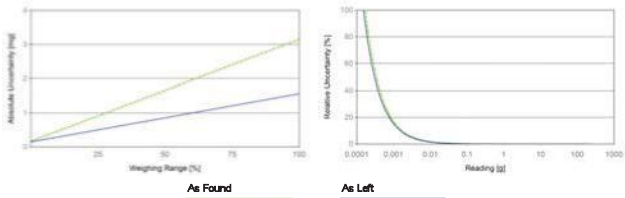
Linearization of Uncertainty Equation

Range	d		As Found	As Left
		Max		
1	0.0001 g	220 g	$U_1 = 0.17 \text{ mg} + 0.0136 \text{ mg/g} \cdot R$	$U_1 = 0.15 \text{ mg} + 0.00644 \text{ mg/g} \cdot R$

To optimize the stability of the linearization, besides of the zero load only increasing measurement points with a test load of 5% of the measurement range or larger are taken for the calculation of the linear equation.

Absolute and Relative Measurement Uncertainty in Use for Various Net Indications (Examples)

Net Indication	As Found		As Left	
0.0220 g	0.17 mg	0.77%	0.15 mg	0.68%
0.2200 g	0.17 mg	0.079%	0.15 mg	0.069%
2.2000 g	0.20 mg	0.0091%	0.16 mg	0.0075%
22.0000 g	0.47 mg	0.0021%	0.29 mg	0.0013%
220.0000 g	3.2 mg	0.0014%	1.6 mg	0.00071%



GWP®
Certificate



As Found



As Left



The weighing device meets the given process requirements.

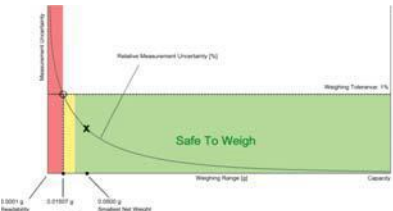
The weighing device meets the given process requirements.

Tests Performed: ☒ As Found ☒ As Left

Process Requirements

Weighing Tolerance: 1% | Smallest Net Weight: 0.0500 g | Safety Factor: 2

Safe Weighing Range



While the values in this graph reflect the actual calibration results, the measurement uncertainty curves are simply a visual representation. This graph reflects As Left testing, unless only As Found was performed.

Minimum Weight

As Found Minimum Weight Table

Minimum weights for different weighing tolerances and safety factors					
Tolerance	Safety Factor				
	1	2	3	5	10
0.1%	0.17097 g	0.34671 g	0.52742 g	0.90460 g	1.95110 g
0.2%	0.08490 g	0.17097 g	0.25823 g	0.43643 g	0.90460 g
0.5%	0.03382 g	0.06783 g	0.10202 g	0.17097 g	0.34671 g
1%	0.01689 g	0.03382 g	0.05080 g	0.08490 g	0.17097 g
2%	0.00844 g	0.01689 g	0.02535 g	0.04231 g	0.08490 g
5%	0.00337 g	0.00675 g	0.01013 g	0.01689 g	0.03382 g

Pass: The determined minimum weight meets the requirement for the smallest net weight.

As Left Minimum Weight Table

Minimum weights for different weighing tolerances and safety factors					
Tolerance	Safety Factor				
	1	2	3	5	10
0.1%	0.15153 g	0.30504 g	0.46056 g	0.77780 g	1.60910 g
0.2%	0.07552 g	0.15153 g	0.22803 g	0.38254 g	0.77780 g
0.5%	0.03015 g	0.06038 g	0.09068 g	0.15153 g	0.30504 g
1%	0.01507 g	0.03015 g	0.04525 g	0.07552 g	0.15153 g
2%	0.00753 g	0.01507 g	0.02261 g	0.03770 g	0.07552 g
5%	0.00301 g	0.00602 g	0.00904 g	0.01507 g	0.03015 g

Pass: The determined minimum weight meets the requirement for the smallest net weight.

At these net minimum weight values, the measurement uncertainty of the weighing device is equal to or less than 1/1 (no safety factor), 1/2, 1/3, 1/5, or 1/10 of the required tolerance. The values are calculated with k = 2 and based on the linear formula of the measurement uncertainty of the weighing device in use.

The safety factor for As Found is always 1. This implies no safety factor. As Found testing looks at the behavior of the instrument from the past until test occurred. For the past, it is necessary to know that the tolerance was met, but not the safety factor. The safety factor is a proactive measure to apply for future measurements.

Notes on minimum weight values in above table:

1. If "N/A" is shown above, no appropriate value could be calculated.
2. METTLER TOLEDO is not responsible for the definition of the process requirements.

Measurement Results

Results Summary

	Repeatability	Eccentricity	Error of Indication
As Found	✓	✓	✓
As Left	✓	✓	✓

✓ = Passed
✗ = Failed
⚠ = Safety Factor not met

Repeatability

Test Load: 100 g

		As Found		As Left	
Tolerance	Control Limit	Std. Deviation	Result	Std. Deviation	Result
0.1%	N/A	0.00007 g*	N/A	0.00006 g*	N/A
0.2%	0.00005 g		✗		✗
0.5%	0.00013 g		✓		✓
1%	0.00025 g		✓		✓
2%	0.00050 g		✓		✓
5%	0.00125 g		✓		✓

*The calculated standard deviation value is below the rounding error of the balance. The 0.41*drule is used for the assessment of this repeatability test and the calculation of the minimum weight.

The weighing tolerance is met if the standard deviation is less than or equal to the corresponding control limit.

Eccentricity

Test Load: 100 g

		As Found		As Left	
Tolerance	Control Limit	Deviation	Result	Deviation	Result
0.1%	0.0500 g	0.0001 g	✓	0.0001 g	✓
0.2%	0.1000 g		✓		✓
0.5%	0.2500 g		✓		✓
1%	0.5000 g		✓		✓
2%	1.0000 g		✓		✓
5%	2.5000 g		✓		✓

The weighing tolerance is met if the deviation is less than or equal to the corresponding control limit.

Error of Indication

As Found

		Control limits for various weighing tolerances					
Reference Value	Error	0.1%	0.2%	0.5%	1%	2%	5%
0.0000 g	0.0000 g	N/A	N/A	N/A	N/A	N/A	N/A
50.0000 g	-0.0004 g	0.0250 g	0.0500 g	0.1250 g	0.2500 g	0.5000 g	1.2500 g
100.0001 g	-0.0008 g	0.0500 g	0.1000 g	0.2500 g	0.5000 g	1.0000 g	2.5000 g
150.0001 g	-0.0012 g	0.0750 g	0.1500 g	0.3750 g	0.7500 g	1.5000 g	3.7500 g
200.0000 g	-0.0015 g	0.1000 g	0.2000 g	0.5000 g	1.0000 g	2.0000 g	5.0000 g
Result		✓	✓	✓	✓	✓	✓

As Left

		Control limits for various weighing tolerances					
Reference Value	Error	0.1%	0.2%	0.5%	1%	2%	5%
0.0000 g	0.0000 g	N/A	N/A	N/A	N/A	N/A	N/A
50.0000 g	0.0000 g	0.0250 g	0.0500 g	0.1250 g	0.2500 g	0.5000 g	1.2500 g
100.0001 g	0.0001 g	0.0500 g	0.1000 g	0.2500 g	0.5000 g	1.0000 g	2.5000 g
150.0001 g	0.0001 g	0.0750 g	0.1500 g	0.3750 g	0.7500 g	1.5000 g	3.7500 g
200.0000 g	0.0001 g	0.1000 g	0.2000 g	0.5000 g	1.0000 g	2.0000 g	5.0000 g
Result		✓	✓	✓	✓	✓	✓

The weighing tolerance is met if the error (of indication) for each test point is less than or equal to the corresponding control limit for that particular weighing tolerance. Results at or close to the zero point cannot be assessed.



Environment Research & Technology Company Limited
25/114 Mo 6 Soi Chinnakhet 1, Ngam Wang Wan Road,
Thong Song Hong, Lak Si, Bangkok 10230
Tel 8-2954-7745-6 Fax 8-2954-77347
E-mail : enviresearch@envi.co.th
www.enviresearch.co.th
Head Office/TS: ID 0185 542 964 961

Calibration Data of NOx Analyzer

Analyzer Performance Test

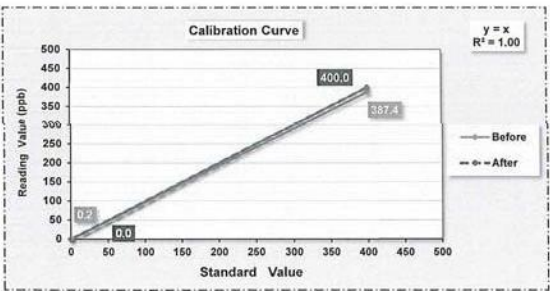
Equipment	Gas Analyzer (NOx)	Customer Name	พินิจ วิญญูธรรม
Manufacture	API	Location	Envi Research
Model	200A	Quotation	2024-01649
Serial No.	2119	Calibration Date	September 9, 2024
Analyzer Unit	ppb		

Instruments for Calibration

Instruments	Manufacture	Model	Serial Number
Zero Air Supply	Thermo Env.	111	0700419829
Dynamic Dilution Calibrator	Tanabyle	300	0165
Standard Gas Components	CO = 4,516 ppm		
Cylinder No. : EB0123013	NO = 55.3 ppm		
Expire Date : Oct 22, 2027	SO ₂ = 54.9 ppm		

Single Point Calibration

Standard Gas	Standard Gas Value	Analyzer Value							
		NO _x (ppb)		NO (ppb)		NO ₂ (ppb)		Stability	
		Before	After	Before	After	Before	After	Before	After
Zero	0	-0.7	0.0	0.2	0.0	-0.9	0.0	-	-
Span	400	387.4	405.0	387.4	400.0	0.0	5.0	-	-



STATUS TEST AND VALIDATION OF NOx ANALYZER MODEL 200A

Parameter	Display As	Unit	Observed Value		Nominal Range
			Before Adjust	After Adjust	
Range	RANGE	ppb	500	500	0 - 500 standard
Stability	STABIL	ppb	0	0	< 2 with zero air
Sample Flow	SAMP FL	cc / min	460	5522	500 +/- 50
Ozone Flow	OZONE FL	cc / min	81	80	80 +/- 10
PMT signal	PMT	mV	107	41	0 to 5,000
Auto - Zero	AZERO	mV	37	39	-20 to 150
High Voltage Power Supply	HVPS	V	78	776	450 to 900
Reaction Cell Temperature	RCELL TEMP	°C	50	50	50 +/- 1
Box Temperature	BOX TEMP	°C	34	34	Ambient temp. +3 / -7
PMT Temperature	PMT TEMP	°C	7	7	7 +/- 1
Converter Temperature	MOLY TEMP	°C	316	315	315 +/- 5
Reaction Cell Pressure	RCEL	In - Hg - A	10	8	2 to 10 (Constant)
Sample Pressure	SAMP	In - Hg - A	31	30	Ambient - 1 (Constant)
NO _x Slope	NO _x SLOPE	-	1.157	1.050	1.000 +/- 0.300
NO _x Offset	NO _x OFFSET	mV	-3	-8	0 +/- 20
NO Slope	NO SLOPE	-	1.148	1.025	1.000 +/- 0.300
NO Offset	NO OFFSET	mV	-1	-9	0 +/- 20

Calibrate By :

(MR.PANUPON PODANG)
September 9, 2024

Checked By :

(MS.SUTATIP IM-NOI)
September 9, 2024

Calibration Data of NOx Analyzer

Analyzer Performance Test

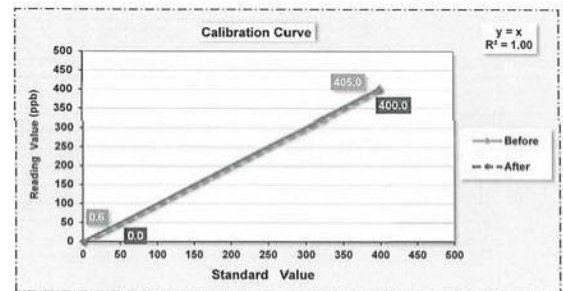
Equipment	Gas Analyzer (NO _x)	Customer Name	วิสาหกิจ ก้าวไกล
Manufacture	API	Location	Envi Research
Model	200A	Quotation	2024-01649
Serial No.	56	Calibration Date	September 16, 2024
Analyzer Unit	ppb		

Instruments for Calibration

Instruments	Manufacture	Model	Serial Number
Zero Air Supply	Thermo Env.	111	0700419829
Dynamic Dilution Calibrator	Tanabyte	300	0165
Standard Gas Components	CO = 4.516 ppm NO = 55.3 ppm SO ₂ = 54.9 ppm		
Cylinder No :	EB0123013		
Expire Date :	Oct 22, 2027		

Single Point Calibration

Standard Gas	Standard Gas Value	Analyzer Value								% Abs Error
		NO _x (ppb)		NO (ppb)		NO ₂ (ppb)		Stability		
		Before	After	Before	After	Before	After	Before	After	
Zero	0	-1.5	0.0	0.6	0.0	-2.1	0.0	-	-	-
Span	400	411.1	405.0	405.0	400.0	6.1	5.0	-	-	1.3



STATUS TEST AND VALIDATION OF NOx ANALYZER MODEL 200A

Parameter	Display As	Unit	Observed Value		Nominal Range
			Before Adjust	After Adjust	
Range	RANGE	ppb	500	500	0 - 500 standard
Stability	STABIL	ppb	1	1	< 2 with zero air
Sample Flow	SAMP FL	cc / min	480	480	500 +/- 50
Ozone Flow	OZONE FL	cc / min	80	80	80 +/- 10
PMT signal	PMT	mV	19	20	0 to 5,000
Auto - Zero	AZERO	mV	13	13	-20 to 150
High Voltage Power Supply	HVPS	V	790	790	450 to 900
Reaction Cell Temperature	RCELL TEMP	°C	50	50	50 +/- 1
Box Temperature	BOX TEMP	°C	31	30	Ambient temp. +3 / -7
PMT Temperature	PMT TEMP	°C	7	7	7 +/- 1
Converter Temperature	MOLY TEMP	°C	314	315	315 +/- 5
Reaction Cell Pressure	RCEL	In - Hg - A	10	10	2 to 10 (Constant)
Sample Pressure	SAMP	In - Hg - A	31	31	Ambient - 1 (Constant)
NO _x Slope	NO _x SLOPE	-	1.216	1.216	1.000 +/- 0.300
NO _x Offset	NO _x OFFSET	mV	-5	-5	0 +/- 20
NO Slope	NO SLOPE	-	1.224	1.224	1.000 +/- 0.300
NO Offset	NO OFFSET	mV	-3	-3	0 +/- 20

Calibrate By :

(MR.PANUPON PODANG)
September 16, 2024

Checked By :

(MS.SUTATIP IM-NOI)
September 16, 2024

Calibration Data of NOx Analyzer

Analyzer Performance Test

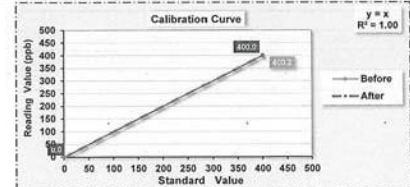
Equipment	Gas Analyzer (NO _x)	Customer Name	วิสาหกิจ ก้าวไกล
Manufacture	HORIBA	Location	Envi Research
Model	APNA-360	Quotation	2024-01649
Serial No.	EYC70090	Calibration Date	October 5, 2024
Analyzer Unit	ppm		

Instruments for Calibration

Instruments	Manufacture	Model	Serial Number
Zero Air Supply	Thermo Env.	111	0700419829
Dynamic Dilution Calibrator	Tanabyte	300	0165
Standard Gas Components	CO = 4.516 ppm NO = 55.3 ppm SO ₂ = 54.9 ppm		
Cylinder No :	EB0123013		
Expire Date :	Oct 22, 2027		

Single Point Calibration

Standard Gas	Standard Gas Value	Analyzer Value								% Abs Error
		NO _x (ppb)		NO (ppb)		NO ₂ (ppb)		Stability		
		Before	After	Before	After	Before	After	Before	After	
Zero	0	-0.4	0.0	-0.4	0.0	0.0	0.0	-	-	-
Span	400	399.5	400.0	400.2	400.0	-0.7	0.0	-	-	0.0



STATUS TEST AND VALIDATION OF NOx ANALYZER MODEL APNA-360

Parameter	Unit	Observed Value		Nominal Range
		Before Adjust	After Adjust	
Range	ppm	0.5	0.5	0.1 - 1.0 Standard
Signal NO	mV	4.4	1.1	Voltage of the measured NO value
Signal NO _x	mV	2.6	14.1	Voltage of the measured NO _x value
Detector	kPa	86.2	79.6	(Present Air Pressure/101.3 x100 - 20) ± 4
Sample Flow	LPM	1.2	0.7	1.1 ± 0.3
NO Slope	-	1.17340	1.23990	0.50000 - 2.00000
NO _x Slope	-	1.23590	1.22270	0.50000 - 2.00000
Motherboard Status	-	OK	OK	OK
Alarm Detected	-	None	None	None

Calibrate By :

(MR.PANUPON PODANG)
October 5, 2024

Checked By :

(MS.SUTATIP IM-NOI)
October 5, 2024

Calibration Data of NOx Analyzer

Analyzer Performance Test

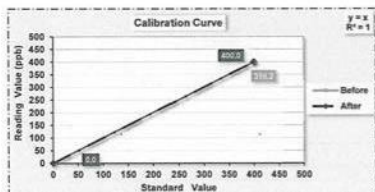
Equipment	Gas Analyzer (NOx)	Customer Name	พิกุล วรรณวิเศษ
Manufacturer	HORIBA	Location	Envr Research
Model	APNA-370	Quotation	2024-01649
Serial No.	U9L550WU	Calibration Date	September 21, 2024
Analyzer Unit	ppb		

Instruments for Calibration

Instruments	Manufacturer	Model	Serial Number
Zero Air Supply	Thermo Env.	111	0700419829
Dynamic Dilution Calibrator	Tanabyte	300	0165
Standard Gas Components	CO = 4.516 ppm		
Cylinder No : EB0123013	NO = 55.3 ppm		
Expire Date : Oct 22, 2027	SO ₂ = 54.9 ppm		

Single Point Calibration

Standard Gas	Standard Gas Value	Analyzer Value				Stability	% Abs Error
		Before	After	Before	After		
Zero	0	-0.8	0.0	-0.2	0.0	-	-
Span	400	399.9	400.0	399.2	400.0	0.7	0.2



STATUS TEST AND VALIDATION OF NOx ANALYZER MODEL APNA-370

Parameter	Unit	Observed Value		Nominal Range
		Before Adjust	After Adjust	
Range	ppb	500	500	0 - 500 Standard
Signal NO	mV	1.0	1.0	Voltage of the measured NO value
Signal NOx	mV	10.8	10.9	Voltage of the measured NOx value
Detector	°C	42.1	42.1	43 °C ± 5 °C
Ambient	kPa	101.2	101.3	Current atmospheric pressure
DC 24V	V	23.7	23.7	24V ±0.5
DC 5V	V	5.0	5.0	5V ±0.5
NO Slope	-	1.13670	1.13670	0.50000 - 2.0000
NOx Slope	-	1.14930	1.14930	0.50000 - 2.0000

Calibrate By : (MR.PANUPON PODANG)
September 21, 2024

Checked By : (MS.SUTATIP IM-NOI)
September 21, 2024

Calibration Data of SO₂ Analyzer

Analyzer Performance Test

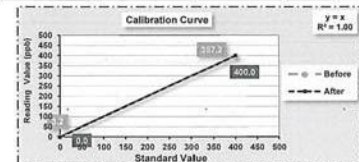
Equipment	Gas Analyzer (SO ₂)	Customer Name	พิกุล วรรณวิเศษ
Manufacturer	Horiba	Location	Envr Research
Model	APSA-370	Quotation	2024-01649
Serial No.	JH9G53FU	Calibration Date	September 17, 2024
Analyzer Unit	ppb		

Instruments for Calibration

Instruments	Manufacturer	Model	Serial Number
Zero Air Supply	Thermo Env.	111	0700419829
Dynamic Dilution Calibrator	Tanabyte	300	0165
Standard Gas Components	CO = 4.516 ppm		
Cylinder No : EB0123013	NO = 55.3 ppm		
Expire Date : Oct 22, 2027	SO ₂ = 54.9 ppm		

Single Point Calibration

Standard Gas	Standard Gas Value	Analyzer Value (ppb)		Stability	% Abs Error
		Before	After		
Zero	0	3.2	0.0	-	-
Span	400	397.2	400.0	-	0.7



STATUS TEST AND VALIDATION OF SO₂ ANALYZER MODEL APSA-370

Parameter	Unit	Observed Value		Nominal Range
		Before Adjust	After Adjust	
Range	ppb	500	500	0 - 500 Standard
Signal (SO ₂)	mV	28.7	28.8	Voltage of the measured SO ₂ value
LAMP	mV	301.0	301.0	200 mV - 1200 mV
CELL	°C	32.2	32.1	Ambient temperature + 5 °C - 15 °C
PUMP	Kpa	39.4	39.3	66 kPa or less
AMBIENT	kPa	100.0	100.0	Current atmospheric pressure
DC 24V	V	24.0	24.0	24 V ±0.5 V
DC 5V	V	5.0	5.0	5 V ±0.5 V

Calibrate By : (MR.PANUPON PODANG)
September 17, 2024

Checked By : (MS.SUTATIP IM-NOI)
September 17, 2024

Calibration Data of SO₂ Analyzer

Analyzer Performance Test

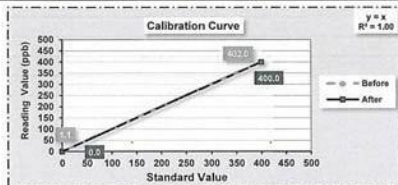
Equipment	Gas Analyzer (SO ₂)	Customer Name	พิกุล วรรณวิเศษ
Manufacturer	Thermo	Location	Envr Research
Model	43i-BNSAA	Quotation	2024-01649
Serial No.	CM14430002	Calibration Date	September 1, 2024
Analyzer Unit	ppb		

Instruments for Calibration

Instruments	Manufacturer	Model	Serial Number
Zero Air Supply	Thermo Env.	111	0700419829
Dynamic Dilution Calibrator	Tanabyte	300	0165
Standard Gas Components	CO = 4.516 ppm		
Cylinder No : EB0123013	NO = 55.3 ppm		
Expire Date : Oct 22, 2027	SO ₂ = 54.9 ppm		

Single Point Calibration

Standard Gas	Standard Gas Value	Analyzer Value (ppb)		Stability	% Abs Error
		Before	After		
Zero	0	1.1	0.0	-	-
Span	400	402.0	400.0	-	0.5



STATUS TEST AND VALIDATION OF SO₂ ANALYZER MODEL 43i-BNSAA

Parameter	Display As	Unit	Observed Value		Nominal Range
			Before Adjust	After Adjust	
Range	RANGE	ppb	500	500	0 - 500 standard
Internal Temperature	INTERNAL	°C	35.4	36.4	8.0 °C to 45.0 °C
Chamber Temp	CHAMBER	°C	44.9	44.9	43.0 °C to 47.0 °C
Pressure	PRESSURE	mmHg	733.6	732.3	400.0 to 1,000
Sample Flow	SAMP FLOW	LPM	0.467	0.467	0.350 to 0.750
Lamp Intensity	LAMP INTENSITY	%	92	92	20 to 100
Lamp Voltage	LAMP VOLTAGE	V	1007	1008	500 to 1200
SO ₂ Concentration	SO ₂ CONCENTRATION	ppb	4.0	1.4	0 to 10,000
Motherboard Status	MOTHERBOARD STATUS	-	OK	OK	OK
Interface Status	INTERFACE STATUS	-	OK	OK	OK

Calibrate By : (MR.PANUPON PODANG)
September 1, 2024

Checked By : (MS.SUTATIP IM-NOI)
September 1, 2024

Calibration Data of SO₂ Analyzer

Analyzer Performance Test

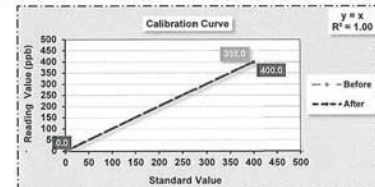
Equipment	Gas Analyzer (SO ₂)	Customer Name	พิกุล วรรณวิเศษ
Manufacturer	Thermo	Location	Envr Research
Model	43C	Quotation	2024-01649
Serial No.	0607415768	Calibration Date	September 10, 2024
Analyzer Unit	ppb		

Instruments for Calibration

Instruments	Manufacturer	Model	Serial Number
Zero Air Supply	Thermo Env.	111	0700419829
Dynamic Dilution Calibrator	Tanabyte	300	0165
Standard Gas Components	CO = 4.516 ppm		
Cylinder No : EB0123013	NO = 55.3 ppm		
Expire Date : Oct 22, 2027	SO ₂ = 54.9 ppm		

Single Point Calibration

Standard Gas	Standard Gas Value	Analyzer Value (ppb)		Stability	% Abs Error
		Before	After		
Zero	0	-0.9	0.0	-	-
Span	400	396.0	400.0	-	0.5



STATUS TEST AND VALIDATION OF SO₂ ANALYZER MODEL 43C

Parameter	Display As	Unit	Observed Value		Nominal Range
			Before Adjust	After Adjust	
Range	RANGE	ppb	500	500	0 - 500 standard
Internal Temperature	INTERNAL	°C	30.8	30.9	8.0 °C to 47.0 °C
Chamber Temp	CHAMBER	°C	45.2	45.1	43.0 °C to 47.0 °C
Pressure	PRESSURE	mmHg	718.6	718.7	400.0 to 1,000
Sample Flow	SAMP FLOW	LPM	0.400	0.397	0.350 to 1,000
Lamp Intensity	INTENSITY	Hz	32,850	33,160	20,000 to 50,000
Lamp Voltage	LAMP VOLTAGE	V	893	893	750 to 1,200
SO ₂ Concentration	SO ₂ CONCENTRATION	ppb	0.2	0.8	0 to 10,000
Motherboard Status	MOTHERBOARD STATUS	-	OK	OK	OK
Interface Status	INTERFACE STATUS	-	OK	OK	OK

Calibrate By : (MR.PANUPON PODANG)
September 10, 2024

Checked By : (MS.SUTATIP IM-NOI)
September 10, 2024

Calibration Data of SO₂ Analyzer

Analyzer Performance Test

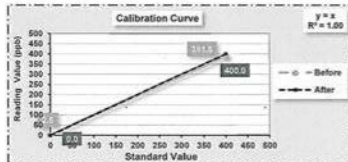
Equipment	Gas Analyzer (SO ₂)	Customer Name	วิภาณี สาริสาณกุล
Manufacture	Horiba	Location	Envi Research
Model	APSA-370	Quotation	2024-01649
Serial No.	12EBX34P	Calibration Date	September 8, 2024
Analyzer Unit	ppb		

Instruments for Calibration

Instruments	Manufacture	Model	Serial Number
Zero Air Supply	Thermo Env.	111	0700419529
Dynamic Dilution Calibrator	Tanabyte	300	0165
Standard Gas Components	CO = 4,516 ppm		
Cylinder No : EBO123013	NO = 55.3 ppm		
Expire Date : Oct 22, 2027	SO ₂ = 54.9 ppm		

Single Point Calibration

Standard Gas	Standard Gas Value	Analyzer Value (ppb)	Stability	% Abs Error
		Before	After	
Zero	0	2.5	0.0	-
Span	400	391.5	400.0	2.1



STATUS TEST AND VALIDATION OF SO₂ ANALYZER MODEL APSA-370

Parameter	Unit	Observed Value		Nominal Range
		Before Adjust	After Adjust	
Range	ppb	500	500	0 - 500 Standard
Signal (SO ₂)	mV	32.6	32.5	Voltage of the measured SO ₂ value
LAMP	mV	249.3	248.2	200 mV - 1200 mV
CELL	°C	32.3	32.3	Ambient temperature ± 5 °C - 15 °C
PUMP	Kpa	43.5	43.0	65 kPa or less
AMBIENT	kPa	100.9	100.9	Current atmospheric pressure
DC 24V	V	24.0	24.0	24 V ±0.5 V
DC 5V	V	4.9	4.9	5 V ±0.5 V

Calibrate By:

(MR.PANUPON PODANG)
September 9, 2024

Checked By:

(MS.SUTATIP IM-NOI)
September 9, 2024

Page 1

CERTIFICATE OF ANALYSIS

Grade of Product: EPA Protocol

Part Number: E04N199E15A0292 Reference Number: 160-401604495-1
Cylinder Number: EBO123013 Cylinder Volume: 144.4 Cubic Feet
Laboratory: 124 - Plumsteadville - PA Cylinder Pressure: 2015 PSIG
PGVP Number: A12019 Valve Outlet: 660
Gas Code: CO,NO,NOX,SO2,BALN Certification Date: Oct 22, 2019

Expiration Date: Oct 22, 2027

Certification performed in accordance with "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards (May 2012)" document EPA 600/R-12/031, using the assay procedures listed. Analytical Methodology does not require correction for analytical interference. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a volume/volume basis unless otherwise noted.
Do Not Use This Cylinder below 100 psig, i.e. 0.7 megapascals.

Component	Requested Concentration	Actual Concentration	Protocol Method	Total Relative Uncertainty	Assay Dates
NOX	55.00 PPM	55.27 PPM	G1	±0.8% NIST Traceable	10/14/2019, 10/22/2019
NITRIC OXIDE	55.00 PPM	55.27 PPM	G1	±0.8% NIST Traceable	10/14/2019, 10/22/2019
SULFUR DIOXIDE	55.00 PPM	54.93 PPM	G1	±0.9% NIST Traceable	10/14/2019, 10/22/2019
CARBON MONOXIDE	4500 PPM	4516 PPM	G1	±0.6% NIST Traceable	10/14/2019
NITROGEN	Balance				

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
NTRM	13010429	KAL004123	97.6 PPM NITRIC OXIDE/NITROGEN	±0.8%	Jul 23, 2025
NTRM	13010429	KAL004123	97.6 PPM NON/NITROGEN	±0.8%	Jul 23, 2025
NTRM	16010235	KAL004419	97.69 PPM SULFUR DIOXIDE/NITROGEN	±0.8%	Dec 23, 2021
NTRM	08012318	KAL004620	4857 PPM CARBON MONOXIDE/NITROGEN	±0.6%	Jun 07, 2024

Instrument/Make/Model	ANALYTICAL EQUIPMENT	Analytical Principle	Last Multipoint Calibration
MKS FTIR - CO - 000928781	FTIR		Sep 26, 2019
MKS FTIR - NO - 000928781	FTIR		Oct 18, 2019
MKS FTIR - NOx - 000928781	FTIR		Oct 18, 2019
MKS FTIR - SO2 - 000928781	FTIR		Oct 03, 2019

Triad Data Available Upon Request

NOTES: Gross Weight: 28.0 Kg, Net Weight: 4.6 Kg.



Approved for Release

Page 1 of 160-401604495-1



THAI METEOROLOGICAL DEPARTMENT

4353 Sukhumvit, Bangna, Bangkok 10260 Tel. 081-454-2804, 0-2399-0469

Calibration Certificate

Issued by : Calibration & Test Section : Meteorological Instruments Bureau

Date of Issue : 17 April, 2024

Certification No. 185/24

Page : 1 of 5

Object : Weather Station

Manufacturer : Davis Instruments Inc.

Type : Vantage Pro2

Serial No. : AS160105025 ID No. : No.24

Customer : Environment Research & Technology Company Limited.
25/113-114 Moo 6 Soi Chinakhet 1, Ngamwongwan Road,
Toongsonghong, Laksi, Bangkok 10210.

Calibration Condition : Temperature 25.1 °C Barometric Pressure 1009.3 hPa

NATIONAL STANDARD WIND TUNNEL : Wind Aloft Plotting Board

: Micromanometer Theodor Friedrichs FC014 Serial No. 9310119 : HOOK GAGE NO 1425

N.I.S.T. Test Reference Number 731/241460 : Standard Velocity at 20 - 30 m/sec

: Ultrasonic Anemometer Model DA-650-3TV (sensor TR-90AH)
Serial Number 110730029 (sensor 120629586)

JAPAN QUALITY ASSURANCE ORGANIZATION : Standard Velocity at 0 - 20 m/sec

STANDARD THERMOMETER : Theodor Friedrichs Dry No.8390/94 Wet No. 8389/94
: Thermocouple No.91881 : testo, testo 545 Serial No. 05604951

Calibrated by : Mr. Watcharapol Subwat

Mr. Pis

Mechanical Engineer

(Authorized Signature)
for the Chief
Sub-Standard Instrument



THAI METEOROLOGICAL DEPARTMENT

4353 Sukhumvit, Bangna, Bangkok 10260 Tel. 081-454-2804, 0-2399-0469

The Result of Calibration

Certification No. 185/24

17 April, 2024

Page : 2 of 5

Standard	HOOK GAGE NO. 1425			TESTED ANEMOMETER	
	Pressure	Vacuum	Velocity	Velocity	Correction
Ultrasonic Anemometer					
m/sec	inches 100	inches 100	m/sec	m/sec	m/sec
1.00	-	-	-	0.9	0.10
3.02	-	-	-	2.7	0.32
5.00	-	-	-	4.9	0.10
7.00	-	-	-	6.7	0.30
9.02	-	-	-	8.9	0.12
11.01	-	-	-	10.7	0.31
13.01	-	-	-	13.0	0.01
15.01	-	-	-	14.8	0.21
17.02	-	-	-	17.0	0.02
20.02	-	-	-	20.0	0.02

Wind Aloft Plotting Board.	
U.S. DEPARTMENT OF COMMERCE WEATHER BUREAU	
WIND DIRECTION	TESTED WIND DIRECTION
0	0
90	90
180	180
270	270

Calibrated by :

Mr. Watcharapol Subwat
Mechanical Engineer





THAI METEOROLOGICAL DEPARTMENT

4353 Sukhumvit, Bangna, Bangkok 10260 Tel. 081-454-2804, 0-2399-0469

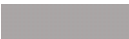
The Result of Calibration

17 April, 2024

Certification No. 185/24

Page : 3 of 5

Standard Temp. °C	Temperature Sensor Reading	
	Reading °C	Correction °C
45.3	45.3	0.0
30.1	30.2	-0.1
15.2	15.3	-0.1

Calibrated by : 
Mr. Watcharapol Subwat
Mechanical Engineer



THAI METEOROLOGICAL DEPARTMENT

4353 Sukhumvit, Bangna, Bangkok 10260 Tel. 081-454-2804, 0-2399-0469

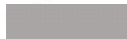
The Result of Calibration

17 April, 2024

Certification No. 185/24

Page : 4 of 5

Standard Humidity % R.H.	Temperature Sensor Reading	
	Reading % R.H.	Correction % R.H.
45.6	46	-0.4
65.2	67	-1.8
91.5	94	-2.5

Calibrated by : 
Mr. Watcharapol Subwat
Mechanical Engineer



Date of Issue 17 April, 2024


Certification No. 185/24

Page: 5 of 5

ใบรับรอง

หนังสือฉบับนี้ขอรับรองว่า เครื่องวัดฝน ชื่อ Davis Instruments แบบ TIPPING
BUCKET Product No. 7852 ID No. 24 ที่การสอบเทียบกับแก้ววัดฝนแบบแก้วดวง GAUGE
DIAMETER 8.0 INCHES, NEGRETTI & ZAMBRA LONDON No. 71082 และสามารถ
นำไปใช้ได้ มีค่าถูกต้องตามรายละเอียดของเครื่องมือ (0.2 mm./TIP)



ลงชื่อ... 
(นายวัชรพล ทวีวัฒน์)
วิศวกรชำนาญการ



THAI METEOROLOGICAL DEPARTMENT

4353 Sukhumvit, Bangna, Bangkok 10260 Tel. 081-454-2804, 0-2399-0469

Calibration Certificate


Issued by : Calibration & Test Section : Meteorological Instruments Bureau

Date of Issue 28 August, 2024

Certification No. 324/24

Page : 1 of 2

Object : Wind speed and wind direction
Manufacturer : Davis Instruments Inc.
Type : Weather Wizard II Product No. 7425
Serial No. : MC70909A08 ID No. : No.19
Customer : Environment Research & Technology Company Limited.
25/113-114 Moo 6 Soi Chinaket 1, Ngamwongwan Road,
Toongsonghong, Laksi, Bangkok 10210.
Calibration Condition : Temperature 25.1 °C Barometric Pressure 1007.1 hPa
NATIONAL STANDARD WIND TUNNEL :
: Micromanometer Theodor Friedrichs FC014 Serial No. 9310119
: HOOK GAGE NO 1425 Pilot Tube Theodor Friedrichs Type 0800.0000 serial 9023
N.I.S.T. Test Reference Number 731/241460 : Standard Velocity at 20 - 30 m/sec
: Ultrasonic Anemometer Model DA-650-3TV (sensor TR-90AH)
Serial Number 110730029 (sensor 120629586)
JAPAN QUALITY ASSURANCE ORGANIZATION : Standard Velocity at 0 - 20 m/sec

Calibrated by 
Mr. Watcharapol Subwat
Mechanical Engineer

Signed 
Mr. Pisood Promsut

(Authorised Signatory)
for the Chief
Sub-Standard Instrument



THAI METEOROLOGICAL DEPARTMENT

4353 Sukhumvit, Bangna, Bangkok 10260 Tel. 081-454-2804,0-2399-0469

The Result of Calibration

Certification No. 324/24

28 August, 2024

Page : 2 of 2

Standard	HOOK GAGE NO. 1425			TESTED ANEMOMETER	
	Pressure	Vacuum	Velocity	Velocity	Correction
Ultrasonic Anemometer	inches H ₂ O	inches H ₂ O	m/sec	m/sec	m/sec
1.00	-	-	-	0.4	0.60
3.02	-	-	-	2.7	0.32
5.00	-	-	-	4.9	0.10
7.04	-	-	-	6.7	0.34
9.02	-	-	-	9.0	0.02
11.01	-	-	-	10.7	0.31
13.01	-	-	-	13.0	0.01
15.01	-	-	-	14.8	0.21
17.02	-	-	-	17.0	0.02
20.02	-	-	-	19.8	0.22

Wind Aloft Plotting Board.	
US.DEPARTMENT OF COMMERCE WEATHER BUREAU	
WIND DIRECTION	TESTED WIND DIRECTION
0	0
90	90
180	180
270	270

Calibrated by :

Mr. Watcharapol Subwat
Mechanical Engineer

Calibration & Test Section
Meteorological Instruments Bureau



THAI METEOROLOGICAL DEPARTMENT

4353 Sukhumvit, Bangna, Bangkok 10260 Tel. 081-454-2804,0-2399-0469

Calibration Certificate

Issued by : Calibration & Test Section : Meteorological Instruments Bureau

Date of Issue 17 April, 2024

Certification No. 183/24

Page : 1 of 2

Object : Wind speed and wind direction

Manufacturer : Davis Instruments Inc.

Type : Weather Wizard III Product No. 7425

Serial No. : WC21023B64 ID No. : No.6

Customer : Environment Research & Technology Company Limited.
25/113-114 Moo 6 Soi Chinaket 1, Ngamwongwan Road,
Toongsonghong, Laksi, Bangkok 10210.

Calibration Condition : Temperature 25.1 °C Barometric Pressure 1008.8 hPa

NATIONAL STANDARD WIND TUNNEL :

: Micromanometer Theodor Friedrichs FC014 Serial No. 9310119

: HOOK GAGE NO 1425 Pitot Tube Theodor Friedrichs Type 0800.0000 serial 9023

N.I.S.T. Test Reference Number 731/241460 : Standard Velocity at 20 - 30 m/sec

: Ultrasonic Anemometer Model DA-650-3TV (sensor TR-90AH)

Serial Number 110730029 (sensor 120629586)

JAPAN QUALITY ASSURANCE ORGANIZATION : Standard Velocity at 0 - 20 m/sec

Calibrated by

Mr. Watcharapol Subwat
Mechanical Engineer

Signed

Mr. Pisod Promsut

(Authorised Signatory)
for the Chief
Sub-Standard Instrument



THAI METEOROLOGICAL DEPARTMENT

4353 Sukhumvit, Bangna, Bangkok 10260 Tel. 081-454-2804,0-2399-0469

The Result of Calibration

Certification No. 183/24

17 April, 2024

Page : 2 of 2

Standard	HOOK GAGE NO. 1425			TESTED ANEMOMETER	
	Pressure	Vacuum	Velocity	Velocity	Correction
Ultrasonic Anemometer	inches H ₂ O	inches H ₂ O	m/sec	m/sec	m/sec
1.00	-	-	-	0.9	0.10
3.02	-	-	-	2.7	0.32
5.00	-	-	-	4.5	0.50
7.04	-	-	-	6.7	0.34
9.02	-	-	-	8.5	0.52
11.01	-	-	-	10.7	0.31
13.01	-	-	-	12.5	0.51
15.01	-	-	-	14.7	0.31
17.02	-	-	-	16.5	0.52
20.02	-	-	-	20.0	0.02

Wind Aloft Plotting Board.	
US.DEPARTMENT OF COMMERCE WEATHER BUREAU	
WIND DIRECTION	TESTED WIND DIRECTION
0	0
90	90
180	180
270	270

Calibrated by :

Mr. Watcharapol Subwat
Mechanical Engineer

Calibration & Test Section
Meteorological Instruments Bureau



THAI METEOROLOGICAL DEPARTMENT

4353 Sukhumvit, Bangna, Bangkok 10260 Tel. 081-454-2804,0-2399-0469

Calibration Certificate

Issued by : Calibration & Test Section : Meteorological Instruments Bureau

Date of Issue 28 August, 2024

Certification No. 322/24

Page : 1 of 2

Object : Wind speed and wind direction

Manufacturer : Davis Instruments Inc.

Type : Weather Wizard III Product No. 7425

Serial No. : WE91016A19 ID No. : No.7

Customer : Environment Research & Technology Company Limited.
25/113-114 Moo 6 Soi Chinaket 1, Ngamwongwan Road,
Toongsonghong, Laksi, Bangkok 10210.

Calibration Condition : Temperature 25.1 °C Barometric Pressure 1007.5 hPa

NATIONAL STANDARD WIND TUNNEL :

: Micromanometer Theodor Friedrichs FC014 Serial No. 9310119

: HOOK GAGE NO 1425 Pitot Tube Theodor Friedrichs Type 0800.0000 serial 9023

N.I.S.T. Test Reference Number 731/241460 : Standard Velocity at 20 - 30 m/sec

: Ultrasonic Anemometer Model DA-650-3TV (sensor TR-90AH)

Serial Number 110730029 (sensor 120629586)

JAPAN QUALITY ASSURANCE ORGANIZATION : Standard Velocity at 0 - 20 m/sec

Calibrated by

Mr. Watcharapol Subwat
Mechanical Engineer

Signed

Mr. Pisod Promsut

(Authorised Signatory)
for the Chief
Sub-Standard Instrument



Nomenclature

P_b - Barometric Pressure
 DGM - Dry Gas Meter
 K_1 - Constant based on standard temp and press
 Θ - Run time, in minutes
 P_m - ΔH (Meter Pressure, gauge)
 V_m - Volume collected by test meter, corrected for STP
 $Q_{m(std)}$ - Calculated flow rate of test meter
 K' - Critical orifice coefficient
 P_w - Measured pressure of reference meter
 t_w - Temperature measured in reference meter

Equations

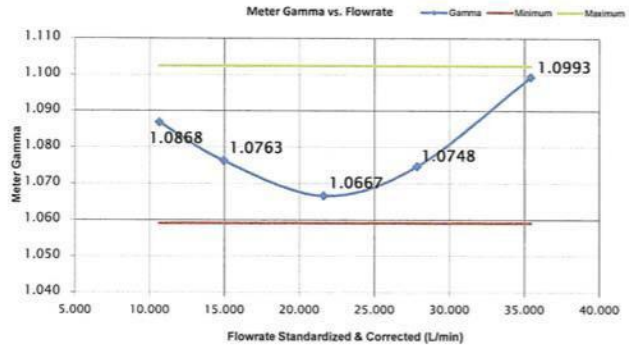
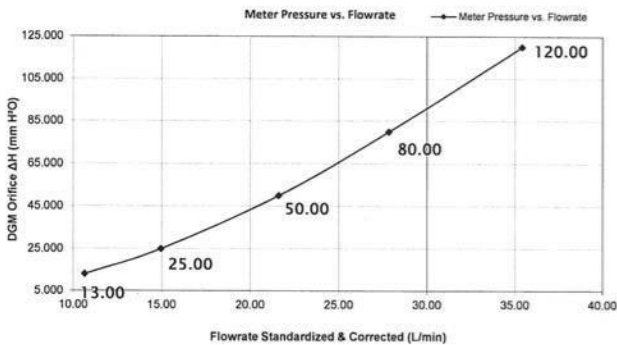
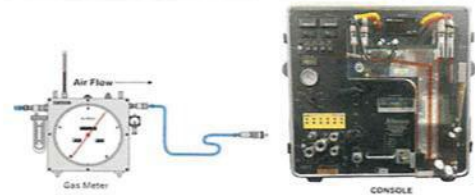
$$V_{m(std)} = Y * K_1 \frac{V_m * (P_{bar} + \frac{P_{m(std)}}{13.6})}{T_w}$$

$$V_{m(std)} = \frac{K_1 V_m (P_{bar} + \frac{\Delta H}{13.6})}{T_m}$$

$$K_1 = \frac{T_{std}}{P_{std}} \quad Y = \frac{V_{cr(std)}}{V_{m(std)}} \quad Q_{m(std)} = \frac{V_{m(std)}}{\Theta}$$

$$Metric \Delta H_m = \frac{P_{m(std)} * 0.0011696 * (P_{bar} + \frac{P_{m(std)}}{13.6}) * (T_w * \Theta)}{V_w * P_{bar}}$$

Calibration Train



UUT Meter Console Information

Model #: 572
 Serial #: 0306016
 DGM Model #: SK25EX
 DGM Serial #: 00005305

Calibration Conditions

Bar. Pressure (mm Hg): 756.4
 Ambient Temperature (°C): 24.9
 Relative Humidity (%): 84
 Altitude (m): 1.83
 Bar. Pressure Corr. (mm Hg): 756.3

Factors/Conversions

Std. Temp. (K): 293.15
 Std. Press. (mm Hg): 760
 K_1 (K/mm Hg): 0.3857

Reference Equipment

Calibration Meter Model: DGM-200H
 Cal. Due Date: 20-Aug-25
 Serial No.: 0000026
 Gamma: 1.0000

UUT Meter (DGM)

Run Time (seconds)	Orifice, ΔH (mm H2O)	Volume			Meter Temperature (°C)		Meter Pressure (in H2O)	Volume (L)			Outlet Temperature (°C)	
		Initial (L)	Final (L)	Total (L)	Initial	Final		Initial	Final	Total	Initial	Final
Θ	$P_{m(g)}$	V_{mi}	V_{mf}	V_m	t_{mi}	t_{mf}	P_w	V_{wi}	V_{wf}	V_w	t_{wi}	t_{wf}
840.00	13.00	1103598.0	1103738.0	140.0	25.0	25.0	0.3	0.00	152.23	152.23	25.0	25.0
630.00	25.00	1103738.0	1103887.0	149.0	25.0	26.0	0.5	0.00	160.29	160.29	25.0	25.0
450.00	50.00	1103887.0	1104042.0	155.0	26.0	26.0	0.6	0.00	165.34	165.34	25.0	25.0
360.00	80.00	1104042.0	1104200.4	158.4	26.0	27.0	2.0	0.00	169.87	169.87	25.0	25.0
300.00	120.00	1104200.4	1104365.0	164.6	28.0	29.0	2.4	0.00	179.87	179.87	25.0	25.0

Reference Meter (WTM)

Standardized Data

Reference Meter (L)		UUT Meter (L)		Correction Factor		ΔH @ (mm H2O)	
Std. Vol.	Std. Flow	Std. Vol.	Std. Flow	Value	Variance	ΔH @	Variance
$V_{w(std)}$	$Q_{w(std)}$	$V_{m(std)}$	$V_{w(std)}$	Y	ΔY	ΔH @	$\Delta \Delta H$ @
149.06	10.65	137.15	10.6	1.0868	0.0060	50.8	3.426
157.03	14.95	145.89	15.0	1.0763	-0.0045	49.5	2.169
162.02	21.60	151.88	21.6	1.0667	-0.0141	47.5	0.174
167.03	27.84	155.41	27.8	1.0748	-0.0060	46.1	-1.189
177.03	35.41	161.04	35.4	1.0993	0.0185	42.8	-4.580
				1.0808	= Y Avg.	47.3	= ΔH @ Avg. Metric

Note: For Calibration Factor Y, the ratio of the reading of the calibration meter to the dry gas meter, acceptable tolerance of individual values from the average is ± 0.02 .
 Note: For ΔH_{or} , orifice pressure differential that equates to 0.0212m³/min at standard temperature and pressure, acceptable tolerance of individual values from the average is ± 0.2 inches (5.1mm) H₂O.

Pass/Fail Judgment : **Pass**

Calibrate By: _____ Approved By: _____ Date: 10 Sep 24

The instruments listed and described on this certificate have been calibrated against standards traceable to the National Institute of Standards and Technology (N.I.S.T.) and in reference to EPA Method 5, Section 10.3.1.

Certificate No: G 670049
Date of issue : 25-Jan-24

Instrument description : Flue Gas Analyzer
Instrument model : Testo 350 New
Control unit serial no. : 03498219/0320
Instrument serial no. : 62227989/0320
ID no. or control no. : -
Manufacturer : Testo SE & Co. KGaA
Probe description : -
Probe model : -
Probe serial no. : -
Customer name : Environment Research & Technology Co., Ltd.
Customer address : 25/114 Moo 6, Soi Chinnakhet 1, Ngamwongwan Rd., Toongsoonghong, Laksi, Bangkok 10210 Thailand
Total pages of certificate : 2 Pages
Receiving no. : L-240264
Receiving date. : 24-Jan-24
Parameter of calibration : Gas Calibration(Oxygen 2.50,10.04,21.02 %vol, Carbon Monoxide 80.14,302,1003 ppm, Nitrogen Dioxide 80.96 ppm, Nitric Oxide 151.5 ppm, Sulphur Dioxide 100.8 ppm)

Condition of UUC. : Used
Ambient condition : All of the Measurement were carried out the stabilized laboratory
Temperature : 23 ± 5 °C
Humidity : 55 ± 15 %RH
Calibration place : 17/121 Soi Ngamwongwan 47 Yaek 48, Toongsoonghong, Laksi, Bangkok 10210
Calibration procedure no.: This instrument was calibrated by comparison with Standard gas mixture according to calibration Work Instruction no. WI-CL-28-C

The calibration certificate expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by coverage factor $k=2$, which for a normal distribution corresponds to a coverage probability of approximately 95%. This certificate is applied only to item under test Environmental condition. This Calibration Certificate may not be reproduced other than in full except with the permission of the issuing laboratory. Calibration certificates without signature and seal not valid and The results relate only to the items tested/calibrated. This calibration certificate documents are traceability to national standards, which realize measurement according to the International System of Units (SI).

Date of calibration : 25-Jan-24

Mr. Kwanchai Khamdoud
Calibration Technician

Mrs. Nongluck Wongsettee
Technical Manager

FM-CL-09-C Rev.8

Page 1 of 2

Issued Date 26/02/16

Entech Industrial Solution Co.,Ltd.

17/121 Soi Ngamwongwan 47 Yaek 48, Toongsoonghong, Laksi, Bangkok 10210 THAILAND Tel. 0-2779-8888 Calibration@entech.co.th
Tax ID : 0105536035591 www.entech.co.th

Meter Console Information (UUT)

Model #: 572
Serial #: 0306016
Units: Metric

Calibration Conditions

Pbar (mm. Hg): 756.4
Humidity (%): 84
Amb. Temp. (°C): 24.9
Altitude (m): 1.8
Corrected Pbar (mm. Hg): 756.3

Reference Devices

TC Simulator Model: CC-VTR-SH
Reference #: 91109269
Barometer Model: 736930
Reference #: EBARODIALSPE01
DP Calibrator Model: 718 30G
Reference #: 9543013

Audit Data

Reference Point	Reference Temp.	Probe	Stack	Filter	Exit	Aux	Reference Point Status ¹
	°C	°C	°C	°C	°C	°C	Pass/Fail
Room	24.9	25	25	24	23	24	PASS
Ice Water	1.8	2	2	2	1	2	PASS

Reference Point	Reference Vacuum	Console Vacuum	Reference Point Status ¹
#	in. Hg	in. Hg	Pass/Fail
1	17.0	17.5	PASS

Calibrate By: _____ Approved By: _____ Date: 10 Sep 24

Notes

¹For valid test results, the maximum difference between test and reference readings should be less than 5.4 °F (3 °C) for all thermocouples except for the stack thermocouple which should be less than 1.5% absolute temperature from the reference reading and the exit thermocouple which should be less than 2°F (1 °C) from the reference reading (EPA Method 2, Section 6.3 and EPA Method 5, Sections 6.1.1.4.6 1.1.8)

²For valid test results, the maximum difference between console and reference barometric pressure readings should be less than 0.1 in. Hg (2.5 mm Hg). (EPA Method 5, Section 6.1.2)

³For valid test results, the maximum difference between console and reference vacuum readings should be less than 0.5 in. Hg (12.5 mm Hg)

I certify that the above Thermocouple, Barometric, and Vacuum Sensors were calibrated and audited in accordance with US EPA Methods, CFR 40 Part 60

neediss
Neediss Supply Instrument Co.,Ltd.

Console Information

Model #: 572
Serial #: 0306016
Units: Metric
Type "English"

Calibration Conditions

Pbar (mm. Hg): 756.4
Humidity (%): 84
Temp (°C): 24.9
Corr. Pbar (mm. Hg): 756.3

Reference Devices

TC Simulator Model: CC-VTR-SH
Reference #: 091109269
Barometer Model: 736930
Reference #: EBARODIALSPE01
Digital Pressure Calibrator Model: 718 30G
Reference #: 9543013

Pressure Gauge / Manometer Calibration Data

Reference Point	Reference Vacuum	Console Vacuum	Reference Point Status ¹
#	in. Hg	in. Hg	Pass/Fail
1	-200.0	-5.5	PASS
2	-150.0	-15.5	PASS
3	-20.0	-20.5	PASS

Reference Point ¹	Reference	Positive (+) Pitot	Negative (-) Pitot	Reference Point Status ¹
#	mm H2O	mm H2O	mm H2O	Pass/Fail
1	-200.0	0.0	-200.0	PASS
2	-150.0	0.0	-150.0	PASS
3	-100.0	0.0	-100.0	PASS
4	-80.0	0.0	-80.0	PASS
5	-50.0	0.0	-50.0	PASS
6	0.0	0.0	0.0	PASS
7	50.0	50.0	0.0	PASS
8	80.0	80.0	0.0	PASS
9	100.0	100.0	0.0	PASS
10	150.0	150.0	0.0	PASS
11	200.0	200.0	0.0	PASS

ΔH Overall Audit Status: PASS

Reference Point ¹	Reference	Positive (+) Pitot	Negative (-) Pitot	Reference Point Status ¹
#	mm H2O	mm H2O	mm H2O	Pass/Fail
1	-200.0	0.0	-200.0	PASS
2	-150.0	0.0	-150.0	PASS
3	-100.0	0.0	-100.0	PASS
4	-80.0	0.0	-80.0	PASS
5	-50.0	0.0	-50.0	PASS
6	0.0	0.0	0.0	PASS
7	50.0	50.0	0.0	PASS
8	80.0	80.0	0.0	PASS
9	100.0	100.0	0.0	PASS
10	150.0	150.0	0.0	PASS
11	200.0	200.0	0.0	PASS

ΔP Overall Audit Status: PASS

Calibrate By: _____ Approved By: _____ Date: 10 Sep 24

Notes

¹Suggested, minimum reference points are 10 (0, 100, 200, 300, 500, 700, 900, 1100, 1500, 1900 °F), can test for more.

²For valid test results, the maximum difference between temperature and reference readings should be less than 5.4 °F (3 °C) for all thermocouples except for the stack thermocouple which should be less than 1.5% absolute temperature from the reference reading and the exit thermocouple which should be less than 2°F (1 °C) from the reference reading (EPA Method 2, Section 6.3 and EPA Method 5, Sections 6.1.1.4.6 1.1.8)

³Do not change this cell value. It is based based on input from Cell H8 at the top of this sheet under "Calibration Conditions"

⁴Absolute temperature difference and other formulas are calculated based on unit input from cell C8 at the top of this sheet under "Meter Console Information"

⁵For valid test results, the maximum difference between console and reference barometric pressure readings should be less than 0.1 in. Hg (2.5 mm Hg). (EPA Method 5, Section 6.1.2)

⁶For valid test results, the maximum difference between console and reference vacuum readings should be less than 0.5 in. Hg (12.5 mm Hg)

⁷For valid test results, the maximum difference between console and reference vacuum readings should be less than 0.5 in. Hg (12.5 mm Hg) or 5% of full scale

I certify that the above Thermocouple Sensors were calibrated in accordance with US EPA Methods 2 and 5, CFR 40 Part 60

neediss
Neediss Supply Instrument Co.,Ltd.

Console Information

Model #: 572
Serial #: 0306016
Units: Metric

Calibration Conditions

Pbar (mm. Hg): 756.4
Humidity (%): 84
Temp (°C): 24.9
Elevation (m): 1.8
Corr. Pbar (mm. Hg): 756.3

Reference Devices

TC Calibrator Model: CC-VTR-SH
Reference #: 091109269
Barometer Model: 736930
Reference #: EBARODIALSPE01
Pressure Model: 718 30G
Reference #: 9543013

Temperature Display Calibration Data

Reference Point ¹	Reference Temp.	Probe	Stack	Filter	Exit	Aux	Reference Point Status ¹
#	°C	°C	°C	°C	°C	°C	Pass/Fail
1	-18	-18	-17	-18	-17	-17	PASS
2	38	38	38	37	36	37	PASS
3	93	93	93	93	92	93	PASS
4	149	150	149	151	149	149	PASS
5	260	259	259	260	259	259	PASS
6	371	372	372	373	371	372	PASS
7	482	482	482	483	482	482	PASS
8	593	595	594	594	594	594	PASS
9	816	816	816	816	816	816	PASS
10	1038	1039	1039	1039	1038	1038	PASS

Overall Audit Status: PASS

Ref Point	Theoretical Temp.	DGM Thermocouple Sensor Reading	ΔT _{abs} ⁴
#	°C	°C	°C
1	1.1	2	0.33%
2	24.9	25	0.02%

Maximum⁵ 0.33%

Status: PASS

Internal temperature thermocouple is not audited in EPA standards, and should not be used as an official reference for ambient temperature

Calibrate By: _____ Approved By: _____ Date: 10 Sep 24

Notes

¹Suggested, minimum reference points are 10 (0, 100, 200, 300, 500, 700, 900, 1100, 1500, 1900 °F), can test for more.

²For valid test results, the maximum difference between temperature and reference readings should be less than 5.4 °F (3 °C) for all thermocouples except for the stack thermocouple which should be less than 1.5% absolute temperature from the reference reading and the exit thermocouple which should be less than 2°F (1 °C) from the reference reading (EPA Method 2, Section 6.3 and EPA Method 5, Sections 6.1.1.4.6 1.1.8)

³Do not change this cell value. It is based based on input from Cell H8 at the top of this sheet under "Calibration Conditions"

⁴Absolute temperature difference and other formulas are calculated based on unit input from cell C8 at the top of this sheet under "Meter Console Information"

⁵For valid test results, the maximum difference between console and reference barometric pressure readings should be less than 0.1 in. Hg (2.5 mm Hg). (EPA Method 5, Section 6.1.2)

⁶For valid test results, the maximum difference between console and reference vacuum readings should be less than 0.5 in. Hg (12.5 mm Hg)

⁷For valid test results, the maximum difference between console and reference vacuum readings should be less than 0.5 in. Hg (12.5 mm Hg) or 5% of full scale

neediss
Neediss Supply Instrument Co.,Ltd.

Standard References (Table 1)

Standard	Certificate No.	Vendor	Due date
Oxygen (O ₂) 2.50 % Vol	2412/23	Linde	27-Aug-27
Oxygen (O ₂) 10.04 % Vol	CG-0153-21	Nimt	18-Nov-26
Oxygen (O ₂) 21.02 % Vol	CG-0041-22	Nimt	10-Feb-27
Carbon monoxide (CO) 80.14 ppm	CG-0040-22	Nimt	14-Feb-27
Carbon monoxide (CO) 302 ppm	1915/23	Linde	16-Jun-25
Carbon monoxide (CO) 1003 ppm	2584/23	Linde	10-Sep-25
Nitrogen Dioxide (NO ₂) 80.96 ppm	2041/22	Linde	26-Jun-24
Nitric Oxide (NO) 151.5 ppm	0161/23	Linde	22-Jan-25
Sulphur Dioxide (SO ₂) 100.8 ppm	3507/22	Linde	09-Nov-24

Measured room conditions

Temperature : 22.6 °C Humidity : 59.8 %RH Pressure : 1012.4 mbar

Calibration conditions

Gas Temperature : 23 °C Flow rate : 1,200 ml/min Gas pressure : 1016.7 mbar

Calibration Results (before adjustment) (Table 2)

Parameter of Standard	Standard Values	Mean of UUC	Error	Uncertainty (±)
O ₂ (%Vol)	2.50	2.53	0.03	0.15
O ₂ (%Vol)	10.04	10.09	0.05	0.20
O ₂ (%Vol)	21.02	21.12	0.10	0.30
CO (ppm)	80.14	79	-1.14	3.0
CO (ppm)	302	297	-5	6.0
CO (ppm)	1003	981	-22	12
*NO ₂ (ppm)	80.96	76.8	-4.16	8.0
*NO (ppm)	151.5	140	-11.5	8.0
*SO ₂ (ppm)	100.8	91	-9.8	6.0

Calibration Results (after adjustment) (Table 3)

Parameter of Standard	Standard Values	Mean of UUC	Error	Uncertainty (±)
O ₂ (%Vol)	2.50	2.53	0.03	0.15
O ₂ (%Vol)	10.04	10.09	0.05	0.20
O ₂ (%Vol)	21.02	21.12	0.10	0.30
CO (ppm)	80.14	81	0.86	3.0
CO (ppm)	302	303	1	6.0
CO (ppm)	1003	1001	-2	12
*NO ₂ (ppm)	80.96	81.2	0.24	8.0
*NO (ppm)	151.5	151	-0.5	8.0
*SO ₂ (ppm)	100.8	100	-0.8	6.0

Remark : 1 cmol/mol = 1 %vol, 1 µmol/mol = 1 ppm.

* Calibrations marked Not TISI Accredited "in this Certificate have been included for completeness."

End of Report

FM-CL-09-C Rev.8

Page 2 of 2

Issued Date 26/02/16

Entech Industrial Solution Co.,Ltd.

17/121 Soi Ngamwongwan 47 Yaek 4B, Toongsonghong, Laksi, Bangkok 10210 THAILAND Tel. 0-2779-8888 Calibration@entech.co.th
Tax ID : 0105536035591 www.entech.co.th



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.: 24MM1
Page: 1 of 3

Certificate of Calibration

Equipment : Electronic Balance

Manufacturer : AND

Model : BM-5

Serial No. : T1004302

ID No. : ERTC-L-In-176

Submitted by : Environment Research & Technology Company Limited.
25/114 Moo 6, Soi Chinaket 1, Ngamwongwan Road,
Toongsonghong, Laksi,
Bangkok 10210

Location : ห้องปฏิบัติการวิเคราะห์ (411)

Received order : 03 January 2024

Calibration Date : 04 January 2024

Ambient Temperature : 15 °C to 40 °C

Relative Humidity : 30 % to 90 %

Calibrated by : Tawatchai Pama

Approved by : 
Approved Signatory

() Pornthippa Tameyakul

(✓) Ponpan Paipim

() Suwit Imjai

Issue Date : 16 January 2024

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 0062479



Equipment : Electronic Balance
Condition As-Received : Used Item
Reference : 2401-0001ON-10

Cert.No.: 24MM1
Page: 2 of 3

Procedure used :-

Calibration were conducted using in-house calibration procedure CP-OB01 according to direct measurement method against standard weight.

Condition of this result of calibration

1. Reference standard instruments:-

Instruments	Model	Serial No.	ID No.	Test report No.	Due date
1) Standard Weight Set (E2)	15884	-	70RC138	MM-0020-23	30 Jan 2025

2. This certificate is valid only to the item calibrated on date and place of calibration.

3. This result of calibration was made on requested at the point specified by customer.

4. This certificate is not certified for any commercial transaction.

5. This certification is traceable to the International System of Unit.

Result of calibration () Without Adjustment (*) After Adjustment by External Calibration

Range capacity : 0 g to 5.2 g Resolution 0.000001 g

Before Adjustment :

Applied Weight (g)	Balance Reading (g)	Correction (g)	Measurement Uncertainty (± mg)	Coverage Factor (k)
2.5	2.500047	-0.000047	0.026	2
5	5.000057	-0.000057	0.028	2

After Adjustment :

1. Determination of the standard deviation of weighing machine (n = 10)

Applied Weight (g)	Standard Deviation of Reading (g)
2.5	0.0000056
5	0.0000048



Equipment : Electronic Balance
Condition As-Received : Used Item
Reference : 2401-0001ON-10

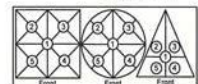
Cert.No.: 24MM1
Page: 3 of 3

Result of calibration

2. Effect of off center loading

A mass of 2 g was placed to various position on the pan.

The weighing machine reading error obtained is given in the table



Maximum difference between off-center and central loading (g)

Position 1 (g)	Position 2 (g)	Position 3 (g)	Position 4 (g)	Position 5 (g)	
+0.000010	+0.000012	0.000000	+0.000013	+0.000009	0.000010

3. Departure from nominal value

Applied Weight (g)	Balance Reading (g)	Correction (g)	Measurement Uncertainty (± mg)	Coverage Factor (k)
Unload	0.000000	0.000000	0.0094	2.37
0.014	0.013991	+0.000009	0.012	2.11
0.015	0.015011	-0.000011	0.012	2.17
0.5	0.499996	+0.000004	0.013	2.06
1	0.999995	+0.000005	0.016	2.04
1.5	1.499985	+0.000015	0.022	2
2	1.999995	+0.000005	0.022	2
2.5	2.499988	+0.000012	0.026	2
3	2.999992	+0.000008	0.026	2
4	3.999998	+0.000002	0.028	2
5	4.999990	+0.000010	0.028	2

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 1197865

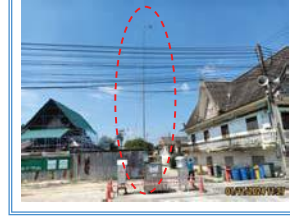
a 1197864

ภาคผนวก 69

บันทึกสภาพแวดล้อมและสภาพอากาศ



Sampling Picture of Ambient Air Quality
Khlong Nueng School (Kaew Nimit), Village no. 4, Khlong Nueng Sub-District,
Khlong Luang District, Pathum Thani Province
Measured during November 1–8, 2024



Sampling Picture of Ambient Air Quality
Sadet Temple, Village no. 5, Suan Phrik Thai Sub-District,
Mueang Pathum Thani District, Pathum Thani Province
Measured during November 1–8, 2024



Sampling Picture of Ambient Air Quality
Saeng San Temple, Village no. 6, Prachathipat Sub-District,
Thanyaburi District, Pathum Thani Province
Measured during November 1–8, 2024



Sampling Picture of Ambient Air Quality
Learning and Recreation Center of Rangsit City Municipality
(located in Rattanakosin Song Roi Pi Housing Estate)
Measured during November 1–8, 2024



Sampling Picture of Noise levels
Common Area of Pak Thang White House Community, Khlong Nueng Sub-District,
Khlong Luang District, Pathum Thani Province
Measured during November 1-8, 2024



Sampling Picture of Noise levels
Project's Fence Located Adjacent to the Staff Dormitory of Teijin Polyester (Thailand) Co., Ltd.,
Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
Measured during November 1-8, 2024



Sampling Picture of Noise levels
Staff Dormitory of Teijin Polyester (Thailand) Co., Ltd., Khlong Nueng Sub-District,
Khlong Luang District, Pathum Thani Province
Measured during November 1-8, 2024



Sampling Picture of Stack
HRSR Stack Unit 1
Measured during November 6, 2024



Sampling Picture of Stack
HRSR Stack Unit 2
Measured during November 7, 2024



บันทึกกิจกรรมการตรวจวัดคุณภาพสิ่งแวดล้อม (ประจำวัน ที่ 1 พฤศจิกายน พ.ศ. 2567)
การติดตามตรวจสอบการปฏิบัติตามมาตรการป้องกันและแก้ไขผลกระทบสิ่งแวดล้อมและมาตรการติดตาม
ตรวจสอบผลกระทบสิ่งแวดล้อม
โครงการผลิตไฟฟ้าและไอน้ำระบบโคเจนเนอเรชัน จังหวัดปทุมธานี (ระยะดำเนินการ)
ระหว่างเดือนกรกฎาคม - ธันวาคม 2567

- การตรวจวัดคุณภาพอากาศในบรรยากาศ (จำนวน 4 สถานี)
วันที่ตรวจวัด : 1 พฤศจิกายน พ.ศ. 2567
ผู้ตรวจวัด : บริษัท เอ็นไวรอนเม้นท์ รีเสิร์ช แอนด์ เทคโนโลยี จำกัด


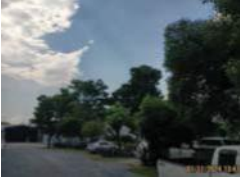


ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออก มีรถผ่านบางเวลา และจุดตรวจวัดมีรถจอดจำนวนมาก มีลมพัดน้อย</p>
สถานี A1 : โรงเรือนคลองหนึ่ง (แก้วนิมิต) หมู่ที่ 4 ต.คลองหนึ่ง อ.คลองหลวง จ.ปทุมธานี	

ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออก ลมพัดน้อย มีรถเข้าออกบางเวลา มีกิจกรรมแข่งขันกีฬาสีในโรงเรียน มีรถจอดข้างจุดตรวจวัด</p>
สถานี A2 : วัดแสงสรรค์ หมู่ที่ 6 ต.ประชาธิปัตย์ อ.ชัยบุรี จ.ปทุมธานี	
 	<p>- มีแดดออก มีรถผ่านบางเวลา และมีกิจกรรมการทำบุญห่างจากจุดตรวจวัดประมาณ 50 เมตร</p>
สถานี A3 : วัดเสด็จ หมู่ที่ 5 ต.สวนพริกไทย อ.เมืองปทุมธานี จ.ปทุมธานี	

ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออกเล็กน้อย มีรถเข้าออก</p>
สถานี A4 : หมู่บ้านรัตนโกสินทร์ 200 ปี (ศูนย์การเรียนรู้และนันทนาการเทศบาลนครรังสิต)	

2. การตรวจวัดระดับเสียงทั่วไป (จำนวน 3 สถานี)
วันที่ตรวจวัด : 1 พฤศจิกายน พ.ศ.2567
ผู้ตรวจวัด : บริษัท เอ็นไวรอนเมนทรีเซอร์วิส แอนด์ เทคโนโลยี จำกัด





ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออกเล็กน้อย มีรถผ่านตลอดเวลา ส่วนมากเป็นเสียงจากการจราจร</p>
สถานี N1 : พื้นที่ชุมชนปากทางรถไฟเขาสี ด่านทิศใต้ของโครงการ (พื้นที่ส่วนกลางของชุมชน)	

ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออกเล็กน้อย มีรถจอดเต็มพื้นที่</p>
สถานี N2 : บริเวณริมรั้วโครงการ (ติดหอพักพนักงาน บริษัท เทียน โพลีเอสเตอร์ (ประเทศไทย) จำกัด)	
 	<p>- มีแดดออกเล็กน้อย มีรถผ่านบางเวลา</p>
สถานี N3 : บริเวณหอพักพนักงาน ของบริษัท เทียน โพลีเอสเตอร์ (ประเทศไทย) จำกัด	

บันทึกกิจกรรมการตรวจวัดคุณภาพสิ่งแวดล้อม (ประจำวัน ที่ 2 พฤศจิกายน พ.ศ. 2567)
การติดตามตรวจสอบการปฏิบัติตามมาตรการป้องกันและแก้ไขผลกระทบสิ่งแวดล้อมและมาตรการติดตาม
ตรวจสอบผลกระทบสิ่งแวดล้อม
โครงการผลิตไฟฟ้าและไอน้ำระบบโคเจนเนอเรชัน จังหวัดปทุมธานี (ระยะดำเนินการ)
ระหว่างเดือนกรกฎาคม – ธันวาคม 2567

- การตรวจวัดคุณภาพอากาศในบรรยากาศ (จำนวน 4 สถานี)
วันที่ตรวจวัด : 2 พฤศจิกายน พ.ศ. 2567
ผู้ตรวจวัด : บริษัท เอ็นไวรอนเม้นท์ รีเสิร์ช แอนด์ เทคโนโลยี จำกัด





ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออก มีรถวิ่งผ่านบางเวลา ลมพัดเล็กน้อย</p>
สถานี A1 : โรงเรียนคลองหนึ่ง (แก้วนิมิตร) หมู่ที่ 4 ต.คลองหนึ่ง อ.คลองหลวง จ.ปทุมธานี	

ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออก มีรถวิ่งผ่านบางเวลา ลมพัดเล็กน้อย</p>
สถานี A2 : วัดแสงสรรค์ หมู่ที่ 6 ต.ประชาธิปไตย อ.ธัญบุรี จ.ปทุมธานี	
 	<p>- มีแดดออก มีรถเข้า-ออกบางเวลา ภายในวัดมีกิจกรรมงานศพ ห่างจากจุดตั้งเครื่องประมาณ 50-70 เมตร</p>
สถานี A3 : วัดเสด็จ หมู่ที่ 5 ต.สวนพริกไทย อ.เมืองปทุมธานี จ.ปทุมธานี	

ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออก มีรถเข้า-ออกบางเวลา มีลมพัด</p>
สถานี A4 : หมู่บ้านรัตนโกสินทร์ 200 ปี (ศูนย์การเรียนรู้และนิทรรศการเทศบาลนครรังสิต)	

- การตรวจวัดระดับเสียงทั่วไป (จำนวน 3 สถานี)
วันที่ตรวจวัด : 2 พฤศจิกายน พ.ศ.2567
ผู้ตรวจวัด : บริษัท เอ็นไวรอนเม้นท์ รีเสิร์ช แอนด์ เทคโนโลยี จำกัด





ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออก มีรถผ่านตลอดเวลา ส่วนใหญ่เป็นเสียงจากการจราจร</p>
สถานี N1 : พื้นที่ชุมชนปากทางวัดโพธิ์ ด้านทิศใต้ของโครงการ (พื้นที่ส่วนกลางของชุมชน)	

ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออกเล็กน้อย และมีรถเข้า-ออกบางเวลา</p>
<p>สถานี N2 : บริเวณริมรั้วโครงการ (ติดหอพักพนักงาน บริษัท เทอิน โพลีเอสเตอร์ (ประเทศไทย) จำกัด)</p>  	<p>- มีแดดออก มีรถผ่านเข้า-ออก บริเวณจุดตรวจวัด</p>
<p>สถานี N3 : บริเวณหอพักพนักงาน ของบริษัท เทอิน โพลีเอสเตอร์ (ประเทศไทย) จำกัด</p>	

บันทึกกิจกรรมการตรวจวัดคุณภาพสิ่งแวดล้อม (ประจำวัน ที่ 3 พฤศจิกายน พ.ศ. 2567)
การติดตามตรวจสอบการปฏิบัติตามมาตรการป้องกันและแก้ไขผลกระทบสิ่งแวดล้อมและมาตรการติดตาม
ตรวจสอบผลกระทบสิ่งแวดล้อม
โครงการผลิตไฟฟ้าและไอน้ำระบบโคเจนเนอเรชัน จังหวัดปทุมธานี (ระยะดำเนินการ)
ระหว่างเดือนกรกฎาคม – ธันวาคม 2567

1. การตรวจวัดคุณภาพอากาศในบรรยากาศ (จำนวน 4 สถานี)
วันที่ตรวจวัด : 3 พฤศจิกายน พ.ศ. 2567
ผู้ตรวจวัด : บริษัท เอ็มไวรอนเม้นท์ รีเสิร์ช แอนด์ เทคโนโลยี จำกัด





ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออก รวดผ่านบางเวลา และมีรถจอดจำนวนมาก</p>
<p>สถานี A1 : โรงเรียนคลองหนึ่ง (แก้วนิมิตร) หมู่ที่ 4 ต.คลองหนึ่ง อ.คลองหลวง จ.ปทุมธานี</p>	

ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออก บริเวณด้านหน้าทางเข้าวัดมีลานจอดรถ มีรถเข้า-ออก และมีรถจอดจำนวนมาก</p>
<p>สถานี A2 : วัดแสงสรรค์ หมู่ที่ 6 ต.ประชาธิปไตย อ.อัญบุรี จ.ปทุมธานี</p>  	<p>- มีแดดออก มีรถเข้า-ออก และจอดใกล้จุดตรวจวัด ภายในวัดมีงานศพ</p>
<p>สถานี A3 : วัดเล็ง หมู่ที่ 5 ต.สวนพริกไทย อ.เมืองปทุมธานี จ.ปทุมธานี</p>	

ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออก มีรถเข้า-ออกบางเวลา</p>
<p>สถานี A4 : หมู่บ้านรัตนโกสินทร์ 200 ปี (ศูนย์การเรียนรู้และนิทรรศการเทศบาลนครรังสิต)</p>	

2. การตรวจวัดระดับเสียงทั่วไป (จำนวน 3 สถานี)
วันที่ตรวจวัด : 3 พฤศจิกายน พ.ศ.2567
ผู้ตรวจวัด : บริษัท เอ็มไวรอนเม้นท์ รีเสิร์ช แอนด์ เทคโนโลยี จำกัด





ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแมคคอก มีรถผ่านตลอดเวลา ส่วนใหญ่เป็นเสียงจากการจราจร</p>
สถานี N1 : พื้นที่ชุมชนปากทางรถไฟเฮาส์ ด้านทิศใต้ของโครงการ (พื้นที่ส่วนกลางของชุมชน)	

ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแมคคอกเล็กน้อย และมีรถเข้า-ออกบางเวลา</p>
สถานี N2 : บริเวณริมรั้วโครงการ (ติดหอพักพนักงาน บริษัท เทียน โพลีเอสเตอร์ (ประเทศไทย) จำกัด)	
 	<p>- มีแมคคอก มีรถผ่านเข้า-ออก บริเวณจุดตรวจวัด</p>
สถานี N3 : บริเวณหอพักพนักงาน ของบริษัท เทียน โพลีเอสเตอร์ (ประเทศไทย) จำกัด	

บันทึกกิจกรรมการตรวจวัดคุณภาพสิ่งแวดล้อม (ประจำวันที่ 4 พฤศจิกายน พ.ศ. 2567)
การติดตามตรวจสอบการปฏิบัติตามมาตรการป้องกันและแก้ไขผลกระทบสิ่งแวดล้อมและมาตรการติดตามตรวจสอบมลพิษทางสิ่งแวดล้อม
โครงการผลิตไฟฟ้าและไอน้ำระบบโคเจนเนอเรชัน จังหวัดปทุมธานี (ระยะดำเนินการ)
ระหว่างเดือนกรกฎาคม – ธันวาคม 2567

1. การตรวจวัดคุณภาพอากาศในบรรยากาศ (จำนวน 4 สถานี)
วันที่ตรวจวัด : 4 พฤศจิกายน พ.ศ. 2567
ผู้ตรวจวัด : บริษัท เอ็มไวรอนเม้นท์ รีเสิร์ช แอนด์ เทคโนโลยี จำกัด





ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแมคคอก รถวิ่งผ่านบางเวลา และมีรถจอดเป็นจำนวนมาก</p>
สถานี A1 : โรงเรียนคลองหนึ่ง (แก้วนิมิตร) หมู่ที่ 4 ต.คลองหนึ่ง อ.คลองหลวง จ.ปทุมธานี	

ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแมคคอก สมัพัทธ์ และไม่มีกิจกรรมใดๆ</p>
สถานี A2 : วัดแสงสรรค์ หมู่ที่ 6 ต.ประชาธิปไตย อ.ธัญบุรี จ.ปทุมธานี	
 	<p>- มีแมคคอก มีรถเข้า-ออกบางเวลา ภายในวัดมีกิจกรรมงานศพ ห่างจากจุดตรวจวัดประมาณ 50-70 เมตร</p>
สถานี A3 : วัดเสด็จ หมู่ที่ 5 ต.สวนพริกไทย อ.เมืองปทุมธานี จ.ปทุมธานี	

ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออกเล็กน้อย มีรถเข้า-ออกบางเวลา มีรถจอดจำนวนมาก</p>
สถานี A4 : หมู่บ้านรัตนโกสินทร์ 200 ปี (ศูนย์การเรียนรู้และนิทรรศการเทศบาลนครรังสิต)	

2. การตรวจวัดระดับเสียงทั่วไป (จำนวน 3 สถานี)
วันที่ตรวจวัด : 4 พฤศจิกายน พ.ศ.2567
ผู้ตรวจวัด : บริษัท เอ็นไวรอนเม้นท์ รีเสิร์ช แอนด์ เทคโนโลยี จำกัด



ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออก มีรถผ่านตลอดเวลา ส่วนใหญ่เป็นเสียงจากการจราจร</p>
สถานี N1 : พื้นที่ชุมชนปากทางวิเศษใต้ ด้านทิศใต้ของโครงการ (พื้นที่ส่วนกลางของชุมชน)	

ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออก มีรถผ่านบางเวลา</p>
สถานี N2 : บริเวณริมรั้วโครงการ (ติดหอพักพนักงาน บริษัท เทอิน โพลีเอสเตอร์ (ประเทศไทย) จำกัด)	
 	<p>- มีแดดออก มีเสียงจากโรงงานตลอดเวลา</p>
สถานี N3 : บริเวณหอพักพนักงาน ของบริษัท เทอิน โพลีเอสเตอร์ (ประเทศไทย) จำกัด	

บันทึกกิจกรรมการตรวจวัดคุณภาพสิ่งแวดล้อม (ประจำวัน ที่ 5 พฤศจิกายน พ.ศ. 2567)
การติดตามตรวจสอบการปฏิบัติตามมาตรการป้องกันและแก้ไขผลกระทบสิ่งแวดล้อมและมาตรการติดตามตรวจสอบผลกระทบสิ่งแวดล้อม
โครงการผลิตไฟฟ้าและไอน้ำระบบโคเจนเนอเรชั่น จังหวัดปทุมธานี (ระยะดำเนินการ)
ระหว่างเดือนกรกฎาคม – ธันวาคม 2567

1. การตรวจวัดคุณภาพอากาศในบรรยากาศ (จำนวน 4 สถานี)
วันที่ตรวจวัด : 5 พฤศจิกายน พ.ศ. 2567
ผู้ตรวจวัด : บริษัท เอ็นไวรอนเม้นท์ รีเสิร์ช แอนด์ เทคโนโลยี จำกัด

ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออก รถวิ่งผ่านบางเวลา และมีรถจอดเป็นจำนวนมากใกล้จุดตรวจวัด</p>
สถานี A1 : โรงเรือนคลองหนึ่ง (แก้วนิมิต) หมู่ที่ 4 คลองหนึ่ง อ.คลองหลวง จ.ปทุมธานี	

ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออก และมีรถเข้า-ออกเป็นบางครั้ง</p>
สถานี A2 : วัดแสงสรรค์ หมู่ที่ 6 ต.ประชาธิปไตย อ.อัญบุรี จ.ปทุมธานี	
 	<p>- มีแดดออก และมีรถเข้า-ออกบางครั้ง</p>
สถานี A3 : วัดเสด็จ หมู่ที่ 5 ต.สวนพริกไทย อ.เมืองปทุมธานี จ.ปทุมธานี	





ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออก รถเข้า-ออกบางครั้ง มีรถจอดติดเครื่องยนต์บริเวณจุดตรวจวัด</p>
สถานี A4 : หมู่บ้านรัตนโกสินทร์ 200 ปี (ศูนย์การเรียนรู้และนันทนาการเทศบาลนครรังสิต)	

2. การตรวจวัดระดับเสียงทั่วไป (จำนวน 3 สถานี)

วันที่ตรวจวัด : 5 พฤศจิกายน พ.ศ.2567

ผู้ตรวจวัด : บริษัท เอ็มวีคอนเนกซ์ รีเสิร์ช แอนด์ เทคโนโลยี จำกัด

ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออก รถวิ่งผ่านตลอดเวลา ส่วนใหญ่เป็นเสียงจากการจราจร</p>
สถานี N1 : พื้นที่ชุมชนปากทางไวกอส์ ด้านทิศใต้ของโครงการ (พื้นที่ส่วนกลางของชุมชน)	

ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออก และมีรถวิ่งผ่านบางครั้ง</p>
สถานี N2 : บริเวณริมรั้วโครงการ (ติดหอพักพนักงาน บริษัท เทชิน โซลิวชันส์ (ประเทศไทย) จำกัด)	
 	<p>- มีแดดออกเล็กน้อย และมีการตัดหญ้าในบริเวณใกล้จุดตรวจวัด</p>
สถานี N3 : บริเวณหอพักพนักงาน ของบริษัท เทชิน โซลิวชันส์ (ประเทศไทย) จำกัด	



บันทึกกิจกรรมการตรวจวัดคุณภาพสิ่งแวดล้อม (ประจำวัน ที่ 6 พฤศจิกายน พ.ศ. 2567)
การติดตามตรวจสอบการปฏิบัติตามมาตรการป้องกันและแก้ไขผลกระทบสิ่งแวดล้อมและมาตรการติดตาม
ตรวจสอบผลกระทบสิ่งแวดล้อม
โครงการผลิตไฟฟ้าและโอนาระบบโคเจนเนอเรชั่น จังหวัดปทุมธานี (ระยะดำเนินการ)
ระหว่างเดือนกรกฎาคม – ธันวาคม 2567

- การตรวจวัดคุณภาพอากาศในบรรยากาศ (จำนวน 4 สถานี)
วันที่ตรวจวัด : 6 พฤศจิกายน พ.ศ. 2567
ผู้ตรวจวัด : บริษัท เอ็นไวรอนเม้นท์ รีเสิร์ช แอนด์ เทคโนโลยี จำกัด

ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- แดดออก มีรถเข้า-ออกบางเวลา มีรถจอดเป็นจำนวนมาก และมีฝนตกตอนกลางคืนที่ผ่านมา</p>
สถานี A1 : โรงเรียนคลองหนึ่ง (แก้วนิมิตร) หมู่ที่ 4 คลองหนึ่ง อ.คลองหลวง จ.ปทุมธานี	

Daily report 6.11.24

หน้า 1

ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออก และมีฝนตกตอนกลางคืนที่ผ่านมา</p>
สถานี A2 : วัดแสงสรรค์ หมู่ที่ 6 ต.ประชาธิปัตย์ อ.ธัญบุรี จ.ปทุมธานี	
 	<p>- มีแดดออก มีรถเข้า-ออกบางเวลา มีการก่อสร้างอาคารบริเวณหลังจุดตรวจวัดประมาณ 40-60 เมตร และมีฝนตกตอนกลางคืนที่ผ่านมา</p>
สถานี A3 : วัดเสด็จ หมู่ที่ 5 ต.สวนพริกไทย อ.เมืองปทุมธานี จ.ปทุมธานี	

Daily report 6.11.24

หน้า 2

ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- ไม่มีแดดออก มีรถเข้า-ออกบางเวลา และมีฝนตกตอนกลางคืนที่ผ่านมา</p>
สถานี A4 : หมู่บ้านรัตนโกสินทร์ 200 ปี (ศูนย์การเรียนรู้และนันทนาการเทศบาลนครรังสิต)	

Daily report 6.11.24

หน้า 3

2. การตรวจวัดระดับเสียงทั่วไป (จำนวน 3 สถานี) วันที่ตรวจวัด : 6 พฤศจิกายน พ.ศ.2567 ผู้ตรวจวัด : บริษัท เอ็นไวรอนเม้นท์ รีเสิร์ช แอนด์ เทคโนโลยี จำกัด	
ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออก มีเสียงจากการจราจรบางเวลา และมีฝนตกตอนกลางคืนที่ผ่านมา</p>
สถานี N1 : พื้นที่ชุมชนปากทางไว้ท์ฮาร์ส ด้านทิศใต้ของโครงการ (พื้นที่ส่วนกลางของชุมชน)	

Daily report 6.11.24

หน้า 4

ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออก มีรถวิ่งผ่านบางเวลา และมีฝนตกตอนกลางคืนที่ผ่านมา</p>
สถานี N2 : บริเวณริมรั้วโครงการ (ติดหอพักพนักงาน บริษัท เทชิน โพลีเอสเตอร์ (ประเทศไทย) จำกัด)	
 	<p>- มีแดดออก มีรถเข้า-ออกบางเวลา และมีฝนตกตอนกลางคืนที่ผ่านมา</p>
สถานี N3 : บริเวณหอพักพนักงาน ของบริษัท เทชิน โพลีเอสเตอร์ (ประเทศไทย) จำกัด	

3. การตรวจวัดคุณภาพอากาศที่ระบายจากปล่อง (จำนวน 1 ปล่อง)
วันที่ตรวจวัด : 6 พฤศจิกายน พ.ศ. 2567
ผู้ตรวจวัด : บริษัทเอ็นไวรอนเมนทรี รีเสิร์ช แอนด์ เทคโนโลยี จำกัด

ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
  	<p>- ท้องฟ้ามีเมฆครึ้ม มีเมฆมาก มีลมพัดตลอดเวลา การจราจรด้านหน้าโครงการมีรถปริมาณมาก ทั้งขาเข้าและขาออกของถนนพหลโยธิน อุณหภูมิเฉลี่ย 30 °C</p>
HRSG Stack Unit 1	

บันทึกกิจกรรมการตรวจวัดคุณภาพสิ่งแวดล้อม (ประจำวันที่ 7 พฤศจิกายน พ.ศ. 2567)
การติดตามตรวจสอบการปฏิบัติตามมาตรการป้องกันและแก้ไขผลกระทบสิ่งแวดล้อมและมาตรการติดตามตรวจสอบผลกระทบสิ่งแวดล้อม
โครงการผลิตไฟฟ้าและไอน้ำระบบโคเจนเนอเรชัน จังหวัดปทุมธานี (ระยะดำเนินการ)
ระหว่างเดือนกรกฎาคม – ธันวาคม 2567

1. การตรวจวัดคุณภาพอากาศในบรรยากาศ (จำนวน 4 สถานี)
วันที่ตรวจวัด : 7 พฤศจิกายน พ.ศ. 2567
ผู้ตรวจวัด : บริษัท เอ็นไวรอนเมนทรี รีเสิร์ช แอนด์ เทคโนโลยี จำกัด

ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออก มีรถวิ่งผ่านบางเวลา</p>
สถานี A1 : โรงเรือนคลองหนึ่ง (แก้วนิมิตร) หมู่ที่ 4 คลองหนึ่ง อ.คลองหลวง จ.ปทุมธานี	

ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออกเล็กน้อย</p>
สถานี A2 : วัดแสงสรรค์ หมู่ที่ 6 ต.ประชาธิปไตย อ.ธัญบุรี จ.ปทุมธานี	
 	<p>- มีแดดออกเล็กน้อย มีรถเข้า-ออกบางเวลา และมีการก่อสร้างภายในวัด</p>
สถานี A3 : วัดเสด็จ หมู่ที่ 5 ต.สวนพริกไทย อ.เมืองปทุมธานี จ.ปทุมธานี	

ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออก มีรถจอดจำนวนมาก มีรถเข้า-ออก บางเวลา</p>
สถานี A4 : หมู่บ้านรัตนโกสินทร์ 200 ปี (ศูนย์การเรียนรู้และนิทรรศการเทศบาลนครรังสิต)	

2. การตรวจวัดระดับเสียงทั่วไป (จำนวน 3 สถานี)
วันที่ตรวจวัด : 7 พฤศจิกายน พ.ศ.2567
ผู้ตรวจวัด : บริษัท เอ็นไวรอนเม้นท์ รีเสิร์ช แอนด์ เทคโนโลยี จำกัด

ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออกเล็กน้อย และมีรถผ่านเข้า-ออก ตลอดเวลา</p>
สถานี N1 : พื้นที่ชุมชนปากทางวิเศษใต้ ด้านทิศใต้ของโครงการ (พื้นที่ส่วนกลางของชุมชน)	

ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออกเล็กน้อย และมีรถเข้า-ออกบางเวลา</p>
สถานี N2 : บริเวณริมรั้วโครงการ (ติดหอพักพนักงาน บริษัท เทียน โพลีเอสเตอร์ (ประเทศไทย) จำกัด)	
 	<p>- มีแดดออกเล็กน้อย และมีรถเข้า-ออกบางเวลา</p>
สถานี N3 : บริเวณหอพักพนักงาน ของบริษัท เทียน โพลีเอสเตอร์ (ประเทศไทย) จำกัด	





3. การตรวจวัดคุณภาพอากาศที่ระบายนจากปล่อง (จำนวน 1 ปล่อง)
วันที่ตรวจวัด : 7 พฤศจิกายน พ.ศ. 2567
ผู้ตรวจวัด : บริษัท เอ็นไวรอนเม้นท์ รีเสิร์ช แอนด์ เทคโนโลยี จำกัด

ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
  	<p>- ท้องฟ้ามีเมฆมาก มีแดด มีลมพัดเบา การจราจรด้านหน้าโรงงานมีรถปริมาณมาก ทั้งเข้าและขาออกของถนนพหลโยธิน อุณหภูมิเฉลี่ย 32 °C</p>
HRSG Stack Unit 2	

บันทึกกิจกรรมการตรวจวัดคุณภาพสิ่งแวดล้อม (ประจำวันที่ 8 พฤศจิกายน พ.ศ. 2567)
การติดตามตรวจสอบการปฏิบัติตามมาตรการป้องกันและแก้ไขผลกระทบสิ่งแวดล้อมและมาตรการติดตาม
ตรวจสอบผลกระทบสิ่งแวดล้อม
โครงการผลิตไฟฟ้าและโอนาระบบโคเจนเนอเรชัน จังหวัดปทุมธานี (ระยะดำเนินการ)
ระหว่างเดือนกรกฎาคม – ธันวาคม 2567


- การตรวจวัดคุณภาพอากาศในบรรยากาศ (จำนวน 4 สถานี)
วันที่ตรวจวัด : 8 พฤศจิกายน พ.ศ. 2567
ผู้ตรวจวัด : บริษัท เอ็นไวรอนเม้นท์ รีเสิร์ช แอนด์ เทคโนโลยี จำกัด

ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออก มีรถวิ่งผ่านบางเวลา</p>
สถานี A1 : โรงเรียนคลองหนึ่ง (แก้วนิมิตร) หมู่ที่ 4 ต.คลองหนึ่ง อ.คลองหลวง จ.ปทุมธานี	

ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออก มีรถวิ่งผ่านบางเวลา</p>
สถานี A2 : วัดแสงสรรค์ หมู่ที่ 6 ต.ประชาธิปไตย อ.ธัญบุรี จ.ปทุมธานี	
 	<p>- มีแดดออก มีรถวิ่งผ่านบางเวลา</p>
สถานี A3 : วัดเสด็จ หมู่ที่ 5 ต.สวนพริกไทย อ.เมืองปทุมธานี จ.ปทุมธานี	

ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออก มีรถเข้า-ออกบางเวลา</p>
สถานี A4 : หมู่บ้านรัตนโกสินทร์ 200 ปี (ศูนย์การเรียนรู้และนิทรรศการเทศบาลนครรังสิต)	

ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออก มีรถวิ่งผ่านตลอดเวลา</p>
สถานี N1 : พื้นที่ชุมชนปากทางไว้ท์เฮาส์ ด้านทิศใต้ของโครงการ (พื้นที่ส่วนกลางของชุมชน)	

ภาพถ่ายจุดตรวจวัด และสภาพแวดล้อมใกล้เคียง	บันทึกสภาพแวดล้อม
 	<p>- มีแดดออกเล็กน้อย มีรถเข้า-ออกบางเวลา</p>
<p>สถานี N2 : บริเวณริมรั้วโครงการ (ติดหอพักพนักงาน บริษัท เทอิน โพลีเอสเตอร์ (ประเทศไทย) จำกัด)</p>  	<p>- มีแดดออกเล็กน้อย มีรถเข้า-ออกบางเวลา</p>
สถานี N3 : บริเวณหอพักพนักงาน ของบริษัท เทอิน โพลีเอสเตอร์ (ประเทศไทย) จำกัด	

ภาคผนวก 70

ผลการวิเคราะห์คุณภาพอากาศจากปล่องระบาย

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Sampling Source : Stack Air Quality
Sampling Point : HRSG Stack Unit 1
GPS. Coordinate : UTM (WGS84) 47P 0674369 E, 1550747 N
Sampling Date : November 6, 2024
Sampling Time : 13:30-16:22
Sampling Method : US.EPA. Method 1-4, 5, 6, 7
Sampling By : Mr.Watcharangkun Kongsang, Registration No. ๓-099-๓-0047
Analyzed By : Environment Research & Technology Co., Ltd. Laboratory Registration No.๓-099

Quotation No. : AR2024-01649
Analysis No. : 2024-AF618-001
Received Date : November 8, 2024
Analytical Date : November 8-13, 2024
Report No. : 2024-RAAX193
Report Date : November 13, 2024

Item	Description	Method of Analysis	Unit	Result		Standard ^{2'}
				Actual Condition	Convert to Excess Oxygen 7%	
1	Fuel Type	-	-	Natural Gas		-
2	Combustion System	-	-	Close		-
3	Stack Height	Measuring Tape	m	35.00		-
4	Stack Diameter	Measuring Tape	m	3.50		-
5	Flue Gas Temperature	Thermocouple	°C	114.42	-	-
6	Pressure in Stack	Incline Manometer	mmHg	758.44	-	-
7	Oxygen Rate	Electrochemical Sensor	%	14.64	-	-
8	Moisture	Condensation Method	%	7.22	-	-
9	Air Velocity	Type S Pitot Tube	m/s	14.07	-	-
10	Volumetric Flow Rate ^{1'}	Calculate	Nm ³ /s	96	-	-
11	Volumetric Flow Rate	Calculate	m ³ /s	135	-	-
12	Sulfur Dioxide ^{1'}	Absorption, Barium-Thorin Titrimetric	ppm	<1.3	<1.3	20
13	Sulfur Dioxide ^{1'}	Absorption, Barium-Thorin Titrimetric	mg/m ³	<3.4	<3.4	52
14	Oxide of Nitrogen ^{1'}	Absorption, Phenoldisulfonic Acid	ppm	13	29	120
15	Oxide of Nitrogen ^{1'}	Absorption, Phenoldisulfonic Acid	mg/m ³	24	53	226
16	Total Suspended Particulate ^{1'}	Isokinetic, Gravimetric	mg/m ³	1.2	2.7	60

Remark : ^{1'} Reference condition is 25 degree Celsius at 1 Atmosphere and Dry Basis.

^{2'} Notification of the Ministry of Industry B.E.2547 (2004), issued under Factory Act B.E.2535 (1992), published in the Royal Government Gazette No.121 Special Part 113D dated October 7, B.E.2547 (2004). (New Power Plant)



(Ms.Natnicha Sermmatiwong)

Laboratory Reviewer No. ๓-099-๓-0012




(Ms.Ramita Taengthai)

Laboratory Supervisor No. ๓-099-๓-0010

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Sampling Source : Stack Air Quality
Sampling Point : HRSO Stack Unit 2
GPS. Coordinate : UTM (WGS84) 47P 0674393 E, 1550750 N
Sampling Date : November 7, 2024
Sampling Time : 13:30-16:22
Sampling Method : US.EPA. Method 1-4, 5, 6, 7
Sampling By : Mr.Watcharangkun Kongsang, Registration No. ๓-099-๓-0047
Analyzed By : Environment Research & Technology Co., Ltd. Laboratory Registration No.๓-099

Quotation No. : AR2024-01649
Analysis No. : 2024-AF618-002
Received Date : November 8, 2024
Analytical Date : November 8-13, 2024
Report No. : 2024-RAAX196
Report Date : November 13, 2024

Item	Description	Method of Analysis	Unit	Result		Standard ^{2'}
				Actual Condition	Convert to Excess Oxygen 7%	
1	Fuel Type	-	-	Natural Gas		-
2	Combustion System	-	-	Close		-
3	Stack Height	Measuring Tape	m	35.00		-
4	Stack Diameter	Measuring Tape	m	3.50		-
5	Flue Gas Temperature	Thermocouple	°C	116.75	-	-
6	Pressure in Stack	Incline Manometer	mmHg	757.48	-	-
7	Oxygen Rate	Electrochemical Sensor	%	14.62	-	-
8	Moisture	Condensation Method	%	7.30	-	-
9	Air Velocity	Type S Pitot Tube	m/s	11.78	-	-
10	Volumetric Flow Rate ^{1'}	Calculate	Nm ³ /s	80	-	-
11	Volumetric Flow Rate	Calculate	m ³ /s	113	-	-
12	Sulfur Dioxide ^{1'}	Absorption, Barium-Thorin Titrimetric	ppm	<1.3	<1.3	20
13	Sulfur Dioxide ^{1'}	Absorption, Barium-Thorin Titrimetric	mg/m ³	<3.4	<3.4	52
14	Oxide of Nitrogen ^{1'}	Absorption, Phenoldisulfonic Acid	ppm	17	38	120
15	Oxide of Nitrogen ^{1'}	Absorption, Phenoldisulfonic Acid	mg/m ³	32	71	226
16	Total Suspended Particulate ^{1'}	Isokinetic, Gravimetric	mg/m ³	1.3	2.9	60

Remark : ^{1'} Reference condition is 25 degree Celsius at 1 Atmosphere and Dry Basis.

^{2'} Notification of the Ministry of Industry B.E.2547 (2004), issued under Factory Act B.E.2535 (1992), published in the Royal Government Gazette No.121 Special Part 113D dated October 7, B.E.2547 (2004). (New Power Plant)

(Ms.Natnicha Sermmatiwong)
Laboratory Reviewer No. ๓-099-๓-0012

(Ms.Ramita Taengthai)
Laboratory Supervisor No. ๓-099-๓-0010

ภาคผนวก 71

ผลการตรวจวัดคุณภาพอากาศในบรรยากาศ

ANALYSIS REPORT

Customer Name

:Klong Luang Utilities Company Limited

Address

:222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210

Project Name

:Electricity and Steam Generating Cogeneration, Pathumthani Province Project

Project Location

:1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani

Sampling Source

:Ambient Air Quality

Sampling Point

:Learning and Recreation Center of Rangsit City Municipality
(located in Rattanakosin Song Roi Pi Housing Estate)

GPS. Coordinate

:UTM (WGS84) 47P 0673848 E, 1547490 N

Sampling Date

:November 1-8, 2024

Sampling Time

:12:35

Sampling Method

:U.S. EPA 40 CFR Part 50

Sampling By

:Mr.Assada Chaiyawong

Analyzed By

:Environment Research & Technology Co., Ltd.

Quotation No.

: AR2024-01649

Analysis No.

: 2024-AF587

Received Date

: November 11, 2024

Analytical Date

: November 11-18, 2024

Report No.

: 2024-RAAX832

Report Date

: November 19, 2024

Parameter	Unit	Method of Analysis	Result						Standard ¹⁾
			Nov 1-2, 24	Nov 3-4, 24	Nov 5-6, 24	Nov 7-8, 24	Nov 9-10, 24	Nov 11-12, 24	
Total Suspended Particulate (TSP) 24 Hours Average	mg/m ³	High-Volume, Gravimetric	0.061	0.074	0.073	0.054	0.041	0.057	0.330
Particulate Size Less Than 10 Micron (PM10) 24 Hours Average	mg/m ³	PM10 Size Selective, High-Volume, Gravimetric	0.036	0.042	0.043	0.032	0.024	0.031	0.120

Remark : ¹⁾ Notification of National Environmental Board, No.10, B.E.2538 (1995), published in the Royal Government Gazette No.112 Part 42D dated May 25, B.E.2538 (1995) and Notification No.24, B.E.2547 (2004), published in the Royal Government Gazette No.121 Special Part 104D dated September 22, B.E.2547 (2004), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).

(Ms.Natricha Sermmatiwong)

Laboratory Reviewer

(Ms.Ramita Taengthai)

Laboratory Supervisor

ANALYSIS REPORT

Customer Name

:Klong Luang Utilities Company Limited

Address

:222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210

Project Name

:Electricity and Steam Generating Cogeneration, Pathumthani Province Project

Project Location

:1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani

Sampling Source

:Ambient Air Quality

Sampling Point

:Saeng San Temple, Village no. 6, Prachathipat Sub-District, Thanyaburi District, Pathum Thani Province

GPS. Coordinate

:UTM (WGS84) 47P 0677579 E, 1548955 N

Sampling Date

:November 1-8, 2024

Sampling Time

:10:25

Sampling Method

:U.S. EPA 40 CFR Part 50

Sampling By

:Mr.Assada Chaiyawong

Analyzed By

:Environment Research & Technology Co., Ltd.

Quotation No.

: AR2024-01649

Analysis No.

: 2024-AF587

Received Date

: November 11, 2024

Analytical Date

: November 11-18, 2024

Report No.

: 2024-RAAX831

Report Date

: November 19, 2024

Parameter	Unit	Method of Analysis	Result						Standard ¹⁾
			Nov 1-2, 24	Nov 3-4, 24	Nov 5-6, 24	Nov 7-8, 24	Nov 9-10, 24	Nov 11-12, 24	
Total Suspended Particulate (TSP) 24 Hours Average	mg/m ³	High-Volume, Gravimetric	0.147	0.131	0.120	0.102	0.068	0.104	0.330
Particulate Size Less Than 10 Micron (PM10) 24 Hours Average	mg/m ³	PM10 Size Selective, High-Volume, Gravimetric	0.076	0.075	0.068	0.053	0.035	0.055	0.120

Remark : ¹⁾ Notification of National Environmental Board, No.10, B.E.2538 (1995), published in the Royal Government Gazette No.112 Part 42D dated May 25, B.E.2538 (1995) and Notification No.24, B.E.2547 (2004), published in the Royal Government Gazette No.121 Special Part 104D dated September 22, B.E.2547 (2004), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).

(Ms.Natricha Sermmatiwong)

Laboratory Reviewer

(Ms.Ramita Taengthai)

Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source : Ambient Air Quality
Measured Point : Khlong Nueng School (Kaew Nimit), Village no. 4, Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0674816 E, 1551787 N
Measured Date : November 1-8, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : NOx Chemiluminescence Analyzer Horiba Model APNA-370 Serial Number U9L550WU

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-001
Report No. : 2024-RAAX836
Report Date : November 21, 2024

Interval Time	Result NO _x (ppm)						Standard ^{1/}
	Nov 1-2, 24	Nov 2-3, 24	Nov 3-4, 24	Nov 4-5, 24	Nov 5-6, 24	Nov 6-7, 24	Nov 7-8, 24
10:00-11:00	0.0105	0.0134	0.0120	0.0151	0.0138	0.0097	0.0102
11:00-12:00	0.0118	0.0157	0.0095	0.0231	0.0124	0.0100	0.0095
12:00-13:00	0.0123	0.0090	0.0101	0.0142	0.0097	0.0090	0.0080
13:00-14:00	0.0140	0.0105	0.0119	0.0109	0.0129	0.0091	0.0087
14:00-15:00	0.0185	0.0095	0.0087	0.0091	0.0102	0.0082	0.0086
15:00-16:00	0.0139	0.0090	0.0087	0.0117	0.0140	0.0103	0.0077
16:00-17:00	0.0140	0.0088	0.0083	0.0153	0.0115	0.0134	0.0107
17:00-18:00	0.0141	0.0094	0.0118	0.0150	0.0144	0.0150	0.0111
18:00-19:00	0.0294	0.0188	0.0213	0.0206	0.0245	0.0191	0.0134
19:00-20:00	0.0319	0.0221	0.0224	0.0160	0.0175	0.0275	0.0211
20:00-21:00	0.0278	0.0224	0.0203	0.0179	0.0171	0.0297	0.0300
21:00-22:00	0.0290	0.0180	0.0183	0.0196	0.0206	0.0290	0.0269
22:00-23:00	0.0312	0.0147	0.0168	0.0211	0.0200	0.0247	0.0250
23:00-00:00	0.0270	0.0235	0.0190	0.0181	0.0211	0.0221	0.0193
00:00-01:00	0.0210	0.0261	0.0234	0.0165	0.0174	0.0210	0.0168
01:00-02:00	0.0158	0.0239	0.0221	0.0170	0.0159	0.0198	0.0107
02:00-03:00	0.0152	0.0227	0.0222	0.0162	0.0127	0.0178	0.0136
03:00-04:00	0.0141	0.0206	0.0231	0.0168	0.0130	0.0179	0.0152
04:00-05:00	0.0129	0.0202	0.0235	0.0172	0.0144	0.0175	0.0152
05:00-06:00	0.0126	0.0204	0.0236	0.0196	0.0152	0.0202	0.0155
06:00-07:00	0.0188	0.0273	0.0270	0.0235	0.0179	0.0218	0.0172
07:00-08:00	0.0157	0.0230	0.0308	0.0209	0.0186	0.0194	0.0172
08:00-09:00	0.0134	0.0130	0.0243	0.0144	0.0158	0.0135	0.0136
24 Hours Average	0.0186	0.0174	0.0180	0.0172	0.0163	0.0180	0.0153
1 Hour Maximum	0.0319	0.0273	0.0308	0.0235	0.0312	0.0297	0.0300

Remark : ^{1/} Notification of National Environmental Board, No.10, B.E.2538 (1995), published in the Royal Government Gazette No.112 Part 420 dated May 25, B.E.2538 (1995), Notification No.28, B.E.2550 (2007), published in the Royal Government Gazette No.124 Special Part 580 dated May 14, B.E.2550 (2007) and Notification No.33, B.E.2552 (2009), published in the Royal Government Gazette No.126 Special Part 1140 dated August 14, B.E.2552 (2009), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).



(Ms.Piyatida Pradangkho)
Laboratory Reviewer

(Ms.Panicha Promchai)
Laboratory Supervisor

DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL
REPORT ANALYSIS REFERS TO SUBMITTED SAMPLE (S) ONLY

F-RP-004 Rev. 02, January 18, 2021

Page 1/1

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source : Ambient Air Quality
Measured Point : Khlong Nueng School (Kaew Nimit), Village no. 4, Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0674816 E, 1551787 N
Measured Date : November 1-8, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : SO₂ UV-Fluorescence Analyzer Horiba Model APSA-370 Serial Number JH9G53FU

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-001
Report No. : 2024-RAAX837
Report Date : November 21, 2024

Interval Time	Result SO ₂ (ppm)						Standard
	Nov 1-2, 24	Nov 2-3, 24	Nov 3-4, 24	Nov 4-5, 24	Nov 5-6, 24	Nov 6-7, 24	Nov 7-8, 24
10:00-11:00	0.0020	0.0017	0.0020	0.0019	0.0022	0.0020	0.0021
11:00-12:00	0.0019	0.0018	0.0018	0.0021	0.0023	0.0018	0.0020
12:00-13:00	0.0018	0.0016	0.0017	0.0024	0.0022	0.0017	0.0019
13:00-14:00	0.0017	0.0017	0.0017	0.0018	0.0020	0.0019	0.0019
14:00-15:00	0.0017	0.0014	0.0015	0.0016	0.0019	0.0016	0.0019
15:00-16:00	0.0017	0.0014	0.0013	0.0016	0.0018	0.0018	0.0019
16:00-17:00	0.0017	0.0013	0.0017	0.0017	0.0015	0.0018	0.0017
17:00-18:00	0.0015	0.0012	0.0015	0.0016	0.0019	0.0021	0.0017
18:00-19:00	0.0016	0.0014	0.0017	0.0019	0.0015	0.0020	0.0017
19:00-20:00	0.0013	0.0013	0.0021	0.0019	0.0017	0.0024	0.0018
20:00-21:00	0.0014	0.0016	0.0021	0.0018	0.0017	0.0023	0.0017
21:00-22:00	0.0016	0.0015	0.0019	0.0020	0.0017	0.0024	0.0022
22:00-23:00	0.0019	0.0019	0.0020	0.0018	0.0019	0.0022	0.0025
23:00-00:00	0.0019	0.0018	0.0020	0.0020	0.0019	0.0024	0.0025
00:00-01:00	0.0019	0.0017	0.0019	0.0017	0.0019	0.0023	0.0023
01:00-02:00	0.0021	0.0020	0.0021	0.0016	0.0017	0.0023	0.0022
02:00-03:00	0.0019	0.0017	0.0020	0.0017	0.0018	0.0020	0.0024
03:00-04:00	0.0021	0.0018	0.0020	0.0014	0.0018	0.0021	0.0021
04:00-05:00	0.0022	0.0019	0.0017	0.0017	0.0018	0.0022	0.0024
05:00-06:00	0.0021	0.0016	0.0018	0.0018	0.0018	0.0020	0.0021
06:00-07:00	0.0019	0.0019	0.0018	0.0017	0.0020	0.0021	0.0021
07:00-08:00	0.0020	0.0022	0.0023	0.0017	0.0023	0.0024	0.0024
08:00-09:00	0.0018	0.0021	0.0021	0.0020	0.0024	0.0022	0.0024
09:00-10:00	0.0018	0.0021	0.0020	0.0020	0.0022	0.0021	0.0023
24 Hours Average	0.0018	0.0017	0.0019	0.0018	0.0019	0.0021	0.0021
1 Hour Maximum	0.0022	0.0022	0.0023	0.0024	0.0024	0.0024	0.0025

Remark : ^{1/} Notification of National Environmental Board, No.10, B.E.2538 (1995), published in the Royal Government Gazette No.112 Part 420 dated May 25, B.E.2538 (1995) and Notification No.24, B.E.2547 (2004), published in the Royal Government Gazette No.121 Special Part 1040 dated September 22, B.E.2547 (2004), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).
^{2/} Notification of National Environmental Board, No.12, B.E.2538 (1995), published in the Royal Government Gazette No.112 Special Part 270 dated July 13, B.E.2538 (1995) and Notification No.21, B.E.2544 (2001), published in the Royal Government Gazette No.118 Special Part 390 dated April 30, B.E.2544 (2001), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).



(Ms.Piyatida Pradangkho)
Laboratory Reviewer

(Ms.Panicha Promchai)
Laboratory Supervisor

DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL
REPORT ANALYSIS REFERS TO SUBMITTED SAMPLE (S) ONLY

F-RP-004 Rev. 02, January 18, 2021

Page 1/1

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source : Ambient Air Quality
Measured Point : Sadet Temple, Village no. 5, Suan Phrik Thai Sub-District, Mueang Pathum Thani District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0668808 E, 1551661 N
Measured Date : November 1-8, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : NOx Chemiluminescence Analyzer API Model 2004 Serial Number 2119

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-008
Report No. : 2024-RAAX838
Report Date : November 21, 2024

Interval Time	Result NO _x (ppm)						Standard ^{1*}
	Nov 1-2, 24	Nov 2-3, 24	Nov 3-4, 24	Nov 4-5, 24	Nov 5-6, 24	Nov 6-7, 24	Nov 7-8, 24
11:00-12:00	0.0163	0.0141	0.0354	0.0300	0.0133	0.0106	0.0139
12:00-13:00	0.0175	0.0533	0.0252	0.0134	0.0153	0.0098	0.0137
13:00-14:00	0.0179	0.0317	0.0165	0.0134	0.0145	0.0083	0.0122
14:00-15:00	0.0225	0.0419	0.0134	0.0100	0.0200	0.0120	0.0171
15:00-16:00	0.0267	0.0495	0.0125	0.0152	0.0160	0.0164	0.0166
16:00-17:00	0.0225	0.0325	0.0136	0.0136	0.0202	0.0164	0.0133
17:00-18:00	0.0174	0.0212	0.0136	0.0219	0.0316	0.0238	0.0150
18:00-19:00	0.0284	0.0132	0.0146	0.0322	0.0344	0.0403	0.0226
19:00-20:00	0.0324	0.0221	0.0254	0.0236	0.0213	0.0442	0.0262
20:00-21:00	0.0335	0.0304	0.0347	0.0150	0.0155	0.0439	0.0262
21:00-22:00	0.0388	0.0275	0.0324	0.0255	0.0292	0.0399	0.0259
22:00-23:00	0.0360	0.0176	0.0259	0.0256	0.0267	0.0275	0.0246
23:00-00:00	0.0372	0.0185	0.0236	0.0269	0.0242	0.0213	0.0258
00:00-01:00	0.0289	0.0188	0.0258	0.0196	0.0194	0.0266	0.0258
01:00-02:00	0.0190	0.0122	0.0338	0.0175	0.0203	0.0243	0.0169
02:00-03:00	0.0185	0.0323	0.0362	0.0192	0.0175	0.0217	0.0170
03:00-04:00	0.0153	0.0307	0.0294	0.0182	0.0175	0.0204	0.0150
04:00-05:00	0.0208	0.0282	0.0297	0.0198	0.0201	0.0249	0.0175
05:00-06:00	0.0191	0.0272	0.0333	0.0216	0.0224	0.0265	0.0156
06:00-07:00	0.0128	0.0326	0.0326	0.0320	0.0175	0.0286	0.0113
07:00-08:00	0.0156	0.0342	0.0377	0.0299	0.0179	0.0291	0.0269
08:00-09:00	0.0140	0.0332	0.0391	0.0297	0.0187	0.0290	0.0171
09:00-10:00	0.0113	0.0251	0.0367	0.0234	0.0201	0.0174	0.0116
10:00-11:00	0.0153	0.0343	0.0308	0.0147	0.0128	0.0123	0.0120
24 Hours Average	0.0224	0.0284	0.0272	0.0213	0.0203	0.0240	0.0183
1 Hour Maximum	0.0388	0.0533	0.0391	0.0322	0.0344	0.0442	0.0269
1.7							

Remark : ^{1*} Notification of National Environmental Board, No.10, B.E.2538 (1995), published in the Royal Government Gazette No.112 Part 420 dated May 25, B.E.2538 (1995), Notification No.38, B.E.2540 (2000), published in the Royal Government Gazette No.121 Special Part 1140 dated August 14, B.E.2552 (2009), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).

(Ms.Piyatida Pradangkho)
Laboratory Reviewer

(Ms.Panicha Promchal)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source : Ambient Air Quality
Measured Point : Sadet Temple, Village no. 5, Suan Phrik Thai Sub-District, Mueang Pathum Thani District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0668808 E, 1551661 N
Measured Date : November 1-8, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : SO₂ UV-Fluorescence Analyzer Thermo Model 43C Serial Number 0607415768

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-008
Report No. : 2024-RAAX839
Report Date : November 21, 2024

Interval Time	Result SO ₂ (ppm)						Standard
	Nov 1-2, 24	Nov 2-3, 24	Nov 3-4, 24	Nov 4-5, 24	Nov 5-6, 24	Nov 6-7, 24	Nov 7-8, 24
11:00-12:00	0.0015	0.0017	0.0016	0.0017	0.0016	0.0017	0.0014
12:00-13:00	0.0015	0.0018	0.0017	0.0015	0.0015	0.0017	0.0014
13:00-14:00	0.0014	0.0018	0.0019	0.0016	0.0016	0.0014	0.0015
14:00-15:00	0.0013	0.0017	0.0018	0.0017	0.0016	0.0014	0.0015
15:00-16:00	0.0014	0.0019	0.0019	0.0017	0.0015	0.0017	0.0016
16:00-17:00	0.0014	0.0018	0.0018	0.0018	0.0017	0.0018	0.0016
17:00-18:00	0.0014	0.0018	0.0018	0.0018	0.0015	0.0017	0.0016
18:00-19:00	0.0012	0.0016	0.0018	0.0017	0.0015	0.0019	0.0016
19:00-20:00	0.0012	0.0017	0.0018	0.0016	0.0014	0.0016	0.0016
20:00-21:00	0.0013	0.0017	0.0016	0.0015	0.0013	0.0018	0.0013
21:00-22:00	0.0014	0.0017	0.0015	0.0016	0.0013	0.0020	0.0012
22:00-23:00	0.0013	0.0015	0.0016	0.0017	0.0015	0.0019	0.0017
23:00-00:00	0.0014	0.0015	0.0018	0.0016	0.0014	0.0019	0.0015
00:00-01:00	0.0015	0.0015	0.0017	0.0015	0.0014	0.0014	0.0013
01:00-02:00	0.0014	0.0015	0.0016	0.0015	0.0013	0.0013	0.0014
02:00-03:00	0.0015	0.0016	0.0018	0.0015	0.0013	0.0012	0.0014
03:00-04:00	0.0015	0.0013	0.0017	0.0017	0.0013	0.0013	0.0012
04:00-05:00	0.0014	0.0016	0.0016	0.0016	0.0013	0.0013	0.0014
05:00-06:00	0.0015	0.0015	0.0017	0.0015	0.0014	0.0012	0.0011
06:00-07:00	0.0014	0.0016	0.0016	0.0015	0.0013	0.0012	0.0014
07:00-08:00	0.0014	0.0017	0.0018	0.0018	0.0016	0.0012	0.0015
08:00-09:00	0.0016	0.0015	0.0015	0.0015	0.0014	0.0013	0.0014
09:00-10:00	0.0016	0.0015	0.0015	0.0015	0.0013	0.0014	0.0019
10:00-11:00	0.0017	0.0016	0.0016	0.0019	0.0015	0.0014	0.0020
24 Hours Average	0.0014	0.0016	0.0017	0.0016	0.0014	0.0015	0.0015
1 Hour Maximum	0.0017	0.0019	0.0019	0.0019	0.0017	0.0020	0.0020
0.30 ^{2*}							

Remark : ^{1*} Notification of National Environmental Board, No.10, B.E.2538 (1995), published in the Royal Government Gazette No.112 Part 420 dated May 25, B.E.2538 (1995) and Notification No.38, B.E.2540 (2000), published in the Royal Government Gazette No.121 Special Part 1040 dated September 22, B.E.2547 (2004), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).
^{2*} Notification of National Environmental Board, No.12, B.E.2538 (1995), published in the Royal Government Gazette No.112 Special Part 270 dated July 13, B.E.2538 (1995) and Notification No.21, B.E.2544 (2001), published in the Royal Government Gazette No.118 Special Part 390 dated April 30, B.E.2544 (2001), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).

(Ms.Piyatida Pradangkho)
Laboratory Reviewer

(Ms.Panicha Promchal)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name

Address

Project Name

Project Location

Measured Source

Measured Point

GPS. Coordinate

Measured Date

Measured By

Analyzed By

Measured Instrument

: Klong Luang Utilities Company Limited

: 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210

: Electricity and Steam Generating Cogeneration, Pathumthani Province Project

: 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani

: Ambient Air Quality

: Saeng San Temple, Village no. 6, Prachathipat Sub-District, Thanyaburi District, Pathum Thani Province

: UTM (WGS84) 47P 0677579 E, 1548955 N

: November 1-8, 2024

: Mr.Assada Chaiyawong

: Environment Research & Technology Co., Ltd.

: NOx Chemiluminescence Analyzer API Model 200A Serial Number 56

Quotation No.

Analysis No.

Report No.

Report Date

: AR2024-01649

: 2024-AFS87-015

: 2024-RAAX840

: November 21, 2024

Interval Time	Result NO _x (ppm)							Standard ^{1/}
	Nov 1-2, 24	Nov 2-3, 24	Nov 3-4, 24	Nov 4-5, 24	Nov 5-6, 24	Nov 6-7, 24	Nov 7-8, 24	
10:00-11:00	0.0106	0.0124	0.0075	0.0072	0.0116	0.0400	0.0090	
11:00-12:00	0.0095	0.0059	0.0079	0.0098	0.0076	0.0127	0.0102	
12:00-13:00	0.0100	0.0099	0.0058	0.0089	0.0109	0.0128	0.0067	
13:00-14:00	0.0158	0.0088	0.0063	0.0100	0.0084	0.0078	0.0057	
14:00-15:00	0.0145	0.0086	0.0053	0.0099	0.0189	0.0107	0.0067	
15:00-16:00	0.0116	0.0070	0.0043	0.0151	0.0116	0.0097	0.0096	
16:00-17:00	0.0105	0.0160	0.0090	0.0163	0.0113	0.0142	0.0122	
17:00-18:00	0.0171	0.0188	0.0136	0.0179	0.0178	0.0176	0.0128	
18:00-19:00	0.0281	0.0213	0.0200	0.0122	0.0195	0.0196	0.0196	
19:00-20:00	0.0351	0.0183	0.0221	0.0149	0.0062	0.0287	0.0217	
20:00-21:00	0.0323	0.0152	0.0163	0.0158	0.0101	0.0299	0.0215	
21:00-22:00	0.0285	0.0143	0.0133	0.0166	0.0118	0.0252	0.0212	
22:00-23:00	0.0135	0.0141	0.0127	0.0144	0.0114	0.0183	0.0209	
23:00-00:00	0.0262	0.0141	0.0183	0.0179	0.0127	0.0166	0.0139	
00:00-01:00	0.0148	0.0194	0.0207	0.0153	0.0101	0.0166	0.0114	
01:00-02:00	0.0131	0.0186	0.0235	0.0118	0.0097	0.0154	0.0087	
02:00-03:00	0.0093	0.0207	0.0214	0.0129	0.0087	0.0124	0.0077	
03:00-04:00	0.0080	0.0195	0.0226	0.0120	0.0093	0.0142	0.0103	
04:00-05:00	0.0078	0.0184	0.0220	0.0109	0.0086	0.0136	0.0109	
05:00-06:00	0.0104	0.0162	0.0203	0.0109	0.0103	0.0120	0.0032	
06:00-07:00	0.0071	0.0174	0.0273	0.0105	0.0120	0.0131	0.0166	
07:00-08:00	0.0167	0.0142	0.0227	0.0167	0.0096	0.0124	0.0244	
08:00-09:00	0.0189	0.0162	0.0225	0.0154	0.0050	0.0194	0.0157	
09:00-10:00	0.0182	0.0122	0.0167	0.0148	0.0063	0.0103	0.0096	
24 Hours Average	0.0162	0.0149	0.0159	0.0133	0.0108	0.0168	0.0129	
1 Hour Maximum	0.0351	0.0213	0.0273	0.0179	0.0195	0.0400	0.0244	

Remark : ^{1/} Notification of National Environmental Board, No.10, B.E.2538 (1995), published in the Royal Government Gazette No.112 Part 420 dated May 25, B.E.2538 (1995), Notification No.26, B.E.2550 (2007), published in the Royal Government Gazette No.124 Special Part 580 dated May 14, B.E.2550 (2007) and Notification No.33, B.E.2552 (2009), published in the Royal Government Gazette No.126 Special Part 1140 dated August 14, B.E.2552 (2009), under the Enhancement and Conservation of National Environmental Quality Act. B.E.2553 (1992).

(Ms. Piyatida Pradangkho)

Laboratory Reviewer

(Ms. Panicha Promchai)

Laboratory Supervisor

ANALYSIS REPORT

Customer Name

Address

Project Name

Project Location

Measured Source

Measured Point

GPS. Coordinate

Measured Date

Measured By

Analyzed By

Measured Instrument

: Klong Luang Utilities Company Limited

: 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210

: Electricity and Steam Generating Cogeneration, Pathumthani Province Project

: 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani

: Ambient Air Quality

: Saeng San Temple, Village no. 6, Prachathipat Sub-District, Thanyaburi District, Pathum Thani Province

: UTM (WGS84) 47P 0677579 E, 1548955 N

: November 1-8, 2024

: Mr.Assada Chaiyawong

: Environment Research & Technology Co., Ltd.

: SO₂ UV-Fluorescence Analyzer Thermo Model 431 Serial Number CN14430002

Quotation No.

Analysis No.

Report No.

Report Date

: AR2024-01649

: 2024-AFS87-015

: 2024-RAAX841

: November 21, 2024

Interval Time	Result SO ₂ (ppm)							Standard
	Nov 1-2, 24	Nov 2-3, 24	Nov 3-4, 24	Nov 4-5, 24	Nov 5-6, 24	Nov 6-7, 24	Nov 7-8, 24	
10:00-11:00	0.0021	0.0019	0.0020	0.0020	0.0021	0.0015	0.0017	
11:00-12:00	0.0020	0.0014	0.0020	0.0024	0.0018	0.0013	0.0016	
12:00-13:00	0.0019	0.0013	0.0019	0.0021	0.0018	0.0016	0.0014	
13:00-14:00	0.0019	0.0015	0.0019	0.0020	0.0016	0.0023	0.0014	
14:00-15:00	0.0018	0.0014	0.0020	0.0019	0.0017	0.0023	0.0015	
15:00-16:00	0.0015	0.0013	0.0019	0.0018	0.0016	0.0022	0.0015	
16:00-17:00	0.0018	0.0016	0.0020	0.0020	0.0016	0.0020	0.0015	
17:00-18:00	0.0019	0.0017	0.0020	0.0020	0.0017	0.0018	0.0014	
18:00-19:00	0.0020	0.0017	0.0022	0.0019	0.0018	0.0018	0.0016	
19:00-20:00	0.0021	0.0014	0.0019	0.0014	0.0019	0.0014	0.0019	
20:00-21:00	0.0022	0.0015	0.0022	0.0020	0.0018	0.0015	0.0019	
21:00-22:00	0.0021	0.0015	0.0022	0.0020	0.0016	0.0015	0.0018	
22:00-23:00	0.0022	0.0016	0.0022	0.0018	0.0016	0.0015	0.0017	
23:00-00:00	0.0022	0.0017	0.0022	0.0019	0.0017	0.0016	0.0016	
00:00-01:00	0.0022	0.0022	0.0022	0.0019	0.0015	0.0016	0.0016	
01:00-02:00	0.0022	0.0022	0.0021	0.0018	0.0017	0.0017	0.0016	
02:00-03:00	0.0022	0.0023	0.0021	0.0020	0.0016	0.0018	0.0014	
03:00-04:00	0.0021	0.0022	0.0019	0.0019	0.0016	0.0015	0.0014	
04:00-05:00	0.0021	0.0020	0.0022	0.0017	0.0018	0.0015	0.0014	
05:00-06:00	0.0021	0.0022	0.0021	0.0019	0.0017	0.0014	0.0015	
06:00-07:00	0.0022	0.0024	0.0020	0.0016	0.0017	0.0017	0.0014	
07:00-08:00	0.0021	0.0023	0.0021	0.0015	0.0018	0.0016	0.0016	
08:00-09:00	0.0020	0.0022	0.0022	0.0017	0.0017	0.0016	0.0019	
09:00-10:00	0.0020	0.0022	0.0021	0.0017	0.0019	0.0016	0.0019	
24 Hours Average	0.0020	0.0018	0.0021	0.0019	0.0017	0.0017	0.0016	
1 Hour Maximum	0.0022	0.0024	0.0022	0.0024	0.0021	0.0023	0.0019	
							0.13 ¹⁴	
							0.30 ¹⁴	

Remark : ^{1/} Notification of National Environmental Board, No.10, B.E.2538 (1995), published in the Royal Government Gazette No.112 Part 420 dated May 25, B.E.2538 (1995) and Notification No.24, B.E.2547 (2004), published in the Royal Government Gazette No.121 Special Part 1040 dated September 22, B.E.2547 (2004), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).
^{2/} Notification of National Environmental Board, No.12, B.E.2538 (1995), published in the Royal Government Gazette No.112 Special Part 270 dated July 13, B.E.2538 (1995) and Notification No.21, B.E.2544 (2001), published in the Royal Government Gazette No.118 Special Part 390 dated April 30, B.E.2544 (2001), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).

(Ms. Piyatida Pradangkho)

Laboratory Reviewer

(Ms. Panicha Promchai)

Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source : Ambient Air Quality
Measured Point : Learning and Recreation Center of Rangsit City Municipality
: (located in Rattanakosin Song Roi Pi Housing Estate)
GPS. Coordinate : UTM (WGS84) 47P 0673848 E, 1547485 N
Measured Date : November 1-8, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : NOx Chemiluminescence Analyzer Horiba Model APNA-360CE Serial Number EYC70000

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-022
Report No. : 2024-RAAX842
Report Date : November 21, 2024

Interval Time	Result NO _x (ppm)						Standard ¹⁾
	Nov 1-2, 24	Nov 2-3, 24	Nov 3-4, 24	Nov 4-5, 24	Nov 5-6, 24	Nov 6-7, 24	Nov 7-8, 24
13:00-14:00	0.0099	0.0146	0.0135	0.0130	0.0135	0.0121	0.0125
14:00-15:00	0.0124	0.0141	0.0125	0.0121	0.0130	0.0115	0.0130
15:00-16:00	0.0120	0.0143	0.0137	0.0098	0.0128	0.0124	0.0122
16:00-17:00	0.0108	0.0143	0.0125	0.0138	0.0139	0.0126	0.0135
17:00-18:00	0.0118	0.0141	0.0128	0.0143	0.0136	0.0131	0.0145
18:00-19:00	0.0139	0.0152	0.0138	0.0141	0.0138	0.0142	0.0168
19:00-20:00	0.0162	0.0170	0.0153	0.0144	0.0142	0.0152	0.0172
20:00-21:00	0.0159	0.0149	0.0152	0.0137	0.0132	0.0148	0.0149
21:00-22:00	0.0175	0.0155	0.0154	0.0137	0.0136	0.0142	0.0145
22:00-23:00	0.0153	0.0138	0.0140	0.0142	0.0136	0.0145	0.0162
23:00-00:00	0.0150	0.0139	0.0131	0.0150	0.0136	0.0134	0.0149
00:00-01:00	0.0144	0.0143	0.0135	0.0130	0.0144	0.0129	0.0145
01:00-02:00	0.0135	0.0131	0.0147	0.0138	0.0135	0.0136	0.0131
02:00-03:00	0.0141	0.0125	0.0143	0.0131	0.0131	0.0137	0.0140
03:00-04:00	0.0133	0.0134	0.0132	0.0140	0.0137	0.0138	0.0136
04:00-05:00	0.0131	0.0137	0.0134	0.0128	0.0128	0.0135	0.0132
05:00-06:00	0.0140	0.0124	0.0128	0.0122	0.0126	0.0130	0.0141
06:00-07:00	0.0117	0.0126	0.0098	0.0092	0.0129	0.0104	0.0137
07:00-08:00	0.0117	0.0115	0.0080	0.0091	0.0114	0.0122	0.0135
08:00-09:00	0.0090	0.0115	0.0095	0.0093	0.0119	0.0110	0.0107
09:00-10:00	0.0097	0.0120	0.0115	0.0117	0.0130	0.0115	0.0128
10:00-11:00	0.0123	0.0125	0.0132	0.0130	0.0131	0.0122	0.0136
11:00-12:00	0.0127	0.0144	0.0127	0.0139	0.0113	0.0130	0.0129
12:00-13:00	0.0134	0.0125	0.0125	0.0145	0.0128	0.0121	0.0134
24 Hours Average	0.0131	0.0137	0.0130	0.0128	0.0131	0.0130	0.0139
1 Hour Maximum	0.0175	0.0170	0.0154	0.0150	0.0144	0.0152	0.0172

Remark : ¹⁾ Notification of National Environmental Board, No.10, B.E.2538 (1995), published in the Royal Government Gazette No.113 Part 420 dated May 25, B.E.2538 (1995), Notification No.28, B.E.2550 (2007), published in the Royal Government Gazette No.124 Special Part 580 dated May 14, B.E.2550 (2007) and Notification No.33, B.E.2553 (2009), published in the Royal Government Gazette No.126 Special Part 1140 dated August 14, B.E.2553 (2009), under the Enhancement and Conservation of National Environmental Quality Act, B.E.2535 (1992).

(Ms.Piyatida Pradangkho)
Laboratory Reviewer

(Ms.Panicha Promchai)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source : Ambient Air Quality
Measured Point : Learning and Recreation Center of Rangsit City Municipality
: (located in Rattanakosin Song Roi Pi Housing Estate)
GPS. Coordinate : UTM (WGS84) 47P 0673848 E, 1547485 N
Measured Date : November 1-8, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : SO₂ UV-Fluorescence Analyzer Horiba Model APSA-370 Serial Number 12E8X34P

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-022
Report No. : 2024-RAAX843
Report Date : November 21, 2024

Interval Time	Result SO ₂ (ppm)						Standard
	Nov 1-2, 24	Nov 2-3, 24	Nov 3-4, 24	Nov 4-5, 24	Nov 5-6, 24	Nov 6-7, 24	Nov 7-8, 24
13:00-14:00	0.0015	0.0020	0.0023	0.0020	0.0022	0.0016	0.0019
14:00-15:00	0.0014	0.0022	0.0024	0.0020	0.0024	0.0016	0.0021
15:00-16:00	0.0014	0.0022	0.0024	0.0021	0.0023	0.0015	0.0022
16:00-17:00	0.0016	0.0021	0.0025	0.0021	0.0020	0.0015	0.0023
17:00-18:00	0.0017	0.0022	0.0024	0.0020	0.0016	0.0016	0.0023
18:00-19:00	0.0017	0.0021	0.0022	0.0017	0.0014	0.0015	0.0021
19:00-20:00	0.0018	0.0020	0.0019	0.0016	0.0013	0.0018	0.0019
20:00-21:00	0.0020	0.0018	0.0017	0.0015	0.0013	0.0018	0.0017
21:00-22:00	0.0020	0.0016	0.0016	0.0013	0.0013	0.0019	0.0015
22:00-23:00	0.0021	0.0015	0.0015	0.0013	0.0013	0.0021	0.0015
23:00-00:00	0.0021	0.0015	0.0014	0.0014	0.0013	0.0019	0.0015
00:00-01:00	0.0021	0.0015	0.0015	0.0015	0.0014	0.0016	0.0014
01:00-02:00	0.0020	0.0016	0.0016	0.0015	0.0014	0.0018	0.0014
02:00-03:00	0.0020	0.0018	0.0017	0.0015	0.0014	0.0018	0.0013
03:00-04:00	0.0019	0.0018	0.0017	0.0015	0.0014	0.0018	0.0013
04:00-05:00	0.0019	0.0018	0.0018	0.0015	0.0015	0.0017	0.0013
05:00-06:00	0.0019	0.0020	0.0018	0.0015	0.0015	0.0017	0.0014
06:00-07:00	0.0018	0.0017	0.0019	0.0015	0.0015	0.0017	0.0015
07:00-08:00	0.0018	0.0017	0.0017	0.0015	0.0015	0.0017	0.0014
08:00-09:00	0.0019	0.0018	0.0018	0.0016	0.0016	0.0016	0.0014
09:00-10:00	0.0021	0.0017	0.0017	0.0016	0.0015	0.0015	0.0014
10:00-11:00	0.0021	0.0020	0.0018	0.0015	0.0016	0.0016	0.0016
11:00-12:00	0.0020	0.0021	0.0018	0.0017	0.0016	0.0017	0.0018
12:00-13:00	0.0020	0.0022	0.0022	0.0018	0.0016	0.0017	0.0021
24 Hours Average	0.0019	0.0019	0.0019	0.0016	0.0016	0.0017	0.0021
1 Hour Maximum	0.0021	0.0022	0.0025	0.0021	0.0024	0.0021	0.0023

Remark : ¹⁾ Notification of National Environmental Board, No.10, B.E.2538 (1995), published in the Royal Government Gazette No.113 Part 420 dated May 25, B.E.2538 (1995) and Notification No.24, B.E.2547 (2004), published in the Royal Government Gazette No.121 Special Part 1940 dated September 22, B.E.2547 (2004), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).
²⁾ Notification of National Environmental Board, No.12, B.E.2538 (1995), published in the Royal Government Gazette No.117 Special Part 270 dated July 13, B.E.2538 (1995) and Notification No.21, B.E.2544 (2001), published in the Royal Government Gazette No.118 Special Part 390 dated April 30, B.E.2544 (2001), under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992).

(Ms.Piyatida Pradangkho)
Laboratory Reviewer

(Ms.Panicha Promchai)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Point : Khlong Nueng School (Kaew Nimit), Village no. 4, Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0674816 E, 1551787 N
Measured Date : November 1-8, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-001 - 007
Report No. : 2024-0AAX844
Report Date : November 21, 2024

Date/Time	Nov 1-2, 24				Nov 3-4, 24				Nov 4-5, 24			
	Temp.	WS	WD	Temp.	WS	WD	Temp.	WS	Temp.	WS	WD	WD
10:00-11:00	33.0	0.4	WNW	33.1	1.3	E	32.9	0.9	E	31.2	0.4	ESE
11:00-12:00	34.8	0.9	WNW	35.3	0.9	E	34.3	0.9	E	32.0	0.9	WNW
12:00-13:00	35.2	1.3	WNW	35.8	0.4	ESE	35.5	0.9	E	34.1	0.4	ESE
13:00-14:00	34.5	0.9	WNW	35.4	0.4	ESE	37.2	0.4	ESE	35.0	0.4	E
14:00-15:00	33.2	1.8	WNW	35.5	1.8	E	36.7	0.9	ESE	34.6	0.9	E
15:00-16:00	34.4	1.8	WNW	35.2	2.2	E	36.2	0.4	ESE	34.3	0.9	E
16:00-17:00	34.4	1.3	WNW	34.4	2.2	E	34.3	0.4	E	32.9	0.4	E
17:00-18:00	33.1	0.4	ESE	33.6	1.8	E	33.4	0.4	ESE	32.6	<0.4	Calm
18:00-19:00	31.1	0.4	WNW	32.1	1.3	E	32.1	<0.4	Calm	31.5	<0.4	Calm
19:00-20:00	29.7	0.4	SW	30.6	<0.4	Calm	31.2	<0.4	Calm	30.6	<0.4	Calm
20:00-21:00	29.8	<0.4	Calm	29.3	<0.4	Calm	30.4	<0.4	Calm	29.8	0.4	E
21:00-22:00	29.7	<0.4	Calm	28.8	<0.4	Calm	29.3	<0.4	Calm	28.7	<0.4	Calm
22:00-23:00	29.4	<0.4	Calm	28.1	<0.4	Calm	28.7	<0.4	Calm	28.9	<0.4	Calm
23:00-00:00	28.9	<0.4	Calm	27.4	<0.4	Calm	28.2	<0.4	Calm	28.9	<0.4	Calm
00:00-01:00	28.5	<0.4	Calm	27.0	<0.4	Calm	27.5	<0.4	Calm	28.3	<0.4	Calm
01:00-02:00	28.3	<0.4	Calm	26.8	<0.4	Calm	27.3	<0.4	Calm	27.6	<0.4	Calm
02:00-03:00	27.9	<0.4	Calm	26.7	<0.4	Calm	27.4	<0.4	Calm	26.9	<0.4	Calm
03:00-04:00	27.7	<0.4	Calm	26.1	<0.4	Calm	26.8	<0.4	Calm	26.4	<0.4	Calm
04:00-05:00	27.4	<0.4	Calm	25.8	<0.4	Calm	26.1	<0.4	Calm	26.2	<0.4	Calm
05:00-06:00	27.4	<0.4	Calm	25.9	<0.4	Calm	26.1	<0.4	Calm	25.9	<0.4	Calm
06:00-07:00	27.4	<0.4	Calm	25.7	<0.4	Calm	26.1	<0.4	Calm	25.9	<0.4	Calm
07:00-08:00	27.6	<0.4	Calm	25.8	<0.4	Calm	25.8	<0.4	Calm	26.1	<0.4	Calm
08:00-09:00	28.7	0.4	NNE	27.9	<0.4	Calm	26.8	<0.4	Calm	27.3	<0.4	Calm
09:00-10:00	31.2	0.9	E	30.8	0.4	E	29.0	0.4	ESE	29.7	0.4	E

Remark : WS = Wind Speed (m/s)
WD = Wind Direction
Temp. = Temperature (°C)
Height of wind vane and anemometer above ground 10 meters.



(Ms.Piyatida Pradangkho)
Laboratory Reviewer

(Ms.Panicha Promdhai)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Point : Khlong Nueng School (Kaew Nimit), Village no. 4, Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0674816 E, 1551787 N
Measured Date : November 1-8, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-001 - 007
Report No. : 2024-0AAX844
Report Date : November 21, 2024

Date/Time	Nov 5-6, 24				Nov 6-7, 24				Nov 7-8, 24			
	Temp.	WS	WD	Temp.	WS	WD	Temp.	WS	Temp.	WS	WD	WD
10:00-11:00	30.4	0.4	ESE	30.3	0.9	E	31.6	0.9	E	31.6	0.9	E
11:00-12:00	32.1	0.4	WNW	31.6	0.9	E	32.8	1.3	E	32.8	1.3	E
12:00-13:00	34.6	0.4	ESE	31.3	1.3	E	33.1	1.8	E	33.1	1.8	E
13:00-14:00	34.1	0.4	SSE	31.8	1.3	E	32.7	1.8	E	32.7	1.8	E
14:00-15:00	34.9	0.4	S	31.8	0.9	E	33.6	1.8	E	33.6	1.8	E
15:00-16:00	32.7	0.4	WSW	31.5	0.4	E	33.8	2.7	E	33.8	2.7	E
16:00-17:00	31.5	0.9	SSW	31.0	0.4	ESE	33.2	1.8	E	33.2	1.8	E
17:00-18:00	26.2	<0.4	Calm	30.4	0.4	SSE	32.5	1.3	E	32.5	1.3	E
18:00-19:00	26.1	<0.4	Calm	29.8	<0.4	Calm	31.5	0.4	E	31.5	0.4	E
19:00-20:00	26.6	0.4	NW	28.7	<0.4	Calm	30.8	0.4	E	30.8	0.4	E
20:00-21:00	25.5	0.4	ESE	28.2	<0.4	Calm	29.9	<0.4	Calm	29.9	<0.4	Calm
21:00-22:00	25.0	<0.4	Calm	27.8	<0.4	Calm	29.6	<0.4	Calm	29.6	<0.4	Calm
22:00-23:00	25.9	<0.4	Calm	27.6	<0.4	Calm	29.4	<0.4	Calm	29.4	<0.4	Calm
23:00-00:00	26.3	<0.4	Calm	27.8	<0.4	Calm	28.9	<0.4	Calm	28.9	<0.4	Calm
00:00-01:00	26.4	<0.4	Calm	27.6	<0.4	Calm	28.4	<0.4	Calm	28.4	<0.4	Calm
01:00-02:00	26.6	<0.4	Calm	27.4	<0.4	Calm	27.9	<0.4	Calm	27.9	<0.4	Calm
02:00-03:00	26.2	<0.4	Calm	27.0	<0.4	Calm	26.7	<0.4	Calm	26.7	<0.4	Calm
03:00-04:00	25.8	<0.4	Calm	26.9	<0.4	Calm	26.3	<0.4	Calm	26.3	<0.4	Calm
04:00-05:00	25.6	<0.4	Calm	26.8	<0.4	Calm	25.9	0.4	NE	25.9	0.4	NE
05:00-06:00	25.5	<0.4	Calm	26.4	<0.4	Calm	25.6	0.4	NE	25.6	0.4	NE
06:00-07:00	25.7	<0.4	Calm	26.2	<0.4	Calm	25.9	0.4	NE	25.9	0.4	NE
07:00-08:00	25.7	<0.4	Calm	26.4	<0.4	Calm	26.2	0.9	NE	26.2	0.9	NE
08:00-09:00	26.7	<0.4	Calm	27.9	0.9	E	26.9	0.9	ENE	26.9	0.9	ENE
09:00-10:00	28.8	0.4	ESE	29.6	0.9	E	28.9	0.9	ENE	28.9	0.9	ENE

Remark : WS = Wind Speed (m/s)
WD = Wind Direction
Temp. = Temperature (°C)
Height of wind vane and anemometer above ground 10 meters.



(Ms.Piyatida Pradangkho)
Laboratory Reviewer

(Ms.Panicha Promdhai)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name

Address

Project Name

Project Location

Measured Point

GPS. Coordinate

Measured Date

Measured By

Analized By

: Klong Luang Utilities Company Limited

: 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210

: Electricity and Steam Generating Cogeneration, Pathumthani Province Project

: 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani

: Khlong Nueng School (Kaew Nimit), Village no. 4, Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province

: UTM (WGS84) 47P 0674816 E, 1551787 N

: November 1-8, 2024

: Mr.Assada Chaiyawong

: Environment Research & Technology Co., Ltd.

Quotation No.

Analysis No.

Report No.

Report Date

: AR2024-01649

: 2024-AF537-001 - 007

: 2024-RAAX844

: November 21, 2024

Wind Direction	Percentage frequency of wind in each speed and direction							Total
	0.4-1.1	1.1-2.1	2.1-3.1	3.1-4.1	≥4.1			
N	0.00000	0.00000	0.00000	0.00000	0.00000			0.00000
NNE	0.59524	0.00000	0.00000	0.00000	0.00000			0.59524
NE	2.38095	0.00000	0.00000	0.00000	0.00000			2.38095
ENE	1.19048	0.00000	0.00000	0.00000	0.00000			1.19048
E	13.09520	7.14286	1.78571	0.00000	0.00000			22.02377
ESE	8.92857	0.00000	0.00000	0.00000	0.00000			8.92857
SE	0.00000	0.00000	0.00000	0.00000	0.00000			0.00000
SSE	1.19048	0.00000	0.00000	0.00000	0.00000			1.19048
S	0.59524	0.00000	0.00000	0.00000	0.00000			0.59524
SSW	0.59524	0.00000	0.00000	0.00000	0.00000			0.59524
SW	0.59524	0.00000	0.00000	0.00000	0.00000			0.59524
WSW	0.59524	0.00000	0.00000	0.00000	0.00000			0.59524
W	0.00000	0.00000	0.00000	0.00000	0.00000			0.00000
WNW	3.57143	2.38095	0.00000	0.00000	0.00000			5.95238
NW	0.59524	0.00000	0.00000	0.00000	0.00000			0.59524
NNW	0.00000	0.00000	0.00000	0.00000	0.00000			0.00000
Calim						54.76190		

ANALYSIS REPORT

Customer Name

Project Name

Measured Point

Measured Date

Report No.

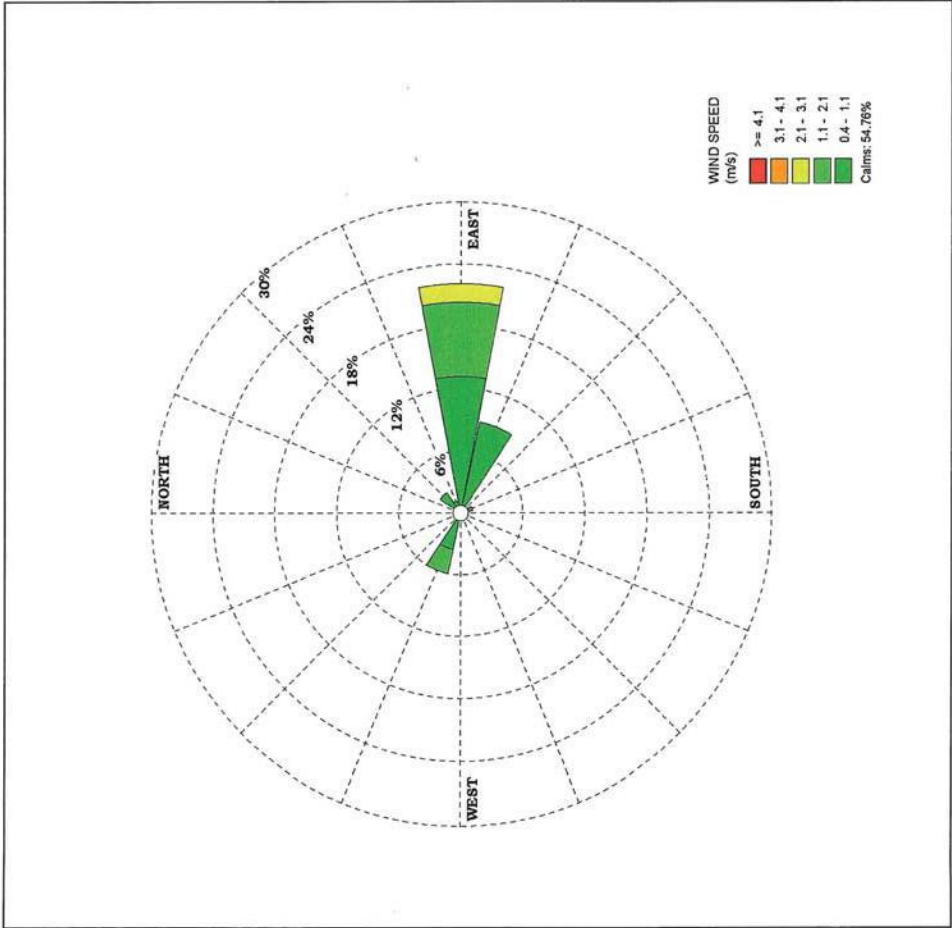
: Klong Luang Utilities Company Limited

: Electricity and Steam Generating Cogeneration, Pathumthani Province Project

: Khlong Nueng School (Kaew Nimit), Village no. 4, Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province

: November 1-8, 2024

: 2024-RAAX844



ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Point : Sadee Temple, Village no. 5, Suan Phrik Thai Sub-District, Mueang Pathum Thani District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0668808 E, 1551661 N
Measured Date : November 1-8, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-008 - 014
Report No. : 2024-RAAX845
Report Date : November 21, 2024

Date/Time	Nov 1-2, 24			Nov 2-3, 24			Nov 3-4, 24			Nov 4-5, 24		
	Temp.	WS	WD	Temp.	WS	WD	Temp.	WS	WD	Temp.	WS	WD
11:00-12:00	34.4	0.9	NW	35.0	0.9	ENE	38.6	0.9	NE	36.6	0.9	NE
12:00-13:00	36.2	1.3	W	35.8	0.9	NNE	39.0	0.9	NE	34.7	0.9	NE
13:00-14:00	33.6	0.9	NNW	36.7	0.9	W	35.6	0.4	NE	32.8	0.9	NE
14:00-15:00	35.5	1.3	WNW	34.7	0.9	N	35.5	<0.4	Calm	33.4	0.9	NE
15:00-16:00	38.3	1.3	NW	32.2	0.9	WNW	34.3	<0.4	Calm	30.3	0.9	NE
16:00-17:00	33.9	1.3	NW	32.8	0.9	N	32.1	<0.4	Calm	29.7	0.4	NE
17:00-18:00	26.1	1.3	SW	32.7	1.3	NW	31.5	<0.4	Calm	27.6	0.4	N
18:00-19:00	24.9	0.9	SSW	32.1	1.3	NW	30.6	<0.4	Calm	26.3	<0.4	Calm
19:00-20:00	25.2	0.4	NE	31.7	1.3	N	29.8	<0.4	Calm	25.8	0.9	NE
20:00-21:00	25.3	<0.4	Calm	32.6	1.3	NW	28.1	0.4	NE	25.6	0.4	NNE
21:00-22:00	25.1	<0.4	Calm	31.9	0.9	NNW	27.7	<0.4	Calm	25.6	0.4	NNW
22:00-23:00	25.2	<0.4	Calm	30.8	0.9	N	27.1	0.4	NE	25.3	0.4	N
23:00-00:00	24.9	0.4	NE	28.8	0.9	N	27.2	0.4	NE	25.0	0.4	W
00:00-01:00	24.4	0.4	ENE	27.9	0.9	NNE	26.8	0.4	NE	24.4	0.9	NE
01:00-02:00	24.2	<0.4	Calm	26.3	0.9	NE	26.2	<0.4	Calm	23.9	0.9	NE
02:00-03:00	24.2	<0.4	Calm	25.2	0.4	NE	25.8	<0.4	Calm	23.5	0.4	NE
03:00-04:00	23.9	<0.4	Calm	25.1	0.4	NE	25.8	<0.4	Calm	23.1	<0.4	Calm
04:00-05:00	23.9	<0.4	Calm	24.8	<0.4	Calm	25.5	<0.4	Calm	22.7	<0.4	Calm
05:00-06:00	23.8	<0.4	Calm	24.3	0.4	N	25.5	<0.4	Calm	22.7	<0.4	Calm
06:00-07:00	24.5	<0.4	Calm	23.8	0.4	N	27.6	<0.4	Calm	23.1	<0.4	Calm
07:00-08:00	27.4	0.4	NE	28.7	0.4	N	29.5	0.4	Calm	25.3	<0.4	Calm
08:00-09:00	30.6	0.9	ENE	30.4	0.4	N	32.1	0.4	NE	30.1	0.4	NE
09:00-10:00	33.7	1.8	E	32.6	0.9	NE	32.9	0.4	NNW	30.8	1.3	NE
10:00-11:00	36.1	1.8	ENE	36.8	0.9	NE	34.7	0.4	NE	34.4	1.3	NW

Remark : WS = Wind Speed (m/s)
WD = Wind Direction
Temp. = Temperature (°C)
Height of wind vane and anemometer above ground 10 meters.

(Ms.Piyatida Pradangkho)
Laboratory Reviewer

(Ms.Panicha Promchai)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Point : Sadee Temple, Village no. 5, Suan Phrik Thai Sub-District, Mueang Pathum Thani District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0668808 E, 1551661 N
Measured Date : November 1-8, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-008 - 014
Report No. : 2024-RAAX845
Report Date : November 21, 2024

Date/Time	Nov 5-6, 24			Nov 6-7, 24			Nov 7-8, 24		
	Temp.	WS	WD	Temp.	WS	WD	Temp.	WS	WD
11:00-12:00	33.3	0.9	N	29.0	1.8	ENE	32.4	1.8	ENE
12:00-13:00	32.1	0.9	N	30.4	1.8	ENE	32.2	1.8	ENE
13:00-14:00	33.9	0.9	N	29.0	1.3	NE	35.3	1.8	ENE
14:00-15:00	29.6	0.9	NE	29.9	0.9	NE	33.3	2.7	ENE
15:00-16:00	29.4	1.3	NE	29.2	1.3	NE	31.3	1.8	ENE
16:00-17:00	22.3	0.9	NW	28.2	0.9	N	29.9	1.3	ENE
17:00-18:00	22.9	<0.4	Calm	26.3	0.4	N	27.6	0.4	ENE
18:00-19:00	23.0	<0.4	Calm	24.9	0.4	NNW	27.0	0.4	NE
19:00-20:00	21.8	0.9	NE	24.8	<0.4	Calm	26.6	<0.4	Calm
20:00-21:00	21.8	0.4	NE	24.4	0.4	NW	26.2	0.4	NNW
21:00-22:00	22.8	<0.4	Calm	24.4	0.4	NW	25.5	<0.4	Calm
22:00-23:00	23.1	<0.4	Calm	24.2	0.4	NNW	25.2	<0.4	Calm
23:00-00:00	23.0	0.4	NW	24.0	0.4	NW	24.7	0.4	N
00:00-01:00	23.1	0.4	NNW	24.1	0.4	NNW	24.6	0.4	NNE
01:00-02:00	22.7	0.4	NNW	23.9	<0.4	Calm	24.0	0.9	NE
02:00-03:00	22.3	0.4	NNW	23.7	0.4	NW	23.6	0.9	NE
03:00-04:00	22.4	0.4	NNW	23.5	<0.4	Calm	23.4	0.9	NE
04:00-05:00	22.3	0.4	NNW	23.3	<0.4	Calm	23.2	0.9	NE
05:00-06:00	22.6	0.4	NNW	23.2	<0.4	Calm	23.2	0.9	NE
06:00-07:00	23.0	0.4	NNW	23.7	0.4	NNE	23.3	1.3	NE
07:00-08:00	24.6	0.4	NE	25.8	0.9	ENE	26.3	1.3	NE
08:00-09:00	27.0	0.9	NNE	27.9	1.3	ENE	28.5	1.3	NE
09:00-10:00	29.2	0.9	NE	30.5	1.3	ENE	33.6	1.3	NE
10:00-11:00	30.4	1.3	NE	32.0	1.8	ENE	35.7	1.3	NE

Remark : WS = Wind Speed (m/s)
WD = Wind Direction
Temp. = Temperature (°C)
Height of wind vane and anemometer above ground 10 meters.

(Ms.Piyatida Pradangkho)
Laboratory Reviewer

(Ms.Panicha Promchai)
Laboratory Supervisor

ANALYSIS REPORT

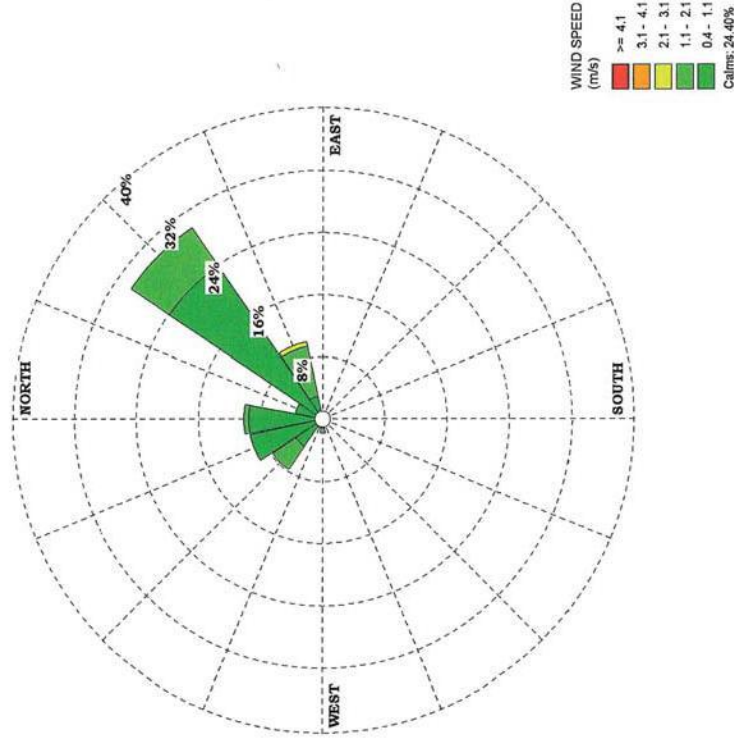
Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Point : Sadet Temple, Village no. 5, Suan Phrik Thai Sub-District, Mueang Pathum Thani District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0668808 E, 15515661 N
Measured Date : November 1-8, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.

Quotation No. : AR2024-01649
Analysis No. : 2024-AFS87-008 - 014
Report No. : 2024-PAAX845
Report Date : November 21, 2024

Wind Direction	Percentage frequency of wind in each speed and direction					Total
	0.4-1.1	1.1-2.1	2.1-3.1	3.1-4.1	≥4.1	
N	9.52381	0.59524	0.00000	0.00000	0.00000	10.11905
NNE	3.57143	0.00000	0.00000	0.00000	0.00000	3.57143
NE	23.80950	5.95238	0.00000	0.00000	0.00000	29.76188
ENE	2.97619	6.54762	0.59524	0.00000	0.00000	10.11905
E	0.00000	0.59524	0.00000	0.00000	0.00000	0.59524
ESE	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SE	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSE	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
S	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSW	0.59524	0.00000	0.00000	0.00000	0.00000	0.59524
SW	0.00000	0.59524	0.00000	0.00000	0.00000	0.59524
WSW	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
W	1.19048	0.59524	0.00000	0.00000	0.00000	1.78572
WNW	0.59524	0.59524	0.00000	0.00000	0.00000	1.19048
NW	4.16667	3.57143	0.00000	0.00000	0.00000	7.73810
NNW	9.52381	0.00000	0.00000	0.00000	0.00000	9.52381
Calm	24.40480					

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Measured Point : Sadet Temple, Village no. 5, Suan Phrik Thai Sub-District, Mueang Pathum Thani District, Pathum Thani Province
Measured Date : November 1-8, 2024
Report No. : 2024-PAAX845



ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Point : Saeng San Temple, Village no. 6, Prachathipat Sub-District, Thanyaburi District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0677579 E, 1548955 N
Measured Date : November 1-8, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-015 - 021
Report No. : 2024-RAAX846
Report Date : November 21, 2024

Date/Time	Nov 5-6, 24				Nov 6-7, 24				Nov 7-8, 24			
	Temp.	WS	WD	Temp.	Temp.	WS	WD	Temp.	Temp.	WS	WD	Temp.
10:00-11:00	31.1	1.3	N	30.4	31.5	1.8	E	31.5	1.8	E	E	ENE
11:00-12:00	32.3	1.3	N	30.5	30.7	2.2	E	30.7	2.2	E	E	E
12:00-13:00	33.7	1.8	N	30.1	31.1	2.7	E	31.1	2.7	E	E	E
13:00-14:00	33.3	1.8	N	30.0	31.8	2.2	ENE	31.8	1.8	E	E	E
14:00-15:00	32.9	1.8	N	30.4	32.3	1.8	ENE	32.3	2.7	E	E	E
15:00-16:00	31.9	1.3	N	30.4	32.2	1.3	NE	32.2	3.1	E	E	E
16:00-17:00	27.3	1.3	N	29.9	31.7	1.3	ENE	31.7	2.7	E	E	E
17:00-18:00	27.9	0.9	N	30.4	31.7	1.8	N	31.7	1.8	E	E	ENE
18:00-19:00	27.6	0.4	N	29.4	30.7	1.8	N	30.7	1.3	E	E	ENE
19:00-20:00	27.4	0.4	N	28.9	30.2	0.4	ENE	30.2	0.4	E	E	ENE
20:00-21:00	26.6	1.3	N	28.5	29.9	0.4	N	29.9	0.4	E	E	NNE
21:00-22:00	27.3	0.4	N	28.2	29.6	0.4	N	29.6	<0.4	E	E	Calm
22:00-23:00	27.4	0.4	N	27.9	29.3	0.9	N	29.3	0.4	E	E	N
23:00-00:00	27.4	0.9	N	27.9	29.0	0.9	N	29.0	<0.4	E	E	Calm
00:00-01:00	27.3	1.3	N	27.9	28.3	0.9	N	28.3	0.4	E	E	NNE
01:00-02:00	26.6	1.3	N	28.0	28.0	0.9	N	28.0	0.4	E	E	N
02:00-03:00	26.4	1.3	N	27.1	27.3	0.4	N	27.3	0.9	E	E	N
03:00-04:00	26.3	0.9	N	26.6	27.1	<0.4	Calm	27.1	0.4	E	E	N
04:00-05:00	25.9	1.3	N	26.6	26.5	<0.4	Calm	26.5	0.4	E	E	N
05:00-06:00	26.0	1.3	N	26.4	26.9	0.4	N	26.9	0.4	E	E	N
06:00-07:00	26.4	0.9	N	26.2	27.2	<0.4	Calm	27.2	0.4	E	E	N
07:00-08:00	26.5	0.9	N	26.9	27.4	0.4	ENE	27.4	0.9	E	E	ENE
08:00-09:00	27.9	0.9	NNE	27.5	28.0	1.8	E	28.0	0.9	E	E	NNE
09:00-10:00	30.2	1.3	NNE	29.4	28.9	1.3	ENE	28.9	0.9	E	E	NNE

Remark : WS = Wind Speed (m/s)
WD = Wind Direction
Temp. = Temperature (°C)
Height of wind vane and anemometer above ground 10 meters.

(Ms.Piyatida Pradangkho)
Laboratory Reviewer

(Ms.Panicha Promchai)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Point : Saeng San Temple, Village no. 6, Prachathipat Sub-District, Thanyaburi District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0677579 E, 1548955 N
Measured Date : November 1-8, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-015 - 021
Report No. : 2024-RAAX846
Report Date : November 21, 2024

Date/Time	Nov 1-2, 24				Nov 2-3, 24				Nov 3-4, 24				Nov 4-5, 24			
	Temp.	WS	WD	Temp.	Temp.	WS	WD	Temp.	Temp.	WS	WD	Temp.	Temp.	WS	WD	Temp.
10:00-11:00	36.2	0.9	N	34.7	34.7	1.8	E	32.5	31.4	1.3	E	31.4	31.4	0.4	N	31.4
11:00-12:00	37.0	0.9	N	34.7	34.7	1.8	ENE	33.9	33.8	0.9	N	33.8	33.8	0.9	N	33.8
12:00-13:00	37.5	1.3	N	34.6	34.6	2.7	E	34.8	34.6	1.3	N	34.6	34.6	1.8	N	34.6
13:00-14:00	33.7	1.8	WNW	34.0	34.8	1.8	ESE	34.8	33.7	1.3	N	33.7	33.7	1.3	N	33.7
14:00-15:00	35.3	1.8	N	33.6	34.4	3.1	E	34.4	33.9	1.3	E	33.9	33.9	1.3	E	33.9
15:00-16:00	34.4	1.3	N	33.1	34.2	3.1	E	34.2	32.7	1.3	ENE	32.7	32.7	1.3	ENE	32.7
16:00-17:00	32.0	1.8	N	33.4	33.6	2.7	E	33.6	32.1	0.9	ENE	32.1	32.1	0.9	ENE	32.1
17:00-18:00	30.8	0.9	N	33.0	32.2	2.2	E	32.2	31.9	0.9	ESE	31.9	31.9	0.9	ESE	31.9
18:00-19:00	30.1	<0.4	Calm	32.6	31.4	1.8	E	31.4	31.3	0.9	N	31.3	31.3	0.9	N	31.3
19:00-20:00	29.8	<0.4	Calm	30.2	29.9	0.4	N	29.9	30.3	<0.4	Calm	30.3	30.3	<0.4	Calm	30.3
20:00-21:00	29.6	<0.4	Calm	28.9	29.3	0.4	N	29.3	29.1	1.3	N	29.1	29.1	1.3	N	29.1
21:00-22:00	28.9	<0.4	Calm	28.4	28.9	0.9	E	28.9	29.6	0.4	N	29.6	29.6	0.4	N	29.6
22:00-23:00	28.5	0.4	NNE	27.7	28.2	0.9	ESE	28.2	28.9	0.4	N	28.9	28.9	0.4	N	28.9
23:00-00:00	28.1	0.4	ENE	27.0	27.8	0.4	ESE	27.8	28.4	1.3	N	28.4	28.4	1.3	N	28.4
00:00-01:00	27.8	0.4	ENE	26.6	27.8	0.4	ESE	27.8	27.9	0.9	N	27.9	27.9	0.9	N	27.9
01:00-02:00	28.2	<0.4	Calm	26.4	27.5	0.4	ESE	27.5	27.6	0.9	N	27.6	27.6	0.9	N	27.6
02:00-03:00	27.8	<0.4	Calm	26.3	26.8	<0.4	Calm	26.8	26.7	0.4	NNE	26.7	26.7	0.4	NNE	26.7
03:00-04:00	28.2	<0.4	Calm	25.7	26.9	<0.4	Calm	26.9	26.5	0.4	NNE	26.5	26.5	0.4	NNE	26.5
04:00-05:00	27.6	<0.4	Calm	25.4	26.8	<0.4	Calm	26.8	26.4	0.4	N	26.4	26.4	0.4	N	26.4
05:00-06:00	27.7	<0.4	Calm	25.5	26.2	<0.4	Calm	26.2	26.3	0.4	N	26.3	26.3	0.4	N	26.3
06:00-07:00	27.8	<0.4	Calm	25.3	25.7	<0.4	Calm	25.7	26.0	0.4	N	26.0	26.0	0.4	N	26.0
07:00-08:00	29.4	0.4	NE	25.4	26.7	<0.4	Calm	26.7	26.8	<0.4	Calm	26.8	26.8	<0.4	Calm	26.8
08:00-09:00	31.3	1.8	E	27.5	28.7	0.9	E	28.7	28.0	0.4	N	28.0	28.0	0.4	N	28.0
09:00-10:00	32.9	2.7	E	30.4	30.2	1.3	E	30.2	29.9	0.9	NNE	29.9	29.9	0.9	NNE	29.9

Remark : WS = Wind Speed (m/s)
WD = Wind Direction
Temp. = Temperature (°C)
Height of wind vane and anemometer above ground 10 meters.

(Ms.Piyatida Pradangkho)
Laboratory Reviewer

(Ms.Panicha Promchai)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name

Address

Project Name

Project Location

Measured Point

GPS. Coordinate

Measured Date

Measured By

Analyzed By

: Klong Luang Utilities Company Limited

: 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210

: Electricity and Steam Generating Cogeneration, Pathumthani Province Project

: 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani

: Saeng San Temple, Village no. 6, Prachathipat Sub-District, Thanyaburi District, Pathum Thani Province

: UTM (WGS84) 47P 0677579 E, 1548955 N

: November 1-8, 2024

: Mr.Assada Chaiyawong

: Environment Research & Technology Co., Ltd.

Quotation No.

Analysis No.

Report No.

Report Date

: AR2024-01649

: 2024-AF587-015 - 021

: 2024-RAAX846

: November 21, 2024

Wind Direction	Percentage frequency of wind in each speed and direction					
	0.4-1.1	1.1-2.1	2.1-3.1	3.1-4.1	≥4.1	Total
N	28.57140	15.47620	0.00000	0.00000	0.00000	44.04760
NNE	7.14286	0.59524	0.00000	0.00000	0.00000	7.73810
NE	1.19048	0.59524	0.00000	0.00000	0.00000	1.78572
ENE	2.97619	5.35714	0.59524	0.00000	0.00000	8.92857
E	2.38095	6.54762	5.95238	1.78571	0.00000	16.66666
ESE	2.97619	0.00000	0.59524	0.00000	0.00000	3.57143
SE	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSE	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
S	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SSW	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
SW	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
WSW	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
W	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
WNW	0.00000	0.59524	0.00000	0.00000	0.00000	0.59524
NW	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
NNW	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Calm						
					16.66670	

ANALYSIS REPORT

Customer Name

Project Name

Measured Point

Measured Date

Report No.

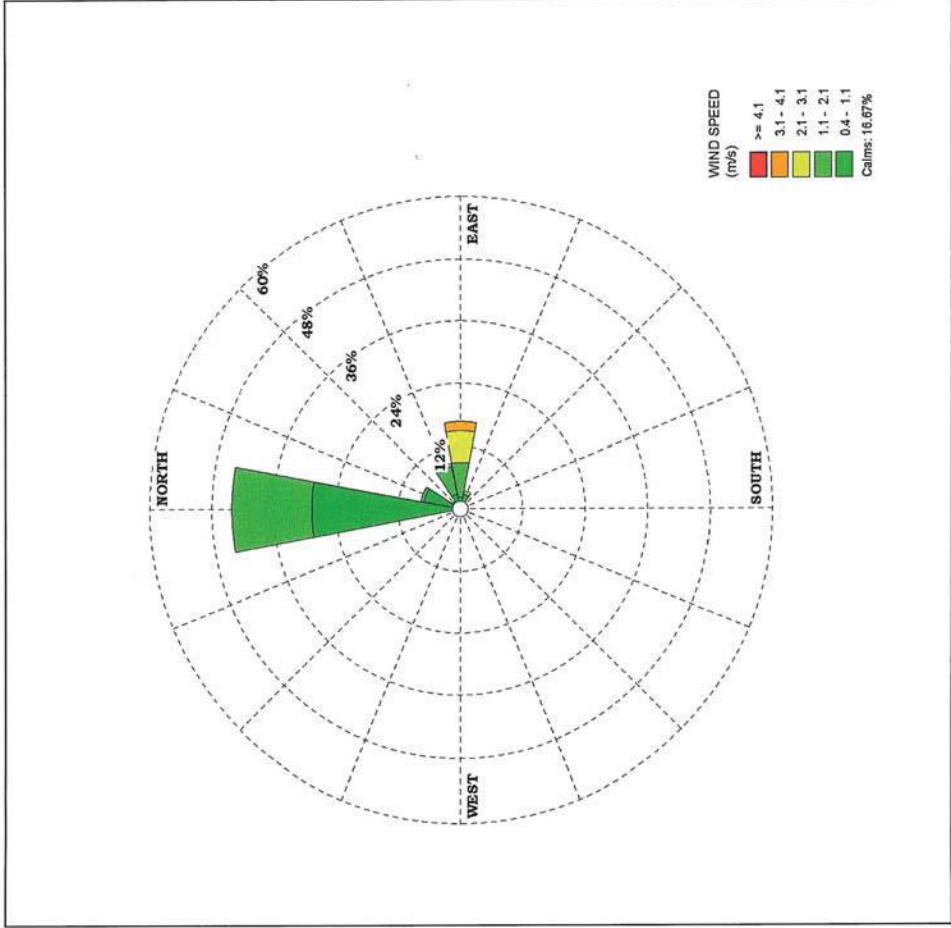
: Klong Luang Utilities Company Limited

: Electricity and Steam Generating Cogeneration, Pathumthani Province Project

: Saeng San Temple, Village no. 6, Prachathipat Sub-District, Thanyaburi District, Pathum Thani Province

: November 1-8, 2024

: 2024-RAAX846



ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Point : Learning and Recreation Center of Rangsit City Municipality
(located in Rattanakosin Song Roi Pi Housing Estate)
GPS. Coordinate : UTM (WGS84) 47P 0673850 E, 1547476 N
Measured Date : November 1-8, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.

Quotation No. : AR2024-01649
Analysis No. : 2024-AFS87-022 - 028
Report No. : 2024-RAAX847
Report Date : November 21, 2024

Date/Time	Nov 1-2, 24			Nov 2-3, 24			Nov 3-4, 24			Nov 4-5, 24		
	Temp.	WS	WD	Temp.	WS	WD	Temp.	WS	WD	Temp.	WS	WD
13:00-14:00	33.1	0.9	NW	38.7	1.8	ENE	39.1	1.3	NNE	35.8	0.9	E
14:00-15:00	33.6	1.3	NNW	39.4	1.8	ENE	38.4	1.3	N	35.9	0.9	E
15:00-16:00	37.4	1.8	NNW	38.0	2.2	ESE	35.0	0.9	N	34.6	1.8	ENE
16:00-17:00	38.8	2.2	NNW	36.3	2.2	SE	34.9	0.9	NE	32.7	0.9	E
17:00-18:00	33.2	1.8	N	32.9	1.8	ESE	33.2	1.3	NNE	32.3	0.9	ENE
18:00-19:00	30.3	0.9	NNE	30.9	1.3	ESE	31.0	0.9	NNE	30.8	1.3	NE
19:00-20:00	29.0	0.4	SW	29.7	0.9	E	30.4	0.9	NNE	30.0	0.4	ENE
20:00-21:00	28.6	<0.4	Calm	28.9	0.9	ENE	29.5	0.9	NE	29.6	1.3	E
21:00-22:00	28.6	<0.4	Calm	28.5	1.3	ENE	28.7	0.9	NE	28.6	0.9	NE
22:00-23:00	28.7	0.4	SE	27.8	0.9	NE	28.2	0.9	NE	28.5	0.9	NNE
23:00-00:00	28.5	0.4	ESE	27.3	0.4	ENE	27.8	0.4	NNE	28.4	1.8	NNE
00:00-01:00	28.0	0.4	E	27.1	0.4	NE	27.2	0.9	NE	27.7	1.8	NNE
01:00-02:00	27.6	0.4	E	26.6	0.4	ENE	27.3	0.4	NE	27.1	0.9	ENE
02:00-03:00	27.3	<0.4	Calm	26.3	0.9	ENE	26.9	0.4	NE	26.4	0.9	ENE
03:00-04:00	27.3	<0.4	Calm	25.9	0.4	ENE	26.3	0.4	NE	26.1	0.4	ENE
04:00-05:00	26.8	<0.4	Calm	25.9	0.4	Calm	25.9	<0.4	Calm	25.7	0.4	ENE
05:00-06:00	26.8	<0.4	Calm	25.7	<0.4	Calm	25.9	<0.4	Calm	25.6	0.4	ENE
06:00-07:00	26.6	<0.4	Calm	25.6	<0.4	Calm	25.6	<0.4	Calm	25.5	0.4	NE
07:00-08:00	27.0	<0.4	Calm	25.5	<0.4	Calm	25.6	<0.4	Calm	26.0	0.4	NE
08:00-09:00	30.2	<0.4	Calm	29.5	0.4	E	27.7	<0.4	Calm	28.7	1.3	ENE
09:00-10:00	31.1	1.3	E	30.1	0.4	ESE	30.1	0.9	NE	29.8	1.3	ENE
10:00-11:00	33.4	2.2	SE	31.8	0.9	SSE	32.7	0.9	NNE	30.3	1.3	NE
11:00-12:00	34.4	1.8	E	34.0	0.9	ENE	33.5	0.9	N	32.6	1.3	N
12:00-13:00	38.4	1.8	ESE	38.2	1.3	ENE	34.1	0.9	N	36.3	1.3	NNE

Remark : WS = Wind Speed (m/s)
WD = Wind Direction
Temp. = Temperature (°C)
Height of wind vane and anemometer above ground 10 meters.

(Ms.Piyatida Pradangkho)
Laboratory Reviewer



(Ms.Panichia Promchial)
Laboratory Supervisor



ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Point : Learning and Recreation Center of Rangsit City Municipality
(located in Rattanakosin Song Roi Pi Housing Estate)
GPS. Coordinate : UTM (WGS84) 47P 0673850 E, 1547476 N
Measured Date : November 1-8, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.

Quotation No. : AR2024-01649
Analysis No. : 2024-AFS87-022 - 028
Report No. : 2024-RAAX847
Report Date : November 21, 2024

Date/Time	Nov 5-6, 24			Nov 6-7, 24			Nov 7-8, 24		
	Temp.	WS	WD	Temp.	WS	WD	Temp.	WS	WD
13:00-14:00	37.4	1.3	NNE	31.9	1.8	E	33.8	1.8	SE
14:00-15:00	36.2	1.8	N	31.6	1.8	E	35.4	2.2	SE
15:00-16:00	31.8	1.3	NNE	31.9	1.8	ENE	34.6	2.2	SE
16:00-17:00	28.8	1.8	SE	31.6	1.3	ENE	34.3	1.8	ENE
17:00-18:00	26.1	0.4	NNE	31.2	1.3	NE	32.1	1.8	ESE
18:00-19:00	26.4	0.4	N	29.2	1.3	NNE	30.9	1.3	E
19:00-20:00	26.1	<0.4	Calm	27.9	0.9	NNE	30.4	0.4	ESE
20:00-21:00	26.2	0.9	NNE	27.7	0.9	NNE	29.9	0.4	ESE
21:00-22:00	25.9	<0.4	Calm	27.6	0.9	NNE	29.3	0.4	ENE
22:00-23:00	26.4	<0.4	Calm	27.6	1.3	NNE	28.8	<0.4	Calm
23:00-00:00	26.7	1.3	NNE	27.5	1.3	N	28.5	0.4	NE
00:00-01:00	26.7	1.3	NNE	26.8	0.4	N	28.1	0.9	ENE
01:00-02:00	25.8	1.3	NNE	27.1	0.9	NNE	27.7	0.4	ENE
02:00-03:00	25.8	1.3	N	26.7	<0.4	Calm	26.9	0.4	NNE
03:00-04:00	25.4	0.9	NNE	26.7	<0.4	Calm	26.5	0.9	NE
04:00-05:00	25.3	1.3	NNE	26.4	0.4	NE	26.1	0.4	NE
05:00-06:00	25.3	1.3	NNE	26.1	0.4	NE	26.1	0.4	NE
06:00-07:00	25.6	1.3	NNE	26.2	<0.4	Calm	26.1	0.9	NE
07:00-08:00	25.7	1.3	NNE	26.8	0.4	E	26.1	0.9	NE
08:00-09:00	28.3	0.9	NNE	28.1	1.8	ESE	27.1	1.3	ENE
09:00-10:00	30.3	1.3	NE	30.3	1.3	SE	29.1	1.3	ENE
10:00-11:00	31.3	1.3	ESE	32.6	1.8	E	31.2	1.3	ENE
11:00-12:00	32.3	1.8	ENE	33.4	1.8	ENE	33.3	1.3	SE
12:00-13:00	30.9	2.2	ENE	34.2	2.2	E	35.6	1.8	SE

Remark : WS = Wind Speed (m/s)
WD = Wind Direction
Temp. = Temperature (°C)
Height of wind vane and anemometer above ground 10 meters.

(Ms.Piyatida Pradangkho)
Laboratory Reviewer



(Ms.Panichia Promchial)
Laboratory Supervisor

ANALYSIS REPORT

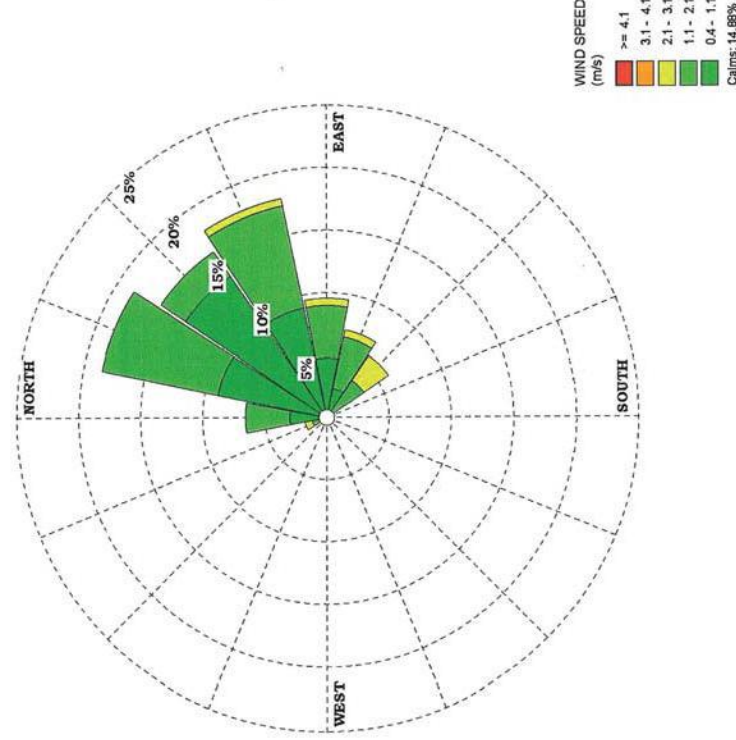
Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Point : Learning and Recreation Center of Rangsit City Municipality
(located in Rattanakosin Song Roi Pi Housing Estate)
GPS. Coordinate : UTM (WGS84) 47P 0673850 E, 1547476 N
Measured Date : November 1-8, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-022 - 028
Report No. : 2024-RAAX847
Report Date : November 21, 2024

Wind Direction	Percentage frequency of wind in each speed and direction							Total
	0.4-1.1	1.1-2.1	2.1-3.1	3.1-4.1	≥4.1			
N	2.97619	3.57143	0.00000	0.00000	0.00000			6.54762
NNE	8.92857	9.52381	0.00000	0.00000	0.00000			18.45238
NE	13.69050	2.38095	0.00000	0.00000	0.00000			16.07145
ENE	8.92857	8.33333	0.59524	0.00000	0.00000			17.85714
E	4.76190	4.16667	0.59524	0.00000	0.00000			9.52381
ESE	2.38095	4.16667	0.59524	0.00000	0.00000			7.14286
SE	0.59524	2.97619	2.38095	0.00000	0.00000			5.95238
SSE	0.59524	0.00000	0.00000	0.00000	0.00000			0.59524
S	0.00000	0.00000	0.00000	0.00000	0.00000			0.00000
SSW	0.00000	0.00000	0.00000	0.00000	0.00000			0.00000
SW	0.59524	0.00000	0.00000	0.00000	0.00000			0.59524
WSW	0.00000	0.00000	0.00000	0.00000	0.00000			0.00000
W	0.00000	0.00000	0.00000	0.00000	0.00000			0.00000
WNW	0.00000	0.00000	0.00000	0.00000	0.00000			0.00000
NW	0.59524	0.00000	0.00000	0.00000	0.00000			0.59524
NNW	0.00000	1.19048	0.59524	0.00000	0.00000			1.78572
Calm						14.88100		

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Measured Point : Learning and Recreation Center of Rangsit City Municipality
(located in Rattanakosin Song Roi Pi Housing Estate)
Measured Date : November 1-8, 2024
Report No. : 2024-RAAX847



ภาคผนวก 72

ผลการตรวจวัดระดับเสียง

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source : Ambient Noise
Measured Point : Common Area of Pak Thang White House Community, Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0673744 E, 1550442 N
Measured Date : November 1-2, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scarlet Tech Model ST-11D Serial Number 820865

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-030
Report No. : 2024-RAAX851
Report Date : November 21, 2024

Interval Time	Noise Level, dB(A)				
	Leq	Lmax	L5	L10	L90
13:00-14:00	63.8	86.6	69.5	66.5	58.9
14:00-15:00	62.7	82.3	68.2	66.1	58.0
15:00-16:00	65.3	84.6	71.0	68.5	61.2
16:00-17:00	65.7	94.0	71.4	68.8	62.0
17:00-18:00	67.3	94.0	72.2	69.8	63.2
18:00-19:00	66.4	94.4	72.0	69.7	63.5
19:00-20:00	65.6	86.4	71.0	68.7	62.4
20:00-21:00	66.8	88.0	72.4	68.9	61.6
21:00-22:00	65.0	86.5	71.7	68.4	59.1
22:00-23:00	65.2	88.6	71.6	68.4	58.7
23:00-00:00	62.3	90.8	68.4	65.1	52.9
00:00-01:00	61.2	88.2	67.9	64.1	51.3
01:00-02:00	58.0	87.5	64.6	61.1	47.6
02:00-03:00	60.1	86.2	66.0	63.3	54.4
03:00-04:00	58.8	87.6	64.5	61.3	48.0
04:00-05:00	57.1	93.1	63.3	60.0	47.7
05:00-06:00	60.7	94.8	66.1	63.8	53.5
06:00-07:00	62.7	91.4	67.9	65.5	57.8
07:00-08:00	65.4	84.0	70.3	68.2	61.9
08:00-09:00	64.7	85.9	69.5	67.3	60.5
09:00-10:00	64.4	90.9	68.9	66.7	60.3
10:00-11:00	62.5	81.1	68.1	66.0	58.0
11:00-12:00	63.9	83.3	70.0	67.3	59.8
12:00-13:00	63.6	84.1	69.0	66.7	58.7
24 Hours Measurement	64.0	94.8	69.6	67.0	59.4
Standard ¹⁾	70	115	-	-	-
Ldn	68.5	-	-	-	-

Remark : ¹⁾ Notification of National Environmental Board, No.15, B.E.2540 (1997) under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992), published in the Royal Government Gazette No.114 Part 27D dated April 3, B.E.2540 (1997).

(Ms.Supawan Suwanmapa)
Laboratory Reviewer


envi research
ENVIRONMENT RESEARCH & TECHNOLOGY CO., LTD.

(Ms.Thanida Bunngrueang)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source : Ambient Noise
Measured Point : Common Area of Pak Thang White House Community, Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0673744 E, 1550442 N
Measured Date : November 2-3, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scarlet Tech Model ST-11D Serial Number 820865

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-030
Report No. : 2024-RAAX851
Report Date : November 21, 2024

Interval Time	Noise Level, dB(A)				
	Leq	Lmax	L5	L10	L90
13:00-14:00	63.6	84.4	68.8	66.2	58.3
14:00-15:00	63.6	86.1	68.6	65.8	58.0
15:00-16:00	65.4	89.0	69.8	67.0	59.8
16:00-17:00	64.8	91.0	69.0	66.6	60.0
17:00-18:00	65.7	86.6	71.4	68.9	62.6
18:00-19:00	66.8	85.7	72.0	69.3	62.7
19:00-20:00	65.0	86.2	69.9	67.7	60.5
20:00-21:00	64.0	85.7	70.4	67.3	59.9
21:00-22:00	64.1	83.9	69.7	66.9	58.4
22:00-23:00	61.5	82.3	67.6	65.2	55.2
23:00-00:00	61.8	84.3	68.4	64.9	52.5
00:00-01:00	61.7	89.0	68.1	64.2	51.5
01:00-02:00	59.3	81.6	65.3	61.9	48.9
02:00-03:00	57.0	84.7	62.5	59.6	47.9
03:00-04:00	57.5	84.6	62.2	58.8	46.9
04:00-05:00	56.6	86.7	63.4	59.5	47.4
05:00-06:00	59.3	84.4	65.3	62.8	51.9
06:00-07:00	62.5	89.9	67.0	64.9	56.4
07:00-08:00	64.8	86.7	70.2	67.6	60.6
08:00-09:00	63.4	84.3	69.3	66.6	59.2
09:00-10:00	63.4	85.5	68.5	66.2	59.4
10:00-11:00	63.8	88.6	70.6	66.6	59.3
11:00-12:00	64.2	87.1	69.5	67.0	58.7
12:00-13:00	63.1	87.1	68.5	66.4	59.1
24 Hours Measurement	63.3	91.0	68.8	66.0	58.4
Standard ¹⁾	70	115	-	-	-
Ldn	67.5	-	-	-	-

Remark : ¹⁾ Notification of National Environmental Board, No.15, B.E.2540 (1997) under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992), published in the Royal Government Gazette No.114 Part 27D dated April 3, B.E.2540 (1997).

(Ms.Supawan Suwanmapa)
Laboratory Reviewer


envi research
ENVIRONMENT RESEARCH & TECHNOLOGY CO., LTD.

(Ms.Thanida Bunngrueang)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source : Ambient Noise
Measured Point : Common Area of Pak Thang White House Community, Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS, Coordinate : UTM (WGS84) 47P 0673744 E, 1550442 N
Measured Date : November 3-4, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scarlet Tech Model ST-11D Serial Number 820865

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-030
Report No. : 2024-RA4X851
Report Date : November 21, 2024

Interval Time	Noise Level, dB(A)				
	Leq	Lmax	L5	L10	L90
13:00-14:00	63.3	87.2	68.1	66.0	59.1
14:00-15:00	64.7	86.9	69.7	67.1	59.5
15:00-16:00	66.3	90.0	71.8	68.1	60.3
16:00-17:00	67.5	90.6	72.7	70.0	62.4
17:00-18:00	66.7	88.2	71.8	69.0	62.4
18:00-19:00	66.6	91.5	72.2	69.8	63.1
19:00-20:00	65.6	94.8	70.5	67.8	60.8
20:00-21:00	64.1	88.4	69.8	66.9	59.3
21:00-22:00	63.6	84.5	69.1	66.2	57.2
22:00-23:00	63.6	87.9	69.3	66.1	57.3
23:00-00:00	61.7	88.2	67.6	65.2	52.5
00:00-01:00	58.8	85.4	64.3	60.8	49.0
01:00-02:00	59.1	83.4	64.4	61.0	54.1
02:00-03:00	55.7	83.3	61.1	58.0	52.6
03:00-04:00	55.5	82.4	62.0	57.8	46.8
04:00-05:00	55.8	80.1	62.5	59.3	48.5
05:00-06:00	60.3	84.1	66.6	64.1	53.3
06:00-07:00	63.9	88.5	68.9	67.1	60.8
07:00-08:00	66.3	91.1	71.3	69.1	63.3
08:00-09:00	65.0	87.7	69.7	67.4	60.1
09:00-10:00	62.8	85.0	68.3	66.3	59.2
10:00-11:00	62.6	87.4	69.1	66.2	59.7
11:00-12:00	64.2	84.6	69.7	66.8	58.6
12:00-13:00	64.8	86.8	69.8	66.5	59.4
24 Hours Measurement	63.9	94.8	69.3	66.6	59.2
Standard ¹⁾	70	115	-	-	-
Ldn	67.9	-	-	-	-

Remark 1 : ¹⁾ Notification of National Environmental Board, No.15, B.E.2540 (1997) under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992), published in the Royal Government Gazette No.114 Part 27D dated April 3, B.E.2540 (1997).

(Ms.Supawan Suwanapa)
Laboratory Reviewer

(Ms.Thanida Bunnungruang)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source : Ambient Noise
Measured Point : Common Area of Pak Thang White House Community, Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS, Coordinate : UTM (WGS84) 47P 0673744 E, 1550442 N
Measured Date : November 4-5, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scarlet Tech Model ST-11D Serial Number 820865

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-030
Report No. : 2024-RA4X851
Report Date : November 21, 2024

Interval Time	Noise Level, dB(A)				
	Leq	Lmax	L5	L10	L90
13:00-14:00	62.3	82.2	68.1	65.6	58.6
14:00-15:00	63.0	90.4	68.8	66.4	58.8
15:00-16:00	64.5	94.1	70.0	67.2	60.5
16:00-17:00	65.2	92.9	70.3	67.2	61.1
17:00-18:00	64.4	87.7	69.4	67.4	61.5
18:00-19:00	64.1	82.7	69.7	67.3	61.1
19:00-20:00	64.7	89.2	69.4	66.8	60.2
20:00-21:00	63.5	93.3	68.8	65.7	58.4
21:00-22:00	62.1	83.9	67.7	65.0	56.5
22:00-23:00	61.1	87.5	66.6	63.4	54.6
23:00-00:00	59.3	80.6	64.9	62.2	52.9
00:00-01:00	59.3	85.4	64.6	61.3	52.4
01:00-02:00	57.1	85.9	63.6	59.5	50.8
02:00-03:00	56.4	85.9	61.1	58.3	52.7
03:00-04:00	55.4	76.6	61.1	57.7	49.4
04:00-05:00	56.3	75.0	62.3	59.6	52.1
05:00-06:00	58.6	78.7	64.2	62.2	52.8
06:00-07:00	61.9	86.5	66.7	65.0	52.8
07:00-08:00	64.4	92.2	68.8	66.8	61.2
08:00-09:00	62.3	85.6	67.6	65.4	59.1
09:00-10:00	64.5	86.2	70.1	68.2	60.8
10:00-11:00	64.4	90.0	70.1	67.1	59.6
11:00-12:00	64.2	86.9	70.1	67.0	59.4
12:00-13:00	64.1	87.8	70.6	67.8	60.4
24 Hours Measurement	62.6	94.1	68.1	65.5	58.6
Standard ¹⁾	70	115	-	-	-
Ldn	66.5	-	-	-	-

Remark 1 : ¹⁾ Notification of National Environmental Board, No.15, B.E.2540 (1997) under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992), published in the Royal Government Gazette No.114 Part 27D dated April 3, B.E.2540 (1997).

(Ms.Supawan Suwanapa)
Laboratory Reviewer

(Ms.Thanida Bunnungruang)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source : Ambient Noise
Measured Point : Common Area of Pak Thang White House Community, Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0673744 E, 1550442 N
Measured Date : November 5-6, 2024
Measured By : Mr.Assada Chaiyawong
Measured By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scarlet Tech Model ST-11D Serial Number 820865

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-030
Report No. : 2024-RAAX851
Report Date : November 21, 2024

Interval Time	Noise Level, dB(A)					
	Leq	Lmax	L5	L10	L50	L90
13:00-14:00	63.1	85.5	68.7	65.9	59.1	54.8
14:00-15:00	63.7	86.2	69.5	67.0	60.1	55.4
15:00-16:00	66.2	88.2	72.1	69.5	61.8	55.8
16:00-17:00	68.4	89.0	72.8	71.1	66.6	62.2
17:00-18:00	67.4	90.1	72.6	69.9	63.8	58.9
18:00-19:00	66.1	87.1	71.4	69.2	63.0	58.5
19:00-20:00	66.7	89.9	72.9	70.1	62.6	57.4
20:00-21:00	64.6	85.0	69.5	67.4	60.8	55.7
21:00-22:00	64.8	90.6	70.3	67.3	59.1	54.5
22:00-23:00	62.2	95.7	67.4	65.0	56.8	53.8
23:00-00:00	62.2	87.4	67.4	64.2	56.4	53.9
00:00-01:00	61.1	83.8	66.7	63.5	55.6	53.4
01:00-02:00	61.0	92.9	66.1	62.5	55.1	53.4
02:00-03:00	58.5	85.1	62.7	59.6	54.6	52.7
03:00-04:00	58.3	77.7	63.3	59.9	54.8	52.9
04:00-05:00	61.0	81.9	66.0	63.5	56.1	53.5
05:00-06:00	61.4	80.9	66.7	64.8	57.3	53.6
06:00-07:00	64.7	85.0	69.3	67.4	61.8	56.5
07:00-08:00	66.9	87.0	71.7	69.7	64.2	59.2
08:00-09:00	65.3	90.6	70.4	68.1	61.9	56.2
09:00-10:00	64.6	96.1	69.8	66.6	59.2	53.6
10:00-11:00	64.0	88.6	68.6	60.1	54.5	54.5
11:00-12:00	64.5	89.4	69.7	66.8	58.7	52.7
12:00-13:00	64.2	90.2	66.4	62.2	58.4	52.4
24 Hours Measurement	64.5	96.1	69.7	67.2	60.7	56.1
Standard ¹⁾	70	115	-	-	-	-
Ldn	68.8	-	-	-	-	-

Remark : ¹⁾ Notification of National Environmental Board, No.15, B.E.2540 (1997) under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992), published in the Royal Government Gazette No.114 Part 270 dated April 3, B.E.2540 (1997).

(Ms.Supawan Suwannapa)

Laboratory Reviewer

(Ms.Thanida Bunrungruang)

Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source : Ambient Noise
Measured Point : Common Area of Pak Thang White House Community, Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0673744 E, 1550442 N
Measured Date : November 6-7, 2024
Measured By : Mr.Assada Chaiyawong
Measured By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scarlet Tech Model ST-11D Serial Number 820865

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-030
Report No. : 2024-RAAX851
Report Date : November 21, 2024

Interval Time	Noise Level, dB(A)					
	Leq	Lmax	L5	L10	L50	L90
13:00-14:00	64.4	85.7	69.4	66.9	58.9	53.3
14:00-15:00	62.8	83.1	67.8	65.5	58.1	54.1
15:00-16:00	63.2	86.0	69.6	67.1	59.9	54.4
16:00-17:00	65.2	95.0	69.2	67.2	61.8	56.5
17:00-18:00	67.1	90.3	72.2	69.7	63.8	58.8
18:00-19:00	66.6	85.6	71.4	69.5	63.5	58.7
19:00-20:00	67.2	91.2	71.9	69.3	62.7	57.7
20:00-21:00	66.5	89.4	71.2	68.2	61.0	55.7
21:00-22:00	64.3	86.4	69.5	66.9	59.2	54.9
22:00-23:00	64.3	89.9	69.2	65.9	57.2	54.0
23:00-00:00	61.5	82.0	67.2	64.3	55.5	53.2
00:00-01:00	61.8	88.1	66.9	63.7	55.2	53.2
01:00-02:00	59.5	86.1	65.9	61.7	53.5	52.1
02:00-03:00	59.2	87.8	63.6	60.9	55.3	53.5
03:00-04:00	57.6	79.0	63.2	59.9	52.3	51.0
04:00-05:00	58.3	77.3	64.4	61.6	54.6	51.3
05:00-06:00	60.6	81.1	66.1	64.0	55.0	51.5
06:00-07:00	63.9	89.3	68.7	67.0	61.0	54.9
07:00-08:00	67.7	94.5	71.2	69.2	63.6	57.9
08:00-09:00	64.3	84.2	69.1	67.3	61.1	55.5
09:00-10:00	63.9	91.4	69.4	66.7	59.2	54.4
10:00-11:00	66.4	93.3	72.5	70.3	63.3	57.4
11:00-12:00	63.2	89.6	68.4	66.2	59.1	52.7
12:00-13:00	64.6	93.1	70.5	67.1	59.4	52.7
24 Hours Measurement	64.3	95.0	69.4	66.9	60.1	55.2
Standard ¹⁾	70	115	-	-	-	-
Ldn	68.6	-	-	-	-	-

Remark : ¹⁾ Notification of National Environmental Board, No.15, B.E.2540 (1997) under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992), published in the Royal Government Gazette No.114 Part 270 dated April 3, B.E.2540 (1997).

(Ms.Supawan Suwannapa)

Laboratory Reviewer

(Ms.Thanida Bunrungruang)

Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source : Ambient Noise
Measured Point : Project's Fence Located Adjacent to the Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd.,
Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0674271 E, 1550801 N
Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-031
Report No. : 2024-RAAX853
Measured Date : November 1-2, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.
Report Date : November 21, 2024
Measured Instrument : Integrating Sound Level Meter Scarlet Tech Model ST-11D Serial Number 820939

Interval Time	Noise Level, dB(A)				
	Leq	Lmax	L5	L10	L90
14:00-15:00	59.8	73.7	61.7	60.7	59.2
15:00-16:00	59.1	72.1	60.1	59.6	58.9
16:00-17:00	59.5	70.6	60.8	60.2	59.3
17:00-18:00	59.2	74.1	60.4	59.7	58.9
18:00-19:00	59.3	71.4	60.1	59.8	59.2
19:00-20:00	59.1	65.9	59.7	59.4	58.9
20:00-21:00	59.2	69.4	59.8	59.6	59.1
21:00-22:00	59.1	73.1	59.7	59.4	58.8
22:00-23:00	58.7	74.5	59.5	59.2	58.5
23:00-00:00	58.6	66.8	59.4	59.0	58.4
00:00-01:00	58.2	68.7	59.0	58.7	58.1
01:00-02:00	58.1	68.1	58.9	58.6	58.0
02:00-03:00	58.0	67.7	58.6	58.4	57.9
03:00-04:00	57.9	65.3	58.4	58.2	57.8
04:00-05:00	58.1	66.9	59.2	58.7	58.0
05:00-06:00	58.2	65.5	58.7	58.5	58.1
06:00-07:00	58.8	67.6	60.7	60.0	58.3
07:00-08:00	59.6	76.8	61.2	60.3	58.6
08:00-09:00	59.1	78.8	60.5	59.9	58.7
09:00-10:00	59.3	79.5	60.6	59.7	59.0
10:00-11:00	59.1	70.9	60.1	59.5	58.8
11:00-12:00	59.0	72.7	59.8	59.6	58.9
12:00-13:00	58.9	69.3	59.9	59.4	58.7
13:00-14:00	59.8	70.0	61.4	60.6	59.5
24 Hours Measurement	58.9	79.5	60.0	59.5	58.7
Standard ¹⁾	70	115	-	-	-
Ldn	64.9	-	-	-	-

Remark : ¹⁾ Notification of National Environmental Board, No.15, B.E.2540 (1997) under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992), published in the Royal Government Gazette No.114 Part 27D dated April 3, B.E.2540 (1997).



(Ms.Supawan Suwanapa)
Laboratory Reviewer

(Ms.Thanida Bunrungrueang)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source : Ambient Noise
Measured Point : Common Area of Pak Thang White House Community, Khlong Nueng Sub-District,
Khlong Luang District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0673744 E, 1550442 N
Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-030
Report No. : 2024-RAAX851
Measured Date : November 7-8, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.
Report Date : November 21, 2024
Measured Instrument : Integrating Sound Level Meter Scarlet Tech Model ST-11D Serial Number 820865

Interval Time	Noise Level, dB(A)				
	Leq	Lmax	L5	L10	L90
13:00-14:00	62.7	85.6	68.8	66.0	58.1
14:00-15:00	64.7	88.8	69.8	67.2	59.2
15:00-16:00	66.1	89.7	71.5	68.2	60.2
16:00-17:00	64.2	95.0	69.7	67.5	61.1
17:00-18:00	67.3	92.7	72.2	69.9	64.0
18:00-19:00	66.1	90.0	71.1	68.8	62.5
19:00-20:00	65.6	88.4	71.5	68.5	61.6
20:00-21:00	67.2	91.3	71.6	68.5	60.7
21:00-22:00	65.2	70.2	70.2	67.1	58.8
22:00-23:00	65.0	95.3	70.8	66.9	56.8
23:00-00:00	62.8	93.0	68.1	65.0	54.9
00:00-01:00	61.1	89.7	66.9	63.7	53.7
01:00-02:00	59.0	86.8	64.6	61.0	53.5
02:00-03:00	58.8	85.1	64.1	60.2	51.9
03:00-04:00	58.5	86.9	64.2	60.1	51.5
04:00-05:00	58.1	81.0	64.7	61.6	52.8
05:00-06:00	61.1	80.3	66.9	64.6	56.1
06:00-07:00	64.4	89.5	69.7	67.7	61.2
07:00-08:00	66.6	90.4	72.0	69.7	63.8
08:00-09:00	64.8	86.9	70.0	67.8	61.4
09:00-10:00	62.8	84.2	68.4	66.1	57.8
10:00-11:00	62.8	94.6	68.9	66.5	58.5
11:00-12:00	65.1	91.6	71.3	68.2	59.0
12:00-13:00	63.9	89.9	69.8	67.1	58.7
24 Hours Measurement	64.2	95.7	69.6	66.9	59.5
Standard ¹⁾	70	115	-	-	-
Ldn	68.9	-	-	-	-

Remark : ¹⁾ Notification of National Environmental Board, No.15, B.E.2540 (1997) under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992), published in the Royal Government Gazette No.114 Part 27D dated April 3, B.E.2540 (1997).

(Ms.Supawan Suwanapa)
Laboratory Reviewer

(Ms.Thanida Bunrungrueang)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source : Ambient Noise
Measured Point : Project's Fence Located Adjacent to the Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd.,
Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0674271 E, 1550801 N
Quotation No. : AR2024-01649
Measured Date : November 2-3, 2024
Analysis No. : 2024-AF587-031
Report No. : 2024-RAAX853
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.
Report Date : November 21, 2024
Measured Instrument : Integrating Sound Level Meter Scarlet Tech Model ST-11D Serial Number 820939

Interval Time	Noise Level, dB(A)					
	Leq	Lmax	L5	L10	L50	L90
14:00-15:00	59.9	73.8	60.9	60.5	59.6	59.2
15:00-16:00	59.7	71.0	60.7	60.3	59.6	59.1
16:00-17:00	60.2	75.5	61.9	61.1	59.8	58.8
17:00-18:00	59.9	68.8	61.2	60.7	59.6	59.2
18:00-19:00	59.4	72.6	60.0	59.6	59.1	58.6
19:00-20:00	58.7	71.1	60.1	59.0	58.4	57.8
20:00-21:00	59.1	69.9	59.8	59.6	59.0	58.7
21:00-22:00	59.3	70.5	59.9	59.7	59.2	58.9
22:00-23:00	59.0	64.9	59.5	59.3	58.9	58.6
23:00-00:00	58.5	71.5	59.3	58.8	58.4	57.9
00:00-01:00	58.6	71.4	59.4	59.0	58.5	58.1
01:00-02:00	58.4	69.0	59.2	58.8	58.3	58.0
02:00-03:00	58.3	68.6	59.1	58.7	58.1	57.7
03:00-04:00	58.2	69.5	58.7	58.5	58.0	57.6
04:00-05:00	58.3	65.4	58.7	58.6	58.2	58.0
05:00-06:00	58.4	65.0	58.8	58.7	58.3	57.5
06:00-07:00	58.6	68.2	59.6	59.1	58.4	58.1
07:00-08:00	59.4	76.8	61.0	60.2	58.7	58.3
08:00-09:00	58.8	74.4	59.8	59.2	58.5	58.2
09:00-10:00	58.5	76.4	59.2	58.9	58.3	58.0
10:00-11:00	58.8	76.4	60.1	59.3	58.5	57.6
11:00-12:00	58.6	73.7	59.7	59.2	58.0	57.9
12:00-13:00	58.3	71.4	59.0	58.7	58.2	57.8
13:00-14:00	58.4	72.4	59.6	59.0	58.3	57.9
24 Hours Measurement	58.9	76.8	59.9	59.4	58.7	58.3
Standard ^{1*}	70	115	-	-	-	-
Ldn	65.0	-	-	-	-	-

Remark : ^{1*} Notification of National Environmental Board, No.15, B.E.2540 (1997) under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992), published in the Royal Government Gazette No.114 Part 270 dated April 3, B.E.2540 (1997).



(Ms.Supawan Suwannapa)
Laboratory Reviewer

(Ms.Thanida Bunnungueang)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source : Ambient Noise
Measured Point : Project's Fence Located Adjacent to the Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd.,
Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0674271 E, 1550801 N
Quotation No. : AR2024-01649
Measured Date : November 3-4, 2024
Analysis No. : 2024-AF587-031
Report No. : 2024-RAAX853
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.
Report Date : November 21, 2024
Measured Instrument : Integrating Sound Level Meter Scarlet Tech Model ST-11D Serial Number 820939

Interval Time	Noise Level, dB(A)					
	Leq	Lmax	L5	L10	L50	L90
14:00-15:00	58.6	65.2	59.3	59.0	58.5	58.2
15:00-16:00	59.1	72.4	60.5	59.8	58.6	57.9
16:00-17:00	59.0	70.3	60.7	60.0	58.7	58.3
17:00-18:00	59.3	70.5	60.9	60.2	59.0	58.6
18:00-19:00	59.2	73.4	59.9	59.6	59.1	58.7
19:00-20:00	58.9	65.4	59.5	59.3	58.8	58.1
20:00-21:00	57.4	72.0	59.1	58.9	57.3	56.3
21:00-22:00	58.9	71.5	59.6	59.3	58.8	58.5
22:00-23:00	58.6	66.5	59.1	58.9	58.5	58.1
23:00-00:00	58.4	68.1	59.0	58.8	58.3	58.1
00:00-01:00	56.7	72.1	57.6	57.1	56.5	56.2
01:00-02:00	58.2	66.2	58.9	58.6	58.1	57.6
02:00-03:00	58.1	64.9	58.8	58.5	57.9	57.6
03:00-04:00	57.9	63.8	58.4	58.3	57.8	57.5
04:00-05:00	58.2	64.0	58.9	58.6	58.1	57.8
05:00-06:00	58.4	75.5	59.0	58.5	58.0	57.6
06:00-07:00	58.9	71.7	60.7	59.9	58.5	58.0
07:00-08:00	59.5	75.0	61.3	60.5	58.6	57.8
08:00-09:00	58.7	70.0	60.0	59.4	58.4	57.9
09:00-10:00	59.8	75.6	61.6	60.6	58.8	58.1
10:00-11:00	58.9	72.9	60.6	59.8	58.3	57.8
11:00-12:00	58.3	65.3	58.8	58.6	58.2	57.9
12:00-13:00	58.7	67.6	59.3	59.0	58.6	58.2
13:00-14:00	59.4	72.2	60.7	60.0	59.1	58.7
24 Hours Measurement	58.7	75.6	59.8	59.3	58.4	57.9
Standard ^{1*}	70	115	-	-	-	-
Ldn	64.7	-	-	-	-	-

Remark : ^{1*} Notification of National Environmental Board, No.15, B.E.2540 (1997) under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992), published in the Royal Government Gazette No.114 Part 270 dated April 3, B.E.2540 (1997).



(Ms.Supawan Suwannapa)
Laboratory Reviewer

(Ms.Thanida Bunnungueang)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source : Ambient Noise
Measured Point : Project's Fence Located Adjacent to the Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd., Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0674271 E, 1550801 N
Measured Date : November 4-5, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scarlet Tech Model ST-11D Serial Number 820939

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-031
Report No. : 2024-RAAX853
Report Date : November 21, 2024

Interval Time	Noise Level, dB(A)						
	Leq	Lmax	L5	L10	L50	L90	
14:00-15:00	59.5	70.1	61.1	60.4	59.2	58.7	
15:00-16:00	59.3	78.8	60.0	59.6	59.0	58.6	
16:00-17:00	59.5	77.2	60.9	60.2	59.1	58.7	
17:00-18:00	59.7	73.9	61.1	60.4	59.3	58.9	
18:00-19:00	59.6	74.7	61.3	60.3	59.2	58.7	
19:00-20:00	59.3	74.4	60.7	59.9	58.9	58.6	
20:00-21:00	58.7	65.0	59.2	59.0	58.6	58.2	
21:00-22:00	58.8	67.0	59.3	59.1	58.7	58.3	
22:00-23:00	58.6	67.5	59.2	59.0	58.5	57.9	
23:00-00:00	58.3	64.7	59.0	58.7	58.1	57.8	
00:00-01:00	58.2	65.9	59.2	58.5	57.9	57.3	
01:00-02:00	57.8	63.7	58.5	58.3	57.5	56.0	
02:00-03:00	57.6	63.0	58.4	57.9	56.0	55.8	
03:00-04:00	56.3	63.4	57.2	56.8	56.2	55.8	
04:00-05:00	58.0	64.6	58.5	58.4	57.8	57.4	
05:00-06:00	58.3	70.4	58.8	58.6	58.2	56.4	
06:00-07:00	58.6	66.9	59.9	59.3	58.3	57.9	
07:00-08:00	59.1	78.3	60.8	59.9	58.5	58.0	
08:00-09:00	58.8	72.8	60.4	59.7	58.4	58.0	
09:00-10:00	58.9	70.9	60.6	59.8	58.5	57.9	
10:00-11:00	59.3	77.3	60.1	59.8	58.1	57.8	
11:00-12:00	59.0	68.7	59.0	59.5	58.7	58.2	
12:00-13:00	58.6	69.8	59.8	59.2	58.5	58.0	
13:00-14:00	59.1	71.2	59.9	59.6	58.9	58.5	
24 Hours Measurement	58.8	78.8	59.9	59.3	58.4	57.9	
Standard 1'	70	115	-	-	-	-	
Ldn	64.6	-	-	-	-	-	

Remark : 1' Notification of National Environmental Board, No.15, B.E.2540 (1997) under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992), published in the Royal Government Gazette No.114 Part 270 dated April 3, B.E.2540 (1997).

(Ms.Supawan Suwannapa)
Laboratory Reviewer

(Ms.Thanida Bunngrueang)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source : Ambient Noise
Measured Point : Project's Fence Located Adjacent to the Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd., Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0674271 E, 1550801 N
Measured Date : November 5-6, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scarlet Tech Model ST-11D Serial Number 820939

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-031
Report No. : 2024-RAAX853
Report Date : November 21, 2024

Interval Time	Noise Level, dB(A)						
	Leq	Lmax	L5	L10	L50	L90	
14:00-15:00	59.1	71.4	60.2	59.6	59.0	58.5	
15:00-16:00	59.3	71.8	60.7	60.4	59.1	58.2	
16:00-17:00	59.7	71.4	61.5	60.8	59.4	58.7	
17:00-18:00	59.7	75.4	61.3	60.5	59.1	58.7	
18:00-19:00	59.3	70.3	60.2	59.7	59.2	58.8	
19:00-20:00	59.8	72.5	61.7	60.9	59.5	58.9	
20:00-21:00	59.5	76.5	60.4	59.9	59.3	58.5	
21:00-22:00	59.5	79.1	60.1	60.0	59.0	58.7	
22:00-23:00	59.0	64.2	59.9	59.7	58.9	58.0	
23:00-00:00	58.5	64.7	59.2	58.9	58.3	58.0	
00:00-01:00	58.1	67.8	58.9	58.5	57.9	57.3	
01:00-02:00	57.9	63.1	58.5	58.2	57.8	57.4	
02:00-03:00	56.9	65.1	57.5	57.2	56.8	56.3	
03:00-04:00	57.4	64.7	57.8	57.6	57.3	56.9	
04:00-05:00	58.0	66.5	58.7	58.4	57.9	57.3	
05:00-06:00	58.1	65.1	58.6	58.5	58.0	57.7	
06:00-07:00	58.4	75.1	59.6	59.1	58.2	57.8	
07:00-08:00	59.3	75.4	60.6	59.9	58.5	57.9	
08:00-09:00	58.6	70.7	59.9	59.2	58.4	57.8	
09:00-10:00	60.1	75.4	62.0	61.1	59.2	58.5	
10:00-11:00	59.7	71.4	61.4	60.8	59.6	58.3	
11:00-12:00	59.5	74.3	61.0	60.3	59.1	58.0	
12:00-13:00	58.8	74.7	59.6	59.3	58.7	58.3	
13:00-14:00	60.0	76.5	61.4	60.8	59.6	59.1	
24 Hours Measurement	59.0	79.1	60.2	59.7	58.7	58.1	
Standard 1'	70	115	-	-	-	-	
Ldn	64.7	-	-	-	-	-	

Remark : 1' Notification of National Environmental Board, No.15, B.E.2540 (1997) under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992), published in the Royal Government Gazette No.114 Part 270 dated April 3, B.E.2540 (1997).

(Ms.Supawan Suwannapa)
Laboratory Reviewer

(Ms.Thanida Bunngrueang)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source : Ambient Noise
Measured Point : Project's Fence Located Adjacent to the Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd., Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0674271 E, 1550801 N
Measured Date : November 6-7, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scarlet Tech Model ST-11D Serial Number 820939

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-031
Report No. : 2024-RAAX853
Report Date : November 21, 2024

Interval Time	Noise Level, dB(A)					
	Leq	Lmax	L5	L10	L50	L90
14:00-15:00	59.8	79.2	61.2	60.5	59.4	59.0
15:00-16:00	59.6	77.4	60.9	60.4	59.3	58.9
16:00-17:00	59.4	85.3	61.3	60.6	58.8	58.3
17:00-18:00	59.7	83.2	60.5	59.8	58.8	58.4
18:00-19:00	59.2	81.2	60.0	59.7	59.0	58.6
19:00-20:00	59.0	86.6	60.2	59.4	58.6	58.2
20:00-21:00	58.8	69.4	59.3	59.1	58.7	58.3
21:00-22:00	59.0	75.1	59.7	59.4	58.8	58.0
22:00-23:00	58.6	66.6	59.1	59.0	58.5	58.2
23:00-00:00	58.1	64.7	58.7	58.5	58.0	57.5
00:00-01:00	57.4	64.0	58.0	57.7	57.3	57.0
01:00-02:00	58.0	63.9	58.8	58.5	57.9	57.2
02:00-03:00	57.6	63.9	58.2	57.9	57.5	56.8
03:00-04:00	57.8	64.2	58.3	58.2	57.7	57.2
04:00-05:00	57.9	67.1	58.6	58.1	57.8	57.5
05:00-06:00	58.0	68.5	58.7	58.5	57.9	57.4
06:00-07:00	58.8	70.2	60.3	59.7	58.4	58.0
07:00-08:00	59.6	76.9	61.5	60.3	59.0	58.5
08:00-09:00	60.5	77.4	62.0	61.3	59.4	58.7
09:00-10:00	60.3	75.7	61.6	60.9	59.3	58.1
10:00-11:00	59.5	74.7	60.4	59.9	58.9	58.5
11:00-12:00	59.0	74.0	60.2	59.7	58.5	58.2
12:00-13:00	59.4	77.7	61.0	60.0	58.7	58.0
13:00-14:00	60.1	84.7	61.2	60.7	59.8	59.3
24 Hours Measurement	59.0	86.6	60.1	59.6	58.6	58.1
Standard ¹⁾	70	115	-	-	-	-
Ldn	64.7	-	-	-	-	-

Remark : ¹⁾ Notification of National Environmental Board, No.15, B.E.2540 (1997) under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992), published in the Royal Government Gazette No.114 Part 270 dated April 3, B.E.2540 (1997).

(Ms.Supawan Suwannapa)
Laboratory Reviewer

(Ms.Thanida Bunngrueang)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source : Ambient Noise
Measured Point : Project's Fence Located Adjacent to the Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd., Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0674271 E, 1550801 N
Measured Date : November 7-8, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scarlet Tech Model ST-11D Serial Number 820939

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-031
Report No. : 2024-RAAX853
Report Date : November 21, 2024

Interval Time	Noise Level, dB(A)					
	Leq	Lmax	L5	L10	L50	L90
14:00-15:00	60.4	74.5	62.3	61.6	59.9	59.3
15:00-16:00	60.0	68.7	61.8	61.1	59.5	59.0
16:00-17:00	59.3	68.6	60.7	60.2	59.2	58.7
17:00-18:00	59.6	70.7	60.4	60.0	59.3	59.0
18:00-19:00	59.3	80.0	60.1	59.7	59.1	58.7
19:00-20:00	59.1	73.9	59.9	59.4	58.9	58.4
20:00-21:00	59.2	77.2	59.8	59.5	59.0	58.7
21:00-22:00	58.9	73.0	59.7	59.3	58.8	58.1
22:00-23:00	58.7	65.2	59.3	59.1	58.6	58.1
23:00-00:00	58.4	66.4	58.9	58.7	58.3	57.8
00:00-01:00	58.0	67.2	58.6	58.4	57.9	57.6
01:00-02:00	57.8	64.9	58.4	58.2	57.7	57.3
02:00-03:00	57.4	61.6	57.8	57.7	57.3	56.8
03:00-04:00	57.2	65.1	57.7	57.5	57.1	56.6
04:00-05:00	58.0	64.0	58.6	58.3	57.9	57.6
05:00-06:00	58.3	67.8	59.1	58.7	58.2	57.6
06:00-07:00	58.9	69.9	60.2	59.8	58.4	57.9
07:00-08:00	59.1	76.7	62.1	61.6	58.6	57.4
08:00-09:00	58.8	77.4	60.4	59.7	58.4	57.6
09:00-10:00	59.3	73.5	60.3	60.0	59.0	58.6
10:00-11:00	58.8	69.7	60.5	59.5	58.4	58.0
11:00-12:00	58.2	69.7	59.5	58.9	57.9	57.5
12:00-13:00	58.9	68.4	60.5	59.8	58.6	58.2
13:00-14:00	60.0	78.1	61.4	60.9	59.7	59.0
24 Hours Measurement	58.9	80.0	60.1	59.6	58.6	58.1
Standard ¹⁾	70	115	-	-	-	-
Ldn	64.7	-	-	-	-	-

Remark : ¹⁾ Notification of National Environmental Board, No.15, B.E.2540 (1997) under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992), published in the Royal Government Gazette No.114 Part 270 dated April 3, B.E.2540 (1997).

(Ms.Supawan Suwannapa)
Laboratory Reviewer

(Ms.Thanida Bunngrueang)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name :Klong Luang Utilities Company Limited
Address :222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name :Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location :1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source :Ambient Noise
Measured Point :Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd., Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate :UTM (WGS84) 47P 0674312 E, 1550830 N
Measured Date :November 1-2, 2024
Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-029
Report No. : 2024-RAAX849
Analyzed By :Mr.Assada Chaiyawong
Measured Instrument :Environment Research & Technology Co., Ltd.
:Integrating Sound Level Meter Scarlet Tech Model ST-21D Serial Number 820445

Interval Time	Noise Level, dB(A)					
	Leq	Lmax	L5	L10	L50	L90
14:00-15:00	53.7	64.4	55.2	54.6	53.4	52.9
15:00-16:00	54.1	68.8	55.6	54.6	53.7	53.1
16:00-17:00	55.0	70.9	57.1	56.4	54.4	53.8
17:00-18:00	54.3	69.1	55.9	55.2	53.9	53.3
18:00-19:00	54.3	68.9	56.1	54.8	53.9	53.3
19:00-20:00	53.3	62.9	54.3	53.9	53.1	52.6
20:00-21:00	54.9	72.9	57.2	54.9	54.4	53.6
21:00-22:00	53.6	67.1	54.6	54.2	53.4	52.9
22:00-23:00	53.5	67.8	54.6	54.1	53.3	52.8
23:00-00:00	53.6	65.7	55.3	54.4	53.1	52.5
00:00-01:00	52.9	62.0	54.6	54.0	52.6	52.1
01:00-02:00	53.0	67.1	54.6	53.8	52.6	52.0
02:00-03:00	53.0	78.2	54.1	53.6	52.8	52.3
03:00-04:00	53.2	78.0	54.4	54.0	52.4	51.8
04:00-05:00	54.4	79.3	56.1	55.1	52.4	51.9
05:00-06:00	55.9	79.3	58.4	56.8	52.6	52.0
06:00-07:00	54.2	68.7	57.2	56.0	53.2	52.3
07:00-08:00	53.4	69.3	55.6	54.4	52.7	52.1
08:00-09:00	53.8	65.8	55.7	54.7	53.3	52.5
09:00-10:00	54.0	63.9	55.4	55.0	53.8	53.0
10:00-11:00	53.9	70.2	55.4	54.8	53.5	52.8
11:00-12:00	53.2	66.7	54.7	54.1	52.9	52.1
12:00-13:00	53.1	66.7	54.4	53.9	52.9	52.3
13:00-14:00	54.7	68.2	55.9	55.5	54.4	53.6
24 Hours Measurement	53.9	79.3	55.7	54.8	53.3	52.7
Standard ¹⁾	70	115	-	-	-	-
Ldn	60.3	-	-	-	-	-

Remark : ¹⁾ Notification of National Environmental Board, No.15, B.E.2540 (1997) under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992), published in the Royal Government Gazette No.114 Part 270 dated April 3, B.E.2540 (1997).



(Ms.Supawan Suwannapa)
Laboratory Reviewer

(Ms.Thanida Bunnungueang)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name :Klong Luang Utilities Company Limited
Address :222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name :Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location :1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source :Ambient Noise
Measured Point :Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd., Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate :UTM (WGS84) 47P 0674312 E, 1550830 N
Measured Date :November 2-3, 2024
Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-029
Report No. : 2024-RAAX849
Analyzed By :Mr.Assada Chaiyawong
Measured Instrument :Environment Research & Technology Co., Ltd.
:Integrating Sound Level Meter Scarlet Tech Model ST-21D Serial Number 820445

Interval Time	Noise Level, dB(A)					
	Leq	Lmax	L5	L10	L50	L90
14:00-15:00	54.9	68.2	56.2	55.7	54.7	53.9
15:00-16:00	55.0	66.0	56.4	55.9	54.8	54.0
16:00-17:00	55.0	65.2	56.4	55.8	54.7	53.9
17:00-18:00	54.8	72.2	56.7	55.9	54.3	53.5
18:00-19:00	53.6	77.0	54.9	54.0	53.2	52.8
19:00-20:00	53.8	67.6	55.1	54.6	53.5	53.0
20:00-21:00	54.2	68.6	55.6	55.0	54.0	53.3
21:00-22:00	53.6	60.1	54.9	54.3	53.4	52.9
22:00-23:00	53.4	62.6	54.4	53.9	53.1	52.6
23:00-00:00	53.0	65.6	54.8	53.5	52.5	52.1
00:00-01:00	52.9	65.4	54.4	53.8	52.6	52.1
01:00-02:00	52.8	62.8	54.4	53.6	52.4	52.0
02:00-03:00	53.0	63.1	54.8	53.9	52.7	52.2
03:00-04:00	52.3	59.1	53.1	52.8	52.2	51.7
04:00-05:00	52.1	62.4	53.1	52.7	52.0	51.5
05:00-06:00	52.9	73.8	54.2	53.5	52.3	51.9
06:00-07:00	53.8	68.9	56.4	55.2	52.9	52.1
07:00-08:00	53.3	65.6	55.8	54.8	52.6	51.8
08:00-09:00	52.6	71.8	54.2	53.3	52.1	51.4
09:00-10:00	52.9	70.9	55.0	53.9	52.1	51.6
10:00-11:00	52.8	71.6	54.1	53.6	52.5	51.8
11:00-12:00	52.5	67.3	54.2	53.1	52.2	51.6
12:00-13:00	53.7	69.0	56.7	55.1	52.9	52.2
13:00-14:00	53.5	70.1	55.7	54.7	52.7	52.1
24 Hours Measurement	53.5	77.0	55.2	54.4	53.1	52.5
Standard ¹⁾	70	115	-	-	-	-
Ldn	59.5	-	-	-	-	-

Remark : ¹⁾ Notification of National Environmental Board, No.15, B.E.2540 (1997) under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992), published in the Royal Government Gazette No.114 Part 270 dated April 3, B.E.2540 (1997).



(Ms.Supawan Suwannapa)
Laboratory Reviewer

(Ms.Thanida Bunnungueang)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source : Ambient Noise
Measured Point : Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd., Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0674312 E, 1550830 N
Measured Date : November 3-4, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scarlett Tech Model ST-21D Serial Number 820445

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-029
Report No. : 2024-RAAX849
Report Date : November 21, 2024

Interval Time	Noise Level, dB(A)								
	Leq	Lmax	L5	L10	L50	L90	L50	L10	L90
14:00-15:00	52.9	62.6	54.2	53.6	52.7	52.1	52.7	52.7	52.1
15:00-16:00	53.6	69.1	55.3	54.5	53.2	52.3	53.2	54.3	52.9
16:00-17:00	53.4	66.5	55.7	55.1	52.7	52.0	54.1	55.5	52.7
17:00-18:00	53.5	69.1	55.3	54.5	53.0	52.4	53.3	54.5	52.7
18:00-19:00	53.6	71.1	55.2	54.5	52.7	52.2	54.1	54.1	52.7
19:00-20:00	53.5	68.3	54.9	54.3	53.1	52.6	54.2	54.2	52.9
20:00-21:00	53.3	68.9	54.8	54.1	52.9	52.4	54.4	54.4	52.9
21:00-22:00	53.7	65.8	55.0	54.4	53.4	52.8	53.3	54.4	53.0
22:00-23:00	52.9	63.9	54.3	53.7	52.7	52.1	53.3	54.7	52.7
23:00-00:00	53.1	70.4	54.6	53.8	52.7	52.2	53.0	54.7	52.3
00:00-01:00	53.2	68.8	55.3	54.2	52.5	52.0	52.8	53.9	52.2
01:00-02:00	52.2	62.8	54.0	53.2	51.8	51.3	52.3	53.2	51.8
02:00-03:00	51.8	60.8	53.4	52.6	51.5	51.0	52.2	53.1	51.7
03:00-04:00	51.9	60.5	52.8	52.5	51.8	51.3	52.1	52.9	51.6
04:00-05:00	52.3	61.2	53.7	53.1	52.1	51.5	52.4	53.1	51.8
05:00-06:00	53.5	67.7	56.7	54.8	52.4	51.8	52.6	55.2	52.1
06:00-07:00	55.0	69.6	58.1	56.1	53.2	52.3	53.4	56.8	52.4
07:00-08:00	53.3	64.5	55.7	54.8	52.7	51.9	53.4	55.7	52.6
08:00-09:00	53.4	72.1	54.8	54.2	52.8	52.2	53.3	54.6	52.6
09:00-10:00	56.5	74.4	60.3	57.4	53.5	52.4	53.5	55.1	52.9
10:00-11:00	53.5	74.9	56.5	55.0	52.3	51.6	53.1	55.6	52.4
11:00-12:00	52.9	63.7	54.1	53.6	52.7	52.2	53.5	54.9	53.0
12:00-13:00	53.1	66.7	54.7	53.9	52.7	52.2	53.5	55.2	52.9
13:00-14:00	54.3	65.0	55.4	54.9	54.1	53.7	53.8	55.0	53.2
24 Hours Measurement	53.5	74.9	55.5	54.4	52.8	52.1	53.2	54.6	52.6
Standard ¹⁾	70	115	-	-	-	-	-	-	-
Ldn	59.5	-	-	-	-	-	-	-	-

Remark : ¹⁾ Notification of National Environmental Board, No.15, B.E.2540 (1997) under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992), published in the Royal Government Gazette No.114 Part 27D dated April 3, B.E.2540 (1997).

(Ms.Supawan Suwannapa)
Laboratory Reviewer

(Ms.Thanida Bunngrueang)
Laboratory Supervisor



ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source : Ambient Noise
Measured Point : Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd., Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0674312 E, 1550830 N
Measured Date : November 4-5, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scarlett Tech Model ST-21D Serial Number 820445

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-029
Report No. : 2024-RAAX849
Report Date : November 21, 2024

Interval Time	Noise Level, dB(A)								
	Leq	Lmax	L5	L10	L50	L90	L50	L10	L90
14:00-15:00	53.6	64.7	54.5	54.2	53.4	53.0	53.4	54.2	53.0
15:00-16:00	53.8	66.3	55.0	54.3	53.4	52.9	53.4	54.3	52.9
16:00-17:00	54.1	72.1	56.4	55.5	53.4	52.7	53.4	55.5	52.7
17:00-18:00	53.7	67.1	55.2	54.5	53.3	52.7	53.3	54.5	52.7
18:00-19:00	53.6	71.2	54.7	54.1	53.3	52.7	53.4	54.1	52.7
19:00-20:00	53.6	65.1	54.7	54.2	53.4	52.9	53.3	54.2	52.9
20:00-21:00	53.6	62.0	54.4	54.1	53.3	52.9	53.4	54.1	52.9
21:00-22:00	53.6	71.7	54.9	54.4	53.4	53.0	53.3	54.4	53.0
22:00-23:00	53.5	67.7	54.6	54.2	53.3	52.7	53.3	54.2	52.7
23:00-00:00	53.4	64.3	55.2	54.7	53.0	52.3	52.8	54.7	52.3
00:00-01:00	53.1	60.8	54.6	53.9	52.8	52.2	52.8	53.9	52.2
01:00-02:00	52.5	63.2	53.6	53.2	52.3	51.8	52.3	53.2	51.8
02:00-03:00	52.4	58.1	53.6	53.1	52.2	51.7	52.2	53.1	51.7
03:00-04:00	52.2	64.8	53.3	52.9	52.1	51.6	52.1	52.9	51.6
04:00-05:00	52.6	70.6	53.4	53.1	52.4	51.8	52.4	53.1	51.8
05:00-06:00	54.7	71.8	56.9	55.2	52.6	52.1	52.6	55.2	52.1
06:00-07:00	54.8	73.0	58.3	56.8	53.4	52.4	53.4	56.8	52.4
07:00-08:00	54.2	68.5	56.7	55.7	53.4	52.6	53.4	55.7	52.6
08:00-09:00	53.7	71.6	55.2	54.6	53.3	52.6	53.3	54.6	52.6
09:00-10:00	53.8	67.5	55.1	54.6	53.5	52.9	53.5	55.1	52.9
10:00-11:00	53.8	69.0	56.5	55.6	53.1	52.4	53.1	55.6	52.4
11:00-12:00	53.9	65.0	55.9	54.9	53.5	53.0	53.5	54.9	53.0
12:00-13:00	54.0	65.7	56.1	55.2	53.5	52.9	53.5	55.2	52.9
13:00-14:00	54.1	67.2	55.5	55.0	53.8	53.2	53.8	55.0	53.2
24 Hours Measurement	53.6	73.0	55.3	54.6	53.2	52.6	53.2	54.6	52.6
Standard ¹⁾	70	115	-	-	-	-	-	-	-
Ldn	59.8	-	-	-	-	-	-	-	-

Remark : ¹⁾ Notification of National Environmental Board, No.15, B.E.2540 (1997) under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992), published in the Royal Government Gazette No.114 Part 27D dated April 3, B.E.2540 (1997).

(Ms.Supawan Suwannapa)
Laboratory Reviewer

(Ms.Thanida Bunngrueang)
Laboratory Supervisor



ANALYSIS REPORT

Customer Name :Klong Luang Utilities Company Limited
Address :222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name :Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location :1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source :Ambient Noise
Measured Point :Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd., Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate :UTM (WGS84) 47P 0674312 E, 1550830 N
Measured Date :November 6-7, 2024
Measured By :Mr.Assada Chaiyawong
Analyzed By :Environment Research & Technology Co., Ltd.
Measured Instrument :Integrating Sound Level Meter Scarlet Tech Model ST-21D Serial Number 820445

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-029
Report No. : 2024-RAAX849
Report Date : November 21, 2024

Interval Time	Noise Level, dB(A)					
	Leq	Lmax	L5	L10	L50	L90
14:00-15:00	54.1	70.1	56.1	55.2	53.6	52.9
15:00-16:00	54.4	70.1	57.6	56.0	53.6	53.0
16:00-17:00	54.0	67.3	55.7	54.8	53.6	53.0
17:00-18:00	54.2	65.7	56.1	55.3	53.8	53.1
18:00-19:00	53.8	68.5	55.3	54.6	53.4	52.8
19:00-20:00	53.5	65.9	54.7	54.2	53.3	52.8
20:00-21:00	54.0	67.3	54.9	54.5	53.8	53.2
21:00-22:00	53.9	63.7	54.8	54.5	53.8	53.2
22:00-23:00	53.3	63.2	54.5	54.0	53.1	52.5
23:00-00:00	52.9	60.4	54.2	53.7	52.7	52.1
00:00-01:00	52.9	63.0	54.6	54.0	52.5	51.9
01:00-02:00	52.6	65.5	54.0	53.4	52.2	51.7
02:00-03:00	52.0	59.1	52.8	52.5	51.9	51.3
03:00-04:00	52.1	60.6	53.2	52.7	52.0	51.5
04:00-05:00	52.6	69.8	53.7	53.2	52.4	51.8
05:00-06:00	55.3	75.2	57.9	56.2	52.7	52.1
06:00-07:00	54.5	75.6	57.3	56.2	53.4	52.5
07:00-08:00	54.6	67.0	56.6	55.8	54.1	53.3
08:00-09:00	54.4	65.6	56.7	55.9	53.8	53.1
09:00-10:00	55.6	72.6	60.0	58.1	53.5	52.8
10:00-11:00	54.1	67.3	55.3	54.8	53.8	53.2
11:00-12:00	54.4	69.0	56.0	55.3	54.2	53.5
12:00-13:00	55.0	68.8	57.5	56.5	54.3	53.6
13:00-14:00	58.3	80.6	62.7	58.4	55.7	55.0
24 Hours Measurement	54.2	80.6	56.6	55.3	53.5	52.8
Standard 1'	70	115	-	-	-	-
Ldn	59.9	-	-	-	-	-

Remark : 1' Notification of National Environmental Board, No.15, B.E.2540 (1997) under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992), published in the Royal Government Gazette No.114 Part 27D dated April 3, B.E.2540 (1997).

(Ms.Supawan Suwannapa)
Laboratory Reviewer

(Ms.Thanida Bunnungueang)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name :Klong Luang Utilities Company Limited
Address :222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name :Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location :1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source :Ambient Noise
Measured Point :Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd., Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate :UTM (WGS84) 47P 0674312 E, 1550830 N
Measured Date :November 5-6, 2024
Measured By :Mr.Assada Chaiyawong
Analyzed By :Environment Research & Technology Co., Ltd.
Measured Instrument :Integrating Sound Level Meter Scarlet Tech Model ST-21D Serial Number 820445

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-029
Report No. : 2024-RAAX849
Report Date : November 21, 2024

Interval Time	Noise Level, dB(A)					
	Leq	Lmax	L5	L10	L50	L90
14:00-15:00	53.8	68.2	55.0	54.6	53.6	53.1
15:00-16:00	58.0	72.5	61.0	59.9	56.8	55.5
16:00-17:00	56.1	81.0	58.6	57.7	54.1	53.1
17:00-18:00	54.7	70.9	56.2	55.6	54.3	53.7
18:00-19:00	54.0	67.7	55.8	54.8	53.6	53.2
19:00-20:00	55.7	70.7	58.5	57.9	54.9	53.8
20:00-21:00	54.6	68.5	56.1	55.1	54.3	53.7
21:00-22:00	53.9	60.3	55.0	54.6	53.7	53.1
22:00-23:00	53.9	60.8	54.6	54.3	53.7	53.2
23:00-00:00	53.6	64.7	55.2	54.5	53.3	52.7
00:00-01:00	53.4	64.7	55.1	54.3	52.6	52.0
01:00-02:00	53.0	69.3	54.4	53.7	52.7	52.1
02:00-03:00	52.8	60.6	54.1	53.5	52.6	52.0
03:00-04:00	53.7	62.7	55.2	54.5	52.2	51.7
04:00-05:00	52.9	61.3	54.1	53.6	52.7	52.1
05:00-06:00	54.3	70.9	58.2	55.3	52.8	52.4
06:00-07:00	54.5	70.7	58.1	56.6	53.2	52.4
07:00-08:00	54.3	72.2	56.7	55.1	53.6	52.8
08:00-09:00	54.3	72.2	57.7	56.0	53.0	52.3
09:00-10:00	54.0	69.0	55.9	54.8	53.5	52.8
10:00-11:00	53.5	66.7	55.4	54.5	53.1	52.5
11:00-12:00	54.3	66.6	55.6	54.1	54.1	53.5
12:00-13:00	54.4	70.2	56.3	55.5	54.0	53.3
13:00-14:00	56.5	72.1	59.3	58.0	55.8	54.8
24 Hours Measurement	54.5	81.0	56.7	55.7	53.8	53.1
Standard 1'	70	115	-	-	-	-
Ldn	60.2	-	-	-	-	-

Remark : 1' Notification of National Environmental Board, No.15, B.E.2540 (1997) under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992), published in the Royal Government Gazette No.114 Part 27D dated April 3, B.E.2540 (1997).

(Ms.Supawan Suwannapa)
Laboratory Reviewer

(Ms.Thanida Bunnungueang)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source : Ambient Noise
Measured Point : Staff Dormitory of Teijin Polyester (Thailand) Co., Ltd., Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0674312 E, 1550830 N
Measured Date : November 7-8, 2024
Measured By : Mr. Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scarlet Tech Model ST-21D Serial Number 820445

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-029
Report No. : 2024-RAAX849
Report Date : November 21, 2024

Interval Time	Noise Level, dB(A)				
	Leq	Lmax	L5	L10	L90
14:00-15:00	56.3	74.8	59.1	57.0	54.8
15:00-16:00	55.1	65.2	57.0	56.1	54.0
16:00-17:00	55.0	67.5	56.7	56.0	54.1
17:00-18:00	54.7	69.4	56.7	55.9	53.5
18:00-19:00	54.0	69.7	56.1	55.4	52.9
19:00-20:00	53.5	62.9	54.6	54.2	52.7
20:00-21:00	53.4	65.8	54.8	54.1	52.5
21:00-22:00	53.7	63.3	54.9	54.2	52.8
22:00-23:00	53.2	62.4	54.5	53.9	52.4
23:00-00:00	53.0	62.6	54.1	53.6	52.3
00:00-01:00	52.6	63.3	53.7	53.2	51.9
01:00-02:00	52.7	62.4	54.0	53.4	51.9
02:00-03:00	52.0	60.7	53.6	52.8	51.3
03:00-04:00	52.1	58.8	53.3	52.9	51.5
04:00-05:00	52.6	70.7	53.8	53.2	51.8
05:00-06:00	54.4	74.6	57.6	54.8	52.3
06:00-07:00	55.0	75.7	58.7	57.2	52.7
07:00-08:00	55.3	71.8	58.3	57.3	53.2
08:00-09:00	55.1	69.6	58.8	57.2	53.1
09:00-10:00	55.1	71.4	58.8	57.4	52.6
10:00-11:00	53.6	67.7	55.8	55.0	52.3
11:00-12:00	53.9	65.1	56.5	55.2	52.8
12:00-13:00	53.5	62.4	54.7	54.2	52.7
13:00-14:00	54.7	70.0	56.5	55.2	53.3
24 Hours Measurement	54.1	75.7	56.3	55.2	52.8
Standard¹⁾	70	115	-	-	-
Ldn	59.8	-	-	-	-

Remark : ¹⁾ Notification of National Environmental Board, No.15, B.E.2540 (1997) under the Enhancement and Conservation of National Environmental Quality Act B.E.2535 (1992), published in the Royal Government Gazette No.114 Part 270 dated April 3, B.E.2540 (1997).



(Ms. Supawan Suwannapa)

Laboratory Reviewer

(Ms. Thanida Bunnungueang)

Laboratory Supervisor

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source : Ambient Noise
Measured Point : Common Area of Pak Thang White House Community, Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0673744 E, 1550442 N
Measured Date : November 1-2, 2024
Measured By : Mr. Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scarlet Tech Model ST-11D Serial Number 820865

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-030
Report No. : 2024-RAAX852
Report Date : November 21, 2024

Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time		Noise Level For 5 minutes, dB(A)		Interval Time		Noise Level For 5 minutes, dB(A)	
	Leq	L90								
13:00-13:05	64.1	53.2	16:00-16:05	64.3	54.9	19:00-19:05	65.4	52.7	22:00-22:05	64.3
13:05-13:10	62.9	52.5	16:05-16:10	63.5	54.1	19:05-19:10	65.7	51.4	22:05-22:10	65.5
13:10-13:15	68.3	53.7	16:10-16:15	64.3	55.3	19:10-19:15	65.6	55.3	22:10-22:15	62.5
13:15-13:20	61.0	51.9	16:15-16:20	64.9	53.7	19:15-19:20	66.2	57.6	22:15-22:20	66.3
13:20-13:25	63.6	56.2	16:20-16:25	70.0	55.5	19:20-19:25	65.2	56.9	22:20-22:25	67.9
13:25-13:30	61.7	52.5	16:25-16:30	63.0	54.0	19:25-19:30	64.9	55.6	22:25-22:30	66.8
13:30-13:35	61.9	50.0	16:30-16:35	65.5	55.9	19:30-19:35	65.6	55.7	22:30-22:35	64.1
13:35-13:40	64.4	51.3	16:35-16:40	65.6	56.3	19:35-19:40	65.9	57.2	22:35-22:40	65.3
13:40-13:45	65.3	51.0	16:40-16:45	65.6	57.0	19:40-19:45	66.5	58.0	22:40-22:45	65.2
13:45-13:50	61.7	52.1	16:45-16:50	64.5	55.4	19:45-19:50	65.6	56.2	22:45-22:50	66.2
13:50-13:55	62.8	53.9	16:50-16:55	66.9	59.4	19:50-19:55	65.5	55.6	22:50-22:55	63.5
13:55-14:00	61.3	51.3	16:55-17:00	64.9	57.9	19:55-20:00	64.3	56.2	22:55-23:00	60.8
14:00-14:05	61.4	50.1	17:00-17:05	68.9	58.5	20:00-20:05	68.6	55.4	23:00-23:05	58.4
14:05-14:10	60.8	49.8	17:05-17:10	68.9	58.4	20:05-20:10	65.5	50.8	23:05-23:10	61.9
14:10-14:15	62.7	51.6	17:10-17:15	69.2	59.1	20:10-20:15	68.5	54.0	23:10-23:15	62.5
14:15-14:20	62.2	50.7	17:15-17:20	68.1	59.3	20:15-20:20	69.0	54.5	23:15-23:20	62.5
14:20-14:25	64.4	50.3	17:20-17:25	68.2	58.1	20:20-20:25	65.7	56.1	23:20-23:25	62.3
14:25-14:30	62.7	51.6	17:25-17:30	68.1	57.9	20:25-20:30	66.2	57.6	23:25-23:30	56.6
14:30-14:35	61.2	50.2	17:30-17:35	67.8	58.5	20:30-20:35	62.9	53.5	23:30-23:35	63.7
14:35-14:40	63.7	51.1	17:35-17:40	64.1	56.7	20:35-20:40	66.1	56.3	23:35-23:40	61.2
14:40-14:45	62.8	50.1	17:40-17:45	64.5	58.2	20:40-20:45	63.8	55.0	23:40-23:45	65.1
14:45-14:50	62.8	50.4	17:45-17:50	64.2	54.5	20:45-20:50	67.0	52.1	23:45-23:50	63.2
14:50-14:55	63.6	53.1	17:50-17:55	64.9	55.7	20:50-20:55	68.6	55.1	23:50-23:55	64.5
14:55-15:00	62.6	50.4	17:55-18:00	65.3	57.1	20:55-21:00	64.7	53.6	23:55-00:00	59.2
15:00-15:05	61.1	52.2	18:00-18:05	61.6	52.2	21:00-21:05	69.3	53.5	00:00-00:05	60.3
15:05-15:10	62.9	53.6	18:05-18:10	68.6	58.8	21:05-21:10	65.7	52.1	00:05-00:10	60.9
15:10-15:15	67.7	59.1	18:10-18:15	67.2	57.5	21:10-21:15	67.5	51.7	00:10-00:15	64.9
15:15-15:20	65.0	56.6	18:15-18:20	67.5	58.1	21:15-21:20	64.4	51.8	00:15-00:20	59.2
15:20-15:25	63.5	52.6	18:20-18:25	66.3	60.3	21:20-21:25	65.2	50.6	00:20-00:25	61.6
15:25-15:30	62.4	52.2	18:25-18:30	68.8	66.5	21:25-21:30	61.3	46.9	00:25-00:30	63.7
15:30-15:35	68.2	56.1	18:30-18:35	65.8	57.2	21:30-21:35	61.6	48.2	00:30-00:35	60.7
15:35-15:40	67.4	56.7	18:35-18:40	64.1	55.0	21:35-21:40	61.6	49.0	00:35-00:40	54.1
15:40-15:45	66.4	55.5	18:40-18:45	64.3	55.2	21:40-21:45	64.5	49.8	00:40-00:45	63.1
15:45-15:50	65.6	51.8	18:45-18:50	65.6	56.2	21:45-21:50	63.6	50.0	00:45-00:50	61.3
15:50-15:55	62.9	51.2	18:50-18:55	67.9	57.8	21:50-21:55	64.9	51.2	00:50-00:55	55.5
15:55-16:00	63.8	54.6	18:55-19:00	63.5	51.9	21:55-22:00	62.4	50.4	00:55-01:00	58.8

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Klong Nueng, Klong Luang, Pathum Thani
Measured Source : Ambient Noise
Measured Point : Common Area of Pak Thang White House Community, Klong Nueng Sub-District, Klong Luang District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0673744 E, 1550442 N
Measured Date : November 2, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scarlet Tech Model ST-11D Serial Number 820865

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-030
Report No. : 2024-RAAX852
Report Date : November 21, 2024

Interval Time	Noise Level For 5 minutes, dB(A)			Interval Time	Noise Level For 5 minutes, dB(A)			Interval Time	Noise Level For 5 minutes, dB(A)		
	Leq	L90	L90		Leq	L90	L90		Leq	L90	L90
01:00-01:05	58.4	45.7	04:00-04:05	52.5	43.1	07:00-07:05	60.6	48.8	10:00-10:05	61.4	50.5
01:05-01:10	61.9	47.5	04:05-04:10	54.9	44.9	07:05-07:10	61.7	51.2	10:05-10:10	63.1	49.0
01:10-01:15	61.4	47.0	04:10-04:15	54.1	44.1	07:10-07:15	67.0	55.3	10:10-10:15	61.7	49.8
01:15-01:20	56.9	44.7	04:15-04:20	51.3	43.5	07:15-07:20	66.9	57.6	10:15-10:20	63.4	51.8
01:20-01:25	60.7	45.3	04:20-04:25	53.7	43.5	07:20-07:25	62.8	52.9	10:20-10:25	62.8	50.4
01:25-01:30	53.5	44.9	04:25-04:30	59.3	44.4	07:25-07:30	66.1	56.6	10:25-10:30	62.9	51.0
01:30-01:35	55.1	45.3	04:30-04:35	60.0	45.6	07:30-07:35	66.4	55.7	10:30-10:35	61.1	51.6
01:35-01:40	53.8	44.7	04:35-04:40	57.6	45.2	07:35-07:40	65.6	52.9	10:35-10:40	61.9	54.1
01:40-01:45	55.0	44.2	04:40-04:45	60.1	44.7	07:40-07:45	66.1	56.1	10:40-10:45	61.2	51.5
01:45-01:50	54.9	44.6	04:45-04:50	57.5	44.6	07:45-07:50	65.8	55.8	10:45-10:50	63.9	51.2
01:50-01:55	56.6	44.3	04:50-04:55	58.0	45.2	07:50-07:55	65.0	55.3	10:50-10:55	63.0	51.7
01:55-02:00	56.2	44.8	04:55-05:00	56.0	45.6	07:55-08:00	65.8	56.4	10:55-11:00	62.1	50.1
02:00-02:05	58.9	44.3	05:00-05:05	59.4	44.7	08:00-08:05	68.0	54.5	11:00-11:05	63.1	53.1
02:05-02:10	55.9	44.5	05:05-05:10	58.7	45.5	08:05-08:10	63.9	51.1	11:05-11:10	63.5	53.6
02:10-02:15	58.4	45.2	05:10-05:15	58.6	45.8	08:10-08:15	63.8	53.4	11:10-11:15	60.8	51.9
02:15-02:20	57.5	45.6	05:15-05:20	57.9	45.8	08:15-08:20	64.4	54.0	11:15-11:20	60.0	52.3
02:20-02:25	55.0	44.9	05:20-05:25	61.5	46.3	08:20-08:25	63.2	53.7	11:20-11:25	62.2	52.8
02:25-02:30	58.1	45.4	05:25-05:30	57.4	45.2	08:25-08:30	64.5	58.1	11:25-11:30	64.2	54.2
02:30-02:35	55.9	45.0	05:30-05:35	61.4	47.7	08:30-08:35	63.6	52.7	11:30-11:35	63.0	53.1
02:35-02:40	55.3	45.0	05:35-05:40	61.1	47.0	08:35-08:40	64.1	52.3	11:35-11:40	65.2	55.8
02:40-02:45	56.7	44.5	05:40-05:45	60.0	49.7	08:40-08:45	63.5	53.4	11:40-11:45	62.8	53.2
02:45-02:50	66.2	51.1	05:45-05:50	62.9	48.7	08:45-08:50	62.0	51.5	11:45-11:50	63.9	52.7
02:50-02:55	62.6	46.7	05:50-05:55	62.7	50.7	08:50-08:55	65.7	50.6	11:50-11:55	65.7	51.7
02:55-03:00	62.2	46.9	05:55-06:00	62.1	48.2	08:55-09:00	66.0	50.1	11:55-12:00	67.3	52.6
03:00-03:05	62.0	47.5	06:00-06:05	59.3	47.1	09:00-09:05	66.7	51.8	12:00-12:05	64.8	52.2
03:05-03:10	53.3	44.8	06:05-06:10	59.1	47.1	09:05-09:10	65.1	55.3	12:05-12:10	63.3	50.7
03:10-03:15	59.6	45.1	06:10-06:15	61.7	47.8	09:10-09:15	67.5	61.8	12:10-12:15	65.9	52.8
03:15-03:20	59.8	44.6	06:15-06:20	64.1	50.0	09:15-09:20	62.9	48.7	12:15-12:20	63.6	50.5
03:20-03:25	60.5	45.5	06:20-06:25	60.9	47.8	09:20-09:25	65.7	53.3	12:20-12:25	64.6	50.6
03:25-03:30	58.1	45.6	06:25-06:30	64.3	50.7	09:25-09:30	62.1	50.4	12:25-12:30	61.0	50.1
03:30-03:35	60.9	44.1	06:30-06:35	59.8	50.4	09:30-09:35	60.3	51.0	12:30-12:35	62.6	51.0
03:35-03:40	51.0	43.5	06:35-06:40	62.9	50.9	09:35-09:40	60.4	50.2	12:35-12:40	64.7	51.8
03:40-03:45	57.4	44.2	06:40-06:45	62.2	50.8	09:40-09:45	61.1	50.1	12:40-12:45	62.3	50.2
03:45-03:50	59.6	44.1	06:45-06:50	64.5	51.6	09:45-09:50	67.0	51.8	12:45-12:50	60.3	51.1
03:50-03:55	58.4	43.4	06:50-06:55	65.2	54.6	09:50-09:55	62.4	53.2	12:50-12:55	64.1	53.7
03:55-04:00	51.6	43.3	06:55-07:00	62.7	52.0	09:55-10:00	63.7	50.6	12:55-13:00	62.9	51.2

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Klong Nueng, Klong Luang, Pathum Thani
Measured Source : Ambient Noise
Measured Point : Common Area of Pak Thang White House Community, Klong Nueng Sub-District, Klong Luang District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0673744 E, 1550442 N
Measured Date : November 2-3, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scarlet Tech Model ST-11D Serial Number 820865

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-030
Report No. : 2024-RAAX852
Report Date : November 21, 2024

Interval Time	Noise Level For 5 minutes, dB(A)			Interval Time	Noise Level For 5 minutes, dB(A)			Interval Time	Noise Level For 5 minutes, dB(A)		
	Leq	L90	L90		Leq	L90	L90		Leq	L90	L90
13:00-13:05	64.0	52.9	16:00-16:05	64.5	52.2	19:00-19:05	63.9	54.7	22:00-22:05	62.0	49.3
13:05-13:10	62.4	51.9	16:05-16:10	64.6	54.9	19:05-19:10	65.8	53.6	22:05-22:10	60.8	50.1
13:10-13:15	62.1	49.7	16:10-16:15	62.6	53.4	19:10-19:15	66.0	54.3	22:10-22:15	62.7	50.4
13:15-13:20	63.8	51.3	16:15-16:20	64.6	53.8	19:15-19:20	66.3	56.2	22:15-22:20	64.5	50.0
13:20-13:25	62.5	51.5	16:20-16:25	62.9	52.0	19:20-19:25	64.4	53.5	22:20-22:25	61.6	49.0
13:25-13:30	61.6	52.5	16:25-16:30	61.5	52.9	19:25-19:30	64.4	56.0	22:25-22:30	60.8	48.2
13:30-13:35	60.2	50.7	16:30-16:35	66.4	54.5	19:30-19:35	66.9	56.9	22:30-22:35	60.9	50.5
13:35-13:40	64.5	50.8	16:35-16:40	63.5	52.8	19:35-19:40	63.2	53.9	22:35-22:40	61.5	49.3
13:40-13:45	64.1	52.0	16:40-16:45	67.8	54.2	19:40-19:45	64.9	53.5	22:40-22:45	59.4	48.6
13:45-13:50	63.5	50.5	16:45-16:50	62.4	52.6	19:45-19:50	65.0	54.0	22:45-22:50	61.2	48.0
13:50-13:55	66.4	50.9	16:50-16:55	67.4	54.6	19:50-19:55	64.6	54.5	22:50-22:55	57.9	47.6
13:55-14:00	64.8	51.1	16:55-17:00	64.0	53.7	19:55-20:00	61.4	52.1	22:55-23:00	61.3	47.3
14:00-14:05	64.8	50.5	17:00-17:05	64.2	55.8	20:00-20:05	63.6	55.0	23:00-23:05	65.2	52.9
14:05-14:10	60.5	50.8	17:05-17:10	64.8	55.3	20:05-20:10	62.5	55.2	23:05-23:10	60.1	48.2
14:10-14:15	64.5	50.0	17:10-17:15	65.3	56.7	20:10-20:15	65.8	56.0	23:10-23:15	61.2	47.0
14:15-14:20	62.2	51.2	17:15-17:20	65.3	55.8	20:15-20:20	61.1	54.2	23:15-23:20	58.6	47.1
14:20-14:25	63.3	51.6	17:20-17:25	64.5	54.9	20:20-20:25	65.2	55.9	23:20-23:25	62.5	49.9
14:25-14:30	61.5	51.4	17:25-17:30	66.3	59.3	20:25-20:30	60.7	53.2	23:25-23:30	62.1	47.7
14:30-14:35	61.9	51.5	17:30-17:35	65.2	56.3	20:30-20:35	63.8	54.8	23:30-23:35	59.9	46.1
14:35-14:40	61.8	51.0	17:35-17:40	66.9	56.9	20:35-20:40	62.8	51.6	23:35-23:40	60.0	46.8
14:40-14:45	64.0	50.0	17:40-17:45	64.9	58.2	20:40-20:45	63.0	48.6	23:40-23:45	56.5	46.4
14:45-14:50	63.5	51.6	17:45-17:50	66.8	58.0	20:45-20:50	67.1	51.9	23:45-23:50	64.8	49.9
14:50-14:55	66.6	53.2	17:50-17:55	65.4	56.5	20:50-20:55	63.3	52.6	23:50-23:55	59.3	46.0
14:55-15:00	64.7	49.0	17:55-18:00	64.6	55.4	20:55-21:00	65.0	52.4	23:55-00:00	57.4	45.4
15:00-15:05	67.2	52.7	18:00-18:05	64.8	57.6	21:00-21:05	62.3	51.8	00:00-00:05	60.8	46.3
15:05-15:10	64.2	51.8	18:05-18:10	67.6	58.6	21:05-21:10	63.2	50.7	00:05-00:10	63.0	48.2
15:10-15:15	64.9	52.0	18:10-18:15	68.2	59.5	21:10-21:15	66.6	53.4	00:10-00:15	63.4	49.4
15:15-15:20	61.7	51.6	18:15-18:20	64.9	58.9	21:15-21:20	63.1	49.0	00:15-00:20	59.1	46.1
15:20-15:25	62.1	51.2	18:20-18:25	65.1	56.6	21:20-21:25	65.3	50.4	00:20-00:25	59.1	46.6
15:25-15:30	61.8	51.6	18:25-18:30	68.4	58.6	21:25-21:30	63.9	51.1	00:25-00:30	64.5	48.9
15:30-15:35	61.5	50.6	18:30-18:35	65.3	56.5	21:30-21:35	62.8	51.9	00:30-00:35	58.6	45.4
15:35-15:40	66.9	51.4	18:35-18:40	66.8	59.5	21:35-21:40	65.0	52.8	00:35-00:40	58.2	45.4
15:40-15:45	65.9	57.8	18:40-18:45	67.0	56.9	21:40-21:45	63.2	51.1	00:40-00:45	55.9	46.0
15:45-15:50	67.5	53.8	18:45-18:50	66.1	55.6	21:45-21:50	65.4	51.2	00:45-00:50	63.2	49.8
15:50-15:55	67.8	53.8	18:50-18:55	67.3	54.7	21:50-21:55	62.7	50.6	00:50-00:55	62.3	46.6
15:55-16:00	65.7	52.0	18:55-19:00	65.0	53.9	21:55-22:00	62.9	50.1	00:55-01:00	58.9	45.2

ANALYSIS REPORT

Customer Name :Klong Luang Utilities Company Limited
Address :222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name :Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location :1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source :Ambient Noise
Measured Point :Common Area of Pak Thang White House Community, Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate :UTM (WGS84) 47P 0673744 E, 1550442 N
Measured Date :November 3, 2024
Measured By :Mr.Assada Chaiyawong
Analyzed By :Environment Research & Technology Co., Ltd.
Measured Instrument :Integrating Sound Level Meter Scarlet Tech Model ST-11D Serial Number 820865

Quotation No. :AR2024-01649
Analysis No. :2024-AF587-030
Report No. :2024-RAAX852
Report Date :November 21, 2024

Interval Time	Noise Level For 5 minutes, dB(A)			Interval Time	Noise Level For 5 minutes, dB(A)			Interval Time	Noise Level For 5 minutes, dB(A)		
	Leq	L90	L90		Leq	L90	L90		Leq	L90	L90
01:00-01:05	57.5	44.6	04:00-04:05	52.1	45.1	07:00-07:05	67.8	52.3	10:00-10:05	62.3	52.9
01:05-01:10	63.3	48.2	04:05-04:10	57.3	44.6	07:05-07:10	62.3	50.7	10:05-10:10	61.4	52.7
01:10-01:15	61.5	46.3	04:10-04:15	56.7	44.8	07:10-07:15	63.5	52.3	10:10-10:15	64.0	54.4
01:15-01:20	60.7	47.4	04:15-04:20	57.1	44.8	07:15-07:20	64.5	50.3	10:15-10:20	62.4	51.8
01:20-01:25	57.7	46.1	04:20-04:25	56.6	44.9	07:20-07:25	64.1	50.7	10:20-10:25	62.5	52.2
01:25-01:30	60.9	46.4	04:25-04:30	55.0	44.7	07:25-07:30	64.8	56.1	10:25-10:30	67.0	51.9
01:30-01:35	60.4	46.6	04:30-04:35	55.6	45.0	07:30-07:35	64.5	53.7	10:30-10:35	62.1	50.0
01:35-01:40	54.9	45.6	04:35-04:40	57.8	45.7	07:35-07:40	64.0	53.3	10:35-10:40	64.0	51.9
01:40-01:45	54.9	46.3	04:40-04:45	57.4	45.7	07:40-07:45	66.4	54.8	10:40-10:45	62.3	52.6
01:45-01:50	57.4	47.0	04:45-04:50	56.9	45.9	07:45-07:50	64.6	52.7	10:45-10:50	64.5	52.2
01:50-01:55	56.3	45.6	04:50-04:55	57.3	45.1	07:50-07:55	63.7	52.6	10:50-10:55	67.0	52.7
01:55-02:00	55.1	45.3	04:55-05:00	56.6	45.1	07:55-08:00	64.9	54.5	10:55-11:00	60.4	49.9
02:00-02:05	54.9	46.0	05:00-05:05	59.2	46.3	08:00-08:05	61.9	52.7	11:00-11:05	59.8	48.6
02:05-02:10	55.0	45.3	05:05-05:10	61.1	45.9	08:05-08:10	60.7	50.5	11:05-11:10	61.6	53.7
02:10-02:15	55.5	44.6	05:10-05:15	58.7	46.5	08:10-08:15	62.8	51.4	11:10-11:15	63.7	51.9
02:15-02:20	56.1	45.6	05:15-05:20	60.2	46.7	08:15-08:20	62.9	54.2	11:15-11:20	63.6	51.8
02:20-02:25	59.6	46.2	05:20-05:25	58.4	46.8	08:20-08:25	63.5	48.0	11:20-11:25	65.4	54.5
02:25-02:30	59.2	46.4	05:25-05:30	58.1	46.2	08:25-08:30	63.5	50.0	11:25-11:30	62.9	52.5
02:30-02:35	52.8	46.4	05:30-05:35	57.5	45.5	08:30-08:35	62.4	49.5	11:30-11:35	65.8	50.5
02:35-02:40	57.6	46.4	05:35-05:40	60.0	47.3	08:35-08:40	64.5	52.4	11:35-11:40	65.6	52.4
02:40-02:45	60.1	46.2	05:40-05:45	63.3	48.3	08:40-08:45	66.4	51.7	11:40-11:45	62.7	50.4
02:45-02:50	51.2	45.9	05:45-05:50	57.6	47.5	08:45-08:50	65.3	51.2	11:45-11:50	67.1	52.3
02:50-02:55	58.0	48.3	05:50-05:55	56.3	48.2	08:50-08:55	62.3	53.3	11:50-11:55	64.1	52.3
02:55-03:00	55.1	45.5	05:55-06:00	55.7	46.8	08:55-09:00	61.6	51.8	11:55-12:00	62.7	48.0
03:00-03:05	57.6	45.8	06:00-06:05	60.4	47.4	09:00-09:05	62.8	53.0	12:00-12:05	61.2	51.8
03:05-03:10	61.1	45.4	06:05-06:10	58.1	46.6	09:05-09:10	61.2	52.2	12:05-12:10	66.6	51.1
03:10-03:15	55.2	45.0	06:10-06:15	60.3	48.0	09:10-09:15	62.1	52.6	12:10-12:15	64.4	50.5
03:15-03:20	56.7	45.2	06:15-06:20	60.2	47.3	09:15-09:20	61.3	52.3	12:15-12:20	63.2	49.7
03:20-03:25	60.1	46.0	06:20-06:25	64.5	49.3	09:20-09:25	67.1	54.8	12:20-12:25	58.8	50.9
03:25-03:30	49.3	44.8	06:25-06:30	60.2	47.7	09:25-09:30	64.8	52.5	12:25-12:30	60.3	51.4
03:30-03:35	58.4	45.5	06:30-06:35	62.3	50.1	09:30-09:35	66.3	52.8	12:30-12:35	63.9	53.9
03:35-03:40	55.7	45.2	06:35-06:40	60.0	50.4	09:35-09:40	61.3	51.8	12:35-12:40	62.6	53.1
03:40-03:45	54.8	45.5	06:40-06:45	62.2	49.9	09:40-09:45	62.0	55.5	12:40-12:45	61.4	53.6
03:45-03:50	54.6	44.9	06:45-06:50	63.1	52.4	09:45-09:50	61.7	55.9	12:45-12:50	63.9	51.5
03:50-03:55	59.5	45.3	06:50-06:55	67.3	51.5	09:50-09:55	62.7	52.9	12:50-12:55	62.0	50.0
03:55-04:00	55.9	45.8	06:55-07:00	62.2	50.5	09:55-10:00	61.4	52.6	12:55-13:00	63.1	53.8

ANALYSIS REPORT

Customer Name :Klong Luang Utilities Company Limited
Address :222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name :Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location :1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source :Ambient Noise
Measured Point :Common Area of Pak Thang White House Community, Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate :UTM (WGS84) 47P 0673744 E, 1550442 N
Measured Date :November 3-4, 2024
Measured By :Mr.Assada Chaiyawong
Analyzed By :Environment Research & Technology Co., Ltd.
Measured Instrument :Integrating Sound Level Meter Scarlet Tech Model ST-11D Serial Number 820865

Quotation No. :AR2024-01649
Analysis No. :2024-AF587-030
Report No. :2024-RAAX852
Report Date :November 21, 2024

Interval Time	Noise Level For 5 minutes, dB(A)			Interval Time	Noise Level For 5 minutes, dB(A)			Interval Time	Noise Level For 5 minutes, dB(A)		
	Leq	L90	L90		Leq	L90	L90		Leq	L90	L90
13:00-13:05	62.2	51.4	16:00-16:05	62.9	57.8	19:00-19:05	64.6	55.0	22:00-22:05	64.7	49.5
13:05-13:10	61.1	50.6	16:05-16:10	62.7	57.6	19:05-19:10	64.4	55.1	22:05-22:10	64.7	49.2
13:10-13:15	64.6	53.1	16:10-16:15	66.9	58.5	19:10-19:15	67.9	55.1	22:10-22:15	60.5	48.4
13:15-13:20	65.7	54.4	16:15-16:20	65.7	57.5	19:15-19:20	65.6	54.1	22:15-22:20	65.8	52.8
13:20-13:25	62.6	51.3	16:20-16:25	68.4	58.5	19:20-19:25	67.2	55.5	22:20-22:25	65.5	49.6
13:25-13:30	61.6	54.1	16:25-16:30	64.1	59.2	19:25-19:30	64.4	51.8	22:25-22:30	63.0	49.9
13:30-13:35	63.1	55.3	16:30-16:35	68.2	58.3	19:30-19:35	65.7	55.0	22:30-22:35	63.8	49.8
13:35-13:40	65.5	59.3	16:35-16:40	68.6	59.9	19:35-19:40	65.4	52.9	22:35-22:40	63.2	53.7
13:40-13:45	61.6	49.5	16:40-16:45	67.1	59.1	19:40-19:45	67.4	54.3	22:40-22:45	63.0	49.6
13:45-13:50	61.8	52.3	16:45-16:50	65.3	58.5	19:45-19:50	63.0	51.9	22:45-22:50	59.0	48.5
13:50-13:55	62.3	54.5	16:50-16:55	65.4	58.4	19:50-19:55	62.4	54.1	22:50-22:55	62.7	47.7
13:55-14:00	63.8	52.6	16:55-17:00	72.8	60.1	19:55-20:00	65.1	55.7	22:55-23:00	62.9	48.4
14:00-14:05	66.0	52.5	17:00-17:05	64.6	53.7	20:00-20:05	66.1	53.8	23:00-23:05	60.5	46.7
14:05-14:10	64.1	54.1	17:05-17:10	69.3	57.4	20:05-20:10	64.7	54.5	23:05-23:10	63.6	48.2
14:10-14:15	63.4	53.2	17:10-17:15	64.9	56.2	20:10-20:15	67.3	57.5	23:10-23:15	62.2	48.7
14:15-14:20	63.4	52.9	17:15-17:20	67.8	59.0	20:15-20:20	64.1	54.9	23:15-23:20	64.6	49.7
14:20-14:25	63.6	53.8	17:20-17:25	65.4	56.6	20:20-20:25	62.4	52.6	23:20-23:25	59.3	47.3
14:25-14:30	63.4	52.6	17:25-17:30	70.1	58.3	20:25-20:30	62.4	51.3	23:25-23:30	63.2	49.6
14:30-14:35	64.9	51.6	17:30-17:35	66.2	55.7	20:30-20:35	64.0	48.3	23:30-23:35	62.5	47.8
14:35-14:40	65.9	51.6	17:35-17:40	64.3	57.2	20:35-20:40	62.8	49.3	23:35-23:40	62.8	48.1
14:40-14:45	63.1	54.5	17:40-17:45	62.2	55.2	20:40-20:45	62.3	49.0	23:40-23:45	56.2	45.7
14:45-14:50	65.4	54.8	17:45-17:50	67.9	58.8	20:45-20:50	63.0	49.5	23:45-23:50	60.1	46.3
14:50-14:55	66.5	54.4	17:50-17:55	66.3	57.9	20:50-20:55	61.5	50.3	23:50-23:55	59.3	46.1
14:55-15:00	65.3	50.8	17:55-18:00	64.1	57.0	20:55-21:00	64.1	49.1	23:55-00:00	60.3	47.4
15:00-15:05	60.2	50.2	18:00-18:05	64.6	56.8	21:00-21:05	65.5	50.9	00:00-00:05	55.2	46.7
15:05-15:10	63.1	52.1	18:05-18:10	64.5	57.2	21:05-21:10	62.1	48.8	00:05-00:10	60.1	46.4
15:10-15:15	64.1	53.7	18:10-18:15	63.6	55.8	21:10-21:15	65.7	50.1	00:10-00:15	60.3	46.5
15:15-15:20	67.0	55.7	18:15-18:20	66.8	58.6	21:15-21:20	61.7	49.1	00:15-00:20	57.8	47.0
15:20-15:25	72.5	58.5	18:20-18:25	66.7	56.7	21:20-21:25	60.1	49.1	00:20-00:25	57.4	46.5
15:25-15:30	65.3	51.8	18:25-18:30	67.3	58.0	21:25-21:30	63.2	48.8	00:25-00:30	60.2	46.5
15:30-15:35	62.9	51.8	18:30-18:35	66.6	58.7	21:30-21:35	63.0	48.5	00:30-00:35	59.4	45.4
15:35-15:40	64.3	53.3	18:35-18:40	66.8	58.3	21:35-21:40	64.7	52.1	00:35-00:40	60.1	45.7
15:40-15:45	62.8	53.6	18:40-18:45	64.9	57.1	21:40-21:45	63.7	50.1	00:40-00:45	56.3	45.5
15:45-15:50	65.2	55.8	18:45-18:50	66.3	54.9	21:45-21:50	62.4	48.3	00:45-00:50	57.8	44.8
15:50-15:55	63.4	55.5	18:50-18:55	71.0	55.5	21:50-21:55	64.5	49.9	00:50-00:55	57.0	45.7
15:55-16:00	64.1	58.1	18:55-19:00	64.4	55.3	21:55-22:00	64.1	49.7	00:55-01:00	59.8	45.5

ANALYSIS REPORT

Customer Name :Klong Luang Utilities Company Limited
Address :222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name :Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location :1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source :Ambient Noise
Measured Point :Common Area of Pak Thang White House Community, Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate :UTM (WGS84) 47P 0673744 E, 1550442 N
Measured Date :November 4, 2024
Measured By :Mr.Assada Chaiyawong
Analyzed By :Environment Research & Technology Co., Ltd.
Measured Instrument :Integrating Sound Level Meter Scarlet Tech Model ST-11D Serial Number 820865

Quotation No. :AR2024-01649
Analysis No. :2024-AF587-030
Report No. :2024-RAAX852
Report Date :November 21, 2024

Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)	
	Leq	L90		Leq	L90		Leq	L90
01:00-01:05	58.6	45.2	04:00-04:05	54.0	45.8	07:00-07:05	65.4	56.0
01:05-01:10	56.5	45.6	04:05-04:10	55.8	47.4	07:05-07:10	63.2	54.3
01:10-01:15	60.7	45.0	04:10-04:15	54.5	45.9	07:10-07:15	64.7	56.6
01:15-01:20	59.3	45.1	04:15-04:20	53.5	46.1	07:15-07:20	68.0	58.9
01:20-01:25	56.0	44.9	04:20-04:25	52.5	45.6	07:20-07:25	65.2	58.1
01:25-01:30	55.9	45.5	04:25-04:30	52.1	46.7	07:25-07:30	66.0	56.0
01:30-01:35	58.4	44.3	04:30-04:35	54.2	44.7	07:30-07:35	65.9	56.9
01:35-01:40	58.0	44.9	04:35-04:40	55.3	44.1	07:35-07:40	67.4	57.9
01:40-01:45	59.4	45.5	04:40-04:45	57.8	45.9	07:40-07:45	68.1	59.0
01:45-01:50	57.2	45.7	04:45-04:50	57.9	45.9	07:45-07:50	64.2	54.3
01:50-01:55	60.3	47.2	04:50-04:55	57.9	45.4	07:50-07:55	67.4	57.7
01:55-02:00	63.1	61.2	04:55-05:00	58.0	44.7	07:55-08:00	66.6	59.9
02:00-02:05	62.9	61.2	05:00-05:05	59.7	44.9	08:00-08:05	68.6	53.3
02:05-02:10	55.9	47.3	05:05-05:10	60.0	45.4	08:05-08:10	62.3	51.0
02:10-02:15	55.5	45.9	05:10-05:15	60.6	45.0	08:10-08:15	62.4	52.5
02:15-02:20	55.6	46.1	05:15-05:20	58.7	44.8	08:15-08:20	63.1	51.3
02:20-02:25	50.2	45.6	05:20-05:25	59.6	48.5	08:20-08:25	63.6	51.2
02:25-02:30	47.9	45.1	05:25-05:30	62.1	47.4	08:25-08:30	64.5	49.8
02:30-02:35	52.8	44.7	05:30-05:35	57.7	46.4	08:30-08:35	63.5	51.3
02:35-02:40	55.0	45.1	05:35-05:40	59.5	47.2	08:35-08:40	64.8	55.3
02:40-02:45	51.4	44.8	05:40-05:45	63.0	48.9	08:40-08:45	63.8	53.0
02:45-02:50	53.2	44.4	05:45-05:50	60.9	48.5	08:45-08:50	67.2	52.2
02:50-02:55	54.1	45.1	05:50-05:55	60.4	48.3	08:50-08:55	67.4	54.0
02:55-03:00	52.0	44.9	05:55-06:00	59.2	48.1	08:55-09:00	62.2	52.2
03:00-03:05	54.8	45.2	06:00-06:05	60.3	46.8	09:00-09:05	63.1	53.5
03:05-03:10	55.5	46.1	06:05-06:10	62.0	50.0	09:05-09:10	63.1	52.1
03:10-03:15	52.7	45.6	06:10-06:15	62.8	51.3	09:10-09:15	63.9	52.5
03:15-03:20	54.1	45.2	06:15-06:20	63.2	49.9	09:15-09:20	64.0	53.7
03:20-03:25	52.6	45.4	06:20-06:25	64.0	52.3	09:20-09:25	62.4	53.5
03:25-03:30	56.0	45.5	06:25-06:30	64.2	55.9	09:25-09:30	64.1	54.9
03:30-03:35	55.8	45.1	06:30-06:35	65.0	55.6	09:30-09:35	61.1	51.4
03:35-03:40	55.8	45.1	06:35-06:40	65.4	56.9	09:35-09:40	62.0	50.1
03:40-03:45	59.5	45.4	06:40-06:45	65.1	58.2	09:40-09:45	63.0	52.1
03:45-03:50	55.0	45.0	06:45-06:50	64.3	56.0	09:45-09:50	60.9	50.6
03:50-03:55	55.3	45.8	06:50-06:55	63.9	55.3	09:50-09:55	61.4	50.5
03:55-04:00	54.5	45.8	06:55-07:00	64.7	55.8	09:55-10:00	63.4	51.7

ANALYSIS REPORT

Customer Name :Klong Luang Utilities Company Limited
Address :222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name :Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location :1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source :Ambient Noise
Measured Point :Common Area of Pak Thang White House Community, Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate :UTM (WGS84) 47P 0673744 E, 1550442 N
Measured Date :November 4, 2024
Measured By :Mr.Assada Chaiyawong
Analyzed By :Environment Research & Technology Co., Ltd.
Measured Instrument :Integrating Sound Level Meter Scarlet Tech Model ST-11D Serial Number 820865

Quotation No. :AR2024-01649
Analysis No. :2024-AF587-030
Report No. :2024-RAAX852
Report Date :November 21, 2024

Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)	
	Leq	L90		Leq	L90		Leq	L90
13:00-13:05	63.5	52.9	16:00-16:05	66.0	54.7	19:00-19:05	61.2	52.8
13:05-13:10	62.3	53.4	16:05-16:10	65.2	54.2	19:05-19:10	64.3	56.1
13:10-13:15	62.1	54.2	16:10-16:15	63.5	53.7	19:10-19:15	63.2	54.8
13:15-13:20	61.7	52.1	16:15-16:20	65.0	55.3	19:15-19:20	62.7	56.9
13:20-13:25	62.2	52.6	16:20-16:25	64.7	54.7	19:20-19:25	63.8	54.8
13:25-13:30	62.8	52.9	16:25-16:30	65.5	57.2	19:25-19:30	65.2	55.4
13:30-13:35	62.1	56.1	16:30-16:35	67.6	56.9	19:30-19:35	62.3	54.6
13:35-13:40	63.2	54.6	16:35-16:40	67.7	56.0	19:35-19:40	63.1	55.5
13:40-13:45	62.9	55.4	16:40-16:45	65.2	56.7	19:40-19:45	63.1	53.6
13:45-13:50	60.8	52.3	16:45-16:50	65.0	56.5	19:45-19:50	68.1	54.5
13:50-13:55	62.1	52.1	16:50-16:55	61.6	54.2	19:50-19:55	68.4	53.8
13:55-14:00	61.5	52.0	16:55-17:00	60.9	53.0	19:55-20:00	63.8	55.1
14:00-14:05	60.5	51.2	17:00-17:05	61.7	53.3	20:00-20:05	61.3	53.2
14:05-14:10	61.3	52.1	17:05-17:10	63.9	56.2	20:05-20:10	62.3	53.6
14:10-14:15	60.9	52.6	17:10-17:15	66.5	56.6	20:10-20:15	66.1	54.0
14:15-14:20	63.2	53.6	17:15-17:20	64.9	57.6	20:15-20:20	64.9	52.9
14:20-14:25	62.7	54.2	17:20-17:25	64.2	56.5	20:20-20:25	62.3	51.4
14:25-14:30	64.6	54.7	17:25-17:30	65.2	56.7	20:25-20:30	62.6	51.8
14:30-14:35	63.6	50.8	17:30-17:35	63.5	53.6	20:30-20:35	65.2	52.2
14:35-14:40	64.0	50.2	17:35-17:40	65.2	55.8	20:35-20:40	64.1	53.2
14:40-14:45	64.6	52.6	17:40-17:45	63.5	57.2	20:40-20:45	63.2	52.1
14:45-14:50	64.5	54.8	17:45-17:50	63.9	56.2	20:45-20:50	63.0	53.0
14:50-14:55	61.7	52.6	17:50-17:55	65.0	55.8	20:50-20:55	61.3	52.7
14:55-15:00	62.2	53.0	17:55-18:00	63.5	54.9	20:55-21:00	62.2	52.2
15:00-15:05	61.1	52.4	18:00-18:05	63.3	55.3	21:00-21:05	61.4	51.6
15:05-15:10	64.2	53.2	18:05-18:10	63.5	56.7	21:05-21:10	61.3	53.5
15:10-15:15	64.4	53.6	18:10-18:15	65.4	56.7	21:10-21:15	59.5	52.2
15:15-15:20	64.7	54.3	18:15-18:20	64.1	56.7	21:15-21:20	62.1	53.4
15:20-15:25	63.9	55.1	18:20-18:25	63.9	56.4	21:20-21:25	63.1	53.1
15:25-15:30	61.7	54.2	18:25-18:30	64.2	58.4	21:25-21:30	58.1	52.2
15:30-15:35	68.1	57.4	18:30-18:35	63.9	56.2	21:30-21:35	61.5	51.9
15:35-15:40	65.5	54.5	18:35-18:40	64.8	56.3	21:35-21:40	64.3	52.0
15:40-15:45	64.6	55.4	18:40-18:45	63.2	54.9	21:40-21:45	63.5	51.1
15:45-15:50	65.4	57.2	18:45-18:50	64.3	54.9	21:45-21:50	61.6	51.0
15:50-15:55	62.5	53.6	18:50-18:55	63.4	54.6	21:50-21:55	61.3	50.5
15:55-16:00	63.9	53.3	18:55-19:00	64.3	55.9	21:55-22:00	64.1	50.5

ANALYSIS REPORT

Customer Name :Klong Luang Utilities Company Limited
Address :222 EGO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name :Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location :1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source :Ambient Noise
Measured Point :Common Area of Pak Thang White House Community, Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate :UTM (WGS84) 47P 0673744 E, 1550442 N
Measured Date :November 5-6, 2024
Measured By :Mr.Assada Chaiyawong
Analyzed By :Environment Research & Technology Co., Ltd.
Measured Instrument :Integrating Sound Level Meter Scarlet Tech Model ST-11D Serial Number 820865

Quotation No. :AR2024-01649
Analysis No. :2024-AF587-030
Report No. :2024-RAAX852
Report Date :November 21, 2024

Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)	
	Leq	L90		Leq	L90		Leq	L90
01:00-01:05	60.7	51.3	04:00-04:05	52.8	46.8	07:00-07:05	62.0	56.6
01:05-01:10	55.2	49.2	04:05-04:10	53.9	47.0	07:05-07:10	64.5	54.5
01:10-01:15	55.3	49.2	04:10-04:15	52.0	48.1	07:10-07:15	63.9	54.7
01:15-01:20	55.2	49.0	04:15-04:20	55.7	49.2	07:15-07:20	64.8	56.4
01:20-01:25	55.1	48.3	04:20-04:25	54.8	49.3	07:20-07:25	63.4	55.8
01:25-01:30	56.8	48.7	04:25-04:30	55.6	48.9	07:25-07:30	64.3	56.4
01:30-01:35	58.6	49.0	04:30-04:35	57.6	48.6	07:30-07:35	65.0	56.5
01:35-01:40	56.9	48.9	04:35-04:40	56.6	48.6	07:35-07:40	63.1	56.1
01:40-01:45	55.2	49.1	04:40-04:45	59.8	58.5	07:40-07:45	66.0	54.5
01:45-01:50	55.3	49.6	04:45-04:50	57.9	49.0	07:45-07:50	67.0	54.6
01:50-01:55	56.9	49.9	04:50-04:55	56.8	49.7	07:50-07:55	64.5	53.3
01:55-02:00	59.2	50.4	04:55-05:00	55.6	49.5	07:55-08:00	62.2	51.8
02:00-02:05	61.0	51.3	05:00-05:05	57.3	49.6	08:00-08:05	63.1	54.7
02:05-02:10	59.9	57.9	05:05-05:10	55.5	49.1	08:05-08:10	63.0	53.5
02:10-02:15	56.5	48.7	05:10-05:15	57.0	48.2	08:10-08:15	60.6	51.7
02:15-02:20	54.6	48.4	05:15-05:20	58.9	48.2	08:15-08:20	62.0	52.6
02:20-02:25	53.3	48.3	05:20-05:25	58.4	48.2	08:20-08:25	62.6	54.2
02:25-02:30	59.6	49.6	05:25-05:30	57.5	48.2	08:25-08:30	62.8	53.5
02:30-02:35	51.9	48.5	05:30-05:35	59.5	48.7	08:30-08:35	61.2	54.0
02:35-02:40	53.7	48.4	05:35-05:40	60.7	49.3	08:35-08:40	59.2	53.3
02:40-02:45	52.2	48.7	05:40-05:45	60.2	49.3	08:40-08:45	58.7	49.3
02:45-02:50	52.5	48.1	05:45-05:50	58.4	48.1	08:45-08:50	60.4	51.3
02:50-02:55	52.0	48.1	05:50-05:55	57.4	48.4	08:50-08:55	65.0	55.6
02:55-03:00	53.5	48.3	05:55-06:00	59.2	48.3	08:55-09:00	64.6	54.9
03:00-03:05	54.3	48.8	06:00-06:05	59.4	49.2	09:00-09:05	61.5	53.9
03:05-03:10	57.3	49.2	06:05-06:10	58.9	49.0	09:05-09:10	63.6	54.1
03:10-03:15	55.8	49.1	06:10-06:15	60.6	49.9	09:10-09:15	63.3	55.4
03:15-03:20	54.3	49.3	06:15-06:20	60.7	50.4	09:15-09:20	63.9	54.6
03:20-03:25	57.8	49.1	06:20-06:25	62.0	53.7	09:20-09:25	63.0	53.9
03:25-03:30	54.5	48.0	06:25-06:30	62.5	54.7	09:25-09:30	63.5	54.4
03:30-03:35	54.3	47.2	06:30-06:35	62.0	55.4	09:30-09:35	63.1	53.9
03:35-03:40	55.8	47.3	06:35-06:40	63.5	53.1	09:35-09:40	63.3	53.9
03:40-03:45	53.5	47.2	06:40-06:45	63.9	53.0	09:40-09:45	65.9	53.2
03:45-03:50	56.6	47.1	06:45-06:50	62.6	52.6	09:45-09:50	61.8	51.4
03:50-03:55	53.1	47.1	06:50-06:55	61.4	52.2	09:50-09:55	69.4	56.5
03:55-04:00	54.4	46.6	06:55-07:00	62.9	54.9	09:55-10:00	64.9	54.7

ANALYSIS REPORT

Customer Name :Klong Luang Utilities Company Limited
Address :222 EGO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name :Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location :1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source :Ambient Noise
Measured Point :Common Area of Pak Thang White House Community, Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate :UTM (WGS84) 47P 0673744 E, 1550442 N
Measured Date :November 5-6, 2024
Measured By :Mr.Assada Chaiyawong
Analyzed By :Environment Research & Technology Co., Ltd.
Measured Instrument :Integrating Sound Level Meter Scarlet Tech Model ST-11D Serial Number 820865

Quotation No. :AR2024-01649
Analysis No. :2024-AF587-030
Report No. :2024-RAAX852
Report Date :November 21, 2024

Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)	
	Leq	L90		Leq	L90		Leq	L90
13:00-13:05	64.0	55.7	16:00-16:05	75.3	70.8	19:00-19:05	65.2	57.0
13:05-13:10	62.5	53.3	16:05-16:10	69.0	62.7	19:05-19:10	69.3	59.5
13:10-13:15	63.4	56.6	16:10-16:15	68.0	59.6	19:10-19:15	66.3	58.4
13:15-13:20	64.0	54.8	16:15-16:20	63.8	56.9	19:15-19:20	67.6	58.5
13:20-13:25	65.2	55.4	16:20-16:25	66.6	57.0	19:20-19:25	65.9	57.5
13:25-13:30	59.6	53.5	16:25-16:30	66.5	58.0	19:25-19:30	62.4	54.5
13:30-13:35	60.7	54.0	16:30-16:35	65.9	58.2	19:30-19:35	67.0	57.4
13:35-13:40	64.1	54.7	16:35-16:40	68.1	58.1	19:35-19:40	66.0	58.2
13:40-13:45	63.7	53.9	16:40-16:45	67.2	57.2	19:40-19:45	65.4	56.5
13:45-13:50	62.4	55.0	16:45-16:50	65.3	57.4	19:45-19:50	68.2	57.4
13:50-13:55	62.5	54.8	16:50-16:55	64.1	57.0	19:50-19:55	67.1	55.7
13:55-14:00	62.2	54.7	16:55-17:00	64.5	57.2	19:55-20:00	66.2	55.7
14:00-14:05	64.1	56.5	17:00-17:05	65.0	57.6	20:00-20:05	64.5	54.0
14:05-14:10	63.4	53.7	17:15-17:20	67.2	58.7	20:05-20:10	65.3	56.3
14:10-14:15	64.4	55.7	17:10-17:15	67.3	59.3	20:10-20:15	64.8	57.9
14:15-14:20	63.1	53.7	17:15-17:20	68.8	59.5	20:15-20:20	65.9	55.2
14:20-14:25	64.2	56.8	17:20-17:25	67.4	59.3	20:20-20:25	66.5	56.3
14:25-14:30	64.1	55.3	17:25-17:30	68.7	59.1	20:25-20:30	61.4	54.3
14:30-14:35	62.3	54.0	17:30-17:35	66.4	59.3	20:30-20:35	63.9	55.5
14:35-14:40	65.2	55.2	17:35-17:40	68.2	58.6	20:35-20:40	62.5	55.9
14:40-14:45	64.9	54.9	17:40-17:45	67.0	59.7	20:40-20:45	64.9	55.1
14:45-14:50	63.3	55.1	17:45-17:50	68.6	59.5	20:45-20:50	64.2	55.3
14:50-14:55	62.1	54.6	17:50-17:55	65.8	58.6	20:50-20:55	64.9	55.9
14:55-15:00	61.3	53.5	17:55-18:00	66.0	57.1	20:55-21:00	64.6	55.1
15:00-15:05	63.9	53.3	18:00-18:05	64.7	58.9	21:00-21:05	65.2	55.5
15:05-15:10	65.1	54.1	18:05-18:10	66.0	58.3	21:05-21:10	66.4	54.8
15:10-15:15	69.1	55.2	18:10-18:15	66.3	60.0	21:10-21:15	66.3	54.1
15:15-15:20	63.8	53.7	18:15-18:20	67.2	60.6	21:15-21:20	63.7	54.1
15:20-15:25	66.6	53.9	18:20-18:25	68.9	58.9	21:20-21:25	63.1	55.1
15:25-15:30	67.1	55.5	18:25-18:30	66.9	58.5	21:25-21:30	64.6	54.7
15:30-15:35	65.4	53.3	18:30-18:35	66.7	57.6	21:30-21:35	62.5	54.0
15:35-15:40	66.3	54.5	18:35-18:40	64.3	57.2	21:35-21:40	64.5	54.3
15:40-15:45	64.8	52.8	18:40-18:45	66.3	58.9	21:40-21:45	66.2	54.0
15:45-15:50	67.4	59.1	18:45-18:50	64.0	56.6	21:45-21:50	66.0	54.3
15:50-15:55	64.7	59.0	18:50-18:55	65.1	58.4	21:50-21:55	64.3	54.4
15:55-16:00	67.3	57.9	18:55-19:00	64.0	56.4	21:55-22:00	62.7	54.4

ANALYSIS REPORT

Customer Name :Klong Luang Utilities Company Limited
Address :222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name :Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location :1/9 Moo 3, Klong Nueng, Klong Luang, Pathum Thani
Measured Source :Ambient Noise
Measured Point :Common Area of Pak Thang White House Community, Klong Nueng Sub-District, Klong Luang District, Pathum Thani Province
GPS. Coordinate :UTM (WGS84) 47P 0673744 E, 1550442 N
Measured Date :November 7, 2024
Measured By :Mr.Assada Chalayawong
Measured By :Environment Research & Technology Co., Ltd.
Report Date :November 21, 2024
Report No. :2024-RAAX852
Quotation No. :AR2024-01649
Analysis No. :2024-AF587-030

Measured Instrument :Integrating Sound Level Meter Scarlet Tech Model ST-11D Serial Number 820865

Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)	
	Leq	L90		Leq	L90		Leq	L90
01:00-01:05	60.7	52.2	04:00-04:05	56.6	49.3	07:00-07:05	65.4	57.4
01:05-01:10	63.0	53.8	04:05-04:10	55.1	49.6	07:05-07:10	64.4	59.1
01:10-01:15	57.3	51.9	04:10-04:15	56.0	49.7	07:10-07:15	65.9	57.1
01:15-01:20	58.1	52.0	04:15-04:20	54.6	50.8	07:15-07:20	66.2	57.2
01:20-01:25	57.7	51.8	04:20-04:25	58.0	52.0	07:20-07:25	67.1	58.9
01:25-01:30	60.0	51.1	04:25-04:30	57.2	52.1	07:25-07:30	65.8	58.2
01:30-01:35	59.2	51.5	04:30-04:35	57.9	51.6	07:30-07:35	66.6	58.6
01:35-01:40	61.2	51.8	04:35-04:40	59.8	51.4	07:35-07:40	67.3	59.0
01:40-01:45	59.4	51.7	04:40-04:45	58.8	51.3	07:40-07:45	65.4	58.5
01:45-01:50	57.6	51.9	04:45-04:50	61.2	52.6	07:45-07:50	71.1	57.0
01:50-01:55	55.6	52.4	04:50-04:55	60.2	51.7	07:50-07:55	72.1	57.1
01:55-02:00	59.2	52.7	04:55-05:00	59.1	52.4	07:55-08:00	67.0	55.8
02:00-02:05	62.0	53.1	05:00-05:05	57.9	52.3	08:00-08:05	64.5	54.2
02:05-02:10	62.2	53.9	05:05-05:10	59.6	52.3	08:05-08:10	65.4	57.1
02:10-02:15	62.2	60.2	05:10-05:15	57.7	51.7	08:10-08:15	65.4	56.0
02:15-02:20	58.9	51.5	05:15-05:20	59.2	50.8	08:15-08:20	62.9	54.3
02:20-02:25	57.0	51.1	05:20-05:25	61.2	51.6	08:20-08:25	64.6	53.6
02:25-02:30	55.8	51.0	05:25-05:30	60.6	50.9	08:25-08:30	65.5	54.6
02:30-02:35	61.8	52.4	05:30-05:35	59.9	50.8	08:30-08:35	65.2	56.3
02:35-02:40	54.4	51.2	05:35-05:40	61.7	51.3	08:35-08:40	63.6	56.7
02:40-02:45	56.2	51.2	05:40-05:45	62.9	52.0	08:40-08:45	61.9	56.0
02:45-02:50	54.7	51.4	05:45-05:50	62.5	51.9	08:45-08:50	62.6	55.2
02:50-02:55	55.0	50.9	05:50-05:55	60.5	50.6	08:50-08:55	64.4	55.6
02:55-03:00	54.5	50.9	05:55-06:00	59.7	51.0	08:55-09:00	64.2	54.3
03:00-03:05	55.9	51.2	06:00-06:05	61.4	51.7	09:00-09:05	62.1	54.1
03:05-03:10	56.7	51.6	06:05-06:10	61.5	51.8	09:05-09:10	64.8	55.4
03:10-03:15	58.8	52.0	06:10-06:15	61.2	51.7	09:10-09:15	62.8	55.7
03:15-03:20	58.4	51.9	06:15-06:20	62.1	52.6	09:15-09:20	66.6	56.1
03:20-03:25	56.7	52.1	06:20-06:25	63.0	53.0	09:20-09:25	67.4	56.6
03:25-03:30	60.2	52.9	06:25-06:30	64.2	56.1	09:25-09:30	65.3	52.8
03:30-03:35	50.7	50.7	06:30-06:35	64.7	57.1	09:30-09:35	60.0	52.3
03:35-03:40	56.5	50.0	06:35-06:40	64.3	57.9	09:35-09:40	62.5	53.1
03:40-03:45	58.1	49.9	06:40-06:45	65.8	55.5	09:40-09:45	59.0	51.6
03:45-03:50	55.9	49.9	06:45-06:50	66.3	55.7	09:45-09:50	63.2	53.5
03:50-03:55	59.0	49.8	06:50-06:55	65.0	55.1	09:50-09:55	64.0	54.1
03:55-04:00	55.4	49.8	06:55-07:00	63.7	54.8	09:55-10:00	62.1	54.3

ANALYSIS REPORT

Customer Name :Klong Luang Utilities Company Limited
Address :222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name :Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location :1/9 Moo 3, Klong Nueng, Klong Luang, Pathum Thani
Measured Source :Ambient Noise
Measured Point :Common Area of Pak Thang White House Community, Klong Nueng Sub-District, Klong Luang District, Pathum Thani Province
GPS. Coordinate :UTM (WGS84) 47P 0673744 E, 1550442 N
Measured Date :November 7-8, 2024
Measured By :Mr.Assada Chalayawong
Measured By :Environment Research & Technology Co., Ltd.
Report Date :November 21, 2024
Report No. :2024-RAAX852
Quotation No. :AR2024-01649
Analysis No. :2024-AF587-030

Measured Instrument :Integrating Sound Level Meter Scarlet Tech Model ST-11D Serial Number 820865

Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)	
	Leq	L90		Leq	L90		Leq	L90
13:00-13:05	60.9	51.7	16:00-16:05	63.9	53.2	19:00-19:05	64.3	54.4
13:05-13:10	63.1	53.5	16:05-16:10	66.1	52.8	19:05-19:10	63.9	54.7
13:10-13:15	60.6	51.1	16:10-16:15	61.1	52.4	19:10-19:15	65.0	56.0
13:15-13:20	60.9	52.6	16:15-16:20	63.5	54.4	19:15-19:20	66.6	56.9
13:20-13:25	61.3	51.8	16:20-16:25	62.6	54.0	19:20-19:25	64.4	56.5
13:25-13:30	62.5	52.7	16:25-16:30	64.0	55.6	19:25-19:30	65.1	56.8
13:30-13:35	60.3	51.3	16:30-16:35	66.8	57.6	19:30-19:35	63.6	55.1
13:35-13:40	61.2	50.2	16:35-16:40	63.6	55.9	19:35-19:40	66.2	57.3
13:40-13:45	66.4	54.7	16:40-16:45	62.4	55.1	19:40-19:45	66.8	54.9
13:45-13:50	65.6	51.6	16:45-16:50	65.6	56.2	19:45-19:50	66.1	54.6
13:50-13:55	61.7	52.6	16:50-16:55	63.9	56.2	19:50-19:55	67.6	55.4
13:55-14:00	62.3	51.8	16:55-17:00	64.1	54.9	19:55-20:00	66.0	55.6
14:00-14:05	63.6	52.0	17:00-17:05	65.3	56.7	20:00-20:05	64.9	54.0
14:05-14:10	67.9	52.3	17:05-17:10	64.7	56.7	20:05-20:10	67.2	53.2
14:10-14:15	64.7	51.1	17:10-17:15	65.1	56.1	20:10-20:15	68.8	58.1
14:15-14:20	63.4	51.7	17:15-17:20	70.5	60.9	20:15-20:20	69.3	54.7
14:20-14:25	66.2	51.7	17:20-17:25	69.7	60.2	20:20-20:25	66.2	54.4
14:25-14:30	63.1	51.8	17:25-17:30	69.2	60.1	20:25-20:30	66.4	54.2
14:30-14:35	64.7	53.7	17:30-17:35	64.8	57.0	20:30-20:35	64.4	53.8
14:35-14:40	64.1	52.5	17:35-17:40	67.2	59.2	20:35-20:40	64.6	53.9
14:40-14:45	61.3	52.7	17:40-17:45	67.8	60.0	20:40-20:45	67.1	53.7
14:45-14:50	62.9	54.5	17:45-17:50	65.8	58.5	20:45-20:50	65.8	52.8
14:50-14:55	65.2	53.5	17:50-17:55	65.8	58.1	20:50-20:55	69.8	54.9
14:55-15:00	65.6	52.6	17:55-18:00	65.7	57.0	20:55-21:00	67.7	55.3
15:00-15:05	66.2	52.9	18:00-18:05	66.0	56.0	21:00-21:05	62.9	54.1
15:05-15:10	67.2	53.0	18:05-18:10	66.2	56.8	21:05-21:10	66.7	53.7
15:10-15:15	63.8	52.0	18:10-18:15	66.3	56.7	21:10-21:15	69.1	54.4
15:15-15:20	67.6	53.6	18:15-18:20	68.4	58.5	21:15-21:20	67.2	54.1
15:20-15:25	67.7	54.4	18:20-18:25	66.6	57.6	21:20-21:25	66.0	52.8
15:25-15:30	67.1	52.2	18:25-18:30	64.6	58.0	21:25-21:30	61.8	51.3
15:30-15:35	65.2	53.8	18:30-18:35	64.3	58.0	21:30-21:35	65.5	50.9
15:35-15:40	66.1	54.6	18:35-18:40	65.6	56.5	21:35-21:40	64.5	52.0
15:40-15:45	67.2	54.2	18:40-18:45	63.7	55.5	21:40-21:45	63.3	51.0
15:45-15:50	62.7	53.1	18:45-18:50	65.4	54.6	21:45-21:50	64.2	52.6
15:50-15:55	64.0	54.3	18:50-18:55	66.2	55.0	21:50-21:55	61.1	52.3
15:55-16:00	64.7	54.7	18:55-19:00	67.2	55.1	21:55-22:00	67.3	52.2

ANALYSIS REPORT

Customer Name :Klong Luang Utilities Company Limited
Address :222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name :Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location :1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source :Ambient Noise
Measured Point :Project's Fence Located Adjacent to the Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd.,
Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate :UTM (WGS84) 47P 0674271 E, 1550801 N
Measured Date :November 3, 2024
Measured By :Mr.Assada Chaiyawong
Analyzed By :Environment Research & Technology Co., Ltd.
Measured Instrument :Integrating Sound Level Meter Scarlet Tech Model ST-11D Serial Number 820939

Quotation No. :AR2024-01649
Analysis No. :2024-AF587-031
Report No. :2024-RAAX854
Report Date :November 21, 2024

Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)	
	Leq	L90		Leq	L90		Leq	L90		Leq	L90
02:00-02:05	58.8	58.0	05:00-05:05	58.5	58.3	08:00-08:05	58.5	58.1	11:00-11:05	58.5	57.9
02:05-02:10	58.4	58.0	05:05-05:10	58.0	56.5	08:05-08:10	59.2	58.1	11:05-11:10	58.7	58.2
02:10-02:15	58.6	58.1	05:10-05:15	58.7	58.5	08:10-08:15	58.4	58.0	11:10-11:15	58.4	58.0
02:15-02:20	58.3	57.6	05:15-05:20	58.4	57.6	08:15-08:20	58.7	58.2	11:15-11:20	58.6	57.5
02:20-02:25	58.6	58.3	05:20-05:25	58.6	57.7	08:20-08:25	58.6	58.2	11:20-11:25	58.6	58.2
02:25-02:30	56.8	56.0	05:25-05:30	58.4	58.1	08:25-08:30	59.7	58.3	11:25-11:30	59.1	57.9
02:30-02:35	58.6	58.2	05:30-05:35	58.5	57.5	08:30-08:35	58.8	58.2	11:30-11:35	58.7	58.0
02:35-02:40	58.0	57.8	05:35-05:40	58.3	54.0	08:35-08:40	59.0	58.2	11:35-11:40	58.2	57.6
02:40-02:45	58.3	58.2	05:40-05:45	58.4	57.5	08:40-08:45	58.4	58.0	11:40-11:45	58.8	57.9
02:45-02:50	58.4	55.9	05:45-05:50	58.5	57.6	08:45-08:50	58.7	58.2	11:45-11:50	58.7	57.8
02:50-02:55	58.8	58.1	05:50-05:55	58.4	57.7	08:50-08:55	58.5	58.2	11:50-11:55	58.2	57.8
02:55-03:00	58.1	57.7	05:55-06:00	58.5	57.5	08:55-09:00	58.5	58.1	11:55-12:00	58.1	57.8
03:00-03:05	58.3	57.8	06:00-06:05	58.4	58.0	09:00-09:05	58.8	58.2	12:00-12:05	58.2	57.7
03:05-03:10	58.3	58.2	06:05-06:10	58.4	58.1	09:05-09:10	58.7	58.0	12:05-12:10	58.3	57.8
03:10-03:15	58.2	57.9	06:10-06:15	58.7	58.2	09:10-09:15	58.5	58.0	12:10-12:15	58.4	57.8
03:15-03:20	58.5	58.0	06:15-06:20	58.7	58.1	09:15-09:20	58.5	58.0	12:15-12:20	58.8	57.9
03:20-03:25	58.0	57.6	06:20-06:25	58.8	58.0	09:20-09:25	58.5	57.9	12:20-12:25	58.4	57.8
03:25-03:30	58.4	57.6	06:25-06:30	58.4	58.4	09:25-09:30	58.4	58.0	12:25-12:30	58.0	57.6
03:30-03:35	58.3	57.3	06:30-06:35	58.4	58.0	09:30-09:35	58.4	58.1	12:30-12:35	58.1	57.8
03:35-03:40	58.5	58.0	06:35-06:40	58.4	58.0	09:35-09:40	58.3	57.9	12:35-12:40	58.7	58.0
03:40-03:45	58.1	57.2	06:40-06:45	58.5	58.1	09:40-09:45	58.4	57.9	12:40-12:45	58.3	57.8
03:45-03:50	58.4	57.8	06:45-06:50	58.5	58.2	09:45-09:50	58.6	58.0	12:45-12:50	58.4	57.8
03:50-03:55	56.2	54.8	06:50-06:55	58.6	58.1	09:50-09:55	58.3	57.9	12:50-12:55	58.1	57.7
03:55-04:00	58.5	58.0	06:55-07:00	59.2	58.2	09:55-10:00	58.2	57.7	12:55-13:00	58.1	57.8
04:00-04:05	58.0	57.9	07:00-07:05	59.7	58.3	10:00-10:05	58.1	57.1	13:00-13:05	58.0	57.6
04:05-04:10	58.2	57.9	07:05-07:10	59.5	58.2	10:05-10:10	59.1	55.7	13:05-13:10	58.4	58.0
04:10-04:15	58.3	58.0	07:10-07:15	59.5	58.2	10:10-10:15	58.8	58.5	13:10-13:15	58.4	57.9
04:15-04:20	58.3	58.0	07:15-07:20	59.1	58.1	10:15-10:20	58.4	57.8	13:15-13:20	59.7	58.0
04:20-04:25	58.3	58.0	07:20-07:25	58.9	58.2	10:20-10:25	58.8	57.9	13:20-13:25	58.1	57.6
04:25-04:30	58.4	58.0	07:25-07:30	59.7	58.3	10:25-10:30	58.1	57.6	13:25-13:30	58.3	57.9
04:30-04:35	58.3	58.0	07:30-07:35	59.9	58.3	10:30-10:35	59.6	57.9	13:30-13:35	58.3	57.9
04:35-04:40	58.3	58.0	07:35-07:40	59.5	58.2	10:35-10:40	58.7	58.2	13:35-13:40	58.1	57.8
04:40-04:45	58.2	57.9	07:40-07:45	59.3	58.3	10:40-10:45	59.0	56.0	13:40-13:45	58.2	57.8
04:45-04:50	58.2	57.9	07:45-07:50	58.6	58.1	10:45-10:50	59.6	57.6	13:45-13:50	58.9	58.0
04:50-04:55	58.3	57.9	07:50-07:55	58.9	58.0	10:50-10:55	58.8	58.0	13:50-13:55	58.2	57.8
04:55-05:00	58.4	58.1	07:55-08:00	60.1	58.4	10:55-11:00	58.9	57.9	13:55-14:00	58.3	57.9

ANALYSIS REPORT

Customer Name :Klong Luang Utilities Company Limited
Address :222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name :Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location :1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source :Ambient Noise
Measured Point :Project's Fence Located Adjacent to the Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd.,
Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate :UTM (WGS84) 47P 0674271 E, 1550801 N
Measured Date :November 3-4, 2024
Measured By :Mr.Assada Chaiyawong
Analyzed By :Environment Research & Technology Co., Ltd.
Measured Instrument :Integrating Sound Level Meter Scarlet Tech Model ST-11D Serial Number 820939

Quotation No. :AR2024-01649
Analysis No. :2024-AF587-031
Report No. :2024-RAAX854
Report Date :November 21, 2024

Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)	
	Leq	L90		Leq	L90		Leq	L90		Leq	L90
14:00-14:05	58.5	58.1	17:00-17:05	59.6	58.6	20:00-20:05	57.8	57.1	23:00-23:05	58.5	57.8
14:05-14:10	58.7	58.2	17:05-17:10	58.9	58.4	20:05-20:10	57.0	54.7	23:05-23:10	58.5	58.3
14:10-14:15	58.5	58.1	17:10-17:15	59.3	58.4	20:10-20:15	58.4	54.0	23:10-23:15	58.7	58.5
14:15-14:20	58.5	58.1	17:15-17:20	59.0	58.3	20:15-20:20	57.6	57.4	23:15-23:20	58.5	58.2
14:20-14:25	58.4	58.0	17:20-17:25	58.9	58.4	20:20-20:25	58.0	57.1	23:20-23:25	58.4	58.3
14:25-14:30	58.2	57.8	17:25-17:30	59.5	58.5	20:25-20:30	57.3	56.4	23:25-23:30	58.5	57.9
14:30-14:35	58.3	57.9	17:30-17:35	60.4	58.5	20:30-20:35	57.7	57.1	23:30-23:35	58.4	58.2
14:35-14:40	58.6	58.2	17:35-17:40	59.2	58.7	20:35-20:40	53.3	51.0	23:35-23:40	58.4	57.9
14:40-14:45	58.8	58.3	17:40-17:45	59.2	58.9	20:40-20:45	58.1	57.7	23:40-23:45	58.3	58.0
14:45-14:50	59.1	58.5	17:45-17:50	59.2	58.8	20:45-20:50	56.8	56.6	23:45-23:50	58.4	58.0
14:50-14:55	58.7	58.3	17:50-17:55	59.3	58.9	20:50-20:55	57.1	56.2	23:50-23:55	58.3	57.9
14:55-15:00	58.9	58.4	17:55-18:00	59.3	58.9	20:55-21:00	57.6	56.7	23:55-00:00	58.2	57.8
15:00-15:05	58.7	58.5	18:00-18:05	59.5	59.1	21:00-21:05	58.8	58.2	00:00-00:05	56.6	56.2
15:05-15:10	58.6	56.1	18:05-18:10	59.6	59.2	21:05-21:10	58.8	57.9	00:05-00:10	56.7	56.5
15:10-15:15	58.7	58.4	18:10-18:15	59.4	59.1	21:10-21:15	59.0	58.7	00:10-00:15	56.9	56.0
15:15-15:20	59.0	58.2	18:15-18:20	59.2	58.8	21:15-21:20	59.0	58.9	00:15-00:20	56.6	55.7
15:20-15:25	58.9	58.1	18:20-18:25	59.6	58.8	21:20-21:25	59.2	58.5	00:20-00:25	56.8	56.4
15:25-15:30	58.9	58.6	18:25-18:30	59.6	58.7	21:25-21:30	59.1	58.8	00:25-00:30	56.7	56.6
15:30-15:35	58.7	57.9	18:30-18:35	58.9	58.2	21:30-21:35	59.0	58.5	00:30-00:35	57.0	56.2
15:35-15:40	60.2	58.2	18:35-18:40	58.9	57.9	21:35-21:40	59.0	58.6	00:35-00:40	56.7	56.3
15:40-15:45	58.6	56.0	18:40-18:45	58.8	58.6	21:40-21:45	58.9	58.4	00:40-00:45	56.5	56.1
15:45-15:50	59.9	57.6	18:45-18:50	59.0	58.9	21:45-21:50	59.0	58.5	00:45-00:50	56.7	56.2
15:50-15:55	58.9	58.0	18:50-18:55	58.8	58.4	21:50-21:55	58.8	58.3	00:50-00:55	56.9	56.3
15:55-16:00	59.2	57.9	18:55-19:00	58.8	58.7	21:55-22:00	58.7	58.6	00:55-01:00	56.7	56.4
16:00-16:05	59.1	58.4	19:00-19:05	58.9	56.5	22:00-22:05	58.8	58.1	01:00-01:05	58.0	57.4
16:05-16:10	59.2	58.2	19:05-19:10	58.5	55.2	22:05-22:10	58.9	58.8	01:05-01:10	58.1	57.1
16:10-16:15	58.5	58.1	19:10-19:15	58.9	58.5	22:10-22:15	58.8	58.5	01:10-01:15	58.2	57.8
16:15-16:20	58.5	58.1	19:15-19:20	58.8	58.5	22:15-22:20	58.8	58.3	01:15-01:20	58.3	57.8
16:20-16:25	59.3	58.2	19:20-19:25	58.2	58.6	22:20-22:25	58.6	58.4	01:20-01:25	58.1	57.7
16:25-16:30	58.8	58.2	19:25-19:30	58.7	58.4	22:25-22:30	58.6	57.9	01:25-01:30	58.2	57.8
16:30-16:35	58.8	58.2	19:30-19:35	59.4	58.7	22:30-22:35	58.5	57.6	01:30-01:35	58.2	57.8
16:35-16:40	58.8	58.2	19:35-19:40	59.2	58.8	22:35-22:40	58.6	58.3	01:35-01:40	58.5	57.9
16:40-16:45	59.3	58.4	19:40-19:45	58.9	58.3	22:40-22:45	58.5	58.4	01:40-01:45	58.2	57.9
16:45-16:50	59.2	58.4	19:45-19:50	59.0	58.0	22:45-22:50	58.5	58.0	01:45-01:50	58.0	57.4
16:50-16:55	59.1	58.3	19:50-19:55	58.9	58.7	22:50-22:55	58.4	58.2	01:50-01:55	58.0	57.1
16:55-17:00	59.6	58.3	19:55-20:00	58.9	57.9	22:55-23:00	58.4	56.0	01:55-02:00	58.0	57.8

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source : Ambient Noise
Measured Point : Project's Fence Located Adjacent to the Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd.,
Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0674271 E, 1550801 N
Measured Date : November 4, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scarlet Tech Model ST-11D Serial Number 820939

Analysis No. : AR2024-01649
Report No. : 2024-AAAX854
Report Date : November 21, 2024

Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Noise Level For 5 minutes, dB(A)	Leq	L90
	Leq	L90		Leq	L90		Leq	L90			
02:00-02:05	58.1	57.5	05:00-05:05	58.1	57.5	08:00-08:05	58.7	57.9	11:00-11:05	58.1	57.5
02:05-02:10	58.3	57.8	05:05-05:10	59.1	57.8	08:05-08:10	58.8	57.8	11:05-11:10	58.4	57.9
02:10-02:15	58.2	57.6	05:10-05:15	58.3	57.9	08:10-08:15	58.6	57.8	11:10-11:15	58.2	57.9
02:15-02:20	58.0	57.6	05:15-05:20	58.2	57.4	08:15-08:20	58.4	57.7	11:15-11:20	58.4	57.9
02:20-02:25	58.0	57.5	05:20-05:25	58.3	58.1	08:20-08:25	59.2	57.8	11:20-11:25	57.9	57.5
02:25-02:30	58.2	57.6	05:25-05:30	58.4	57.9	08:25-08:30	58.9	57.7	11:25-11:30	58.1	57.8
02:30-02:35	58.4	57.5	05:30-05:35	58.4	58.1	08:30-08:35	58.7	58.0	11:30-11:35	58.2	57.8
02:35-02:40	58.2	57.6	05:35-05:40	58.2	57.5	08:35-08:40	58.9	58.0	11:35-11:40	58.3	57.8
02:40-02:45	58.0	57.5	05:40-05:45	58.2	57.8	08:40-08:45	58.6	57.8	11:40-11:45	58.4	58.1
02:45-02:50	58.0	57.5	05:45-05:50	58.3	55.7	08:45-08:50	58.5	58.0	11:45-11:50	58.2	57.8
02:50-02:55	58.0	57.4	05:50-05:55	58.3	57.9	08:50-08:55	58.7	58.0	11:50-11:55	58.4	58.0
02:55-03:00	58.1	57.5	05:55-06:00	59.0	57.4	08:55-09:00	58.5	57.9	11:55-12:00	58.5	58.2
03:00-03:05	58.2	57.8	06:00-06:05	58.4	57.9	09:00-09:05	58.9	58.1	12:00-12:05	58.4	58.0
03:05-03:10	57.7	57.1	06:05-06:10	58.4	58.2	09:05-09:10	58.9	58.0	12:05-12:10	58.4	58.0
03:10-03:15	58.0	57.0	06:10-06:15	58.5	58.0	09:10-09:15	59.5	58.2	12:10-12:15	58.6	58.2
03:15-03:20	58.1	57.8	06:15-06:20	58.8	58.1	09:15-09:20	58.9	57.9	12:15-12:20	58.5	58.2
03:20-03:25	58.3	58.0	06:20-06:25	58.8	58.0	09:20-09:25	60.1	58.1	12:20-12:25	58.5	58.1
03:25-03:30	57.9	57.5	06:25-06:30	59.0	58.1	09:25-09:30	62.9	58.3	12:25-12:30	58.6	58.2
03:30-03:35	58.2	57.9	06:30-06:35	58.9	58.1	09:30-09:35	62.4	58.4	12:30-12:35	58.8	58.2
03:35-03:40	55.9	55.7	06:35-06:40	58.6	58.0	09:35-09:40	59.5	58.1	12:35-12:40	59.1	58.3
03:40-03:45	58.2	57.9	06:40-06:45	59.1	57.9	09:40-09:45	58.4	57.6	12:40-12:45	58.4	58.1
03:45-03:50	57.7	57.4	06:45-06:50	59.2	58.0	09:45-09:50	58.5	58.2	12:45-12:50	58.7	58.2
03:50-03:55	57.8	57.5	06:50-06:55	58.9	58.0	09:50-09:55	58.2	57.9	12:50-12:55	59.3	58.7
03:55-04:00	58.1	57.4	06:55-07:00	59.7	58.0	09:55-10:00	58.4	58.1	12:55-13:00	58.8	58.4
04:00-04:05	58.0	57.7	07:00-07:05	60.8	58.2	10:00-10:05	59.2	58.0	13:00-13:05	59.2	58.7
04:05-04:10	58.1	57.7	07:05-07:10	58.9	57.8	10:05-10:10	59.5	58.5	13:05-13:10	59.4	58.9
04:10-04:15	58.3	57.8	07:10-07:15	59.1	57.6	10:10-10:15	58.3	57.8	13:10-13:15	59.6	59.0
04:15-04:20	58.7	58.4	07:15-07:20	59.1	57.7	10:15-10:20	58.5	57.8	13:15-13:20	59.3	58.6
04:20-04:25	58.5	58.0	07:20-07:25	59.2	57.9	10:20-10:25	59.7	57.8	13:20-13:25	60.4	58.8
04:25-04:30	58.1	57.5	07:25-07:30	60.2	57.9	10:25-10:30	58.4	57.5	13:25-13:30	59.3	58.7
04:30-04:35	58.2	57.7	07:30-07:35	62.3	58.3	10:30-10:35	59.2	57.6	13:30-13:35	59.5	58.5
04:35-04:40	58.1	57.9	07:35-07:40	58.6	57.6	10:35-10:40	60.2	57.6	13:35-13:40	59.2	58.7
04:40-04:45	58.1	57.6	07:40-07:45	58.3	57.6	10:40-10:45	58.4	57.7	13:40-13:45	59.1	58.4
04:45-04:50	58.0	57.7	07:45-07:50	58.6	57.5	10:45-10:50	58.2	57.7	13:45-13:50	59.0	58.6
04:50-04:55	58.4	58.1	07:50-07:55	58.5	57.7	10:50-10:55	58.0	57.6	13:50-13:55	59.1	58.7
04:55-05:00	58.2	57.8	07:55-08:00	58.5	57.6	10:55-11:00	58.2	57.8	13:55-14:00	59.6	58.8

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source : Ambient Noise
Measured Point : Project's Fence Located Adjacent to the Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd.,
Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0674271 E, 1550801 N
Measured Date : November 4-5, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scarlet Tech Model ST-11D Serial Number 820939

Analysis No. : AR2024-01649
Report No. : 2024-AAAX854
Report Date : November 21, 2024

Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Noise Level For 5 minutes, dB(A)	Leq	L90
	Leq	L90		Leq	L90		Leq	L90			
14:00-14:05	59.7	58.9	17:00-17:05	59.6	58.6	20:00-20:05	58.6	58.2	23:00-23:05	58.5	58.0
14:05-14:10	59.9	58.9	17:05-17:10	59.1	58.7	20:05-20:10	58.7	58.5	23:05-23:10	58.3	57.9
14:10-14:15	59.8	58.8	17:10-17:15	59.6	58.7	20:10-20:15	58.6	56.3	23:10-23:15	58.6	57.9
14:15-14:20	59.6	58.8	17:15-17:20	59.4	58.7	20:15-20:20	58.9	58.5	23:15-23:20	58.4	57.7
14:20-14:25	60.3	58.8	17:20-17:25	59.3	58.8	20:20-20:25	58.4	58.0	23:20-23:25	57.9	57.8
14:25-14:30	59.5	58.5	17:25-17:30	59.4	58.9	20:25-20:30	59.1	58.1	23:25-23:30	58.7	57.9
14:30-14:35	59.2	58.5	17:30-17:35	59.3	58.8	20:30-20:35	58.8	58.4	23:30-23:35	58.4	57.4
14:35-14:40	59.0	58.6	17:35-17:40	59.2	58.7	20:35-20:40	58.9	58.4	23:35-23:40	58.2	58.1
14:40-14:45	59.5	58.7	17:40-17:45	59.8	59.1	20:40-20:45	58.6	58.3	23:40-23:45	58.0	57.8
14:45-14:50	58.9	58.5	17:45-17:50	60.5	59.2	20:45-20:50	58.8	58.4	23:45-23:50	58.1	58.0
14:50-14:55	59.1	58.6	17:50-17:55	60.2	59.5	20:50-20:55	58.7	58.4	23:50-23:55	58.1	57.6
14:55-15:00	59.3	58.9	17:55-18:00	60.2	59.0	20:55-21:00	58.8	58.4	23:55-00:00	58.2	58.0
15:00-15:05	59.3	58.4	18:00-18:05	59.8	59.3	21:00-21:05	59.1	58.5	00:00-00:05	58.8	55.6
15:05-15:10	59.4	59.1	18:05-18:10	59.7	59.0	21:05-21:10	58.9	58.5	00:05-00:10	58.2	57.8
15:10-15:15	59.3	58.8	18:10-18:15	60.0	59.2	21:10-21:15	58.9	58.4	00:10-00:15	58.0	57.2
15:15-15:20	59.3	59.1	18:15-18:20	61.3	58.8	21:15-21:20	58.7	58.3	00:15-00:20	58.1	57.3
15:20-15:25	59.3	58.6	18:20-18:25	59.7	59.1	21:20-21:25	58.8	58.4	00:20-00:25	58.3	57.8
15:25-15:30	60.5	58.8	18:25-18:30	59.3	56.9	21:25-21:30	58.9	58.5	00:25-00:30	58.2	57.7
15:30-15:35	59.1	56.6	18:30-18:35	59.2	58.8	21:30-21:35	58.4	58.0	00:30-00:35	58.4	55.8
15:35-15:40	59.0	58.8	18:35-18:40	59.1	58.7	21:35-21:40	59.1	58.7	00:35-00:40	58.4	55.8
15:40-15:45	59.0	58.3	18:40-18:45	59.1	58.6	21:40-21:45	58.8	58.5	00:40-00:45	58.1	57.5
15:45-15:50	59.0	58.4	18:45-18:50	59.0	58.5	21:45-21:50	58.6	57.6	00:45-00:50	58.3	57.6
15:50-15:55	59.1	58.7	18:50-18:55	58.8	58.5	21:50-21:55	58.6	58.1	00:50-00:55	58.0	57.4
15:55-16:00	59.0	58.6	18:55-19:00	59.0	58.5	21:55-22:00	58.8	58.5	00:55-01:00	58.1	57.6
16:00-16:05	59.1	58.7	19:00-19:05	59.0	58.6	22:00-22:05	58.7	56.3	01:00-01:05	57.8	56.2
16:05-16:10	59.6	58.8	19:05-19:10	59.2	58.7	22:05-22:10	58.6	58.5	01:05-01:10	57.9	56.1
16:10-16:15	59.0	58.6	19:10-19:15	59.2	58.8	22:10-22:15	58.7	58.0	01:10-01:15	58.1	56.4
16:15-16:20	59.4	58.7	19:15-19:20	59.4	58.9	22:15-22:20	58.7	58.1	01:15-01:20	57.9	55.9
16:20-16:25	59.2	58.7	19:20-19:25	59.5	58.9	22:20-22:25	58.7	58.4	01:20-01:25	58.0	56.6
16:25-16:30	59.7	58.7	19:25-19:30	60.2	58.6	22:25-22:30	58.6	57.9	01:25-01:30	57.5	55.6
16:30-16:35	59.1	58.7	19:30-19:35	60.5	58.4	22:30-22:35	58.7	58.2	01:30-01:35	58.2	56.4
16:35-16:40	59.2	58.7	19:35-19:40	59.1	58.5	22:35-22:40	58.6	56.0	01:35-01:40	57.9	56.0
16:40-16:45	59.5	58.9	19:40-19:45	58.6	58.0	22:40-22:45	58.8	58.3	01:40-01:45	57.7	56.2
16:45-16:50	59.7	58.6	19:45-19:50	58.9	58.7	22:45-22:50	58.5	58.1	01:45-01:50	57.6	54.0
16:50-16:55	59.7	58.6	19:50-19:55	58.7	58.3	22:50-22:55	58.5	58.1	01:50-01:55	57.7	56.2
16:55-17:00	60.1	58.7	19:55-20:00	58.6	58.5	22:55-23:00	58.4	57.9	01:55-02:00	57.6	55.7

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source : Ambient Noise
Measured Point : Project's Fence Located Adjacent to the Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd., Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0674271 E, 1550801 N
Measured Date : November 5, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scarlett Tech Model ST-11D Serial Number 820939

Analysis No.
: AR2024-AF587-031
Report No.
: 2024-RAAX854
Report Date
: November 21, 2024

Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)	
	Leq	L90		Leq	L90		Leq	L90
02:00-02:05	57.6	55.7	05:00-05:05	59.0	56.4	08:00-08:05	59.2	58.1
02:05-02:10	57.5	55.6	05:05-05:10	57.9	56.1	08:05-08:10	58.8	58.1
02:10-02:15	57.6	55.7	05:10-05:15	58.4	56.3	08:10-08:15	58.4	57.9
02:15-02:20	57.5	55.7	05:15-05:20	58.2	56.4	08:15-08:20	59.1	58.1
02:20-02:25	57.4	55.6	05:20-05:25	57.7	55.9	08:20-08:25	59.0	58.3
02:25-02:30	57.7	55.9	05:25-05:30	58.4	56.6	08:25-08:30	58.9	57.9
02:30-02:35	57.2	55.4	05:30-05:35	58.1	56.3	08:30-08:35	58.5	58.2
02:35-02:40	57.9	56.1	05:35-05:40	58.3	56.4	08:35-08:40	58.8	57.9
02:40-02:45	57.7	55.8	05:40-05:45	58.2	56.4	08:40-08:45	58.8	57.7
02:45-02:50	57.9	56.0	05:45-05:50	58.3	56.5	08:45-08:50	58.3	57.9
02:50-02:55	57.4	55.6	05:50-05:55	58.5	56.5	08:50-08:55	58.8	58.0
02:55-03:00	57.8	56.0	05:55-06:00	58.2	56.4	08:55-09:00	58.4	57.9
03:00-03:05	54.5	54.1	06:00-06:05	58.1	57.8	09:00-09:05	59.0	58.0
03:05-03:10	56.7	56.1	06:05-06:10	58.4	57.9	09:05-09:10	59.0	57.9
03:10-03:15	56.2	55.8	06:10-06:15	58.4	57.9	09:10-09:15	60.5	58.4
03:15-03:20	56.3	56.0	06:15-06:20	58.7	58.1	09:15-09:20	58.9	57.9
03:20-03:25	56.6	56.2	06:20-06:25	58.6	58.0	09:20-09:25	58.6	58.0
03:25-03:30	56.5	56.1	06:25-06:30	58.5	57.9	09:25-09:30	58.7	58.1
03:30-03:35	56.6	56.2	06:30-06:35	58.6	57.9	09:30-09:35	58.6	57.9
03:35-03:40	55.0	54.3	06:35-06:40	58.5	57.9	09:35-09:40	58.5	57.9
03:40-03:45	56.2	55.8	06:40-06:45	59.2	58.0	09:40-09:45	58.9	58.1
03:45-03:50	56.6	56.2	06:45-06:50	59.1	58.1	09:45-09:50	58.6	58.0
03:50-03:55	56.5	56.0	06:50-06:55	58.4	57.9	09:50-09:55	58.5	56.1
03:55-04:00	56.8	56.6	06:55-07:00	58.5	57.9	09:55-10:00	58.4	58.3
04:00-04:05	57.7	57.4	07:00-07:05	59.2	57.9	10:00-10:05	59.1	57.8
04:05-04:10	58.4	57.9	07:05-07:10	58.9	58.0	10:05-10:10	58.6	57.6
04:10-04:15	58.1	57.7	07:10-07:15	58.4	57.9	10:10-10:15	58.1	58.0
04:15-04:20	58.2	56.0	07:15-07:20	59.5	58.1	10:15-10:20	58.8	57.9
04:20-04:25	57.8	57.6	07:20-07:25	58.3	57.9	10:20-10:25	58.6	58.2
04:25-04:30	58.3	57.7	07:25-07:30	59.7	58.2	10:25-10:30	58.5	56.0
04:30-04:35	56.0	55.0	07:30-07:35	59.1	58.2	10:30-10:35	58.5	58.0
04:35-04:40	58.2	57.6	07:35-07:40	58.8	57.7	10:35-10:40	58.6	57.8
04:40-04:45	58.1	57.7	07:40-07:45	58.4	57.9	10:40-10:45	60.4	57.9
04:45-04:50	58.3	57.8	07:45-07:50	59.7	58.1	10:45-10:50	59.3	58.0
04:50-04:55	58.1	57.7	07:50-07:55	59.3	58.2	10:50-10:55	60.7	58.3
04:55-05:00	58.1	57.7	07:55-08:00	59.1	58.0	10:55-11:00	61.2	58.1

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source : Ambient Noise
Measured Point : Project's Fence Located Adjacent to the Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd., Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0674271 E, 1550801 N
Measured Date : November 5-6, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scarlett Tech Model ST-11D Serial Number 820939

Analysis No.
: AR2024-01649
Report No.
: 2024-RAAX854
Report Date
: November 21, 2024

Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)	
	Leq	L90		Leq	L90		Leq	L90
14:00-14:05	59.2	58.6	17:00-17:05	61.1	58.6	20:00-20:05	59.2	58.3
14:05-14:10	59.4	58.7	17:05-17:10	59.0	58.5	20:05-20:10	61.1	58.6
14:10-14:15	59.1	58.6	17:10-17:15	59.0	58.6	20:10-20:15	59.3	58.5
14:15-14:20	59.3	58.6	17:15-17:20	59.2	58.7	20:15-20:20	59.2	58.4
14:20-14:25	59.3	58.5	17:20-17:25	59.1	58.5	20:20-20:25	59.4	58.5
14:25-14:30	58.8	58.4	17:25-17:30	60.0	58.6	20:25-20:30	59.4	58.6
14:30-14:35	59.1	58.5	17:30-17:35	59.2	58.7	20:30-20:35	59.3	58.5
14:35-14:40	59.1	58.6	17:35-17:40	59.0	58.2	20:35-20:40	59.5	58.5
14:40-14:45	59.2	58.7	17:40-17:45	59.0	58.9	20:40-20:45	59.3	58.4
14:45-14:50	59.2	58.4	17:45-17:50	59.9	58.8	20:45-20:50	59.2	58.3
14:50-14:55	58.9	58.4	17:50-17:55	60.1	59.0	20:50-20:55	59.4	58.5
14:55-15:00	59.0	58.5	17:55-18:00	60.6	59.5	20:55-21:00	59.8	58.7
15:00-15:05	58.9	58.4	18:00-18:05	59.8	59.3	21:00-21:05	59.6	58.9
15:05-15:10	59.1	58.8	18:05-18:10	59.7	59.2	21:05-21:10	60.3	59.2
15:10-15:15	59.0	58.3	18:10-18:15	59.7	59.1	21:10-21:15	59.7	58.7
15:15-15:20	59.2	59.0	18:15-18:20	59.5	58.9	21:15-21:20	59.1	59.0
15:20-15:25	58.8	58.4	18:20-18:25	59.4	58.8	21:20-21:25	59.8	58.8
15:25-15:30	58.9	58.2	18:25-18:30	59.7	58.7	21:25-21:30	59.5	59.0
15:30-15:35	59.0	56.0	18:30-18:35	59.6	58.5	21:30-21:35	59.0	58.7
15:35-15:40	59.4	57.6	18:35-18:40	59.0	58.6	21:35-21:40	59.4	58.9
15:40-15:45	57.9	57.0	18:40-18:45	58.9	58.6	21:40-21:45	59.5	56.7
15:45-15:50	59.7	58.9	18:45-18:50	59.0	58.6	21:45-21:50	59.7	59.0
15:50-15:55	59.8	59.1	18:50-18:55	58.9	58.6	21:50-21:55	59.3	58.5
15:55-16:00	61.0	57.7	18:55-19:00	58.7	58.4	21:55-22:00	59.5	58.5
16:00-16:05	61.5	59.5	19:00-19:05	58.7	58.4	22:00-22:05	57.4	57.0
16:05-16:10	60.4	58.9	19:05-19:10	59.1	58.7	22:05-22:10	59.5	58.4
16:10-16:15	60.8	59.2	19:10-19:15	62.1	59.4	22:10-22:15	59.0	58.7
16:15-16:20	60.7	58.8	19:15-19:20	59.4	58.7	22:15-22:20	59.1	56.5
16:20-16:25	58.9	58.5	19:20-19:25	59.8	59.0	22:20-22:25	59.2	58.1
16:25-16:30	59.0	58.5	19:25-19:30	59.6	58.5	22:25-22:30	59.1	58.4
16:30-16:35	58.9	58.1	19:30-19:35	59.4	59.3	22:30-22:35	59.2	58.4
16:35-16:40	58.9	58.6	19:35-19:40	60.9	59.0	22:35-22:40	59.2	58.2
16:40-16:45	59.0	58.4	19:40-19:45	60.0	59.1	22:40-22:45	59.0	58.1
16:45-16:50	59.0	58.1	19:45-19:50	59.2	58.7	22:45-22:50	58.9	58.0
16:50-16:55	59.1	58.5	19:50-19:55	59.3	58.9	22:50-22:55	58.9	58.0
16:55-17:00	59.3	58.8	19:55-20:00	59.3	58.8	22:55-23:00	57.9	57.4

ANALYSIS REPORT

Customer Name :Klong Luang Utilities Company Limited
Address :222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name :Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location :1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source :Ambient Noise
Measured Point :Project's Fence Located Adjacent to the Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd.,
Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate :UTM (WG584) 47P 0674271 E, 1550801 N
Measured Date :November 6, 2024
Measured By :Mr.Assada Chaiyavong
Analyzed By :Environment Research & Technology Co., Ltd.
Measured Instrument :Integrating Sound Level Meter Scarlet Tech Model ST-11D Serial Number 820939

Quotation No. :AR2024-01649
Analysis No. :2024-AF587-031
Report No. :2024-RAAX854
Report Date :November 21, 2024

Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)	
	Leq	L90		Leq	L90		Leq	L90
02:00-02:05	56.8	56.4	05:00-05:05	58.0	57.6	08:00-08:05	58.7	56.0
02:05-02:10	56.9	56.4	05:05-05:10	58.0	57.7	08:05-08:10	58.6	57.6
02:10-02:15	57.0	56.3	05:10-05:15	58.0	57.6	08:10-08:15	58.8	57.9
02:15-02:20	56.9	56.2	05:15-05:20	58.1	57.8	08:15-08:20	59.0	58.1
02:20-02:25	56.8	56.5	05:20-05:25	58.1	58.0	08:20-08:25	58.6	58.0
02:25-02:30	56.9	56.8	05:25-05:30	58.2	57.7	08:25-08:30	58.4	57.7
02:30-02:35	56.9	56.4	05:30-05:35	58.1	58.0	08:30-08:35	58.7	58.0
02:35-02:40	57.0	56.8	05:35-05:40	58.2	55.8	08:35-08:40	58.4	57.9
02:40-02:45	57.1	54.5	05:40-05:45	58.3	57.9	08:40-08:45	58.9	58.1
02:45-02:50	56.8	56.7	05:45-05:50	58.1	57.8	08:45-08:50	58.3	57.5
02:50-02:55	56.9	56.2	05:50-05:55	58.3	57.9	08:50-08:55	58.6	58.2
02:55-03:00	56.7	56.3	05:55-06:00	58.2	57.8	08:55-09:00	58.5	57.9
03:00-03:05	57.3	57.2	06:00-06:05	58.1	57.7	09:00-09:05	58.8	58.2
03:05-03:10	57.6	57.4	06:05-06:10	58.2	57.8	09:05-09:10	58.7	58.2
03:10-03:15	57.1	56.7	06:10-06:15	58.1	57.7	09:10-09:15	60.0	58.5
03:15-03:20	57.8	55.5	06:15-06:20	59.0	57.8	09:15-09:20	61.2	58.6
03:20-03:25	57.3	57.1	06:20-06:25	58.1	57.7	09:20-09:25	60.7	58.4
03:25-03:30	57.2	56.5	06:25-06:30	58.8	57.8	09:25-09:30	61.2	58.5
03:30-03:35	57.5	57.4	06:30-06:35	59.2	57.9	09:30-09:35	60.1	58.6
03:35-03:40	57.3	57.1	06:35-06:40	58.3	57.9	09:35-09:40	60.0	58.7
03:40-03:45	57.4	56.7	06:40-06:45	58.2	57.8	09:40-09:45	60.4	58.6
03:45-03:50	57.3	56.4	06:45-06:50	58.4	57.9	09:45-09:50	59.5	58.5
03:50-03:55	57.3	57.1	06:50-06:55	58.2	58.0	09:50-09:55	60.6	58.7
03:55-04:00	57.4	57.3	06:55-07:00	58.3	57.5	09:55-10:00	59.7	58.5
04:00-04:05	57.9	57.5	07:00-07:05	58.5	58.2	10:00-10:05	59.3	58.3
04:05-04:10	57.8	56.8	07:05-07:10	58.2	58.0	10:05-10:10	59.5	58.5
04:10-04:15	57.8	55.5	07:10-07:15	58.7	58.2	10:10-10:15	59.7	58.4
04:15-04:20	57.7	56.7	07:15-07:20	58.7	57.9	10:15-10:20	59.3	58.3
04:20-04:25	57.8	57.6	07:20-07:25	58.9	58.1	10:20-10:25	59.0	58.2
04:25-04:30	58.3	57.8	07:25-07:30	58.6	55.9	10:25-10:30	59.2	58.4
04:30-04:35	58.9	57.5	07:30-07:35	58.1	57.1	10:30-10:35	62.5	58.5
04:35-04:40	58.1	57.7	07:35-07:40	59.8	57.9	10:35-10:40	60.6	58.6
04:40-04:45	57.9	57.6	07:40-07:45	59.6	58.1	10:40-10:45	59.2	58.6
04:45-04:50	57.9	57.6	07:45-07:50	62.1	58.4	10:45-10:50	59.0	58.4
04:50-04:55	57.8	57.5	07:50-07:55	59.3	57.9	10:50-10:55	59.1	58.6
04:55-05:00	58.0	57.6	07:55-08:00	59.2	58.2	10:55-11:00	59.0	58.5

ANALYSIS REPORT

Customer Name :Klong Luang Utilities Company Limited
Address :222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name :Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location :1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source :Ambient Noise
Measured Point :Project's Fence Located Adjacent to the Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd.,
Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate :UTM (WG584) 47P 0674271 E, 1550801 N
Measured Date :November 6, 2024
Measured By :Mr.Assada Chaiyavong
Analyzed By :Environment Research & Technology Co., Ltd.
Measured Instrument :Integrating Sound Level Meter Scarlet Tech Model ST-11D Serial Number 820939

Quotation No. :AR2024-01649
Analysis No. :2024-AF587-031
Report No. :2024-RAAX854
Report Date :November 21, 2024

Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)	
	Leq	L90		Leq	L90		Leq	L90
14:00-14:05	59.7	58.8	17:00-17:05	59.7	58.4	20:00-20:05	58.6	58.4
14:05-14:10	60.0	59.1	17:05-17:10	59.4	58.3	20:05-20:10	58.8	58.6
14:10-14:15	59.4	59.0	17:10-17:15	60.0	58.4	20:10-20:15	58.9	58.0
14:15-14:20	59.5	59.1	17:15-17:20	59.8	58.5	20:15-20:20	58.6	58.2
14:20-14:25	59.5	59.0	17:20-17:25	59.3	58.4	20:20-20:25	58.8	58.5
14:25-14:30	60.7	58.9	17:25-17:30	59.4	58.4	20:25-20:30	58.7	58.2
14:30-14:35	59.8	59.0	17:30-17:35	59.8	58.5	20:30-20:35	58.7	58.2
14:35-14:40	59.7	59.0	17:35-17:40	59.6	58.4	20:35-20:40	58.8	58.4
14:40-14:45	59.9	59.1	17:40-17:45	59.2	58.3	20:40-20:45	58.9	58.7
14:45-14:50	59.8	59.4	17:45-17:50	59.5	58.3	20:45-20:50	58.8	56.4
14:50-14:55	60.2	58.7	17:50-17:55	60.2	58.5	20:50-20:55	58.7	58.6
14:55-15:00	59.5	58.7	17:55-18:00	60.4	58.7	20:55-21:00	58.7	58.3
15:00-15:05	59.2	58.8	18:00-18:05	59.3	58.8	21:00-21:05	58.9	58.1
15:05-15:10	59.4	58.9	18:05-18:10	59.5	58.7	21:05-21:10	58.9	58.2
15:10-15:15	59.5	59.1	18:10-18:15	58.9	58.6	21:10-21:15	60.3	58.4
15:15-15:20	59.7	59.1	18:15-18:20	59.1	58.5	21:15-21:20	59.0	58.3
15:20-15:25	59.2	58.8	18:20-18:25	59.0	58.9	21:20-21:25	59.0	57.9
15:25-15:30	59.2	58.8	18:25-18:30	59.1	58.5	21:25-21:30	58.8	58.0
15:30-15:35	59.1	58.7	18:30-18:35	59.1	58.8	21:30-21:35	58.8	58.4
15:35-15:40	59.7	58.8	18:35-18:40	59.4	58.7	21:35-21:40	58.9	58.4
15:40-15:45	59.5	58.9	18:40-18:45	58.8	58.3	21:40-21:45	58.7	56.1
15:45-15:50	59.9	58.7	18:45-18:50	58.8	58.3	21:45-21:50	58.8	58.3
15:50-15:55	60.7	59.1	18:50-18:55	59.1	58.6	21:50-21:55	58.7	57.8
15:55-16:00	59.7	58.7	18:55-19:00	59.7	58.7	21:55-22:00	58.6	57.9
16:00-16:05	59.9	58.8	19:00-19:05	60.1	58.7	22:00-22:05	58.7	58.3
16:05-16:10	61.6	58.5	19:05-19:10	59.3	58.4	22:05-22:10	58.5	58.1
16:10-16:15	59.2	58.6	19:10-19:15	58.8	57.9	22:10-22:15	58.6	58.0
16:15-16:20	59.5	58.6	19:15-19:20	58.9	58.5	22:15-22:20	58.7	58.4
16:20-16:25	58.8	58.4	19:20-19:25	59.2	58.3	22:20-22:25	58.6	57.9
16:25-16:30	58.6	58.3	19:25-19:30	58.6	58.5	22:25-22:30	58.5	58.2
16:30-16:35	58.6	58.2	19:30-19:35	58.6	58.1	22:30-22:35	58.8	58.4
16:35-16:40	58.9	58.3	19:35-19:40	58.7	58.5	22:35-22:40	58.7	58.3
16:40-16:45	59.5	58.5	19:40-19:45	58.6	56.2	22:40-22:45	58.5	58.1
16:45-16:50	58.8	58.4	19:45-19:50	58.9	58.5	22:45-22:50	58.8	58.3
16:50-16:55	58.8	56.9	19:50-19:55	58.7	58.0	22:50-22:55	58.6	58.3
16:55-17:00	59.0	58.4	19:55-20:00	58.8	58.1	22:55-23:00	58.4	58.0

ANALYSIS REPORT

Customer Name :Klong Luang Utilities Company Limited
Address :222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name :Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location :1/9 Moo 3, Klong Nueng, Klong Luang, Pathum Thani
Measured Source :Ambient Noise
Measured Point :Project's Fence Located Adjacent to the Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd.,
Klong Nueng Sub-District, Klong Luang District, Pathum Thani Province
GPS. Coordinate :UTM (WGS84) 47P 0674271 E, 1550801 N
Measured Date :November 8, 2024
Measured By :Mr.Assada Chaiyawong
Analyzed By :Environment Research & Technology Co., Ltd.
Measured Instrument :Integrating Sound Level Meter Scarlet Tech Model ST-11D Serial Number 820939

Quotation No. :AR2024-01649
Analysis No. :2024-AF587-031
Report No. :2024-RAAX854
Report Date :November 21, 2024

Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)	
	Leq	L90		Leq	L90		Leq	L90		Leq	L90
02:00-02:05	57.2	57.1	05:00-05:05	57.7	57.2	08:00-08:05	58.5	57.6	11:00-11:05	57.8	57.3
02:05-02:10	57.2	54.9	05:05-05:10	58.5	58.0	08:05-08:10	59.2	57.9	11:05-11:10	58.0	57.4
02:10-02:15	57.4	57.1	05:10-05:15	58.2	57.6	08:10-08:15	59.0	57.7	11:10-11:15	58.5	57.4
02:15-02:20	57.5	56.8	05:15-05:20	58.3	57.9	08:15-08:20	58.3	57.5	11:15-11:20	58.1	57.5
02:20-02:25	57.2	56.7	05:20-05:25	58.2	55.9	08:20-08:25	58.3	57.4	11:20-11:25	57.9	57.5
02:25-02:30	57.4	56.5	05:25-05:30	58.5	58.1	08:25-08:30	58.1	57.3	11:25-11:30	57.9	57.4
02:30-02:35	57.3	57.2	05:30-05:35	56.4	56.2	08:30-08:35	58.3	57.4	11:30-11:35	58.7	57.8
02:35-02:40	57.6	56.7	05:35-05:40	58.6	57.8	08:35-08:40	57.7	57.2	11:35-11:40	58.2	57.3
02:40-02:45	57.1	56.9	05:40-05:45	58.5	58.0	08:40-08:45	58.8	57.5	11:40-11:45	58.9	57.4
02:45-02:50	57.7	56.9	05:45-05:50	58.3	58.1	08:45-08:50	58.0	57.2	11:45-11:50	57.8	57.4
02:50-02:55	57.4	57.0	05:50-05:55	58.5	57.8	08:50-08:55	58.5	57.4	11:50-11:55	58.0	57.3
02:55-03:00	57.6	56.9	05:55-06:00	58.9	57.9	08:55-09:00	61.2	58.4	11:55-12:00	58.1	58.0
03:00-03:05	57.3	56.8	06:00-06:05	58.2	58.0	09:00-09:05	61.9	61.1	12:00-12:05	59.1	58.4
03:05-03:10	57.1	56.7	06:05-06:10	58.1	57.5	09:05-09:10	61.5	60.6	12:05-12:10	59.4	58.7
03:10-03:15	57.3	57.0	06:10-06:15	58.6	58.2	09:10-09:15	58.1	57.7	12:10-12:15	59.3	58.2
03:15-03:20	57.1	56.5	06:15-06:20	58.1	58.0	09:15-09:20	58.3	57.7	12:15-12:20	59.1	58.5
03:20-03:25	57.1	56.7	06:20-06:25	59.1	58.1	09:20-09:25	58.3	57.8	12:20-12:25	58.6	58.1
03:25-03:30	57.0	56.8	06:25-06:30	58.8	57.8	09:25-09:30	58.0	57.6	12:25-12:30	58.5	58.0
03:30-03:35	57.3	57.1	06:30-06:35	58.2	58.0	09:30-09:35	59.5	57.9	12:30-12:35	58.8	58.2
03:35-03:40	57.1	56.6	06:35-06:40	58.3	55.9	09:35-09:40	59.6	58.3	12:35-12:40	58.7	58.0
03:40-03:45	57.0	56.9	06:40-06:45	58.4	58.1	09:40-09:45	58.6	58.0	12:40-12:45	58.4	57.9
03:45-03:50	57.3	54.8	06:45-06:50	59.8	58.1	09:45-09:50	58.8	58.1	12:45-12:50	58.6	58.1
03:50-03:55	56.8	56.4	06:50-06:55	59.9	58.4	09:50-09:55	58.5	58.0	12:50-12:55	59.2	58.2
03:55-04:00	57.5	56.4	06:55-07:00	60.5	58.6	09:55-10:00	58.3	57.9	12:55-13:00	59.1	58.6
04:00-04:05	57.8	57.2	07:00-07:05	60.3	58.4	10:00-10:05	58.4	58.0	13:00-13:05	59.7	58.8
04:05-04:10	57.8	57.5	07:05-07:10	58.7	58.2	10:05-10:10	58.7	58.1	13:05-13:10	60.3	57.6
04:10-04:15	57.9	57.4	07:10-07:15	59.3	58.3	10:10-10:15	58.7	58.0	13:10-13:15	60.0	59.4
04:15-04:20	58.0	57.5	07:15-07:20	59.2	58.3	10:15-10:20	59.1	57.9	13:15-13:20	60.5	59.2
04:20-04:25	58.0	57.8	07:20-07:25	58.9	58.1	10:20-10:25	59.6	57.9	13:20-13:25	60.3	59.2
04:25-04:30	57.9	57.3	07:25-07:30	59.1	53.2	10:25-10:30	58.4	58.0	13:25-13:30	59.6	59.1
04:30-04:35	58.3	58.0	07:30-07:35	60.4	58.7	10:30-10:35	58.5	58.0	13:30-13:35	57.8	56.2
04:35-04:40	58.0	57.7	07:35-07:40	59.8	55.9	10:35-10:40	58.2	57.6	13:35-13:40	60.0	59.3
04:40-04:45	58.0	57.5	07:40-07:45	56.8	53.9	10:40-10:45	58.7	57.8	13:40-13:45	59.5	59.3
04:45-04:50	57.9	57.7	07:45-07:50	60.1	59.8	10:45-10:50	59.0	57.9	13:45-13:50	60.1	59.6
04:50-04:55	57.8	57.2	07:50-07:55	55.4	48.5	10:50-10:55	59.0	58.4	13:50-13:55	60.3	59.4
04:55-05:00	58.2	58.0	07:55-08:00	59.1	58.4	10:55-11:00	58.6	58.1	13:55-14:00	60.9	59.3

(Ms.Sujawan Suwannapa)
Laboratory Reviewer

(Ms.Thanida Burungruang)
Laboratory Supervisor

ANALYSIS REPORT

Customer Name :Klong Luang Utilities Company Limited
Address :222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name :Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location :1/9 Moo 3, Klong Nueng, Klong Luang, Pathum Thani
Measured Source :Ambient Noise
Measured Point :Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd., Klong Nueng Sub-District,
Klong Luang District, Pathum Thani Province
GPS. Coordinate :UTM (WGS84) 47P 0674312 E, 1550830 N
Measured Date :November 1-2, 2024
Measured By :Mr.Assada Chaiyawong
Analyzed By :Environment Research & Technology Co., Ltd.
Measured Instrument :Integrating Sound Level Meter Scarlet Tech Model ST-21D Serial Number 820445

Quotation No. :AR2024-01649
Analysis No. :2024-AF587-029
Report No. :2024-RAAX850
Report Date :November 21, 2024

Interval Time	Noise Level For 5 minutes, dB(A)			Interval Time	Noise Level For 5 minutes, dB(A)			Interval Time	Noise Level For 5 minutes, dB(A)		
	Leq	L90	L90		Leq	L90	L90		Leq	L90	L90
14:00-14:05	53.0	52.6	17:00-17:05	54.8	53.6	20:00-20:05	53.5	53.2	23:00-23:05	54.8	52.6
14:05-14:10	53.3	52.4	17:05-17:10	54.7	53.4	20:05-20:10	53.6	53.0	23:05-23:10	53.5	52.8
14:10-14:15	53.0	52.5	17:10-17:15	55.2	53.6	20:10-20:15	57.5	54.3	23:10-23:15	53.8	53.0
14:15-14:20	53.3	52.7	17:15-17:20	54.4	53.4	20:15-20:20	58.1	55.8	23:15-23:20	53.7	52.7
14:20-14:25	53.4	52.7	17:20-17:25	53.9	53.1	20:20-20:25	56.5	53.8	23:20-23:25	53.3	52.5
14:25-14:30	53.2	52.6	17:25-17:30	53.8	53.0	20:25-20:30	54.1	53.6	23:25-23:30	53.5	52.5
14:30-14:35	55.2	53.2	17:30-17:35	53.9	53.1	20:30-20:35	54.0	53.5	23:30-23:35	53.4	52.7
14:35-14:40	53.8	53.1	17:35-17:40	53.6	53.0	20:35-20:40	54.1	53.6	23:35-23:40	52.7	52.1
14:40-14:45	53.8	53.2	17:40-17:45	54.7	53.4	20:40-20:45	53.3	52.6	23:40-23:45	53.5	52.6
14:45-14:50	53.7	53.1	17:45-17:50	54.3	53.2	20:45-20:50	53.5	52.7	23:45-23:50	53.6	52.4
14:50-14:55	53.6	53.0	17:50-17:55	53.9	53.1	20:50-20:55	53.3	52.6	23:50-23:55	53.4	52.3
14:55-15:00	54.7	53.1	17:55-18:00	53.8	53.3	20:55-21:00	53.4	53.0	23:55-00:00	53.1	52.3
15:00-15:05	53.8	53.1	18:00-18:05	54.4	53.7	21:00-21:05	53.3	52.2	00:00-00:05	53.0	52.2
15:05-15:10	54.5	53.0	18:05-18:10	56.9	53.7	21:05-21:10	53.4	53.0	00:05-00:10	52.8	51.9
15:10-15:15	53.8	53.0	18:10-18:15	53.9	53.3	21:10-21:15	53.4	52.9	00:10-00:15	52.8	52.1
15:15-15:20	54.1	53.3	18:15-18:20	53.7	53.2	21:15-21:20	53.7	53.1	00:15-00:20	53.1	52.0
15:20-15:25	54.1	53.5	18:20-18:25	54.0	53.2	21:20-21:25	53.4	52.7	00:20-00:25	52.9	52.0
15:25-15:30	53.7	53.2	18:25-18:30	53.4	52.9	21:25-21:30	53.1	52.6	00:25-00:30	53.2	52.2
15:30-15:35	53.9	53.2	18:30-18:35	54.7	53.4	21:30-21:35	53.8	52.9	00:30-00:35	52.9	51.9
15:35-15:40	55.1	53.4	18:35-18:40	54.1	53.2	21:35-21:40	53.5	53.0	00:35-00:40	53.1	52.2
15:40-15:45	54.1	53.1	18:40-18:45	53.6	53.1	21:40-21:45	53.9	52.9	00:40-00:45	52.8	52.1
15:45-15:50	54.3	52.7	18:45-18:50	53.4	52.8	21:45-21:50	54.2	52.9	00:45-00:50	52.5	51.8
15:50-15:55	53.7	52.8	18:50-18:55	54.4	53.9	21:50-21:55	53.8	53.1	00:50-00:55	53.0	52.0
15:55-16:00	54.2	53.1	18:55-19:00	54.1	53.6	21:55-22:00	53.8	53.0	00:55-01:00	53.2	52.3
16:00-16:05	54.5	53.6	19:00-19:05	53.5	52.8	22:00-22:05	52.9	52.4	01:00-01:05	53.4	52.5
16:05-16:10	54.5	53.4	19:05-19:10	53.5	52.7	22:05-22:10	53.8	52.4	01:05-01:10	52.6	51.9
16:10-16:15	53.8	53.3	19:10-19:15	53.5	52.9	22:10-22:15	53.5	53.3	01:10-01:15	53.0	52.0
16:15-16:20	54.5	53.5	19:15-19:20	53.5	52.6	22:15-22:20	53.9	53.2	01:15-01:20	55.2	52.6
16:20-16:25	55.3	54.1	19:20-19:25	52.7	52.3	22:20-22:25	53.4	52.7	01:20-01:25	53.1	52.3
16:25-16:30	55.3	54.2	19:25-19:30	52.6	52.1	22:25-22:30	53.3	52.7	01:25-01:30	52.9	52.1
16:30-16:35	54.7	54.0	19:30-19:35	52.9	52.3	22:30-22:35	53.9	52.9	01:30-01:35	52.6	52.0
16:35-16:40	56.5	54.3	19:35-19:40	53.5	52.9	22:35-22:40	53.3	52.8	01:35-01:40	52.7	51.9
16:40-16:45	56.4	53.7	19:40-19:45	53.3	52.8	22:40-22:45	53.4	52.6	01:40-01:45	52.4	51.8
16:45-16:50	55.1	53.5	19:45-19:50	53.3	52.5	22:45-22:50	53.6	53.0	01:45-01:50	52.2	51.7
16:50-16:55	54.4	53.5	19:50-19:55	53.5	53.0	22:50-22:55	53.8	53.1	01:50-01:55	52.3	51.7
16:55-17:00	54.7	53.8	19:55-20:00	53.3	52.4	22:55-23:00	52.9	52.3	01:55-02:00	52.7	51.5

ANALYSIS REPORT

Customer Name :Klong Luang Utilities Company Limited
Address :222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name :Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location :1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source :Ambient Noise
Measured Point :Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd., Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate :UTM (WGS84) 47P 0674312 E, 1550830 N
Measured Date :November 2, 2024
Measured By :Mr.Assada Chaiyawong
Analyzed By :Environment Research & Technology Co., Ltd.
Measured Instrument :Integrating Sound Level Meter Scairek Tech Model ST-21D Serial Number 820445

Quotation No. :AR2024-01649
Analysis No. :2024-AF587-029
Report No. :2024-RAAX850
Report Date :November 21, 2024

Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)	
	Leq	L90		Leq	L90		Leq	L90		Leq	L90
02:00-02:05	52.7	52.1	05:00-05:05	52.5	51.9	08:00-08:05	53.0	51.9	11:00-11:05	53.4	51.8
02:05-02:10	52.5	52.1	05:05-05:10	53.6	52.3	08:05-08:10	53.5	51.9	11:05-11:10	53.2	52.7
02:10-02:15	53.1	52.3	05:10-05:15	59.9	51.8	08:10-08:15	53.1	52.1	11:10-11:15	53.4	52.2
02:15-02:20	53.1	52.5	05:15-05:20	58.6	52.0	08:15-08:20	53.8	52.5	11:15-11:20	53.0	52.1
02:20-02:25	52.8	52.2	05:20-05:25	60.0	52.2	08:20-08:25	53.5	52.3	11:20-11:25	53.2	51.9
02:25-02:30	53.6	52.4	05:25-05:30	53.0	52.0	08:25-08:30	53.9	52.3	11:25-11:30	53.1	52.0
02:30-02:35	53.3	52.5	05:30-05:35	52.4	52.0	08:30-08:35	53.8	52.7	11:30-11:35	54.1	52.4
02:35-02:40	52.8	52.7	05:35-05:40	52.4	51.8	08:35-08:40	53.2	52.4	11:35-11:40	53.2	52.4
02:40-02:45	53.2	52.4	05:40-05:45	56.0	51.9	08:40-08:45	54.0	52.7	11:40-11:45	53.6	52.8
02:45-02:50	53.2	52.3	05:45-05:50	52.9	52.4	08:45-08:50	55.0	53.1	11:45-11:50	53.0	52.3
02:50-02:55	52.9	52.3	05:50-05:55	52.8	51.6	08:50-08:55	54.1	52.9	11:50-11:55	52.4	51.2
02:55-03:00	53.0	52.1	05:55-06:00	52.9	52.5	08:55-09:00	53.9	52.8	11:55-12:00	52.3	51.1
03:00-03:05	52.8	52.3	06:00-06:05	54.5	51.9	09:00-09:05	54.6	53.6	12:00-12:05	53.1	52.1
03:05-03:10	52.5	51.9	06:05-06:10	54.5	52.4	09:05-09:10	54.0	53.0	12:05-12:10	53.4	52.2
03:10-03:15	52.7	52.1	06:10-06:15	55.7	52.9	09:10-09:15	53.9	53.1	12:10-12:15	52.5	51.7
03:15-03:20	52.8	51.9	06:15-06:20	53.9	52.5	09:15-09:20	54.3	52.8	12:15-12:20	53.0	52.4
03:20-03:25	52.3	51.6	06:20-06:25	54.1	52.3	09:20-09:25	55.1	54.3	12:20-12:25	53.2	52.2
03:25-03:30	52.9	52.3	06:25-06:30	53.7	52.0	09:25-09:30	54.2	53.2	12:25-12:30	53.8	52.8
03:30-03:35	52.8	51.9	06:30-06:35	54.6	52.5	09:30-09:35	53.8	53.1	12:30-12:35	53.7	52.9
03:35-03:40	52.5	51.6	06:35-06:40	53.5	52.3	09:35-09:40	53.5	52.8	12:35-12:40	52.7	51.9
03:40-03:45	55.6	51.4	06:40-06:45	53.9	52.2	09:40-09:45	53.8	52.6	12:40-12:45	52.5	51.6
03:45-03:50	55.1	51.4	06:45-06:50	55.0	52.5	09:45-09:50	53.4	52.3	12:45-12:50	52.9	51.9
03:50-03:55	52.0	51.3	06:50-06:55	53.3	51.9	09:50-09:55	53.8	52.9	12:50-12:55	52.8	52.0
03:55-04:00	52.9	52.0	06:55-07:00	53.3	52.0	09:55-10:00	53.8	52.2	12:55-13:00	53.8	53.1
04:00-04:05	56.3	52.0	07:00-07:05	52.9	51.9	10:00-10:05	54.5	53.3	13:00-13:05	54.3	53.2
04:05-04:10	52.5	52.0	07:05-07:10	53.4	52.4	10:05-10:10	54.4	53.6	13:05-13:10	54.6	53.3
04:10-04:15	52.5	52.0	07:10-07:15	52.9	51.9	10:10-10:15	54.2	53.5	13:10-13:15	54.9	53.0
04:15-04:20	52.5	52.0	07:15-07:20	54.5	52.3	10:15-10:20	53.4	52.3	13:15-13:20	54.6	53.6
04:20-04:25	52.4	51.9	07:20-07:25	53.8	51.6	10:20-10:25	55.5	53.0	13:20-13:25	54.7	53.7
04:25-04:30	51.9	51.3	07:25-07:30	54.0	52.5	10:25-10:30	54.1	52.9	13:25-13:30	55.2	54.2
04:30-04:35	52.8	52.1	07:30-07:35	53.1	51.9	10:30-10:35	53.5	52.4	13:30-13:35	54.9	54.2
04:35-04:40	54.1	52.3	07:35-07:40	53.3	52.1	10:35-10:40	53.3	52.6	13:35-13:40	54.8	53.7
04:40-04:45	56.4	51.8	07:40-07:45	53.2	51.9	10:40-10:45	53.5	52.5	13:40-13:45	55.0	54.0
04:45-04:50	53.2	51.7	07:45-07:50	52.8	51.7	10:45-10:50	54.0	52.9	13:45-13:50	55.1	53.6
04:50-04:55	57.6	51.7	07:50-07:55	53.6	52.4	10:50-10:55	53.0	52.0	13:50-13:55	54.2	53.3
04:55-05:00	55.4	52.1	07:55-08:00	52.8	52.0	10:55-11:00	53.2	52.5	13:55-14:00	54.4	53.6

ANALYSIS REPORT

Customer Name :Klong Luang Utilities Company Limited
Address :222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name :Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location :1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source :Ambient Noise
Measured Point :Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd., Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate :UTM (WGS84) 47P 0674312 E, 1550830 N
Measured Date :November 2-3, 2024
Measured By :Mr.Assada Chaiyawong
Analyzed By :Environment Research & Technology Co., Ltd.
Measured Instrument :Integrating Sound Level Meter Scairek Tech Model ST-21D Serial Number 820445

Quotation No. :AR2024-01649
Analysis No. :2024-AF587-029
Report No. :2024-RAAX850
Report Date :November 21, 2024

Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)	
	Leq	L90		Leq	L90		Leq	L90		Leq	L90
14:00-14:05	54.4	52.8	17:00-17:05	55.7	54.6	20:00-20:05	53.8	53.0	23:00-23:05	53.0	52.4
14:05-14:10	55.0	53.9	17:05-17:10	55.4	54.3	20:05-20:10	54.0	53.3	23:05-23:10	52.8	52.0
14:10-14:15	56.1	54.7	17:10-17:15	54.5	53.5	20:10-20:15	53.9	53.0	23:10-23:15	52.3	51.8
14:15-14:20	54.6	53.6	17:15-17:20	54.9	53.7	20:15-20:20	53.9	53.2	23:15-23:20	52.6	51.9
14:20-14:25	55.4	54.6	17:20-17:25	55.3	53.4	20:20-20:25	54.2	53.3	23:20-23:25	52.8	52.2
14:25-14:30	54.7	53.5	17:25-17:30	54.3	53.2	20:25-20:30	54.7	53.5	23:25-23:30	54.3	52.4
14:30-14:35	54.9	53.8	17:30-17:35	54.6	53.3	20:30-20:35	54.5	53.9	23:30-23:35	52.8	52.1
14:35-14:40	54.9	54.1	17:35-17:40	54.0	53.0	20:35-20:40	54.3	53.6	23:35-23:40	52.5	51.9
14:40-14:45	54.7	54.0	17:40-17:45	54.2	53.1	20:40-20:45	54.7	53.5	23:40-23:45	52.5	52.0
14:45-14:50	54.9	53.7	17:45-17:50	54.5	53.2	20:45-20:50	53.9	53.3	23:45-23:50	52.5	51.9
14:50-14:55	55.1	53.9	17:50-17:55	55.5	53.7	20:50-20:55	54.0	53.1	23:50-23:55	53.2	51.8
14:55-15:00	54.4	53.6	17:55-18:00	53.9	53.2	20:55-21:00	54.2	53.3	23:55-00:00	53.9	52.2
15:00-15:05	54.6	53.2	18:00-18:05	53.6	53.0	21:00-21:05	54.0	53.1	00:00-00:05	52.6	51.4
15:05-15:10	54.8	54.0	18:05-18:10	54.1	53.1	21:05-21:10	54.3	53.4	00:05-00:10	53.0	51.9
15:10-15:15	55.4	54.3	18:10-18:15	53.5	52.9	21:10-21:15	53.7	53.0	00:10-00:15	53.3	52.3
15:15-15:20	55.5	54.6	18:15-18:20	53.1	52.6	21:15-21:20	53.8	53.1	00:15-00:20	52.8	52.1
15:20-15:25	55.3	54.5	18:20-18:25	53.0	52.5	21:20-21:25	53.4	52.9	00:20-00:25	53.2	52.3
15:25-15:30	55.2	54.2	18:25-18:30	53.5	52.9	21:25-21:30	53.8	52.9	00:25-00:30	52.7	52.0
15:30-15:35	55.2	53.9	18:30-18:35	53.5	53.0	21:30-21:35	53.6	53.1	00:30-00:35	52.9	51.9
15:35-15:40	54.8	53.4	18:35-18:40	53.6	52.6	21:35-21:40	53.5	53.0	00:35-00:40	52.9	52.1
15:40-15:45	54.5	53.3	18:40-18:45	53.2	52.7	21:40-21:45	53.5	52.8	00:40-00:45	52.8	52.3
15:45-15:50	54.5	53.5	18:45-18:50	53.2	52.2	21:45-21:50	53.3	52.6	00:45-00:50	52.8	52.6
15:50-15:55	55.0	54.1	18:50-18:55	53.5	53.0	21:50-21:55	53.2	52.7	00:50-00:55	53.2	52.1
15:55-16:00	54.7	54.2	18:55-19:00	54.7	52.9	21:55-22:00	53.2	52.5	00:55-01:00	52.8	52.2
16:00-16:05	56.1	54.4	19:00-19:05	53.1	52.5	22:00-22:05	53.4	52.6	01:00-01:05	53.2	52.5
16:05-16:10	54.9	54.0	19:05-19:10	53.5	52.9	22:05-22:10	53.5	52.7	01:05-01:10	53.4	52.4
16:10-16:15	54.8	54.0	19:10-19:15	53.9	53.2	22:10-22:15	53.2	52.5	01:10-01:15	53.3	52.2
16:15-16:20	54.7	53.6	19:15-19:20	54.1	53.0	22:15-22:20	53.1	52.6	01:15-01:20	53.0	51.5
16:20-16:25	55.2	53.7	19:20-19:25	54.1	52.9	22:20-22:25	52.8	52.3	01:20-01:25	52.5	52.1
16:25-16:30	54.9	54.1	19:25-19:30	53.7	53.0	22:25-22:30	53.5	52.5	01:25-01:30	52.4	51.9
16:30-16:35	55.1	54.3	19:30-19:35	53.5	52.7	22:30-22:35	53.5	52.9	01:30-01:35	53.0	52.0
16:35-16:40	55.3	54.0	19:35-19:40	53.5	52.8	22:35-22:40	53.4	52.7	01:35-01:40	52.4	51.7
16:40-16:45	54.9	54.1	19:40-19:45	53.9	53.1	22:40-22:45	53.1	52.5	01:40-01:45	52.4	51.8
16:45-16:50	54.5	53.8	19:45-19:50	54.0	53.2	22:45-22:50	53.7	53.1	01:45-01:50	53.4	52.0
16:50-16:55	54.5	53.8	19:50-19:55	54.0	53.0	22:50-22:55	54.1	52.9	01:50-01:55	52.4	51.7
16:55-17:00	54.4	53.1	19:55-20:00	54.0	53.1	22:55-23:00	52.9	52.3	01:55-02:00	52.4	51.8

ANALYSIS REPORT

Customer Name :Klong Luang Utilities Company Limited
Address :222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name :Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location :1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source :Ambient Noise
Measured Point :Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd., Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate :UTM (WGS84) 47P 0674312 E, 1550830 N
Measured Date :November 3-4, 2024
Measured By :Mr.Assada Chaiyawong
Analyzed By :Environment Research & Technology Co., Ltd.
Measured Instrument :Integrating Sound Level Meter Scarlett Tech Model ST-21D Serial Number 820445

Quotation No. :AR2024-01649
Analysis No. :2024-AF587-029
Report No. :2024-RAAX850
Report Date :November 21, 2024

Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Noise Level For 5 minutes, dB(A)	Leq	L90
	Leq	L90		Leq	L90		Leq	L90			
02:00-02:05	52.9	51.9	05:00-05:05	52.5	51.6	08:00-08:05	52.5	51.8	11:00-11:05	53.3	51.9
02:05-02:10	52.3	51.6	05:05-05:10	52.2	51.7	08:05-08:10	52.9	51.4	11:05-11:10	52.3	51.4
02:10-02:15	52.9	52.5	05:10-05:15	52.6	52.0	08:10-08:15	53.1	51.7	11:10-11:15	52.7	51.8
02:15-02:20	53.1	52.1	05:15-05:20	52.5	51.3	08:15-08:20	53.5	51.5	11:15-11:20	52.9	51.9
02:20-02:25	54.2	52.3	05:20-05:25	53.6	52.2	08:20-08:25	53.1	51.6	11:20-11:25	51.9	51.2
02:25-02:30	52.9	52.1	05:25-05:30	53.3	51.9	08:25-08:30	52.8	51.4	11:25-11:30	52.5	52.0
02:30-02:35	52.8	52.0	05:30-05:35	52.5	51.7	08:30-08:35	52.1	51.2	11:30-11:35	52.4	51.7
02:35-02:40	53.0	52.5	05:35-05:40	52.2	51.6	08:35-08:40	52.1	51.2	11:35-11:40	52.1	51.4
02:40-02:45	52.9	51.9	05:40-05:45	53.1	51.9	08:40-08:45	52.6	51.8	11:40-11:45	52.8	51.8
02:45-02:50	52.6	52.0	05:45-05:50	53.6	52.2	08:45-08:50	52.2	51.1	11:45-11:50	52.2	51.6
02:50-02:55	53.4	52.3	05:50-05:55	53.9	52.1	08:50-08:55	52.2	51.3	11:50-11:55	52.3	51.4
02:55-03:00	53.3	52.5	05:55-06:00	52.7	52.0	08:55-09:00	51.8	51.0	11:55-12:00	52.6	51.3
03:00-03:05	52.6	51.8	06:00-06:05	53.2	52.0	09:00-09:05	51.9	51.2	12:00-12:05	53.5	52.5
03:05-03:10	52.6	52.1	06:05-06:10	54.2	52.5	09:05-09:10	52.2	51.6	12:05-12:10	53.2	52.4
03:10-03:15	52.5	52.0	06:10-06:15	54.6	52.7	09:10-09:15	52.1	51.4	12:10-12:15	53.6	52.9
03:15-03:20	52.6	51.9	06:15-06:20	53.6	52.4	09:15-09:20	52.2	51.4	12:15-12:20	52.7	51.9
03:20-03:25	52.6	52.0	06:20-06:25	54.4	52.1	09:20-09:25	52.5	51.8	12:20-12:25	54.0	52.0
03:25-03:30	52.5	51.8	06:25-06:30	53.8	51.7	09:25-09:30	52.8	51.6	12:25-12:30	53.9	52.3
03:30-03:35	52.4	51.7	06:30-06:35	54.0	51.9	09:30-09:35	52.2	51.5	12:30-12:35	52.8	52.1
03:35-03:40	51.7	51.1	06:35-06:40	53.3	52.0	09:35-09:40	52.2	51.9	12:35-12:40	53.7	52.0
03:40-03:45	52.0	51.3	06:40-06:45	53.9	52.3	09:40-09:45	54.4	51.6	12:40-12:45	52.7	52.0
03:45-03:50	52.0	51.5	06:45-06:50	53.7	51.9	09:45-09:50	52.5	51.8	12:45-12:50	53.4	52.8
03:50-03:55	51.8	51.2	06:50-06:55	52.5	51.4	09:50-09:55	51.7	51.1	12:50-12:55	54.1	51.9
03:55-04:00	52.1	51.6	06:55-07:00	53.5	51.8	09:55-10:00	52.2	51.8	12:55-13:00	55.6	51.5
04:00-04:05	51.9	51.5	07:00-07:05	53.7	52.0	10:00-10:05	53.5	52.2	13:00-13:05	56.0	52.2
04:05-04:10	51.7	50.8	07:05-07:10	52.8	51.9	10:05-10:10	52.8	51.8	13:05-13:10	53.3	51.7
04:10-04:15	52.0	51.7	07:10-07:15	53.2	51.5	10:10-10:15	53.5	52.3	13:10-13:15	53.2	51.8
04:15-04:20	52.5	51.9	07:15-07:20	53.1	52.1	10:15-10:20	53.6	51.7	13:15-13:20	53.5	52.1
04:20-04:25	52.2	51.6	07:20-07:25	52.9	51.9	10:20-10:25	52.7	51.9	13:20-13:25	53.0	52.5
04:25-04:30	52.6	51.5	07:25-07:30	53.0	51.7	10:25-10:30	52.9	51.6	13:25-13:30	53.1	52.1
04:30-04:35	51.9	51.3	07:30-07:35	52.8	51.5	10:30-10:35	52.7	52.0	13:30-13:35	52.3	51.3
04:35-04:40	52.2	51.5	07:35-07:40	54.9	51.7	10:35-10:40	52.2	51.8	13:35-13:40	53.3	52.5
04:40-04:45	52.1	51.2	07:40-07:45	53.8	51.8	10:40-10:45	52.9	51.7	13:40-13:45	53.6	52.4
04:45-04:50	51.9	51.4	07:45-07:50	52.9	51.6	10:45-10:50	52.3	51.5	13:45-13:50	52.9	52.1
04:50-04:55	52.0	51.3	07:50-07:55	52.8	51.9	10:50-10:55	52.0	51.2	13:50-13:55	52.5	52.0
04:55-05:00	52.4	51.7	07:55-08:00	53.4	52.3	10:55-11:00	52.5	51.7	13:55-14:00	53.6	52.5

ANALYSIS REPORT

Customer Name :Klong Luang Utilities Company Limited
Address :222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name :Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location :1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source :Ambient Noise
Measured Point :Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd., Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate :UTM (WGS84) 47P 0674312 E, 1550830 N
Measured Date :November 3-4, 2024
Measured By :Mr.Assada Chaiyawong
Analyzed By :Environment Research & Technology Co., Ltd.
Measured Instrument :Integrating Sound Level Meter Scarlett Tech Model ST-21D Serial Number 820445

Quotation No. :AR2024-01649
Analysis No. :2024-AF587-029
Report No. :2024-RAAX850
Report Date :November 21, 2024

Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Noise Level For 5 minutes, dB(A)	Leq	L90
	Leq	L90		Leq	L90		Leq	L90			
14:00-14:05	52.5	51.9	17:00-17:05	53.1	52.1	20:00-20:05	54.1	52.7	23:00-23:05	53.5	52.4
14:05-14:10	53.1	52.4	17:05-17:10	53.0	52.2	20:05-20:10	54.5	52.6	23:05-23:10	53.0	52.1
14:10-14:15	53.4	52.4	17:10-17:15	52.8	52.2	20:10-20:15	53.3	52.7	23:10-23:15	52.7	52.6
14:15-14:20	51.9	51.1	17:15-17:20	52.7	51.7	20:15-20:20	53.3	52.5	23:15-23:20	54.3	52.9
14:20-14:25	52.4	51.5	17:20-17:25	53.6	52.6	20:20-20:25	52.8	52.2	23:20-23:25	52.7	51.9
14:25-14:30	52.9	52.2	17:25-17:30	53.2	52.3	20:25-20:30	52.8	52.3	23:25-23:30	52.4	51.8
14:30-14:35	53.7	52.5	17:30-17:35	54.1	52.8	20:30-20:35	53.1	52.5	23:30-23:35	52.9	51.9
14:35-14:40	53.6	52.7	17:35-17:40	55.0	52.6	20:35-20:40	53.6	52.4	23:35-23:40	53.0	52.1
14:40-14:45	52.8	52.0	17:40-17:45	53.7	52.4	20:40-20:45	52.9	52.3	23:40-23:45	53.1	52.4
14:45-14:50	52.8	52.2	17:45-17:50	53.2	52.5	20:45-20:50	53.3	52.5	23:45-23:50	53.4	52.6
14:50-14:55	52.6	52.0	17:50-17:55	53.3	52.3	20:50-20:55	53.0	52.4	23:50-23:55	52.9	52.4
14:55-15:00	52.6	51.5	17:55-18:00	53.5	52.5	20:55-21:00	52.8	52.2	23:55-00:00	52.9	52.1
15:00-15:05	53.8	51.6	18:00-18:05	56.9	52.3	21:00-21:05	53.2	52.4	00:00-00:05	53.0	52.5
15:05-15:10	53.9	52.5	18:05-18:10	54.4	52.2	21:05-21:10	53.3	52.7	00:05-00:10	53.5	52.0
15:10-15:15	53.5	52.5	18:10-18:15	53.2	52.3	21:10-21:15	54.0	52.8	00:10-00:15	52.8	52.5
15:15-15:20	54.5	52.7	18:15-18:20	53.2	52.3	21:15-21:20	54.6	52.9	00:15-00:20	53.6	52.4
15:20-15:25	54.4	53.0	18:20-18:25	52.8	51.8	21:20-21:25	53.3	52.7	00:20-00:25	53.0	52.6
15:25-15:30	53.8	52.7	18:25-18:30	52.9	52.5	21:25-21:30	53.7	52.6	00:25-00:30	55.3	52.2
15:30-15:35	53.3	51.9	18:30-18:35	52.8	52.3	21:30-21:35	53.6	52.9	00:30-00:35	52.4	51.1
15:35-15:40	53.4	52.0	18:35-18:40	53.4	52.1	21:35-21:40	53.8	53.2	00:35-00:40	51.8	51.4
15:40-15:45	54.1	52.1	18:40-18:45	52.6	52.0	21:40-21:45	53.8	52.9	00:40-00:45	52.4	51.5
15:45-15:50	53.0	52.2	18:45-18:50	52.8	52.2	21:45-21:50	53.4	52.8	00:45-00:50	53.5	51.9
15:50-15:55	52.2	51.6	18:50-18:55	52.9	52.2	21:50-21:55	53.7	53.0	00:50-00:55	52.8	52.1
15:55-16:00	52.8	52.1	18:55-19:00	52.8	52.3	21:55-22:00	53.8	52.9	00:55-01:00	52.7	52.0
16:00-16:05	53.9	52.3	19:00-19:05	53.2	52.4	22:00-22:05	53.7	52.6	01:00-01:05	52.6	51.8
16:05-16:10	52.4	51.9	19:05-19:10	52.7	52.1	22:05-22:10	53.2	52.4	01:05-01:10	52.8	52.0
16:10-16:15	52.7	52.1	19:10-19:15	52.8	52.2	22:10-22:15	53.0	52.3	01:10-01:15	53.2	52.0
16:15-16:20	53.5	52.3	19:15-19:20	54.0	52.7	22:15-22:20	53.2	52.1	01:15-01:20	52.3	51.7
16:20-16:25	52.6	51.8	19:20-19:25	53.9	52.8	22:20-22:25	52.9	52.2	01:20-01:25	52.2	51.3
16:25-16:30	52.8	52.1	19:25-19:30	53.5	52.7	22:25-22:30	52.8	52.0	01:25-01:30	53.0	51.3
16:30-16:35	55.8	52.0	19:30-19:35	53.6	52.5	22:30-22:35	52.6	52.2	01:30-01:35	51.6	51.0
16:35-16:40	54.4	51.9	19:35-19:40	53.6	52.6	22:35-22:40	52.4	51.9	01:35-01:40	51.9	50.6
16:40-16:45	52.6	51.6	19:40-19:45	53.1	53.0	22:40-22:45	52.2	52.0	01:40-01:45	51.6	51.1
16:45-16:50	52.7	51.8	19:45-19:50	54.0	52.5	22:45-22:50	52.8	52.2	01:45-01:50	51.4	50.9
16:50-16:55	52.9	51.9	19:50-19:55	53.7	53.0	22:50-22:55	52.9	52.0	01:50-01:55	51.8	50.9
16:55-17:00	52.8	52.0	19:55-20:00	53.4	52.7	22:55-23:00	52.7	51.8	01:55-02:00	51.6	51.1

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source : Ambient Noise
Measured Point : Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd., Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0674312 E, 1550830 N
Measured Date : November 4, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scairek Tech Model ST-21D Serial Number 820445

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-029
Report No. : 2024-RAAX850
Report Date : November 21, 2024

Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Noise Level For 5 minutes, Leq	L90
	Leq	L90		Leq	L90		Leq	L90		
02:00-02:05	51.9	51.2	05:00-05:05	52.8	52.0	08:00-08:05	52.6	51.6	52.0	51.3
02:05-02:10	51.2	50.7	05:05-05:10	52.2	51.6	08:05-08:10	52.9	51.9	52.7	52.0
02:10-02:15	51.4	51.0	05:10-05:15	52.1	51.4	08:10-08:15	53.4	52.1	53.2	52.7
02:15-02:20	51.5	51.2	05:15-05:20	53.0	51.8	08:15-08:20	53.2	52.1	53.5	52.3
02:20-02:25	52.7	50.8	05:20-05:25	52.9	52.0	08:20-08:25	53.0	52.2	53.0	52.4
02:25-02:30	51.6	50.9	05:25-05:30	52.0	51.5	08:25-08:30	54.8	53.8	52.9	52.2
02:30-02:35	51.9	51.0	05:30-05:35	52.3	51.6	08:30-08:35	53.0	52.0	52.7	52.1
02:35-02:40	51.9	51.4	05:35-05:40	56.9	51.8	08:35-08:40	52.7	51.8	52.6	51.9
02:40-02:45	51.8	51.3	05:40-05:45	53.9	52.0	08:40-08:45	53.3	52.3	52.5	51.7
02:45-02:50	52.1	50.9	05:45-05:50	53.4	51.7	08:45-08:50	55.1	52.1	52.8	51.9
02:50-02:55	51.5	51.0	05:50-05:55	52.9	51.7	08:50-08:55	53.2	52.1	54.4	52.7
02:55-03:00	51.7	51.0	05:55-06:00	55.1	52.3	08:55-09:00	52.9	51.9	53.1	52.5
03:00-03:05	51.8	51.2	06:00-06:05	57.4	52.4	09:00-09:05	59.9	52.2	54.0	52.2
03:05-03:10	51.8	51.3	06:05-06:10	55.7	52.6	09:05-09:10	53.0	51.7	53.8	52.6
03:10-03:15	51.8	51.4	06:10-06:15	55.4	52.2	09:10-09:15	53.5	51.8	52.8	52.4
03:15-03:20	52.2	51.1	06:15-06:20	56.0	52.1	09:15-09:20	54.3	52.4	53.0	52.3
03:20-03:25	52.3	51.6	06:20-06:25	54.4	52.6	09:20-09:25	57.9	52.5	52.7	52.0
03:25-03:30	51.7	51.3	06:25-06:30	54.6	52.3	09:25-09:30	54.8	52.2	53.0	52.4
03:30-03:35	52.0	51.4	06:30-06:35	53.6	52.2	09:30-09:35	52.7	51.8	52.6	52.1
03:35-03:40	51.8	51.2	06:35-06:40	53.6	52.5	09:35-09:40	60.0	52.6	52.2	51.6
03:40-03:45	51.9	51.2	06:40-06:45	55.2	52.4	09:40-09:45	60.1	55.2	52.5	52.5
03:45-03:50	51.7	51.1	06:45-06:50	54.3	52.5	09:45-09:50	52.4	51.3	53.0	52.1
03:50-03:55	51.8	51.2	06:50-06:55	54.1	52.0	09:50-09:55	53.6	51.6	54.4	52.5
03:55-04:00	51.9	51.4	06:55-07:00	53.2	51.9	09:55-10:00	52.4	51.6	52.9	52.1
04:00-04:05	51.9	51.3	07:00-07:05	54.0	51.8	10:00-10:05	55.0	53.2	54.0	53.4
04:05-04:10	52.4	51.1	07:05-07:10	54.1	51.9	10:05-10:10	52.1	51.9	54.1	53.7
04:10-04:15	52.6	51.4	07:10-07:15	53.7	51.9	10:10-10:15	52.1	51.5	54.2	53.9
04:15-04:20	52.1	51.5	07:15-07:20	53.1	52.0	10:15-10:20	52.1	51.4	54.3	53.6
04:20-04:25	52.3	51.6	07:20-07:25	53.0	52.0	10:20-10:25	53.2	51.1	54.4	53.9
04:25-04:30	52.4	51.7	07:25-07:30	53.2	51.9	10:25-10:30	53.7	51.3	54.3	53.5
04:30-04:35	52.2	51.5	07:30-07:35	52.5	51.7	10:30-10:35	52.1	51.4	54.7	53.8
04:35-04:40	52.4	51.7	07:35-07:40	52.8	51.8	10:35-10:40	52.9	51.3	54.0	53.6
04:40-04:45	52.3	51.6	07:40-07:45	53.1	51.9	10:40-10:45	54.3	51.8	53.9	53.4
04:45-04:50	52.8	51.9	07:45-07:50	53.4	52.0	10:45-10:50	55.0	51.3	54.5	53.7
04:50-04:55	52.3	51.5	07:50-07:55	53.6	52.4	10:50-10:55	54.7	51.5	54.5	53.9
04:55-05:00	52.2	51.6	07:55-08:00	52.9	51.8	10:55-11:00	53.4	51.4	54.4	53.8

ANALYSIS REPORT

Customer Name : Klong Luang Utilities Company Limited
Address : 222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name : Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location : 1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source : Ambient Noise
Measured Point : Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd., Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate : UTM (WGS84) 47P 0674312 E, 1550830 N
Measured Date : November 4-5, 2024
Measured By : Mr.Assada Chaiyawong
Analyzed By : Environment Research & Technology Co., Ltd.
Measured Instrument : Integrating Sound Level Meter Scairek Tech Model ST-21D Serial Number 820445

Quotation No. : AR2024-01649
Analysis No. : 2024-AF587-029
Report No. : 2024-RAAX850
Report Date : November 21, 2024

Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Noise Level For 5 minutes, Leq	L90
	Leq	L90		Leq	L90		Leq	L90		
14:00-14:05	53.2	53.0	17:00-17:05	53.6	52.2	20:00-20:05	53.1	52.6	53.1	52.4
14:05-14:10	53.7	52.7	17:05-17:10	53.4	52.6	20:05-20:10	53.2	52.7	53.5	52.6
14:10-14:15	54.0	53.1	17:10-17:15	53.6	52.5	20:10-20:15	53.4	53.1	53.1	52.8
14:15-14:20	53.8	53.0	17:15-17:20	53.5	52.4	20:15-20:20	53.9	53.1	53.1	52.4
14:20-14:25	53.7	52.7	17:20-17:25	53.8	52.8	20:20-20:25	53.8	53.2	53.2	52.5
14:25-14:30	53.5	53.3	17:25-17:30	53.6	52.8	20:25-20:30	53.8	53.1	53.6	52.5
14:30-14:35	53.5	53.0	17:30-17:35	53.7	53.0	20:30-20:35	53.0	52.4	52.9	52.1
14:35-14:40	53.4	53.2	17:35-17:40	53.9	52.8	20:35-20:40	53.7	52.7	52.8	52.0
14:40-14:45	53.3	52.7	17:40-17:45	54.3	52.9	20:40-20:45	53.7	52.9	52.3	52.0
14:45-14:50	53.2	52.6	17:45-17:50	53.4	52.6	20:45-20:50	53.6	52.7	52.7	52.0
14:50-14:55	54.0	53.1	17:50-17:55	53.9	53.1	20:50-20:55	53.7	53.2	53.5	52.2
14:55-15:00	53.5	53.1	17:55-18:00	53.6	53.0	20:55-21:00	53.8	52.7	55.1	52.6
15:00-15:05	54.0	53.0	18:00-18:05	54.7	52.9	21:00-21:05	53.9	53.4	53.2	52.5
15:05-15:10	53.9	53.3	18:05-18:10	53.7	53.0	21:05-21:10	53.7	52.8	52.8	52.0
15:10-15:15	54.1	53.2	18:10-18:15	53.3	52.7	21:10-21:15	53.3	52.7	52.8	51.9
15:15-15:20	53.9	53.0	18:15-18:20	54.0	52.8	21:15-21:20	53.7	53.0	53.0	52.1
15:20-15:25	55.0	53.3	18:20-18:25	54.1	52.8	21:20-21:25	53.4	52.9	53.1	52.3
15:25-15:30	53.5	52.8	18:25-18:30	53.2	52.6	21:25-21:30	53.5	53.0	53.2	52.2
15:30-15:35	53.3	52.7	18:30-18:35	53.3	52.8	21:30-21:35	53.8	53.2	53.4	52.2
15:35-15:40	53.1	52.5	18:35-18:40	52.3	52.7	21:35-21:40	53.9	53.4	53.6	52.5
15:40-15:45	53.3	52.6	18:40-18:45	53.1	52.5	21:40-21:45	53.7	53.0	53.5	52.6
15:45-15:50	53.7	52.7	18:45-18:50	52.9	52.4	21:45-21:50	53.6	53.2	52.7	52.2
15:50-15:55	53.8	52.8	18:50-18:55	53.5	52.6	21:50-21:55	53.7	52.8	53.0	52.4
15:55-16:00	53.5	52.6	18:55-19:00	53.9	52.9	21:55-22:00	53.5	52.7	52.9	51.7
16:00-16:05	53.5	52.6	19:00-19:05	53.9	52.9	22:00-22:05	53.7	52.7	52.9	52.2
16:05-16:10	55.3	52.7	19:05-19:10	53.6	52.9	22:05-22:10	53.7	52.9	53.8	52.4
16:10-16:15	53.7	52.9	19:10-19:15	53.8	53.0	22:10-22:15	53.5	52.8	52.8	51.8
16:15-16:20	54.5	52.8	19:15-19:20	54.0	53.3	22:15-22:20	53.5	52.9	52.9	51.9
16:20-16:25	53.6	52.5	19:20-19:25	53.8	52.9	22:20-22:25	53.6	52.6	52.3	51.7
16:25-16:30	54.8	52.8	19:25-19:30	53.8	52.9	22:25-22:30	53.5	52.4	52.2	51.6
16:30-16:35	54.5	53.2	19:30-19:35	54.0	53.3	22:30-22:35	53.3	52.7	51.8	51.8
16:35-16:40	55.6	52.8	19:35-19:40	53.3	52.8	22:35-22:40	53.5	52.6	51.9	51.5
16:40-16:45	53.5	52.7	19:40-19:45	53.2	52.6	22:40-22:45	53.7	52.8	51.5	51.5
16:45-16:50	53.4	52.5	19:45-19:50	53.0	52.5	22:45-22:50	53.0	52.4	52.5	51.7
16:50-16:55	53.3	52.6	19:50-19:55	53.2	52.8	22:50-22:55	53.5	52.6	52.1	51.6
16:55-17:00	53.1	52.1	19:55-20:00	53.2	52.3	22:55-23:00	53.3	52.6	52.4	51.9

ANALYSIS REPORT

Customer Name :Klong Luang Utilities Company Limited
Address :222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name :Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location :1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source :Ambient Noise
Measured Point :Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd., Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate :UTM (WGS84) 47P 0674312 E, 1550830 N
Measured Date :November 5-6, 2024
Measured By :Mr.Assada Chaiyawong
Analyzed By :Environment Research & Technology Co., Ltd.
Measured Instrument :Integrating Sound Level Meter Scairek Tech Model ST-21D Serial Number 820445

Quotation No. :AR2024-01649
Analysis No. :2024-AF587-029
Report No. :2024-RAAX950
Report Date :November 21, 2024

Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Noise Level For 5 minutes, dB(A)	Leq	L90
	Leq	L90		Leq	L90		Leq	L90			
02:00-02:05	52.9	52.0	05:00-05:05	54.1	51.9	08:00-08:05	53.3	52.3	11:00-11:05	53.5	52.9
02:05-02:10	52.6	52.1	05:05-05:10	54.4	51.6	08:05-08:10	53.3	52.3	11:05-11:10	53.7	53.1
02:10-02:15	53.0	52.0	05:10-05:15	54.3	52.1	08:10-08:15	54.2	52.9	11:10-11:15	53.9	53.5
02:15-02:20	52.5	51.9	05:15-05:20	57.1	52.2	08:15-08:20	53.4	52.7	11:15-11:20	53.8	53.3
02:20-02:25	52.0	51.4	05:20-05:25	55.8	52.0	08:20-08:25	53.6	52.7	11:20-11:25	53.9	53.4
02:25-02:30	51.7	51.2	05:25-05:30	54.1	52.0	08:25-08:30	53.2	52.6	11:25-11:30	53.6	52.6
02:30-02:35	52.3	51.5	05:30-05:35	53.4	52.1	08:30-08:35	54.6	52.9	11:30-11:35	53.6	52.7
02:35-02:40	52.2	51.6	05:35-05:40	54.3	52.4	08:35-08:40	53.5	52.3	11:35-11:40	54.0	53.0
02:40-02:45	52.1	51.5	05:40-05:45	53.2	52.0	08:40-08:45	53.4	52.5	11:40-11:45	53.3	52.6
02:45-02:50	52.5	51.8	05:45-05:50	53.6	52.4	08:45-08:50	53.2	52.6	11:45-11:50	53.2	52.5
02:50-02:55	52.5	51.9	05:50-05:55	55.5	52.2	08:50-08:55	53.3	52.6	11:50-11:55	53.8	52.8
02:55-03:00	52.2	51.6	05:55-06:00	55.0	52.1	08:55-09:00	54.8	53.0	11:55-12:00	56.1	53.1
03:00-03:05	52.4	51.8	06:00-06:05	56.2	52.4	09:00-09:05	54.0	52.5	12:00-12:05	54.0	52.6
03:05-03:10	51.8	51.3	06:05-06:10	56.3	52.5	09:05-09:10	53.8	52.9	12:05-12:10	53.1	52.2
03:10-03:15	52.1	51.5	06:10-06:15	56.5	52.6	09:10-09:15	53.8	53.1	12:10-12:15	54.0	52.4
03:15-03:20	52.1	51.6	06:15-06:20	54.2	52.2	09:15-09:20	54.0	53.1	12:15-12:20	53.6	52.9
03:20-03:25	53.1	51.7	06:20-06:25	54.5	52.5	09:20-09:25	53.8	53.0	12:20-12:25	53.9	53.1
03:25-03:30	51.9	51.4	06:25-06:30	53.9	52.1	09:25-09:30	54.2	53.2	12:25-12:30	55.1	53.3
03:30-03:35	51.9	51.5	06:30-06:35	54.0	52.3	09:30-09:35	53.6	52.8	12:30-12:35	53.7	52.7
03:35-03:40	52.2	51.7	06:35-06:40	54.0	52.4	09:35-09:40	53.9	53.1	12:35-12:40	54.4	52.8
03:40-03:45	52.1	51.6	06:40-06:45	54.5	52.3	09:40-09:45	53.6	52.8	12:40-12:45	54.1	52.9
03:45-03:50	52.2	51.7	06:45-06:50	54.4	52.5	09:45-09:50	53.6	52.6	12:45-12:50	54.4	53.0
03:50-03:55	52.4	51.5	06:50-06:55	53.6	52.1	09:50-09:55	53.7	53.0	12:50-12:55	53.4	52.8
03:55-04:00	52.2	51.5	06:55-07:00	53.8	52.5	09:55-10:00	53.4	52.8	12:55-13:00	54.4	53.5
04:00-04:05	52.4	51.9	07:00-07:05	54.8	52.4	10:00-10:05	53.6	52.8	13:00-13:05	54.8	53.9
04:05-04:10	52.1	51.6	07:05-07:10	53.8	52.5	10:05-10:10	54.7	52.6	13:05-13:10	54.1	53.3
04:10-04:15	52.2	51.6	07:10-07:15	54.1	52.7	10:10-10:15	53.0	52.3	13:10-13:15	54.5	53.5
04:15-04:20	52.3	51.8	07:15-07:20	54.5	52.7	10:15-10:20	52.4	51.7	13:15-13:20	54.0	52.9
04:20-04:25	52.6	52.1	07:20-07:25	54.0	52.8	10:20-10:25	53.3	52.1	13:20-13:25	54.0	53.0
04:25-04:30	52.4	51.7	07:25-07:30	54.6	52.7	10:25-10:30	53.3	52.4	13:25-13:30	53.3	52.6
04:30-04:35	52.2	51.5	07:30-07:35	55.3	53.1	10:30-10:35	53.1	52.2	13:30-13:35	53.7	53.0
04:35-04:40	52.6	52.1	07:35-07:40	54.2	52.5	10:35-10:40	53.1	52.0	13:35-13:40	54.9	53.5
04:40-04:45	52.8	52.1	07:40-07:45	53.6	52.5	10:40-10:45	53.1	52.4	13:40-13:45	54.0	53.0
04:45-04:50	52.5	51.9	07:45-07:50	53.7	52.9	10:45-10:50	56.2	52.8	13:45-13:50	53.4	52.7
04:50-04:55	52.5	51.6	07:50-07:55	53.5	52.6	10:50-10:55	54.5	53.0	13:50-13:55	53.8	53.2
04:55-05:00	54.4	52.1	07:55-08:00	53.4	52.1	10:55-11:00	53.5	52.7	13:55-14:00	54.6	53.4

ANALYSIS REPORT

Customer Name :Klong Luang Utilities Company Limited
Address :222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name :Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location :1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source :Ambient Noise
Measured Point :Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd., Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate :UTM (WGS84) 47P 0674312 E, 1550830 N
Measured Date :November 5-6, 2024
Measured By :Mr.Assada Chaiyawong
Analyzed By :Environment Research & Technology Co., Ltd.
Measured Instrument :Integrating Sound Level Meter Scairek Tech Model ST-21D Serial Number 820445

Quotation No. :AR2024-01649
Analysis No. :2024-AF587-029
Report No. :2024-RAAX950
Report Date :November 21, 2024

Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Noise Level For 5 minutes, dB(A)	Leq	L90
	Leq	L90		Leq	L90		Leq	L90			
14:00-14:05	53.9	53.1	17:00-17:05	54.3	53.5	20:00-20:05	56.3	53.8	23:00-23:05	53.8	53.2
14:05-14:10	53.8	53.5	17:05-17:10	54.3	53.6	20:05-20:10	54.7	54.1	23:05-23:10	53.5	52.9
14:10-14:15	53.8	53.3	17:10-17:15	55.6	54.0	20:10-20:15	54.8	54.2	23:10-23:15	54.4	52.8
14:15-14:20	53.7	53.4	17:15-17:20	55.0	54.0	20:15-20:20	55.0	53.9	23:15-23:20	53.6	52.9
14:20-14:25	53.5	53.1	17:20-17:25	54.6	53.8	20:20-20:25	54.5	53.9	23:20-23:25	53.8	53.1
14:25-14:30	53.8	53.2	17:25-17:30	54.9	53.9	20:25-20:30	54.6	54.2	23:25-23:30	53.4	52.6
14:30-14:35	53.3	52.8	17:30-17:35	54.2	53.4	20:30-20:35	54.2	53.7	23:30-23:35	53.4	52.7
14:35-14:40	54.8	53.3	17:35-17:40	54.1	53.3	20:35-20:40	53.8	53.3	23:35-23:40	52.7	52.0
14:40-14:45	53.7	53.1	17:40-17:45	54.4	53.7	20:40-20:45	54.2	53.3	23:40-23:45	53.0	52.1
14:45-14:50	53.8	53.0	17:45-17:50	54.3	53.6	20:45-20:50	54.2	53.4	23:45-23:50	53.8	52.8
14:50-14:55	53.9	52.9	17:50-17:55	55.4	53.9	20:50-20:55	54.2	53.6	23:50-23:55	53.6	52.7
14:55-15:00	53.5	52.6	17:55-18:00	54.7	54.1	20:55-21:00	54.1	53.4	23:55-00:00	53.9	52.1
15:00-15:05	53.8	53.2	18:00-18:05	54.4	53.9	21:00-21:05	54.0	53.3	00:00-00:05	52.4	52.0
15:05-15:10	53.7	52.9	18:05-18:10	54.4	53.5	21:05-21:10	54.1	53.4	00:05-00:10	52.9	51.5
15:10-15:15	56.7	53.4	18:10-18:15	54.0	53.0	21:10-21:15	53.9	53.2	00:10-00:15	52.9	51.9
15:15-15:20	54.5	52.9	18:15-18:20	54.4	53.3	21:15-21:20	53.6	52.9	00:15-00:20	52.9	51.8
15:20-15:25	53.3	52.6	18:20-18:25	53.7	53.1	21:20-21:25	53.7	53.1	00:20-00:25	54.3	51.8
15:25-15:30	54.6	53.2	18:25-18:30	53.7	52.9	21:25-21:30	54.3	53.4	00:25-00:30	52.9	52.2
15:30-15:35	54.1	53.3	18:30-18:35	55.2	53.1	21:30-21:35	53.8	53.2	00:30-00:35	52.6	52.0
15:35-15:40	54.9	53.3	18:35-18:40	53.7	53.2	21:35-21:40	53.7	52.9	00:35-00:40	53.1	52.3
15:40-15:45	55.6	53.7	18:40-18:45	53.5	53.1	21:40-21:45	54.2	53.2	00:40-00:45	53.0	52.4
15:45-15:50	55.6	54.2	18:45-18:50	53.7	53.2	21:45-21:50	53.7	52.9	00:45-00:50	52.6	52.0
15:50-15:55	60.0	54.8	18:50-18:55	53.4	52.7	21:50-21:55	53.6	52.9	00:50-00:55	52.8	51.7
15:55-16:00	65.4	62.5	18:55-19:00	53.5	52.9	21:55-22:00	53.9	53.1	00:55-01:00	53.7	52.5
16:00-16:05	60.3	54.1	19:00-19:05	53.9	53.2	22:00-22:05	53.3	52.8	01:00-01:05	53.5	52.5
16:05-16:10	54.5	53.7	19:05-19:10	60.6	54.4	22:05-22:10	53.7	53.1	01:05-01:10	53.2	51.7
16:10-16:15	54.3	53.2	19:10-19:15	56.0	53.8	22:10-22:15	53.4	52.9	01:10-01:15	53.2	52.5
16:15-16:20	53.6	52.9	19:15-19:20	55.2	54.0	22:15-22:20	53.9	53.2	01:15-01:20	53.1	52.3
16:20-16:25	53.4	52.7	19:20-19:25	55.0	53.8	22:20-22:25	53.9	53.0	01:20-01:25	53.6	51.7
16:25-16:30	53.8	52.4	19:25-19:30	54.8	54.1	22:25-22:30	53.4	53.3	01:25-01:30	52.6	51.9
16:30-16:35	53.3	52.6	19:30-19:35	54.5	53.7	22:30-22:35	54.4	53.5	01:30-01:35	52.8	52.2
16:35-16:40	53.9	52.5	19:35-19:40	54.8	54.0	22:35-22:40	54.1	53.5	01:35-01:40	53.0	52.3
16:40-16:45	53.8	53.0	19:40-19:45	54.5	53.7	22:40-22:45	54.3	53.3	01:40-01:45	53.2	52.1
16:45-16:50	55.7	53.1	19:45-19:50	54.6	53.9	22:45-22:50	54.1	53.5	01:45-01:50	52.4	51.9
16:50-16:55	57.6	53.6	19:50-19:55	54.6	53.9	22:50-22:55	54.0	53.4	01:50-01:55	52.6	52.0
16:55-17:00	59.7	53.5	19:55-20:00	54.0	53.5	22:55-23:00	53.6	53.0	01:55-02:00	52.5	51.9

ANALYSIS REPORT

Customer Name :Klong Luang Utilities Company Limited
Address :222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name :Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location :1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source :Ambient Noise
Measured Point :Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd., Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate :UTM (WGS84) 47P 0674312 E, 1550830 N
Measured Date :November 6, 2024
Measured By :Mr.Assada Chaiyawong
Analyzed By :Environment Research & Technology Co., Ltd.
Measured Instrument :Integrating Sound Level Meter Scarlet Tech Model ST-21D Serial Number 820445

Quotation No. :AR2024-01649
Analysis No. :2024-AF587-029
Report No. :2024-RAAX850
Report Date :November 21, 2024

Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)				
	Leq	L90		Leq	L90		Leq	L90			
02:00-02:05	52.9	52.2	05:00-05:05	52.6	51.9	08:00-08:05	53.7	52.5	11:00-11:05	53.9	52.8
02:05-02:10	52.9	52.2	05:05-05:10	52.5	51.9	08:05-08:10	53.7	52.6	11:05-11:10	54.2	53.6
02:10-02:15	53.0	52.4	05:10-05:15	52.7	52.0	08:10-08:15	53.7	52.4	11:10-11:15	53.4	52.7
02:15-02:20	52.2	51.4	05:15-05:20	53.1	52.3	08:15-08:20	54.6	52.8	11:15-11:20	54.0	53.2
02:20-02:25	52.6	51.8	05:20-05:25	53.2	52.3	08:20-08:25	54.0	51.9	11:20-11:25	54.3	53.5
02:25-02:30	52.9	52.1	05:25-05:30	53.2	52.0	08:25-08:30	52.6	51.7	11:25-11:30	54.9	53.8
02:30-02:35	53.5	52.5	05:30-05:35	55.9	52.2	08:30-08:35	55.1	52.1	11:30-11:35	55.0	54.1
02:35-02:40	53.6	52.3	05:35-05:40	53.7	52.3	08:35-08:40	54.0	52.0	11:35-11:40	54.6	53.9
02:40-02:45	52.8	52.2	05:40-05:45	54.9	52.4	08:40-08:45	54.5	52.0	11:40-11:45	54.7	54.0
02:45-02:50	52.4	51.7	05:45-05:50	56.2	52.4	08:45-08:50	56.1	52.0	11:45-11:50	54.1	53.5
02:50-02:55	52.2	51.6	05:50-05:55	53.6	52.0	08:50-08:55	54.8	52.3	11:50-11:55	54.3	53.6
02:55-03:00	52.2	51.5	05:55-06:00	55.6	52.2	08:55-09:00	53.8	52.9	11:55-12:00	53.9	53.1
03:00-03:05	52.3	51.5	06:00-06:05	53.7	52.3	09:00-09:05	53.9	53.0	12:00-12:05	54.7	53.4
03:05-03:10	52.3	51.6	06:05-06:10	56.2	52.3	09:05-09:10	53.9	53.3	12:05-12:10	54.3	53.6
03:10-03:15	52.1	51.5	06:10-06:15	55.1	52.5	09:10-09:15	53.4	52.4	12:10-12:15	54.5	53.7
03:15-03:20	52.4	51.8	06:15-06:20	56.8	52.4	09:15-09:20	54.9	52.9	12:15-12:20	54.0	53.2
03:20-03:25	52.1	51.6	06:20-06:25	53.8	52.3	09:20-09:25	54.3	52.6	12:20-12:25	54.7	53.1
03:25-03:30	52.3	51.5	06:25-06:30	54.3	52.6	09:25-09:30	53.7	53.0	12:25-12:30	54.8	53.6
03:30-03:35	52.3	51.7	06:30-06:35	54.5	52.5	09:30-09:35	54.0	53.2	12:30-12:35	54.2	52.6
03:35-03:40	52.3	51.6	06:35-06:40	53.4	52.7	09:35-09:40	53.5	52.4	12:35-12:40	54.2	52.4
03:40-03:45	52.3	51.8	06:40-06:45	53.6	52.6	09:40-09:45	55.4	52.8	12:40-12:45	53.7	53.0
03:45-03:50	57.5	51.9	06:45-06:50	53.4	52.3	09:45-09:50	54.1	52.7	12:45-12:50	54.2	53.1
03:50-03:55	56.9	51.9	06:50-06:55	53.5	52.3	09:50-09:55	53.5	52.4	12:50-12:55	55.3	53.3
03:55-04:00	52.8	52.0	06:55-07:00	53.6	52.1	09:55-10:00	53.5	52.5	12:55-13:00	54.4	53.8
04:00-04:05	52.8	52.1	07:00-07:05	53.4	52.6	10:00-10:05	53.0	52.1	13:00-13:05	54.6	53.8
04:05-04:10	52.9	52.2	07:05-07:10	54.4	52.8	10:05-10:10	54.0	52.6	13:05-13:10	54.9	54.2
04:10-04:15	52.7	52.1	07:10-07:15	53.6	52.9	10:10-10:15	53.7	52.3	13:10-13:15	54.5	53.8
04:15-04:20	52.9	52.3	07:15-07:20	53.8	53.0	10:15-10:20	54.0	52.6	13:15-13:20	54.3	53.8
04:20-04:25	53.2	52.2	07:20-07:25	54.2	53.0	10:20-10:25	53.3	52.3	13:20-13:25	54.6	53.9
04:25-04:30	53.1	51.8	07:25-07:30	53.0	52.4	10:25-10:30	53.9	52.5	13:25-13:30	56.7	54.5
04:30-04:35	53.3	52.7	07:30-07:35	53.9	53.0	10:30-10:35	53.3	52.5	13:30-13:35	58.7	56.7
04:35-04:40	53.0	52.2	07:35-07:40	53.7	52.6	10:35-10:40	53.5	52.4	13:35-13:40	60.0	57.5
04:40-04:45	52.7	52.2	07:40-07:45	53.9	52.8	10:40-10:45	53.6	52.8	13:40-13:45	57.5	56.3
04:45-04:50	52.7	52.0	07:45-07:50	57.1	53.2	10:45-10:50	53.2	52.3	13:45-13:50	57.5	53.6
04:50-04:55	52.9	51.8	07:50-07:55	54.9	52.9	10:50-10:55	53.2	52.4	13:50-13:55	54.6	53.3
04:55-05:00	52.7	51.9	07:55-08:00	54.2	52.9	10:55-11:00	53.4	52.8	13:55-14:00	54.3	53.0

ANALYSIS REPORT

Customer Name :Klong Luang Utilities Company Limited
Address :222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name :Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location :1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source :Ambient Noise
Measured Point :Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd., Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate :UTM (WGS84) 47P 0674312 E, 1550830 N
Measured Date :November 6-7, 2024
Measured By :Mr.Assada Chaiyawong
Analyzed By :Environment Research & Technology Co., Ltd.
Measured Instrument :Integrating Sound Level Meter Scarlet Tech Model ST-21D Serial Number 820445

Quotation No. :AR2024-01649
Analysis No. :2024-AF587-029
Report No. :2024-RAAX850
Report Date :November 21, 2024

Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)	
	Leq	L90		Leq	L90		Leq	L90		Leq	L90
14:00-14:05	55.4	53.7	17:00-17:05	53.9	53.0	20:00-20:05	53.5	52.9	23:00-23:05	53.8	52.3
14:05-14:10	54.7	53.1	17:05-17:10	54.3	53.3	20:05-20:10	54.1	52.9	23:05-23:10	53.2	52.6
14:10-14:15	54.6	53.1	17:10-17:15	54.7	53.4	20:10-20:15	53.5	52.8	23:10-23:15	53.2	52.6
14:15-14:20	54.5	53.0	17:15-17:20	53.6	52.7	20:15-20:20	54.4	52.6	23:15-23:20	53.1	52.3
14:20-14:25	54.4	53.1	17:20-17:25	54.5	53.3	20:20-20:25	53.6	53.0	23:20-23:25	53.0	52.5
14:25-14:30	53.5	52.8	17:25-17:30	55.0	53.5	20:25-20:30	53.6	53.1	23:25-23:30	52.9	52.2
14:30-14:35	53.6	52.5	17:30-17:35	54.2	53.1	20:30-20:35	53.7	53.1	23:30-23:35	52.6	51.9
14:35-14:40	54.1	52.9	17:35-17:40	53.8	53.0	20:35-20:40	54.2	53.6	23:35-23:40	52.5	51.7
14:40-14:45	53.2	52.6	17:40-17:45	54.1	53.2	20:40-20:45	54.5	53.9	23:40-23:45	52.7	51.8
14:45-14:50	53.4	52.7	17:45-17:50	54.5	53.0	20:45-20:50	54.1	53.5	23:45-23:50	53.0	51.9
14:50-14:55	53.3	52.5	17:50-17:55	54.4	53.2	20:50-20:55	54.1	53.4	23:50-23:55	52.3	51.6
14:55-15:00	54.1	53.0	17:55-18:00	53.6	53.0	20:55-21:00	54.2	53.7	23:55-00:00	52.3	51.8
15:00-15:05	53.7	52.9	18:00-18:05	54.1	53.1	21:00-21:05	54.5	53.5	00:00-00:05	52.8	51.9
15:05-15:10	53.6	53.0	18:05-18:10	53.9	52.7	21:05-21:10	54.8	53.8	00:05-00:10	53.8	52.2
15:10-15:15	54.0	53.3	18:10-18:15	54.1	52.9	21:10-21:15	54.0	53.4	00:10-00:15	53.6	52.1
15:15-15:20	53.7	52.8	18:15-18:20	54.5	52.8	21:15-21:20	54.4	53.6	00:15-00:20	52.6	52.0
15:20-15:25	54.0	53.2	18:20-18:25	53.5	52.1	21:20-21:25	54.0	53.5	00:20-00:25	52.7	51.9
15:25-15:30	53.9	53.0	18:25-18:30	53.4	52.8	21:25-21:30	54.1	53.5	00:25-00:30	53.5	51.9
15:30-15:35	54.2	53.1	18:30-18:35	54.0	53.2	21:30-21:35	53.9	53.4	00:30-00:35	52.6	51.8
15:35-15:40	57.3	53.1	18:35-18:40	53.4	52.8	21:35-21:40	53.9	53.2	00:35-00:40	52.5	51.7
15:40-15:45	55.5	52.7	18:40-18:45	53.6	52.8	21:40-21:45	53.0	52.5	00:40-00:45	52.4	51.8
15:45-15:50	53.8	52.8	18:45-18:50	53.4	52.6	21:45-21:50	53.4	52.9	00:45-00:50	52.3	51.8
15:50-15:55	54.0	52.7	18:50-18:55	53.5	52.8	21:50-21:55	53.4	52.9	00:50-00:55	52.4	51.7
15:55-16:00	54.0	52.9	18:55-19:00	53.5	52.8	21:55-22:00	53.0	52.4	00:55-01:00	53.1	52.0
16:00-16:05	53.5	52.6	19:00-19:05	54.0	53.1	22:00-22:05	53.3	52.7	01:00-01:05	53.2	52.2
16:05-16:10	54.1	52.8	19:05-19:10	53.9	53.1	22:05-22:10	53.2	52.5	01:05-01:10	53.4	51.8
16:10-16:15	54.2	53.4	19:10-19:15	53.1	52.6	22:10-22:15	53.7	52.7	01:10-01:15	53.1	52.1
16:15-16:20	54.2	53.1	19:15-19:20	53.8	52.8	22:15-22:20	53.3	52.7	01:15-01:20	52.5	51.8
16:20-16:25	53.5	52.5	19:20-19:25	53.8	52.5	22:20-22:25	53.0	52.4	01:20-01:25	53.0	51.9
16:25-16:30	53.5	52.5	19:25-19:30	53.3	53.0	22:25-22:30	53.7	52.9	01:25-01:30	52.5	51.3
16:30-16:35	53.6	53.0	19:30-19:35	53.2	52.7	22:30-22:35	53.2	52.5	01:30-01:35	51.9	51.3
16:35-16:40	53.9	53.2	19:35-19:40	53.1	52.9	22:35-22:40	52.9	52.1	01:35-01:40	52.9	51.7
16:40-16:45	53.8	53.1	19:40-19:45	53.6	52.8	22:40-22:45	53.8	52.4	01:40-01:45	52.0	51.4
16:45-16:50	54.2	52.8	19:45-19:50	53.3	53.0	22:45-22:50	53.2	52.6	01:45-01:50	52.1	51.5
16:50-16:55	55.4	53.2	19:50-19:55	53.8	52.8	22:50-22:55	53.3	52.7	01:50-01:55	51.9	51.3
16:55-17:00	53.8	52.9	19:55-20:00	53.1	52.5	22:55-23:00	52.8	52.0	01:55-02:00	51.9	51.4

ANALYSIS REPORT

Customer Name :Klong Luang Utilities Company Limited
Address :222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name :Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location :1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source :Ambient Noise
Measured Point :Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd., Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate :UTM (WGS84) 47P 0674312 E, 1550830 N
Measured Date :November 7, 2024
Measured By :Mr.Assada Chaiyawong
Analyzed By :Environment Research & Technology Co., Ltd.
Measured Instrument :Integrating Sound Level Meter Scarlet Tech Model ST-21D Serial Number 820445

Quotation No. :AR2024-01649
Analysis No. :2024-AF587-029
Report No. :2024-RAAX850
Report Date :November 21, 2024

Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Noise Level For 5 minutes, dB(A)	Leq	L90
	Leq	L90		Leq	L90		Leq	L90			
02:00-02:05	52.3	51.7	05:00-05:05	52.2	51.6	08:00-08:05	54.8	53.6	11:00-11:05	53.7	53.2
02:05-02:10	52.0	51.4	05:05-05:10	52.4	51.8	08:05-08:10	54.6	53.6	11:05-11:10	53.7	53.1
02:10-02:15	51.8	51.2	05:10-05:15	52.9	52.1	08:10-08:15	54.4	53.4	11:10-11:15	53.8	53.1
02:15-02:20	52.1	51.5	05:15-05:20	53.1	52.2	08:15-08:20	54.2	53.2	11:15-11:20	54.4	53.5
02:20-02:25	52.0	51.3	05:20-05:25	59.6	52.2	08:20-08:25	54.8	53.2	11:20-11:25	54.7	53.7
02:25-02:30	51.9	51.4	05:25-05:30	55.6	52.1	08:25-08:30	54.2	52.8	11:25-11:30	54.3	53.5
02:30-02:35	51.7	50.9	05:30-05:35	56.5	51.9	08:30-08:35	56.9	53.5	11:30-11:35	54.2	53.7
02:35-02:40	51.8	51.0	05:35-05:40	54.2	52.3	08:35-08:40	54.2	53.0	11:35-11:40	54.0	53.3
02:40-02:45	52.0	51.5	05:40-05:45	52.7	52.1	08:40-08:45	54.1	53.1	11:40-11:45	54.0	52.8
02:45-02:50	51.5	51.1	05:45-05:50	56.0	52.2	08:45-08:50	53.8	52.2	11:45-11:50	55.1	54.2
02:50-02:55	52.1	51.4	05:50-05:55	57.4	52.1	08:50-08:55	53.1	52.2	11:50-11:55	55.8	54.4
02:55-03:00	52.2	51.6	05:55-06:00	52.8	52.1	08:55-09:00	52.9	52.3	11:55-12:00	54.8	53.6
03:00-03:05	52.3	51.7	06:00-06:05	53.2	52.2	09:00-09:05	53.8	52.5	12:00-12:05	57.9	54.3
03:05-03:10	52.0	51.4	06:05-06:10	57.2	52.9	09:05-09:10	53.8	52.6	12:05-12:10	55.3	54.2
03:10-03:15	51.9	51.3	06:10-06:15	54.9	52.6	09:10-09:15	53.4	52.6	12:10-12:15	54.0	53.0
03:15-03:20	52.4	51.9	06:15-06:20	55.5	52.9	09:15-09:20	54.3	52.5	12:15-12:20	55.0	53.7
03:20-03:25	52.1	51.5	06:20-06:25	54.6	52.8	09:20-09:25	55.7	52.9	12:20-12:25	55.4	53.6
03:25-03:30	51.9	51.5	06:25-06:30	53.5	52.3	09:25-09:30	53.8	53.0	12:25-12:30	54.5	53.5
03:30-03:35	52.8	51.6	06:30-06:35	53.1	52.4	09:30-09:35	53.6	52.8	12:30-12:35	54.1	53.1
03:35-03:40	52.0	51.4	06:35-06:40	53.4	52.1	09:35-09:40	54.2	53.0	12:35-12:40	53.5	53.0
03:40-03:45	52.1	51.7	06:40-06:45	53.3	52.3	09:40-09:45	55.0	52.9	12:40-12:45	54.7	53.4
03:45-03:50	52.0	51.5	06:45-06:50	54.7	52.5	09:45-09:50	56.1	53.0	12:45-12:50	54.3	53.4
03:50-03:55	52.0	51.4	06:50-06:55	54.7	52.9	09:50-09:55	56.4	52.8	12:50-12:55	54.5	53.6
03:55-04:00	52.0	51.5	06:55-07:00	53.9	52.4	09:55-10:00	60.5	53.1	12:55-13:00	55.1	53.8
04:00-04:05	52.5	51.6	07:00-07:05	53.7	52.6	10:00-10:05	54.2	53.5	13:00-13:05	55.1	54.4
04:05-04:10	52.4	51.8	07:05-07:10	54.0	52.8	10:05-10:10	54.3	53.6	13:05-13:10	54.9	54.2
04:10-04:15	53.7	51.8	07:10-07:15	53.5	52.9	10:10-10:15	54.1	53.4	13:10-13:15	58.0	54.8
04:15-04:20	53.0	52.2	07:15-07:20	54.9	53.4	10:15-10:20	54.4	53.5	13:15-13:20	56.2	55.0
04:20-04:25	52.3	51.7	07:20-07:25	54.2	53.3	10:20-10:25	53.7	52.8	13:20-13:25	55.1	54.7
04:25-04:30	52.6	52.0	07:25-07:30	54.4	53.3	10:25-10:30	53.8	53.1	13:25-13:30	55.7	54.8
04:30-04:35	52.4	51.9	07:30-07:35	54.8	53.7	10:30-10:35	53.9	53.1	13:30-13:35	61.9	55.1
04:35-04:40	52.4	51.8	07:35-07:40	56.4	54.3	10:35-10:40	53.9	53.0	13:35-13:40	60.6	55.2
04:40-04:45	52.3	51.6	07:40-07:45	55.3	53.8	10:40-10:45	53.6	52.9	13:40-13:45	57.9	55.0
04:45-04:50	52.5	51.8	07:45-07:50	54.8	53.4	10:45-10:50	53.8	53.1	13:45-13:50	59.7	55.7
04:50-04:55	53.0	51.9	07:50-07:55	54.5	53.0	10:50-10:55	55.2	53.5	13:50-13:55	60.3	55.3
04:55-05:00	52.4	51.9	07:55-08:00	54.2	53.3	10:55-11:00	54.2	53.3	13:55-14:00	56.7	55.2

ANALYSIS REPORT

Customer Name :Klong Luang Utilities Company Limited
Address :222 EGCO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210
Project Name :Electricity and Steam Generating Cogeneration, Pathumthani Province Project
Project Location :1/9 Moo 3, Khlong Nueng, Khlong Luang, Pathum Thani
Measured Source :Ambient Noise
Measured Point :Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd., Khlong Nueng Sub-District, Khlong Luang District, Pathum Thani Province
GPS. Coordinate :UTM (WGS84) 47P 0674312 E, 1550830 N
Measured Date :November 7-8, 2024
Measured By :Mr.Assada Chaiyawong
Analyzed By :Environment Research & Technology Co., Ltd.
Measured Instrument :Integrating Sound Level Meter Scarlet Tech Model ST-21D Serial Number 820445

Quotation No. :AR2024-01649
Analysis No. :2024-AF587-029
Report No. :2024-RAAX850
Report Date :November 21, 2024

Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Interval Time	Noise Level For 5 minutes, dB(A)		Noise Level For 5 minutes, dB(A)	Leq	L90
	Leq	L90		Leq	L90		Leq	L90			
14:00-14:05	60.2	55.5	17:00-17:05	54.9	53.3	20:00-20:05	54.2	53.5	23:00-23:05	53.4	52.4
14:05-14:10	56.1	55.2	17:05-17:10	54.3	53.3	20:05-20:10	54.2	53.0	23:05-23:10	53.6	53.0
14:10-14:15	55.8	54.6	17:10-17:15	54.9	53.5	20:10-20:15	53.9	52.7	23:10-23:15	53.2	52.5
14:15-14:20	56.2	54.8	17:15-17:20	54.3	53.3	20:15-20:20	53.1	52.5	23:15-23:20	53.1	52.6
14:20-14:25	55.6	54.6	17:20-17:25	55.4	53.6	20:20-20:25	52.6	52.1	23:20-23:25	52.9	52.3
14:25-14:30	55.1	54.2	17:25-17:30	55.5	53.9	20:25-20:30	53.0	52.5	23:25-23:30	53.0	52.4
14:30-14:35	56.6	55.8	17:30-17:35	55.0	53.7	20:30-20:35	53.0	52.3	23:30-23:35	53.0	52.4
14:35-14:40	56.0	55.0	17:35-17:40	54.9	53.7	20:35-20:40	53.0	52.2	23:35-23:40	53.3	52.5
14:40-14:45	55.5	54.7	17:40-17:45	54.5	53.5	20:40-20:45	54.0	52.6	23:40-23:45	52.6	52.0
14:45-14:50	55.2	54.5	17:45-17:50	53.8	53.2	20:45-20:50	53.2	52.3	23:45-23:50	52.2	51.6
14:50-14:55	55.1	54.1	17:50-17:55	54.3	53.4	20:50-20:55	52.9	52.3	23:50-23:55	52.5	51.8
14:55-15:00	55.2	54.1	17:55-18:00	54.7	53.7	20:55-21:00	53.0	52.4	23:55-00:00	52.3	51.8
15:00-15:05	55.5	54.7	18:00-18:05	57.5	53.9	21:00-21:05	55.1	52.5	00:00-00:05	52.8	52.1
15:05-15:10	54.7	54.2	18:05-18:10	53.8	53.2	21:05-21:10	53.6	52.8	00:05-00:10	52.6	51.7
15:10-15:15	55.0	54.3	18:10-18:15	53.8	53.2	21:10-21:15	53.7	53.2	00:10-00:15	52.1	51.2
15:15-15:20	55.3	54.4	18:15-18:20	53.9	53.3	21:15-21:20	54.3	53.0	00:15-00:20	52.4	52.2
15:20-15:25	55.1	54.1	18:20-18:25	53.7	52.8	21:20-21:25	53.8	52.9	00:20-00:25	52.5	52.0
15:25-15:30	55.7	54.4	18:25-18:30	53.9	52.9	21:25-21:30	53.6	53.0	00:25-00:30	52.4	51.9
15:30-15:35	54.6	53.7	18:30-18:35	53.4	52.8	21:30-21:35	53.7	52.5	00:30-00:35	53.1	52.3
15:35-15:40	54.3	53.8	18:35-18:40	53.3	52.3	21:35-21:40	53.3	52.4	00:35-00:40	52.7	51.8
15:40-15:45	54.6	53.8	18:40-18:45	53.2	52.5	21:40-21:45	53.4	53.0	00:40-00:45	52.2	52.1
15:45-15:50	54.8	53.7	18:45-18:50	53.2	52.7	21:45-21:50	53.4	53.2	00:45-00:50	52.5	51.9
15:50-15:55	56.0	53.6	18:50-18:55	53.1	52.6	21:50-21:55	53.2	52.6	00:50-00:55	52.5	51.9
15:55-16:00	54.7	53.7	18:55-19:00	53.5	52.8	21:55-22:00	53.0	52.5	00:55-01:00	52.6	51.9
16:00-16:05	54.6	53.7	19:00-19:05	53.7	52.7	22:00-22:05	53.3	52.7	01:00-01:05	52.9	52.1
16:05-16:10	55.5	54.2	19:05-19:10	53.3	52.6	22:05-22:10	53.0	52.4	01:05-01:10	53.0	51.9
16:10-16:15	55.1	54.3	19:10-19:15	53.7	52.8	22:10-22:15	53.0	52.2	01:10-01:15	52.6	52.0
16:15-16:20	55.3	54.4	19:15-19:20	53.0	52.4	22:15-22:20	53.3	52.6	01:15-01:20	53.0	52.1
16:20-16:25	54.8	54.5	19:20-19:25	53.7	52.8	22:20-22:25	53.1	52.5	01:20-01:25	52.3	51.6
16:25-16:30	54.8	54.3	19:25-19:30	53.1	52.7	22:25-22:30	53.0	52.4	01:25-01:30	52.4	51.7
16:30-16:35	55.1	54.4	19:30-19:35	53.6	52.9	22:30-22:35	53.5	52.6	01:30-01:35	52.7	52.0
16:35-16:40	54.8	54.2	19:35-19:40	53.6	53.0	22:35-22:40	53.3	52.2	01:35-01:40	53.4	52.1
16:40-16:45	54.9	54.0	19:40-19:45	53.1	52.5	22:40-22:45	53.1	52.4	01:40-01:45	52.6	52.1
16:45-16:50	54.7	53.5	19:45-19:50	53.2	52.6	22:45-22:50	52.8	52.1	01:45-01:50	52.6	51.7
16:50-16:55	55.2	53.7	19:50-19:55	53.7	52.9	22:50-22:55	52.8	52.3	01:50-01:55	52.7	51.9
16:55-17:00	54.5	53.5	19:55-20:00	53.8	53.0	22:55-23:00	53.7	51.9	01:55-02:00	52.2	51.2

ANALYSIS REPORT

:Klong Luang Utilities Company Limited

:222 EGO Tower, Vibhavadi Rangsit Road, Thung Song Hong, Lak Si, Bangkok 10210

:Electricity and Steam Generating Cogeneration, Pathumthani Province Project

:1/9 Moo 3, Klong Nueng, Pathum Thani

:Ambient Noise

:Staff Dormitory of Teijin Polyester (Thailand) Co.,Ltd., Klong Nueng Sub-District, Klong Luang District, Pathum Thani Province

Quotation No.	: AR2024-01649
Analysis No.	: 2024-AF587-029
Report No.	: 2024-RAAX850
Report Date	: November 21, 2024

F-RP-011 Rev. 03 January 18 2021