

ภาคผนวก ค

รายงานผลการตรวจวัดคุณภาพสิ่งแวดล้อม

Request No. ATR6708025

Report No. 6708-0323 - 6708-0329

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : วัดมาบขลุค  
RECEIVED DATE : 20/08/2024 SAMPLE NO. : A67080323 - A67080329  
TESTED DATE : 20/08/2024-20/08/2024 REPORTED DATE : 23/08/2024

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	STD <sup>1/</sup>	UNIT
Total Suspended Particulate (TSP)	Gravimetric Method	02-03/08/2024	0.087	0.33	mg/m <sup>3</sup>
		03-04/08/2024	0.059	0.33	mg/m <sup>3</sup>
		04-05/08/2024	0.067	0.33	mg/m <sup>3</sup>
		05-06/08/2024	0.092	0.33	mg/m <sup>3</sup>
		06-07/08/2024	0.090	0.33	mg/m <sup>3</sup>
		07-08/08/2024	0.103	0.33	mg/m <sup>3</sup>
		08-09/08/2024	0.068	0.33	mg/m <sup>3</sup>

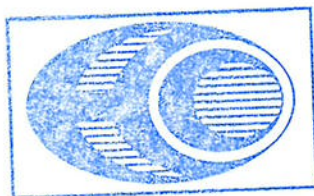
## REMARK:

<sup>1/</sup> Notification of The National Environmental Board Volume 24 B.E.2547 (2004) Standard for 24-hr Average.

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

(Sampling By Mr. Tummarut Photankham)

GPS = Sampling at UTM 47P 736823E 1407369N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

23/08/2024

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

Request No. ATR6708025

Report No. 6708-0316 - 6708-0322

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mucang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : วัดมาบชลด  
RECEIVED DATE : 20/08/2024 SAMPLE NO. : A67080316 - A67080322  
TESTED DATE : 20/08/2024-20/08/2024 REPORTED DATE : 23/08/2024

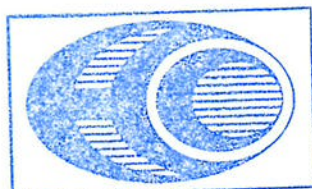
PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	STD <sup>/1</sup>	UNIT
Particulate matter less than or Equal					
10 micrometers (PM 10)	Gravimetric Method	02-03/08/2024	0.037	0.12	mg/m <sup>3</sup>
		03-04/08/2024	0.034	0.12	mg/m <sup>3</sup>
		04-05/08/2024	0.032	0.12	mg/m <sup>3</sup>
		05-06/08/2024	0.043	0.12	mg/m <sup>3</sup>
		06-07/08/2024	0.037	0.12	mg/m <sup>3</sup>
		07-08/08/2024	0.044	0.12	mg/m <sup>3</sup>
		08-09/08/2024	0.027	0.12	mg/m <sup>3</sup>

**REMARK:**<sup>/1</sup> Notification of The National Environmental Board Volume 24 B.E.2547 (2004) Standard for 24-hr Average.

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

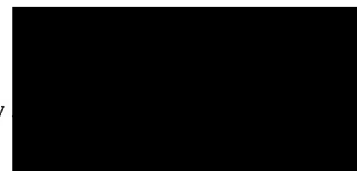
(Sampling By Mr. Tummarut Photankham)

GPS = Sampling at UTM 47P 736823E 1407369N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



23/08/2024

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

Request No. ATR6708025

Report No. 6708-0330 - 6708-0336

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : วัดมาบชลูค  
RECEIVED DATE : 20/08/2024 SAMPLE NO. : A67080330 - A67080336  
TESTED DATE : 20/08/2024-19/08/2024 REPORTED DATE : 23/08/2024

PARAMETER**	TEST METHOD	SAMPLING DATE	RESULT <sup>/1</sup>	UNIT
Propylene oxide	NIOSH1612/GC-FID	02-03/08/2024	ND	mg/m <sup>3</sup>
			ND	ppm
		03-04/08/2024	ND	mg/m <sup>3</sup>
			ND	ppm
		04-05/08/2024	ND	mg/m <sup>3</sup>
			ND	ppm
		05-06/08/2024	ND	mg/m <sup>3</sup>
			ND	ppm
		06-07/08/2024	ND	mg/m <sup>3</sup>
			ND	ppm
		07-08/08/2024	1.70	mg/m <sup>3</sup>
			0.72	ppm
		08-09/08/2024	ND	mg/m <sup>3</sup>
			ND	ppm

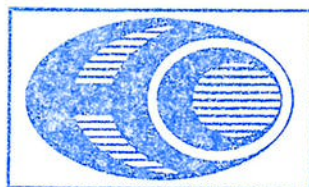
## REMARK:

<sup>/1</sup> ND = Non detectable : When detection limit of Propylene Oxide is less than 0.10 mg/m<sup>3</sup> or 0.05 ppm.

\*\* Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Tummarut Photankham)

Analysed By SECOT Co.,Ltd.

GPS = Sampling at UTM 47P 736823E 1407369N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.

23/08/2024

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



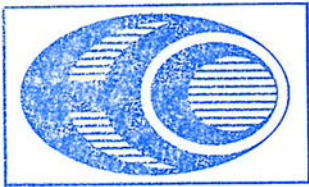
Request No. LA67-R0849  
Report No. R6708-4491 - R6708-4497

TEST REPORT

CUSTOMER	: PTT Global Chemical Public Company Limited Branch 19		
ADDRESS	: Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150		
SAMPLE SOURCE	: GC19		
SAMPLE POINT	: วัดมาบชลูด	SAMPLE NO.	: 29883-29889
PARAMETER*	: Nitrogen Dioxide	SAMPLING DATE	: 02-09/08/2024
DETERMINATION METHOD	: Chemiluminescence	RECEIVED DATE	: 09/08/2024
INSTRUMENT	: API Model T200 S/N 7874	REPORTED DATE	: 24/08/2024

TIME / DATE	02-03/08/2024	03-04/08/2024	04-05/08/2024	05-06/08/2024	06-07/08/2024	07-08/08/2024	08-09/08/2024	UNIT
10:00 - 11:00 <sup>12</sup>	0.002	0.003	0.006	0.006	0.003	0.003	0.003	ppm
11:00 - 12:00	0.002	0.005	0.011	0.007	0.002	0.003	0.003	ppm
12:00 - 13:00	0.002	0.003	0.012	0.005	0.002	0.005	0.003	ppm
13:00 - 14:00	0.003	0.002	0.003	0.005	0.002	0.003	0.002	ppm
14:00 - 15:00	0.003	0.002	0.002	0.005	0.003	0.003	0.002	ppm
15:00 - 16:00	0.002	0.003	0.004	0.004	0.003	0.003	0.004	ppm
16:00 - 17:00	0.002	0.002	0.003	0.003	0.005	0.003	0.004	ppm
17:00 - 18:00	0.002	0.003	0.004	0.003	0.006	0.005	0.005	ppm
18:00 - 19:00	0.002	0.005	0.004	0.004	0.007	0.004	0.007	ppm
19:00 - 20:00	0.002	0.007	0.003	0.005	0.004	0.004	0.006	ppm
20:00 - 21:00	0.002	0.006	0.002	0.005	0.004	0.004	0.004	ppm
21:00 - 22:00	0.001	0.005	0.002	0.004	0.003	0.005	0.004	ppm
22:00 - 23:00	0.002	0.003	0.002	0.004	0.003	0.003	0.003	ppm
23:00 - 00:00	0.002	0.002	0.003	0.003	0.003	0.003	0.004	ppm
00:00 - 01:00	0.001	0.001	0.003	0.003	0.002	0.002	0.002	ppm
01:00 - 02:00	0.001	0.002	0.003	0.002	0.003	0.003	0.002	ppm
02:00 - 03:00	0.002	0.002	0.002	0.003	0.003	0.003	0.002	ppm
03:00 - 04:00	0.001	0.002	0.002	0.003	0.003	0.003	0.002	ppm
04:00 - 05:00	0.001	0.004	0.004	0.003	0.004	0.004	0.002	ppm
05:00 - 06:00	0.001	0.005	0.006	0.004	0.006	0.003	0.003	ppm
06:00 - 07:00	0.001	0.004	0.005	0.003	0.007	0.004	0.003	ppm
07:00 - 08:00	0.001	0.004	0.006	0.006	0.007	0.005	0.006	ppm
08:00 - 09:00	0.001	0.004	0.005	0.004	0.006	0.004	0.006	ppm
09:00 - 10:00	0.002	0.004	0.005	0.003	0.003	0.003	0.008	ppm
Maximum 1 hr.	0.003	0.007	0.012	0.007	0.007	0.005	0.008	ppm
Average 24 hr.	0.002	0.003	0.004	0.004	0.004	0.003	0.004	ppm
Standard (1 hr.) <sup>11</sup>	0.17	0.17	0.17	0.17	0.17	0.17	0.17	ppm

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



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By..



24/08/2024

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

## Wind Speed &amp; Wind Direction

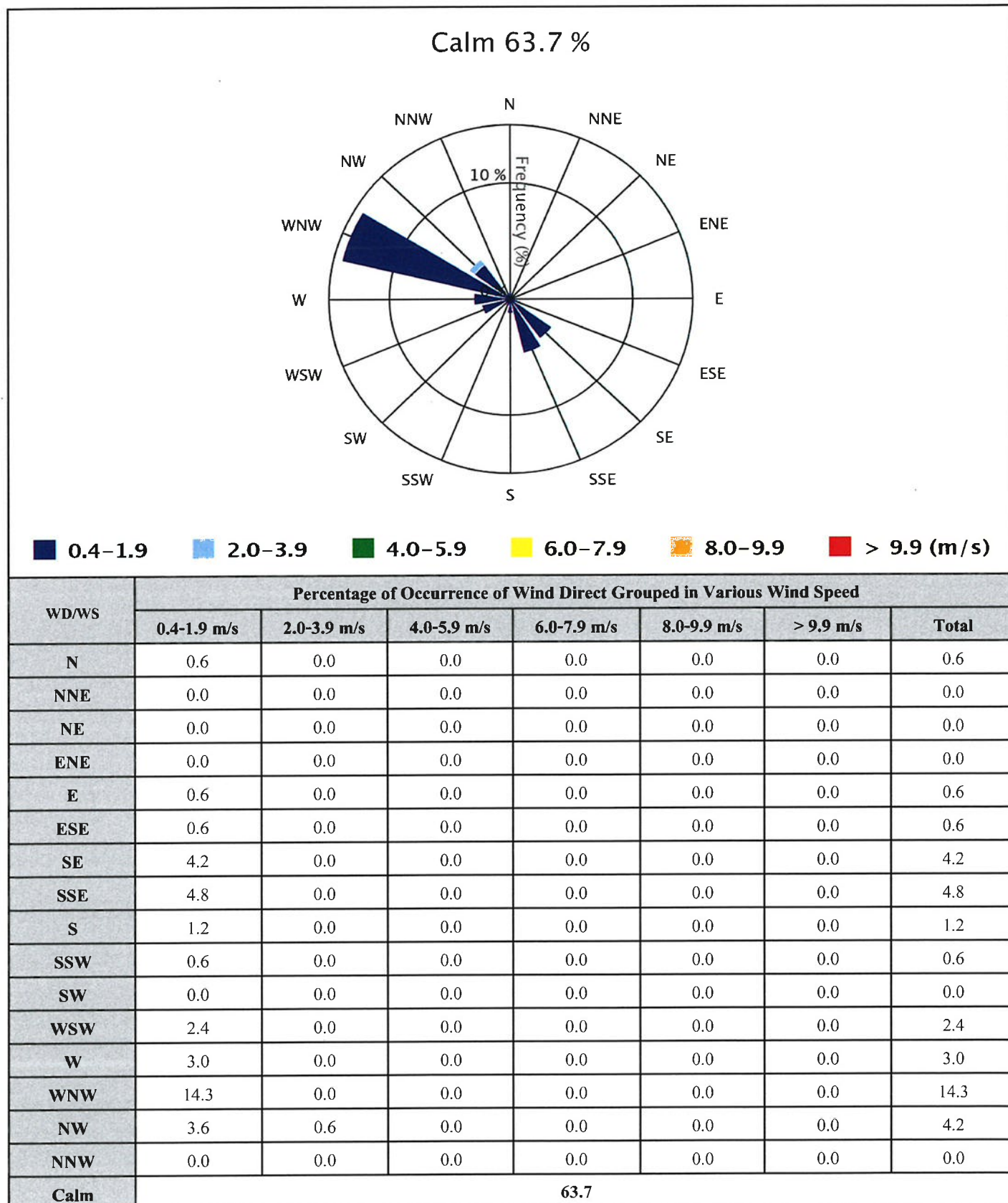
Request No. LA67-R0849

PTT Global Chemical Public Company Limited Branch 19 (GC 19)

Sample No. 29897

Sampling Source : วัดมาบขลุ่ด

Sampling Date : August 2-9, 2024



Wind Speed & Wind Direction

Request No. LA67-R0849

PTT Global Chemical Public Company Limited Branch 19 (GC 19)

Sample No. 29897

Sampling Source : วัดมาบชอุตสาหกรรม

Sampling Date : August 2-9, 2024

Time	August 2-3, 2024		August 3-4, 2024		August 4-5, 2024		August 5-6, 2024		August 6-7, 2024		August 7-8, 2024		August 8-9, 2024	
	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction	Wind Speed (m/s)	Wind Direction
10:00-11:00	0.0	-	0.0	-	0.4	E	0.0	-	0.4	NW	0.0	-	0.4	WNW
11:00-12:00	0.4	WNW	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
12:00-13:00	0.4	WNW	0.0	-	0.0	-	0.4	WNW	0.0	-	0.4	WNW	0.0	-
13:00-14:00	0.9	WNW	0.4	NW	0.0	-	0.9	SE	0.4	N	0.4	WNW	0.0	-
14:00-15:00	0.4	SSE	0.0	-	0.0	-	0.9	SSE	0.9	SE	1.8	WNW	0.4	NW
15:00-16:00	0.4	SSE	1.8	SE	0.9	SE	1.3	WNW	1.3	WSW	0.4	W	0.0	-
16:00-17:00	0.0	-	1.3	WNW	0.4	WNW	0.0	-	0.9	W	0.9	WNW	0.0	-
17:00-18:00	0.4	WNW	0.4	SE	0.4	WNW	0.4	WNW	0.4	W	0.0	-	0.0	-
18:00-19:00	0.4	WNW	0.9	SE	0.9	S	0.4	NW	0.0	-	0.0	-	0.0	-
19:00-20:00	0.0	-	0.9	SSE	0.4	SSE	0.0	-	0.0	-	0.0	-	0.0	-
20:00-21:00	0.0	-	0.4	SSE	0.4	SE	0.0	-	0.0	-	0.0	-	0.0	-
21:00-22:00	0.9	ESE	0.0	-	0.4	SSW	0.0	-	0.4	NW	0.0	-	0.0	-
22:00-23:00	0.4	S	0.9	SSE	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
23:00-00:00	0.9	WNW	0.4	SSE	0.0	-	0.4	WNW	0.0	-	0.0	-	0.0	-
00:00-01:00	0.0	-	2.2	NW	0.0	-	0.4	W	0.0	-	0.0	-	0.9	WNW
01:00-02:00	0.0	-	0.0	-	0.0	-	0.4	WNW	0.0	-	0.0	-	0.4	NW
02:00-03:00	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
03:00-04:00	0.4	WNW	0.0	-	0.0	-	0.0	-	0.0	-	0.4	WSW	0.0	-
04:00-05:00	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	1.3	WSW	0.0	-
05:00-06:00	0.9	W	0.0	-	0.0	-	0.0	-	0.0	-	0.9	WNW	0.0	-
06:00-07:00	0.4	WNW	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-
07:00-08:00	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.4	WNW
08:00-09:00	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.4	WSW
09:00-10:00	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-



Request No. LA67-0812

Report No. 6708-0329

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
 ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
 SAMPLE SOURCE : GC 19  
 SAMPLE POINT : ปล่องของระบบ TO SAMPLE NO. : 02972  
 SAMPLING DATE : 07/08/2024 SAMPLING TIME : 09:20-10:05  
 RECEIVED DATE : 13/08/2024 REPORTED DATE : 20/08/2024  
 TESTED DATE : 13-14/08/2024  
 STACK DESCRIPTION@

Height :	60.00	m	Type of Process :	Combustion
Diameter :	2.70	m	Type of Fuel :	Natural Gas
Temperature :	420.00	°C	Oxygen Content :	1.82 %
Air Velocity :	10.52	m/s	Barometric Pressure :	757.00 mmHg
Flow rate <sup>/2</sup> :	24.08	m <sup>3</sup> /s	Atmospheric Temperature :	33.00 °C
Moisture Content :	6.63	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>/2</sup>		STD <sup>/1</sup>	UNIT
			1.82 % O <sub>2</sub>	7 % O <sub>2</sub>		
Total Suspended Particulate	Isokinetic, Gravimetric	09:20-10:05	1.3	0.9	320, 113 <sup>/3</sup>	mg/m <sup>3</sup>
(TSP)	(U.S. EPA Method 5)		0.031 <sup>@</sup>	-	2.866 <sup>/3</sup>	g/s

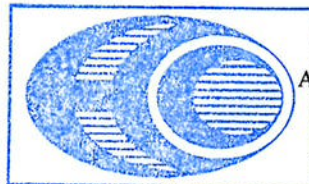
- REMARK:**
- <sup>/1</sup> Notification of The Ministry of Industry B.E. 2549 (2006)
  - <sup>/2</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
  - <sup>/3</sup> ค่ากำหนดตามรายงานการประเมินผลกระทบสิ่งแวดล้อม (EIA)
  - <sup>@</sup> These Data Outside The Scope of The Registration of The Department of Industrial Works.
  - Sampling By Mr.Warakorn Vitayasevee (ว-003-ค-0021)
  - GPS = Sampling at UTM 47P 731246E 1406443N

Examined By



(ว-003-ค-0007)

20/08/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(ว-003-ค-0012)

20/08/2024

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. LA67-0812

Report No. 6708-0330

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE POINT : ปล่องของระบบ TO SAMPLE NO. : 02973  
SAMPLING DATE : 07/08/2024 SAMPLING TIME : 09:40-09:45  
RECEIVED DATE : 13/08/2024 REPORTED DATE : 20/08/2024  
TESTED DATE : 13/08/2024

STACK DESCRIPTION<sup>®</sup>

Height :	60.00	m	Type of Process :	Combustion
Diameter :	2.70	m	Type of Fuel :	Natural Gas
Temperature :	420.00	°C	Oxygen Content :	1.82 %
Air Velocity :	10.52	m/s	Barometric Pressure :	757.00 mmHg
Flow rate <sup>2</sup> :	24.08	m <sup>3</sup> /s	Atmospheric Temperature :	33.00 °C
Moisture Content :	6.63	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>2</sup>		STD <sup>1</sup>	UNIT
			1.82 % O <sub>2</sub>	7 % O <sub>2</sub>		
Oxides of Nitrogen	Absorption, Phenoldisulfonic	09:40-09:45	8.8	6.4	376, 28.6 <sup>3</sup>	mg/m <sup>3</sup>
(NO <sub>x</sub> as NO <sub>2</sub> )	Acid (U.S. EPA Method 7)		4.7	3.4	200, 15.2 <sup>3</sup>	ppm
			0.212 <sup>®</sup>	-	0.725 <sup>3</sup>	g/s

**REMARK:**

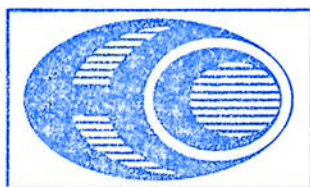
- <sup>1</sup> Notification of The Ministry of Industry B.E. 2549 (2006)
- <sup>2</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
- <sup>3</sup> ค่ากำหนดตามรายงานการประเมินผลกระทบสิ่งแวดล้อม (EIA)
- <sup>®</sup> These Data Outside The Scope of The Registration of The Department of Industrial Works.
- Sampling By Mr. Warakorn Vitayasevee (ว-003-ค-0021)
- GPS = Sampling at UTM 47P 731246E 1406443N

Examined By



(ว-003-ค-0007)

20/08/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(ว-003-ค-0012)

20/08/2024

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

Request No. LA67-0812

Report No. 6708-0331

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE POINT : ปล่องของระบบ TO SAMPLE NO. : 02974  
SAMPLING DATE : 07/08/2024 SAMPLING TIME : 09:40-10:10  
RECEIVED DATE : 13/08/2024 REPORTED DATE : 20/08/2024  
TESTED DATE : 13-14/08/2024

STACK DESCRIPTION<sup>®</sup>

Height :	60.00	m	Type of Process :	Combustion
Diameter :	2.70	m	Type of Fuel :	Natural Gas
Temperature :	420.00	°C	Oxygen Content :	1.82 %
Air Velocity :	10.52	m/s	Barometric Pressure :	757.00 mmHg
Flow rate <sup>2</sup> :	24.08	m <sup>3</sup> /s	Atmospheric Temperature :	33.00 °C
Moisture Content :	6.63	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>2</sup>		STD <sup>1</sup>	UNIT
			1.82 % O <sub>2</sub>	7 % O <sub>2</sub>		
Carbon monoxide	Non-Dispersive Infrared	09:40-10:10	10.1	7.4	790	mg/m <sup>3</sup>
(CO)	(U.S. EPA Method 10)		8.8	6.4	690	ppm

**REMARK:**

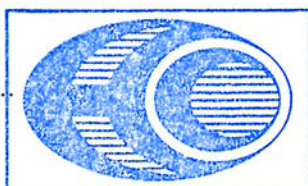
- <sup>1</sup> Notification of The Ministry of Industry B.E. 2549 (2006)
- <sup>2</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
- <sup>®</sup> These Data Outside The Scope of The Registration of The Department of Industrial Works.
- Sampling By Mr.Warakorn Vitayasevee (ว-003-ค-0021)
- GPS = Sampling at UTM 47P 731246E 1406443N

Examined By



(ว-003-ค-0007)

20/08/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(ว-003-ค-0012)

20/08/2024

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. LA67-0812

Report No. 6708-0332

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
 ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
 SAMPLE SOURCE : GC 19  
 SAMPLE POINT : ปล่องของระบบ TO SAMPLE NO. : 02975  
 SAMPLING DATE : 07/08/2024 SAMPLING TIME : 09:40-10:10  
 RECEIVED DATE : 13/08/2024 REPORTED DATE : 20/08/2024  
 TESTED DATE : 13-19/08/2024

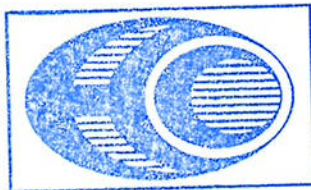
## STACK DESCRIPTION

Height :	60.00	m	Type of Process :	Combustion
Diameter :	2.70	m	Type of Fuel :	Natural Gas
Temperature :	420.00	°C	Oxygen Content :	1.82 %
Air Velocity :	10.52	m/s	Barometric Pressure :	757.00 mmHg
Flow rate <sup>2</sup> :	24.08	m <sup>3</sup> /s	Atmospheric Temperature :	33.00 °C
Moisture Content :	6.63	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>2</sup>		STD <sup>1</sup>	UNIT
			1.82 % O <sub>2</sub>	7 % O <sub>2</sub>		
Total Volatile Organic Compounds	U.S.EPA Method 25 A	09:40-10:10	8.84	6.44	-, <sup>3</sup>	mg/m <sup>3</sup>
(TVOCs) <sup>4</sup>			4.90	3.57	-, <sup>3</sup>	ppm
			0.213	-	2.383 <sup>3</sup>	g/s

**REMARK:**

- <sup>1</sup> Notification of The Ministry of Industry B.E. 2549 (2006)
- <sup>2</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
- <sup>3</sup> ค่ากำหนดตามรายงานการประเมินผลกระทบสิ่งแวดล้อม (EIA)
- <sup>4</sup> Sampling by Eastern Thai Consulting 1992 Co.,Ltd. (Mr.Warakorn Vitayasevec)  
Analysed By SECOT Co.,Ltd.
- GPS = Sampling at UTM 47P 731246E 1406443N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.

20/08/2024

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY



Request No. LA67-0943

Report No. 6710-0155

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE POINT : ปล่อง Liquid Incinerator SAMPLE NO. : 03741  
SAMPLING DATE : 23/09/2024 SAMPLING TIME : 10:00-10:35  
RECEIVED DATE : 25/09/2024 REPORTED DATE : 04/10/2024  
TESTED DATE : 25/09/2024 – 01/10/2024  
STACK DESCRIPTION<sup>®</sup>

Height :	60.00	m	Type of Process :	Combustion
Diameter :	2.20	m	Type of Fuel :	Natural Gas
Temperature :	290.00	°C	Oxygen Content :	9.39 %
Air Velocity :	10.16	m/s	Barometric Pressure :	755.50 mmHg
Flow rate <sup>2</sup> :	18.64	m <sup>3</sup> /s	Atmospheric Temperature :	32.00 °C
Moisture Content :	8.21	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>2</sup>		STD <sup>1</sup>	UNIT
			9.39 % O <sub>2</sub>	7 % O <sub>2</sub>		
Total Suspended Particulate	Isokinetic, Gravimetric	10:00-10:35	1.3	1.6	35, 28 <sup>3</sup>	mg/m <sup>3</sup>
(TSP)	(U.S. EPA Method 5)		0.024 <sup>®</sup>	-	0.880 <sup>3</sup>	g/s

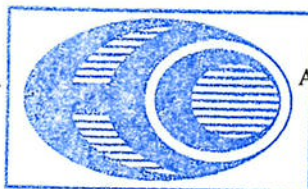
**REMARK:**

- <sup>1</sup> Notification of The Ministry of Industry B.E. 2545 (2002)
- <sup>2</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
- <sup>3</sup> ค่ากำหนดตามรายงานการประเมินผลกระทบสิ่งแวดล้อม (EIA)
- <sup>®</sup> These Data Outside The Scope of The Registration of The Department of Industrial Works.
- Sampling By Mr.Warakorn Vitayasevee (ว-003-ค-0021)
- GPS = Sampling at UTM 47P 731287E 1406416N

Examined By

(ว-003-ค-0007)

04/10/2024



บริษัท อีสเทิร์นไทยคอนซัลต์ติ้ง 1992 จำกัด

Approved By

(ว-003-ค-0012)

04/10/2024

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

Request No. LA67-0943

Report No. 6710-0156

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
 ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
 SAMPLE SOURCE : GC 19  
 SAMPLE POINT : ปล่อง Liquid Incinerator SAMPLE NO. : 03742  
 SAMPLING DATE : 23/09/2024 SAMPLING TIME : 10:05-10:10  
 RECEIVED DATE : 25/09/2024 REPORTED DATE : 04/10/2024  
 TESTED DATE : 25/09/2024 – 01/10/2024  
 STACK DESCRIPTION®

Height :	60.00	m	Type of Process :	Combustion
Diameter :	2.20	m	Type of Fuel :	Natural Gas
Temperature :	290.00	°C	Oxygen Content :	9.39 %
Air Velocity :	10.16	m/s	Barometric Pressure :	755.50 mmHg
Flow rate <sup>2</sup> :	18.64	m <sup>3</sup> /s	Atmospheric Temperature :	32.00 °C
Moisture Content :	8.21	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>2</sup>		STD <sup>1</sup>	UNIT
			9.39 % O <sub>2</sub>	7 % O <sub>2</sub>		
Oxides of Nitrogen (NO <sub>x</sub> as NO <sub>2</sub> )	Absorption, Phenoldisulfonic	10:05-10:10	2.6	3.1	150, 15.7 <sup>3</sup>	mg/m <sup>3</sup>
	Acid (U.S. EPA Method 7)		1.4	1.7	79.7, 8.3 <sup>3</sup>	ppm
			0.048 <sup>@</sup>	-	0.490 <sup>3</sup>	g/s

**REMARK:**

- <sup>1</sup> Notification of The Ministry of Industry B.E. 2545 (2002)
- <sup>2</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
- <sup>3</sup> ค่ากำหนดตามรายงานการประเมินผลกระทบสิ่งแวดล้อม (EIA)
- <sup>@</sup> These Data Outside The Scope of The Registration of The Department of Industrial Works.
- Sampling By Mr.Warakom Vitayasevec (ว-003-ค-0021)
- GPS = Sampling at UTM 47P 731287E 1406416N

Examined By...

(N

(ว-003-ค-0007)

04/10/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By...

(ว-003-ค-0012)

04/10/2024

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

Request No. LA67-0943

Report No. 6710-0157

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
 ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
 SAMPLE SOURCE : GC 19  
 SAMPLE POINT : ปล่อง Liquid Incinerator SAMPLE NO. : 03743  
 SAMPLING DATE : 23/09/2024 SAMPLING TIME : 10:20-10:30  
 RECEIVED DATE : 25/09/2024 REPORTED DATE : 12/10/2024  
 TESTED DATE : 25/09/2024 – 09/10/2024

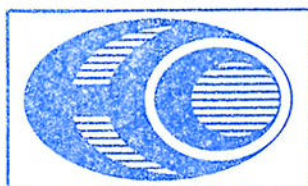
## STACK DESCRIPTION

Height :	60.00	m	Type of Process :	Combustion
Diameter :	2.20	m	Type of Fuel :	Natural Gas
Temperature :	290.00	°C	Oxygen Content :	9.39 %
Air Velocity :	10.16	m/s	Barometric Pressure :	755.50 mmHg
Flow rate <sup>2</sup> :	18.64	m <sup>3</sup> /s	Atmospheric Temperature :	32.00 °C
Moisture Content :	8.21	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>2</sup>		STD <sup>1</sup>	UNIT
			9.39 % O <sub>2</sub>	7 % O <sub>2</sub>		
Total Volatile Organic Compounds	U.S.EPA Method 25 A	10:20-10:30	15.89	19.19	-, <sup>3</sup>	mg/m <sup>3</sup>
(TVOCs) <sup>4</sup>			6.94	8.38	-, <sup>3</sup>	ppm
			0.296	-	2.989 <sup>3</sup>	g/s

**REMARK:**

- <sup>1</sup> Notification of The Ministry of Industry B.E. 2545 (2002)
- <sup>2</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
- <sup>3</sup> ค่ากำหนดตามรายงานการประเมินผลกระทบสิ่งแวดล้อม (EIA)
- <sup>4</sup> Sampling by Eastern Thai Consulting 1992 Co.,Ltd. (Mr.Warakorn Vitayaseevee)  
 Analysed By The Office of Public Health and Environmental Technology Services,  
 Faculty of Public Health, Mahidol University.
- GPS = Sampling at UTM 47P 731287E 1406416N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.

12/10/2024

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

Request No. LA67-0943

Report No. 6710-0158

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE POINT : ปล่อง Liquid Incinerator SAMPLE NO. : 03744  
SAMPLING DATE : 23/09/2024 SAMPLING TIME : 10:20-10:30  
RECEIVED DATE : 25/09/2024 REPORTED DATE : 04/10/2024  
TESTED DATE : 25-27/09/2024  
STACK DESCRIPTION<sup>®</sup>

Height :	60.00	m	Type of Process :	Combustion
Diameter :	2.20	m	Type of Fuel :	Natural Gas
Temperature :	290.00	°C	Oxygen Content :	9.39 %
Air Velocity :	10.16	m/s	Barometric Pressure :	755.50 mmHg
Flow rate <sup>2</sup> :	18.64	m <sup>3</sup> /s	Atmospheric Temperature :	32.00 °C
Moisture Content :	8.21	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>2</sup>		STD <sup>1</sup>	UNIT
			9.39 % O <sub>2</sub>	7 % O <sub>2</sub>		
Carbon monoxide	Non-Dispersive Infrared	10:20-10:30	24.5	29.6	115	mg/m <sup>3</sup>
(CO)	(U.S. EPA Method 10)		21.4	25.8	100	ppm

**REMARK:**

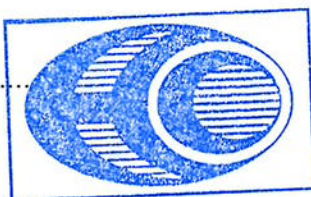
- <sup>1</sup> Notification of The Ministry of Industry B.E. 2545 (2002)
- <sup>2</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
- <sup>®</sup> These Data Outside The Scope of The Registration of The Department of Industrial Works.
- Sampling By Mr.Warakorn Vitayasevee (ว-003-ค-0021)
- GPS = Sampling at UTM 47P 731287E 1406416N

Examined By.



(ว-003-ค-0007)

04/10/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(ว-003-ค-0012)

04/10/2024

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

## Test Report

Request No : W6707612

Report No : 6708-1030

Customer : PTT Global Chemical Public Company Limited Branch 19

Address : Noen Phra Sub-district, Mueang Rayong District, Rayong 21150

Sampling Source : GC 19

Sample No : W 67071877

Sample Name : Final Check Basin

Sampling Date : 26/07/2024

Sampling By : ETC

Sampling Time : 10:35 AM

Sampling Method : Grab

Received Date : 27/07/2024

Tested Date : 30/07/2024 - 03/08/2024

Reported Date : 19/08/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Biochemical Oxygen Demand	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	18.8	≤500
Chemical Oxygen Demand	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	82	≤750
Oil and Grease	mg/L	Liquid-Liquid, Partition-Gravimetric Method (SM:5520B)	< 3.0	≤10
pH (on site)		Electrometric Method	7.8	5.5 - 9
Phenol	mg/L	Distillation, Direct Photometric Method (SM:5530B,D)	0.100	≤1
Temperature	°C	Laboratory and Field Method (SM:2550 B)	30	≤45
Total Dissolved Solids	mg/L	Dried at 180 degree celsius (SM:2540C)	940	≤3000

Physical Apperance : 1. Sample : greenish, lightly SS

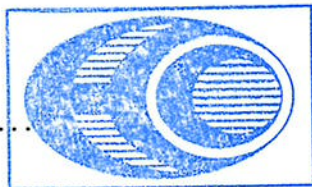
2. Container : Normal [ PE 0.5 L(2 Bottle) , PE 1.0 L , PE 1.8 L, G 1.0 L ]

Remark : 1. /1 Eastern Industrial Estate (Map ta Phut) , Maximum levels for Wastewater Discharging to Central Wastewater Treatment Plant

2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.

3. Sampling By Mr. Metee Sukprasert (จ-003-ท-0035)

Examined By

(จ-003-ท-0007)  
19/08/2024

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(จ-003-ท-0005)  
19/08/2024

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



## Test Report

Customer : PTT Global Chemical Public Company Limited Branch 19

Address : Noen Phra Sub-district, Mueang Rayong District, Rayong 21150

Sampling Source : GC 19

Sample Name : Final Check Basin

Sampling By : ETC

Sampling Method : Grab

Tested Date : 30/07/2024 - 03/08/2024

Request No : W6707612

Report No : 6708-1030

Sample No : W 67071877

Sampling Date : 26/07/2024

Sampling Time : 10:35 AM

Received Date : 27/07/2024

Reported Date : 03/08/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Total Suspended Solids	mg/L	Dried at 103-105 degree celsius (SM:2540D)	13	≤200

Physical Apperance : 1. Sample : greenish, lightly SS

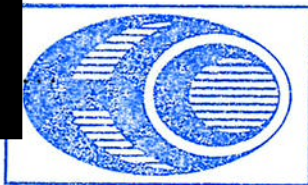
2. Container : Normal [ PE 0.5 L(2 Bottle) , PE 1.0 L , PE 1.8 L, G 1.0 L ]

Remark : 1. /1 Eastern Industrial Estate (Map ta Phut) , Maximum levels for Wastewater Discharging to Central Wastewater Treatment Plant

2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.

3. Sampling By Mr. Metee Sukprasert (จ-003-ก-0035)

Examined By

(จ-003-ก-0007)  
03/08/2024

Approved By

(จ-003-ก-0005)  
03/08/2024REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

## Test Report

Request No : W6707612

Report No : 6708-1032

Customer : PTT Global Chemical Public Company Limited Branch 19

Address : Noen Phra Sub-district, Mueang Rayong District, Rayong 21150

Sampling Source : GC 19

Sample No : W 67071879

Sample Name : Cooling Water Blowdown

Sampling Date : 26/07/2024

Sampling By : ETC

Sampling Time : 10:22 AM

Sampling Method : Grab

Received Date : 27/07/2024

Tested Date : 30/07/2024 - 09/08/2024

Reported Date : 09/08/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Biochemical Oxygen Demand	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	5.5	≤500
Chemical Oxygen Demand	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	63	≤750
Oil and Grease	mg/L	Liquid-Liquid, Partition-Gravimetric Method (SM:5520B)	< 3.0	≤10
pH (on site)		Electrometric Method	6.7	5.5 - 9
Temperature	°C	Laboratory and Field Method (SM:2550 B)	31	≤45
Total Dissolved Solids	mg/L	Dried at 180 degree celsius (SM:2540C)	936	≤3000
Total Suspended Solids	mg/L	Dried at 103-105 degree celsius (SM:2540D)	< 5	≤200

Physical Apperance : 1. Sample : yellowish, lightly SS

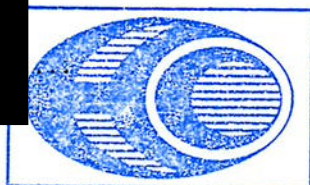
2. Container : Normal [ PE 0.5 L(2 Bottle) , PE 1.0 L , PE 1.8 L, G 1.0 L ]

Remark : 1. /1 Eastern Industrial Estate (Map ta Phut) , Maximum levels for Wastewater Discharging to Central Wastewater Treatment Plant

2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.

3. Sampling By Mr. Metee Sukprasert (จ-003-ก-0035)

Examined By

(จ-003-ก-0007)  
09/08/2024

Approved By

(จ-003-ก-0005)  
09/08/2024REPORT IS FOR THE SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY



Request No : W6707612

Report No : 6708-1031

### TEST REPORT


Customer : PTT Global Chemical Public Company Limited Branch 19  
Address : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
Sampling Source : GC 19 Sample No. : W 67071878  
Sample Name : Salt Solution Package Sampling Date : 26/07/2024  
Sampling By : ETC Sampling Time : 10:28 AM  
Sampling Method : Grab Received Date : 27/07/2024  
Tested Date : 27/07/2024 – 03/08/2024 Reported Date : 03/08/2024

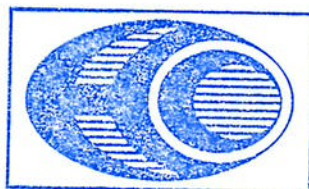
Parameter	Unit	Method	Result	Standard <sup>1/,2</sup>
Biochemical Oxygen Demand	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	2.8	≤ 20
Chemical Oxygen Demand	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	< 40	≤ 120
Oil and Grease	mg/L	Liquid-Liquid, Partition-Gravimetric Method (SM:5520B)	< 3.0	≤ 5
pH (on site)		Electrometric Method	8.4	5.5-9.0
Phenol	mg/L	Distillation, Direct Photometric Method (SM:5530B,D)	0.016	≤ 1
Temperature	°C	Laboratory and Field Method (SM:2550 B)	33	≤ 40
Total Dissolved Solids	mg/L	Dried at 180 degree celsius (SM:2540C)	11,040	36,960***
Total Suspended Solids	mg/L	Dried at 103-105 degree celsius (SM:2540D)	14	≤ 50


Physical Apperance : 1. Sample : yellowish, lightly SS  
2. Container : Normal [PE 0.5 L, PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1./1 Industrial Effluent Standard , Notification of the Ministry of Industry , B.E. 2560 (2017)  
2./2 Notification of the Ministry of Natural Resources and Environmental, B.E. 2559 (2016)  
3. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023  
4. \*\*\* ของแข็งละลายน้ำทั้งหมด (Total Dissolved Solids) กรณีระบายลงแหล่งน้ำที่มีค่าของแข็งละลายน้ำทั้งหมดเกินกว่า 3,000 มิลลิกรัมต่อลิตร ค่าของแข็งละลายน้ำทั้งหมดในน้ำทิ้งที่จะระบายได้ต้องมีค่าเกินกว่าค่าของแข็งละลายน้ำทั้งหมดที่มีอยู่ในแหล่งน้ำนั้นไม่เกิน 5,000 มิลลิกรัมต่อลิตร (คลองบางเบิด บริเวณระยะห่างจากจุดระบายน้ำทิ้งของนิคมอุตสาหกรรมผาแดง 500 เมตร มีค่า Total Dissolved Solids = 31,960 มิลลิกรัมต่อลิตร)

5. Sample By: Mr. Metee Sukprasert (ว-003-ค-0035)

Examined By :   
(ว-003-ค-0007)  
03/08/2024



Approved By :   
(ว-003-ค-0005)  
03/08/2024

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

## Test Report

Request No : W6708235

Report No : 6708-1158

Customer : PTT Global Chemical Public Company Limited Branch 19

Address : Noen Phra Sub-district, Mueang Rayong District, Rayong 21150

Sampling Source : GC 19

Sample No : W 67080722

Sample Name : Final Check Basin

Sampling Date : 07/08/2024

Sampling By : ETC

Sampling Time : 10:40 AM

Sampling Method : Grab

Received Date : 08/08/2024

Tested Date : 08/08/2024 - 16/08/2024

Reported Date : 20/08/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Biochemical Oxygen Demand	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	7.8	≤500
Chemical Oxygen Demand	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	54	≤750
Oil and Grease	mg/L	Liquid-Liquid, Partition-Gravimetric Method (SM:5520B)	< 3.0	≤10
pH (on site)		Electrometric Method	7.9	5.5 - 9
Phenol	mg/L	Distillation, Direct Photometric Method (SM:5530B,D)	0.021	≤1
Temperature	°C	Laboratory and Field Method (SM:2550 B)	32	≤45
Total Dissolved Solids	mg/L	Dried at 180 degree celsius (SM:2540C)	856	≤3000

Physical Apperance : 1. Sample : yellowish, lightly SS

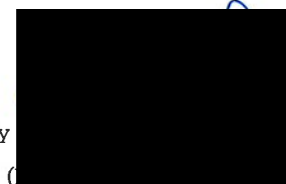
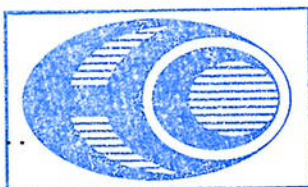
2. Container : Normal [ PE 0.5 L(2 Bottle) , PE 1.0 L , PE 1.8 L, G 1.0 L ]

Remark : 1. /1 Eastern Industrial Estate (Map ta Phut) , Maximum levels for Wastewater Discharging to Central Wastewater Treatment Plant

2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.

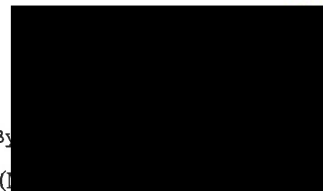
3. Sampling By Mr. Supharerk Phatklang (จ-003-ค-0031)

Examined By

(จ-003-ค-0007)  
20/08/2024

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(จ-003-ค-0005)  
20/08/2024

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

## Test Report

Request No : W6708235

Report No : 6708-1158

Customer : PTT Global Chemical Public Company Limited Branch 19

Address : Noen Phra Sub-district, Mueang Rayong District, Rayong 21150

Sampling Source : GC 19

Sample No : W 67080722

Sample Name : Final Check Basin

Sampling Date : 07/08/2024

Sampling By : ETC

Sampling Time : 10:40 AM

Sampling Method : Grab

Received Date : 08/08/2024

Tested Date : 08/08/2024 - 16/08/2024

Reported Date : 20/08/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Total Suspended Solids	mg/L	Dried at 103-105 degree celsius (SM:2540D)	< 5	≤200

Physical Apperance : 1. Sample : yellowish, lightly SS

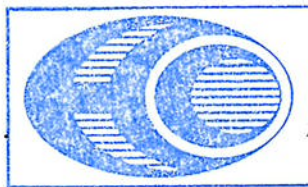
2. Container : Normal [ PE 0.5 L(2 Bottle) , PE 1.0 L , PE 1.8 L, G 1.0 L ]

Remark : 1. /1 Eastern Industrial Estate (Map ta Phut) , Maximum levels for Wastewater Discharging to Central Wastewater Treatment Plant

2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.

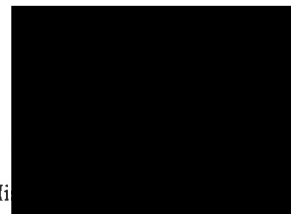
3. Sampling By Mr. Supharerk Phatklang (จ-003-ค-0031)

Examined By

(จ-003-ค-0007)  
20/08/2024

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(Mi

(จ-003-ค-0005)  
20/08/2024REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

## Test Report

Request No : W6708235

Report No : 6708-1160

Customer : PTT Global Chemical Public Company Limited Branch 19

Address : Noen Phra Sub-district, Mueang Rayong District, Rayong 21150

Sampling Source : GC 19

Sample No : W 67080724

Sample Name : Cooling Water Blowdown

Sampling Date : 07/08/2024

Sampling By : ETC

Sampling Time : 10:30 AM

Sampling Method : Grab

Received Date : 08/08/2024

Tested Date : 08/08/2024 - 16/08/2024

Reported Date : 20/08/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Biochemical Oxygen Demand	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	2.8	≤500
Chemical Oxygen Demand	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	51	≤750
Oil and Grease	mg/L	Liquid-Liquid, Partition-Gravimetric Method (SM:5520B)	< 3.0	≤10
pH (on site)		Electrometric Method	8.2	5.5 - 9
Temperature	°C	Laboratory and Field Method (SM:2550 B)	33	≤45
Total Dissolved Solids	mg/L	Dried at 180 degree celsius (SM:2540C)	1,040	≤3000
Total Suspended Solids	mg/L	Dried at 103-105 degree celsius (SM:2540D)	< 5	≤200

Physical Apperance : 1. Sample : yellowish, lightly SS

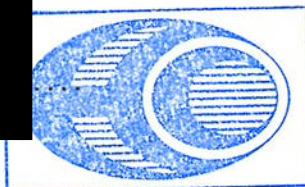
2. Container : Normal [ PE 0.5 L(2 Bottle) , PE 1.0 L , PE 1.8 L, G 1.0 L ]

Remark : 1. /1 Eastern Industrial Estate (Map ta Phut) , Maximum levels for Wastewater Discharging to Central Wastewater Treatment Plant

2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.

3. Sampling By Mr. Supharerk Phatklang (จ-003-ก-0031)

Examined By

(จ-003-ก-0007)  
20/08/2024

Approved By

(Mi

(จ-003-ก-0005)  
20/08/2024
 บริษัท อีสเทิร์น ไทย คอนซัลติ้ง 1992 จำกัด  
 REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
 THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
 WITHOUT THE WRITTEN APPROVAL LABORATORY



Request No : W6708235

Report No : 6708-1159

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 19  
Address : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
Sampling Source : GC 19 Sample No. : W 67080723  
Sample Name : Salt Solution Package Sampling Date : 07/08/2024  
Sampling By : ETC Sampling Time : 10:50 AM  
Sampling Method : Grab Received Date : 08/08/2024  
Tested Date : 08/08/2024 – 20/08/2024 Reported Date : 20/08/2024

Parameter	Unit	Method	Result	Standard <sup>1/,2</sup>
Biochemical Oxygen Demand	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	8.9	≤ 20
Chemical Oxygen Demand	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	< 40	≤ 120
Oil and Grease	mg/L	Liquid-Liquid, Partition-Gravimetric Method (SM:5520B)	< 3.0	≤ 5
pH (on site)		Electrometric Method	8.3	5.5-9.0
Phenol	mg/L	Distillation, Direct Photometric Method (SM:5530B,D)	0.294	≤ 1
Temperature	°C	Laboratory and Field Method (SM:2550 B)	33	≤ 40
Total Dissolved Solids	mg/L	Dried at 180 degree celsius (SM:2540C)	2,204	35,560***
Total Suspended Solids	mg/L	Dried at 103-105 degree celsius (SM:2540D)	32	≤ 50

Physical Apperance : 1. Sample : slightly – gray, lightly SS  
2. Container : Normal [PE 0.5 L, PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1./1 Industrial Effluent Standard , Notification of the Ministry of Industry , B.E. 2560 (2017)  
2./2 Notification of the Ministry of Natural Resources and Environmental, B.E. 2559 (2016)  
3. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023  
4. \*\*\* ของแข็งละลายน้ำทั้งหมด (Total Dissolved Solids) กรณีระบายลงแหล่งน้ำที่มีค่าของแข็งละลายน้ำทั้งหมดเกินกว่า 3,000 มิลลิกรัมต่อลิตร ค่าของแข็งละลายน้ำทั้งหมดในน้ำทิ้งที่จะระบายได้ต้องมีค่าเกินกว่าค่าของแข็งละลายน้ำทั้งหมดที่มีอยู่ในแหล่งน้ำนั้นไม่เกิน 5,000 มิลลิกรัมต่อลิตร (คลองบางเบิด บริเวณระยะห่างจากจุดระบายน้ำทิ้งของนิคมอุตสาหกรรมผาแดง 500 เมตร มีค่า Total Dissolved Solids = 30,560 มิลลิกรัมต่อลิตร)

5. Sampling By Mr. Supharerk Phatklang (ว-003-ค-0031)

Examined By ..

(ว-003-ค-0007)

20/08/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By ..

(ว-003-ค-0005)

20/08/2024

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

## Test Report

Request No : W6709584

Report No : 6710-0412

Customer : PTT Global Chemical Public Company Limited Branch 19

Address : Noen Phra Sub-district, Mueang Rayong District, Rayong 21150

Sampling Source : GC 19

Sample No : W 67091991

Sample Name : Final Check Basin

Sampling Date : 25/09/2024

Sampling By : ETC

Sampling Time : 9:45 AM

Sampling Method : Grab

Received Date : 26/09/2024

Tested Date : 26/09/2024 - 05/10/2024

Reported Date : 08/10/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Biochemical Oxygen Demand	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	< 2.0	≤500
Chemical Oxygen Demand	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	40	≤750
Oil and Grease	mg/L	Liquid-Liquid, Partition-Gravimetric Method (SM:5520B)	< 3.0	≤10
pH (on site)		Electrometric Method	7.5	5.5 - 9
Phenol	mg/L	Distillation, Direct Photometric Method (SM:5530B,D)	0.070	≤1
Temperature	°C	Laboratory and Field Method (SM:2550 B)	30	≤45
Total Dissolved Solids	mg/L	Dried at 180 degree celsius (SM:2540C)	496	≤3000

Physical Apperance : 1. Sample : yellowish, lightly SS

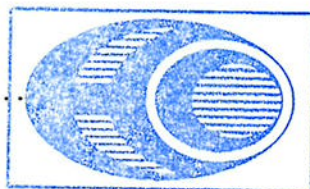
2. Container : Normal [ PE 0.5 L [ 2 Bottle], PE 1.0 L, PE 1.8 L, G 1.0 L ]

Remark : 1. /1 Eastern Industrial Estate (Map ta Phut) , Maximum levels for Wastewater Discharging to Central Wastewater Treatment Plant

2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.

3. Sampling By Mr. Parkpoom Buasawad (จ-003-ค-0017)

Examined By

(จ-003-ค-0007)  
08/10/2024

Approved By

(จ-003-ค-0005)  
08/10/2024บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

## Test Report

Request No : W6709584

Report No : 6710-0412

Customer : PTT Global Chemical Public Company Limited Branch 19

Address : Noen Phra Sub-district, Mueang Rayong District, Rayong 21150

Sampling Source : GC 19

Sample No : W 67091991

Sample Name : Final Check Basin

Sampling Date : 25/09/2024

Sampling By : ETC

Sampling Time : 9:45 AM

Sampling Method : Grab

Received Date : 26/09/2024

Tested Date : 26/09/2024 - 05/10/2024

Reported Date : 08/10/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Total Suspended Solids	mg/L	Dried at 103-105 degree celsius (SM:2540D)	< 5	≤ 200

Physical Apperance : 1. Sample : yellowish, lightly SS

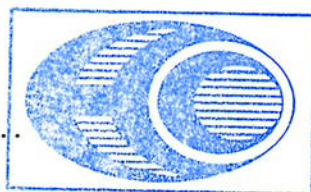
2. Container : Normal [ PE 0.5 L [ 2 Bottle], PE 1.0 L, PE 1.8 L, G 1.0 L ]

Remark : 1. /1 Eastern Industrial Estate (Map ta Phut) , Maximum levels for Wastewater Discharging to Central Wastewater Treatment Plant

2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.

3. Sampling By Mr. Parkpoom Buasawad (จ-003-ค-0017)

Examined By

(จ-003-ค-0007)  
08/10/2024

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved

(จ-003-ค-0005)  
08/10/2024REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY



## Test Report

Request No : W6709584

Report No : 6710-0414

Customer : PTT Global Chemical Public Company Limited Branch 19

Address : Noen Phra Sub-district, Mueang Rayong District, Rayong 21150

Sampling Source : GC 19

Sample No : W 67091993

Sample Name : Cooling Water Blowdown

Sampling Date : 25/09/2024

Sampling By : ETC

Sampling Time : 9:25 AM

Sampling Method : Grab

Received Date : 26/09/2024

Tested Date : 26/09/2024 - 03/10/2024

Reported Date : 08/10/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Biochemical Oxygen Demand	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	< 2.0	≤500
Chemical Oxygen Demand	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	< 40	≤750
Oil and Grease	mg/L	Liquid-Liquid, Partition-Gravimetric Method (SM:5520B)	< 3.0	≤10
pH (on site)		Electrometric Method	7.8	5.5 - 9
Temperature	°C	Laboratory and Field Method (SM:2550 B)	32	≤45
Total Dissolved Solids	mg/L	Dried at 180 degree celsius (SM:2540C)	692	≤3000
Total Suspended Solids	mg/L	Dried at 103-105 degree celsius (SM:2540D)	6	≤200

Physical Apperance : 1. Sample : yellowish, lightly SS

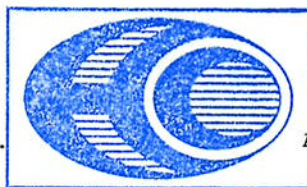
2. Container : Normal [ PE 0.5 L, PE 1.0 L, PE 1.8 L, G 1.0 L ]

Remark : 1. /1 Eastern Industrial Estate (Map ta Phut) , Maximum levels for Wastewater Discharging to Central Wastewater Treatment Plant

2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.

3. Sampling By Mr. Parkpoom Buasawad (ว-003-ก-0017)

Examined By

(ว-003-ก-0007)  
08/10/2024

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(N

(ว-003-ก-0005)  
08/10/2024REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No : W6709584

Report No : 6710-0413

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 19  
Address : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
Sampling Source : GC 19 Sample No. : W 67091992  
Sample Name : Salt Solution Package Sampling Date : 25/09/2024  
Sampling By : ETC Sampling Time : 09:35 AM  
Sampling Method : Grab Received Date : 26/09/2024  
Tested Date : 26/09/2024 – 05/10/2024 Reported Date : 08/10/2024

Parameter	Unit	Method	Result	Standard <sup>1,2</sup>
Biochemical Oxygen Demand	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	< 2.0	≤ 20
Chemical Oxygen Demand	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	< 40	≤ 120
Oil and Grease	mg/L	Liquid-Liquid, Partition-Gravimetric Method (SM:5520B)	< 3.0	≤ 5
pH (on site)		Electrometric Method	8.1	5.5-9.0
Phenol	mg/L	Distillation, Direct Photometric Method (SM:5530B,D)	< 0.005	≤ 1
Temperature	°C	Laboratory and Field Method (SM:2550 B)	33	≤ 40
Total Dissolved Solids	mg/L	Dried at 180 degree celsius (SM:2540C)	10,480	37,180***
Total Suspended Solids	mg/L	Dried at 103-105 degree celsius (SM:2540D)	36	≤ 50

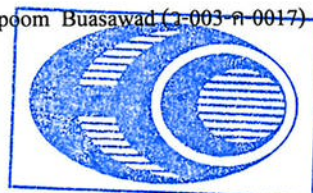
Physical Appearance : 1. Sample : yellowish, lightly SS  
2. Container : Normal [PE 0.5 L, PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1./1 Industrial Effluent Standard, Notification of the Ministry of Industry, B.E. 2560 (2017)  
2./2 Notification of the Ministry of Natural Resources and Environmental, B.E. 2559 (2016)  
3. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023  
4. \*\*\* ของแข็งละลายน้ำทั้งหมด (Total Dissolved Solids) กรณีระบายลงแหล่งน้ำที่มีค่าของแข็งละลายน้ำทั้งหมดเกินกว่า 3,000 มิลลิกรัมต่อลิตร ค่าของแข็งละลายน้ำทั้งหมดในน้ำทิ้งที่จะระบายได้ต้องมีค่าเกินกว่าค่าของแข็งละลายน้ำทั้งหมดที่มีอยู่ในแหล่งน้ำนั้นไม่เกิน 5,000 มิลลิกรัมต่อลิตร (คลองบางเบิด บริเวณระยะห่างจากจุดระบายน้ำทิ้งของนิคมอุตสาหกรรมผาแดง 500 เมตร มีค่า Total Dissolved Solids = 32,180 มิลลิกรัมต่อลิตร)  
5. Sampling By Mr. Parkpoom Buasawad (ว-003-ก-0017)

Examined By

(ว-003-ก-0007)

08/10/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By ...

(ว-003-ก-0005)

08/10/2024

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

## Test Report

Request No : W6709584

Report No : 6710-0415

Customer : PTT Global Chemical Public Company Limited Branch 19

Address : Noen Phra Sub-district, Mueang Rayong District, Rayong 21150

Sampling Source : GC 19

Sample No : W 67091994

Sample Name : TK-1693

Sampling Date : 25/09/2024

Sampling By : ETC

Sampling Time : 9:15 AM

Sampling Method : Grab

Received Date : 26/09/2024

Tested Date : 26/09/2024 - 03/10/2024

Reported Date : 08/10/2024

Parameter	Unit	Method	Result
Biochemical Oxygen Demand	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	25,150
Chemical Oxygen Demand	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	155,200
Oil and Grease	mg/L	Liquid-Liquid, Partition-Gravimetric Method (SM:5520B)	331
pH (on site)		Electrometric Method	12.5
Temperature	°C	Laboratory and Field Method (SM:2550 B)	28
Total Dissolved Solids	mg/L	Dried at 180 degree celsius (SM:2540C)	83,050
Total Suspended Solids	mg/L	Dried at 103-105 degree celsius (SM:2540D)	< 5

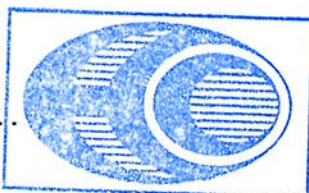
Physical Apperance : 1. Sample : brown, lightly SS

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

Remark : 1. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.

2. Sampling By Mr. Parkpoom Buasawad (ว-003-ก-0017)

Examined By

(ว-003-ก-0007)  
08/10/2024

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(N

(ว-003-ก-0005)  
08/10/2024REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

## Test Report

Request No : W6709584

Report No : 6710-0416

Customer : PTT Global Chemical Public Company Limited Branch 19

Address : Noen Phra Sub-district, Mueang Rayong District, Rayong 21150

Sampling Source : GC 19

Sample No : W 67091995

Sample Name : Equalization Pond

Sampling Date : 25/09/2024

Sampling By : ETC

Sampling Time : 9:55 AM

Sampling Method : Grab

Received Date : 26/09/2024

Tested Date : 26/09/2024 - 07/10/2024

Reported Date : 08/10/2024

Parameter	Unit	Method	Result
Biochemical Oxygen Demand	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	10.4
Chemical Oxygen Demand	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	< 40
Oil and Grease	mg/L	Liquid-Liquid, Partition-Gravimetric Method (SM:5520B)	< 3.0
pH (on site)		Electrometric Method	7.0
Temperature	°C	Laboratory and Field Method (SM:2550 B)	32
Total Dissolved Solids	mg/L	Dried at 180 degree celsius (SM:2540C)	400
Total Suspended Solids	mg/L	Dried at 103-105 degree celsius (SM:2540D)	< 5

Physical Apperance : 1. Sample : yellowish, lightly SS

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

Remark : 1. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.

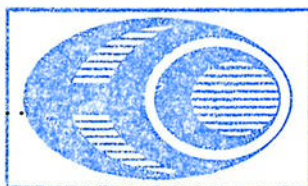
2. Sampling By Mr. Parkpoom Buasawad (ว-003-ท-0017)

Examined By



(ว-003-ท-0007)

08/10/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(ว-003-ท-0005)

08/10/2024

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

## Test Report

Request No : W6710507

Report No : 6711-0155

Customer : PTT Global Chemical Public Company Limited Branch 19

Address : Noen Phra Sub-district, Mueang Rayong District, Rayong 21150

Sampling Source : GC19 Propylene Oxide Plant

Sample No : W 67101542

Sample Name : Final Check Basin

Sampling Date : 18/10/2024

Sampling By : ETC

Sampling Time : 10:20 AM

Sampling Method : Grab

Received Date : 19/10/2024

Tested Date : 19/10/2024 - 30/10/2024

Reported Date : 30/10/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Biochemical Oxygen Demand	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	20.0	≤500
Chemical Oxygen Demand	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	83	≤750
Oil and Grease	mg/L	Liquid-Liquid, Partition-Gravimetric Method (SM:5520B)	< 3.0	≤10
pH (on site)		Electrometric Method	7.2	5.5 - 9
Phenol	mg/L	Distillation, Direct Photometric Method (SM:5530B,D)	0.042	≤1
Temperature	°C	Laboratory and Field Method (SM:2550 B)	29	≤45
Total Dissolved Solids	mg/L	Dried at 180 degree celsius (SM:2540C)	526	≤3000

Physical Appearance : 1. Sample : yellow, lightly SS

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

Remark : 1. /1 Eastern Industrial Estate (Map ta Phut) , Maximum levels for Wastewater Discharging to Central Wastewater Treatment Plant

2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.

3. Sampling By Mr. Parkpoom Buasawad (จ-003-ก-0017)

Examined By

(จ-003-ก-0007)  
30/10/2024

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(จ-003-ก-0005)  
30/10/2024

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



## Test Report

Request No : W6710507

Report No : 6711-0155

Customer : PTT Global Chemical Public Company Limited Branch 19

Address : Noen Phra Sub-district, Mueang Rayong District, Rayong 21150

Sampling Source : GC19 Propylene Oxide Plant

Sample No : W 67101542

Sample Name : Final Check Basin

Sampling Date : 18/10/2024

Sampling By : ETC

Sampling Time : 10:20 AM

Sampling Method : Grab

Received Date : 19/10/2024

Tested Date : 19/10/2024 - 30/10/2024

Reported Date : 30/10/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Total Suspended Solids	mg/L	Dried at 103-105 degrec celsius (SM:2540D)	9	≤200

Physical Apperance : 1. Sample : yellow, lightly SS

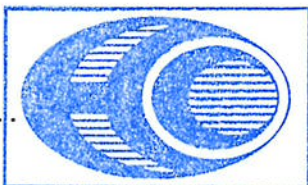
2. Container : Normal [ PE 0.5 L [ 2 Bottle], PE 1.0 L, PE 1.8 L, G 1.0 L ]

Remark : 1. /1 Eastern Industrial Estate (Map ta Phut) , Maximum levels for Wastewater Discharging to Central Wastewater Treatment Plant

2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.

3. Sampling By Mr. Parkpoom Buasawad (จ-003-ค-0017)

Examined By

(จ-003-ค-0007)  
30/10/2024

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(จ-003-ค-0005)  
30/10/2024REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

## Test Report

Request No : W6710507

Report No : 6711-0157

Customer : PTT Global Chemical Public Company Limited Branch 19

Address : Noen Phra Sub-district, Mueang Rayong District, Rayong 21150

Sampling Source : GC19 Propylene Oxide Plant

Sample No : W 67101544

Sample Name : Cooling Water Blowdown

Sampling Date : 18/10/2024

Sampling By : ETC

Sampling Time : 10:00 AM

Sampling Method : Grab

Received Date : 19/10/2024

Tested Date : 19/10/2024 - 30/10/2024

Reported Date : 30/10/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Biochemical Oxygen Demand	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	2.5	≤500
Chemical Oxygen Demand	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	64	≤750
Oil and Grease	mg/L	Liquid-Liquid, Partition-Gravimetric Method (SM:5520B)	< 3.0	≤10
pH (on site)		Electrometric Method	7.1	5.5 - 9
Temperature	°C	Laboratory and Field Method (SM:2550 B)	31	≤45
Total Dissolved Solids	mg/L	Dried at 180 degree celsius (SM:2540C)	904	≤3000
Total Suspended Solids	mg/L	Dried at 103-105 degree celsius (SM:2540D)	9	≤200

Physical Apperance : 1. Sample : yellow, lightly SS

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

Remark : 1. /1 Eastern Industrial Estate (Map ta Phut) , Maximum levels for Wastewater Discharging to Central Wastewater Treatment Plant

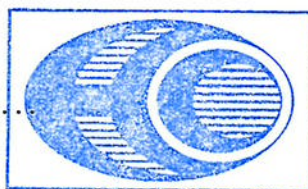
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.

3. Sampling By Mr. Parkpoom Buasawad (ว-003-ก-0017)

Examined By

(ว-003-ก-0007)

30/10/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(ว-003-ก-0005)

30/10/2024

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



Request No : W6710507

Report No : 6711-0156

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 19  
Address : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
Sampling Source : GC 19 Sample No. : W 67101543  
Sample Name : Salt Solution Package Sampling Date : 18/10/2024  
Sampling By : ETC Sampling Time : 10:10 AM  
Sampling Method : Grab Received Date : 19/10/2024  
Tested Date : 19/10/2024 – 30/10/2024 Reported Date : 30/10/2024

Parameter	Unit	Method	Result	Standard <sup>1,2</sup>
Biochemical Oxygen Demand	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	< 2.0	≤ 20
Chemical Oxygen Demand	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	< 40	≤ 120
Oil and Grease	mg/L	Liquid-Liquid, Partition-Gravimetric Method (SM:5520B)	< 3.0	≤ 5
pH (on site)		Electrometric Method	8.5	5.5-9.0
Phenol	mg/L	Distillation, Direct Photometric Method (SM:5530B,D)	0.070	≤ 1
Temperature	°C	Laboratory and Field Method (SM:2550 B)	28	≤ 40
Total Dissolved Solids	mg/L	Dried at 180 degree celsius (SM:2540C)	1,508	37,060***
Total Suspended Solids	mg/L	Dried at 103-105 degree celsius (SM:2540D)	< 5	≤ 50

Physical Apperance : 1. Sample : yellowish, lightly SS  
2. Container : Normal [PE 0.5 L, PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1./1 Industrial Effluent Standard , Notification of the Ministry of Industry , B.E. 2560 (2017)  
2./2 Notification of the Ministry of Natural Resources and Environmental, B.E. 2559 (2016)  
3. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.  
4. \*\*\* ของแข็งละลายน้ำทั้งหมด (Total Dissolved Solids) กรณีระบายลงแหล่งน้ำที่มีค่าของแข็งละลายน้ำทั้งหมดเกินกว่า 3,000 มิลลิกรัมต่อลิตร ค่าของแข็งละลายน้ำทั้งหมดในน้ำทิ้งที่จะระบายได้ต้องมีค่าเกินกว่าค่าของแข็งละลายน้ำทั้งหมดที่มีอยู่ในแหล่งน้ำนั้นไม่เกิน 5,000 มิลลิกรัมต่อลิตร (คลองบางเบิด บริเวณระยะห่างจากจุดระบายน้ำทิ้งของนิคมอุตสาหกรรมผาแดง 500 เมตร มีค่า Total Dissolved Solids = 32,060 มิลลิกรัมต่อลิตร)  
5. Sampling By Mr. Parkpoom Buasawad (ว-003-ก-0017)

Examined By

(ว-003-ก-0007)

30/10/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By ....

( ว-003-ก-0005)

30/10/2024

REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

## Test Report

Request No : W6711646

Report No : 6712-0227

Customer : PTT Global Chemical Public Company Limited Branch 19

Address : Noen Phra Sub-district, Mueang Rayong District, Rayong 21150

Sampling Source : GC19 Propylene Oxide Plant

Sample No : W 67111967

Sample Name : Final Check Basin

Sampling Date : 27/11/2024

Sampling By : ETC

Sampling Time : 10:10 AM

Sampling Method : Grab

Received Date : 28/11/2024

Tested Date : 28/11/2024 - 03/12/2024

Reported Date : 06/12/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Biochemical Oxygen Demand	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	8.7	≤500
Chemical Oxygen Demand	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	< 40	≤750
Oil and Grease	mg/L	Liquid-Liquid, Partition-Gravimetric Method (SM:5520B)	< 3.0	≤10
pH (on site)		Electrometric Method	8.1	5.5 - 9
Phenol	mg/L	Distillation, Direct Photometric Method (SM:5530B,D)	0.026	≤1
Temperature	°C	Laboratory and Field Method (SM:2550 B)	30	≤45
Total Dissolved Solids	mg/L	Dried at 180 degree celsius (SM:2540C)	376	≤3000

Physical Apperance : 1. Sample : yellowish, lightly SS

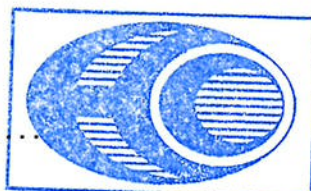
2. Container : Normal [ PE 0.5 L [ 2 Bottle], PE 1.0 L, PE 1.8 L ]

Remark : 1. /1 Eastern Industrial Estate (Map ta Phut) , Maximum levels for Wastewater Discharging to Central Wastewater Treatment Plant

2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.

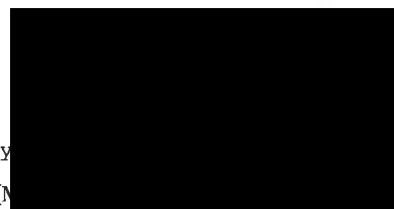
3. Sampling By Mr. Suttha Songthaninai (จ-003-ค-0010)

Examined By

(จ-003-ค-0007)  
06/12/2024

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(จ-003-ค-0005)  
06/12/2024

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

## Test Report

Request No : W6711646

Report No : 6712-0227

Customer : PTT Global Chemical Public Company Limited Branch 19

Address : Noen Phra Sub-district, Mueang Rayong District, Rayong 21150

Sampling Source : GC19 Propylene Oxide Plant

Sample No : W 67111967

Sample Name : Final Check Basin

Sampling Date : 27/11/2024

Sampling By : ETC

Sampling Time : 10:10 AM

Sampling Method : Grab

Received Date : 28/11/2024

Tested Date : 28/11/2024 - 03/12/2024

Reported Date : 06/12/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Total Suspended Solids	mg/L	Dried at 103-105 degree celsius (SM:2540D)	< 5	≤200

Physical Apperance : 1. Sample : yellowish, lightly SS

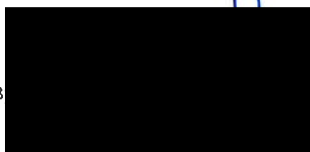
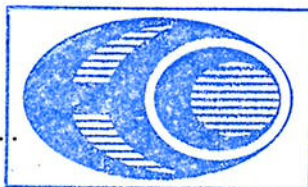
2. Container : Normal [ PE 0.5 L [ 2 Bottle], PE 1.0 L, PE 1.8 L ]

Remark : 1. /1 Eastern Industrial Estate (Map ta Phut) , Maximum levels for Wastewater Discharging to Central Wastewater Treatment Plant

2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.

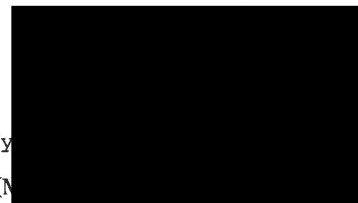
3. Sampling By Mr. Suttha Songthaninai (จ-003-ท-0010)

Examined By

(จ-003-ท-0007)  
06/12/2024

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(จ-003-ท-0005)  
06/12/2024REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY



## Test Report

Request No : W6711646

Report No : 6712-0229

Customer : PTT Global Chemical Public Company Limited Branch 19

Address : Noen Phra Sub-district, Mueang Rayong District, Rayong 21150

Sampling Source : GC19 Propylene Oxide Plant

Sample No : W 67111969

Sample Name : Cooling Water Blowdown

Sampling Date : 27/11/2024

Sampling By : ETC

Sampling Time : 9:55 AM

Sampling Method : Grab

Received Date : 28/11/2024

Tested Date : 28/11/2024 - 03/12/2024

Reported Date : 06/12/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Biochemical Oxygen Demand	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	7.2	≤500
Chemical Oxygen Demand	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	42	≤750
Oil and Grease	mg/L	Liquid-Liquid, Partition-Gravimetric Method (SM:5520B)	< 3.0	≤10
pH (on site)		Electrometric Method	8.0	5.5 - 9
Temperature	°C	Laboratory and Field Method (SM:2550 B)	30	≤45
Total Dissolved Solids	mg/L	Dried at 180 degree celsius (SM:2540C)	430	≤3000
Total Suspended Solids	mg/L	Dried at 103-105 degree celsius (SM:2540D)	< 5	≤200

Physical Apperance : 1. Sample : yellowish, lightly SS

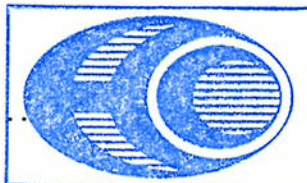
2. Container : Normal [ PE 0.5 L [ 2 Bottle], PE 1.0 L, PE 1.8 L, G 1.0 L ]

Remark : 1./1 Eastern Industrial Estate (Map ta Phut) , Maximum levels for Wastewater Discharging to Central Wastewater Treatment Plant

2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.

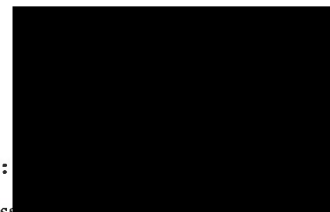
3. Sampling By Mr. Suttha Songthaninai (จ-003-ก-0010)

Examined By

(จ-003-ก-0007)  
06/12/2024

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By :

(Miss Nannapat Datchanont)  
(จ-003-ก-0005)  
06/12/2024REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No : W6711646

Report No : 6712-0228

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 19  
Address : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
Sampling Source : GC 19 Sample No. : W 67111968  
Sample Name : Salt Solution Package Sampling Date : 27/11/2024  
Sampling By : ETC Sampling Time : 10:00 AM  
Sampling Method : Grab Received Date : 28/11/2024  
Tested Date : 28/11/2024 – 03/12/2024 Reported Date : 06/12/2024

Parameter	Unit	Method	Result	Standard <sup>1/,2</sup>
Biochemical Oxygen Demand	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	5.8	≤ 20
Chemical Oxygen Demand	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	< 40	≤ 120
Oil and Grease	mg/L	Liquid-Liquid, Partition-Gravimetric Method (SM:5520B)	< 3.0	≤ 5
pH (on site)		Electrometric Method	8.3	5.5-9.0
Phenol	mg/L	Distillation, Direct Photometric Method (SM:5530B,D)	0.009	≤ 1
Temperature	°C	Laboratory and Field Method (SM:2550 B)	33	≤ 40
Total Dissolved Solids	mg/L	Dried at 180 degree celsius (SM:2540C)	10,320	35,440***
Total Suspended Solids	mg/L	Dried at 103-105 degree celsius (SM:2540D)	15	≤ 50

Physical Apperance : 1. Sample : yellowish, lightly SS  
2. Container : Normal [PE 0.5 L, PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1./1 Industrial Effluent Standard , Notification of the Ministry of Industry , B.E. 2560 (2017)  
2./2 Notification of the Ministry of Natural Resources and Environmental, B.E. 2559 (2016)  
3. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.  
4. \*\*\* ของแข็งละลายน้ำทั้งหมด (Total Dissolved Solids) กรณีระบายลงแหล่งน้ำที่มีค่าของแข็งละลายน้ำทั้งหมดเกินกว่า 3,000 มิลลิกรัมต่อลิตร ค่าของแข็งละลายน้ำทั้งหมดในน้ำทิ้งที่จะระบายได้ต้องมีค่าเกินกว่าค่าของแข็งละลายน้ำทั้งหมดที่มีอยู่ในแหล่งน้ำนั้นไม่เกิน 5,000 มิลลิกรัมต่อลิตร (คลองบางเบิด บริเวณระยะห่างจากจุดระบายน้ำทิ้งของนิคมอุตสาหกรรมผาแดง 500 เมตร มีค่า Total Dissolved Solids = 30,440 มิลลิกรัมต่อลิตร)

5. Sampling By Mr. Suttha Songthaninai (ว-003-ก-0010)

Examined By

(ว-003-ก-0007)

06/12/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(ว-003-ก-0005)

06/12/2024

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



## Test Report

Request No : W6712315

Report No : 6712-1552

Customer : PTT Global Chemical Public Company Limited Branch 19

Address : Noen Phra Sub-district, Mueang Rayong District, Rayong 21150

Sampling Source : GC19

Sample No : W 67120969

Sample Name : Final Check Basin

Sampling Date : 11/12/2024

Sampling By : ETC

Sampling Time : 11:40 AM

Sampling Method : Grab

Received Date : 12/12/2024

Tested Date : 12/12/2024 - 18/12/2024

Reported Date : 23/12/2024

Parameter	Unit	Method	Result	Standard/ <sup>1</sup>
Biochemical Oxygen Demand	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	4.2	≤500
Chemical Oxygen Demand	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	< 40	≤750
Oil and Grease	mg/L	Liquid-Liquid, Partition-Gravimetric Method (SM:5520B)	< 3.0	≤10
pH (on site)		Electrometric Method	7.9	5.5 - 9
Phenol	mg/L	Distillation, Direct Photometric Method (SM:5530B,D)	< 0.005	≤1
Temperature	°C	Laboratory and Field Method (SM:2550 B)	31	≤45
Total Dissolved Solids	mg/L	Dried at 180 degree celsius (SM:2540C)	724	≤3000

Physical Apperance : 1. Sample : yellowish, lightly SS

2. Container : Normal [ PE 0.5 L [ 2 Bottle], PE 1.8 L, PE 2.0 L, G 1.0 L ]

Remark : 1. /1 Eastern Industrial Estate (Map ta Phut) , Maximum levels for Wastewater Discharging to Central Wastewater Treatment Plant

2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.

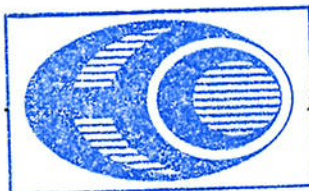
3. Sampling By Mr. Songpon Phiwuan (จ-003-ก-0016)

Examined By



(จ-003-ก-0007)

23/12/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(M

(จ-003-ก-0005)

23/12/2024

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

## Test Report

Request No : W6712315

Report No : 6712-1552

Customer : PTT Global Chemical Public Company Limited Branch 19

Address : Noen Phra Sub-district, Mueang Rayong District, Rayong 21150

Sampling Source : GC19

Sample No : W 67120969

Sample Name : Final Check Basin

Sampling Date : 11/12/2024

Sampling By : ETC

Sampling Time : 11:40 AM

Sampling Method : Grab

Received Date : 12/12/2024

Tested Date : 12/12/2024 - 18/12/2024

Reported Date : 23/12/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Total Suspended Solids	mg/L	Dried at 103-105 degree celsius (SM:2540D)	< 5	≤200

Physical Apperance : 1. Sample : yellowish, lightly SS

2. Container : Normal [ PE 0.5 L [ 2 Bottle], PE 1.8 L, PE 2.0 L, G 1.0 L ]

Remark : 1. /I Eastern Industrial Estate (Map ta Phut) , Maximum levels for Wastewater Discharging to Central Wastewater Treatment Plant

2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.

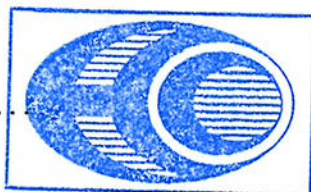
3. Sampling By Mr. Songpon Phiwan (จ-003-ค-0016)

Examined By



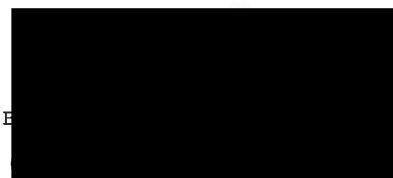
(จ-003-ค-0007)

23/12/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(จ-003-ค-0005)

23/12/2024

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

## Test Report

Request No : W6712315

Report No : 6712-1554

Customer : PTT Global Chemical Public Company Limited Branch 19

Address : Noen Phra Sub-district, Mueang Rayong District, Rayong 21150

Sampling Source : GC19

Sample No : W 67120971

Sample Name : Cooling Water Blowdown

Sampling Date : 11/12/2024

Sampling By : ETC

Sampling Time : 11:20 AM

Sampling Method : Grab

Received Date : 12/12/2024

Tested Date : 12/12/2024 - 18/12/2024

Reported Date : 23/12/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Biochemical Oxygen Demand	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	2.9	≤500
Chemical Oxygen Demand	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	58	≤750
Oil and Grease	mg/L	Liquid-Liquid, Partition-Gravimetric Method (SM:5520B)	< 3.0	≤10
pH (on site)		Electrometric Method	7.9	5.5 - 9
Temperature	°C	Laboratory and Field Method (SM:2550 B)	29	≤45
Total Dissolved Solids	mg/L	Dried at 180 degree celsius (SM:2540C)	2,160	≤3000
Total Suspended Solids	mg/L	Dried at 103-105 degree celsius (SM:2540D)	6	≤200

Physical Apperance : 1. Sample : yellowish, lightly SS


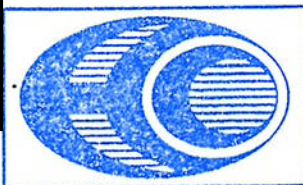
2. Container : Normal [ PE 0.5 L, PE 1.8 L, PE 2.0 L, G 1.0 L ]

Remark : 1. /1 Eastern Industrial Estate (Map ta Phut) , Maximum levels for Wastewater Discharging to Central Wastewater Treatment Plant

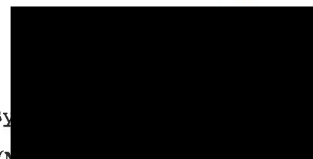
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.

3. Sampling By Mr. Songpon Phiwan (J-003-ค-0016)

Examined By

  
(Miss Praphas Chan-arny)  
(J-003-ค-0007)  
23/12/2024

Approved By

  
(Miss Praphas Chan-arny)  
(J-003-ค-0005)  
23/12/2024REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No : W6712660

## TEST REPORT

Report No : 6801-0507

Customer : PTT Global Chemical Public Company Limited Branch 19  
Address : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
Sampling Source : GC 19 Sample No. : W 67122061  
Sample Name : Salt Solution Package Sampling Date : 27/12/2024  
Sampling By : ETC Sampling Time : 09:35 AM  
Sampling Method : Grab Received Date : 28/12/2024  
Tested Date : 28/12/2024 – 09/01/2025 Reported Date : 09/01/2025

Parameter	Unit	Method	Result	Standard <sup>1/,2</sup>
Biochemical Oxygen Demand	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	< 2.0	≤ 20
Chemical Oxygen Demand	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	< 40	≤ 120
Oil and Grease	mg/L	Liquid-Liquid, Partition-Gravimetric Method (SM:5520B)	< 3.0	≤ 5
pH (on site)		Electrometric Method	7.2	5.5-9.0
Phenol	mg/L	Distillation, Direct Photometric Method (SM:5530B,D)	0.011	≤ 1
Temperature	°C	Laboratory and Field Method (SM:2550 B)	28	≤ 40
Total Dissolved Solids	mg/L	Dried at 180 degree celsius (SM:2540C)	1,468	40,340***
Total Suspended Solids	mg/L	Dried at 103-105 degree celsius (SM:2540D)	< 5	≤ 50

Physical Apperance : 1. Sample : lightly SS  
2. Container : Normal [PE 0.5 L, PE 1.0 L, PE 1.8 L, G 1.0 L]

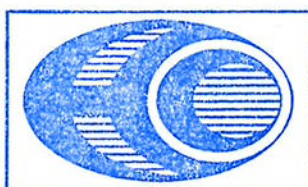
Remark : 1./1 Industrial Effluent Standard , Notification of the Ministry of Industry , B.E. 2560 (2017)  
2./2 Notification of the Ministry of Natural Resources and Environmental, B.E. 2559 (2016)  
3. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.  
4. \*\*\* ของแข็งละลายน้ำทั้งหมด (Total Dissolved Solids) กรณีระบายลงแหล่งน้ำที่มีค่าของแข็งละลายน้ำทั้งหมดเกินกว่า 3,000 มิลลิกรัมต่อลิตร ค่าของแข็งละลายน้ำทั้งหมดในน้ำทิ้งที่จะระบายได้ต้องมีค่าเกินกว่าค่าของแข็งละลายน้ำทั้งหมดที่มีอยู่ในแหล่งน้ำนั้นไม่เกิน 5,000 มิลลิกรัมต่อลิตร (คลองบางเบิด บริเวณระยะห่างจากจุดระบายน้ำทิ้งของนิคมอุตสาหกรรมผาแดง 500 เมตร มีค่า Total Dissolved Solids = 35,340 มิลลิกรัมต่อลิตร)  
5. Sampling By Mr. Songpon Phiwuan (ว-003-ค-0016)

Examined By



(ว-003-ค-0007)

09/01/2025



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(ว-003-ค-0005)

09/01/2025

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



บริษัท ซีคอต จำกัด  
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800  
239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

TEL. (662) 959-3600 FAX (662) 959-3535 Website : secot.co.th E-mail : envserv@secot.co.th

SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.(GC 19 : GCO)	REQUEST SERVICE No.	: 2132/67
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING METHOD	: Hand Auger
SAMPLING DATE	: 18/10/2024	SAMPLING TIME	: 10:00-10:08
RECEIVED DATE	: 19/10/2024	ANALYTICAL DATE	: 19-20/10/2024
REPORT DATE	: 31/10/2024	SITE OPERATOR	: Mr.Natthachai Chaiyakhot
SAMPLE CONDITION	: Normal	FILE CODE	: 224026_Soil_October

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	STANDARD <sup>1/</sup>
				บ่อน้ำใต้ดิน (MW 1)	
pH	-	9045 D	-	7.41	-
Acetone	mg/kg	5035 A / 8260 D	< 0.001	ND	≤ 1,000
Ethylbenzene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 230

REFERENCE : US EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE, 3<sup>rd</sup> ED., 2020



Analyst

REG. NO. 2-239-ก-0022



Technical Management Team

REG. NO. 2-239-ก-0004

- Remark :**
1. Reported analysis refers to submitted sample only.
  2. This report shall not be reproduced, except in full, without official approval.
  3. <sup>1/</sup> Notification of the Ministry of Industry, B.E.2559 (2016).
  4. - Not available.

COPY





บริษัท ซีคอต จำกัด  
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800  
239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND  
TEL. (662) 959-3600 FAX (662) 959-3535 Website : secot.co.th E-mail : envserv@secot.co.th

SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical Public Co., Ltd.(GC 19 : GCO) REQUEST SERVICE No. : 2132/67  
SAMPLING BY : SECOT Co., Ltd. SAMPLING METHOD : Hand Auger  
SAMPLING DATE : 18/10/2024 SAMPLING TIME : 09:40-09:47  
RECEIVED DATE : 19/10/2024 ANALYTICAL DATE : 19-20/10/2024  
REPORT DATE : 31/10/2024 SITE OPERATOR : Mr.Natthachai Chaiyakhot  
SAMPLE CONDITION : Normal FILE CODE : 224026\_Soil\_October

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	STANDARD <sup>1/</sup>
				บ่อน้ำใต้ดิน (MW 3)	
pH	-	9045 D	-	6.85	-
Acetone	mg/kg	5035 A / 8260 D	< 0.001	ND	≤ 1,000
Ethylbenzene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 230

REFERENCE : US EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE, 1<sup>st</sup> ED., 2020



Analyst

REG. NO. ๖-239-๖-0022



Technical Management Team

REG. NO. ๖-239-๖-0004

- Remark : 1. Reported analysis refers to submitted sample only.  
2. This report shall not be reproduced, except in full, without official approval.  
3. <sup>1/</sup> Notification of the Ministry of Industry, B.E.2559 (2016).  
4. - Not available.



บริษัท ซีคอต จำกัด  
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800  
239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

TEL. (662) 959-3600 FAX (662) 959-3535 Website: secot.co.th E-mail: envserv@secot.co.th

SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.(GC 19 : GCO)	REQUEST SERVICE No.	: 2132/67
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING METHOD	: Hand Auger
SAMPLING DATE	: 18/10/2024	SAMPLING TIME	: 09:17-09:26
RECEIVED DATE	: 19/10/2024	ANALYTICAL DATE	: 19-20/10/2024
REPORT DATE	: 31/10/2024	SITE OPERATOR	: Mr.Natthachai Chaiyakhot
SAMPLE CONDITION	: Normal	FILE CODE	: 224026_Soil_October

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION บ่อน้ำใต้ดิน (MW 2)	STANDARD <sup>1)</sup>
pH	-	9045 D	-	7.09	-
Acetone	mg/kg	5035 A / 8260 D	< 0.001	ND	≤ 1,000
Ethylbenzene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 230

REFERENCE : US EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE, 1<sup>st</sup> ED., 2024



Analyst

REG. NO. 2-239-ท-0022



Technical Management Team

REG. NO. 2-239-ท-0004

- Remark :
1. Reported analysis refers to submitted sample only.
  2. This report shall not be reproduced, except in full, without official approval.
  3. <sup>1)</sup> Notification of the Ministry of Industry, B.E.2559 (2016).
  4. - Not available.

COPY



บริษัท ซีคอต จำกัด  
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

TEL. (662) 959-3600 FAX (662) 959-3535 Website : secot.co.th E-mail : cnvserv@secot.co.th

SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.(GC 19 : GCO)	REQUEST SERVICE No.	: 2132/67
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING METHOD	: Hand Auger
SAMPLING DATE	: 18/10/2024	SAMPLING TIME	: 10:00-10:08
RECEIVED DATE	: 19/10/2024	ANALYTICAL DATE	: 19, 24-30/10/2024
REPORT DATE	: 31/10/2024	SITE OPERATOR	: Mr.Naithachai Chaiyakhot
SAMPLE CONDITION	: Normal	FILE CODE	: 224026 Soill October

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION บ่อน้ำใต้ดิน (MW 1)	STANDARD <sup>1/</sup>
<b>Total Petroleum Hydrocarbons</b>					
- TPH (C <sub>5</sub> - C <sub>8</sub> )	mg/kg	5035 A / 8260 D	< 0.003	ND	≤ 25
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C <sub>9</sub> - C <sub>16</sub> )	mg/kg	3540 C / 8015 D	< 0.25	ND	≤ 25
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C <sub>17</sub> - C <sub>35</sub> )	mg/kg	3540 C / 8015 D	< 1.85	3.23	≤ 8
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetratriacontane					
- Pentatriacontane					

REFERENCE : US EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE, 1<sup>st</sup> ED., 2020.

Analyst

REG. NO. 2-239-ก-0022

Technical Management Team

REG. NO. 2-239-ก-0004

- Remark :**
1. Reported analysis refers to submitted sample only.
  2. This report shall not be reproduced, except in full, without official approval.
  3. <sup>1/</sup> Notification of the Ministry of Industry, B.E.2559 (2016).
  4. - Not available.



บริษัท ซีคอต จำกัด  
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800  
239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

TEL. (662) 959-3600 FAX (662) 959-3535 Website : secot.co.th E-mail : envserv@secot.co.th

SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.(GC 19 : GCO)	REQUEST SERVICE No.	: 2132/67
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING METHOD	: Hand Auger
SAMPLING DATE	: 18/10/2024	SAMPLING TIME	: 09:17-09:26
RECEIVED DATE	: 19/10/2024	ANALYTICAL DATE	: 19.24-30/10/2024
REPORT DATE	: 31/10/2024	SITE OPERATOR	: Mr.Natthachai Chaiyakhot
SAMPLE CONDITION	: Normal	FILE CODE	: 224026_Soil_October

PARAMETER	UNIT	ANALYSIS	ND	STATION	STANDARD <sup>1/</sup>
		METHODS	(non-detectable)	บ่อน้ำใต้ดิน (MW 2)	
Total Petroleum Hydrocarbons					
- TPH (C <sub>5</sub> - C <sub>8</sub> )	mg/kg	5035 A / 8260 D	< 0.003	ND	≤ 25
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C <sub>9</sub> - C <sub>16</sub> )	mg/kg	3540 C / 8015 D	< 0.25	1.36	≤ 25
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C <sub>17</sub> - C <sub>35</sub> )	mg/kg	3540 C / 8015 D	< 1.85	ND	≤ 8
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

REFERENCE : US EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE, 1<sup>st</sup> ED., 2020.

Analyst

REG. NO. 2-239-ก-0022

Technical Management Team

REG. NO. 2-239-ก-0004

- Remark :
1. Reported analysis refers to submitted sample only.
  2. This report shall not be reproduced, except in full, without official approval.
  3. <sup>1/</sup> Notification of the Ministry of Industry, B.E.2559 (2016).
  4. - Not available.



# บริษัท ซีคอต จำกัด SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800  
239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

TEL. (662) 959-3600 FAX (662) 959-3535 Website : secot.co.th E-mail : cnvserv@secot.co.th

## SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.(GC 19 : GCO)	REQUEST SERVICE No.	: 2132/67
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING METHOD	: Hand Auger
SAMPLING DATE	: 18/10/2024	SAMPLING TIME	: 09:40-09:47
RECEIVED DATE	: 19/10/2024	ANALYTICAL DATE	: 19. 24-30/10/2024
REPORT DATE	: 31/10/2024	SITE OPERATOR	: Mr.Naithachai Chaiyakhot
SAMPLE CONDITION	: Normal	FILE CODE	: 224026 Soil_October

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION บ่อน้ำใต้ดิน (MW 3)	STANDARD <sup>1)</sup>
<b>Total Petroleum Hydrocarbons</b>					
- TPH (C <sub>5</sub> - C <sub>8</sub> )	mg/kg	5035 A / 8260 D	< 0.003	ND	≤ 25
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C <sub>9</sub> - C <sub>16</sub> )	mg/kg	3540 C / 8015 D	< 0.25	ND	≤ 25
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C <sub>17</sub> - C <sub>35</sub> )	mg/kg	3540 C / 8015 D	< 1.85	ND	≤ 8
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentacontane					

REFERENCE : US EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE, 1<sup>st</sup> ED., 2020.

Analyst

REG. NO. 2-239-0-0022

Technical Management Team

REG. NO. 2-239-0-0004

- Remark :**
1. Reported analysis refers to submitted sample only.
  2. This report shall not be reproduced, except in full, without official approval.
  3. <sup>1)</sup> Notification of the Ministry of Industry, B.E.2559 (2016).
  4. - Not available.

COPY



Request No. LA67-R0849

Report No. R6708-4498

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong 21150  
SAMPLE SOURCE : GC19  
SAMPLE POINT : บริเวณริมรั้วโรงงานด้านทิศตะวันตก  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  24 hr.,  $L_{max}$ ,  $L_{90}$  &  $L_{dn}$   
DETERMINATION METHOD : ISO 1996-1:2016  
INSTRUMENT : Integrated Sound Level Meter  
S/N 00322749 : Class 2

SAMPLE NO. : 29890  
MEASURING DATE : 02-03/08/2024  
RECEIVED DATE : 09/08/2024  
REPORTED DATE : 24/08/2024

TIME \ DATE	02-03/08/2024 ( $L_{eq}$ )	02-03/08/2024 ( $L_{max}$ )	02-03/08/2024 ( $L_{90}$ )	UNIT
10:00 - 11:00 <sup>1/3</sup>	57.8	77.6	56.5	dB(A)
11:00 - 12:00	57.0	61.8	56.2	dB(A)
12:00 - 13:00	57.9	66.2	56.6	dB(A)
13:00 - 14:00	58.7	66.6	57.6	dB(A)
14:00 - 15:00	58.3	62.6	57.6	dB(A)
15:00 - 16:00	58.3	66.9	57.4	dB(A)
16:00 - 17:00	58.1	69.1	57.4	dB(A)
17:00 - 18:00	58.1	61.9	57.4	dB(A)
18:00 - 19:00	58.4	64.2	57.6	dB(A)
19:00 - 20:00	58.4	65.5	57.5	dB(A)
20:00 - 21:00	58.2	66.5	57.4	dB(A)
21:00 - 22:00	58.3	61.7	57.4	dB(A)
22:00 - 23:00	58.4	68.1	57.6	dB(A)
23:00 - 00:00	58.3	62.0	57.6	dB(A)
00:00 - 01:00	58.3	69.6	57.6	dB(A)
01:00 - 02:00	58.4	63.3	57.5	dB(A)
02:00 - 03:00	60.1	67.0	57.4	dB(A)
03:00 - 04:00	61.1	71.4	58.4	dB(A)
04:00 - 05:00	60.0	64.1	58.9	dB(A)
05:00 - 06:00	56.6	61.8	55.7	dB(A)
06:00 - 07:00	56.4	65.5	55.3	dB(A)
07:00 - 08:00	55.6	65.5	54.9	dB(A)
08:00 - 09:00	56.1	69.2	55.0	dB(A)
09:00 - 10:00	58.6	69.0	57.7	dB(A)
$L_{eq}$ 24 hr.	58.3	-	-	dB(A)
$L_{dn}$	65.2	-	-	dB(A)
Maximum	-	77.6	-	dB(A)
Standard	$70^{1/1}, 70^{1/2}$	$115^{1/1}, 115^{1/2}$	-	dB(A)

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

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.

24/08/2024

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

Request No. LA67-R0849

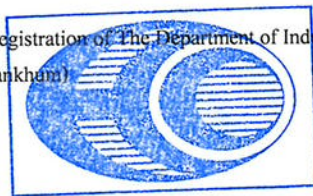
Report No. R6708-4499

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong 21150  
SAMPLE SOURCE : GC19  
SAMPLE POINT : บริเวณริมรั้วโรงงานด้านทิศตะวันตก  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  24 hr.,  $L_{max}$ ,  $L_{90}$  &  $L_{dn}$   
DETERMINATION METHOD : ISO 1996-1:2016  
INSTRUMENT : Integrated Sound Level Meter  
S/N 00322749 : Class 2

SAMPLE NO. : 29891  
MEASURING DATE : 03-04/08/2024  
RECEIVED DATE : 09/08/2024  
REPORTED DATE : 24/08/2024

TIME \ DATE	03-04/08/2024 ( $L_{eq}$ )	03-04/08/2024 ( $L_{max}$ )	03-04/08/2024 ( $L_{90}$ )	UNIT
10:00 - 11:00 <sup>1/3</sup>	58.5	63.5	57.6	dB(A)
11:00 - 12:00	57.9	62.7	56.9	dB(A)
12:00 - 13:00	57.8	67.2	56.9	dB(A)
13:00 - 14:00	58.5	67.1	57.6	dB(A)
14:00 - 15:00	58.9	70.3	58.0	dB(A)
15:00 - 16:00	58.6	64.2	57.8	dB(A)
16:00 - 17:00	58.5	63.4	57.6	dB(A)
17:00 - 18:00	58.2	61.3	57.4	dB(A)
18:00 - 19:00	58.4	63.1	57.6	dB(A)
19:00 - 20:00	58.7	64.6	58.0	dB(A)
20:00 - 21:00	58.8	71.4	58.0	dB(A)
21:00 - 22:00	58.7	63.6	57.8	dB(A)
22:00 - 23:00	58.3	62.8	57.3	dB(A)
23:00 - 00:00	58.6	74.2	55.5	dB(A)
00:00 - 01:00	58.4	66.1	56.7	dB(A)
01:00 - 02:00	58.2	62.8	57.3	dB(A)
02:00 - 03:00	58.0	61.8	57.2	dB(A)
03:00 - 04:00	57.6	62.1	56.9	dB(A)
04:00 - 05:00	59.5	63.6	58.4	dB(A)
05:00 - 06:00	58.0	62.4	57.2	dB(A)
06:00 - 07:00	58.3	63.6	57.5	dB(A)
07:00 - 08:00	58.5	63.7	57.7	dB(A)
08:00 - 09:00	58.1	66.3	57.3	dB(A)
09:00 - 10:00	58.1	68.5	57.2	dB(A)
$L_{eq}$ 24 hr.	58.4	-	-	dB(A)
$L_{dn}$	64.8	-	-	dB(A)
Maximum	-	74.2	-	dB(A)
Standard	70 <sup>1/1</sup> , 70 <sup>2/2</sup>	115 <sup>1/1</sup> , 115 <sup>2/2</sup>	-	dB(A)

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

Approved By...

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

24/08/2024

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

Request No. LA67-R0849

Report No. R6708-4500

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong 21150  
SAMPLE SOURCE : GC19  
SAMPLE POINT : บริเวณริมรั้วโรงงานด้านทิศตะวันตก  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  24 hr.,  $L_{max}$ ,  $L_{90}$  &  $L_{dn}$   
DETERMINATION METHOD : ISO 1996-1:2016  
INSTRUMENT : Integrated Sound Level Meter  
S/N 00322749 : Class 2

SAMPLE NO. : 29892  
MEASURING DATE : 04-05/08/2024  
RECEIVED DATE : 09/08/2024  
REPORTED DATE : 24/08/2024

TIME \ DATE	04-05/08/2024 ( $L_{eq}$ )	04-05/08/2024 ( $L_{max}$ )	04-05/08/2024 ( $L_{90}$ )	UNIT
10:00 - 11:00 <sup>/3</sup>	57.3	77.1	56.0	dB(A)
11:00 - 12:00	56.4	61.2	55.6	dB(A)
12:00 - 13:00	57.3	65.6	56.0	dB(A)
13:00 - 14:00	58.1	66.0	57.0	dB(A)
14:00 - 15:00	58.1	68.7	57.1	dB(A)
15:00 - 16:00	58.0	62.7	57.1	dB(A)
16:00 - 17:00	58.2	61.9	57.4	dB(A)
17:00 - 18:00	58.6	63.9	57.5	dB(A)
18:00 - 19:00	59.0	73.4	57.9	dB(A)
19:00 - 20:00	58.8	63.0	58.0	dB(A)
20:00 - 21:00	58.5	63.0	57.7	dB(A)
21:00 - 22:00	58.7	62.2	57.9	dB(A)
22:00 - 23:00	58.7	67.5	58.0	dB(A)
23:00 - 00:00	58.4	69.2	57.7	dB(A)
00:00 - 01:00	57.0	61.4	55.9	dB(A)
01:00 - 02:00	56.3	62.6	55.1	dB(A)
02:00 - 03:00	56.1	60.2	54.9	dB(A)
03:00 - 04:00	57.0	62.2	56.3	dB(A)
04:00 - 05:00	57.2	62.9	56.4	dB(A)
05:00 - 06:00	57.4	62.6	56.5	dB(A)
06:00 - 07:00	57.2	66.3	56.1	dB(A)
07:00 - 08:00	56.1	66.0	55.4	dB(A)
08:00 - 09:00	56.6	69.7	55.5	dB(A)
09:00 - 10:00	57.6	68.2	56.6	dB(A)
$L_{eq}$ 24 hr.	57.7	-	-	dB(A)
$L_{dn}$	63.8	-	-	dB(A)
Maximum	-	77.1	-	dB(A)
Standard	70 <sup>/1</sup> , 70 <sup>/2</sup>	115 <sup>/1</sup> , 115 <sup>/2</sup>	-	dB(A)

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

Approved By.

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

24/08/2024

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

Request No. LA67-R0849

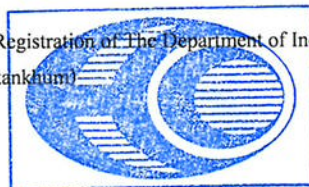
Report No. R6708-4501

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong 21150  
SAMPLE SOURCE : GC19  
SAMPLE POINT : บริเวณริมรั้วโรงงานด้านทิศตะวันตก  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  24 hr.,  $L_{max}$ ,  $L_{90}$  &  $L_{dn}$   
DETERMINATION METHOD : ISO 1996-1:2016  
INSTRUMENT : Integrated Sound Level Meter  
S/N 00322749 : Class 2

SAMPLE NO. : 29893  
MEASURING DATE : 05-06/08/2024  
RECEIVED DATE : 09/08/2024  
REPORTED DATE : 24/08/2024

TIME \ DATE	05-06/08/2024 ( $L_{eq}$ )	05-06/08/2024 ( $L_{max}$ )	05-06/08/2024 ( $L_{90}$ )	UNIT
10:00 - 11:00 <sup>1/3</sup>	57.3	64.5	56.3	dB(A)
11:00 - 12:00	58.0	64.3	56.9	dB(A)
12:00 - 13:00	57.9	64.6	56.9	dB(A)
13:00 - 14:00	57.9	64.7	56.9	dB(A)
14:00 - 15:00	58.0	63.9	56.8	dB(A)
15:00 - 16:00	57.5	65.8	56.5	dB(A)
16:00 - 17:00	57.7	65.0	56.8	dB(A)
17:00 - 18:00	58.1	63.4	57.2	dB(A)
18:00 - 19:00	58.4	71.5	57.6	dB(A)
19:00 - 20:00	58.5	63.1	57.7	dB(A)
20:00 - 21:00	58.7	63.1	57.9	dB(A)
21:00 - 22:00	59.0	64.3	58.2	dB(A)
22:00 - 23:00	59.0	64.2	58.2	dB(A)
23:00 - 00:00	58.6	66.8	57.8	dB(A)
00:00 - 01:00	58.1	62.2	57.3	dB(A)
01:00 - 02:00	57.7	62.7	57.0	dB(A)
02:00 - 03:00	57.2	60.5	56.5	dB(A)
03:00 - 04:00	57.5	63.5	56.9	dB(A)
04:00 - 05:00	57.5	62.6	56.9	dB(A)
05:00 - 06:00	58.6	64.8	57.9	dB(A)
06:00 - 07:00	58.9	66.6	57.6	dB(A)
07:00 - 08:00	56.9	60.9	55.8	dB(A)
08:00 - 09:00	57.2	58.8	56.5	dB(A)
09:00 - 10:00	57.4	65.4	56.4	dB(A)
$L_{eq}$ 24 hr.	58.0	-	-	dB(A)
$L_{dn}$	64.5	-	-	dB(A)
Maximum	-	71.5	-	dB(A)
Standard	$70^{1/1}, 70^{1/2}$	$115^{1/1}, 115^{1/2}$	-	dB(A)

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

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By...

24/08/2024

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



Request No. LA67-R0849

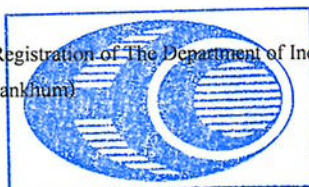
Report No. R6708-4502

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong 21150  
SAMPLE SOURCE : GC19  
SAMPLE POINT : บริเวณริมรั้วโรงงานด้านทิศตะวันตก  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  24 hr.,  $L_{max}$ ,  $L_{90}$  &  $L_{dn}$   
DETERMINATION METHOD : ISO 1996-1:2016  
INSTRUMENT : Integrated Sound Level Meter  
S/N 00322749 : Class 2

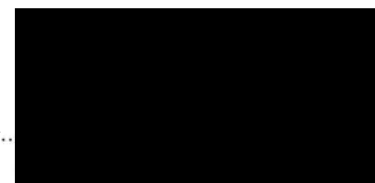
SAMPLE NO. : 29894  
MEASURING DATE : 06-07/08/2024  
RECEIVED DATE : 09/08/2024  
REPORTED DATE : 24/08/2024

TIME \ DATE	06-07/08/2024 ( $L_{eq}$ )	06-07/08/2024 ( $L_{max}$ )	06-07/08/2024 ( $L_{90}$ )	UNIT
10:00 - 11:00 <sup>/3</sup>	57.5	64.6	56.5	dB(A)
11:00 - 12:00	58.1	64.5	57.0	dB(A)
12:00 - 13:00	58.0	63.7	57.0	dB(A)
13:00 - 14:00	57.5	65.1	54.8	dB(A)
14:00 - 15:00	57.8	66.2	56.7	dB(A)
15:00 - 16:00	57.2	61.7	56.5	dB(A)
16:00 - 17:00	57.5	63.4	56.7	dB(A)
17:00 - 18:00	58.2	64.7	57.4	dB(A)
18:00 - 19:00	58.6	66.8	57.9	dB(A)
19:00 - 20:00	58.9	64.4	58.1	dB(A)
20:00 - 21:00	58.6	64.3	57.9	dB(A)
21:00 - 22:00	58.7	64.6	57.9	dB(A)
22:00 - 23:00	58.6	63.6	57.9	dB(A)
23:00 - 00:00	58.7	63.7	57.8	dB(A)
00:00 - 01:00	58.7	63.4	58.0	dB(A)
01:00 - 02:00	58.4	63.2	57.4	dB(A)
02:00 - 03:00	58.3	64.9	57.6	dB(A)
03:00 - 04:00	58.7	63.8	58.0	dB(A)
04:00 - 05:00	58.7	61.0	57.9	dB(A)
05:00 - 06:00	57.9	68.5	56.9	dB(A)
06:00 - 07:00	58.2	63.7	57.1	dB(A)
07:00 - 08:00	58.5	69.8	57.3	dB(A)
08:00 - 09:00	58.7	64.2	57.8	dB(A)
09:00 - 10:00	58.3	65.5	57.1	dB(A)
$L_{eq}$ 24 hr.	58.3	-	-	dB(A)
$L_{dn}$	64.8	-	-	dB(A)
Maximum	-	69.8	-	dB(A)
Standard	$70^{/1}, 70^{/2}$	$115^{/1}, 115^{/2}$	-	dB(A)

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

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By..



24/08/2024

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



Request No. LA67-R0849

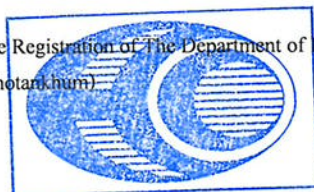
Report No. R6708-4503

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong 21150  
SAMPLE SOURCE : GC19  
SAMPLE POINT : บริเวณริมรั้วโรงงานด้านทิศตะวันตก  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  24 hr.,  $L_{max}$ ,  $L_{90}$  &  $L_{dn}$   
DETERMINATION METHOD : ISO 1996-1:2016  
INSTRUMENT : Integrated Sound Level Meter  
S/N 00322749 : Class 2

SAMPLE NO. : 29895  
MEASURING DATE : 07-08/08/2024  
RECEIVED DATE : 09/08/2024  
REPORTED DATE : 24/08/2024

TIME \ DATE	07-08/08/2024 ( $L_{eq}$ )	07-08/08/2024 ( $L_{max}$ )	07-08/08/2024 ( $L_{90}$ )	UNIT
10:00 - 11:00 <sup>/3</sup>	58.4	69.0	57.4	dB(A)
11:00 - 12:00	58.7	64.2	57.6	dB(A)
12:00 - 13:00	59.1	70.4	57.9	dB(A)
13:00 - 14:00	59.3	64.8	58.4	dB(A)
14:00 - 15:00	58.9	66.1	57.7	dB(A)
15:00 - 16:00	58.6	64.3	57.4	dB(A)
16:00 - 17:00	58.3	63.4	57.5	dB(A)
17:00 - 18:00	58.8	64.5	58.0	dB(A)
18:00 - 19:00	58.9	70.2	58.2	dB(A)
19:00 - 20:00	59.0	64.3	58.3	dB(A)
20:00 - 21:00	59.3	63.5	58.5	dB(A)
21:00 - 22:00	59.4	63.8	58.7	dB(A)
22:00 - 23:00	59.4	63.8	58.7	dB(A)
23:00 - 00:00	59.3	66.3	58.6	dB(A)
00:00 - 01:00	59.3	63.6	58.5	dB(A)
01:00 - 02:00	59.0	64.3	58.2	dB(A)
02:00 - 03:00	59.2	63.9	58.4	dB(A)
03:00 - 04:00	59.1	62.7	58.3	dB(A)
04:00 - 05:00	59.4	64.6	58.3	dB(A)
05:00 - 06:00	59.1	65.3	58.4	dB(A)
06:00 - 07:00	59.4	67.1	58.1	dB(A)
07:00 - 08:00	57.8	61.8	56.7	dB(A)
08:00 - 09:00	58.1	59.7	57.4	dB(A)
09:00 - 10:00	58.3	66.3	57.3	dB(A)
$L_{eq}$ 24 hr.	58.9	-	-	dB(A)
$L_{dn}$	65.6	-	-	dB(A)
Maximum	-	70.4	-	dB(A)
Standard	70 <sup>/1</sup> , 70 <sup>/2</sup>	115 <sup>/1</sup> , 115 <sup>/2</sup>	-	dB(A)

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

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.

24/08/2024

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

Request No. LA67-R0849

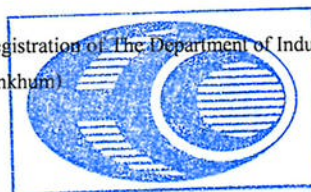
Report No. R6708-4504

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong 21150  
SAMPLE SOURCE : GC19  
SAMPLE POINT : บริเวณริมรั้วโรงงานด้านทิศตะวันตก  
PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  24 hr.,  $L_{max}$ ,  $L_{90}$  &  $L_{dn}$   
DETERMINATION METHOD : ISO 1996-1:2016  
INSTRUMENT : Integrated Sound Level Meter  
S/N 00322749 : Class 2

SAMPLE NO. : 29896  
MEASURING DATE : 08-09/08/2024  
RECEIVED DATE : 09/08/2024  
REPORTED DATE : 24/08/2024

TIME \ DATE	08-09/08/2024 ( $L_{eq}$ )	08-09/08/2024 ( $L_{max}$ )	08-09/08/2024 ( $L_{90}$ )	UNIT
10:00 - 11:00 <sup>1/3</sup>	58.4	65.5	57.4	dB(A)
11:00 - 12:00	58.6	65.0	57.5	dB(A)
12:00 - 13:00	58.5	64.2	57.5	dB(A)
13:00 - 14:00	58.0	65.6	55.3	dB(A)
14:00 - 15:00	58.4	66.8	57.3	dB(A)
15:00 - 16:00	57.8	62.3	57.1	dB(A)
16:00 - 17:00	58.1	64.0	57.3	dB(A)
17:00 - 18:00	58.8	65.3	58.0	dB(A)
18:00 - 19:00	59.1	67.3	58.4	dB(A)
19:00 - 20:00	59.4	64.9	58.6	dB(A)
20:00 - 21:00	59.3	65.0	58.6	dB(A)
21:00 - 22:00	59.4	65.3	58.6	dB(A)
22:00 - 23:00	59.3	64.3	58.6	dB(A)
23:00 - 00:00	59.2	64.2	58.3	dB(A)
00:00 - 01:00	59.2	63.9	58.5	dB(A)
01:00 - 02:00	59.2	64.0	58.2	dB(A)
02:00 - 03:00	59.1	65.7	58.4	dB(A)
03:00 - 04:00	59.2	64.3	58.5	dB(A)
04:00 - 05:00	59.2	61.5	58.4	dB(A)
05:00 - 06:00	58.4	72.8	57.3	dB(A)
06:00 - 07:00	58.3	62.5	57.5	dB(A)
07:00 - 08:00	58.0	62.5	57.2	dB(A)
08:00 - 09:00	58.0	61.5	57.2	dB(A)
09:00 - 10:00	58.0	66.8	57.3	dB(A)
$L_{eq}$ 24 hr.	58.7	-	-	dB(A)
$L_{dn}$	65.4	-	-	dB(A)
Maximum	-	72.8	-	dB(A)
Standard	70 <sup>1/1</sup> , 70 <sup>2/2</sup>	115 <sup>1/1</sup> , 115 <sup>2/2</sup>	-	dB(A)

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

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.

24/08/2024

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

Request No. ATR6708010

Report No. 6708-0081

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : Oxidation Section  
SAMPLING DATE : 01/08/2024 SAMPLE NO. : A67080081  
RECEIVED DATE : 06/08/2024 SAMPLING TIME : 08:44-09:44  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.10 L/min TESTED DATE : 06/08/2024-13/08/2024  
Serial No. 218403 REPORTED DATE : 17/08/2024

PARAMETER*	TEST METHOD	RESULT	STD <sup>/1</sup>	UNIT
Cumene	Sorbent Adsorption, Gas	< 0.72	245	mg/m <sup>3</sup>
	Chromatography/NIOSH1501	< 0.15	50	ppm

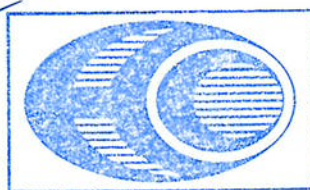
**REMARK:**<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and  
No.0202-03-2564-0005.

(Sampling By Mr. Witchawan Singto)

GPS = Sampling at UTM 47P 731088E 1406270N

Examined By .....

17/08/2024



Approved By .....

17/08/2024

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. ATR6712018

Report No. 6712-0303

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : Oxidation Section  
SAMPLING DATE : 29/11/2024 SAMPLE NO. : A67120303  
RECEIVED DATE : 06/12/2024 SAMPLING TIME : 08:59-09:59  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.10 L/min TESTED DATE : 06/12/2024-10/12/2024  
Serial No. 218388 REPORTED DATE : 13/12/2024

PARAMETER**	TEST METHOD	RESULT <sup>/2</sup>	STD <sup>/1</sup>	UNIT
Cumene	GC-FID, NIOSH 1501	ND	245	mg/m <sup>3</sup>
		ND	50	ppm

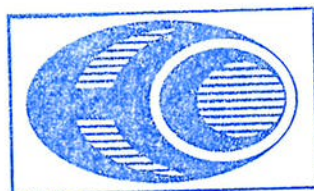
**REMARK:**<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.<sup>/2</sup> ND = Non detectable : detection limit of Cumene is less than 0.05 mg/m<sup>3</sup> or 0.01 ppm.

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

Sampling By Eastern Thai Consulting 1992 Co.,Ltd. (Mr. Weerachai Porjai)

Analysed By SECOT Co.,Ltd.

GPS = Sampling at UTM 47P 731088E 1406270N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.

13/12/2024

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

Request No. ATR6708010

Report No. 6708-0082

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : Expoxidation Section  
SAMPLING DATE : 01/08/2024 SAMPLE NO. : A67080082  
RECEIVED DATE : 06/08/2024 SAMPLING TIME : 08:35-09:35  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.10 L/min TESTED DATE : 06/08/2024-13/08/2024  
Serial No. 20200403077 REPORTED DATE : 17/08/2024

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Cumene	Sorbent Adsorption, Gas	< 0.72	245	mg/m <sup>3</sup>
	Chromatography/NIOSH1501	< 0.15	50	ppm

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

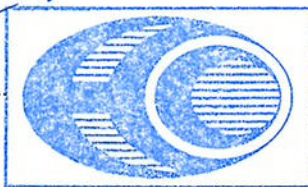
\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and  
No.0202-03-2564-0005.

(Sampling By Mr. Witchawan Singto)

GPS = Sampling at UTM 47P 731244E 1406145N

Examined By

17/08/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

17/08/2024

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



Request No. ATR6712018

Report No. 6712-0304

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : Expoxidation Section  
SAMPLING DATE : 29/11/2024 SAMPLE NO. : A67120304  
RECEIVED DATE : 06/12/2024 SAMPLING TIME : 08:46-09:46  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.10 L/min TESTED DATE : 06/12/2024-10/12/2024  
Serial No. 218413 REPORTED DATE : 14/12/2024

PARAMETER**	TEST METHOD	RESULT <sup>/2</sup>	STD <sup>/1</sup>	UNIT
Cumene	GC-FID, NIOSH 1501	ND	245	mg/m <sup>3</sup>
		ND	50	ppm

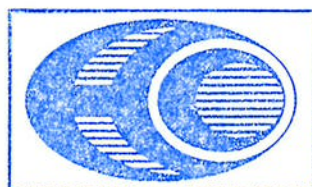
**REMARK:**<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.<sup>/2</sup> ND = Non detectable : detection limit of Cumene is less than 0.05 mg/m<sup>3</sup> or 0.01 ppm.

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

Sampling By Eastern Thai Consulting 1992 Co.,Ltd. (Mr. Weerachai Porjai)

Analysed By SECOT Co.,Ltd.

GPS = Sampling at UTM 47P 731244E 1406145N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By

14/12/2024

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

Request No. ATR6708010

Report No. 6708-0083

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : Expoxidation Section  
SAMPLING DATE : 01/08/2024 SAMPLE NO. : A67080083  
RECEIVED DATE : 06/08/2024 SAMPLING TIME : 08:35-09:35  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.05 L/min TESTED DATE : 06/08/2024-13/08/2024  
Serial No. 20200403077 REPORTED DATE : 17/08/2024

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Acetone	Sorbent Adsorption, Gas	< 13.17	2,400	mg/m <sup>3</sup>
	Chromatography/NIOSH 2555	< 5.54	1,000	ppm

## REMARK:

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

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

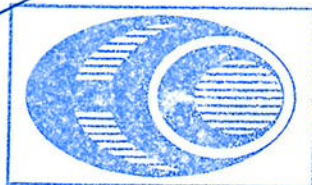
(Sampling By Mr. Witchawan Singto)

GPS = Sampling at UTM 47P 731244E 1406145N

Examined By ...



17/08/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By ...



17/08/2024

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

Request No. ATR6712018

Report No. 6712-0305

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : Expoxidation Section  
SAMPLING DATE : 29/11/2024 SAMPLE NO. : A67120305  
RECEIVED DATE : 06/12/2024 SAMPLING TIME : 08:46-09:46  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.05 L/min TESTED DATE : 06/12/2024-09/12/2024  
Serial No. 218405 REPORTED DATE : 14/12/2024

PARAMETER*	TEST METHOD	RESULT	STD <sup>1/</sup>	UNIT
Acetone	Sorbent Adsorption, Gas	< 13.17	2,400	mg/m <sup>3</sup>
	Chromatography/NIOSH 2555	< 5.54	1,000	ppm

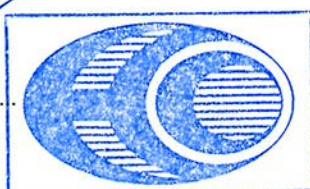
**REMARK:**<sup>1/</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and  
No.0202-03-2564-0005.

(Sampling By Mr. Wcerachai Porjai)

GPS = Sampling at UTM 47P 731244E 1406145N

Examined By

14/12/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

14/12/2024

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

Request No. ATR6708010

Report No. 6708-0084

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : Expoxidation Section  
SAMPLING DATE : 01/08/2024 SAMPLE NO. : A67080084  
RECEIVED DATE : 06/08/2024 SAMPLING TIME : 08:35-09:25  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.10 L/min TESTED DATE : 06/08/2024-15/08/2024  
Serial No. 20200403077 REPORTED DATE : 17/08/2024

PARAMETER**	TEST METHOD	RESULT <sup>/2</sup>	STD <sup>/1</sup>	UNIT
Propylene Oxide	NIOSH 1612/GC-FID	ND	240	mg/m <sup>3</sup>
		ND	100	ppm

## REMARK:

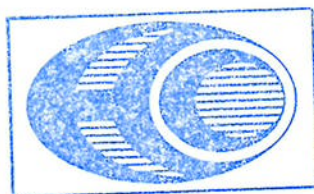
<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.<sup>/2</sup> ND = Non detectable : When detection limit of Propylene Oxide is less than 0.10 mg/m<sup>3</sup> or 0.05 ppm.

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

Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Witchawan Singto)

Analysed By SECOT Co.,Ltd.

GPS = Sampling at UTM 47P 731244E 1406145N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By..

17/08/2024

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

Request No. ATR6712018

Report No. 6712-0306

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : Expoxidation Section  
SAMPLING DATE : 29/11/2024 SAMPLE NO. : A67120306  
RECEIVED DATE : 06/12/2024 SAMPLING TIME : 08:46-09:36  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.10 L/min TESTED DATE : 06/12/2024-12/12/2024  
Serial No. 218391 REPORTED DATE : 14/12/2024

PARAMETER**	TEST METHOD	RESULT <sup>/2</sup>	STD <sup>/1</sup>	UNIT
Propylene Oxide	NIOSH 1612/GC-FID	ND	240	mg/m <sup>3</sup>
		ND	100	ppm

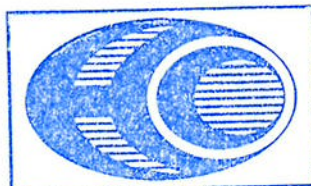
**REMARK:**<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.<sup>/2</sup> ND = Non detectable : When detection limit of Propylene Oxide is less than 0.10 mg/m<sup>3</sup> or 0.05 ppm.

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

Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Weerachai Porjai)

Analysed By SECOT Co.,Ltd.

GPS = Sampling at UTM 47P 731244E 1406145N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By

14/12/2024

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





Request No. ATR6708010

Report No. 6708-0085

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : C3-PO Purification Section  
SAMPLING DATE : 01/08/2024 SAMPLE NO. : A67080085  
RECEIVED DATE : 06/08/2024 SAMPLING TIME : 08:37-09:37  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.10 L/min TESTED DATE : 06/08/2024-13/08/2024  
Serial No. 20200403064 REPORTED DATE : 17/08/2024

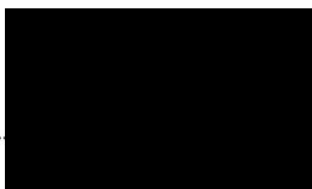
PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Cumene	Sorbent Adsorption, Gas	< 0.72	245	mg/m <sup>3</sup>
	Chromatography/NIOSH1501	< 0.15	50	ppm

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

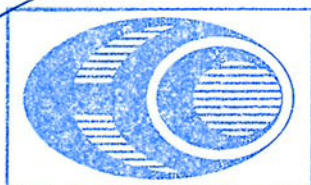
(Sampling By Mr. Witchawan Singto)

GPS = Sampling at UTM 47P 731204E 1406197N

Examined By .....



17/08/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved .....



17/08/2024

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

Request No. ATR6712018

Report No. 6712-0307

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : C3-PO Purification Section  
SAMPLING DATE : 29/11/2024 SAMPLE NO. : A67120307  
RECEIVED DATE : 06/12/2024 SAMPLING TIME : 08:49-09:49  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.10 L/min TESTED DATE : 06/12/2024-10/12/2024  
Serial No. 218385 REPORTED DATE : 14/12/2024

PARAMETER**	TEST METHOD	RESULT <sup>/2</sup>	STD <sup>/1</sup>	UNIT
Cumene	GC-FID, NIOSH 1501	ND	245	mg/m <sup>3</sup>
		ND	50	ppm

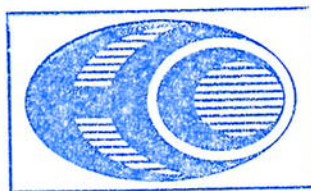
**REMARK:**<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.<sup>/2</sup> ND = Non detectable : detection limit of Cumene is less than 0.05 mg/m<sup>3</sup> or 0.01 ppm.

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

Sampling By Eastern Thai Consulting 1992 Co.,Ltd. (Mr. Weerachai Porjai)

Analysed By SECOT Co.,Ltd.

GPS = Sampling at UTM 47P 731204E 1406197N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By...

14/12/2024

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

Request No. ATR6708010

Report No. 6708-0086

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : C3-PO Purification Section  
SAMPLING DATE : 01/08/2024 SAMPLE NO. : A67080086  
RECEIVED DATE : 06/08/2024 SAMPLING TIME : 08:37-09:37  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.05 L/min TESTED DATE : 06/08/2024-13/08/2024  
Serial No. 20200403064 REPORTED DATE : 17/08/2024

PARAMETER*	TEST METHOD	RESULT	STD <sup>1/</sup>	UNIT
Acetone	Sorbent Adsorption, Gas	< 13.17	2,400	mg/m <sup>3</sup>
	Chromatography/NIOSH 2555	< 5.54	1,000	ppm

## REMARK:

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

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

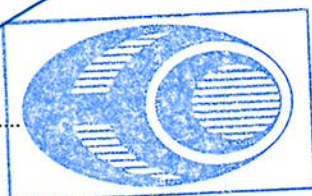
(Sampling By Mr. Witchawan Singto)

GPS = Sampling at UTM 47P 731204E 1406197N

Examined By

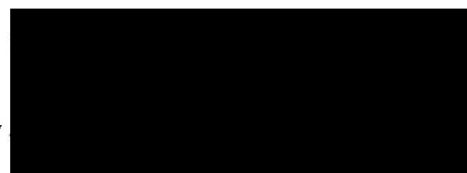


17/08/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



17/08/2024

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

Request No. ATR6712018

Report No. 6712-0308

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : C3-PO Purification Section  
SAMPLING DATE : 29/11/2024 SAMPLE NO. : A67120308  
RECEIVED DATE : 06/12/2024 SAMPLING TIME : 08:49-09:49  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.05 L/min TESTED DATE : 06/12/2024-09/12/2024  
Serial No. 218411 REPORTED DATE : 14/12/2024

PARAMETER*	TEST METHOD	RESULT	STD <sup>1/</sup>	UNIT
Acetone	Sorbent Adsorption, Gas	< 13.17	2,400	mg/m <sup>3</sup>
	Chromatography/NIOSH 2555	< 5.54	1,000	ppm

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

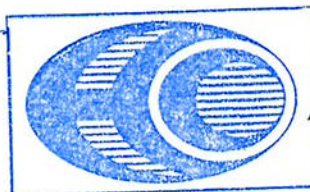
(Sampling By Mr. Weerachai Porjai)

GPS = Sampling at UTM 47P 731204E 1406197N

Examined By .....

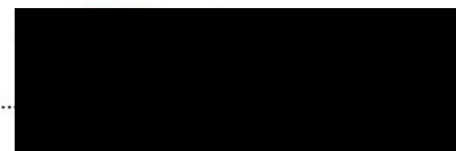


14/12/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....



14/12/2024

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

Request No. ATR6708010

Report No. 6708-0087

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : C3-PO Purification Section  
SAMPLING DATE : 01/08/2024 SAMPLE NO. : A67080087  
RECEIVED DATE : 06/08/2024 SAMPLING TIME : 08:37-09:27  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.10 L/min TESTED DATE : 06/08/2024-15/08/2024  
Serial No. 20200403064 REPORTED DATE : 17/08/2024

PARAMETER**	TEST METHOD	RESULT <sup>/2</sup>	STD <sup>/1</sup>	UNIT
Propylene Oxide	NIOSH 1612/GC-FID	ND	240	mg/m <sup>3</sup>
		ND	100	ppm

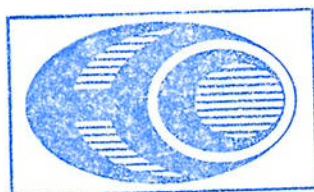
**REMARK:**<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.<sup>/2</sup> ND = Non detectable : When detection limit of Propylene Oxide is less than 0.10 mg/m<sup>3</sup> or 0.05 ppm.

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

Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Witchawan Singto)

Analysed By SECOT Co.,Ltd.

GPS = Sampling at UTM 47P 731204E 1406197N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.

17/08/2024

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



Request No. ATR6712018

Report No. 6712-0309

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : C3-PO Purification Section  
SAMPLING DATE : 29/11/2024 SAMPLE NO. : A67120309  
RECEIVED DATE : 06/12/2024 SAMPLING TIME : 08:49-09:39  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.10 L/min TESTED DATE : 06/12/2024-12/12/2024  
Serial No. 218402 REPORTED DATE : 14/12/2024

PARAMETER**	TEST METHOD	RESULT <sup>/2</sup>	STD <sup>/1</sup>	UNIT
Propylene Oxide	NIOSH 1612/GC-FID	ND	240	mg/m <sup>3</sup>
		ND	100	ppm

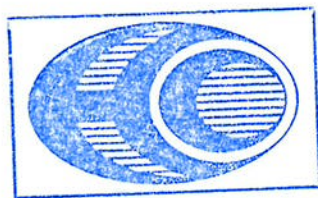
**REMARK:**<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.<sup>/2</sup> ND = Non detectable : When detection limit of Propylene Oxide is less than 0.10 mg/m<sup>3</sup> or 0.05 ppm.

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

Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Weerachai Porjai)

Analysed By SECOT Co.,Ltd.

GPS = Sampling at UTM 47P 731204E 1406197N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By...

14/12/2024

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

Request No. ATR6708010

Report No. 6708-0088

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : Hydrogenation Section  
SAMPLING DATE : 01/08/2024 SAMPLE NO. : A67080088  
RECEIVED DATE : 06/08/2024 SAMPLING TIME : 08:40-09:40  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.10 L/min TESTED DATE : 06/08/2024-13/08/2024  
Serial No. 218444 REPORTED DATE : 17/08/2024

PARAMETER*	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Cumene	Sorbent Adsorption, Gas	< 0.72	245	mg/m <sup>3</sup>
	Chromatography/NIOSH1501	< 0.15	50	ppm

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

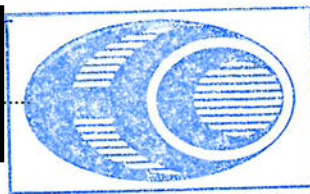
\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Witchawan Singto)

GPS = Sampling at UTM 47P 731204E 1406213N

Examined By .

17/08/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

17/08/2024

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

Request No. ATR6712018

Report No. 6712-0310

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : Hydrogenation Section  
SAMPLING DATE : 29/11/2024 SAMPLE NO. : A67120310  
RECEIVED DATE : 06/12/2024 SAMPLING TIME : 08:51-09:51  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.10 L/min TESTED DATE : 06/12/2024-10/12/2024  
Serial No. 218406 REPORTED DATE : 14/12/2024

PARAMETER**	TEST METHOD	RESULT <sup>/2</sup>	STD <sup>/1</sup>	UNIT
Cumene	GC-FID, NIOSH 1501	ND	245	mg/m <sup>3</sup>
		ND	50	ppm

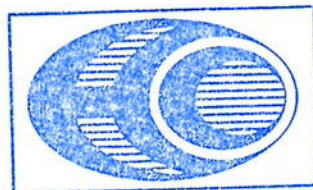
**REMARK:**<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.<sup>/2</sup> ND = Non detectable : detection limit of Cumene is less than 0.05 mg/m<sup>3</sup> or 0.01 ppm.

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

Sampling By Eastern Thai Consulting 1992 Co.,Ltd. (Mr. Weerachai Porjai)

Analysed By SECOT Co.,Ltd.

GPS = Sampling at UTM 47P 731204E 1406213N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By

14/12/2024

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

Request No. ATR6708010

Report No. 6708-0089

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : PO Purification Section  
SAMPLING DATE : 01/08/2024 SAMPLE NO. : A67080089  
RECEIVED DATE : 06/08/2024 SAMPLING TIME : 08:42-09:42  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.05 L/min TESTED DATE : 06/08/2024-13/08/2024  
Serial No. 20200403075 REPORTED DATE : 17/08/2024

PARAMETER*	TEST METHOD	RESULT	STD <sup>1/</sup>	UNIT
Acetone	Sorbent Adsorption, Gas	< 13.17	2,400	mg/m <sup>3</sup>
	Chromatography/NIOSH 2555	< 5.54	1,000	ppm

## REMARK:

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

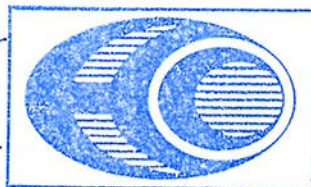
(Sampling By Mr. Witchawan Singto)

GPS = Sampling at UTM 47P 731136E 1406237N

Examined By

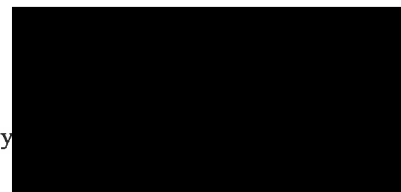


17/08/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



17/08/2024

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

Request No. ATR6712018

Report No. 6712-0311

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : PO Purification Section  
SAMPLING DATE : 29/11/2024 SAMPLE NO. : A67120311  
RECEIVED DATE : 06/12/2024 SAMPLING TIME : 08:53-09:53  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.05 L/min TESTED DATE : 06/12/2024-09/12/2024  
Serial No. 218444 REPORTED DATE : 14/12/2024

PARAMETER*	TEST METHOD	RESULT	STD <sup>1/</sup>	UNIT
Acetone	Sorbent Adsorption, Gas	< 13.17	2,400	mg/m <sup>3</sup>
	Chromatography/NIOSH 2555	< 5.54	1,000	ppm

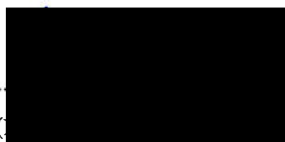
**REMARK:**<sup>1/</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.

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

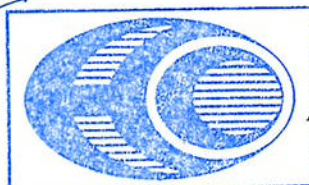
(Sampling By Mr. Weerachai Porjai)

GPS = Sampling at UTM 47P 731136E 1406237N

Examined By ...

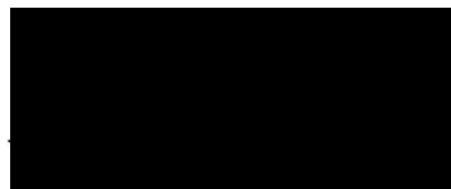


14/12/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By ...



14/12/2024

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



Request No. ATR6708010

Report No. 6708-0090

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : PO Purification Section  
SAMPLING DATE : 01/08/2024 SAMPLE NO. : A67080090  
RECEIVED DATE : 06/08/2024 SAMPLING TIME : 08:42-09:32  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.10 L/min TESTED DATE : 06/08/2024-15/08/2024  
Serial No. 20200403075 REPORTED DATE : 17/08/2024

PARAMETER**	TEST METHOD	RESULT <sup>/2</sup>	STD <sup>/1</sup>	UNIT
Propylene Oxide	NIOSH 1612/GC-FID	ND	240	mg/m <sup>3</sup>
		ND	100	ppm

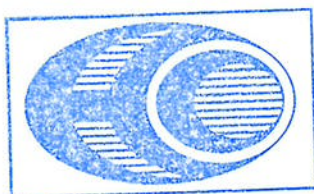
**REMARK:**<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.<sup>/2</sup> ND = Non detectable : When detection limit of Propylene Oxide is less than 0.10 mg/m<sup>3</sup> or 0.05 ppm.

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

Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Witchawan Singto)

Analysed By SECOT Co.,Ltd.

GPS = Sampling at UTM 47P 731136E 1406237N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.

17/08/2024

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

Request No. ATR6712018

Report No. 6712-0312

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : PO Purification Section  
SAMPLING DATE : 29/11/2024 SAMPLE NO. : A67120312  
RECEIVED DATE : 06/12/2024 SAMPLING TIME : 08:53-09:43  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.10 L/min TESTED DATE : 06/12/2024-12/12/2024  
Serial No. 218403 REPORTED DATE : 14/12/2024

PARAMETER**	TEST METHOD	RESULT <sup>/2</sup>	STD <sup>/1</sup>	UNIT
Propylene Oxide	NIOSH 1612/GC-FID	ND	240	mg/m <sup>3</sup>
		ND	100	ppm

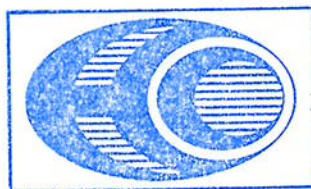
**REMARK:**<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.<sup>/2</sup> ND = Non detectable : When detection limit of Propylene Oxide is less than 0.10 mg/m<sup>3</sup> or 0.05 ppm.

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

Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Weerachai Porjai)

Analysed By SECOT Co.,Ltd.

GPS = Sampling at UTM 47P 731136E 1406237N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By...

14/12/2024

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

Request No. ATR6708010

Report No. 6708-0091

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : Tank Farm 1 (TK-1460)  
SAMPLING DATE : 01/08/2024 SAMPLE NO. : A67080091  
RECEIVED DATE : 06/08/2024 SAMPLING TIME : 08:50-09:50  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 06/08/2024-15/08/2024  
Serial No. 20160502016 REPORTED DATE : 17/08/2024

PARAMETER**	TEST METHOD	RESULT	UNIT
Total Volatile Organic Compounds (TVOCs)	GC - FID	3.22	ppm

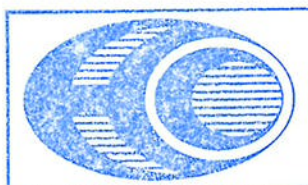
**REMARK:**

\*\* Parameter not have License Registration of Department of Labour Protection and Welfare.

Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Witchawan Singto)

Analysed By SECOT Co.,Ltd.

GPS = Sampling at UTM 47P 730981E 1406187N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By...

17/08/2024

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

Request No. ATR6712018

Report No. 6712-0313

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : Tank Farm 1 (TK-1460)  
SAMPLING DATE : 29/11/2024 SAMPLE NO. : A67120313  
RECEIVED DATE : 06/12/2024 SAMPLING TIME : 09:11-10:11  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 06/12/2024-12/12/2024  
Serial No. 20211103029 REPORTED DATE : 14/12/2024

PARAMETER**	TEST METHOD	RESULT	UNIT
Total Volatile Organic Compounds (TVOCs)	GC - FID	10.13	ppm

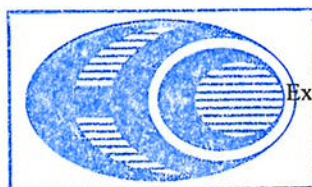
**REMARK:**

\*\* Parameter not have License Registration of Department of Labour Protection and Welfare.

Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Weerachai Porjai)

Analysed By SECOT Co.,Ltd.

GPS = Sampling at UTM 47P 730981E 1406187N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By..

14/12/2024

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

Request No. ATR6708010

Report No. 6708-0093

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : Tank Farm 2 (TK-1456)  
SAMPLING DATE : 01/08/2024 SAMPLE NO. : A67080093  
RECEIVED DATE : 06/08/2024 SAMPLING TIME : 09:00-10:00  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 06/08/2024-15/08/2024  
Serial No. 20160502013 REPORTED DATE : 17/08/2024

PARAMETER**	TEST METHOD	RESULT	UNIT
Total Volatile Organic Compounds (TVOCs)	GC - FID	3.03	ppm

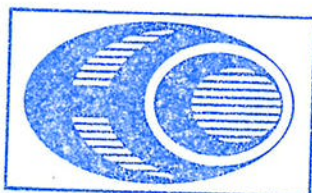
**REMARK:**

\*\* Parameter not have License Registration of Department of Labour Protection and Welfare.

Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Witchawan Singto)

Analysed By SECOT Co.,Ltd.

GPS = Sampling at UTM 47P 731017E 1406244N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By...

17/08/2024

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



Request No. ATR6712018

Report No. 6712-0314

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : Tank Farm 2 (TK-1456)  
SAMPLING DATE : 29/11/2024 SAMPLE NO. : A67120314  
RECEIVED DATE : 06/12/2024 SAMPLING TIME : 08:58-09:58  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 06/12/2024-12/12/2024  
Serial No. 20180903081 REPORTED DATE : 14/12/2024

PARAMETER**	TEST METHOD	RESULT	UNIT
Total Volatile Organic Compounds (TVOCs)	GC - FID	3.09	ppm

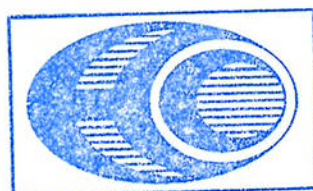
**REMARK:**

\*\* Parameter not have License Registration of Department of Labour Protection and Welfare.

Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Weerachai Porjai)

Analysed By SECOT Co.,Ltd.

GPS = Sampling at UTM 47P 731017E 1406244N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By...

14/12/2024

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

Request No. ATR6708010

Report No. 6708-0094

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : Tank From 3 (TK-1693)  
SAMPLING DATE : 01/08/2024 SAMPLE NO. : A67080094  
RECEIVED DATE : 06/08/2024 SAMPLING TIME : 09:05-10:05  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 06/08/2024-15/08/2024  
Serial No. 20211103029 REPORTED DATE : 17/08/2024

PARAMETER**	TEST METHOD	RESULT	UNIT
Total Volatile Organic Compounds (TVOCs)	GC - FID	3.29	ppm

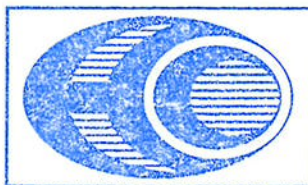
**REMARK:**

\*\* Parameter not have License Registration of Department of Labour Protection and Welfare.

Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Witchawan Singto)

Analysed By SECOT Co.,Ltd.

GPS = Sampling at UTM 47P 731342E 1406131N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.

17/08/2024

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

Request No. ATR6712018

Report No. 6712-0315

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : Tank Farm 3 (TK-1693)  
SAMPLING DATE : 29/11/2024 SAMPLE NO. : A67120315  
RECEIVED DATE : 06/12/2024 SAMPLING TIME : 09:48-10:48  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 06/12/2024-12/12/2024  
Serial No. 20200403062 REPORTED DATE : 14/12/2024

PARAMETER**	TEST METHOD	RESULT	UNIT
Total Volatile Organic Compounds (TVOCs)	GC - FID	3.47	ppm

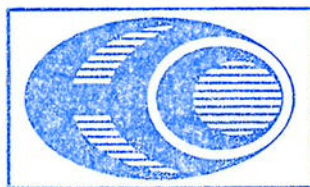
**REMARK:**

\*\* Parameter not have License Registration of Department of Labour Protection and Welfare.

Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Weerachai Porjai)

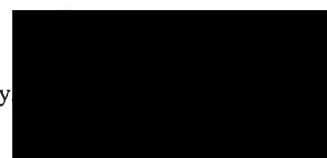
Analysed By SECOT Co.,Ltd.

GPS = Sampling at UTM 47P 731342E 1406131N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By



14/12/2024

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

Request No. ATR6708010

Report No. 6708-0092

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : Tank Farm 4 (TK-5402)  
SAMPLING DATE : 01/08/2024 SAMPLE NO. : A67080092  
RECEIVED DATE : 06/08/2024 SAMPLING TIME : 08:55-09:55  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 06/08/2024-15/08/2024  
Serial No. 20180903076 REPORTED DATE : 17/08/2024

PARAMETER**	TEST METHOD	RESULT	UNIT
Total Volatile Organic Compounds (TVOCs)	GC - FID	3.10	ppm

**REMARK:**

\*\* Parameter not have License Registration of Department of Labour Protection and Welfare.

Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Witchawan Singto)

Analysed By SECOT Co.,Ltd.

GPS = Sampling at UTM 47P 730961E 1406269N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

(

17/08/2024

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



Request No. ATR6712018

Report No. 6712-0316

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : Tank Farm 4 (TK-5402)  
SAMPLING DATE : 29/11/2024 SAMPLE NO. : A67120316  
RECEIVED DATE : 06/12/2024 SAMPLING TIME : 09:05-10:05  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 06/12/2024-12/12/2024  
Serial No. 20180903094 REPORTED DATE : 14/12/2024

PARAMETER**	TEST METHOD	RESULT	UNIT
Total Volatile Organic Compounds (TVOCs)	GC - FID	2.11	ppm

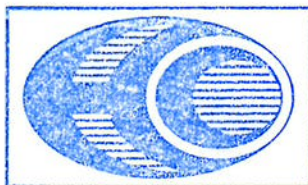
**REMARK:**

\*\* Parameter not have License Registration of Department of Labour Protection and Welfare.

Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Weerachai Porjai)

Analysed By SECOT Co.,Ltd.

GPS = Sampling at UTM 47P 730961E 1406269N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By...

14/12/2024

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



Request No. ATR6708010

Report No. 6708-0095

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : พนักงานปฏิบัติงานในพื้นที่เสี่ยงในกระบวนการผลิต (คุณมานะชัย โชติมณี)  
SAMPLING DATE : 01/08/2024 SAMPLE NO. : A67080095  
RECEIVED DATE : 06/08/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.01 L/min TESTED DATE : 06/08/2024-15/08/2024  
Serial No. 218391 REPORTED DATE : 17/08/2024

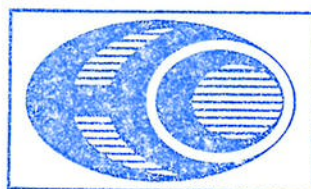
PARAMETER**	TEST METHOD	RESULT	STD <sup>/1</sup>	UNIT
Propylene Oxide	NIOSH 1612/GC-FID	0.22	240	mg/m <sup>3</sup>
		0.09	100	ppm

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

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

Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Witchawan Singto)

Analysed By SECOT Co.,Ltd.



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By...

17/08/2024

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

Request No. ATR6708010

Report No. 6708-0096

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : พนักงานปฏิบัติงานในพื้นที่เสี่ยงในกระบวนการผลิต (คุณชัยพฤกษ์ วิริญโท)  
SAMPLING DATE : 01/08/2024 SAMPLE NO. : A67080096  
RECEIVED DATE : 06/08/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.01 L/min TESTED DATE : 06/08/2024-15/08/2024  
Serial No. 218402 REPORTED DATE : 17/08/2024

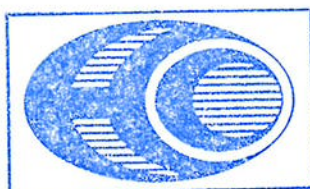
PARAMETER**	TEST METHOD	RESULT	STD <sup>1/</sup>	UNIT
Propylene Oxide	NIOSH 1612/GC-FID	0.44	240	mg/m <sup>3</sup>
		0.18	100	ppm

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

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

Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Witchawan Singto)

Analysed By SECOT Co.,Ltd.



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.

17/08/2024

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

Request No. ATR6708010

Report No. 6708-0097

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : พนักงานปฏิบัติงานในพื้นที่เสี่ยงในกระบวนการผลิต (อุตสาหกรรม รัตนโสภา)  
SAMPLING DATE : 01/08/2024 SAMPLE NO. : A67080097  
RECEIVED DATE : 06/08/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.01 L/min TESTED DATE : 06/08/2024-15/08/2024  
Serial No. 218405 REPORTED DATE : 17/08/2024

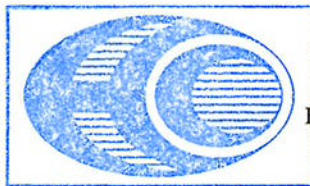
PARAMETER**	TEST METHOD	RESULT <sup>/2</sup>	STD <sup>/1</sup>	UNIT
Propylene Oxide	NIOSH 1612/GC-FID	ND	240	mg/m <sup>3</sup>
		ND	100	ppm

**REMARK:**<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.<sup>/2</sup> ND = Non detectable : When detection limit of Propylene Oxide is less than 0.10 mg/m<sup>3</sup> or 0.05 ppm.

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

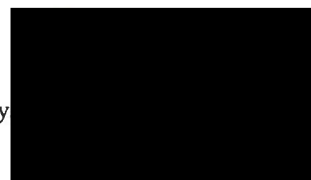
Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Witchawan Singto)

Analysed By SECOT Co.,Ltd.



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By



17/08/2024

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

Request No. ATR6708010

Report No. 6708-0098

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : พนักงานปฏิบัติงานในพื้นที่เสี่ยงในกระบวนการผลิต (คุณธีระเดช แสงเดช)  
SAMPLING DATE : 01/08/2024 SAMPLE NO. : A67080098  
RECEIVED DATE : 06/08/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.01 L/min TESTED DATE : 06/08/2024-15/08/2024  
Serial No. 218412 REPORTED DATE : 17/08/2024

PARAMETER**	TEST METHOD	RESULT <sup>/2</sup>	STD <sup>/1</sup>	UNIT
Propylene Oxide	NIOSH 1612/GC-FID	ND	240	mg/m <sup>3</sup>
		ND	100	ppm

**REMARK:**<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.<sup>/2</sup> ND = Non detectable : When detection limit of Propylene Oxide is less than 0.10 mg/m<sup>3</sup> or 0.05 ppm.

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

Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Witchawan Singto)

Analysed By SECOT Co.,Ltd.



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.

17/08/2024

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

Request No. ATR6708010

Report No. 6708-0099

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : พนักงานปฏิบัติงานในพื้นที่เสี่ยงในกระบวนการผลิต (คุณเจริญพงษ์ เกษไชย)  
SAMPLING DATE : 01/08/2024 SAMPLE NO. : A67080099  
RECEIVED DATE : 06/08/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.01 L/min TESTED DATE : 06/08/2024-15/08/2024  
Serial No. 218445 REPORTED DATE : 17/08/2024

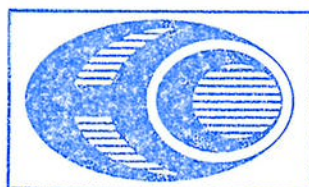
PARAMETER**	TEST METHOD	RESULT <sup>/2</sup>	STD <sup>/1</sup>	UNIT
Propylene Oxide	NIOSH 1612/GC-FID	ND	240	mg/m <sup>3</sup>
		ND	100	ppm

**REMARK:**<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.<sup>/2</sup> ND = Non detectable : When detection limit of Propylene Oxide is less than 0.10 mg/m<sup>3</sup> or 0.05 ppm.

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

Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Witchawan Singto)

Analysed By SECOT Co.,Ltd.



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By...

17/08/2024

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



Request No. ATR6712018

Report No. 6712-0317

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : พนักงานที่ปฏิบัติงานในพื้นที่เสี่ยงในกระบวนการผลิต (อุตสาหกรรม รัตนโสภา)  
SAMPLING DATE : 29/11/2024 SAMPLE NO. : A67120317  
RECEIVED DATE : 06/12/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.01 L/min TESTED DATE : 06/12/2024-12/12/2024  
Serial No. 218432 REPORTED DATE : 14/12/2024

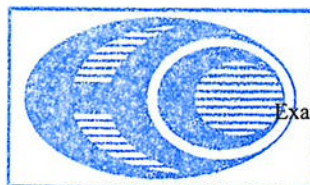
PARAMETER**	TEST METHOD	RESULT <sup>/2</sup>	STD <sup>/1</sup>	UNIT
Propylene Oxide	NIOSH 1612/GC-FID	ND	240	mg/m <sup>3</sup>
		ND	100	ppm

**REMARK:**<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.<sup>/2</sup> ND = Non detectable : When detection limit of Propylene Oxide is less than 0.10 mg/m<sup>3</sup> or 0.05 ppm.

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

Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Weerachai Porjai)

Analysed By SECOT Co.,Ltd.



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

14/12/2024

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

Request No. ATR6712018

Report No. 6712-0318

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : พนักงานที่ปฏิบัติงานในพื้นที่เสี่ยงในกระบวนการผลิต (คุณมานะชัย โชติมณี)  
SAMPLING DATE : 29/11/2024 SAMPLE NO. : A67120318  
RECEIVED DATE : 06/12/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.01 L/min TESTED DATE : 06/12/2024-12/12/2024  
Serial No. 218412 REPORTED DATE : 14/12/2024

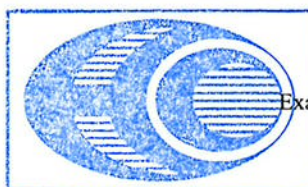
PARAMETER**	TEST METHOD	RESULT <sup>/2</sup>	STD <sup>/1</sup>	UNIT
Propylene Oxide	NIOSH 1612/GC-FID	ND	240	mg/m <sup>3</sup>
		ND	100	ppm

**REMARK:**<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.<sup>/2</sup> ND = Non detectable : When detection limit of Propylene Oxide is less than 0.10 mg/m<sup>3</sup> or 0.05 ppm.

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

Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Weerachai Porjai)

Analysed By SECOT Co.,Ltd.



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

(1)

14/12/2024

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

Request No. ATR6712018

Report No. 6712-0319

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : พนักงานที่ปฏิบัติงานในพื้นที่เสี่ยงในกระบวนการผลิต (คุณชัยพฤกษ์ วิจารณ์โท)  
SAMPLING DATE : 29/11/2024 SAMPLE NO. : A67120319  
RECEIVED DATE : 06/12/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.01 L/min TESTED DATE : 06/12/2024-12/12/2024  
Serial No. 218383 REPORTED DATE : 14/12/2024

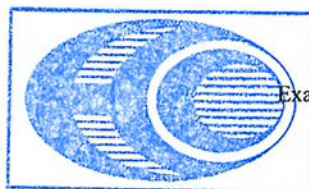
PARAMETER**	TEST METHOD	RESULT <sup>/2</sup>	STD <sup>/1</sup>	UNIT
Propylene Oxide	NIOSH 1612/GC-FID	ND	240	mg/m <sup>3</sup>
		ND	100	ppm

**REMARK:**<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.<sup>/2</sup> ND = Non detectable : When detection limit of Propylene Oxide is less than 0.10 mg/m<sup>3</sup> or 0.05 ppm.

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

Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Weerachai Porjai)

Analysed By SECOT Co.,Ltd.



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By

14/12/2024

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

Request No. ATR6712018

Report No. 6712-0320

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : พนักงานที่ปฏิบัติงานในพื้นที่เสี่ยงในกระบวนการผลิต (คุณธีระเดช แสงเดช)  
SAMPLING DATE : 29/11/2024 SAMPLE NO. : A67120320  
RECEIVED DATE : 06/12/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.01 L/min TESTED DATE : 06/12/2024-12/12/2024  
Serial No. 218408 REPORTED DATE : 14/12/2024

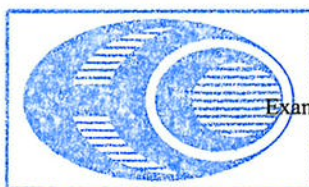
PARAMETER**	TEST METHOD	RESULT <sup>/2</sup>	STD <sup>/1</sup>	UNIT
Propylene Oxide	NIOSH 1612/GC-FID	ND	240	mg/m <sup>3</sup>
		ND	100	ppm

**REMARK:**<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.<sup>/2</sup> ND = Non detectable : When detection limit of Propylene Oxide is less than 0.10 mg/m<sup>3</sup> or 0.05 ppm.

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

Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Weerachai Porjai)

Analysed By SECOT Co.,Ltd.



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By...

14/12/2024

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

Request No. ATR6712018

Report No. 6712-0321

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : พนักงานที่ปฏิบัติงานในพื้นที่เสี่ยงในกระบวนการผลิต (คุณเจริญพงษ์ เกษไช)  
SAMPLING DATE : 29/11/2024 SAMPLE NO. : A67120321  
RECEIVED DATE : 06/12/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.01 L/min TESTED DATE : 06/12/2024-12/12/2024  
Serial No. 218445 REPORTED DATE : 14/12/2024

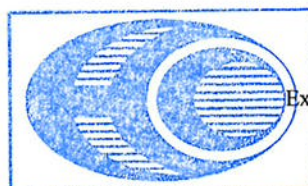
PARAMETER**	TEST METHOD	RESULT <sup>2</sup>	STD <sup>1</sup>	UNIT
Propylene Oxide	NIOSH 1612/GC-FID	ND	240	mg/m <sup>3</sup>
		ND	100	ppm

**REMARK:**<sup>1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.<sup>2</sup> ND = Non detectable : When detection limit of Propylene Oxide is less than 0.10 mg/m<sup>3</sup> or 0.05 ppm.

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

Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Weerachai Porjai)

Analysed By SECOT Co.,Ltd.



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By

14/12/2024

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



Request No. LA67-R0808

Report No. R6708-0046

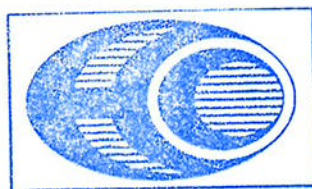
## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
 ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
 SAMPLE SOURCE : GC19  
 SAMPLE POINT : Air Compressors  
 PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  12 hr. &  $L_{max}$  SAMPLE NO. : 25426  
 DETERMINATION METHOD : ISO 11202:2010 MEASURING DATE : 02/08/2024  
 INSTRUMENT : Integrated Sound Level Meter ; RECEIVED DATE : 02/08/2024  
 S/N 00322754 : Class 2 REPORTED DATE : 09/08/2024

MEASURING TIME	RESULT		UNIT
	$L_{eq}$ 1 hr.	$L_{max}$	
08:30-09:30	84.8	89.0	dB(A)
09:30-10:30	84.9	86.8	dB(A)
10:30-11:30	84.4	86.7	dB(A)
11:30-12:30	83.7	86.0	dB(A)
12:30-13:30	83.6	85.8	dB(A)
13:30-14:30	84.1	86.4	dB(A)
14:30-15:30	84.7	86.9	dB(A)
15:30-16:30	84.8	87.3	dB(A)
16:30-17:30	84.8	86.9	dB(A)
17:30-18:30	84.9	87.3	dB(A)
18:30-19:30	84.9	87.3	dB(A)
19:30-20:30	84.8	87.0	dB(A)
$L_{eq}$ 12 hr.	84.6	—	dB(A)
Standard	$87^{(1)}$	$140^{(1)}, 115^{(2)}$	dB(A)

REMARK : <sup>(1)</sup> Notification of The Ministry of Industry B.E. 2546 (2003)<sup>(2)</sup> Regulation of The Ministry of Labour B.E. 2559 (2016)

\* Measurement By Ms. Onanong Leewongsak



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .

09/08/2024

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

Request No. LA67-R0808

Report No. R6708-0047

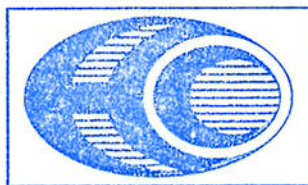
## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
 ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
 SAMPLE SOURCE : GC19  
 SAMPLE POINT : C3 Recycle Compressors  
 PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  12 hr. &  $L_{max}$  SAMPLE NO. : 25427  
 DETERMINATION METHOD : ISO 11202:2010 MEASURING DATE : 02/08/2024  
 INSTRUMENT : Integrated Sound Level Meter ; RECEIVED DATE : 02/08/2024  
 S/N 00322745 : Class 2 REPORTED DATE : 09/08/2024

MEASURING TIME	RESULT		UNIT
	$L_{eq}$ 1 hr.	$L_{max}$	
08:30-09:30	83.4	84.1	dB(A)
09:30-10:30	83.3	84.1	dB(A)
10:30-11:30	83.2	83.9	dB(A)
11:30-12:30	83.0	83.6	dB(A)
12:30-13:30	82.8	83.5	dB(A)
13:30-14:30	83.2	84.1	dB(A)
14:30-15:30	83.3	84.1	dB(A)
15:30-16:30	83.4	84.2	dB(A)
16:30-17:30	83.4	84.2	dB(A)
17:30-18:30	83.5	84.3	dB(A)
18:30-19:30	83.5	84.4	dB(A)
19:30-20:30	83.5	84.3	dB(A)
$L_{eq}$ 12 hr.	83.3	—	dB(A)
Standard	87 <sup>1</sup>	140 <sup>1</sup> , 115 <sup>2</sup>	dB(A)

REMARK : <sup>1</sup> Notification of The Ministry of Industry B.E. 2546 (2003)<sup>2</sup> Regulation of The Ministry of Labour B.E. 2559 (2016)

\* Measurement By Ms. Onanong Leewongsak



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

09/08/2024

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

Request No. LA67-R0808

Report No. R6708-0036

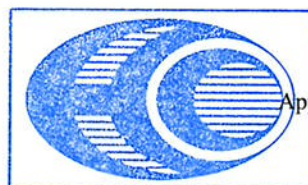
## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC19  
SAMPLE POINT : บริเวณพื้นที่กระบวนการผลิต Shift A (Morning Shift) (คุณธีระเดช แสงเดช ID 26008020)  
MEASURING DATE : 01/08/2024 SAMPLE NO. : 25416  
RECEIVED DATE : 02/08/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1498 REPORTED DATE : 09/08/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	59.8	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	83.4	115 <sup>/3</sup>	dB(A)
12 Hour dose	0.45	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	61.5	85 <sup>/1</sup>	dB(A)

**REMARK :**

- <sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)
- <sup>/2</sup> Standard of National Institute for Occupational Safety and Health, Occupational Noise Exposure Revised Criteria 1998
- <sup>#</sup> Based on Criteria 85 dB(A) ; 3 dB Exchange Rate
- \* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Measurement By Ms. Onanong Leewongsak)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

09/08/2024

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

Request No. LA67-R0808

Report No. R6708-0037

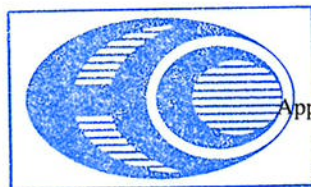
## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC19  
SAMPLE POINT : บริเวณพื้นที่กระบวนการผลิต Shift A (Morning Shift) (คุณสมบัติ ID 26009931)  
MEASURING DATE : 01/08/2024 SAMPLE NO. : 25417  
RECEIVED DATE : 02/08/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1499 REPORTED DATE : 09/08/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	78.0	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	94.7	115 <sup>/3</sup>	dB(A)
12 Hour dose	30.21	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	79.8	85 <sup>/1</sup>	dB(A)

**REMARK :**

- <sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)
- <sup>/2</sup> Standard of National Institute for Occupational Safety and Health, Occupational Noise Exposure Revised Criteria 1998
- <sup>#</sup> Based on Criteria 85 dB(A) ; 3 dB Exchange Rate
- \* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Measurement By Ms. Onanong Leewongsak)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.

09/08/2024

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

Request No. LA67-R0808

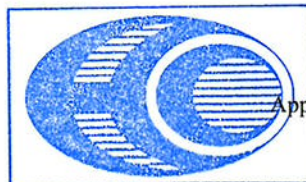
Report No. R6708-0038

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC19  
SAMPLE POINT : บริเวณพื้นที่กระบวนการผลิต Shift A (Morning Shift) (ศูนย์พักพิง วิทยาลัย ID 26008179)  
MEASURING DATE : 01/08/2024 SAMPLE NO. : 25418  
RECEIVED DATE : 02/08/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1500 REPORTED DATE : 09/08/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	82.2	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	107.2	115 <sup>/3</sup>	dB(A)
12 Hour dose	77.93	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	83.9	85 <sup>/1</sup>	dB(A)

**REMARK :** <sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)  
<sup>/2</sup> Standard of National Institute for Occupational Safety and Health, Occupational Noise Exposure Revised Criteria 1998  
<sup>#</sup> Based on Criteria 85 dB(A) ; 3 dB Exchange Rate  
\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Measurement By Ms. Onanong Leewongsak)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

09/08/2024

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



Request No. LA67-R0808

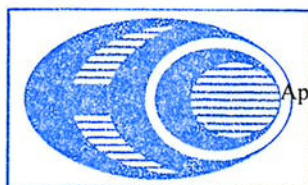
Report No. R6708-0039

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC19  
SAMPLE POINT : บริเวณพื้นที่กระบวนการผลิต Shift A (Morning Shift) (จุดวัดเทพรัตน์โสภณ ID 26008180)  
MEASURING DATE : 01/08/2024 SAMPLE NO. : 25419  
RECEIVED DATE : 02/08/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1497 REPORTED DATE : 09/08/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	59.5	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	78.7	115 <sup>/3</sup>	dB(A)
12 Hour dose	0.42	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	61.2	85 <sup>/1</sup>	dB(A)

**REMARK :** <sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)  
<sup>/2</sup> Standard of National Institute for Occupational Safety and Health, Occupational Noise Exposure Revised Criteria 1998  
<sup>#</sup> Based on Criteria 85 dB(A) ; 3 dB Exchange Rate  
\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Measurement By Ms. Onanong Leewongsak)



Approved By....

(M

09/08/2024

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. LA67-R0808

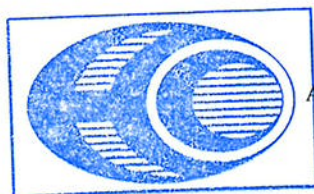
Report No. R6708-0040

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC19  
SAMPLE POINT : บริเวณพื้นที่กระบวนการผลิต Shift A (Morning Shift) (คุณเจริญพงษ์ เกษไชย ID 26008178)  
MEASURING DATE : 01/08/2024 SAMPLE NO. : 25420  
RECEIVED DATE : 02/08/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1365 REPORTED DATE : 09/08/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	76.2	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	92.6	115 <sup>/3</sup>	dB(A)
12 Hour dose	19.87	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	78.0	85 <sup>/1</sup>	dB(A)

**REMARK :** <sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)  
<sup>/2</sup> Standard of National Institute for Occupational Safety and Health, Occupational Noise Exposure Revised Criteria 1998  
<sup>#</sup> Based on Criteria 85 dB(A) ; 3 dB Exchange Rate  
\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Measurement By Ms. Onanong Leewongsak)



Approved By.

09/08/2024

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. LA67-R0827

Report No. R6708-4015

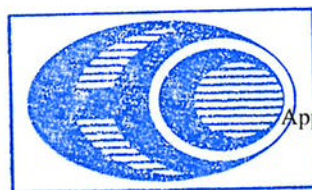
## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC19  
SAMPLE POINT : บริเวณพื้นที่กระบวนการผลิต Shift B (Morning Shift) (คุณอรุณโกวิท สิงห์โตทอง ID 26008184)  
MEASURING DATE : 06/08/2024 SAMPLE NO. : 29395  
RECEIVED DATE : 08/08/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1497 REPORTED DATE : 16/08/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	76.7	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	89.8	115 <sup>/3</sup>	dB(A)
12 Hour dose	21.99	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	78.4	85 <sup>/1</sup>	dB(A)

**REMARK :**

- <sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)
- <sup>/2</sup> Standard of National Institute for Occupational Safety and Health, Occupational Noise Exposure Revised Criteria 1998
- <sup>/3</sup> Regulation of The Ministry of Labour B.E. 2559 (2016)
- <sup>#</sup> Based on Criteria 85 dB(A) ; 3 dB Exchange Rate
- \* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Measurement By Ms. Onanong Leewongsak)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

16/08/2024

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

Request No. LA67-R0827

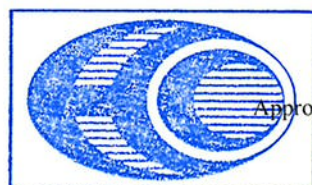
Report No. R6708-4016

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC19  
SAMPLE POINT : บริเวณพื้นที่กระบวนการผลิต Shift B (Morning Shift) (คุณวัฒน์ชัย สุวรรณเมฆ ID 26008185)  
MEASURING DATE : 06/08/2024 SAMPLE NO. : 29396  
RECEIVED DATE : 08/08/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1498 REPORTED DATE : 16/08/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	72.6	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	92.0	115 <sup>/3</sup>	dB(A)
12 Hour dose	8.64	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	74.4	85 <sup>/1</sup>	dB(A)

**REMARK :** <sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)  
<sup>/2</sup> Standard of National Institute for Occupational Safety and Health, Occupational Noise Exposure Revised Criteria 1998  
<sup>/3</sup> Regulation of The Ministry of Labour B.E. 2559 (2016)  
<sup>#</sup> Based on Criteria 85 dB(A) ; 3 dB Exchange Rate  
\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Measurement By Ms. Onanong Leewongsak)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

16/08/2024

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

Request No. LA67-R0827

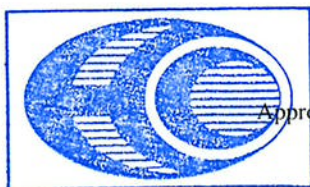
Report No. R6708-4017

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC19  
SAMPLE POINT : บริเวณพื้นที่กระบวนการผลิต Shift B (Morning Shift) (คุณพงษ์นรินทร์ ลีตานา ID 26008175)  
MEASURING DATE : 06/08/2024 SAMPLE NO. : 29397  
RECEIVED DATE : 08/08/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1499 REPORTED DATE : 16/08/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	77.5	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	100.2	115 <sup>/3</sup>	dB(A)
12 Hour dose	26.70	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	79.3	85 <sup>/1</sup>	dB(A)

**REMARK :** <sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)  
<sup>/2</sup> Standard of National Institute for Occupational Safety and Health, Occupational Noise Exposure Revised Criteria 1998  
<sup>/3</sup> Regulation of The Ministry of Labour B.E. 2559 (2016)  
<sup>#</sup> Based on Criteria 85 dB(A) ; 3 dB Exchange Rate  
\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Measurement By Ms. Onanong Leewongsak)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

16/08/2024

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



Request No. LA67-R0827

Report No. R6708-4018

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC19  
SAMPLE POINT : บริเวณพื้นที่กระบวนการผลิต Shift B (Morning Shift) (คุณชัชชัยธนภรณ์ อรรคสังข์ ID 26008182)  
MEASURING DATE : 06/08/2024 SAMPLE NO. : 29398  
RECEIVED DATE : 08/08/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1500 REPORTED DATE : 16/08/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	71.3	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	94.0	115 <sup>/3</sup>	dB(A)
12 Hour dose	6.41	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	73.1	85 <sup>/1</sup>	dB(A)

**REMARK :**

<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)

<sup>/2</sup> Standard of National Institute for Occupational Safety and Health, Occupational Noise Exposure Revised Criteria 1998

<sup>/3</sup> Regulation of The Ministry of Labour B.E. 2559 (2016)

<sup>#</sup> Based on Criteria 85 dB(A) ; 3 dB Exchange Rate

\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Measurement By Ms. Onanong Leewongsak)



บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

Approved By..

16/08/2024

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

Request No. LA67-R0915

Report No. R6709-1084

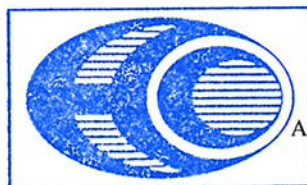
## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC19  
SAMPLE POINT : บริเวณพื้นที่กระบวนการผลิต Shift B (Morning Shift) (คุณภัทรพล นุ่มนึ่ง ID 26008019)  
MEASURING DATE : 03/09/2024 SAMPLE NO. : 32290  
RECEIVED DATE : 04/09/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB0957 REPORTED DATE : 11/09/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	65.7	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	77.1	115 <sup>/3</sup>	dB(A)
12 Hour dose	1.78	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	67.5	85 <sup>/1</sup>	dB(A)

**REMARK :**

- <sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)
- <sup>/2</sup> Standard of National Institute for Occupational Safety and Health, Occupational Noise Exposure Revised Criteria 1998
- <sup>/3</sup> Regulation of The Ministry of Labour B.E. 2559 (2016)
- <sup>#</sup> Based on Criteria 85 dB(A) ; 3 dB Exchange Rate
- \* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Measurement By Ms. Savita Kittinoavarat)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.

11/09/2024

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

Request No. LA67-R0827

Report No. R6708-4019

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC19  
SAMPLE POINT : บริเวณพื้นที่กระบวนการผลิต Shift C (Morning Shift) (คุณพิชัย ศรีชัย ID 26008182)  
MEASURING DATE : 08/08/2024 SAMPLE NO. : 29399  
RECEIVED DATE : 08/08/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB0954 REPORTED DATE : 16/08/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	72.6	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	90.6	115 <sup>/3</sup>	dB(A)
12 Hour dose	8.63	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	74.4	85 <sup>/1</sup>	dB(A)

**REMARK :**

<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)

<sup>/2</sup> Standard of National Institute for Occupational Safety and Health, Occupational Noise Exposure Revised Criteria 1998

<sup>/3</sup> Regulation of The Ministry of Labour B.E. 2559 (2016)

<sup>#</sup> Based on Criteria 85 dB(A) ; 3 dB Exchange Rate

\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Measurement By Ms. Onanong Leewongsak)



Approved By.

16/08/2024

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. LA67-R0827

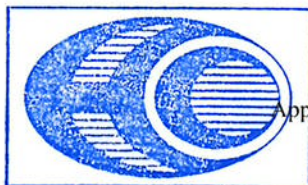
Report No. R6708-4020

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC19  
SAMPLE POINT : บริเวณพื้นที่กระบวนการผลิต Shift C (Morning Shift) (คุณฐิติกร เทิงสูงเนิน ID 26008177)  
MEASURING DATE : 08/08/2024 SAMPLE NO. : 29400  
RECEIVED DATE : 08/08/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB0955 REPORTED DATE : 16/08/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	82.8	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	101.1	115 <sup>/3</sup>	dB(A)
12 Hour dose	89.74	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	84.5	85 <sup>/1</sup>	dB(A)

**REMARK :** <sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)  
<sup>/2</sup> Standard of National Institute for Occupational Safety and Health, Occupational Noise Exposure Revised Criteria 1998  
<sup>/3</sup> Regulation of The Ministry of Labour B.E. 2559 (2016)  
<sup>#</sup> Based on Criteria 85 dB(A) ; 3 dB Exchange Rate  
\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Measurement By Ms. Onanong Leewongsak)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

16/08/2024

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

Request No. LA67-R0827

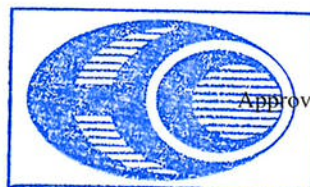
Report No. R6708-4021

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC19  
SAMPLE POINT : บริเวณพื้นที่กระบวนการผลิต Shift C (Morning Shift) (คุณสมบัติวัสดุ ID 26008174)  
MEASURING DATE : 08/08/2024 SAMPLE NO. : 29401  
RECEIVED DATE : 08/08/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB0956 REPORTED DATE : 16/08/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	62.0	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	86.0	115 <sup>/3</sup>	dB(A)
12 Hour dose	0.75	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	63.8	85 <sup>/1</sup>	dB(A)

**REMARK :** <sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)  
<sup>/2</sup> Standard of National Institute for Occupational Safety and Health, Occupational Noise Exposure Revised Criteria 1998  
<sup>/3</sup> Regulation of The Ministry of Labour B.E. 2559 (2016)  
<sup>#</sup> Based on Criteria 85 dB(A) ; 3 dB Exchange Rate  
\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Measurement By Ms. Onanong Leewongsak)



Approved By.

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

16/08/2024

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



Request No. LA67-R0915

Report No. R6709-1085

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC19  
SAMPLE POINT : บริเวณพื้นที่กระบวนการผลิต Shift C (Morning Shift) (คุณนวกาศย์ แสงสุรินทร์ ID 26008183)  
MEASURING DATE : 04/09/2024 SAMPLE NO. : 32291  
RECEIVED DATE : 04/09/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB0640 REPORTED DATE : 11/09/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	58.6	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	83.3	115 <sup>/3</sup>	dB(A)
12 Hour dose	0.34	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	60.3	85 <sup>/1</sup>	dB(A)

**REMARK :**

- <sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)
- <sup>/2</sup> Standard of National Institute for Occupational Safety and Health, Occupational Noise Exposure Revised Criteria 1998
- <sup>/3</sup> Regulation of The Ministry of Labour B.E. 2559 (2016)
- <sup>#</sup> Based on Criteria 85 dB(A) ; 3 dB Exchange Rate
- \* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Measurement By Ms. Savita Kittinoavarat)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By..

11/09/2024

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

Request No. LA67-R0915

Report No. R6709-1086

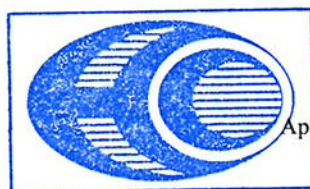
## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC19  
SAMPLE POINT : บริเวณพื้นที่กระบวนการผลิต Shift C (Morning Shift) (คุณภาพพิเศษ เยียดยัด ID 26008176)  
MEASURING DATE : 04/09/2024 SAMPLE NO. : 32292  
RECEIVED DATE : 04/09/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB0641 REPORTED DATE : 11/09/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	58.9	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	83.9	115 <sup>/3</sup>	dB(A)
12 Hour dose	0.37	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	60.7	85 <sup>/1</sup>	dB(A)

**REMARK :**

<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)  
<sup>/2</sup> Standard of National Institute for Occupational Safety and Health, Occupational Noise Exposure Revised Criteria 1998  
<sup>/3</sup> Regulation of The Ministry of Labour B.E. 2559 (2016)  
<sup>#</sup> Based on Criteria 85 dB(A) ; 3 dB Exchange Rate  
\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Measurement By Ms. Savita Kittinoavarat)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

11/09/2024

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

Request No. LA67-R0808

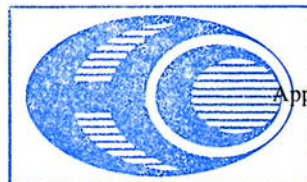
Report No. R6708-0041

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC19  
SAMPLE POINT : บริเวณพื้นที่กระบวนการผลิต Shift D (Morning Shift) (จุดตรวจฯ แสดงกระจำ ID 26008173)  
MEASURING DATE : 02/08/2024 SAMPLE NO. : 25421  
RECEIVED DATE : 02/08/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1365 REPORTED DATE : 09/08/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	77.6	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	92.6	115 <sup>/3</sup>	dB(A)
12 Hour dose	27.51	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	79.4	85 <sup>/1</sup>	dB(A)

**REMARK :** <sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)  
<sup>/2</sup> Standard of National Institute for Occupational Safety and Health, Occupational Noise Exposure Revised Criteria 1998  
<sup>#</sup> Based on Criteria 85 dB(A) ; 3 dB Exchange Rate  
\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Measurement By Ms. Onanong Leewongsak)



Approved By.

09/08/2024

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. LA67-R0808

Report No. R6708-0042

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
 ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
 SAMPLE SOURCE : GC19  
 SAMPLE POINT : บริเวณพื้นที่กระบวนการผลิต Shift D (Morning Shift) (คุณภาพวัสดุ อินนังแท่น ID 26008189)  
 MEASURING DATE : 02/08/2024 SAMPLE NO. : 25422  
 RECEIVED DATE : 02/08/2024 SAMPLING TIME : 07:00-19:00  
 SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1497 REPORTED DATE : 09/08/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	57.4	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	84.6	115 <sup>/3</sup>	dB(A)
12 Hour dose	0.26	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	59.1	85 <sup>/1</sup>	dB(A)

**REMARK :** <sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)  
<sup>/2</sup> Standard of National Institute for Occupational Safety and Health, Occupational Noise Exposure Revised Criteria 1998  
<sup>#</sup> Based on Criteria 85 dB(A) ; 3 dB Exchange Rate  
 \* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
 (Measurement By Ms. Onanong Leewongsak)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.

09/08/2024

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

Request No. LA67-R0808

Report No. R6708-0043

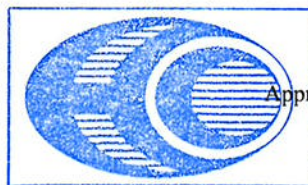
## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC19  
SAMPLE POINT : บริเวณพื้นที่กระบวนการผลิต Shift D (Morning Shift) (คุณนารากร สูดสายตา ID 26008186)  
MEASURING DATE : 02/08/2024 SAMPLE NO. : 25423  
RECEIVED DATE : 02/08/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1498 REPORTED DATE : 09/08/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	76.0	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	104.3	115 <sup>/3</sup>	dB(A)
12 Hour dose	18.87	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	77.8	85 <sup>/1</sup>	dB(A)

**REMARK :**

- <sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)
- <sup>/2</sup> Standard of National Institute for Occupational Safety and Health, Occupational Noise Exposure Revised Criteria 1998
- <sup>#</sup> Based on Criteria 85 dB(A) ; 3 dB Exchange Rate
- \* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Measurement By Ms. Onanong Leewongsak)



Approved By

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

09/08/2024

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



Request No. LA67-R0808

Report No. R6708-0044

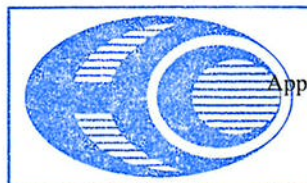
## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC19  
SAMPLE POINT : บริเวณพื้นที่กระบวนการผลิต Shift D (Morning Shift) (คุณสมบัติคำภาพพจน์ ID 26008170)  
MEASURING DATE : 02/08/2024 SAMPLE NO. : 25424  
RECEIVED DATE : 02/08/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1499 REPORTED DATE : 09/08/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	73.3	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	92.4	115 <sup>/3</sup>	dB(A)
12 Hour dose	10.07	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	75.0	85 <sup>/1</sup>	dB(A)

**REMARK :**

- <sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)
- <sup>/2</sup> Standard of National Institute for Occupational Safety and Health, Occupational Noise Exposure Revised Criteria 1998
- <sup>#</sup> Based on Criteria 85 dB(A) ; 3 dB Exchange Rate
- \* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Measurement By Ms. Onanong Leewongsak)



Approved By

09/08/2024

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

Request No. LA67-R0808

Report No. R6708-0045

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC19  
SAMPLE POINT : บริเวณพื้นที่กระบวนการผลิต Shift D (Morning Shift) (คุณชุกรี ประเสริฐคำ ID 26008171)  
MEASURING DATE : 02/08/2024 SAMPLE NO. : 25425  
RECEIVED DATE : 02/08/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1500 REPORTED DATE : 09/08/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	75.9	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	93.3	115 <sup>/3</sup>	dB(A)
12 Hour dose	18.47	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	77.7	85 <sup>/1</sup>	dB(A)

**REMARK :** <sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E. 2561 (2018)  
<sup>/2</sup> Standard of National Institute for Occupational Safety and Health, Occupational Noise Exposure Revised Criteria 1998  
<sup>#</sup> Based on Criteria 85 dB(A) ; 3 dB Exchange Rate  
\* Parameter have License Registration of Department of Labour Protection and Welfare No. 0403-03-2564-0009  
(Measurement By Ms. Onanong Leewongsak)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

09/08/2024

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