

ภาคผนวก ค

รายงานผลการตรวจวัดคุณภาพสิ่งแวดล้อม

Request No. ATR6702024

Report No. 6702-0332 - 6702-0338

## 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 : วัดมาบขลุ่  
RECEIVED DATE : 19/02/2024 SAMPLE NO. : A67020332 - A67020338  
TESTED DATE : 19/02/2024-20/02/2024 REPORTED DATE : 23/02/2024

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	STD <sup>1/</sup>	UNIT
Total Suspended Particulate (TSP)	Gravimetric Method	06-07/02/2024	0.076	0.33	mg/m <sup>3</sup>
		07-08/02/2024	0.071	0.33	mg/m <sup>3</sup>
		08-09/02/2024	0.140	0.33	mg/m <sup>3</sup>
		09-10/02/2024	0.055	0.33	mg/m <sup>3</sup>
		10-11/02/2024	0.069	0.33	mg/m <sup>3</sup>
		11-12/02/2024	0.103	0.33	mg/m <sup>3</sup>
		12-13/02/2024	0.116	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.

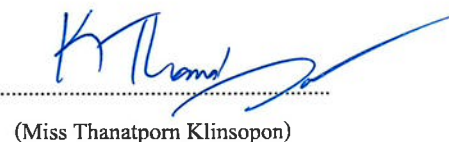
\* Parameter not have License Registration of Department of Labour Protection and Welfare.

(Sampling By Mr. Tummarut Photankham)

GPS = Sampling at UTM 47P 736823E 1407369N



Approved By



(Miss Thanatporn Klinsopon)

23/02/2024

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

Request No. ATR6702024

Report No. 6702-0325 - 6702-0331

## 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 NAME : วัดมาบชูด  
RECEIVED DATE : 19/02/2024 SAMPLE NO. : A67020325 - A67020331  
TESTED DATE : 19/02/2024-20/02/2024 REPORTED DATE : 23/02/2024

PARAMETER*	TEST METHOD	SAMPLING DATE	RESULT	STD <sup>/1</sup>	UNIT
Particulate matter less than or Equal					
10 micrometers (PM 10)	Gravimetric Method	06-07/02/2024	0.036	0.12	mg/m <sup>3</sup>
		07-08/02/2024	0.031	0.12	mg/m <sup>3</sup>
		08-09/02/2024	0.051	0.12	mg/m <sup>3</sup>
		09-10/02/2024	0.030	0.12	mg/m <sup>3</sup>
		10-11/02/2024	0.044	0.12	mg/m <sup>3</sup>
		11-12/02/2024	0.065	0.12	mg/m <sup>3</sup>
		12-13/02/2024	0.081	0.12	mg/m <sup>3</sup>

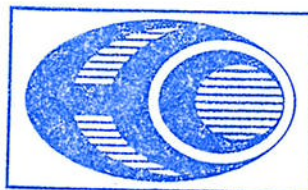
## REMARK:

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

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

(Sampling By Mr. Tummarut Photankham)

GPS = Sampling at UTM 47P 736823E 1407369N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Miss Thanatporn Klinsoon)

23/02/2024

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Request No. ATR6702024

Report No. 6702-0339 - 6702-0345

## 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 : 19/02/2024 SAMPLE NO. : A67020339 - A67020345  
TESTED DATE : 19/02/2024-21/02/2024 REPORTED DATE : 23/02/2024

PARAMETER**	TEST METHOD	SAMPLING DATE	RESULT <sup>1/</sup>	UNIT
Propylene oxide	NIOSH1612/GC-FID	06-07/02/2024	ND	mg/m <sup>3</sup>
			ND	ppm
		07-08/02/2024	ND	mg/m <sup>3</sup>
			ND	ppm
		08-09/02/2024	ND	mg/m <sup>3</sup>
			ND	ppm
		09-10/02/2024	ND	mg/m <sup>3</sup>
			ND	ppm
		10-11/02/2024	ND	mg/m <sup>3</sup>
			ND	ppm
		11-12/02/2024	ND	mg/m <sup>3</sup>
			ND	ppm
		12-13/02/2024	ND	mg/m <sup>3</sup>
			ND	ppm

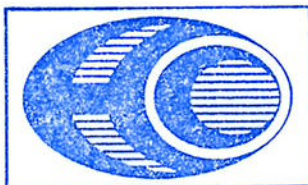
## REMARK:

<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.....

(Miss Thanatporn Klinsoon)

23/02/2024

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Request No. LA67-R0240

Report No. R6702-0607 - R6702-0613

## 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 : วัดมาบชอุทิศ  
PARAMETER\* : Nitrogen Dioxide  
DETERMINATION METHOD : Chemiluminescence  
INSTRUMENT : API Model T200 S/N 2004

SAMPLE NO. : 01425-01431  
SAMPLING DATE : 06-13/02/2024  
RECEIVED DATE : 13/02/2024  
REPORTED DATE : 19/02/2024

TIME / DATE	06-07/02/2024	07-08/02/2024	08-09/02/2024	UNIT
11:00 - 12:00 <sup>2</sup>	0.007	0.007	0.004	ppm
12:00 - 13:00	0.007	0.005	0.002	ppm
13:00 - 14:00	0.006	0.006	0.003	ppm
14:00 - 15:00	0.004	0.006	0.003	ppm
15:00 - 16:00	0.006	0.006	0.003	ppm
16:00 - 17:00	0.007	0.006	0.003	ppm
17:00 - 18:00	0.007	0.003	0.002	ppm
18:00 - 19:00	0.006	0.003	0.002	ppm
19:00 - 20:00	0.005	0.002	0.002	ppm
20:00 - 21:00	0.004	0.001	0.002	ppm
21:00 - 22:00	0.007	0.002	0.002	ppm
22:00 - 23:00	0.005	0.006	0.007	ppm
23:00 - 00:00	0.003	0.005	0.008	ppm
00:00 - 01:00	0.001	0.002	0.006	ppm
01:00 - 02:00	0.003	0.005	0.003	ppm
02:00 - 03:00	0.003	0.006	0.002	ppm
03:00 - 04:00	0.006	0.004	0.001	ppm
04:00 - 05:00	0.004	0.003	0.001	ppm
05:00 - 06:00	0.003	0.003	0.002	ppm
06:00 - 07:00	0.002	0.003	0.002	ppm
07:00 - 08:00	0.004	0.002	0.002	ppm
08:00 - 09:00	0.007	0.002	0.004	ppm
09:00 - 10:00	0.009	0.003	0.004	ppm
10:00 - 11:00	0.009	0.003	0.009	ppm
Maximum 1 hr.	0.009	0.007	0.009	ppm
Average 24 hr.	0.005	0.004	0.003	ppm
Standard (1 hr.) <sup>1</sup>	0.17	0.17	0.17	ppm

REMARK : <sup>1</sup> Notification of The National Environmental Board Volume 33 B.E. 2552 (2009)<sup>2</sup> Start Time

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



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MS. THANATPORN KLINSOPON)

19/02/2024

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WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. LA67-R0240

Report No. R6702-0607 - R6702-0613

## TEST REPORT

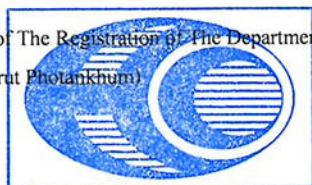
CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC19  
SAMPLE POINT : วัดมาบชอุค  
PARAMETER\* : Nitrogen Dioxide  
DETERMINATION METHOD : Chemiluminescence  
INSTRUMENT : API Model T200 S/N 2004

SAMPLE NO. : 01425-01431  
SAMPLING DATE : 06-13/02/2024  
RECEIVED DATE : 13/02/2024  
REPORTED DATE : 19/02/2024

TIME / DATE	09-10/02/2024	10-11/02/2024	11-12/02/2024	UNIT
11:00 - 12:00 <sup>2</sup>	0.004	0.012	0.006	ppm
12:00 - 13:00	0.007	0.011	0.006	ppm
13:00 - 14:00	0.009	0.012	0.005	ppm
14:00 - 15:00	0.008	0.005	0.005	ppm
15:00 - 16:00	0.005	0.003	0.017	ppm
16:00 - 17:00	0.005	0.005	0.009	ppm
17:00 - 18:00	0.004	0.006	0.007	ppm
18:00 - 19:00	0.003	0.004	0.007	ppm
19:00 - 20:00	0.002	0.004	0.007	ppm
20:00 - 21:00	0.002	0.004	0.009	ppm
21:00 - 22:00	0.002	0.004	0.010	ppm
22:00 - 23:00	0.002	0.004	0.010	ppm
23:00 - 00:00	0.002	0.008	0.012	ppm
00:00 - 01:00	0.002	0.015	0.014	ppm
01:00 - 02:00	0.005	0.008	0.009	ppm
02:00 - 03:00	0.003	0.009	0.008	ppm
03:00 - 04:00	0.004	0.007	0.008	ppm
04:00 - 05:00	0.002	0.008	0.007	ppm
05:00 - 06:00	0.004	0.006	0.007	ppm
06:00 - 07:00	0.002	0.009	0.008	ppm
07:00 - 08:00	0.001	0.007	0.009	ppm
08:00 - 09:00	0.004	0.009	0.014	ppm
09:00 - 10:00	0.004	0.006	0.012	ppm
10:00 - 11:00	0.008	0.006	0.010	ppm
Maximum 1 hr.	0.009	0.015	0.017	ppm
Average 24 hr.	0.004	0.007	0.009	ppm
Standard (1 hr.) <sup>1</sup>	0.17	0.17	0.17	ppm

REMARK : <sup>1</sup> Notification of The National Environmental Board Volume 33 B.E. 2552 (2009)<sup>2</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.....

(MS. THANATPORN KLINSOPON)

19/02/2024

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Request No. LA67-R0240

Report No. R6702-0607 - R6702-0613

## 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 : วัดมาบชอุทิศ  
 PARAMETER\* : Nitrogen Dioxide  
 DETERMINATION METHOD : Chemiluminescence  
 INSTRUMENT : API Model T200 S/N 2004

SAMPLE NO. : 01425-01431  
 SAMPLING DATE : 06-13/02/2024  
 RECEIVED DATE : 13/02/2024  
 REPORTED DATE : 19/02/2024

TIME / DATE	12-13/02/2024	UNIT
11:00 - 12:00 <sup>2</sup>	0.008	ppm
12:00 - 13:00	0.007	ppm
13:00 - 14:00	0.006	ppm
14:00 - 15:00	0.006	ppm
15:00 - 16:00	0.006	ppm
16:00 - 17:00	0.010	ppm
17:00 - 18:00	0.009	ppm
18:00 - 19:00	0.009	ppm
19:00 - 20:00	0.010	ppm
20:00 - 21:00	0.015	ppm
21:00 - 22:00	0.025	ppm
22:00 - 23:00	0.031	ppm
23:00 - 00:00	0.025	ppm
00:00 - 01:00	0.019	ppm
01:00 - 02:00	0.012	ppm
02:00 - 03:00	0.011	ppm
03:00 - 04:00	0.011	ppm
04:00 - 05:00	0.010	ppm
05:00 - 06:00	0.011	ppm
06:00 - 07:00	0.012	ppm
07:00 - 08:00	0.017	ppm
08:00 - 09:00	0.018	ppm
09:00 - 10:00	0.016	ppm
10:00 - 11:00	0.011	ppm
Maximum 1 hr.	0.031	ppm
Average 24 hr.	0.013	ppm
Standard (1 hr.) <sup>1</sup>	0.17	ppm

REMARK : <sup>1</sup> Notification of The National Environmental Board Volume 33 B.E. 2552 (2009)<sup>2</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

(MS. THANATPORN KLINSOPON)

19/02/2024

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
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## Wind Speed &amp; Wind Direction

Request No. LA67-R0240

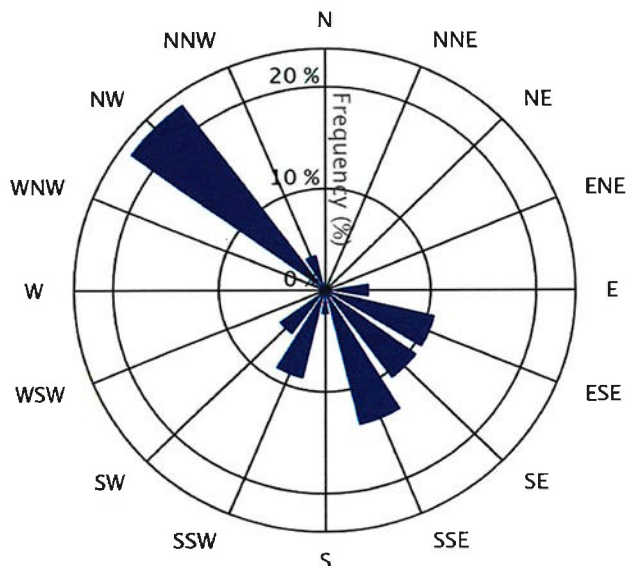
PTT Global Chemical Public Company Limited Branch 19 (GC 19)

Sample No. 01432

Sampling Source : วัดมาบชูด

Sampling Date : February 6-13, 2024

Calm 17.3 %



0.4-1.9    2.0-3.9    4.0-5.9    6.0-7.9    8.0-9.9    &gt; 9.9 (m/s)

WD/WS	Percentage of Occurrence of Wind Direct Grouped in Various Wind Speed						Total
	0.4-1.9 m/s	2.0-3.9 m/s	4.0-5.9 m/s	6.0-7.9 m/s	8.0-9.9 m/s	> 9.9 m/s	
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	4.2	0.0	0.0	0.0	0.0	0.0	4.2
ESE	10.7	0.0	0.0	0.0	0.0	0.0	10.7
SE	10.7	0.0	0.0	0.0	0.0	0.0	10.7
SSE	13.7	0.0	0.0	0.0	0.0	0.0	13.7
S	2.4	0.0	0.0	0.0	0.0	0.0	2.4
SSW	8.9	0.0	0.0	0.0	0.0	0.0	8.9
SW	5.4	0.0	0.0	0.0	0.0	0.0	5.4
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.6	0.0	0.0	0.0	0.0	0.0	0.6
NW	22.6	0.0	0.0	0.0	0.0	0.0	22.6
NNW	3.6	0.0	0.0	0.0	0.0	0.0	3.6
Calm	17.3						



## Wind Speed &amp; Wind Direction

Request No. LA67-R0240

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

Sample No. 01432

Sampling Source : วัดมาบชูด

Sampling Date : February 6-13, 2024

Time	February 6-7, 2024		February 7-8, 2024		February 8-9, 2024		February 9-10, 2024		February 10-11, 2024		February 11-12, 2024		February 12-13, 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
11:00-12:00	0.4	ESE	0.9	SE	0.9	SSE	0.4	E	0.9	E	1.3	NW	1.3	NW
12:00-13:00	0.4	ESE	0.9	SSE	0.9	SE	0.9	ESE	1.3	E	0.9	NNW	0.9	NW
13:00-14:00	0.9	SSE	0.9	SE	0.9	SSE	0.9	SSE	1.3	NW	0.9	NNW	0.9	NW
14:00-15:00	0.9	SSE	0.9	S	0.9	SSE	0.9	SSE	0.4	NNW	0.4	NNW	0.4	NW
15:00-16:00	0.9	SSE	1.3	S	0.9	SSE	0.9	SE	0.4	NW	0.9	SE	0.9	NW
16:00-17:00	0.9	SSW	0.9	SSE	0.9	S	0.9	SE	0.0	-	0.9	SSE	0.9	SSE
17:00-18:00	0.9	SE	0.9	SSW	0.9	SSE	0.9	SSE	0.9	SSW	0.9	SSW	0.9	SSW
18:00-19:00	0.4	SW	0.9	SSW	0.4	SE	0.4	SSE	0.4	SW	0.4	SSW	0.4	SSW
19:00-20:00	0.4	SSW	0.4	SW	0.4	ESE	0.4	SE	0.0	-	0.4	SSW	0.0	-
20:00-21:00	0.0	-	0.4	SW	0.4	ESE	0.4	SSE	0.0	-	0.0	-	0.0	-
21:00-22:00	0.0	-	0.0	-	0.4	ESE	0.9	E	0.0	-	0.0	-	0.4	NW
22:00-23:00	0.0	-	0.0	-	0.4	ESE	0.4	SE	0.0	-	0.0	-	0.4	NW
23:00-00:00	0.0	-	0.0	-	0.4	ESE	0.4	SE	0.4	E	0.0	-	0.0	-
00:00-01:00	0.0	-	0.0	-	0.4	SE	0.4	SE	0.0	-	0.4	NW	0.4	NW
01:00-02:00	0.0	-	0.4	SW	0.4	SE	0.4	SE	0.0	-	0.9	NW	0.4	NW
02:00-03:00	0.4	SSE	0.4	SW	0.4	ESE	0.4	ESE	0.4	NNW	0.9	NW	0.4	NW
03:00-04:00	0.4	SW	0.4	SSW	0.4	ESE	0.4	ESE	0.4	NW	1.3	NW	0.4	NW
04:00-05:00	0.4	SW	0.4	SSW	0.4	ESE	0.4	E	0.9	NW	0.9	NW	0.0	-
05:00-06:00	0.0	-	0.4	SSW	0.4	SE	0.9	ESE	0.9	NW	0.9	NW	0.4	NW
06:00-07:00	0.0	-	0.4	SSW	0.4	SE	0.4	ESE	1.3	NW	0.9	NW	0.4	NW
07:00-08:00	0.4	SW	0.4	SSW	0.4	SE	0.4	ESE	1.3	NW	0.9	NW	0.9	NW
08:00-09:00	0.0	-	0.4	SSE	0.0	-	0.4	SSE	1.3	NW	0.9	NW	0.9	NW
09:00-10:00	0.4	NNW	0.4	SSE	0.4	E	0.4	SSE	1.3	NW	1.3	NW	1.3	WNW
10:00-11:00	0.4	S	0.9	SSE	0.4	ESE	0.4	ESE	1.3	NW	1.3	NW	1.3	NW

Request No. LA67-0211

Report No. 6702-0091

## 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 POINT : ปล่องของระบบ TO SAMPLE NO. : 00202  
 SAMPLING DATE : 08/02/2024 SAMPLING TIME : 13:40-14:18  
 RECEIVED DATE : 12/02/2024 REPORTED DATE : 15/02/2024  
 TESTED DATE : 12-14/02/2024

STACK DESCRIPTION<sup>@</sup>

Height :	60.00	m	Type of Process :	Combustion
Diameter :	2.70	m	Type of Fuel :	Natural Gas
Temperature :	449.00	°C	Oxygen Content :	2.39 %
Air Velocity :	16.07	m/s	Barometric Pressure :	760.00 mmHg
Flow rate <sup>2</sup> :	34.39	m <sup>3</sup> /s	Atmospheric Temperature :	40.70 °C
Moisture Content :	9.26	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>2</sup>		STD <sup>1</sup>	UNIT
			2.39 % O <sub>2</sub>	7 % O <sub>2</sub>		
Total Suspended Particulate	Isokinetic, Gravimetric	13:40-14:18	0.1	0.1	320, 113 <sup>3</sup>	mg/m <sup>3</sup>
(TSP)	(U.S. EPA Method 5)		0.003 <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.Teerapong Naulin (ว-003-ค-0014)
- GPS = Sampling at UTM 47P 731246E 1406443N

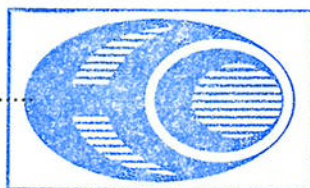
Examined By.....



(Miss Apiradee Chuen-arom)

(ว-003-ค-0007)

15/02/2024



บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

Approved By.....



(Mr. Thongchai Boonsak)

(ว-003-ค-0012)

15/02/2024

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. LA67-0211

Report No. 6702-0092

## 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 POINT : ปล่องของระบบ TO SAMPLE NO. : 00203  
SAMPLING DATE : 08/02/2024 SAMPLING TIME : 13:50-13:55  
RECEIVED DATE : 12/02/2024 REPORTED DATE : 15/02/2024  
TESTED DATE : 12-14/02/2024

## STACK DESCRIPTION@

Height :	60.00	m	Type of Process :	Combustion
Diameter :	2.70	m	Type of Fuel :	Natural Gas
Temperature :	449.00	°C	Oxygen Content :	2.39 %
Air Velocity :	16.07	m/s	Barometric Pressure :	760.00 mmHg
Flow rate <sup>2</sup> :	34.39	m <sup>3</sup> /s	Atmospheric Temperature :	40.70 °C
Moisture Content :	9.26	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>2</sup>		STD <sup>1</sup>	UNIT
			2.39 % O <sub>2</sub>	7 % O <sub>2</sub>		
Oxides of Nitrogen	Absorption, Phenoldisulfonic	13:50-13:55	14.3	10.7	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)		7.6	5.7	200, 15.2 <sup>3</sup>	ppm
			0.492 <sup>@</sup>	-	0.725 <sup>3</sup>	g/s

## REMARK:

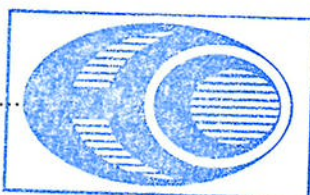
- <sup>1</sup> Notification of The Ministry of Industry B.E. 2549 (2006)
- <sup>2</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
- <sup>3</sup> ค่ากำหนดตามรายงานการประเมินผลกระทบสิ่งแวดล้อม (EIA)
- <sup>@</sup> These Data Outside The Scope of The Registration of The Department of Industrial Works.
- Sampling By Mr.Teerapong Naulin (จ-003-ค-0014)
- GPS = Sampling at UTM 47P 731246E 1406443N

Examined By.....

(Miss Apiradee Chuen-arom)

(จ-003-ค-0007)

15/02/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(Mr. Thongchai Boonsak)

(จ-003-ค-0012)

15/02/2024

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY



Request No. LA67-0211

Report No. 6702-0093

## 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 POINT : ปล่องของระบบ TO SAMPLE NO. : 00204  
SAMPLING DATE : 08/02/2024 SAMPLING TIME : 13:40-14:10  
RECEIVED DATE : 12/02/2024 REPORTED DATE : 15/02/2024  
TESTED DATE : 12-15/02/2024

STACK DESCRIPTION<sup>@</sup>

Height :	60.00	m	Type of Process :	Combustion
Diameter :	2.70	m	Type of Fuel :	Natural Gas
Temperature :	449.00	°C	Oxygen Content :	2.39 %
Air Velocity :	16.07	m/s	Barometric Pressure :	760.00 mmHg
Flow rate <sup>2</sup> :	34.39	m <sup>3</sup> /s	Atmospheric Temperature :	40.70 °C
Moisture Content :	9.26	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>2</sup>		STD <sup>1</sup>	UNIT
			2.39 % O <sub>2</sub>	7 % O <sub>2</sub>		
Carbon monoxide	Non-Dispersive Infrared	13:40-14:10	12.0	9.0	790	mg/m <sup>3</sup>
(CO)	(U.S. EPA Method 10)		10.5	7.9	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.Teerapong Naulin (จ-003-ค-0014)
- GPS = Sampling at UTM 47P 731246E 1406443N

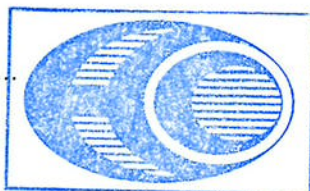
Examined By.....



(Miss Apiradee Chuen-arom)

(จ-003-ค-0007)

15/02/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....



(Mr. Thongchai Boonsak)

(จ-003-ค-0012)

15/02/2024

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. LA67-0211

Report No. 6702-0094

## 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 POINT : ปล่องของระบบ TO SAMPLE NO. : 00205  
 SAMPLING DATE : 08/02/2024 SAMPLING TIME : 13:40-14:10  
 RECEIVED DATE : 12/02/2024 REPORTED DATE : 21/02/2024  
 TESTED DATE : 12-21/02/2024

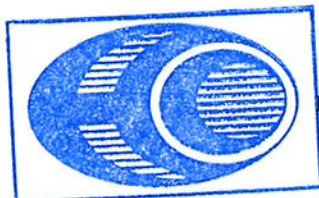
## STACK DESCRIPTION

Height :	60.00 m	Type of Process :	Combustion
Diameter :	2.70 m	Type of Fuel :	Natural Gas
Temperature :	449.00 °C	Oxygen Content :	2.39 %
Air Velocity :	16.07 m/s	Barometric Pressure :	760.00 mmHg
Flow rate <sup>2</sup> :	34.39 m <sup>3</sup> /s	Atmospheric Temperature :	40.70 °C
Moisture Content :	9.26 %		

PARAMETER	TEST METHOD	TIME	RESULT <sup>2</sup>		STD <sup>1</sup>	UNIT
			2.39 % O <sub>2</sub>	7 % O <sub>2</sub>		
Total Volatile Organic Compounds (TVOCs) <sup>4</sup>	U.S.EPA Method 25 A	13:40-14:10	4.18	3.14	-, <sup>3</sup>	mg/m <sup>3</sup>
			2.32	1.74	-, <sup>3</sup>	ppm
			0.144	-	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.Teerapong Naulin )  
Analysed By SECOT Co.,Ltd.
- GPS = Sampling at UTM 47P 731246E 1406443N



บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

Examined By.....

Thongchai Boonsak

(Mr. Thongchai Boonsak)

21/02/2024

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. LA67-0211

Report No. 6702-0095

## 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 POINT : ปล่อง Liquid Incinerator SAMPLE NO. : 00206  
 SAMPLING DATE : 08/02/2024 SAMPLING TIME : 10:35-11:10  
 RECEIVED DATE : 12/02/2024 REPORTED DATE : 15/02/2024  
 TESTED DATE : 12-14/02/2024

STACK DESCRIPTION<sup>@</sup>

Height :	60.00	m	Type of Process :	Combustion
Diameter :	2.20	m	Type of Fuel :	Natural Gas
Temperature :	303.30	°C	Oxygen Content :	13.44 %
Air Velocity :	7.06	m/s	Barometric Pressure :	760.00 mmHg
Flow rate <sup>2</sup> :	12.77	m <sup>3</sup> /s	Atmospheric Temperature :	33.60 °C
Moisture Content :	8.21	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>2</sup>		STD <sup>1</sup>	UNIT
			13.44 % O <sub>2</sub>	7 % O <sub>2</sub>		
Total Suspended Particulate	Isokinetic, Gravimetric	10:35-11:10	1.2	2.2	35, 28 <sup>3</sup>	mg/m <sup>3</sup>
(TSP)	(U.S. EPA Method 5)		0.015 <sup>@</sup>	-	0.880 <sup>3</sup>	g/s

**REMARK:**

1. <sup>1</sup> Notification of The Ministry of Industry B.E. 2545 (2002)
2. <sup>2</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
3. <sup>3</sup> ค่ากำหนดตามรายงานการประเมินผลกระทบสิ่งแวดล้อม (EIA)
4. <sup>@</sup> These Data Outside The Scope of The Registration of The Department of Industrial Works.
5. Sampling By Mr.Teerapong Naulin (จ-003-ค-0014)
6. GPS = Sampling at UTM 47P 731287E 1406416N

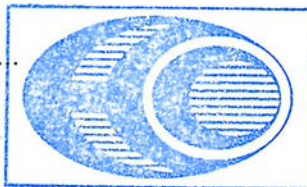
Examined By.....



(Miss Apiradee Chuen-arom)

(จ-003-ค-0007)

03/11/2023



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....



(Mr. Thongchai Boonsak)

(จ-003-ค-0012)

03/11/2023

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. LA67-0211

Report No. 6702-0096

## 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 POINT : ปล่อง Liquid Incinerator  
SAMPLING DATE : 08/02/2024  
RECEIVED DATE : 12/02/2024  
TESTED DATE : 12-14/02/2024  
STACK DESCRIPTION@

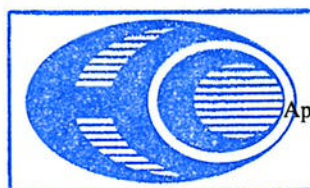
Height :	60.00	m	Type of Process :	Combustion
Diameter :	2.20	m	Type of Fuel :	Natural Gas
Temperature :	303.30	°C	Oxygen Content :	13.44 %
Air Velocity :	7.06	m/s	Barometric Pressure :	760.00 mmHg
Flow rate <sup>2</sup> :	12.77	m <sup>3</sup> /s	Atmospheric Temperature :	33.60 °C
Moisture Content :	8.21	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>2</sup>		STD <sup>1</sup>	UNIT
			13.44 % O <sub>2</sub>	7 % O <sub>2</sub>		
Oxides of Nitrogen	Absorption, Phenoldisulfonic	10:50-10:55	<2.0	<3.7	150, 15.7 <sup>3</sup>	mg/m <sup>3</sup>
(NO <sub>x</sub> as NO <sub>2</sub> )	Acid (U.S. EPA Method 7)		<1.0	<1.9	79.7, 8.3 <sup>3</sup>	ppm
			<0.027 <sup>@</sup>	-	0.490 <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.Teerapong Naulin (จ-003-ค-0014)
- GPS = Sampling at UTM 47P 731287E 1406416N

Examined By.....  
(Miss Apiradee Chuen-arom)  
(จ-003-ค-0007)  
15/02/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....  
(Mr. Thongchai Boonsak)  
(จ-003-ค-0012)  
15/02/2024

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
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Request No. LA67-0211

Report No. 6702-0097

## 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 POINT : ปล่อง Liquid Incinerator SAMPLE NO. : 00208  
SAMPLING DATE : 08/02/2024 SAMPLING TIME : 10:35-11:05  
RECEIVED DATE : 12/02/2024 REPORTED DATE : 15/02/2024  
TESTED DATE : 12-15/02/2024

STACK DESCRIPTION<sup>@</sup>

Height :	60.00	m	Type of Process :	Combustion
Diameter :	2.20	m	Type of Fuel :	Natural Gas
Temperature :	303.30	°C	Oxygen Content :	13.44 %
Air Velocity :	7.06	m/s	Barometric Pressure :	760.00 mmHg
Flow rate <sup>2</sup> :	12.77	m <sup>3</sup> /s	Atmospheric Temperature :	33.60 °C
Moisture Content :	8.21	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>2</sup>		STD <sup>1</sup>	UNIT
			13.44 % O <sub>2</sub>	7 % O <sub>2</sub>		
Carbon monoxide	Non-Dispersive Infrared	10:35-11:05	147.1	274.1	790	mg/m <sup>3</sup>
(CO)	(U.S. EPA Method 10)		128.4	239.2	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. Teerapong Naulin (ว-003-ค-0014)
- GPS = Sampling at UTM 47P 731287E 1406416N

Examined By.....

(Miss Apiradee Chuen-arom)

(ว-003-ค-0007)

15/02/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(Mr. Thongchai Boonsak)

(ว-003-ค-0012)

15/02/2024

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. LA67-0211

Report No. 6702-0098

## 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 POINT : ปล่อง Liquid Incinerator SAMPLE NO. : 00209  
 SAMPLING DATE : 08/02/2024 SAMPLING TIME : 10:35-11:05  
 RECEIVED DATE : 12/02/2024 REPORTED DATE : 21/02/2024  
 TESTED DATE : 12-21/02/2024

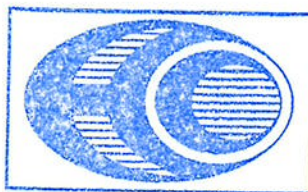
## STACK DESCRIPTION

Height :	60.00	m	Type of Process :	Combustion
Diameter :	2.20	m	Type of Fuel :	Natural Gas
Temperature :	303.30	°C	Oxygen Content :	13.44 %
Air Velocity :	7.06	m/s	Barometric Pressure :	760.00 mmHg
Flow rate <sup>2</sup> :	12.77	m <sup>3</sup> /s	Atmospheric Temperature :	33.60 °C
Moisture Content :	8.21	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>2</sup>		STD <sup>1</sup>	UNIT
			13.44 % O <sub>2</sub>	7 % O <sub>2</sub>		
Total Volatile Organic Compounds	U.S.EPA Method 25 A	10:35-11:05	4.71	8.78	-, - <sup>3</sup>	mg/m <sup>3</sup>
(TVOCs) <sup>4</sup>			2.61	4.86	-, - <sup>3</sup>	ppm
			0.060	-	2.989 <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.Teerapong Naulin )  
Analysed By SECOT Co.,Ltd.
- GPS = Sampling at UTM 47P 731287E 1406416N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By... *Thongchai Boonsak*

(Mr. Thongchai Boonsak)

21/02/2024

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. LA67-0211

Report No. 6702-0099

## 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 POINT : ปล่อง Liquid Incinerator SAMPLE NO. : 00210  
 SAMPLING DATE : 08/02/2024 SAMPLING TIME : 10:35-11:05  
 RECEIVED DATE : 12/02/2024 REPORTED DATE : 15/02/2024  
 TESTED DATE : 12-15/02/2024

## STACK DESCRIPTION

Height :	60.00	m	Type of Process :	Combustion
Diameter :	2.20	m	Type of Fuel :	Natural Gas
Temperature :	303.30	°C	Oxygen Content :	13.44 %
Air Velocity :	7.06	m/s	Barometric Pressure :	760.00 mmHg
Flow rate <sup>1</sup> :	12.77	m <sup>3</sup> /s	Atmospheric Temperature :	33.60 °C
Moisture Content :	8.21	%		

PARAMETER	TEST METHOD	TIME	RESULT <sup>1</sup>		UNIT
			13.44 % O <sub>2</sub>	7 % O <sub>2</sub>	
Benzene	Adsorption, Gas Chromatography	10:35-11:05	<1.68	<3.13	mg/m <sup>3</sup>
			<0.52	<0.97	ppm
			<0.021	-	g/s

**REMARK:**

- <sup>1</sup> Standard Condition (Temperature 25°C, Pressure 760 mmHg) and Dry Basis
- Parameter Outside The Scope of The Registration of The Department of Industrial Works.
- Sampling By Mr.Teerapong Naulin
- GPS = Sampling at UTM 47P 731287E 1406416N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Examined By Thongchai Boonsak

(Mr. Thongchai Boonsak)

15/02/2024



## Test Report

Request No : W6702013

Report No : 6702-0380

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 : 01/02/2024 - 07/02/2024

Sample No : W 67020032  
Sampling Date : 31/01/2024\*\*  
Sampling Time : 10:00 AM\*\*  
Received Date : 01/02/2024  
Reported Date : 10/02/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Biochemical Oxygen Demand #	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	8.9	≤500
Chemical Oxygen Demand #	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	< 40	≤750
Oil and Grease @	mg/L	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)	< 0.005	≤1
Temperature *	°C	Laboratory and Field Method	30	≤45
Total Dissolved Solids #	mg/L	Dried at 180 degree celsius (SM:2540C)	152	≤3000
Total Suspended Solids #	mg/L	Dried at 103-105 degree celsius (SM:2540D)	10	≤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. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,

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

3. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.

4. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Songpon Phiwan (จ-003-ก-0016)\*

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

Examined By : .....

(Miss Apiradee Chuen-arom)

(จ-003-ก-0007)

10/02/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By : .....

(Miss Nunnaphat Bakhuntod)

(จ-003-ก-0005)

10/02/2024

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

## Test Report

Request No : W6702013

Report No : 6702-0382

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 : Cooling Water Blowdown\*\*  
Sampling By : ETC\*\*  
Sampling Method : Grab\*\*  
Tested Date : 01/02/2024 - 07/02/2024

Sample No : W 67020034  
Sampling Date : 31/01/2024\*\*  
Sampling Time : 9:50 AM\*\*  
Received Date : 01/02/2024  
Reported Date : 10/02/2024

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)	42	≤750
Oil and Grease @	mg/L	Partition-Gravimetric Method (SM:5520B)	<3.0	≤10
pH (on site) *		Electrometric Method	8.0	5.5 - 9
Temperature *	°C	Laboratory and Field Method	30	≤45
Total Dissolved Solids #	mg/L	Dried at 180 degree celsius (SM:2540C)	828	≤3000
Total Suspended Solids #	mg/L	Dried at 103-105 degree celsius (SM:2540D)	5	≤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. /I Eastern Industrial Estate (Map ta Phut) , Maximum levels for Wastewater Discharging to Central Wastewater Treatment Plant

2. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,

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

3. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.

4. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Songpon Phiwan (1-003-ก-0016)\*

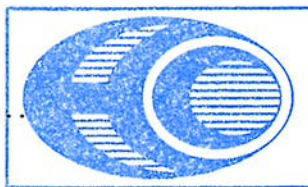
5. \*\* = These data are non laboratory data.

Examined By : .....

(Miss Apiradee Chuen-arom)

(1-003-ก-0007)

10/02/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By : .....

(Miss Nunnaphat Bakhuntod)

(1-003-ก-0005)

10/02/2024

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
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Request No : W6702013

Report No : 6702-0381

**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 67020033  
Sample Name : Salt Solution Package\*\* Sampling Date : 31/01/2024\*\*  
Sampling By : ETC\*\* Sampling Time : 10:10 AM\*\*  
Sampling Method : Grab\*\* Received Date : 01/02/2024  
Tested Date : 01/02/2024 – 07/02/2024 Reported Date : 10/02/2024

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	Partition-Gravimetric Method (SM:5520B)	< 3.0	≤ 5
pH (on site) *		Electrometric Method	8.0	5.5-9.0
Phenol *	mg/L	Distillation, Direct Photometric Method (SM:5530B,D)	0.030	≤ 1
Temperature *	°C	Laboratory and Field Method	31	≤ 40
Total Dissolved Solids *	mg/L	Dried at 180 degree celsius (SM:2540C)	11,100	34,580***
Total Suspended Solids #	mg/L	Dried at 103-105 degree celsius (SM:2540D)	19	≤ 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. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,  
SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017  
4. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.  
5. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Songpon Phaiwuan (ว-003-ค-0016)\*  
6. \*\*\* ของแข็งละลายน้ำทั้งหมด (Total Dissolved Solids) กรณีระบายลงแหล่งน้ำที่มีค่าของแข็งละลายน้ำทั้งหมดเกินกว่า 3,000 มิลลิกรัมต่อลิตร ค่าของแข็งละลายน้ำทั้งหมดในน้ำทิ้งที่จะระบายได้ต้องมีค่าเกินกว่าค่าของแข็งละลายน้ำทั้งหมดที่มีอยู่ในแหล่งน้ำนั้นไม่เกิน 5,000 มิลลิกรัมต่อลิตร (คลองบางเบิด บริเวณระยะห่างจากจุดระบายน้ำทิ้งของนิคมอุตสาหกรรมผาแดง 500 เมตร มีค่า Total Dissolved Solids = 29,580 มิลลิกรัมต่อลิตร)

7. \*\* = These data are non laboratory data

Examined By .....

( Miss Apiradee Chuen-arom )

(ว-003-ค-0007)

10/02/2024



บริษัท อีสเทิร์นไทยคอนซัลต์ 1992 จำกัด

Approved By .....

( Miss Nunnaphat Bakhuntod )

( ว-003-ค-0005 )

10/02/2024

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## 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 67020694  
Sample Name : Final Check Basin\*\* Sampling Date : 07/02/2024\*\*  
Sampling By : ETC\*\* Sampling Time : 10:05 AM\*\*  
Sampling Method : Grab\*\* Received Date : 08/02/2024  
Tested Date : 08/02/2024 - 16/02/2024 Reported Date : 19/02/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Biochemical Oxygen Demand #	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	8.1	≤500
Chemical Oxygen Demand #	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	< 40	≤750
Oil and Grease @	mg/L	Partition-Gravimetric Method (SM:5520B)	< 3.0	≤10
pH (on site) *		Electrometric Method	8.0	5.5 - 9
Phenol *	mg/L	Distillation, Direct Photometric Method (SM:5530B,D)	0.013	≤1
Temperature *	°C	Laboratory and Field Method (SM:2550 B)	31	≤45
Total Dissolved Solids #	mg/L	Dried at 180 degree celsius (SM:2540C)	190	≤3000
Total Suspended Solids #	mg/L	Dried at 103-105 degree celsius (SM:2540D)	12	≤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. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,

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

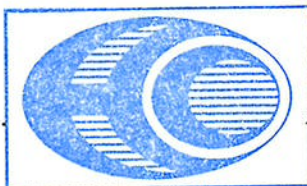
3. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.

4. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Supharerk Phatklang (1-003-ค-0031)\*


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

Examined By :   
(Miss Apiradee Chuen-arom)  
(1-003-ค-0007)

19/02/2024



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Approved By :   
(Miss Nunnaphat Bakhuntod)  
(1-003-ค-0005)

19/02/2024

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
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## 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 : Cooling Water Blowdown\*\*  
Sampling By : ETC\*\*  
Sampling Method : Grab\*\*  
Tested Date : 08/02/2024 - 14/02/2024

Request No : W6702228  
Report No : 6702-0993  
Sample No : W 67020696  
Sampling Date : 07/02/2024\*\*  
Sampling Time : 9:50 AM\*\*  
Received Date : 08/02/2024  
Reported Date : 19/02/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Biochemical Oxygen Demand #	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	5.9	≤500
Chemical Oxygen Demand #	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	60	≤750
Oil and Grease @	mg/L	Partition-Gravimetric Method (SM:5520B)	< 3.0	≤10
pH (on site) *		Electrometric Method	7.6	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)	1,060	≤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. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,

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

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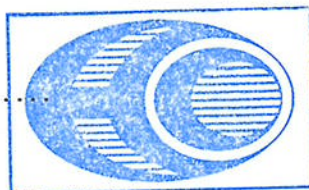
5. \*\* = These data are non laboratory data.

Examined By : .....

(Miss Apiradee Chuen-arom)

(1-003-ก-0007)

19/02/2024



Approved By : .....

(Miss Nunnaphat Bakhuntod)

(1-003-ก-0005)

19/02/2024

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Request No : W6702228

Report No : 6702-0992

**TEST REPORT**

Customer	: PTT Global Chemical Public Company Limited Branch 19**	Sample No.	: W 67020695
Address	: Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150**	Sampling Date	: 07/02/2024**
Sampling Source	: GC 19**	Sampling Time	: 10:10 AM**
Sample Name	: Salt Solution Package**	Received Date	: 08/02/2024
Sampling By	: ETC**	Reported Date	: 19/02/2024
Sampling Method	: Grab**		
Tested Date	: 08/02/2024 – 16/02/2024		

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	Partition-Gravimetric Method (SM:5520B)	< 3.0	≤ 5
pH (on site) *		Electrometric Method	8.2	5.5-9.0
Phenol *	mg/L	Distillation, Direct Photometric Method (SM:5530B,D)	0.010	≤ 1
Temperature *	°C	Laboratory and Field Method (SM:2550 B)	31	≤ 40
Total Dissolved Solids *	mg/L	Dried at 180 degree celsius (SM:2540C)	11,120	38,900***
Total Suspended Solids #	mg/L	Dried at 103-105 degree celsius (SM:2540D)	17	≤ 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. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,  
SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017  
4. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.  
5. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Supharerk Phatklang (ว-003-ค-0031)\*  
6. \*\*\* ของแข็งละลายน้ำทั้งหมด (Total Dissolved Solids) กรณีระบายลงแหล่งน้ำที่มีค่าของแข็งละลายน้ำทั้งหมดเกินกว่า 3,000 มิลลิกรัมต่อลิตร ค่าของแข็งละลายน้ำทั้งหมดในน้ำทิ้งที่จะระบายได้ต้องมีค่าเกินกว่าค่าของแข็งละลายน้ำทั้งหมดที่มีอยู่ในแหล่งน้ำนั้นไม่เกิน 5,000 มิลลิกรัมต่อลิตร (คลองบางเบิด บริเวณระยะห่างจากจุดระบายน้ำทิ้งของนิคมอุตสาหกรรมมาบตาพุด 500 เมตร มีค่า Total Dissolved Solids = 33,900 มิลลิกรัมต่อลิตร)

7. \*\* = These data are non laboratory data

Examined By .....

( Miss Apiradee Chuen-arom )

(ว-003-ค-0007)

19/02/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

( Miss Nunnaphat Bakhuntod )

( ว-003-ค-0005 )

19/02/2024

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## 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 : 04/03/2024 - 09/03/2024


Request No : W6703061  
Report No : 6704-0610

Sample No : W 67030167  
Sampling Date : 02/03/2024\*\*  
Sampling Time : 10:55 AM\*\*  
Received Date : 04/03/2024  
Reported Date : 09/03/2024


Parameter	Unit	Method	Result	Standard <sup>1</sup>
Biochemical Oxygen Demand #	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	6.7	≤500
Chemical Oxygen Demand #	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	69	≤750
Oil and Grease @	mg/L	Partition-Gravimetric Method (SM:5520B)	<3.0	≤10
pH (on site) *		Electrometric Method	7.6	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)	32	≤45
Total Dissolved Solids #	mg/L	Dried at 180 degree celsius (SM:2540C)	856	≤3000
Total Suspended Solids #	mg/L	Dried at 103-105 degree celsius (SM:2540D)	10	≤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. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,  
SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017.  
3. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.  
4. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Parkpoom Buasawad (1-003-ก-0017)\*  
5. \*\* = These data are non laboratory data.

Examined By :   
(Miss Apiradee Chuen-arom)  
(1-003-ก-0007)  
09/03/2024



Approved By :   
(Miss Nunnaphat Bakhuntod)  
(1-003-ก-0005)  
09/03/2024

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Request No : W6703061

Report No : 6704-0611

**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 67030168  
Sample Name : Salt Solution Package\*\* Sampling Date : 02/03/2024\*\*  
Sampling By : ETC\*\* Sampling Time : 10:45 AM\*\*  
Sampling Method : Grab\*\* Received Date : 04/03/2024  
Tested Date : 04/03/2024 – 09/03/2024 Reported Date : 09/03/2024

Parameter	Unit	Method	Result	Standard <sup>1,2</sup>
Biochemical Oxygen Demand #	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	2.1	≤ 20
Chemical Oxygen Demand #	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	< 40	≤ 120
Oil and Grease @	mg/L	Partition-Gravimetric Method (SM:5520B)	< 3.0	≤ 5
pH (on site) *		Electrometric Method	7.9	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)	31	≤ 40
Total Dissolved Solids #	mg/L	Dried at 180 degree celsius (SM:2540C)	320	42,140***
Total Suspended Solids #	mg/L	Dried at 103-105 degree celsius (SM:2540D)	9	≤ 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. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,  
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4. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.  
5. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Parkpoom Buasawad (จ-003-ค-0017)\*  
6. \*\*\* ของแข็งละลายน้ำทั้งหมด (Total Dissolved Solids) กรณีระบายลงแหล่งน้ำที่มีค่าของแข็งละลายน้ำทั้งหมดเกินกว่า 3,000 มิลลิกรัมต่อลิตร ค่าของแข็งละลายน้ำทั้งหมดในน้ำที่จะระบายได้ต้องมีค่าเกินกว่าค่าของแข็งละลายน้ำทั้งหมดที่มีอยู่ในแหล่งน้ำนั้นไม่เกิน 5,000 มิลลิกรัมต่อลิตร (คลองบางเบิด บริเวณระยะห่างจากจุดระบายน้ำทิ้งของนิคมอุตสาหกรรมผาแดง 500 เมตร มีค่า Total Dissolved Solids = 37,140 มิลลิกรัมต่อลิตร)

7. \*\* = These data are non laboratory data

Examined By .....

( Miss Apiradee Chuen-arom )

(จ-003-ค-0007)

09/03/2024



บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

Approved By .....

( Miss Nunnaphat Bakhuntod )

( จ-003-ค-0005 )

09/03/2024

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## 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 67030169  
Sample Name : Cooling Water Blowdown\*\* Sampling Date : 02/03/2024\*\*  
Sampling By : ETC\*\* Sampling Time : 10:35 AM\*\*  
Sampling Method : Grab\*\* Received Date : 04/03/2024  
Tested Date : 04/03/2024 - 09/03/2024 Reported Date : 09/03/2024

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)	56	≤750
Oil and Grease @	mg/L	Partition-Gravimetric Method (SM:5520B)	<3.0	≤10
pH (on site) *		Electrometric Method	8.3	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)	940	≤3000
Total Suspended Solids #	mg/L	Dried at 103-105 degree celsius (SM:2540D)	7	≤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. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,

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

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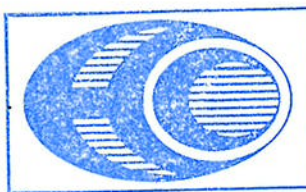
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Examined By : .....

(Miss Apiradee Chuen-arom)

(จ-003-ท-0007)

09/03/2024



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Approved By : .....

(Miss Nunnaphat Bakhuntod)

(จ-003-ท-0005)

09/03/2024

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## Test Report

Request No : W6704547

Report No : 6705-0713

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 : 25/04/2024 - 03/05/2024

Sample No : W 67041658  
Sampling Date : 24/04/2024\*\*  
Sampling Time : 10:45 AM\*\*  
Received Date : 25/04/2024  
Reported Date : 03/05/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Biochemical Oxygen Demand #	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	26.5	≤500
Chemical Oxygen Demand #	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	96	≤750
Oil and Grease @	mg/L	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)	32	≤45
Total Dissolved Solids #	mg/L	Dried at 180 degree celsius (SM:2540C)	780	≤3000
Total Suspended Solids #	mg/L	Dried at 103-105 degree celsius (SM:2540D)	17	≤200

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. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,

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

3. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.

4. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Songpon Phiwan (1-003-ก-0016)\*

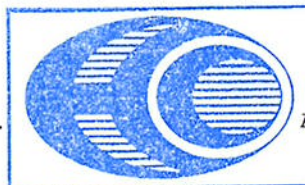
5. \*\* = These data are non laboratory data.

Examined By : .....

(Miss Apiradee Chuen-arom)

(1-003-ก-0007)

03/05/2024



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Approved By : .....

(Miss Nunnaphat Bakhuntod)

(1-003-ก-0005)

03/05/2024

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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 : Cooling Water Blowdown\*\*  
Sampling By : ETC\*\*  
Sampling Method : Grab\*\*  
Tested Date : 25/04/2024 - 30/04/2024


Request No : W6704547  
Report No : 6705-0715

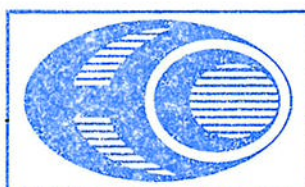
Sample No : W 67041660  
Sampling Date : 24/04/2024\*\*  
Sampling Time : 10:00 AM\*\*  
Received Date : 25/04/2024  
Reported Date : 30/04/2024

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)	54	≤750
Oil and Grease @	mg/L	Partition-Gravimetric Method (SM:5520B)	<3.0	≤10
pH (on site) *		Electrometric Method	7.3	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)	848	≤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, 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. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,  
SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017.  
3. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.  
4. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Songpon Phiwan (จ-003-ก-0017)\*  
5. \*\* = These data are non laboratory data.

Examined By :   
(Miss Apiradee Chuen-arom)  
(จ-003-ก-0007)  
30/04/2024



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Approved By :   
(Miss Nunnaphat Bakhuntod)  
(จ-003-ก-0005)  
30/04/2024

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Request No : W6704547

Report No : 6705-0714

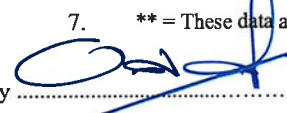
**TEST REPORT**

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 67041659  
Sample Name : Salt Solution Package\*\* Sampling Date : 24/04/2024\*\*  
Sampling By : ETC\*\* Sampling Time : 10:30 AM\*\*  
Sampling Method : Grab\*\* Received Date : 25/04/2024  
Tested Date : 25/04/2024 – 03/05/2024 Reported Date : 03/05/2024


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	Partition-Gravimetric Method (SM:5520B)	< 3.0	≤ 5
pH (on site) *		Electrometric Method	7.7	5.5-9.0
Phenol *	mg/L	Distillation, Direct Photometric Method (SM:5530B,D)	0.102	≤ 1
Temperature *	°C	Laboratory and Field Method (SM:2550 B)	31	≤ 40
Total Dissolved Solids *	mg/L	Dried at 180 degree celsius (SM:2540C)	13,960	38,220***
Total Suspended Solids #	mg/L	Dried at 103-105 degree celsius (SM:2540D)	7	≤ 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. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,  
SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
  4. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.
  5. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Songpon Phiwuan (ว-003-ค-0016)\*
  6. \*\*\* ของแข็งละลายน้ำทั้งหมด (Total Dissolved Solids) กรณีระบายลงแหล่งน้ำที่มีค่าของแข็งละลายน้ำทั้งหมดเกินกว่า 3,000 มิลลิกรัมต่อลิตร ค่าของแข็งละลายน้ำทั้งหมดในน้ำทิ้งที่จะระบายได้ต้องมีค่าเกินกว่าค่าของแข็งละลายน้ำทั้งหมดที่มีอยู่ในแหล่งน้ำนั้นไม่เกิน 5,000 มิลลิกรัมต่อลิตร (คลองบางเบิด บริเวณระยะห่างจากจุดระบายน้ำทิ้งของนิคมอุตสาหกรรมผาแดง 500 เมตร มีค่า Total Dissolved Solids = 33,220 มิลลิกรัมต่อลิตร)
  7. \*\* = These data are non laboratory data.

Examined By   
( Miss Apiradee Chuen-arom )  
(ว-003-ค-0007)  
03/05/2024



Approved By   
( Miss Nunnaphat Bakhuntod )  
( ว-003-ค-0005 )  
03/05/2024

REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY  
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## 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 : 09/05/2024 - 21/05/2024


Request No : W6705210  
Report No : 6705-1659

Sample No : W 67050743  
Sampling Date : 08/05/2024\*\*  
Sampling Time : 1:50 PM\*\*  
Received Date : 09/05/2024  
Reported Date : 21/05/2024


Parameter	Unit	Method	Result	Standard <sup>1</sup>
Biochemical Oxygen Demand #	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	65.1	≤500
Chemical Oxygen Demand #	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	283	≤750
Oil and Grease @	mg/L	Partition-Gravimetric Method (SM:5520B)	< 3.0	≤10
pH (on site) *		Electrometric Method	7.3	5.5 - 9
Phenol *	mg/L	Distillation, Direct Photometric Method (SM:5530B,D)	0.068	≤1
Temperature *	°C	Laboratory and Field Method (SM:2550 B)	33	≤45
Total Dissolved Solids #	mg/L	Dried at 180 degree celsius (SM:2540C)	1,028	≤3000
Total Suspended Solids #	mg/L	Dried at 103-105 degree celsius (SM:2540D)	10	≤200

Physical Appearance : 1. Sample : slightly - orange, 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. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,  
SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017.  
3. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.  
4. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Supharerk Phatklang (จ-003-ก-0031)\*  
5. \*\* = These data are non laboratory data.

Examined By :   
(Miss Apiradee Chuen-arom)  
(จ-003-ก-0007)  
21/05/2024



Approved By :   
(Miss Nunnaphat Bakhuntod)  
(จ-003-ก-0005)  
21/05/2024

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
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Request No : W6705210

Report No : 6705-1660

**TEST REPORT**

Customer	: PTT Global Chemical Public Company Limited Branch 19**	Sample No.	: W 67050744
Address	: Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150**	Sampling Date	: 08/05/2024**
Sampling Source	: GC 19**	Sampling Time	: 2:00 PM**
Sample Name	: Salt Solution Package**	Received Date	: 09/05/2024
Sampling By	: ETC**	Reported Date	: 15/05/2024
Sampling Method	: Grab**		
Tested Date	: 09/05/2024 – 15/05/2024		

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	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)	0.064	≤ 1
Temperature *	°C	Laboratory and Field Method (SM:2550 B)	33	≤ 40
Total Dissolved Solids #	mg/L	Dried at 180 degree celsius (SM:2540C)	3,084	40,940***
Total Suspended Solids #	mg/L	Dried at 103-105 degree celsius (SM:2540D)	14	≤ 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. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,  
SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017  
4. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.  
5. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Supharerk Phatklang (จ-003-ค-0031)\*  
6. \*\*\* ของแข็งละลายน้ำทั้งหมด (Total Dissolved Solids) กรณีระบายลงแหล่งน้ำที่มีค่าของแข็งละลายน้ำทั้งหมดเกินกว่า 3,000 มิลลิกรัมต่อลิตร ค่าของแข็งละลายน้ำทั้งหมดในน้ำทิ้งที่จะระบายได้ต้องมีค่าเกินกว่าค่าของแข็งละลายน้ำทั้งหมดที่มีอยู่ในแหล่งน้ำนั้นไม่เกิน 5,000 มิลลิกรัมต่อลิตร (คลองบางเบิด บริเวณระยะห่างจากจุดระบายน้ำทิ้งของนิคมอุตสาหกรรมผาแดง 500 เมตร มีค่า Total Dissolved Solids = 35,940 มิลลิกรัมต่อลิตร)

7. \*\* = These data are non laboratory data.

Examined By .....

( Miss Apiradee Chuen-arom )

(จ-003-ค-0007)

15/05/2024



บริษัท อีสเทิร์นไทยคอนซัลต์ 1992 จำกัด

Approved By .....

( Miss Nunnaphat Bakhuntod )

( จ-003-ค-0005 )

15/05/2024

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## 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 : Cooling Water Blowdown\*\*  
Sampling By : ETC\*\*  
Sampling Method : Grab\*\*  
Tested Date : 09/05/2024 - 15/05/2024


Request No : W6705210  
Report No : 6705-1661

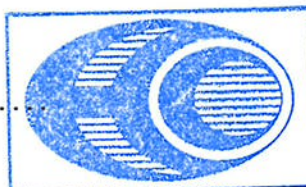
Sample No : W 67050745  
Sampling Date : 08/05/2024\*\*  
Sampling Time : 1:45 PM\*\*  
Received Date : 09/05/2024  
Reported Date : 15/05/2024

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)	62	≤750
Oil and Grease @	mg/L	Partition-Gravimetric Method (SM:5520B)	<3.0	≤10
pH (on site) *		Electrometric Method	7.7	5.5 - 9
Temperature *	°C	Laboratory and Field Method (SM:2550 B)	35	≤45
Total Dissolved Solids #	mg/L	Dried at 180 degree celsius (SM:2540C)	1,004	≤3000
Total Suspended Solids #	mg/L	Dried at 103-105 degree celsius (SM:2540D)	<5	≤200


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 Eastern Industrial Estate (Map ta Phut) , Maximum levels for Wastewater Discharging to Central Wastewater Treatment Plant  
2. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,  
SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017.  
3. Miss Apiradee Chuen-arom is Section Head / Miss Nunnaphat Bakhuntod is Technical Management.  
4. \* = Test Report/Sampling marked Not Accredited, Sampling By Mr. Supharerk Phatklang (7-003-ก-0031)\*  
5. \*\* = These data are non laboratory data.

Examined By :   
(Miss Apiradee Chuen-arom)  
(7-003-ก-0007)  
15/05/2024



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Approved By :   
(Miss Nunnaphat Bakhuntod)  
(7-003-ก-0005)  
15/05/2024

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## Test Report

Request No : W6706509

Report No : 6707-0240

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 67061523

Sample Name : Final Check Basin

Sampling Date : 19/06/2024

Sampling By : ETC

Sampling Time : 9:45 AM

Sampling Method : Grab

Received Date : 20/06/2024

Tested Date : 20/06/2024 - 27/06/2024

Reported Date : 27/06/2024

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	8.0	5.5 - 9
Phenol	mg/L	Distillation, Direct Photometric Method (SM:5530B,D)	0.018	≤1
Temperature	°C	Laboratory and Field Method (SM:2550 B)	32	≤45
Total Dissolved Solids	mg/L	Dried at 180 degree celsius (SM:2540C)	728	≤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.

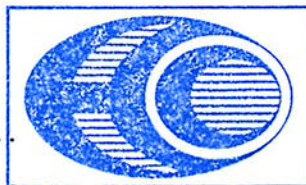
3. Sampling By Mr. Songpon Phiwan (จ-003-ท-0016)

Examined By : .....

(Miss Apiradee Chuen-arom)

(จ-003-ท-0007)

27/06/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By : .....

(Miss Nunnaphat Bakhuntod)

(จ-003-ท-0005)

27/06/2024

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
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## Test Report

Request No : W6706509

Report No : 6707-0240

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 67061523

Sample Name : Final Check Basin

Sampling Date : 19/06/2024

Sampling By : ETC

Sampling Time : 9:45 AM

Sampling Method : Grab

Received Date : 20/06/2024

Tested Date : 20/06/2024 - 27/06/2024

Reported Date : 27/06/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Total Suspended Solids	mg/L	Dried at 103-105 degree celsius (SM:2540D)	12	≤200

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. /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.

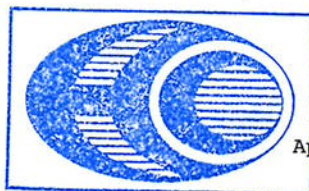
3. Sampling By Mr. Songpon Phiwan (ว-003-ท-0016)

Examined By : .....

(Miss Apiradee Chuen-arom)

(ว-003-ท-0007)

27/06/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By : .....

(Miss Nunnaphat Bakhuntod)

(ว-003-ท-0005)

27/06/2024

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

Request No : W6706509

Report No : 6707-0241

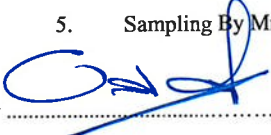
## TEST REPORT

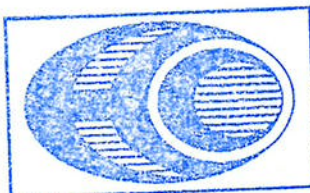
Customer	: PTT Global Chemical Public Company Limited Branch 19	Sample No.	: W 67061524
Address	: Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150	Sampling Date	: 19/05/2024
Sampling Source	: GC 19	Sampling Time	: 09:35 AM
Sample Name	: Salt Solution Package	Received Date	: 20/06/2024
Sampling By	: ETC	Reported Date	: 27/06/2024
Sampling Method	: Grab		
Tested Date	: 20/06/2024 – 27/06/2024		


Parameter	Unit	Method	Result	Standard <sup>1,2</sup>
Biochemical Oxygen Demand	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	3.4	≤ 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	7.9	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)	34	≤ 40
Total Dissolved Solids	mg/L	Dried at 180 degree celsius (SM:2540C)	13,410	35,280***
Total Suspended Solids	mg/L	Dried at 103-105 degree celsius (SM:2540D)	13	≤ 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 = 30,280 มิลลิกรัมต่อลิตร)  
5. Sampling By Mr. Songpon Phiwan (ว-003-ค-0016)

Examined By   
( Miss Apiradee Chuen-arom )  
(ว-003-ค-0007)  
27/06/2024



Approved By   
( Miss Nunnaphat Bakhuntod )  
( ว-003-ค-0005 )  
27/06/2024

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## Test Report

Request No : W6706510

Report No : 6707-0154

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 67061528

Sample Name : ทิศเหนือของพื้นที่โครงการ (น้ำใต้ดิน)

Sampling Date : 19/06/2024

Sampling By : ETC

Sampling Time : 10:30 AM

Sampling Method : Grab

Received Date : 20/06/2024

Tested Date : 20/06/2024 - 29/06/2024

Reported Date : 03/07/2024

Parameter	Unit	Method	Result	Standard/ <sup>1</sup>
pH (on site)		Electrometric Method	7.0	6.5 - 9.2***

Physical Apperance : 1. Sample : orange, turbid

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

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry . B.E.2559 (2016)

2. \*\*\*ค่า pH จากจุดเก็บตัวอย่างบ่อน้ำกับจุดเก็บตัวอย่างบ่อน้ำที่เปลี่ยนแปลงจะต้องไม่เกินหนึ่งระดับ และ

ไม่อยู่นอกช่วงค่าเกณฑ์อนุโลมสูงสุดของมาตรฐาน คุณภาพน้ำบาดาลที่ใช้บริโภค

3. GPS = Sampling at 47 P 731228 E 1406508 N

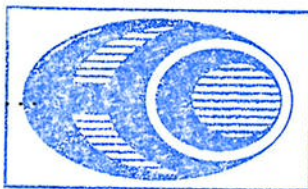
4. Sampling By Mr. Songpon Phiwuan (จ-003-ค-0016)

Examined By : .....

(Miss Apiradee Chuen-arom)

(จ-003-ค-0007)

03/07/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By : .....

(Miss Nunnaphat Bakhuntod)

(จ-003-ค-0005)

03/07/2024

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## Test Report

Request No : W6706510

Report No : 6707-0154

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 67061528

Sample Name : ทิศเหนือของพื้นที่โครงการ (น้ำใต้ดิน)

Sampling Date : 19/06/2024

Sampling By : ETC

Sampling Time : 10:30 AM

Sampling Method : Grab

Received Date : 20/06/2024

Tested Date : 20/06/2024 - 29/06/2024

Reported Date : 03/07/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Temperature	°C	Laboratory and Field Method (SM:2550 B)	31	-

Physical Apperance : 1. Sample : orange, turbid

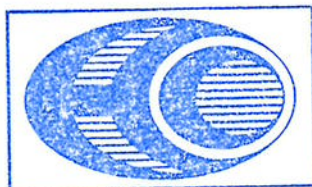
2. Container : Normal [ PE 2.0 L, G 1.0 L ]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry . B.E.2559 (2016)

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

3. GPS = Sampling at 47 P 731228 E 1406508 N

4. Sampling By Mr. Songpon Phiwuan



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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Examined By : .....

(Miss Apiradee Chuen-arom)

03/07/2024

Request No. W6706510

Report No. 6707-0154

## 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 : ทิศเหนือของพื้นที่โครงการ (น้ำใต้ดิน)  
Sampling By : ETC  
Sampling Method : Grab  
Tested Date : 20/06/2024 29/06/2024  
Sample No. : W 67061528  
Sampling Date : 19/06/2024  
Sampling Time : 10:30 AM  
Received Date : 20/06/2024  
Reported Date : 03/07/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
<b>Volatile Organic Compounds</b>				
Ethylbenzene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	<0.00050	≤ 2.0
Acetone	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	0.01379	≤ 230

Physical Appearance :

1. Sample : orange, turbid
2. Container : Normal [ PE 2.0 L, G 1.0 L ]

Remark :

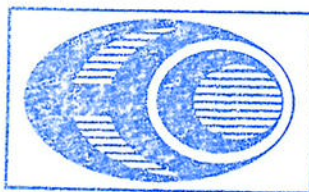
1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023
3. Sampling By Mr. Songpon Phiwan (จ-003-ค-0016)
4. GPS = Sampling at 47 P 731228 E 1406508 N

Examined By.....

( Miss Apiradee Chuen-arom )

(จ-003-ค-0007)

03/07/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

( Miss Nunnaphat Bakhuntod )

(จ-003-ค-0005)

03/07/2024

REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY  
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Request No. W6706510

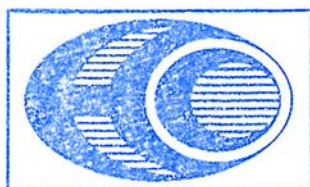
Report No. 6707-0154

## 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 67061528  
Sample Name : ทิศเหนือของพื้นที่โครงการ (น้ำใต้ดิน) Sampling Date : 19/06/2024  
Sampling By : ETC Sampling Time : 10:30 AM  
Sampling Method : Grab Received Date : 20/06/2024  
Tested Date : 20/06/2024 29/06/2024 Reported Date : 03/07/2024

Parameter ***	Unit	Method	Result	Standard <sup>1</sup>
Total Petroleum Hydrocarbons				
- TPH (C <sub>5</sub> -C <sub>8</sub> )	mg/L	5030 C /8260 D	ND	≤ 1.4
- Pentane				
- Benzene				
- Toluene				
- m,p-Xylene				
- o-Xylene				
- Ethylbenzene				
- TPH (C <sub>8</sub> -C <sub>16</sub> )	mg/L	3510 C/8015 D	ND	≤ 1.7
- n-Nonane				
- n-Decane				
- n-Dodecane				
- n-Tetradecane				
- n-Hexadecane				

Physical Apperance : 1. Sample : orange, turbid  
2. Container : Normal [ PE 2.0 L, G 1.0 L ]  
Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)  
2. Sampling By Eastern Thai Consulting 1992 Co., Ltd., (Mr. Songpon Phiwuan)  
3. \*\*\* Tested by SECOT Co.,Ltd. (1-239)  
4. ND = non-detectable [ TPH (C<sub>5</sub>-C<sub>8</sub>) = < 0.003 mg/L, TPH (C<sub>8</sub>-C<sub>16</sub>) = < 0.025 mg/L,  
TPH (C<sub>16</sub>-C<sub>35</sub>) = < 0.050 mg/L ]  
5. GPS = Sampling at 47 P 731228 E 1406508 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By .....

( Miss Apiradee Chuen-arom )

03/07/2024

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Request No. W6706510

Report No. 6707-0154

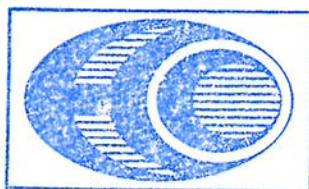
## TEST REPORT

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 67061528  
Sample Name : ทิศเหนือของพื้นที่โครงการ (น้ำใต้ดิน) Sampling Date : 19/06/2024  
Sampling By : ETC Sampling Time : 10:30 AM  
Sampling Method : Grab Received Date : 20/06/2024  
Tested Date : 20/06/2024 29/06/2024 Reported Date : 03/07/2024

Parameter ***	Unit	Method	Result	Standard <sup>1</sup>
Total Petroleum Hydrocarbons				
- TPH (C <sub>&gt;16</sub> -C <sub>35</sub> )	mg/L	3510 C/8015 D	ND	≤ 0.1
- n-Octadecane				
- n-Eicosane				
- n-Docosane				
- n-Tetracosane				
- n-Hexacosane				
- n-Octacosane				
- n-Triacontane				
- n-Dotriacontane				
- n-Tetratriacontane				
- Pentatriacontane				

Physical Apperance : 1. Sample : orange, turbid  
2. Container : Normal [ PE 2.0 L, G 1.0 L ]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)  
2. Sampling By Eastern Thai Consulting 1992 Co., Ltd., (Mr. Songpon Phiwuan)  
3. \*\*\* Tested by SECOT Co.,Ltd. (ว-239)  
4. ND = non-detectable [ TPH (C<sub>5</sub>-C<sub>8</sub>) = < 0.003 mg/L, TPH (C<sub>8</sub>-C<sub>16</sub>) = < 0.025 mg/L,  
TPH (C<sub>>16</sub>-C<sub>35</sub>) = < 0.050 mg/L ]  
5. GPS = Sampling at 47 P 731228 E 1406508 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By .....

( Miss Apiradee Chuen-arom )

03/07/2024

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## Test Report

Request No : W6706510

Report No : 6707-0156

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 67061530

Sample Name : ทิศตะวันตกเฉียงใต้ของพื้นที่โครงการ (น้ำใต้ดิน)

Sampling Date : 19/06/2024

Sampling By : ETC

Sampling Time : 10:50 AM

Sampling Method : Grab

Received Date : 20/06/2024

Tested Date : 20/06/2024 - 29/06/2024

Reported Date : 03/07/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
pH (on site)		Electrometric Method	6.8	6.5 - 9.2***

Physical Apperance : 1. Sample : orange, turbid

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

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry . B.E.2559 (2016)

2. \*\*\*ค่า pH จากจุดเก็บตัวอย่างบ่อท้ายน้ำกับจุดเก็บตัวอย่างบ่อเหนือน้ำที่เปลี่ยนแปลงจะต้องไม่เกินหนึ่งระดับ และ  
ไม่อยู่นอกช่วงค่าเกณฑ์อนุโลมสูงสุดของมาตรฐาน คุณภาพน้ำบาดาลที่ใช้บริโภค

3. GPS = Sampling at 47 P 730877 E 1406047 N

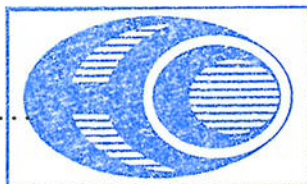
4. Sampling By Mr. Songpon Phiwuan (1-003-ค-0016)

Examined By : .....

(Miss Apiradee Chuen-arom)

(1-003-ค-0007)

03/07/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By : .....

(Miss Nunnaphat Bakhuntod)

(1-003-ค-0005)

03/07/2024

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## Test Report

Request No : W6706510

Report No : 6707-0156

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 67061530

Sample Name : ทิศตะวันตกเฉียงใต้ของพื้นที่โครงการ (น้ำใต้ดิน)

Sampling Date : 19/06/2024

Sampling By : ETC

Sampling Time : 10:50 AM

Sampling Method : Grab

Received Date : 20/06/2024

Tested Date : 20/06/2024 - 29/06/2024

Reported Date : 03/07/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Temperature	°C	Laboratory and Field Method (SM:2550 B)	31	-

Physical Apperance : 1. Sample : orange, turbid

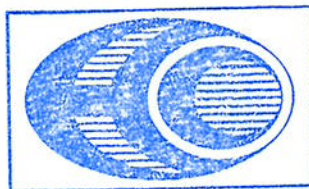
2. Container : Normal [ PE 2.0 L, G 1.0 L ]

Remark : 1./1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry . B.E.2559 (2016)

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

3. GPS = Sampling at 47 P 730877 E 1406047 N

4. Sampling By Mr. Songpon Phiwuan

Examined By : 

(Miss Apiradee Chuen-arom)

03/07/2024

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
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Request No. W6706510

Report No. 6707-0156

## 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 Name : ทิศตะวันตกเฉียงใต้ของพื้นที่โครงการ (น้ำใต้ดิน)  
Sampling By : ETC  
Sampling Method : Grab  
Tested Date : 20/06/2024 29/06/2024

Sample No. : W 67061530  
Sampling Date : 19/06/2024  
Sampling Time : 10:50 AM  
Received Date : 20/06/2024  
Reported Date : 03/07/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
<b>Volatile Organic Compounds</b>				
Ethylbenzene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	<0.00050	≤ 2.0
Acetone	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	0.01381	≤ 230

Physical Apperance :  
1. Sample : orange, turbid  
2. Container : Normal [ PE 2.0 L, G 1.0 L]

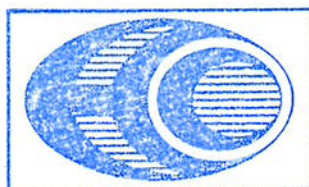
Remark :  
1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)  
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023  
3. Sampling By Mr. Songpon Phiwuan (จ-003-ค-0016)  
4. GPS = Sampling at 47 P 730877 E 1406047 N

Examined By.....

( Miss Apiradee Chuen-arom)

(จ-003-ค-0007)

03/07/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

( Miss Nunnaphat Bakhuntod )

(จ-003-ค-0005)

03/07/2024

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Request No. W6706510

Report No. 6707-0156

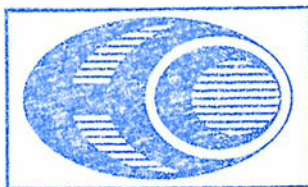
## TEST REPORT

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 67061530  
Sample Name : ทิศตะวันตกเฉียงใต้ของพื้นที่โครงการ (น้ำใต้ดิน) Sampling Date : 19/06/2024  
Sampling By : ETC Sampling Time : 10:50 AM  
Sampling Method : Grab Received Date : 20/06/2024  
Tested Date : 20/06/2024 29/06/2024 Reported Date : 03/07/2024

Parameter ***	Unit	Method	Result	Standard <sup>1</sup>
Total Petroleum Hydrocarbons				
- TPH (C <sub>5</sub> -C <sub>8</sub> )	mg/L	5030 C /8260 D	ND	≤ 1.4
- Pentane				
- Benzene				
- Toluene				
- m,p-Xylene				
- o-Xylene				
- Ethylbenzene				
- TPH (C <sub>8</sub> -C <sub>16</sub> )	mg/L	3510 C/8015 D	ND	≤ 1.7
- n-Nonane				
- n-Decane				
- n-Dodecane				
- n-Tetradecane				
- n-Hexadecane				

Physical Apperance : 1. Sample : orange, turbid  
2. Container : Normal [ PE 2.0 L, G 1.0 L ]

Remark : 1./1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)  
2. Sampling By Eastern Thai Consulting 1992 Co., Ltd., (Mr. Songpon Phiwan)  
3. \*\*\* Tested by SECOT Co.,Ltd. (1-239)  
4. ND = non-detectable [ TPH (C<sub>5</sub>-C<sub>8</sub>) = < 0.003 mg/L, TPH (C<sub>8</sub>-C<sub>16</sub>) = < 0.025 mg/L,  
TPH (C<sub>16</sub>-C<sub>35</sub>) = < 0.050 mg/L ]  
5. GPS = Sampling at 47 P 730877 E 1406047 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By .....

( Miss Apiradee Chuen-arom )

03/07/2024

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Request No. W6706510

Report No. 6707-0156

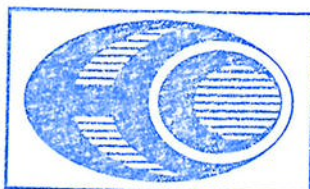
## TEST REPORT

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 67061530  
 Sample Name : ทิศตะวันตกเฉียงใต้ของพื้นที่โครงการ (น้ำใต้ดิน) Sampling Date : 19/06/2024  
 Sampling By : ETC Sampling Time : 10:50 AM  
 Sampling Method : Grab Received Date : 20/06/2024  
 Tested Date : 20/06/2024 29/06/2024 Reported Date : 03/07/2024

Parameter ***	Unit	Method	Result	Standard <sup>1/</sup>
Total Petroleum Hydrocarbons				
- TPH (C <sub>&gt;16</sub> -C <sub>35</sub> )	mg/L	3510 C/8015 D	ND	≤ 0.1
- n-Octadecane				
- n-Eicosane				
- n-Docosane				
- n-Tetracosane				
- n-Hexacosane				
- n-Octacosane				
- n-Triacontane				
- n-Dotriacontane				
- n-Tetratriacontane				
- Pentatriacontane				

Physical Appearance : 1. Sample : orange, turbid  
 2. Container : Normal [ PE 2.0 L, G 1.0 L]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)  
 2. Sampling By Eastern Thai Consulting 1992 Co., Ltd., (Mr. Songpon Phiwuan)  
 3. \*\*\* Tested by SECOT Co.,Ltd. (จ-239)  
 4. ND = non-detectable [ TPH (C<sub>5</sub>-C<sub>8</sub>) = < 0.003 mg/L, TPH (C<sub>8</sub>-C<sub>16</sub>) = < 0.025 mg/L,  
 TPH (C<sub>>16</sub>-C<sub>35</sub>) = < 0.050 mg/L ]  
 5. GPS = Sampling at 47 P 730877 E 1406047 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By .....

( Miss Apiradee Chuen-arom )

03/07/2024

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## Test Report

Request No : W6706510

Report No : 6705-0155

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 67061529

Sample Name : ทิศตะวันออกของพื้นที่โครงการ (น้ำใต้ดิน)

Sampling Date : 19/06/2024

Sampling By : ETC

Sampling Time : 11:05 AM

Sampling Method : Grab

Received Date : 20/06/2024

Tested Date : 20/06/2024 - 29/06/2024

Reported Date : 03/07/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
pH (on site)		Electrometric Method	6.9	6.5 - 9.2***

Physical Apperance : 1. Sample : orange, turbid

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


Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry . B.E.2559 (2016)

2. \*\*\*ค่า pH จากจุดเก็บตัวอย่างบ่อน้ำที่จุดเก็บตัวอย่างบ่อน้ำที่เปลี่ยนแปลงจะต้องไม่เกินหนึ่งระดับ และ

ไม่อยู่นอกช่วงค่าเกณฑ์อนุโลมสูงสุดของมาตรฐาน คุณภาพน้ำบาดาลที่ใช้บริโภค

3. GPS = Sampling at 47 P 731433 E 1406036 N

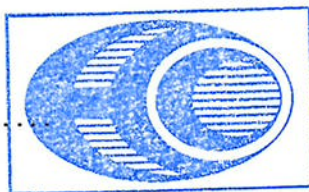
4. Sampling By Mr. Songpon Phiwuan (จ-003-ค-0016)

Examined By : 


(Miss Apiradee Chuen-arom)

(จ-003-ค-0007)

03/07/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By : 

(Miss Nunnaphat Bakhuntod)

(จ-003-ค-0005)

03/07/2024

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## Test Report

Request No : W6706510

Report No : 6705-0155

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 67061529

Sample Name : ทิศตะวันออกของพื้นที่โครงการ (น้ำใต้ดิน)

Sampling Date : 19/06/2024

Sampling By : ETC

Sampling Time : 11:05 AM

Sampling Method : Grab

Received Date : 20/06/2024

Tested Date : 20/06/2024 - 29/06/2024

Reported Date : 03/07/2024

Parameter	Unit	Method	Result	Standard/ <sup>1</sup>
Temperature	°C	Laboratory and Field Method (SM:2550 B)	30	-

Physical Apperance : 1. Sample : orange, turbid

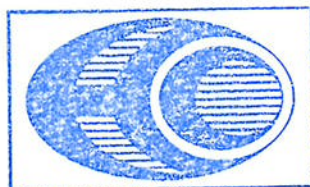
2. Container : Normal [ PE 2.0 L, G 1.0 L ]

Remark : 1./1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry . B.E.2559 (2016)

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

3. GPS = Sampling at 47 P 731433 E 1406036 N

4. Sampling By Mr. Songpon Phiwuan



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By : .....

(Miss Apiradee Chuen-arom)

03/07/2024

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Request No. W6706510

Report No. 6707-0155

## 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 : ทิศตะวันออกของพื้นที่โครงการ (น้ำใต้ดิน)  
Sampling By : ETC  
Sampling Method : Grab  
Tested Date : 20/06/2024 29/06/2024  
Sample No. : W 67061529  
Sampling Date : 19/06/2024  
Sampling Time : 11:05 AM  
Received Date : 20/06/2024  
Reported Date : 03/07/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
<b>Volatile Organic Compounds</b>				
Ethylbenzene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	<0.00050	≤ 2.0
Acetone	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	0.02195	≤ 230

Physical Appearance :  
1. Sample : orange, turbid  
2. Container : Normal [ PE 2.0 L, G 1.0 L ]

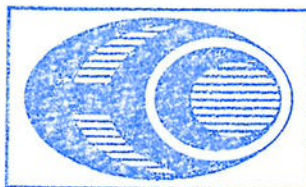
Remark :  
1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)  
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023  
3. Sampling By Mr. Songpon Phiwan (จ-003-ก-0016)  
4. GPS = Sampling at 47 P 731433 E 1406036 N

Examined By.....

( Miss Apiradee Chuen-arom )

(จ-003-ก-0007)

03/07/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

( Miss Nunnaphat Bakhuntod )

(จ-003-ก-0005)

03/07/2024

REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY  
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Request No. W6706510

Report No. 6707-0155

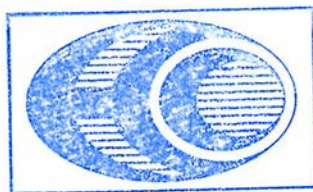
## TEST REPORT

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 67061529  
 Sample Name : ทิศตะวันออกของพื้นที่โครงการ (น้ำใต้ดิน) Sampling Date : 19/06/2024  
 Sampling By : ETC Sampling Time : 11:05 AM  
 Sampling Method : Grab Received Date : 20/06/2024  
 Tested Date : 20/06/2024 29/06/2024 Reported Date : 03/07/2024

Parameter ***	Unit	Method	Result	Standard <sup>1</sup>
Total Petroleum Hydrocarbons				
- TPH (C <sub>5</sub> -C <sub>8</sub> )	mg/L	5030 C /8260 D	ND	≤ 1.4
- Pentane				
- Benzene				
- Toluene				
- m,p-Xylene				
- o-Xylene				
- Ethylbenzene				
- TPH (C <sub>8</sub> -C <sub>16</sub> )	mg/L	3510 C/8015 D	ND	≤ 1.7
- n-Nonane				
- n-Decane				
- n-Dodecane				
- n-Tetradecane				
- n-Hexadecane				

Physical Apperance : 1. Sample : orange, turbid  
 2. Container : Normal [ PE 2.0 L, G 1.0 L ]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)  
 2. Sampling By Eastern Thai Consulting 1992 Co., Ltd., (Mr. Songpon Phiwuan)  
 3. \*\*\* Tested by SECOT Co.,Ltd. (1-239)  
 4. ND = non-detectable [ TPH (C<sub>5</sub>-C<sub>8</sub>) = < 0.003 mg/L, TPH (C<sub>8</sub>-C<sub>16</sub>) = < 0.025 mg/L,  
 TPH (C<sub>16</sub>-C<sub>35</sub>) = < 0.050 mg/L ]  
 5. GPS = Sampling at 47 P 731433 E 1406036 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By .....

( Miss Apiradee Chuen-arom )

03/07/2024

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WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. W6706510

Report No. 6707-0155

## 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 67061529  
Sample Name : ทิศตะวันออกของพื้นที่โครงการ (น้ำใต้ดิน) Sampling Date : 19/06/2024  
Sampling By : ETC Sampling Time : 11:05 AM  
Sampling Method : Grab Received Date : 20/06/2024  
Tested Date : 20/06/2024 29/06/2024 Reported Date : 03/07/2024

Parameter ***	Unit	Method	Result	Standard <sup>1</sup>
Total Petroleum Hydrocarbons				
- TPH (C <sub>&gt;16</sub> -C <sub>35</sub> )	mg/L	3510 C/8015 D	ND	≤ 0.1
- n-Octadecane				
- n-Eicosane				
- n-Docosane				
- n-Tetracosane				
- n-Hexacosane				
- n-Octacosane				
- n-Triacontane				
- n-Dotriacontane				
- n-Tetratriacontane				
- Pentatriacontane				

Physical Apperance : 1. Sample : orange, turbid  
2. Container : Normal [ PE 2.0 L, G 1.0 L ]

Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)  
2. Sampling By Eastern Thai Consulting 1992 Co., Ltd., (Mr. Songpon Phiwuan)  
3. \*\*\* Tested by SECOT Co.,Ltd. (จ-239)  
4. ND = non-detectable [ TPH (C<sub>5</sub>-C<sub>8</sub>) = < 0.003 mg/L, TPH (C<sub>>8</sub>-C<sub>16</sub>) = < 0.025 mg/L,  
TPH (C<sub>>16</sub>-C<sub>35</sub>) = < 0.050 mg/L ]  
5. GPS = Sampling at 47 P 731433 E 1406036 N



Examined By .....

( Miss Apiradee Chuen-arom )

03/07/2024

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Request No. LA67-R0240

Report No. R6702-0600

## 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 00230989 : Class 1

SAMPLE NO. : 01418  
MEASURING DATE : 06-07/02/2024  
RECEIVED DATE : 13/02/2024  
REPORTED DATE : 19/02/2024

TIME \ DATE	06-07/02/2024 ( $L_{eq}$ )	06-07/02/2024 ( $L_{max}$ )	06-07/02/2024 ( $L_{90}$ )	UNIT
13:00 - 14:00 <sup>3</sup>	59.5	78.5	58.5	dB(A)
14:00 - 15:00	59.4	64.9	58.6	dB(A)
15:00 - 16:00	59.6	71.4	58.6	dB(A)
16:00 - 17:00	59.7	68.8	58.9	dB(A)
17:00 - 18:00	59.7	64.3	59.0	dB(A)
18:00 - 19:00	59.8	66.9	59.2	dB(A)
19:00 - 20:00	59.6	64.4	59.0	dB(A)
20:00 - 21:00	59.5	65.4	58.9	dB(A)
21:00 - 22:00	59.4	64.1	58.8	dB(A)
22:00 - 23:00	59.6	64.8	59.0	dB(A)
23:00 - 00:00	59.7	64.4	59.1	dB(A)
00:00 - 01:00	59.6	65.9	59.0	dB(A)
01:00 - 02:00	59.7	65.3	59.1	dB(A)
02:00 - 03:00	59.9	65.0	59.3	dB(A)
03:00 - 04:00	59.8	64.6	59.3	dB(A)
04:00 - 05:00	59.6	66.9	59.0	dB(A)
05:00 - 06:00	59.8	66.7	59.2	dB(A)
06:00 - 07:00	60.0	71.6	59.4	dB(A)
07:00 - 08:00	59.4	63.1	58.6	dB(A)
08:00 - 09:00	59.4	63.0	58.5	dB(A)
09:00 - 10:00	59.4	75.9	58.4	dB(A)
10:00 - 11:00	59.0	65.8	58.2	dB(A)
11:00 - 12:00	59.2	66.6	58.3	dB(A)
12:00 - 13:00	59.6	69.7	58.6	dB(A)
$L_{eq}$ 24 hr.	59.6	-	-	dB(A)
$L_{dn}$	66.1	-	-	dB(A)
Maximum	-	78.5	-	dB(A)
Standard	$70^{1/1}, 70^{2/2}$	$115^{1/1}, 115^{2/2}$	-	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)\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
(Measurement By Mr. Tummarut Photankhum)<sup>3/</sup> Start Time

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

19/02/2024

บริษัท อีสเทิร์น ไทย คอนซัลติ้ง 1992 จำกัด  
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Request No. LA67-R0240

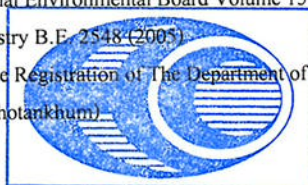
Report No. R6702-0601

## 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 00230989 : Class 1

SAMPLE NO. : 01419  
MEASURING DATE : 07-08/02/2024  
RECEIVED DATE : 13/02/2024  
REPORTED DATE : 19/02/2024

TIME \ DATE	07-08/02/2024 ( $L_{eq}$ )	07-08/02/2024 ( $L_{max}$ )	07-08/02/2024 ( $L_{90}$ )	UNIT
13:00 - 14:00 <sup>1/3</sup>	59.3	65.1	58.5	dB(A)
14:00 - 15:00	59.7	68.2	58.8	dB(A)
15:00 - 16:00	59.6	67.2	58.8	dB(A)
16:00 - 17:00	60.0	73.8	59.1	dB(A)
17:00 - 18:00	59.7	65.3	59.0	dB(A)
18:00 - 19:00	59.8	69.8	59.1	dB(A)
19:00 - 20:00	59.7	64.4	59.3	dB(A)
20:00 - 21:00	59.0	64.5	58.4	dB(A)
21:00 - 22:00	59.1	63.5	58.6	dB(A)
22:00 - 23:00	59.4	64.4	58.8	dB(A)
23:00 - 00:00	59.5	64.2	58.9	dB(A)
00:00 - 01:00	59.9	64.4	59.4	dB(A)
01:00 - 02:00	60.0	72.3	59.4	dB(A)
02:00 - 03:00	59.9	64.6	59.3	dB(A)
03:00 - 04:00	59.4	63.0	58.6	dB(A)
04:00 - 05:00	59.5	65.2	58.6	dB(A)
05:00 - 06:00	59.9	66.0	58.9	dB(A)
06:00 - 07:00	59.7	68.1	58.7	dB(A)
07:00 - 08:00	59.6	65.3	58.7	dB(A)
08:00 - 09:00	60.0	66.2	59.0	dB(A)
09:00 - 10:00	60.3	66.2	59.3	dB(A)
10:00 - 11:00	59.6	67.0	58.6	dB(A)
11:00 - 12:00	59.1	65.0	58.1	dB(A)
12:00 - 13:00	59.0	63.3	58.0	dB(A)
$L_{eq}$ 1 hr.	59.6	-	-	dB(A)
$L_{dn}$	66.1	-	-	dB(A)
Maximum	-	73.8	-	dB(A)
Standard	$70^{1/1}, 70^{1/2}$	$115^{1/1}, 115^{1/2}$	-	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)\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
(Measurement By Mr. Tummarut Photankhum)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

<sup>3/</sup> Start Time

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

19/02/2024

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Request No. LA67-R0240

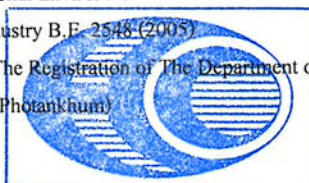
Report No. R6702-0602

## 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 00230989 : Class 1

SAMPLE NO. : 01420  
MEASURING DATE : 08-09/02/2024  
RECEIVED DATE : 13/02/2024  
REPORTED DATE : 19/02/2024

TIME \ DATE	08-09/02/2024 ( $L_{eq}$ )	08-09/02/2024 ( $L_{max}$ )	08-09/02/2024 ( $L_{90}$ )	UNIT
13:00 - 14:00 <sup>3</sup>	59.3	65.7	58.4	dB(A)
14:00 - 15:00	59.7	67.7	58.8	dB(A)
15:00 - 16:00	59.5	70.1	58.7	dB(A)
16:00 - 17:00	59.7	67.4	59.0	dB(A)
17:00 - 18:00	59.7	69.1	58.9	dB(A)
18:00 - 19:00	59.4	70.1	58.7	dB(A)
19:00 - 20:00	59.5	63.7	58.9	dB(A)
20:00 - 21:00	59.3	67.5	58.7	dB(A)
21:00 - 22:00	59.5	69.4	58.8	dB(A)
22:00 - 23:00	59.2	64.3	58.6	dB(A)
23:00 - 00:00	59.3	65.1	58.6	dB(A)
00:00 - 01:00	59.6	64.7	58.9	dB(A)
01:00 - 02:00	59.7	64.5	59.0	dB(A)
02:00 - 03:00	59.7	64.3	59.0	dB(A)
03:00 - 04:00	59.6	65.0	58.8	dB(A)
04:00 - 05:00	60.2	64.3	59.2	dB(A)
05:00 - 06:00	60.4	66.4	59.4	dB(A)
06:00 - 07:00	60.1	64.6	59.1	dB(A)
07:00 - 08:00	59.9	72.1	59.0	dB(A)
08:00 - 09:00	59.6	65.0	58.8	dB(A)
09:00 - 10:00	59.6	64.5	58.7	dB(A)
10:00 - 11:00	59.2	66.0	58.2	dB(A)
11:00 - 12:00	59.2	67.0	58.2	dB(A)
12:00 - 13:00	59.4	65.3	58.4	dB(A)
$L_{eq}$ 24 hr.	59.6	-	-	dB(A)
$L_{dn}$	66.1	-	-	dB(A)
Maximum	-	72.1	-	dB(A)
Standard	$70^{1/1}, 70^{2/2}$	$115^{1/1}, 115^{2/2}$	-	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)\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
(Measurement By Mr. Tummarut Photankhum)<sup>1/3</sup> Start Time

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

19/02/2024

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Request No. LA67-R0240

Report No. R6702-0603

# 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 00230989 : Class 1

SAMPLE NO. : 01421  
MEASURING DATE : 09-10/02/2024  
RECEIVED DATE : 13/02/2024  
REPORTED DATE : 19/02/2024

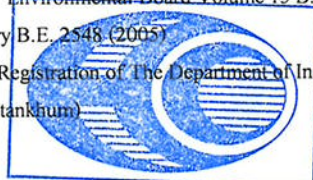
TIME \ DATE	09-10/02/2024 ( $L_{eq}$ )	09-10/02/2024 ( $L_{max}$ )	09-10/02/2024 ( $L_{90}$ )	UNIT
13:00 - 14:00 <sup>3</sup>	59.6	65.8	58.5	dB(A)
14:00 - 15:00	59.7	65.8	58.7	dB(A)
15:00 - 16:00	60.1	68.4	59.2	dB(A)
16:00 - 17:00	60.1	67.7	59.1	dB(A)
17:00 - 18:00	60.1	68.7	59.1	dB(A)
18:00 - 19:00	60.1	66.2	59.1	dB(A)
19:00 - 20:00	59.9	68.6	59.0	dB(A)
20:00 - 21:00	59.5	62.8	58.7	dB(A)
21:00 - 22:00	59.5	63.8	58.7	dB(A)
22:00 - 23:00	59.2	64.4	58.3	dB(A)
23:00 - 00:00	59.1	62.3	58.3	dB(A)
00:00 - 01:00	59.3	62.5	58.4	dB(A)
01:00 - 02:00	59.3	62.9	58.5	dB(A)
02:00 - 03:00	59.0	62.0	58.3	dB(A)
03:00 - 04:00	59.2	62.9	58.4	dB(A)
04:00 - 05:00	59.2	62.5	58.4	dB(A)
05:00 - 06:00	59.1	64.3	58.3	dB(A)
06:00 - 07:00	59.0	69.5	58.3	dB(A)
07:00 - 08:00	58.9	67.4	58.1	dB(A)
08:00 - 09:00	60.3	64.5	59.6	dB(A)
09:00 - 10:00	60.1	72.8	59.4	dB(A)
10:00 - 11:00	59.7	65.5	58.9	dB(A)
11:00 - 12:00	59.8	66.5	59.0	dB(A)
12:00 - 13:00	62.5	74.2	60.0	dB(A)
$L_{eq}$ 24 hr.	59.7	-	-	dB(A)
$L_{dn}$	65.7	-	-	dB(A)
Maximum	-	74.2	-	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)

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

(Measurement By Mr. Tummarut Photankhum)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

<sup>3</sup> Start Time

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

19/02/2024

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

Request No. LA67-R0240

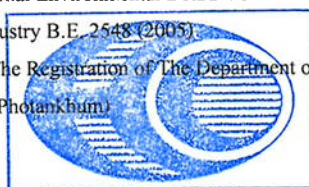
Report No. R6702-0604

## 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 00230989 : Class 1

SAMPLE NO. : 01422  
MEASURING DATE : 10-11/02/2024  
RECEIVED DATE : 13/02/2024  
REPORTED DATE : 19/02/2024

TIME \ DATE	10-11/02/2024 ( $L_{eq}$ )	10-11/02/2024 ( $L_{max}$ )	10-11/02/2024 ( $L_{90}$ )	UNIT
13:00 - 14:00 <sup>3</sup>	60.6	69.1	59.2	dB(A)
14:00 - 15:00	57.9	63.8	57.2	dB(A)
15:00 - 16:00	58.8	65.7	58.2	dB(A)
16:00 - 17:00	59.6	63.7	58.9	dB(A)
17:00 - 18:00	60.5	70.2	59.4	dB(A)
18:00 - 19:00	62.3	72.8	60.6	dB(A)
19:00 - 20:00	60.4	66.1	59.9	dB(A)
20:00 - 21:00	59.8	64.5	59.5	dB(A)
21:00 - 22:00	60.4	94.7	58.2	dB(A)
22:00 - 23:00	65.7	95.9	62.3	dB(A)
23:00 - 00:00	58.9	63.0	58.4	dB(A)
00:00 - 01:00	59.2	63.6	58.8	dB(A)
01:00 - 02:00	59.0	63.3	58.4	dB(A)
02:00 - 03:00	59.1	63.9	58.5	dB(A)
03:00 - 04:00	59.4	63.9	58.6	dB(A)
04:00 - 05:00	59.4	63.4	58.6	dB(A)
05:00 - 06:00	59.4	65.0	58.6	dB(A)
06:00 - 07:00	59.3	63.5	58.6	dB(A)
07:00 - 08:00	59.0	64.8	58.1	dB(A)
08:00 - 09:00	58.2	63.0	57.3	dB(A)
09:00 - 10:00	58.5	73.7	57.5	dB(A)
10:00 - 11:00	59.0	70.4	58.1	dB(A)
11:00 - 12:00	58.9	64.0	58.0	dB(A)
12:00 - 13:00	58.7	62.5	57.8	dB(A)
$L_{eq}$ 24 hr.	60.0	-	-	dB(A)
$L_{dn}$	66.9	-	-	dB(A)
Maximum	-	95.9	-	dB(A)
Standard	$70^{1/1}, 70^{2/2}$	$115^{1/1}, 115^{2/2}$	-	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)\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
(Measurement By Mr. Tummarut Photankhum)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

<sup>3</sup> Start Time

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

19/02/2024

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY



Request No. LA67-R0240

Report No. R6702-0605

## 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 00230989 : Class 1

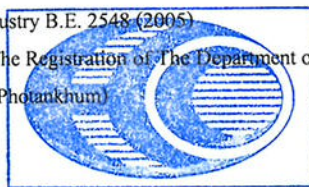
SAMPLE NO. : 01423  
MEASURING DATE : 11-12/02/2024  
RECEIVED DATE : 13/02/2024  
REPORTED DATE : 19/02/2024

TIME \ DATE	11-12/02/2024 ( $L_{eq}$ )	11-12/02/2024 ( $L_{max}$ )	11-12/02/2024 ( $L_{90}$ )	UNIT
13:00 - 14:00 <sup>3</sup>	58.9	64.3	57.9	dB(A)
14:00 - 15:00	59.2	64.4	58.4	dB(A)
15:00 - 16:00	59.8	64.2	59.0	dB(A)
16:00 - 17:00	59.8	64.6	59.0	dB(A)
17:00 - 18:00	60.1	66.5	59.6	dB(A)
18:00 - 19:00	60.5	69.2	60.0	dB(A)
19:00 - 20:00	59.4	63.6	59.0	dB(A)
20:00 - 21:00	58.8	63.0	58.4	dB(A)
21:00 - 22:00	58.8	64.1	58.3	dB(A)
22:00 - 23:00	60.3	66.2	59.8	dB(A)
23:00 - 00:00	59.1	64.7	58.7	dB(A)
00:00 - 01:00	58.9	63.3	58.4	dB(A)
01:00 - 02:00	58.5	62.4	57.8	dB(A)
02:00 - 03:00	58.6	63.0	57.9	dB(A)
03:00 - 04:00	58.8	63.3	58.1	dB(A)
04:00 - 05:00	58.7	63.1	58.0	dB(A)
05:00 - 06:00	59.3	66.4	58.6	dB(A)
06:00 - 07:00	58.9	69.1	58.1	dB(A)
07:00 - 08:00	58.5	67.0	57.7	dB(A)
08:00 - 09:00	59.9	64.1	59.2	dB(A)
09:00 - 10:00	59.4	74.0	58.3	dB(A)
10:00 - 11:00	57.7	65.6	56.4	dB(A)
11:00 - 12:00	57.6	62.4	56.3	dB(A)
12:00 - 13:00	57.9	63.4	56.5	dB(A)
$L_{eq}$ 24 hr.	59.1	-	-	dB(A)
$L_{dn}$	65.5	-	-	dB(A)
Maximum	-	74.0	-	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)

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

(Measurement By Mr. Tummarut Photankhum)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

<sup>3</sup> Start Time

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

19/02/2024

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. LA67-R0240

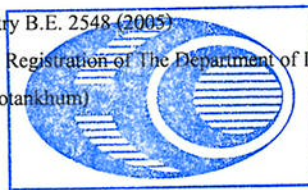
Report No. R6702-0606

## 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 00230989 : Class 1

SAMPLE NO. : 01424  
MEASURING DATE : 12-13/02/2024  
RECEIVED DATE : 13/02/2024  
REPORTED DATE : 19/02/2024

TIME \ DATE	12-13/02/2024 ( $L_{eq}$ )	12-13/02/2024 ( $L_{max}$ )	12-13/02/2024 ( $L_{90}$ )	UNIT
13:00 - 14:00 <sup>3</sup>	57.2	64.3	56.0	dB(A)
14:00 - 15:00	58.3	70.3	57.4	dB(A)
15:00 - 16:00	59.3	63.4	58.5	dB(A)
16:00 - 17:00	58.2	76.8	57.0	dB(A)
17:00 - 18:00	58.5	65.5	57.8	dB(A)
18:00 - 19:00	59.1	68.6	58.6	dB(A)
19:00 - 20:00	58.9	68.6	58.2	dB(A)
20:00 - 21:00	59.8	67.4	59.1	dB(A)
21:00 - 22:00	60.2	67.5	59.6	dB(A)
22:00 - 23:00	60.4	69.0	59.6	dB(A)
23:00 - 00:00	59.6	71.4	58.6	dB(A)
00:00 - 01:00	59.2	63.9	58.8	dB(A)
01:00 - 02:00	59.0	64.5	58.6	dB(A)
02:00 - 03:00	59.2	63.8	58.7	dB(A)
03:00 - 04:00	59.6	64.0	58.7	dB(A)
04:00 - 05:00	59.4	64.0	58.5	dB(A)
05:00 - 06:00	59.5	64.0	58.7	dB(A)
06:00 - 07:00	59.4	66.4	58.5	dB(A)
07:00 - 08:00	59.2	62.9	58.4	dB(A)
08:00 - 09:00	59.2	62.8	58.3	dB(A)
09:00 - 10:00	59.2	64.1	58.3	dB(A)
10:00 - 11:00	59.4	68.8	58.4	dB(A)
11:00 - 12:00	59.2	63.9	58.2	dB(A)
12:00 - 13:00	59.8	64.6	59.0	dB(A)
$L_{eq}$ 24 hr.	59.2	-	-	dB(A)
$L_{dn}$	65.8	-	-	dB(A)
Maximum	-	76.8	-	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)\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
(Measurement By Mr. Tummarut Photankham)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

<sup>3/3</sup> Start Time

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

19/02/2024

Request No. ATR6702022

Report No. 6702-0292

## 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 : 12/02/2024 SAMPLE NO. : A67020292  
RECEIVED DATE : 15/02/2024 SAMPLING TIME : 09:43-10:43  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.10 L/min TESTED DATE : 15/02/2024-16/02/2024  
Serial No. 218403 REPORTED DATE : 23/02/2024

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.

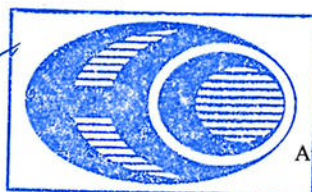
(Sampling By Mr. Witchawan Singto)

GPS = Sampling at UTM 47P 731088E 1406270N

Examined By .....

(Miss Thanatporn Klinsoon)

23/02/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Mr. Kawee Suthasub)

23/02/2024

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

Request No. ATR6705069

Report No. 6705-1186

## 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 : 14/05/2024 SAMPLE NO. : A67051186  
RECEIVED DATE : 20/05/2024 SAMPLING TIME : 10:25-11:25  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.10 L/min TESTED DATE : 20/05/2024-21/05/2024  
Serial No. 218406 REPORTED DATE : 01/06/2024

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.

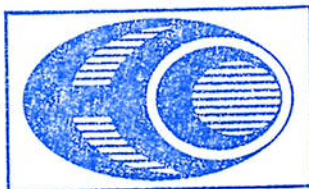
(Sampling By Mr. Witchawan Singto)

GPS = Sampling at UTM 47P 731088E 1406270N

Examined By

(Miss Thanatporn Klinsopon)

01/06/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

01/06/2024

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



Request No. ATR6702022

Report No. 6702-0293

## 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 : 12/02/2024 SAMPLE NO. : A67020293  
RECEIVED DATE : 15/02/2024 SAMPLING TIME : 09:30-10:30  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.10 L/min TESTED DATE : 15/02/2024-16/02/2024  
Serial No. 20180903084 REPORTED DATE : 23/02/2024

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.

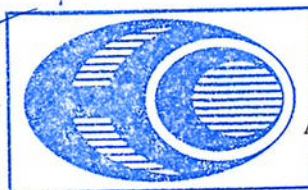
(Sampling By Mr. Witchawan Singto)

GPS = Sampling at UTM 47P 731244E 1406145N

Examined By

(Miss Thanatporn Klinsopon)

23/02/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

23/02/2024

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

Request No. ATR6705069

Report No. 6705-1187

## 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 : Epoxidation Section  
SAMPLING DATE : 14/05/2024 SAMPLE NO. : A67051187  
RECEIVED DATE : 20/05/2024 SAMPLING TIME : 10:20-11:20  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.10 L/min TESTED DATE : 20/05/2024-21/05/2024  
Serial No. 20200403064 REPORTED DATE : 01/06/2024

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.

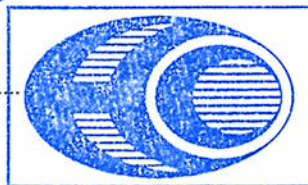
(Sampling By Mr. Witchawan Singto)

GPS = Sampling at UTM 47P 731244E 1406145N

Examined By

(Miss Thanatporn Klinsopon)

01/06/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

01/06/2024

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

Request No. ATR6702022

Report No. 6702-0294

## TEST REPORT

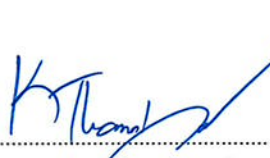
CUSTOMER : PTT Global Chemical Public Company Limited Branch 19  
ADDRESS : Noen Phra Sub-district, Mueang Rayong District, Rayong, 21150  
SAMPLE SOURCE : GC 19  
SAMPLE NAME : Expoxidation Section  
SAMPLING DATE : 12/02/2024 SAMPLE NO. : A67020294  
RECEIVED DATE : 15/02/2024 SAMPLING TIME : 09:30-10:30  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.05 L/min TESTED DATE : 15/02/2024-16/02/2024  
Serial No. 20180903084 REPORTED DATE : 23/02/2024

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

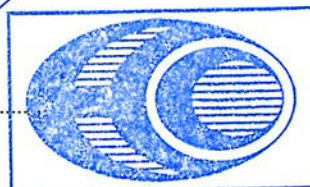
**REMARK:**<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and  
No.0202-03-2564-0005.

(Sampling By Mr. Witchawan Singto)


GPS = Sampling at UTM 47P 731244E 1406145N

Examined By   
(Miss Thanatporn Klinsopon)

23/02/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By   
(Mr. Kawee Suthasub)

23/02/2024

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

Request No. ATR6705069

Report No. 6705-1188

## 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 : Epoxidation Section  
SAMPLING DATE : 14/05/2024 SAMPLE NO. : A67051188  
RECEIVED DATE : 20/05/2024 SAMPLING TIME : 10:20-11:20  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.05 L/min TESTED DATE : 20/05/2024-21/05/2024  
Serial No. 20200403064 REPORTED DATE : 01/06/2024

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.

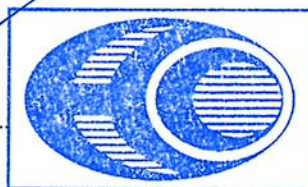
(Sampling By Mr. Witchawan Singto)

GPS = Sampling at UTM 47P 731244E 1406145N

Examined By

(Miss Thanatporn Klinsopon)

01/06/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

01/06/2024

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
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Request No. ATR6702022

Report No. 6702-0295

## 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 : 12/02/2024 SAMPLE NO. : A67020295  
RECEIVED DATE : 15/02/2024 SAMPLING TIME : 09:30-10:20  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.10 L/min TESTED DATE : 15/02/2024-21/02/2024  
Serial No. 20180903084 REPORTED DATE : 23/02/2024

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:

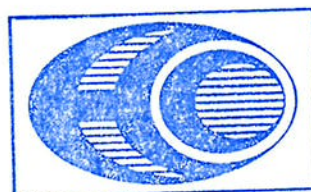
<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.<sup>/2</sup> ND = Non detectable : When detection limit of Propylene Oxide is less than 0.10 mg/m<sup>3</sup> or 0.05 ppm.

\*\* 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



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REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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Examined By.....

(Miss Thanatporn Klinsopon)

23/02/2024

Request No. ATR6705069

Report No. 6705-1189

## 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 : Epoxidation Section  
SAMPLING DATE : 14/05/2024 SAMPLE NO. : A67051189  
RECEIVED DATE : 20/05/2024 SAMPLING TIME : 10:20-11:10  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.10 L/min TESTED DATE : 20/05/2024-25/05/2024  
Serial No. 20200403064 REPORTED DATE : 01/06/2024

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

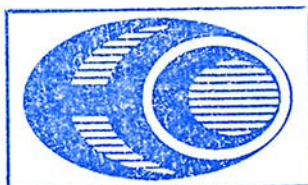
**REMARK:**<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.<sup>/2</sup> ND = Non detectable : When detection limit of Propylene Oxide is less than 0.10 mg/m<sup>3</sup> or 0.05 ppm.

\*\* 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.....

(Miss Thanatporn Klinsopon)

01/06/2024

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Request No. ATR6702022

Report No. 6702-0296

## 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 : 12/02/2024 SAMPLE NO. : A67020296  
RECEIVED DATE : 15/02/2024 SAMPLING TIME : 09:32-10:32  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.10 L/min TESTED DATE : 15/02/2024-16/02/2024  
Serial No. 20160502017 REPORTED DATE : 23/02/2024

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.

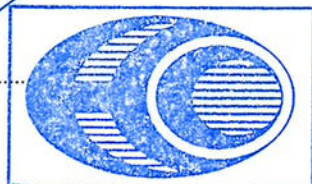

\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and No.0202-03-2564-0005.

(Sampling By Mr. Witchawan Singto)

GPS = Sampling at UTM 47P 731204E 1406197N

Examined By   
(Miss Thanatporn Klinsopon)

23/02/2024

Approved By   
(Mr. Kawee Suthasub)

23/02/2024

บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด  
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Request No. ATR6705069

Report No. 6705-1190

## 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 : 14/05/2024 SAMPLE NO. : A67051190  
RECEIVED DATE : 20/05/2024 SAMPLING TIME : 10:22-11:22  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.10 L/min TESTED DATE : 20/05/2024-21/05/2024  
Serial No. 20200403061 REPORTED DATE : 01/06/2024

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.

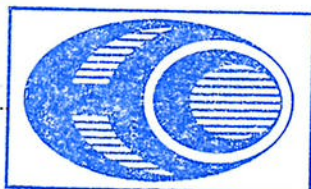
(Sampling By Mr. Witchawan Singto)

GPS = Sampling at UTM 47P 731204E 1406197N

Examined By

(Miss Thanatporn Klinsopon)

01/06/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

01/06/2024

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Request No. ATR6702022

Report No. 6702-0297

## 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 : 12/02/2024 SAMPLE NO. : A67020297  
RECEIVED DATE : 15/02/2024 SAMPLING TIME : 09:32-10:32  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.05 L/min TESTED DATE : 15/02/2024-16/02/2024  
Serial No. 20160502017 REPORTED DATE : 23/02/2024


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:

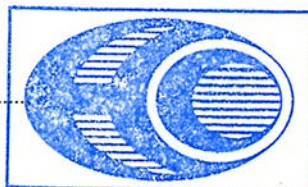
<sup>1/</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008 and  
No.0202-03-2564-0005.

(Sampling By Mr. Witchawan Singto)


GPS = Sampling at UTM 47P 731204E 1406197N

Examined By   
(Miss Thanatporn Klinsopon)

23/02/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By   
(Mr. Kawee Suthasub)

23/02/2024

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Request No. ATR6705069

Report No. 6705-1191

## 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 : 14/05/2024 SAMPLE NO. : A67051191  
RECEIVED DATE : 20/05/2024 SAMPLING TIME : 10:22-11:22  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.05 L/min TESTED DATE : 20/05/2024-21/05/2024  
Serial No. 20200403061 REPORTED DATE : 01/06/2024

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.

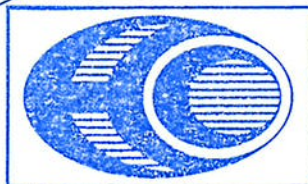
(Sampling By Mr. Witchawan Singto)

GPS = Sampling at UTM 47P 731204E 1406197N

Examined By

(Miss Thanatporn Klinsoon)

01/06/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

01/06/2024

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Request No. ATR6702022

Report No. 6702-0298

## 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 : 12/02/2024 SAMPLE NO. : A67020298  
RECEIVED DATE : 15/02/2024 SAMPLING TIME : 09:32-10:22  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.10 L/min TESTED DATE : 15/02/2024-21/02/2024  
Serial No. 20160502017 REPORTED DATE : 23/02/2024

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:

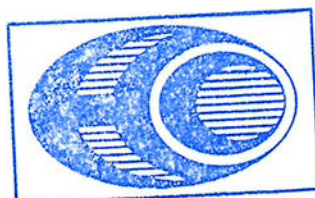
<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.<sup>/2</sup> ND = Non detectable : When detection limit of Propylene Oxide is less than 0.10 mg/m<sup>3</sup> or 0.05 ppm.

\*\* 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.....

(Miss Thanatporn Klinsopon)

23/02/2024

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Request No. ATR6705069

Report No. 6705-1192

## 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 : 14/05/2024 SAMPLE NO. : A67051192  
RECEIVED DATE : 20/05/2024 SAMPLING TIME : 10:22-11:12  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.10 L/min TESTED DATE : 20/05/2024-25/05/2024  
Serial No. 20200403061 REPORTED DATE : 01/06/2024

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

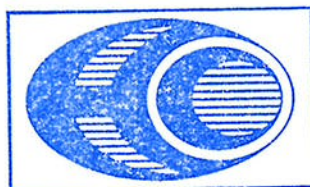
**REMARK:**<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.<sup>/2</sup> ND = Non detectable : When detection limit of Propylene Oxide is less than 0.10 mg/m<sup>3</sup> or 0.05 ppm.

\*\* 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.....

(Miss Thanaporn Klinsopon)

01/06/2024

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Request No. ATR6702022

Report No. 6702-0299

## 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 : 12/02/2024 SAMPLE NO. : A67020299  
RECEIVED DATE : 15/02/2024 SAMPLING TIME : 09:37-10:37  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.10 L/min TESTED DATE : 15/02/2024-16/02/2024  
Serial No. 218445 REPORTED DATE : 23/02/2024

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.

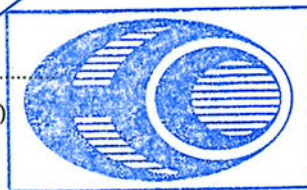
(Sampling By Mr. Witchawan Singto)

GPS = Sampling at UTM 47P 731204E 1406213N

Examined By

(Miss Thanatporn Klinsopon)

23/02/2024



Approved By

(Mr. Kawee Suthasub)

23/02/2024

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY  
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Request No. ATR6705069

Report No. 6705-1193

## 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 : 14/05/2024 SAMPLE NO. : A67051193  
RECEIVED DATE : 20/05/2024 SAMPLING TIME : 10:25-11:25  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.10 L/min TESTED DATE : 20/05/2024-21/05/2024  
Serial No. 218406 REPORTED DATE : 01/06/2024

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.

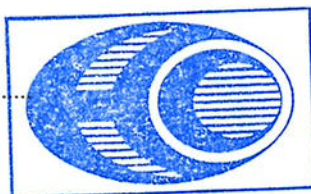
(Sampling By Mr. Witchawan Singto)

GPS = Sampling at UTM 47P 731204E 1406213N

Examined By

(Miss Thanatporn Klinsopon)

01/06/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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

Approved By

(Mr. Kawee Suthasub)

01/06/2024

Request No. ATR6702022

Report No. 6702-0300

## 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 : 12/02/2024 SAMPLE NO. : A67020300  
RECEIVED DATE : 15/02/2024 SAMPLING TIME : 09:40-10:40  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.05 L/min TESTED DATE : 15/02/2024-16/02/2024  
Serial No. 20200403061 REPORTED DATE : 23/02/2024

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.

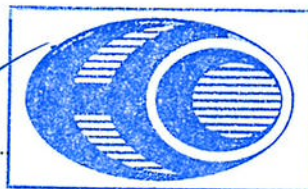
(Sampling By Mr. Witchawan Singto)

GPS = Sampling at UTM 47P 731136E 1406237N

Examined By

(Miss Thanatporn Klinsopon)

23/02/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

23/02/2024

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

Request No. ATR6705069

Report No. 6705-1194

## 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 : 14/05/2024 SAMPLE NO. : A67051194  
RECEIVED DATE : 20/05/2024 SAMPLING TIME : 10:27-11:27  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.05 L/min TESTED DATE : 20/05/2024-21/05/2024  
Serial No. 20211102103 REPORTED DATE : 01/06/2024

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.

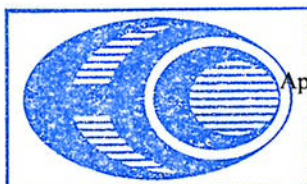
(Sampling By Mr. Witchawan Singto)

GPS = Sampling at UTM 47P 731136E 1406237N

Examined By

(Miss Thanatporn Klinsopon)

01/06/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

01/06/2024

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



Request No. ATR6702022

Report No. 6702-0301

## 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 : 12/02/2024 SAMPLE NO. : A67020301  
RECEIVED DATE : 15/02/2024 SAMPLING TIME : 09:40-10:30  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.10 L/min TESTED DATE : 15/02/2024-21/02/2024  
Serial No. 20200403061 REPORTED DATE : 23/02/2024

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:

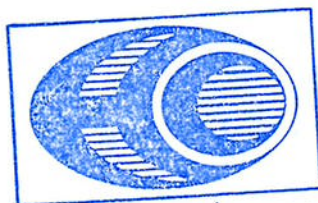
<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.<sup>/2</sup> ND = Non detectable : When detection limit of Propylene Oxide is less than 0.10 mg/m<sup>3</sup> or 0.05 ppm.

\*\* 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 อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Examined By.....

(Miss Thanatporn Klinsoon)

23/02/2024

Request No. ATR6705069

Report No. 6705-1195

## 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 : 14/05/2024 SAMPLE NO. : A67051195  
RECEIVED DATE : 20/05/2024 SAMPLING TIME : 10:27-11:17  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.10 L/min TESTED DATE : 20/05/2024-25/05/2024  
Serial No. 20211102103 REPORTED DATE : 01/06/2024

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

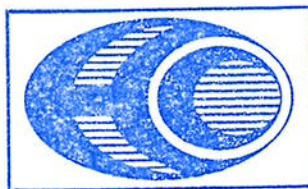
**REMARK:**<sup>/1</sup> Notification of The Department of Labour Protection and Welfare B.E.2560 (2017), Concentration Limits of Hazardous Chemicals.<sup>/2</sup> ND = Non detectable : When detection limit of Propylene Oxide is less than 0.10 mg/m<sup>3</sup> or 0.05 ppm.

\*\* 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.....

(Miss Thanatporn Klinsoapon)

01/06/2024

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

Request No. ATR6702022

Report No. 6702-0302

## 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 : 12/02/2024 SAMPLE NO. : A67020302  
RECEIVED DATE : 15/02/2024 SAMPLING TIME : 09:50-10:50  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 15/02/2024-21/02/2024  
Serial No. 20180903081 REPORTED DATE : 23/02/2024

PARAMETER**	TEST METHOD	RESULT	UNIT
Total Volatile Organic Compounds (TVOCs)	GC - FID	2.12	ppm

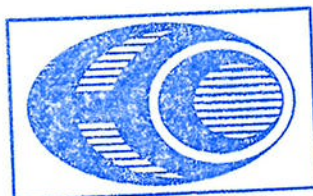
**REMARK:**

\*\* 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.....

(Miss Thanatporn Klinsoon)

23/02/2024

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

Request No. ATR6705069

Report No. 6705-1196

## 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 : 14/05/2024 SAMPLE NO. : A67051196  
RECEIVED DATE : 20/05/2024 SAMPLING TIME : 10:34-11:34  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 20/05/2024-28/05/2024  
Serial No. 20180903081 REPORTED DATE : 01/06/2024

PARAMETER**	TEST METHOD	RESULT	UNIT
Total Volatile Organic Compounds (TVOCs)	GC - FID	2.60	ppm

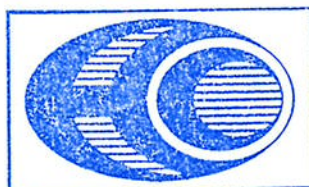
**REMARK:**

\*\* 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.....

(Miss Thanatporn Klinsopon)

01/06/2024

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



Request No. ATR6702022

Report No. 6702-0303

## 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 : Tank Farm 2 (TK-1456)  
SAMPLING DATE : 12/02/2024 SAMPLE NO. : A67020303  
RECEIVED DATE : 15/02/2024 SAMPLING TIME : 09:52-10:52  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 15/02/2024-21/02/2024  
Serial No. 20150302001 REPORTED DATE : 23/02/2024

PARAMETER**	TEST METHOD	RESULT	UNIT
Total Volatile Organic Compounds (TVOCs)	GC - FID	2.03	ppm

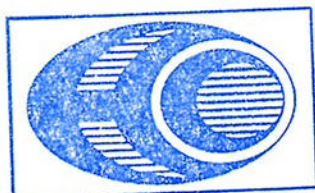
**REMARK:**

\*\* 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.....

(Miss Thanatporn Klinsoon)

23/02/2024

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

Request No. ATR6705069

Report No. 6705-1197

## 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 : 14/05/2024 SAMPLE NO. : A67051197  
RECEIVED DATE : 20/05/2024 SAMPLING TIME : 10:40-11:40  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 20/05/2024-28/05/2024  
Serial No. 20180903094 REPORTED DATE : 01/06/2024

PARAMETER**	TEST METHOD	RESULT	UNIT
Total Volatile Organic Compounds (TVOCs)	GC - FID	3.57	ppm

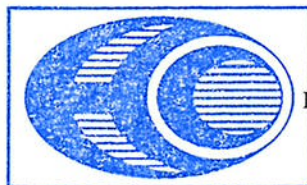
**REMARK:**

\*\* 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.....

(Miss Thanatporn Klinsopon)

01/06/2024

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

Request No. ATR6702022

Report No. 6702-0304

## 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 : Tank From 3 (TK-1693)  
SAMPLING DATE : 12/02/2024 SAMPLE NO. : A67020304  
RECEIVED DATE : 15/02/2024 SAMPLING TIME : 10:10-11:10  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 15/02/2024-21/02/2024  
Serial No. 20100402002 REPORTED DATE : 23/02/2024

PARAMETER**	TEST METHOD	RESULT	UNIT
Total Volatile Organic Compounds (TVOCs)	GC - FID	2.20	ppm

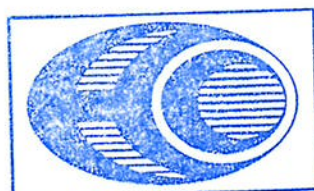
**REMARK:**

\*\* 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.....

(Miss Thanatporn Klinsoon)

23/02/2024

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

Request No. ATR6705069

Report No. 6705-1198

## 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 : 14/05/2024 SAMPLE NO. : A67051198  
RECEIVED DATE : 20/05/2024 SAMPLING TIME : 10:45-11:45  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 20/05/2024-28/05/2024  
Serial No. 20100401018 REPORTED DATE : 01/06/2024

PARAMETER**	TEST METHOD	RESULT	UNIT
Total Volatile Organic Compounds (TVOCs)	GC - FID	3.93	ppm

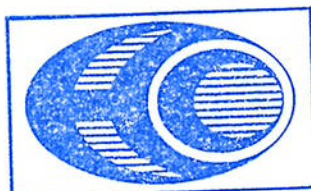
**REMARK:**

\*\* 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.....

(Miss Thanatporn Klinsoon)

01/06/2024

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



Request No. ATR6702022

Report No. 6702-0305

## 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 : Tank Farm 4 (TK-5402)  
SAMPLING DATE : 12/02/2024 SAMPLE NO. : A67020305  
RECEIVED DATE : 15/02/2024 SAMPLING TIME : 09:55-10:55  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 15/02/2024-21/02/2024  
Serial No. 20100401022 REPORTED DATE : 23/02/2024

PARAMETER**	TEST METHOD	RESULT	UNIT
Total Volatile Organic Compounds (TVOCs)	GC - FID	2.05	ppm

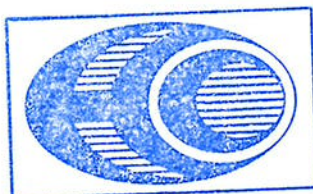
**REMARK:**

\*\* 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 อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

Examined By.....

(Miss Thanatporn Klinsoon)

23/02/2024

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

Request No. ATR6705069

Report No. 6705-1199

## 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 : 14/05/2024 SAMPLE NO. : A67051199  
RECEIVED DATE : 20/05/2024 SAMPLING TIME : 10:37-11:37  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.20 L/min TESTED DATE : 20/05/2024-28/05/2024  
Serial No. 20181001042 REPORTED DATE : 01/06/2024

PARAMETER**	TEST METHOD	RESULT	UNIT
Total Volatile Organic Compounds (TVOCs)	GC - FID	1.75	ppm

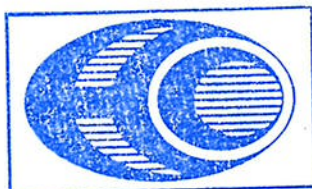
**REMARK:**

\*\* 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.....

(Miss Thanatporn Klinsopon)

01/06/2024

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

Request No. ATR6702022

Report No. 6702-0287

## 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 (คุณนวกาศย์ แสงสุรินทร์)  
SAMPLING DATE : 12/02/2024 SAMPLE NO. : A67020287  
RECEIVED DATE : 15/02/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.01 L/min TESTED DATE : 15/02/2024-21/02/2024  
Serial No. 218383 REPORTED DATE : 23/02/2024

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

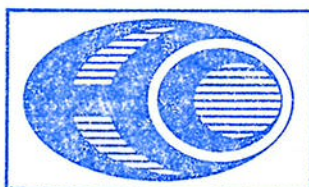
## REMARK:

<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

(Miss Thanatporn Klinsoon)

23/02/2024

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

Request No. ATR6702022

Report No. 6702-0288

## 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 (คุณภัทรพล นุ่มนึ่ง)  
SAMPLING DATE : 12/02/2024 SAMPLE NO. : A67020288  
RECEIVED DATE : 15/02/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.01 L/min TESTED DATE : 15/02/2024-21/02/2024  
Serial No. 218412 REPORTED DATE : 23/02/2024

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

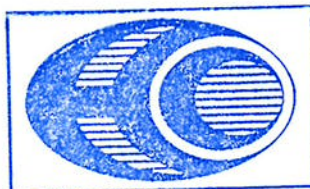
## REMARK:

<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.....

(Miss Thanatporn Klinsopon)

23/02/2024

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



Request No. ATR6702022

Report No. 6702-0289

## 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 (คุณจิตติกร เทิงสูงเนิน)  
SAMPLING DATE : 12/02/2024 SAMPLE NO. : A67020289  
RECEIVED DATE : 15/02/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.01 L/min TESTED DATE : 15/02/2024-21/02/2024  
Serial No. 218444 REPORTED DATE : 23/02/2024

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

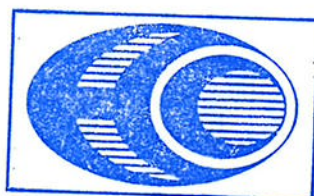
## REMARK:

<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

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

Examined By.....

(Miss Thanatporn Klinsoon)

23/02/2024

Request No. ATR6702022

Report No. 6702-0290

## 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 (คุณภานุเดช เขียวดัด)  
SAMPLING DATE : 12/02/2024 SAMPLE NO. : A67020290  
RECEIVED DATE : 15/02/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.01 L/min TESTED DATE : 15/02/2024-21/02/2024  
Serial No. 218385 REPORTED DATE : 23/02/2024

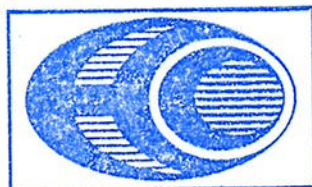
PARAMETER**	TEST METHOD	RESULT <sup>/2</sup>	STD <sup>/1</sup>	UNIT
Propylene Oxide	NIOSH 1612/GC-FID	ND	240	mg/m <sup>3</sup>
		ND	100	ppm

**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.....

(Miss Thanatporn Klinsoyon)

23/02/2024

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

Request No. ATR6702022

Report No. 6702-0291

## 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 (คุณสรายุทธ วิลังคะ)  
SAMPLING DATE : 12/02/2024 SAMPLE NO. : A67020291  
RECEIVED DATE : 15/02/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.01 L/min TESTED DATE : 15/02/2024-21/02/2024  
Serial No. 218406 REPORTED DATE : 23/02/2024

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

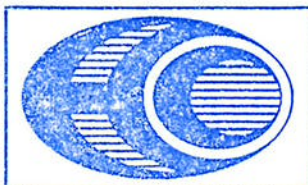
## REMARK:

<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.....

(Miss Thanatporn Klinsoyon)

23/02/2024

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

Request No. ATR6705069

Report No. 6705-1200

## 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 (คุณอรรถโกวิท สิงห์โตทอง)  
SAMPLING DATE : 14/05/2024 SAMPLE NO. : A67051200  
RECEIVED DATE : 20/05/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.01 L/min TESTED DATE : 20/05/2024-25/05/2024  
Serial No. 218411 REPORTED DATE : 01/06/2024

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.....

(Miss Thanatporn Klinsoon)

01/06/2024

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WITHOUT THE WRITTEN APPROVAL LABORATORY



Request No. ATR6705069

Report No. 6705-1201

## 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 (คุณพวงษ์นรินทร์ สีตานา)  
SAMPLING DATE : 14/05/2024 SAMPLE NO. : A67051201  
RECEIVED DATE : 20/05/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.01 L/min TESTED DATE : 20/05/2024-25/05/2024  
Serial No. 218385 REPORTED DATE : 01/06/2024

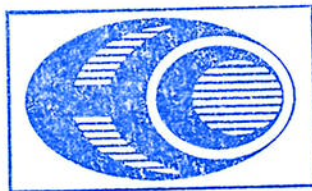
PARAMETER**	TEST METHOD	RESULT <sup>/2</sup>	STD <sup>/1</sup>	UNIT
Propylene Oxide	NIOSH 1612/GC-FID	ND	240	mg/m <sup>3</sup>
		ND	100	ppm

**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.....

(Miss Thanatporn Klinsoon)

01/06/2024

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. ATR6705069

Report No. 6705-1202

## 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 (คุณภัทรพล นุ่มนึ่ง)  
SAMPLING DATE : 14/05/2024 SAMPLE NO. : A67051202  
RECEIVED DATE : 20/05/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.01 L/min TESTED DATE : 20/05/2024-25/05/2024  
Serial No. 218391 REPORTED DATE : 01/06/2024

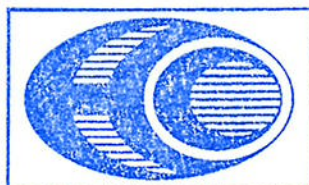
PARAMETER**	TEST METHOD	RESULT <sup>/2</sup>	STD <sup>/1</sup>	UNIT
Propylene Oxide	NIOSH 1612/GC-FID	ND	240	mg/m <sup>3</sup>
		ND	100	ppm

**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.....

(Miss Thanatporn Klinsoon)

01/06/2024

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. ATR6705069

Report No. 6705-1203

## 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 (คุณภาพเศษ เยียดยัด)  
SAMPLING DATE : 14/05/2024 SAMPLE NO. : A67051203  
RECEIVED DATE : 20/05/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.01 L/min TESTED DATE : 20/05/2024-25/05/2024  
Serial No. 218388 REPORTED DATE : 01/06/2024

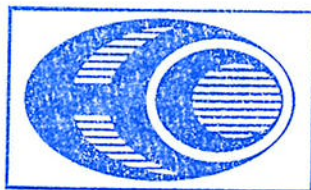
PARAMETER**	TEST METHOD	RESULT <sup>/2</sup>	STD <sup>/1</sup>	UNIT
Propylene Oxide	NIOSH 1612/GC-FID	ND	240	mg/m <sup>3</sup>
		ND	100	ppm

**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.....

(Miss Thanatporn Klinsopon)

01/06/2024

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Request No. ATR6705069

Report No. 6705-1204

## 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 (คุณวีระวร อรรถสังข์)  
SAMPLING DATE : 14/05/2024 SAMPLE NO. : A67051204  
RECEIVED DATE : 20/05/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.01 L/min TESTED DATE : 20/05/2024-25/05/2024  
Serial No. 218412 REPORTED DATE : 01/06/2024

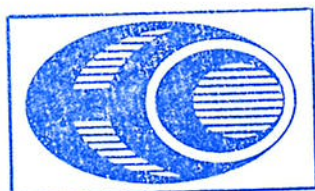
PARAMETER**	TEST METHOD	RESULT <sup>/2</sup>	STD <sup>/1</sup>	UNIT
Propylene Oxide	NIOSH 1612/GC-FID	ND	240	mg/m <sup>3</sup>
		ND	100	ppm

**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.....

(Miss Thanatporn Klinsoon)

01/06/2024

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



Request No. LA67-R0306

Report No. R6703-0101

## 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. : 02344  
 DETERMINATION METHOD : ISO 11202:2010 MEASURING DATE : 29/02/2024  
 INSTRUMENT : Integrated Sound Level Meter ; RECEIVED DATE : 01/03/2024  
 S/N 00322756 : Class 2 REPORTED DATE : 04/03/2024

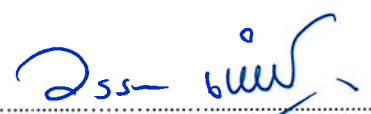
MEASURING TIME	RESULT		UNIT
	$L_{eq}$ 1 hr.	$L_{max}$	
08:00-09:00	83.4	86.5	dB(A)
09:00-10:00	83.7	86.2	dB(A)
10:00-11:00	83.4	86.0	dB(A)
11:00-12:00	83.4	86.0	dB(A)
12:00-13:00	83.3	85.9	dB(A)
13:00-14:00	83.3	85.5	dB(A)
14:00-15:00	83.4	85.9	dB(A)
15:00-16:00	83.1	100.4	dB(A)
16:00-17:00	83.8	86.5	dB(A)
17:00-18:00	84.0	86.3	dB(A)
18:00-19:00	83.9	86.6	dB(A)
19:00-20:00	84.0	88.3	dB(A)
$L_{eq}$ 12 hr.	83.6	—	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. Pornnapa Phongphet



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 

(MRS. WANPEN LHAOCHINDAWAT)

04/03/2024

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

Request No. LA67-R0306

Report No. R6702-0102

## 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. : 02345  
DETERMINATION METHOD : ISO 11202:2010 MEASURING DATE : 29/02/2024  
INSTRUMENT : Integrated Sound Level Meter ; RECEIVED DATE : 01/03/2024  
S/N 00322750 : Class 2 REPORTED DATE : 04/03/2024

MEASURING TIME	RESULT		UNIT
	$L_{eq}$ 1 hr.	$L_{max}$	
08:00-09:00	83.7	88.4	dB(A)
09:00-10:00	83.6	84.5	dB(A)
10:00-11:00	83.6	84.5	dB(A)
11:00-12:00	83.6	84.5	dB(A)
12:00-13:00	83.6	84.5	dB(A)
13:00-14:00	83.5	84.3	dB(A)
14:00-15:00	83.6	84.4	dB(A)
15:00-16:00	83.5	84.3	dB(A)
16:00-17:00	83.9	86.5	dB(A)
17:00-18:00	83.8	86.5	dB(A)
18:00-19:00	83.9	86.6	dB(A)
19:00-20:00	83.4	84.2	dB(A)
$L_{eq}$ 12 hr.	83.6	—	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. Pornnapha Phongphet



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(MRS. WANPEN LHAOCHINDAWAT)

04/03/2024

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

Request No. LA67-R0306

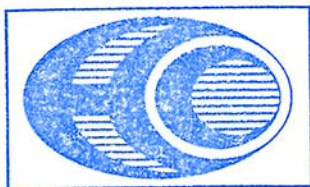
Report No. R6703-0094

## 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 โซติมิณี ID 26009931)  
MEASURING DATE : 29/02/2024 SAMPLE NO. : 02337  
RECEIVED DATE : 01/03/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1499 REPORTED DATE : 04/03/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	82.7	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	95.4	115 <sup>/3</sup>	dB(A)
12 Hour dose	88.20	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. Pornnapha Phongphet)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

04/03/2024

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

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Request No. LA67-R0311

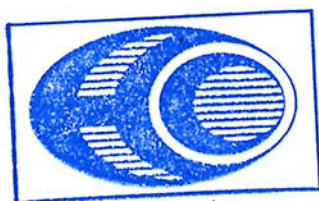
Report No. R6703-0123

## 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) (จุดตัดเทพ รัตนโสภา ID 26008180)  
 MEASURING DATE : 04/03/2024 SAMPLE NO. : 02367  
 RECEIVED DATE : 04/03/2024 SAMPLING TIME : 07:00-19:00  
 SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1365 REPORTED DATE : 08/03/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	53.2	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	82.6	115 <sup>/3</sup>	dB(A)
12 Hour dose	0.10	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	55.0	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>/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.....

(MRS. WANPEN LHAOCHINDAWAT)

08/03/2024

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

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WITHOUT THE WRITTEN APPROVAL LABORATORY



Request No. LA67-R0311

Report No. R6703-0124

## 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) (ศูนย์พิกุล วิจัย ID 26008179)  
 MEASURING DATE : 04/03/2024 SAMPLE NO. : 02368  
 RECEIVED DATE : 04/03/2024 SAMPLING TIME : 07:00-19:00  
 SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1497 REPORTED DATE : 08/03/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	78.9	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	93.2	115 <sup>/3</sup>	dB(A)
12 Hour dose	37.00	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	80.7	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.....

(MRS. WANPEN LHAOCHINDAWAT)

08/03/2024

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Request No. LA67-R0311

Report No. R6703-0125

## 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) (จุดเจริญพงษ์ เกษ ใส ID 26008178)  
MEASURING DATE : 04/03/2024 SAMPLE NO. : 02369  
RECEIVED DATE : 04/03/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1498 REPORTED DATE : 08/03/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	81.5	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	93.6	115 <sup>/3</sup>	dB(A)
12 Hour dose	67.00	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	83.3	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.....

(MRS. WANPEN LHAOCHINDAWAT)

08/03/2024

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Request No. LA67-R0311

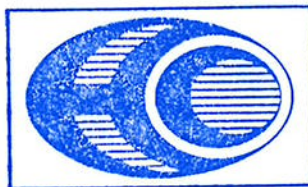
Report No. R6703-0126

## 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 : 04/03/2024 SAMPLE NO. : 02370  
RECEIVED DATE : 04/03/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1499 REPORTED DATE : 08/03/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	68.0	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	85.4	115 <sup>/3</sup>	dB(A)
12 Hour dose	3.00	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	69.8	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. Savita Kittinoavarat)



Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

08/03/2024

REPORTED TEST RESULT TO SUBMITTED SAMPLES ONLY

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Request No. LA67-R0306

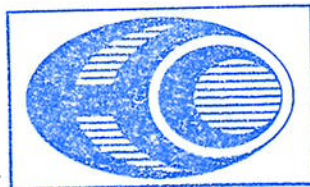
Report No. R6703-0092

## 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) (จุดกึ่งกลาง นุ่มนึ่ง ID 26008019)  
MEASURING DATE : 29/02/2024 SAMPLE NO. : 02335  
RECEIVED DATE : 01/03/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1497 REPORTED DATE : 04/03/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	56.2	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	83.4	115 <sup>/3</sup>	dB(A)
12 Hour dose	0.20	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	58.0	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>/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. Pornnapa Phongphet)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

04/03/2024

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Request No. LA67-R0306

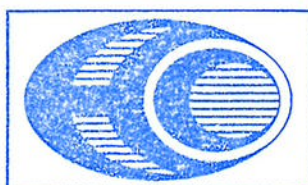
Report No. R6703-0093

## 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) (จุดพวงเวียนรินทร์ ดิฉันา ID 26008175)  
MEASURING DATE : 29/02/2024 SAMPLE NO. : 02336  
RECEIVED DATE : 01/03/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1498 REPORTED DATE : 04/03/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	73.2	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	92.5	115 <sup>/3</sup>	dB(A)
12 Hour dose	9.80	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	74.9	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>/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. Pornnapa Phongphet)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

04/03/2024

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Request No. LA67-R0306

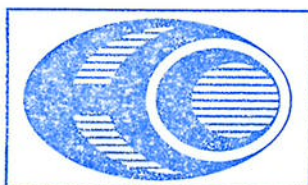
Report No. R6703-0095

## 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) (คุณวีระวร อรรถสังข์ ID 26008182)  
MEASURING DATE : 29/02/2024 SAMPLE NO. : 02338  
RECEIVED DATE : 01/03/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1500 REPORTED DATE : 04/03/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	82.6	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	102.7	115 <sup>/3</sup>	dB(A)
12 Hour dose	85.40	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	84.3	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. Pornnapa Phongphet)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

04/03/2024

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Request No. LA67-R0306

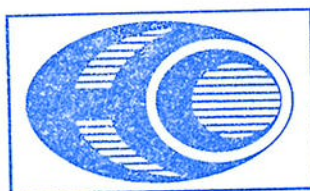
Report No. R6703-0091

## 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 : 29/02/2024 SAMPLE NO. : 02334  
RECEIVED DATE : 01/03/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1365 REPORTED DATE : 04/03/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	79.5	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	99.6	115 <sup>/3</sup>	dB(A)
12 Hour dose	42.10	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	81.2	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>/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. Pornnapa Phongphet)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

04/03/2024

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Request No. LA67-R06126

Report No. R6706-4803

## 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) (คุณอรรถโกวิท สิงห์โตทอง ID 26008184)  
 MEASURING DATE : 20/06/2024 SAMPLE NO. : 20289  
 RECEIVED DATE : 20/06/2024 SAMPLING TIME : 07:00-19:00  
 SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1498 REPORTED DATE : 03/07/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	78.3	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	101.7	115 <sup>/3</sup>	dB(A)
12 Hour dose	31.73	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	80.0	85 <sup>/1</sup>	dB(A)

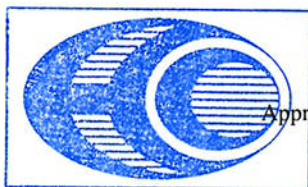
**REMARK :**

<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)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

03/07/2024

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Request No. LA67-R0306

Report No. R6703-0100

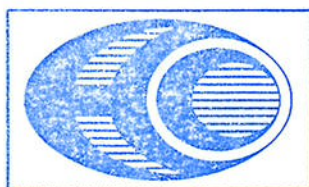
## TEST REPORT

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) (จุดพิชัย ศรีชัย ID 26008018)  
MEASURING DATE : 01/03/2024 SAMPLE NO. : 02343  
RECEIVED DATE : 01/03/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1500 REPORTED DATE : 04/03/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	67.6	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	92.8	115 <sup>/3</sup>	dB(A)
12 Hour dose	2.70	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	69.3	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. Pornnapa Phongphet)



Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

04/03/2024

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Request No. LA67-R0306

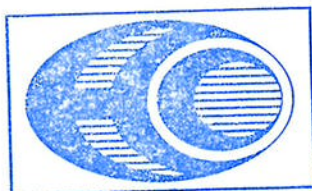
Report No. R6703-0096

## 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 : 01/03/2024 SAMPLE NO. : 02339  
RECEIVED DATE : 01/03/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1365 REPORTED DATE : 04/03/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	67.7	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	92.4	115 <sup>/3</sup>	dB(A)
12 Hour dose	2.80	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	69.5	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. Pornnapha Phongphet)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

04/03/2024

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Request No. LA67-R0306

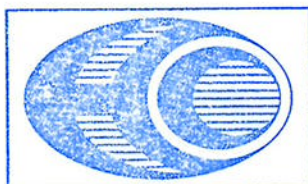
Report No. R6703-0099

## 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) (คุณสมบัติ วิ่งคละ ID 26008174)  
MEASURING DATE : 01/03/2024 SAMPLE NO. : 02342  
RECEIVED DATE : 01/03/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1499 REPORTED DATE : 04/03/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	73.1	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	93.4	115 <sup>/3</sup>	dB(A)
12 Hour dose	9.70	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	74.9	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>/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. Pornnapa Phongphet)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

04/03/2024

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Request No. LA67-R0306

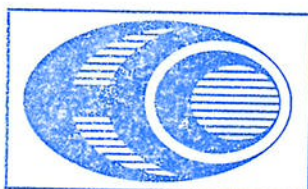
Report No. R6703-0097

## 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 26008172)  
MEASURING DATE : 01/03/2024 SAMPLE NO. : 02340  
RECEIVED DATE : 01/03/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1497 REPORTED DATE : 04/03/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	73.9	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	92.7	115 <sup>/3</sup>	dB(A)
12 Hour dose	11.60	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	75.6	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. Pornnapa Phongphet)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

04/03/2024

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Request No. LA67-R0306

Report No. R6703-0098

## 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 เขียดยัด ID 26008176)  
MEASURING DATE : 01/03/2024 SAMPLE NO. : 02341  
RECEIVED DATE : 01/03/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1498 REPORTED DATE : 04/03/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	71.1	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	86.4	115 <sup>/3</sup>	dB(A)
12 Hour dose	6.10	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	72.9	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>/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. Pornnapa Phongphet)



Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

04/03/2024

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Request No. LA67-R04104

Report No. R6704-4587

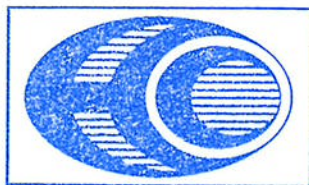
## TEST REPORT

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) (คุณสมบัติ ค่าภาพงษ์ ID 26008172)  
MEASURING DATE : 22/04/2024 SAMPLE NO. : 10552  
RECEIVED DATE : 22/04/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1499 REPORTED DATE : 30/04/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	71.2	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	92.6	115 <sup>/3</sup>	dB(A)
12 Hour dose	6.20	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	72.9	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. Jutarat Suksaget)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

30/04/2024

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Request No. LA67-R04104

Report No. R6704-4588

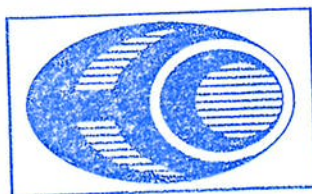
## TEST REPORT

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 ประเสริฐดำ ID 26008171)  
MEASURING DATE : 22/04/2024 SAMPLE NO. : 10553  
RECEIVED DATE : 22/04/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1497 REPORTED DATE : 30/04/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	77.8	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	95.1	115 <sup>/3</sup>	dB(A)
12 Hour dose	28.70	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	79.6	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. Jutarat Suksaget)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

30/04/2024

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Request No. LA67-R04104

Report No. R6704-4589

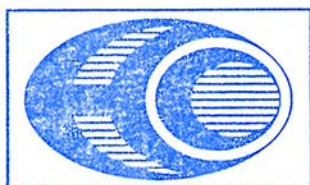
## TEST REPORT

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 : 22/04/2024 SAMPLE NO. : 10554  
RECEIVED DATE : 22/04/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1500 REPORTED DATE : 30/04/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	66.5	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	87.2	115 <sup>/3</sup>	dB(A)
12 Hour dose	2.10	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	68.2	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. Jutarat Suksaget)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

30/04/2024

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Request No. LA67-R04104

Report No. R6704-4590

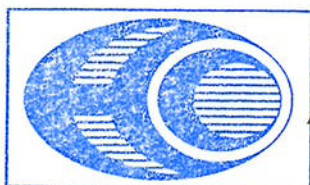
## TEST REPORT

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) (คุณภาพวัณณ์ อินนังแท่น ID 26008189)  
 MEASURING DATE : 22/04/2024 SAMPLE NO. : 10555  
 RECEIVED DATE : 22/04/2024 SAMPLING TIME : 07:00-19:00  
 SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1498 REPORTED DATE : 30/04/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	64.0	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	89.3	115 <sup>/3</sup>	dB(A)
12 Hour dose	1.20	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	65.8	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. Jutarat Suksaget)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

30/04/2024

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Request No. LA67-R05124

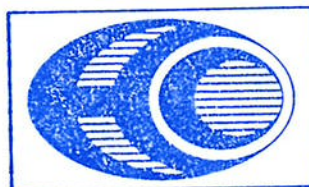
Report No. R6705-3576

## 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) (จุดตรวจวัด แสงกระจ่าย ID 26008173)  
MEASURING DATE : 20/05/2024 SAMPLE NO. : 14114  
RECEIVED DATE : 20/05/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB0640 REPORTED DATE : 30/05/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	73.7	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	93.2	115 <sup>/3</sup>	dB(A)
12 Hour dose	11.00	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	75.4	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. Savita Kittinoavarat)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

30/05/2024

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