



บริษัท ซีคอต จำกัด  
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพฯ 10800  
239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND  
TEL : +66(0) 2959-3600 FAX : +66(0) 2959-3535 E-mail : envserv@secot.co.th

STACK EMISSION ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd. (Branch 16)	REFERENCE NO.	: 224112-Stack_NOx/B-910
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING DATE	: 08/02/2024
REPORT DATE	: 16/02/2024	SAMPLE CONDITION	: Good
STACK LOCATION	: B-910 stack	SITE OPERATOR	: Mr. Song Hengchwankul
SOURCE DESCRIPTION	: Combustion	FUEL TYPE	: Natural Gas
STACK DESCRIPTION			

Height	: 23.0	m	Gas Velocity	: 5.4	m/s
Diameter	: 0.8	m	Flow rate*	: 90.2	Ncu.m./min
Temperature	: 172.7	°C	Excess Oxygen	: 4.6	%
Moisture content	: 16.49	%			

PARAMETER	UNIT	RESULT*		STANDARD	REFERENCE
		4.6%O <sub>2</sub>	7%O <sub>2</sub>	7%O <sub>2</sub>	METHOD
Oxides of Nitrogen (NO <sub>x</sub> )	mg/Ncu.m.	42.32	36.16	376 <sup>1/</sup> (85.0 <sup>2/</sup> )	US EPA Method 7E
	ppm	22.49	19.22	200 <sup>1/</sup> (45.2 <sup>2/</sup> )	
	g/s	0.064	-	0.068 <sup>2/</sup>	

(Miss Katesarin Vorradetwittaya)

Environmental Scientist

(Miss Preeda Somjai)

Technical Management Team

**Remark** : 1. Reported analysis refers to submitted sample only.

2. This report shall not be reproduced, except in full, without official approval.

3. \* At standard pressure of 760 mm.Hg and temperature of 25 °C, dry basis.

4. <sup>1/</sup> Notification of Ministry of Industry B.E.2549 (2006) and Notification of Natural Resources and Environment B.E.2549 (2006)

5. <sup>2/</sup> The value was assigned in EIA report.

Request No. LA67-R0250

Report No. R6702-0883 - R6702-0889

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE POINT : บ้านหนองแฟบ  
PARAMETER\* : Nitrogen Dioxide  
DETERMINATION METHOD : Chemiluminescence  
INSTRUMENT : API Model T200 S/N 6758

SAMPLE NO. : 01703-01709  
SAMPLING DATE : 08-15/02/2024  
RECEIVED DATE : 15/02/2024  
REPORTED DATE : 21/02/2024

TIME / DATE	08-09/02/2024	09-10/02/2024	10-11/02/2024	UNIT
09:00 - 10:00 <sup>2</sup>	0.008	0.005	0.008	ppm
10:00 - 11:00	0.010	0.006	0.011	ppm
11:00 - 12:00	0.009	0.007	0.010	ppm
12:00 - 13:00	0.012	0.011	0.011	ppm
13:00 - 14:00	0.011	0.008	0.011	ppm
14:00 - 15:00	0.009	0.006	0.014	ppm
15:00 - 16:00	0.010	0.007	0.020	ppm
16:00 - 17:00	0.008	0.009	0.014	ppm
17:00 - 18:00	0.007	0.008	0.012	ppm
18:00 - 19:00	0.006	0.008	0.011	ppm
19:00 - 20:00	0.006	0.006	0.006	ppm
20:00 - 21:00	0.013	0.009	0.008	ppm
21:00 - 22:00	0.005	0.006	0.005	ppm
22:00 - 23:00	0.005	0.007	0.005	ppm
23:00 - 00:00	0.004	0.005	0.022	ppm
00:00 - 01:00	0.004	0.005	0.015	ppm
01:00 - 02:00	0.004	0.006	0.012	ppm
02:00 - 03:00	0.004	0.006	0.009	ppm
03:00 - 04:00	0.005	0.005	0.023	ppm
04:00 - 05:00	0.006	0.007	0.026	ppm
05:00 - 06:00	0.004	0.006	0.014	ppm
06:00 - 07:00	0.004	0.007	0.012	ppm
07:00 - 08:00	0.007	0.008	0.013	ppm
08:00 - 09:00	0.007	0.009	0.013	ppm
Maximum 1 hr.	0.013	0.011	0.026	ppm
Average 24 hr.	0.007	0.007	0.013	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)

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-R0250

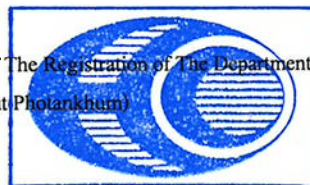
Report No. R6702-0883 - R6702-0889

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE POINT : บ้านหนองแฟบ  
PARAMETER\* : Nitrogen Dioxide  
DETERMINATION METHOD : Chemiluminescence  
INSTRUMENT : API Model T200 S/N 6758

SAMPLE NO. : 01703-01709  
SAMPLING DATE : 08-15/02/2024  
RECEIVED DATE : 15/02/2024  
REPORTED DATE : 21/02/2024

TIME / DATE	11-12/02/2024	12-13/02/2024	13-14/02/2024	UNIT
09:00 - 10:00 <sup>2</sup>	0.015	0.022	0.025	ppm
10:00 - 11:00	0.016	0.026	0.029	ppm
11:00 - 12:00	0.019	0.027	0.033	ppm
12:00 - 13:00	0.017	0.029	0.028	ppm
13:00 - 14:00	0.018	0.031	0.022	ppm
14:00 - 15:00	0.014	0.028	0.021	ppm
15:00 - 16:00	0.013	0.021	0.023	ppm
16:00 - 17:00	0.009	0.016	0.021	ppm
17:00 - 18:00	0.009	0.021	0.019	ppm
18:00 - 19:00	0.011	0.020	0.018	ppm
19:00 - 20:00	0.012	0.024	0.020	ppm
20:00 - 21:00	0.011	0.022	0.021	ppm
21:00 - 22:00	0.010	0.030	0.023	ppm
22:00 - 23:00	0.011	0.027	0.019	ppm
23:00 - 00:00	0.012	0.025	0.018	ppm
00:00 - 01:00	0.012	0.021	0.024	ppm
01:00 - 02:00	0.011	0.017	0.023	ppm
02:00 - 03:00	0.014	0.025	0.018	ppm
03:00 - 04:00	0.013	0.029	0.017	ppm
04:00 - 05:00	0.012	0.023	0.018	ppm
05:00 - 06:00	0.013	0.017	0.020	ppm
06:00 - 07:00	0.019	0.016	0.020	ppm
07:00 - 08:00	0.024	0.019	0.028	ppm
08:00 - 09:00	0.020	0.022	0.030	ppm
Maximum 1 hr.	0.024	0.031	0.033	ppm
Average 24 hr.	0.014	0.023	0.022	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)

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-R0250

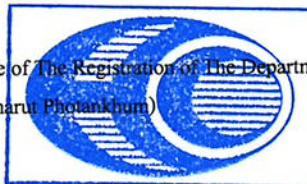
Report No. R6702-0883 - R6702-0889

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 16  
 ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
 SAMPLE SOURCE : EOEG Plant  
 SAMPLE POINT : บ้านหนองแฟบ  
 PARAMETER\* : Nitrogen Dioxide  
 DETERMINATION METHOD : Chemiluminescence  
 INSTRUMENT : API Model T200 S/N 6758

SAMPLE NO. : 01703-01709  
 SAMPLING DATE : 08-15/02/2024  
 RECEIVED DATE : 15/02/2024  
 REPORTED DATE : 21/02/2024

TIME / DATE	14-15/02/2024	UNIT
09:00 - 10:00 <sup>2</sup>	0.032	ppm
10:00 - 11:00	0.018	ppm
11:00 - 12:00	0.018	ppm
12:00 - 13:00	0.021	ppm
13:00 - 14:00	0.025	ppm
14:00 - 15:00	0.018	ppm
15:00 - 16:00	0.020	ppm
16:00 - 17:00	0.018	ppm
17:00 - 18:00	0.014	ppm
18:00 - 19:00	0.012	ppm
19:00 - 20:00	0.011	ppm
20:00 - 21:00	0.008	ppm
21:00 - 22:00	0.008	ppm
22:00 - 23:00	0.007	ppm
23:00 - 00:00	0.007	ppm
00:00 - 01:00	0.007	ppm
01:00 - 02:00	0.006	ppm
02:00 - 03:00	0.007	ppm
03:00 - 04:00	0.008	ppm
04:00 - 05:00	0.008	ppm
05:00 - 06:00	0.008	ppm
06:00 - 07:00	0.007	ppm
07:00 - 08:00	0.013	ppm
08:00 - 09:00	0.018	ppm
Maximum 1 hr.	0.032	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)

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-R0250

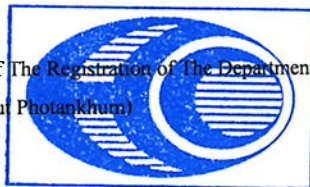
Report No. R6702-0869 - R6702-0875

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE POINT : วัดมาบชูด  
PARAMETER\* : Nitrogen Dioxide  
DETERMINATION METHOD : Chemiluminescence  
INSTRUMENT : API Model T200 S/N 2004

SAMPLE NO. : 01689-01695  
SAMPLING DATE : 08-15/02/2024  
RECEIVED DATE : 15/02/2024  
REPORTED DATE : 21/02/2024

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

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-R0250

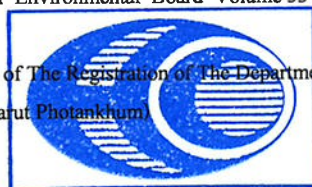
Report No. R6702-0869 - R6702-0875

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 16  
 ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
 SAMPLE SOURCE : EOEG Plant  
 SAMPLE POINT : วัดมาบชอุุด  
 PARAMETER\* : Nitrogen Dioxide  
 DETERMINATION METHOD : Chemiluminescence  
 INSTRUMENT : API Model T200 S/N 2004

SAMPLE NO. : 01689-01695  
 SAMPLING DATE : 08-15/02/2024  
 RECEIVED DATE : 15/02/2024  
 REPORTED DATE : 21/02/2024

TIME / DATE	11-12/02/2024	12-13/02/2024	13-14/02/2024	UNIT
09:00 - 10:00 <sup>2</sup>	0.006	0.012	0.016	ppm
10:00 - 11:00	0.006	0.010	0.011	ppm
11:00 - 12:00	0.006	0.008	0.011	ppm
12:00 - 13:00	0.006	0.007	0.008	ppm
13:00 - 14:00	0.005	0.006	0.012	ppm
14:00 - 15:00	0.005	0.006	0.019	ppm
15:00 - 16:00	0.017	0.006	0.014	ppm
16:00 - 17:00	0.009	0.010	0.014	ppm
17:00 - 18:00	0.007	0.009	0.012	ppm
18:00 - 19:00	0.007	0.009	0.009	ppm
19:00 - 20:00	0.007	0.010	0.010	ppm
20:00 - 21:00	0.009	0.015	0.016	ppm
21:00 - 22:00	0.010	0.025	0.025	ppm
22:00 - 23:00	0.010	0.031	0.026	ppm
23:00 - 00:00	0.012	0.025	0.021	ppm
00:00 - 01:00	0.014	0.019	0.025	ppm
01:00 - 02:00	0.009	0.012	0.023	ppm
02:00 - 03:00	0.008	0.011	0.023	ppm
03:00 - 04:00	0.008	0.011	0.014	ppm
04:00 - 05:00	0.007	0.010	0.016	ppm
05:00 - 06:00	0.007	0.011	0.017	ppm
06:00 - 07:00	0.008	0.012	0.015	ppm
07:00 - 08:00	0.009	0.017	0.018	ppm
08:00 - 09:00	0.014	0.018	0.028	ppm
Maximum 1 hr.	0.017	0.031	0.028	ppm
Average 24 hr.	0.008	0.013	0.017	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)

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-R0250

Report No. R6702-0869 - R6702-0875

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 16  
 ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
 Amphur Muang Rayong, Rayong 21150  
 SAMPLE SOURCE : EOEG Plant  
 SAMPLE POINT : วัดมาบชลด  
 PARAMETER\* : Nitrogen Dioxide  
 DETERMINATION METHOD : Chemiluminescence  
 INSTRUMENT : API Model T200 S/N 2004

SAMPLE NO. : 01689-01695  
 SAMPLING DATE : 08-15/02/2024  
 RECEIVED DATE : 15/02/2024  
 REPORTED DATE : 21/02/2024

TIME / DATE	14-15/02/2024	UNIT
09:00 - 10:00 <sup>2</sup>	0.031	ppm
10:00 - 11:00	0.022	ppm
11:00 - 12:00	0.013	ppm
12:00 - 13:00	0.013	ppm
13:00 - 14:00	0.024	ppm
14:00 - 15:00	0.024	ppm
15:00 - 16:00	0.025	ppm
16:00 - 17:00	0.017	ppm
17:00 - 18:00	0.011	ppm
18:00 - 19:00	0.009	ppm
19:00 - 20:00	0.009	ppm
20:00 - 21:00	0.008	ppm
21:00 - 22:00	0.006	ppm
22:00 - 23:00	0.008	ppm
23:00 - 00:00	0.010	ppm
00:00 - 01:00	0.010	ppm
01:00 - 02:00	0.010	ppm
02:00 - 03:00	0.014	ppm
03:00 - 04:00	0.008	ppm
04:00 - 05:00	0.006	ppm
05:00 - 06:00	0.009	ppm
06:00 - 07:00	0.014	ppm
07:00 - 08:00	0.018	ppm
08:00 - 09:00	0.022	ppm
Maximum 1 hr.	0.031	ppm
Average 24 hr.	0.014	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)

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-R0250

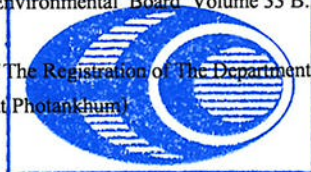
Report No. R6702-0876 - R6702-0882

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE POINT : สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอ ตะวันออก (มาบตาพุด)  
PARAMETER\* : Nitrogen Dioxide  
DETERMINATION METHOD : Chemiluminescence  
INSTRUMENT : Environnement SA. Model AC32e S/N 693

SAMPLE NO. : 01696-01702  
SAMPLING DATE : 08-15/02/2024  
RECEIVED DATE : 15/02/2024  
REPORTED DATE : 21/02/2024

TIME / DATE	08-09/02/2024	09-10/02/2024	10-11/02/2024	UNIT
09:00 - 10:00 <sup>1/2</sup>	0.013	0.017	0.019	ppm
10:00 - 11:00	0.011	0.018	0.016	ppm
11:00 - 12:00	0.014	0.018	0.013	ppm
12:00 - 13:00	0.012	0.016	0.016	ppm
13:00 - 14:00	0.016	0.015	0.015	ppm
14:00 - 15:00	0.017	0.010	0.018	ppm
15:00 - 16:00	0.022	0.012	0.015	ppm
16:00 - 17:00	0.015	0.012	0.019	ppm
17:00 - 18:00	0.012	0.014	0.020	ppm
18:00 - 19:00	0.013	0.013	0.025	ppm
19:00 - 20:00	0.007	0.012	0.018	ppm
20:00 - 21:00	0.008	0.015	0.015	ppm
21:00 - 22:00	0.008	0.017	0.016	ppm
22:00 - 23:00	0.012	0.014	0.010	ppm
23:00 - 00:00	0.013	0.013	0.011	ppm
00:00 - 01:00	0.011	0.010	0.012	ppm
01:00 - 02:00	0.012	0.011	0.009	ppm
02:00 - 03:00	0.011	0.010	0.009	ppm
03:00 - 04:00	0.015	0.010	0.010	ppm
04:00 - 05:00	0.012	0.011	0.015	ppm
05:00 - 06:00	0.012	0.012	0.015	ppm
06:00 - 07:00	0.016	0.012	0.016	ppm
07:00 - 08:00	0.015	0.018	0.016	ppm
08:00 - 09:00	0.015	0.017	0.014	ppm
Maximum 1 hr.	0.022	0.018	0.025	ppm
Average 24 hr.	0.013	0.014	0.015	ppm
Standard (1 hr.) <sup>1/1</sup>	0.17	0.17	0.17	ppm

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

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-R0250

Report No. R6702-0876 - R6702-0882

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 16  
 ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
 SAMPLE SOURCE : EOEG Plant  
 SAMPLE POINT : สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอ ตะวันออก (มาบตาพุด)  
 PARAMETER\* : Nitrogen Dioxide SAMPLE NO. : 01696-01702  
 DETERMINATION METHOD : Chemiluminescence SAMPLING DATE : 08-15/02/2024  
 INSTRUMENT : Environnement SA. Model AC32e S/N 693 RECEIVED DATE : 15/02/2024  
 REPORTED DATE : 21/02/2024

TIME / DATE	11-12/02/2024	12-13/02/2024	13-14/02/2024	UNIT
09:00 - 10:00 <sup>/2</sup>	0.013	0.008	0.008	ppm
10:00 - 11:00	0.008	0.007	0.008	ppm
11:00 - 12:00	0.009	0.005	0.005	ppm
12:00 - 13:00	0.010	0.009	0.008	ppm
13:00 - 14:00	0.012	0.010	0.009	ppm
14:00 - 15:00	0.011	0.008	0.006	ppm
15:00 - 16:00	0.010	0.009	0.007	ppm
16:00 - 17:00	0.012	0.006	0.011	ppm
17:00 - 18:00	0.015	0.011	0.011	ppm
18:00 - 19:00	0.011	0.006	0.007	ppm
19:00 - 20:00	0.010	0.013	0.014	ppm
20:00 - 21:00	0.008	0.010	0.010	ppm
21:00 - 22:00	0.009	0.019	0.013	ppm
22:00 - 23:00	0.010	0.022	0.007	ppm
23:00 - 00:00	0.007	0.020	0.011	ppm
00:00 - 01:00	0.009	0.009	0.017	ppm
01:00 - 02:00	0.009	0.006	0.014	ppm
02:00 - 03:00	0.010	0.008	0.011	ppm
03:00 - 04:00	0.013	0.005	0.014	ppm
04:00 - 05:00	0.014	0.005	0.013	ppm
05:00 - 06:00	0.012	0.008	0.016	ppm
06:00 - 07:00	0.013	0.008	0.013	ppm
07:00 - 08:00	0.010	0.008	0.017	ppm
08:00 - 09:00	0.010	0.006	0.018	ppm
Maximum 1 hr.	0.015	0.022	0.018	ppm
Average 24 hr.	0.011	0.009	0.011	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)

21/02/2024

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



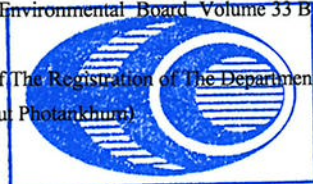
Request No. LA67-R0250

Report No. R6702-0876 - R6702-0882

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 16  
 ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
 Amphur Muang Rayong, Rayong 21150  
 SAMPLE SOURCE : EOEG Plant  
 SAMPLE POINT : สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอ ตะวันออก (มาบตาพุด)  
 PARAMETER\* : Nitrogen Dioxide SAMPLE NO. : 01696-01702  
 DETERMINATION METHOD : Chemiluminescence SAMPLING DATE : 08-15/02/2024  
 INSTRUMENT : Environnement SA. Model AC32e S/N 693 RECEIVED DATE : 15/02/2024  
 REPORTED DATE : 21/02/2024

TIME / DATE	14-15/02/2024	UNIT
09:00 - 10:00 <sup>1/2</sup>	0.013	ppm
10:00 - 11:00	0.016	ppm
11:00 - 12:00	0.013	ppm
12:00 - 13:00	0.014	ppm
13:00 - 14:00	0.008	ppm
14:00 - 15:00	0.009	ppm
15:00 - 16:00	0.009	ppm
16:00 - 17:00	0.013	ppm
17:00 - 18:00	0.014	ppm
18:00 - 19:00	0.012	ppm
19:00 - 20:00	0.013	ppm
20:00 - 21:00	0.012	ppm
21:00 - 22:00	0.016	ppm
22:00 - 23:00	0.013	ppm
23:00 - 00:00	0.013	ppm
00:00 - 01:00	0.017	ppm
01:00 - 02:00	0.016	ppm
02:00 - 03:00	0.006	ppm
03:00 - 04:00	0.008	ppm
04:00 - 05:00	0.019	ppm
05:00 - 06:00	0.018	ppm
06:00 - 07:00	0.011	ppm
07:00 - 08:00	0.009	ppm
08:00 - 09:00	0.012	ppm
Maximum 1 hr.	0.019	ppm
Average 24 hr.	0.013	ppm
Standard (1 hr.) <sup>1/1</sup>	0.17	ppm

REMARK : <sup>1/1</sup> Notification of The National Environmental Board Volume 35 B.E. 2552 (2009)<sup>1/2</sup> Start Time\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
(Measurement By Mr. Tummaru Photankhurn)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MS. THANATPORN KLINSOPON)

21/02/2024

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

## Wind Speed & Wind Direction

Request No. LA67-R0250

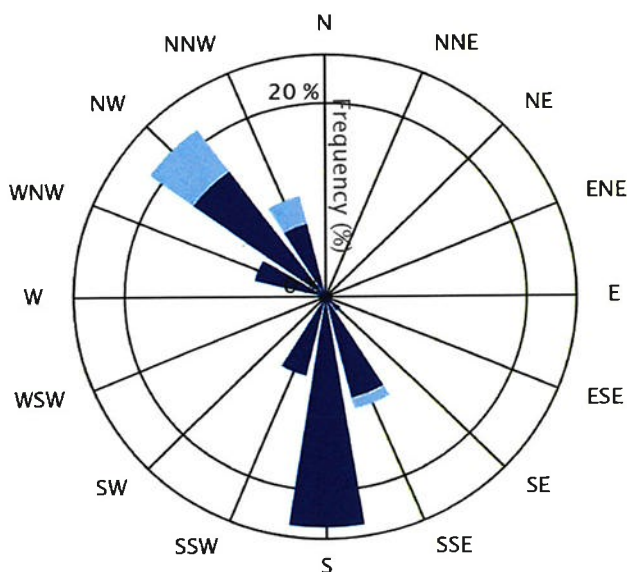
PTT Global Chemical Public Company Limited Branch 16 (EOEG Plant)

Sample No. 01710

Sampling Source : สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอ ตะวันออก (มาบตาพุด)

Sampling Date : February 8-15, 2024

Calm 11.9 %



0.4-1.9 2.0-3.9 4.0-5.9 6.0-7.9 8.0-9.9 > 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	1.2	0.0	0.0	0.0	0.0	0.0	1.2
NNE	0.6	0.0	0.0	0.0	0.0	0.0	0.6
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.6	0.0	0.0	0.0	0.0	0.0	0.6
SE	1.8	0.0	0.0	0.0	0.0	0.0	1.8
SSE	10.7	1.2	0.0	0.0	0.0	0.0	11.9
S	23.8	0.0	0.0	0.0	0.0	0.0	23.8
SSW	8.3	0.0	0.0	0.0	0.0	0.0	8.3
SW	0.6	0.0	0.0	0.0	0.0	0.0	0.6
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	7.1	0.0	0.0	0.0	0.0	0.0	7.1
NW	16.1	5.4	0.0	0.0	0.0	0.0	21.5
NNW	7.7	3.0	0.0	0.0	0.0	0.0	10.7
Calm	11.9						

## Wind Speed &amp; Wind Direction

Request No. LA67-R0250

PTT Global Chemical Public Company Limited Branch 16 (EOEG Plant)

Sample No. 01710

Sampling Source : สำนักงานนิคมอุตสาหกรรมดับบลิวเอชเอ ตะวันออก (มาบตาพุด)

Sampling Date : February 8-15, 2024

Time	February 8-9, 2024		February 9-10, 2024		February 10-11, 2024		February 11-12, 2024		February 12-13, 2024		February 13-14, 2024		February 14-15, 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
09:00-10:00	0.9	NW	0.9	SSE	0.9	S	2.7	NW	2.2	NW	2.7	NW	0.4	NW
10:00-11:00	0.0	-	0.9	SSE	0.9	SW	1.8	NW	1.8	NW	2.2	NW	0.9	NNW
11:00-12:00	0.4	SSW	0.9	S	0.9	S	0.9	NW	1.8	NW	1.3	NW	0.4	S
12:00-13:00	1.3	SSW	1.3	SSW	0.9	SSE	1.3	NW	1.3	NW	0.9	NW	0.4	NW
13:00-14:00	1.3	SSW	0.9	SSW	1.3	N	0.9	NW	1.3	NW	1.3	SSE	0.9	SE
14:00-15:00	1.3	SSW	1.3	S	1.3	NNW	0.9	WNW	1.3	NW	0.9	S	0.9	SSE
15:00-16:00	1.3	SSW	1.3	SSW	0.9	NNW	0.9	SE	0.9	WNW	2.2	SSE	0.9	SSE
16:00-17:00	1.3	SSW	2.2	SSE	0.9	WNW	1.3	SSE	1.3	S	1.8	SSE	0.9	S
17:00-18:00	1.3	S	1.3	SSW	1.3	S	1.3	SSE	1.3	SSE	1.8	S	1.3	S
18:00-19:00	1.3	SSE	1.3	S	1.3	S	1.3	SSE	0.4	WNW	0.9	WNW	0.9	S
19:00-20:00	0.9	SSE	1.3	SSE	0.4	S	0.9	SSE	0.4	WNW	0.4	WNW	0.9	S
20:00-21:00	0.4	SSW	0.9	SSW	0.4	S	0.4	WNW	0.0	-	0.0	-	0.9	S
21:00-22:00	0.9	S	0.9	SSE	0.9	S	0.0	-	0.4	NW	0.0	-	0.9	S
22:00-23:00	0.4	NNE	0.9	S	0.4	S	0.4	NW	0.4	NW	0.0	-	0.4	S
23:00-00:00	0.9	NNW	0.9	S	1.3	WNW	0.4	NNW	0.0	-	0.4	WNW	0.4	S
00:00-01:00	0.9	S	0.9	S	0.4	NNW	0.4	NNW	0.4	NW	0.0	-	0.0	-
01:00-02:00	0.9	S	0.9	S	0.4	NNW	1.3	NW	0.9	WNW	0.0	-	0.0	-
02:00-03:00	0.9	S	0.9	ESE	0.9	N	1.3	NW	1.3	NNW	0.0	-	0.0	-
03:00-04:00	0.9	SSE	0.9	S	1.8	NNW	2.2	NW	0.9	NNW	0.0	-	0.0	-
04:00-05:00	0.4	SSW	0.9	SSW	1.3	NW	2.2	NW	0.9	NW	0.4	NNW	0.4	S
05:00-06:00	0.4	SSE	0.9	S	2.2	NNW	1.8	NW	0.9	NW	0.9	NW	0.0	-
06:00-07:00	0.9	S	0.9	S	2.2	NNW	2.2	NW	0.9	WNW	0.4	NW	0.0	-
07:00-08:00	0.9	S	0.4	SE	2.7	NNW	2.2	NW	1.8	NNW	0.0	-	0.0	-
08:00-09:00	0.9	S	0.9	S	2.7	NNW	2.2	NW	2.2	NNW	0.0	-	0.4	NW

LARO2: Lab Analysis Report Online Export Data.  
Exported Date : July 03, 2024  
Exported By: 26003093

**Sampling Point: EG1-F1801 (Waste Water Effluent)**

Date/Time	Parameter	Chloride as Cl	COD	Formaldehyde	Oil Content	pH data	Temperature	TSS mg/L
	Unit	mg/L	mg O2/L	mg/L	ppm	pH unit	deg.C	mg/L
	Spec: EG1-F1801 : 1	2000 Max	750 Max	1.0 Max	10 Max	5.5-9.0		200 Max
02-ม.ค.-24 09:00 AM		150	103	0.36	-	6.9	21	-
09-ม.ค.-24 09:00 AM		143	125	0.55	-	7	21	-
16-ม.ค.-24 09:00 AM		149	126	0.54	1.5	6.8	20	19
23-ม.ค.-24 09:00 AM		149	122	0.65	3.5	7.3	24	27
30-ม.ค.-24 09:00 AM		148	93	0.39	1.3	7.6	20	15
06-ก.พ.-24 09:00 AM		136	98	0.29	1.7	7.4	23	17
13-ก.พ.-24 09:00 AM		145	119	0.57	0.8	7.2	21	16
20-ก.พ.-24 09:00 AM		146	155	0.26	2.4	6.9	24	18
23-มี.ย.-24 09:00 AM		152	70	<0.2	2.2	7.5	23	18
30-มี.ย.-24 09:00 AM		153	67	0.22	0.5	7.6	23	7
07-พ.ค.-24 09:00 AM		126	52	<0.2	1.1	7.5	22	13
14-พ.ค.-24 09:00 AM		129	46	<0.2	1.6	7.8	21	17
21-พ.ค.-24 09:00 AM		142	49	0.22	1.7	7.8	20	36
28-พ.ค.-24 09:00 AM		132	285	<0.2	1.2	7.7	24	12
04-มิ.ย.-24 09:00 AM		5	80	<0.2	3.2	7.4	23	12
11-มิ.ย.-24 09:00 AM		136	124	0.31	<0.5	7.5	20	27
18-มิ.ย.-24 09:00 AM		133	62	<0.2	0.8	7.6	20	8
25-มิ.ย.-24 09:00 AM		139	55	<0.2	1.2	7.6	23	5



Request No : W6701342

Report No : 6701-1414-1

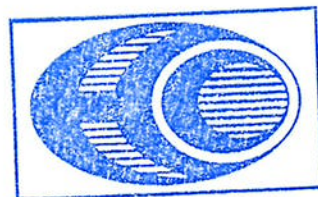
## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9-9/1 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67011079  
Sample Name : น้ำทิ้งของโครงการที่ระบายจาก Waste Water Holding Pit Sampling Date : 03/01/2024  
Sampling By : Customer Sampling Time : --  
Sampling Method : Grab Received Date : 18/01/2024  
Tested Date : 18/01/2024 – 22/01/2024 Reported Date : 14/06/2024

Parameter	Unit	Method	Result
Oil and Grease	mg/L	Partition-Gravimetric Method (SM:5520B)	< 3.0
Total Suspended Solids	mg/L	Dried at 103-105 degree celsius (SM:2540 D)	12

Physical Apperance : 1. Sample : slightly – white,turbid  
2. Container : Normal [ PE 0.5 L, PE 1.0 L , PE 1.8 L, G 1.0 L ]  
Remark : 1. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017  
2. Sampling at UTM 47 P 730914 E 1404772 N

SUPPLEMENT TO TEST REPORT NO. 6701-1414



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....



( Miss Apiradee Chuen-arom )

14/06/2024

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



Request No : W6701342

Report No : 6701-1415-1

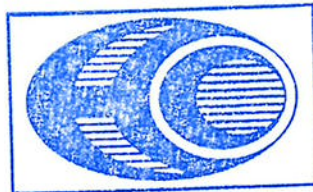
## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9-9/1 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67011080  
Sample Name : น้ำทิ้งของโครงการที่ระบายจาก Waste Water Holding Pit Sampling Date : 10/01/2024  
Sampling By : Customer Sampling Time : --  
Sampling Method : Grab Received Date : 18/01/2024  
Tested Date : 18/01/2024 – 22/01/2024 Reported Date : 14/06/2024

Parameter	Unit	Method	Result
Oil and Grease	mg/L	Partition-Gravimetric Method (SM:5520B)	< 3.0
Total Suspended Solids	mg/L	Dried at 103-105 degree celsius (SM:2540 D)	10

Physical Apperance : 1. Sample : slightly – white,turbid  
2. Container : Normal [ PE 0.5 L, PE 1.0 L , PE 1.8 L, G 1.0 L ]  
Remark : 1. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017  
2. Sampling at UTM 47 P 730914 E 1404772 N

SUPPLEMENT TO TEST REPORT NO. 6701-1415



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....  
( Miss Apiradee Chuen-arom )

14/06/2024

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

Request No : W6701258

Report No : 6701-1182-1

## TEST REPORT

Customer	:	PTT Global Chemical Public Company Limited Branch 16	Sample No.	:	W 67010856
Address	:	9-9/1 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150	Sampling Date	:	12/01/2024
Sampling Source	:	EOEG Plant	Sampling Time	:	--
Sample Name	:	จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสียของนิคม WHA	Received Date	:	13/01/2024
Sampling By	:	Customer	Reported Date	:	14/06/2024
Sampling Method	:	Grab			
Tested Date	:	13/01/2024 – 22/01/2024			

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Biochemical Oxygen Demand	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	25.4	≤ 500
Chemical Oxygen Demand	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	130	≤ 750
Chloride	mg/L as Cl <sub>2</sub>	Argentometric Method (SM:4500-Cl- B)	138	-
Formaldehyde	mg/L	Distillation, Colorimetric Method	< 0.50	≤ 1
Oil and Grease	mg/L	Partition-Gravimetric Method (SM:5520B)	< 3.0	≤ 10
pH (on site)		Electrometric Method	6.9	5.5-9.0
Temperature	°C	Laboratory and Field Method	32	≤ 45
Total Dissolved Solids	mg/L	Dried at 180 degree celsius (SM:2540C)	680	≤ 3,000
Total Suspended Solids	mg/L	Dried at 103-105 degree celsius (SM:2540 D)	10	≤ 200

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

Remark : 1. /1 Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)  
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017  
3. Sampling at UTM 47 P 0730729 E 1404613 N

SUPPLEMENT TO TEST REPORT NO. 6701-1182



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

( Miss Apiradee Chuen-arom )

14 / 06 / 2024

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

Request No : W6702273

Report No : 6702-0833-1

## TEST REPORT

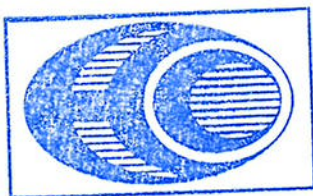
Customer	:	PTT Global Chemical Public Company Limited Branch 16		
Address	:	9-9/1 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150		
Sampling Source	:	EOEG Plant	Sample No.	: W 67020811
Sample Name	:	จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสียของนิคม WHA	Sampling Date	: 08/02/2024
Sampling By	:	Customer	Sampling Time	: --
Sampling Method	:	Grab	Received Date	: 09/02/2024
Tested Date	:	09/02/2024 – 15/02/2024	Reported Date	: 14/06/2024

Parameter	Unit	Method	Result	Standard <sup>1/</sup>
Biochemical Oxygen Demand	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	27.2	≤ 500
Chemical Oxygen Demand	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	110	≤ 750
Chloride	mg/L as Cl <sub>2</sub>	Argentometric Method (SM:4500-Cl- B)	148	-
Formaldehyde	mg/L	Distillation, Colorimetric Method	< 0.50	≤ 1
Oil and Grease	mg/L	Partition-Gravimetric Method (SM:5520B)	< 3.0	≤ 10
pH (on site)		Electrometric Method	6.8	5.5-9.0
Temperature	°C	Laboratory and Field Method (SM:2550B)	32	≤ 45
Total Dissolved Solids	mg/L	Dried at 180 degree celsius (SM:2540C)	744	≤ 3,000
Total Suspended Solids	mg/L	Dried at 103-105 degree celsius (SM:2540 D)	8	≤ 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 Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)  
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017  
3. Sampling at UTM 47 P 0730729 E 1404613 N

SUPPLEMENT TO TEST REPORT NO. 6702-0833



Examined By.....

( Miss Apiradee Chuen-arom)

14 / 06 / 2024

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

Request No : W6704276

Report No : 6704-1200-1

## TEST REPORT

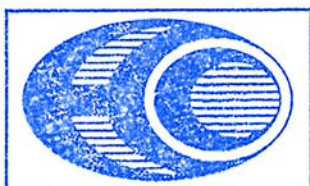
Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9-9/1 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant  
Sample Name : จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสียของนิคม WHA  
Sampling By : Customer  
Sampling Method : Grab  
Tested Date : 10/04/2024-19/04/2024  
Sample No. : W 67040850  
Sampling Date : 09/04/2024  
Sampling Time : 2:40 PM  
Received Date : 10/04/2024  
Reported Date : 14/06/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Biochemical Oxygen Demand	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	11.0	≤ 500
Chemical Oxygen Demand	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	52	≤ 750
Chloride	mg/L as Cl <sub>2</sub>	Argentometric Method (SM:4500-Cl- B)	54.7	-
Formaldehyde	mg/L	Distillation, Colorimetric Method	< 0.50	≤ 1
Oil and Grease	mg/L	Partition-Gravimetric Method (SM:5520B)	< 3.0	≤ 10
pH (on site)		Electrometric Method	7.7	5.5-9.0
Temperature	°C	Laboratory and Field Method (SM:2550B)	34	≤ 45
Total Dissolved Solids	mg/L	Dried at 180 degree celsius (SM:2540C)	234	≤ 3,000
Total Suspended Solids	mg/L	Dried at 103-105 degree celsius (SM:2540 D)	13	≤ 200

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

Remark : 1. /1 Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)  
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017  
3. Sampling at UTM 47 P 0730729 E 1404613 N

SUPPLEMENT TO TEST REPORT NO. 6704-1200



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

( Miss Apiradee Chuen-arom )

14 / 06 / 2024

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



Request No : W6705280

Report No : 6705-1136-1

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9-9/1 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

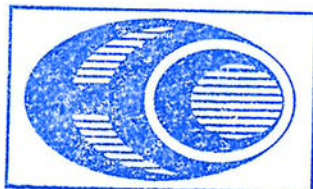
Sampling Source : EOEG Plant Sample No. : W 67050933  
Sample Name : จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสียของนิคม WHA Sampling Date : 10/05/2024  
Sampling By : Customer Sampling Time : --  
Sampling Method : Grab Received Date : 11/05/2024  
Tested Date : 11/05/2024 – 17/05/2024 Reported Date : 14/06/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Biochemical Oxygen Demand	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	9.0	≤ 500
Chemical Oxygen Demand	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	62	≤ 750
Chloride	mg/L as Cl <sub>2</sub>	Argentometric Method (SM:4500-Cl- B)	132	-
Formaldehyde	mg/L	Distillation, Colorimetric Method	<0.50	≤ 1
Oil and Grease	mg/L	Partition-Gravimetric Method (SM:5520B)	<3.0	≤ 10
pH (on site)		Electrometric Method	7.3	5.5-9.0
Temperature	°C	Laboratory and Field Method (SM:2550B)	34	≤ 45
Total Dissolved Solids	mg/L	Dried at 180 degree celsius (SM:2540C)	672	≤ 3,000
Total Suspended Solids	mg/L	Dried at 103-105 degree celsius (SM:2540 D)	17	≤ 200

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

Remark : 1. /1 Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)  
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017  
3. Sampling at UTM 47 P 0730729 E 1404613 N

SUPPLEMENT TO TEST REPORT NO. 6705-1136



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

( Miss Apiradee Chuen-arom )

14 / 06 / 2024

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



Request No : W6706278

Report No : 6706-1507

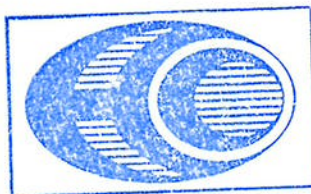
## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9-9/1 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67060842  
Sample Name : จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสียของนิคม WHA Sampling Date : 10/06/2024  
Sampling By : Customer Sampling Time : --  
Sampling Method : Grab Received Date : 12/06/2024  
Tested Date : 12/06/2024 – 18/06/2024 Reported Date : 18/06/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Biochemical Oxygen Demand	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	6.2	≤ 500
Chemical Oxygen Demand	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	56	≤ 750
Chloride	mg/L as Cl <sub>2</sub>	Argentometric Method (SM:4500-Cl- B)	136	-
Formaldehyde	mg/L	Distillation, Colorimetric Method	< 0.50	≤ 1
Oil and Grease	mg/L	Partition-Gravimetric Method (SM:5520B)	< 3.0	≤ 10
pH (on site)		Electrometric Method	7.3	5.5-9.0
Temperature	°C	Laboratory and Field Method (SM:2550B)	31	≤ 45
Total Dissolved Solids	mg/L	Dried at 180 degree celsius (SM:2540C)	750	≤ 3,000
Total Suspended Solids	mg/L	Dried at 103-105 degree celsius (SM:2540 D)	< 5	≤ 200

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

Remark : 1. /1 Notification of Industrial Estate Authority of Thailand 029 / 2567 (2024)  
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023  
3. Sampling at UTM 47 P 0730729 E 1404613 N



Examined By.....

( Miss Apiradee Chuen-arom )

18 / 06 / 2024

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

Request No : W6705404, W6706512

Report No : 6705-1811-1, 6706-1395

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9-9/1 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051275, W 67061534  
Sample Name : จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสีย ## Sampling Date : 15/05/2024, 19/06/2024  
Sampling By : ETC Sampling Time : 11:20 AM, 1:50 PM  
Sampling Method : Grab Received Date : 16/05/2024, 20/06/2024  
Tested Date : 16/05/2024 – 28/05/2024 Reported Date : 21/06/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Arsenic	mg/L	Continuous Hydride Generation/AAS Method (SM:3114B)	0.0067	≤ 0.25
Barium	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.11	≤ 1
Biochemical Oxygen Demand	mg/L	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	62.6	≤ 500
Cadmium	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	≤ 0.03
Chemical Oxygen Demand	mg/L	Closed Reflux, Titrimetric Method (SM:5220C)	200	≤ 750
Color (Original)	ADMI	ADMI Weighted Ordinate Spectrophotometric Method (SM:2120F)	< 20	≤ 600
Color (pH 7.0)	ADMI	ADMI Weighted Ordinate Spectrophotometric Method (SM:2120F)	29	≤ 600

Physical Apperance : 1. Sample : yellow, lightly SS, nonsmelling  
2. Container : Normal [ PE 0.5 L [ 3 Bottle], PE 1.0 L, PE 1.8 L, G 0.25 L ]

Remark : 1. /1 Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)  
2. /2 Sample No. W67061534 : Sampling Date 19/06/2024 (1:50 PM) Tested Date 20/06/2024 – 21/06/2024  
3. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.  
4. Sampling By Mr. Songpon Phiwuan (ว-003-ค-0016)  
5. ## จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสียของนิคมอุตสาหกรรม ดับบลิวเอชเอ ตะวันออก (มาบตาพุด)  
6. Sampling at UTM 47 P 0730729 E 1404613 N

Examined By.....

( Miss Apiradee Chuen-arom )

(ว-003-ค-0007)

21/06/2024

SUPPLEMENT TO TEST REPORT NO. 6705-1811



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

( Miss Nunnaphat Bakhuntod )

(ว-003-ค-0005)

21/06/2024

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

Request No : W6705404, W6706512

Report No : 6705-1811-1, 6706-1395

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9-9/1 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant  
Sample Name : จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสีย ##  
Sampling By : ETC  
Sampling Method : Grab  
Tested Date : 16/05/2024 – 28/05/2024  
Sample No. : W 67051275, W 67061534  
Sampling Date : 15/05/2024, 19/06/2024  
Sampling Time : 11:20 AM, 1:50 PM  
Received Date : 16/05/2024, 20/06/2024  
Reported Date : 21/06/2024

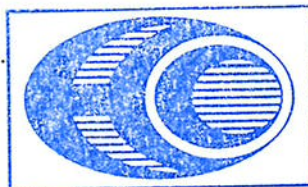
Parameter	Unit	Method	Result	Standard <sup>1</sup>
Copper	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.10	≤ 2
Cyanide	mg/L as HCN	Distillation, Colorimetric Method (SM:4500 CN- C, E)	< 0.020	≤ 0.2
Formaldehyde	mg/L	Distillation, Colorimetric Method	< 0.50	≤ 1
Free Chlorine	mg/L	DPD Colorimetric Method (SM:4500-Cl G)	< 0.05	≤ 1
Hexavalent Chromium	mg/L as Cr <sup>6+</sup>	Filtration, Colorimetric Method (SM:3500-Cr B)	< 0.050	≤ 0.25
Lead	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	≤ 0.2
Manganese	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.14	≤ 5
Mercury	mg/L	Cold-Vapor Atomic Absorption Spectrometric Method (SM:3112B)	< 0.0010	≤ 0.005
Nickel	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	≤ 1

Physical Appearance : 1. Sample : yellow, lightly SS, nonsmelling  
2. Container : Normal [ PE 0.5 L [ 3 Bottle], PE 1.0 L, PE 1.8 L, G 0.25 L ]

Remark : 1. /1 Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)  
2. /2 Sample No. W67061534 : Sampling Date 19/06/2024 (1:50 PM) Tested Date 20/06/2024 – 21/06/2024  
3. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.  
4. Sampling By Mr. Songpon Phiwan (ว-003-ค-0016)  
5. ## จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสียของนิคมอุตสาหกรรม ดับบลิวเอชเอ ตะวันออก (มาบตาพุด)  
6. Sampling at UTM 47 P 0730729 E 1404613 N

SUPPLEMENT TO TEST REPORT NO. 6705-1811

Examined By.....  
( Miss Apiradee Chuen-arom )  
( ว-003-ค-0007 )  
21/06/2024



Approved By.....  
( Miss Nunnaphat Bakhuntod )  
( ว-003-ค-0005 )  
21/06/2024

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

Request No : W6705404, W6706512

Report No : 6705-1811-1, 6706-1395

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9-9/1 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051275, W 67061534  
Sample Name : จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสีย ## Sampling Date : 15/05/2024, 19/06/2024  
Sampling By : ETC Sampling Time : 11:20 AM, 1:50 PM  
Sampling Method : Grab Received Date : 16/05/2024, 20/06/2024  
Tested Date : 16/05/2024 – 28/05/2024 Reported Date : 21/06/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Oil and Grease	mg/L	Partition-Gravimetric Method	<3.0	≤ 10
pH (on site)		Electrometric Method	7.4	5.5-9.0
Phenol	mg/L	Distillation, Direct Photometric Method (SM:5530B,D)	< 0.005	≤ 1
Selenium	mg/L	Digestion, Hydride Generation/AAS Method (SM:3030F, 3114B&C)	< 0.0020	≤ 0.02
Sulfide <sup>2</sup>	mg/L as H <sub>2</sub> S	ZnS Precipitation, Iodometric Method (SM:4500 -S2- F)	1.0	≤ 1
Temperature	°C	Laboratory and Field Method (SM:2550 B)	31	≤ 45
Total Dissolved Solids	mg/L	Dried at 180 degree celsius (SM:2540C)	1,652	≤ 3000
Total Kjeldahl Nitrogen	mg/L as NH <sub>3</sub> -N	Macro Kjeldahl Method (SM:4500 -Norg B)	< 5	≤ 100
Total Suspended Solids	mg/L	Dried at 103-105 degree celsius (SM:2540D)	8	≤ 200
Trivalent Chromium	mg/L as Cr <sup>3+</sup>	Digestion, Direct ICP Method; Filtration, Colorimetric Method; Calculation (SM:3500 -Cr B, 3120B)	< 0.03	≤ 0.75
Zinc	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.95	≤ 5

Physical Appearance : 1. Sample : yellow, lightly SS, nonsmelling  
2. Container : Normal [ PE 0.5 L [ 3 Bottle], PE 1.0 L, PE 1.8 L, G 0.25 L ]

Remark : 1. /1 Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)  
2. /2 Sample No. W67061534 : Sampling Date 19/06/2024 (1:50 PM) Tested Date 20/06/2024 – 21/06/2024  
3. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.  
4. Sampling By Mr. Songpon Phiwan (ว-003-ค-0016)  
5. ## จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสียของนิคมอุตสาหกรรม คับบลิวเอชเอ ตะวันออก (มาบตาพุด)  
6. Sampling at UTM 47 P 0730729 E 1404613 N

Examined By.....

( Miss Apiradee Chuen-arom )

(ว-003-ค-0007)

21/06/2024

SUPPLEMENT TO TEST REPORT NO. 6705-1811



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

( Miss Nunnaphat Bakhuntod )

(ว-003-ค-0005)

21/06/2024

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



Request No : W6705404

Report No : 6705-1811-1

## TEST REPORT

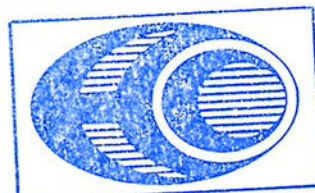
Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9-9/1 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant  
Sample Name : จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสีย ##  
Sampling By : ETC  
Sampling Method : Grab  
Tested Date : 16/05/2024 – 28/05/2024  
Sample No. : W 67051275  
Sampling Date : 15/05/2024  
Sampling Time : 11:20 AM  
Received Date : 16/05/2024  
Reported Date : 21/06/2024

Parameter	Unit	Method	Result	Standard <sup>1/</sup>
Chloride	mg/L as Cl <sub>2</sub>	Argentometric Method (SM:4500-Cl- B)	112	-
Fluoride	mg/L	Ion-Selective Electrode Method (SM:4500 -F- C)	0.76	≤ 5
Iron	mg/L	Digestion,Inductively Coupled Plasma Method (SM:3030F, 3120B)	2.16	≤ 10
Silver	mg/L	Digestion,Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.05	≤ 1
Surfactants	mg/L as MBAS	Anionic Surfactants as MBAS Method (SM:5540C)	< 0.40	≤ 30

Physical Apperance : 1. Sample : yellow, lightly SS, nonsmelling  
2. Container : Normal [ PE 0.5 L [ 3 Bottle], PE 1.0 L, PE 1.8 L, G 0.25 L ]

Remark : 1. /1 Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)  
2. Parameter Outside The Scope of The Registration of Department of Industrial Works  
3. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.  
4. Sampling By Mr. Songpon Phiwan  
5. ## จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสียของนิคมอุตสาหกรรม คับบลิเวเฮเซ ตะวันออก (มาบตาพุด)  
6. Sampling at UTM 47 P 0730729 E 1404613 N

SUPPLEMENT TO TEST REPORT NO. 6705-1811



Examined By.....

( Miss Apiradee Chuen-arom )

21/06/2024

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



Request No : W6705404

Report No : 6705-1811

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9-9/1 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant  
Sample Name : จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสีย ##  
Sampling By : ETC  
Sampling Method : Grab  
Tested Date : 16/05/2024 – 28/05/2024  
Sample No. : W 67051275  
Sampling Date : 15/05/2024  
Sampling Time : 11:20 AM  
Received Date : 16/05/2024  
Reported Date : 28/05/2024

Parameter	Unit	Method	Method Detection Limit	Result	Standard <sup>1</sup>
<b>Organochlorine Pesticides</b>					
alpha-BHC	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410B)	0.030	Not Detected	****
beta-BHC	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410B)	0.030	Not Detected	****
gamma-BHC (Lindane)	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410B)	0.030	Not Detected	****
delta-BHC	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410B)	0.030	Not Detected	****
Heptachlor	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410B)	0.030	Not Detected	****
Aldrin	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410B)	0.030	Not Detected	****
Heptachlor epoxide (isomer B)	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410B)	0.030	Not Detected	****
trans-Chlordane	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410B)	0.030	Not Detected	****
Endosulfan I	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410B)	0.030	Not Detected	****
cis-Chlordane	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410B)	0.030	Not Detected	****
Dieldrin	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410B)	0.030	Not Detected	****
4,4'-DDE	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410B)	0.030	Not Detected	****
Endrin	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410B)	0.050	Not Detected	****
Endosulfan II	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410B)	0.030	Not Detected	****
4,4'-DDD	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410B)	0.030	Not Detected	****
Endrin aldehyde	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410B)	0.030	Not Detected	****
Endosulfan sulfate	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410B)	0.030	Not Detected	****
4,4'-DDT	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410B)	0.030	Not Detected	****
Endrin Ketone	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410B)	0.030	Not Detected	****
Methoxychlor	µg/L	Liquid-Liquid Extraction / GC-MS (SM:6410B)	0.030	Not Detected	****

Physical Apperance : 1. Sample : yellow, lightly SS, nonsmelling  
2. Container : Normal [ PE 0.5 L [ 6 Bottle], PE 1.0 L [ 2 Bottl], PE 1.8 L, G 1.0 L ]

Remark : 1. /1 Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)  
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023.  
3. \*\*\*\* ต้องตรวจไม่พบตามวิธีการตรวจสอบที่กำหนด  
4. Sampling By Mr. Songpon Phiwan (ว-003-ค-0016) / Sampling at UTM 47 P 0730729 E 1404613 N  
5. ## จุดปล่อยน้ำทิ้งลงท่อรวบรวมน้ำเสียของนิคมอุตสาหกรรม ดันบัวทองตะวันออก ตะวันออก (มาบตาพุด)

Examined By.....

(Miss Apiradee Chuen-arom)

(ว-003-ค-0007)

28/05/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Miss Nunnaphat Bakhuntod)

(ว-003-ค-0005)

28/05/2024

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

Request No. W6705406

Report No. 6706-0257

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051280  
Sample Name : ริมรั้วด้านทิศเหนือโครงการ (บ่อเหนือ) (Up-gradient)) (MW01) Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 9:50 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024 – 04/06/2024 Reported Date : 10/06/2024

Parameter	Unit	Method	Result	Standard <sup>1/</sup>
Arsenic	mg/L	Continuous Hydride Generation/AAS Method (SM:3114B)	< 0.0020	≤ 0.1
Beryllium	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.01	≤ 0.01
Cadmium	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.003	≤ 2.0
Chromium	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	≤ 6.0
Hexavalent Chromium	mg/L as Cr <sup>6+</sup>	Filtration, Colorimetric Method (SM:3500 -Cr B)	< 0.050	≤ 6.0
Lead	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.010	≤ 4.0
Manganese	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.03	≤ 33
Mercury	mg/L	Cold-Vapor Atomic Absorption Spectrometric Method (SM:3112B)	< 0.0010	≤ 0.7

Physical Appearance : 1. Sample : lightly SS  
2. Container : Normal [ PE 0.5 L [ 3 Bottle], G 1.0 L ]

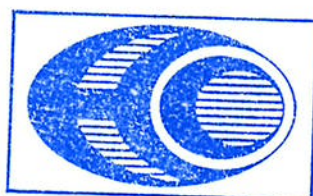
Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)  
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023  
3. Sampling By Mr. Songpon Phiwan (ว-003-ก-0016)  
4. Sampling At UTM 47 P 731078 E 1405208 N

Examined By.....

( Miss Apiradee Chuen-arom)

(ว-003-ก-0007)

10 / 06 / 2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

( Miss Nunnaphat Bakhuntod )

(ว-003-ก-0005)

10 / 06 / 2024

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

Request No. W6705406

Report No. 6706-0257

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051280  
Sample Name : ริมรั้วด้านทิศเหนือโครงการ (บ่อเหนือ) (Up-gradient) (MW01) Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 9:50 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024 – 04/06/2024 Reported Date : 10/06/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Nickel	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	≤ 5.0
Selenium	mg/L	Digestion, Hydride Generation/AAS Method (SM:3030F, 3114B&C)	< 0.0020	≤ 12
Vanadium	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.02	≤ 17
Zinc	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.52	≤ 10

Physical Appearance : 1. Sample : lightly SS  
2. Container : Normal [ PE 0.5 L [ 3 Bottle], 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 (ว-003-ค-0016)  
4. Sampling At UTM 47 P 731078 E 1405208 N

Examined By.....

(Miss Apiradee Chuen-arom)

(ว-003-ค-0007)

10 / 06 / 2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(Miss Nunnaphat Bakhuntod)

(ว-003-ค-0005)

10 / 06 / 2024

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

Request No. W6705406

Report No. 6706-0257

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051280  
Sample Name : รีมรูดานทศเหนือโครงการ (บ่อเหนือหน้า (Up-gradient)) (MW01) Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 9:50 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024 – 04/06/2024 Reported Date : 10/06/2024

Parameter	Unit	Method	Result	Standard <sup>1/</sup>
pH (on site)		Electrometric Method	7.1	6.5-9.2 ***

Physical Apperance : 1. Sample : lightly SS  
2. Container : Normal [ PE 0.5 L [ 3 Bottle], 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 จากจุดเก็บตัวอย่างบ่อก้นน้ำกับจุดเก็บตัวอย่างบ่อเหนือน้ำที่เปลี่ยนแปลงจะต้องไม่เกินหนึ่งระดับ และ  
ไม่อยู่นอกช่วงค่าเกณฑ์อนุโลมสูงสุดของมาตรฐาน คุณภาพน้ำบาดาลที่ใช้บริโภค  
3. Sampling By Mr. Songpon Phiwuan (จ-003-ค-0016)  
4. Sampling At UTM 47 P 731078 E 1405208 N

Examined By.....

(Miss Apiradee Chuen-arom)

(จ-003-ค-0007)

10 / 06 / 2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(Miss Nunnaphat Bakhuntod)

(จ-003-ค-0005)

10 / 06 / 2024

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



Request No. W6705406

Report No. 6706-0257

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051280  
Sample Name : รีมรูด้านทิศเหนือโครงการ (บ่อเหนือหน้า (Up-gradient)) (MW01) Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 9:50 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024 – 04/06/2024 Reported Date : 10/06/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Boron	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.09	-
Cobalt	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.02	-
Copper	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	-
Iron	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	1.13	-
Titanium	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.02	-

Physical Appearance : 1. Sample : lightly SS  
2. Container : Normal [ PE 0.5 L [ 3 Bottle], 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. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023  
4. Sampling By Mr. Songpon Phiwan  
5. Sampling At UTM 47 P 731078 E 1405208 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

( Miss Apiradee Chuen-arom )

10 / 06 / 2024

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

Request No. W6705406

Report No. 6706-0257

## TEST REPORT


Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,  
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 67051280  
Sample Name : รีมรื้อด้านทิศเหนือโครงการ(บ่อเหนือหน้า)## Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 9:50 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024 – 04/06/2024 Reported Date : 10/06/2024

Parameter	Unit	Method	Results	Standard <sup>1)</sup>
<b>Volatile Organic Compounds</b>				
- Benzene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 0.2
- Carbon tetrachloride	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00025	≤ 0.4
- 1,2-Dichloroethane	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 0.5
- 1,1-Dichloroethylene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 0.1
- cis-1,2-Dichloroethylene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 2.0
- trans-1,2-Dichloroethylene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 5.0
- Ethylbenzene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 2.0
- Styrene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00100	≤ 24
- Tetrachloroethylene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 0.9
- Toluene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 5.0
- 1,2,4 - Trichlorobenzene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 24
- 1,1,1-Trichloroethane	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00025	≤ 0.2

Physical Apperance : 1. Sample : lightly SS  
2. Container : Normal [ PE 0.5 L [ 3 Bottle], 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 (ว-003-ค-0016)  
4. ## รีมรื้อด้านทิศเหนือโครงการ (บ่อเหนือหน้า (Up-gradient)) (MW01)  
5. Sampling At UTM 47 P 731078 E 1405208 N

Examined By   
( Miss Apiradee Chuen-arom )

(ว-003-ค-0007)

10/06/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By   
( Miss Nunnaphat Bakhuntod )

( ว-003-ค-0005 )

10/06/2024

REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. W6705406

Report No. 6706-0257

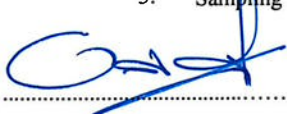
## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,  
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051280  
Sample Name : รีมรื้อด้านทิศเหนือโครงการ(บ่อเหนือหน้า)## Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 9:50 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024 – 04/06/2024 Reported Date : 10/06/2024

Parameter	Unit	Method	Results	Standard <sup>1/</sup>
<b>Volatile Organic Compounds</b>				
- 1,1,2-Trichloroethane	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 0.8
- Trichloroethylene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 4.4
- Vinyl Chloride	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00025	≤ 0.03
- p,m-Xylene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00100	≤ 24
- o-Xylene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00100	≤ 24
- Xylene Total	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00100	≤ 24
- Methylene chloride	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00200	≤ 6.0


Physical Apperance : 1. Sample : lightly SS  
2. Container : Normal [ PE 0.5 L [ 3 Bottle], 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 (ว-003-ค-0016)  
4. ## รีมรื้อด้านทิศเหนือโครงการ (บ่อเหนือหน้า (Up-gradient)) (MW01)  
5. Sampling At UTM 47 P 731078 E 1405208 N

Examined By   
( Miss Apiradee Chuen-arom )  
(ว-003-ค-0007)  
10/06/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By   
( Miss Nunnaphat Bakhuntod )  
( ว-003-ค-0005 )  
10/06/2024

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

Request No. W6705406

Report No. 6706-0257

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,  
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051280  
Sample Name : รีมรื้อด้านทิศเหนือโครงการ(บ่อเหนือน้ำ)## Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 9:50 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024 – 04/06/2024 Reported Date : 10/06/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
<b>Total Petroleum Hydrocarbons ***</b>				
- 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 : lightly SS  
2. Container : Normal [ PE 0.5 L [ 3 Bottle], 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>8</sub>-C<sub>16</sub>) = < 0.025 mg/L ]  
5. Sampling At UTM 47 P 731078 E 1405208 N  
6. ## รีมรื้อด้านทิศเหนือโครงการ (บ่อเหนือน้ำ (Up-gradient)) (MW01)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By 

( Miss Apiradee Chuen-arom )

10 / 06 / 2024

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



Request No. W6705406

Report No. 6706-0258

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051281  
Sample Name : ริมร้วด้านทิศใต้โครงการ (บ่อกักน้ำ (Down-gradient)) (MW05) Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 10:25 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024 – 04/06/2024 Reported Date : 10/06/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Arsenic	mg/L	Continuous Hydride Generation/AAS Method (SM:3114B)	< 0.0020	≤ 0.1
Beryllium	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.01	≤ 0.01
Cadmium	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.003	≤ 2.0
Chromium	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	≤ 6.0
Hexavalent Chromium	mg/L as Cr <sup>6+</sup>	Filtration, Colorimetric Method (SM:3500 -Cr B)	< 0.050	≤ 6.0
Lead	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.010	≤ 4.0
Manganese	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	≤ 33
Mercury	mg/L	Cold-Vapor Atomic Absorption Spectrometric Method (SM:3112B)	< 0.0010	≤ 0.7

Physical Apperance : 1. Sample : lightly SS  
2. Container : Normal [ PE 0.5 L [ 3 Bottle], PE 2.0 L, G 2.5 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 (ว-003-ก-0016)  
4. Sampling At UTM 47 P 730370 E 1404509 N

Examined By.....

(Miss Apiradee Chuen-arom)

(ว-003-ก-0007)

10 / 06 / 2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(Miss Nunnaphat Bakhuntod)

(ว-003-ก-0005)

10 / 06 / 2024

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

Request No. W6705406

Report No. 6706-0258

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051281  
Sample Name : ริมร้วด้านทิศใต้โครงการ (บ่อกักน้ำ (Down-gradient)) (MW05) Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 10:25 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024 – 04/06/2024 Reported Date : 10/06/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Nickel	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	≤ 5.0
Selenium	mg/L	Digestion, Hydride Generation/AAS Method (SM:3030F, 3114B&C)	< 0.0020	≤ 12
Vanadium	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.02	≤ 17
Zinc	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.49	≤ 10

Physical Appearance : 1. Sample : lightly SS  
2. Container : Normal [ PE 0.5 L [ 3 Bottle], G 1.0 L ]

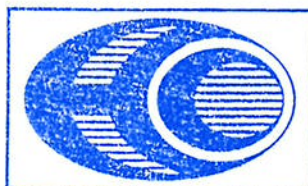
Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)  
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023  
3. Sampling By Mr. Songpon Phiwan (ว-003-ค-0016)  
4. Sampling At UTM 47 P 730370 E 1404509 N

Examined By.....

(Miss Apiradee Chuen-arom)

(ว-003-ค-0007)

10 / 06 / 2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(Miss Nunnaphat Bakhuntod)

(ว-003-ค-0005)

10 / 06 / 2024

REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. W6705406

Report No. 6706-0258

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051281  
Sample Name : ริมร้วด้านทิศใต้โครงการ (บ่อท้ายน้ำ (Down-gradient)) (MW05) Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 10:25 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024 – 04/06/2024 Reported Date : 10/06/2024

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

Physical Apperance : 1. Sample : lightly SS  
2. Container : Normal [ PE 0.5 L [ 3 Bottle], 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 จากจุดเก็บตัวอย่างบ่อท้ายน้ำกับจุดเก็บตัวอย่างบ่อน้ำที่เปลี่ยนแปลงจะต้องไม่เกินหนึ่งระดับ และ  
ไม่อยู่นอกช่วงค่าเกณฑ์อนุโลมสูงสุดของมาตรฐาน คุณภาพน้ำบาดาลที่ใช้บริโภค  
3. Sampling By Mr. Songpon Phiwuan (ว-003-ค-0016)  
4. Sampling At UTM 47 P 730370 E 1404509 N

Examined By.....

(Miss Apiradee Chuen-arom)

(ว-003-ค-0007)

10 / 06 / 2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(Miss Nunnaphat Bakhuntod)

(ว-003-ค-0005)

10 / 06 / 2024

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

Request No. W6705406

Report No. 6706-0258

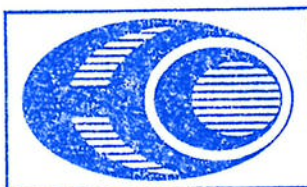
## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051281  
Sample Name : รีมรูด้านทิศใต้โครงการ (บ่อทำynnน้ำ (Down-gradient)) (MW05) Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 10:25 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024 – 04/06/2024 Reported Date : 10/06/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Boron	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.08	-
Cobalt	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.02	-
Copper	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	-
Iron	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	1.16	-
Titanium	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.02	-

Physical Appearance : 1. Sample : lightly SS  
2. Container : Normal [ PE 0.5 L [ 3 Bottle], 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. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023  
4. Sampling By Mr. Songpon Phiwan  
5. Sampling At UTM 47 P 730370 E 1404509 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

( Miss Apiradee Chuen-arom )

10 / 06 / 2024

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



Request No. W6705406

Report No. 6706-0258

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,  
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051281  
Sample Name : รีมรื้อด้านทิศใต้โครงการ(บ่อท้ายน้ำ)## Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 10:25 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024 – 04/06/2024 Reported Date : 10/06/2024

Parameter	Unit	Method	Results	Standard <sup>1</sup>
<b>Volatile Organic Compounds</b>				
- Benzene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 0.2
- Carbon tetrachloride	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00025	≤ 0.4
- 1,2-Dichloroethane	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 0.5
- 1,1-Dichloroethylene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 0.1
- cis-1,2-Dichloroethylene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 2.0
- trans-1,2-Dichloroethylene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 5.0
- Ethylbenzene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 2.0
- Styrene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00100	≤ 24
- Tetrachloroethylene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 0.9
- Toluene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 5.0
- 1,2,4 - Trichlorobenzene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 24
- 1,1,1-Trichloroethane	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00025	≤ 0.2

Physical Apperance : 1. Sample : lightly SS  
2. Container : Normal [ PE 0.5 L [ 3 Bottle], 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 (ว-003-ค-0016)  
4. ## รีมรื้อด้านทิศใต้โครงการ (บ่อท้ายน้ำ (Down-gradient)) (MW05)  
5. Sampling At UTM 47 P 730370 E 1404509 N

Examined By .....

(Miss Apiradee Chuen-arom)

(ว-003-ค-0007)

10/06/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Miss Nunnaphat Bakhuntod)

(ว-003-ค-0005)

10/06/2024

REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. W6705406

Report No. 6706-0258

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,  
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051281  
Sample Name : รีมรูด้านทิศใต้โครงการ(บ่อท้ายน้ำ)## Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 10:25 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024 – 04/06/2024 Reported Date : 10/06/2024

Parameter	Unit	Method	Results	Standard <sup>1</sup>
<b>Volatile Organic Compounds</b>				
- 1,1,2-Trichloroethane	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 0.8
- Trichloroethylene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 4.4
- Vinyl Chloride	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00025	≤ 0.03
- p,m-Xylene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00100	≤ 24
- o-Xylene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00100	≤ 24
- Xylene Total	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00100	≤ 24
- Methylene chloride	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00200	≤ 6.0

Physical Apperance : 1. Sample : lightly SS  
2. Container : Normal [ PE 0.5 L [ 3 Bottle], 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. ## รีมรูด้านทิศใต้โครงการ (บ่อท้ายน้ำ (Down-gradient)) (MW05)  
5. Sampling At UTM 47 P 730370 E 1404509 N

Examined By .....  
(Miss Apiradee Chuen-arom )  
(จ-003-ค-0007)  
10/06/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....  
(Miss Nunnaphat Bakhuntod )  
( จ-003-ค-0005 )  
10/06/2024

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

Request No. W6705406

Report No. 6706-0258

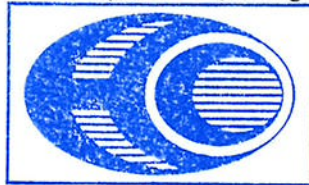
## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,  
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051281  
Sample Name : รีมรื้อด้านทิศใต้โครงการ(บ่อกักน้ำ)## Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 10:25 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024 – 04/06/2024 Reported Date : 10/06/2024

Parameter	Unit	Method	Result	Standard <sup>1/</sup>
<b>Total Petroleum Hydrocarbons ***</b>				
- 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 : lightly SS  
2. Container : Normal [ PE 0.5 L [ 3 Bottle], 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>8</sub>-C<sub>16</sub>) = < 0.025 mg/L ]  
5. Sampling At UTM 47 P 730370 E 1404509 N  
6. ## รีมรื้อด้านทิศใต้โครงการ (บ่อกักน้ำ (Down-gradient)) (MW05)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By .....  
( Miss Apiradee Chuen-arom )

10 / 06 / 2024

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

Request No. W6705406

Report No. 6706-0259

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051282  
Sample Name : ริมรั้วด้านทิศตะวันตกโครงการ (บ่อกลางน้ำ (Middle-gradient)) (MW06) Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 11:00 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024 – 04/06/2024 Reported Date : 10/06/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Arsenic	mg/L	Continuous Hydride Generation/AAS Method (SM:3114B)	< 0.0020	≤ 0.1
Beryllium	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.01	≤ 0.01
Cadmium	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.003	≤ 2.0
Chromium	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	≤ 6.0
Hexavalent Chromium	mg/L as Cr <sup>6+</sup>	Filtration, Colorimetric Method (SM:3500 -Cr B)	< 0.050	≤ 6.0
Lead	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.010	≤ 4.0
Manganese	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	≤ 33
Mercury	mg/L	Cold-Vapor Atomic Absorption Spectrometric Method (SM:3112B)	< 0.0010	≤ 0.7

Physical Appearance : 1. Sample : lightly SS  
2. Container : Normal [ PE 0.5 L [ 3 Bottle], 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 (ว-003-ก-0016)  
4. Sampling At UTM 47 P 730789 E 1404730 N

Examined By.....

(Miss Apiradee Chuen-arom)

(ว-003-ก-0007)

10 / 06 / 2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(Miss Nunnaphat Bakhuntod)

(ว-003-ก-0005)

10 / 06 / 2024

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



Request No. W6705406

Report No. 6706-0259

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051282  
Sample Name : ริมร้วด้านทิศตะวันตกโครงการ (บ่อกลางน้ำ (Middle-gradient)) (MW06) Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 11:00 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024 – 04/06/2024 Reported Date : 10/06/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Nickel	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	≤ 5.0
Selenium	mg/L	Digestion, Hydride Generation/AAS Method (SM:3030F, 3114B&C)	< 0.0020	≤ 12
Vanadium	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.02	≤ 17
Zinc	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.48	≤ 10

Physical Appearance : 1. Sample : lightly SS  
2. Container : Normal [ PE 0.5 L [ 3 Bottle], G 1.0 L ]

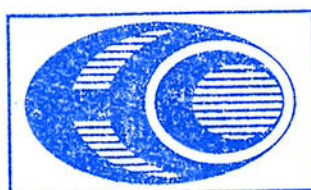
Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)  
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023  
3. Sampling By Mr. Songpon Phiwan (ว-003-ค-0016)  
4. Sampling At UTM 47 P 730789 E 1404730 N

Examined By.....

( Miss Apiradee Chuen-arom )

(ว-003-ค-0007)

10 / 06 / 2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

( Miss Nunnaphat Bakhuntod )

(ว-003-ค-0005)

10 / 06 / 2024

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

Request No. W6705406

Report No. 6706-0259

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051282  
Sample Name : รีมรูดานทิตตะวันตกโครงการ (บ่อกกลางน้ำ (Middle-gradient)) (MW06) Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 11:00 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024 – 04/06/2024 Reported Date : 10/06/2024

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

Physical Apperance : 1. Sample : lightly SS  
2. Container : Normal [ PE 0.5 L [ 3 Bottle], 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 จากจุดเก็บตัวอย่างบ่อกน้ำกับจุดเก็บตัวอย่างบ่อกน้ำที่เปลี่ยนแปลงจะต้องไม่เกินหนึ่งระดับ และ  
ไม่อยู่นอกช่วงค่าเกณฑ์อนุโลมสูงสุดของมาตรฐาน คุณภาพน้ำบาดาลที่ใช้นบริโภค  
3. Sampling By Mr. Songpon Phiwuan (จ-003-ค-0016)  
4. Sampling At UTM 47 P 730789 E 1404730 N

Examined By.....

(Miss Apiradee Chuen-arom)

(จ-003-ค-0007)

10 / 06 / 2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(Miss Nunnaphat Bakhuntod)

(จ-003-ค-0005)

10 / 06 / 2024

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

Request No. W6705406

Report No. 6706-0259

## TEST REPORT

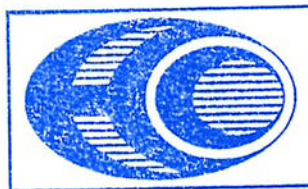
Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 67051282  
Sample Name : ริมรั้วด้านทิศตะวันตกโครงการ (บ่อกลางน้ำ (Middle-gradient)) (MW06) Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 11:00 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024 – 04/06/2024 Reported Date : 10/06/2024

Parameter	Unit	Method	Result	Standard <sup>/1</sup>
Boron	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.07	-
Cobalt	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.02	-
Copper	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	-
Iron	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	1.11	-
Titanium	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.02	-

Physical Appearance : 1. Sample : lightly SS  
2. Container : Normal [ PE 0.5 L [ 3 Bottle], 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. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023  
4. Sampling By Mr. Songpon Phiwuan  
5. Sampling At UTM 47 P 730789 E 1404730 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

( Miss Apiradee Chuen-arom )

10 / 06 / 2024

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

Request No. W6705406

Report No. 6706-0259

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,  
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051282  
Sample Name : รีมรื้อด้านทิศตะวันตกโครงการ(บ่อกลางน้ำ)## Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 11:00 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024 – 04/06/2024 Reported Date : 10/06/2024

Parameter	Unit	Method	Results	Standard <sup>1</sup>
<b>Volatile Organic Compounds</b>				
- Benzene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 0.2
- Carbon tetrachloride	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00025	≤ 0.4
- 1,2-Dichloroethane	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 0.5
- 1,1-Dichloroethylene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 0.1
- cis-1,2-Dichloroethylene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 2.0
- trans-1,2-Dichloroethylene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 5.0
- Ethylbenzene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 2.0
- Styrene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00100	≤ 24
- Tetrachloroethylene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 0.9
- Toluene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 5.0
- 1,2,4 - Trichlorobenzene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 24
- 1,1,1-Trichloroethane	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00025	≤ 0.2

Physical Apperance : 1. Sample : lightly SS  
2. Container : Normal [ PE 0.5 L [ 3 Bottle], 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 (ว-003-ค-0016)  
4. ## รีมรื้อด้านทิศตะวันตกโครงการ (บ่อกลางน้ำ (Middle-gradient)) (MW06)  
5. Sampling At UTM 47 P 730789 E 1404730 N

Examined By .....

( Miss Apiradee Chuen-arom )

( ว-003-ค-0007 )

10/06/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

( Miss Nunnaphat Bakhuntod )

( ว-003-ค-0005 )

10/06/2024

REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY



Request No. W6705406

Report No. 6706-0259

## TEST REPORT


Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,  
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

Sampling Source : EOEG Plant Sample No. : W 67051282  
Sample Name : รีมรื้อด้านทิศตะวันตกโครงการ(บ่อกกลางน้ำ)## Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 11:00 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024 – 04/06/2024 Reported Date : 10/06/2024

Parameter	Unit	Method	Results	Standard <sup>1)</sup>
<b>Volatile Organic Compounds</b>				
- 1,1,2-Trichloroethane	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 0.8
- Trichloroethylene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 4.4
- Vinyl Chloride	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00025	≤ 0.03
- p,m-Xylene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00100	≤ 24
- o-Xylene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00100	≤ 24
- Xylene Total	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00100	≤ 24
- Methylene chloride	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00200	≤ 6.0


Physical Apperance : 1. Sample : lightly SS  
2. Container : Normal [ PE 0.5 L [ 3 Bottle], 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 (ว-003-ค-0016)  
4. ## รีมรื้อด้านทิศตะวันตกโครงการ (บ่อกกลางน้ำ (Middle-gradient)) (MW06)  
5. Sampling At UTM 47 P 730789 E 1404730 N

Examined By   
( Miss Apiradee Chuen-arom )  
(ว-003-ค-0007)  
10/06/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By   
( Miss Nunnaphat Bakhuntod )  
( ว-003-ค-0005 )  
10/06/2024

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

Request No. W6705406

Report No. 6706-0259

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,  
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051282  
Sample Name : ริมรั้วด้านทิศตะวันตกโครงการ(บ่อกลางน้ำ)## Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 11:00 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024 – 04/06/2024 Reported Date : 10/06/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
<b>Total Petroleum Hydrocarbons ***</b>				
- 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 : lightly SS  
2. Container : Normal [ PE 0.5 L [ 3 Bottle], 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>8</sub>-C<sub>16</sub>) = < 0.025 mg/L ]  
5. Sampling At UTM 47 P 730789 E 1404730 N  
6. ## ริมรั้วด้านทิศตะวันตกโครงการ (บ่อกลางน้ำ (Middle-gradient)) (MW06)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By .....

( Miss Apiradee Chuen-arom )

10 / 06 / 2024

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

Request No. W6705406

Report No. 6706-0260

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051283  
Sample Name : บริเวณแนวท่อใต้ดิน (MW07) Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 11:10 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024 – 04/06/2024 Reported Date : 10/06/2024

Parameter	Unit	Method	Result	Standard <sup>1/</sup>
Arsenic	mg/L	Continuous Hydride Generation/AAS Method (SM:3114B)	< 0.0020	≤ 0.1
Beryllium	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.01	≤ 0.01
Cadmium	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.003	≤ 2.0
Chromium	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	≤ 6.0
Hexavalent Chromium	mg/L as Cr <sup>6+</sup>	Filtration, Colorimetric Method (SM:3500 -Cr B)	< 0.050	≤ 6.0
Lead	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.010	≤ 4.0
Manganese	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	≤ 33
Mercury	mg/L	Cold-Vapor Atomic Absorption Spectrometric Method (SM:3112B)	< 0.0010	≤ 0.7

Physical Appearance : 1. Sample : lightly SS  
2. Container : Normal [ PE 0.5 L [ 3 Bottle], 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 (ว-003-ค-0016)  
4. Sampling At UTM 47 P 730841 E 1404704 N

Examined By.....

(Miss Apiradee Chuen-arom)

(ว-003-ค-0007)

10 / 06 / 2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(Miss Nunnaphat Bakhuntod)

(ว-003-ค-0005)

10 / 06 / 2024

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

Request No. W6705406

Report No. 6706-0260

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051283  
Sample Name : บริเวณแนวท่อใต้ดิน (MW07) Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 11:10 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024 – 04/06/2024 Reported Date : 10/06/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Nickel	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	≤ 5.0
Selenium	mg/L	Digestion, Hydride Generation/AAS Method (SM:3030F, 3114B&C)	< 0.0020	≤ 12
Vanadium	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.02	≤ 17
Zinc	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.48	≤ 10

Physical Appearance : 1. Sample : lightly SS  
2. Container : Normal [ PE 0.5 L [ 3 Bottle], 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 (ว-003-ค-0016)  
4. Sampling At UTM 47 P 730841 E 1404704 N

Examined By.....

( Miss Apiradee Chuen-arom )

(ว-003-ค-0007)

10 / 06 / 2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Approved By.....

( Miss Nunnaphat Bakhuntod )

(ว-003-ค-0005)

10 / 06 / 2024



Request No. W6705406

Report No. 6706-0260

## TEST REPORT

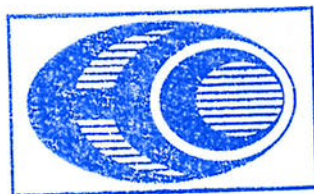
Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051283  
Sample Name : บริเวณแนวท่อใต้ดิน (MW07) Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 11:10 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024 – 04/06/2024 Reported Date : 10/06/2024

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

Physical Apperance : 1. Sample : lightly SS  
2. Container : Normal [ PE 0.5 L [ 3 Bottle], 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 จากจุดเก็บตัวอย่างบ่อท้ายน้ำกับจุดเก็บตัวอย่างบ่อเหนือที่เปลี่ยนแปลงจะต้องไม่เกินหนึ่งระดับ และ  
ไม่อยู่นอกช่วงค่าเกณฑ์อนุโลมสูงสุดของมาตรฐาน คุณภาพน้ำบาดาลที่ใช้บริโภค  
3. Sampling By Mr. Songpon Phiwuan (ว-003-ค-0016)  
4. Sampling At UTM 47 P 730841 E 1404704 N

Examined By.....  
(Miss Apiradee Chuen-arom)  
(ว-003-ค-0007)  
10 / 06 / 2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....  
(Miss Nunnaphat Bakhuntod)  
(ว-003-ค-0005)  
10 / 06 / 2024

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

Request No. W6705406

Report No. 6706-0260

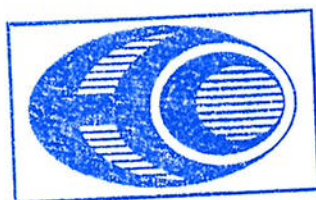
## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051283  
Sample Name : บริเวณแนวท่อใต้ดิน (MW07) Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 11:10 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024 – 04/06/2024 Reported Date : 10/06/2024

Parameter	Unit	Method	Result	Standard <sup>/1</sup>
Boron	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	0.09	-
Cobalt	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.02	-
Copper	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.03	-
Iron	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	1.10	-
Titanium	mg/L	Digestion, Inductively Coupled Plasma Method (SM:3030F, 3120B)	< 0.02	-

Physical Apperance : 1. Sample : lightly SS  
2. Container : Normal [ PE 0.5 L [ 3 Bottle], 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. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023  
4. Sampling By Mr. Songpon Phiwuan  
5. Sampling At UTM 47 P 730841 E 1404704 N



Examined By.....  
( Miss Apiradee Chuen-arom )

10 / 06 / 2024

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

Request No. W6705406

Report No. 6706-0260

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,  
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051283  
Sample Name : บริเวณแนวท่อใต้ดิน (MW07) Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 11:10 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024 – 04/06/2024 Reported Date : 10/06/2024

Parameter	Unit	Method	Results	Standard <sup>1)</sup>
<b>Volatile Organic Compounds</b>				
- Benzene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 0.2
- Carbon tetrachloride	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00025	≤ 0.4
- 1,2-Dichloroethane	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 0.5
- 1,1-Dichloroethylene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 0.1
- cis-1,2-Dichloroethylene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 2.0
- trans-1,2-Dichloroethylene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 5.0
- Ethylbenzene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 2.0
- Styrene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00100	≤ 24
- Tetrachloroethylene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 0.9
- Toluene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 5.0
- 1,2,4 - Trichlorobenzene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 24
- 1,1,1-Trichloroethane	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00025	≤ 0.2

Physical Appearance : 1. Sample : lightly SS  
2. Container : Normal [ PE 0.5 L [ 3 Bottle], 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 (ว-003-ค-0016)  
4. Sampling At UTM 47 P 730841 E 1404704 N

Examined By .....

( Miss Apiradee Chuen-arom )

(ว-003-ค-0007)

10/06/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

( Miss Nunnaphat Bakhuntod )

(ว-003-ค-0005)

10/06/2024

REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. W6705406

Report No. 6706-0260

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,  
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051283  
Sample Name : บริเวณแนวท่อใต้ดิน (MW07) Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 11:10 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024 – 04/06/2024 Reported Date : 10/06/2024

Parameter	Unit	Method	Results	Standard <sup>1)</sup>
<b>Volatile Organic Compounds</b>				
- 1,1,2-Trichloroethane	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 0.8
- Trichloroethylene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00050	≤ 4.4
- Vinyl Chloride	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00025	≤ 0.03
- p,m-Xylene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00100	≤ 24
- o-Xylene	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00100	≤ 24
- Xylene Total	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00100	≤ 24
- Methylene chloride	mg/L	Purge-and-Trap Capillary-Column/GC-MS (SM:6200B)	< 0.00200	≤ 6.0

Physical Apperance : 1. Sample : lightly SS  
2. Container : Normal [ PE 0.5 L [ 3 Bottle], G 1.0 L ]

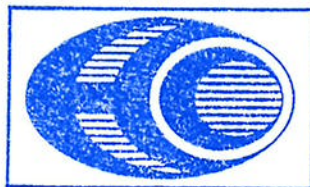
Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)  
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24th Edition, 2023  
3. Sampling By Mr. Songpon Phiwan (ว-003-ก-0016)  
4. Sampling At UTM 47 P 730841 E 1404704 N

Examined By .....

( Miss Apiradee Chuen-arom )

( ว-003-ก-0007 )

10/06/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

( Miss Nunnaphat Bakhuntod )

( ว-003-ก-0005 )

10/06/2024

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



Request No. W6705406

Report No. 6706-0260

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
 Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,  
 Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
 Sampling Source : EOEG Plant Sample No. : W 67051283  
 Sample Name : บริเวณแนวท่อใต้ดิน (MW07) Sampling Date : 15/05/2024  
 Sampling By : ETC Sampling Time : 11:10 AM  
 Sampling Method : Grab Received Date : 16/05/2024  
 Tested Date : 16/05/2024 – 04/06/2024 Reported Date : 10/06/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
<b>Total Petroleum Hydrocarbons ***</b>				
- 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 : lightly SS  
 2. Container : Normal [ PE 0.5 L [ 3 Bottle], 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>8</sub>-C<sub>16</sub>) = < 0.025 mg/L ]  
 5. Sampling At UTM 47 P 730841 E 1404704 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By .....



( Miss Apiradee Chuen-arom )

10 / 06 / 2024

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

Request No. W6705408

Report No. 6706-0323

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051287  
Sample Name : ริมรั้วด้านทิศเหนือโครงการ (บ่อเหนือ) (Up-gradient) (MW01) Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 10:00 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024-01/06/2024 Reported Date : 08/06/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Arsenic (As)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	< 5.00	≤ 27
Beryllium (Be)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	< 1.00	≤ 13
Cadmium (Cd)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	0.33	≤ 810
Chromium (Cr)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	7.24	≤ 640
Hexavalent Chromium	mg/kg	Alkaline Digestion,Colorimetric (US EPA. Method 3060A, 7196A)	< 2.00	≤ 640
Lead (Pb)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	11.8	≤ 750
Manganese (Mn)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	167	≤ 32,000
Mercury (Hg)	mg/kg	Digestion,Cold-Vapor AAS (US EPA. Method 3050B, 7471B)	< 0.20	≤ 610
Nickel (Ni)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	1.33	≤ 41,000
Selenium (Se)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	< 5.00	≤ 10,000
Vanadium (V)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	8.85	≤ 1,000
Zinc (Zn)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	59.0	≤ 1,000

Physical Appearance : 1. Sample : brown, soil  
2. Container : Normal [ 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 Mr. Songpon Phiwan (ว-003-ก-0016)  
3. Sampling At UTM 47 P 731078 E 1405208 N  
4. Unit mg/kg (Dry weight)  
5. United States Environmental Protection Agency. SW-846 Method 3050B, 3060A, 7196A (1996), 6010C, 7471B (2007).

Examined By.....  
( Miss Apiradee Chuen-arom )  
(ว-003-ก-0007)  
08 / 06 / 2024



Approved By.....  
( Miss Nunnaphat Bakhuntod )  
(ว-003-ก-0005)  
08 / 06 / 2024

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

Request No. W6705408

Report No. 6706-0323

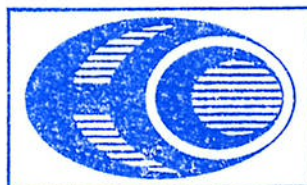
## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051287  
Sample Name : รีมั้วด้านทิศเหนือโครงการ (บ่อเหนือหน้า (Up-gradient)) (MW01) Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 10:00 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024-01/06/2024 Reported Date : 08/06/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Boron (B)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	23.3	-
Cobalt (Co)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	1.14	-
Copper (Cu)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	1.75	-
Iron (Fe)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	4,129	-
Titanium (Ti)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	30.7	-

Physical Apperance : 1. Sample : brown, soil  
2. Container : Normal [ 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. Sampling By Mr. Songpon Phiwuan  
4. Sampling At UTM 47 P 731078 E 1405208 N  
5. Unit mg/kg (Dry weight)  
6. United States Environmental Protection Agency. SW-846 Method 3050B (1996), 6010C (2007).



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Examined By.....

(Miss Apiradee Chuen-arom)

08/06/2024

Request No. W6705408

Report No. 6706-0323

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051287  
Sample Name : รีมร้วด้านทิศเหนือโครงการ(บ่อเหนือหน้า)## Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 10:00 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024-01/06/2024 Reported Date : 08/06/2024

Parameter	Unit	Method	Results	Standard <sup>1)</sup>
<b>Volatile Organic Compounds</b>				
- Benzene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 15
- Carbon tetrachloride	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 5.3
- 1,2-Dichloroethane	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 7.6
- 1,1-Dichloroethylene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 1.2
- cis-1,2-Dichloroethylene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 150
- trans-1,2-Dichloroethylene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 210
- Ethylbenzene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 230
- Methylene Chloride	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 210
- Styrene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 1,700
- Tetrachloroethylene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 190
- Toluene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 520
- 1,2,4 - Trichlorobenzene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 1,000
- 1,1,1-Trichloroethane	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 1,400

Physical Apperance : 1. Sample : brown, soil  
2. Container : Normal [ 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 Mr. Songpon Phiwuan (ว-003-ค-0016)  
3. Sampling At UTM 47 P 731078 E 1405208 N  
4. Unit mg/kg (Dry weight)  
5. United States Environmental Protection Agency. SW-846 Method 8260D (2018), 5035A (2002).  
6.## รีมร้วด้านทิศเหนือโครงการ (บ่อเหนือหน้า (Up-gradient)) (MW01)

Examined By.....

(Miss Apiradee Chuen-arom)

(ว-003-ค-0007)

08 / 06 / 2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(Miss Nunnaphat Bakhuntod)

(ว-003-ค-0005)

08 / 06 / 2024

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



Request No. W6705408

Report No. 6706-0323

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant  
Sample Name : ริมรั้วด้านทิศเหนือโครงการ(บ่อเหนือหน้า)##  
Sampling By : ETC  
Sampling Method : Grab  
Tested Date : 16/05/2024-01/06/2024  
Sample No. : W 67051287  
Sampling Date : 15/05/2024  
Sampling Time : 10:00 AM  
Received Date : 16/05/2024  
Reported Date : 08/06/2024

Parameter	Unit	Method	Results	Standard <sup>1)</sup>
<b>Volatile Organic Compounds</b>				
- 1,1,2-Trichloroethane	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 19
- Trichloroethylene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 61
- Vinyl Chloride	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 8.3
- m,p-Xylene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 210
- o-Xylene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 210
- Xylene Total	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 210

Physical Apperance :

1. Sample : brown, soil  
2. Container : Normal [ 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 Mr. Songpon Phiwan (จ-003-ค-0016)  
3. Sampling At UTM 47 P 731078 E 1405208 N  
4. Unit mg/kg (Dry weight)  
5. United States Environmental Protection Agency. SW-846 Method 8260D (2018), 5035A (2002).  
6.## ริมรั้วด้านทิศเหนือโครงการ (บ่อเหนือหน้า (Up-gradient)) (MW01)

Examined By.....

(Miss Apiradee Chuen-arom)

(จ-003-ค-0007)

08 / 06 / 2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Miss Nunnaphat Bakhuntod)

(จ-003-ค-0005)

08 / 06 / 2024

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

Request No. W6705408

Report No. 6706-0323

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051287  
Sample Name : ริมรั้วด้านทิศเหนือโครงการ(บ่อเหนือน้ำ)## Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 10:00 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024-01/06/2024 Reported Date : 08/06/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
<b>Total Petroleum Hydrocarbons ***</b>				
- TPH (C <sub>&gt;8</sub> -C <sub>16</sub> )	mg/kg	3540 C /8015 D	ND	≤ 25
- n-Nonane				
- n-Decane				
- n-Dodecane				
- n-Tetradecane				
- n-Hexadecane				

Physical Apperance : 1. Sample : brown, soil  
2. Container : Normal [ 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>>8</sub>-C<sub>16</sub>) = < 0.25 mg/kg ]  
5. Sampling At UTM 47 P 731078 E 1405208 N  
6.## ริมรั้วด้านทิศเหนือโครงการ (บ่อเหนือน้ำ (Up-gradient)) (MW01)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By   
( Miss Apiradee Chuen-arom )

08 / 06 / 2024

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

Request No. W6705408

Report No. 6706-0324

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051288  
Sample Name : รีมรูด้านทิศใต้โครงการ (บ่อท้ายน้ำ (Down-gradient)) (MW05) Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 10:30 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024-01/06/2024 Reported Date : 08/06/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Arsenic (As)	mg/kg	Digestion, ICP (US EPA. Method 3050B, 6010C)	< 5.00	≤ 27
Beryllium (Be)	mg/kg	Digestion, ICP (US EPA. Method 3050B, 6010C)	< 1.00	≤ 13
Cadmium (Cd)	mg/kg	Digestion, ICP (US EPA. Method 3050B, 6010C)	0.74	≤ 810
Chromium (Cr)	mg/kg	Digestion, ICP (US EPA. Method 3050B, 6010C)	35.0	≤ 640
Hexavalent Chromium	mg/kg	Alkaline Digestion, Colorimetric (US EPA. Method 3060A, 7196A)	< 2.00	≤ 640
Lead (Pb)	mg/kg	Digestion, ICP (US EPA. Method 3050B, 6010C)	28.4	≤ 750
Manganese (Mn)	mg/kg	Digestion, ICP (US EPA. Method 3050B, 6010C)	112	≤ 32,000
Mercury (Hg)	mg/kg	Digestion, Cold-Vapor AAS (US EPA. Method 3050B, 7471B)	< 0.20	≤ 610
Nickel (Ni)	mg/kg	Digestion, ICP (US EPA. Method 3050B, 6010C)	11.4	≤ 41,000
Selenium (Se)	mg/kg	Digestion, ICP (US EPA. Method 3050B, 6010C)	< 5.00	≤ 10,000
Vanadium (V)	mg/kg	Digestion, ICP (US EPA. Method 3050B, 6010C)	24.2	≤ 1,000
Zinc (Zn)	mg/kg	Digestion, ICP (US EPA. Method 3050B, 6010C)	33.5	≤ 1,000

Physical Appearance : 1. Sample : brown, soil  
2. Container : Normal [ 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 Mr. Songpon Phiwan (ว-003-ค-0016)  
3. Sampling At UTM 47 P 730370 E 1404509 N  
4. Unit mg/kg (Dry weight)  
5. United States Environmental Protection Agency. SW-846 Method 3050B, 3060A, 7196A (1996), 6010C, 7471B (2007).

Examined By.....

(Miss Apiradee Chuen-arom)

(ว-003-ค-0007)

08 / 06 / 2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(Miss Nunnaphat Bakhuntod )

(ว-003-ค-0005)

08/06/2024

REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. W6705408

Report No. 6706-0324

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051288  
Sample Name : ริมรั้วด้านทิศใต้โครงการ (บ่อท้ายน้ำ (Down-gradient)) (MW05) Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 10:30 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024-01/06/2024 Reported Date : 08/06/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Boron (B)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	73.9	-
Cobalt (Co)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	< 1.00	-
Copper (Cu)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	3.58	-
Iron (Fe)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	11,874	-
Titanium (Ti)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	24.5	-

Physical Apperance : 1. Sample : brown, soil  
2. Container : Normal [ 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. Sampling By Mr. Songpon Phiwuan  
4. Sampling At UTM 47 P 730370 E 1404509 N  
5. Unit mg/kg (Dry weight)  
6. United States Environmental Protection Agency. SW-846 Method 3050B (1996), 6010C (2007).



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

(Miss Apiradee Chuen-arom)

08/06/2024

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



Request No. W6705408

Report No. 6706-0324

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051288  
Sample Name : รีมรื้อด้านทิศใต้โครงการ(บ่อท้ายน้ำ)## Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 10:30 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024-01/06/2024 Reported Date : 08/06/2024

Parameter	Unit	Method	Results	Standard <sup>1</sup>
<b>Volatile Organic Compounds</b>				
- Benzene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 15
- Carbon tetrachloride	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 5.3
- 1,2-Dichloroethane	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 7.6
- 1,1-Dichloroethylene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 1.2
- cis-1,2-Dichloroethylene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 150
- trans-1,2-Dichloroethylene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 210
- Ethylbenzene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 230
- Methylene Chloride	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 210
- Styrene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 1,700
- Tetrachloroethylene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 190
- Toluene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 520
- 1,2,4 - Trichlorobenzene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 1,000
- 1,1,1-Trichloroethane	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 1,400

Physical Apperance : 1. Sample : brown, soil  
2. Container : Normal [ 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 Mr. Songpon Phiwuan (จ-003-ก-0016)  
3. Sampling At UTM 47 P 730370 E 1404509 N  
4. Unit mg/kg (Dry weight)  
5. United States Environmental Protection Agency. SW-846 Method 8260D (2018), 5035A (2002).  
6. ## รีมรื้อด้านทิศใต้โครงการ (บ่อท้ายน้ำ (Down-gradient)) (MW05)

Examined By.....

( Miss Apiradee Chuen-arom )

(จ-003-ก-0007)

08 / 06 / 2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

( Miss Nunnaphat Bakhuntod )

(จ-003-ก-0005)

08 / 06 / 2024

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

Request No. W6705408

Report No. 6706-0324

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

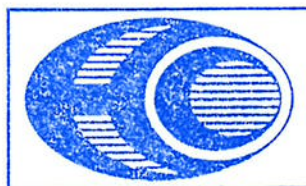
Sampling Source : EOEG Plant Sample No. : W 67051288  
Sample Name : ริมร้วด้านทิศใต้โครงการ(บ่อท้ายน้ำ)## Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 10:30 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024-01/06/2024 Reported Date : 08/06/2024

Parameter	Unit	Method	Results	Standard <sup>11</sup>
<b>Volatile Organic Compounds</b>				
- 1,1,2-Trichloroethane	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 19
- Trichloroethylene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 61
- Vinyl Chloride	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 8.3
- m,p-Xylene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 210
- o-Xylene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 210
- Xylene Total	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 210

Physical Apperance : 1. Sample : brown, soil  
2. Container : Normal [ 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 Mr. Songpon Phiwuan (ว-003-ท-0016)  
3. Sampling At UTM 47 P 730370 E 1404509 N  
4. Unit mg/kg (Dry weight)  
5. United States Environmental Protection Agency. SW-846 Method 8260D (2018), 5035A (2002).  
6. ## ริมร้วด้านทิศใต้โครงการ (บ่อท้ายน้ำ (Down-gradient)) (MW05)

Examined By.....  
( Miss Apiradee Chuen-arom )  
(ว-003-ท-0007)  
08 / 06 / 2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....  
( Miss Nunnaphat Bakhuntod )  
(ว-003-ท-0005)  
08 / 06 / 2024

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

Request No. W6705408

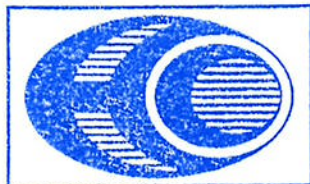
Report No. 6706-0324

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051288  
Sample Name : ริมรั้วด้านทิศใต้โครงการ(บ่อท้ายน้ำ)## Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 10:30 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024-01/06/2024 Reported Date : 08/06/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
<b>Total Petroleum Hydrocarbons ***</b>				
- TPH (C <sub>8</sub> -C <sub>16</sub> )	mg/kg	3540 C /8015 D	ND	≤ 25
- n-Nonane				
- n-Decane				
- n-Dodecane				
- n-Tetradecane				
- n-Hexadecane				

Physical Apperance : 1. Sample : brown, soil  
2. Container : Normal [ 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>8</sub>-C<sub>16</sub>) = < 0.25 mg/kg ]  
5. Sampling At UTM 47 P 730370 E 1404509 N  
6. ## ริมรั้วด้านทิศใต้โครงการ (บ่อท้ายน้ำ (Down-gradient)) (MW05)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By   
( Miss Apiradee Chuen-arom )

08 / 06 / 2024

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

Request No. W6705408

Report No. 6706-0325

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051289  
Sample Name : ริมร้วด้านทิศตะวันตกโครงการ (บ่อกลางน้ำ (Middle-gradient)) (MW06) Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 10:55 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024-01/06/2024 Reported Date : 08/06/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Arsenic (As)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	< 5.00	≤ 27
Beryllium (Be)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	< 1.00	≤ 13
Cadmium (Cd)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	0.24	≤ 810
Chromium (Cr)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	3.93	≤ 640
Hexavalent Chromium	mg/kg	Alkaline Digestion,Colorimetric (US EPA. Method 3060A, 7196A)	< 2.00	≤ 640
Lead (Pb)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	7.07	≤ 750
Manganese (Mn)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	189	≤ 32,000
Mercury (Hg)	mg/kg	Digestion,Cold-Vapor AAS (US EPA. Method 3050B, 7471B)	< 0.20	≤ 610
Nickel (Ni)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	< 1.00	≤ 41,000
Selenium (Se)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	< 5.00	≤ 10,000
Vanadium (V)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	7.03	≤ 1,000
Zinc (Zn)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	46.0	≤ 1,000

Physical Apperance : 1. Sample : brown, soil  
2. Container : Normal [ 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 Mr. Songpon Phiwan (ว-003-ค-0016)  
3. Sampling At UTM 47 P 730789 E 1404730 N  
4. Unit mg/kg (Dry weight)  
5. United States Environmental Protection Agency. SW-846 Method 3050B, 3060A, 7196A (1996), 6010C, 7471B (2007).

Examined By.....

(Miss Apiradee Chuen-arom)

(ว-003-ค-0007)

08 / 06 / 2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(Miss Nunnaphat Bakhuntod)

(ว-003-ค-0005)

08/06/2024

REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY



Request No. W6705408

Report No. 6706-0325

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051289  
Sample Name : รีมรื้อด้านทิศตะวันตกโครงการ (บ่อกลางน้ำ (Middle-gradient)) (MW06) Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 10:55 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024-01/06/2024 Reported Date : 08/06/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Boron (B)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	26.2	-
Cobalt (Co)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	< 1.00	-
Copper (Cu)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	1.08	-
Iron (Fe)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	3,803	-
Titanium (Ti)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	43.2	-

Physical Apperance : 1. Sample : brown, soil  
2. Container : Normal [ 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. Sampling By Mr. Songpon Phiwuan  
4. Sampling At UTM 47 P 730789 E 1404730 N  
5. Unit mg/kg (Dry weight)  
6. United States Environmental Protection Agency. SW-846 Method 3050B (1996), 6010C (2007).



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

(Miss Apiradee Chuen-arom)

08/06/2024

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

Request No. W6705408

Report No. 6706-0325

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051289  
Sample Name : ริมรั้วด้านทิศตะวันตกโครงการ(บ่อกลางน้ำ)## Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 10:55 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024-01/06/2024 Reported Date : 08/06/2024

Parameter	Unit	Method	Results	Standard <sup>1</sup>
<b>Volatile Organic Compounds</b>				
- Benzene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 15
- Carbon tetrachloride	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 5.3
- 1,2-Dichloroethane	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 7.6
- 1,1-Dichloroethylene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 1.2
- cis-1,2-Dichloroethylene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 150
- trans-1,2-Dichloroethylene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 210
- Ethylbenzene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 230
- Methylene Chloride	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 210
- Styrene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 1,700
- Tetrachloroethylene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 190
- Toluene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 520
- 1,2,4 - Trichlorobenzene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 1,000
- 1,1,1-Trichloroethane	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 1,400

Physical Apperance : 1. Sample : brown, soil  
2. Container : Normal [ G 1.0 L ]

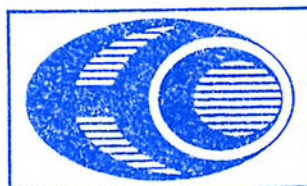
Remark : 1. /1 Soil and Groundwater Contamination Standard, Notification of the Ministry of Industry , B.E. 2559 (2016)  
2. Sampling By Mr. Songpon Phiwan (ว-003-ค-0016)  
3. Sampling At UTM 47 P 730789 E 1404730 N  
4. Unit mg/kg (Dry weight)  
5. United States Environmental Protection Agency. SW-846 Method 8260D (2018), 5035A (2002).  
6. ## ริมรั้วด้านทิศตะวันตกโครงการ (บ่อกลางน้ำ) (Middle-gradient)) (MW06)

Examined By.....

( Miss Apiradee Chuen-arom )

(ว-003-ค-0007)

08 / 06 / 2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

( Miss Nunnaphat Bakhuntod )

(ว-003-ค-0005)

08 / 06 / 2024

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

Request No. W6705408

Report No. 6706-0325

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051289  
Sample Name : ริมรั้วด้านทิศตะวันตกโครงการ(บ่อกลางน้ำ)## Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 10:55 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024-01/06/2024 Reported Date : 08/06/2024

Parameter	Unit	Method	Results	Standard <sup>#1</sup>
<b>Volatile Organic Compounds</b>				
- 1,1,2-Trichloroethane	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 19
- Trichloroethylene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 61
- Vinyl Chloride	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 8.3
- m,p-Xylene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 210
- o-Xylene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 210
- Xylene Total	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 210

Physical Apperance : 1. Sample : brown, soil  
2. Container : Normal [ 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 Mr. Songpon Phiwan (ว-003-ท-0016)  
3. Sampling At UTM 47 P 730789 E 1404730 N  
4. Unit mg/kg (Dry weight)  
5. United States Environmental Protection Agency. SW-846 Method 8260D (2018), 5035A (2002).  
6. ## ริมรั้วด้านทิศตะวันตกโครงการ (บ่อกลางน้ำ (Middle-gradient)) (MW06)

Examined By.....  
( Miss Apiradee Chuen-arom )  
(ว-003-ท-0007)  
08 / 06 / 2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....  
( Miss Nunnaphat Bakhuntod )  
(ว-003-ท-0005)  
08 / 06 / 2024

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

Request No. W6705408

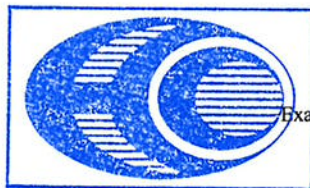
Report No. 6706-0325

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051289  
Sample Name : ริมรั้วด้านทิศตะวันตกโครงการ(บ่อกลางน้ำ)## Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 10:55 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024-01/06/2024 Reported Date : 08/06/2024

Parameter	Unit	Method	Result	Standard <sup>1/</sup>
<b>Total Petroleum Hydrocarbons ***</b>				
- TPH (C <sub>8</sub> -C <sub>16</sub> )	mg/kg	3540 C /8015 D	ND	≤ 25
- n-Nonane				
- n-Decane				
- n-Dodecane				
- n-Tetradecane				
- n-Hexadecane				

Physical Apperance : 1. Sample : brown, soil  
2. Container : Normal [ 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>8</sub>-C<sub>16</sub>) = < 0.25 mg/kg ]  
5. Sampling At UTM 47 P 730789 E 1404730 N  
6. ## ริมรั้วด้านทิศตะวันตกโครงการ (บ่อกลางน้ำ (Middle-gradient)) (MW06)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By   
( Miss Apiradee Chuen-arom )

08 / 06 / 2024

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



Request No. W6705408

Report No. 6706-0326

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051290  
Sample Name : บริเวณแนวท่อใต้ดิน (MW07) Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 11:15 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024-01/06/2024 Reported Date : 08/06/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Arsenic (As)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	< 5.00	≤ 27
Beryllium (Be)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	< 1.00	≤ 13
Cadmium (Cd)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	0.57	≤ 810
Chromium (Cr)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	12.3	≤ 640
Hexavalent Chromium	mg/kg	Alkaline Digestion,Colorimetric (US EPA. Method 3060A, 7196A)	< 2.00	≤ 640
Lead (Pb)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	6.97	≤ 750
Manganese (Mn)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	121	≤ 32,000
Mercury (Hg)	mg/kg	Digestion,Cold-Vapor AAS (US EPA. Method 3050B, 7471B)	< 0.20	≤ 610
Nickel (Ni)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	< 1.00	≤ 41,000
Selenium (Se)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	< 5.00	≤ 10,000
Vanadium (V)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	28.2	≤ 1,000
Zinc (Zn)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	10.6	≤ 1,000

Physical Apperance : 1. Sample : brown, soil  
2. Container : Normal [ 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 Mr. Songpon Phiwan (ว-003-ท-0016)  
3. Sampling At UTM 47 P 730841 E 1404704 N  
4. Unit mg/kg (Dry weight)  
5. United States Environmental Protection Agency. SW-846 Method 3050B, 3060A, 7196A (1996), 6010C, 7471B (2007).

Examined By.....

( Miss Apiradee Chuen-arom )

(ว-003-ท-0007)

08 / 06 / 2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

( Miss Nunnaphat Bakhuntod )

(ว-003-ท-0005)

08/06/2024

REPORTED TESTS REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. W6705408

Report No. 6706-0326

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051290  
Sample Name : บริเวณแนวท่อใต้ดิน (MW07) Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 11:15 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024-01/06/2024 Reported Date : 08/06/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
Boron (B)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	63.3	-
Cobalt (Co)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	< 1.00	-
Copper (Cu)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	1.85	-
Iron (Fe)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	9,917	-
Titanium (Ti)	mg/kg	Digestion,ICP (US EPA. Method 3050B, 6010C)	29.4	-

Physical Apperance : 1. Sample : brown, soil  
2. Container : Normal [ 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. Sampling By Mr. Songpon Phiwuan  
4. Sampling At UTM 47 P 730841 E 1404704 N  
5. Unit mg/kg (Dry weight)  
6. United States Environmental Protection Agency. SW-846 Method 3050B (1996), 6010C (2007).



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By   
( Miss Apiradee Chuen-arom )

08/06/2024

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

Request No. W6705408

Report No. 6706-0326

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051290  
Sample Name : บริเวณแนวท่อใต้ดิน (MW07) Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 11:15 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024-01/06/2024 Reported Date : 08/06/2024

Parameter	Unit	Method	Results	Standard <sup>1)</sup>
<b>Volatile Organic Compounds</b>				
- Benzene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 15
- Carbon tetrachloride	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 5.3
- 1,2-Dichloroethane	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 7.6
- 1,1-Dichloroethylene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 1.2
- cis-1,2-Dichloroethylene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 150
- trans-1,2-Dichloroethylene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 210
- Ethylbenzene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 230
- Methylene Chloride	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 210
- Styrene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 1,700
- Tetrachloroethylene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 190
- Toluene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 520
- 1,2,4 - Trichlorobenzene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 1,000
- 1,1,1-Trichloroethane	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 1,400

Physical Appearance : 1. Sample : brown, soil  
2. Container : Normal [ 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 Mr. Songpon Phiwan (จ-003-ค-0016)  
3. Sampling At UTM 47 P 730841 E 1404704 N  
4. Unit mg/kg (Dry weight)  
5. United States Environmental Protection Agency. SW-846 Method 8260D (2018), 5035A (2002).

Examined By.....

( Miss Apiradee Chuen-arom )

(จ-003-ค-0007)

08 / 06 / 2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

( Miss Nunnaphat Bakhuntod )

(จ-003-ค-0005)

08 / 06 / 2024

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

Request No. W6705408

Report No. 6706-0326

## TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 16  
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
Sampling Source : EOEG Plant Sample No. : W 67051290  
Sample Name : บริเวณแนวท่อใต้ดิน (MW07) Sampling Date : 15/05/2024  
Sampling By : ETC Sampling Time : 11:15 AM  
Sampling Method : Grab Received Date : 16/05/2024  
Tested Date : 16/05/2024-01/06/2024 Reported Date : 08/06/2024

Parameter	Unit	Method	Results	Standard <sup>1</sup>
<b>Volatile Organic Compounds</b>				
- 1,1,2-Trichloroethane	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 19
- Trichloroethylene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 61
- Vinyl Chloride	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 8.3
- m,p-Xylene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 210
- o-Xylene	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 210
- Xylene Total	mg/kg	Purge-and-Trap/GC-MS (U.S.EPA Method 8260D, 5035A)	< 0.010	≤ 210

Physical Apperance : 1. Sample : brown, soil  
2. Container : Normal [ 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 Mr. Songpon Phiwuan (ว-003-ค-0016)  
3. Sampling At UTM 47 P 730841 E 1404704 N  
4. Unit mg/kg (Dry weight)  
5. United States Environmental Protection Agency. SW-846 Method 8260D (2018), 5035A (2002).

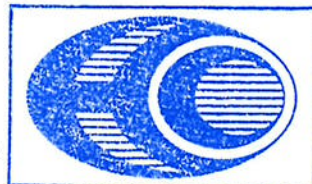
Examined By



( Miss Apiradee Chuen-arom )


(ว-003-ค-0007)

08 / 06 / 2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



( Miss Nunnaphat Bakhuntod )

(ว-003-ค-0005)

08 / 06 / 2024

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



Request No. W6705408

Report No. 6706-0326

## TEST REPORT

Customer	:	PTT Global Chemical Public Company Limited Branch 16		
Address	:	9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150		
Sampling Source	:	EOEG Plant	Sample No.	: W 67051290
Sample Name	:	บริเวณแนวท่อใต้ดิน (MW07)	Sampling Date	: 15/05/2024
Sampling By	:	ETC	Sampling Time	: 11:15 AM
Sampling Method	:	Grab	Received Date	: 16/05/2024
Tested Date	:	16/05/2024-01/06/2024	Reported Date	: 08/06/2024

Parameter	Unit	Method	Result	Standard <sup>1</sup>
<b>Total Petroleum Hydrocarbons ***</b>				
- TPH (C <sub>8</sub> -C <sub>16</sub> )	mg/kg	3540 C /8015 D	ND	≤ 25
- n-Nonane				
- n-Decane				
- n-Dodecane				
- n-Tetradecane				
- n-Hexadecane				

Physical Apperance :	1. Sample :	brown, soil
	2. Container :	Normal [ 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. (จ-239)
	4.	ND = non detectable [ TPH (C <sub>8</sub> -C <sub>16</sub> ) = < 0.25 mg/kg ]
	5.	Sampling At UTM 47 P 730841 E 1404704 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By   
( Miss Apiradee Chuen-arom )

08 / 06 / 2024

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

Request No. LA67-R0250

Report No. R6702-0890

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE POINT : บริเวณริมรั้วด้านทิศเหนือ  
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 00230994 : Class 1

SAMPLE NO. : 01711  
MEASURING DATE : 08-09/02/2024  
RECEIVED DATE : 15/02/2024  
REPORTED DATE : 21/02/2024

TIME \ DATE	08-09/02/2024 ( $L_{eq}$ )	08-09/02/2024 ( $L_{max}$ )	08-09/02/2024 ( $L_{90}$ )	UNIT
09:00 - 10:00 <sup>3</sup>	61.0	80.7	55.6	dB(A)
10:00 - 11:00	62.8	83.5	56.1	dB(A)
11:00 - 12:00	63.6	94.7	55.9	dB(A)
12:00 - 13:00	60.7	82.8	55.0	dB(A)
13:00 - 14:00	61.7	84.7	56.2	dB(A)
14:00 - 15:00	62.1	89.3	56.0	dB(A)
15:00 - 16:00	62.0	81.7	56.0	dB(A)
16:00 - 17:00	64.4	84.8	56.9	dB(A)
17:00 - 18:00	63.7	84.5	56.2	dB(A)
18:00 - 19:00	63.0	87.0	56.0	dB(A)
19:00 - 20:00	61.9	85.5	55.7	dB(A)
20:00 - 21:00	58.9	76.3	55.5	dB(A)
21:00 - 22:00	58.5	75.9	55.5	dB(A)
22:00 - 23:00	60.5	90.2	55.3	dB(A)
23:00 - 00:00	58.4	91.4	55.4	dB(A)
00:00 - 01:00	57.3	82.5	55.5	dB(A)
01:00 - 02:00	57.2	77.5	55.5	dB(A)
02:00 - 03:00	56.4	73.9	55.5	dB(A)
03:00 - 04:00	56.6	75.3	55.6	dB(A)
04:00 - 05:00	56.9	75.3	55.5	dB(A)
05:00 - 06:00	58.3	79.3	55.4	dB(A)
06:00 - 07:00	63.4	81.7	56.8	dB(A)
07:00 - 08:00	64.8	82.0	57.4	dB(A)
08:00 - 09:00	63.8	95.3	56.0	dB(A)
$L_{eq}$ 24 hr.	61.5	-	-	dB(A)
$L_{dn}$	66.1	-	-	dB(A)
Maximum	-	95.3	-	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)<sup>3/</sup> Start Time\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
(Measurement By Mr. Tummarut Photankhum)

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

21/02/2024

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

Request No. LA67-R0250

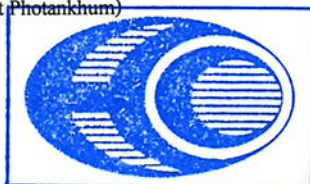
Report No. R6702-0891

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE POINT : บริเวณริมรั้วด้านทิศเหนือ  
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 00230994 : Class 1

SAMPLE NO. : 01712  
MEASURING DATE : 09-10/02/2024  
RECEIVED DATE : 15/02/2024  
REPORTED DATE : 21/02/2024

TIME \ DATE	09-10/02/2024 ( $L_{eq}$ )	09-10/02/2024 ( $L_{max}$ )	09-10/02/2024 ( $L_{90}$ )	UNIT
09:00 - 10:00 <sup>1/3</sup>	64.4	91.5	58.1	dB(A)
10:00 - 11:00	64.5	84.5	58.1	dB(A)
11:00 - 12:00	63.6	86.2	57.1	dB(A)
12:00 - 13:00	63.6	93.1	56.0	dB(A)
13:00 - 14:00	61.4	83.5	55.9	dB(A)
14:00 - 15:00	62.2	87.1	56.3	dB(A)
15:00 - 16:00	62.4	88.5	56.3	dB(A)
16:00 - 17:00	65.4	88.8	57.2	dB(A)
17:00 - 18:00	65.4	89.0	56.6	dB(A)
18:00 - 19:00	63.3	82.2	56.3	dB(A)
19:00 - 20:00	61.9	82.3	56.1	dB(A)
20:00 - 21:00	59.0	78.0	55.7	dB(A)
21:00 - 22:00	59.1	78.8	55.7	dB(A)
22:00 - 23:00	58.5	79.9	55.7	dB(A)
23:00 - 00:00	57.9	76.7	55.5	dB(A)
00:00 - 01:00	57.7	76.9	55.6	dB(A)
01:00 - 02:00	57.1	73.8	55.4	dB(A)
02:00 - 03:00	56.4	76.4	55.2	dB(A)
03:00 - 04:00	56.5	73.3	55.4	dB(A)
04:00 - 05:00	56.2	67.4	55.5	dB(A)
05:00 - 06:00	57.0	73.7	55.7	dB(A)
06:00 - 07:00	62.8	80.7	56.5	dB(A)
07:00 - 08:00	65.2	89.6	56.6	dB(A)
08:00 - 09:00	63.1	93.9	56.4	dB(A)
$L_{eq}$ 24 hr.	62.1	-	-	dB(A)
$L_{dn}$	65.9	-	-	dB(A)
Maximum	-	93.9	-	dB(A)
Standard	$70^{1/1}, 70^{1/2}$	$115^{1/1}, 115^{1/2}$	-	dB(A)

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

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

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-R0250

Report No. R6702-0892

TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE POINT : บริเวณริมรั้วด้านทิศเหนือ  
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 00230994 : Class 1

SAMPLE NO. : 01713  
MEASURING DATE : 10-11/02/2024  
RECEIVED DATE : 15/02/2024  
REPORTED DATE : 21/02/2024

TIME \ DATE	10-11/02/2024 ( $L_{eq}$ )	10-11/02/2024 ( $L_{max}$ )	10-11/02/2024 ( $L_{90}$ )	UNIT
09:00 - 10:00 <sup>1/3</sup>	61.7	80.4	56.3	dB(A)
10:00 - 11:00	61.6	82.0	55.6	dB(A)
11:00 - 12:00	63.3	90.6	55.6	dB(A)
12:00 - 13:00	62.3	83.6	57.0	dB(A)
13:00 - 14:00	62.5	79.2	57.8	dB(A)
14:00 - 15:00	60.6	77.7	55.5	dB(A)
15:00 - 16:00	62.5	86.9	55.9	dB(A)
16:00 - 17:00	63.8	81.2	56.5	dB(A)
17:00 - 18:00	64.7	80.6	60.3	dB(A)
18:00 - 19:00	65.7	86.6	59.7	dB(A)
19:00 - 20:00	59.9	80.4	56.4	dB(A)
20:00 - 21:00	58.5	90.3	55.9	dB(A)
21:00 - 22:00	57.1	81.8	55.4	dB(A)
22:00 - 23:00	67.1	94.5	63.6	dB(A)
23:00 - 00:00	57.6	78.7	56.5	dB(A)
00:00 - 01:00	56.6	74.5	55.9	dB(A)
01:00 - 02:00	56.6	69.6	56.0	dB(A)
02:00 - 03:00	56.5	71.9	55.8	dB(A)
03:00 - 04:00	56.1	75.8	55.5	dB(A)
04:00 - 05:00	56.2	73.0	55.5	dB(A)
05:00 - 06:00	57.8	81.6	55.6	dB(A)
06:00 - 07:00	62.7	83.2	56.3	dB(A)
07:00 - 08:00	63.7	93.4	56.1	dB(A)
08:00 - 09:00	60.1	78.6	55.7	dB(A)
$L_{eq}$ 24 hr.	61.8	-	-	dB(A)
$L_{dn}$	67.3	-	-	dB(A)
Maximum	-	94.5	-	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)

<sup>1/3</sup> Start Time

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



บริษัท อีสเทิร์นไทยคอนซัลต์ติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

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-R0250

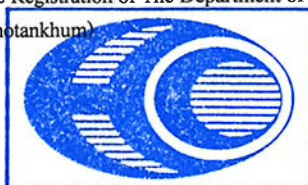
Report No. R6702-0893

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE POINT : บริเวณริมรั้วด้านทิศเหนือ  
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 00230994 : Class 1

SAMPLE NO. : 01714  
MEASURING DATE : 11-12/02/2024  
RECEIVED DATE : 15/02/2024  
REPORTED DATE : 21/02/2024

TIME \ DATE	11-12/02/2024 ( $L_{eq}$ )	11-12/02/2024 ( $L_{max}$ )	11-12/02/2024 ( $L_{90}$ )	UNIT
09:00 - 10:00 <sup>/3</sup>	60.0	82.1	55.4	dB(A)
10:00 - 11:00	59.8	80.6	55.1	dB(A)
11:00 - 12:00	62.4	92.3	55.0	dB(A)
12:00 - 13:00	60.0	86.3	54.6	dB(A)
13:00 - 14:00	58.7	78.8	55.2	dB(A)
14:00 - 15:00	59.7	80.3	55.6	dB(A)
15:00 - 16:00	60.1	82.4	55.8	dB(A)
16:00 - 17:00	63.6	88.5	55.9	dB(A)
17:00 - 18:00	59.4	83.3	55.5	dB(A)
18:00 - 19:00	63.4	85.6	55.9	dB(A)
19:00 - 20:00	59.5	78.1	55.1	dB(A)
20:00 - 21:00	56.0	72.8	54.8	dB(A)
21:00 - 22:00	56.5	74.2	54.8	dB(A)
22:00 - 23:00	56.5	72.7	54.9	dB(A)
23:00 - 00:00	55.9	71.6	54.9	dB(A)
00:00 - 01:00	56.3	81.8	54.9	dB(A)
01:00 - 02:00	56.0	73.2	55.2	dB(A)
02:00 - 03:00	56.3	75.9	55.5	dB(A)
03:00 - 04:00	56.2	80.7	55.5	dB(A)
04:00 - 05:00	57.1	75.0	55.6	dB(A)
05:00 - 06:00	58.7	79.8	55.8	dB(A)
06:00 - 07:00	64.5	82.4	58.0	dB(A)
07:00 - 08:00	65.4	82.9	58.1	dB(A)
08:00 - 09:00	62.5	83.3	55.9	dB(A)
$L_{eq}$ 24 hr.	60.4	-	-	dB(A)
$L_{dn}$	65.5	-	-	dB(A)
Maximum	-	92.3	-	dB(A)
Standard	$70^{/1}$ , $70^{/2}$	$115^{/1}$ , $115^{/2}$	-	dB(A)

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

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

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-R0250

Report No. R6702-0894

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE POINT : บริเวณริมรั้วด้านทิศเหนือ  
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 00230994 : Class 1

SAMPLE NO. : 01715  
MEASURING DATE : 12-13/02/2024  
RECEIVED DATE : 15/02/2024  
REPORTED DATE : 21/02/2024

TIME \ DATE	12-13/02/2024 ( $L_{eq}$ )	12-13/02/2024 ( $L_{max}$ )	12-13/02/2024 ( $L_{90}$ )	UNIT
09:00 - 10:00 <sup>1/3</sup>	61.8	86.2	55.9	dB(A)
10:00 - 11:00	62.5	80.7	56.1	dB(A)
11:00 - 12:00	62.6	79.0	55.3	dB(A)
12:00 - 13:00	62.1	88.0	54.5	dB(A)
13:00 - 14:00	61.8	80.3	55.2	dB(A)
14:00 - 15:00	62.1	79.3	55.9	dB(A)
15:00 - 16:00	61.7	78.3	56.0	dB(A)
16:00 - 17:00	65.1	82.4	57.6	dB(A)
17:00 - 18:00	63.8	84.4	56.0	dB(A)
18:00 - 19:00	64.5	86.7	56.2	dB(A)
19:00 - 20:00	61.6	80.6	56.1	dB(A)
20:00 - 21:00	59.4	78.5	55.4	dB(A)
21:00 - 22:00	59.2	85.1	55.8	dB(A)
22:00 - 23:00	59.0	80.4	55.7	dB(A)
23:00 - 00:00	57.5	77.9	55.3	dB(A)
00:00 - 01:00	56.3	71.0	55.5	dB(A)
01:00 - 02:00	57.5	75.7	56.1	dB(A)
02:00 - 03:00	57.4	79.1	56.0	dB(A)
03:00 - 04:00	56.9	76.0	55.9	dB(A)
04:00 - 05:00	60.2	90.3	55.6	dB(A)
05:00 - 06:00	59.3	85.1	55.6	dB(A)
06:00 - 07:00	64.4	84.9	57.8	dB(A)
07:00 - 08:00	65.3	87.5	57.5	dB(A)
08:00 - 09:00	61.5	78.0	55.6	dB(A)
$L_{eq}$ 24 hr.	61.7	-	-	dB(A)
$L_{dn}$	66.5	-	-	dB(A)
Maximum	-	90.3	-	dB(A)
Standard	$70^{1/1}, 70^{1/2}$	$115^{1/1}, 115^{1/2}$	-	dB(A)

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

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

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-R0250

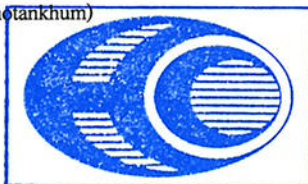
Report No. R6702-0895

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE POINT : บริเวณริมรั้วด้านทิศเหนือ  
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 00230994 : Class 1

SAMPLE NO. : 01716  
MEASURING DATE : 13-14/02/2024  
RECEIVED DATE : 15/02/2024  
REPORTED DATE : 21/02/2024

TIME \ DATE	13-14/02/2024 ( $L_{eq}$ )	13-14/02/2024 ( $L_{max}$ )	13-14/02/2024 ( $L_{90}$ )	UNIT
09:00 - 10:00 <sup>1/3</sup>	62.2	81.4	55.5	dB(A)
10:00 - 11:00	63.1	83.2	55.7	dB(A)
11:00 - 12:00	63.2	84.5	55.0	dB(A)
12:00 - 13:00	60.6	79.7	55.3	dB(A)
13:00 - 14:00	62.4	87.8	56.1	dB(A)
14:00 - 15:00	61.9	81.7	56.6	dB(A)
15:00 - 16:00	62.8	79.3	56.8	dB(A)
16:00 - 17:00	68.3	98.4	57.1	dB(A)
17:00 - 18:00	64.0	85.8	55.9	dB(A)
18:00 - 19:00	63.7	84.5	56.0	dB(A)
19:00 - 20:00	61.0	81.7	55.2	dB(A)
20:00 - 21:00	59.1	82.7	54.9	dB(A)
21:00 - 22:00	58.6	77.2	54.6	dB(A)
22:00 - 23:00	57.5	75.1	54.7	dB(A)
23:00 - 00:00	57.3	74.8	54.9	dB(A)
00:00 - 01:00	57.1	76.2	55.3	dB(A)
01:00 - 02:00	56.7	75.4	55.5	dB(A)
02:00 - 03:00	56.2	77.8	55.0	dB(A)
03:00 - 04:00	56.5	75.7	55.6	dB(A)
04:00 - 05:00	57.0	77.1	55.6	dB(A)
05:00 - 06:00	59.0	81.4	55.7	dB(A)
06:00 - 07:00	65.6	92.9	58.0	dB(A)
07:00 - 08:00	65.5	82.1	58.2	dB(A)
08:00 - 09:00	62.7	85.2	55.7	dB(A)
$L_{eq}$ 24 hr.	62.2	-	-	dB(A)
$L_{dn}$	66.6	-	-	dB(A)
Maximum	-	98.4	-	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)<sup>3/</sup> Start Time\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
(Measurement By Mr. Tummarut Photankhum)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

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-R0250

Report No. R6702-0896

TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE POINT : บริเวณริมรั้วด้านทิศเหนือ  
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 00230994 : Class 1

SAMPLE NO. : 01717  
MEASURING DATE : 14-15/02/2024  
RECEIVED DATE : 15/02/2024  
REPORTED DATE : 21/02/2024

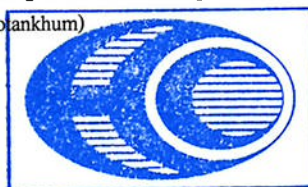
TIME \ DATE	14-15/02/2024 ( $L_{eq}$ )	14-15/02/2024 ( $L_{max}$ )	14-15/02/2024 ( $L_{90}$ )	UNIT
09:00 - 10:00 <sup>13</sup>	62.8	82.7	55.7	dB(A)
10:00 - 11:00	62.0	85.3	55.8	dB(A)
11:00 - 12:00	62.9	81.6	56.2	dB(A)
12:00 - 13:00	61.2	79.4	56.5	dB(A)
13:00 - 14:00	62.8	89.5	56.2	dB(A)
14:00 - 15:00	61.6	79.5	56.1	dB(A)
15:00 - 16:00	61.8	80.5	56.1	dB(A)
16:00 - 17:00	64.7	86.7	57.5	dB(A)
17:00 - 18:00	64.7	83.9	56.7	dB(A)
18:00 - 19:00	65.0	91.2	56.2	dB(A)
19:00 - 20:00	61.6	82.9	55.8	dB(A)
20:00 - 21:00	59.4	82.7	55.4	dB(A)
21:00 - 22:00	59.9	87.5	55.2	dB(A)
22:00 - 23:00	57.7	84.7	55.3	dB(A)
23:00 - 00:00	56.8	75.1	55.4	dB(A)
00:00 - 01:00	56.4	71.2	55.4	dB(A)
01:00 - 02:00	56.7	77.4	55.2	dB(A)
02:00 - 03:00	57.3	80.3	55.6	dB(A)
03:00 - 04:00	55.9	76.5	55.3	dB(A)
04:00 - 05:00	57.2	76.5	55.4	dB(A)
05:00 - 06:00	59.4	84.1	55.5	dB(A)
06:00 - 07:00	64.4	84.6	57.0	dB(A)
07:00 - 08:00	65.8	85.3	57.6	dB(A)
08:00 - 09:00	61.9	79.5	55.3	dB(A)
$L_{eq}$ 24 hr.	61.8	-	-	dB(A)
$L_{dn}$	66.2	-	-	dB(A)
Maximum	-	91.2	-	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)

<sup>13</sup> Start Time

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



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

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-R0250

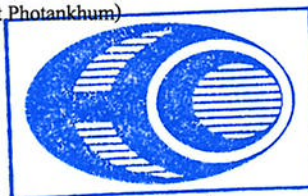
Report No. R6702-0897

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE POINT : บริเวณริมรั้วด้านทิศใต้  
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 00230992 : Class 1

SAMPLE NO. : 01718  
MEASURING DATE : 08-09/02/2024  
RECEIVED DATE : 15/02/2024  
REPORTED DATE : 21/02/2024

TIME \ DATE	08-09/02/2024 ( $L_{eq}$ )	08-09/02/2024 ( $L_{max}$ )	08-09/02/2024 ( $L_{90}$ )	UNIT
09:00 - 10:00 <sup>1/3</sup>	63.1	88.0	58.9	dB(A)
10:00 - 11:00	62.3	81.2	58.7	dB(A)
11:00 - 12:00	62.7	85.9	57.5	dB(A)
12:00 - 13:00	60.6	83.6	54.7	dB(A)
13:00 - 14:00	62.8	90.4	56.4	dB(A)
14:00 - 15:00	60.4	86.0	57.2	dB(A)
15:00 - 16:00	62.6	89.5	57.1	dB(A)
16:00 - 17:00	61.3	87.6	56.4	dB(A)
17:00 - 18:00	61.8	76.3	56.3	dB(A)
18:00 - 19:00	58.8	80.2	55.6	dB(A)
19:00 - 20:00	58.1	80.1	54.8	dB(A)
20:00 - 21:00	59.1	90.5	55.8	dB(A)
21:00 - 22:00	58.8	85.8	55.3	dB(A)
22:00 - 23:00	57.5	73.0	55.4	dB(A)
23:00 - 00:00	56.6	72.5	54.9	dB(A)
00:00 - 01:00	59.5	89.8	55.2	dB(A)
01:00 - 02:00	57.5	70.2	55.5	dB(A)
02:00 - 03:00	58.6	74.4	57.3	dB(A)
03:00 - 04:00	62.9	82.9	57.3	dB(A)
04:00 - 05:00	58.1	85.0	56.1	dB(A)
05:00 - 06:00	59.4	79.9	56.1	dB(A)
06:00 - 07:00	61.5	82.8	56.9	dB(A)
07:00 - 08:00	62.1	93.3	55.6	dB(A)
08:00 - 09:00	62.9	79.4	56.5	dB(A)
$L_{eq}$ 24 hr.	60.8	-	-	dB(A)
$L_{dn}$	66.3	-	-	dB(A)
Maximum	-	93.3	-	dB(A)
Standard	$70^{1/1}, 70^{1/2}$	$115^{1/1}, 115^{1/2}$	-	dB(A)

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

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

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-R0250

Report No. R6702-0898

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE POINT : บริเวณริมรั้วด้านทิศใต้  
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 00230992 : Class 1

SAMPLE NO. : 01719  
MEASURING DATE : 09-10/02/2024  
RECEIVED DATE : 15/02/2024  
REPORTED DATE : 21/02/2024

TIME \ DATE	09-10/02/2024 ( $L_{eq}$ )	09-10/02/2024 ( $L_{max}$ )	09-10/02/2024 ( $L_{90}$ )	UNIT
09:00 - 10:00 <sup>1/3</sup>	62.0	96.1	55.9	dB(A)
10:00 - 11:00	61.3	81.5	55.7	dB(A)
11:00 - 12:00	62.2	83.4	55.9	dB(A)
12:00 - 13:00	60.3	81.4	55.0	dB(A)
13:00 - 14:00	62.6	90.6	56.2	dB(A)
14:00 - 15:00	62.3	89.6	57.3	dB(A)
15:00 - 16:00	62.5	85.0	56.2	dB(A)
16:00 - 17:00	63.3	88.3	56.0	dB(A)
17:00 - 18:00	62.5	85.6	56.3	dB(A)
18:00 - 19:00	60.1	80.7	54.9	dB(A)
19:00 - 20:00	60.8	89.3	56.5	dB(A)
20:00 - 21:00	61.0	92.9	54.6	dB(A)
21:00 - 22:00	56.8	76.4	53.9	dB(A)
22:00 - 23:00	57.3	76.3	54.4	dB(A)
23:00 - 00:00	60.2	77.4	55.2	dB(A)
00:00 - 01:00	61.2	89.8	55.3	dB(A)
01:00 - 02:00	59.5	79.5	57.0	dB(A)
02:00 - 03:00	55.8	77.0	53.6	dB(A)
03:00 - 04:00	55.8	80.9	53.0	dB(A)
04:00 - 05:00	57.9	92.8	53.8	dB(A)
05:00 - 06:00	59.5	84.7	54.7	dB(A)
06:00 - 07:00	58.8	76.3	54.6	dB(A)
07:00 - 08:00	61.3	86.3	54.4	dB(A)
08:00 - 09:00	64.3	94.4	60.0	dB(A)
$L_{eq}$ 24 hr.	60.9	-	-	dB(A)
$L_{dn}$	65.8	-	-	dB(A)
Maximum	-	96.1	-	dB(A)
Standard	$70^{1/1}, 70^{1/2}$	$115^{1/1}, 115^{1/2}$	-	dB(A)

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

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

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-R0250

Report No. R6702-0899

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE POINT : บริเวณริมรั้วด้านทิศใต้  
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 00230992 : Class 1

SAMPLE NO. : 01720  
MEASURING DATE : 10-11/02/2024  
RECEIVED DATE : 15/02/2024  
REPORTED DATE : 21/02/2024

TIME \ DATE	10-11/02/2024 ( $L_{eq}$ )	10-11/02/2024 ( $L_{max}$ )	10-11/02/2024 ( $L_{90}$ )	UNIT
09:00 - 10:00 <sup>1/3</sup>	63.1	87.6	55.4	dB(A)
10:00 - 11:00	63.5	84.8	59.5	dB(A)
11:00 - 12:00	64.8	102.9	56.3	dB(A)
12:00 - 13:00	62.8	92.7	55.4	dB(A)
13:00 - 14:00	64.7	94.7	58.4	dB(A)
14:00 - 15:00	62.5	89.3	56.6	dB(A)
15:00 - 16:00	61.5	89.2	56.5	dB(A)
16:00 - 17:00	61.2	85.8	55.8	dB(A)
17:00 - 18:00	63.0	88.6	57.0	dB(A)
18:00 - 19:00	66.7	86.8	63.5	dB(A)
19:00 - 20:00	61.2	88.8	57.0	dB(A)
20:00 - 21:00	60.0	87.0	55.1	dB(A)
21:00 - 22:00	58.1	80.2	55.0	dB(A)
22:00 - 23:00	68.9	89.8	66.0	dB(A)
23:00 - 00:00	58.7	75.2	56.3	dB(A)
00:00 - 01:00	61.4	86.7	57.5	dB(A)
01:00 - 02:00	58.8	88.1	56.4	dB(A)
02:00 - 03:00	58.8	78.9	56.2	dB(A)
03:00 - 04:00	58.1	85.9	56.1	dB(A)
04:00 - 05:00	56.7	74.0	55.5	dB(A)
05:00 - 06:00	57.7	83.9	55.6	dB(A)
06:00 - 07:00	59.9	84.3	56.1	dB(A)
07:00 - 08:00	60.0	82.0	56.1	dB(A)
08:00 - 09:00	60.8	89.3	55.4	dB(A)
$L_{eq}$ 24 hr.	62.5	-	-	dB(A)
$L_{dn}$	68.5	-	-	dB(A)
Maximum	-	102.9	-	dB(A)
Standard	$70^{1/1}, 70^{1/2}$	$115^{1/1}, 115^{1/2}$	-	dB(A)

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

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

21/02/2024

Request No. LA67-R0250

Report No. R6702-0900

TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE POINT : บริเวณริมรั้วด้านทิศใต้  
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 00230992 : Class 1

SAMPLE NO. : 01721  
MEASURING DATE : 11-12/02/2024  
RECEIVED DATE : 15/02/2024  
REPORTED DATE : 21/02/2024

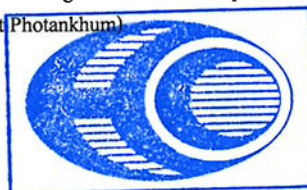
TIME \ DATE	11-12/02/2024 ( $L_{eq}$ )	11-12/02/2024 ( $L_{max}$ )	11-12/02/2024 ( $L_{90}$ )	UNIT
09:00 - 10:00 <sup>1/3</sup>	62.7	91.3	56.2	dB(A)
10:00 - 11:00	58.6	78.2	54.2	dB(A)
11:00 - 12:00	59.4	86.1	53.8	dB(A)
12:00 - 13:00	56.5	74.9	53.2	dB(A)
13:00 - 14:00	57.3	73.5	53.4	dB(A)
14:00 - 15:00	58.0	82.8	53.7	dB(A)
15:00 - 16:00	57.4	75.9	53.2	dB(A)
16:00 - 17:00	58.2	75.3	54.4	dB(A)
17:00 - 18:00	56.7	73.7	54.3	dB(A)
18:00 - 19:00	57.6	76.0	54.4	dB(A)
19:00 - 20:00	57.4	78.8	54.4	dB(A)
20:00 - 21:00	59.3	91.7	54.8	dB(A)
21:00 - 22:00	57.2	77.5	54.5	dB(A)
22:00 - 23:00	57.5	88.5	54.5	dB(A)
23:00 - 00:00	57.0	81.1	54.9	dB(A)
00:00 - 01:00	60.9	89.9	56.3	dB(A)
01:00 - 02:00	57.9	76.7	55.4	dB(A)
02:00 - 03:00	58.8	75.3	56.9	dB(A)
03:00 - 04:00	58.7	77.3	55.3	dB(A)
04:00 - 05:00	58.3	83.5	55.4	dB(A)
05:00 - 06:00	61.3	85.9	55.7	dB(A)
06:00 - 07:00	59.5	76.5	56.2	dB(A)
07:00 - 08:00	62.1	82.6	57.2	dB(A)
08:00 - 09:00	63.6	86.8	58.8	dB(A)
$L_{eq}$ 24 hr.	59.3	-	-	dB(A)
$L_{dn}$	65.6	-	-	dB(A)
Maximum	-	91.7	-	dB(A)
Standard	$70^{1/1}, 70^{1/2}$	$115^{1/1}, 115^{1/2}$	-	dB(A)

REMARK : <sup>1/1</sup> Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

<sup>1/2</sup> Notification of Ministry of the Industry B.E. 2548 (2005)

<sup>1/3</sup> Start Time

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



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

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-R0250

Report No. R6702-0901

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE POINT : บริเวณริมรั้วด้านทิศใต้  
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 00230992 : Class 1

SAMPLE NO. : 01722  
MEASURING DATE : 12-13/02/2024  
RECEIVED DATE : 15/02/2024  
REPORTED DATE : 21/02/2024

TIME \ DATE	12-13/02/2024 ( $L_{eq}$ )	12-13/02/2024 ( $L_{max}$ )	12-13/02/2024 ( $L_{90}$ )	UNIT
09:00 - 10:00 <sup>1/3</sup>	62.9	81.3	60.2	dB(A)
10:00 - 11:00	61.7	83.1	59.0	dB(A)
11:00 - 12:00	62.8	87.9	58.4	dB(A)
12:00 - 13:00	61.3	86.3	57.9	dB(A)
13:00 - 14:00	61.3	80.3	56.3	dB(A)
14:00 - 15:00	61.9	87.3	57.1	dB(A)
15:00 - 16:00	63.3	90.2	59.9	dB(A)
16:00 - 17:00	64.5	94.0	58.4	dB(A)
17:00 - 18:00	62.9	84.1	58.2	dB(A)
18:00 - 19:00	62.3	87.2	58.9	dB(A)
19:00 - 20:00	62.5	85.9	59.3	dB(A)
20:00 - 21:00	58.9	86.1	56.2	dB(A)
21:00 - 22:00	60.0	83.8	56.6	dB(A)
22:00 - 23:00	61.9	88.6	58.4	dB(A)
23:00 - 00:00	57.7	73.6	56.1	dB(A)
00:00 - 01:00	61.9	90.4	58.7	dB(A)
01:00 - 02:00	60.1	81.4	57.4	dB(A)
02:00 - 03:00	59.8	78.0	57.6	dB(A)
03:00 - 04:00	59.9	87.4	57.1	dB(A)
04:00 - 05:00	60.8	87.5	56.3	dB(A)
05:00 - 06:00	58.8	76.5	56.7	dB(A)
06:00 - 07:00	60.0	82.2	56.9	dB(A)
07:00 - 08:00	62.8	87.7	57.0	dB(A)
08:00 - 09:00	62.9	87.7	57.9	dB(A)
$L_{eq}$ 24 hr.	61.7	-	-	dB(A)
$L_{dn}$	67.0	-	-	dB(A)
Maximum	-	94.0	-	dB(A)
Standard	70 <sup>1/1</sup> , 70 <sup>2/2</sup>	115 <sup>1/1</sup> , 115 <sup>2/2</sup>	-	dB(A)

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

บริษัท อีสเทิร์นไทยคอนซัลต์ติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

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-R0250

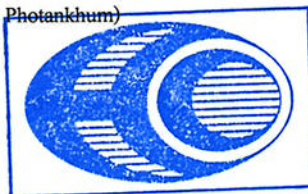
Report No. R6702-0902

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE POINT : บริเวณริมรั้วด้านทิศใต้  
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 00230992 : Class 1

SAMPLE NO. : 01723  
MEASURING DATE : 13-14/02/2024  
RECEIVED DATE : 15/02/2024  
REPORTED DATE : 21/02/2024

TIME \ DATE	13-14/02/2024 ( $L_{eq}$ )	13-14/02/2024 ( $L_{max}$ )	13-14/02/2024 ( $L_{90}$ )	UNIT
09:00 - 10:00 <sup>3</sup>	61.6	84.3	57.4	dB(A)
10:00 - 11:00	61.0	88.3	56.5	dB(A)
11:00 - 12:00	61.9	88.0	57.6	dB(A)
12:00 - 13:00	61.7	87.7	56.8	dB(A)
13:00 - 14:00	62.6	87.7	58.4	dB(A)
14:00 - 15:00	62.5	79.1	57.6	dB(A)
15:00 - 16:00	62.1	88.5	57.0	dB(A)
16:00 - 17:00	63.9	90.7	57.3	dB(A)
17:00 - 18:00	63.8	88.7	59.4	dB(A)
18:00 - 19:00	60.5	77.5	57.1	dB(A)
19:00 - 20:00	60.1	84.3	56.8	dB(A)
20:00 - 21:00	59.8	87.4	56.0	dB(A)
21:00 - 22:00	59.5	79.8	57.6	dB(A)
22:00 - 23:00	57.8	74.5	55.8	dB(A)
23:00 - 00:00	58.1	85.4	55.6	dB(A)
00:00 - 01:00	58.7	82.7	56.0	dB(A)
01:00 - 02:00	60.4	89.4	56.5	dB(A)
02:00 - 03:00	59.7	85.4	56.6	dB(A)
03:00 - 04:00	60.8	90.4	55.9	dB(A)
04:00 - 05:00	58.1	82.2	56.3	dB(A)
05:00 - 06:00	59.6	88.2	55.8	dB(A)
06:00 - 07:00	60.5	86.6	56.5	dB(A)
07:00 - 08:00	61.9	81.0	56.7	dB(A)
08:00 - 09:00	61.7	80.0	56.1	dB(A)
$L_{eq}$ 24 hr.	61.1	-	-	dB(A)
$L_{dn}$	66.3	-	-	dB(A)
Maximum	-	90.7	-	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)<sup>3/</sup> Start Time\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
(Measurement By Mr. Tummarut Photankhum)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

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-R0250

Report No. R6702-0903

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE POINT : บริเวณริมรั้วด้านทิศใต้  
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 00230992 : Class 1

SAMPLE NO. : 01724  
MEASURING DATE : 14-15/02/2024  
RECEIVED DATE : 15/02/2024  
REPORTED DATE : 21/02/2024

TIME \ DATE	14-15/02/2024 ( $L_{eq}$ )	14-15/02/2024 ( $L_{max}$ )	14-15/02/2024 ( $L_{90}$ )	UNIT
09:00 - 10:00 <sup>1/3</sup>	64.9	85.9	59.7	dB(A)
10:00 - 11:00	61.8	84.6	58.5	dB(A)
11:00 - 12:00	64.0	87.6	58.1	dB(A)
12:00 - 13:00	62.0	87.9	57.6	dB(A)
13:00 - 14:00	62.1	90.0	57.1	dB(A)
14:00 - 15:00	62.7	90.5	57.2	dB(A)
15:00 - 16:00	61.0	83.5	56.6	dB(A)
16:00 - 17:00	61.2	83.5	56.2	dB(A)
17:00 - 18:00	62.4	88.4	56.7	dB(A)
18:00 - 19:00	61.0	89.0	56.0	dB(A)
19:00 - 20:00	62.8	92.0	55.8	dB(A)
20:00 - 21:00	59.6	91.0	54.2	dB(A)
21:00 - 22:00	57.4	74.2	55.4	dB(A)
22:00 - 23:00	59.6	89.7	55.3	dB(A)
23:00 - 00:00	58.0	77.8	55.3	dB(A)
00:00 - 01:00	61.6	90.0	57.9	dB(A)
01:00 - 02:00	57.7	73.8	56.4	dB(A)
02:00 - 03:00	60.9	84.9	56.4	dB(A)
03:00 - 04:00	59.0	84.8	56.1	dB(A)
04:00 - 05:00	60.0	84.4	55.8	dB(A)
05:00 - 06:00	57.9	87.1	54.9	dB(A)
06:00 - 07:00	58.9	74.5	55.0	dB(A)
07:00 - 08:00	62.6	85.9	56.4	dB(A)
08:00 - 09:00	64.1	88.7	59.5	dB(A)
$L_{eq}$ 24 hr.	61.4	-	-	dB(A)
$L_{dn}$	66.4	-	-	dB(A)
Maximum	-	92.0	-	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)<sup>1/3</sup> Start Time\* Parameter Outside The Scope of The Registration of The Department of Industrial Works  
(Measurement By Mr. Tummarut Photankhum)

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

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. ATR6702011

Report No. 6702-0133

## TEST REPORT

CUSTOMER : GC Glycol Company Limited

ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150

SAMPLE SOURCE : EOEG Plant

SAMPLE NAME : พนักงานทำงานเกี่ยวข้องกับ EO (คุณมานพ โอภาชาติ)

SAMPLING DATE : 05/02/2024 SAMPLE NO : A67020133

RECEIVED DATE : 09/02/2024 SAMPLING TIME : 08:15-20:15

SAMPLING INSTRUMENT : Passive Sampling TESTED DATE : 09/02/2024 – 16/02/2024

REPORTED DATE : 19/02/2024

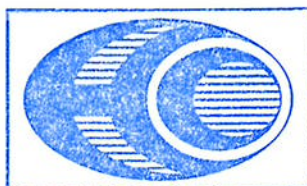
PARAMETER**	TEST METHOD	RESULT <sup>2</sup>	STD <sup>1</sup>	UNIT
Ethylene Oxide	OSHA 1010	ND	1.8	mg/m <sup>3</sup>
		ND	1.0	ppm

**REMARK:**

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

<sup>2</sup> ND = Non detectable : detection limit of Ethylene Oxide is 0.05 mg/m<sup>3</sup> or 0.03 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. Sutha Songthaninai)  
Analysed By SECOT Co.,Ltd.



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By .....

(Miss Thanatporn Klinsopon)

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. ATR6702011

Report No. 6702-0132

## TEST REPORT

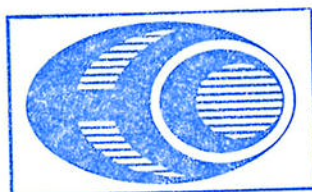
CUSTOMER : PTT Global Chemical Public Company Limited Branch16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE NAME : พนักงานทำงานเกี่ยวข้องกับ EO (คุณจตุรงค์ ศรีแก้ว)  
SAMPLING DATE : 05/02/2024 SAMPLE NO : A67020132  
RECEIVED DATE : 09/02/2024 SAMPLING TIME : 08:14-20:14  
SAMPLING INSTRUMENT : Passive Sampling TESTED DATE : 09/02/2024 – 16/02/2024  
REPORTED DATE : 19/02/2024

PARAMETER**	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Ethylene Oxide	OSHA 1010	0.13	1.8	mg/m <sup>3</sup>
		0.07	1.0	ppm

**REMARK:**

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

\*\* Parameter have License Registration of Department of Labour Protection and Welfare No.0201-03-2564-0008  
Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Sutha Songthaninai)  
Analysed By SECOT Co.,Ltd.



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By



(Miss Thanatporn Klinsonop)

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-R0214

Report No. R6702-0177

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 16

ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,  
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

SAMPLE SOURCE : EOEG Plant

SAMPLE POINT : Compressor Area : C-115

PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  8 hr. &  $L_{max}$  SAMPLE NO. : 00989

DETERMINATION METHOD : SO 11202:2010 MEASURING DATE : 05/02/2024

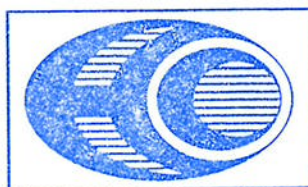
INSTRUMENT : Integrated Sound Level Meter RECEIVED DATE : 05/02/2024

S/N 00322752 : Class 2 REPORTED DATE : 09/02/2024

MEASURING TIME	RESULT		UNIT
	$L_{eq}$ 1 hr.	$L_{max}$	
08:45-09:45	83.8	85.2	dB(A)
09:45-10:45	83.9	85.4	dB(A)
10:45-11:45	83.8	85.1	dB(A)
11:45-12:45	83.6	84.8	dB(A)
12:45-13:45	83.3	84.7	dB(A)
13:45-14:45	83.3	85.0	dB(A)
14:45-15:45	83.2	84.6	dB(A)
15:45-16:45	83.2	84.7	dB(A)
$L_{eq}$ 8 hr.	83.5	—	dB(A)
Standard	90 <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. Priyaporn Sungthong



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(MRS. WANPEN LHAOCHINDAWAT)

09/02/2024

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. LA67-R0214

Report No. R6702-0176

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 16

ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,  
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

SAMPLE SOURCE : EOEG Plant

SAMPLE POINT : Compressor Area : C-320

PARAMETER\* :  $L_{eq}$  1 hr.,  $L_{eq}$  8 hr. &  $L_{max}$  SAMPLE NO. : 00988

DETERMINATION METHOD : ISO 11202:2010 MEASURING DATE : 05/02/2024

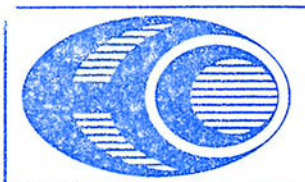
INSTRUMENT : Integrated Sound Level Meter RECEIVED DATE : 05/02/2024

S/N 00222593 : Class 2 REPORTED DATE : 09/02/2024


MEASURING TIME	RESULT		UNIT
	$L_{eq}$ 1 hr.	$L_{max}$	
08:30-09:30	81.4	82.6	dB(A)
09:30-10:30	81.3	82.1	dB(A)
10:30-11:30	81.4	82.2	dB(A)
11:30-12:30	81.6	82.3	dB(A)
12:30-13:30	81.7	82.5	dB(A)
13:30-14:30	81.7	82.3	dB(A)
14:30-15:30	81.6	82.4	dB(A)
15:30-16:30	81.6	82.4	dB(A)
$L_{eq}$ 8 hr.	81.5	—	dB(A)
Standard	90 <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. Priyaporn Sungthong



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By   
(MRS. WANPEN LHAOCHINDAWAT)

09/02/2024

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. LA67-R0214

Report No. R6702-0172

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,  
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE POINT : Operation 1 (กลิ่นมนตรี ชูวา ID 26006430)  
MEASURING DATE : 05/02/2024 SAMPLE NO. : 00984  
RECEIVED DATE : 05/02/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1365 REPORTED DATE : 09/02/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	77.0	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	91.6	115 <sup>/3</sup>	dB(A)
12 Hour dose	24.00	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	78.8	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. Priyaporn Sungthong)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

09/02/2024



Request No. LA67-R0214

Report No. R6702-0173

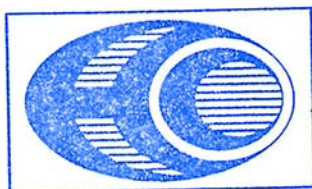
## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,  
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE POINT : Operation 2 (อุณหภูมิเครื่อง ซีรีแกว ID 26008332)  
MEASURING DATE : 05/02/2024 SAMPLE NO. : 00985  
RECEIVED DATE : 05/02/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1497 REPORTED DATE : 09/02/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	80.6	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	98.0	115 <sup>/3</sup>	dB(A)
12 Hour dose	55.00	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	82.4	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. Priyaporn Sungthong)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

09/02/2024

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. LA67-R0214

Report No. R6702-0174

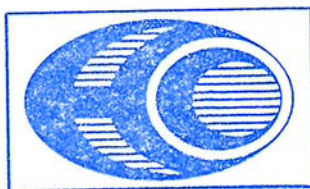
## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,  
Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE POINT : Operation 3 (อุณหภูมิ ไออากาศ ID 26003077)  
MEASURING DATE : 05/02/2024 SAMPLE NO. : 00986  
RECEIVED DATE : 05/02/2024 SAMPLING TIME : 07:00-19:00  
SAMPLING INSTRUMENT : Noise dosimeter : S/N CB1498 REPORTED DATE : 09/02/2024

PARAMETER*	RESULT	STANDARD	UNIT
Time weighted average level (12-hr TWA) <sup>#</sup>	80.6	83 <sup>/1</sup>	dB(A)
L <sub>max</sub> 12 hr	97.2	115 <sup>/3</sup>	dB(A)
12 Hour dose	54.00	100 <sup>/2</sup>	%
Time weighted average level (8-hr TWA) <sup>#</sup>	82.3	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. Priyaporn Sungthong)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

09/02/2024

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. LA67-R0253

Report No. R6702-0914

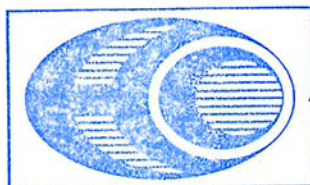
## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 16  
 ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,  
 Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
 SAMPLE SOURCE : EOEG Plant  
 SAMPLE POINT : Operation 4 (คุณอัมพร ทองสันต์ ID 26004739)  
 MEASURING DATE : 19/02/2024 SAMPLE NO. : 01735  
 RECEIVED DATE : 19/02/2024 SAMPLING TIME : 07:00-19:00  
 SAMPLING INSTRUMENT : Noise dosimeter : S/N CB0954 REPORTED DATE : 22/02/2024

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	87.9	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. Pornnapa Phongphet)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

22/02/2024

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. ATR6702011

Report No. 6702-0125

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE NAME : EO Scrubbing (T-311)  
SAMPLING DATE : 05/02/2024 SAMPLE NO. : A67020125  
RECEIVED DATE : 09/02/2024 SAMPLING TIME : 08:35-20:35  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.05 L/min TESTED DATE : 09/02/2024-14/02/2024  
Serial No. 218391 REPORTED DATE : 19/02/2024

PARAMETER**	TEST METHOD	RESULT	STD <sup>/1</sup>	UNIT
Carbon Dioxide	Non-Dispersive Infrared Method	1,483.2	9,000	mg/m <sup>3</sup>
		824.0	5,000	ppm

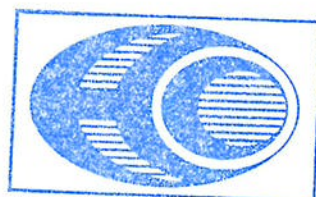
**REMARK:**<sup>/1</sup> Occupational Safety and Health Administration (OSHA) ; Standard Number 1910.1000 Table Z-1 Limits for Air Contaminants.

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

Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Suttha Songthaninai)

Analysed By SECOT Co.,Ltd.

GPS = Sampling at UTM 47 P 731050E 1404810N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

(Miss Thanatporn Klinsoapon)

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. ATR6705107

Report No. 6705-1826

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map  
Ta Phut, Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE NAME : EO Scrubbing (T-311)  
SAMPLING DATE : 25/05/2024 SAMPLE NO. : A67051826  
RECEIVED DATE : 30/05/2024 SAMPLING TIME : 08:12-20:12  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.05 L/min TESTED DATE : 30/05/2024-11/06/2024  
Serial No. 20150302001 REPORTED DATE : 12/06/2024

PARAMETER**	TEST METHOD	RESULT	STD <sup>11</sup>	UNIT
Carbon Dioxide	Non-Dispersive Infrared Method	1,508.4	9,000	mg/m <sup>3</sup>
		838.0	5,000	ppm

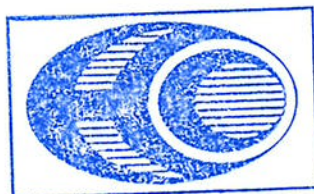
**REMARK:**<sup>11</sup> Occupational Safety and Health Administration (OSHA) ; Standard Number 1910.1000 Table Z-1 Limits for Air Contaminants.

\*\* 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 47 P 731050E 1404810N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

(Miss Thanatporn Klinsoapon)

12/06/2024

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

Request No. ATR6702011

Report No. 6702-0126

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE NAME : CO2 Removal Unit (T-220)  
SAMPLING DATE : 05/02/2024 SAMPLE NO. : A67020126  
RECEIVED DATE : 09/02/2024 SAMPLING TIME : 08:48-20:48  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.05 L/min TESTED DATE : 09/02/2024-14/02/2024  
Serial No. 218445 REPORTED DATE : 19/02/2024

PARAMETER**	TEST METHOD	RESULT	STD <sup>/1</sup>	UNIT
Carbon Dioxide	Non-Dispersive Infrared Method	1,476.0	9,000	mg/m <sup>3</sup>
		820.0	5,000	ppm

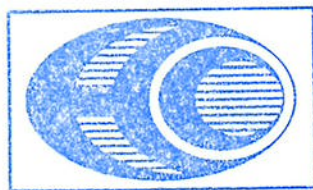
**REMARK:**<sup>/1</sup> Occupational Safety and Health Administration (OSHA) ; Standard Number 1910.1000 Table Z-1 Limits for Air Contaminants.

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

Sampling By Eastern Thai Consulting 1992 Co.,Ltd., (Mr. Suttha Songthaninai)

Analysed By SECOT Co.,Ltd.

GPS = Sampling at UTM 47 P 731017E 1404785N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By 

(Miss Thanatporn Klinsopon)

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. ATR6705107

Report No. 6705-1827

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map  
Ta Phut, Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE NAME : CO2 Removal Unit (T-220)  
SAMPLING DATE : 25/05/2024 SAMPLE NO. : A67051827  
RECEIVED DATE : 30/05/2024 SAMPLING TIME : 08:15-20:15  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.05 L/min TESTED DATE : 30/05/2024-11/06/2024  
Serial No. 20100401018 REPORTED DATE : 12/06/2024

PARAMETER**	TEST METHOD	RESULT	STD <sup>1</sup>	UNIT
Carbon Dioxide	Non-Dispersive Infrared Method	1,535.4	9,000	mg/m <sup>3</sup>
		853.0	5,000	ppm

## REMARK:

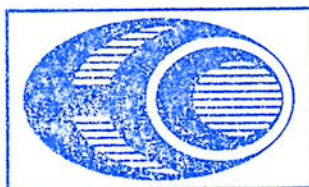
<sup>1</sup> Occupational Safety and Health Administration (OSHA) ; Standard Number 1910.1000 Table Z-1 Limits for Air Contaminants.

\*\* 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 47 P 731017E 1404785N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

(Miss Thanatporn Klinsoyon)

12/06/2024

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

Request No. ATR6702011

Report No. 6702-0127

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE NAME : Glycol Feed Stripper (T-510)  
SAMPLING DATE : 05/02/2024 SAMPLE NO. : A67020127  
RECEIVED DATE : 09/02/2024 SAMPLING TIME : 08:30-20:30  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.05 L/min TESTED DATE : 09/02/2024-13/02/2024  
Serial No. 218444 REPORTED DATE : 19/02/2024

PARAMETER*	TEST METHOD	RESULT	STD <sup>1/</sup>	UNIT
Formaldehyde	Sorbent Adsorption, Gas	< 0.12	0.92	mg/m <sup>3</sup>
	Chromatography/NIOSH 2541	< 0.10	0.75	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.

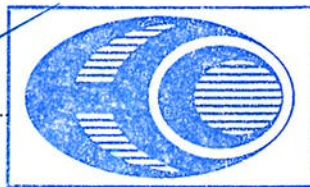
(Sampling By Mr. Suttha Songthaninai)

GPS = Sampling at UTM 47 P 731046E 1404821N

Examined By .....

(Miss Thanatporn Klinsopon)

19/02/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Mr. Kawee Suthasub)

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. ATR6705107

Report No. 6705-1828

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map  
Ta Phut, Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE NAME : Glycol Feed Stripper (T-510)  
SAMPLING DATE : 25/05/2024 SAMPLE NO. : A67051828  
RECEIVED DATE : 30/05/2024 SAMPLING TIME : 08:08-20:08  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.05 L/min TESTED DATE : 30/05/2024-01/06/2024  
Serial No. 218402 REPORTED DATE : 12/06/2024

PARAMETER*	TEST METHOD	RESULT	STD <sup>/1</sup>	UNIT
Formaldehyde	Sorbent Adsorption, Gas	< 0.12	0.92	mg/m <sup>3</sup>
	Chromatography/NIOSH 2541	< 0.10	0.75	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.

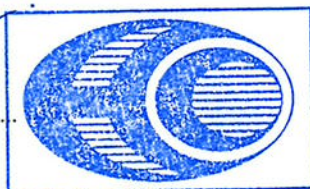
(Sampling By Mr. Witchawan Singto)

GPS = Sampling at UTM 47 P 731046E 1404821N

Examined By .....

(Miss Thanatporn Klinsopon)

12/06/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By .....

(Mr. Kawee Suthasub)

12/06/2024

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

Request No. ATR6702011

Report No. 6702-0128

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE NAME : EO Purification Unit (T-410)  
SAMPLING DATE : 05/02/2024 SAMPLE NO. : A67020128  
RECEIVED DATE : 09/02/2024 SAMPLING TIME : 08:50-20:50  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.05 L/min TESTED DATE : 09/02/2024-13/02/2024  
Serial No. 218402 REPORTED DATE : 19/02/2024

PARAMETER*	TEST METHOD	RESULT	STD <sup>1/</sup>	UNIT
Formaldehyde	Sorbent Adsorption, Gas	< 0.12	0.92	mg/m <sup>3</sup>
	Chromatography/NIOSH 2541	< 0.10	0.75	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.

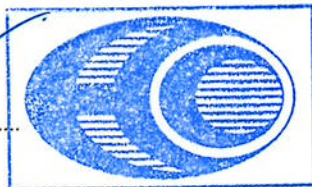
(Sampling By Mr. Suttha Songthaninai)

GPS = Sampling at UTM 47 P 731019E 1404725N

Examined By

(Miss Thanatporn Klinsoon)

19/02/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

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. ATR6705107

Report No. 6705-1829

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE NAME : EO Purification Unit (T-410)  
SAMPLING DATE : 25/05/2024 SAMPLE NO. : A67051829  
RECEIVED DATE : 30/05/2024 SAMPLING TIME : 08:17-20:17  
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.05 L/min TESTED DATE : 30/05/2024-01/06/2024  
Serial No. 218444 REPORTED DATE : 12/06/2024

PARAMETER*	TEST METHOD	RESULT	STD <sup>/1</sup>	UNIT
Formaldehyde	Sorbent Adsorption, Gas	< 0.12	0.92	mg/m <sup>3</sup>
	Chromatography/NIOSH 2541	< 0.10	0.75	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.

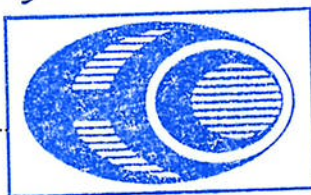
(Sampling By Mr. Witchawan Singto)

GPS = Sampling at UTM 47 P 731019E 1404725N

Examined By

(Miss Thanatporn Klinsopon)

12/06/2024



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

12/06/2024

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

Request No. ATR6702011

Report No. 6702-0129

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE NAME : EO Purification Unit (T-410) SAMPLE NO : A67020129  
SAMPLING DATE : 05/02/2024 SAMPLING TIME : 08:50-20:50  
RECEIVED DATE : 09/02/2024 TESTED DATE : 09/02/2024 – 16/02/2024  
SAMPLING INSTRUMENT : Passive Sampling REPORTED DATE : 19/02/2024

PARAMETER**	TEST METHOD	RESULT <sup>1/2</sup>	STD <sup>1/</sup>	UNIT
Ethylene Oxide	OSHA 1010	ND	1.8	mg/m <sup>3</sup>
		ND	1.0	ppm

**REMARK:**

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

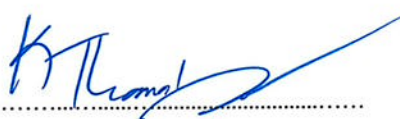
<sup>1/2</sup> ND = Non detectable : detection limit of Ethylene Oxide is 0.05 mg/m<sup>3</sup> or 0.03 ppm.

\*\* 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. Sutha Songthaninai)  
Analysed By SECOT Co.,Ltd. / GPS = Sampling at UTM 47 P 731019E 1404725N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By



(Miss Thanatporn Klinsoopon)

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. ATR6705107

Report No. 6705-1830

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE NAME : EO Purification Unit (T-410) SAMPLE NO : A67051830  
SAMPLING DATE : 25/05/2024 SAMPLING TIME : 08:20-20:20  
RECEIVED DATE : 30/05/2024 TESTED DATE : 30/05/2024 – 11/06/2024  
SAMPLING INSTRUMENT : Passive Sampling REPORTED DATE : 12/06/2024

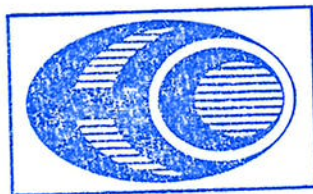
PARAMETER**	TEST METHOD	RESULT <sup>1/2</sup>	STD <sup>1/</sup>	UNIT
Ethylene Oxide	OSHA 1010	ND	1.8	mg/m <sup>3</sup>
		ND	1.0	ppm

**REMARK:**

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

<sup>1/2</sup> ND = Non detectable : detection limit of Ethylene Oxide is less than 0.05 mg/m<sup>3</sup> or 0.03 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 47 P 731019E 1404725N

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด  
REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

Examined By .....

(Miss Thanatporn Klinsopon)

12/06/2024

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. ATR6702011

Report No. 6702-0130

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE NAME : ริมรั้วโครงการด้านทิศตะวันตก SAMPLE NO : A67020130  
SAMPLING DATE : 05/02/2024 SAMPLING TIME : 09:15-21:15  
RECEIVED DATE : 09/02/2024 TESTED DATE : 09/02/2024 – 16/02/2024  
SAMPLING INSTRUMENT : Passive Sampling REPORTED DATE : 19/02/2024

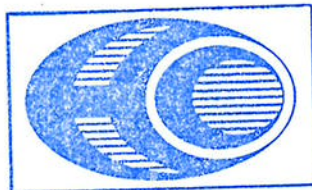
PARAMETER**	TEST METHOD	RESULT <sup>2</sup>	STD <sup>1</sup>	UNIT
Ethylene Oxide	OSHA 1010	ND	1.8	mg/m <sup>3</sup>
		ND	1.0	ppm

**REMARK:**

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

<sup>2</sup> ND = Non detectable : detection limit of Ethylene Oxide is 0.05 mg/m<sup>3</sup> or 0.03 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. Sutha Songthaninai)  
Analysed By SECOT Co.,Ltd. / GPS = Sampling at UTM 47 P 730858E 1404823N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By .....



(Miss Thanatporn Klinsopon)

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. ATR6705107

Report No. 6705-1831

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE NAME : ริมรั้วโครงการด้านทิศตะวันตก SAMPLE NO : A67051831  
SAMPLING DATE : 25/05/2024 SAMPLING TIME : 08:40-20:40  
RECEIVED DATE : 30/05/2024 TESTED DATE : 30/05/2024 – 11/06/2024  
SAMPLING INSTRUMENT : Passive Sampling REPORTED DATE : 12/06/2024

PARAMETER**	TEST METHOD	RESULT <sup>2</sup>	STD <sup>1</sup>	UNIT
Ethylene Oxide	OSHA 1010	ND	1.8	mg/m <sup>3</sup>
		ND	1.0	ppm

**REMARK:**

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

<sup>2</sup> ND = Non detectable : detection limit of Ethylene Oxide is less than 0.05 mg/m<sup>3</sup> or 0.03 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 47 P 730858E 1404823N



Examined By .....



(Miss Thanatporn Klinsopon)

12/06/2024

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. ATR6702011

Report No. 6702-0131

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE NAME : EO Storage Tank (O3) (D-1410A) SAMPLE NO : A67020131  
SAMPLING DATE : 05/02/2024 SAMPLING TIME : 08:55-20:55  
RECEIVED DATE : 09/02/2024 TESTED DATE : 09/02/2024 – 16/02/2024  
SAMPLING INSTRUMENT : Passive Sampling REPORTED DATE : 19/02/2024

PARAMETER**	TEST METHOD	RESULT <sup>2</sup>	STD <sup>1</sup>	UNIT
Ethylene Oxide	OSHA 1010	ND	1.8	mg/m <sup>3</sup>
		ND	1.0	ppm

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

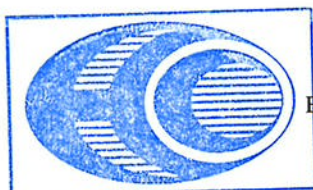
Concentration Limits of Hazardous Chemicals.

<sup>2</sup> ND = Non detectable : detection limit of Ethylene Oxide is 0.05 mg/m<sup>3</sup> or 0.03 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. Sutha Songthaninai)

Analysed By SECOT Co.,Ltd. / GPS = Sampling at UTM 47 P 731004E 1404676N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By .....

(Miss Thanatporn Klinsopon)

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. ATR6705107

Report No. 6705-1832

## TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch16  
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,  
Amphur Muang Rayong, Rayong 21150  
SAMPLE SOURCE : EOEG Plant  
SAMPLE NAME : EO Storage Tank (O3) (D-1410A) SAMPLE NO : A67051832  
SAMPLING DATE : 25/05/2024 SAMPLING TIME : 08:25-20:25  
RECEIVED DATE : 30/05/2024 TESTED DATE : 30/05/2024 – 11/06/2024  
SAMPLING INSTRUMENT : Passive Sampling REPORTED DATE : 12/06/2024

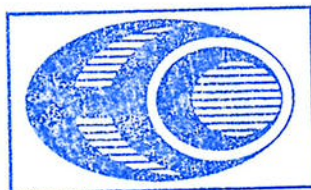
PARAMETER**	TEST METHOD	RESULT <sup>2</sup>	STD <sup>1</sup>	UNIT
Ethylene Oxide	OSHA 1010	ND	1.8	mg/m <sup>3</sup>
		ND	1.0	ppm

**REMARK:**

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

<sup>2</sup> ND = Non detectable : detection limit of Ethylene Oxide is less than 0.05 mg/m<sup>3</sup> or 0.03 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 47 P 731004E 1404676N



Examined By .....

(Miss Thanatporn Klinsopon)

12/06/2024

REPORTED TEST REPORT TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL  
WITHOUT THE WRITTEN APPROVAL LABORATORY