

Request No. LA65-1120

Report No. 6511-0294

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 : EA Plant
SAMPLE POINT : ปล่อง Ammonia Vent Scrubber
SAMPLE NO. : 06862
SAMPLING DATE : 04/11/2022
SAMPLING TIME : 14:30-15:07
RECEIVED DATE : 10/11/2022
REPORTED DATE : 22/11/2022
TESTED DATE : 10-21/11/2022

STACK DESCRIPTION

Height :	14.00	m	Type of Process :	Exhaust
Diameter :	0.15	m	Type of Fuel :	-
Temperature :	34.00	°C	Oxygen Content :	20.89 %
Air Velocity :	2.22	m/s	Barometric Pressure :	757.00 mm.Hg
Flow rate ² :	0.04	m ³ /s	Atmospheric Temperature :	36.00 °C
Moisture Content :	3.20	%		

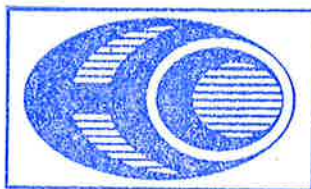
PARAMETER	TEST METHOD	TIME	RESULT ²	STD ¹	UNIT
Ammonia ³	U.S.EPA Method CTM 027	14:30-15:07	<0.036	35	mg/m ³
(NH ₃)			<0.050	50	ppm

REMARK:

¹ ค่ากำหนดตามรายงานการประเมินผลกระทบสิ่งแวดล้อม (EIA)² DRY BASIS (25°C, 760 mm.Hg)³ SAMPLING BY EASTERN THAI CONSULTING 1992 CO.,LTD. (MR. METEE SUKPRASERT)

ANALYSED BY SECOT CO.,LTD.

Sampling at UTM 47P 731282E 1404902N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By...

Thongchai Boonsak

(MR. THONGCHAI BOONSAK)

22/11/2022

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

TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 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 : EA 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 00310458 : Type 2

SAMPLE NO. : 33921
MEASURING DATE : 03-04/11/2022
RECEIVED DATE : 10/11/2022
REPORTED DATE : 22/11/2022

TIME \ DATE	03-04/11/2022 (L_{eq})	03-04/11/2022 (L_{max})	03-04/11/2022 ($L_{90\#}$)	UNIT
10:20 – 11:20 ^{/3}	66.4	86.6	60.9	dB(A)
11:20 – 12:20	60.0	82.7	55.4	dB(A)
12:20 – 13:20	63.0	86.9	56.4	dB(A)
13:20 – 14:20	61.6	82.6	57.9	dB(A)
14:20 – 15:20	61.5	82.7	57.6	dB(A)
15:20 – 16:20	66.4	98.3	58.6	dB(A)
16:20 – 17:20	59.2	80.8	56.6	dB(A)
17:20 – 18:20	59.2	82.3	56.7	dB(A)
18:20 – 19:20	58.5	78.5	56.7	dB(A)
19:20 – 20:20	56.6	65.9	55.8	dB(A)
20:20 – 21:20	56.9	73.3	56.2	dB(A)
21:20 – 22:20	57.5	64.0	56.9	dB(A)
22:20 – 23:20	57.4	75.5	56.5	dB(A)
23:20 – 00:20	57.4	62.3	56.9	dB(A)
00:20 – 01:20	57.5	65.3	57.0	dB(A)
01:20 – 02:20	57.1	59.0	56.5	dB(A)
02:20 – 03:20	57.7	59.8	57.1	dB(A)
03:20 – 04:20	57.7	61.8	57.0	dB(A)
04:20 – 05:20	57.0	63.1	56.5	dB(A)
05:20 – 06:20	57.2	68.0	56.6	dB(A)
06:20 – 07:20	58.8	77.5	57.0	dB(A)
07:20 – 08:20	60.1	83.6	56.5	dB(A)
08:20 – 09:20	64.4	90.0	56.7	dB(A)
09:20 – 10:20	65.2	99.0	56.7	dB(A)
L_{eq} 24 hr.	61.1	-	-	dB(A)
$L_{dn\#}$	65.1	-	-	dB(A)
Maximum	-	99.0	-	dB(A)
Standard	$70^{/1}, 70^{/2}$	$115^{/1}, 115^{/2}$	-	dB(A)

REMARK : # Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

^{/1} Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

^{/2} Notification of Ministry of the Industry B.E. 2548 (2005)

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

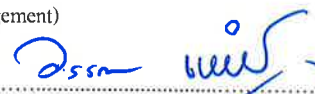
(Ms. Thanatporn Klinsoon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement By Mr. Tummarut Phorankhuan)

^{/3} Start Time



Approved By



(MRS. WANPEN LHAOCHINDAWAT)

22/11/2022

บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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

TEST REPORT

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 : EA 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 00310458 : Type 2

SAMPLE NO. : 33922
MEASURING DATE : 04-05/11/2022
RECEIVED DATE : 10/11/2022
REPORTED DATE : 22/11/2022

TIME \ DATE	04-05/11/2022 (L_{eq})	04-05/11/2022 (L_{max})	04-05/11/2022 ($L_{90\#}$)	UNIT
10:20 – 11:20 ¹³	67.0	91.4	56.7	dB(A)
11:20 – 12:20	60.8	81.5	55.2	dB(A)
12:20 – 13:20	61.0	83.8	55.0	dB(A)
13:20 – 14:20	64.3	98.2	57.5	dB(A)
14:20 – 15:20	69.8	104.3 [#]	57.5	dB(A)
15:20 – 16:20	62.9	88.7	56.7	dB(A)
16:20 – 17:20	61.9	83.6	57.0	dB(A)
17:20 – 18:20	61.3	83.8	56.6	dB(A)
18:20 – 19:20	58.7	81.4	56.7	dB(A)
19:20 – 20:20	56.7	69.0	55.8	dB(A)
20:20 – 21:20	56.8	64.1	55.8	dB(A)
21:20 – 22:20	57.4	73.4	56.8	dB(A)
22:20 – 23:20	56.9	62.8	56.3	dB(A)
23:20 – 00:20	56.8	58.9	56.2	dB(A)
00:20 – 01:20	57.0	62.4	56.2	dB(A)
01:20 – 02:20	55.7	63.1	54.5	dB(A)
02:20 – 03:20	55.5	58.4	54.6	dB(A)
03:20 – 04:20	56.5	61.0	54.5	dB(A)
04:20 – 05:20	57.0	61.9	56.2	dB(A)
05:20 – 06:20	57.2	66.9	56.4	dB(A)
06:20 – 07:20	57.9	73.1	56.5	dB(A)
07:20 – 08:20	67.6	73.3	67.4	dB(A)
08:20 – 09:20	67.6	81.5	67.2	dB(A)
09:20 – 10:20	67.5	71.0	67.3	dB(A)
L_{eq} 24 hr.	63.0	-	-	dB(A)
$L_{dn\#}$	65.6	-	-	dB(A)
Maximum	-	104.3 [#]	-	dB(A)
Standard	70 ^{1/1} , 70 ^{1/2}	115 ^{1/1} , 115 ^{1/2}	-	dB(A)

REMARK : Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

^{1/1} Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

^{1/2} Notification of Ministry of the Industry B.E. 2548 (2005)

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

(Ms. Thanatporn Klinsopon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement By Mr. Tummarut Photankum)



บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

Approved By: 
(MRS. WANPEN LHAOCHINDAWAT)

22/11/2022

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

TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 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 : EA 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 00310458 : Type 2

SAMPLE NO. : 33923
MEASURING DATE : 05-06/11/2022
RECEIVED DATE : 10/11/2022
REPORTED DATE : 22/11/2022

TIME \ DATE	05-06/11/2022 (L_{eq})	05-06/11/2022 (L_{max})	05-06/11/2022 ($L_{90\#}$)	UNIT
10:20 - 11:20 ^{1/3}	72.9	106.2 [#]	66.5	dB(A)
11:20 - 12:20	72.4	102.7 [#]	68.1	dB(A)
12:20 - 13:20	66.4	89.5	62.5	dB(A)
13:20 - 14:20	69.4	101.8 [#]	67.3	dB(A)
14:20 - 15:20	69.9	102.3 [#]	67.8	dB(A)
15:20 - 16:20	67.9	81.2	67.6	dB(A)
16:20 - 17:20	68.1	82.0	67.7	dB(A)
17:20 - 18:20	68.0	71.5	67.8	dB(A)
18:20 - 19:20	68.1	73.8	67.9	dB(A)
19:20 - 20:20	68.1	70.2	67.9	dB(A)
20:20 - 21:20	68.1	79.8	67.9	dB(A)
21:20 - 22:20	68.3	69.5	68.1	dB(A)
22:20 - 23:20	68.2	69.5	68.1	dB(A)
23:20 - 00:20	68.5	69.3	68.3	dB(A)
00:20 - 01:20	68.5	69.4	68.4	dB(A)
01:20 - 02:20	68.5	69.3	68.4	dB(A)
02:20 - 03:20	68.6	70.2	68.4	dB(A)
03:20 - 04:20	68.4	69.1	68.3	dB(A)
04:20 - 05:20	68.3	69.7	68.1	dB(A)
05:20 - 06:20	68.2	73.8	68.0	dB(A)
06:20 - 07:20	68.0	72.0	67.8	dB(A)
07:20 - 08:20	67.9	75.3	67.7	dB(A)
08:20 - 09:20	67.4	70.4	67.0	dB(A)
09:20 - 10:20	67.1	70.6	66.7	dB(A)
L_{eq} 24 hr.	68.8	-	-	dB(A)
$L_{dn\#}$	74.9	-	-	dB(A)
Maximum	-	106.2 [#]	-	dB(A)
Standard	70 ^{1/1} , 70 ^{2/2}	115 ^{1/1} , 115 ^{2/2}	-	dB(A)

REMARK : [#] Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

^{1/1} Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

^{2/2} Notification of Ministry of the Industry B.E. 2548 (2005)

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

(Ms. Thanatporn Klinsoon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement By Mr. Tummarut Photakham)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....
(MRS. WANPEN LHAOCHINDAWAT)

22/11/2022

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

TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 16
ADDRESS : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road,
Tamboon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
SAMPLE SOURCE : EA 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 00310458 : Type 2

SAMPLE NO. : 33924
MEASURING DATE : 06-07/11/2022
RECEIVED DATE : 10/11/2022
REPORTED DATE : 22/11/2022

TIME \ DATE	06-07/11/2022 (L_{eq})	06-07/11/2022 (L_{max})	06-07/11/2022 ($L_{90\#}$)	UNIT
10:20 – 11:20 ^{1/3}	67.0	68.0	66.7	dB(A)
11:20 – 12:20	67.1	72.2	66.9	dB(A)
12:20 – 13:20	67.0	71.0	66.8	dB(A)
13:20 – 14:20	67.1	68.1	66.9	dB(A)
14:20 – 15:20	67.0	68.0	66.7	dB(A)
15:20 – 16:20	66.9	68.9	66.7	dB(A)
16:20 – 17:20	68.3	69.0	68.1	dB(A)
17:20 – 18:20	67.9	69.6	67.7	dB(A)
18:20 – 19:20	68.4	73.0	67.7	dB(A)
19:20 – 20:20	69.2	71.5	69.0	dB(A)
20:20 – 21:20	69.2	71.8	69.0	dB(A)
21:20 – 22:20	68.8	69.7	68.6	dB(A)
22:20 – 23:20	68.6	69.8	68.4	dB(A)
23:20 – 00:20	69.7	72.0	69.5	dB(A)
00:20 – 01:20	69.7	72.3	69.5	dB(A)
01:20 – 02:20	69.3	70.2	69.1	dB(A)
02:20 – 03:20	69.1	70.3	68.9	dB(A)
03:20 – 04:20	68.8	69.5	68.6	dB(A)
04:20 – 05:20	68.4	70.1	68.2	dB(A)
05:20 – 06:20	68.1	69.7	67.9	dB(A)
06:20 – 07:20	67.8	70.7	67.5	dB(A)
07:20 – 08:20	67.8	79.0	67.3	dB(A)
08:20 – 09:20	69.4	82.8	68.2	dB(A)
09:20 – 10:20	68.9	82.3	67.7	dB(A)
L_{eq} 24 hr.	68.4	-	-	dB(A)
$L_{dn\#}$	75.2	-	-	dB(A)
Maximum	-	82.8	-	dB(A)
Standard	$70^{1/1}, 70^{2/2}$	$115^{1/1}, 115^{2/2}$	-	dB(A)

REMARK : # Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

^{1/1} Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

^{1/2} Notification of Ministry of the Industry B.E. 2534 (2005)

* Parameter Outside The Scope of The Registration of The Department of Industrial Works
(Ms. Thanatporn Klinsoon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)
(Measurement By Mr. Tummarut Photanasingh)

^{1/3} Start Time



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By: 
(MRS. WANPEN LHAOCHINDAWAT)

22/11/2022

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

TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 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 : EA 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 00310458 : Type 2

SAMPLE NO. : 33925
MEASURING DATE : 07-08/11/2022
RECEIVED DATE : 10/11/2022
REPORTED DATE : 22/11/2022

TIME \ DATE	07-08/11/2022 (L_{eq})	07-08/11/2022 (L_{max})	07-08/11/2022 ($L_{90\#}$)	UNIT
10:20 – 11:20 ³	73.5	101.0 [#]	67.2	dB(A)
11:20 – 12:20	68.7	87.6	66.3	dB(A)
12:20 – 13:20	67.5	81.8	66.6	dB(A)
13:20 – 14:20	68.1	99.7	66.8	dB(A)
14:20 – 15:20	68.3	87.5	66.4	dB(A)
15:20 – 16:20	68.2	84.4	66.6	dB(A)
16:20 – 17:20	67.8	85.7	66.8	dB(A)
17:20 – 18:20	68.9	91.7	66.8	dB(A)
18:20 – 19:20	67.8	88.3	66.5	dB(A)
19:20 – 20:20	67.1	83.5	66.3	dB(A)
20:20 – 21:20	67.1	82.9	66.4	dB(A)
21:20 – 22:20	67.2	87.1	66.6	dB(A)
22:20 – 23:20	66.9	78.6	66.4	dB(A)
23:20 – 00:20	66.5	67.9	66.3	dB(A)
00:20 – 01:20	66.5	69.1	66.4	dB(A)
01:20 – 02:20	66.6	68.8	66.4	dB(A)
02:20 – 03:20	66.7	69.3	66.4	dB(A)
03:20 – 04:20	66.7	69.2	66.5	dB(A)
04:20 – 05:20	66.6	69.9	66.4	dB(A)
05:20 – 06:20	66.6	68.6	66.4	dB(A)
06:20 – 07:20	66.7	74.8	66.4	dB(A)
07:20 – 08:20	64.4	79.1	62.6	dB(A)
08:20 – 09:20	69.9	101.0 [#]	62.9	dB(A)
09:20 – 10:20	69.6	85.5	66.8	dB(A)
L_{eq} 24 hr.	68.1	-	-	dB(A)
$L_{dn\#}$	73.4	-	-	dB(A)
Maximum	-	101.0 [#]	-	dB(A)
Standard	70 ¹ , 70 ²	115 ¹ , 115 ²	-	dB(A)

REMARK : [#] Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

¹ Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

² Notification of Ministry of the Industry B.E. 2548 (2005)

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

(Ms. Thanatporn Klinsoon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement By Mr. Tummarut Photakumthum)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By... 
(MRS. WANPEN LHAOCHINDAWAT)

22/11/2022

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

TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 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 : EA 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 00310458 : Type 2

SAMPLE NO. : 33926
MEASURING DATE : 08-09/11/2022
RECEIVED DATE : 10/11/2022
REPORTED DATE : 22/11/2022

TIME \ DATE	08-09/11/2022 (L_{eq})	08-09/11/2022 (L_{max})	08-09/11/2022 ($L_{90\#}$)	UNIT
10:20 – 11:20 ³	69.3	86.3	67.6	dB(A)
11:20 – 12:20	67.6	82.1	66.2	dB(A)
12:20 – 13:20	67.0	84.0	65.9	dB(A)
13:20 – 14:20	68.1	87.4	66.8	dB(A)
14:20 – 15:20	67.5	89.4	66.7	dB(A)
15:20 – 16:20	67.9	91.1	66.9	dB(A)
16:20 – 17:20	68.3	92.5	67.1	dB(A)
17:20 – 18:20	67.2	82.7	66.6	dB(A)
18:20 – 19:20	67.3	82.5	66.7	dB(A)
19:20 – 20:20	67.9	85.3	67.4	dB(A)
20:20 – 21:20	67.4	84.8	66.9	dB(A)
21:20 – 22:20	67.1	68.4	66.9	dB(A)
22:20 – 23:20	67.0	68.4	66.8	dB(A)
23:20 – 00:20	67.0	68.2	66.8	dB(A)
00:20 – 01:20	67.0	67.9	66.9	dB(A)
01:20 – 02:20	67.1	68.1	66.9	dB(A)
02:20 – 03:20	67.1	68.7	66.9	dB(A)
03:20 – 04:20	67.2	68.7	67.0	dB(A)
04:20 – 05:20	67.2	67.9	67.0	dB(A)
05:20 – 06:20	67.2	69.6	67.0	dB(A)
06:20 – 07:20	67.3	70.9	67.1	dB(A)
07:20 – 08:20	65.0	82.5	62.7	dB(A)
08:20 – 09:20	68.3	100.8 [#]	63.6	dB(A)
09:20 – 10:20	69.6	95.6	67.8	dB(A)
L_{eq} 24 hr.	67.6	-	-	dB(A)
$L_{dn\#}$	73.6	-	-	dB(A)
Maximum	-	100.8 [#]	-	dB(A)
Standard	70 ¹ , 70 ²	115 ¹ , 115 ²	-	dB(A)

REMARK : [#] Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

¹ Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

² Notification of Ministry of the Industry B.E. 2548 (2005)

* Parameter Outside The Scope of The Registration of The Department of Industrial Works
(Ms. Thanatporn Klinsoon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)
(Measurement By Mr. Tummarut Phoraksum)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By: 
(MRS. WANPEN LHAOCHINDAWAT)

22/11/2022

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

TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 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 : EA 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 00310458 : Type 2

SAMPLE NO. : 33927
MEASURING DATE : 09-10/11/2022
RECEIVED DATE : 10/11/2022
REPORTED DATE : 22/11/2022

TIME \ DATE	09-10/11/2022 (L_{eq})	09-10/11/2022 (L_{max})	09-10/11/2022 ($L_{90\#}$)	UNIT
10:20 – 11:20 ³	68.9	84.1	67.5	dB(A)
11:20 – 12:20	68.5	80.7	67.6	dB(A)
12:20 – 13:20	72.3	93.2	66.9	dB(A)
13:20 – 14:20	68.2	101.0 [#]	63.0	dB(A)
14:20 – 15:20	68.5	88.3	67.0	dB(A)
15:20 – 16:20	67.4	83.0	66.7	dB(A)
16:20 – 17:20	67.3	86.8	66.9	dB(A)
17:20 – 18:20	67.0	82.8	66.6	dB(A)
18:20 – 19:20	67.3	85.8	66.8	dB(A)
19:20 – 20:20	67.5	85.1	66.9	dB(A)
20:20 – 21:20	67.6	81.6	67.1	dB(A)
21:20 – 22:20	67.5	82.9	67.1	dB(A)
22:20 – 23:20	67.2	75.6	67.0	dB(A)
23:20 – 00:20	67.1	68.2	67.0	dB(A)
00:20 – 01:20	67.2	67.9	67.0	dB(A)
01:20 – 02:20	67.0	67.7	66.9	dB(A)
02:20 – 03:20	67.0	70.4	66.8	dB(A)
03:20 – 04:20	67.0	68.5	66.8	dB(A)
04:20 – 05:20	67.0	72.4	66.8	dB(A)
05:20 – 06:20	67.0	70.6	66.9	dB(A)
06:20 – 07:20	67.0	71.4	66.8	dB(A)
07:20 – 08:20	67.3	79.0	67.0	dB(A)
08:20 – 09:20	68.7	87.0	67.0	dB(A)
09:20 – 10:20	69.4	85.6	67.2	dB(A)
L_{eq} 24 hr.	68.0	-	-	dB(A)
$L_{dn\#}$	73.7	-	-	dB(A)
Maximum	-	101.0 [#]	-	dB(A)
Standard	70 ¹ , 70 ²	115 ¹ , 115 ²	-	dB(A)

REMARK : [#] Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

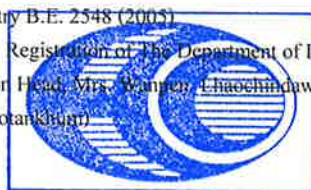
¹ Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

² Notification of Ministry of the Industry B.E. 2548 (2005)

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

(Ms. Thanatporn Klinsonon is Section Head, Mrs. Wannan Lhaochindawat is Technical Management)

(Measurement By Mr. Tummarut Photankhuan)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By... 
(MRS. WANPEN LHAOCHINDAWAT)

22/11/2022

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

TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 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 : EA 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 01209915 : Type 2

SAMPLE NO. : 33907
MEASURING DATE : 03-04/11/2022
RECEIVED DATE : 10/11/2022
REPORTED DATE : 22/11/2022

TIME \ DATE	03-04/11/2022 (L_{eq})	03-04/11/2022 (L_{max})	03-04/11/2022 ($L_{90\#}$)	UNIT
10:40 – 11:40 ^{/3}	68.4	70.7	68.0	dB(A)
11:40 – 12:40	67.8	69.1	67.5	dB(A)
12:40 – 13:40	67.8	69.1	67.4	dB(A)
13:40 – 14:40	67.9	72.2	67.6	dB(A)
14:40 – 15:40	68.2	69.4	67.8	dB(A)
15:40 – 16:40	67.2	68.6	66.8	dB(A)
16:40 – 17:40	67.4	69.0	67.0	dB(A)
17:40 – 18:40	67.5	68.8	67.1	dB(A)
18:40 – 19:40	67.6	68.8	67.2	dB(A)
19:40 – 20:40	67.6	69.3	67.2	dB(A)
20:40 – 21:40	67.6	69.3	67.3	dB(A)
21:40 – 22:40	69.2	79.3	67.2	dB(A)
22:40 – 23:40	67.9	70.8	67.6	dB(A)
23:40 – 00:40	67.8	69.0	67.5	dB(A)
00:40 – 01:40	67.6	69.8	67.3	dB(A)
01:40 – 02:40	67.6	70.3	67.3	dB(A)
02:40 – 03:40	67.6	71.4	67.2	dB(A)
03:40 – 04:40	67.7	71.1	67.4	dB(A)
04:40 – 05:40	67.7	69.2	67.4	dB(A)
05:40 – 06:40	67.7	70.6	67.3	dB(A)
06:40 – 07:40	67.9	71.9	67.5	dB(A)
07:40 – 08:40	67.9	69.9	67.5	dB(A)
08:40 – 09:40	67.9	72.0	67.5	dB(A)
09:40 – 10:40	67.8	70.1	67.4	dB(A)
L_{eq} 24 hr.	67.8	-	-	dB(A)
$L_{dn\#}$	74.3	-	-	dB(A)
Maximum	-	79.3	-	dB(A)
Standard	$70^{/1}, 70^{/2}$	$115^{/1}, 115^{/2}$	-	dB(A)

REMARK : # Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

^{/1} Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

^{/2} Notification of Ministry of the Industry B.E. 2548 (2005)

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

(Ms. Thanatporn Klinsoopon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement By Mr. Tummarut Photakham)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(MRS. WANPEN LHAOCHINDAWAT)

22/11/2022

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

TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 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 : EA 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 01209915 : Type 2

SAMPLE NO. : 33908
MEASURING DATE : 04-05/11/2022
RECEIVED DATE : 10/11/2022
REPORTED DATE : 22/11/2022

TIME \ DATE	04-05/11/2022 (L_{eq})	04-05/11/2022 (L_{max})	04-05/11/2022 ($L_{90\#}$)	UNIT
10:40 – 11:40 ^{/3}	67.2	68.5	66.9	dB(A)
11:40 – 12:40	67.4	68.7	67.0	dB(A)
12:40 – 13:40	67.5	71.8	67.2	dB(A)
13:40 – 14:40	67.6	68.8	67.2	dB(A)
14:40 – 15:40	67.6	70.9	67.2	dB(A)
15:40 – 16:40	67.6	68.9	67.2	dB(A)
16:40 – 17:40	67.7	68.7	67.4	dB(A)
17:40 – 18:40	67.8	69.1	67.5	dB(A)
18:40 – 19:40	67.8	69.4	67.5	dB(A)
19:40 – 20:40	67.6	70.6	67.3	dB(A)
20:40 – 21:40	67.6	71.0	67.3	dB(A)
21:40 – 22:40	67.7	74.3	67.3	dB(A)
22:40 – 23:40	67.7	69.2	67.4	dB(A)
23:40 – 00:40	67.8	69.4	67.4	dB(A)
00:40 – 01:40	67.8	69.8	67.4	dB(A)
01:40 – 02:40	68.0	70.6	67.6	dB(A)
02:40 – 03:40	68.0	70.2	67.6	dB(A)
03:40 – 04:40	67.9	70.9	67.5	dB(A)
04:40 – 05:40	67.9	70.1	67.5	dB(A)
05:40 – 06:40	68.1	87.1	67.6	dB(A)
06:40 – 07:40	67.7	72.0	67.4	dB(A)
07:40 – 08:40	67.6	70.5	67.4	dB(A)
08:40 – 09:40	67.9	69.0	67.6	dB(A)
09:40 – 10:40	67.6	68.9	67.3	dB(A)
L_{eq} 24 hr.	67.7	-	-	dB(A)
$L_{dn\#}$	74.3	-	-	dB(A)
Maximum	-	87.1	-	dB(A)
Standard	$70^{/1}, 70^{/2}$	$115^{/1}, 115^{/2}$	-	dB(A)

REMARK : # Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

^{/1} Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

^{/2} Notification of Ministry of the Industry B.E. 2548 (2005)

* Parameter Outside The Scope of The Regulation of The Department of Industrial Works
(Ms. Thanatporn Klinsonon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)
(Measurement By Mr. Tummarut Photaknum)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By: 
(MRS. WANPEN LHAOCHINDAWAT)

22/11/2022

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

TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 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 : EA 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 01209915 : Type 2

SAMPLE NO. : 33909
MEASURING DATE : 05-06/11/2022
RECEIVED DATE : 10/11/2022
REPORTED DATE : 22/11/2022

TIME \ DATE	05-06/11/2022 (L_{eq})	05-06/11/2022 (L_{max})	05-06/11/2022 ($L_{90\#}$)	UNIT
10:40 – 11:40 ³	67.6	68.6	67.3	dB(A)
11:40 – 12:40	67.9	68.9	67.6	dB(A)
12:40 – 13:40	67.9	69.1	67.6	dB(A)
13:40 – 14:40	68.1	69.7	67.8	dB(A)
14:40 – 15:40	68.2	72.5	67.9	dB(A)
15:40 – 16:40	68.1	71.0	67.9	dB(A)
16:40 – 17:40	68.2	69.3	67.9	dB(A)
17:40 – 18:40	68.2	69.5	67.9	dB(A)
18:40 – 19:40	68.2	69.2	67.9	dB(A)
19:40 – 20:40	68.5	69.5	68.2	dB(A)
20:40 – 21:40	68.5	69.7	68.2	dB(A)
21:40 – 22:40	68.6	71.5	68.3	dB(A)
22:40 – 23:40	68.7	70.9	68.4	dB(A)
23:40 – 00:40	68.6	74.5	68.3	dB(A)
00:40 – 01:40	68.5	72.3	68.2	dB(A)
01:40 – 02:40	68.4	77.6	68.1	dB(A)
02:40 – 03:40	68.3	70.2	68.0	dB(A)
03:40 – 04:40	68.2	71.6	67.9	dB(A)
04:40 – 05:40	68.2	71.0	67.8	dB(A)
05:40 – 06:40	67.9	73.6	67.6	dB(A)
06:40 – 07:40	67.9	71.3	67.6	dB(A)
07:40 – 08:40	67.7	68.9	67.4	dB(A)
08:40 – 09:40	67.8	69.2	67.5	dB(A)
09:40 – 10:40	67.8	69.1	67.5	dB(A)
L_{eq} 24 hr.	68.2	-	-	dB(A)
$L_{dn\#}$	74.7	-	-	dB(A)
Maximum	-	77.6	-	dB(A)
Standard	$70^{1/1}, 70^{1/2}$	$115^{1/1}, 115^{1/2}$	-	dB(A)

REMARK : Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

^{1/1} Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

^{1/2} Notification of Ministry of the Industry B.E. 2548 (2005)

* Parameter Outside The Scope of The Regulation of The Department of Industrial Works

(Ms. Thanatporn Klinsonon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement By Mr. Tummarut Phorankhum)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 
(MRS. WANPEN LHAOCHINDAWAT)

22/11/2022

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

TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 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 : EA 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 01209915 : Type 2

SAMPLE NO. : 33910
MEASURING DATE : 06-07/11/2022
RECEIVED DATE : 10/11/2022
REPORTED DATE : 22/11/2022

TIME \ DATE	06-07/11/2022 (L_{eq})	06-07/11/2022 (L_{max})	06-07/11/2022 ($L_{90\#}$)	UNIT
10:40 – 11:40 ^{1/3}	68.0	69.1	67.7	dB(A)
11:40 – 12:40	68.2	69.2	67.9	dB(A)
12:40 – 13:40	68.3	69.8	68.0	dB(A)
13:40 – 14:40	68.2	73.9	67.9	dB(A)
14:40 – 15:40	68.2	71.6	67.9	dB(A)
15:40 – 16:40	68.1	69.3	67.8	dB(A)
16:40 – 17:40	68.2	69.6	67.9	dB(A)
17:40 – 18:40	68.2	69.5	67.9	dB(A)
18:40 – 19:40	68.3	69.4	68.0	dB(A)
19:40 – 20:40	68.5	69.5	68.2	dB(A)
20:40 – 21:40	68.6	70.1	68.3	dB(A)
21:40 – 22:40	68.7	71.6	68.4	dB(A)
22:40 – 23:40	68.6	73.4	68.4	dB(A)
23:40 – 00:40	68.5	75.0	68.2	dB(A)
00:40 – 01:40	68.4	70.4	68.1	dB(A)
01:40 – 02:40	68.3	69.9	68.0	dB(A)
02:40 – 03:40	68.3	72.7	68.0	dB(A)
03:40 – 04:40	68.1	71.3	67.8	dB(A)
04:40 – 05:40	67.9	75.8	67.5	dB(A)
05:40 – 06:40	67.6	70.4	67.3	dB(A)
06:40 – 07:40	67.7	69.9	67.4	dB(A)
07:40 – 08:40	67.6	69.3	67.3	dB(A)
08:40 – 09:40	67.7	70.5	67.4	dB(A)
09:40 – 10:40	67.7	69.1	67.4	dB(A)
L_{eq} 24 hr.	68.2	-	-	dB(A)
$L_{dn\#}$	74.7	-	-	dB(A)
Maximum	-	75.8	-	dB(A)
Standard	$70^{1/1}, 70^{1/2}$	$115^{1/1}, 115^{1/2}$	-	dB(A)

REMARK : * Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

^{1/1} Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

^{1/2} Notification of Ministry of the Industry B.E. 2548 (2005)

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

(Ms. Thanatporn Klinsopon is Section Head, Mr. Wanpen Lhaochindawat is Technical Management)

(Measurement By Mr. Tummarut Phothakham)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....
(MRS. WANPEN LHAOCHINDAWAT)

22/11/2022

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

TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 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 : EA 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 01209915 : Type 2

SAMPLE NO. : 33911
MEASURING DATE : 07-08/11/2022
RECEIVED DATE : 10/11/2022
REPORTED DATE : 22/11/2022

TIME \ DATE	07-08/11/2022 (L_{eq})	07-08/11/2022 (L_{max})	07-08/11/2022 ($L_{90\#}$)	UNIT
10:40 – 11:40 ^{1/3}	67.8	75.4	67.4	dB(A)
11:40 – 12:40	71.3	73.4	69.8	dB(A)
12:40 – 13:40	70.8	72.9	69.3	dB(A)
13:40 – 14:40	68.6	70.4	68.3	dB(A)
14:40 – 15:40	69.4	71.3	69.1	dB(A)
15:40 – 16:40	69.0	72.4	68.0	dB(A)
16:40 – 17:40	68.1	69.7	67.9	dB(A)
17:40 – 18:40	68.2	86.1	67.9	dB(A)
18:40 – 19:40	68.0	71.2	67.7	dB(A)
19:40 – 20:40	67.9	69.1	67.6	dB(A)
20:40 – 21:40	67.9	69.1	67.6	dB(A)
21:40 – 22:40	67.6	69.2	67.3	dB(A)
22:40 – 23:40	67.6	70.2	67.3	dB(A)
23:40 – 00:40	67.4	70.9	67.2	dB(A)
00:40 – 01:40	67.4	70.9	67.1	dB(A)
01:40 – 02:40	67.2	70.5	66.8	dB(A)
02:40 – 03:40	67.1	69.4	66.8	dB(A)
03:40 – 04:40	66.8	69.9	66.4	dB(A)
04:40 – 05:40	66.5	76.6	66.0	dB(A)
05:40 – 06:40	67.8	75.3	67.4	dB(A)
06:40 – 07:40	67.5	71.3	67.1	dB(A)
07:40 – 08:40	67.2	68.7	66.8	dB(A)
08:40 – 09:40	66.9	68.3	66.5	dB(A)
09:40 – 10:40	66.8	68.3	66.4	dB(A)
L_{eq} 24 hr.	68.1	-	-	dB(A)
$L_{dn\#}$	73.9	-	-	dB(A)
Maximum	-	86.1	-	dB(A)
Standard	$70^{1/1}, 70^{1/2}$	$115^{1/1}, 115^{1/2}$	-	dB(A)

REMARK : Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

^{1/1} Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

^{1/2} Notification of Ministry of the Industry B.E. 2548 (2005)

* Parameter Outside The Scope of The Regulation of The Department of Industrial Works

(Ms. Thanatporn Klinsoon is Section Head, Ms. Wanpen Lhaochindawat is Technical Management)

(Measurement By Mr. Tummarut Photakham)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(MRS. WANPEN LHAOCHINDAWAT)

22/11/2022

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

TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 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 : EA 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 01209915 : Type 2

SAMPLE NO. : 33912
MEASURING DATE : 08-09/11/2022
RECEIVED DATE : 10/11/2022
REPORTED DATE : 22/11/2022

TIME \ DATE	08-09/11/2022 (L_{eq})	08-09/11/2022 (L_{max})	08-09/11/2022 ($L_{90\#}$)	UNIT
10:40 – 11:40 ³	67.0	68.3	66.6	dB(A)
11:40 – 12:40	67.4	68.6	67.1	dB(A)
12:40 – 13:40	67.8	69.1	67.5	dB(A)
13:40 – 14:40	67.8	69.3	67.5	dB(A)
14:40 – 15:40	67.9	69.8	67.6	dB(A)
15:40 – 16:40	68.0	69.9	67.7	dB(A)
16:40 – 17:40	68.0	70.9	67.7	dB(A)
17:40 – 18:40	67.9	69.6	67.6	dB(A)
18:40 – 19:40	67.6	68.8	67.3	dB(A)
19:40 – 20:40	67.5	68.6	67.2	dB(A)
20:40 – 21:40	67.5	68.7	67.2	dB(A)
21:40 – 22:40	67.5	69.5	67.2	dB(A)
22:40 – 23:40	67.6	71.5	67.3	dB(A)
23:40 – 00:40	67.9	69.4	67.5	dB(A)
00:40 – 01:40	67.9	69.4	67.6	dB(A)
01:40 – 02:40	68.0	69.2	67.7	dB(A)
02:40 – 03:40	68.2	70.3	67.9	dB(A)
03:40 – 04:40	68.2	69.8	67.9	dB(A)
04:40 – 05:40	68.4	72.7	68.0	dB(A)
05:40 – 06:40	68.3	69.8	67.9	dB(A)
06:40 – 07:40	67.8	69.5	67.4	dB(A)
07:40 – 08:40	68.6	83.0	67.0	dB(A)
08:40 – 09:40	67.0	68.5	66.6	dB(A)
09:40 – 10:40	66.7	68.9	66.4	dB(A)
L_{eq} 24 hr.	67.8	-	-	dB(A)
$L_{dn\#}$	74.4	-	-	dB(A)
Maximum	-	83.0	-	dB(A)
Standard	$70^{1/1}, 70^{2/2}$	$115^{1/1}, 115^{2/2}$	-	dB(A)


REMARK : # Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

^{1/1} Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

^{1/2} Notification of Ministry of the Industry B.E. 2548 (2005)

* Parameter Outside The Scope of The Registration of The Department of Industrial Works
(Ms. Thanaporn Klinsopon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)
(Measurement By Mr. Tummarut Photakarn)



Approved By: 
(MRS. WANPEN LHAOCHINDAWAT)
22/11/2022

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

TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 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 : EA 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 01209915 : Type 2

SAMPLE NO. : 33913
MEASURING DATE : 09-10/11/2022
RECEIVED DATE : 10/11/2022
REPORTED DATE : 22/11/2022

TIME \ DATE	09-10/11/2022 (L_{eq})	09-10/11/2022 (L_{max})	09-10/11/2022 ($L_{90\#}$)	UNIT
10:40 – 11:40 ³	66.8	77.0	66.5	dB(A)
11:40 – 12:40	67.3	69.0	67.0	dB(A)
12:40 – 13:40	67.5	69.2	67.2	dB(A)
13:40 – 14:40	67.7	70.2	67.4	dB(A)
14:40 – 15:40	68.1	69.0	67.7	dB(A)
15:40 – 16:40	67.9	69.7	67.6	dB(A)
16:40 – 17:40	68.0	70.8	67.7	dB(A)
17:40 – 18:40	67.9	69.4	67.6	dB(A)
18:40 – 19:40	67.8	69.2	67.5	dB(A)
19:40 – 20:40	67.5	68.6	67.3	dB(A)
20:40 – 21:40	67.5	68.6	67.2	dB(A)
21:40 – 22:40	67.6	69.0	67.2	dB(A)
22:40 – 23:40	67.5	69.1	67.2	dB(A)
23:40 – 00:40	67.7	69.5	67.4	dB(A)
00:40 – 01:40	67.9	69.6	67.6	dB(A)
01:40 – 02:40	68.2	69.4	67.7	dB(A)
02:40 – 03:40	68.1	70.1	67.8	dB(A)
03:40 – 04:40	68.3	70.3	67.9	dB(A)
04:40 – 05:40	68.3	70.6	67.9	dB(A)
05:40 – 06:40	68.3	70.7	68.0	dB(A)
06:40 – 07:40	68.7	70.3	68.4	dB(A)
07:40 – 08:40	68.9	73.2	68.5	dB(A)
08:40 – 09:40	68.8	70.3	68.4	dB(A)
09:40 – 10:40	68.4	70.1	68.0	dB(A)
L_{eq} 24 hr.	68.0	-	-	dB(A)
$L_{dn\#}$	74.4	-	-	dB(A)
Maximum	-	77.0	-	dB(A)
Standard	$70^{/1}, 70^{/2}$	$115^{/1}, 115^{/2}$	-	dB(A)

REMARK : ¹ Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

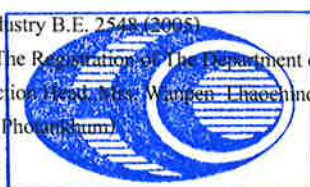
¹ Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

² Notification of Ministry of the Industry B.E. 2548 (2005)

* Parameter Outside The Scope of The Regulation of The Department of Industrial Works

(Ms. Thanatporn Klinsonop is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement By Mr. Tummarut Phonsaksum)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(MRS. WANPEN LHAOCHINDAWAT)

22/11/2022

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

TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 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 : EA Plant
SAMPLE POINT : บริเวณริมรั้วด้านทิศตะวันตก
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 00443358 : Type 2

SAMPLE NO. : 33914
MEASURING DATE : 03-04/11/2022
RECEIVED DATE : 10/11/2022
REPORTED DATE : 22/11/2022

TIME \ DATE	03-04/11/2022 (L_{eq})	03-04/11/2022 (L_{max})	03-04/11/2022 ($L_{90\#}$)	UNIT
10:30 – 11:30 ^{1/3}	63.2	73.0	62.7	dB(A)
11:30 – 12:30	62.8	68.5	62.4	dB(A)
12:30 – 13:30	63.0	68.0	62.6	dB(A)
13:30 – 14:30	63.2	71.0	62.7	dB(A)
14:30 – 15:30	63.2	72.9	62.8	dB(A)
15:30 – 16:30	66.8	91.8	62.8	dB(A)
16:30 – 17:30	63.4	66.6	63.0	dB(A)
17:30 – 18:30	63.2	66.1	62.8	dB(A)
18:30 – 19:30	63.2	66.2	62.9	dB(A)
19:30 – 20:30	63.2	66.0	62.9	dB(A)
20:30 – 21:30	63.4	66.9	63.0	dB(A)
21:30 – 22:30	63.7	66.4	63.4	dB(A)
22:30 – 23:30	63.7	73.4	63.3	dB(A)
23:30 – 00:30	63.6	66.6	63.3	dB(A)
00:30 – 01:30	63.7	66.7	63.4	dB(A)
01:30 – 02:30	63.6	66.5	63.3	dB(A)
02:30 – 03:30	63.8	67.9	63.4	dB(A)
03:30 – 04:30	64.0	67.4	63.6	dB(A)
04:30 – 05:30	63.7	67.5	63.4	dB(A)
05:30 – 06:30	63.8	67.6	63.5	dB(A)
06:30 – 07:30	63.8	66.3	63.5	dB(A)
07:30 – 08:30	63.4	66.7	63.1	dB(A)
08:30 – 09:30	63.2	67.4	62.8	dB(A)
09:30 – 10:30	63.1	68.4	62.7	dB(A)
L_{eq} 24 hr.	63.6	-	-	dB(A)
$L_{dn\#}$	70.1	-	-	dB(A)
Maximum	-	91.8	-	dB(A)
Standard	$70^{1/1}, 70^{1/2}$	$115^{1/1}, 115^{1/2}$	-	dB(A)

REMARK : # Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

^{1/1} Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

^{1/2} Notification of Ministry of the Industry B.E. 2548 (2005)

* Parameter Outside The Scope of The Regulation of The Department of Industrial Works

(Ms. Thanatporn Klinsopon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement By Mr. Tummarut Photanakhon)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 
(MRS. WANPEN LHAOCHINDAWAT)

22/11/2022

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

TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 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 : EA Plant
SAMPLE POINT : บริเวณรั้วด้านทิศตะวันตก
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 00443358 : Type 2

SAMPLE NO. : 33915
MEASURING DATE : 04-05/11/2022
RECEIVED DATE : 10/11/2022
REPORTED DATE : 22/11/2022

TIME \ DATE	04-05/11/2022 (L_{eq})	04-05/11/2022 (L_{max})	04-05/11/2022 ($L_{90\#}$)	UNIT
10:30 – 11:30 ^{/3}	66.4	88.2	62.5	dB(A)
11:30 – 12:30	62.7	68.1	62.3	dB(A)
12:30 – 13:30	63.0	68.9	62.5	dB(A)
13:30 – 14:30	63.2	72.2	62.7	dB(A)
14:30 – 15:30	63.2	69.9	62.6	dB(A)
15:30 – 16:30	63.1	69.0	62.7	dB(A)
16:30 – 17:30	63.2	73.0	62.8	dB(A)
17:30 – 18:30	63.2	67.1	62.9	dB(A)
18:30 – 19:30	63.3	66.2	63.0	dB(A)
19:30 – 20:30	63.3	66.3	63.0	dB(A)
20:30 – 21:30	68.3	84.0	63.0	dB(A)
21:30 – 22:30	68.8	84.5	63.5	dB(A)
22:30 – 23:30	66.8	73.1	63.2	dB(A)
23:30 – 00:30	63.5	68.4	63.2	dB(A)
00:30 – 01:30	63.4	66.5	63.1	dB(A)
01:30 – 02:30	63.3	66.0	63.0	dB(A)
02:30 – 03:30	63.4	69.5	63.0	dB(A)
03:30 – 04:30	63.4	66.5	63.0	dB(A)
04:30 – 05:30	63.3	66.8	63.0	dB(A)
05:30 – 06:30	63.5	67.0	63.2	dB(A)
06:30 – 07:30	63.5	69.1	63.1	dB(A)
07:30 – 08:30	63.4	75.7	63.0	dB(A)
08:30 – 09:30	63.7	78.0	63.1	dB(A)
09:30 – 10:30	63.5	73.6	63.1	dB(A)
L_{eq} 24 hr.	64.4	-	-	dB(A)
$L_{dn\#}$	70.5	-	-	dB(A)
Maximum	-	88.2	-	dB(A)
Standard	70 ^{/1} , 70 ^{/2}	115 ^{/1} , 115 ^{/2}	-	dB(A)

REMARK : # Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

^{/1} Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

^{/2} Notification of Ministry of the Industry B.E. 2548 (2005)

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

(Ms. Thanatporn Klinsopon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement By Mr. Tummarut Photakham)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....
(MRS. WANPEN LHAOCHINDAWAT)

22/11/2022

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

TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 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 : EA Plant
SAMPLE POINT : บริเวณริมรั้วด้านทิศตะวันตก
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 00443358 : Type 2

SAMPLE NO. : 33916
MEASURING DATE : 05-06/11/2022
RECEIVED DATE : 10/11/2022
REPORTED DATE : 22/11/2022

TIME \ DATE	05-06/11/2022 (L_{eq})	05-06/11/2022 (L_{max})	05-06/11/2022 ($L_{90\#}$)	UNIT
10:30 – 11:30 ³	63.2	69.5	62.9	dB(A)
11:30 – 12:30	63.2	71.0	62.8	dB(A)
12:30 – 13:30	63.0	66.5	62.7	dB(A)
13:30 – 14:30	63.4	70.4	62.9	dB(A)
14:30 – 15:30	63.2	70.2	62.8	dB(A)
15:30 – 16:30	63.5	73.8	62.9	dB(A)
16:30 – 17:30	63.2	68.8	62.8	dB(A)
17:30 – 18:30	63.2	75.0	62.8	dB(A)
18:30 – 19:30	63.2	66.2	62.9	dB(A)
19:30 – 20:30	63.2	66.0	62.9	dB(A)
20:30 – 21:30	63.2	70.4	62.8	dB(A)
21:30 – 22:30	63.3	69.3	62.9	dB(A)
22:30 – 23:30	63.2	69.9	62.9	dB(A)
23:30 – 00:30	63.5	66.4	63.1	dB(A)
00:30 – 01:30	63.5	68.9	63.1	dB(A)
01:30 – 02:30	63.5	66.3	63.2	dB(A)
02:30 – 03:30	63.5	66.7	63.1	dB(A)
03:30 – 04:30	63.4	66.2	63.0	dB(A)
04:30 – 05:30	63.6	68.6	63.1	dB(A)
05:30 – 06:30	63.4	68.8	63.1	dB(A)
06:30 – 07:30	63.6	66.5	63.2	dB(A)
07:30 – 08:30	63.4	70.1	63.0	dB(A)
08:30 – 09:30	63.2	66.6	62.8	dB(A)
09:30 – 10:30	63.0	77.8	62.6	dB(A)
L_{eq} 24 hr.	63.3	-	-	dB(A)
$L_{dn\#}$	69.8	-	-	dB(A)
Maximum	-	77.8	-	dB(A)
Standard	$70^{1/1}, 70^{1/2}$	$115^{1/1}, 115^{1/2}$	-	dB(A)

REMARK : ³ Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

^{1/1} Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

^{1/2} Notification of Ministry of the Industry B.E. 2548 (2005)

* Parameter Outside The Scope of The Regulation of The Department of Industrial Works
(Ms. Thanatporn Klinsonon is Section Head, Ms. Wanpen Lhaochindawat is Technical Management)
(Measurement By Mr. Tummarut Pholachumt)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 
(MRS. WANPEN LHAOCHINDAWAT)

22/11/2022

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

TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 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 : EA Plant
SAMPLE POINT : บริเวณริมรั้วด้านทิศตะวันตก
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 00443358 : Type 2

SAMPLE NO. : 33917
MEASURING DATE : 06-07/11/2022
RECEIVED DATE : 10/11/2022
REPORTED DATE : 22/11/2022

TIME \ DATE	06-07/11/2022 (L_{eq})	06-07/11/2022 (L_{max})	06-07/11/2022 ($L_{90\#}$)	UNIT
10:30 – 11:30 ^{1/3}	62.9	66.3	62.5	dB(A)
11:30 – 12:30	64.0	80.2	62.7	dB(A)
12:30 – 13:30	65.5	81.0	62.7	dB(A)
13:30 – 14:30	63.1	69.0	62.6	dB(A)
14:30 – 15:30	63.2	68.9	62.8	dB(A)
15:30 – 16:30	63.0	72.6	62.7	dB(A)
16:30 – 17:30	64.1	83.8	62.7	dB(A)
17:30 – 18:30	69.7	94.2	63.8	dB(A)
18:30 – 19:30	68.7	75.2	63.5	dB(A)
19:30 – 20:30	68.2	72.2	63.5	dB(A)
20:30 – 21:30	69.0	93.5	63.1	dB(A)
21:30 – 22:30	64.9	72.6	63.2	dB(A)
22:30 – 23:30	63.5	66.8	63.1	dB(A)
23:30 – 00:30	63.4	79.4	63.1	dB(A)
00:30 – 01:30	63.3	66.6	63.0	dB(A)
01:30 – 02:30	63.4	66.4	63.1	dB(A)
02:30 – 03:30	63.5	66.9	63.2	dB(A)
03:30 – 04:30	63.3	66.5	63.0	dB(A)
04:30 – 05:30	64.9	70.5	63.0	dB(A)
05:30 – 06:30	63.3	67.1	63.0	dB(A)
06:30 – 07:30	63.3	67.5	63.0	dB(A)
07:30 – 08:30	63.2	68.3	62.9	dB(A)
08:30 – 09:30	63.4	74.8	62.8	dB(A)
09:30 – 10:30	63.8	67.4	62.9	dB(A)
L_{eq} 24 hr.	65.1	-	-	dB(A)
$L_{dn\#}$	70.4	-	-	dB(A)
Maximum	-	94.2	-	dB(A)
Standard	$70^{1/1}, 70^{2/2}$	$115^{1/1}, 115^{2/2}$	-	dB(A)

REMARK: * Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

^{1/1} Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

^{1/2} Notification of Ministry of the Industry B.E. 2548 (2005)

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

(Ms. Thanatporn Klinsopon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement By Mr. Tummarut Pholwattana)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(MRS. WANPEN LHAOCHINDAWAT)

22/11/2022

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

TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 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 : EA Plant
SAMPLE POINT : บริเวณริมรั้วด้านทิศตะวันตก
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 00443358 : Type 2

SAMPLE NO. : 33918
MEASURING DATE : 07-08/11/2022
RECEIVED DATE : 10/11/2022
REPORTED DATE : 22/11/2022

TIME \ DATE	07-08/11/2022 (L_{eq})	07-08/11/2022 (L_{max})	07-08/11/2022 ($L_{90\#}$)	UNIT
10:30 – 11:30 ^{/3}	63.2	67.4	62.7	dB(A)
11:30 – 12:30	63.1	68.3	62.7	dB(A)
12:30 – 13:30	63.0	71.0	62.6	dB(A)
13:30 – 14:30	63.3	68.2	62.8	dB(A)
14:30 – 15:30	63.2	69.4	62.9	dB(A)
15:30 – 16:30	63.2	68.2	62.9	dB(A)
16:30 – 17:30	63.6	70.8	63.0	dB(A)
17:30 – 18:30	65.7	89.8	62.8	dB(A)
18:30 – 19:30	65.1	90.3	62.8	dB(A)
19:30 – 20:30	63.2	66.4	62.9	dB(A)
20:30 – 21:30	63.5	67.5	63.1	dB(A)
21:30 – 22:30	63.4	70.1	63.1	dB(A)
22:30 – 23:30	63.4	66.4	63.1	dB(A)
23:30 – 00:30	63.3	67.7	62.9	dB(A)
00:30 – 01:30	63.3	68.1	63.0	dB(A)
01:30 – 02:30	63.4	69.5	63.0	dB(A)
02:30 – 03:30	63.4	68.1	63.0	dB(A)
03:30 – 04:30	63.5	68.8	63.2	dB(A)
04:30 – 05:30	63.5	69.1	63.1	dB(A)
05:30 – 06:30	63.7	68.4	63.3	dB(A)
06:30 – 07:30	63.5	68.9	63.2	dB(A)
07:30 – 08:30	63.3	69.0	62.8	dB(A)
08:30 – 09:30	63.3	76.9	62.8	dB(A)
09:30 – 10:30	63.5	73.6	62.7	dB(A)
L_{eq} 24 hr.	63.6	-	-	dB(A)
$L_{dn\#}$	69.9	-	-	dB(A)
Maximum	-	90.3	-	dB(A)
Standard	70 ^{/1} , 70 ^{/2}	115 ^{/1} , 115 ^{/2}	-	dB(A)

REMARK : ^{/3} Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

^{/1} Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

^{/2} Notification of Ministry of the Industry B.E. 2548 (2005)

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

(Ms. Thanatporn Klinsopon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement By Mr. Tummarut Photakum)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(MRS. WANPEN LHAOCHINDAWAT)

22/11/2022

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

TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 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 : EA Plant
SAMPLE POINT : บริเวณริมรั้วด้านทิศตะวันตก
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 00443358 : Type 2

SAMPLE NO. : 33919
MEASURING DATE : 08-09/11/2022
RECEIVED DATE : 10/11/2022
REPORTED DATE : 22/11/2022

TIME \ DATE	08-09/11/2022 (L_{eq})	08-09/11/2022 (L_{max})	08-09/11/2022 ($L_{90\#}$)	UNIT
10:30 – 11:30 ¹³	63.7	67.3	63.0	dB(A)
11:30 – 12:30	63.1	69.1	62.7	dB(A)
12:30 – 13:30	62.9	68.1	62.5	dB(A)
13:30 – 14:30	63.0	71.5	62.6	dB(A)
14:30 – 15:30	63.3	67.7	62.7	dB(A)
15:30 – 16:30	63.1	66.7	62.7	dB(A)
16:30 – 17:30	63.3	67.5	62.8	dB(A)
17:30 – 18:30	63.1	70.4	62.8	dB(A)
18:30 – 19:30	63.3	66.9	62.9	dB(A)
19:30 – 20:30	63.5	68.4	63.1	dB(A)
20:30 – 21:30	63.5	66.8	63.1	dB(A)
21:30 – 22:30	63.4	69.3	63.0	dB(A)
22:30 – 23:30	63.2	68.2	62.9	dB(A)
23:30 – 00:30	63.2	68.9	62.9	dB(A)
00:30 – 01:30	63.4	67.7	63.0	dB(A)
01:30 – 02:30	63.4	68.1	63.0	dB(A)
02:30 – 03:30	63.3	67.4	63.0	dB(A)
03:30 – 04:30	63.5	68.0	63.1	dB(A)
04:30 – 05:30	63.5	68.7	63.1	dB(A)
05:30 – 06:30	63.4	66.9	63.0	dB(A)
06:30 – 07:30	63.5	67.3	63.2	dB(A)
07:30 – 08:30	63.5	70.3	63.1	dB(A)
08:30 – 09:30	63.3	69.3	62.9	dB(A)
09:30 – 10:30	63.2	70.1	62.8	dB(A)
L_{eq} 24 hr.	63.3	-	-	dB(A)
$L_{dn\#}$	69.8	-	-	dB(A)
Maximum	-	71.5	-	dB(A)
Standard	$70^{11}, 70^{12}$	$115^{11}, 115^{12}$	-	dB(A)

REMARK : Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

¹¹ Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

¹² Notification of Ministry of the Industry B.E. 2548 (2005)

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

(Ms. Thanatporn Klinsopon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement By Mr. Tummarut Photakorn)



บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

Approved By 
(MRS. WANPEN LHAOCHINDAWAT)

22/11/2022

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

TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 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 : EA Plant
SAMPLE POINT : บริเวณริมรั้วด้านทิศตะวันตก
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 00443358 : Type 2

SAMPLE NO. : 33920
MEASURING DATE : 09-10/11/2022
RECEIVED DATE : 10/11/2022
REPORTED DATE : 22/11/2022

TIME \ DATE	09-10/11/2022 (L_{eq})	09-10/11/2022 (L_{max})	09-10/11/2022 ($L_{90\#}$)	UNIT
10:30 – 11:30 ^{1/3}	63.2	67.7	62.8	dB(A)
11:30 – 12:30	64.0	70.8	63.6	dB(A)
12:30 – 13:30	62.9	69.3	62.5	dB(A)
13:30 – 14:30	63.0	71.3	62.6	dB(A)
14:30 – 15:30	63.0	69.1	62.6	dB(A)
15:30 – 16:30	63.0	70.2	62.5	dB(A)
16:30 – 17:30	63.0	68.4	62.6	dB(A)
17:30 – 18:30	63.1	66.4	62.8	dB(A)
18:30 – 19:30	63.3	69.5	62.9	dB(A)
19:30 – 20:30	63.4	66.5	63.1	dB(A)
20:30 – 21:30	63.4	66.6	63.1	dB(A)
21:30 – 22:30	63.4	69.6	63.1	dB(A)
22:30 – 23:30	63.4	68.8	63.1	dB(A)
23:30 – 00:30	63.4	68.4	63.1	dB(A)
00:30 – 01:30	63.4	66.8	63.1	dB(A)
01:30 – 02:30	63.2	68.9	62.9	dB(A)
02:30 – 03:30	63.3	66.2	62.9	dB(A)
03:30 – 04:30	63.4	68.9	62.9	dB(A)
04:30 – 05:30	63.3	69.3	63.0	dB(A)
05:30 – 06:30	63.2	66.5	62.9	dB(A)
06:30 – 07:30	64.4	69.3	63.0	dB(A)
07:30 – 08:30	63.2	69.2	62.9	dB(A)
08:30 – 09:30	63.2	70.6	62.7	dB(A)
09:30 – 10:30	63.3	78.5	62.7	dB(A)
L_{eq} 24 hr.	63.3	-	-	dB(A)
$L_{dn\#}$	69.8	-	-	dB(A)
Maximum	-	78.5	-	dB(A)
Standard	70 ^{1/1} , 70 ^{2/2}	115 ^{1/1} , 115 ^{2/2}	-	dB(A)

REMARK : Test Report/Sampling marked 'Not TISI Accredited' in this report are not included in the TISI Accreditation Schedule for our laboratory

^{1/1} Notification of Office of The National Environmental Board Volume 15 B.E. 2540 (1997)

^{2/2} Notification of Ministry of the Industry B.E. 2542 (1999)

* Parameter Outside The Scope of The Regulation of The Department of Industrial Works

(Ms. Thanatporn Klinsopon is Section Head, Mrs. Wanpen Lhaochindawat is Technical Management)

(Measurement By Mr. Tummarut Photankum)



บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

Approved By 
(MRS. WANPEN LHAOCHINDAWAT)

22/11/2022

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

TEST REPORT


Customer : PTT Global Chemical Public Company Limited Branch 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 : EA Plant**
Sample Name : จุกระบายน้ำฝนจาก Storm Water Diversion (TK-301)**
Sampling By : ETC**
Sampling Method : Grab**
Tested Date : 15/07/2022 – 22/07/2022

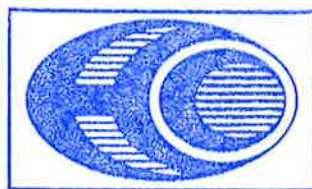
Sample No. : W 65071398
Sampling Date : 14/07/2022**
Sampling Time : 10:05 AM**
Received Date : 15/07/2022
Reported Date : 02/08/2022

Parameter	Unit	Method	Result
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	115
Chemical Oxygen Demand #	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	231
pH (on site) *		Electrometric Method	7.2
Temperature *	°C	Laboratory and Field Method	27
Total Dissolved Solids #	mg/l	Dried at 180 °C (SM:2540C)	80
Total Kjeldahl Nitrogen *	mg/l as NH ₃ -N	Macro Kjeldahl Method (SM:4500-Norg B)	42
Total Suspended Solids #	mg/l	Dried at 103-105 °C (SM:2540 D)	28


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

Remark : 1. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
2. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
3. * = Test Report/Sampling marked Not Accredited, Sampling By Miss Pornpinan Viriyakusolkul (จ-003-ท-8334)*
4. ** = These data are non laboratory data. / Sampling at UTM 47 P 731235 E 1404859 N

Examined By 
(Miss Apiradee Chuen-arom)
(จ-003-ท-4377)
02 / 08 / 2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 
(Mr. Kawee Suthasub)
(จ-003-ท-2205)
02 / 08 / 2022

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

Request No : W6507352

Report No : 6507-2125

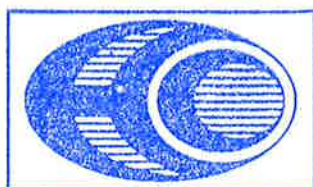
TEST REPORT

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 : EA Plant
Sample Name : จุดระบายน้ำฝนจาก Storm Water Diversion (TK-301)
Sampling By : ETC
Sampling Method : Grab
Tested Date : 15/07/2022 – 22/07/2022
Sample No. : W 65071398
Sampling Date : 14/07/2022
Sampling Time : 10:05 AM
Received Date : 15/07/2022
Reported Date : 02/08/2022

Parameter	Unit	Method	Result
Ammonia	mg/l as NH ₃	Distillation and Titrimetric Method (SM:4500 -NH ₃ B,4500 -NH ₃ C)	39
Formaldehyde	mg/l	Distillation,Colorimetric Method	0.15
Oil and Grease	mg/l	Partition-Gravimetric Method (SM:5520B)	2.0

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

Remark : 1. Parameter Outside The Scope of The Registration of Department of Industrial Works
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
3. MDL = Method Detection Limit [MDL of Formaldehyde = 0.20 mg/l]
4. LOQ = Level of Quantitation [LOQ of Oil and Grease = 3.0 mg/l]
5. Sampling By Miss Pornpinan Viriyakusolkul (๓-๐๐3-๓-8334)
6. Sampling at UTM 47 P 731235 E 1404859 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By



(Miss Apiradee Chuen-arom)

02 / 08 / 2022

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

TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 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 : EA Plant** Sample No. : W 65081021
Sample Name : จุกระบายน้ำฝนจาก Storm Water Diversion (TK-301)** Sampling Date : 10/08/2022**
Sampling By : ETC** Sampling Time : 9:50 AM**
Sampling Method : Grab** Received Date : 11/08/2022
Tested Date : 11/08/2022 – 20/08/2022 Reported Date : 22/08/2022

Parameter	Unit	Method	Result
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	10.0
Chemical Oxygen Demand #	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	< 40
pH (on site) *		Electrometric Method	6.9
Temperature *	°C	Laboratory and Field Method	29
Total Dissolved Solids #	mg/l	Dried at 180 °C (SM:2540C)	48
Total Kjeldahl Nitrogen *	mg/l as NH ₃ -N	Macro Kjeldahl Method (SM:4500-Norg B)	5
Total Suspended Solids #	mg/l	Dried at 103-105 °C (SM:2540 D)	7

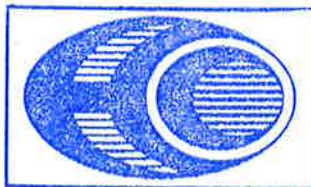
Physical Apperance : 1. Sample : yellowish, lightly SS
2. Container : Normal [PE 0.5 L, PE 1.0 L , PE 1.8 L, G 1.0 L]
Remark : 1. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
2. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
3. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Supharerk Phatklang (จ-003-จ-5637)*
4. ** = These data are non laboratory data. / Sampling at UTM 47 P 731235 E 1404859 N

Examined By.....

(Miss Apiradee Chuen-arom)

(จ-003-ค-4377)

22 / 08 / 2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....

(Mr. Kawee Suthasub)

(จ-003-ค-2205)

22 / 08 / 2022

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

Request No : W6508267

Report No : 6508-2173

TEST REPORT

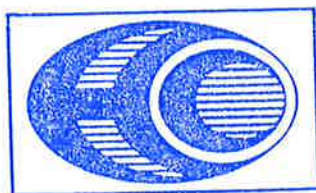
Customer : PTT Global Chemical Public Company Limited Branch 16
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
Sampling Source : EA Plant
Sample Name : จุดระบายน้ำฝนจาก Storm Water Diversion (TK-301)
Sampling By : ETC
Sampling Method : Grab
Tested Date : 11/08/2022 – 20/08/2022

Sample No. : W 65081021
Sampling Date : 10/08/2022
Sampling Time : 9:50 AM
Received Date : 11/08/2022
Reported Date : 22/08/2022

Parameter	Unit	Method	Result
Ammonia	mg/l as NH ₃	Distillation and Titrimetric Method (SM:4500 -NH3 B,4500 -NH3 C)	4
Formaldehyde	mg/l	Distillation,Colorimetric Method	0.05
Oil and Grease	mg/l	Partition-Gravimetric Method (SM:5520B)	0.1

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. Parameter Outside The Scope of The Registration of Department of Industrial Works
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
3. MDL = Method Detection Limit [MDL of Formaldehyde = 0.20 mg/l]
4. LOQ = Level of Quantitation [LOQ of Oil and Grease = 3.0 mg/l]
5. Sampling By Mr. Supharerk Phatklang (ว-003-จ-5637)
6. Sampling at UTM 47 P 731235 E 1404859 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

(Miss Apiradee Chuen-arom)

22 / 08 / 2022


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

TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 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 : EA Plant** Sample No. : W 65091465
Sample Name : จุติระบายน้ำฝนจาก Storm Water Diversion (TK-301)** Sampling Date : 14/09/2022**
Sampling By : ETC** Sampling Time : 11:00 AM**
Sampling Method : Grab** Received Date : 15/09/2022
Tested Date : 15/09/2022 – 28/09/2022 Reported Date : 28/09/2022


Parameter	Unit	Method	Result
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	8.5
Chemical Oxygen Demand #	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	< 40
pH (on site) *		Electrometric Method	8.1
Temperature *	°C	Laboratory and Field Method	28
Total Dissolved Solids #	mg/l	Dried at 180 °C (SM:2540C)	45
Total Kjeldahl Nitrogen *	mg/l as NH ₃ -N	Macro Kjeldahl Method (SM:4500-Norg B)	9
Total Suspended Solids #	mg/l	Dried at 103-105 °C (SM:2540 D)	16

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. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
2. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
3. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Songpon Phiwuan (จ-003-ค-7279)*
4. ** = These data are non laboratory data. / Sampling at UTM 47 P 731235 E 1404859 N

Examined By 
(Miss Apiradee Chuen-arom)
(จ-003-ค-4377)
28 / 09 / 2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 
(Mr. Kawee Suthasub)
(จ-003-ค-2205)
28 / 09 / 2022

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

Request No : W6509362

Report No : 6510-0244

TEST REPORT

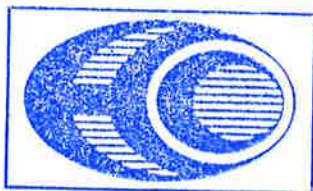
Customer : PTT Global Chemical Public Company Limited Branch 16
 Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150
 Sampling Source : EA Plant
 Sample Name : จุกระบายน้ำฝนจาก Storm Water Diversion (TK-301)
 Sampling By : ETC
 Sampling Method : Grab
 Tested Date : 15/09/2022 – 28/09/2022

Sample No. : W 65091465
 Sampling Date : 14/09/2022
 Sampling Time : 11:00 AM
 Received Date : 15/09/2022
 Reported Date : 28/09/2022

Parameter	Unit	Method	Result
Ammonia	mg/l as NH ₃	Distillation and Titrimetric Method (SM:4500 -NH ₃ B,4500 -NH ₃ C)	< 2.43
Formaldehyde	mg/l	Distillation,Colorimetric Method	0.01
Oil and Grease	mg/l	Partition-Gravimetric Method (SM:5520B)	0.4

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. Parameter Outside The Scope of The Registration of Department of Industrial Works
 2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
 3. MDL = Method Detection Limit [MDL of Formaldehyde = 0.20 mg/l]
 4. LOQ = Level of Quantitation [LOQ of Oil and Grease = 3.0 mg/l]
 5. Sampling By Mr. Songpon Phiwan (ว-003-ก-7279)
 6. Sampling at UTM 47 P 731235 E 1404859 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By



(Miss Apiradee Chuen-arom)

28 / 09 / 2022

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

TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 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 : EA Plant** Sample No. : W 65101317
Sample Name : จุติระบายน้ำฝนจาก Storm Water Diversion (TK-301)** Sampling Date : 12/10/2022**
Sampling By : ETC** Sampling Time : 9:55 AM**
Sampling Method : Grab** Received Date : 14/10/2022
Tested Date : 14/10/2022 – 26/10/2022 Reported Date : 26/10/2022

Parameter	Unit	Method	Result
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	42.3
Chemical Oxygen Demand #	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	160
pH (on site) *		Electrometric Method	8.7
Temperature *	°C	Laboratory and Field Method	30
Total Dissolved Solids #	mg/l	Dried at 180 °C (SM:2540C)	61
Total Kjeldahl Nitrogen *	mg/l as NH ₃ -N	Macro Kjeldahl Method (SM:4500-Norg B)	27
Total Suspended Solids #	mg/l	Dried at 103-105 °C (SM:2540 D)	13

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. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
2. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
3. * = Test Report/Sampling marked Not Accredited, Sampling By Miss Pornpinan Viriyakusolkul (จ-003-จ-8334)*
4. ** = These data are non laboratory data. / Sampling at UTM 47 P 731235 E 1404859 N

Examined By.....
(Miss Apiradee Chuen-arom)
(จ-003-ค-4377)
26 / 10 / 2022



Approved By.....
(Mr. Kawee Suthasub)
(จ-003-ค-2205)
26 / 10 / 2022

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

Request No : W6510347

Report No : 6510-1821

TEST REPORT

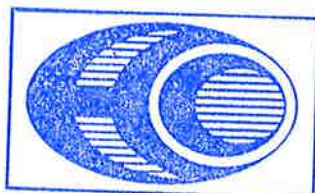
Customer : PTT Global Chemical Public Company Limited Branch 16
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

Sampling Source : EA Plant Sample No. : W 65101317
Sample Name : จุลินทรีย์น้ำฝนจาก Storm Water Diversion (TK-301) Sampling Date : 12/10/2022
Sampling By : ETC Sampling Time : 9:55 AM
Sampling Method : Grab Received Date : 14/10/2022
Tested Date : 14/10/2022 – 26/10/2022 Reported Date : 26/10/2022

Parameter	Unit	Method	Result
Ammonia	mg/l as NH ₃	Distillation and Titrimetric Method (SM:4500 -NH ₃ B, 4500 -NH ₃ C)	18
Formaldehyde	mg/l	Distillation, Colorimetric Method	0.10
Oil and Grease	mg/l	Partition-Gravimetric Method (SM:5520B)	0.5

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 :
- Parameter Outside The Scope of The Registration of Department of Industrial Works
 - SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
 - MDL = Method Detection Limit [MDL of Formaldehyde = 0.20 mg/l]
 - LOQ = Level of Quantitation [LOQ of Oil and Grease = 3.0 mg/l]
 - Sampling By Miss Pornpinan Viriyakusolkul (๓-๐๐3-๓-8334)
 - Sampling at UTM 47 P 731235 E 1404859 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By



(Miss Apiradee Chuen-arom)

26 / 10 / 2022


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

TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 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 : EA Plant** Sample No. : W 65111001
Sample Name : จุดระบายน้ำฝนจาก Storm Water Diversion (TK-301)** Sampling Date : 09/11/2022**
Sampling By : ETC** Sampling Time : 10:20 AM**
Sampling Method : Grab** Received Date : 10/11/2022
Tested Date : 10/11/2022 – 17/11/2022 Reported Date : 21/11/2022


Parameter	Unit	Method	Result
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	4.7
Chemical Oxygen Demand #	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	< 40
pH (on site) *		Electrometric Method	7.8
Temperature *	°C	Laboratory and Field Method	28
Total Dissolved Solids #	mg/l	Dried at 180 °C (SM:2540C)	57
Total Kjeldahl Nitrogen *	mg/l as NH ₃ -N	Macro Kjeldahl Method (SM:4500-Norg B)	6
Total Suspended Solids #	mg/l	Dried at 103-105 °C (SM:2540 D)	14

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. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
2. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
3. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Parkpoom Buasawad (จ-003-ก-7280)*
4. ** = These data are non laboratory data. / Sampling at UTM 47 P 731235 E 1404859 N

Examined By 
(Miss Apiradee Chuen-arom)
(จ-003-ก-4377)
21 / 11 / 2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 
(Mr. Kawee Suthasub)
(จ-003-ก-2205)
21 / 11 / 2022

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

Request No : W6511260

Report No : 6511-1711

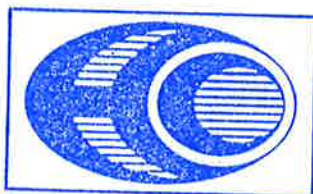
TEST REPORT

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 : EA Plant Sample No. : W 65111001
Sample Name : จุดระบายน้ำฝนจาก Storm Water Diversion (TK-301) Sampling Date : 09/11/2022
Sampling By : ETC Sampling Time : 10:20 AM
Sampling Method : Grab Received Date : 10/11/2022
Tested Date : 10/11/2022 – 17/11/2022 Reported Date : 21/11/2022

Parameter	Unit	Method	Result
Ammonia	mg/l as NH ₃	Distillation and Titrimetric Method (SM:4500 -NH3 B,4500 -NH3 C)	4
Formaldehyde	mg/l	Distillation,Colorimetric Method	0.05
Oil and Grease	mg/l	Partition-Gravimetric Method (SM:5520B)	0.5

- 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. Parameter Outside The Scope of The Registration of Department of Industrial Works
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
3. MDL = Method Detection Limit [MDL of Formaldehyde = 0.20 mg/l]
4. LOQ = Level of Quantitation [LOQ of Oil and Grease = 3.0 mg/l]
5. Sampling By Mr. Parkpoom Buasawad (ว-003-ก-7280)
6. Sampling at UTM 47 P 731235 E 1404859 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

(Miss Apiradee Chuen-arom)

21 / 11 / 2022


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

TEST REPORT

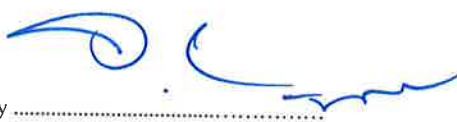
Customer : PTT Global Chemical Public Company Limited Branch 16**
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150**
Sampling Source : EA Plant**
Sample Name : จุติระบายน้ำฝนจาก Storm Water Diversion (TK-301)**
Sampling By : ETC**
Sampling Method : Grab**
Tested Date : 06/12/2022 – 13/12/2022
Sample No. : W 65120563
Sampling Date : 03/12/2022**
Sampling Time : 9:45 AM**
Received Date : 06/12/2022
Reported Date : 15/12/2022

Parameter	Unit	Method	Result
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	33.6
Chemical Oxygen Demand #	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	64
pH (on site) *		Electrometric Method	7.9
Temperature *	°C	Laboratory and Field Method	28
Total Dissolved Solids #	mg/l	Dried at 180 °C (SM:2540C)	88
Total Kjeldahl Nitrogen *	mg/l as NH ₃ -N	Macro Kjeldahl Method (SM:4500-Norg B)	6
Total Suspended Solids #	mg/l	Dried at 103-105 °C (SM:2540 D)	29

Physical Apperance : 1. Sample : green, lightly SS
2. Container : Normal [PE 0.5 L, PE 1.0 L, PE 1.8 L, G 1.0 L]
Remark : 1. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
2. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
3. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Songpon Phiwuan (จ-003-ก-7279)*
4. ** = These data are non laboratory data. / Sampling at UTM 47 P 731235 E 1404859 N

Examined By 
(Miss Apiradee Chuen-arom)
(จ-003-ก-4377)
15 / 12 / 2022



Approved By 
(Mr. Kawee Suthasub)
(จ-003-ก-2205)
15 / 12 / 2022

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

Request No : W6512124

Report No : 6512-1201

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 : EA Plant
Sample Name : จุดระบายน้ำฝนจาก Storm Water Diversion (TK-301)
Sampling By : ETC
Sampling Method : Grab
Tested Date : 06/12/2022 – 13/12/2022
Sample No. : W 65120563
Sampling Date : 03/12/2022
Sampling Time : 9:45 AM
Received Date : 06/12/2022
Reported Date : 15/12/2022

Parameter	Unit	Method	Result
Ammonia	mg/l as NH ₃	Distillation and Titrimetric Method (SM:4500 -NH ₃ B,4500 -NH ₃ C)	7
Formaldehyde	mg/l	Distillation,Colorimetric Method	0.01
Oil and Grease	mg/l	Partition-Gravimetric Method (SM:5520B)	1.6

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

Remark : 1. Parameter Outside The Scope of The Registration of Department of Industrial Works
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
3. MDL = Method Detection Limit [MDL of Formaldehyde = 0.20 mg/l]
4. LOQ = Level of Quantitation [LOQ of Oil and Grease = 3.0 mg/l]
5. Sampling By Mr. Songpon Phiwan (จ-003-ท-7279)
6. Sampling at UTM 47 P 731235 E 1404859 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

(Miss Apiradee Chuen-arom)

15 / 12 / 2022

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

TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 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 : EA Plant**
Sample Name : บ่อปรับสมดุล Equalization Sump (TK-101)**
Sampling By : ETC**
Sampling Method : Grab**
Tested Date : 15/07/2022 – 27/07/2022
Sample No. : W 65071399
Sampling Date : 14/07/2022**
Sampling Time : 10:00 AM**
Received Date : 15/07/2022
Reported Date : 02/08/2022

Parameter	Unit	Method	Result
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	946
Chemical Oxygen Demand #	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	1,799
Formaldehyde *	mg/l	Distillation, Colorimetric Method	8.68
pH (on site) *		Electrometric Method	10.8
Temperature *	°C	Laboratory and Field Method	28
Total Dissolved Solids #	mg/l	Dried at 180 °C (SM:2540C)	< 25
Total Kjeldahl Nitrogen *	mg/l as NH ₃ -N	Macro Kjeldahl Method (SM:4500-Norg B)	246
Total Suspended Solids #	mg/l	Dried at 103-105 °C (SM:2540 D)	< 5

Physical Appearance : 1. Sample : lightly SS

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

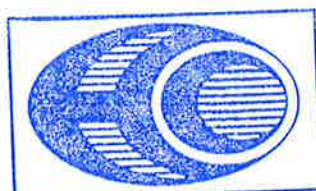
Remark : 1. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
2. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
3. * = Test Report/Sampling marked Not Accredited, Sampling By Miss Pornpinan Viriyakusolkul (จ-003-จ-8334)*
4. ** = These data are non laboratory data. / Sampling at UTM 47 P 731233 E 1404850 N

Examined By _____

(Miss Apiradee Chuen-arom)

(จ-003-ค-4377)

02 / 08 / 2022



บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด

Approved By _____

(Mr. Kawee Suthasub)

(จ-003-ค-2205)

02 / 08 / 2022

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

Request No : W6507352

Report No : 6507-2126

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 : EA Plant
 Sample Name : บ่อปรับสมดุล Equalization Sump (TK-101)
 Sampling By : ETC
 Sampling Method : Grab
 Tested Date : 15/07/2022 – 27/07/2022

Sample No. : W 65071399
 Sampling Date : 14/07/2022
 Sampling Time : 10:00 AM
 Received Date : 15/07/2022
 Reported Date : 02/08/2022

Parameter	Unit	Method	Result
Ammonia	mg/l as NH ₃	Distillation and Titrimetric Method (SM:4500 -NH3 B,4500 -NH3 C)	14
Oil and Grease	mg/l	Partition-Gravimetric Method (SM:5520B)	1.3

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

Remark : 1. Parameter Outside The Scope of The Registration of Department of Industrial Works
 2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
 3. LOQ = Level of Quantitation [LOQ of Oil and Grease = 3.0 mg/l]
 4. Sampling By Miss Pompinan Viriyakusolkul (จ-003-๓-8334)
 5. Sampling at UTM 47 P 731233 E 1404850 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

(Miss Apiradee Chuen-arom)

02 / 08 / 2022


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

TEST REPORT


Customer : PTT Global Chemical Public Company Limited Branch 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 : EA Plant**
Sample Name : บ่อปรับสมดุล Equalization Sump (TK-101)**
Sampling By : ETC**
Sampling Method : Grab**
Tested Date : 11/08/2022 – 29/08/2022
Sample No. : W 65081022
Sampling Date : 10/08/2022**
Sampling Time : 9:45 AM**
Received Date : 11/08/2022
Reported Date : 29/08/2022

Parameter	Unit	Method	Result
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	744
Chemical Oxygen Demand #	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	1,448
Formaldehyde *	mg/l	Distillation, Colorimetric Method	5.11
pH (on site) *		Electrometric Method	10.4
Temperature *	°C	Laboratory and Field Method	36
Total Dissolved Solids #	mg/l	Dried at 180 °C (SM:2540C)	< 25
Total Kjeldahl Nitrogen *	mg/l as NH ₃ -N	Macro Kjeldahl Method (SM:4500-Norg B)	224
Total Suspended Solids #	mg/l	Dried at 103-105 °C (SM:2540 D)	< 5

Physical Appearance : 1. Sample : lightly SS
2. Container : Normal [PE 0.5 L, PE 1.0 L, PE 1.8 L, G 1.0 L]
Remark : 1. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
2. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
3. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Supharerk Phatklang (จ-003-จ-5637)*
4. ** = These data are non laboratory data. / Sampling at UTM 47 P 731233 E 1404850 N

Examined By 
(Miss Apiradee Chuen-arom)
(จ-003-ค-4377)
29 / 08 / 2022



Approved By 
(Mr. Kawee Suthasub)
(จ-003-ค-2205)
29 / 08 / 2022

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

Request No : W6508267

Report No : 6508-2174

TEST REPORT

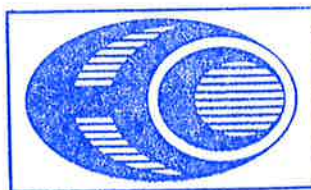
Customer : PTT Global Chemical Public Company Limited Branch 16
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut, Amphur Muang Rayong, Rayong 21150

Sampling Source : EA Plant Sample No. : W 65081022
Sample Name : บ่อปรับสมดุล Equalization Sump (TK-101) Sampling Date : 10/08/2022
Sampling By : ETC Sampling Time : 9:45 AM
Sampling Method : Grab Received Date : 11/08/2022
Tested Date : 11/08/2022 – 29/08/2022 Reported Date : 29/08/2022

Parameter	Unit	Method	Result
Ammonia	mg/l as NH ₃	Distillation and Titrimetric Method (SM:4500 -NH3 B,4500 -NH3 C)	5
Oil and Grease	mg/l	Partition-Gravimetric Method (SM:5520B)	0.2

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

Remark : 1. Parameter Outside The Scope of The Registration of Department of Industrial Works
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
3. LOQ = Level of Quantitation [LOQ of Oil and Grease = 3.0 mg/l]
4. Sampling By Mr. Supharerk Phatklang (๖-003-๖-5637)
5. Sampling at UTM 47 P 731233 E 1404850 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

(Miss Apiradee Chuen-arom)

29 / 08 / 2022

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

TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 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 : EA Plant** Sample No. : W 65091466
Sample Name : บ่อปรับสมดุล Equalization Sump (TK-101)** Sampling Date : 14/09/2022**
Sampling By : ETC** Sampling Time : 10:50 AM**
Sampling Method : Grab** Received Date : 15/09/2022
Tested Date : 15/09/2022 - 04/10/2022 Reported Date : 04/10/2022

Parameter	Unit	Method	Result
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	30.4
Chemical Oxygen Demand #	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	1,016
Formaldehyde *	mg/l	Distillation, Colorimetric Method	4.71
pH (on site) *		Electrometric Method	10.3
Temperature *	°C	Laboratory and Field Method	31
Total Dissolved Solids #	mg/l	Dried at 180 °C (SM:2540C)	28
Total Kjeldahl Nitrogen *	mg/l as NH ₃ -N	Macro Kjeldahl Method (SM:4500-Norg B)	95
Total Suspended Solids #	mg/l	Dried at 103-105 °C (SM:2540 D)	< 5

Physical Appearance : 1. Sample : lightly SS
2. Container : Normal [PE 0.5 L, PE 1.0 L, PE 1.8 L, G 1.0 L]
Remark : 1. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
2. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
3. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Songpon Phiwuan (จ-003-ค-7279)*
4. ** = These data are non laboratory data. / Sampling at UTM 47 P 731233 E 1404850 N


Examined By 
(Miss Apiradee Chuen-arom)

(จ-003-ค-4377)

04 / 10 / 2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 
(Mr. Kawee Suthasub)

(จ-003-ค-2205)

04 / 10 / 2022

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

Request No : W6509362

Report No : 6510-0245

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 : EA Plant
Sample Name : บ่อปรับสมดุล Equalization Sump (TK-101)
Sampling By : ETC
Sampling Method : Grab
Tested Date : 15/09/2022 - 04/10/2022

Sample No. : W 65091466
Sampling Date : 14/09/2022
Sampling Time : 10:50 AM
Received Date : 15/09/2022
Reported Date : 04/10/2022

Parameter	Unit	Method	Result
Ammonia	mg/l as NH ₃	Distillation and Titrimetric Method (SM:4500 -NH3 B,4500 -NH3 C)	4.0
Oil and Grease	mg/l	Partition-Gravimetric Method (SM:5520B)	0.1

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

Remark : 1. Parameter Outside The Scope of The Registration of Department of Industrial Works
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
3. LOQ = Level of Quantitation [LOQ of Oil and Grease = 3.0 mg/l]
4. Sampling By Mr. Songpon Phiwuan (ว-003-ค-7279)
5. Sampling at UTM 47 P 731233 E 1404850 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By 

(Miss Apiradee Chuen-arom)

04 / 10 / 2022

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

TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 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 : EA Plant** Sample No. : W 65101318
Sample Name : บ่อปรับสมดุล Equalization Sump (TK-101)** Sampling Date : 12/10/2022**
Sampling By : ETC** Sampling Time : 9:50 AM**
Sampling Method : Grab** Received Date : 14/10/2022
Tested Date : 14/10/2022 – 26/10/2022 Reported Date : 26/10/2022

Parameter	Unit	Method	Result
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	27.6
Chemical Oxygen Demand #	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	307
Formaldehyde *	mg/l	Distillation, Colorimetric Method	1.13
pH (on site) *		Electrometric Method	9.7
Temperature *	°C	Laboratory and Field Method	40
Total Dissolved Solids #	mg/l	Dried at 180 °C (SM:2540C)	< 25
Total Kjeldahl Nitrogen *	mg/l as NH ₃ -N	Macro Kjeldahl Method (SM:4500-Norg B)	63
Total Suspended Solids #	mg/l	Dried at 103-105 °C (SM:2540 D)	6

Physical Appearance : 1. Sample : lightly SS

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

Remark : 1. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017

2. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.

3. * = Test Report/Sampling marked Not Accredited, Sampling By Miss Pornpinan Viriyakusolkul (จ-003-จ-8334)*

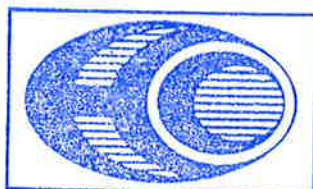
4. ** = These data are non laboratory data. / Sampling at UTM 47 P 731233 E 1404850 N

Examined By

(Miss Apiradee Chuen-arom)

(จ-003-ค-4377)

26 / 10 / 2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

(จ-003-ค-2205)

26 / 10 / 2022

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

Request No : W6510347

Report No : 6510-1822

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 : EA Plant Sample No. : W 65101318
 Sample Name : บ่อปรับสมดุล Equalization Sump (TK-101) Sampling Date : 12/10/2022
 Sampling By : ETC Sampling Time : 9:50 AM
 Sampling Method : Grab Received Date : 14/10/2022
 Tested Date : 14/10/2022 – 26/10/2022 Reported Date : 26/10/2022

Parameter	Unit	Method	Result
Ammonia	mg/l as NH ₃	Distillation and Titrimetric Method (SM:4500 -NH ₃ B, 4500 -NH ₃ C)	6
Oil and Grease	mg/l	Partition-Gravimetric Method (SM:5520B)	0.1

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

Remark : 1. Parameter Outside The Scope of The Registration of Department of Industrial Works
 2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
 3. LOQ = Level of Quantitation [LOQ of Oil and Grease = 3.0 mg/l]
 4. Sampling By Miss Pornpinan Viriyakusolkul (ว-003-จ-8334)
 5. Sampling at UTM 47 P 731233 E 1404850 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

(Miss Apiradee Chuen-arom)

26 / 10 / 2022

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

TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 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 : EA Plant** Sample No. : W 65111002
Sample Name : บ่อปรับสมดุล Equalization Sump (TK-101)** Sampling Date : 09/11/2022**
Sampling By : ETC** Sampling Time : 10:10 AM**
Sampling Method : Grab** Received Date : 10/11/2022
Tested Date : 10/11/2022 – 21/11/2022 Reported Date : 21/11/2022

Parameter	Unit	Method	Result
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	81.2
Chemical Oxygen Demand #	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	757
Formaldehyde *	mg/l	Distillation, Colorimetric Method	3.23
pH (on site) *		Electrometric Method	9.9
Temperature *	°C	Laboratory and Field Method	36
Total Dissolved Solids #	mg/l	Dried at 180 °C (SM:2540C)	142
Total Kjeldahl Nitrogen *	mg/l as NH ₃ -N	Macro Kjeldahl Method (SM:4500-Norg B)	155
Total Suspended Solids #	mg/l	Dried at 103-105 °C (SM:2540 D)	< 5


Physical Apperance : 1. Sample : lightly SS
2. Container : Normal [PE 0.5 L, PE 1.0 L, PE 1.8 L, G 1.0 L]
Remark : 1. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
2. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
3. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Parkpoom Buasawad (จ-003-ค-7280)*
4. ** = These data are non laboratory data. / Sampling at UTM 47 P 731233 E 1404850 N

Examined By 
(Miss Apiradee Chuen-arom)

(จ-003-ค-4377)
21 / 11 / 2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 
(Mr. Kawee Suthasub)

(จ-003-ค-2205)
21 / 11 / 2022

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

Request No : W6511260

Report No : 6511-1712

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 : EA Plant Sample No. : W 65111002
Sample Name : บ่อปรับสมดุล Equalization Sump (TK-101) Sampling Date : 09/11/2022
Sampling By : ETC Sampling Time : 10:10 AM
Sampling Method : Grab Received Date : 10/11/2022
Tested Date : 10/11/2022 – 21/11/2022 Reported Date : 21/11/2022

Parameter	Unit	Method	Result
Ammonia	mg/l as NH ₃	Distillation and Titrimetric Method (SM:4500 -NH ₃ B,4500 -NH ₃ C)	5
Oil and Grease	mg/l	Partition-Gravimetric Method (SM:5520B)	0.2

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

Remark : 1. Parameter Outside The Scope of The Registration of Department of Industrial Works
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
3. LOQ = Level of Quantitation [LOQ of Oil and Grease = 3.0 mg/l]
4. Sampling By Mr. Parkpoom Buasawad (๖-003-ก-7280)
5. Sampling at UTM 47 P 731233 E 1404850 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด


 Examined By.....

(Miss Apiradee Chuen-arom)

21 / 11 / 2022


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

TEST REPORT


Customer : PTT Global Chemical Public Company Limited Branch 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 : EA Plant** Sample No. : W 65120564
Sample Name : บ่อปรับสมดุล Equalization Sump (TK-101)** Sampling Date : 03/12/2022**
Sampling By : ETC** Sampling Time : 9:40 AM**
Sampling Method : Grab** Received Date : 06/12/2022
Tested Date : 06/12/2022 – 19/12/2022 Reported Date : 19/12/2022

Parameter	Unit	Method	Result
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	780
Chemical Oxygen Demand #	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	1,756
Formaldehyde *	mg/l	Distillation, Colorimetric Method	5.69
pH (on site) *		Electrometric Method	10.4
Temperature *	°C	Laboratory and Field Method	32
Total Dissolved Solids #	mg/l	Dried at 180 °C (SM:2540C)	< 25
Total Kjeldahl Nitrogen *	mg/l as NH ₃ -N	Macro Kjeldahl Method (SM:4500-Norg B)	272
Total Suspended Solids #	mg/l	Dried at 103-105 °C (SM:2540 D)	< 5

Physical Appearance : 1. Sample : lightly SS
2. Container : Normal [PE 0.5 L, PE 1.0 L, PE 1.8 L, G 1.0 L]
Remark : 1. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
2. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
3. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Songpon Phiwan (จ-003-ท-7279)*
4. ** = These data are non laboratory data. / Sampling at UTM 47 P 731233 E 1404850 N

Examined By: 
(Miss Apiradee Chuen-arom)
(จ-003-ท-4377)
19 / 12 / 2022



Approved By: 
(Mr. Kawee Suthasub)
(จ-003-ท-2205)
19 / 12 / 2022

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

Request No : W6512124

Report No : 6512-1202

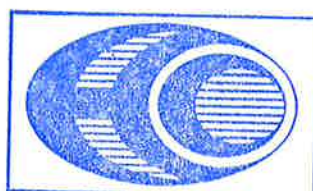
TEST REPORT

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 : EA Plant
Sample Name : บ่อปรับสมดุล Equalization Sump (TK-101)
Sampling By : ETC
Sampling Method : Grab
Tested Date : 06/12/2022 – 19/12/2022
Sample No. : W 65120564
Sampling Date : 03/12/2022
Sampling Time : 9:40 AM
Received Date : 06/12/2022
Reported Date : 19/12/2022

Parameter	Unit	Method	Result
Ammonia	mg/l as NH ₃	Distillation and Titrimetric Method (SM:4500 -NH ₃ B, 4500 -NH ₃ C)	8
Oil and Grease	mg/l	Partition-Gravimetric Method (SM:5520B)	0.2

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

Remark : 1. Parameter Outside The Scope of The Registration of Department of Industrial Works
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
3. LOQ = Level of Quantitation [LOQ of Oil and Grease = 3.0 mg/l]
4. Sampling By Mr. Songpon Phiwan (ว-003-ท-7279)
5. Sampling at UTM 47 P 731233 E 1404850 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

(Miss Apiradee Chuen-arom)

19 / 12 / 2022

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

TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 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 : EA Plant** Sample No. : W 65071400
Sample Name : บุคลากรออกจาก Neutralization Sump (TK-201)** Sampling Date : 14/07/2022**
Sampling By : ETC** Sampling Time : 9:52 AM**
Sampling Method : Grab** Received Date : 15/07/2022
Tested Date : 15/07/2022 – 27/07/2022 Reported Date : 02/08/2022

Parameter	Unit	Method	Result
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	513
Chemical Oxygen Demand #	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	867
Formaldehyde *	mg/l	Distillation, Colorimetric Method	1.10
Oil and Grease @	mg/l	Partition-Gravimetric Method (SM:5520B)	3.3
pH (on site) *		Electrometric Method	5.9
Temperature *	°C	Laboratory and Field Method	24
Total Dissolved Solids #	mg/l	Dried at 180 °C (SM:2540C)	580
Total Kjeldahl Nitrogen *	mg/l as NH ₃ -N	Macro Kjeldahl Method (SM:4500-Norg B)	136
Total Suspended Solids #	mg/l	Dried at 103-105 °C (SM:2540 D)	8

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. @ = ISO/IEC 17025:2017 Accredited by TISI, # = ISO/IEC 17025:2017 Accredited by DSS,
SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
2. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
3. * = Test Report/Sampling marked Not Accredited, Sampling By Miss Pornpinan Viriyakusolkul (จ-003-จ-8334)*
4. ** = These data are non laboratory data. / Sampling at UTM 47 P 731229 E 1404850 N

Examined By.....
(Miss Apiradee Chuen-arom)
(จ-003-ค-4377)
02 / 08 / 2022



Approved By.....
(Mr. Kawee Suthasub)
(จ-003-ค-2205)
02 / 08 / 2022

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

Request No : W6507352

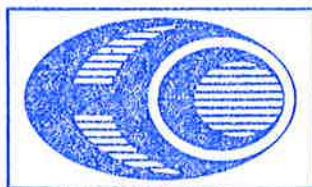
Report No : 6507-2127

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 : EA Plan Sample No. : W 65071400
Sample Name : จุลินทรีย์จาก Neutralization Sump (TK-201) Sampling Date : 14/07/2022
Sampling By : ETC Sampling Time : 9:52 AM
Sampling Method : Grab Received Date : 15/07/2022
Tested Date : 15/07/2022 – 27/07/2022 Reported Date : 02/08/2022

Parameter	Unit	Method	Result
Ammonia	mg/l as NH ₃	Distillation and Titrimetric Method (SM:4500 -NH ₃ B,4500 -NH ₃ C)	17

Physical Appearance : 1. Sample : yellowish, lightly SS
2. Container : Normal [PE 0.5 L, PE 1.0 L, PE 1.8 L, G 1.0 L]
Remark : 1. Parameter Outside The Scope of The Registration of Department of Industrial Works
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
3. Sampling By Miss Pornpinan Viriyakusolkul (๓-003-๓-8334)
4. Sampling at UTM 47 P 731229 E 1404850 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

(Miss Apiradee Chuen-arom)

02 / 08 / 2022

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

TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 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 : EA Plant** Sample No. : W 65081023
Sample Name : จุติระบายนออกจาก Neutralization Sump (TK-201)** Sampling Date : 10/08/2022**
Sampling By : ETC** Sampling Time : 9:30 AM**
Sampling Method : Grab** Received Date : 11/08/2022
Tested Date : 11/08/2022 – 29/08/2022 Reported Date : 29/08/2022

Parameter	Unit	Method	Result
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	546
Chemical Oxygen Demand #	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	945
Formaldehyde *	mg/l	Distillation, Colorimetric Method	3.29
pH (on site) *		Electrometric Method	6.0
Temperature *	°C	Laboratory and Field Method	37
Total Dissolved Solids #	mg/l	Dried at 180 °C (SM:2540C)	852
Total Kjeldahl Nitrogen *	mg/l as NH ₃ -N	Macro Kjeldahl Method (SM:4500-Norg B)	164
Total Suspended Solids #	mg/l	Dried at 103-105 °C (SM:2540 D)	< 5

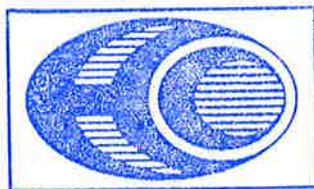
Physical Apperance : 1. Sample : lightly SS
2. Container : Normal [PE 0.5 L, PE 1.0 L, PE 1.8 L, G 1.0 L]
Remark : 1. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
2. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
3. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Supharerk Phatklang (จ-003-จ-5637)*
4. ** = These data are non laboratory data. / Sampling at UTM 47 P 731229 E 1404850 N

Examined By

(Miss Apiradee Chuen-arom)

(จ-003-จ-4377)

29 / 08 / 2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

(จ-003-จ-2205)

29 / 08 / 2022

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

Request No : W6508267

Report No : 6508-2175

TEST REPORT

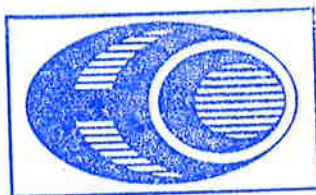
Customer : PTT Global Chemical Public Company Limited Branch 16
Address : 9 Soi G-12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Tambon Map Ta Phut,
Amphur Muang Rayong, Rayong 21150

Sampling Source : EA Plant Sample No. : W 65081023
Sample Name : จุลินทรีย์จาก Neutralization Sump (TK-201) Sampling Date : 10/08/2022
Sampling By : ETC Sampling Time : 9:30 AM
Sampling Method : Grab Received Date : 11/08/2022
Tested Date : 11/08/2022 – 29/08/2022 Reported Date : 29/08/2022

Parameter	Unit	Method	Result
Ammonia	mg/l as NH ₃	Distillation and Titrimetric Method (SM:4500 -NH ₃ B,4500 -NH ₃ C)	6
Oil and Grease	mg/l	Partition-Gravimetric Method (SM:5520B)	0.6

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

Remark : 1. Parameter Outside The Scope of The Registration of Department of Industrial Works
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
3. LOQ = Level of Quantitation [LOQ of Oil and Grease = 3.0 mg/l]
4. Sampling By Mr. Supharerk Phatklang (๖-003-๖-5637)
5. Sampling at UTM 47 P 731229 E 1404850 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

(Miss Apiradee Chuen-arom)

29 / 08 / 2022

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

TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 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 : EA Plant** Sample No. : W 65091467
Sample Name : จุลินทรีย์บำบัดน้ำเสีย Neutralization Sump (TK-201)** Sampling Date : 14/09/2022**
Sampling By : ETC** Sampling Time : 10:30 AM**
Sampling Method : Grab** Received Date : 15/09/2022
Tested Date : 15/09/2022 – 27/09/2022 Reported Date : 27/09/2022

Parameter	Unit	Method	Result
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	439
Chemical Oxygen Demand #	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	762
Formaldehyde *	mg/l	Distillation, Colorimetric Method	2.28
pH (on site) *		Electrometric Method	7.6
Temperature *	°C	Laboratory and Field Method	32
Total Dissolved Solids #	mg/l	Dried at 180 °C (SM:2540C)	780
Total Kjeldahl Nitrogen *	mg/l as NH ₃ -N	Macro Kjeldahl Method (SM:4500-Norg B)	118
Total Suspended Solids #	mg/l	Dried at 103-105 °C (SM:2540 D)	< 5

Physical Apperance : 1. Sample : lightly SS
2. Container : Normal [PE 0.5 L, PE 1.0 L, PE 1.8 L, G 1.0 L]
Remark : 1. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
2. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
3. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Songpon Phiwan (จ-003-ท-7279)*
4. ** = These data are non laboratory data. / Sampling at UTM 47 P 731229 E 1404850 N

Examined By



(Miss Apiradee Chuen-arom) .

(จ-003-ท-4377)

27 / 09 / 2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By



(Mr. Kawee Suthasub)

(จ-003-ท-2205)

27 / 09 / 2022

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

Request No : W6509362

Report No : 6510-0246

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 : EA Plant
Sample Name : จุลินทรีย์ออกซิเจนจาก Neutralization Sump (TK-201)
Sampling By : ETC
Sampling Method : Grab
Tested Date : 15/09/2022 – 27/09/2022
Sample No. : W 65091467
Sampling Date : 14/09/2022
Sampling Time : 10:30 AM
Received Date : 15/09/2022
Reported Date : 27/09/2022

Parameter	Unit	Method	Result
Ammonia	mg/l as NH ₃	Distillation and Titrimetric Method (SM:4500 -NH3 B,4500 -NH3 C)	5.0
Oil and Grease	mg/l	Partition-Gravimetric Method (SM:5520B)	0.1

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

Remark : 1. Parameter Outside The Scope of The Registration of Department of Industrial Works
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
3. LOQ = Level of Quantitation [LOQ of Oil and Grease = 3.0 mg/l]
4. Sampling By Mr. Songpon Phiwan (ว-003-ค-7279)
5. Sampling at UTM 47 P 731229 E 1404850 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By



(Miss Apiradee Chuen-arom)

27 / 09 / 2022


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

TEST REPORT


Customer : PTT Global Chemical Public Company Limited Branch 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 : EA Plant** Sample No. : W 65101319
Sample Name : จุติระบายนอกจาก Neutralization Sump (TK-201)** Sampling Date : 12/10/2022**
Sampling By : ETC** Sampling Time : 9:43 AM**
Sampling Method : Grab** Received Date : 14/10/2022
Tested Date : 14/10/2022 – 26/10/2022 Reported Date : 26/10/2022

Parameter	Unit	Method	Result
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	44.7
Chemical Oxygen Demand #	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	576
Formaldehyde *	mg/l	Distillation, Colorimetric Method	2.10
pH (on site) *		Electrometric Method	9.2
Temperature *	°C	Laboratory and Field Method	32
Total Dissolved Solids #	mg/l	Dried at 180 °C (SM:2540C)	294
Total Kjeldahl Nitrogen *	mg/l as NH ₃ -N	Macro Kjeldahl Method (SM:4500-Norg B)	115
Total Suspended Solids #	mg/l	Dried at 103-105 °C (SM:2540 D)	11

Physical Appearance : 1. Sample : yellowish, lightly SS
2. Container : Normal [PE 0.5 L, PE 1.0 L, PE 1.8 L, G 1.0 L]
Remark : 1. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
2. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
3. * = Test Report/Sampling marked Not Accredited, Sampling By Miss Pimpinan Viriyakusolkul (จ-003-จ-8334)*
4. ** = These data are non laboratory data. / Sampling at UTM 47 P 731229 E 1404850 N

Examined By 
(Miss Apiradee Chuen-arom)
(จ-003-จ-4377)
26 / 10 / 2022



Approved By 
(Mr. Kawee Suthasub)
(จ-003-จ-2205)
26 / 10 / 2022

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

Request No : W6510347

Report No : 6510-1823

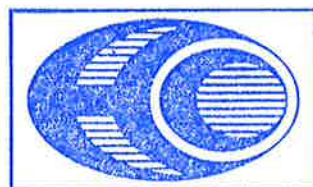
TEST REPORT

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 : EA Plant
Sample Name : จุลินทรีย์จาก Neutralization Sump (TK-201)
Sampling By : ETC
Sampling Method : Grab
Tested Date : 14/10/2022 – 26/10/2022
Sample No. : W 65101319
Sampling Date : 12/10/2022
Sampling Time : 9:43 AM**
Received Date : 14/10/2022
Reported Date : 26/10/2022

Parameter	Unit	Method	Result
Ammonia	mg/l as NH ₃	Distillation and Titrimetric Method (SM:4500 -NH3 B,4500 -NH3 C)	18
Oil and Grease	mg/l	Partition-Gravimetric Method (SM:5520B)	0.4

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. Parameter Outside The Scope of The Registration of Department of Industrial Works
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
3. LOQ = Level of Quantitation [LOQ of Oil and Grease = 3.0 mg/l]
4. Sampling By Miss Pornpinan Viriyakusolkul (๖-003-๑-8334)
5. Sampling at UTM 47 P 731229 E 1404850 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

(Miss Apiradee Chuen-arom)

26 / 10 / 2022

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

TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 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 : EA Plant** Sample No. : W 65111003
Sample Name : จุลินทรีย์บำบัดน้ำเสียจาก Neutralization Sump (TK-201)** Sampling Date : 09/11/2022**
Sampling By : ETC** Sampling Time : 9:50 AM**
Sampling Method : Grab** Received Date : 10/11/2022
Tested Date : 10/11/2022 – 21/11/2022 Reported Date : 21/11/2022

Parameter	Unit	Method	Result
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	27.9
Chemical Oxygen Demand #	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	614
Formaldehyde *	mg/l	Distillation, Colorimetric Method	1.54
pH (on site) *		Electrometric Method	6.5
Temperature *	°C	Laboratory and Field Method	37
Total Dissolved Solids #	mg/l	Dried at 180 °C (SM:2540C)	706
Total Kjeldahl Nitrogen *	mg/l as NH ₃ -N	Macro Kjeldahl Method (SM:4500-Norg B)	106
Total Suspended Solids #	mg/l	Dried at 103-105 °C (SM:2540 D)	< 5

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. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
2. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
3. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Parkpoom Buasawad (จ-003-ค-7280)*
4. ** = These data are non laboratory data. / Sampling at UTM 47 P 731229 E 1404850 N

Examined By.....
(Miss Apiradee Chuen-arom)
(จ-003-ค-4377)
21 / 11 / 2022



Approved By.....
(Mr. Kawee Suthasub)
(จ-003-ค-2205)
21 / 11 / 2022

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

Request No : W6511260

Report No : 6511-1713

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 : EA Plant Sample No. : W 65111003
Sample Name : จุลินทรีย์จาก Neutralization Sump (TK-201) Sampling Date : 09/11/2022
Sampling By : ETC Sampling Time : 9:50 AM
Sampling Method : Grab Received Date : 10/11/2022
Tested Date : 10/11/2022 – 21/11/2022 Reported Date : 21/11/2022

Parameter	Unit	Method	Result
Ammonia	mg/l as NH ₃	Distillation and Titrimetric Method (SM:4500 -NH ₃ B,4500 -NH ₃ C)	6
Oil and Grease	mg/l	Partition-Gravimetric Method (SM:5520B)	0.1

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. Parameter Outside The Scope of The Registration of Department of Industrial Works
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
3. LOQ = Level of Quantitation [LOQ of Oil and Grease = 3.0 mg/l]
4. Sampling By Mr. Parkpoom Buasawad (๖-003-๓-7280)
5. Sampling at UTM 47 P 731229 E 1404850 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By. 

(Miss Apiradee Chuen-arom)

21 / 11 / 2022

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

TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 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 : EA Plant** Sample No. : W 65120565
Sample Name : จุลินทรีย์บำบัดน้ำจาก Neutralization Sump (TK-201)** Sampling Date : 03/12/2022**
Sampling By : ETC** Sampling Time : 9:25 AM**
Sampling Method : Grab** Received Date : 06/12/2022
Tested Date : 06/12/2022 – 19/12/2022 Reported Date : 19/12/2022

Parameter	Unit	Method	Result
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	766
Chemical Oxygen Demand #	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	1,629
Formaldehyde *	mg/l	Distillation, Colorimetric Method	0.87
pH (on site) *		Electrometric Method	6.0
Temperature *	°C	Laboratory and Field Method	32
Total Dissolved Solids #	mg/l	Dried at 180 °C (SM:2540C)	1,520
Total Kjeldahl Nitrogen *	mg/l as NH ₃ -N	Macro Kjeldahl Method (SM:4500-Norg B)	283
Total Suspended Solids #	mg/l	Dried at 103-105 °C (SM:2540 D)	< 5

Physical Appearance : 1. Sample : yellowish, lightly SS
2. Container : Normal [PE 0.5 L, PE 1.0 L, PE 1.8 L, G 1.0 L]
Remark : 1. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
2. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
3. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Songpon Phiwuan (จ-003-ก-7279)*
4. ** = These data are non laboratory data. / Sampling at UTM 47 P 731229 E 1404850 N

Examined By.....
(Miss Apiradee Chuen-arom)
(จ-003-ก-4377)
19 / 12 / 2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By.....
(Mr. Kawee Suthasub)
(จ-003-ก-2205)
19 / 12 / 2022

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

Request No : W6512124

Report No : 6512-1203

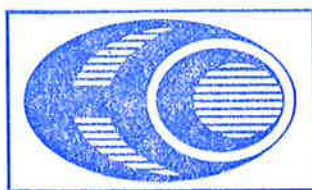
TEST REPORT

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 : EA Plant
Sample Name : จุลินทรีย์จาก Neutralization Sump (TK-201)
Sampling By : ETC
Sampling Method : Grab
Tested Date : 06/12/2022 – 19/12/2022
Sample No. : W 65120565
Sampling Date : 03/12/2022**
Sampling Time : 9:25 AM**
Received Date : 06/12/2022
Reported Date : 19/12/2022

Parameter	Unit	Method	Result
Ammonia	mg/l as NH ₃	Distillation and Titrimetric Method (SM:4500 -NH ₃ B,4500 -NH ₃ C)	11
Oil and Grease	mg/l	Partition-Gravimetric Method (SM:5520B)	0.8

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. Parameter Outside The Scope of The Registration of Department of Industrial Works
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
3. LOQ = Level of Quantitation [LOQ of Oil and Grease = 3.0 mg/l]
4. Sampling By Mr. Songpon Phiwan (ว-003-ก-7279)
5. Sampling at UTM 47 P 731229 E 1404850 N



บริษัท อีสเทิร์นไทยคอนซัลติง 1992 จำกัด


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

19 / 12 / 2022

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

TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 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 : EA Plant** Sample No. : W 65071401
Sample Name : จุลินทรีย์บ่อบำบัด Final Check Basin (TK-601)** Sampling Date : 14/07/2022**
Sampling By : ETC** Sampling Time : 9:57 AM**
Sampling Method : Grab** Received Date : 15/07/2022
Tested Date : 15/07/2022 – 22/07/2022 Reported Date : 02/08/2022

Parameter	Unit	Method	Result	Standard ¹⁾
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	83.1	≤ 500
Chemical Oxygen Demand #	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	193	≤ 750
pH (on site) *		Electrometric Method	7.1	5.5-9.0
Temperature *	°C	Laboratory and Field Method	26	≤ 45
Total Dissolved Solids #	mg/l	Dried at 180 °C (SM:2540C)	496	≤ 3000
Total Kjeldahl Nitrogen *	mg/l as NH ₃ -N	Macro Kjeldahl Method (SM:4500-Norg B)	41	≤ 100
Total Suspended Solids #	mg/l	Dried at 103-105 °C (SM:2540 D)	21	≤ 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]

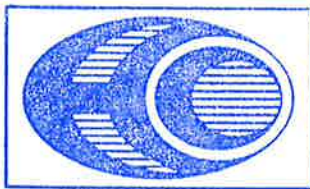
Remark : 1. /1 Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)
1. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
3. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
4. * = Test Report/Sampling marked Not Accredited, Sampling By Miss Pompinan Viriyakusolkul (จ-003-จ-8334)*
5. ** = These data are non laboratory data. / Sampling at UTM 47 P 731233 E 1404844 N

Examined By

(Miss Apiradee Chuen-arom)

(จ-003-ค-4377)

02 / 08 / 2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

(จ-003-ค-2205)

02 / 08 / 2022

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

Request No : W6507352

Report No : 6507-2128

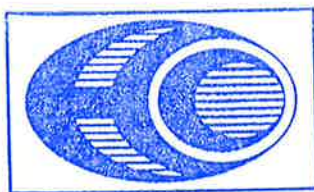
TEST REPORT

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 : EA Plant
Sample Name : จุติระบายออกจากถัง Final Check Basin (TK-601)
Sampling By : ETC
Sampling Method : Grab
Tested Date : 15/07/2022 – 22/07/2022
Sample No. : W 65071401
Sampling Date : 14/07/2022
Sampling Time : 9:57 AM
Received Date : 15/07/2022
Reported Date : 02/08/2022

Parameter	Unit	Method	Result	Standard ¹
Ammonia	mg/l as NH ₃	Distillation and Titrimetric Method (SM:4500 -NH ₃ B,4500 -NH ₃ C)	40	-
Formaldehyde	mg/l	Distillation,Colorimetric Method	0.06	≤ 1
Oil and Grease	mg/l	Partition-Gravimetric Method (SM:5520B)	1.3	≤ 10

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. Parameter Outside The Scope of The Registration of Department of Industrial Works
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
3. MDL = Method Detection Limit [MDL of Formaldehyde = 0.20 mg/l]
4. LOQ = Level of Quantitation [LOQ of Oil and Grease = 3.0 mg/l]
5. Sampling By Miss Pompinan Viriyakusolkul (๖-003-๖-8334)
6. Sampling at UTM 47 P 731233 E 1404844 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

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

02 / 08 / 2022

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



EASTERN THAI CONSULTING 1992 CO., LTD.

683 Moo 11 Sukhapibarn 8 Rd., Nongkham, Sriracha, Chonburi 20230
Tel. 0-3848-1197-8, 0-3876-3031-2 Fax : 0-3848-2095 E-mail : marketing@etc1992.com



TESTING
No.0159

Request No : W6508267

Report No : 6508-2176

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 : EA Plant** Sample No. : W 65081024
Sample Name : จุดระบายออกจากถัง Final Check Basin (TK-601)** Sampling Date : 10/08/2022**
Sampling By : ETC** Sampling Time : 9:40 AM**
Sampling Method : Grab** Received Date : 11/08/2022
Tested Date : 11/08/2022 – 20/08/2022 Reported Date : 22/08/2022

Parameter	Unit	Method	Result	Standard ¹⁾
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	136	≤ 500
Chemical Oxygen Demand #	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	271	≤ 750
Formaldehyde *	mg/l	Distillation, Colorimetric Method	0.54	≤ 1
pH (on site) *		Electrometric Method	6.6	5.5-9.0
Temperature *	°C	Laboratory and Field Method	36	≤ 45
Total Dissolved Solids #	mg/l	Dried at 180 °C (SM:2540C)	508	≤ 3000
Total Kjeldahl Nitrogen *	mg/l as NH ₃ -N	Macro Kjeldahl Method (SM:4500-Norg B)	56	≤ 100
Total Suspended Solids #	mg/l	Dried at 103-105 °C (SM:2540 D)	25	≤ 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. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
3. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
4. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Supharerk Phatklang (จ-003-จ-5637)*
5. ** = These data are non laboratory data. / Sampling at UTM 47 P 73 1233 E 1404844 N

Examined By

(Miss Apiradee Chuen-arom)

(จ-003-ค-4377)

22 / 08 / 2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

(จ-003-ค-2205)

22 / 08 / 2022

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

Request No : W6508267

Report No : 6508-2176

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 : EA Plant
Sample Name : จุติระบายออกจากถัง Final Check Basin (TK-601)
Sampling By : ETC
Sampling Method : Grab
Tested Date : 11/08/2022 – 20/08/2022
Sample No. : W 65081024
Sampling Date : 10/08/2022
Sampling Time : 9:40 AM
Received Date : 11/08/2022
Reported Date : 22/08/2022

Parameter	Unit	Method	Result	Standard ¹
Ammonia	mg/l as NH ₃	Distillation and Titrimetric Method (SM:4500 -NH3 B,4500 -NH3 C)	56	-
Oil and Grease	mg/l	Partition-Gravimetric Method (SM:5520B)	1.3	≤ 10

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. Parameter Outside The Scope of The Registration of Department of Industrial Works
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
3. LOQ = Level of Quantitation [LOQ of Oil and Grease = 3.0 mg/l]
4. Sampling By Mr. Supharerk Phatklang (๖-003-๖-5637)
5. Sampling at IJTM 47 P 731233 E 1404844 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By.....

(Miss Apiradee Chuen-arom)

22 / 08 / 2022

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

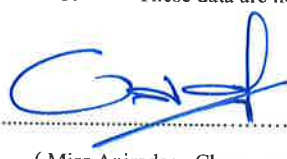
TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 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 : EA Plant** Sample No. : W 65091468
Sample Name : จุกตะกอนขี้โคลนจากถัง Final Check Basin (TK-601)** Sampling Date : 14/09/2022**
Sampling By : ETC** Sampling Time : 10:40 AM**
Sampling Method : Grab** Received Date : 15/09/2022
Tested Date : 15/09/2022 – 27/09/2022 Reported Date : 27/09/2022


Parameter	Unit	Method	Result	Standard ¹
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	61.9	≤ 500
Chemical Oxygen Demand #	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	140	≤ 750
pH (on site) *		Electrometric Method	6.4	5.5-9.0
Temperature *	°C	Laboratory and Field Method	32	≤ 45
Total Dissolved Solids #	mg/l	Dried at 180 °C (SM:2540C)	256	≤ 3000
Total Kjeldahl Nitrogen *	mg/l as NH ₃ -N	Macro Kjeldahl Method (SM:4500-Norg B)	32	≤ 100
Total Suspended Solids #	mg/l	Dried at 103-105 °C (SM:2540 D)	11	≤ 200

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

Remark : 1. /1 Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)
2. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
3. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
4. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Songpon Phiwuan (๖-003-๓-7279)*
5. ** = These data are non laboratory data. / Sampling at UTM 47 P 731233 E 1404844 N

Examined By 
(Miss Apiradee Chuen-arom)
(๖-003-๓-4377)
27 / 09 / 2022



Approved By 
(Mr. Kawee Suthasub)
(๖-003-๓-2205)
27 / 09 / 2022

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

Request No : W6509362

Report No : 6510-0247

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 : EA Plant
Sample Name : จุกระบายออกจากถัง Final Check Basin (TK-601)
Sampling By : ETC
Sampling Method : Grab
Tested Date : 15/09/2022 – 27/09/2022
Sample No. : W 65091468
Sampling Date : 14/09/2022
Sampling Time : 10:40 AM
Received Date : 15/09/2022
Reported Date : 27/09/2022

Parameter	Unit	Method	Result	Standard ¹
Ammonia	mg/l as NH ₃	Distillation and Titrimetric Method (SM:4500 -NH ₃ B,4500 -NH ₃ C)	12.0	
Formaldehyde	mg/l	Distillation,Colorimetric Method	0.38	
Oil and Grease	mg/l	Partition-Gravimetric Method (SM:5520B)	0.9	≤ 10

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 :
- Parameter Outside The Scope of The Registration of Department of Industrial Works
 - SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
 - MDL = Method Detection Limit [MDL of Formaldehyde = 0.20 mg/l]
 - LOQ = Level of Quantitation [LOQ of Oil and Grease = 3.0 mg/l]
 - Sampling By Mr. Songpon Phiwuan (ว-003-ค-7279)
 - Sampling at UTM 47 P 731233 E 1404844 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By



(Miss Apiradee Chuen-arom)

27 / 09 / 2022

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

TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 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 : EA Plant**
Sample Name : จุติระบายออกจากถัง Final Check Basin (TK-601)**
Sampling By : ETC**
Sampling Method : Grab**
Tested Date : 14/10/2022 – 22/10/2022
Sample No. : W 65101320
Sampling Date : 12/10/2022**
Sampling Time : 9:46 AM**
Received Date : 14/10/2022
Reported Date : 24/10/2022

Parameter	Unit	Method	Result	Standard ¹
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	40.6	≤ 500
Chemical Oxygen Demand #	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	115	≤ 750
pH (on site) *		Electrometric Method	8.2	5.5-9.0
Temperature *	°C	Laboratory and Field Method	31	≤ 45
Total Dissolved Solids #	mg/l	Dried at 180 °C (SM:2540C)	266	≤ 3000
Total Kjeldahl Nitrogen *	mg/l as NH ₃ -N	Macro Kjeldahl Method (SM:4500-Norg B)	29	≤ 100
Total Suspended Solids #	mg/l	Dried at 103-105 °C (SM:2540 D)	8	≤ 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. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
3. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
4. * = Test Report/Sampling marked Not Accredited, Sampling By Miss Pornpinan Viriyakusolkul (จ-003-จ-8334)*
5. ** = These data are non laboratory data. / Sampling at UTM 47 P 731233 E 1404844 N

Examined By.....
(Miss Apiradee Chuen-arom)
(จ-003-ค-4377)
24 / 10 / 2022



Approved By.....
(Mr. Kawee Suthasub)
(จ-003-ค-2205)
24 / 10 / 2022

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

Request No : W6510347

Report No : 6510-1824

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 : EA Plant
Sample Name : จุกระบายออกจากถัง Final Check Basin (TK-601)
Sampling By : ETC
Sampling Method : Grab
Tested Date : 14/10/2022 – 22/10/2022
Sample No. : W 65101320
Sampling Date : 12/10/2022
Sampling Time : 9:46 AM
Received Date : 14/10/2022
Reported Date : 24/10/2022

Parameter	Unit	Method	Result	Standard ¹
Ammonia	mg/l as NH ₃	Distillation and Titrimetric Method (SM:4500 -NH ₃ B,4500 -NH ₃ C)	25	-
Formaldehyde	mg/l	Distillation,Colorimetric Method	0.04	
Oil and Grease	mg/l	Partition-Gravimetric Method (SM:5520B)	1.8	≤ 10

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. Parameter Outside The Scope of The Registration of Department of Industrial Works
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
3. MDL = Method Detection Limit [MDL of Formaldehyde = 0.20 mg/l]
4. LOQ = Level of Quantitation [LOQ of Oil and Grease = 3.0 mg/l]
5. Sampling By Miss Pornpinan Viriyakusolkul (ว-003-ท-8334)
6. Sampling at UTM 47 P 731233 E 1404844 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด



Examined By.....

(Miss Apiradee Chuen-arom)

24 / 10 / 2022

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


TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 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 : EA Plant** Sample No. : W 65111004
Sample Name : จุติระบายนอกจากถัง Final Check Basin (TK-601)** Sampling Date : 09/11/2022**
Sampling By : ETC** Sampling Time : 10:00 AM**
Sampling Method : Grab** Received Date : 10/11/2022
Tested Date : 10/11/2022 – 17/11/2022 Reported Date : 21/11/2022


Parameter	Unit	Method	Result	Standard ¹
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	89.0	≤ 500
Chemical Oxygen Demand #	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	182	≤ 750
pH (on site) *		Electrometric Method	7.3	5.5-9.0
Temperature *	°C	Laboratory and Field Method	34	≤ 45
Total Dissolved Solids #	mg/l	Dried at 180 °C (SM:2540C)	408	≤ 3000
Total Kjeldahl Nitrogen *	mg/l as NH ₃ -N	Macro Kjeldahl Method (SM:4500-Norg B)	45	≤ 100
Total Suspended Solids #	mg/l	Dried at 103-105 °C (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. # = ISO/IEC 17025:2017 Accredited by DSS, SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
3. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
4. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Parkpoom Buasawad (จ-003-ค-7280)*
5. ** = These data are non laboratory data. / Sampling at UTM 47 P 731233 E 1404844 N

Examined By 
(Miss Apiradee Chuen-arom)
(จ-003-ค-4377)
21 / 11 / 2022



Approved By 
(Mr. Kawee Suthasub)
(จ-003-ค-2205)
21 / 11 / 2022

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

Request No : W6511260

Report No : 6511-1714

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 : EA Plant Sample No. : W 65111004
Sample Name : จุติระบายออกจากถัง Final Check Basin (TK-601) Sampling Date : 09/11/2022
Sampling By : ETC Sampling Time : 10:00 AM
Sampling Method : Grab Received Date : 10/11/2022
Tested Date : 10/11/2022 – 17/11/2022 Reported Date : 21/11/2022

Parameter	Unit	Method	Result	Standard ¹⁾
Ammonia	mg/l as NH ₃	Distillation and Titrimetric Method (SM:4500 -NH ₃ B,4500 -NH ₃ C)	48	
Formaldehyde	mg/l	Distillation, Colorimetric Method	0.05	
Oil and Grease	mg/l	Partition-Gravimetric Method (SM:5520B)	0.7	≤ 10

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. Parameter Outside The Scope of The Registration of Department of Industrial Works
2. SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
3. MDL = Method Detection Limit [MDL of Formaldehyde = 0.20 mg/l]
4. LOQ = Level of Quantitation [LOQ of Oil and Grease = 3.0 mg/l]
5. Sampling By Mr. Parkpoom Buasawad (ว-003-ค-7280)
6. Sampling at UTM 47 P 731233 E 1404844 N



Examined By.....

(Miss Apiradee Chuen-arom)

21 / 11 / 2022

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

TEST REPORT

Customer : PTT Global Chemical Public Company Limited Branch 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 : EA Plant**
Sample Name : จุดระบายออกจากถัง Final Check Basin (TK-601)**
Sampling By : ETC**
Sampling Method : Grab**
Tested Date : 06/12/2022 – 13/12/2022
Sample No. : W 65120566
Sampling Date : 03/12/2022**
Sampling Time : 9:35 AM**
Received Date : 06/12/2022
Reported Date : 15/12/2022

Parameter	Unit	Method	Result	Standard ¹⁾
Biochemical Oxygen Demand #	mg/l	5-Day BOD Test, Membrane Electrode Method (SM:5210B)	141	≤ 500
Chemical Oxygen Demand #	mg/l	Closed Reflux, Titrimetric Method (SM:5220C)	287	≤ 750
Oil and Grease @	mg/l	Partition-Gravimetric Method (SM:5520B)	3.4	≤ 10
pH (on site) *		Electrometric Method	7.1	5.5-9.0
Temperature *	°C	Laboratory and Field Method	34	≤ 45
Total Dissolved Solids #	mg/l	Dried at 180 °C (SM:2540C)	528	≤ 3000
Total Kjeldahl Nitrogen *	mg/l as NH ₃ -N	Macro Kjeldahl Method (SM:4500-Norg B)	19	≤ 100
Total Suspended Solids #	mg/l	Dried at 103-105 °C (SM:2540 D)	11	≤ 200

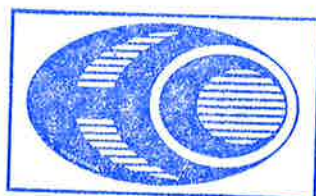
Physical Apperance : 1. Sample : yellow, lightly SS
2. Container : Normal [PE 0.5 L, PE 1.0 L, PE 1.8 L, G 1.0 L]

Remark : 1. /1 Notification of Industrial Estate Authority of Thailand 76 / 2560 (2017)
2. @ = ISO/IEC 17025:2017 Accredited by TISI., # = ISO/IEC 17025:2017 Accredited by DSS,
SM = Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017
3. Miss Apiradee Chuen-arom is Section Head / Mr. Kawee Suthasub is Technical Management.
4. * = Test Report/Sampling marked Not Accredited, Sampling By Mr. Songpon Phiwuan (จ-003-ท-7279)*
5. ** = These data are non laboratory data. / Sampling at UTM 47 P 731233 E 1404844 N


Examined By: 
(Miss Apiradee Chuen-arom)

(จ-003-ท-4377)

15 / 12 / 2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By: 
(Mr. Kawee Suthasub)

(จ-003-ท-2205)

15 / 12 / 2022

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

Request No : W6512124

Report No : 6512-1204

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 : EA Plant
Sample Name : จุลินทรีย์ออกจากถัง Final Check Basin (TK-601)
Sampling By : ETC
Sampling Method : Grab
Tested Date : 06/12/2022 – 13/12/2022
Sample No. : W 65120566
Sampling Date : 03/12/2022
Sampling Time : 9:35 AM
Received Date : 06/12/2022
Reported Date : 15/12/2022

Parameter	Unit	Method	Result	Standard ¹
Ammonia	mg/l as NH ₃	Distillation and Titrimetric Method (SM:4500 -NH ₃ B,4500 -NH ₃ C)	61	-
Formaldehyde	mg/l	Distillation, Colorimetric Method	0.01	≤ 1

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. 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, 23rd Edition, 2017
4. MDL = Method Detection Limit [MDL of Formaldehyde = 0.20 mg/l]
5. Sampling By Mr. Songpon Phiwuan (ว-003-ค-7279)
6. Sampling at UTM 47 P 731233 E 1404844 N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By. 
(Miss Apiradee Chuen-arom)

15 / 12 / 2022

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

Request No. ATR6508021

Report No. 6508-0363

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 : EA Plant
SAMPLE NAME : บริเวณ Ammonia Vent Scrubber (Area) (A2014) ด้านบน
SAMPLING DATE : 09/08/2022 SAMPLE NO. : A65080363
RECEIVED DATE : 16/08/2022 SAMPLING TIME : 07:00-19:00
SAMPLING INSTRUMENT : Personal Pump Flow rate 0.10 L/min TESTED DATE : 16/08/2022-18/08/2022
Serial No. 20200403065 REPORTED DATE : 25/08/2022

PARAMETER*	TEST METHOD	RESULT	STD ^{1/}	UNIT
Ammonia	Ion Chromatrography Method(NIOSH6016)	< 0.200	35	mg/m ³
		< 0.280	50	ppm

REMARK:^{1/} 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.

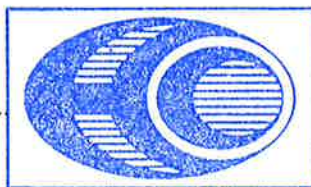
(Sampling By Mr. Nitchaphon Tonglor)

GPS = Sampling at UTM 47 P 731262E 1404912N

Examined By

(Miss Thanatporn Klinsoon)

25/08/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

25/08/2022

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

Request No. ATR6511021

Report No. 6511-0368

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 : EA Plant
 SAMPLE NAME : บริเวณ Ammonia Vent Scrubber (Area) (A2014) ด้านบน
 SAMPLING DATE : 04/11/2022 SAMPLE NO. : A65110368
 RECEIVED DATE : 08/11/2022 SAMPLING TIME : 08:55-20:55
 SAMPLING INSTRUMENT : Personal Pump Flow rate 0.10 L/min TESTED DATE : 08/11/2022-14/11/2022
 Serial No. 218411 REPORTED DATE : 22/11/2022

PARAMETER*	TEST METHOD	RESULT	STD ¹	UNIT
Ammonia	Ion Chromatrography Method(NIOSH6016)	< 0.200	35	mg/m ³
		< 0.280	50	ppm

REMARK:

¹ 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.

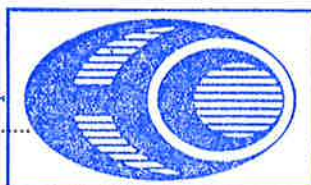
(Sampling By Mr. Aocha Khwansirimongkon)

GPS = Sampling at UTM 47 P 731262E 1404912N

Examined By

(Miss Thanatporn Klinsonon)

22/11/2022



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By

(Mr. Kawee Suthasub)

22/11/2022

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

Request No. ATR6508021

Report No. 6508-0365

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 : EA Plant

SAMPLE NAME : EO Pump (P2054 A/B) SAMPLE NO : A65080365

SAMPLING DATE : 09/08/2022 SAMPLING TIME : 07:00-19:00

RECEIVED DATE : 16/08/2022 TESTED DATE : 16/08/2022-22/08/2022

SAMPLING INSTRUMENT : Passive Sampling REPORTED DATE : 25/08/2022

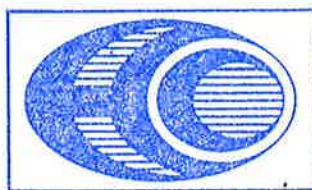
PARAMETER**	TEST METHOD	RESULT ^{/2}	STD ^{/1}	UNIT
Ethylene Oxide	OSHA 1010	ND	1.8	mg/m ³
		ND	1.0	ppm

REMARK:

^{/1} Notification of The Department of Labour Protection and Welfare B.E.2560 (2017),
Concentration Limits of Hazardous Chemicals.

^{/2} ND = Non detectable : detection limit of Ethylene Oxide is 0.05 mg/m³ 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. Nitchaphon Tonglor)
Analysed By SECOT Co.,Ltd. / GPS = Sampling at UTM 47 P 731246E 1404930N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By



(Miss Thanaporn Klinsoopon)

25/08/2022

REPORTED TEST REFER TO SUBMITTED SAMPLES ONLY

THIS REPORT SHALL NOT REPRODUCED EXCEPT IN FULL

WITHOUT THE WRITTEN APPROVAL LABORATORY

Request No. ATR6511021

Report No. 6511-0369

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 : EA Plant
SAMPLE NAME : พื้นที่กระบวนการผลิต (Area) (P2054) SAMPLE NO : A65110369
SAMPLING DATE : 04/11/2022 SAMPLING TIME : 08:50-20:50
RECEIVED DATE : 08/11/2022 TESTED DATE : 08/11/2022-21/11/2022
SAMPLING INSTRUMENT : Passive Sampling REPORTED DATE : 22/11/2022

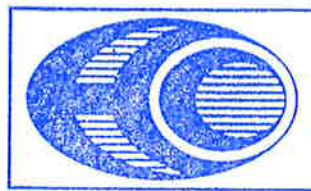
PARAMETER**	TEST METHOD	RESULT ^{/2}	STD ^{/1}	UNIT
Ethylene Oxide	OSHA 1010	ND	1.8	mg/m ³
		ND	1.0	ppm

REMARK:

^{/1} Notification of The Department of Labour Protection and Welfare B.E.2560 (2017),
Concentration Limits of Hazardous Chemicals.

^{/2} ND = Non detectable : detection limit of Ethylene Oxide is 0.05 mg/m³ 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. Aocha Khwansirimongkon)
Analysed By SECOT Co.,Ltd. / GPS = Sampling at UTM 47 P 731245E 1404907N



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Examined By



(Miss Thanatporn Klinsonpon)

22/11/2022

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



EASTERN THAI CONSULTING 1992 CO., LTD.

683 Moo 11 Sukhapibarn 8 Rd., Nongkham, Sriracha, Chonburi 20230
Tel. 0-3848-1197-8, 0-3876-3031-2 Fax : 0-3848-2095 E-mail : marketing@etc1992.com



Request No. LA65-R0827

Report No. R6508-1927

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 : EA Plant
SAMPLE POINT : กระบวนการผลิต (P2051A)
PARAMETER* : L_{eq} 1 hr., L_{eq} 8 hr. & L_{max} SAMPLE NO. : 22522
DETERMINATION METHOD : ISO 11202:2010 MEASURING DATE : 09/08/2022
INSTRUMENT : Integrated Sound Level Meter RECEIVED DATE : 09/08/2022
S/N 01209916 : Type 2 REPORTED DATE : 15/08/2022

MEASURING TIME	RESULT		UNIT
	L_{eq} 1 hr.	L_{max}	
07:00-08:00	84.1	90.4	dB(A)
08:00-09:00	83.6	85.0	dB(A)
09:00-10:00	83.5	85.0	dB(A)
10:00-11:00	83.5	84.2	dB(A)
11:00-12:00	83.5	84.4	dB(A)
12:00-13:00	83.6	84.4	dB(A)
13:00-14:00	83.5	84.2	dB(A)
14:00-15:00	83.4	84.1	dB(A)
L_{eq} 8 hr.	83.6	-	dB(A)
Standard	90 ¹	140 ¹ , 115 ²	dB(A)


REMARK : ¹ Notification of The Ministry of Industry B.E. 2546 (2003)

² Regulation of The Ministry of Labour B.E. 2559 (2016)

* Ms. Thanatporn Klinsoon is Section Head / Mrs. Wanpen Lhaochindawat is Technical Management
(Measurement By Ms. Winida Jampaton)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 
(MRS. WANPEN LHAOCHINDAWAT)

15/08/2022

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

TEST REPORT

CUSTOMER : PTT Global Chemical Public Company Limited Branch 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 : EA Plant
SAMPLE POINT : กระบวนการผลิต (P2051A)
PARAMETER* : L_{eq} 1 hr., L_{eq} 8 hr. & L_{max} SAMPLE NO. : 31928
DETERMINATION METHOD : ISO 11202:2010 MEASURING DATE : 04/11/2022
INSTRUMENT : Integrated Sound Level Meter RECEIVED DATE : 04/11/2022
S/N 01209916 : Type 2 REPORTED DATE : 09/11/2022

MEASURING TIME	RESULT		UNIT
	L_{eq} 1 hr.	L_{max}	
09:00-10:00	83.2	84.7	dB(A)
10:00-11:00	82.7	89.1	dB(A)
11:00-12:00	82.5	83.3	dB(A)
12:00-13:00	82.4	83.4	dB(A)
13:00-14:00	82.6	84.3	dB(A)
14:00-15:00	82.8	83.8	dB(A)
15:00-16:00	83.0	83.8	dB(A)
16:00-17:00	83.1	83.9	dB(A)
L_{eq} 8 hr.	82.8	—	dB(A)
Standard	90 ^{1/}	140 ^{1/} , 115 ^{2/}	dB(A)


REMARK : ^{1/} Notification of The Ministry of Industry B.E. 2546 (2003)

^{2/} Regulation of The Ministry of Labour B.E. 2559 (2016)

* Ms. Thanatporn Klinsoon is Section Head / Mrs. Wanpen Lhaochindawat is Technical Management
(Measurement By Ms. Savita Kittinoavarat)



บริษัท อีสเทิร์นไทยคอนซัลติ้ง 1992 จำกัด

Approved By 
(MRS. WANPEN LHAOCHINDAWAT)

09/11/2022

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