

ภาคผนวก ง.3

ใบรับรองผลการตรวจวัดคุณภาพน้ำทิ้ง



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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

WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.	: 1424/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Grab
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 09.26
SAMPLING DATE	: 05/07/2022	ANALYTICAL DATE	: 06-12/07/2022
RECEIVED DATE	: 06/07/2022	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 12/07/2022	FILE CODE	: 222097_WW_July
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	STANDARD
				Bio-Transfer Tank	
Temperature	°C	2550 B	< 0.5	33.6	-
pH	-	4500-H ⁺ B	< 0.10	6.88	-
Total Dissolved Solids	mg/l	2540 C	< 50	286	-
Total Suspended Solids	mg/l	2540 D	< 5	22	-
Fat Oil & Grease	mg/l	5520 B	< 0.50	ND	-
Dissolved Oxygen	mg/l	4500-O G	< 0.10	4.5	-
BOD ₅	mg/l	5210 B	< 1.0	110	-
COD	mg/l	5220 C	< 15.00	146	-
Total Organic Carbon*	mg/l	5310 B	< 0.01	38.32	-
Mercury (Hg)	mg/l	3112 B	< 0.0005	ND	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED., 2017 (AWWA, APHA, WEF)



(Miss Khemchuda Insorn)

Analyst

REG. NO. ว-239-ค-5976



(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ว-239-ค-5863

- Remark :**
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. *Total Organic Carbon analysis was performed by Faculty of Public Health, Mahidol University.
 4. - Not available.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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

WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.	: 1424/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Grab
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 09.40
SAMPLING DATE	: 05/07/2022	ANALYTICAL DATE	: 06-12/07/2022
RECEIVED DATE	: 06/07/2022	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 12/07/2022	FILE CODE	: 222097_WW_July
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	STANDARD
				Bio-DAF หลังผ่าน Clarifier Tank	
Temperature	°C	2550 B	< 0.5	32.5	-
pH	-	4500-H ⁺ B	< 0.10	6.89	-
Total Dissolved Solids	mg/l	2540 C	< 50	308	-
Total Suspended Solids	mg/l	2540 D	< 5	< 5	-
Fat Oil & Grease	mg/l	5520 B	< 0.50	ND	-
Dissolved Oxygen	mg/l	4500-O G	< 0.10	5.5	-
BOD ₅	mg/l	5210 B	< 1.0	< 1.0	-
COD	mg/l	5220 C	< 15.00	< 15.00	-
Total Organic Carbon*	mg/l	5310 B	< 0.01	3.54	-
Mercury (Hg)	mg/l	3112 B	< 0.0005	ND	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED., 2017 (AWWA, APHA, WEF)

(Miss Khemchuda Insorn)

Analyst

REG. NO. ๖-239-๓-5976

(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ๖-239-๓-5863

- Remark :**
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. *Total Organic Carbon analysis was performed by Faculty of Public Health, Mahidol University.
 4. - Not available.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

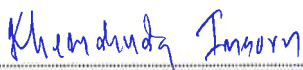
TEL. (662) 959-3600 FAX (662) 959-3535 Website : secot.co.th E-mail : envserv@secot.co.th

WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.	: 1424/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Grab
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 09.49
SAMPLING DATE	: 05/07/2022	ANALYTICAL DATE	: 06-12/07/2022
RECEIVED DATE	: 06/07/2022	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 12/07/2022	FILE CODE	: 222097_WW_July
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	STANDARD ^{1/}
				Final Effluent Basin	
Temperature	°C	2550 B	< 0.5	32.7	≤ 40
pH	-	4500-H ⁺ B	< 0.10	7.38	5.5-9.0
Total Dissolved Solids	mg/l	2540 C	< 50	423	≤ 3,000
Total Suspended Solids	mg/l	2540 D	< 5	< 5	≤ 50
Fat Oil & Grease	mg/l	5520 B	< 0.50	ND	≤ 5
BOD ₅	mg/l	5210 B	< 1.0	< 1.0	≤ 20
Dissolved Oxygen	mg/l	4500-O G	< 0.1	6.6	-
COD	mg/l	5220 C	< 15.00	< 15.00	≤ 120
Total Organic Carbon*	mg/l	5310 B	< 0.01	5.15	-
Mercury (Hg)	mg/l	3112 B	< 0.0005	ND	≤ 0.005

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED., 2017 (AWWA, APHA, WEF)



(Miss Khemchuda Insorn)

Analyst

REG. NO. ๖-239-๓-5976



(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ๖-239-๓-5863

- Remark :**
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. ^{1/} Notification of the Ministry of Natural Resources and Environment B.E.2559 (2016).
 4. *Total Organic Carbon analysis was performed by Faculty of Public Health, Mahidol University.
 5. - Not available.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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

WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.	: 1424/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Grab
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 09.35
SAMPLING DATE	: 05/07/2022	ANALYTICAL DATE	: 08/07/2022
RECEIVED DATE	: 06/07/2022	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 12/07/2022	FILE CODE	: 222097_WW_July
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION ระบบหล่อเย็นก่อนเข้า Final Effluent Basin	STANDARD
Zinc (Zn)	mg/l	3120 B	< 0.003	1.04	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED., 2017 (AWWA, APHA, WEF)

(Miss Krisana Chanthoom)

Analyst

REG. NO. ๖-239-๖-7802

(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ๖-239-๓-5863

- Remark :**
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. ^{1/} Notification of the Ministry of Natural Resources and Environment B.E.2559 (2016).



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND


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


WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.	: 1424/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Grab
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 09.55
SAMPLING DATE	: 05/07/2022	ANALYTICAL DATE	: 10/06/2022
RECEIVED DATE	: 06/07/2022	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 12/07/2022	FILE CODE	: 222097_WW_July
SAMPLE CONDITION	: Normal		
LOCATION DESCRIPTION	: 1 = Hg Treated Water Tank (หน่วยบำบัดปรอทในน้ำเสียจากกระบวนการผลิต (น้ำจาก Desalter))		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION 1	STANDARD
Mercury (Hg)	mg/l	3112 B	< 0.0005	ND	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED., 2017 (AWWA, APHA, WEF)


(Miss Krisana Chanthoom)
Analyst
REG. NO. ๖-239-จ-7802


(Mrs. Araya Tipparuk)
Technical Management Team
REG. NO. ๖-239-ค-5863

- Remark :**
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. - Not available.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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

WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.	: 1567/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Grab
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 15.54
SAMPLING DATE	: 02/08/2022	ANALYTICAL DATE	: 03-09/08/2022
RECEIVED DATE	: 03/08/2022	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 10/08/2022	FILE CODE	: 222097_WW_August
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	STANDARD
				Bio-Transfer Tank	
Temperature	°C	2550 B	< 0.5	30.0	-
pH	-	4500-H ⁺ B	< 0.10	8.02	-
Total Dissolved Solids	mg/l	2540 C	< 50	127	-
Total Suspended Solids	mg/l	2540 D	< 5	17	-
Fat Oil & Grease	mg/l	5520 B	< 0.50	0.57	-
Dissolved Oxygen	mg/l	4500-O G	< 0.10	3.9	-
BOD ₅	mg/l	5210 B	< 1.0	85.6	-
COD	mg/l	5220 C	< 15.00	102	-
Total Organic Carbon*	mg/l	5310 B	< 0.01	21.43	-
Mercury (Hg)	mg/l	3112 B	< 0.0005	0.0046	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED., 2017 (AWWA, APHA, WEF)

Khemchuda Insorn

(Miss Khemchuda Insorn)

Analyst

REG. NO. ว-239-ก-5976

Araya Tipparuk

(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ว-239-ก-5863

- Remark :**
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. *Total Organic Carbon analysis was performed by Faculty of Public Health, Mahidol University.
 4. - Not available.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

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

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

WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.	: 1567/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Grab
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 16.12
SAMPLING DATE	: 02/08/2022	ANALYTICAL DATE	: 03-09/08/2022
RECEIVED DATE	: 03/08/2022	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 10/08/2022	FILE CODE	: 222097_WW_August
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	STANDARD
				Bio-DAF หลังผ่าน Clarifier Tank	
Temperature	°C	2550 B	< 0.5	30.5	-
pH	-	4500-H ⁺ B	< 0.10	7.06	-
Total Dissolved Solids	mg/l	2540 C	< 50	217	-
Total Suspended Solids	mg/l	2540 D	< 5	< 5	-
Fat Oil & Grease	mg/l	5520 B	< 0.50	ND	-
Dissolved Oxygen	mg/l	4500-O G	< 0.10	4.6	-
BOD ₅	mg/l	5210 B	< 1.0	2.2	-
COD	mg/l	5220 C	< 15.00	< 15.00	-
Total Organic Carbon*	mg/l	5310 B	< 0.01	3.18	-
Mercury (Hg)	mg/l	3112 B	< 0.0005	0.0016	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED., 2017 (AWWA, APHA, WEF)



(Miss Khemchuda Insorn)

Analyst

REG. NO. ๖-239-ค-5976



(Mrs. Araya Tippasuk)

Technical Management Team

REG. NO. ๖-239-ค-5863

- Remark :**
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. *Total Organic Carbon analysis was performed by Faculty of Public Health, Mahidol University.
 4. - Not available.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND


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

WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.	: 1567/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Grab
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 16.23
SAMPLING DATE	: 02/08/2022	ANALYTICAL DATE	: 03-09/08/2022
RECEIVED DATE	: 03/08/2022	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 10/08/2022	FILE CODE	: 222097_WW_August
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	STANDARD ^{1/}
				Final Effluent Basin	
Temperature	°C	2550 B	< 0.5	32.8	≤ 40
pH	-	4500-H ⁺ B	< 0.10	7.14	5.5-9.0
Total Dissolved Solids	mg/l	2540 C	< 50	428	≤ 3,000
Total Suspended Solids	mg/l	2540 D	< 5	< 5	≤ 50
Fat Oil & Grease	mg/l	5520 B	< 0.50	ND	≤ 5
BOD ₅	mg/l	5210 B	< 1.0	2.3	≤ 20
Dissolved Oxygen	mg/l	4500-O G	< 0.1	5.6	-
COD	mg/l	5220 C	< 15.00	< 15.00	≤ 120
Total Organic Carbon*	mg/l	5310 B	< 0.01	5.62	-
Mercury (Hg)	mg/l	3112 B	< 0.0005	ND	≤ 0.005

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED., 2017 (AWWA, APHA, WEF)



(Miss Khemchuda Insorn)

Analyst

REG. NO. ว-239-ค-5976



(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ว-239-ค-5863

- Remark :**
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. ^{1/} Notification of the Ministry of Natural Resources and Environment B.E.2559 (2016).
 4. *Total Organic Carbon analysis was performed by Faculty of Public Health, Mahidol University.
 5. - Not available.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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

WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.	: 1567/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Grab
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 16.23
SAMPLING DATE	: 02/08/2022	ANALYTICAL DATE	: 05,08/08/2022
RECEIVED DATE	: 03/08/2022	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 10/08/2022	FILE CODE	: 222097_WW_August
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION ระบบหล่อเย็นก่อนเข้า Final Effluent Basin	STANDARD
Zinc (Zn)	mg/l	3120 B	< 0.003	1.10	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED, 2017 (AWWA, APHA, WEF)

(Miss Krisana Chanthoom)

Analyst

REG. NO. ๖-239-๖-7802

(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ๖-239-๖-5863

- Remark :**
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. ^{1/} Notification of the Ministry of Natural Resources and Environment B.E.2559 (2016).



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

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


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


WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.	: 1567/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Grab
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 16.30
SAMPLING DATE	: 02/08/2022	ANALYTICAL DATE	: 06/08/2022
RECEIVED DATE	: 03/08/2022	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 10/08/2022	FILE CODE	: 222097_WW_August
SAMPLE CONDITION	: Normal		
LOCATION DESCRIPTION	: 1 = Hg Treated Water Tank (หน่วยบำบัดปรอทในน้ำเสียจากกระบวนการผลิต (น้ำจาก Desalter))		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION 1	STANDARD
Mercury (Hg)	mg/l	3112 B	< 0.0005	0.0011	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED., 2017 (AWWA, APHA, WEF)


(Miss Krisana Chanthoom)
Analyst
REG. NO. ๖-239-๓-7802


(Mrs. Araya Tipparuk)
Technical Management Team
REG. NO. ๖-239-๓-5863

Remark : 1. Reported analysis refers to submitted sample only.
2. This report shall not be reproduced, except in full, without official approval.
3. - Not available.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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

WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.	: 1851/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Grab
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 08.45
SAMPLING DATE	: 09/09/2022	ANALYTICAL DATE	: 10-19/09/2022
RECEIVED DATE	: 10/09/2022	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 26/09/2022	FILE CODE	: 222097_WW_September
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	STANDARD
				Bio-Transfer Tank	
Temperature	°C	2550 B	< 0.5	30.2	-
pH	-	4500-H ⁺ B	< 0.10	7.35	-
Total Dissolved Solids	mg/l	2540 C	< 50	192	-
Total Suspended Solids	mg/l	2540 D	< 5	10	-
Fat Oil & Grease	mg/l	5520 B	< 0.50	0.92	-
Dissolved Oxygen	mg/l	4500-O G	< 0.10	5.3	-
BOD ₅	mg/l	5210 B	< 1.0	100	-
COD	mg/l	5220 C	< 15.00	162	-
Total Organic Carbon*	mg/l	5310 B	< 0.01	41.75	-
Mercury (Hg)	mg/l	3112 B	< 0.0005	ND	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED. 2017 (AWWA, APHA, WEF)



(Miss Khemchuda Insorn)

Analyst

REG. NO. ว-239-ท-5976



(Mrs. Araya Tippiaruk)

Technical Management Team

REG. NO. ว-239-ท-5863

- Remark :**
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. *Total Organic Carbon analysis was performed by Faculty of Public Health, Mahidol University.
 4. - Not available.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND


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

WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.	: 1851/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Grab
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 09.26
SAMPLING DATE	: 09/09/2022	ANALYTICAL DATE	: 10-19/09/2022
RECEIVED DATE	: 10/09/2022	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 26/09/2022	FILE CODE	: 222097_WW_September
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	STANDARD
				Bio-DAF หลังผ่าน Clarifier Tank	
Temperature	°C	2550 B	< 0.5	29.7	-
pH	-	4500-H ⁺ B	< 0.10	7.24	-
Total Dissolved Solids	mg/l	2540 C	< 50	192	-
Total Suspended Solids	mg/l	2540 D	< 5	< 5	-
Fat Oil & Grease	mg/l	5520 B	< 0.50	ND	-
Dissolved Oxygen	mg/l	4500-O G	< 0.10	4.9	-
BOD ₅	mg/l	5210 B	< 1.0	< 1.0	-
COD	mg/l	5220 C	< 15.00	< 15.00	-
Total Organic Carbon*	mg/l	5310 B	< 0.01	3.24	-
Mercury (Hg)	mg/l	3112 B	< 0.0005	ND	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED., 2017 (AWWA, APHA, WEF)



(Miss Khemchuda Insorn)

Analyst

REG. NO. ว-239-ค-5976



(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ว-239-ค-5863

- Remark :
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. *Total Organic Carbon analysis was performed by Faculty of Public Health, Mahidol University.
 4. - Not available.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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

WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.	: 1851/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Grab
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 09.35
SAMPLING DATE	: 09/09/2022	ANALYTICAL DATE	: 10-19/09/2022
RECEIVED DATE	: 10/09/2022	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 26/09/2022	FILE CODE	: 222097_WW_September
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	STANDARD ^{1/}
				Final Effluent Basin	
Temperature	°C	2550 B	< 0.5	30.5	≤ 40
pH	-	4500-H ⁺ B	< 0.10	7.36	5.5-9.0
Total Dissolved Solids	mg/l	2540 C	< 50	344	≤ 3,000
Total Suspended Solids	mg/l	2540 D	< 5	< 5	≤ 50
Fat Oil & Grease	mg/l	5520 B	< 0.50	ND	≤ 5
BOD ₅	mg/l	5210 B	< 1.0	< 1.0	≤ 20
Dissolved Oxygen	mg/l	4500-O G	< 0.1	6.0	-
COD	mg/l	5220 C	< 15.00	< 15.00	≤ 120
Total Organic Carbon*	mg/l	5310 B	< 0.01	5.09	-
Mercury (Hg)	mg/l	3112 B	< 0.0005	ND	≤ 0.005

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED., 2017 (AWWA, APHA, WEF)



(Miss Khemchuda Insorn)

Analyst

REG. NO. ๖-239-๓-5976



(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ๖-239-๓-5863

- Remark :**
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. ^{1/} Notification of the Ministry of Natural Resources and Environment B.E.2559 (2016).
 4. *Total Organic Carbon analysis was performed by Faculty of Public Health, Mahidol University.
 5. - Not available.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND


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


WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.	: 1851/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Grab
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 09.55
SAMPLING DATE	: 09/09/2022	ANALYTICAL DATE	: 14/09/2022
RECEIVED DATE	: 10/09/2022	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 26/09/2022	FILE CODE	: 222097_WW_September
SAMPLE CONDITION	: Normal		
LOCATION DESCRIPTION	: 1 = Hg Treated Water Tank (หน่วยบำบัดปรอทในน้ำเสียจากกระบวนการผลิต (น้ำจาก Desalter))		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION 1	STANDARD
Mercury (Hg)	mg/l	3112 B	< 0.0005	ND	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED.2017 (AWWA,APHA, WEF)


(Miss Krisana Chanthoom)
Analyst
REG. NO. ๖-239-๖-7802


(Mrs. Araya Tipparuk)
Technical Management Team
REG. NO. ๖-239-๖-5863

- Remark :**
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. - Not available.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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

WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd. REQUEST SERVICE No. : 1851/65
	(Branch 5 : Aromatics 2 Plant) SAMPLING METHOD : Grab
SAMPLING BY	: SECOT Co., Ltd. SAMPLING TIME : 09.15
SAMPLING DATE	: 09/09/2022 ANALYTICAL DATE : 12/09/2022
RECEIVED DATE	: 10/09/2022 SITE OPERATOR : Mr. Aniwat Pimwanna
REPORT DATE	: 26/09/2022 FILE CODE : 222097_WW_September
SAMPLE CONDITION	: Normal

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION ระบบหล่อเย็นก่อนเข้า Final Effluent Basin	STANDARD
Zinc (Zn)	mg/l	3120 B	< 0.003	0.05	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED., 2017 (AWWA, APHA, WEF)

(Miss Krisana Chanthoom)

Analyst

REG. NO. ว-239-ท-7802

(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ว-239-ท-5863

- Remark :
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. ^{1/} Notification of the Ministry of Natural Resources and Environment B.E.2559 (2016).



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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

WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.	: 1984/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Grab
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 09.53
SAMPLING DATE	: 04/10/2022	ANALYTICAL DATE	: 05-11/10/2022
RECEIVED DATE	: 05/10/2022	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 11/10/2022	FILE CODE	: 222097_WW_October
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS	ND	STATION	STANDARD
		METHODS	(non-detectable)	Bio-Transfer Tank	
Temperature	°C	2550 B	< 0.5	31.1	-
pH	-	4500-H ⁺ B	< 0.10	7.93	-
Total Dissolved Solids	mg/l	2540 C	< 50	214	-
Total Suspended Solids	mg/l	2540 D	< 5	8	-
Fat Oil & Grease	mg/l	5520 B	< 0.50	ND	-
Dissolved Oxygen	mg/l	4500-O G	< 0.10	2.9	-
BOD ₅	mg/l	5210 B	< 1.0	103	-
COD	mg/l	5220 C	< 15.00	167	-
Total Organic Carbon*	mg/l	5310 B	< 0.01	43.16	-
Mercury (Hg)	mg/l	3112 B	< 0.0005	ND	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED. 2017 (AWWA, APHA, WEF)



(Miss Khemchuda Insorn)

Analyst

REG. NO. ๖-239-ก-5976



(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ๖-239-ก-5863

- Remark :**
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. *Total Organic Carbon analysis was performed by Faculty of Public Health, Mahidol University.
 4. - Not available.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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

WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.	: 1984/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Grab
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 10.09
SAMPLING DATE	: 04/10/2022	ANALYTICAL DATE	: 05-11/10/2022
RECEIVED DATE	: 05/10/2022	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 11/10/2022	FILE CODE	: 222097_WW_October
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	STANDARD
				Bio-DAF หลังผ่าน Clarifier Tank	
Temperature	°C	2550 B	< 0.5	30.9	-
pH	-	4500-H ⁺ B	< 0.10	7.70	-
Total Dissolved Solids	mg/l	2540 C	< 50	240	-
Total Suspended Solids	mg/l	2540 D	< 5	< 5	-
Fat Oil & Grease	mg/l	5520 B	< 0.50	ND	-
Dissolved Oxygen	mg/l	4500-O G	< 0.10	5.2	-
BOD ₅	mg/l	5210 B	< 1.0	< 1.0	-
COD	mg/l	5220 C	< 15.00	< 15.00	-
Total Organic Carbon*	mg/l	5310 B	< 0.01	2.95	-
Mercury (Hg)	mg/l	3112 B	< 0.0005	ND	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED., 2017 (AWWA, APHA, WEF)

(Miss Khemchuda Insorn)

Analyst

REG. NO. ๖-239-ค-5976

(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ๖-239-ค-5863

- Remark :**
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. *Total Organic Carbon analysis was performed by Faculty of Public Health, Mahidol University.
 4. - Not available.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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

WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.	: 1984/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Grab
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 10.21
SAMPLING DATE	: 04/10/2022	ANALYTICAL DATE	: 05-11/10/2022
RECEIVED DATE	: 05/10/2022	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 11/10/2022	FILE CODE	: 222097_WW_October
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS	ND (non-detectable)	STATION	STANDARD ^{1/}
		METHODS		Final Effluent Basin	
Temperature	°C	2550 B	< 0.5	31.0	≤ 40
pH	-	4500-H ⁺ B	< 0.10	7.43	5.5-9.0
Total Dissolved Solids	mg/l	2540 C	< 50	242	≤ 3,000
Total Suspended Solids	mg/l	2540 D	< 5	< 5	≤ 50
Fat Oil & Grease	mg/l	5520 B	< 0.50	ND	≤ 5
BOD ₅	mg/l	5210 B	< 1.0	< 1.0	≤ 20
Dissolved Oxygen	mg/l	4500-O G	< 0.1	6.7	-
COD	mg/l	5220 C	< 15.00	< 15.00	≤ 120
Total Organic Carbon*	mg/l	5310 B	< 0.01	2.97	-
Mercury (Hg)	mg/l	3112 B	< 0.0005	ND	≤ 0.005

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED., 2017 (AWWA, APHA, WEF)



(Miss Khemchuda Insorn)

Analyst

REG. NO. ๖-239-๓-5976



(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ๖-239-๓-5863

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

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

3. ^{1/} Notification of the Ministry of Natural Resources and Environment B.E.2559 (2016).

4. *Total Organic Carbon analysis was performed by Faculty of Public Health, Mahidol University.

5. - Not available.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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

WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.	: 1984/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Grab
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 10.28
SAMPLING DATE	: 04/10/2022	ANALYTICAL DATE	: 06/10/2022
RECEIVED DATE	: 05/10/2022	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 11/10/2022	FILE CODE	: 222097_WW_October
SAMPLE CONDITION	: Normal		
LOCATION DESCRIPTION	: 1 = Hg Treated Water Tank (หน่วยบำบัดปรอทในน้ำเสียจากกระบวนการผลิต (น้ำจาก Desalter))		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION 1	STANDARD
Mercury (Hg)	mg/l	3112 B	< 0.0005	ND	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED. 2017 (AWWA, APHA, WEF)



(Miss Krisana Chanthoom)

Analyst

REG. NO. ๖-239-๖-7802



(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ๖-239-๓-5863

- Remark :**
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. - Not available.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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

WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.	: 1984/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Grab
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 10.01
SAMPLING DATE	: 04/10/2022	ANALYTICAL DATE	: 07-10/10/2022
RECEIVED DATE	: 05/10/2022	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 11/10/2022	FILE CODE	: 222097_WW_October
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION ระบบหล่อเย็นก่อนเข้า Final Effluent Basin	STANDARD
Zinc (Zn)	mg/l	3120 B	< 0.003	0.94	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED. 2017 (AWWA, APHA, WEF)

(Miss Krisana Chanthoom)

Analyst

REG. NO. ว-239-ท-7802

(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ว-239-ท-5863

- Remark :
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. ^{1/} Notification of the Ministry of Natural Resources and Environment B.E.2559 (2016).



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

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

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

WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.	: 2185/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Grab
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 14.05
SAMPLING DATE	: 02/11/2022	ANALYTICAL DATE	: 03-10/11/2022
RECEIVED DATE	: 03/11/2022	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 10/11/2022	FILE CODE	: 222097_WW_November
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	STANDARD
				Bio-Transfer Tank	
Temperature	°C	2550 B	< 0.5	34.1	-
pH	-	4500-H ⁺ B	< 0.10	6.55	-
Total Dissolved Solids	mg/l	2540 C	< 50	402	-
Total Suspended Solids	mg/l	2540 D	< 5	19	-
Fat Oil & Grease	mg/l	5520 B	< 0.50	ND	-
Dissolved Oxygen	mg/l	4500-O G	< 0.10	3.2	-
BOD ₅	mg/l	5210 B	< 1.0	172	-
COD	mg/l	5220 C	< 15.00	257	-
Total Organic Carbon*	mg/l	5310 B	< 0.01	79.85	-
Mercury (Hg)	mg/l	3112 B	< 0.0005	0.0026	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED., 2017 (AWWA, APHA, WEF)



(Miss Khemchuda Insorn)

Analyst

REG. NO. ๖-239-ก-5976



(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ๖-239-ก-5863

- Remark :**
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. *Total Organic Carbon analysis was performed by Faculty of Public Health, Mahidol University.
 4. - Not available.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

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

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

WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.	: 2185/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Grab
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 14.19
SAMPLING DATE	: 02/11/2022	ANALYTICAL DATE	: 03-10/11/2022
RECEIVED DATE	: 03/11/2022	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 10/11/2022	FILE CODE	: 222097_WW_November
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	STANDARD
				Bio-DAF หลังผ่าน Clarifier Tank	
Temperature	°C	2550 B	< 0.5	32.0	-
pH		4500-H ⁺ B	< 0.10	7.28	-
Total Dissolved Solids	mg/l	2540 C	< 50	278	-
Total Suspended Solids	mg/l	2540 D	< 5	< 5	-
Fat Oil & Grease	mg/l	5520 B	< 0.50	ND	-
Dissolved Oxygen	mg/l	4500-O G	< 0.10	4.6	-
BOD ₅	mg/l	5210 B	< 1.0	< 1.0	-
COD	mg/l	5220 C	< 15.00	40.08	-
Total Organic Carbon*	mg/l	5310 B	< 0.01	3.98	-
Mercury (Hg)	mg/l	3112 B	< 0.0005	ND	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED., 2017 (AWWA, APHA, WEF)



(Miss Khemchuda Insorn)

Analyst

REG. NO. ว-239-ค-5976



(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ว-239-ค-5863

- Remark :**
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. *Total Organic Carbon analysis was performed by Faculty of Public Health, Mahidol University.
 4. - Not available.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

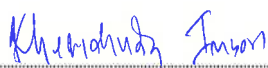
TEL. (662) 959-3600 FAX (662) 959-3535 Website : secot.co.th E-mail : envserv@secot.co.th

WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.	: 2185/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Grab
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 14.30
SAMPLING DATE	: 02/11/2022	ANALYTICAL DATE	: 03-10/11/2022
RECEIVED DATE	: 03/11/2022	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 10/11/2022	FILE CODE	: 222097_WW_November
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS	ND (non-detectable)	STATION	STANDARD ^{1/}
		METHODS		Final Effluent Basin	
Temperature	°C	2550 B	< 0.5	32.4	≤ 40
pH	-	4500-H ⁺ B	< 0.10	7.32	5.5-9.0
Total Dissolved Solids	mg/l	2540 C	< 50	412	≤ 3,000
Total Suspended Solids	mg/l	2540 D	< 5	< 5	≤ 50
Fat Oil & Grease	mg/l	5520 B	< 0.50	ND	≤ 5
BOD ₅	mg/l	5210 B	< 1.0	< 1.0	≤ 20
Dissolved Oxygen	mg/l	4500-O G	< 0.1	5.1	-
COD	mg/l	5220 C	< 15.00	45.91	≤ 120
Total Organic Carbon*	mg/l	5310 B	< 0.01	5.89	-
Mercury (Hg)	mg/l	3112 B	< 0.0005	0.0010	≤ 0.005

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED., 2017 (AWWA, APHA, WEF)



(Miss Khemchuda Insorn)

Analyst

REG. NO. ๖-239-ก-5976



(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ๖-239-ก-5863

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

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

3. ^{1/} Notification of the Ministry of Natural Resources and Environment B.E.2559 (2016).

4. *Total Organic Carbon analysis was performed by Faculty of Public Health, Mahidol University.

5. - Not available.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND


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

WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.	: 2185/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Grab
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 14.40
SAMPLING DATE	: 02/11/2022	ANALYTICAL DATE	: 07/11/2022
RECEIVED DATE	: 03/11/2022	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 10/11/2022	FILE CODE	: 222097_WW_November
SAMPLE CONDITION	: Normal		
LOCATION DESCRIPTION	: 1 = Hg Treated Water Tank (หน่วยบำบัดปรอทในน้ำเสียจากกระบวนการผลิต (น้ำจาก Desalter))		

PARAMETER	UNIT	ANALYSIS METHODS	ND	STATION	STANDARD
			(non-detectable)	1	
Mercury (Hg)	mg/l	3112 B	< 0.0005	ND	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED., 2017 (AWWA, APHA, WEF)


(Miss Krisana Chanthoom)

Analyst

REG. NO. ว-239-จ-7802


(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ว-239-ค-5863

- Remark :**
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. - Not available.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

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

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

WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.	: 2185/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Grab
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 14.10
SAMPLING DATE	: 02/11/2022	ANALYTICAL DATE	: 05,07/11/2022
RECEIVED DATE	: 03/11/2022	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 10/11/2022	FILE CODE	: 222097_WW_November
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION ระบบหล่อเย็นก่อนเข้า Final Effluent Basin	STANDARD
Zinc (Zn)	mg/l	3120 B	< 0.003	0.81	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED. 2017 (AWWA, APHA, WEF)


(Miss Krisana Chanthoom)

Analyst

REG. NO. ว-239-จ-7802


(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ว-239-ค-5863

- Remark :
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. ^{1/} Notification of the Ministry of Natural Resources and Environment B.E.2559 (2016).



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

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

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

WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.	: 2447/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Grab
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 13.35
SAMPLING DATE	: 07/12/2022	ANALYTICAL DATE	: 08-17/12/2022
RECEIVED DATE	: 08/12/2022	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 17/12/2022	FILE CODE	: 222097_WW_December
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	STANDARD
				Bio-Transfer Tank	
Temperature	°C	2550 B	< 0.5	34.6	-
pH		4500-H ⁺ B	< 0.10	6.81	-
Total Dissolved Solids	mg/l	2540 C	< 50	343	-
Total Suspended Solids	mg/l	2540 D	< 5	40	-
Fat Oil & Grease	mg/l	5520 B	< 0.50	ND	-
Dissolved Oxygen	mg/l	4500-O G	< 0.10	3.5	-
BOD ₅	mg/l	5210 B	< 1.0	128	-
COD	mg/l	5220 C	< 15.00	167	-
Total Organic Carbon*	mg/l	5310 B	< 0.01	46.87	-
Mercury (Hg)	mg/l	3112 B	< 0.0005	0.0178	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED., 2017 (AWWA, APHA, WEF)



(Miss Khemchuda Insorn)

Analyst

REG. NO. ๖-239-ก-5976



(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ๖-239-ก-5863

- Remark :**
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. *Total Organic Carbon analysis was performed by Faculty of Public Health, Mahidol University.
 4. - Not available.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

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

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

WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd. (Branch 5 : Aromatics 2 Plant)	REQUEST SERVICE No.	: 2447/65
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING METHOD	: Grab
SAMPLING DATE	: 07/12/2022	SAMPLING TIME	: 13.46
RECEIVED DATE	: 08/12/2022	ANALYTICAL DATE	: 08-17/12/2022
REPORT DATE	: 17/12/2022	SITE OPERATOR	: Mr. Aniwat Pimwanna
SAMPLE CONDITION	: Normal	FILE CODE	: 222097_WW_December

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	STANDARD
				Bio-DAF หลังผ่าน Clarifier Tank	
Temperature	°C	2550 B	< 0.5	32.3	-
pH	-	4500-H ⁺ B	< 0.10	6.87	-
Total Dissolved Solids	mg/l	2540 C	< 50	238	-
Total Suspended Solids	mg/l	2540 D	< 5	< 5	-
Fat Oil & Grease	mg/l	5520 B	< 0.50	ND	-
Dissolved Oxygen	mg/l	4500-O G	< 0.10	4.1	-
BOD ₅	mg/l	5210 B	< 1.0	< 1.0	-
COD	mg/l	5220 C	< 15.00	< 15.00	-
Total Organic Carbon*	mg/l	5310 B	< 0.01	3.46	-
Mercury (Hg)	mg/l	3112 B	< 0.0005	ND	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23RD ED. 2017 (AWWA, APHA, WEF)



(Miss Khemchuda Insorn)

Analyst

REG. NO. ๖-239-ก-5976



(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ๖-239-ก-5863

- Remark :**
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. *Total Organic Carbon analysis was performed by Faculty of Public Health, Mahidol University.
 4. - Not available.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

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

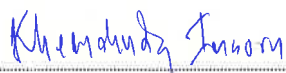
TEL. (662) 959-3600 FAX (662) 959-3535 Website : secot.co.th E-mail : envserv@secot.co.th

WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.	: 2447/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Grab
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 13.53
SAMPLING DATE	: 07/12/2022	ANALYTICAL DATE	: 08-17/12/2022
RECEIVED DATE	: 08/12/2022	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 17/12/2022	FILE CODE	: 222097_WW_December
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS METHODS	ND	STATION	STANDARD ^{1/}
			(non-detectable)	Final Effluent Basin	
Temperature	°C	2550 B	< 0.5	32.4	≤ 40
pH	-	4500-H ⁺ B	< 0.10	7.43	5.5-9.0
Total Dissolved Solids	mg/l	2540 C	< 50	376	≤ 3,000
Total Suspended Solids	mg/l	2540 D	< 5	< 5	≤ 50
Fat Oil & Grease	mg/l	5520 B	< 0.50	ND	≤ 5
BOD ₅	mg/l	5210 B	< 1.0	< 1.0	≤ 20
Dissolved Oxygen	mg/l	4500-O G	< 0.1	5.4	-
COD	mg/l	5220 C	< 15.00	< 15.00	≤ 120
Total Organic Carbon*	mg/l	5310 B	< 0.01	5.47	-
Mercury (Hg)	mg/l	3112 B	< 0.0005	ND	≤ 0.005

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED. 2017 (AWWA, APHA, WEF)



(Miss Khemchuda Insorn)

Analyst

REG. NO. ว-239-ก-5976



(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ว-239-ก-5863

- Remark :**
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. ^{1/} Notification of the Ministry of Natural Resources and Environment B.E.2559 (2016).
 4. *Total Organic Carbon analysis was performed by Faculty of Public Health, Mahidol University.
 5. - Not available.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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

WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.	: 2447/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Grab
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 13.41
SAMPLING DATE	: 07/12/2022	ANALYTICAL DATE	: 12/12/2022
RECEIVED DATE	: 08/12/2022	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 17/12/2022	FILE CODE	: 222097_WW_December
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION ระบบหล่อเย็นก่อนเข้า Final Effluent Basin	STANDARD
Zinc (Zn)	mg/l	3120 B	< 0.003	1.54	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED., 2017 (AWWA, APHA, WEF)

(Miss Krisana Chanthoom)

Analyst

REG. NO. ว-239-จ-7802

(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ว-239-ก-5863

- Remark :**
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. ^{1/} Notification of the Ministry of Natural Resources and Environment B.E.2559 (2016).



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

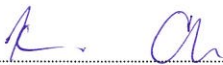
TEL. (662) 959-3600 FAX (662) 959-3535 Website : secot.co.th E-mail : envserv@secot.co.th


WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No. :	2447/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Grab
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 13.59
SAMPLING DATE	: 07/12/2022	ANALYTICAL DATE	: 13/12/2022
RECEIVED DATE	: 08/12/2022	SITE OPERATOR	: Mr. Aniwat Pimwana
REPORT DATE	: 17/12/2022	FILE CODE	: 222097_WW_December
SAMPLE CONDITION	: Normal		
LOCATION DESCRIPTION	: 1 = Hg Treated Water Tank (หน่วยบำบัดปรอทในน้ำเสียจากกระบวนการผลิต (น้ำจาก Desalter))		

PARAMETER	UNIT	ANALYSIS	ND	STATION	STANDARD
		METHODS	(non-detectable)	1	
Mercury (Hg)	mg/l	3112 B	< 0.0005	ND	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED., 2017 (AWWA, APHA, WEF)


(Miss Krisana Chanthoom)
Analyst
REG. NO. ว-239-จ-7802


(Mrs. Araya Tipparuk)
Technical Management Team
REG. NO. ว-239-ค-5863

- Remark :**
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. - Not available.

ภาคผนวก ง.4

ใบรับรองผลการตรวจวัดคุณภาพน้ำผิวดิน



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

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

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

WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.	: 1852/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Grab
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 10.50
SAMPLING DATE	: 09/09/2022	ANALYTICAL DATE	: 10-15/09/2022
RECEIVED DATE	: 10/09/2022	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 16/09/2022	FILE CODE	: 222097_SW_September
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	STANDARD ^{1/}
				คลองห้วยใหญ่หลังจุดระบายน้ำโครงการ 50 เมตร	
Temperature	°C	2550 B	< 0.5	29.0	n ¹
pH	-	4500-H ⁺ B	< 0.10	7.18	5 - 9
Total Dissolved Solids	mg/l	2540 C	< 50	152	-
Fat Oil & Grease	mg/l	5520 B	< 0.50	ND	-
Dissolved Oxygen	mg/l	4500-O C	< 0.10	5.7	≥ 4.0
BOD ₅	mg/l	5210 B	< 1.0	< 1.0	≤ 2.0
COD	mg/l	5220 C	< 15.00	18.07	-
Mercury (Hg)	mg/l	3112 B	< 0.0005	ND	≤ 0.002
Zinc (Zn)	mg/l	3111 B	< 0.005	< 0.04	≤ 1.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 21st ED. 2017 (AWWA, APHA, WEF)

(Miss Khemchuda Insorn)

Analyst

(Mrs. Araya Tipparuk)

Technical Management Team

- Remark :**
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. ^{1/} The Standard values of Surface Water Quality for class 3, notification by the National Environment Board No.8, B.E.2537 (1994).
 4. n¹ means naturally but changing by no more than 3 °C.
 5. - Not available.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

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

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

WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.	: 1852/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Grab
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 10.40
SAMPLING DATE	: 09/09/2022	ANALYTICAL DATE	: 10-15/09/2022
RECEIVED DATE	: 10/09/2022	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 16/09/2022	FILE CODE	: 222097_SW_September
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	STANDARD ^{1/}
				คลองห้วยใหญ่ก่อนจุดระบายน้ำโครงการ 50 เมตร	
Temperature	°C	2550 B	< 0.5	30.0	n ¹
pH	-	4500-H ⁺ B	< 0.10	7.23	5 - 9
Total Dissolved Solids	mg/l	2540 C	< 50	158	-
Fat Oil & Grease	mg/l	5520 B	< 0.50	ND	-
Dissolved Oxygen	mg/l	4500-O C	< 0.10	5.9	≥ 4.0
BOD ₅	mg/l	5210 B	< 1.0	1.2	≤ 2.0
COD	mg/l	5220 C	< 15.00	25.92	-
Mercury (Hg)	mg/l	3112 B	< 0.0005	ND	≤ 0.002
Zinc (Zn)	mg/l	3111 B	< 0.005	< 0.04	≤ 1.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED, 2017 (AWWA, APHA, WEF)

(Miss Khemchuda Insorn)

Analyst

(Mrs. Araya Tipparuk)

Technical Management Team

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

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

3. ^{1/} The Standard values of Surface Water Quality for class 3, notification by the National Environment Board No.8, B.E.2537 (1994).

4. n¹ means naturally but changing by no more than 3 °C.

5. - Not available.

ภาคผนวก ง.5

ใบรับรองผลการตรวจวัดคุณภาพน้ำใต้ดิน



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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

GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.:	1954/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Pneumatic Bladder Pump
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 11:28-11:45
SAMPLING DATE	: 27/09/2022	ANALYTICAL DATE	: 05/10/2022
RECEIVED DATE	: 28/09/2022	SITE OPERATOR	: Mr. Baworn Deechaiya
REPORT DATE	: 11/10/2022	FILE CODE	: 222097_GW_September
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS	ND	STATION	STANDARD ^{1/}
		METHODS	(non-detectable)	MW-02	
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Toluene	mg/l	6200 B	< 0.0002	ND	≤ 5.0
m-Xylene	mg/l	6200 B	< 0.0002	ND	≤ 24
o-Xylene	mg/l	6200 B	< 0.0002	ND	≤ 24
p-Xylene	mg/l	6200 B	< 0.0002	ND	≤ 24
Total Xylenes	mg/l	6200 B	< 0.0006	ND	≤ 24

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED., 2017 (AWWA, APHA, WEF)

Natsiri L.

(Miss Natsiri Lertterapipat)

Analyst

REG. NO. ๖-239-ค-0001

Araya Tipparuk

(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ๖-239-ค-5863

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



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

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

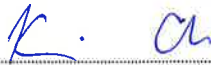
TEL. (662) 959-3600 FAX (662) 959-3535 Website : secot.co.th E-mail : envserv@secot.co.th

GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.:	1954/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Pneumatic Bladder Pump
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 11:28-11:45
SAMPLING DATE	: 27/09/2022	ANALYTICAL DATE	: 30/09/2022
RECEIVED DATE	: 28/09/2022	SITE OPERATOR	: Mr. Baworn Deechaiya
REPORT DATE	: 11/10/2022	FILE CODE	: 222097_GW_September
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-02	STANDARD ^{1/}
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7

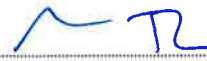
REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED., 2017 (AWWA, APHA, WEF)



(Miss Krisana Chanthoom)

Analyst

REG. NO. ๖-239-๖-7802



(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ๖-239-๖-5863

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



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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

GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No. :	2086/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Pneumatic Bladder Pump
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 14:46-15:00
SAMPLING DATE	: 17/10/2022	ANALYTICAL DATE	: 20/10/2022
RECEIVED DATE	: 18/10/2022	SITE OPERATOR	: Mr. Baworn Deechaiya
REPORT DATE	: 27/10/2022	FILE CODE	: 222097_GW_October
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	STANDARD ^{1/}
				MW-04	
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Toluene	mg/l	6200 B	< 0.0002	ND	≤ 5.0
m-Xylene	mg/l	6200 B	< 0.0002	ND	≤ 24
o-Xylene	mg/l	6200 B	< 0.0002	ND	≤ 24
p-Xylene	mg/l	6200 B	< 0.0002	ND	≤ 24
Total Xylenes	mg/l	6200 B	< 0.0006	ND	≤ 24

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED., 2017 (AWWA, APHA, WEF)

Natsiri L.

(Miss Natsiri Lertterapipat)

Analyst

REG. NO. ว-239-ท-0001

Araya Tipparuk

(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ว-239-ท-5863

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



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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

GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No. :	2086/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Pneumatic Bladder Pump
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 14:46-15:00
SAMPLING DATE	: 17/10/2022	ANALYTICAL DATE	: 22/10/2022
RECEIVED DATE	: 18/10/2022	SITE OPERATOR	: Mr. Baworn Deechaiya
REPORT DATE	: 27/10/2022	FILE CODE	: 222097_GW_October
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-04	STANDARD ^{1/}
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED., 2017 (AWWA, APHA, WEF)

(Miss Krisana Chanthoom)

Analyst

REG. NO. ๖-239-๖-7802

(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ๖-239-๖-5863

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



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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

GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No. :	2086/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Pneumatic Bladder Pump
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 15:55-16:10
SAMPLING DATE	: 17/10/2022	ANALYTICAL DATE	: 20/10/2022
RECEIVED DATE	: 18/10/2022	SITE OPERATOR	: Mr. Baworn Deechaiya
REPORT DATE	: 27/10/2022	FILE CODE	: 222097_GW_October
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS	ND	STATION	STANDARD ^{1/}
		METHODS	(non-detectable)	MW-06	
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Toluene	mg/l	6200 B	< 0.0002	ND	≤ 5.0
m-Xylene	mg/l	6200 B	< 0.0002	ND	≤ 24
o-Xylene	mg/l	6200 B	< 0.0002	ND	≤ 24
p-Xylene	mg/l	6200 B	< 0.0002	ND	≤ 24
Total Xylenes	mg/l	6200 B	< 0.0006	ND	≤ 24

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED., 2017 (AWWA, APHA, WEF)

Natsiri L.

(Miss Natsiri Lertterapipat)

Analyst

REG. NO. ว-239-ก-0001

Araya Tipparuk

(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ว-239-ก-5863

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



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND


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

GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.:	2086/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Pneumatic Bladder Pump
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 15:55-16:10
SAMPLING DATE	: 17/10/2022	ANALYTICAL DATE	: 22/10/2022
RECEIVED DATE	: 18/10/2022	SITE OPERATOR	: Mr. Baworn Deechaiya
REPORT DATE	: 27/10/2022	FILE CODE	: 222097_GW_October
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-06	STANDARD ^{1/}
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED., 2017 (AWWA, APHA, WEF)


(Miss Krisana Chanthoom)

Analyst

REG. NO. ๖-239-๖-7802


(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ๖-239-ก-5863

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



บริษัท ซีคอต จำกัด SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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

GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.:	1954/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Pneumatic Bladder Pump
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 15:16-15:37
SAMPLING DATE	: 26/09/2022	ANALYTICAL DATE	: 05/10/2022
RECEIVED DATE	: 28/09/2022	SITE OPERATOR	: Mr. Baworn Deechaiya
REPORT DATE	: 11/10/2022	FILE CODE	: 222097_GW_September
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	STANDARD ^{1/}
				MW-08	
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Toluene	mg/l	6200 B	< 0.0002	ND	≤ 5.0
m-Xylene	mg/l	6200 B	< 0.0002	ND	≤ 24
o-Xylene	mg/l	6200 B	< 0.0002	ND	≤ 24
p-Xylene	mg/l	6200 B	< 0.0002	ND	≤ 24
Total Xylenes	mg/l	6200 B	< 0.0006	ND	≤ 24

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED. 2017 (AWWA, APHA, WEF)

Natsiri L.

(Miss Natsiri Lertterapipat)

Analyst

REG. NO. ว-239-ท-0001

Araya Tipparuk

(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ว-239-ท-5863

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



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

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


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

GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.:	1954/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Pneumatic Bladder Pump
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 15:16-15:37
SAMPLING DATE	: 26/09/2022	ANALYTICAL DATE	: 30/09/2022
RECEIVED DATE	: 28/09/2022	SITE OPERATOR	: Mr. Baworn Deechaiya
REPORT DATE	: 11/10/2022	FILE CODE	: 222097_GW_September
SAMPLE CONDITION	: Normal		


PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-08	STANDARD ^{1/}
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED., 2017 (AWWA, APHA, WEF)


(Miss Krisana Chanthoom)

Analyst

REG. NO. ๖-239-๖-7802


(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ๖-239-๖-5863

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



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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

GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.:	1954/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Pneumatic Bladder Pump
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 15:18-15:35
SAMPLING DATE	: 27/09/2022	ANALYTICAL DATE	: 05/10/2022
RECEIVED DATE	: 28/09/2022	SITE OPERATOR	: Mr. Baworn Deechaiya
REPORT DATE	: 11/10/2022	FILE CODE	: 222097_GW_September
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	STANDARD ^{1/}
				MW-09	
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Toluene	mg/l	6200 B	< 0.0002	ND	≤ 5.0
m-Xylene	mg/l	6200 B	< 0.0002	ND	≤ 24
o-Xylene	mg/l	6200 B	< 0.0002	ND	≤ 24
p-Xylene	mg/l	6200 B	< 0.0002	ND	≤ 24
Total Xylenes	mg/l	6200 B	< 0.0006	ND	≤ 24

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED., 2017 (AWWA, APHA, WEF)

Natsiri L.

(Miss Natsiri Lertterapipat)

Analyst

REG. NO. ๖-239-ก-0001

Araya Tipparuk

(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ๖-239-ก-5863

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



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

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

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

GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.	: 1954/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Pneumatic Bladder Pump
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 16:03-16:25
SAMPLING DATE	: 27/09/2022	ANALYTICAL DATE	: 30/09/2022
RECEIVED DATE	: 28/09/2022	SITE OPERATOR	: Mr. Baworn Deechaiya
REPORT DATE	: 11/10/2022	FILE CODE	: 222097_GW_September
SAMPLE CONDITION	: Normal		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-10	STANDARD ^{1/}
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 23rd ED., 2017 (AWWA, APHA, WEF)

(Miss Krisana Chanthoom)

Analyst

REG. NO. ว-239-จ-7802

(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ว-239-ท-5863

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

ภาคผนวก ง.6

ใบรับรองผลการตรวจวัดระดับเสียงโดยทั่วไป



Noise Monitoring Result : Community Noise

MTR-PTTGC 5

Location : Noppakate Village				Monitor Period : 17-24 Dec 2022			
SLM Model : RION NL-21				Serial No : 00487723			
Site Operator : Mr. Siwanon Kulawong							
Calibrator Model : RION NC-74				Serial No : 34283648			
Calibration Ref dB(A) : 94.0				Certified Date : 24 Dec 2021			
SLM Reading / Adjust dB(A) : 94.0/0.0				Expire Date : 23 Dec 2022			
Cal Sheet No.: NC-74-2022-102							
Time	Equivalent Sound Pressure Level (dB(A))						
	17-18 Dec 2022	18-19 Dec 2022	19-20 Dec 2022	20-21 Dec 2022	21-22 Dec 2022	22-23 Dec 2022	23-24 Dec 2022
15:00 - 16:00	54.0	51.8	55.0	54.4	57.1	54.6	55.5
16:00 - 17:00	57.1	50.6	52.5	54.3	55.3	53.3	54.0
17:00 - 18:00	56.7	49.7	51.3	52.3	51.8	52.6	55.0
18:00 - 19:00	54.6	48.2	48.9	51.5	50.6	51.6	52.5
19:00 - 20:00	53.3	45.5	48.8	48.8	49.7	50.9	51.3
20:00 - 21:00	52.6	46.8	49.1	47.9	48.2	52.3	51.8
21:00 - 22:00	51.6	45.9	46.7	49.9	45.5	51.5	50.6
22:00 - 23:00	50.9	44.3	44.9	48.0	46.8	48.8	49.7
23:00 - 00:00	50.8	45.9	44.6	45.0	45.9	47.9	48.2
00:00 - 01:00	51.4	48.0	46.0	46.4	44.3	49.9	45.5
01:00 - 02:00	49.0	52.3	48.8	47.8	45.9	48.0	48.1
02:00 - 03:00	48.1	55.9	53.0	52.3	49.9	45.0	48.5
03:00 - 04:00	48.5	55.8	56.0	58.2	50.6	46.4	49.9
04:00 - 05:00	49.9	53.6	55.7	55.6	53.5	47.8	50.6
05:00 - 06:00	50.6	53.0	53.3	54.3	53.4	53.0	53.5
06:00 - 07:00	53.5	53.0	52.8	53.1	53.4	56.0	47.8
07:00 - 08:00	53.4	53.6	51.7	52.9	55.5	55.7	52.3
08:00 - 09:00	54.2	53.1	53.8	53.9	54.0	53.3	58.2
09:00 - 10:00	53.2	52.4	52.4	52.6	55.0	52.8	55.6
10:00 - 11:00	52.3	51.6	51.8	52.7	52.5	51.7	54.3
11:00 - 12:00	54.0	54.8	51.9	52.4	51.3	52.6	54.0
12:00 - 13:00	53.9	53.4	53.0	51.8	54.0	54.6	55.0
13:00 - 14:00	55.8	55.5	57.1	51.9	57.1	53.3	55.4
14:00 - 15:00	53.4	54.0	55.3	53.0	56.7	53.4	54.9
Leq(24)*	53.2	52.3	52.6	52.7	53.0	52.3	53.2
Ldn	57.8	59.1	58.8	59.5	57.7	57.5	57.2
Lmax **	76.4	73.1	78.9	75.4	78.9	74.8	78.9
Standard-24Hr	70 dB(A)						
Standard-Max	115 dB(A)						

Remark : * Average time between 15:00-15:00

** Maximum Sound Pressure Level between 15:00-15:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Preeda Somjai)
Technical Management Team



Noise Monitoring Result : Background Noise MTR-PTTGC 5

Location : Noppakate Village
SLM Model : RION NL-21
Site Operator : Mr. Siwanon Kulawong


Monitor Period : 17-24 Dec 2022
Serial No : 00487723


Calibrator Model : Cirrus CR:515
Calibration Ref dB(A) : 94.0
SLM Reading / Adjust dB(A) : 94.0/0.0
Cal Sheet No.: NC-74-2022-102

Serial No : 94310
Certified Date : 25 Feb 2022
Expire Date : 24 Feb 2023

Time	L90 (dB(A))						
	17-18 Dec 2022	18-19 Dec 2022	19-20 Dec 2022	20-21 Dec 2022	21-22 Dec 2022	22-23 Dec 2022	23-24 Dec 2022
15:00 - 16:00	47.6	47.0	49.0	50.2	50.8	50.5	50.9
16:00 - 17:00	49.5	45.4	47.6	48.9	50.6	49.3	49.9
17:00 - 18:00	50.8	42.6	45.3	47.3	47.0	48.2	49.0
18:00 - 19:00	50.5	41.2	43.8	45.8	45.4	47.3	47.6
19:00 - 20:00	49.3	40.1	44.1	44.5	42.6	45.9	45.3
20:00 - 21:00	48.2	39.6	42.7	43.1	41.2	47.3	47.0
21:00 - 22:00	47.3	39.5	41.6	43.2	40.1	45.8	45.4
22:00 - 23:00	45.9	40.6	41.6	42.1	39.6	44.5	42.6
23:00 - 00:00	45.8	41.0	40.7	41.7	39.5	43.1	41.2
00:00 - 01:00	45.2	42.1	40.7	42.1	40.6	43.2	40.1
01:00 - 02:00	43.6	45.5	42.1	42.4	41.0	42.1	43.1
02:00 - 03:00	43.1	50.5	46.0	46.0	44.4	41.7	43.9
03:00 - 04:00	43.9	51.6	51.8	51.4	45.2	42.1	44.4
04:00 - 05:00	44.4	49.2	50.7	50.7	48.2	42.4	45.2
05:00 - 06:00	45.2	47.9	48.3	48.5	48.7	46.0	48.2
06:00 - 07:00	48.2	47.9	47.1	47.6	47.7	51.8	42.4
07:00 - 08:00	48.7	48.3	45.5	46.7	50.9	50.7	46.0
08:00 - 09:00	48.5	47.7	47.8	48.2	49.9	48.3	51.4
09:00 - 10:00	47.8	46.2	45.2	46.5	49.0	47.1	50.7
10:00 - 11:00	47.9	46.3	45.8	45.9	47.6	45.5	48.5
11:00 - 12:00	49.6	47.1	45.4	45.2	45.3	48.2	49.9
12:00 - 13:00	49.7	47.7	46.6	45.8	47.6	50.5	49.0
13:00 - 14:00	49.4	50.9	50.8	45.4	49.5	49.3	49.9
14:00 - 15:00	48.9	49.9	50.6	46.6	50.8	47.7	49.6
L90(avg)*	48.0	47.1	47.1	46.9	47.4	47.6	47.8

Remark : * Average time between 15:00-15:00


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Preeda Somjai)
Technical Management Team



Noise Monitoring Result : Community Noise MTR-PTTGC 5

Location : Ban Phak PTT

Monitor Period : 17-24 Dec 2022

SLM Model : RION NL-21

Serial No : 00198277

Site Operator : Mr. Siwanon Kulawong

Calibrator Model : Cirrus CR:515

Serial No : 94310

Calibration Ref dB(A) : 94.0

Certified Date : 25 Feb 2022

SLM Reading / Adjust dB(A) : 94.0/0.0

Expire Date : 24 Feb 2023

Cal Sheet No.: NC-74-2022-102

Time	Equivalent Sound Pressure Level (dB(A))						
	17-18 Dec 2022	18-19 Dec 2022	19-20 Dec 2022	20-21 Dec 2022	21-22 Dec 2022	22-23 Dec 2022	23-24 Dec 2022
15:00 - 16:00	51.6	51.8	44.3	48.5	52.6	48.8	48.0
16:00 - 17:00	52.0	52.9	43.0	45.5	48.3	48.4	46.9
17:00 - 18:00	51.5	51.2	42.8	43.2	44.0	48.1	46.1
18:00 - 19:00	50.4	50.5	45.5	44.5	48.3	46.4	44.8
19:00 - 20:00	51.1	49.6	44.9	44.6	44.8	46.5	43.6
20:00 - 21:00	49.2	49.2	46.6	46.4	46.1	46.1	44.0
21:00 - 22:00	50.7	47.0	50.5	51.1	49.1	47.6	46.0
22:00 - 23:00	50.3	44.1	53.8	53.5	54.2	55.5	49.4
23:00 - 00:00	52.1	43.3	53.1	52.9	53.6	54.0	53.8
00:00 - 01:00	51.2	43.6	53.0	52.1	52.4	53.4	53.5
01:00 - 02:00	49.0	42.4	53.5	51.9	50.7	52.0	51.5
02:00 - 03:00	49.2	43.3	50.6	54.6	51.2	49.9	50.0
03:00 - 04:00	51.3	48.2	50.8	51.1	53.4	52.9	51.5
04:00 - 05:00	51.3	49.9	50.3	53.9	53.1	49.0	50.8
05:00 - 06:00	51.5	52.1	51.0	52.6	52.6	54.6	49.6
06:00 - 07:00	52.1	55.0	55.3	51.2	51.0	53.1	50.5
07:00 - 08:00	54.1	51.7	52.4	51.7	51.3	51.9	50.7
08:00 - 09:00	56.2	52.8	51.7	52.6	51.2	50.6	51.1
09:00 - 10:00	56.5	52.2	52.8	53.6	52.5	51.7	51.3
10:00 - 11:00	54.6	51.1	54.1	53.4	52.5	53.4	51.0
11:00 - 12:00	53.7	50.4	51.4	53.6	52.2	51.4	50.8
12:00 - 13:00	54.6	48.0	48.8	53.9	50.9	51.4	50.7
13:00 - 14:00	54.2	46.7	47.1	53.3	49.9	51.1	50.8
14:00 - 15:00	52.1	45.6	46.3	54.4	48.3	49.2	50.7
Leq(24)*	52.6	50.1	51.0	52.0	51.3	51.5	50.2
Ldn	57.8	55.8	58.8	59.0	58.8	59.2	57.6
Lmax **	74.0	71.3	78.1	80.8	80.0	81.5	73.4
Standard-24Hr	70 dB(A)						
Standard-Max	115 dB(A)						

Remark : * Average time between 15:00-15:00

** Maximum Sound Pressure Level between 15:00-15:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



Noise Monitoring Result : Background Noise MTR-PTTGC 5

Location : Ban Phak PTT

Monitor Period : 17-24 Dec 2022

SLM Model : RION NL-21

Serial No : 00198277

Site Operator : Mr. Siwanon Kulawong

Calibrator Model : Cirrus CR:515

Serial No : 94310

Calibration Ref dB(A) : 94.0

Certified Date : 25 Feb 2022


SLM Reading / Adjust dB(A) : 94.0/0.0


Expire Date : 24 Feb 2023

Cal Sheet No.: NC-74-2022-102

Time	L90 (dB(A))						
	17-18 Dec 2022	18-19 Dec 2022	19-20 Dec 2022	20-21 Dec 2022	21-22 Dec 2022	22-23 Dec 2022	23-24 Dec 2022
15:00 - 16:00	47.5	47.8	39.7	40.7	44.6	46.0	45.2
16:00 - 17:00	47.7	48.2	39.3	40.1	41.9	45.9	44.5
17:00 - 18:00	46.8	46.9	40.3	38.9	40.2	46.3	42.5
18:00 - 19:00	45.9	45.0	40.1	40.1	39.8	45.2	41.9
19:00 - 20:00	45.1	44.5	41.0	40.3	40.5	44.7	39.1
20:00 - 21:00	44.7	44.3	43.5	41.8	42.2	43.7	39.2
21:00 - 22:00	45.3	42.0	47.2	45.4	44.8	43.2	42.5
22:00 - 23:00	44.2	39.3	49.7	49.3	49.9	47.5	45.5
23:00 - 00:00	45.8	38.6	48.3	48.6	48.5	49.5	48.4
00:00 - 01:00	46.1	37.3	48.1	46.9	46.6	47.6	49.5
01:00 - 02:00	44.1	36.6	48.1	47.7	46.4	47.6	46.4
02:00 - 03:00	44.6	39.8	45.8	47.5	46.0	45.0	46.0
03:00 - 04:00	45.5	42.1	44.6	45.9	44.5	44.5	46.8
04:00 - 05:00	45.4	48.2	44.8	45.8	43.8	43.9	45.5
05:00 - 06:00	47.4	49.1	45.7	45.9	46.7	45.5	44.9
06:00 - 07:00	48.4	50.9	46.4	46.0	47.4	47.9	46.3
07:00 - 08:00	48.9	48.2	47.4	47.7	46.7	46.5	46.2
08:00 - 09:00	52.3	48.3	47.0	48.6	47.3	46.4	46.5
09:00 - 10:00	51.9	48.1	48.2	49.1	48.4	48.1	46.7
10:00 - 11:00	50.6	46.4	48.3	49.2	48.8	48.7	46.5
11:00 - 12:00	49.5	44.8	46.8	50.5	49.0	47.9	46.2
12:00 - 13:00	50.4	43.4	44.3	48.9	47.3	47.2	46.2
13:00 - 14:00	49.8	41.4	43.6	47.3	47.0	44.7	46.2
14:00 - 15:00	48.1	41.0	41.6	51.6	45.0	46.1	46.1
L90(avg)*	48.0	45.8	46.0	47.2	46.3	46.5	45.8

Remark : * Average time between 15:00-15:00


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Preeda Somjai)
Technical Management Team



Noise Monitoring Result : Community Noise MTR-PTTGC 5

Location : East of Fence

Monitor Period : 17-24 Dec 2022

SLM Model : RION NL-21

Serial No : 00187481

Site Operator : Mr. Siwanon Kulawong

Calibrator Model : Cirrus CR:515

Serial No : 94310

Calibration Ref dB(A) : 94.0

Certified Date : 25 Feb 2022

SLM Reading / Adjust dB(A) : 94.0/0.0

Expire Date : 24 Feb 2023

Cal Sheet No.: NC-74-2022-102

Time	Equivalent Sound Pressure Level (dB(A))						
	17-18 Dec 2022	18-19 Dec 2022	19-20 Dec 2022	20-21 Dec 2022	21-22 Dec 2022	22-23 Dec 2022	23-24 Dec 2022
15:00 - 16:00	46.2	46.4	46.2	46.8	45.7	47.7	54.5
16:00 - 17:00	45.5	45.6	47.0	46.5	47.7	47.2	54.5
17:00 - 18:00	45.2	45.7	47.3	46.8	51.3	47.7	55.0
18:00 - 19:00	46.7	46.5	47.8	47.3	47.2	47.9	46.4
19:00 - 20:00	46.5	46.2	47.7	47.4	47.5	47.8	45.6
20:00 - 21:00	46.2	46.0	47.3	47.4	47.7	47.2	45.7
21:00 - 22:00	46.6	45.8	45.9	47.1	47.3	46.7	46.5
22:00 - 23:00	45.9	45.6	45.9	47.1	48.0	46.7	46.5
23:00 - 00:00	46.9	45.0	45.2	46.5	48.2	46.9	46.2
00:00 - 01:00	47.0	45.6	45.1	46.7	47.5	46.9	46.6
01:00 - 02:00	46.3	46.2	45.8	46.9	48.6	47.3	45.6
02:00 - 03:00	45.8	46.5	45.4	46.8	48.1	47.6	45.0
03:00 - 04:00	47.4	46.0	45.1	46.9	47.7	47.3	45.6
04:00 - 05:00	47.1	46.5	46.0	46.8	47.2	47.2	46.2
05:00 - 06:00	47.3	46.9	46.1	47.3	47.3	47.5	45.8
06:00 - 07:00	47.4	48.7	46.9	48.2	47.7	47.4	47.4
07:00 - 08:00	47.2	48.4	48.2	48.4	49.6	48.3	47.1
08:00 - 09:00	49.2	48.2	46.7	47.3	48.1	48.4	47.3
09:00 - 10:00	48.0	48.9	46.3	46.2	47.1	46.4	48.2
10:00 - 11:00	48.8	47.5	45.6	48.5	45.6	45.3	46.7
11:00 - 12:00	48.0	47.2	45.0	45.8	44.9	45.1	46.3
12:00 - 13:00	48.5	46.5	44.9	45.0	45.9	54.0	45.6
13:00 - 14:00	47.1	46.7	45.5	45.1	45.8	53.9	45.8
14:00 - 15:00	46.7	46.7	46.2	45.0	47.0	53.6	45.0
Leq(24)*	47.1	46.8	46.3	46.9	47.7	48.8	48.7
Ldn	53.3	52.9	52.3	53.4	54.2	54.0	53.3
Lmax **	68.9	68.8	62.3	70.0	74.6	69.8	75.7
Standard-24Hr	70 dB(A)						
Standard-Max	115 dB(A)						

Remark : * Average time between 15:00-15:00

** Maximum Sound Pressure Level between 15:00-15:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



Noise Monitoring Result : Background Noise MTR-PTTGC 5

Location : East of Fence	Monitor Period : 17-24 Dec 2022
SLM Model : RION NL-21	Serial No : 00187481
Site Operator : Mr. Siwanon Kulawong	

Calibrator Model : Cirrus CR:515	Serial No : 94310
Calibration Ref dB(A) : 94.0	Certified Date : 25 Feb 2022
SLM Reading / Adjust dB(A) : 94.0/0.0	Expire Date : 24 Feb 2023
Cal Sheet No.: NC-74-2022-102	

Time	L90 (dB(A))						
	17-18 Dec 2022	18-19 Dec 2022	19-20 Dec 2022	20-21 Dec 2022	21-22 Dec 2022	22-23 Dec 2022	23-24 Dec 2022
15:00 - 16:00	42.8	44.0	44.0	44.2	42.3	45.5	52.5
16:00 - 17:00	43.1	43.5	44.8	44.1	45.6	45.0	53.0
17:00 - 18:00	43.7	44.3	45.1	44.1	45.8	45.4	54.0
18:00 - 19:00	45.5	45.2	45.6	45.0	45.2	45.9	44.0
19:00 - 20:00	45.2	44.9	46.0	45.9	45.7	45.6	43.5
20:00 - 21:00	44.6	44.7	45.7	46.1	46.1	45.6	44.3
21:00 - 22:00	44.1	44.8	44.8	46.2	46.5	45.5	45.2
22:00 - 23:00	44.2	44.4	44.9	46.3	47.1	45.8	45.2
23:00 - 00:00	44.4	43.8	44.3	45.8	47.4	46.0	44.6
00:00 - 01:00	44.8	44.3	44.3	46.1	46.7	45.6	44.1
01:00 - 02:00	44.4	45.4	45.0	46.3	47.7	46.7	44.4
02:00 - 03:00	44.4	45.5	44.5	46.1	47.4	47.1	43.8
03:00 - 04:00	44.9	45.0	44.2	46.4	46.8	46.6	44.3
04:00 - 05:00	45.0	45.4	44.9	46.1	46.5	46.6	45.4
05:00 - 06:00	45.1	45.4	44.9	46.2	46.5	46.9	44.4
06:00 - 07:00	45.2	46.1	45.3	46.3	47.0	46.5	44.9
07:00 - 08:00	45.0	46.3	46.0	46.7	47.0	46.4	45.0
08:00 - 09:00	45.1	45.6	44.5	44.7	45.3	46.8	45.1
09:00 - 10:00	44.9	46.1	43.7	43.5	43.5	44.0	46.0
10:00 - 11:00	45.2	44.8	43.7	44.7	41.9	42.3	44.5
11:00 - 12:00	44.7	44.3	42.7	42.6	41.7	42.2	43.7
12:00 - 13:00	45.4	44.1	42.8	42.6	43.0	52.0	43.7
13:00 - 14:00	44.6	44.6	43.2	42.5	43.8	52.2	42.6
14:00 - 15:00	44.2	44.2	43.6	42.2	44.0	52.4	42.6
L90(avg)*	44.7	44.9	44.6	45.2	45.8	47.3	47.0

Remark : * Average time between 15:00-15:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Preeda Somjai)
Technical Management Team

ภาคผนวก ง.7

ใบรับรองผลการตรวจวัดโลหะหนัก
ในกากตะกอนจากระบบบำบัดน้ำเสีย



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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


SLUDGE SAMPLES ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.	: 1985/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Grab Samplers
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 10.31
SAMPLING DATE	: 04/10/2022	ANALYTICAL DATE	: 08-12/10/2022
RECEIVED DATE	: 05/10/2022	SITE OPERATOR	: Mr. Baworn Deechaiya
REPORT DATE	: 14/10/2022	FILE CODE	: 222097_Sludge_October
SAMPLE CONDITION	: Normal		

PARAMETER	UNITS		ANALYSIS	ND	SAMPLING LOCATION	STANDARD
			METHODS	(non-detectable)	ภาคตะกอนจากระบบบำบัดน้ำเสีย (ETP)	
Arsenic	TTLC	mg/kg	3050 B / 6010 D	< 2.00	5,420	-
	STLC	mg/l	3010 A / 6010 D	< 0.02	150	-
Mercury (Hg)	TTLC	mg/kg	7471 B	< 0.05	1,017	-
	STLC	mg/l	7470 A	< 0.0005	1.13	-


Reference method : Test Methods of Evaluating Solid Waste . Physical/Chemical Methods . SW-846 , 3rd edition , US EPA 2014 .

Ministry of Industry Disposal of waste or unused materials . B.E.2548 (2005) .


.....
(Miss Krisana Chanthoom)

Analyst

REG. NO. ๖-239-๖-7802


.....
(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ๖-239-๖-5863

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

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

3. TTLC = Total Threshold Limit Concentration (mg/kg) , STLC = Soluble Threshold Limit Concentration (mg/l).

4. - Not available.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

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


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

SLUDGE SAMPLES ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REQUEST SERVICE No.	: 1985/65
	(Branch 5 : Aromatics 2 Plant)	SAMPLING METHOD	: Grab Samplers
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING TIME	: 10.35
SAMPLING DATE	: 04/10/2022	ANALYTICAL DATE	: 08-12/10/2022
RECEIVED DATE	: 05/10/2022	SITE OPERATOR	: Mr. Baworn Deechaiya
REPORT DATE	: 14/10/2022	FILE CODE	: 222097_Sludge_October
SAMPLE CONDITION	: Normal		

PARAMETER	UNITS	ANALYSIS METHODS	ND (non-detectable)	SAMPLING LOCATION	
				ภาคตะกอนจากระบบบำบัดน้ำเสีย จากหน่วย Desalter	STANDARD
Arsenic	TTLIC	mg/kg	3050 B / 6010 D	< 2.00	5,917
	STLC	mg/l	3010 A / 6010 D	< 0.02	147
Mercury (Hg)	TTLIC	mg/kg	7471 B	< 0.05	54.50
	STLC	mg/l	7470 A	< 0.0005	0.0029

Reference method : Test Methods of Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 3rd edition, US EPA 2014,
Ministry of Industry Disposal of waste or unused materials, B.E.2548 (2005).


(Miss Krisana Chanthoom)

Analyst

REG. NO. 1-239-1-7802


(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. 1-239-1-5863

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

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

3. TTLIC = Total Threshold Limit Concentration (mg/kg) , STLC = Soluble Threshold Limit Concentration (mg/l).

4. - Not available.

ภาคผนวก ง.8

ใบรับรองผลการตรวจวัดคุณภาพอากาศภายในสถานประกอบการ

แบบติดตั้งกับพื้นที่



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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

ANALYSIS/TEST REPORT

Customer	: RND/SECOT Co., Ltd.	Request Service No.	: 1641/65
For	: PTT Global Chemical Public Co., Ltd (Branch 5 : Aromatics 2 Plant)	Sampling Date	: 08-09/08/2022
Address	: 96/9 Rayong Highway Road 3191, RIL Industrial Estate, Map Ta Phut, Muang Rayong, Rayong 21150	Received Date	: 11/08/2022
Tel/Fax	: +66(0) 3897-3000/+66(0) 3897-3353	Test Date	: 18-19/08/2022
		Report Date	: 25/08/2022

SAMPLE DESCRIPTION / SAMPLING INFORMATION

Sample Designated As	: Workplace Air	Sampling Method	: Sorbent Adsorption
Sampling By	: SECOT Co., Ltd.	Sample Condition	: Normal

Sampling Location	Sampling Date/Time	Compound	Analytical Method	ND	RESULT	STANDARD
				ppm	ppm	ppm
Aromatics 1	09/08/2022	Benzene	NIOSH 1501/GC FID	< 0.02	ND	1
	09:17-13:17	Toluene	NIOSH 1501/GC FID	< 0.02	ND	200
		Total xylene	NIOSH 1501/GC FID	< 0.03	ND	100
Reformer 1	08/08/2022	Benzene	NIOSH 1501/GC FID	< 0.02	ND	1
	10:48-14:48	Toluene	NIOSH 1501/GC FID	< 0.02	ND	200
		Total xylene	NIOSH 1501/GC FID	< 0.03	ND	100
Utility Area	08/08/2022	Benzene	NIOSH 1501/GC FID	< 0.02	ND	1
	10:57-14:57	Toluene	NIOSH 1501/GC FID	< 0.02	ND	200
		Total xylene	NIOSH 1501/GC FID	< 0.03	ND	100
Laboratory Area	09/08/2022	Benzene	NIOSH 1501/GC FID	< 0.02	ND	1
	08:22-12:22	Toluene	NIOSH 1501/GC FID	< 0.02	ND	200
		Total xylene	NIOSH 1501/GC FID	< 0.03	ND	100

Analyst By :

Sudaporn Soonthorn
(Miss Sudaporn Soonthorn)

Approved By :

Narisa Poowasanpetch
(Miss Narisa Poowasanpetch)
Technical Management Team

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

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

3. Notification of the Department of Labour Protection and Welfare, B.E.2560 (2017).

4. ND = non-detectable.



บริษัท ซีคอต จำกัด SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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

ANALYSIS/TEST REPORT

Customer	: RND/SECOT Co., Ltd.	Request Service No.	: 1641/65
For	: PTT Global Chemical Public Co., Ltd (Branch 5 : Aromatics 2 Plant)	Sampling Date	: 09/08/2022
Address	: 96/9 Rayong Highway Road 3191, RIL Industrial Estate, Map Ta Phut, Muang Rayong, Rayong 21150	Received Date	: 11/08/2022
Tel/Fax	: +66(0) 3897-3000/+66(0) 3897-3353	Test Date	: 18-19/08/2022
		Report Date	: 25/08/2022

SAMPLE DESCRIPTION / SAMPLING INFORMATION

Sample Designated As	: Workplace Air	Sampling Method	: Sorbent Adsorption
Sampling By	: SECOT Co., Ltd.	Sample Condition	: Normal

Sampling Location	Sampling Date/Time	Compound	Analytical Method	ND	RESULT	STANDARD
				ppm	ppm	ppm
Tank Farm	09/08/2022	Benzene	NIOSH 1501/GC FID	< 0.02	ND	1
	10:18-14:18	Toluene	NIOSH 1501/GC FID	< 0.02	ND	200
		Total xylene	NIOSH 1501/GC FID	< 0.03	ND	100

Analyst By :

Sudaporn Soonthorn
(Miss Sudaporn Soonthorn)

Approved By :

Narisa Poowasanpetch
(Miss Narisa Poowasanpetch)

Technical Management Team

- Remark :**
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. Notification of the Department of Labour Protection and Welfare, B.E.2560 (2017).
 4. ND = non-detectable.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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

ANALYSIS/TEST REPORT

Customer	: RND/SECOT Co., Ltd.	Request Service No.	: 1641/65
For	: PTT Global Chemical Public Co., Ltd (Branch 5 : Aromatics 2 Plant)	Sampling Date	: 08-09/08/2022
Address	: 96/9 Rayong Highway Road 3191, RIL Industrial Estate, Map Ta Phut, Muang Rayong, Rayong 21150	Received Date	: 11/08/2022
		Test Date	: 17/08/2022
Tel/Fax	: +66(0) 3897-3000/+66(0) 3897-3353	Report Date	: 25/08/2022

SAMPLE DESCRIPTION / SAMPLING INFORMATION

Sample Designated As	: Workplace Air	Sampling Method	: Filtration
Sampling By	: SECOT Co., Ltd.	Sample Condition	: Normal

Sampling Location	Sampling Date/Time	Compound	Analytical Method	ND	RESULT	STANDARD
				mg/m ³	mg/m ³	mg/m ³
Reformer 1	08/08/2022 10:48-14:48	Mercury	OSHA ID-145/CVAAS	< 0.003	ND	0.1
Reformer 3	08/08/2022 10:53-14:53	Mercury	OSHA ID-145/CVAAS	< 0.003	ND	0.1
Utility Area	08/08/2022 10:57-14:57	Mercury	OSHA ID-145/CVAAS	< 0.003	ND	0.1
Laboratory Area	09/08/2022 08:22-12:22	Mercury	OSHA ID-145/CVAAS	< 0.003	ND	0.1

Analyst By :

K. Ch

(Miss Krisana Chanthoom)

Approved By :

Narin Poowasanpetch

(Miss Narisa Poowasanpetch)

Technical Management Team

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

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

3. Notification of the Department of Labour Protection and Welfare, B.E.2560 (2017).

4. ND = non-detectable.



บริษัท ซีคอต จำกัด SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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

ANALYSIS/TEST REPORT


Customer	: RND/SECOT Co., Ltd.	Request Service No.	: 1641/65
For	: PTT Global Chemical Public Co., Ltd (Branch 5 : Aromatics 2 Plant)	Sampling Date	: 08-09/08/2022
Address	: 96/9 Rayong Highway Road 3191, RIL Industrial Estate, Map Ta Phut, Muang Rayong, Rayong 21150	Received Date	: 11/08/2022
Tel/Fax	: +66(0) 3897-3000/+66(0) 3897-3353	Test Date	: 20/08/2022
		Report Date	: 25/08/2022

SAMPLE DESCRIPTION / SAMPLING INFORMATION

Sample Designated As	: Workplace Air	Sampling Method	: Filtration
Sampling By	: SECOT Co., Ltd.	Sample Condition	: Normal

Sampling Location	Sampling Date/Time	Compound	Analytical Method	ND	RESULT	STANDARD
				mg/m ³	mg/m ³	mg/m ³
Reformer 1	08/08/2022 10:48-14:48	Inorganic arsenic	NIOSH 7901/GFAAS	< 0.0003	ND	0.01
Reformer 3	08/08/2022 10:53-14:53	Inorganic arsenic	NIOSH 7901/GFAAS	< 0.0003	ND	0.01
Utility Area	08/08/2022 10:57-14:57	Inorganic arsenic	NIOSH 7901/GFAAS	< 0.0003	ND	0.01
Laboratory Area	09/08/2022 08:22-12:22	Inorganic arsenic	NIOSH 7901/GFAAS	< 0.0003	ND	0.01

Analyst By :


(Miss Krisana Chanthoom)

Approved By :


(Miss Narisa Poowasanpetch)

Technical Management Team

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

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

3. Notification of the Department of Labour Protection and Welfare, B.E.2560 (2017).

4. ND = non-detectable.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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

ANALYSIS/TEST REPORT

Customer	: RND/SECOT Co., Ltd.	Request Service No.	: 1641/65
For	: PTT Global Chemical Public Co., Ltd (Branch 5 : Aromatics 2 Plant)	Sampling Date	: 09/08/2022
Address	: 96/9 Rayong Highway Road 3191, RIL Industrial Estate, Map Ta Phut, Muang Rayong, Rayong 21150	Received Date	: 11/08/2022
Tel/Fax	: +66(0) 3897-3000/+66(0) 3897-3353	Test Date	: 15/08/2022
		Report Date	: 25/08/2022

SAMPLE DESCRIPTION / SAMPLING INFORMATION

Sample Designated As	: Workplace Air	Sampling Method	: Sampling Bag
Sampling By	: SECOT Co., Ltd.	Sample Condition	: Normal

Sampling Location	Sampling Date/Time	Compound	Analytical Method	ND	RESULT	STANDARD
				ppm	ppm	ppm
Tank Farm	09/08/2022 10:18-10:33	NMHC	THC Analyzer / FID	< 0.05	0.85	-

Analyst By :

Sudaporn Soonthorn
(Miss Sudaporn Soonthorn)

Approved By :

Narisa Poowasanpetch
(Miss Narisa Poowasanpetch)

Technical Management Team

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

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

3. ND = non-detectable.

4. - No Standard.



บริษัท ซีคอต จำกัด SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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

ANALYSIS/TEST REPORT

Customer	: RND/SECOT Co., Ltd.	Request Service No.	: 2295/65
For	: PTT Global Chemical Public Co., Ltd (Branch 5 : Aromatics 2 Plant)	Sampling Date	: 10-11/11/2022
Address	: 96/9 Rayong Highway Road 3191, RIL Industrial Estate, Map Ta Phut, Muang Rayong, Rayong 21150	Received Date	: 14/11/2022
Tel/Fax	: +66(0) 3897-3000/+66(0) 3897-3353	Test Date	: 14/11/2022
		Report Date	: 24/11/2022

SAMPLE DESCRIPTION / SAMPLING INFORMATION

Sample Designated As	: Workplace Air	Sampling Method	: Sorbent Adsorption
Sampling By	: SECOT Co., Ltd.	Sample Condition	: Normal

Sampling Location	Sampling Date/Time	Compound	Analytical Method	ND	RESULT	STANDARD
				ppm	ppm	ppm
Aromatics 1	11/11/2022	Benzene	NIOSH 1501/GC FID	< 0.02	ND	1
	09:10-14:10	Toluene	NIOSH 1501/GC FID	< 0.02	ND	200
		Total xylene	NIOSH 1501/GC FID	< 0.03	ND	100
Reformer 1	10/11/2022	Benzene	NIOSH 1501/GC FID	< 0.02	ND	1
	09:00-14:00	Toluene	NIOSH 1501/GC FID	< 0.02	ND	200
		Total xylene	NIOSH 1501/GC FID	< 0.03	ND	100
Utility Area	10/11/2022	Benzene	NIOSH 1501/GC FID	< 0.02	0.16	1
	09:15-14:15	Toluene	NIOSH 1501/GC FID	< 0.02	ND	200
		Total xylene	NIOSH 1501/GC FID	< 0.03	ND	100
Laboratory Area	11/11/2022	Benzene	NIOSH 1501/GC FID	< 0.02	0.08	1
	07:30-12:30	Toluene	NIOSH 1501/GC FID	< 0.02	0.08	200
		Total xylene	NIOSH 1501/GC FID	< 0.03	ND	100

Analyst By :

Sudaporn Soonthorn

(Miss Sudaporn Soonthorn)

Approved By :

Narisa Poowasanpetch

(Miss Narisa Poowasanpetch)

Technical Management Team

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

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

3. Notification of the Department of Labour Protection and Welfare, B.E.2560 (2017).

4. ND = non-detectable.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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

ANALYSIS/TEST REPORT

Customer	: RND/SECOT Co., Ltd.	Request Service No.	: 2295/65
For	: PTT Global Chemical Public Co., Ltd (Branch 5 : Aromatics 2 Plant)	Sampling Date	: 11/11/2022
Address	: 96/9 Rayong Highway Road 3191, RIL Industrial Estate, Map Ta Phut, Muang Rayong, Rayong 21150	Received Date	: 14/11/2022
Tel/Fax	: +66(0) 3897-3000/+66(0) 3897-3353	Test Date	: 14/11/2022
		Report Date	: 24/11/2022

SAMPLE DESCRIPTION / SAMPLING INFORMATION

Sample Designated As	: Workplace Air	Sampling Method	: Sorbent Adsorption
Sampling By	: SECOT Co., Ltd.	Sample Condition	: Normal

Sampling Location	Sampling Date/Time	Compound	Analytical Method	ND	RESULT	STANDARD
				ppm	ppm	ppm
Tank Farm	11/11/2022	Benzene	NIOSH 1501/GC FID	< 0.02	ND	1
	09:40-14:40	Toluene	NIOSH 1501/GC FID	< 0.02	ND	200
		Total xylene	NIOSH 1501/GC FID	< 0.03	ND	100

Analyst By : Sudaporn Soonthorn
(Miss Sudaporn Soonthorn)

Approved By : Narisa Poowasanpetch
(Miss Narisa Poowasanpetch)
Technical Management Team

- Remark :** 1. Reported analysis refers to submitted sample only.
2. This report shall not be reproduced, except in full, without official approval.
3. Notification of the Department of Labour Protection and Welfare, B.E.2560 (2017).
4. ND = non-detectable.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

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

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

ANALYSIS/TEST REPORT


Customer	: RND/SECOT Co., Ltd.	Request Service No.	: 2295/65
For	: PTT Global Chemical Public Co., Ltd (Branch 5 : Aromatics 2 Plant)	Sampling Date	: 10-11/11/2022
Address	: 96/9 Rayong Highway Road 3191, RIL Industrial Estate, Map Ta Phut, Muang Rayong, Rayong 21150	Received Date	: 14/11/2022
Tel/Fax	: +66(0) 3897-3000/+66(0) 3897-3353	Test Date	: 17/11/2022
		Report Date	: 24/11/2022

SAMPLE DESCRIPTION / SAMPLING INFORMATION

Sample Designated As	: Workplace Air	Sampling Method	: Filtration
Sampling By	: SECOT Co., Ltd.	Sample Condition	: Normal

Sampling Location	Sampling Date/Time	Compound	Analytical Method	ND	RESULT	STANDARD
				mg/m ³	mg/m ³	mg/m ³
Reformer 1	10/11/2022 09:00-14:00	Inorganic arsenic	NIOSH 7901/GFAAS	< 0.0003	ND	0.01
Reformer 3	10/11/2022 09:10-14:10	Inorganic arsenic	NIOSH 7901/GFAAS	< 0.0003	ND	0.01
Utility Area	10/11/2022 09:15-14:15	Inorganic arsenic	NIOSH 7901/GFAAS	< 0.0003	ND	0.01
Laboratory Area	11/11/2022 07:30-12:30	Inorganic arsenic	NIOSH 7901/GFAAS	< 0.0003	ND	0.01

Analyst By :


(Miss Krisana Chanthoom)

Approved By :


(Miss Narisa Poowasanpetch)
Technical Management Team

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

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

3. Notification of the Department of Labour Protection and Welfare, B.E.2560 (2017).

4. ND = non-detectable.



บริษัท ซีคอต จำกัด SECOT CO., LTD.

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

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

ANALYSIS/TEST REPORT

Customer	: RND/SECOT Co., Ltd.	Request Service No.	: 2295/65
For	: PTT Global Chemical Public Co., Ltd (Branch 5 : Aromatics 2 Plant)	Sampling Date	: 10-11/11/2022
Address	: 96/9 Rayong Highway Road 3191, RIL Industrial Estate, Map Ta Phut, Muang Rayong, Rayong 21150	Received Date	: 14/11/2022
Tel/Fax	: +66(0) 3897-3000/+66(0) 3897-3353	Test Date	: 16/11/2022
		Report Date	: 24/11/2022

SAMPLE DESCRIPTION / SAMPLING INFORMATION

Sample Designated As	: Workplace Air	Sampling Method	: Filtration
Sampling By	: SECOT Co., Ltd.	Sample Condition	: Normal

Sampling Location	Sampling Date/Time	Compound	Analytical Method	ND	RESULT	STANDARD
				mg/m ³	mg/m ³	mg/m ³
Reformer 1	10/11/2022 09:00-14:00	Mercury	OSHA ID-145/CVAAS	< 0.003	ND	0.1
Reformer 3	10/11/2022 09:10-14:10	Mercury	OSHA ID-145/CVAAS	< 0.003	ND	0.1
Utility Area	10/11/2022 09:15-14:15	Mercury	OSHA ID-145/CVAAS	< 0.003	ND	0.1
Laboratory Area	11/11/2022 07:30-12:30	Mercury	OSHA ID-145/CVAAS	< 0.003	ND	0.1

Analyst By :

(Miss Krisana Chanthoom)

Approved By :

(Miss Narisa Pongwasanetch)

Technical Management Team

- Remark :**
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. Notification of the Department of Labour Protection and Welfare, B.E.2560 (2017).
 4. ND = non-detectable.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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

ANALYSIS/TEST REPORT

Customer	: RND/SECOT Co., Ltd.	Request Service No.	: 2295/65
For	: PTT Global Chemical Public Co., Ltd (Branch 5 : Aromatics 2 Plant)	Sampling Date	: 11/11/2022
Address	: 96/9 Rayong Highway Road 3191, RIL Industrial Estate, Map Ta Phut, Muang Rayong, Rayong 21150	Received Date	: 14/11/2022
Tel/Fax	: +66(0) 3897-3000/+66(0) 3897-3353	Test Date	: 14/11/2022
		Report Date	: 24/11/2022

SAMPLE DESCRIPTION / SAMPLING INFORMATION

Sample Designated As	: Workplace Air	Sampling Method	: Sampling Bag
Sampling By	: SECOT Co., Ltd.	Sample Condition	: Normal

Sampling Location	Sampling Date/Time	Compound	Analytical Method	ND	RESULT	STANDARD
				ppm	ppm	ppm
Tank Farm	11/11/2022 09:40-09:55	NMHC	THC Analyzer / FID	< 0.05	0.99	-

Analyst By :

Sudaporn Soonthorn
(Miss Sudaporn Soonthorn)

Approved By :

Narisa Poowasanpetch
(Miss Narisa Poowasanpetch)
Technical Management Team

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

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

3. ND = non-detectable.

4. - No Standard.

แบบติดตัวบุคคล



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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

ANALYSIS/TEST REPORT

Customer	: RND/SECOT Co., Ltd.	Request Service No.	: 1642/65
For	: PTT Global Chemical Public Co.,Ltd. (Branch 5 : Aromatics 2 Plant)	Sampling Date	: 08-09/08/2022
Address	: 98/9 Rayong Highway Road 3191 , RIL Industrial Estate , Map Ta Phut , Muang Rayong , Rayong 21150 Thailand	Received Date	: 11/08/2022
Tel/Fax	: 0-3899-4000 / 0-3899-4111	Test Date	: 19/08/2022
		Report Date	: 29/08/2022

SAMPLE DESCRIPTION / SAMPLING INFORMATION

Sample Designated As	: Workplace Air	Sampling Method	: Passive Diffusion
Sampling By	: SECOT Co., Ltd.	Sample Condition	: Normal

Sampling Location	Sampling Date/Time	Compound	Analytical Method	ND	RESULT	STANDARD
				ppm	ppm	ppm
ID. 26002454	08/08/2022	Benzene	OSHA 1005/GC FID	< 0.04	ND	1
Area : Reformer 1	09:50-13:50	Toluene	OSHA 111/GC FID	< 0.04	ND	200
		Total xylene	OSHA 1002/GC FID	< 0.08	ND	100
ID. 26001119	09/08/2022	Benzene	OSHA 1005/GC FID	< 0.04	ND	1
Area : Aromatics 1	09:05-13:05	Toluene	OSHA 111/GC FID	< 0.04	ND	200
		Total xylene	OSHA 1002/GC FID	< 0.08	ND	100
ID. 26006852	08/08/2022	Benzene	OSHA 1005/GC FID	< 0.04	ND	1
Area : Utility Field Operator	09:52-13:52	Toluene	OSHA 111/GC FID	< 0.04	ND	200
		Total xylene	OSHA 1002/GC FID	< 0.08	ND	100
ID. 26002345	09/08/2022	Benzene	OSHA 1005/GC FID	< 0.04	ND	1
Area : Laboratory Technician	08:25-12:25	Toluene	OSHA 111/GC FID	< 0.04	ND	200
		Total xylene	OSHA 1002/GC FID	< 0.08	ND	100
ID. 26002064	09/08/2022	Benzene	OSHA 1005/GC FID	< 0.04	ND	1
Area : Tank Farm	09:52-13:52	Toluene	OSHA 111/GC FID	< 0.04	ND	200
		Total xylene	OSHA 1002/GC FID	< 0.08	ND	100

Analyst By :

Sudaporn Soonthorn
(Miss Sudaporn Soonthorn)

Approved By :

Narisa Poowasanpetch
(Miss Narisa Poowasanpetch)

Technical Management Team

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

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

3. Notification of the Department of Labour Protection and Welfare, B.E.2560 (2017).

4. ND = non-detectable.



บริษัท ซีคอต จำกัด
SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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

ANALYSIS/TEST REPORT

Customer	: RND/SECOT Co., Ltd.	Request Service No.	: 2296/65
For	: PTT Global Chemical Public Co.,Ltd. (Branch 5 : Aromatics 2 Plant)	Sampling Date	: 10-11/11/2022
Address	: 98/9 Rayong Highway Road 3191 , RIL Industrial Estate , Map Ta Phut , Muang Rayong , Rayong 21150 Thailand	Received Date	: 14/11/2022
		Test Date	: 17/11/2022
Tel/Fax	: 0-3899-4000 / 0-3899-4111	Report Date	: 24/11/2022

SAMPLE DESCRIPTION / SAMPLING INFORMATION

Sample Designated As	: Workplace Air	Sampling Method	: Passive Diffusion
Sampling By	: SECOT Co., Ltd.	Sample Condition	: Normal

Sampling Location	Sampling Date/Time	Compound	Analytical Method	ND	RESULT	STANDARD
				ppm	ppm	ppm
ID. 26002454	10/11/2022	Benzene	OSHA 1005/GC FID	< 0.04	ND	1
Area : Reformer 1	08:55-13:55	Toluene	OSHA 111/GC FID	< 0.04	0.30	200
		Total xylene	OSHA 1002/GC FID	< 0.08	ND	100
ID. 26001119	11/11/2022	Benzene	OSHA 1005/GC FID	< 0.04	ND	1
Area : Aromatics 1	08:40-13:40	Toluene	OSHA 111/GC FID	< 0.04	0.21	200
		Total xylene	OSHA 1002/GC FID	< 0.08	ND	100
ID. 26006852	10/11/2022	Benzene	OSHA 1005/GC FID	< 0.04	ND	1
Area : Utility Field Operator	08:38-13:38	Toluene	OSHA 111/GC FID	< 0.04	ND	200
		Total xylene	OSHA 1002/GC FID	< 0.08	0.21	100
ID. 26001343	11/11/2022	Benzene	OSHA 1005/GC FID	< 0.04	0.20	1
Area : Laboratory Technician	07:40-14:40	Toluene	OSHA 111/GC FID	< 0.04	0.37	200
		Total xylene	OSHA 1002/GC FID	< 0.08	ND	100
ID. 26002633	11/11/2022	Benzene	OSHA 1005/GC FID	< 0.04	ND	1
Area : Tank Farm	09:32-14:32	Toluene	OSHA 111/GC FID	< 0.04	ND	200
		Total xylene	OSHA 1002/GC FID	< 0.08	ND	100

Analyst By :

Sudaporn Soonthorn

(Miss Sudaporn Soonthorn)

Approved By :

Narisa Poowasanpet

(Miss Narisa Poowasanpet)

Technical Management Team

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

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

3. Notification of the Department of Labour Protection and Welfare, B.E.2560 (2017).

4. ND = non-detectable.

ภาคผนวก ง.9

ใบรับรองผลการตรวจวัดระดับเสียงภายในสถานประกอบการ



Noise Monitoring Result : Working Noise MTR-PTTGC 5

Location : Aromatics 1	Monitor Period : Oct 06, 2022
SLM Model : CASELLA CEL-246	Serial No : 3173306
Site Operator : Mr. Aniwat Pimwanna	

Calibrator Model : CASELLA CEL120/2	Serial No : 2839225
Calibration Ref dB(A) : 114.0	Certified Date : Dec 24, 2021
SLM Reading / Adjust dB(A) : 113.8/0.2	Expire Date : Dec 23, 2022
Cal Sheet No.: CEL120/2-2022-098	

Time	Equivalent Sound Pressure Level (dB(A))	
	Oct 06, 2022	
00:00 - 01:00		
01:00 - 02:00		
02:00 - 03:00		
03:00 - 04:00		
04:00 - 05:00		
05:00 - 06:00		
06:00 - 07:00		
07:00 - 08:00		
08:00 - 09:00		
09:00 - 10:00	81.1	
10:00 - 11:00	80.3	
11:00 - 12:00	80.5	
12:00 - 13:00	80.4	
13:00 - 14:00	80.4	
14:00 - 15:00	80.6	
15:00 - 16:00	80.7	
16:00 - 17:00	80.9	
17:00 - 18:00		
18:00 - 19:00		
19:00 - 20:00		
20:00 - 21:00		
21:00 - 22:00		
22:00 - 23:00		
23:00 - 24:00		
Leq(8)*	80.6	
Lmax **	100.2	
Standard-8Hr	90 dB(A)	
Standard-Max	140 dB(A)	

Remark : * Average time between 09:00-17:00

** Maximum Sound Pressure Level between 09:00-17:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Sununta Sirawuttinanon

(Miss Sununta Sirawuttinanon)
Technical Management Team



Noise Monitoring Result : Working Noise MTR-PTTGC 5

Location : Reformer 1

Monitor Period : Oct 06, 2022

SLM Model : CASELLA CEL-246

Serial No : 3173161

Site Operator : Mr. Aniwat Pimwanna

Calibrator Model : CASELLA CEL120/2

Serial No : 2839225

Calibration Ref dB(A) : 114.0

Certified Date : Dec 24, 2021

SLM Reading / Adjust dB(A) : 113.7/0.3


Expire Date : Dec 23, 2022

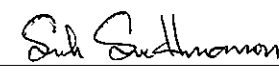
Cal Sheet No.: CEL120/2-2022-098

Time	Equivalent Sound Pressure Level (dB(A))	
	Oct 06, 2022	
00:00 - 01:00		
01:00 - 02:00		
02:00 - 03:00		
03:00 - 04:00		
04:00 - 05:00		
05:00 - 06:00		
06:00 - 07:00		
07:00 - 08:00		
08:00 - 09:00		
09:00 - 10:00	80.8	
10:00 - 11:00	80.9	
11:00 - 12:00	80.9	
12:00 - 13:00	81.0	
13:00 - 14:00	80.9	
14:00 - 15:00	81.0	
15:00 - 16:00	81.0	
16:00 - 17:00	81.0	
17:00 - 18:00		
18:00 - 19:00		
19:00 - 20:00		
20:00 - 21:00		
21:00 - 22:00		
22:00 - 23:00		
23:00 - 24:00		
Leq(8)*	80.9	
Lmax **	83.0	
Standard-8Hr	90 dB(A)	
Standard-Max	140 dB(A)	

Remark : * Average time between 09:00-17:00

** Maximum Sound Pressure Level between 09:00-17:00


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Sununta Sirawuttinanon)
Technical Management Team

ภาคผนวก ง.10

ใบรับรองผลการตรวจวัดปริมาณเสียงสะสมที่ตัวพนักงาน



บริษัท ซีคอต จำกัด

SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพฯ 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

TEL : +66(0) 2959-3600 FAX : +66(0) 2959-3535 E-mail : envserv@secot.co.th

NOISE MEASUREMENT REPORT : NOISE DOSE

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REFERENCE NO.	: 222097/MON2H/Noise Dose/Oct
	: (Branch 5 : Aromatics 2 Plant)		
MEASUREMENT BY	: SECOT Co., Ltd.	INSTRUMENT	: Noise Dosimeter
MEASUREMENT DATE	: 06/10/2022	CALIBRATOR TYPE	: Cirrus RC:110A, Pulsar 22R
MEASUREMENT LOCATION	: PTTGC5 Plant	SERIAL NO.	: 95168, 79781
SITE OPERATOR	: Miss Chanita Lamsai	CALIBRATOR REF.	: 114 dB @ 1kHz

USER NAME	AREA/PLANT	SOUND PRESSURE LEVEL (dB(A))		
		TWA (8-hr)	%DOSE	STANDARD *
ID:26002456	Aromatics 1	78.8	24.1	85.0
ID:26002450	Aromatics 2	76.6	14.5	85.0
ID:26001180	Aromatics 3	71.2	4.2	85.0
ID:26002057	Reformer 1	73.7	7.3	85.0
ID:26002429	Reformer 3	77.2	16.4	85.0
ID:26006775	Utility	77.4	17.2	85.0

(Miss Katesarin Vorradetwittaya)

Environmental Scientist

(Miss Sununta Sirawuttinanon)

Technical Management Team

- Remark :**
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 - 3.* Notification of Department of Labour Protection and Welfare B.E.2561 (2018).
 4. Average sound pressure level not exceeding 85 dB(A) for working time of 8 hours per day.
 5. TWA means Time Weighted Average.