

ภาคผนวก ง

ใบรับรองผลการตรวจวัดและวิเคราะห์

คุณภาพอากาศในบรรยากาศ



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

AMBIENT AIR QUALITY ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd, Branch 6	REQUEST SERVICE No.	: 0060/69
	(Refinery GC 6)	SAMPLING METHOD	: Subatmospheric Pressure Sampling
SAMPLING BY	: SECOT Co., Ltd.	ANALYTICAL DATE	: 14-15/01/2026
SAMPLING DATE	: 08-09/01/2026	SAMPLE CONDITION	: Normal
SAMPLING TIME	: 14:30-13:45	FILE CODE	: 226010_TO-15_January
RECEIVED DATE	: 10/01/2026		
REPORT DATE	: 17/01/2026		

Compound	Non Detection		SAMPLING LOCATION		STANDARD* ($\mu\text{g}/\text{m}^3$)
			Takuan-Ao Pradu Community 1		
	ppbv	$\mu\text{g}/\text{m}^3$	ppbv	$\mu\text{g}/\text{m}^3$	
Benzene	0.004 ₁	0.013	1.05	3.35	7.6

Methods for the Determination of Toxic Organic Compound in Ambient Air, 2nd : EPA Methods TO-15,1999

Jutarat Jaernuen

(Miss Jutarat Jaernuen)

Analyst

Siriwan Chimsa-nga

(Miss Siriwan Chimsa-nga)

Technical Management Team

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

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

3. * Notification of the Pollution Control Department, dated December 18,B.E.2551(2008), which was published in the Royal Government Gazette Vol. 126, Special Part 13D dated January 27, B.E. 2552 (2009).

R:\Database\Windrose\FiltControlWin-226010-Takuan-Ao pradu Community 1 08-09 Jan 2026



Meteorological Monitoring Results : Wind Rose

MTR-PTTGC6-Refinery

Location : Takuan-Ao pradu Community 1 Monitor period : 08-09 Jan 2026

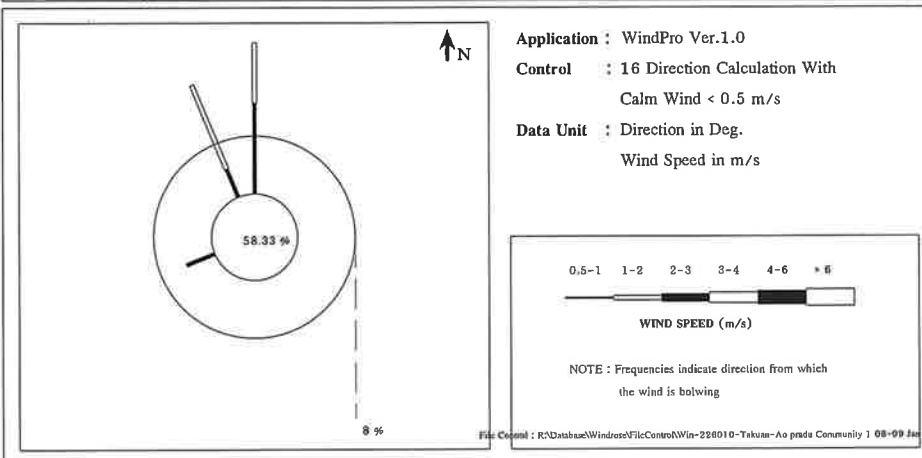
Wind Speed Model : Novalynx WS-25

Serial No : A5088

Wind Direction Model : Novalynx WS-25

Serial No : A5088

Direction	Percentage of Occurrence of Wind Direct Grouped in Various Wind Speed						Total
	0.5-1 m/s	1-2 m/s	2-3 m/s	3-4 m/s	4-6 m/s	More than 6	
N	0.1250	0.0833	0.0000	0.0000	0.0000	0.0000	0.2083
NNE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ENE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
E	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ESE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
S	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
WSW	0.0417	0.0000	0.0000	0.0000	0.0000	0.0000	0.0417
W	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
WNW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NNW	0.0417	0.1250	0.0000	0.0000	0.0000	0.0000	0.1667
CALM	0.5833						



(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



Meteorological Monitoring Results : Wind Rose MTR-PTTGC6-Refinery

Location : Takuan-Ao pradu Community 1		Monitor period : 08-09 Jan 2026	
Wind Speed Model : Novalynx WS-25		Serial No : A5088	
Wind Direction Model : Novalynx WS-25		Serial No : A5088	
Time	08-09 Jan 2026		WD
	WS(m/s)		
14:00 - 15:00	0.2		NNW
15:00 - 16:00	0.5		NNW
16:00 - 17:00	1.2		N
17:00 - 18:00	0.3		NNW
18:00 - 19:00	1.6		NNW
19:00 - 20:00	0.4		NNW
20:00 - 21:00	1.3		NNW
21:00 - 22:00	1.2		NNW
22:00 - 23:00	1.7		N
23:00 - 24:00	0.2		N
00:00 - 01:00	0.3		N
01:00 - 02:00	0.4		N
02:00 - 03:00	0.7		N
03:00 - 04:00	0.9		N
04:00 - 05:00	0.2		N
05:00 - 06:00	0.1		WSW
06:00 - 07:00	0.2		WSW
07:00 - 08:00	0.4		W
08:00 - 09:00	0.6		N
09:00 - 10:00	0.3		NNE
10:00 - 11:00	0.4		SSW
11:00 - 12:00	0.5		WSW
12:00 - 13:00	0.2		SW
13:00 - 14:00	0.3		WSW
Wind Rose			



File Control : R:\Database\Win\res\Win-226010-Takuan-Ao pradu Community 1 08-09 Jan 2026

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



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AMBIENT AIR QUALITY ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd. Branch 6 (Refinery GC 6)	REQUEST SERVICE No.	: 0060/69
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING METHOD	: Subatmospheric Pressure Sampling
SAMPLING DATE	: 08-09/01/2026	ANALYTICAL DATE	: 14-15/01/2026
SAMPLING TIME	: 14:42-14:00	SAMPLE CONDITION	: Normal
RECEIVED DATE	: 10/01/2026	FILE CODE	: 226010_TO-15_January
REPORT DATE	: 17/01/2026		

Compound	Non Detection		SAMPLING LOCATION		STANDARD* ($\mu\text{g}/\text{m}^3$)
			Takuan-Ao Pradu Community 2		
	ppbv	$\mu\text{g}/\text{m}^3$	ppbv	$\mu\text{g}/\text{m}^3$	
Benzene	0.004	0.013	0.60	1.92	7.6

Methods for the Determination of Toxic Organic Compound in Ambient Air, 2nd : EPA Methods TO-15, 1999

Jularat Jaemruen
(Miss Jularat Jaemruen)

Analyst

Siriwan Chimsa-ngu
(Miss Siriwan Chimsa-ngu)

Technical Management Team

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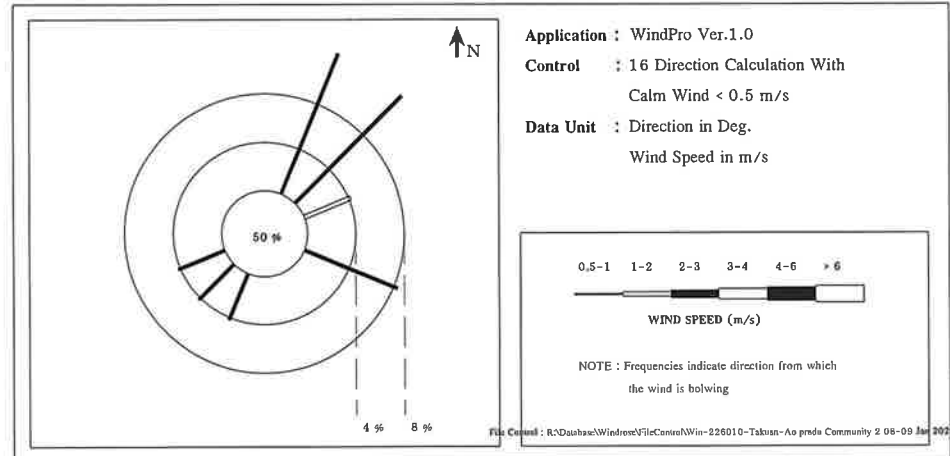
3. * Notification of the Pollution Control Department, dated December 18, B.E.2551(2008), which was published in the Royal Government Gazette Vol. 126, Special Part 13D dated January 27, B.E. 2552 (2009).



Meteorological Monitoring Results : Wind Rose MTR-PTTGC6-Refinery

Location : Takuan-Ao pradu Community 2 Monitor period : 08-09 Jan 2026
Wind Speed Model : NRG Symphonie Serial No : 309012348
Wind Direction Model : NRG Symphonie Serial No : 309012348

Direction	Percentage of Occurrence of Wind Direct Grouped in Various Wind Speed						Total
	0.5-1 m/s	1-2 m/s	2-3 m/s	3-4 m/s	4-6 m/s	More than 6	
N	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NNE	0.1250	0.0000	0.0000	0.0000	0.0000	0.0000	0.1250
NE	0.1250	0.0000	0.0000	0.0000	0.0000	0.0000	0.1250
ENE	0.0000	0.0417	0.0000	0.0000	0.0000	0.0000	0.0417
E	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ESE	0.0833	0.0000	0.0000	0.0000	0.0000	0.0000	0.0833
SE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
S	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSW	0.0417	0.0000	0.0000	0.0000	0.0000	0.0000	0.0417
SW	0.0417	0.0000	0.0000	0.0000	0.0000	0.0000	0.0417
WSW	0.0417	0.0000	0.0000	0.0000	0.0000	0.0000	0.0417
W	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
WNW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NNW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CALM	0.5000						



(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



Meteorological Monitoring Results : Wind Rose MTR-PTTGC6-Refinery

Location : Takuan-Ao pradu Community 2 Monitor period : 08-09 Jan 2026
Wind Speed Model : NRG Symphonie Serial No : 309012348
Wind Direction Model : NRG Symphonie Serial No : 309012348

Time	08-09 Jan 2026	
	WS(m/s)	WD
11:00 - 12:00	0.4	NNE
12:00 - 13:00	0.4	NNE
13:00 - 14:00	0.4	NNE
14:00 - 15:00	0.4	NNE
15:00 - 16:00	0.4	NNE
16:00 - 17:00	0.4	NNE
17:00 - 18:00	0.6	NE
18:00 - 19:00	0.5	NNE
19:00 - 20:00	0.4	NNE
20:00 - 21:00	0.4	NNE
21:00 - 22:00	0.5	NNE
22:00 - 23:00	0.4	NNE
23:00 - 24:00	0.4	NNE
00:00 - 01:00	0.6	ESE
01:00 - 02:00	0.9	ESE
02:00 - 03:00	1.0	ENE
03:00 - 04:00	0.8	NE
04:00 - 05:00	0.7	NNE
05:00 - 06:00	0.4	NNE
06:00 - 07:00	0.4	NNE
07:00 - 08:00	0.6	NE
08:00 - 09:00	0.8	SSW
09:00 - 10:00	0.9	SW
10:00 - 11:00	0.6	WSW

Wind Rose



(Miss Katesarin Vorradetwittaya)
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AMBIENT AIR QUALITY ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical Public Co., Ltd, Branch 6 (Refinery GC 6)
REQUEST SERVICE No. : 0183/69
SAMPLING BY : SECOT Co., Ltd.
SAMPLING METHOD : Subatmospheric Pressure Sampling
SAMPLING DATE : 03-04/02/2026
ANALYTICAL DATE : 07/02/2026
SAMPLING TIME : 13:44-13:28
SAMPLE CONDITION : Normal
RECEIVED DATE : 05/02/2026
FILE CODE : 226010_TO-15_February
REPORT DATE : 07/02/2026

Compound	SAMPLING LOCATION				STANDARD* (µg/m ³)
	Non Detection		Takuan-Ao Pradu Community 1		
	ppbv	µg/m ³	ppbv	µg/m ³	
Benzene	0.004	0.013	0.83	2.65	7.6

Methods for the Determination of Toxic Organic Compound in Ambient Air, 2nd - EPA Methods TO-15.1999

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

Sittham Chimsanag

(Miss Siriwan Chimsa-ngai)

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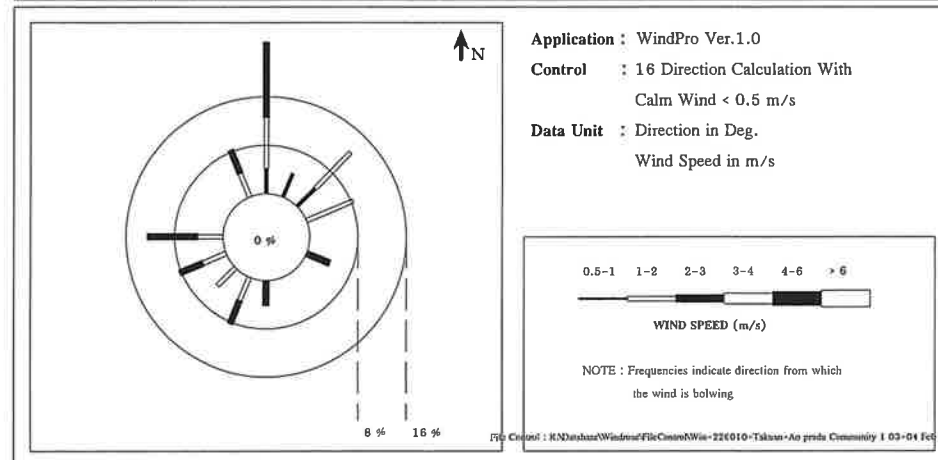
R:\Database\Windrose\FileComm\Win-226010-Takuan-Ao pradu Community 1 03-04 Feb 2026



Meteorological Monitoring Results : Wind Rose
MTR-PTTGC6-Refinery

Location : Takuan-Ao pradu Community 1
Monitor period : 03-04 Feb 2026
Wind Speed Model : Novalynx WS-25
Serial No : A4907
Wind Direction Model : Novalynx WS-25
Serial No : A4907

Direction	Percentage of Occurrence of Wind Direct Grouped in Various Wind Speed						Total
	0.5-1 m/s	1-2 m/s	2-3 m/s	3-4 m/s	4-6 m/s	More than 6	
N	0.0417	0.0833	0.1250	0.0000	0.0000	0.0000	0.2500
NNE	0.0417	0.0000	0.0000	0.0000	0.0000	0.0000	0.0417
NE	0.0417	0.0833	0.0000	0.0000	0.0000	0.0000	0.1250
ENE	0.0000	0.0833	0.0000	0.0000	0.0000	0.0000	0.0833
E	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ESE	0.0000	0.0000	0.0417	0.0000	0.0000	0.0000	0.0417
SE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
S	0.0000	0.0000	0.0417	0.0000	0.0000	0.0000	0.0417
SSW	0.0000	0.0417	0.0417	0.0000	0.0000	0.0000	0.0833
SW	0.0000	0.0417	0.0000	0.0000	0.0000	0.0000	0.0417
WSW	0.0000	0.0417	0.0417	0.0000	0.0000	0.0000	0.0833
W	0.0000	0.0417	0.0833	0.0000	0.0000	0.0000	0.1250
WNW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NNW	0.0000	0.0417	0.0417	0.0000	0.0000	0.0000	0.0833
CALM	0.0000						



(Miss Katesarin Vorradetwittaya)

Environmental Scientist

Preeda S.

(Miss Preeda Somjai)
Technical Management Team

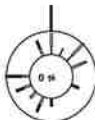


Meteorological Monitoring Results : Wind Rose

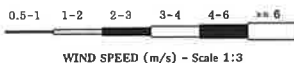
MTR-PTTGC6-Refinery

Location : Takuan-Ao pradu Community 1		Monitor period : 03-04 Feb 2026	
Wind Speed Model : Novalynx WS-25		Serial No : A4907	
Wind Direction Model : Novalynx WS-25		Serial No : A4907	

Time	03-04 Feb 2026	
	WS(m/s)	WD
13:00 - 14:00	2.0	SSW
14:00 - 15:00	2.0	S
15:00 - 16:00	1.3	SSW
16:00 - 17:00	1.4	WSW
17:00 - 18:00	2.0	W
18:00 - 19:00	2.1	W
19:00 - 20:00	2.1	WSW
20:00 - 21:00	1.5	W
21:00 - 22:00	0.8	N
22:00 - 23:00	1.0	N
23:00 - 24:00	1.5	NNW
00:00 - 01:00	2.2	NNW
01:00 - 02:00	2.2	ESE
02:00 - 03:00	1.7	ENE
03:00 - 04:00	2.2	N
04:00 - 05:00	1.0	NE
05:00 - 06:00	0.8	NE
06:00 - 07:00	0.8	NNE
07:00 - 08:00	1.0	N
08:00 - 09:00	1.1	NE
09:00 - 10:00	2.1	N
10:00 - 11:00	2.2	N
11:00 - 12:00	1.9	ENE
12:00 - 13:00	1.0	SW

Wind Rose	
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12 %



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AMBIENT AIR QUALITY ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd. Branch 6 (Refinery GC 6)	REQUEST SERVICE No.	: 0183/69
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING METHOD	: Subatmospheric Pressure Sampling
SAMPLING DATE	: 03-04/02/2026	ANALYTICAL DATE	: 07/02/2026
SAMPLING TIME	: 13:33-13:22	SAMPLE CONDITION	: Normal
RECEIVED DATE	: 05/02/2026	FILE CODE	: 226010_TO-15_February
REPORT DATE	: 07/02/2026		

Compound	SAMPLING LOCATION				STANDARD* ($\mu\text{g}/\text{m}^3$)
	Non Detection		Takuan-Ao Pradu Community 2		
	ppbv	$\mu\text{g}/\text{m}^3$	ppbv	$\mu\text{g}/\text{m}^3$	
Benzene	0.004	0.013	0.77	2.46	7.6

Methods for the Determination of Toxic Organic Compound in Ambient Air, ^{2nd} : EPA Methods TO-15.1999

Jutarat Jaemruen
 (Miss Jutarat Jaemruen)

Analyst

Siriwan Chimsa-ngai
 (Miss Siriwan Chimsa-ngai)

Technical Management Team

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(Miss Katesarin Vorradetwittaya)
 Environmental Scientist

Preeda S.
 (Miss Preeda Somjai)
 Technical Management Team



Meteorological Monitoring Results : Wind Rose

MTR-PTTGC6-Refinery

Location : Takuan-Ao pradu Community 2

Monitor period : 03-04 Feb 2026

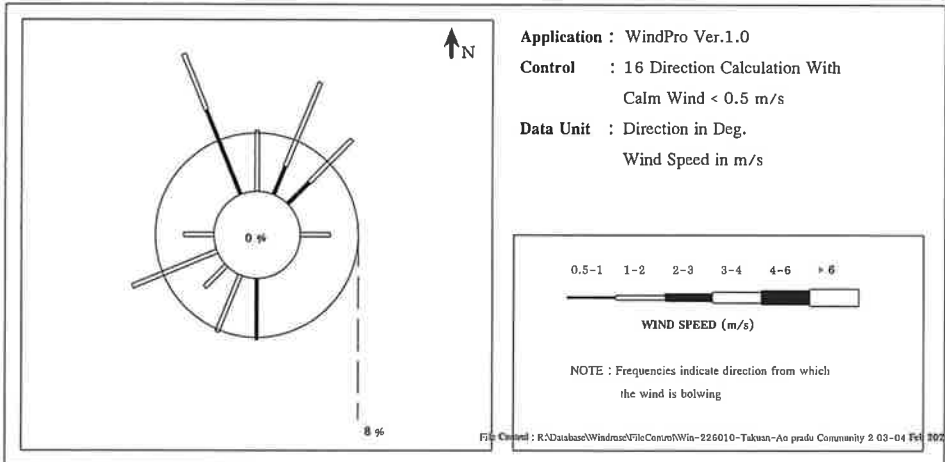
Wind Speed Model : Novalynx WS-25

Serial No : A5092

Wind Direction Model : Novalynx WS-25

Serial No : A5092

Direction	Percentage of Occurrence of Wind Direct Grouped in Various Wind Speed						Total
	0.5-1 m/s	1-2 m/s	2-3 m/s	3-4 m/s	4-6 m/s	More than 6	
N	0.0000	0.0833	0.0000	0.0000	0.0000	0.0000	0.0833
NNE	0.0417	0.1250	0.0000	0.0000	0.0000	0.0000	0.1667
NE	0.0417	0.0833	0.0000	0.0000	0.0000	0.0000	0.1250
ENE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
E	0.0000	0.0417	0.0000	0.0000	0.0000	0.0000	0.0417
ESE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
S	0.0833	0.0000	0.0000	0.0000	0.0000	0.0000	0.0833
SSW	0.0000	0.0833	0.0000	0.0000	0.0000	0.0000	0.0833
SW	0.0000	0.0417	0.0000	0.0000	0.0000	0.0000	0.0417
WSW	0.0000	0.1250	0.0000	0.0000	0.0000	0.0000	0.1250
W	0.0000	0.0417	0.0000	0.0000	0.0000	0.0000	0.0417
WNW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NNW	0.1250	0.0833	0.0000	0.0000	0.0000	0.0000	0.2083
CALM	0.0000						



(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Preeda Somjai)
Technical Management Team



Meteorological Monitoring Results : Wind Rose

MTR-PTTGC6-Refinery

Location : Takuan-Ao pradu Community 2

Monitor period : 03-04 Feb 2026

Wind Speed Model : Novalynx WS-25

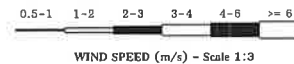
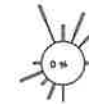
Serial No : A5092

Wind Direction Model : Novalynx WS-25

Serial No : A5092

Time	03-04 Feb 2026	
	WS(m/s)	WD
13:00 - 14:00	1.2	SSW
14:00 - 15:00	0.8	S
15:00 - 16:00	0.7	S
16:00 - 17:00	1.3	SW
17:00 - 18:00	1.6	WSW
18:00 - 19:00	1.2	W
19:00 - 20:00	1.5	WSW
20:00 - 21:00	1.7	WSW
21:00 - 22:00	0.9	NNW
22:00 - 23:00	0.8	NNW
23:00 - 24:00	0.9	NNW
00:00 - 01:00	1.0	NNW
01:00 - 02:00	1.5	E
02:00 - 03:00	1.2	NE
03:00 - 04:00	1.6	NNW
04:00 - 05:00	1.0	NNE
05:00 - 06:00	0.8	NNE
06:00 - 07:00	1.5	N
07:00 - 08:00	1.7	N
08:00 - 09:00	0.8	NE
09:00 - 10:00	1.3	NNE
10:00 - 11:00	1.5	N
11:00 - 12:00	1.2	NE
12:00 - 13:00	1.7	SSW

Wind Rose



File Control : R:\Database\Windrose\FileControl\Win-226010-Takuan-Ao pradu Community 2 03-04 Feb 2026

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Preeda Somjai)
Technical Management Team



บริษัท ซีคอต จำกัด SECOT CO., LTD.

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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

AMBIENT AIR QUALITY ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd. Branch 6	REQUEST SERVICE No.	: 0392/69
	(Refinery GC 6)	SAMPLING METHOD	: Subatmospheric Pressure Sampling
SAMPLING BY	: SECOT Co., Ltd.	ANALYTICAL DATE	: 07/03/2026
SAMPLING DATE	: 04-05/03/2026	SAMPLE CONDITION	: Normal
SAMPLING TIME	: 09:34-09:59	FILE CODE	: 226010_TO-15_March
RECEIVED DATE	: 06/03/2026		
REPORT DATE	: 09/03/2026		

Compound	SAMPLING LOCATION				STANDARD* ($\mu\text{g}/\text{m}^3$)
	Non Detection		Takuan-Ao Pradu Community 1		
	ppbv	$\mu\text{g}/\text{m}^3$	ppbv	$\mu\text{g}/\text{m}^3$	
Benzene	0.004	0.013	0.47	1.50	7.6

Methods for the Determination of Toxic Organic Compound in Ambient Air, 2nd : EPA Methods TO-15, 1999

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

Siriwan Chimsa-ngab

(Miss Siriwan Chimsa-ngab)

Technical Management Team

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

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3. * Notification of the Pollution Control Department, dated December 18,B.E.2551(2008), which was published in the Royal Government Gazette Vol. 126, Special Part 13D dated January 27, B.E. 2552 (2009).

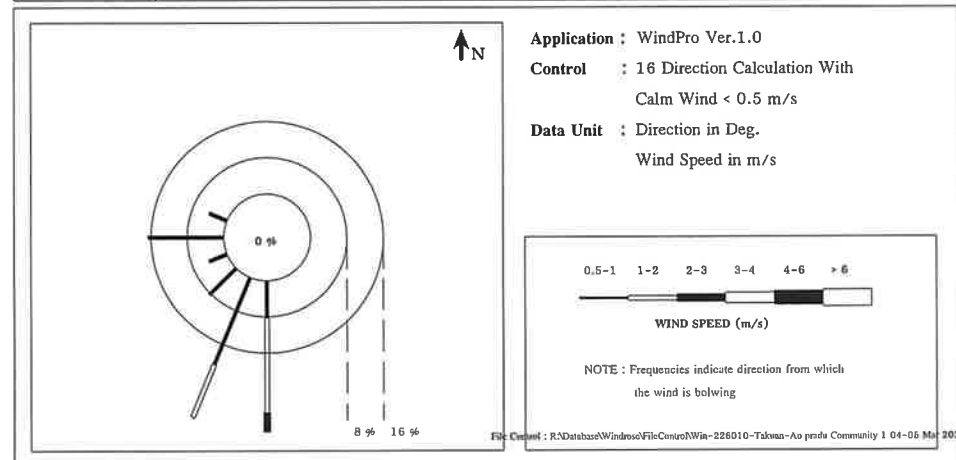
R:\Database\Windrose\FileControlWin-226010-Takuan-Ao pradu Community 1 04-05 Mar 2026



Meteorological Monitoring Results : Wind Rose MTR-PTTGC6-Refinery

Location : Takuan-Ao pradu Community 1	Monitor period : 04-05 Mar 2026
Wind Speed Model : Scarlet WS-21	Serial No : AD:62
Wind Direction Model : Scarlet WS-21	Serial No : AD:62

Direction	Percentage of Occurrence of Wind Direct Grouped in Various Wind Speed						Total
	0.5-1 m/s	1-2 m/s	2-3 m/s	3-4 m/s	4-6 m/s	More than 6	
N	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NNE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ENE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
E	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ESE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
S	0.0833	0.2083	0.0417	0.0000	0.0000	0.0000	0.3333
SSW	0.2083	0.1250	0.0000	0.0000	0.0000	0.0000	0.3333
SW	0.0833	0.0000	0.0000	0.0000	0.0000	0.0000	0.0833
WSW	0.0417	0.0000	0.0000	0.0000	0.0000	0.0000	0.0417
W	0.1667	0.0000	0.0000	0.0000	0.0000	0.0000	0.1667
WNW	0.0417	0.0000	0.0000	0.0000	0.0000	0.0000	0.0417
NW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NNW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CALM	0.0000						



(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



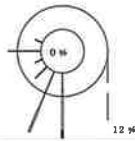
Meteorological Monitoring Results : Wind Rose

MTR-PTTGC6-Refinery

Location : Takuan-Ao pradu Community 1 Monitor period : 04-05 Mar 2026
 Wind Speed Model : Scarlet WS-21 Serial No : AD:62
 Wind Direction Model : Scarlet WS-21 Serial No : AD:62

Time	04-05 Mar 2026	
	WS(m/s)	WD
10:00 - 11:00	1.3	S
11:00 - 12:00	1.1	SSW
12:00 - 13:00	1.0	S
13:00 - 14:00	1.0	S
14:00 - 15:00	0.9	S
15:00 - 16:00	0.9	S
16:00 - 17:00	0.7	SSW
17:00 - 18:00	0.7	SSW
18:00 - 19:00	0.9	SSW
19:00 - 20:00	0.8	SSW
20:00 - 21:00	0.8	SSW
21:00 - 22:00	0.7	WSW
22:00 - 23:00	0.7	SW
23:00 - 24:00	0.8	W
00:00 - 01:00	0.7	W
01:00 - 02:00	0.7	W
02:00 - 03:00	0.6	WNW
03:00 - 04:00	0.6	W
04:00 - 05:00	0.8	SW
05:00 - 06:00	1.0	SSW
06:00 - 07:00	1.3	S
07:00 - 08:00	1.3	S
08:00 - 09:00	1.1	SSW
09:00 - 10:00	2.3	S

Wind Rose



WIND SPEED (m/s) - Scale 1:3

File Control : R:\Database\Windrose\File Control\Win-226010-Takuan-Ao pradu Community 1 04-05 Mar 2026

(Miss Katesarin Vorradetwittaya)
 Environmental Scientist

Preeda S.
 (Miss Preeda Somjai)
 Technical Management Team



บริษัท ซีคอต จำกัด

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

AMBIENT AIR QUALITY ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical Public Co., Ltd, Branch 6 REQUEST SERVICE No. : 0392/69
 (Refinery GC 6) SAMPLING METHOD : Subatmospheric Pressure Sampling
 SAMPLING BY : SECOT Co., Ltd. ANALYTICAL DATE : 07/03/2026
 SAMPLING DATE : 04-05/03/2026 SAMPLE CONDITION : Normal
 SAMPLING TIME : 09:26-09:53 FILE CODE : 226010_TO-15_March
 RECEIVED DATE : 06/03/2026
 REPORT DATE : 09/03/2026

Compound	SAMPLING LOCATION				STANDARD* ($\mu\text{g}/\text{m}^3$)
	Non Detection		Takuan-Ao Pradu Community 2		
	ppbv	$\mu\text{g}/\text{m}^3$	ppbv	$\mu\text{g}/\text{m}^3$	
Benzene	0.004	0.013	0.19	0.61	7.6

Methods for the Determination of Toxic Organic Compound in Ambient Air, 2nd : EPA Methods TO-15.1999

Jutarat Jaemruen
 (Miss Jutarat Jaemruen)

Analyst

Siriwan Chimsa-nga
 (Miss Siriwan Chimsa-nga)

Technical Management Team

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Meteorological Monitoring Results : Wind Rose

MTR-PTTGC6-Refinery

Location : Takuan-Ao pradu Community 2

Monitor period : 04-05 Mar 2026

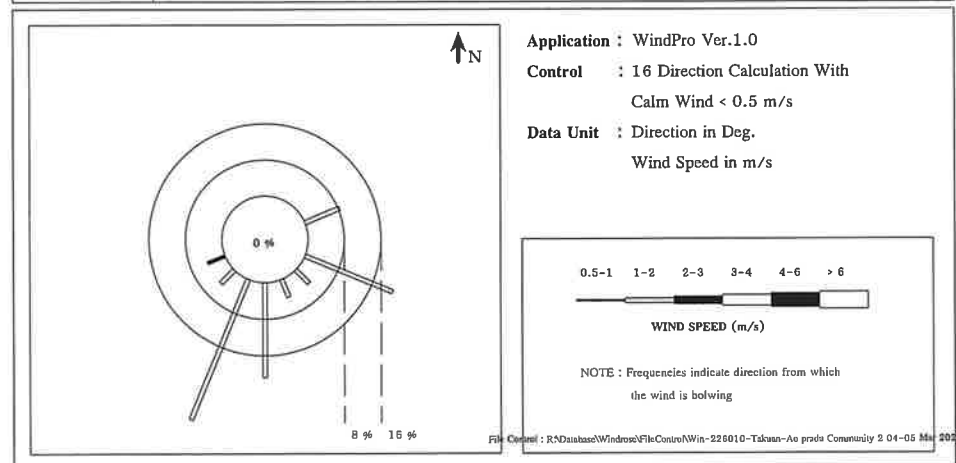
Wind Speed Model : Scarlet WS-21

Serial No : AD:42

Wind Direction Model : Scarlet WS-21

Serial No : AD:42

Direction	Percentage of Occurrence of Wind Direct Grouped in Various Wind Speed						Total
	0.5-1 m/s	1-2 m/s	2-3 m/s	3-4 m/s	4-6 m/s	More than 6	
N	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NNE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ENE	0.0000	0.0833	0.0000	0.0000	0.0000	0.0000	0.0833
E	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ESE	0.0000	0.2083	0.0000	0.0000	0.0000	0.0000	0.2083
SE	0.0000	0.0417	0.0000	0.0000	0.0000	0.0000	0.0417
SSE	0.0000	0.0417	0.0000	0.0000	0.0000	0.0000	0.0417
S	0.0000	0.2083	0.0000	0.0000	0.0000	0.0000	0.2083
SSW	0.0000	0.3333	0.0000	0.0000	0.0000	0.0000	0.3333
SW	0.0000	0.0417	0.0000	0.0000	0.0000	0.0000	0.0417
WSW	0.0417	0.0000	0.0000	0.0000	0.0000	0.0000	0.0417
W	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
WNW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NNW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CALM	0.0000						



(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



Meteorological Monitoring Results : Wind Rose

MTR-PTTGC6-Refinery

Location : Takuan-Ao pradu Community 2

Monitor period : 04-05 Mar 2026

Wind Speed Model : Scarlet WS-21

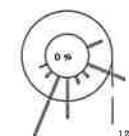
Serial No : AD:42

Wind Direction Model : Scarlet WS-21

Serial No : AD:42

Time	04-05 Mar 2026	
	WS(m/s)	WD
10:00 - 11:00	1.6	S
11:00 - 12:00	1.7	SSW
12:00 - 13:00	1.7	SSW
13:00 - 14:00	1.5	SSW
14:00 - 15:00	1.5	SSW
15:00 - 16:00	1.4	SSW
16:00 - 17:00	1.4	SSW
17:00 - 18:00	1.2	S
18:00 - 19:00	1.3	S
19:00 - 20:00	1.4	SSW
20:00 - 21:00	1.3	SSE
21:00 - 22:00	1.2	SE
22:00 - 23:00	1.3	ESE
23:00 - 24:00	1.3	ESE
00:00 - 01:00	1.2	ESE
01:00 - 02:00	1.3	ESE
02:00 - 03:00	1.3	ESE
03:00 - 04:00	1.6	ENE
04:00 - 05:00	1.6	ENE
05:00 - 06:00	1.4	SW
06:00 - 07:00	1.5	S
07:00 - 08:00	1.8	SSW
08:00 - 09:00	1.6	S
09:00 - 10:00	0.9	WSW

Wind Rose



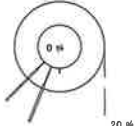
File Control : R:\Database\Windrose\Win-226010-Takuan-Ao pradu Community 2 04-05 Mar 2026

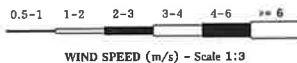
(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



Meteorological Monitoring Results : Wind Rose MTR-PTTGC6-Refinery

Location : Takuan-Ao pradu Community 1		Monitor period : 02-03 Apr 2026	
Wind Speed Model : Novalynx WS-25		Serial No : A4907	
Wind Direction Model : Novalynx WS-25		Serial No : A4907	
Time	02-03 Apr 2026		
	WS(m/s)	WD	
12:00 - 13:00	0.8	SSW	
13:00 - 14:00	1.6	SW	
14:00 - 15:00	1.2	SW	
15:00 - 16:00	1.0	SSW	
16:00 - 17:00	1.2	SSW	
17:00 - 18:00	1.3	SW	
18:00 - 19:00	1.3	SSW	
19:00 - 20:00	0.9	SSW	
20:00 - 21:00	1.2	SSW	
21:00 - 22:00	1.0	SW	
22:00 - 23:00	1.0	SSW	
23:00 - 24:00	1.3	SSW	
00:00 - 01:00	1.0	SW	
01:00 - 02:00	0.9	SSW	
02:00 - 03:00	1.2	SSW	
03:00 - 04:00	1.7	SSW	
04:00 - 05:00	1.4	SW	
05:00 - 06:00	0.8	SW	
06:00 - 07:00	1.3	SW	
07:00 - 08:00	1.7	SW	
08:00 - 09:00	1.0	SW	
09:00 - 10:00	0.7	SSW	
10:00 - 11:00	0.8	SW	
11:00 - 12:00	0.7	S	
Wind Rose			



File Control : R:\Database\Windrose\FileControl\Win-226010-Takuan-Ao pradu Community 1 02-03 Apr 2026


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


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Technical Management Team



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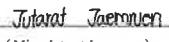
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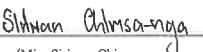
AMBIENT AIR QUALITY ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd. Branch 6 (Refinery GC 6)	REQUEST SERVICE No.	: 0562/69
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING METHOD	: Subatmospheric Pressure Sampling
SAMPLING DATE	: 02-03/04/2026	ANALYTICAL DATE	: 06/04/2026
SAMPLING TIME	: 11:51-11:50	SAMPLE CONDITION	: Normal
RECEIVED DATE	: 04/04/2026	FILE CODE	: 226010_TO-15_April
REPORT DATE	: 07/04/2026		

Compound	SAMPLING LOCATION				STANDARD* (µg/m ³)
	Non Detection		Takuan-Ao Pradu Community 2		
	ppbv	µg/m ³	ppbv	µg/m ³	
Benzene	0.004	0.013	0.06	0.19	7.6

Methods for the Determination of Toxic Organic Compounds in Ambient Air, 3rd : EPA Methods TO-15, 1999


(Miss Jutarat Jaemruen)
Analyst


(Miss Sirivan Chimsa-nga)
Technical Management Team

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Meteorological Monitoring Results : Wind Rose

MTR-PTTGC6-Refinery

Location : Takuan-Ao pradu Community 2

Monitor period : 02-03 Apr 2026

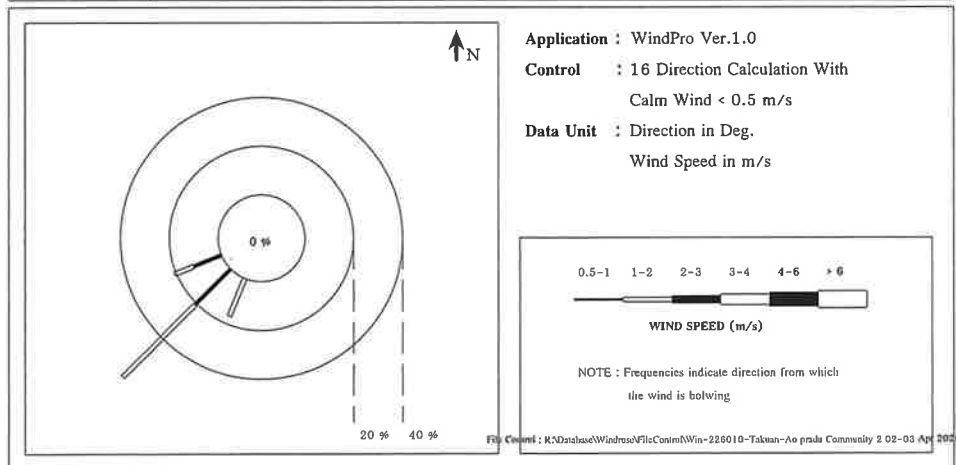
Wind Speed Model : Novalynx WS-25

Serial No : A4905

Wind Direction Model : Novalynx WS-25

Serial No : A4905

Direction	Percentage of Occurrence of Wind Direct Grouped in Various Wind Speed						
	0.5-1 m/s	1-2 m/s	2-3 m/s	3-4 m/s	4-6 m/s	More than 6	Total
N	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NNE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ENE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
E	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ESE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
S	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSW	0.0000	0.1667	0.0000	0.0000	0.0000	0.0000	0.1667
SW	0.2083	0.4167	0.0000	0.0000	0.0000	0.0000	0.6250
WSW	0.1250	0.0833	0.0000	0.0000	0.0000	0.0000	0.2083
W	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
WNW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NNW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CALM	0.0000						



(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



Meteorological Monitoring Results : Wind Rose

MTR-PTTGC6-Refinery

Location : Takuan-Ao pradu Community 2

Monitor period : 02-03 Apr 2026

Wind Speed Model : Novalynx WS-25

Serial No : A4905

Wind Direction Model : Novalynx WS-25

Serial No : A4905

Time	02-03 Apr 2026	
	WS(m/s)	WD
11:00 - 12:00	1.3	SW
12:00 - 13:00	0.7	SW
13:00 - 14:00	1.1	WSW
14:00 - 15:00	0.8	SW
15:00 - 16:00	0.7	SW
16:00 - 17:00	1.2	SW
17:00 - 18:00	1.2	SW
18:00 - 19:00	1.2	SW
19:00 - 20:00	0.8	SW
20:00 - 21:00	1.3	SW
21:00 - 22:00	1.0	SW
22:00 - 23:00	0.9	SW
23:00 - 24:00	1.0	SSW
00:00 - 01:00	1.2	SW
01:00 - 02:00	1.3	SSW
02:00 - 03:00	1.2	SSW
03:00 - 04:00	1.1	SW
04:00 - 05:00	1.3	SW
05:00 - 06:00	0.8	WSW
06:00 - 07:00	0.9	WSW
07:00 - 08:00	1.0	WSW
08:00 - 09:00	1.0	SW
09:00 - 10:00	1.0	SSW
10:00 - 11:00	0.9	WSW

Wind Rose



(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



บริษัท ซีคอต จำกัด SECOT CO., LTD.

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

AMBIENT AIR QUALITY ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd. Branch 6	REQUEST SERVICE No.	: 0718.0717/69
	(Refinery GC 6)	SAMPLING METHOD	: Subatmospheric Pressure Sampling
SAMPLING BY	: SECOT Co., Ltd.	ANALYTICAL DATE	: 07/05/2026
SAMPLING DATE	: 03-04/05/2026	SAMPLE CONDITION	: Normal
SAMPLING TIME	: 12:20-12:00	FILE CODE	: 226010_TO-15_May
RECEIVED DATE	: 05/05/2026		
REPORT DATE	: 08/05/2026		

Compound	SAMPLING LOCATION				STANDARD* (µg/m ³)
	Non Detection		Takuan-Ao Pradu Community 1		
	ppbv	µg/m ³	ppbv	µg/m ³	
Benzene	0.004	0.013	0.17	0.54	7.6

Methods for the Determination of Toxic Organic Compound in Ambient Air, 2nd : EPA Methods TO-15.1999

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

Siriwan Chimsanga

(Miss Siriwan Chimsanga)

Technical Management Team

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R:\Database\Windrose\FileControl\Win-226010-Takuan-Ao pradu Community 1 03-04 May 2026



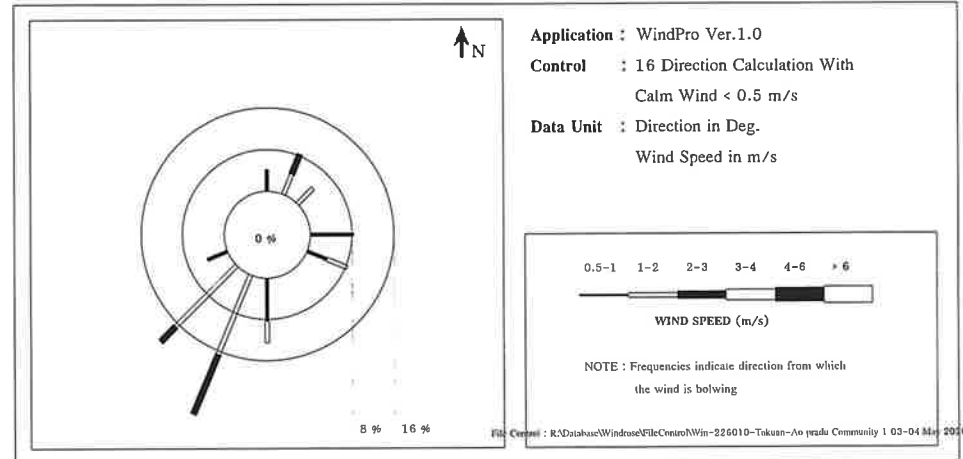
Meteorological Monitoring Results : Wind Rose MTR-PTTGC6-Refinery

Location : Takuan-Ao pradu Community 1 Monitor period : 03-04 May 2026

Wind Speed Model : Novalynx WS-25 Serial No : A4904

Wind Direction Model : Novalynx WS-25 Serial No : A4904

Direction	Percentage of Occurrence of Wind Direct Grouped in Various Wind Speed						Total
	0.5-1 m/s	1-2 m/s	2-3 m/s	3-4 m/s	4-6 m/s	More than 6	
N	0.0417	0.0000	0.0000	0.0000	0.0000	0.0000	0.0417
NNE	0.0000	0.0417	0.0417	0.0000	0.0000	0.0000	0.0833
NE	0.0000	0.0417	0.0000	0.0000	0.0000	0.0000	0.0417
ENE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
E	0.0833	0.0000	0.0000	0.0000	0.0000	0.0000	0.0833
ESE	0.0417	0.0417	0.0000	0.0000	0.0000	0.0000	0.0833
SE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
S	0.0833	0.0417	0.0000	0.0000	0.0000	0.0000	0.1250
SSW	0.0000	0.1667	0.1250	0.0000	0.0000	0.0000	0.2917
SW	0.0000	0.1667	0.0417	0.0000	0.0000	0.0000	0.2083
WSW	0.0417	0.0000	0.0000	0.0000	0.0000	0.0000	0.0417
W	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
WNW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NNW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CALM	0.0000						



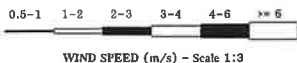
(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



Meteorological Monitoring Results : Wind Rose MTR-PTTGC6-Refinery

Location : Takuan-Ao pradu Community 1		Monitor period : 03-04 May 2026	
Wind Speed Model : Novalynx WS-25		Serial No : A4904	
Wind Direction Model : Novalynx WS-25		Serial No : A4904	
Time	03-04 May 2026		WD
	WS(m/s)		
11:00 - 12:00	1.9		SSW
12:00 - 13:00	1.6		S
13:00 - 14:00	2.0		NNE
14:00 - 15:00	1.2		NE
15:00 - 16:00	2.0		SSW
16:00 - 17:00	2.1		SSW
17:00 - 18:00	1.5		NNE
18:00 - 19:00	1.8		SSW
19:00 - 20:00	1.5		SSW
20:00 - 21:00	1.8		SW
21:00 - 22:00	1.5		SW
22:00 - 23:00	0.9		N
23:00 - 24:00	0.8		E
00:00 - 01:00	0.8		S
01:00 - 02:00	0.7		WSW
02:00 - 03:00	0.7		E
03:00 - 04:00	0.6		ESE
04:00 - 05:00	0.9		S
05:00 - 06:00	1.7		ESE
06:00 - 07:00	1.5		SSW
07:00 - 08:00	1.9		SW
08:00 - 09:00	1.4		SW
09:00 - 10:00	2.2		SW
10:00 - 11:00	2.4		SSW
Wind Rose			



File Control :R:\Database\Windrose\FileControl\Win-226010-Takuan-Ao pradu Community 1 03-04 May 2026

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Preeda Somjai)
Technical Management Team



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

AMBIENT AIR QUALITY ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd. Branch 6 (Refinery GC 6)	REQUEST SERVICE No.	: 0718,0717/69
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING METHOD	: Subatmospheric Pressure Sampling
SAMPLING DATE	: 03-04/05/2026	ANALYTICAL DATE	: 07/05/2026
SAMPLING TIME	: 11:47-11:45	SAMPLE CONDITION	: Normal
RECEIVED DATE	: 05/05/2026	FILE CODE	: 226010_TO-15_May
REPORT DATE	: 08/05/2026		

Compound	SAMPLING LOCATION				STANDARD* (µg/m ³)
	Non Detection		Takuan-Ao Pradu Community 2		
	ppbv	µg/m ³	ppbv	µg/m ³	
Benzene	0.004	0.013	0.04	0.13	7.6

Methods for the Determination of Toxic Organic Compound in Ambient Air, 2nd : EPA Methods TO-15,1999

(Miss Jutarat Jaemruen)

Analyst

(Miss Siriwan Chimsa-ngai)

Technical Management Team

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

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

3. * Notification of the Pollution Control Department, dated December 18,B.E.2551(2008), which was published in the Royal Government Gazette Vol. 126, Special Part 13D dated January 27, B.E. 2552 (2009).



Meteorological Monitoring Results : Wind Rose

MTR-PTTGC6-Refinery

Location : Takuan-Ao pradu Community 2

Monitor period : 03-04 May 2026

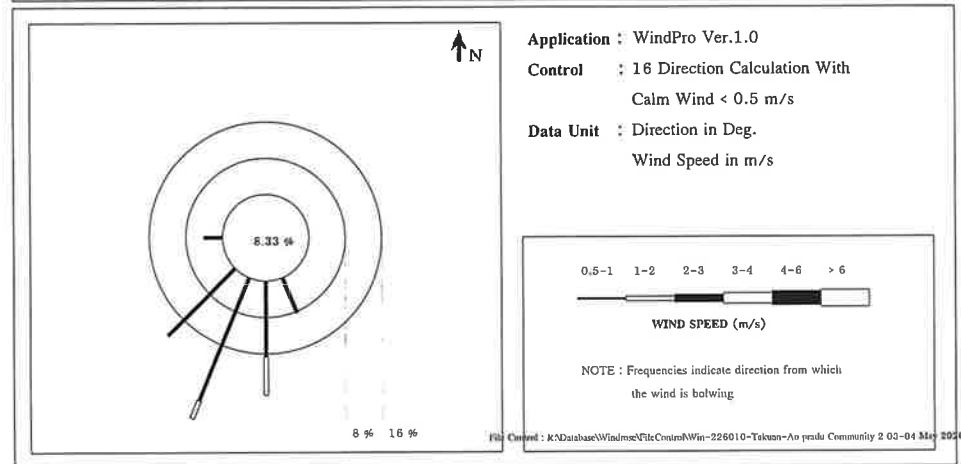
Wind Speed Model : Scarlet WS-21

Serial No : AD:42

Wind Direction Model : Scarlet WS-21

Serial No : AD:42

Direction	Percentage of Occurrence of Wind Direct Grouped in Various Wind Speed						
	0.5-1 m/s	1-2 m/s	2-3 m/s	3-4 m/s	4-6 m/s	More than 6	Total
N	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NNE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ENE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
E	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ESE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSE	0.0833	0.0000	0.0000	0.0000	0.0000	0.0000	0.0833
S	0.1667	0.0833	0.0000	0.0000	0.0000	0.0000	0.2500
SSW	0.2917	0.0417	0.0000	0.0000	0.0000	0.0000	0.3333
SW	0.2083	0.0000	0.0000	0.0000	0.0000	0.0000	0.2083
WSW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
W	0.0417	0.0000	0.0000	0.0000	0.0000	0.0000	0.0417
WNW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NNW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CALM	0.0833						



(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



Meteorological Monitoring Results : Wind Rose

MTR-PTTGC6-Refinery

Location : Takuan-Ao pradu Community 2

Monitor period : 03-04 May 2026

Wind Speed Model : Scarlet WS-21

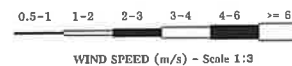
Serial No : AD:42

Wind Direction Model : Scarlet WS-21

Serial No : AD:42

Time	03-04 May 2026	
	WS(m/s)	WD
11:00 - 12:00	0.9	S
12:00 - 13:00	0.9	SW
13:00 - 14:00	1.0	SSW
14:00 - 15:00	0.9	SSW
15:00 - 16:00	0.9	S
16:00 - 17:00	0.8	SSE
17:00 - 18:00	0.9	SSE
18:00 - 19:00	0.8	S
19:00 - 20:00	0.6	SSW
20:00 - 21:00	0.6	SW
21:00 - 22:00	0.5	SW
22:00 - 23:00	0.7	SSW
23:00 - 24:00	0.7	SSW
00:00 - 01:00	0.7	SSW
01:00 - 02:00	0.8	SSW
02:00 - 03:00	0.7	SSW
03:00 - 04:00	0.6	SW
04:00 - 05:00	0.4	W
05:00 - 06:00	0.4	WSW
06:00 - 07:00	0.5	W
07:00 - 08:00	0.8	SW
08:00 - 09:00	0.8	S
09:00 - 10:00	1.0	S
10:00 - 11:00	1.0	S

Wind Rose



(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



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

AMBIENT AIR QUALITY ANALYSIS REPORT

CLIENT NAME	PTT Global Chemical Public Co., Ltd. Branch 6 (Refinery GC 6)	REQUEST SERVICE No.	0969/69
SAMPLING BY	SECOT Co., Ltd.	SAMPLING METHOD	Subatmospheric Pressure Sampling
SAMPLING DATE	04-05/06/2026	ANALYTICAL DATE	08/06/2026
SAMPLING TIME	09:50-09:45	SAMPLE CONDITION	Normal
RECEIVED DATE	06/06/2026	FILE CODE	226010_TO-15_June
REPORT DATE	10/06/2026		

Compound	Non Detection		SAMPLING LOCATION		STANDARD* ($\mu\text{g}/\text{m}^3$)
			Takuan-Ae Pradu Community I		
	ppbv	$\mu\text{g}/\text{m}^3$	ppbv	$\mu\text{g}/\text{m}^3$	
Benzene	0.004	0.013	0.13	0.42	7.6

Methods for the Determination of Toxic Organic Compound in Ambient Air, 2nd : EPA Methods TO-15, 1999

Jutarat Jaemruen
(Miss Jutarat Jaemruen)

Analyst

Siriwan Chimsa-ngae
(Miss Siriwan Chimsa-ngae)

Technical Management Team

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3. * Notification of the Pollution Control Department, dated December 18, B.E.2551(2008), which was published in the Royal Government Gazette Vol. 126, Special Part 13D dated January 27, B.E. 2552 (2009).

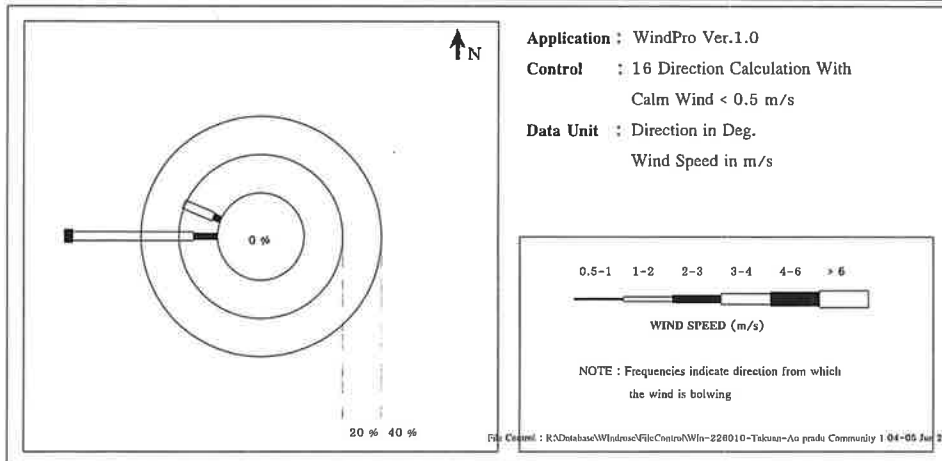
R:\Database\Windrose\FileControl\Win-226010-Takuan-Ao pradu Community 1 04-05 Jun 2026



Meteorological Monitoring Results : Wind Rose MTR-PTTGC6-Refinery

Location : Takuan-Ao pradu Community 1 Monitor period : 04-05 Jun 2026
Wind Speed Model : Scarlet WL-21 Serial No : 2112DR0042
Wind Direction Model : Scarlet WL-21 Serial No : 2112DR0042

Direction	Percentage of Occurrence of Wind Direct Grouped in Various Wind Speed						Total
	0.5-1 m/s	1-2 m/s	2-3 m/s	3-4 m/s	4-6 m/s	More than 6	
N	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NNE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ENE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
E	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ESE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
S	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
WSW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
W	0.0000	0.0000	0.1250	0.6250	0.0417	0.0000	0.7917
WNW	0.0000	0.0000	0.0417	0.1667	0.0000	0.0000	0.2083
NW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NNW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CALM	0.0000						



(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



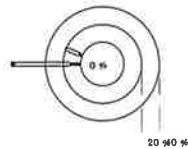
Meteorological Monitoring Results : Wind Rose

MTR-PTTGC6-Refinery

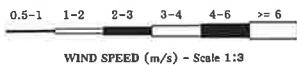
Location : Takuan-Ao pradu Community 1 Monitor period : 04-05 Jun 2026
 Wind Speed Model : Scarlet WL-21 Serial No : 2112DR0042
 Wind Direction Model : Scarlet WL-21 Serial No : 2112DR0042

Time	04-05 Jun 2026	
	WS(m/s)	WD
09:00 - 10:00	3.2	W
10:00 - 11:00	3.3	W
11:00 - 12:00	3.7	WNW
12:00 - 13:00	3.7	WNW
13:00 - 14:00	3.9	W
14:00 - 15:00	4.0	W
15:00 - 16:00	3.5	W
16:00 - 17:00	3.3	W
17:00 - 18:00	3.1	W
18:00 - 19:00	2.9	W
19:00 - 20:00	2.4	WNW
20:00 - 21:00	2.8	W
21:00 - 22:00	3.4	W
22:00 - 23:00	3.7	W
23:00 - 24:00	3.8	WNW
00:00 - 01:00	3.6	W
01:00 - 02:00	3.2	W
02:00 - 03:00	3.4	WNW
03:00 - 04:00	3.2	W
04:00 - 05:00	3.3	W
05:00 - 06:00	2.9	W
06:00 - 07:00	3.4	W
07:00 - 08:00	3.4	W
08:00 - 09:00	3.5	W

Wind Rose



20 %



File Control :K:\Database\Windrose\FileControl\Win-226010-Takuan-Ao pradu Community 1 04-05 Jun 2026



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

AMBIENT AIR QUALITY ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical Public Co., Ltd. Branch 6 REQUEST SERVICE No. : 0969/69
 (Refinery GC 6)
 SAMPLING BY : SECOT Co., Ltd. SAMPLING METHOD : Subatmospheric Pressure Sampling
 SAMPLING DATE : 04-05/06/2026 ANALYTICAL DATE : 08/06/2026
 SAMPLING TIME : 09:40-10:00 SAMPLE CONDITION : Normal
 RECEIVED DATE : 06/06/2026 FILE CODE : 226010_TO-15_June
 REPORT DATE : 10/06/2026

Compound	SAMPLING LOCATION				STANDARD* ($\mu\text{g}/\text{m}^3$)
	Non Detection		Takuan-Ao Pradu Community 2		
	ppbv	$\mu\text{g}/\text{m}^3$	ppbv	$\mu\text{g}/\text{m}^3$	
Benzene	0.004	0.013	0.09	0.29	7.6

Methods for the Determination of Toxic Organic Compound in Ambient Air, 2nd : EPA Methods TO-15.1999

Jutarat Jaemruen
 (Miss Jutarat Jaemruen)

Analyst

Siriwan Chimsa-nga
 (Miss Siriwan Chimsa-nga)

Technical Management Team

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(Miss Katesarin Vorradetwittaya)
 Environmental Scientist

(Miss Preeda Somjai)
 Technical Management Team



Meteorological Monitoring Results : Wind Rose

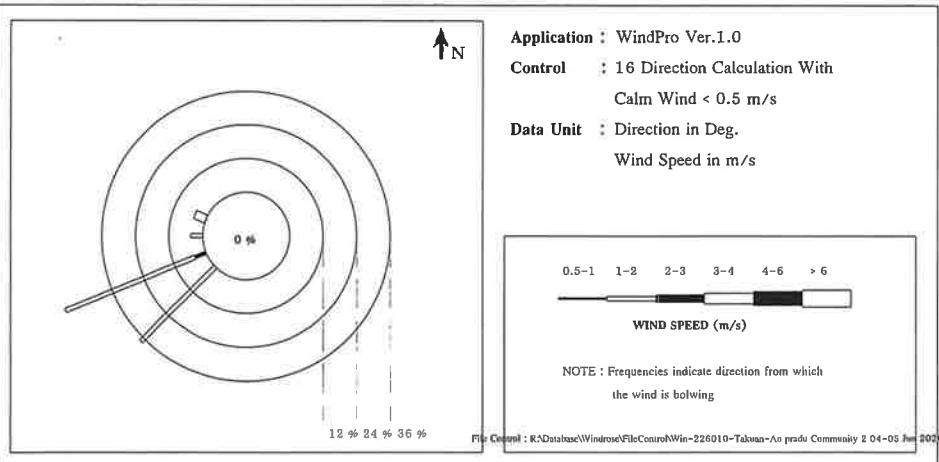
MTR-PTTGC6-Refinery

Location : Takuan-Ao pradu Community 2 Monitor period : 04-05 Jun 2026

Wind Speed Model : Scarlet WL-21 Serial No : 2205DR0038

Wind Direction Model : Scarlet WL-21 Serial No : 2205DR0038

Direction	Percentage of Occurrence of Wind Direct Grouped in Various Wind Speed						Total
	0.5-1 m/s	1-2 m/s	2-3 m/s	3-4 m/s	4-6 m/s	More than 6	
N	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NNE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ENE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
E	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ESE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
S	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SW	0.0000	0.3750	0.0000	0.0000	0.0000	0.0000	0.3750
WSW	0.0417	0.5000	0.0000	0.0000	0.0000	0.0000	0.5417
W	0.0000	0.0417	0.0000	0.0000	0.0000	0.0000	0.0417
WNW	0.0000	0.0000	0.0000	0.0417	0.0000	0.0000	0.0417
NW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NNW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CALM	0.0000						



(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Preeda Somjai)
Technical Management Team



Meteorological Monitoring Results : Wind Rose

MTR-PTTGC6-Refinery

Location : Takuan-Ao pradu Community 2 Monitor period : 04-05 Jun 2026

Wind Speed Model : Scarlet WL-21 Serial No : 2205DR0038

Wind Direction Model : Scarlet WL-21 Serial No : 2205DR0038

Time	04-05 Jun 2026	
	WS(m/s)	WD
09:00 - 10:00	1.3	SW
10:00 - 11:00	1.3	SW
11:00 - 12:00	1.3	WSW
12:00 - 13:00	1.4	W
13:00 - 14:00	1.4	WSW
14:00 - 15:00	1.4	WSW
15:00 - 16:00	1.3	WSW
16:00 - 17:00	1.3	SW
17:00 - 18:00	1.3	SW
18:00 - 19:00	1.1	SW
19:00 - 20:00	0.9	WSW
20:00 - 21:00	1.0	SW
21:00 - 22:00	1.3	SW
22:00 - 23:00	1.3	WSW
23:00 - 24:00	1.3	WSW
00:00 - 01:00	1.3	WSW
01:00 - 02:00	1.3	WSW
02:00 - 03:00	1.2	WSW
03:00 - 04:00	1.1	SW
04:00 - 05:00	1.2	SW
05:00 - 06:00	3.4	WNW
06:00 - 07:00	1.1	WSW
07:00 - 08:00	1.2	WSW
08:00 - 09:00	1.3	WSW

Wind Rose



File Control : R:\Database\Windrose\FileControl\Win-226010-Takuan-Ao pradu Community 2 04-05 Jun 2026

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Preeda Somjai)
Technical Management Team



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

AMBIENT AIR QUALITY ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical Public Co., Ltd. REFERENCE NO. : 226010-Amb-2605-0027
Branch 6 (Refinery)
SAMPLING BY : SECOT Co., Ltd. SAMPLING DATE : 18-25/05/2026
RECEIVED DATE : 02/06/2026 ANALYTICAL DATE : 05-09/06/2026
REPORT DATE : 12/06/2026 SAMPLE CONDITION : Normal
SITE OPERATOR : Mr. Siwanon Kulawong
LOCATION DESCRIPTION : 1. North of Refinery Area 3. Takuan-Ao Pradu Community 1
2. North of VCU Area 4. Takuan-Ao Pradu Community 2

PARAMETER	SAMPLING DATE	UNITS	RESULTS				STANDARD*	REFERENCE METHOD
			1	2	3	4		
TSP (24 hr)	18-19/05/2026	mg/m ³	0.039	0.016	0.014	0.011	0.200	High Volume Air
	19-20/05/2026	mg/m ³	0.026	0.015	0.015	0.012		Sampler / Gravimetric
	20-21/05/2026	mg/m ³	0.022	0.018	0.018	0.018		Method
	21-22/05/2026	mg/m ³	0.018	0.018	0.016	0.015		
	22-23/05/2026	mg/m ³	0.013	0.009	0.009	0.006		
	23-24/05/2026	mg/m ³	0.015	0.009	0.009	0.008		
	24-25/05/2026	mg/m ³	0.015	0.012	0.014	0.012		

(Miss Pornnapa Budthum)

Analyst

(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 National Environment Board, No.24, B.E.2569 (2026).



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SECOT CO., LTD.

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239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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

AMBIENT AIR QUALITY ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical Public Co., Ltd. REFERENCE NO. : 226010-Amb-2605-0027
Branch 6 (Refinery)
SAMPLING BY : SECOT Co., Ltd. SAMPLING DATE : 18-25/05/2026
RECEIVED DATE : 02/06/2026 ANALYTICAL DATE : 05-09/06/2026
REPORT DATE : 12/06/2026 SAMPLE CONDITION : Normal
SITE OPERATOR : Mr. Siwanon Kulawong
LOCATION DESCRIPTION : 1. North of Refinery Area 3. Takuan-Ao Pradu Community 1
2. North of VCU Area 4. Takuan-Ao Pradu Community 2

PARAMETER	SAMPLING DATE	UNITS	RESULTS				STANDARD*	REFERENCE METHOD
			1	2	3	4		
PM-10 (24 hr)	18-19/05/2026	mg/m ³	0.014	0.008	0.006	0.008	0.100	High Volume Air Sampler
	19-20/05/2026	mg/m ³	0.013	0.010	0.007	0.009		(Hi-Vol, PM-10 Size
	20-21/05/2026	mg/m ³	0.011	0.014	0.008	0.013		Selective Inlet/
	21-22/05/2026	mg/m ³	0.011	0.013	0.007	0.011		Gravimetric Method
	22-23/05/2026	mg/m ³	0.008	0.008	0.005	0.004		
	23-24/05/2026	mg/m ³	0.009	0.007	0.005	0.007		
	24-25/05/2026	mg/m ³	0.009	0.009	0.007	0.010		

(Miss Pornnapa Budthum)

Analyst

(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 National Environment Board, No.24, B.E.2569 (2026).



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AMBIENT AIR QUALITY ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical Public Co., Ltd. REFERENCE NO. : 226010-Amb-2605-0027
Branch 6 (Refinery)
SAMPLING BY : SECOT Co., Ltd. SAMPLING DATE : 18-24/05/2026
RECEIVED DATE : 02/06/2026 ANALYTICAL DATE : 09/06/2026
REPORT DATE : 18/06/2026 SAMPLE CONDITION : Normal
INSTRUMENT : Impingment Absorption SITE OPERATOR : Mr. Siwanon Kulawong
LOCATION DESCRIPTION : 1. North of Refinery Area 3. Takuan-Ao Pradu Community 1
2. North of VCU Area 4. Takuan-Ao Pradu Community 2

PARAMETER	SAMPLING DATE	UNITS	ND Non-detectable	RESULTS				REFERENCE METHOD
				1	2	3	4	
Hydrogen Sulfide (H ₂ S)	18/05/2026	ppm	<0.001	ND	ND	ND	ND	Intersociety Committee Method 701
	19/05/2026	ppm	<0.001	ND	ND	ND	ND	
	20/05/2026	ppm	<0.001	ND	ND	ND	ND	
	21/05/2026	ppm	<0.001	ND	ND	ND	ND	
	22/05/2026	ppm	<0.001	ND	ND	ND	ND	
	23/05/2026	ppm	<0.001	ND	ND	ND	ND	
	24/05/2026	ppm	<0.001	ND	ND	ND	ND	

Bongke Puthan
(Miss Pornnapa Budthum)

Analyst

Narisa Poowasanpetch
(Miss Narisa Poowasanpetch)

Technical Management Team

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AMBIENT AIR QUALITY ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical Public Co., Ltd. REFERENCE NO. : 226010-Amb-2605-0027
Branch 6 (Refinery)
SAMPLING BY : SECOT Co., Ltd. SAMPLING DATE : 18-24/05/2026
RECEIVED DATE : 02/06/2026 ANALYTICAL DATE : 06/06/2026
REPORT DATE : 18/06/2026 SAMPLE CONDITION : Normal
INSTRUMENT : Impingment Absorption SITE OPERATOR : Mr. Siwanon Kulawong
LOCATION DESCRIPTION : 1. North of Refinery Area 3. Takuan-Ao Pradu Community 1
2. North of VCU Area 4. Takuan-Ao Pradu Community 2

PARAMETER	SAMPLING DATE	UNITS	ND Non-detectable	RESULTS				REFERENCE METHOD
				1	2	3	4	
Non-methane	18/05/2026	ppm	<0.05	0.15	0.18	0.05	0.12	Flame Ionization Detection Method
Hydrocarbon (NMHC)	19/05/2026	ppm	<0.05	0.12	0.15	0.09	0.05	
	20/05/2026	ppm	<0.05	0.07	0.09	0.05	0.05	
	21/05/2026	ppm	<0.05	0.10	0.11	0.08	0.04	
	22/05/2026	ppm	<0.05	0.06	0.14	0.05	0.06	
	23/05/2026	ppm	<0.05	0.21	0.19	0.06	0.05	
	24/05/2026	ppm	<0.05	0.18	0.14	0.03	0.09	

Sudaporn S.
(Miss Sudaporn Soonthorn)

Analyst

Narisa Poowasanpetch
(Miss Narisa Poowasanpetch)

Technical Management Team

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AMBIENT AIR QUALITY ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical Public Co., Ltd. REFERENCE NO. : 226010-Amb-2605-0027
Branch 6 (Refinery)
SAMPLING BY : SECOT Co., Ltd. SAMPLING DATE : 18-24/05/2026
RECEIVED DATE : 02/06/2026 ANALYTICAL DATE : 06/06/2026
REPORT DATE : 18/06/2026 SAMPLE CONDITION : Normal
INSTRUMENT : Impingment Absorption SITE OPERATOR : Mr. Siwanon Kulawong
LOCATION DESCRIPTION : 1. North of Refinery Area 3. Takuan-Ao Pradu Community 1
2. North of VCU Area 4. Takuan-Ao Pradu Community 2

PARAMETER	SAMPLING DATE	UNITS	ND	RESULTS				REFERENCE METHOD
				Non-detectable	1	2	3	4
Total Hydrocarbon	18/05/2026	ppm	<0.10	3.89	3.95	3.53	3.59	Flame ionization
(THC)	19/05/2026	ppm	<0.10	3.52	3.82	3.75	3.64	Detection Method
	20/05/2026	ppm	<0.10	3.93	3.95	3.64	3.60	
	21/05/2026	ppm	<0.10	4.18	4.10	3.43	3.70	
	22/05/2026	ppm	<0.10	4.10	4.27	3.61	3.65	
	23/05/2026	ppm	<0.10	4.35	4.32	3.54	3.59	
	24/05/2026	ppm	<0.10	4.01	4.15	3.45	3.72	

Sudaporn S.
(Miss Sudaporn Soonthorn)

Analyst

Miss Narisa Poowasanpetch
(Miss Narisa Poowasanpetch)

Technical Management Team

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

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R:\Database\Ambient\Air\Control\Amb-226010-North of Refinery Area-NO2 18-25 May 2026



Ambient Air Monitoring Results : Nitrogen dioxide MTR-PTTGC6-Refinery

Location : North of Refinery Area Monitor Period : 18-25 May 2026
Analyzer Model : API 200A Station No : Mobile 10
Serial No : 2385 Site Operator : Mr. Siwanon Kulawong

Calibrator Model : Teledyne 700E Serial No : 1367
Calibration Gas Cylinder I.D.: EB0102326
Certified Date : 08 Jan 2026 Cal Concentration (ppb) : 0,100,200,400
Expire Date : 07 Jan 2027

Time	NO2 Concentration (ppb)						
	18-19 May 2026	19-20 May 2026	20-21 May 2026	21-22 May 2026	22-23 May 2026	23-24 May 2026	24-25 May 2026
11:00 - 12:00	3.1	3.3	7.4	7.0	4.5	5.3	6.6
12:00 - 13:00	4.1	6.8	4.0	3.6	4.5	6.7	7.7
13:00 - 14:00	5.5	5.7	6.2	7.3	7.5	5.3	7.5
14:00 - 15:00	6.7	3.4	4.6	5.1	6.9	7.4	7.0
15:00 - 16:00	4.3	3.3	7.3	6.9	4.9	7.6	5.4
16:00 - 17:00	4.3	8.5	8.1	4.3	4.1	5.1	4.5
17:00 - 18:00	5.5	9.5	9.3	8.6	7.8	9.5	4.8
18:00 - 19:00	9.0	8.7	10.6	8.7	9.0	10.9	10.9
19:00 - 20:00	8.0	11.9	8.9	7.6	12.2	11.3	9.6
20:00 - 21:00	11.4	10.5	11.7	10.4	13.0	9.9	9.4
21:00 - 22:00	7.4	9.4	7.7	11.1	14.7	11.0	12.0
22:00 - 23:00	13.1	10.1	14.2	9.0	8.2	8.4	9.1
23:00 - 00:00	12.0	10.7	12.7	10.3	9.3	8.7	9.9
00:00 - 01:00	12.7	10.6	13.9	10.3	11.8	8.2	10.3
01:00 - 02:00	15.9	11.1	11.4	8.2	10.3	10.0	10.5
02:00 - 03:00	13.8	9.8	9.0	8.7	8.0	10.5	11.8
03:00 - 04:00	11.1	8.3	10.3	8.3	10.0	10.5	10.2
04:00 - 05:00	12.7	10.1	7.7	11.4	11.9	8.4	12.2
05:00 - 06:00	14.3	8.9	10.3	9.4	11.8	8.7	9.5
06:00 - 07:00	14.8	15.2	8.1	11.2	9.9	10.1	10.4
07:00 - 08:00	9.6	9.7	8.6	8.8	9.6	9.9	10.1
08:00 - 09:00	7.2	4.9	10.1	10.2	5.3	6.1	7.4
09:00 - 10:00	5.1	7.4	4.8	7.1	5.1	7.5	6.5
10:00 - 11:00	4.8	4.8	5.6	4.4	6.3	7.8	4.8
Average-24Hr*	9.0	8.4	8.9	8.2	8.6	8.5	8.7
Max-1Hr	15.9	15.2	14.2	11.4	14.7	11.3	12.2
Min-1Hr	3.1	3.3	4.0	3.6	4.1	5.1	4.5
Standard-1Hr	120 ppb						
Standard-24Hr	-						

Remark : * Average time between 11:00-11:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



Ambient Air Monitoring Results : Nitrogen dioxide MTR-PTTGC6-Refinery

Location : North of VCU Area				Monitor Period : 18-25 May 2026			
Analyzer Model : Teledyne T200				Station No : Shelter 12			
Serial No : 110				Site Operator : Mr. Siwanon Kulawong			
Calibrator Model : Teledyne 700E				Serial No : 1367			
Calibration Gas Cylinder I.D.: EB0102326							
Certified Date : 08 Jan 2026				Cal Concentration (ppb) : 0,100,200,400			
Expire Date : 07 Jan 2027							
Time	NO2 Concentration (ppb)						
	18-19 May 2026	19-20 May 2026	20-21 May 2026	21-22 May 2026	22-23 May 2026	23-24 May 2026	24-25 May 2026
11:00 - 12:00	4.9	5.1	5.4	5.4	6.1	3.6	4.5
12:00 - 13:00	6.0	5.1	3.9	6.5	3.2	4.6	4.8
13:00 - 14:00	2.3	3.8	5.2	3.0	6.3	3.6	4.8
14:00 - 15:00	2.4	4.0	4.2	5.2	3.3	6.5	4.6
15:00 - 16:00	3.3	2.4	4.2	6.1	4.2	4.9	5.5
16:00 - 17:00	6.0	6.8	7.0	2.8	5.6	6.0	6.0
17:00 - 18:00	4.8	6.7	6.5	7.2	8.9	10.3	6.4
18:00 - 19:00	9.2	11.6	12.6	9.9	7.5	8.6	9.3
19:00 - 20:00	6.2	10.8	14.1	10.4	10.9	8.8	7.4
20:00 - 21:00	9.5	12.4	10.7	8.5	9.9	10.3	10.7
21:00 - 22:00	11.1	7.4	12.7	8.6	13.5	10.1	9.0
22:00 - 23:00	11.6	10.1	11.6	10.7	7.7	8.9	9.1
23:00 - 00:00	11.0	6.7	12.0	12.6	9.4	10.7	10.4
00:00 - 01:00	11.9	9.2	14.2	9.6	9.6	8.6	10.7
01:00 - 02:00	14.0	6.7	9.2	10.8	9.7	7.3	11.2
02:00 - 03:00	13.1	9.9	8.7	9.7	10.3	10.5	10.8
03:00 - 04:00	11.2	9.8	10.1	10.7	10.7	8.9	7.9
04:00 - 05:00	10.2	8.0	8.6	6.9	10.8	7.4	9.7
05:00 - 06:00	8.6	9.6	10.2	10.7	9.8	7.5	10.2
06:00 - 07:00	10.9	10.3	8.8	14.2	7.8	8.1	11.2
07:00 - 08:00	12.1	10.3	10.3	9.2	9.8	5.3	9.9
08:00 - 09:00	3.8	7.2	7.6	10.3	7.0	6.6	5.9
09:00 - 10:00	3.8	3.3	4.1	5.6	5.5	4.5	4.9
10:00 - 11:00	3.6	5.1	6.3	3.7	4.5	4.6	3.7
Average-24Hr*	8.0	7.6	8.7	8.3	8.0	7.3	7.9
Max-1Hr	14.0	12.4	14.2	14.2	13.5	10.7	11.2
Min-1Hr	2.3	2.4	3.9	2.8	3.2	3.6	3.7
Standard-1Hr	120 ppb						
Standard-24Hr	-						

Remark : * Average time between 11:00-11:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



Ambient Air Monitoring Results : Nitrogen dioxide MTR-PTTGC6-Refinery

Location : Takuan-Ao Pradu Community 1				Monitor Period : 18-25 May 2026			
Analyzer Model : Thermo 42C				Station No : SCT-14			
Serial No : 0426708263				Site Operator : Mr. Siwanon Kulawong			
Calibrator Model : Teledyne 700E				Serial No : 1367			
Calibration Gas Cylinder I.D.: EB0102326							
Certified Date : 08 Jan 2026				Cal Concentration (ppb) : 0,100,200,400			
Expire Date : 07 Jan 2027							
Time	NO2 Concentration (ppb)						
	18-19 May 2026	19-20 May 2026	20-21 May 2026	21-22 May 2026	22-23 May 2026	23-24 May 2026	24-25 May 2026
12:00 - 13:00	2.1	4.0	2.4	3.7	4.0	3.3	5.9
13:00 - 14:00	4.5	3.5	3.4	4.0	2.3	4.4	3.3
14:00 - 15:00	2.2	3.2	2.4	4.4	6.0	4.6	2.7
15:00 - 16:00	4.5	4.6	6.9	3.4	3.6	3.1	5.4
16:00 - 17:00	2.0	8.7	3.3	4.7	4.8	9.3	5.0
17:00 - 18:00	2.3	5.3	5.8	9.0	9.2	9.0	4.6
18:00 - 19:00	5.4	6.1	13.0	6.7	9.3	12.0	9.8
19:00 - 20:00	8.9	7.6	12.4	8.6	11.9	8.8	9.4
20:00 - 21:00	6.7	13.1	12.2	9.4	9.3	8.4	10.3
21:00 - 22:00	9.8	6.1	5.6	8.0	9.9	13.4	10.0
22:00 - 23:00	12.0	9.1	13.2	7.0	6.3	9.9	8.2
23:00 - 00:00	16.7	6.4	9.6	8.4	7.7	8.1	6.8
00:00 - 01:00	11.6	7.3	10.1	8.2	7.1	6.4	10.2
01:00 - 02:00	15.1	6.6	8.9	9.6	7.5	9.0	7.5
02:00 - 03:00	9.6	7.1	9.2	6.4	7.5	9.9	9.6
03:00 - 04:00	11.3	7.5	7.9	7.7	9.2	7.1	9.4
04:00 - 05:00	10.1	6.9	6.9	7.0	8.6	10.3	8.2
05:00 - 06:00	13.1	7.2	9.2	9.6	7.7	9.0	7.5
06:00 - 07:00	11.6	9.8	7.6	7.6	7.1	9.2	8.9
07:00 - 08:00	6.7	8.8	9.0	9.6	6.7	7.3	9.4
08:00 - 09:00	4.4	8.4	4.1	7.9	2.1	3.9	2.6
09:00 - 10:00	2.2	4.6	3.1	4.0	4.8	3.1	5.1
10:00 - 11:00	3.3	3.6	4.4	5.6	2.7	5.3	4.0
11:00 - 12:00	5.1	4.1	2.8	4.4	5.7	5.3	4.6
Average-24Hr*	7.6	6.7	7.2	6.9	6.7	7.5	7.0
Max-1Hr	16.7	13.1	13.2	9.6	11.9	13.4	10.3
Min-1Hr	2.0	3.2	2.4	3.4	2.1	3.1	2.6
Standard-1Hr	120 ppb						
Standard-24Hr	-						

Remark : * Average time between 12:00-12:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



Ambient Air Monitoring Results : Nitrogen dioxide MTR-PTTGC6-Refinery

Location : Takuan-Ao Pradu Community 2	Monitor Period : 18-25 May 2026
Analyzer Model : API 200AU	Station No : SCT-16
Serial No : 144	Site Operator : Mr. Siwanon Kulawong

Calibrator Model : Teledyne 700E	Serial No : 1367
Calibration Gas Cylinder I.D.: EB0102326	
Certified Date : 08 Jan 2026	Cal Concentration (ppb) : 0,100,200,400
Expire Date : 07 Jan 2027	

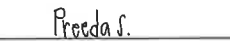
Time	NO2 Concentration (ppb)						
	18-19 May 2026	19-20 May 2026	20-21 May 2026	21-22 May 2026	22-23 May 2026	23-24 May 2026	24-25 May 2026
12:00 - 13:00	1.2	1.5	4.8	2.1	4.7	5.5	4.1
13:00 - 14:00	1.9	4.7	1.6	2.5	2.8	4.9	5.6
14:00 - 15:00	3.2	2.1	3.7	4.2	1.9	5.3	2.7
15:00 - 16:00	3.3	3.6	1.5	2.0	2.6	4.0	3.2
16:00 - 17:00	3.6	2.1	8.5	3.0	5.3	4.0	5.8
17:00 - 18:00	1.6	9.5	5.6	7.7	6.5	6.2	8.5
18:00 - 19:00	8.4	8.2	6.9	7.5	6.0	6.7	9.2
19:00 - 20:00	7.3	5.8	9.7	5.4	8.9	7.3	6.7
20:00 - 21:00	9.5	6.5	12.0	6.5	9.7	6.8	6.7
21:00 - 22:00	11.7	7.1	7.0	7.0	8.7	10.7	6.5
22:00 - 23:00	11.9	6.1	8.5	6.8	8.6	6.6	6.8
23:00 - 00:00	10.1	5.2	12.0	8.5	6.4	6.1	6.5
00:00 - 01:00	11.7	6.4	10.0	12.6	5.7	8.3	9.9
01:00 - 02:00	11.8	8.1	8.5	7.6	7.1	9.9	9.5
02:00 - 03:00	9.4	5.1	7.7	5.8	9.6	7.5	8.7
03:00 - 04:00	11.0	7.8	6.2	6.1	7.3	7.6	6.3
04:00 - 05:00	12.5	5.1	8.4	6.7	5.8	9.3	6.8
05:00 - 06:00	12.4	6.7	7.9	5.9	6.7	6.4	6.7
06:00 - 07:00	8.9	6.8	9.2	12.0	9.1	7.3	6.4
07:00 - 08:00	6.1	5.2	7.5	8.6	6.3	7.6	8.1
08:00 - 09:00	6.9	3.7	8.6	8.5	4.8	4.7	6.2
09:00 - 10:00	1.9	3.3	3.8	4.9	3.4	4.9	4.8
10:00 - 11:00	4.5	2.7	2.5	1.8	1.9	2.6	5.3
11:00 - 12:00	2.4	4.9	2.9	3.2	3.7	2.1	6.1

Average-24Hr*	7.2	5.3	6.9	6.1	6.0	6.3	6.5
Max-1Hr	12.5	9.5	12.0	12.6	9.7	10.7	9.9
Min-1Hr	1.2	1.5	1.5	1.8	1.9	2.1	2.7

Standard-1Hr	120 ppb						
Standard-24Hr	-						

Remark : * Average time between 12:00-12:00


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Preeda Somjai)
Technical Management Team



Ambient Air Monitoring Results : Sulfur dioxide MTR-PTTGC6-Refinery

Location : North of Refinery Area	Monitor Period : 18-25 May 2026
Analyzer Model : API 100A	Station No : Mobile 10
Serial No : 382	Site Operator : Mr. Siwanon Kulawong

Calibrator Model : Teledyne 700E	Serial No : 1367
Calibration Gas Cylinder I.D.: EB0102326	
Certified Date : 10 Jan 2026	Cal Concentration (ppb) : 0,100,200,400
Expire Date : 09 Jan 2027	

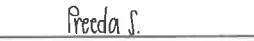
Time	SO2 Concentration (ppb)						
	18-19 May 2026	19-20 May 2026	20-21 May 2026	21-22 May 2026	22-23 May 2026	23-24 May 2026	24-25 May 2026
11:00 - 12:00	6.2	7.9	6.8	5.1	7.5	5.6	6.4
12:00 - 13:00	6.4	5.5	8.0	5.7	4.9	7.6	5.4
13:00 - 14:00	5.9	7.2	7.3	7.0	7.4	7.6	6.0
14:00 - 15:00	5.8	5.9	6.9	6.6	7.9	5.4	6.6
15:00 - 16:00	5.8	5.0	6.1	6.0	7.2	5.1	6.0
16:00 - 17:00	5.2	6.2	7.3	6.4	7.4	7.9	6.9
17:00 - 18:00	5.1	7.3	6.5	7.3	5.7	6.9	5.9
18:00 - 19:00	5.0	6.9	5.2	5.7	7.2	6.2	6.4
19:00 - 20:00	6.8	6.5	7.5	5.0	7.1	7.1	5.8
20:00 - 21:00	7.7	5.2	4.9	7.0	5.2	6.5	5.7
21:00 - 22:00	6.5	5.0	6.2	6.5	5.9	6.2	7.4
22:00 - 23:00	6.4	6.4	7.4	7.4	7.5	5.9	6.5
23:00 - 00:00	10.9	5.3	7.0	7.0	7.4	7.3	7.6
00:00 - 01:00	9.6	6.5	5.6	6.3	6.7	7.2	5.3
01:00 - 02:00	7.9	6.5	5.8	5.2	6.0	6.2	5.0
02:00 - 03:00	7.4	6.4	5.8	5.9	5.4	7.8	7.5
03:00 - 04:00	8.0	6.3	6.0	7.5	7.3	5.8	7.4
04:00 - 05:00	7.8	7.7	6.4	5.8	7.4	7.4	6.8
05:00 - 06:00	5.2	5.4	7.4	7.9	7.2	6.1	7.5
06:00 - 07:00	6.0	6.7	5.6	8.8	6.4	7.8	5.8
07:00 - 08:00	6.1	6.0	7.0	7.8	6.5	6.1	6.4
08:00 - 09:00	6.4	6.0	7.1	5.5	7.2	5.3	5.3
09:00 - 10:00	6.1	5.6	5.3	4.9	6.7	7.5	7.5
10:00 - 11:00	7.6	5.1	7.5	6.3	6.7	7.5	6.1

Average-24Hr*	6.7	6.2	6.5	6.4	6.7	6.7	6.4
Max-1Hr	10.9	7.9	8.0	8.8	7.9	7.9	7.6
Min-1Hr	5.0	5.0	4.9	4.9	4.9	5.1	5.0

Standard-1Hr	100 ppb						
Standard-24Hr	50 ppb						

Remark : * Average time between 11:00-11:00


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Preeda Somjai)
Technical Management Team



Ambient Air Monitoring Results : Sulfur dioxide MTR-PTTGC6-Refinery

Location : North of VCU Area Monitor Period : 18-25 May 2026
Analyzer Model : Teledyne T100 Station No : Shelter 12
Serial No : 186 Site Operator : Mr. Siwanon Kulawong

Calibrator Model : Teledyne 700E Serial No : 1367
Calibration Gas Cylinder I.D.: EB0102326
Certified Date : 10 Jan 2026 Cal Concentration (ppb) : 0,100,200,400
Expire Date : 09 Jan 2027

Time	SO2 Concentration (ppb)						
	18-19 May 2026	19-20 May 2026	20-21 May 2026	21-22 May 2026	22-23 May 2026	23-24 May 2026	24-25 May 2026
11:00 - 12:00	3.1	5.2	3.4	4.2	6.5	6.8	5.3
12:00 - 13:00	3.9	4.2	3.3	6.5	3.7	3.6	4.7
13:00 - 14:00	5.4	3.9	4.1	5.1	6.6	4.3	6.3
14:00 - 15:00	3.6	6.5	6.4	3.3	7.1	6.1	5.0
15:00 - 16:00	6.3	4.3	4.0	3.2	5.3	7.0	7.2
16:00 - 17:00	6.2	6.2	3.1	6.2	5.5	3.4	5.6
17:00 - 18:00	3.8	3.9	5.3	3.5	6.2	5.3	4.3
18:00 - 19:00	3.6	5.6	3.2	6.3	6.0	4.8	5.3
19:00 - 20:00	4.3	6.2	4.1	4.4	3.6	3.9	4.0
20:00 - 21:00	4.8	3.9	5.4	3.4	5.7	4.2	4.1
21:00 - 22:00	5.1	4.5	5.7	5.5	5.6	5.4	7.0
22:00 - 23:00	4.7	6.5	3.9	5.9	7.0	6.3	5.1
23:00 - 00:00	7.8	5.6	6.5	6.1	3.9	3.2	7.1
00:00 - 01:00	10.1	4.1	3.4	5.3	3.8	5.0	5.1
01:00 - 02:00	3.6	5.1	4.0	5.2	4.7	3.3	6.3
02:00 - 03:00	6.0	4.3	6.8	5.3	4.2	6.6	5.9
03:00 - 04:00	6.5	6.8	6.8	5.7	3.5	6.2	3.5
04:00 - 05:00	7.7	5.7	5.5	6.6	5.8	4.3	3.4
05:00 - 06:00	5.6	5.3	5.7	7.1	6.7	6.2	5.9
06:00 - 07:00	7.0	4.6	4.3	4.9	4.6	7.0	4.7
07:00 - 08:00	6.3	6.8	4.3	7.1	3.6	3.5	3.9
08:00 - 09:00	5.0	6.2	6.5	6.1	6.0	3.5	6.2
09:00 - 10:00	6.2	5.6	5.5	4.5	6.7	7.0	3.4
10:00 - 11:00	6.3	4.1	7.0	4.4	6.4	5.4	6.8
Average-24Hr*	5.5	5.2	4.9	5.2	5.4	5.1	5.3
Max-1Hr	10.1	6.8	7.0	7.1	7.1	7.0	7.2
Min-1Hr	3.1	3.3	3.1	3.2	3.5	3.2	3.4
Standard-1Hr	100 ppb						
Standard-24Hr	50 ppb						

Remark : * Average time between 11:00-11:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



Ambient Air Monitoring Results : Sulfur dioxide MTR-PTTGC6-Refinery

Location : Takuan-Ao Pradu Community 1 Monitor Period : 18-25 May 2026
Analyzer Model : API 100A Station No : SCT-14
Serial No : 906 Site Operator : Mr. Siwanon Kulawong

Calibrator Model : Teledyne 700E Serial No : 1367
Calibration Gas Cylinder I.D.: EB0102326
Certified Date : 10 Jan 2026 Cal Concentration (ppb) : 0,100,200,400
Expire Date : 09 Jan 2027

Time	SO2 Concentration (ppb)						
	18-19 May 2026	19-20 May 2026	20-21 May 2026	21-22 May 2026	22-23 May 2026	23-24 May 2026	24-25 May 2026
12:00 - 13:00	4.1	5.3	4.5	5.1	7.1	6.3	6.0
13:00 - 14:00	6.7	6.4	6.8	4.6	4.7	7.5	5.4
14:00 - 15:00	6.0	6.7	3.6	7.1	7.3	5.1	7.1
15:00 - 16:00	7.0	6.1	4.9	5.8	6.7	5.9	7.6
16:00 - 17:00	6.8	3.4	4.2	6.2	5.5	5.3	6.9
17:00 - 18:00	3.4	5.2	4.6	6.8	5.5	4.8	4.0
18:00 - 19:00	6.7	4.2	5.5	4.7	3.6	7.5	4.6
19:00 - 20:00	6.4	5.8	5.5	7.4	4.2	6.8	6.3
20:00 - 21:00	4.1	4.6	5.5	4.8	6.0	6.6	7.2
21:00 - 22:00	5.6	3.9	3.3	5.4	5.9	3.6	5.8
22:00 - 23:00	5.6	5.2	4.6	4.6	5.9	4.5	6.9
23:00 - 00:00	9.7	4.4	6.3	5.9	4.5	4.7	3.8
00:00 - 01:00	10.0	5.0	6.3	6.7	7.5	6.2	7.3
01:00 - 02:00	5.3	5.1	6.9	4.8	4.1	7.5	6.5
02:00 - 03:00	7.2	3.3	7.2	5.3	5.0	3.8	4.0
03:00 - 04:00	6.0	4.9	5.1	5.0	6.4	4.9	6.5
04:00 - 05:00	7.1	3.7	4.0	5.6	4.5	4.1	4.8
05:00 - 06:00	5.2	5.9	6.8	4.9	7.5	4.5	5.0
06:00 - 07:00	7.0	6.6	5.4	5.3	4.7	3.6	3.8
07:00 - 08:00	3.1	3.5	4.3	6.7	4.1	5.1	5.0
08:00 - 09:00	5.6	5.0	3.7	4.7	5.7	4.8	7.4
09:00 - 10:00	5.5	4.4	5.3	5.0	6.5	4.2	7.1
10:00 - 11:00	3.2	4.0	7.0	3.9	7.2	5.5	5.7
11:00 - 12:00	6.5	5.0	5.6	3.9	3.8	4.2	6.0
Average-24Hr*	6.0	4.9	5.3	5.4	5.6	5.3	5.9
Max-1Hr	10.0	6.7	7.2	7.4	7.5	7.5	7.6
Min-1Hr	3.1	3.3	3.3	3.9	3.6	3.6	3.8
Standard-1Hr	100 ppb						
Standard-24Hr	50 ppb						

Remark : * Average time between 12:00-12:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



Ambient Air Monitoring Results : Sulfur dioxide MTR-PTTGC6-Refinery

Location : Takuan-Ao Pradu Community 2 Monitor Period : 18-25 May 2026
Analyzer Model : Teledyne T100 Station No : SCT-16
Serial No : 120 Site Operator : Mr. Siwanon Kulawong

Calibrator Model : Teledyne 700E Serial No : 1367
Calibration Gas Cylinder I.D.: EB0102326
Certified Date : 10 Jan 2026 Cal Concentration (ppb) : 0,100,200,400
Expire Date : 09 Jan 2027

Time	SO2 Concentration (ppb)						
	18-19 May 2026	19-20 May 2026	20-21 May 2026	21-22 May 2026	22-23 May 2026	23-24 May 2026	24-25 May 2026
12:00 ~ 13:00	4.2	3.5	2.7	5.0	5.0	6.1	3.5
13:00 ~ 14:00	5.5	5.2	4.5	2.6	2.2	2.7	4.5
14:00 ~ 15:00	2.5	2.4	4.7	6.1	2.5	3.2	4.1
15:00 ~ 16:00	2.4	5.5	2.7	3.1	6.1	5.9	5.1
16:00 ~ 17:00	3.0	3.0	4.6	2.6	5.8	5.6	4.9
17:00 ~ 18:00	2.0	2.6	4.9	4.1	2.2	6.1	5.0
18:00 ~ 19:00	6.0	4.5	2.2	4.2	4.1	5.0	2.4
19:00 ~ 20:00	5.5	2.5	5.7	4.3	6.1	2.2	4.5
20:00 ~ 21:00	5.7	4.0	4.0	5.0	2.9	3.4	5.9
21:00 ~ 22:00	5.1	4.4	2.4	6.2	3.8	4.8	5.0
22:00 ~ 23:00	2.3	4.2	5.2	5.3	3.0	6.0	5.7
23:00 ~ 00:00	6.6	5.5	4.4	4.5	4.4	2.9	3.0
00:00 ~ 01:00	8.3	4.2	3.7	4.7	4.1	6.2	5.7
01:00 ~ 02:00	9.8	4.1	4.0	3.5	3.4	6.1	6.2
02:00 ~ 03:00	6.6	2.1	5.7	3.3	4.3	3.9	2.5
03:00 ~ 04:00	6.2	4.9	2.7	2.9	3.0	4.3	5.9
04:00 ~ 05:00	3.5	6.0	2.1	4.3	3.3	3.4	2.8
05:00 ~ 06:00	4.1	4.0	3.6	6.0	3.9	3.4	2.7
06:00 ~ 07:00	3.2	3.1	6.1	5.0	5.0	4.4	4.4
07:00 ~ 08:00	5.7	5.9	5.6	4.5	5.5	4.8	6.0
08:00 ~ 09:00	4.0	2.3	4.0	3.7	2.6	3.7	3.3
09:00 ~ 10:00	5.6	3.1	4.0	2.6	6.0	3.1	6.3
10:00 ~ 11:00	5.4	2.8	4.6	4.7	5.1	5.2	4.2
11:00 ~ 12:00	2.8	2.8	3.7	5.2	4.1	4.6	2.7
Average-24Hr*	4.8	3.9	4.1	4.3	4.1	4.5	4.4
Max-1Hr	9.8	6.0	6.1	6.2	6.1	6.2	6.3
Min-1Hr	2.0	2.1	2.1	2.6	2.2	2.2	2.4
Standard-1Hr	100 ppb						
Standard-24Hr	50 ppb						

Remark : * Average time between 12:00-12:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

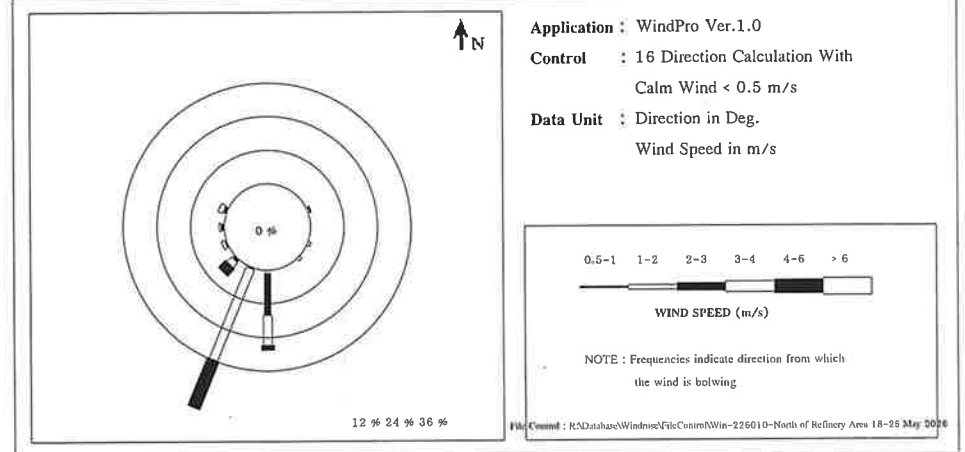
Preeda S.
(Miss Preeda Somjai)
Technical Management Team



Meteorological Monitoring Results : Wind Rose MTR-PTTGC6-Refinery

Location : North of Refinery Area Monitor period : 18-25 May 2026
Wind Speed Model : Scarlet WL-21 Serial No : 2112DR0008
Wind Direction Model : Scarlet WL-21 Serial No : 2112DR0008

Direction	Percentage of Occurrence of Wind Direct Grouped in Various Wind Speed						Total
	0.5-1 m/s	1-2 m/s	2-3 m/s	3-4 m/s	4-6 m/s	More than 6	
N	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NNE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ENE	0.0000	0.0060	0.0060	0.0000	0.0000	0.0000	0.0119
E	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
ESE	0.0000	0.0119	0.0000	0.0000	0.0000	0.0000	0.0119
SE	0.0000	0.0119	0.0000	0.0000	0.0000	0.0000	0.0119
SSE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
S	0.0000	0.0119	0.1488	0.1071	0.0179	0.0000	0.2857
SSW	0.0000	0.0000	0.0060	0.3512	0.1845	0.0000	0.5417
SW	0.0000	0.0000	0.0119	0.0238	0.0357	0.0000	0.0714
WSW	0.0000	0.0000	0.0060	0.0119	0.0000	0.0000	0.0179
W	0.0000	0.0000	0.0119	0.0060	0.0000	0.0000	0.0179
WNW	0.0000	0.0000	0.0119	0.0179	0.0000	0.0000	0.0298
NW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NNW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CALM	0.0000						



(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



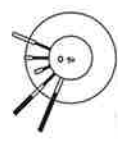
Meteorological Monitoring Results : Wind Rose

MTR-PTTGC6-Refinery

Location : North of Refinery Area Monitor period : 18-25 May 2026
 Wind Speed Model : Scarlet WL-21 Serial No : 2112DR0008
 Wind Direction Model : Scarlet WL-21 Serial No : 2112DR0008

Time	18-19 May 2026		19-20 May 2026		20-21 May 2026		21-22 May 2026	
	WS(m/s)	WD	WS(m/s)	WD	WS(m/s)	WD	WS(m/s)	WD
11:00 - 12:00	4.3	SSW	4.9	SW	4.7	SSW	3.8	SSW
12:00 - 13:00	4.0	SSW	4.5	SSW	4.2	SSW	3.7	SSW
13:00 - 14:00	4.6	SSW	4.1	SSW	4.0	SSW	3.9	SSW
14:00 - 15:00	4.8	SW	3.9	SSW	3.9	SSW	4.1	S
15:00 - 16:00	4.5	SSW	4.6	SSW	4.1	SSW	4.0	S
16:00 - 17:00	4.1	SSW	4.1	SSW	3.8	SSW	4.1	S
17:00 - 18:00	3.5	SSW	3.8	SSW	3.7	S	4.0	SSW
18:00 - 19:00	3.1	SSW	3.7	SSW	3.6	SSW	3.8	SSW
19:00 - 20:00	3.4	SW	3.0	SSW	3.6	SSW	3.5	SSW
20:00 - 21:00	2.8	SW	2.9	S	3.6	SSW	3.6	SSW
21:00 - 22:00	2.4	SW	3.7	SSW	3.5	SSW	3.3	SSW
22:00 - 23:00	2.5	WNW	4.1	SSW	3.2	SSW	2.9	S
23:00 - 24:00	2.9	WNW	4.1	SW	3.7	SSW	3.2	S
00:00 - 01:00	3.0	WNW	4.1	SW	4.1	SSW	3.3	S
01:00 - 02:00	3.2	WNW	3.7	SW	3.7	SSW	3.0	S
02:00 - 03:00	3.2	WNW	3.4	WSW	3.5	S	2.6	S
03:00 - 04:00	3.5	W	3.7	SSW	2.9	SSW	2.4	S
04:00 - 05:00	2.9	W	4.0	SSW	2.3	S	2.7	S
05:00 - 06:00	3.1	WSW	4.1	SSW	3.1	S	2.8	S
06:00 - 07:00	2.0	WSW	3.9	SSW	3.7	SSW	3.1	SSW
07:00 - 08:00	2.3	W	3.7	SSW	3.7	SSW	1.5	ENE
08:00 - 09:00	3.1	SW	4.1	SSW	3.8	SSW	1.3	SE
09:00 - 10:00	4.2	SW	4.3	SSW	3.6	SSW	1.4	ESE
10:00 - 11:00	4.5	SW	4.4	SSW	4.1	SSW	1.7	SE

Wind Rose



12 %



20 % 10 %



20 % 10 %



20 %



WIND SPEED (m/s) - Scale 1:3

File Control : R:\Database\Windrose\FileControl\Win-226010-North of Refinery Area 18-25 May 2026

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Preeda Somjai)
Technical Management Team



Meteorological Monitoring Results : Wind Rose

MTR-PTTGC6-Refinery

Location : North of Refinery Area Monitor period : 18-25 May 2026
 Wind Speed Model : Scarlet WL-21 Serial No : 2112DR0008
 Wind Direction Model : Scarlet WL-21 Serial No : 2112DR0008

Time	22-23 May 2026		23-24 May 2026		24-25 May 2026	
	WS(m/s)	WD	WS(m/s)	WD	WS(m/s)	WD
11:00 - 12:00	2.6	S	4.2	SSW	4.1	SSW
12:00 - 13:00	2.6	S	4.5	SSW	4.0	SSW
13:00 - 14:00	2.9	S	4.2	SSW	4.1	SSW
14:00 - 15:00	2.8	S	4.1	SSW	3.8	S
15:00 - 16:00	2.1	S	3.5	SSW	3.7	SSW
16:00 - 17:00	2.1	S	3.0	S	3.6	SSW
17:00 - 18:00	2.2	S	2.9	S	3.2	S
18:00 - 19:00	2.6	S	2.6	S	2.9	S
19:00 - 20:00	2.5	S	1.9	S	2.7	S
20:00 - 21:00	1.9	S	2.1	S	3.0	S
21:00 - 22:00	2.3	S	2.8	S	3.0	S
22:00 - 23:00	2.8	S	3.1	S	3.1	S
23:00 - 24:00	3.1	SSW	3.3	S	3.4	SSW
00:00 - 01:00	3.2	SSW	3.3	SSW	3.2	S
01:00 - 02:00	3.0	S	3.1	S	3.4	SSW
02:00 - 03:00	3.5	SSW	3.5	SSW	3.3	SSW
03:00 - 04:00	3.4	SSW	3.6	SSW	3.4	SSW
04:00 - 05:00	3.4	SSW	3.7	SSW	3.4	SSW
05:00 - 06:00	3.6	SSW	3.7	SSW	3.6	SSW
06:00 - 07:00	3.6	SSW	3.7	SW	3.3	S
07:00 - 08:00	4.1	SSW	3.8	SSW	1.9	ESE
08:00 - 09:00	3.8	SSW	3.7	SSW	2.0	ENE
09:00 - 10:00	3.8	SSW	3.5	SSW	2.8	S
10:00 - 11:00	3.8	SSW	3.9	SSW	4.1	SSW

Wind Rose



20 %



20 %



20 %



WIND SPEED (m/s) - Scale 1:3

File Control : R:\Database\Windrose\FileControl\Win-226010-North of Refinery Area 18-25 May 2026

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Preeda Somjai)
Technical Management Team

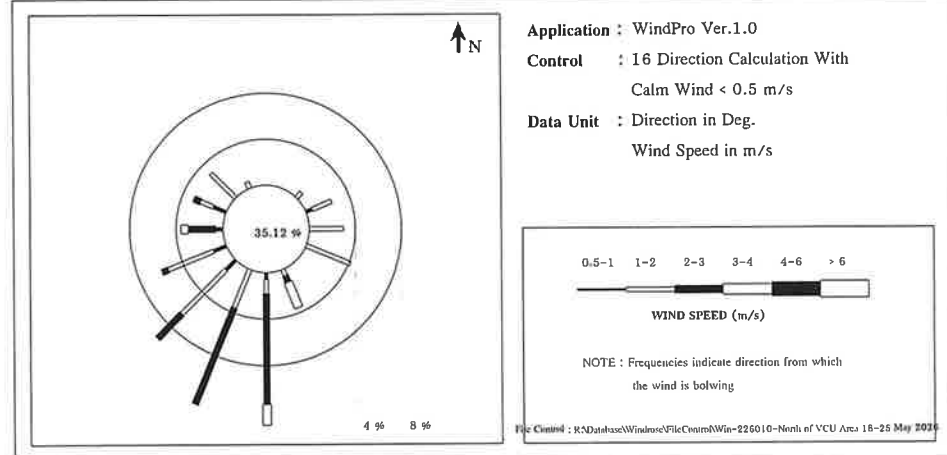


Meteorological Monitoring Results : Wind Rose

MTR-PTTGC6-Refinery

Location : North of VCU Area Monitor period : 18-25 May 2026
 Wind Speed Model : Scarlet WL-21 Serial No : 2112DR0020
 Wind Direction Model : Scarlet WL-21 Serial No : 2112DR0020

Direction	Percentage of Occurrence of Wind Direct Grouped in Various Wind Speed						
	0.5-1 m/s	1-2 m/s	2-3 m/s	3-4 m/s	4-6 m/s	More than 6	Total
N	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NNE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NE	0.0000	0.0060	0.0000	0.0000	0.0000	0.0000	0.0060
ENE	0.0060	0.0179	0.0000	0.0000	0.0000	0.0000	0.0238
E	0.0000	0.0298	0.0000	0.0000	0.0000	0.0000	0.0298
ESE	0.0000	0.0417	0.0000	0.0000	0.0000	0.0000	0.0417
SE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSE	0.0000	0.0060	0.0060	0.0238	0.0000	0.0000	0.0357
S	0.0060	0.0119	0.0952	0.0179	0.0000	0.0000	0.1310
SSW	0.0000	0.0357	0.0893	0.0000	0.0000	0.0000	0.1250
SW	0.0119	0.0536	0.0298	0.0000	0.0000	0.0000	0.0952
WSW	0.0119	0.0417	0.0060	0.0000	0.0000	0.0000	0.0595
W	0.0060	0.0000	0.0238	0.0060	0.0000	0.0000	0.0357
WNW	0.0119	0.0119	0.0060	0.0000	0.0000	0.0000	0.0298
NW	0.0000	0.0298	0.0000	0.0000	0.0000	0.0000	0.0298
NNW	0.0000	0.0060	0.0000	0.0000	0.0000	0.0000	0.0060
CALM	0.3512						



(Miss Katesarin Vorradetwittaya)
 Environmental Scientist

Preeda S.
 (Miss Preeda Somjai)
 Technical Management Team



Meteorological Monitoring Results : Wind Rose

MTR-PTTGC6-Refinery

Location : North of VCU Area Monitor period : 18-25 May 2026
 Wind Speed Model : Scarlet WL-21 Serial No : 2112DR0020
 Wind Direction Model : Scarlet WL-21 Serial No : 2112DR0020

Time	18-19 May 2026		19-20 May 2026		20-21 May 2026		21-22 May 2026	
	WS(m/s)	WD	WS(m/s)	WD	WS(m/s)	WD	WS(m/s)	WD
11:00 - 12:00	1.3	WSW	1.7	E	1.8	NW	0.0	W
12:00 - 13:00	1.5	SSW	1.9	ESE	1.7	NE	0.0	W
13:00 - 14:00	2.0	SSW	1.8	E	0.8	ENE	0.0	WNW
14:00 - 15:00	2.2	SW	1.6	E	0.0	ESE	0.0	WNW
15:00 - 16:00	2.2	SW	1.4	E	0.0	ENE	0.0	WNW
16:00 - 17:00	2.1	SW	1.4	ESE	0.0	NE	0.0	WNW
17:00 - 18:00	1.6	WSW	1.3	ESE	0.0	NE	0.0	WNW
18:00 - 19:00	1.5	WSW	1.4	ESE	0.0	NE	0.0	WNW
19:00 - 20:00	1.2	WSW	1.1	ESE	0.0	NE	0.0	WNW
20:00 - 21:00	1.3	SW	1.4	ESE	0.0	NE	0.0	WNW
21:00 - 22:00	0.7	WSW	1.4	ESE	0.0	NE	0.0	WNW
22:00 - 23:00	0.6	SW	1.2	E	0.0	NE	0.0	WNW
23:00 - 24:00	1.0	S	1.3	ENE	0.0	NE	0.0	WNW
00:00 - 01:00	0.6	WSW	1.2	NW	0.0	NE	0.0	WNW
01:00 - 02:00	0.4	SSW	1.3	WNW	0.0	NE	0.0	WNW
02:00 - 03:00	0.4	W	1.1	NNW	0.0	NE	0.0	WNW
03:00 - 04:00	0.5	SW	1.1	WNW	0.0	NE	0.0	WNW
04:00 - 05:00	0.5	W	0.9	WNW	0.0	NE	0.0	WNW
05:00 - 06:00	0.1	E	0.9	WNW	0.0	NE	0.0	WNW
06:00 - 07:00	0.0	S	1.3	NW	0.0	NE	0.0	WNW
07:00 - 08:00	0.0	SW	1.3	ENE	0.0	NE	0.0	WNW
08:00 - 09:00	0.0	ESE	1.5	ENE	0.0	NW	2.1	SSW
09:00 - 10:00	0.3	ESE	1.8	NW	0.0	W	2.1	SSW
10:00 - 11:00	1.8	SSE	1.7	NW	0.0	W	2.7	S



(Miss Katesarin Vorradetwittaya)
 Environmental Scientist

Preeda S.
 (Miss Preeda Somjai)
 Technical Management Team



Meteorological Monitoring Results : Wind Rose

MTR-PTTGC6-Refinery

Location : North of VCU Area

Monitor period : 18-25 May 2026

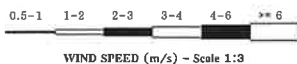
Wind Speed Model : Scarlet WL-21

Serial No : 2112DR0020

Wind Direction Model : Scarlet WL-21

Serial No : 2112DR0020

Time	22-23 May 2026		23-24 May 2026		24-25 May 2026		
	WS(m/s)	WD	WS(m/s)	WD	WS(m/s)	WD	
11:00 - 12:00	2.5	S	2.1	SSW	3.4	S	
12:00 - 13:00	2.2	SSW	2.3	SSW	3.1	SSE	
13:00 - 14:00	1.8	SSW	2.1	SSW	3.1	SSE	
14:00 - 15:00	1.5	SW	2.7	S	3.0	SSE	
15:00 - 16:00	1.5	SW	2.4	S	3.0	SSE	
16:00 - 17:00	1.4	SW	2.8	S	3.3	S	
17:00 - 18:00	1.3	SSW	2.8	SSE	3.3	S	
18:00 - 19:00	1.3	SW	2.5	S	2.8	S	
19:00 - 20:00	2.3	WNW	2.0	SSW	2.5	S	
20:00 - 21:00	2.2	W	1.7	SSW	2.2	S	
21:00 - 22:00	2.6	W	1.8	SSW	2.2	SSW	
22:00 - 23:00	3.1	W	2.7	W	1.8	S	
23:00 - 24:00	2.1	SW	2.4	SSW	1.5	SSW	
00:00 - 01:00	2.5	W	2.3	SSW	0.6	S	
01:00 - 02:00	1.9	WSW	2.4	SSW	0.0	S	
02:00 - 03:00	1.8	WSW	2.1	SSW	0.0	SSE	
03:00 - 04:00	1.8	WSW	2.0	S	0.0	S	
04:00 - 05:00	1.6	SW	2.1	S	0.0	S	
05:00 - 06:00	1.7	SW	2.3	S	0.0	S	
06:00 - 07:00	1.9	SW	2.5	S	0.0	S	
07:00 - 08:00	2.4	WSW	2.4	SSW	0.0	S	
08:00 - 09:00	2.5	SW	2.4	S	0.0	S	
09:00 - 10:00	2.3	SSW	2.9	S	0.0	S	
10:00 - 11:00	1.9	SW	2.9	S	0.0	SSE	
Wind Rose							



File Content: R:\Database\Windrose\FileContent\Win-228010-North of VCU Area 18-25 May 2026

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



Meteorological Monitoring Results : Wind Rose

MTR-PTTGC6-Refinery

Location : Takuan-Ao Pradu Community 1

Monitor period : 18-25 May 2026

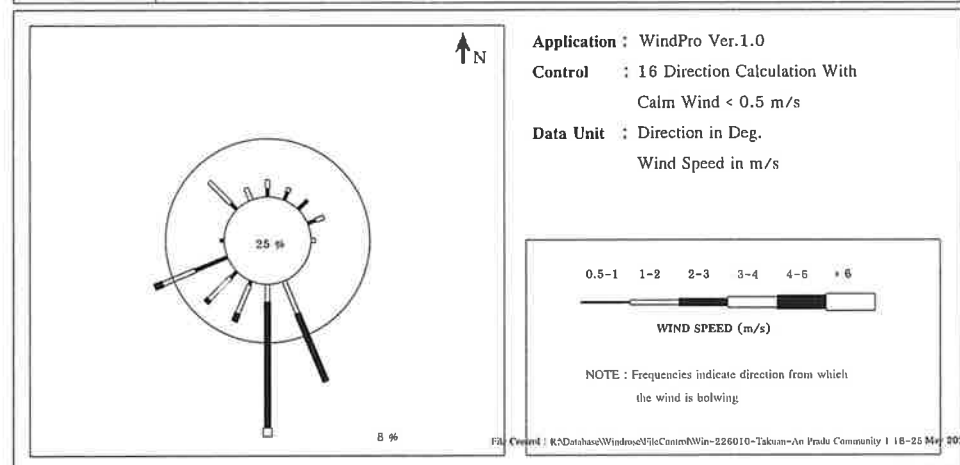
Wind Speed Model : Scarlet WL-21

Serial No : 2205DR0061

Wind Direction Model : Scarlet WL-21

Serial No : 2205DR0061

Direction	Percentage of Occurrence of Wind Direct Grouped in Various Wind Speed						
	0.5-1 m/s	1-2 m/s	2-3 m/s	3-4 m/s	4-6 m/s	More than 6	Total
N	0.0119	0.0119	0.0000	0.0000	0.0000	0.0000	0.0238
NNE	0.0119	0.0060	0.0000	0.0000	0.0000	0.0000	0.0179
NE	0.0179	0.0000	0.0000	0.0000	0.0000	0.0000	0.0179
ENE	0.0119	0.0119	0.0000	0.0000	0.0000	0.0000	0.0238
E	0.0000	0.0060	0.0000	0.0000	0.0000	0.0000	0.0060
ESE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SSE	0.0000	0.0476	0.1012	0.0000	0.0000	0.0000	0.1488
S	0.0000	0.0238	0.1726	0.0119	0.0000	0.0000	0.2083
SSW	0.0060	0.0417	0.0119	0.0000	0.0000	0.0000	0.0595
SW	0.0119	0.0417	0.0060	0.0000	0.0000	0.0000	0.0595
WSW	0.0476	0.0476	0.0119	0.0000	0.0000	0.0000	0.1071
W	0.0060	0.0000	0.0000	0.0000	0.0000	0.0000	0.0060
WNW	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NW	0.0119	0.0417	0.0000	0.0000	0.0000	0.0000	0.0536
NNW	0.0000	0.0179	0.0000	0.0000	0.0000	0.0000	0.0179
CALM	0.2500						



(Miss Katesarin Vorradetwittaya)
Environmental Scientist

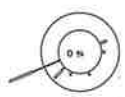
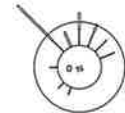
Preeda S.
(Miss Preeda Somjai)
Technical Management Team

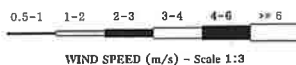


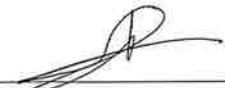
Meteorological Monitoring Results : Wind Rose

MTR-PTTGC6-Refinery

Location : Takuan-Ao Pradu Community 1	Monitor period : 18-25 May 2026
Wind Speed Model : Scarlet WL-21	Serial No : 2205DR0061
Wind Direction Model : Scarlet WL-21	Serial No : 2205DR0061

Time	18-19 May 2026		19-20 May 2026		20-21 May 2026		21-22 May 2026	
	WS(m/s)	WD	WS(m/s)	WD	WS(m/s)	WD	WS(m/s)	WD
12:00 - 13:00	1.0	WSW	1.3	N	1.5	NW	0.0	SE
13:00 - 14:00	1.1	SW	1.4	N	1.4	NNW	0.0	SE
14:00 - 15:00	1.2	SW	1.4	NNW	0.8	NE	0.0	SE
15:00 - 16:00	1.5	WSW	1.2	NNE	0.0	ESE	0.0	SE
16:00 - 17:00	1.7	WSW	0.9	N	0.0	E	0.0	SE
17:00 - 18:00	1.5	WSW	0.9	NNE	0.0	SE	0.0	SE
18:00 - 19:00	1.5	WSW	0.8	ENE	0.0	SE	0.0	SE
19:00 - 20:00	1.4	WSW	0.7	ENE	0.0	SE	0.0	SE
20:00 - 21:00	1.2	WSW	0.9	NE	0.0	SE	0.0	SE
21:00 - 22:00	0.9	WSW	0.7	NE	0.0	SE	0.0	SE
22:00 - 23:00	0.7	WSW	0.9	NNE	0.0	SE	0.0	SE
23:00 - 24:00	0.7	WSW	0.9	N	0.0	SE	0.0	SE
00:00 - 01:00	0.8	WSW	1.1	NW	0.0	SE	0.0	SE
01:00 - 02:00	1.0	SW	1.0	NW	0.0	SE	0.0	SE
02:00 - 03:00	0.6	WSW	1.0	NW	0.0	SE	0.0	SE
03:00 - 04:00	0.6	WSW	0.9	NW	0.0	SE	0.0	SE
04:00 - 05:00	0.7	WSW	0.9	W	0.0	SE	0.0	SE
05:00 - 06:00	0.7	WSW	0.8	SW	0.0	SE	0.0	SE
06:00 - 07:00	0.6	SW	0.7	SSW	0.0	SE	0.0	SE
07:00 - 08:00	1.1	ENE	0.9	NW	0.0	SE	0.0	SE
08:00 - 09:00	1.1	ENE	1.1	NNW	0.0	SE	0.0	SE
09:00 - 10:00	1.0	E	1.2	NW	0.0	SE	2.5	S
10:00 - 11:00	1.2	SSW	1.3	NW	0.0	SE	2.9	S
11:00 - 12:00	1.3	SSE	1.5	NW	0.0	SE	3.1	S
Wind Rose								
	20 %		12 %		87.5 %		5 %	




(Miss Katesarin Vorradetwittaya)
Environmental Scientist

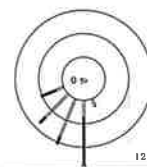
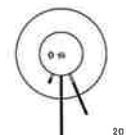
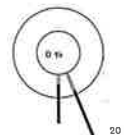

(Miss Preeda Somjai)
Technical Management Team

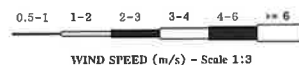


Meteorological Monitoring Results : Wind Rose

MTR-PTTGC6-Refinery

Location : Takuan-Ao Pradu Community 1	Monitor period : 18-25 May 2026
Wind Speed Model : Scarlet WL-21	Serial No : 2205DR0061
Wind Direction Model : Scarlet WL-21	Serial No : 2205DR0061

Time	22-23 May 2026		23-24 May 2026		24-25 May 2026	
	WS(m/s)	WD	WS(m/s)	WD	WS(m/s)	WD
12:00 - 13:00	2.9	S	2.7	S	2.5	SSE
13:00 - 14:00	2.5	S	2.7	S	2.3	SSE
14:00 - 15:00	1.7	S	2.4	SSE	2.2	SSE
15:00 - 16:00	1.4	SSW	2.1	SSE	2.2	SSE
16:00 - 17:00	1.5	SSW	1.8	SSE	2.3	S
17:00 - 18:00	1.2	SSW	1.6	SSE	2.3	S
18:00 - 19:00	1.0	SSE	2.1	SSE	2.0	S
19:00 - 20:00	1.3	SW	2.4	SSE	1.9	S
20:00 - 21:00	1.8	WSW	2.1	S	1.9	S
21:00 - 22:00	2.1	WSW	2.2	S	2.3	S
22:00 - 23:00	2.1	SW	2.0	SSW	2.2	SSE
23:00 - 24:00	2.3	WSW	1.4	SSW	1.8	SSE
00:00 - 01:00	1.7	SW	2.3	S	1.4	SSE
01:00 - 02:00	1.6	SW	2.6	S	1.2	SSE
02:00 - 03:00	1.7	SSW	2.4	S	1.8	SSE
03:00 - 04:00	1.1	S	2.3	S	2.1	SSE
04:00 - 05:00	1.3	SW	2.1	SSE	2.1	S
05:00 - 06:00	1.5	SSW	2.4	S	2.3	SSE
06:00 - 07:00	2.1	S	2.6	S	2.4	SSE
07:00 - 08:00	2.4	SSW	2.8	S	2.3	S
08:00 - 09:00	2.8	S	2.8	S	2.5	S
09:00 - 10:00	3.2	S	2.7	S	2.4	S
10:00 - 11:00	2.6	S	2.6	SSE	2.5	SSE
11:00 - 12:00	2.4	S	2.5	SSE	2.5	SSE
Wind Rose						
	12 % 24 %		20 %		20 %	




(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Preeda Somjai)
Technical Management Team

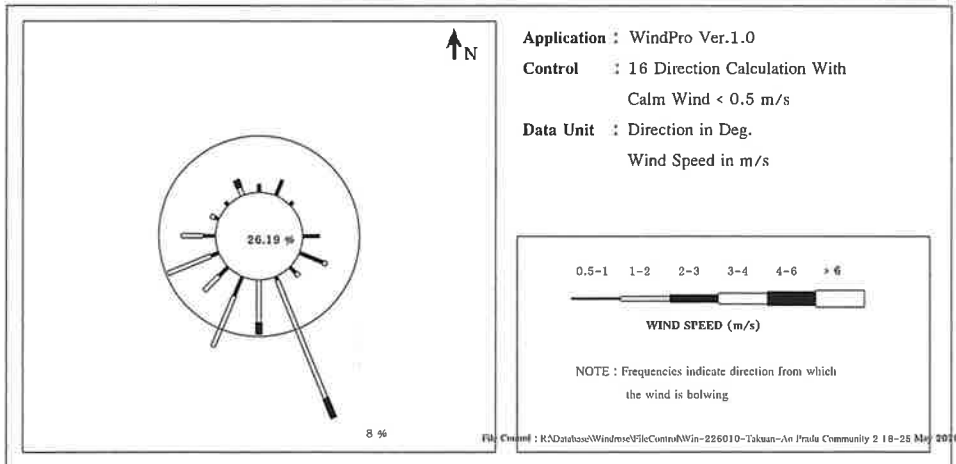


Meteorological Monitoring Results : Wind Rose

MTR-PTTGC6-Refinery

Location : Takuan-Ao Pradu Community 2 Monitor period : 18-25 May 2026
 Wind Speed Model : Scarlet WL-21 Serial No : 2205DR0080
 Wind Direction Model : Scarlet WL-21 Serial No : 2205DR0080

Direction	Percentage of Occurrence of Wind Direct Grouped in Various Wind Speed						
	0.5-1 m/s	1-2 m/s	2-3 m/s	3-4 m/s	4-6 m/s	More than 6	Total
N	0.0119	0.0000	0.0000	0.0000	0.0000	0.0000	0.0119
NNE	0.0238	0.0000	0.0000	0.0000	0.0000	0.0000	0.0238
NE	0.0060	0.0000	0.0000	0.0000	0.0000	0.0000	0.0060
ENE	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
E	0.0238	0.0000	0.0000	0.0000	0.0000	0.0000	0.0238
ESE	0.0357	0.0060	0.0000	0.0000	0.0000	0.0000	0.0417
SE	0.0119	0.0060	0.0000	0.0000	0.0000	0.0000	0.0179
SSE	0.0060	0.1786	0.0298	0.0000	0.0000	0.0000	0.2143
S	0.0000	0.0595	0.0179	0.0000	0.0000	0.0000	0.0774
SSW	0.0298	0.0774	0.0000	0.0000	0.0000	0.0000	0.1071
SW	0.0179	0.0298	0.0000	0.0000	0.0000	0.0000	0.0476
WSW	0.0119	0.0655	0.0000	0.0000	0.0000	0.0000	0.0774
W	0.0179	0.0298	0.0000	0.0000	0.0000	0.0000	0.0476
WNW	0.0060	0.0060	0.0000	0.0000	0.0000	0.0000	0.0119
NW	0.0060	0.0000	0.0000	0.0000	0.0000	0.0000	0.0060
NNW	0.0000	0.0119	0.0119	0.0000	0.0000	0.0000	0.0238
CALM	0.2619						



(Miss Katesarin Vorradetwittaya)
 Environmental Scientist

Preeda S.
 (Miss Preeda Somjai)
 Technical Management Team



Meteorological Monitoring Results : Wind Rose

MTR-PTTGC6-Refinery

Location : Takuan-Ao Pradu Community 2 Monitor period : 18-25 May 2026
 Wind Speed Model : Scarlet WL-21 Serial No : 2205DR0080
 Wind Direction Model : Scarlet WL-21 Serial No : 2205DR0080

Time	18-19 May 2026		19-20 May 2026		20-21 May 2026		21-22 May 2026	
	WS(m/s)	WD	WS(m/s)	WD	WS(m/s)	WD	WS(m/s)	WD
12:00 - 13:00	0.5	NNE	2.0	SSE	2.2	S	0.0	NNE
13:00 - 14:00	0.6	W	2.1	SSE	2.1	S	0.0	NNE
14:00 - 15:00	0.7	WSW	2.1	SSE	1.3	S	0.0	NNE
15:00 - 16:00	0.9	W	1.9	SSE	0.0	SW	0.0	NNE
16:00 - 17:00	0.9	SSW	1.7	SSE	0.0	SSW	0.0	NNE
17:00 - 18:00	0.9	SW	1.6	SSE	0.0	W	0.0	NNE
18:00 - 19:00	0.8	WNW	1.2	SSE	0.0	SW	0.0	NNE
19:00 - 20:00	0.9	W	1.1	SSE	0.0	SW	0.0	NNE
20:00 - 21:00	0.7	NW	1.1	SSE	0.0	SW	0.0	NNE
21:00 - 22:00	0.5	WSW	1.2	SSE	0.0	SW	0.0	NNE
22:00 - 23:00	0.3	S	1.3	SSE	0.0	SW	0.0	NNE
23:00 - 24:00	0.3	SSW	1.5	SSE	0.0	SW	0.0	NNE
00:00 - 01:00	0.5	SSW	1.7	SSE	0.0	SW	0.0	NNE
01:00 - 02:00	0.5	SW	1.5	SSE	0.0	SW	0.0	NNE
02:00 - 03:00	0.3	W	1.8	SSE	0.0	SW	0.0	N
03:00 - 04:00	0.6	SSW	1.3	SSE	0.0	SW	0.0	N
04:00 - 05:00	0.4	SW	1.5	SSE	0.0	SW	0.0	N
05:00 - 06:00	0.5	SW	1.4	SSE	0.0	SW	0.0	N
06:00 - 07:00	0.5	SSW	1.1	SSE	0.0	SW	0.0	N
07:00 - 08:00	0.8	SE	1.4	SSE	0.0	SW	1.5	WSW
08:00 - 09:00	0.6	ESE	1.7	SSE	0.0	SW	1.0	ESE
09:00 - 10:00	0.5	SSE	2.0	SSE	0.0	WSW	1.6	WSW
10:00 - 11:00	0.9	SSW	2.0	SSE	0.0	NNE	0.8	ESE
11:00 - 12:00	1.0	SSE	2.1	S	0.0	NNE	1.1	SSE



(Miss Katesarin Vorradetwittaya)
 Environmental Scientist

Preeda S.
 (Miss Preeda Somjai)
 Technical Management Team



Meteorological Monitoring Results : Wind Rose

MTR-PTTGC6-Refinery

Location : Takuan-Ao Pradu Community 2

Monitor period : 18-25 May 2026

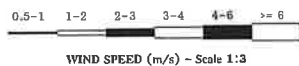
Wind Speed Model : Scarlet WL-21

Serial No : 2205DR0080

Wind Direction Model : Scarlet WL-21

Serial No : 2205DR0080

Time	22-23 May 2026		23-24 May 2026		24-25 May 2026		
	WS(m/s)	WD	WS(m/s)	WD	WS(m/s)	WD	
12:00 - 13:00	1.4	WSW	1.4	SSW	1.3	SSW	
13:00 - 14:00	1.3	SSW	1.6	W	1.4	WSW	
14:00 - 15:00	1.6	W	1.3	S	1.4	W	
15:00 - 16:00	1.1	SSE	0.5	NNE	0.5	N	
16:00 - 17:00	1.1	SSW	0.9	ESE	1.1	S	
17:00 - 18:00	1.4	WSW	0.5	NNE	1.0	SSE	
18:00 - 19:00	1.1	SSE	1.1	SE	1.5	W	
19:00 - 20:00	1.1	SSE	0.8	ESE	1.5	WSW	
20:00 - 21:00	1.4	SSW	1.7	WNW	1.2	S	
21:00 - 22:00	0.8	NE	2.0	NNW	1.9	NNW	
22:00 - 23:00	1.2	SSW	1.3	SW	1.5	SW	
23:00 - 24:00	1.8	NNW	1.0	SSE	0.9	ESE	
00:00 - 01:00	1.3	S	1.5	WSW	1.6	WSW	
01:00 - 02:00	1.3	S	1.3	SW	1.3	SSW	
02:00 - 03:00	1.5	WSW	0.8	E	1.2	SSE	
03:00 - 04:00	1.6	WSW	1.2	SSE	0.8	E	
04:00 - 05:00	0.5	N	1.2	SSE	1.4	WSW	
05:00 - 06:00	0.8	E	1.2	SSE	1.3	SW	
06:00 - 07:00	1.4	SW	0.5	NNE	1.2	S	
07:00 - 08:00	1.2	SSW	0.8	E	1.2	S	
08:00 - 09:00	1.1	S	1.2	SSW	0.8	ESE	
09:00 - 10:00	2.0	NNW	1.2	SSE	0.9	SE	
10:00 - 11:00	1.4	SSW	1.4	SSW	1.6	W	
11:00 - 12:00	1.4	S	1.5	SSW	1.3	SSW	
Wind Rose							



File Control :K:\Database\Windrose\FileControl\Win-22010-Takuan-Ao Pradu Community 2 18-25 May 2026

(Miss Katesarin Vorradetwittaya)

 Environmental Scientist

(Miss Preeda Somjai)

 Technical Management Team

คุณภาพอากาศจากปล่องระบายอากาศ



บริษัท ซีคอต จำกัด
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STACK EMISSION ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REFERENCE NO.	: 226010-Stack-2605-0026
	Branch 6 (Refinery)		
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION NO.	: 2-239
SAMPLING DATE	: 21/05/2026	SAMPLING TIME	: 11.00 a.m.-01.00 p.m.
RECEIVED DATE	: 23/05/2026	ANALYTICAL DATE	: 26-27/05/2026
REPORT DATE	: 04/06/2026	OPERATOR	: Mr. Pisanu Seenampeng (2-239-2-0029)
STACK LOCATION	: Main Stack	FUEL TYPE	: Fuel gas and Fuel Oil
SOURCE DESCRIPTION	: Combustion	SAMPLE CONDITION	: Normal

STACK DESCRIPTION

Height	: 140.0 m	Flow rate ^{1/}	: 9,594 Ncu.m/min
Diameter	: 4.5 m	Excess Oxygen	: 4.9 %
Temperature	: 201.7 °C	Moisture Content	: 13.3 %
Gas Velocity	: 18.6 m/s		

PARAMETER	UNIT	RESULTS		ASSIGN VALUE ^{2/}	STANDARD ^{3/}	REFERENCE METHODS
		4.9%O ₂	7%O ₂			
Particulate Matter	mg/Ncu.m	1.09	0.94	240	240	US. EPA Method 5
	g/s	-	0.174	31.120	-	

Pornnapa Budthum
(Miss Pornnapa Budthum)

Analyst

REG.NO.2-239-2-0018

Miss Narisa Poowasanpetch
(Miss Narisa Poowasanpetch)

Technical Management Team

REG.NO.2-239-2-0010

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

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

3. ^{1/} At standard pressure of 760 mmHg and temperature of 25 °C, dry basis.

4. ^{2/} The assign value in EIA report.

5. ^{3/} Notification of the Ministry of Natural Resources and Environment B.E.2554.



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STACK EMISSION ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REFERENCE NO.	: 226010-Stack-2605-0026
	Branch 6 (Refinery)		
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION NO.	: 2-239
SAMPLING DATE	: 21/05/2026	SAMPLING TIME	: 11.00 a.m.-01.00 p.m.
RECEIVED DATE	: 23/05/2026	ANALYTICAL DATE	: 23/05/2026-06/06/2026
REPORT DATE	: 09/06/2026	OPERATOR	: Mr. Pisanu Seenampeng (2-239-2-0029)
STACK LOCATION	: Main Stack	FUEL TYPE	: Fuel gas and Fuel Oil
SOURCE DESCRIPTION	: Combustion	SAMPLE CONDITION	: Normal

STACK DESCRIPTION

Height	: 140.0 m	Flow rate ^{1/}	: 9,594 Ncu.m/min
Diameter	: 4.5 m	Excess Oxygen	: 4.9 %
Temperature	: 201.7 °C	Moisture Content	: 13.3 %
Gas Velocity	: 18.6 m/s		

PARAMETER	UNIT	ND	RESULTS		ASSIGN VALUE ^{2/}	STANDARD ^{3/}	REFERENCE METHODS
		Non-detectable	4.9%O ₂	7%O ₂			
Lead	mg/m ³	<0.02	0.17	0.15	5.0	5.0	US. EPA Method 29
	g/s	-	-	0.027	0.709	-	
Mercury	mg/m ³	<0.0003	ND	-	2.4	2.4	US. EPA Method 29
	g/s	<0.0003	-	ND	<0.00005	0.340	

Jutarat Jaemruen
(Miss Jutarat Jaemruen)

Analyst

REG.NO.2-239-2-0022

Miss Narisa Poowasanpetch
(Miss Narisa Poowasanpetch)

Technical Management Team

REG.NO.2-239-2-0010

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STACK EMISSION ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical Public Co., Ltd. REFERENCE NO. : 226010-Stack-2605-0026
Branch 6 (Refinery)
SAMPLING BY : SECOT Co., Ltd. SAMPLING DATE : 21/05/2026
SAMPLING TIME : 11.00 a.m.-01.00 p.m. RECEIVED DATE : 23/05/2026
ANALYTICAL DATE : 25/05/2026 REPORT DATE : 09/06/2026
STACK LOCATION : Main Stack FUEL TYPE : Fuel gas and Fuel Oil
SOURCE DESCRIPTION : Combustion SAMPLE CONDITION : Normal
OPERATOR : Mr. Pisanu Seenampeng

STACK DESCRIPTION
Height : 140.0 m Flow rate^{1/} : 9,594 Ncu.m/min
Diameter : 4.5 m Excess Oxygen : 4.9 %
Temperature : 201.7 °C Moisture Content : 13.3 %
Gas Velocity : 18.6 m/s

PARAMETER	UNIT	ND	RESULTS		ASSIGN	STANDARD ^{3/}	REFERENCE
		Non-detectable	4.9%O ₂	7%O ₂	VALUE ^{2/}		
TVOC as propane	ppm	-	21.93	19.02	-	-	US. EPA Method 25A
	g/s	-	-	6.325	-	-	

Sudaporn S.

(Miss Sudaporn Soonthorn)

Analyst

Maia Poowasanpetch

(Miss Narisa Poowasanpetch)

Technical Management Team

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STACK EMISSION ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical Public Co., Ltd. REFERENCE NO. : 226010-Stack-2605-0026
Branch 6 (Refinery)
SAMPLING BY : SECOT Co., Ltd. REGISTRATION NO. : -
SAMPLING DATE : 21/05/2026 SAMPLING TIME : 11.00 a.m.-01.00 p.m.
RECEIVED DATE : 23/05/2026 ANALYTICAL DATE : 25/05/2026
REPORT DATE : 09/06/2026 OPERATOR : Mr. Pisanu Seenampeng
STACK LOCATION : Main Stack FUEL TYPE : Fuel gas and Fuel Oil
SOURCE DESCRIPTION : Combustion SAMPLE CONDITION : Normal

STACK DESCRIPTION
Height : 140.0 m Flow rate^{1/} : 9,594 Ncu.m/min
Diameter : 4.5 m Excess Oxygen : 4.9 %
Temperature : 201.7 °C Moisture Content : 13.3 %
Gas Velocity : 18.6 m/s

PARAMETER	UNIT	ND	RESULTS		ASSIGN	STANDARD ^{3/}	REFERENCE
		Non-detectable	4.9%O ₂	7%O ₂	VALUE ^{2/}		
Hydrogen Sulfide (H ₂ S)	ppm	<0.30	ND	-	60	60	US. EPA Method 16
		<0.26	-	ND			
	g/s	-	-	<0.067	11.830	-	

Sudaporn S.

(Miss Sudaporn Soonthorn)

Analyst

Maia Poowasanpetch

(Miss Narisa Poowasanpetch)

Technical Management Team

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STACK EMISSION ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REFERENCE NO.	: 226010-CEMs-2605-0026
	Branch 6 (Refinery)		
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION NO.	: 2-239
SAMPLING DATE	: 21/05/2026	SAMPLING TIME	: 11.00 a.m.-01.00 p.m.
RECEIVED DATE	: 04/06/2026	ANALYTICAL DATE	: 04-10/06/2026
REPORT DATE	: 10/06/2026	OPERATOR	: Mr. Pisanu Seenampeng (2-239-2-0029)
STACK LOCATION	: Main Stack	FUEL TYPE	: Fuel Gas and Fuel Oil
SOURCE DESCRIPTION	: Combustion	SAMPLE CONDITION	: Normal
STACK DESCRIPTION			
Height	: 140.0 m	Flow Rate*	: 9,594 Ncu,m/min
Diameter	: 4.5 m	Excess Oxygen	: 4.9 %
Temperature	: 201.7 °C	Moisture Content	: 13.3 %
Gas Velocity	: 18.6 m/s		

PARAMETER	RESULT*		STANDARD ^{1/} / EIA ^{2/}		EMISSION RATE		REFERENCE METHOD
	ppm		ppm		g/s		
	4.9%O ₂	7%O ₂	7%O ₂	RESULT	EIA ^{2/}		
Sulfur Dioxide (SO ₂)	19.79	17.16	950/700	8.289	135,000	US.EPA Method 6C	
Oxide of Nitrogen (NOx)	30.96	26.85	200/180	9.312	30,000	US.EPA Method 7E	
Carbon Monoxide (CO)	11.38	9.87	690/690	2.093	112,034	US.EPA Method 10	


(Miss Katesarin Vorradetwittaya)

Environmental Scientist

REG.NO. 2-239-2-0006


(Miss Preeda Somjai)

Technical Management Team

REG.NO. 2-239-2-0006

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

4. ^{1/} Notification of the Ministry of Natural Resources and Environment B.E.2554.

5. ^{2/} The assigned value is specified in EIA report.

The Monitoring Result of Emission Concentration

Main Stack

PTT Global Chemical Public Company Limited

May 21, 2026

Run Number	Oxygen content (%)		Oxide of Nitrogen (ppm)		
	RM Stack Gas Conc	Corrected Gas Conc	RM Stack Gas Conc	Corrected Gas Conc @Actual O ₂	Corrected Gas Conc @7% O ₂
1	4.85	4.94	31.20	31.20	27.17
2	4.74	4.84	30.97	30.96	26.80
3	4.73	4.84	30.73	30.72	26.59
Average	4.78	4.87	30.96	30.96	26.85

Run Number	Oxygen content (%)		Sulfur dioxide (ppm)		
	RM Stack Gas Conc	Corrected Gas Conc	RM Stack Gas Conc	Corrected Gas Conc @Actual O ₂	Corrected Gas Conc @7% O ₂
1	4.85	4.94	17.24	17.22	15.00
2	4.74	4.84	19.72	19.71	17.06
3	4.73	4.84	22.44	22.43	19.41
Average	4.78	4.87	19.80	19.79	17.16

Run Number	Oxygen content (%)		Carbonmonoxide (ppm)		
	RM Stack Gas Conc	Corrected Gas Conc	RM Stack Gas Conc	Corrected Gas Conc @Actual O ₂	Corrected Gas Conc @7% O ₂
1	4.85	4.94	12.08	12.04	10.49
2	4.74	4.84	11.13	11.10	9.61
3	4.73	4.84	11.04	11.01	9.53
Average	4.78	4.87	11.42	11.38	9.87

PTT Global Chemical Public Company Limited
EMISSION TEST RESULT

Date: May 21, 2026
Start time: 11:30 AM
O₂ instrument Model: AMI 70
NO_x instrument Model: TELEDYNE 200 EM
SO₂ instrument Model: TELEDYNE 100 EH
CO instrument Model: API 300 A
Fuel Type : Fuel Gas and Fuel Oil

Run # : 1
Location : Main Stack
Finish time : 11:50 AM
Serial No.: 161212-13
Serial No.: 435
Serial No.: 058
Serial No.: 78253-388
Test Operator : Pisanu S.

Time, min	O ₂ (%)	NO _x (ppm)	SO ₂ (ppm)	CO (ppm)
11:30 AM	4.88	30.07	14.94	10.06
11:31 AM	4.83	30.13	15.38	10.06
11:32 AM	4.73	30.02	15.82	11.08
11:33 AM	4.73	30.16	16.09	11.08
11:34 AM	4.80	30.46	16.43	11.08
11:35 AM	4.85	30.92	16.61	11.08
11:36 AM	4.85	31.33	16.90	11.67
11:37 AM	4.82	31.51	16.87	12.35
11:38 AM	4.78	31.32	17.13	13.11
11:39 AM	4.76	30.97	17.35	13.11
11:40 AM	4.65	30.85	17.34	13.11
11:41 AM	4.75	30.97	17.63	12.85
11:42 AM	4.92	31.46	17.83	12.09
11:43 AM	4.98	31.87	18.02	12.08
11:44 AM	4.95	31.96	18.14	12.08
11:45 AM	4.87	31.80	17.87	12.08
11:46 AM	4.89	31.74	17.90	12.84
11:47 AM	5.00	31.88	18.17	13.10
11:48 AM	5.02	32.09	18.41	13.10
11:49 AM	4.93	31.96	18.47	13.09
11:50 AM	4.87	31.69	18.81	12.67
Average	4.85	31.20	17.24	12.08

Signature



(Miss Katesarin Vorradetwittaya)

Environmental Scientist

PTT Global Chemical Public Company Limited
EMISSION TEST RESULT

Date: May 21, 2026
Start time: 11:51 AM
O₂ instrument Model: AMI 70
NO_x instrument Model: TELEDYNE 200 EM
SO₂ instrument Model: TELEDYNE 100 EH
CO instrument Model: API 300 A
Fuel Type : Fuel Gas and Fuel Oil

Run # : 2
Location : Main Stack
Finish time : 12:11 PM
Serial No.: 161212-13
Serial No.: 435
Serial No.: 058
Serial No.: 78253-388
Test Operator : Pisanu S.

Time, min	O ₂ (%)	NO _x (ppm)	SO ₂ (ppm)	CO (ppm)
11:51 AM	4.83	31.47	18.90	12.07
11:52 AM	4.81	31.29	18.95	11.31
11:53 AM	4.83	31.21	19.18	11.05
11:54 AM	4.80	31.38	19.21	11.05
11:55 AM	4.73	31.35	19.41	10.12
11:56 AM	4.71	31.03	19.62	10.03
11:57 AM	4.56	30.65	19.51	10.03
11:58 AM	4.58	30.52	19.33	10.62
11:59 AM	4.70	30.80	19.13	11.04
12:00 PM	4.70	30.88	18.84	11.04
12:01 PM	4.63	30.90	18.76	11.04
12:02 PM	4.61	30.75	19.01	11.04
12:03 PM	4.57	30.60	19.38	11.46
12:04 PM	4.73	30.57	19.69	12.05
12:05 PM	4.83	30.67	19.97	12.05
12:06 PM	4.82	30.95	20.49	12.04
12:07 PM	4.81	31.14	20.73	12.04
12:08 PM	4.86	31.11	20.84	11.79
12:09 PM	4.78	31.05	20.86	11.02
12:10 PM	4.78	30.97	21.04	10.77
12:11 PM	4.91	31.01	21.23	10.00
Average	4.74	30.97	19.72	11.13

Signature



(Miss Katesarin Vorradetwittaya)

Environmental Scientist

PTT Global Chemical Public Company Limited EMISSION TEST RESULT

Date: May 21, 2026
Start time: 12:12 PM
O₂ instrument Model: AMI 70
NO_x instrument Model: TELEDYNE 200 EM
SO₂ instrument Model: TELEDYNE 100 EH
CO instrument Model: API 300 A
Fuel Type : Fuel Gas and Fuel Oil

Run # : 3
Location : Main Stack
Finish time : 12:32 PM
Serial No.: 161212-13
Serial No.: 435
Serial No.: 058
Serial No.: 78253-388
Test Operator : Pisanu S.

Time, min	O ₂ (%)	NO _x (ppm)	SO ₂ (ppm)	CO (ppm)
12:12 PM	4.82	31.15	21.55	10.00
12:13 PM	4.77	31.21	21.81	10.00
12:14 PM	4.79	30.97	21.35	10.00
12:15 PM	4.80	30.99	21.21	10.77
12:16 PM	4.84	31.05	21.58	11.02
12:17 PM	4.89	31.00	21.66	11.44
12:18 PM	4.92	30.92	22.05	12.03
12:19 PM	4.83	30.81	22.12	12.03
12:20 PM	4.73	30.46	22.22	12.03
12:21 PM	4.66	30.40	22.46	11.43
12:22 PM	4.67	30.38	22.61	11.01
12:23 PM	4.73	30.60	22.68	11.01
12:24 PM	4.74	30.86	22.77	11.01
12:25 PM	4.71	30.81	22.75	11.01
12:26 PM	4.66	30.54	22.94	11.01
12:27 PM	4.54	30.18	23.09	11.01
12:28 PM	4.59	30.20	23.31	11.01
12:29 PM	4.77	30.43	23.36	11.01
12:30 PM	4.74	30.73	23.19	11.01
12:31 PM	4.61	30.93	23.26	11.00
12:32 PM	4.58	30.63	23.37	11.01
Average	4.73	30.73	22.44	11.04

Signature 
 (Miss Katesarin Vorradetwittaya)
 Environmental Scientist



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STACK EMISSION ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical Public Co., Ltd. **REFERENCE NO. :** 226010-Stack-2605-0026
Branch 6 (Refinery)
SAMPLING BY : SECOT Co., Ltd. **SAMPLING DATE :** 22/05/2026
SAMPLING TIME : 11:00 a.m. - 00:42 p.m. **RECEIVED DATE :** 23/05/2026
ANALYTICAL DATE : 25/05/2026 **REPORT DATE :** 09/06/2026
STACK LOCATION : CRS Stack **FUEL TYPE :** Fuel gas
SOURCE DESCRIPTION : Combustion **SAMPLE CONDITION :** Normal
OPERATOR : Mr. Kittipong Thakoengsuk

STACK DESCRIPTION

Height	: 100.0 m	Flow rate ^{1/}	: 288.5 Ncu,m/min
Diameter	: 1.66 m	Excess Oxygen	: 3.7 %
Temperature	: 178.5 °C	Moisture Content	: 12.8 %
Gas Velocity	: 3.9 m/s		

PARAMETER	UNIT	ND	RESULTS		ASSIGN	STANDARD ^{3/}	REFERENCE METHODS
		Non-detecable	3.7%O ₂	7%O ₂	VALUE ^{2/}		
TVOC as propane	ppm	-	3.00	2.42	-	-	US. EPA Method 25A
	g/s	-	-	0.026	-	-	

Sudaporn S.
 (Miss Sudaporn Soonthorn)

Analyst


 (Miss Narisa Poowasanpetch)
 Technical Management Team

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SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพฯ 10800

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

STACK EMISSION ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.		REFERENCE NO.	: 226010-CEMs-2605-0026	
	Branch 6 (Refinery)				
SAMPLING BY	: SECOT Co., Ltd.		REGISTRATION NO.	: 1-239	
SAMPLING DATE	: 22/05/2026		SAMPLING TIME	: 11.00 a.m. - 00.42 p.m.	
RECEIVED DATE	: 04/06/2026		ANALYTICAL DATE	: 04-10/06/2026	
REPORT DATE	: 10/06/2026		OPERATOR	: Mr. Kittipong Thakoengsuk (1-239-1-0024)	
STACK LOCATION	: CRS Stack		FUEL TYPE	: Fuel Gas	
SOURCE DESCRIPTION	: Combustion		SAMPLE CONDITION	: Normal	
STACK DESCRIPTION					
Height	: 100.0	m	Flow Rate*	: 288.5	Ncu.m/min
Diameter	: 1.66	m	Excess Oxygen	: 3.7	%
Temperature	: 178.5	°C	Moisture Content	: 12.8	%
Gas Velocity	: 3.9	m/s			

PARAMETER	RESULT*		STANDARD ^{1/} / EIA ^{2/}	EMISSION RATE		REFERENCE METHOD
	ppm		ppm	g/s		
	3.7%O ₂	7%O ₂	7%O ₂	RESULT	EIA ^{2/}	
Sulfur Dioxide (SO ₂)	0.38	0.31	60/3.5	0.005	0.200	US.EPA Method 6C
Oxide of Nitrogen (NOx)	27.03	21.79	200/60	0.244	2.404	US.EPA Method 7E
Carbon Monoxide (CO)	3.65	2.94	690/690	0.020	16.826	US.EPA Method 10


(Miss Katesarin Vorradetwittaya)

Environmental Scientist

REG.NO. 1-239-1-0006


(Miss Preeda Somjai)

Technical Management Team

REG.NO. 1-239-1-0006

- Remark :
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. * At standard pressure of 760 mmHg and temperature of 25 °C, dry basis.
 4. ^{1/} Notification of the Ministry of Natural Resources and Environment B.E.2554.
 5. ^{2/} The assigned value is specified in EIA report.

The Monitoring Result of Emission Concentration CRS Stack PTT Global Chemical Public Company Limited May 22, 2026

Run Number	Oxygen content (%)		Oxide of Nitrogen (ppm)		
	RM Stack Gas Conc	Corrected Gas Conc	RM Stack Gas Conc	Corrected Gas Conc @Actual O2	Corrected Gas Conc @7% O2
1	3.77	3.73	26.33	26.32	21.31
2	3.58	3.54	26.77	26.76	21.43
3	3.74	3.70	28.03	28.02	22.64
Average	3.70	3.66	27.04	27.03	21.79

Run Number	Oxygen content (%)		Sulfur dioxide (ppm)		
	RM Stack Gas Conc	Corrected Gas Conc	RM Stack Gas Conc	Corrected Gas Conc @Actual O2	Corrected Gas Conc @7% O2
1	3.77	3.73	0.27	0.22	0.18
2	3.58	3.54	0.29	0.24	0.19
3	3.74	3.70	0.72	0.68	0.55
Average	3.70	3.66	0.42	0.38	0.31

Run Number	Oxygen content (%)		Carbonmonoxide (ppm)		
	RM Stack Gas Conc	Corrected Gas Conc	RM Stack Gas Conc	Corrected Gas Conc @Actual O2	Corrected Gas Conc @7% O2
1	3.77	3.73	3.65	3.63	2.94
2	3.58	3.54	4.03	4.01	3.21
3	3.74	3.70	3.33	3.3	2.67
Average	3.70	3.66	3.67	3.65	2.94

PTT Global Chemical Public Company Limited
EMISSION TEST RESULT

Run # : 1

Date: May 22, 2026
Start time: 11:40 AM
O₂ instrument Model: AMI 70
NO_x instrument Model: Teledyne 200 EM
SO₂ instrument Model: API 100 AH
CO instrument Model: API 300 A
Fuel Type : Fuel Gas

Location : CRS Stack
Finish time : 12:00 PM
Serial No.: 161212-13
Serial No.: 435
Serial No.: 186
Serial No.: 1070
Test Operator : Kittipong T.

Time, min	O ₂ (%)	NO _x (ppm)	SO ₂ (ppm)	CO (ppm)
11:40 AM	4.05	25.47	0.03	3.55
11:41 AM	4.13	24.49	0.30	3.40
11:42 AM	4.02	27.75	0.29	3.71
11:43 AM	3.92	25.19	0.26	3.71
11:44 AM	3.81	24.93	0.24	3.88
11:45 AM	3.71	24.91	0.23	4.01
11:46 AM	3.75	25.27	0.21	4.01
11:47 AM	3.74	25.85	0.21	4.01
11:48 AM	3.73	26.38	0.35	3.73
11:49 AM	3.68	26.66	0.35	3.61
11:50 AM	3.73	26.66	0.32	3.47
11:51 AM	3.67	26.66	0.31	3.71
11:52 AM	3.70	26.71	0.29	3.71
11:53 AM	3.80	26.90	0.29	3.71
11:54 AM	3.73	27.31	0.26	3.49
11:55 AM	3.60	27.14	0.26	3.54
11:56 AM	3.62	26.59	0.28	3.68
11:57 AM	3.63	26.54	0.28	3.56
11:58 AM	3.72	26.89	0.29	3.42
11:59 AM	3.77	27.23	0.28	3.42
12:00 PM	3.76	27.39	0.28	3.22
Average	3.77	26.33	0.27	3.65

Signature



(Miss Katesarin Vorradetwittaya)

Environmental Scientist

PTT Global Chemical Public Company Limited
EMISSION TEST RESULT

Run # : 2

Date: May 22, 2026
Start time: 12:01 PM
O₂ instrument Model: AMI 70
NO_x instrument Model: Teledyne 200 EM
SO₂ instrument Model: API 100 AH
CO instrument Model: API 300 A
Fuel Type : Fuel Gas

Location : CRS Stack
Finish time : 12:21 PM
Serial No.: 161212-13
Serial No.: 435
Serial No.: 186
Serial No.: 1070
Test Operator : Kittipong T.

Time, min	O ₂ (%)	NO _x (ppm)	SO ₂ (ppm)	CO (ppm)
12:01 PM	3.56	27.24	0.27	3.37
12:02 PM	3.35	26.63	0.27	3.51
12:03 PM	3.21	25.55	0.27	4.37
12:04 PM	3.31	24.78	0.28	5.56
12:05 PM	3.61	25.31	0.27	6.82
12:06 PM	3.69	26.62	0.26	5.84
12:07 PM	3.50	27.02	0.25	4.81
12:08 PM	3.39	26.28	0.25	4.09
12:09 PM	3.45	25.67	0.24	4.05
12:10 PM	3.57	25.94	0.22	4.28
12:11 PM	3.71	26.65	0.19	4.14
12:12 PM	3.79	27.34	0.16	3.83
12:13 PM	3.78	27.95	0.14	3.47
12:14 PM	3.73	28.07	0.12	3.15
12:15 PM	3.63	27.65	0.14	3.13
12:16 PM	3.68	27.15	0.12	3.25
12:17 PM	3.74	27.19	0.13	3.43
12:18 PM	3.75	27.59	0.52	3.43
12:19 PM	3.62	27.68	0.63	3.44
12:20 PM	3.59	27.15	0.63	3.44
12:21 PM	3.56	26.73	0.64	3.21
Average	3.58	26.77	0.29	4.03

Signature



(Miss Katesarin Vorradetwittaya)

Environmental Scientist

PTT Global Chemical Public Company Limited

EMISSION TEST RESULT

Date: May 22, 2026
Start time: 12:22 PM
O₂ instrument Model: AMI 70
NO_x instrument Model: Teledyne 200 EM
SO₂ instrument Model: API 100 AH
CO instrument Model: API 300 A
Fuel Type : Fuel Gas

Run # : 3
Location : CRS Stack
Finish time : 12:42 PM
Serial No.: 161212-13
Serial No.: 435
Serial No.: 186
Serial No.: 1070
Test Operator : Kittipong T.

Time, min	O ₂ (%)	NO _x (ppm)	SO ₂ (ppm)	CO (ppm)
12:22 PM	3.61	26.78	0.64	3.14
12:23 PM	3.77	27.10	0.64	3.14
12:24 PM	3.73	27.53	0.64	3.15
12:25 PM	3.75	27.56	0.65	3.15
12:26 PM	3.66	27.35	0.65	3.15
12:27 PM	3.56	27.03	0.65	3.15
12:28 PM	3.59	26.77	0.68	3.31
12:29 PM	3.65	26.91	0.68	3.46
12:30 PM	3.71	27.22	0.69	3.38
12:31 PM	3.82	27.65	0.69	3.16
12:32 PM	3.75	28.04	0.72	3.16
12:33 PM	3.55	27.84	0.74	3.17
12:34 PM	3.68	27.33	0.74	3.17
12:35 PM	3.66	27.47	0.76	3.17
12:36 PM	3.92	28.38	0.77	3.37
12:37 PM	3.78	28.50	0.77	3.41
12:38 PM	3.73	29.55	0.76	3.23
12:39 PM	3.88	30.00	0.80	3.45
12:40 PM	3.90	29.70	0.92	3.83
12:41 PM	3.89	29.50	0.76	3.88
12:42 PM	3.91	30.33	0.73	4.00
Average	3.74	28.03	0.72	3.33

Signature

(Miss Katesarin Vorradetwittaya)

Environmental Scientist



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STACK EMISSION ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical Public Co., Ltd. **REFERENCE NO. :** 226010-Stack-2605-0026
Branch 6 (Refinery)
SAMPLING BY : SECOT Co., Ltd. **SAMPLING DATE :** 19/05/2026
SAMPLING TIME : 10.20-11.42 a.m. **RECEIVED DATE :** 23/05/2026
ANALYTICAL DATE : 25/05/2026 **REPORT DATE :** 09/06/2026
STACK LOCATION : HMU Stack **FUEL TYPE :** Fuel gas
SOURCE DESCRIPTION : Combustion **SAMPLE CONDITION :** Normal
OPERATOR : Mr. Kittipong Thakoengsuk

STACK DESCRIPTION

Height : 60.0 m **Flow rate^{1/} :** 2,311 Ncu.m/min
Diameter : 2.4 m **Excess Oxygen :** 5.9 %
Temperature : 181.0 °C **Moisture Content :** 11.5 %
Gas Velocity : 14.7 m/s

PARAMETER	UNIT	ND	RESULTS		ASSIGN	STANDARD ^{3/}	REFERENCE
		Non-detectable	5.9%O ₂	7%O ₂	VALUE ^{2/}		
TVOC as propane	ppm	-	8.23	7.61	-	-	US. EPA Method 25A
	g/s	-	-	0.572	-	-	

Sudaporn S.

(Miss Sudaporn Soonthorn)

Analyst

(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. ^{1/} At standard pressure of 760 mmHg and temperature of 25 °C, dry basis.
4. ^{2/} The assign value in EIA report.
5. ^{3/} Notification of the Ministry of Natural Resources and Environment B.E.2554.



บริษัท ซีคอต จำกัด

SECOT CO., LTD.

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STACK EMISSION ANALYSIS REPORT

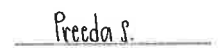
CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REFERENCE NO.	: 226010-CEMS-2605-0026
	Branch 6 (Refinery)		
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION NO.	: 7-239
SAMPLING DATE	: 19/05/2026	SAMPLING TIME	: 10.20-11.42 a.m.
RECEIVED DATE	: 04/06/2026	ANALYTICAL DATE	: 04-10/06/2026
REPORT DATE	: 10/06/2026	OPERATOR	: Mr. Kittipong Thakoengsuk (7-239-0-0024)
STACK LOCATION	: HMU Stack	FUEL TYPE	: Fuel Gas
SOURCE DESCRIPTION	: Combustion	SAMPLE CONDITION	: Normal
STACK DESCRIPTION			
Height	: 60.0 m	Flow Rate*	: 2,311 Ncu.m/min
Diameter	: 2.4 m	Excess Oxygen	: 5.9 %
Temperature	: 181.0 °C	Moisture Content	: 11.5 %
Gas Velocity	: 14.7 m/s		

PARAMETER	RESULT*		STANDARD ^{1/} / EIA ^{2/}	EMISSION RATE		REFERENCE METHOD
	ppm		ppm	g/s		
	5.9%O ₂	7%O ₂	7%O ₂	RESULT	EIA ^{2/}	
Oxide of Nitrogen (NOx)	29.71	27.46	200/180	2.152	4.450	US.EPA Method 7E
Carbon Monoxide (CO)	0.77	0.71	690/690	0.034	44.879	US.EPA Method 10


(Miss Katesarin Vorradetwittaya)

Environmental Scientist

REG.NO. 7-239-0-0006


(Miss Preeda Somjai)

Technical Management Team

REG.NO. 7-239-0-0006

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

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5. ^{2/} The assigned value is specified in EIA report.

The Monitoring Result of Emission Concentration

HMU Stack

PTT Global Chemical Public Company Limited

May 19, 2026

Run Number	Oxygen content (%)		Oxide of Nitrogen (ppm)		
	RM Stack Gas Conc	Corrected Gas Conc	RM Stack Gas Conc	Corrected Gas Conc @Actual O2	Corrected Gas Conc @7% O2
1	6.42	6.38	29.59	29.58	28.32
2	5.56	5.51	30.26	30.25	27.32
3	5.77	5.70	29.30	29.29	26.78
Average	5.92	5.86	29.72	29.71	27.46

Run Number	Oxygen content (%)		Sulfur dioxide (ppm)		
	RM Stack Gas Conc	Corrected Gas Conc	RM Stack Gas Conc	Corrected Gas Conc @Actual O2	Corrected Gas Conc @7% O2
1	6.42	6.38	0.68	0.65	0.62
2	5.56	5.51	0.44	0.39	0.35
3	5.77	5.70	0.24	0.18	0.16
Average	5.92	5.86	0.45	0.41	0.38

Run Number	Oxygen content (%)		Carbonmonoxide (ppm)		
	RM Stack Gas Conc	Corrected Gas Conc	RM Stack Gas Conc	Corrected Gas Conc @Actual O2	Corrected Gas Conc @7% O2
1	6.42	6.38	0.81	0.74	0.71
2	5.56	5.51	0.82	0.77	0.70
3	5.77	5.70	0.85	0.81	0.74
Average	5.92	5.86	0.83	0.77	0.71

PTT Global Chemical Public Company Limited

EMISSION TEST RESULT

Date: May 19, 2026
Start time: 10:40 AM
O₂ instrument Model: AMI 70
NO_x instrument Model: TELEDYNE 200 EM
SO₂ instrument Model: TELEDYNE 100 EH
CO instrument Model: API 300 A
Fuel Type : Fuel Gas

Run # : 1
Location : HMU Stack
Finish time : 11:00 AM
Serial No.: 16121-13
Serial No.: 435
Serial No.: 186
Serial No.: 1070
Test Operator : Kittipong T.

Time, min	O ₂ (%)	NO _x (ppm)	SO ₂ (ppm)	CO (ppm)
10:40 AM	6.19	27.75	0.77	0.80
10:41 AM	6.50	28.74	0.78	0.80
10:42 AM	6.06	29.53	0.77	0.80
10:43 AM	6.04	28.29	0.76	0.80
10:44 AM	6.54	27.57	0.76	0.81
10:45 AM	6.45	28.82	0.76	0.80
10:46 AM	6.44	30.15	0.74	0.80
10:47 AM	6.41	29.72	0.73	0.80
10:48 AM	6.77	29.10	0.72	0.80
10:49 AM	6.66	29.82	0.71	0.81
10:50 AM	6.67	30.76	0.70	0.81
10:51 AM	6.55	30.35	0.67	0.82
10:52 AM	6.83	29.29	0.65	0.82
10:53 AM	6.76	29.37	0.63	0.82
10:54 AM	6.42	30.05	0.63	0.82
10:55 AM	6.24	30.03	0.60	0.82
10:56 AM	6.33	29.42	0.59	0.82
10:57 AM	6.47	29.92	0.59	0.82
10:58 AM	6.35	31.19	0.59	0.81
10:59 AM	6.02	31.16	0.58	0.81
11:00 AM	6.10	30.37	0.55	0.81
Average	6.42	29.59	0.68	0.81

Signature



(Miss Katesarin Vorradetwittaya)

Environmental Scientist

PTT Global Chemical Public Company Limited

EMISSION TEST RESULT

Date: May 19, 2026
Start time: 11:01 AM
O₂ instrument Model: AMI 70
NO_x instrument Model: TELEDYNE 200 EM
SO₂ instrument Model: TELEDYNE 100 EH
CO instrument Model: API 300 A
Fuel Type : Fuel Gas

Run # : 2
Location : HMU Stack
Finish time : 11:21 AM
Serial No.: 16121-13
Serial No.: 435
Serial No.: 186
Serial No.: 1070
Test Operator : Kittipong T.

Time, min	O ₂ (%)	NO _x (ppm)	SO ₂ (ppm)	CO (ppm)
11:01 AM	6.13	30.58	0.55	0.80
11:02 AM	5.99	31.50	0.53	0.81
11:03 AM	5.61	31.79	0.51	0.81
11:04 AM	5.79	31.04	0.50	0.81
11:05 AM	5.92	30.69	0.48	0.81
11:06 AM	5.75	31.06	0.47	0.81
11:07 AM	5.48	31.07	0.46	0.82
11:08 AM	5.52	30.28	0.42	0.82
11:09 AM	5.59	29.82	0.42	0.82
11:10 AM	5.49	30.26	0.43	0.82
11:11 AM	5.12	30.13	0.45	0.82
11:12 AM	5.24	29.32	0.45	0.82
11:13 AM	5.45	29.59	0.43	0.82
11:14 AM	5.53	30.68	0.43	0.83
11:15 AM	5.25	30.80	0.42	0.88
11:16 AM	5.40	29.49	0.40	0.77
11:17 AM	5.52	29.25	0.40	0.81
11:18 AM	5.55	29.85	0.38	0.84
11:19 AM	5.26	29.89	0.36	0.84
11:20 AM	5.37	29.13	0.35	0.84
11:21 AM	5.79	29.31	0.33	0.84
Average	5.56	30.26	0.44	0.82

Signature



(Miss Katesarin Vorradetwittaya)

Environmental Scientist

PTT Global Chemical Public Company Limited

EMISSION TEST RESULT

Date: May 19, 2026
Start time: 11:22 AM
O₂ instrument Model: AMI 70
NO_x instrument Model: TELEDYNE 200 EM
SO₂ instrument Model: TELEDYNE 100 EH
CO instrument Model: API 300 A
Fuel Type : Fuel Gas

Run # : 3
Location : HMU Stack
Finish time : 11:42 AM
Serial No.: 16121-13
Serial No.: 435
Serial No.: 186
Serial No.: 1070
Test Operator : Kittipong T.

Time, min	O ₂ (%)	NO _x (ppm)	SO ₂ (ppm)	CO (ppm)
11:22 AM	5.80	30.42	0.32	0.85
11:23 AM	5.40	30.10	0.31	0.85
11:24 AM	5.80	28.60	0.29	0.84
11:25 AM	6.16	28.71	0.28	0.84
11:26 AM	6.00	29.77	0.27	0.85
11:27 AM	5.62	29.52	0.25	0.85
11:28 AM	5.91	28.28	0.24	0.84
11:29 AM	6.23	28.46	0.24	0.84
11:30 AM	5.97	29.46	0.24	0.84
11:31 AM	5.81	29.30	0.22	0.84
11:32 AM	6.01	28.50	0.19	0.84
11:33 AM	6.06	28.62	0.19	0.84
11:34 AM	5.67	29.15	0.19	0.84
11:35 AM	5.46	29.12	0.18	0.84
11:36 AM	5.72	28.97	0.16	0.84
11:37 AM	5.87	29.45	0.14	0.85
11:38 AM	5.66	30.40	0.14	0.85
11:39 AM	5.44	29.92	0.14	0.82
11:40 AM	5.54	28.77	0.18	0.88
11:41 AM	5.64	29.32	0.45	0.85
11:42 AM	5.45	30.42	0.48	0.86
Average	5.77	29.30	0.24	0.85

Signature

(Miss Katesarin Vorradetwittaya)

Environmental Scientist



บริษัท ซีคอต จำกัด

SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพฯ 10800

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

STACK EMISSION ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical Public Co., Ltd. **REFERENCE NO. :** 226010-Stack-2605-0026
Branch 6 (Refinery)
SAMPLING BY : SECOT Co., Ltd. **SAMPLING DATE :** 21/05/2026
SAMPLING TIME : 03.00-04.02 p.m. **RECEIVED DATE :** 23/05/2026
ANALYTICAL DATE : 25/05/2026 **REPORT DATE :** 09/06/2026
STACK LOCATION : HCU Stack **FUEL TYPE :** Fuel gas
SOURCE DESCRIPTION : Combustion **SAMPLE CONDITION :** Normal
OPERATOR : Mr. Kittipong Thakoengsuk

STACK DESCRIPTION

Height : 61.0 m **Flow rate^{1/} :** 243.5 Ncu,m/min
Diameter : 1.7 m **Excess Oxygen :** 2.7 %
Temperature : 244.5 °C **Moisture Content :** 10.3 %
Gas Velocity : 3.5 m/s

PARAMETER	UNIT	ND	RESULTS		ASSIGN	STANDARD ^{3/}	REFERENCE
		Non-detectable	2.7%O ₂	7%O ₂	VALUE ^{2/}		
TVOC as propane	ppm	-	3.30	2.52	-	-	US, EPA Method 25A
	g/s	-	-	0.024	-	-	

Sudaporn S.

(Miss Sudaporn Soonthorn)

Analyst

Naris Poowasanpetch

(Miss Narisa Poowasanpetch)

Technical Management Team

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 3. ^{1/} At standard pressure of 760 mmHg and temperature of 25 °C, dry basis.
 4. ^{2/} The assign value in EIA report.
 5. ^{3/} Notification of the Ministry of Natural Resources and Environment B.E.2554.



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MTR HCU Stack (NO_x+CO)Sum1/6/15/2026

**The Monitoring Result of Emission Concentration
HCU Stack
PTT Global Chemical Public Company Limited
May 21, 2026**

STACK EMISSION ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REFERENCE NO.	: 226010-CEMs-2605-0026
	Branch 6 (Refinery)		
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION NO.	: 7-239
SAMPLING DATE	: 21/05/2026	SAMPLING TIME	: 03.00-04.02 p.m.
RECEIVED DATE	: 04/06/2026	ANALYTICAL DATE	: 04-10/06/2026
REPORT DATE	: 10/06/2026	OPERATOR	: Mr. Kittipong Thakoengsuk (7-239-7-0024)
STACK LOCATION	: HCU Stack	FUEL TYPE	: Fuel Gas
SOURCE DESCRIPTION	: Combustion	SAMPLE CONDITION	: Normal
STACK DESCRIPTION			
Height	: 61.0 m	Flow Rate*	: 243.5 Ncu.m/min
Diameter	: 1.7 m	Excess Oxygen	: 2.7 %
Temperature	: 244.5 °C	Moisture Content	: 10.3 %
Gas Velocity	: 3.5 m/s		

PARAMETER	RESULT*		STANDARD ^{1/} / EIA ^{2/}	EMISSION RATE		REFERENCE METHOD
	ppm		ppm	g/s		
	2.7%O ₂	7%O ₂	7%O ₂	RESULT	EIA ^{2/}	
Oxide of Nitrogen (NOx)	35.36	27.01	200/180	0.270	1.070	US.EPA Method 7E
Carbon Monoxide (CO)	0.26	0.20	690/690	0.001	6.727	US.EPA Method 10



(Miss Katesarin Vorradetwittaya)

Environmental Scientist

REG.NO. 7-239-7-0006



(Miss Preeda Somjai)

Technical Management Team

REG.NO. 7-239-7-0006

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

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

4. ^{1/} Notification of the Ministry of Natural Resources and Environment B.E.2554.

5. ^{2/} The assigned value is specified in EIA report.

Run Number	Oxygen content (%)		Oxide of Nitrogen (ppm)		
	RM Stack Gas Conc	Corrected Gas Conc	RM Stack Gas Conc	Corrected Gas Conc @Actual O2	Corrected Gas Conc @7% O2
1	2.77	2.72	33.63	33.62	25.71
2	2.72	2.67	35.71	35.71	27.23
3	2.75	2.71	36.75	36.75	28.08
Average	2.75	2.70	35.36	35.36	27.01

Run Number	Oxygen content (%)		Carbonmonoxide (ppm)		
	RM Stack Gas Conc	Corrected Gas Conc	RM Stack Gas Conc	Corrected Gas Conc @Actual O2	Corrected Gas Conc @7% O2
1	2.77	2.72	0.31	0.27	0.21
2	2.72	2.67	0.29	0.25	0.19
3	2.75	2.71	0.30	0.27	0.21
Average	2.75	2.70	0.30	0.26	0.20

PTT Global Chemical Public Company Limited EMISSION TEST RESULT

Date: May 21, 2026
Start time: 3:00 PM
O₂ instrument Model: AMI 70
NO_x instrument Model: TELEDYNE 200 EM
CO instrument Model: THERMO 48 C
Fuel Type : Fuel Gas

Run # : 1
Location : HCU Stack
Finish time : 3:20 PM
Serial No.: 170615-6
Serial No.: 433
Serial No.: 0412106049
Test Operator : Kittipong T.

Time, min	O ₂ (%)	NO _x (ppm)	CO (ppm)
3:00 PM	3.09	30.99	0.31
3:01 PM	2.97	31.49	0.31
3:02 PM	2.82	32.88	0.31
3:03 PM	2.65	32.98	0.31
3:04 PM	2.69	32.36	0.31
3:05 PM	2.97	32.09	0.31
3:06 PM	3.00	32.76	0.31
3:07 PM	2.79	33.92	0.31
3:08 PM	2.51	33.52	0.31
3:09 PM	2.51	32.96	0.31
3:10 PM	2.78	32.51	0.31
3:11 PM	2.82	33.70	0.30
3:12 PM	2.78	34.55	0.30
3:13 PM	2.76	34.96	0.30
3:14 PM	2.91	34.72	0.30
3:15 PM	2.68	35.27	0.30
3:16 PM	2.74	35.22	0.30
3:17 PM	2.64	34.43	0.30
3:18 PM	2.65	34.91	0.30
3:19 PM	2.56	34.95	0.30
3:20 PM	2.80	35.02	0.30
Average	2.77	33.63	0.31

Signature



(Miss Katesarin Vorradetwittaya)

Environmental Scientist

PTT Global Chemical Public Company Limited EMISSION TEST RESULT

Date: May 21, 2026
Start time: 3:21 PM
O₂ instrument Model: AMI 70
NO_x instrument Model: TELEDYNE 200 EM
CO instrument Model: THERMO 48 C
Fuel Type : Fuel Gas

Run # : 2
Location : HCU Stack
Finish time : 3:41 PM
Serial No.: 170615-6
Serial No.: 435
Serial No.: 0412106049
Test Operator : Kittipong T.

Time, min	O ₂ (%)	NO _x (ppm)	CO (ppm)
3:21 PM	2.76	35.26	0.30
3:22 PM	2.94	36.21	0.29
3:23 PM	2.92	36.46	0.29
3:24 PM	2.80	36.57	0.29
3:25 PM	2.78	36.66	0.29
3:26 PM	2.65	36.47	0.29
3:27 PM	2.67	36.28	0.29
3:28 PM	2.78	35.14	0.28
3:29 PM	2.56	35.27	0.29
3:30 PM	2.65	35.29	0.29
3:31 PM	2.60	34.87	0.29
3:32 PM	2.63	35.26	0.29
3:33 PM	2.68	35.84	0.29
3:34 PM	2.64	35.89	0.29
3:35 PM	2.99	36.36	0.29
3:36 PM	2.95	36.60	0.29
3:37 PM	2.68	36.95	0.29
3:38 PM	2.42	36.06	0.29
3:39 PM	2.47	34.48	0.29
3:40 PM	2.59	33.74	0.29
3:41 PM	2.91	34.34	0.29
Average	2.72	35.71	0.29

Signature



(Miss Katesarin Vorradetwittaya)

Environmental Scientist

PTT Global Chemical Public Company Limited

EMISSION TEST RESULT

Date: May 21, 2026
Start time: 3:42 PM
O₂ instrument Model: AMI 70
NO_x instrument Model: TELEDYNE 200 EM
CO instrument Model: THERMO 48 C
Fuel Type : Fuel Gas

Run # : 3
Location : HCU Stack
Finish time : 4:02 PM
Serial No.: 170615-6
Serial No.: 435
Serial No.: 0412106049
Test Operator : Kittipong T.

Time, min	O ₂ (%)	NO _x (ppm)	CO (ppm)
3:42 PM	2.95	35.73	0.29
3:43 PM	2.83	37.22	0.29
3:44 PM	2.88	37.13	0.29
3:45 PM	2.89	37.16	0.29
3:46 PM	2.88	37.43	0.29
3:47 PM	2.67	37.44	0.29
3:48 PM	2.72	36.76	0.29
3:49 PM	2.71	35.69	0.29
3:50 PM	2.53	35.62	0.29
3:51 PM	2.42	35.07	0.29
3:52 PM	2.94	34.40	0.29
3:53 PM	2.91	36.46	0.29
3:54 PM	2.81	38.13	0.29
3:55 PM	2.74	38.10	0.29
3:56 PM	2.67	37.76	0.29
3:57 PM	2.88	37.43	0.29
3:58 PM	2.61	37.31	0.31
3:59 PM	2.73	37.33	0.36
4:00 PM	2.69	36.19	0.38
4:01 PM	2.70	36.39	0.34
4:02 PM	2.68	36.93	0.33
Average	2.75	36.75	0.30

Signature



(Miss Katesarin Vorradetwittaya)

Environmental Scientist



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STACK EMISSION ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical Public Co., Ltd. **REFERENCE NO. :** 226010-Stack-2605-0026
Branch 6 (Refinery)
SAMPLING BY : SECOT Co., Ltd. **SAMPLING DATE :** 22/05/2026
SAMPLING TIME : 02.15-04.15 p.m. **RECEIVED DATE :** 23/05/2026
ANALYTICAL DATE : 25/05/2026 **REPORT DATE :** 09/06/2026
STACK LOCATION : DHOS Stack **FUEL TYPE :** Fuel gas
SOURCE DESCRIPTION : Combustion **SAMPLE CONDITION :** Normal
OPERATOR : Mr. Kittipong Thakoengsuk

STACK DESCRIPTION

Height : 80.0 m **Flow rate^{1/} :** 171.4 Ncu,m/min
Diameter : 1.2 m **Excess Oxygen :** 4.3 %
Temperature : 184.6 °C **Moisture Content :** 13.5 %
Gas Velocity : 4.5 m/s

PARAMETER	UNIT	ND	RESULTS		ASSIGN	REFERENCE
		Non-detectable	4.3%O ₂	7%O ₂	VALUE ^{2/} STANDARD ^{3/}	
TVOC as propane	ppm	-	2.99	2.50	-	US. EPA Method 25A
	g/s	-	-	0.015	-	

Sudaporn S.
(Miss Sudaporn Soonthorn)

Analyst

Main Poowanapetch
(Miss Narisa Poowanapetch)

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/} At standard pressure of 760 mmHg and temperature of 25 °C, dry basis.
 4. ^{2/} The assign value in EIA report.
 5. ^{3/} Notification of the Ministry of Natural Resources and Environment B.E.2554.



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STACK EMISSION ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REFERENCE NO.	: 226010-Stack-2605-0026
	Branch 6 (Refinery)		
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION NO.	: 2-239
SAMPLING DATE	: 22/05/2026	SAMPLING TIME	: 02.15-16.15 p.m.
RECEIVED DATE	: 23/05/2026	ANALYTICAL DATE	: 23/05/2026-06/06/2026
REPORT DATE	: 09/06/2026	OPERATOR	: Mr. Kittipong Thakoengsuk (2-239-ก-0024)
STACK LOCATION	: DHDS Stack	FUEL TYPE	: Fuel gas
SOURCE DESCRIPTION	: Combustion	SAMPLE CONDITION	: Normal

STACK DESCRIPTION

Height	: 80.0	m	Flow rate ^{1/}	: 171.4	Ncu,m/min
Diameter	: 1.2	m	Excess Oxygen	: 4.3	%
Temperature	: 184.6	°C	Moisture Content	: 13.5	%
Gas Velocity	: 4.5	m/s			

PARAMETER	UNIT	ND	RESULTS		ASSIGN	STANDARD ^{3/}	REFERENCE METHODS
		Non-detectable	4.3%O ₂	7%O ₂	VALUE ^{2/}		
Lead	mg/m ³	<0.02	0.04	0.03	5.0	-	US. EPA Method 29
	g/s	-	-	0.0001	0.050	-	
Mercury	mg/m ³	<0.0003	ND	-	2.4	-	US. EPA Method 29
	g/s	<0.0003	-	ND	0.024	-	

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG.NO.2-239-ก-0022

Miss Narisa Poowasanpetch

(Miss Narisa Poowasanpetch)

Technical Management Team

REG.NO.2-239-ก-0010

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3. ^{1/} At standard pressure of 760 mmHg and temperature of 25 °C, dry basis.4. ^{2/} The assign value in EIA report.5. ^{3/} Notification of the Ministry of Natural Resources and Environment B.E.2554.

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STACK EMISSION ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REFERENCE NO.	: 226010-CEMS-2605-0026
	Branch 6 (Refinery)		
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION NO.	: 2-239
SAMPLING DATE	: 22/05/2026	SAMPLING TIME	: 02.15-04.15 p.m.
RECEIVED DATE	: 04/06/2026	ANALYTICAL DATE	: 04-10/06/2026
REPORT DATE	: 10/06/2026	OPERATOR	: Mr. Kittipong Thakoengsuk (2-239-ก-0024)
STACK LOCATION	: DHDS Stack	FUEL TYPE	: Fuel gas
SOURCE DESCRIPTION	: Combustion	SAMPLE CONDITION	: Normal

STACK DESCRIPTION

Height	: 80.0	m	Flow Rate*	: 171.4	Ncu,m/min
Diameter	: 1.2	m	Excess Oxygen	: 4.3	%
Temperature	: 184.6	°C	Moisture Content	: 13.5	%
Gas Velocity	: 4.5	m/s			

PARAMETER	RESULT*		STANDARD ^{1/} / EIA ^{2/}	EMISSION RATE		REFERENCE METHOD
	ppm		ppm	g/s		
	4.3%O ₂	7%O ₂	7%O ₂	RESULT	EIA ^{2/}	
Sulfur Dioxide (SO ₂)	0.29	0.24	60/3.5	0.002	0.091	US.EPA Method 6C
Oxide of Nitrogen (NOx)	29.57	24.74	200/50	0.159	0.933	US.EPA Method 7E
Carbon Monoxide (CO)	0.66	0.55	690/690	0.002	7.834	US.EPA Method 10

(Miss Katesarin Vorradetwittaya)

Environmental Scientist

REG.NO. 2-239-ก-0006

Preeda S.

(Miss Preeda Somjai)

Technical Management Team

REG.NO. 2-239-ก-0006

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

4. ^{1/} Notification of the Ministry of Natural Resources and Environment B.E.2554.5. ^{2/} The assigned value is specified in EIA report.

The Monitoring Result of Emission Concentration
DHDS Stack
PTT Global Chemical Public Company Limited
May 22, 2026

Run Number	Oxygen content (%)		Oxide of Nitrogen (ppm)		
	RM Stack Gas Conc	Corrected Gas Conc	RM Stack Gas Conc	Corrected Gas Conc @Actual O2	Corrected Gas Conc @7% O2
1	4.35	4.31	29.82	29.81	24.98
2	4.37	4.33	29.71	29.70	24.91
3	4.26	4.22	29.20	29.19	24.33
Average	4.33	4.29	29.58	29.57	24.74

Run Number	Oxygen content (%)		Sulfur dioxide (ppm)		
	RM Stack Gas Conc	Corrected Gas Conc	RM Stack Gas Conc	Corrected Gas Conc @Actual O2	Corrected Gas Conc @7% O2
1	4.35	4.31	0.19	0.15	0.13
2	4.37	4.33	0.39	0.35	0.29
3	4.26	4.22	0.40	0.37	0.31
Average	4.33	4.29	0.33	0.29	0.24

Run Number	Oxygen content (%)		Carbonmonoxide (ppm)		
	RM Stack Gas Conc	Corrected Gas Conc	RM Stack Gas Conc	Corrected Gas Conc @Actual O2	Corrected Gas Conc @7% O2
1	4.35	4.31	0.76	0.73	0.61
2	4.37	4.33	0.65	0.62	0.52
3	4.26	4.22	0.66	0.62	0.52
Average	4.33	4.29	0.69	0.66	0.55

PTT Global Chemical Public Company Limited
EMISSION TEST RESULT

Date: May 22, 2026
 Start time: 2:50 PM
 O₂ instrument Model: AMI 70
 NO_x instrument Model: TELEDYNE 200 EM
 SO₂ instrument Model: TELEDYNE 100 EH
 CO instrument Model: API 300 A
 Fuel Type : Fuel Gas

Run # : 1
 Location : DHDS Stack
 Finish time : 3:10 PM
 Serial No.: 161212-13
 Serial No.: 435
 Serial No.: 186
 Serial No.: 1070
 Test Operator : Kittipong T.

Time, min	O ₂ (%)	NO _x (ppm)	SO ₂ (ppm)	CO (ppm)
2:50 PM	4.26	29.36	0.19	0.79
2:51 PM	4.22	29.35	0.19	0.80
2:52 PM	4.20	29.52	0.19	0.80
2:53 PM	4.19	29.67	0.19	0.80
2:54 PM	4.21	29.63	0.17	0.82
2:55 PM	4.13	29.62	0.19	0.82
2:56 PM	4.36	29.62	0.18	0.80
2:57 PM	4.52	29.65	0.21	0.79
2:58 PM	4.46	29.75	0.22	0.78
2:59 PM	4.45	29.95	0.22	0.77
3:00 PM	4.43	30.07	0.22	0.76
3:01 PM	4.38	30.08	0.12	0.75
3:02 PM	4.38	30.08	0.11	0.74
3:03 PM	4.42	30.03	0.10	0.73
3:04 PM	4.46	30.07	0.09	0.73
3:05 PM	4.50	30.14	0.06	0.72
3:06 PM	4.45	30.15	0.03	0.71
3:07 PM	4.39	30.00	0.02	0.71
3:08 PM	4.31	29.82	0.02	0.70
3:09 PM	4.28	29.77	0.63	0.70
3:10 PM	4.33	29.84	0.74	0.69
Average	4.35	29.82	0.19	0.76

Signature

(Miss Katesarin Vorradetwittaya)

Environmental Scientist

PTT Global Chemical Public Company Limited EMISSION TEST RESULT

Date: May 22, 2026
Start time: 3:11 PM
O₂ instrument Model: AMI 70
NO_x instrument Model: TELEDYNE 200 EM
SO₂ instrument Model: TELEDYNE 100 EH
CO instrument Model: API 300 A
Fuel Type : Fuel Gas

Run # : 2
Location : DHDS Stack
Finish time : 3:31 PM
Serial No.: 161212-13
Serial No.: 435
Serial No.: 186
Serial No.: 1070
Test Operator : Kittipong T.

Time, min	O ₂ (%)	NO _x (ppm)	SO ₂ (ppm)	CO (ppm)
3:11 PM	4.40	30.04	0.70	0.69
3:12 PM	4.40	30.19	0.68	0.69
3:13 PM	4.38	30.14	0.63	0.68
3:14 PM	4.30	29.92	0.63	0.67
3:15 PM	4.31	29.66	0.58	0.66
3:16 PM	4.38	29.55	0.55	0.66
3:17 PM	4.41	29.71	0.51	0.65
3:18 PM	4.48	29.89	0.48	0.64
3:19 PM	4.50	29.99	0.45	0.63
3:20 PM	4.46	29.88	0.42	0.63
3:21 PM	4.41	29.73	0.39	0.63
3:22 PM	4.43	29.67	0.34	0.63
3:23 PM	4.40	29.69	0.29	0.63
3:24 PM	4.26	29.56	0.26	0.64
3:25 PM	4.17	29.40	0.24	0.64
3:26 PM	4.24	29.33	0.23	0.64
3:27 PM	4.40	29.38	0.21	0.65
3:28 PM	4.42	29.51	0.18	0.64
3:29 PM	4.36	29.71	0.19	0.64
3:30 PM	4.36	29.64	0.17	0.65
3:31 PM	4.34	29.41	0.15	0.65
Average	4.37	29.71	0.39	0.65

Signature

(Miss Katesarin Vorradetwittaya)

Environmental Scientist

PTT Global Chemical Public Company Limited EMISSION TEST RESULT

Date: May 22, 2026
Start time: 3:32 PM
O₂ instrument Model: AMI 70
NO_x instrument Model: TELEDYNE 200 EM
SO₂ instrument Model: TELEDYNE 100 EH
CO instrument Model: API 300 A
Fuel Type : Fuel Gas

Run # : 3
Location : DHDS Stack
Finish time : 3:52 PM
Serial No.: 161212-13
Serial No.: 435
Serial No.: 186
Serial No.: 1070
Test Operator : Kittipong T.

Time, min	O ₂ (%)	NO _x (ppm)	SO ₂ (ppm)	CO (ppm)
3:32 PM	4.21	29.26	0.12	0.65
3:33 PM	4.17	29.09	0.12	0.65
3:34 PM	4.21	28.98	0.10	0.65
3:35 PM	4.22	29.04	0.10	0.65
3:36 PM	4.17	29.02	0.08	0.65
3:37 PM	4.13	28.93	0.07	0.66
3:38 PM	4.19	28.81	0.06	0.65
3:39 PM	4.29	28.92	0.51	0.66
3:40 PM	4.34	29.23	0.61	0.66
3:41 PM	4.22	29.30	0.61	0.66
3:42 PM	4.12	29.13	0.58	0.66
3:43 PM	4.17	29.02	0.58	0.66
3:44 PM	4.28	29.12	0.56	0.67
3:45 PM	4.34	29.36	0.55	0.67
3:46 PM	4.34	29.58	0.55	0.67
3:47 PM	4.30	29.57	0.56	0.68
3:48 PM	4.25	29.34	0.53	0.68
3:49 PM	4.33	29.25	0.51	0.68
3:50 PM	4.36	29.22	0.51	0.68
3:51 PM	4.40	29.42	0.50	0.68
3:52 PM	4.38	29.60	0.50	0.68
Average	4.26	29.20	0.40	0.66

Signature

(Miss Katesarin Vorradetwittaya)

Environmental Scientist



บริษัท ซีคอต จำกัด

SECOT CO., LTD.

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STACK EMISSION ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REFERENCE NO.	: 226010-CEMS-2605-0026
	Branch 6 (Refinery)		
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION NO.	: ๓-239
SAMPLING DATE	: 20/05/2026	SAMPLING TIME	: 11.40 a.m. - 00.42 p.m.
RECEIVED DATE	: 04/06/2026	ANALYTICAL DATE	: 04-10/06/2026
REPORT DATE	: 10/06/2026	OPERATOR	: Mr. Kittipong Thakoengsuk (๓-239-๓-0024)
STACK LOCATION	: Gas Turbine 1	FUEL TYPE	: Natural Gas
SOURCE DESCRIPTION	: Combustion	SAMPLE CONDITION	: Normal
STACK DESCRIPTION			
Height	: 60.0 m	Flow Rate ^{1/}	: 3,109 Ncu.m/min
Diameter	: 2.5 m	Excess Oxygen	: 12.9 %
Temperature	: 197.5 °C	Molsture Content	: 11.1 %
Gas Velocity	: 18.8 m/s		

PARAMETER	RESULT*		STANDARD ^{1/} / EIA ^{2/}	EMISSION RATE		REFERENCE METHOD
	ppm		ppm	g/s		
	12.9%O ₂	7%O ₂	7%O ₂	RESULT	EIA ^{2/}	
Oxide of Nitrogen (NOx)	38.02	65.82	200/180	3.706	6.000	US.EPA Method 7E
Carbon Monoxide (CO)	189.49	328.01	690/690	11.290	20.470	US.EPA Method 10

(Miss Katesarin Vorradetwittaya)

Environmental Scientist

REG.NO. ๓-239-๓-0006

(Miss Preeda Somjai)

Technical Management Team

REG.NO. ๓-239-๓-0006

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

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

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

4. ^{1/} Notification of the Ministry of Natural Resources and Environment B.E.2554.

5. ^{2/} The assigned value is specified in EIA report.

MTR GasTurbine I (NO_x+CO)/Sum1/6/15/2026

The Monitoring Result of Emission Concentration GAS Turbine 1 PTT Global Chemical Public Company Limited May 20, 2026

Run Number	Oxygen content (%)		Oxide of Nitrogen (ppm)		
	RM Stack Gas Conc	Corrected Gas Conc	RM Stack Gas Conc	Corrected Gas Conc @Actual O2	Corrected Gas Conc @7% O2
1	12.98	12.94	38.19	38.19	66.69
2	12.90	12.85	38.51	38.51	66.50
3	12.88	12.82	37.37	37.37	64.29
Average	12.92	12.87	38.02	38.02	65.82

Run Number	Oxygen content (%)		Carbonmonoxide (ppm)		
	RM Stack Gas Conc	Corrected Gas Conc	RM Stack Gas Conc	Corrected Gas Conc @Actual O2	Corrected Gas Conc @7% O2
1	12.98	12.94	194.54	194.72	340.03
2	12.90	12.85	185.17	185.33	320.01
3	12.88	12.82	188.27	188.42	324.14
Average	12.92	12.87	189.33	189.49	328.01

PTT Global Chemical Public Company Limited EMISSION TEST RESULT

Date: May 20, 2026
Start time: 11:40 AM
O₂ instrument Model: AMI 70
NO_x instrument Model: TELEDYNE 200 EM
CO instrument Model: THERMO 48 C
Fuel Type : Natural Gas

Run # : 1
Location : GAS Turbine 1
Finish time : 12:00 PM
Serial No.: 170615-6
Serial No.: 433
Serial No.: 0412106049
Test Operator : Kittipong T.

Time, min	O ₂ (%)	NOx (ppm)	CO (ppm)
11:40 AM	12.87	30.70	174.18
11:41 AM	12.82	30.60	186.70
11:42 AM	12.84	33.17	196.11
11:43 AM	12.80	36.26	199.81
11:44 AM	12.83	36.51	189.84
11:45 AM	12.86	37.17	152.41
11:46 AM	12.90	37.93	207.03
11:47 AM	12.89	39.44	208.20
11:48 AM	12.92	40.82	203.66
11:49 AM	12.97	40.60	203.87
11:50 AM	13.02	40.27	203.83
11:51 AM	13.07	39.98	209.29
11:52 AM	13.14	39.78	206.46
11:53 AM	13.26	39.86	201.50
11:54 AM	13.33	39.96	197.05
11:55 AM	13.04	39.96	193.05
11:56 AM	12.97	39.87	190.73
11:57 AM	13.01	39.77	188.31
11:58 AM	13.01	39.79	191.55
11:59 AM	12.98	39.88	193.56
12:00 PM	12.98	39.77	188.14
Average	12.98	38.19	194.54

Signature



(Miss Katesarin Vorradetwittaya)

Environmental Scientist

PTT Global Chemical Public Company Limited EMISSION TEST RESULT

Date: May 20, 2026
Start time: 12:01 PM
O₂ instrument Model: AMI 70
NO_x instrument Model: TELEDYNE 200 EM
CO instrument Model: THERMO 48 C
Fuel Type : Natural Gas

Run # : 2
Location : GAS Turbine 1
Finish time : 12:21 PM
Serial No.: 170615-6
Serial No.: 433
Serial No.: 0412106049
Test Operator : Kittipong T.

Time, min	O ₂ (%)	NOx (ppm)	CO (ppm)
12:01 PM	12.95	39.47	182.69
12:02 PM	13.01	39.38	183.85
12:03 PM	13.01	39.52	181.11
12:04 PM	12.98	39.69	180.94
12:05 PM	12.94	39.61	181.15
12:06 PM	12.90	39.27	178.44
12:07 PM	12.91	38.66	177.36
12:08 PM	12.90	38.10	181.69
12:09 PM	12.90	38.04	186.22
12:10 PM	12.94	38.19	186.47
12:11 PM	12.91	38.23	184.97
12:12 PM	12.88	38.24	190.17
12:13 PM	12.84	38.22	187.83
12:14 PM	12.87	38.16	184.80
12:15 PM	12.84	38.10	188.50
12:16 PM	12.86	38.16	187.50
12:17 PM	12.83	38.14	188.54
12:18 PM	12.83	37.98	189.74
12:19 PM	12.83	37.80	191.71
12:20 PM	12.88	37.81	189.24
12:21 PM	12.87	37.93	185.71
Average	12.90	38.51	185.17

Signature



(Miss Katesarin Vorradetwittaya)

Environmental Scientist

PTT Global Chemical Public Company Limited

EMISSION TEST RESULT

Date: May 20, 2026
Start time: 12:22 PM
O₂ instrument Model: AMI 70
NO_x instrument Model: TELEDYNE 200 EM
CO instrument Model: THERMO 48 C
Fuel Type : Natural Gas

Run # : 3
Location : GAS Turbine 1
Finish time : 12:42 PM
Serial No.: 170615-6
Serial No.: 433
Serial No.: 0412106049
Test Operator : Kittipong T.

Time, min	O ₂ (%)	NO _x (ppm)	CO (ppm)
12:22 PM	12.85	37.88	184.70
12:23 PM	12.89	37.88	184.66
12:24 PM	12.93	37.95	189.20
12:25 PM	12.87	37.79	188.32
12:26 PM	12.89	37.60	189.80
12:27 PM	12.88	37.42	192.87
12:28 PM	12.87	37.13	188.90
12:29 PM	12.88	36.97	187.40
12:30 PM	12.90	36.97	182.90
12:31 PM	12.88	37.00	184.73
12:32 PM	12.88	37.04	188.14
12:33 PM	12.86	37.07	186.64
12:34 PM	12.88	37.31	189.97
12:35 PM	12.87	37.55	192.13
12:36 PM	12.90	37.51	191.88
12:37 PM	12.88	37.46	189.38
12:38 PM	12.92	37.36	187.46
12:39 PM	12.92	37.31	192.96
12:40 PM	12.87	37.35	187.30
12:41 PM	12.84	37.17	187.13
12:42 PM	12.85	36.99	187.13
Average	12.88	37.37	188.27

Signature

(Miss Katesarin Vorradetwittaya)

Environmental Scientist



บริษัท ซีคอต จำกัด

SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพฯ 10800

239 RIMKLONGPRAPA ROAD, BANGSUE, BANGKOK 10800, THAILAND

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

STACK EMISSION ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical Public Co., Ltd. **REFERENCE NO. :** 226010-CEMs-2605-0026
Branch 6 (Refinery)

SAMPLING BY : SECOT Co., Ltd. **REGISTRATION NO. :** 7-239
SAMPLING DATE : 20/05/2026 **SAMPLING TIME :** 11.10 a.m. - 03.32 p.m.
RECEIVED DATE : 04/06/2026 **ANALYTICAL DATE :** 04-10/06/2026
REPORT DATE : 10/06/2026 **OPERATOR :** Mr. Kittipong Thakoengsuk (7-239-ท-0024)
STACK LOCATION : Gas Turbine 2 **FUEL TYPE :** Natural Gas
SOURCE DESCRIPTION : Combustion **SAMPLE CONDITION :** Normal

STACK DESCRIPTION

Height : 60.0 m **Flow Rate* :** 3,150 Ncu.m/min
Diameter : 2.5 m **Excess Oxygen :** 13.2 %
Temperature : 203.9 °C **Moisture Content :** 10.4 %
Gas Velocity : 19.2 m/s

PARAMETER	RESULT*		STANDARD ^{1/} / EIA ^{2/}	EMISSION RATE		REFERENCE METHOD
	ppm		ppm	g/s		
	13.2%O ₂	7%O ₂	7%O ₂	RESULT	EIA ^{2/}	
Oxide of Nitrogen (NOx)	34.96	62.78	200/180	3.452	6.000	US EPA Method 7E
Carbon Monoxide (CO)	176.80	317.50	690/690	10.675	20.470	US EPA Method 10

(Miss Katesarin Vorradetwittaya)

Environmental Scientist

REG.NO. 7-239-ท-0006

Preeda S

(Miss Preeda Somjai)

Technical Management Team

REG.NO. 7-239-ท-0006

- Remark :**
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. * At standard pressure of 760 mmHg and temperature of 25 °C, dry basis.
 4. ^{1/} Notification of the Ministry of Natural Resources and Environment B.E.2554.
 5. ^{2/} The assigned value is specified in EIA report.

The Monitoring Result of Emission Concentration
GAS Turbine 2
PTT Global Chemical Public Company Limited
May 20, 2026

Run Number	Oxygen content (%)		Oxide of Nitrogen (ppm)		
	RM Stack Gas Conc	Corrected Gas Conc	RM Stack Gas Conc	Corrected Gas Conc @Actual O2	Corrected Gas Conc @7% O2
1	13.27	13.20	35.86	35.86	64.73
2	13.24	13.15	34.85	34.85	62.51
3	13.24	13.13	34.16	34.16	61.11
Average	13.25	13.16	34.96	34.96	62.78

Run Number	Oxygen content (%)		Carbonmonoxide (ppm)		
	RM Stack Gas Conc	Corrected Gas Conc	RM Stack Gas Conc	Corrected Gas Conc @Actual O2	Corrected Gas Conc @7% O2
1	13.27	13.20	175.52	175.66	317.10
2	13.24	13.15	175.59	175.76	315.23
3	13.24	13.13	178.78	178.97	320.17
Average	13.25	13.16	176.63	176.80	317.50

PTT Global Chemical Public Company Limited
EMISSION TEST RESULT

Date: May 20, 2026
 Start time: 2:30 PM
 O₂ instrument Model: AMI 70
 NO_x instrument Model: TELEDYNE 200 EM
 CO instrument Model: THERMO 48 C
 Fuel Type : Natural Gas

Run # : 1
 Location : GAS Turbine 2
 Finish time : 2:50 PM
 Serial No.: 170615-6
 Serial No.: 433
 Serial No.: 0412106049
 Test Operator : Kittipong T.

Time, min	O ₂ (%)	NOx (ppm)	CO (ppm)
2:30 PM	13.39	36.11	196.83
2:31 PM	13.37	35.89	189.59
2:32 PM	13.34	35.77	185.09
2:33 PM	13.32	35.79	182.93
2:34 PM	13.32	35.79	180.60
2:35 PM	13.34	35.88	183.59
2:36 PM	13.31	35.90	182.67
2:37 PM	13.27	35.89	175.59
2:38 PM	13.21	35.93	170.84
2:39 PM	13.18	36.06	163.93
2:40 PM	13.20	36.06	162.93
2:41 PM	13.24	35.89	165.84
2:42 PM	13.27	35.86	171.42
2:43 PM	13.29	36.04	172.84
2:44 PM	13.28	36.13	174.25
2:45 PM	13.23	35.96	171.84
2:46 PM	13.26	35.80	168.85
2:47 PM	13.21	35.66	171.43
2:48 PM	13.22	35.62	168.85
2:49 PM	13.22	35.58	171.76
2:50 PM	13.26	35.43	174.34
Average	13.27	35.86	175.52

Signature



(Miss Katesarin Vorradetwittaya)

Environmental Scientist

PTT Global Chemical Public Company Limited EMISSION TEST RESULT

Date: May 20, 2026 **Run # :** 2
Start time: 2:51 PM **Location :** GAS Turbine 2
O₂ instrument Model: AMI 70 **Finish time :** 3:11 PM
NO_x instrument Model: TELEDYNE 200 EM **Serial No.:** 170615-6
CO instrument Model: THERMO 48 C **Serial No.:** 433
Fuel Type : Natural Gas **Serial No.:** 0412106049
Test Operator : Kittipong T.

Time, min	O ₂ (%)	NO _x (ppm)	CO (ppm)
2:51 PM	13.24	35.43	173.51
2:52 PM	13.26	35.49	173.76
2:53 PM	13.26	35.38	176.09
2:54 PM	13.23	35.31	174.51
2:55 PM	13.19	35.12	169.68
2:56 PM	13.20	34.82	168.60
2:57 PM	13.19	34.67	168.60
2:58 PM	13.26	34.62	172.94
2:59 PM	13.25	34.72	176.60
3:00 PM	13.26	34.82	176.43
3:01 PM	13.27	34.77	181.20
3:02 PM	13.27	34.86	181.28
3:03 PM	13.27	34.96	179.95
3:04 PM	13.27	35.04	177.77
3:05 PM	13.23	35.03	178.02
3:06 PM	13.23	34.82	173.02
3:07 PM	13.21	34.55	174.52
3:08 PM	13.22	34.44	174.44
3:09 PM	13.24	34.43	176.77
3:10 PM	13.26	34.33	178.35
3:11 PM	13.28	34.25	181.36
Average	13.24	34.85	175.59

Signature

(Miss Katesarin Vorradetwittaya)

Environmental Scientist

PTT Global Chemical Public Company Limited EMISSION TEST RESULT

Date: May 20, 2026 **Run # :** 3
Start time: 3:12 PM **Location :** GAS Turbine 2
O₂ instrument Model: AMI 70 **Finish time :** 3:32 PM
NO_x instrument Model: TELEDYNE 200 EM **Serial No.:** 170615-6
CO instrument Model: THERMO 48 C **Serial No.:** 433
Fuel Type : Natural Gas **Serial No.:** 0412106049
Test Operator : Kittipong T.

Time, min	O ₂ (%)	NO _x (ppm)	CO (ppm)
3:12 PM	13.28	34.25	183.11
3:13 PM	13.28	34.35	183.53
3:14 PM	13.23	34.29	181.53
3:15 PM	13.20	34.08	174.94
3:16 PM	13.20	33.97	173.61
3:17 PM	13.20	33.98	174.44
3:18 PM	13.20	33.94	173.03
3:19 PM	13.22	33.95	176.19
3:20 PM	13.25	34.01	179.61
3:21 PM	13.25	34.06	179.86
3:22 PM	13.29	34.29	183.19
3:23 PM	13.27	34.48	182.69
3:24 PM	13.26	34.45	181.86
3:25 PM	13.26	34.40	178.35
3:26 PM	13.27	34.31	179.44
3:27 PM	13.26	34.13	179.44
3:28 PM	13.23	34.08	177.86
3:29 PM	13.27	34.12	177.77
3:30 PM	13.26	34.12	178.93
3:31 PM	13.26	34.06	180.03
3:32 PM	13.20	34.05	174.93
Average	13.24	34.16	178.78

Signature

(Miss Katesarin Vorradetwittaya)

Environmental Scientist



บริษัท ซีคอต จำกัด

SECOT CO., LTD.

239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพฯ 10800

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

MTR GasTurbine 3 (NOx+CO)/Sum.1/6/15/2026

**The Monitoring Result of Emission Concentration
GAS Turbine 3
PTT Global Chemical Public Company Limited
May 21, 2026**

STACK EMISSION ANALYSIS REPORT

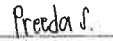
CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REFERENCE NO.	: 226010-CEMS-2605-0026
	Branch 6 (Refinery)		
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION NO.	: 2-239
SAMPLING DATE	: 21/05/2026	SAMPLING TIME	: 10.30 a.m. - 01.22 p.m.
RECEIVED DATE	: 04/06/2026	ANALYTICAL DATE	: 04-10/06/2026
REPORT DATE	: 10/06/2026	OPERATOR	: Mr. Kittipong Thakoengsuk (2-239-0-0024)
STACK LOCATION	: Gas Turbine 3	FUEL TYPE	: Natural Gas
SOURCE DESCRIPTION	: Combustion	SAMPLE CONDITION	: Normal
STACK DESCRIPTION			
Height	: 60.0 m	Flow Rate ^{1/}	: 2,977 Ncu.m/min
Diameter	: 2.5 m	Excess Oxygen	: 12.8 %
Temperature	: 201.6 °C	Moisture Content	: 10.5 %
Gas Velocity	: 18.1 m/s		

PARAMETER	RESULT*		STANDARD ^{1/} / EIA ^{2/}	EMISSION RATE		REFERENCE METHOD
	ppm		ppm	g/s		
	12.8%O ₂	7%O ₂	7%O ₂	RESULT	EIA ^{2/}	
Oxide of Nitrogen (NOx)	36.93	63.43	200/180	3,447	6,000	US.EPA Method 7E
Carbon Monoxide (CO)	236.95	406.95	690/690	13,520	20,470	US.EPA Method 10


(Miss Katesarin Vorradetwittaya)

Environmental Scientist

REG.NO. 2-239-0-0006


(Miss Preeda Somjai)

Technical Management Team

REG.NO. 2-239-0-0006

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

4. ^{1/}Notification of the Ministry of Natural Resources and Environment B.E.2554.

5. ^{2/}The assigned value is specified in EIA report.

Run Number	Oxygen content (%)		Oxide of Nitrogen (ppm)		
	RM Stack Gas Conc	Corrected Gas Conc	RM Stack Gas Conc	Corrected Gas Conc @Actual O2	Corrected Gas Conc @7% O2
1	12.95	12.90	37.86	37.86	65.78
2	12.86	12.79	36.83	36.83	63.12
3	12.82	12.73	36.12	36.11	61.44
Average	12.87	12.81	36.93	36.93	63.43

Run Number	Oxygen content (%)		Carbonmonoxide (ppm)		
	RM Stack Gas Conc	Corrected Gas Conc	RM Stack Gas Conc	Corrected Gas Conc @Actual O2	Corrected Gas Conc @7% O2
1	12.95	12.90	245.44	245.60	426.73
2	12.86	12.79	235.68	235.84	404.21
3	12.82	12.73	229.22	229.4	390.29
Average	12.87	12.81	236.78	236.95	406.95

PTT Global Chemical Public Company Limited EMISSION TEST RESULT

Date: May 21, 2026 **Run # :** 1
Start time: 12:20 PM **Location :** GAS Turbine 3
O₂ instrument Model: AMI 70 **Finish time :** 12:40 PM
NO_x instrument Model: TELEDYNE 200 EM **Serial No.:** 170615-6
CO instrument Model: THERMO 48 C **Serial No.:** 433
Fuel Type : Natural Gas **Serial No.:** 0412106049
Test Operator : Kittipong T.

Time, min	O ₂ (%)	NOx (ppm)	CO (ppm)
12:20 PM	12.94	38.12	240.03
12:21 PM	12.92	38.29	239.20
12:22 PM	12.90	38.18	235.32
12:23 PM	12.94	38.09	235.53
12:24 PM	12.95	38.02	240.57
12:25 PM	13.00	38.17	245.08
12:26 PM	13.04	38.20	256.86
12:27 PM	12.99	38.07	260.80
12:28 PM	12.97	37.95	252.44
12:29 PM	12.95	37.75	249.24
12:30 PM	12.95	37.70	246.62
12:31 PM	12.99	37.82	251.95
12:32 PM	12.96	37.93	250.99
12:33 PM	12.99	37.99	253.15
12:34 PM	12.95	38.08	249.49
12:35 PM	12.90	37.95	243.91
12:36 PM	12.91	37.51	236.41
12:37 PM	12.94	37.26	246.70
12:38 PM	12.89	37.28	242.66
12:39 PM	12.90	37.31	239.08
12:40 PM	12.88	37.34	238.21
Average	12.95	37.86	245.44

Signature

(Miss Katesarin Vorradetwittaya)

Environmental Scientist

PTT Global Chemical Public Company Limited EMISSION TEST RESULT

Date: May 21, 2026 **Run # :** 2
Start time: 12:41 PM **Location :** GAS Turbine 3
O₂ instrument Model: AMI 70 **Finish time :** 1:01 PM
NO_x instrument Model: TELEDYNE 200 EM **Serial No.:** 170615-6
CO instrument Model: THERMO 48 C **Serial No.:** 433
Fuel Type : Natural Gas **Serial No.:** 0412106049
Test Operator : Kittipong T.

Time, min	O ₂ (%)	NOx (ppm)	CO (ppm)
12:41 PM	12.89	37.48	234.33
12:42 PM	12.92	37.66	241.92
12:43 PM	12.90	37.65	243.05
12:44 PM	12.90	37.53	243.54
12:45 PM	12.91	37.51	242.70
12:46 PM	12.90	37.29	244.99
12:47 PM	12.87	36.73	235.57
12:48 PM	12.86	36.50	234.53
12:49 PM	12.88	36.67	240.66
12:50 PM	12.88	36.78	238.50
12:51 PM	12.90	36.88	242.58
12:52 PM	12.93	36.98	246.99
12:53 PM	12.89	36.82	247.08
12:54 PM	12.88	36.51	237.36
12:55 PM	12.87	36.38	238.12
12:56 PM	12.83	36.40	232.28
12:57 PM	12.82	36.47	223.37
12:58 PM	12.77	36.43	224.41
12:59 PM	12.79	36.35	221.32
1:00 PM	12.76	36.20	218.29
1:01 PM	12.75	36.16	217.70
Average	12.86	36.83	235.68

Signature

(Miss Katesarin Vorradetwittaya)

Environmental Scientist

PTT Global Chemical Public Company Limited

EMISSION TEST RESULT

Run # : 3
Date: May 21, 2026
Start time: 1:02 PM
O₂ instrument Model: AMI 70
NO_x instrument Model: TELEDYNE 200 EM
CO instrument Model: THERMO 48 C
Fuel Type : Natural Gas
Location : GAS Turbine 3
Finish time : 1:22 PM
Serial No.: 170615-6
Serial No.: 433
Serial No.: 0412106049
Test Operator : Kittipong T.

Time, min	O ₂ (%)	NO _x (ppm)	CO (ppm)
1:02 PM	12.81	36.37	222.40
1:03 PM	12.85	36.68	228.61
1:04 PM	12.86	36.80	235.82
1:05 PM	12.80	36.72	234.65
1:06 PM	12.78	36.69	222.86
1:07 PM	12.77	36.59	218.66
1:08 PM	12.78	36.36	220.36
1:09 PM	12.79	35.93	224.02
1:10 PM	12.81	35.71	224.90
1:11 PM	12.85	35.98	233.81
1:12 PM	12.85	36.37	237.10
1:13 PM	12.85	36.34	237.40
1:14 PM	12.82	36.05	232.11
1:15 PM	12.82	35.77	232.32
1:16 PM	12.81	35.59	230.48
1:17 PM	12.81	35.60	228.61
1:18 PM	12.81	35.87	226.82
1:19 PM	12.80	35.99	226.98
1:20 PM	12.82	35.89	230.11
1:21 PM	12.81	35.64	230.48
1:22 PM	12.84	35.55	235.19
Average	12.82	36.12	229.22

Signature

(Miss Katesarin Vorradetwittaya)

Environmental Scientist



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STACK EMISSION ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical Public Co., Ltd. **REFERENCE NO. :** 226010-Stack-2605-0026
Branch 6 (Refinery)
SAMPLING BY : SECOT Co., Ltd. **REGISTRATION NO. :** -
SAMPLING DATE : 22/05/2026 **SAMPLING TIME :** 10.00 a.m. - 00.32 p.m.
RECEIVED DATE : 23/05/2026 **ANALYTICAL DATE :** 25/05/2026
REPORT DATE : 09/06/2026 **OPERATOR :** Mr. Pisanu Seenampeng
STACK LOCATION : Inlet Sulfur Scrubber **FUEL TYPE :** -
SOURCE DESCRIPTION : Process **SAMPLE CONDITION :** Normal

STACK DESCRIPTION

Height : 5.0 m **Flow rate^{1/} :** 36.5 Ncu,m/min
Diameter : 0.5 m **Excess Oxygen :** 20.4 %
Temperature : 32.3 °C **Moisture Content :** 10.8 %
Gas Velocity : 3.6 m/s

PARAMETER	UNIT	ND	RESULTS	ASSIGN	STANDARD	REFERENCE
		Non-detecable	Inlet	VALUE ^{2/}		METHODS
Hydrogen Sulfide	ppm	<0.30	ND	-	-	US. EPA Method 16
(H ₂ S)	g/s	-	<0.0003	-	-	

Sudaporn S.

(Miss Sudaporn Soonthorn)

Analyst

Narisara 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. ^{1/} At standard pressure of 760 mmHg and temperature of 25 °C, dry basis.

4. ^{2/} The assign value in EIA report.



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STACK EMISSION ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical Public Co., Ltd. REFERENCE NO. : 226010-CEMs-2605-0026
Branch 6 (Refinery)
SAMPLING BY : SECOT Co., Ltd. REGISTRATION NO. : 2-239
SAMPLING DATE : 22/05/2026 SAMPLING TIME : 10.00 a.m. - 00.32 p.m.
RECEIVED DATE : 04/06/2026 ANALYTICAL DATE : 04-10/06/2026
REPORT DATE : 10/06/2026 OPERATOR : Mr. Pisanu Seenampeng (2-239-จ-0029)
STACK LOCATION : Inlet Sulfur Scrubber FUEL TYPE : -
SOURCE DESCRIPTION : Process SAMPLE CONDITION : Normal

STACK DESCRIPTION

Height : 5.0 m Flow Rate* : 36.5 Ncu.m/min
Diameter : 0.5 m Excess Oxygen : 20.4 %
Temperature : 32.3 °C Moisture Content : 10.8 %
Gas Velocity : 3.6 m/s

PARAMETER	RESULT*	STANDARD ^{1/} /	EMISSION RATE	REFERENCE METHOD
	ppm	EIA ^{2/}	g/s	
	Inlet Sulfur Scrubber	ppm	RESULT EIA ^{2/}	
Sulfur Dioxide (SO ₂)	0.25	-	0.0004	US.EPA Method 6C


(Miss Katesarin Vorradetwittaya)

Environmental Scientist

REG.NO. 2-239-จ-0006


(Miss Preeda Somjai)

Technical Management Team

REG.NO. 2-239-ท-0006

- Remark :
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. * At standard pressure of 760 mmHg and temperature of 25 °C, dry basis.
 4. ^{1/} Notification of Ministry of Industry, B.E.2549 and the Ministry of Natural Resources and Environment, B.E.2549
 5. ^{2/} The assigned value is specified in EIA report.

The Monitoring Result of Emission Concentration Sulfur scrubber (Inlet) PTT Global Chemical Public Company Limited May 22, 2026

Run Number	Oxygen content (%)		Sulfur dioxide (ppm)	
	RM Stack Gas Conc	Corrected Gas Conc	RM Stack Gas Conc	Corrected Gas Conc @Actual O2
1	20.45	20.35	0.32	0.28
2	20.48	20.37	0.24	0.20
3	20.44	20.32	0.30	0.27
Average	20.46	20.35	0.28	0.25

PTT Global Chemical Public Company Limited
EMISSION TEST RESULT

Date: May 22, 2026
Start time: 11:30 AM
O₂ instrument Model: AMI 70
SO₂ instrument Model: API 100 AH
Fuel Type : -

Run # : 1
Location : Sulfur scrubber (Inlet)
Finish time : 11:50 AM
Serial No.: 170615-6
Serial No.: 118
Test Operator : Pisanu S.

Time, min	O ₂ (%)	SO ₂ (ppm)
11:30 AM	20.37	0.23
11:31 AM	20.39	0.26
11:32 AM	20.40	0.26
11:33 AM	20.42	0.28
11:34 AM	20.42	0.26
11:35 AM	20.45	0.28
11:36 AM	20.47	0.29
11:37 AM	20.47	0.29
11:38 AM	20.47	0.32
11:39 AM	20.47	0.32
11:40 AM	20.47	0.34
11:41 AM	20.47	0.35
11:42 AM	20.47	0.35
11:43 AM	20.47	0.35
11:44 AM	20.47	0.35
11:45 AM	20.47	0.39
11:46 AM	20.47	0.36
11:47 AM	20.47	0.36
11:48 AM	20.47	0.41
11:49 AM	20.47	0.40
11:50 AM	20.47	0.21
Average	20.45	0.32

Signature

(Miss Katesarin Vorradetwittaya)

Environmental Scientist

PTT Global Chemical Public Company Limited
EMISSION TEST RESULT

Date: May 22, 2026
Start time: 11:51 AM
O₂ instrument Model: AMI 70
SO₂ instrument Model: API 100 AH
Fuel Type : -

Run # : 2
Location : Sulfur scrubber (Inlet)
Finish time : 12:11 PM
Serial No.: 170615-6
Serial No.: 118
Test Operator : Pisanu S.

Time, min	O ₂ (%)	SO ₂ (ppm)
11:51 AM	20.47	0.21
11:52 AM	20.48	0.21
11:53 AM	20.47	0.21
11:54 AM	20.48	0.19
11:55 AM	20.48	0.21
11:56 AM	20.48	0.21
11:57 AM	20.48	0.21
11:58 AM	20.48	0.22
11:59 AM	20.48	0.22
12:00 PM	20.48	0.24
12:01 PM	20.48	0.24
12:02 PM	20.48	0.23
12:03 PM	20.47	0.28
12:04 PM	20.48	0.27
12:05 PM	20.48	0.24
12:06 PM	20.48	0.28
12:07 PM	20.48	0.28
12:08 PM	20.48	0.28
12:09 PM	20.48	0.27
12:10 PM	20.48	0.26
12:11 PM	20.49	0.28
Average	20.48	0.24

Signature

(Miss Katesarin Vorradetwittaya)

Environmental Scientist

PTT Global Chemical Public Company Limited

EMISSION TEST RESULT

Date: May 22, 2026

Start time: 12:12 PM

O₂ instrument Model: AMI 70SO₂ instrument Model: API 100 AH

Fuel Type: -

Run #: 3

Location: Sulfur scrubber (Inlet)

Finish time: 12:32 PM

Serial No.: 170615-6

Serial No.: 118

Test Operator: Pisanu S.

Time, min	O ₂ (%)	SO ₂ (ppm)
12:12 PM	20.49	0.28
12:13 PM	20.48	0.29
12:14 PM	20.49	0.29
12:15 PM	20.49	0.30
12:16 PM	20.49	0.30
12:17 PM	20.50	0.31
12:18 PM	20.49	0.29
12:19 PM	20.50	0.28
12:20 PM	20.49	0.31
12:21 PM	20.49	0.30
12:22 PM	20.49	0.33
12:23 PM	20.49	0.32
12:24 PM	20.49	0.29
12:25 PM	20.49	0.29
12:26 PM	20.42	0.30
12:27 PM	20.36	0.31
12:28 PM	20.32	0.30
12:29 PM	20.30	0.29
12:30 PM	20.29	0.29
12:31 PM	20.32	0.25
12:32 PM	20.30	0.28
Average	20.44	0.30

Signature

(Miss Katesarin Vorradetwittaya)

Environmental Scientist

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STACK EMISSION ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REFERENCE NO.	: 226010-Stack-2605-0026
	Branch 6 (Refinery)		
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION NO.	: -
SAMPLING DATE	: 22/05/2026	SAMPLING TIME	: 10.00 a.m. - 00.32 p.m.
RECEIVED DATE	: 23/05/2026	ANALYTICAL DATE	: 25/05/2026
REPORT DATE	: 09/06/2026	OPERATOR	: Mr. Pisanu Seenampeng
STACK LOCATION	: Outlet Sulfur Scrubber	FUEL TYPE	: -
SOURCE DESCRIPTION	: Process	SAMPLE CONDITION	: Normal

STACK DESCRIPTION

Height	: 5.0 m	Flow rate ^{1/}	: 28.3 Ncu.m/min
Diameter	: 0.5 m	Excess Oxygen	: 20.5 %
Temperature	: 33.8 °C	Moisture Content	: 10.0 %
Gas Velocity	: 2.8 m/s		

PARAMETER	UNIT	ND Non-detectable	RESULTS Outlet	ASSIGN VALUE ^{2/}	STANDARD ^{3/}	REFERENCE METHODS
Hydrogen Sulfide (H ₂ S)	ppm g/s	<0.30 -	ND <0.0002	- -	100 -	US. EPA Method 16

Sudaporn S.

(Miss Sudaporn Soonthorn)

Analyst

Narisa Poowasanpetch

(Miss Narisa Poowasanpetch)

Technical Management Team

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

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3. ^{1/} At standard pressure of 760 mmHg and temperature of 25 °C, dry basis.4. ^{2/} The assign value in EIA report.5. ^{3/} Notification of Ministry of Industry, B.E.2549 and the Ministry of Natural Resources and Environment, B.E.2549



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STACK EMISSION ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical Public Co., Ltd. REFERENCE NO. : 226010-CEMS-2605-0026
Branch 6 (Refinery)
SAMPLING BY : SECOT Co., Ltd. REGISTRATION NO. : 2-239
SAMPLING DATE : 22/05/2026 SAMPLING TIME : 10.00 a.m. - 00.32 p.m.
RECEIVED DATE : 04/06/2026 ANALYTICAL DATE : 04-10/06/2026
REPORT DATE : 10/06/2026 OPERATOR : Mr. Pisanu Seenampeng (2-239-ก-0029)
STACK LOCATION : Outlet Sulfur Scrubber FUEL TYPE : -
SOURCE DESCRIPTION : Process SAMPLE CONDITION : Normal

STACK DESCRIPTION

Height : 5.0 m Flow Rate^{1/} : 28.3 Ncu.m/min
Diameter : 0.5 m Excess Oxygen : 20.5 %
Temperature : 33.8 °C Moisture Content : 10.0 %
Gas Velocity : 2.8 m/s

PARAMETER	RESULT*	STANDARD ^{1/} /	EMISSION RATE		REFERENCE METHOD
	ppm	EIA ^{2/}	g/s		
	Outlet Sulfur Scrubber	ppm	RESULT	EIA ^{2/}	
Sulfur Dioxide (SO ₂)	0.23	500/-	0.0003	-	US.EPA Method 6C


(Miss Katesarin Vorradetwittaya)

Environmental Scientist

REG.NO. 2-239-ก-0006


(Miss Preeda Somjai)

Technical Management Team

REG.NO. 2-239-ก-0006

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

4. ^{1/} Notification of Ministry of Industry, B.E.2549 and the Ministry of Natural Resources and Environment, B.E.2549

5. ^{2/} The assigned value is specified in EIA report.

The Monitoring Result of Emission Concentration Sulfur scrubber (Outlet) PTT Global Chemical Public Company Limited May 22, 2026

Run Number	Oxygen content (%)		Sulfur dioxide (ppm)	
	RM Stack Gas Conc	Corrected Gas Conc	RM Stack Gas Conc	Corrected Gas Conc @Actual O2
1	20.54	20.52	0.33	0.30
2	20.52	20.52	0.25	0.21
3	20.46	20.48	0.24	0.19
Average	20.51	20.51	0.27	0.23

PTT Global Chemical Public Company Limited
EMISSION TEST RESULT

Date: May 22, 2026
Start time: 11:30 AM
O₂ instrument Model: AMI 70
SO₂ instrument Model: API 100 A
Fuel Type: -

Run # : 1
Location : Sulfur scrubber (Outlet)
Finish time : 11:50 AM
Serial No.: 121121-10
Serial No.: 060
Test Operator : Pisanu S.

Time, min	O ₂ (%)	SO ₂ (ppm)
11:30 AM	20.53	0.28
11:31 AM	20.53	0.28
11:32 AM	20.53	0.28
11:33 AM	20.53	0.27
11:34 AM	20.53	0.28
11:35 AM	20.53	0.27
11:36 AM	20.53	0.27
11:37 AM	20.53	0.27
11:38 AM	20.53	0.23
11:39 AM	20.53	0.86
11:40 AM	20.53	0.99
11:41 AM	20.53	0.27
11:42 AM	20.55	0.27
11:43 AM	20.55	0.27
11:44 AM	20.60	0.26
11:45 AM	20.54	0.26
11:46 AM	20.53	0.26
11:47 AM	20.53	0.26
11:48 AM	20.53	0.26
11:49 AM	20.53	0.26
11:50 AM	20.53	0.26
Average	20.54	0.33

Signature

(Miss Katesarin Vorradetwittaya)

Environmental Scientist

PTT Global Chemical Public Company Limited
EMISSION TEST RESULT

Date: May 22, 2026
Start time: 11:51 AM
O₂ instrument Model: AMI 70
SO₂ instrument Model: API 100 A
Fuel Type: -

Run # : 2
Location : Sulfur scrubber (Outlet)
Finish time : 12:11 PM
Serial No.: 121121-10
Serial No.: 060
Test Operator : Pisanu S.

Time, min	O ₂ (%)	SO ₂ (ppm)
11:51 AM	20.53	0.25
11:52 AM	20.53	0.25
11:53 AM	20.53	0.26
11:54 AM	20.53	0.26
11:55 AM	20.53	0.26
11:56 AM	20.53	0.26
11:57 AM	20.53	0.26
11:58 AM	20.53	0.25
11:59 AM	20.53	0.25
12:00 PM	20.53	0.25
12:01 PM	20.53	0.25
12:02 PM	20.53	0.25
12:03 PM	20.53	0.25
12:04 PM	20.53	0.25
12:05 PM	20.52	0.24
12:06 PM	20.53	0.25
12:07 PM	20.51	0.25
12:08 PM	20.45	0.24
12:09 PM	20.53	0.25
12:10 PM	20.53	0.24
12:11 PM	20.53	0.25
Average	20.52	0.25

Signature

(Miss Katesarin Vorradetwittaya)

Environmental Scientist

PTT Global Chemical Public Company Limited

EMISSION TEST RESULT

Date: May 22, 2026
Start time: 12:12 PM
O₂ instrument Model: AMI 70
SO₂ instrument Model: API 100 A
Fuel Type : -

Run # : 3
Location : Sulfur scrubber (Outlet)
Finish time : 12:32 PM
Serial No.: 121121-10
Serial No.: 060
Test Operator : Pisanu S.

Time, min	O ₂ (%)	SO ₂ (ppm)
12:12 PM	20.53	0.24
12:13 PM	20.53	0.24
12:14 PM	20.52	0.24
12:15 PM	20.52	0.24
12:16 PM	20.52	0.24
12:17 PM	20.48	0.24
12:18 PM	20.44	0.24
12:19 PM	20.47	0.24
12:20 PM	20.51	0.24
12:21 PM	20.44	0.24
12:22 PM	20.43	0.23
12:23 PM	20.43	0.24
12:24 PM	20.45	0.23
12:25 PM	20.43	0.23
12:26 PM	20.45	0.23
12:27 PM	20.43	0.24
12:28 PM	20.44	0.23
12:29 PM	20.45	0.23
12:30 PM	20.45	0.23
12:31 PM	20.35	0.24
12:32 PM	20.32	0.23
Average	20.46	0.24

Signature



(Miss Katesarin Vorradetwittaya)

Environmental Scientist



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STACK EMISSION ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical Public Co., Ltd.
REFERENCE NO. : 226010-Stack-2605-0026
Branch 6 (Refinery)

SAMPLING BY : SECOT Co., Ltd.
SAMPLING DATE : 20/05/2026

SAMPLING TIME : 14:26-15:40 a.m.
RECEIVED DATE : 23/05/2026

ANALYTICAL DATE : 27/05/2026
REPORT DATE : 09/06/2026

STACK LOCATION : VRU Stack of Tank Farm
FUEL TYPE : -

SOURCE DESCRIPTION : Process
SAMPLE CONDITION : Normal

OPERATOR : Mr, Pisanu Seenampeng

PARAMETER	UNIT	ND	RESULT*			STANDARD	REFERENCE METHOD
		Non-detectable	Inlet (V5202)	Outlet (V5204)	Outlet (V5205)		
TVOC as propane	ppm	-	39,150	7,383	6,723	-	US. EPA Method
	mg/l	-	70.61	13.32	12.13	-	25A

Sudaporn S.

(Miss Sudaporn Soonthorn)

Analyst



(Miss Narisa Poowasanpetch)

Technical Management Team

- Remark :
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 3. * At standard pressure of 760 mmHg and temperature of 25 °C, dry basis.



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STACK EMISSION ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REFERENCE NO.	: 226010-Stack-2605-0026
	Branch 6 (Refinery)		
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING DATE	: 20/05/2026
SAMPLING TIME	: 14.26-15.40 a.m.	RECEIVED DATE	: 23/05/2026
ANALYTICAL DATE	: 27-28/05/2026	REPORT DATE	: 09/06/2026
STACK LOCATION	: VRU Stack of Tank Farm	FUEL TYPE	: -
SOURCE DESCRIPTION	: Process	SAMPLE CONDITION	: Normal
OPERATOR	: Mr. Pisanu Seenampeng		

PARAMETER	UNIT	ND	RESULT*			STANDARD	REFERENCE METHOD
		Non-detectable	Inlet (V5202)	Outlet (V5204)	Outlet (V5205)		
Benzene	ppm	<0.06	2,980	ND	ND	-	US, EPA Method 18
	mg/l	<0.0002	9.52	ND	ND	-	

Sudaporn S.

(Miss Sudaporn Soonthorn)

Analyst

Maia Pawanapetch

(Miss Narisa Poowasanpetch)

Technical Management Team

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



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STACK EMISSION ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REFERENCE NO.	: 226010-Stack-2605-0026
	Branch 6 (Refinery)		
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING DATE	: 22/05/2026
SAMPLING TIME	: 11.10 a.m. - 00.05 p.m.	RECEIVED DATE	: 23/05/2026
ANALYTICAL DATE	: 27/05/2026	REPORT DATE	: 09/06/2026
STACK LOCATION	: VRU Stack of Truck Loading	FUEL TYPE	: -
SOURCE DESCRIPTION	: Process	SAMPLE CONDITION	: Normal
OPERATOR	: Mr. Pisanu Seenampeng		

PARAMETER	UNIT	ND	RESULT*		ASSIGN	STANDARD ^{2/}	REFERENCE
		Non-detectable	Inlet	Outlet	VALUE ^{1/}		
TVOC as propane	ppm	-	26,825	114	-	-	US, EPA Method
	mg/l	-	48.38	0.21	15.0	17	25A

Sudaporn S.

(Miss Sudaporn Soonthorn)

Analyst

Maia Pawanapetch

(Miss Narisa Poowasanpetch)

Technical Management Team

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4. ^{1/} The assign value in EIA report.

5. ^{2/} Notification of the Ministry of Natural Resources and Environment B.E.2564.



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239 ถนนริมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพฯ 10800

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STACK EMISSION ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Co., Ltd.	REFERENCE NO.	: 226010-Stack-2605-0026
	Branch 6 (Refinery)		
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING DATE	: 22/05/2026
SAMPLING TIME	: 11.10 a.m. - 00.05 p.m.	RECEIVED DATE	: 23/05/2026
ANALYTICAL DATE	: 27/05/2026	REPORT DATE	: 09/06/2026
STACK LOCATION	: VRU Stack of Truck Loading	FUEL TYPE	: -
SOURCE DESCRIPTION	: Process	SAMPLE CONDITION	: Normal
OPERATOR	: Mr. Pisanu Seenampeng		

PARAMETER	UNIT	ND	RESULT*		ASSIGN	STANDARD ^{2/}	REFERENCE
		Non-detectable	Inlet	Outlet	VALUE ^{1/}		
Benzene	ppm	<0.06	103	0.60	-	-	US. EPA Method 18
	mg/l	<0.0002	0.33	0.002	0.21	-	

Sudaporn S.

(Miss Sudaporn Soonthorn)

Analyst

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. * At standard pressure of 760 mmHg and temperature of 25 °C, dry basis.

4. ^{1/} The assign value in EIA report.

5. ^{2/} Notification of the Ministry of Natural Resources and Environment B.E.2564.

ระดับเสียง



Noise Monitoring Result : Community Noise

MTR-PTTGC6-Refinery

Location : Takuan-Ao Pradu Community-1				Monitor Period : 01-08 Apr 2026			
SLM Model : SCARLET ST-21D				Serial No : 820725			
Site Operator : Mr. Song Hengchwankun							
Calibrator Model : Cirrus CR:515				Serial No : 97097			
Calibration Ref dB(A) : 94.0				Certified Date : 14 Oct 2025			
SLM Reading / Adjust dB(A) : 93.8/0.0				Expire Date : 13 Oct 2026			
Cal Sheet No.: CR-515-2026-082							
Time	Equivalent Sound Pressure Level (dB(A))						
	01-02 Apr 2026	02-03 Apr 2026	03-04 Apr 2026	04-05 Apr 2026	05-06 Apr 2026	06-07 Apr 2026	07-08 Apr 2026
11:00 - 12:00	55.9	63.6	57.7	61.2	52.4	53.1	55.6
12:00 - 13:00	55.3	57.6	55.6	52.6	50.2	52.6	55.8
13:00 - 14:00	51.7	52.3	54.2	49.8	51.6	53.6	53.5
14:00 - 15:00	53.5	54.9	52.8	52.9	50.7	51.7	52.0
15:00 - 16:00	54.1	52.9	51.3	53.5	51.6	47.2	53.2
16:00 - 17:00	59.0	55.8	56.1	60.7	51.9	49.3	56.4
17:00 - 18:00	59.6	63.3	61.8	58.7	51.0	56.7	60.0
18:00 - 19:00	56.2	58.1	57.7	57.2	56.5	54.3	56.8
19:00 - 20:00	58.9	60.1	57.5	57.5	56.6	55.1	54.4
20:00 - 21:00	51.9	56.1	52.9	52.1	51.9	51.2	50.9
21:00 - 22:00	49.6	53.4	53.2	51.3	50.5	52.9	51.4
22:00 - 23:00	50.1	54.6	52.5	51.5	48.2	51.3	49.2
23:00 - 00:00	49.5	53.2	53.2	55.7	53.3	53.1	50.0
00:00 - 01:00	50.2	50.9	52.0	51.5	49.1	50.9	49.5
01:00 - 02:00	49.3	51.6	51.7	51.5	49.6	51.1	50.6
02:00 - 03:00	51.2	50.5	51.5	52.0	50.5	51.7	51.5
03:00 - 04:00	50.7	51.7	50.4	52.0	51.4	51.7	51.1
04:00 - 05:00	51.6	51.5	51.5	51.4	51.9	52.0	51.3
05:00 - 06:00	53.1	54.2	54.4	54.0	49.6	54.1	54.2
06:00 - 07:00	62.5	58.2	57.9	55.0	60.8	56.0	54.6
07:00 - 08:00	60.1	59.8	60.4	57.8	58.0	60.2	59.4
08:00 - 09:00	54.8	55.2	56.0	54.2	55.0	57.0	55.1
09:00 - 10:00	52.5	54.3	55.3	52.7	53.3	54.2	52.4
10:00 - 11:00	51.9	53.4	54.3	52.6	54.8	54.7	53.7
Leq(24)*	55.7	57.1	55.8	55.4	53.8	54.0	54.5
Ldn	61.5	61.1	60.5	60.1	60.2	59.5	58.9
Lmax **	96.7	94.9	88.7	92.9	93.4	84.7	85.9
Standard-24Hr	70 dB(A)						
Standard-Max	115 dB(A)						

Remark : * Average time between 11:00-11:00

** Maximum Sound Pressure Level between 11:00-11:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



Noise Monitoring Result : Background Noise

MTR-PTTGC6-Refinery

Location : Takuan-Ao Pradu Community-1				Monitor Period : 01-08 Apr 2026			
SLM Model : SCARLET ST-21D				Serial No : 820725			
Site Operator : Mr. Song Hengchwankun							
Calibrator Model : Cirrus CR:515				Serial No : 97097			
Calibration Ref dB(A) : 94.0				Certified Date : 14 Oct 2025			
SLM Reading / Adjust dB(A) : 93.8/0.0				Expire Date : 13 Oct 2026			
Cal Sheet No.: CR-515-2026-082							
Time	L90 (dB(A))						
	01-02 Apr 2026	02-03 Apr 2026	03-04 Apr 2026	04-05 Apr 2026	05-06 Apr 2026	06-07 Apr 2026	07-08 Apr 2026
11:00 - 12:00	48.2	45.9	49.6	50.2	47.7	50.2	50.3
12:00 - 13:00	45.5	45.5	50.3	49.0	44.7	49.6	49.8
13:00 - 14:00	45.4	45.6	50.5	42.3	47.5	48.6	47.9
14:00 - 15:00	46.2	47.1	50.5	44.2	48.4	47.3	47.9
15:00 - 16:00	46.7	49.2	44.4	49.2	47.8	44.5	45.7
16:00 - 17:00	48.4	50.5	45.0	49.2	46.3	45.2	46.1
17:00 - 18:00	44.6	52.4	51.8	47.8	46.3	45.5	47.1
18:00 - 19:00	45.0	51.3	51.4	47.7	46.0	45.1	46.1
19:00 - 20:00	49.1	49.9	50.7	47.8	46.7	45.1	44.7
20:00 - 21:00	48.5	50.0	50.5	47.6	46.5	46.3	45.4
21:00 - 22:00	47.5	49.2	50.2	47.2	45.4	47.5	46.6
22:00 - 23:00	47.2	49.1	49.6	48.3	45.0	48.7	46.4
23:00 - 00:00	47.8	49.5	50.8	49.8	48.1	49.0	47.3
00:00 - 01:00	48.1	49.3	50.7	50.0	47.4	49.4	47.8
01:00 - 02:00	48.0	49.1	49.9	49.6	47.6	49.7	49.2
02:00 - 03:00	48.0	48.8	49.7	50.0	49.3	50.1	49.4
03:00 - 04:00	47.6	49.0	49.1	50.0	49.6	50.0	49.1
04:00 - 05:00	47.0	49.4	49.5	49.9	50.0	50.6	49.9
05:00 - 06:00	47.5	49.8	50.0	50.3	44.3	50.9	50.5
06:00 - 07:00	48.1	51.3	51.1	51.0	45.4	52.0	44.7
07:00 - 08:00	49.2	51.5	51.3	50.4	51.7	52.9	52.5
08:00 - 09:00	47.2	50.8	51.0	49.8	51.7	52.4	50.4
09:00 - 10:00	45.6	49.6	48.7	49.6	49.5	50.8	48.8
10:00 - 11:00	45.2	49.4	49.7	49.1	51.0	50.9	47.3
L90(avg)*	47.3	49.6	50.1	49.1	48.2	49.5	48.4

Remark : * Average time between 11:00-11:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



Noise Monitoring Result : Community Noise

MTR-PTTGC6-Refinery

Location : Takuan-Ao Pradu Community-2				Monitor Period : 01-08 Apr 2026			
SLM Model : SCARLET ST-21D				Serial No : 820730			
Site Operator : Mr. Song Hengchwankun							
Calibrator Model : Cirrus CR:515				Serial No : 97097			
Calibration Ref dB(A) : 94.0				Certified Date : 14 Oct 2025			
SLM Reading / Adjust dB(A) : 93.8/0.0				Expire Date : 13 Oct 2026			
Cal Sheet No.: CR-515-2026-082							
Time	Equivalent Sound Pressure Level (dB(A))						
	01-02 Apr 2026	02-03 Apr 2026	03-04 Apr 2026	04-05 Apr 2026	05-06 Apr 2026	06-07 Apr 2026	07-08 Apr 2026
11:00 - 12:00	61.1	62.6	61.9	59.8	61.0	57.5	57.3
12:00 - 13:00	56.0	61.3	56.9	55.4	55.5	53.7	55.6
13:00 - 14:00	56.2	58.9	60.5	58.9	62.7	52.9	67.3
14:00 - 15:00	56.7	57.5	62.4	60.9	61.9	60.8	60.4
15:00 - 16:00	56.5	59.1	60.7	60.8	59.0	62.9	62.1
16:00 - 17:00	65.2	58.9	63.7	56.0	52.8	60.5	57.9
17:00 - 18:00	54.8	61.9	63.0	55.2	54.5	51.9	54.1
18:00 - 19:00	68.6	68.7	67.0	67.1	65.9	65.6	65.6
19:00 - 20:00	50.6	49.5	59.9	51.1	51.0	49.6	49.8
20:00 - 21:00	50.8	54.2	55.3	52.0	51.2	52.5	60.2
21:00 - 22:00	49.3	49.0	60.4	49.6	49.1	49.8	47.0
22:00 - 23:00	45.8	47.8	60.7	48.4	47.5	50.5	47.7
23:00 - 00:00	49.2	62.4	55.5	50.5	59.2	50.8	47.3
00:00 - 01:00	47.7	49.7	50.7	45.0	49.0	50.4	45.2
01:00 - 02:00	59.7	48.9	60.9	49.4	51.0	50.4	49.3
02:00 - 03:00	45.3	51.9	49.9	49.9	51.0	50.3	46.6
03:00 - 04:00	48.3	57.3	48.0	48.0	51.1	52.7	49.7
04:00 - 05:00	56.8	57.6	49.2	52.6	52.0	48.3	51.3
05:00 - 06:00	67.1	66.9	65.0	65.7	67.4	66.0	69.1
06:00 - 07:00	58.1	58.5	60.9	57.0	57.9	58.1	59.0
07:00 - 08:00	56.7	56.7	58.1	54.1	58.7	56.6	60.7
08:00 - 09:00	58.1	64.8	65.5	58.1	60.2	63.4	57.8
09:00 - 10:00	60.1	67.4	63.5	60.6	65.2	60.3	58.7
10:00 - 11:00	57.9	58.0	62.7	63.5	62.6	59.6	55.4
Leq(24)*	60.1	61.5	61.5	59.2	60.2	59.1	60.5
Ldn	65.8	66.7	66.3	64.2	65.9	64.6	66.7
Lmax **	104.9	105.6	98.4	94.0	98.6	101.9	100.6
Standard-24Hr	70 dB(A)						
Standard-Max	115 dB(A)						

Remark : * Average time between 11:00-11:00

** Maximum Sound Pressure Level between 11:00-11:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



Noise Monitoring Result : Background Noise

MTR-PTTGC6-Refinery

Location : Takuan-Ao Pradu Community-2				Monitor Period : 01-08 Apr 2026			
SLM Model : SCARLET ST-21D				Serial No : 820730			
Site Operator : Mr. Song Hengchwankun							
Calibrator Model : Cirrus CR:515				Serial No : 97097			
Calibration Ref dB(A) : 94.0				Certified Date : 14 Oct 2025			
SLM Reading / Adjust dB(A) : 93.8/0.0				Expire Date : 13 Oct 2026			
Cal Sheet No.: CR-515-2026-082							
Time	L90 (dB(A))						
	01-02 Apr 2026	02-03 Apr 2026	03-04 Apr 2026	04-05 Apr 2026	05-06 Apr 2026	06-07 Apr 2026	07-08 Apr 2026
11:00 - 12:00	51.5	49.4	51.9	51.7	49.8	49.3	49.9
12:00 - 13:00	51.5	47.9	51.0	50.8	50.1	47.3	50.8
13:00 - 14:00	51.7	47.8	53.1	51.1	49.1	44.8	51.7
14:00 - 15:00	51.7	47.7	54.3	51.8	48.7	49.2	51.4
15:00 - 16:00	50.9	50.9	53.8	51.0	47.4	48.8	51.4
16:00 - 17:00	49.6	49.5	58.9	48.8	47.5	47.8	47.9
17:00 - 18:00	48.3	49.0	58.6	47.6	47.2	47.2	47.0
18:00 - 19:00	47.2	48.0	57.0	47.3	46.8	47.3	46.4
19:00 - 20:00	45.1	46.6	54.7	47.7	48.0	46.8	45.6
20:00 - 21:00	45.5	45.7	48.3	49.2	47.9	46.7	45.8
21:00 - 22:00	44.6	45.0	54.3	47.3	46.7	45.9	45.2
22:00 - 23:00	40.2	44.8	49.1	46.4	45.4	46.9	45.0
23:00 - 00:00	44.2	45.2	47.3	47.4	45.2	47.4	44.2
00:00 - 01:00	44.1	46.2	46.8	41.8	44.3	46.5	40.3
01:00 - 02:00	44.5	45.3	46.5	46.1	45.5	45.7	45.1
02:00 - 03:00	43.3	46.6	46.0	46.4	47.2	46.3	43.7
03:00 - 04:00	43.4	45.6	45.5	44.7	46.3	45.5	44.0
04:00 - 05:00	43.2	44.6	44.6	44.6	46.7	44.4	45.1
05:00 - 06:00	43.7	45.0	46.7	46.2	48.6	46.1	45.5
06:00 - 07:00	49.6	49.8	51.1	44.9	51.8	51.2	50.2
07:00 - 08:00	48.8	49.0	50.6	46.6	51.1	50.3	51.4
08:00 - 09:00	50.4	49.2	51.8	48.2	51.0	52.2	49.4
09:00 - 10:00	49.8	52.2	53.2	45.0	51.7	50.7	50.3
10:00 - 11:00	49.3	51.3	53.3	49.4	56.7	51.5	48.6
L90(avg)*	48.4	48.2	53.0	48.3	49.4	48.3	48.3

Remark : * Average time between 11:00-11:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



Noise Monitoring Result : Community Noise

MTR-PTTGC6-Refinery

Location : North of Refinery				Monitor Period : 01-08 Apr 2026			
SLM Model : SCARLET ST-21D				Serial No : 820726			
Site Operator : Mr. Song Hengchwankun							
Calibrator Model : Cirrus CR:515				Serial No : 97097			
Calibration Ref dB(A) : 94.0				Certified Date : 14 Oct 2025			
SLM Reading / Adjust dB(A) : 93.8/0.0				Expire Date : 13 Oct 2026			
Cal Sheet No.: CR-515-2026-082							
Time	Equivalent Sound Pressure Level (dB(A))						
	01-02 Apr 2026	02-03 Apr 2026	03-04 Apr 2026	04-05 Apr 2026	05-06 Apr 2026	06-07 Apr 2026	07-08 Apr 2026
09:00 - 10:00	70.4	70.5	68.2	68.4	68.4	68.6	68.6
10:00 - 11:00	69.9	70.3	68.5	68.6	68.3	68.2	68.3
11:00 - 12:00	70.5	70.2	70.5	68.9	66.3	68.1	68.3
12:00 - 13:00	69.6	69.9	68.3	68.5	66.0	68.2	68.0
13:00 - 14:00	69.6	70.0	68.6	68.6	68.1	61.9	68.0
14:00 - 15:00	69.6	70.0	67.3	68.3	68.1	68.3	68.2
15:00 - 16:00	70.1	69.6	64.6	68.4	68.0	68.5	68.0
16:00 - 17:00	69.6	69.6	68.2	68.1	68.0	64.3	67.6
17:00 - 18:00	69.5	69.7	68.2	68.1	68.0	66.7	68.0
18:00 - 19:00	69.6	68.4	68.6	68.0	68.1	67.9	67.5
19:00 - 20:00	69.7	68.8	68.3	68.1	68.0	67.9	67.5
20:00 - 21:00	69.6	68.5	68.1	68.1	67.9	67.8	67.5
21:00 - 22:00	69.9	68.2	67.9	68.2	67.9	67.8	67.5
22:00 - 23:00	69.6	68.1	67.4	68.3	68.0	67.6	67.6
23:00 - 00:00	69.4	67.8	67.4	67.9	68.0	67.5	67.4
00:00 - 01:00	69.5	63.7	67.4	67.8	68.0	67.3	67.5
01:00 - 02:00	69.6	67.1	67.4	68.0	68.0	67.2	67.5
02:00 - 03:00	69.5	68.1	67.5	68.2	68.0	67.1	67.3
03:00 - 04:00	69.6	68.0	67.6	68.2	67.9	67.2	67.4
04:00 - 05:00	69.6	68.1	67.4	68.2	68.0	67.2	67.3
05:00 - 06:00	69.5	68.1	67.6	68.2	68.1	67.3	67.4
06:00 - 07:00	69.5	68.0	67.8	68.3	68.4	67.7	67.9
07:00 - 08:00	69.8	67.8	67.9	68.3	67.9	67.6	67.6
08:00 - 09:00	70.1	68.4	68.1	68.4	68.2	67.9	68.3
Leq(24)*	69.7	68.8	68.0	68.3	67.9	67.5	67.8
Ldn	76.0	74.3	74.0	74.6	74.4	73.8	74.0
Lmax **	96.6	90.8	97.1	90.6	82.6	89.0	97.5
Standard-24Hr	70 dB(A)						
Standard-Max	115 dB(A)						

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

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

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team



Noise Monitoring Result : Background Noise

MTR-PTTGC6-Refinery

Location : North of Refinery				Monitor Period : 01-08 Apr 2026			
SLM Model : SCARLET ST-21D				Serial No : 820726			
Site Operator : Mr. Song Hengchwankun							
Calibrator Model : Cirrus CR:515				Serial No : 97097			
Calibration Ref dB(A) : 94.0				Certified Date : 14 Oct 2025			
SLM Reading / Adjust dB(A) : 93.8/0.0				Expire Date : 13 Oct 2026			
Cal Sheet No.: CR-515-2026-082							
Time	L90 (dB(A))						
	01-02 Apr 2026	02-03 Apr 2026	03-04 Apr 2026	04-05 Apr 2026	05-06 Apr 2026	06-07 Apr 2026	07-08 Apr 2026
09:00 - 10:00	69.6	69.5	67.4	67.5	67.8	67.7	67.5
10:00 - 11:00	69.1	69.4	67.5	67.8	67.7	67.4	67.4
11:00 - 12:00	69.5	69.4	67.7	67.8	50.5	67.5	67.4
12:00 - 13:00	69.1	69.2	67.6	67.6	50.5	67.5	67.4
13:00 - 14:00	69.0	69.2	67.6	67.7	67.6	64.7	67.1
14:00 - 15:00	69.0	69.3	51.3	67.6	67.6	67.5	67.1
15:00 - 16:00	69.1	68.8	50.2	67.5	67.5	67.6	67.2
16:00 - 17:00	68.9	68.9	67.5	67.4	67.5	59.6	66.8
17:00 - 18:00	68.9	69.0	67.5	67.5	67.5	60.6	66.8
18:00 - 19:00	69.0	67.4	67.7	67.5	67.5	67.3	66.9
19:00 - 20:00	69.1	67.5	67.8	67.6	67.5	67.4	67.0
20:00 - 21:00	69.1	67.5	67.6	67.6	67.5	67.4	67.0
21:00 - 22:00	69.2	67.5	67.4	67.7	67.6	67.3	67.0
22:00 - 23:00	69.2	67.5	67.0	67.7	67.6	67.2	67.1
23:00 - 00:00	69.1	67.4	67.0	67.5	67.6	67.0	67.0
00:00 - 01:00	69.1	50.5	67.0	67.4	67.6	66.9	67.2
01:00 - 02:00	69.2	50.9	67.0	67.6	67.6	66.8	67.1
02:00 - 03:00	69.1	67.6	67.1	67.7	67.6	66.8	66.9
03:00 - 04:00	69.2	67.6	67.1	67.8	67.5	66.8	67.0
04:00 - 05:00	69.2	67.7	67.0	67.8	67.6	66.8	66.9
05:00 - 06:00	69.2	67.6	67.1	67.8	67.6	66.8	66.9
06:00 - 07:00	69.1	67.4	67.1	67.8	67.7	67.0	67.0
07:00 - 08:00	69.3	67.4	67.2	67.8	67.5	67.1	67.2
08:00 - 09:00	69.4	67.5	67.3	67.8	67.5	67.3	67.3
L90(avg)*	69.2	67.9	67.0	67.6	67.2	66.8	67.1

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

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

Preeda S.
(Miss Preeda Somjai)
Technical Management Team

คุณภาพน้ำทิ้ง



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0040/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 08/01/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 09/01/2026	SAMPLING TIME	: 09:30
ANALYTICAL DATE	: 09-17/01/2026		: Miss Thipsuda Wannakran
REPORT DATE	: 17/01/2026	SITE OPERATOR	: 7-239-0-0027
SAMPLE CONDITION	: เหลืองขุ่น	FILE CODE	: 226010_WW_January

PARAMETER	UNIT	ANALYSIS	ND	STATION	STANDARD
		METHODS	(non-detectable)	น้ำเสียก่อนผ่านเข้า	
				Neutralization Basin	
Temperature	°C	2550 B	< 0.5	36.1	-
pH	-	4500-H ⁺ B	< 0.10	6.78	-
Total Dissolved Solids	mg/l	2540 C	< 25	752	-
Total Suspended Solids	mg/l	2540 D	< 2.5	32	-
Fat Oil & Grease	mg/l	5520 B	< 2.0	20.8	-
Sulfide as H ₂ S	mg/l	4500-S ²⁻ F	< 0.20	2.1	-
Phenols	mg/l	5530 B,D	< 0.10	1.5	-
BOD ₅	mg/l	5210 B	< 1.0	123	-
COD	mg/l	5220 C	< 15.00	326	-
Arsenic (As)	mg/l	3114 C	< 0.0001	1.96	-
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	-
Lead (Pb)	mg/l	3120 B	< 0.008	ND	-
Mercury (Hg)	mg/l	3112 B	< 0.0005	0.0502	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA APHA WEF)

Pornnapa Budthum

(Miss Pornnapa Budthum)

Analyst

REG. NO. 7-239-0-0018

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-0-0005

Remark : 1. Reported analysis refers to submitted sample only.
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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0040/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: -
SAMPLING DATE	: 08/01/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 09/01/2026	SAMPLING TIME	: 09:30
ANALYTICAL DATE	: 08,12/01/2026		: Miss Thipsuda Wannakran
REPORT DATE	: 17/01/2026	SITE OPERATOR	: -
SAMPLE CONDITION	: เหลืองขุ่น	FILE CODE	: 226010_WW_January

PARAMETER	UNIT	ANALYSIS	ND	STATION	STANDARD
		METHODS	(non-detectable)	น้ำเสียก่อนผ่านเข้า	
				Neutralization Basin	
Flow Rate ^{1/}	m ³ /hr	-	-	40	-
Ammonia Nitrogen	mg/l	4500-NH ₃ B,C	< 0.02	13.6	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA APHA WEF)

Pornnapa Budthum

(Miss Pornnapa Budthum)

Analyst

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

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3. ^{1/} Data from PTT Global Chemical Public Company Limited , Branch 6 (Refinery)
4. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No. :	0040/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 2-239
SAMPLING DATE	: 08/01/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 09/01/2026	SAMPLING TIME	: 09:25
ANALYTICAL DATE	: 09-17/01/2026	SITE OPERATOR	: Miss Thipsuda Wannakran
REPORT DATE	: 17/01/2026		: 2-239-9-0027
SAMPLE CONDITION	: เหลืองขุ่น	FILE CODE	: 226010_WW_January

PARAMETER	UNIT*	ANALYSIS	ND	STATION	STANDARD
		METHODS	(non-detectable)	น้ำเสียก่อนผ่านเข้า CPI	
Temperature	"C	2550 B	< 0.5	37.8	-
pH	-	4500-H ⁺ B	< 0.10	6.89	-
Total Dissolved Solids	mg/l	2540 C	< 25	340	-
Total Suspended Solids	mg/l	2540 D	< 2.5	3.0	-
Fat Oil & Grease	mg/l	5520 B	< 2.0	3.4	-
Sulfide as H ₂ S	mg/l	4500-S ²⁻ F	< 0.20	3.4	-
Phenols	mg/l	5530 B,D	< 0.10	2.6	-
BOD ₅	mg/l	5210 B	< 1.0	189	-
COD	mg/l	5220 C	< 15.00	448	-
Arsenic (As)	mg/l	3114 C	< 0.0001	3.00	-
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	-
Lead (Pb)	mg/l	3120 B	< 0.008	ND	-
Mercury (Hg)	mg/l	3112 B	< 0.0005	0.0631	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 (AWWA, APHA, WEF)

Pornnapa Budthum

(Miss Pornnapa Budthum)

Analyst

REG. NO. 2-239-9-0018

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 2-239-9-0005

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3. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No. :	0040/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: -
SAMPLING DATE	: 08/01/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 09/01/2026	SAMPLING TIME	: 09:25
ANALYTICAL DATE	: 08,12/01/2026	SITE OPERATOR	: Miss Thipsuda Wannakran
REPORT DATE	: 17/01/2026		: -
SAMPLE CONDITION	: เหลืองขุ่น	FILE CODE	: 226010_WW_January

PARAMETER	UNIT	ANALYSIS	ND	STATION	STANDARD
		METHODS	(non-detectable)	น้ำเสียก่อนผ่านเข้า CPI	
Flow Rate ^{1/}	m ³ /hr	-	-	60	-
Ammonia Nitrogen	mg/l	4500-NH ₃ B,C	< 0.02	19.4	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 (AWWA, APHA, WEF)

Pornnapa Budthum

(Miss Pornnapa Budthum)

Analyst

REG. NO. 2-239-9-0018

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 2-239-9-0005

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3. ^{1/} Data from PTT Global Chemical Public Company Limited , Branch 6 (Refinery)
4. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0040/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 08/01/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 09/01/2026	SAMPLING TIME	: 09:35
ANALYTICAL DATE	: 09-17/01/2026	SITE OPERATOR	: Miss Thipsuda Wannakran
REPORT DATE	: 17/01/2026		: 7-239-9-0027
SAMPLE CONDITION	: เหลือใสมีตะกอน	FILE CODE	: 226010_WW_January

PARAMETER	UNIT	ANALYSIS METHOD	ND	STATION	STANDARD ¹⁾
			(non-detectable)	น้ำทิ้งหลังผ่านการบำบัดที่	
				Observation Basin	
Temperature	°C	2550 B	< 0.5	28.6	≤ 40
pH	-	4500-H ²⁾ B	< 0.10	6.97	5.5-9.0
Total Dissolved Solids	mg/l	2540 C	< 25	3,246	≤ 37,760 ³⁾
Total Suspended Solids	mg/l	2540 D	< 2.5	6.4	≤ 50
Fat Oil & Grease	mg/l	5520 B	< 2.0	ND	≤ 5
Sulfide as H ₂ S	mg/l	4500-S ²⁾ F	< 0.20	ND	≤ 1
Phenols	mg/l	5530 B,C	< 0.001	ND	≤ 1
BOD ₅	mg/l	5210 B	< 1.0	< 1.0	≤ 20
COD	mg/l	5220 C	< 15.00	30.58	≤ 120
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0345	≤ 0.25
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 0.03
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 0.2
Mercury (Hg)	mg/l	3112 B	< 0.0005	ND	≤ 0.005

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 (AWWA,APHA,WEF)

Pornnapa Budthum

(Miss Pornnapa Budthum)

Analyst

REG. NO. 7-239-9-0018

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-9-0005

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

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3. ¹⁾ Notification of the Ministry of Industry, Regarding Industrial Effluent Standards, B.E.2560 (2017).

4. ³⁾ In case of discharging effluent into water resources containing TDS of more than 3,000 mg/l, TDS in the effluent to be discharged must exceed TDS in the water resources by not more than 5,000 mg/l (Measurement Results of Coastal Water on January 08, 2026 found to be 32,760 mg/l therefore the Standard of TDS found to be 37,760 mg/l).

5. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0040/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 08/01/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 09/01/2026	SAMPLING TIME	: 09:35
ANALYTICAL DATE	: 08,12-14/01/2026	SITE OPERATOR	: Miss Thipsuda Wannakran
REPORT DATE	: 17/01/2026		: 7-239-9-0027
SAMPLE CONDITION	: เหลือใสมีตะกอน	FILE CODE	: 226010_WW_January

PARAMETER	UNIT	ANALYSIS METHOD	ND (non-detectable)	STATION	STANDARD
				น้ำทิ้งหลังผ่านการบำบัดที่	
				Observation Basin	
Flow Rate ^{1/}	m ³ /hr	-	-	110	-
Ammonia Nitrogen	mg/l	Method 350.2	< 0.02	0.08	-
Benzene	µg/l	5030 C / 8260 D	< 0.20	ND	-

REFERENCE : US EPA, 1983, Method for Chemical Analysis of Water and Wastewater, USEPA, EPA 600/4-79-020, Method 349.2.

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

Pornnapa Budthum

(Miss Pornnapa Budthum)

Analyst

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

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3. ¹⁾ Data from PTT Global Chemical Public Company Limited, Branch 6 (Refinery)

4. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0040/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 08/01/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 09/01/2026	SAMPLING TIME	: 09:13
ANALYTICAL DATE	: 09-17/01/2026	SITE OPERATOR	: Miss Thipsuda Wannakran
REPORT DATE	: 17/01/2026		: 7-239-0-0027
SAMPLE CONDITION	: เขียวใส	FILE CODE	: 226010_WW_January

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION บ่อ LLOD-S	STANDARD ^{1/}
Temperature	°C	2550 B	< 0.5	26.9	≤ 40
pH	-	4500-H ⁺ B	< 0.10	7.46	5.5-9.0
Total Dissolved Solids	mg/l	2540 C	< 25	1,330	≤ 37,760 ^{2/}
Total Suspended Solids	mg/l	2540 D	< 2.5	8.8	≤ 50
Fat Oil & Grease	mg/l	5520 B	< 2.0	ND	≤ 5
BOD ₅	mg/l	5210 B	< 1.0	2.3	≤ 20
COD	mg/l	5220 C	< 15.00	52.42	≤ 120

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

Pornnapa Budthum

(Miss Pornnapa Budthum)

Analyst

REG. NO. 7-239-0-0018

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-0-0005

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 2. This report shall not be reproduced, except in full, without official approval.
 - 3.^{1/} Notification of the Ministry of Industry, Regarding Industrial Effluent Standards, B.E.2560 (2017).
 - 4.^{2/} In case of discharging effluent into water resources containing TDS of more than 3,000 mg/l, TDS in the effluent to be discharged must exceed TDS in the water resources by not more than 5,000 mg/l (Measurement Results of Coastal Water on January 08, 2026 found to be 32,760 mg/l therefore the Standard of TDS found to be 37,760 mg/l).
 5. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0186/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 05/02/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 06/02/2026	SAMPLING TIME	: 09:57
ANALYTICAL DATE	: 06-13/02/2026	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 13/02/2026		: 7-239-0-0007
SAMPLE CONDITION	: ตีปูนมีตะกอน	FILE CODE	: 226010_WW_February

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION น้ำเสียก่อนผ่านเข้า Neutralization Basin	STANDARD
Temperature	°C	2550 B	< 0.5	50.0	*
pH	-	4500-H ⁺ B	< 0.10	6.60	*
Total Dissolved Solids	mg/l	2540 C	< 25	404	*
Total Suspended Solids	mg/l	2540 D	< 2.5	160	*
Fat Oil & Grease	mg/l	5520 B	< 2.0	15.6	*
Sulfide as H ₂ S	mg/l	4500-S ⁻ F	< 0.20	1.3	*
Phenols	mg/l	5530 B,D	< 0.10	2.5	*
BOD ₅	mg/l	5210 B	< 1.0	238	*
COD	mg/l	5220 C	< 15.00	636	*
Arsenic (As)	mg/l	3114 C	< 0.0001	6.96	*
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	*
Lead (Pb)	mg/l	3120 B	< 0.008	ND	*
Mercury (Hg)	mg/l	3112 B	< 0.0005	0.0627	*

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 (AWWA, APHA, WEF)

Pornnapa Budthum

(Miss Pornnapa Budthum)

Analyst

REG. NO. 7-239-0-0018

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-0-0005

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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No. :	0186/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: *
SAMPLING DATE	: 05/02/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 06/02/2026	SAMPLING TIME	: 09:57
ANALYTICAL DATE	: 06-13/02/2026	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 13/02/2026		: *
SAMPLE CONDITION	: ค่าฝุ่นมีตะกอน	FILE CODE	: 226010_WW_February

PARAMETER	UNIT	ANALYSIS	ND	STATION	STANDARD
		METHODS	(non-detectable)	น้ำเสียก่อนผ่านเข้า Neutralization Basin	
Flow Rate ^{1/}	m ³ /hr	-	-	32	-
Ammonia Nitrogen	mg/l	4500-NH ₃ B,C	< 0.02	26.6	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 (AWWA, APHA, WEF)

Bongke puthum

(Miss Pornnapa Budthum)

Analyst

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

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3. ^{1/} Data from PTT Global Chemical Public Company Limited , Branch 6 (Refinery)

4. - Not available.



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SECOT CO., LTD.

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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No. :	0186/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 05/02/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 06/02/2026	SAMPLING TIME	: 10:18
ANALYTICAL DATE	: 06-13/02/2026	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 13/02/2026		: 7-239-9-0007
SAMPLE CONDITION	: เหลืองนุ่น	FILE CODE	: 226010_WW_February

PARAMETER	UNIT	ANALYSIS	ND	STATION	STANDARD
		METHODS	(non-detectable)	น้ำเสียก่อนผ่านเข้า CPI	
Temperature	°C	2550 B	< 0.5	41.4	*
pH	*	4500-H ⁺ B	< 0.10	6.80	*
Total Dissolved Solids	mg/l	2540 C	< 25	368	*
Total Suspended Solids	mg/l	2540 D	< 2.5	14	*
Fat Oil & Grease	mg/l	5520 B	< 2.0	7.5	*
Sulfide as H ₂ S	mg/l	4500-S ²⁻ F	< 0.20	1.2	*
Phenols	mg/l	5530 B,D	< 0.10	2.9	*
BOD ₅	mg/l	5210 B	< 1.0	192	*
COD	mg/l	5220 C	< 15.00	424	*
Arsenic (As)	mg/l	3114 C	< 0.0001	9.01	*
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	*
Lead (Pb)	mg/l	3120 B	< 0.008	ND	*
Mercury (Hg)	mg/l	3112 B	< 0.0005	0.0077	*

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 (AWWA, APHA, WEF)

Bongke puthum

(Miss Pornnapa Budthum)

Analyst

REG. NO. 7-239-9-0018

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-9-0005

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

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3. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0186/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: -
SAMPLING DATE	: 05/02/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 06/02/2026	SAMPLING TIME	: 10:18
ANALYTICAL DATE	: 06-13/02/2026	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 13/02/2026		: -
SAMPLE CONDITION	: เหลืองขุ่น	FILE CODE	: 226010_WW_February

PARAMETER	UNIT	ANALYSIS	ND	STATION	STANDARD
		METHODS	(non-detectable)	น้ำเสียก่อนผ่านเข้า CPI	
Flow Rate ^U	m ³ /hr	-	-	40	-
Ammonia Nitrogen	mg/l	4500-NH ₃ B,C	< 0.02	23.4	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED, 2023 (AWWA APHA WEF)

Pornnapa Budthum
(Miss Pornnapa Budthum)

Analyst

REG. NO. 2-239-0-0018

Khemchuda Insorn
(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 2-239-0-0005

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 2. This report shall not be reproduced, except in full, without official approval.
 3. ^U Data from PTT Global Chemical Public Company Limited , Branch 6 (Refinery)
 4. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0186/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 2-239
SAMPLING DATE	: 05/02/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 06/02/2026	SAMPLING TIME	: 10:00
ANALYTICAL DATE	: 06-13/02/2026	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 13/02/2026		: 2-239-0-0007
SAMPLE CONDITION	: เหลืองใสมีตะกอน	FILE CODE	: 226010_WW_February

PARAMETER	UNIT	ANALYSIS METHOD	ND (non-detectable)	STATION	STANDARD ^U
				น้ำทิ้งหลังผ่านการบำบัดที่ Observation Basin	
Temperature	*C	2550 B	< 0.5	31.7	≤ 40
pH	-	4500-H ⁺ B	< 0.10	7.39	5.5-9.0
Total Dissolved Solids	mg/l	2540 C	< 25	1,138	≤ 32,200 ^U
Total Suspended Solids	mg/l	2540 D	< 2.5	3.3	≤ 50
Fat Oil & Grease	mg/l	5520 B	< 2.0	ND	≤ 5
Sulfide as H ₂ S	mg/l	4500-S ²⁻ F	< 0.20	ND	≤ 1
Phenols	mg/l	5530 B,C	< 0.001	ND	≤ 1
BOD ₅	mg/l	5210 B	< 1.0	< 1.0	≤ 20
COD	mg/l	5220 C	< 15.00	24.23	≤ 120
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0524	≤ 0.25
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 0.03
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 0.2
Mercury (Hg)	mg/l	3112 B	< 0.0005	ND	≤ 0.005

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED, 2023 (AWWA APHA WEF)

Pornnapa Budthum
(Miss Pornnapa Budthum)

Analyst

REG. NO. 2-239-0-0018

Khemchuda Insorn
(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 2-239-0-0005

- Remark :
1. Reported analysis refers to submitted sample only.
 2. This report shall not be reproduced, except in full, without official approval.
 3. ^U Notification of the Ministry of Industry, Regarding Industrial Effluent Standards, B.E.2560 (2017).
 4. ^{2/} In case of discharging effluent into water resources containing TDS of more than 3,000 mg/l, TDS in the effluent to be discharged must exceed TDS in the water resources by not more than 5,000 mg/l (Measurement Results of Coastal Water on February 05,2026 found to be 27,220 mg/l therefore the Standard of TDS found to be 32,200 mg/l).
 5. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0186/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: -
SAMPLING DATE	: 05/02/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 06/02/2026	SAMPLING TIME	: 10:00
ANALYTICAL DATE	: 06-13/02/2026	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 13/02/2026		
SAMPLE CONDITION	: เหลืองใสมีตะกอน	FILE CODE	: 226010_WW_February

PARAMETER	UNIT	ANALYSIS METHOD	ND (non-detectable)	STATION	STANDARD
				น้ำทิ้งหลังผ่านการบำบัดที่ Observation Basin	
Flow Rate ^{1/}	m ³ /hr	-	-	68	-
Ammonia Nitrogen	mg/l	Method 350.2	< 0.02	0.09	-
Benzene	μg/l	5030 C / 8260 D	< 0.20	ND	-

REFERENCE : US EPA 1993, Method for Chemical Analysis of Water and Waste, USEPA, EPA 600/4-79-010, Method 350.2

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

Pornapa Budthum

(Miss Pornapa Budthum)

Analyst

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

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3. ^{1/} Data from PTT Global Chemical Public Company Limited, Branch 6 (Refinery)

4. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0186/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 2-239
SAMPLING DATE	: 05/02/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 06/02/2026	SAMPLING TIME	: 09:42
ANALYTICAL DATE	: 06-13/02/2026	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 13/02/2026		
SAMPLE CONDITION	: เหลืองใสมีตะกอน	FILE CODE	: 226010_WW_February

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	STANDARD ^{1/}
				บ่อ LLOD-S	
Temperature	°C	2550 B	< 0.5	30.4	≤ 40
pH	-	4500-H ⁺ B	< 0.10	7.64	5.5-9.0
Total Dissolved Solids	mg/l	2540 C	< 25	1,144	≤ 32,200 ^{2/}
Total Suspended Solids	mg/l	2540 D	< 2.5	< 2.5	≤ 50
Fat Oil & Grease	mg/l	5520 B	< 2.0	ND	≤ 5
BOD ₅	mg/l	5210 B	< 1.0	2.2	≤ 20
COD	mg/l	5220 C	< 15.00	38.30	≤ 120

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

Pornapa Budthum

(Miss Pornapa Budthum)

Analyst

REG. NO. 2-239-9-0018

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 2-239-9-0005

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

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3. ^{1/} Notification of the Ministry of Industry, Regarding Industrial Effluent Standards, B.E.2560 (2017).

4. ^{2/} In case of discharging effluent into water resources containing TDS of more than 3,000 mg/l, TDS in the effluent to be discharged must exceed TDS in the water resources by not more than 5,000 mg/l (Measurement Results of Coastal Water on February 05, 2026 found to be 27,220 mg/l therefore the Standard of TDS found to be 32,200 mg/l).

5. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0389/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 05/03/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 06/03/2026	SAMPLING TIME	: 09:24
ANALYTICAL DATE	: 06-13/03/2026	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 13/03/2026		: 7-239-ท-0007
SAMPLE CONDITION	: ค่าขึ้น	FILE CODE	: 226010_WW_March

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION น้ำเสียก่อนผ่านเข้า Neutralization Basin	STANDARD
Temperature	°C	2550 B	< 0.5	39.5	-
pH	-	4500-H ⁺ B	< 0.10	7.11	-
Total Dissolved Solids	mg/l	2540 C	< 25	854	-
Total Suspended Solids	mg/l	2540 D	< 2.5	179	-
Fat Oil & Grease	mg/l	5520 B	< 2.0	29.7	-
Sulfide as H ₂ S	mg/l	4500-S ²⁻ F	< 0.20	1.8	-
Phenols	mg/l	5530 B,D	< 0.10	1.7	-
BOD ₅	mg/l	5210 B	< 1.0	157	-
COD	mg/l	5220 C	< 15.00	320	-
Arsenic (As)	mg/l	3114 C	< 0.0001	3.80	-
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	-
Lead (Pb)	mg/l	3120 B	< 0.008	ND	-
Mercury (Hg)	mg/l	3112 B	< 0.0005	0.0541	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 (AWWA,APHA, WEF)

Bongke Puthum
(Miss Pornnapa Budthum)

Analyst

REG. NO. 7-239-ท-0018

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-ท-0005

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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0389/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: -
SAMPLING DATE	: 05/03/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 06/03/2026	SAMPLING TIME	: 09:24
ANALYTICAL DATE	: 05,09/03/2026	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 13/03/2026		: -
SAMPLE CONDITION	: ค่าขึ้น	FILE CODE	: 226010_WW_March

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION น้ำเสียก่อนผ่านเข้า Neutralization Basin	STANDARD
Flow Rate ^{1/}	m ³ /hr	-	-	64	-
Ammonia Nitrogen	mg/l	4500-NH ₃ B,C	< 0.02	32.2	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 (AWWA,APHA, WEF)

Bongke Puthum
(Miss Pornnapa Budthum)

Analyst

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

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 4. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No. :	0389/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No. :	จ-239
SAMPLING DATE	: 05/03/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 06/03/2026	SAMPLING TIME	: 09:46
ANALYTICAL DATE	: 06-13/03/2026	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 13/03/2026		: จ-239-จ-0007
SAMPLE CONDITION	: น้ำตาลขุ่น	FILE CODE	: 226010_WW_March

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION น้ำเสียก่อนผ่านเข้า CPI	STANDARD
Temperature	°C	2550 B	< 0.5	40.0	-
pH	-	4500-H ⁺ B	< 0.10	6.57	-
Total Dissolved Solids	mg/l	2540 C	< 25	354	-
Total Suspended Solids	mg/l	2540 D	< 2.5	140	-
Fat Oil & Grease	mg/l	5520 B	< 2.0	79.6	-
Sulfide as H ₂ S	mg/l	4500-S ²⁻ F	< 0.20	2.2	-
Phenols	mg/l	5530 B,D	< 0.10	3.3	-
BOD ₅	mg/l	5210 B	< 1.0	270	-
COD	mg/l	5220 C	< 15.00	374	-
Arsenic (As)	mg/l	3114 C	< 0.0001	4.89	-
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	-
Lead (Pb)	mg/l	3120 B	< 0.008	ND	-
Mercury (Hg)	mg/l	3112 B	< 0.0005	0.0278	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA APHA WEF)

Pornapa Budthum

(Miss Pornapa Budthum)

Analyst

REG. NO. จ-239-จ-0018

Khemchuda Inorn

(Miss Khemchuda Inorn)

Technical Management Team

REG. NO. จ-239-จ-0005

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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No. :	0389/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No. :	-
SAMPLING DATE	: 05/03/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 06/03/2026	SAMPLING TIME	: 09:46
ANALYTICAL DATE	: 05,09/03/2026	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 13/03/2026		: -
SAMPLE CONDITION	: น้ำตาลขุ่น	FILE CODE	: 226010_WW_March

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION น้ำเสียก่อนผ่านเข้า CPI	STANDARD
Flow Rate ^{1/}	m ³ /hr	-	-	52	-
Ammonia Nitrogen	mg/l	4500-NH ₃ B,C	< 0.02	46.4	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA APHA WEF)

Pornapa Budthum

(Miss Pornapa Budthum)

Analyst

Khemchuda Inorn

(Miss Khemchuda Inorn)

Technical Management Team

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 3. ^{1/} Data from PTT Global Chemical Public Company Limited , Branch 6 (Refinery)
 4. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0389/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 05/03/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 06/03/2026	SAMPLING TIME	: 09:32
ANALYTICAL DATE	: 06-13/03/2026	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 13/03/2026	FILE CODE	: 7-239-ก-0007
SAMPLE CONDITION	: เหลืองขุ่น		: 226010_WW_March

PARAMETER	UNIT	ANALYSIS METHOD	ND (non-detectable)	STATION	
				น้ำทิ้งหลังผ่านการบำบัดที่ Observation Basin	STANDARD ^{1/}
Temperature	°C	2550 B	< 0.5	31.6	≤ 40
pH	-	4500-H ⁺ B	< 0.10	7.28	5.5-9.0
Total Dissolved Solids	mg/l	2540 C	< 25	1,642	≤ 35,560 ^{2/}
Total Suspended Solids	mg/l	2540 D	< 2.5	5.8	≤ 50
Fat Oil & Grease	mg/l	5520 B	< 2.0	ND	≤ 5
Sulfide as H ₂ S	mg/l	4500-S ²⁻ F	< 0.20	ND	≤ 1
Phenols	mg/l	5530 B,C	< 0.001	ND	≤ 1
BOD ₅	mg/l	5210 B	< 1.0	< 1.0	≤ 20
COD	mg/l	5220 C	< 15.00	< 15.00	≤ 120
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0825	≤ 0.25
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 0.03
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 0.2
Mercury (Hg)	mg/l	3112 B	< 0.0005	ND	≤ 0.005

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 (AWWA, APHA, WEF)

Pornapa Budthum
(Miss Pornapa Budthum)

Analyst

REG. NO. 7-239-ก-0018

Khemchuda Insorn
(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-ก-0005

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

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3. ^{1/} Notification of the Ministry of Industry, Regarding Industrial Effluent Standards, B.E.2560 (2017).

4. ^{2/} In case of discharging effluent into water resources containing TDS of more than 3,000 mg/l, TDS in the effluent to be discharged must exceed TDS in the water resources by not more than 5,000 mg/l (Measurement Results of Coastal Water on March 05, 2026

found to be 30,560 mg/l therefore the Standard of TDS found to be 35,560 mg/l).

5. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0389/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: -
SAMPLING DATE	: 05/03/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 06/03/2026	SAMPLING TIME	: 09:32
ANALYTICAL DATE	: 05,09/03/2026	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 13/03/2026	FILE CODE	: -
SAMPLE CONDITION	: เหลืองขุ่น		: 226010_WW_March

PARAMETER	UNIT	ANALYSIS METHOD	ND (non-detectable)	STATION	
				น้ำทิ้งหลังผ่านการบำบัดที่ Observation Basin	STANDARD
Flow Rate ^{1/}	m ³ /hr	-	-	64	-
Ammonia Nitrogen	mg/l	Method 350.2	< 0.02	ND	-
Benzene	µg/l	5030 C / 8260 D	< 0.20	ND	-

REFERENCE : US EPA 1993, Method for Chemical Analysis of Water and Waste, USEPA, EPA 800/4-79-020, Method 350.2

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

Pornapa Budthum
(Miss Pornapa Budthum)

Analyst

Khemchuda Insorn
(Miss Khemchuda Insorn)

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/} Data from PTT Global Chemical Public Company Limited, Branch 6 (Refinery)

4. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0389/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 05/03/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 06/03/2026	SAMPLING TIME	: 09:05
ANALYTICAL DATE	: 06-13/03/2026	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 13/03/2026		: 7-239-9-0007
SAMPLE CONDITION	: เหลืองใส	FILE CODE	: 226010_WW_March

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION 10 LLOD-S	STANDARD ^{1/}
Temperature	°C	2550 B	< 0.5	31.8	≤ 40
pH	-	4500-H ⁺ B	< 0.10	6.97	5.5-9.0
Total Dissolved Solids	mg/l	2540 C	< 25	1,376	≤ 35,560 ^{2/}
Total Suspended Solids	mg/l	2540 D	< 2.5	< 2.5	≤ 50
Fat Oil & Grease	mg/l	5520 B	< 2.0	ND	≤ 5
BOD ₅	mg/l	5210 B	< 1.0	< 1.0	≤ 20
COD	mg/l	5220 C	< 15.00	22.87	≤ 120

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 (AWWA, APHA, WEF)

Pornnapa Budthum

(Miss Pornnapa Budthum)

Analyst

REG. NO. 7-239-9-0018

Khemchuda Insom

(Miss Khemchuda Insom)

Technical Management Team

REG. NO. 7-239-9-0005

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

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3. ^{1/} Notification of the Ministry of Industry, Regarding Industrial Effluent Standards, B.E.2560 (2017).

4. ^{2/} In case of discharging effluent into water resources containing TDS of more than 3,000 mg/l, TDS in the effluent to be discharged must exceed TDS in the water resources by not more than 5,000 mg/l (Measurement Results of Coastal Water on March 05,2026

found to be 30,560 mg/l therefore the Standard of TDS found to be 35,560 mg/l).

5. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0546/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 02/04/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 03/04/2026	SAMPLING TIME	: 09:30
ANALYTICAL DATE	: 03-10/04/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 10/04/2026		: 7-239-9-0025
SAMPLE CONDITION	: ค่าขึ้น	FILE CODE	: 226010_WW_April

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION น้ำเสียก่อนผ่านเข้า Neutralization Basin	STANDARD
Temperature	°C	2550 B	< 0.5	42.4	+
pH	-	4500-H ⁺ B	< 0.10	7.40	+
Total Dissolved Solids	mg/l	2540 C	< 25	562	+
Total Suspended Solids	mg/l	2540 D	< 2.5	180	+
Fat Oil & Grease	mg/l	5520 B	< 2.0	37.4	+
Sulfide as H ₂ S	mg/l	4500-S ²⁻ F	< 0.20	3.4	+
Phenols	mg/l	5530 B,D	< 0.10	2.8	+
BOD ₅	mg/l	5210 B	< 1.0	348	+
COD	mg/l	5220 C	< 15.00	863	+
Arsenic (As)	mg/l	3114 C	< 0.0001	6.72	+
Cadmium (Cd)	mg/l	3120 B	< 0.001	< 0.01	+
Lead (Pb)	mg/l	3120 B	< 0.008	ND	+
Mercury (Hg)	mg/l	3112 B	< 0.0005	0.2239	+

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 (AWWA, APHA, WEF)

Pornnapa Budthum

(Miss Pornnapa Budthum)

Analyst

REG. NO. 7-239-9-0018

Khemchuda Insom

(Miss Khemchuda Insom)

Technical Management Team

REG. NO. 7-239-9-0005

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

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3. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0546/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: -
SAMPLING DATE	: 02/04/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 03/04/2026	SAMPLING TIME	: 09:30
ANALYTICAL DATE	: 02,03/04/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 10/04/2026		
SAMPLE CONDITION	: ดำเนิน	FILE CODE	: 226010_WW_April

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION น้ำเสียก่อนผ่านเข้า Neutralization Basin	STANDARD
Flow Rate ¹⁾	m ³ /hr	-	-	20	-
Ammonia Nitrogen	mg/l	4500-NH ₃ B,C	< 0.02	31.3	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 (AWWA APHA WEF)

Pornnapa Budthum

(Miss Pornnapa Budthum)

Analyst

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

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3. ¹⁾ Data from PTT Global Chemical Public Company Limited , Branch 6 (Refinery)

4. - Not available.



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CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0546/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 02/04/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 03/04/2026	SAMPLING TIME	: 09:45
ANALYTICAL DATE	: 03-10/04/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 10/04/2026		: 7-239-8-0025
SAMPLE CONDITION	: เหลืองขุ่น	FILE CODE	: 226010_WW_April

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION น้ำเสียก่อนผ่านเข้า CPI	STANDARD
Temperature	°C	2550 B	< 0.5	45.1	-
pH	-	4500-H ⁺ B	< 0.10	7.84	-
Total Dissolved Solids	mg/l	2540 C	< 2.5	502	-
Total Suspended Solids	mg/l	2540 D	< 2.5	140	-
Fat Oil & Grease	mg/l	5520 B	< 2.0	28.0	-
Sulfide as H ₂ S	mg/l	4500-S ²⁻ F	< 0.20	2.8	-
Phenols	mg/l	5530 B,D	< 0.10	2.6	-
BOD ₅	mg/l	5210 B	< 1.0	162	-
COD	mg/l	5220 C	< 15.00	706	-
Arsenic (As)	mg/l	3114 C	< 0.0001	2.35	-
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	-
Lead (Pb)	mg/l	3120 B	< 0.008	ND	-
Mercury (Hg)	mg/l	3112 B	< 0.0005	0.0262	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 (AWWA APHA WEF)

Pornnapa Budthum

(Miss Pornnapa Budthum)

Analyst

REG. NO. 7-239-8-0018

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-8-0005

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3. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0546/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: -
SAMPLING DATE	: 02/04/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 03/04/2026	SAMPLING TIME	: 09:45
ANALYTICAL DATE	: 02,03/04/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 10/04/2026		
SAMPLE CONDITION	: เหลือขุ่น	FILE CODE	: 226010_WW_April

PARAMETER	UNIT	ANALYSIS	ND	STATION	STANDARD
		METHODS	(non-detectable)	น้ำเสียก่อนผ่านเข้า CPI	
Flow Rate ^{1/}	m ³ /hr	-	-	65	-
Ammonia Nitrogen	mg/l	4500-NH ₃ B,C	< 0.02	30.8	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA, APHA, WEF)

Pornnapa Budthum

(Miss Pornnapa Budthum)

Analyst

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

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3. ^{1/} Data from PTT Global Chemical Public Company Limited , Branch 6 (Refinery)

4. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0546/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 02/04/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 03/04/2026	SAMPLING TIME	: 09:18
ANALYTICAL DATE	: 03-10/04/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 10/04/2026		: 7-239-8-0025
SAMPLE CONDITION	: เหลือใส	FILE CODE	: 226010_WW_April

PARAMETER	UNIT	ANALYSIS METHOD	ND (non-detectable)	STATION	STANDARD ^{1/}
				น้ำทิ้งหลังผ่านการบำบัดที่ Observation Basin	
Temperature	°C	2550 B	< 0.5	33.8	≤ 40
pH	-	4500-H ⁺ B	< 0.10	8.00	5.5-9.0
Total Dissolved Solids	mg/l	2540 C	< 25	1,040	≤ 31,960 ^{2/}
Total Suspended Solids	mg/l	2540 D	< 2.5	5.4	≤ 50
Fat Oil & Grease	mg/l	5520 B	< 2.0	ND	≤ 5
Sulfide as H ₂ S	mg/l	4500-S ²⁻ F	< 0.20	ND	≤ 1
Phenols	mg/l	5530 B,C	< 0.001	ND	≤ 1
BOD ₅	mg/l	5210 B	< 1.0	< 1.0	≤ 20
COD	mg/l	5220 C	< 15.00	23.54	≤ 120
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0645	≤ 0.25
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 0.03
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 0.2
Mercury (Hg)	mg/l	3112 B	< 0.0005	ND	≤ 0.005

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA, APHA, WEF)

Pornnapa Budthum

(Miss Pornnapa Budthum)

Analyst

REG. NO. 7-239-8-0018

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-8-0005

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3. ^{1/} Notification of the Ministry of Industry, Regarding Industrial Effluent Standards, B.E.2560 (2017).

4. ^{2/} In case of discharging effluent into water resources containing TDS of more than 3,000 mg/l, TDS in the effluent to be discharged must exceed TDS in the water resources by not more than 5,000 mg/l (Measurement Results of Coastal Water on April 02,2026 found to be 26,960 mg/l therefore the Standard of TDS found to be 31,960 mg/l).

5. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0546/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: -
SAMPLING DATE	: 02/04/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 03/04/2026	SAMPLING TIME	: 09:18
ANALYTICAL DATE	: 02,03/04/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 10/04/2026		: -
SAMPLE CONDITION	: เหลืองใส	FILE CODE	: 226010_WW_April

PARAMETER	UNIT	ANALYSIS METHOD	ND (non-detectable)	STATION	STANDARD
				น้ำทิ้งหลังผ่านการบำบัดที่ Observation Basin	
Flow Rate ^{1/}	m ³ /hr	-	-	70	-
Ammonia Nitrogen	mg/l	Method 350.2	< 0.02	ND	-
Benzene	µg/l	5030 C / 8260 D	< 0.20	ND	-

REFERENCE : US EPA, 1993, Method for Chemical Analysis of Water and Wastewater, USEPA, EPA 600/4-78/020, Method 350.2.

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

Pornnapha Budthum

(Miss Pornnapha Budthum)

Analyst

Khemchuda Insom

(Miss Khemchuda Insom)

Technical Management Team

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3. ^{1/} Data from PTT Global Chemical Public Company Limited, Branch 6 (Refinery)

4. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0546/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 02/04/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 03/04/2026	SAMPLING TIME	: 09:00
ANALYTICAL DATE	: 03-10/04/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 10/04/2026		: 7-239-0-0025
SAMPLE CONDITION	: เหลืองใส	FILE CODE	: 226010_WW_April

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	STANDARD ^{1/}
				น้ำ LLOD-S	
Temperature	°C	2550 B	< 0.5	32.8	≤ 40
pH	-	4500-H ⁺ B	< 0.10	7.89	5.5-9.0
Total Dissolved Solids	mg/l	2540 C	< 25	1,048	≤ 31,960 ^{2/}
Total Suspended Solids	mg/l	2540 D	< 2.5	3.8	≤ 50
Fat Oil & Grease	mg/l	5520 B	< 2.0	ND	≤ 5
BOD ₅	mg/l	5210 B	< 1.0	< 1.0	≤ 20
COD	mg/l	5220 C	< 15.00	23.54	≤ 120

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED., 2021 (AWWA, APHA, WEF)

Pornnapha Budthum

(Miss Pornnapha Budthum)

Analyst

REG. NO. 7-239-0-0018

Khemchuda Insom

(Miss Khemchuda Insom)

Technical Management Team

REG. NO. 7-239-0-0005

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3. ^{1/} Notification of the Ministry of Industry, Regarding Industrial Effluent Standards, B.E.2560 (2017).

4. ^{2/} In case of discharging effluent into water resources containing TDS of more than 3,000 mg/l, TDS in the effluent to be discharged must exceed TDS in the water resources by not more than 5,000 mg/l (Measurement Results of Coastal Water on April 02,2026 found to be 26,960 mg/l therefore the Standard of TDS found to be 31,960 mg/l).

5. - Not available.



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SECOT CO., LTD.

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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	0756/69
SAMPLING BY	SECOT Co., Ltd.	REGISTRATION No.	ว-239
SAMPLING DATE	07/05/2026	SAMPLING METHOD	Grab
RECEIVED DATE	08/05/2026	SAMPLING TIME	11:48
ANALYTICAL DATE	08-16/05/2026	SITE OPERATOR	Mr. Jeerawat Khothamhan
REPORT DATE	16/05/2026		ว-239-ท-0025
SAMPLE CONDITION	คำปั่น	FILE CODE	226010_WW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION		STANDARD
				น้ำเสียก่อนผ่านเข้า	Neutralization Basin	
Temperature	°C	2550 B	< 0.5	38.9		
pH	-	4500-H ⁺ B	< 0.10	6.99		
Total Dissolved Solids	mg/l	2540 C	< 25	1,740		
Total Suspended Solids	mg/l	2540 D	< 2.5	320		
Fat Oil & Grease	mg/l	5520 B	< 2.0	124		
Sulfide as H ₂ S	mg/l	4500-S ²⁻ F	< 0.20	3.5		
Phenols	mg/l	5530 B,D	< 0.10	2.5		
BOD ₅	mg/l	5210 B	< 1.0	370		
COD	mg/l	5220 C	< 15.00	824		
Arsenic (As)	mg/l	3114 C	< 0.0001	6.54		
Cadmium (Cd)	mg/l	3120 B	< 0.001	<0.01		
Lead (Pb)	mg/l	3120 B	< 0.008	ND		
Mercury (Hg)	mg/l	3112 B	< 0.0005	0.2968		

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED, 2021 (AWWA, APHA, WEF)

Pornnapa Budthum

(Miss Pornnapa Budthum)

Analyst

REG. NO. ว-239-ท-0018

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. ว-239-ท-0005

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3. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	0756/69
SAMPLING BY	SECOT Co., Ltd.	REGISTRATION No.	ว-239
SAMPLING DATE	07/05/2026	SAMPLING METHOD	Grab
RECEIVED DATE	08/05/2026	SAMPLING TIME	11:48
ANALYTICAL DATE	07,09/05/2026	SITE OPERATOR	Mr. Jeerawat Khothamhan
REPORT DATE	16/05/2026		ว-239-ท-0025
SAMPLE CONDITION	คำปั่น	FILE CODE	226010_WW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION		STANDARD
				น้ำเสียก่อนผ่านเข้า	Neutralization Basin	
Flow Rate ^W	m ³ /hr			38		
Ammonia Nitrogen	mg/l	4500-NH ₃ B,C	< 0.02	47.4		

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED, 2021 (AWWA, APHA, WEF)

Pornnapa Budthum

(Miss Pornnapa Budthum)

Analyst

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

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2. This report shall not be reproduced, except in full, without official approval.
3. ^W Data from PTT Global Chemical Public Company Limited, Branch 6 (Refinery)
4. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0756/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 07/05/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 08/05/2026	SAMPLING TIME	: 11:55
ANALYTICAL DATE	: 08-16/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 16/05/2026		: 7-239-9-0025
SAMPLE CONDITION	: เหลือขุ่น	FILE CODE	: 226010_WW_May

PARAMETER	UNIT	ANALYSIS	ND	STATION	STANDARD
		METHODS	(non-detectable)	น้ำเสียก่อนผ่านเข้า CPI	
Temperature	°C	2550 B	< 0.5	44.3	-
pH	-	4500-H ⁺ B	< 0.10	6.65	-
Total Dissolved Solids	mg/l	2540 C	< 25	728	-
Total Suspended Solids	mg/l	2540 D	< 2.5	10	-
Fat Oil & Grease	mg/l	5520 B	< 2.0	16.5	-
Sulfide as H ₂ S	mg/l	4500-S ²⁻ F	< 0.20	1.8	-
Phenols	mg/l	5530 B,D	< 0.10	3.0	-
BOD ₅	mg/l	5210 B	< 1.0	190	-
COD	mg/l	5220 C	< 15.00	496	-
Arsenic (As)	mg/l	3114 C	< 0.0001	2.88	-
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	-
Lead (Pb)	mg/l	3120 B	< 0.008	ND	-
Mercury (Hg)	mg/l	3112 B	< 0.0005	0.0096	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 (AWWA, APHA, WEF)

(Miss Pornnapa Budthum)

Analyst

REG. NO. 7-239-9-0018

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-9-0005

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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0756/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: -
SAMPLING DATE	: 07/05/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 08/05/2026	SAMPLING TIME	: 11:55
ANALYTICAL DATE	: 07,09/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 16/05/2026		: -
SAMPLE CONDITION	: เหลือขุ่น	FILE CODE	: 226010_WW_May

PARAMETER	UNIT	ANALYSIS	ND	STATION	STANDARD
		METHODS	(non-detectable)	น้ำเสียก่อนผ่านเข้า CPI	
Flow Rate ^{1/}	m ³ /hr	-	-	53	-
Ammonia Nitrogen	mg/l	4500-NH ₃ B,C	< 0.02	30.9	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 (AWWA, APHA, WEF)

(Miss Pornnapa Budthum)

Analyst

(Miss Khemchuda Insorn)

Technical Management Team

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3. ^{1/} Data from PTT Global Chemical Public Company Limited , Branch 6 (Refinery)
4. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0756/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 07/05/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 08/05/2026	SAMPLING TIME	: 11:42
ANALYTICAL DATE	: 08-16/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 16/05/2026	FILE CODE	: 226010_WW_May
SAMPLE CONDITION	: เหลือไม่ถึงตะกอน		

PARAMETER	UNIT	ANALYSIS METHOD	ND (non-detectable)	STATION	
				น้ำทิ้งหลังผ่านการบำบัดที่ Observation Basin	STANDARD ^u
Temperature	°C	2550 B	< 0.5	33.7	≤ 40
pH	-	4500-H ⁺ B	< 0.10	7.39	5.5-9.0
Total Dissolved Solids	mg/l	2540 C	< 25	2,696	≤ 35,140 ^{2v}
Total Suspended Solids	mg/l	2540 D	< 2.5	7.4	≤ 50
Fat Oil & Grease	mg/l	5520 B	< 2.0	ND	≤ 5
Sulfide as H ₂ S	mg/l	4500-S ²⁻ F	< 0.20	ND	≤ 1
Phenols	mg/l	5530 B,C	< 0.001	ND	≤ 1
BOD ₅	mg/l	5210 B	< 1.0	< 1.0	≤ 20
COD	mg/l	5220 C	< 15.00	28.04	≤ 120
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0971	≤ 0.25
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 0.03
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 0.2
Mercury (Hg)	mg/l	3112 B	< 0.0005	ND	≤ 0.005

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 (AWWA-APHA-WEF)

Pornnapa Budthum

(Miss Pornnapa Budthum)

Analyst

REG. NO. 7-239-9-0018

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-9-0005

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3. ^u Notification of the Ministry of Industry, Regarding Industrial Effluent Standards, B.E.2560 (2017).

4. ^{2v} In case of discharging effluent into water resources containing TDS of more than 3,000 mg/l, TDS in the effluent to be discharged must exceed TDS in the water resources by not more than 5,000 mg/l (Measurement Results of Coastal Water on May 07, 2026

found to be 30,140 mg/l therefore the Standard of TDS found to be 35,140 mg/l).

5. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0756/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: -
SAMPLING DATE	: 07/05/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 08/05/2026	SAMPLING TIME	: 11:42
ANALYTICAL DATE	: 07,09-13/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 16/05/2026	FILE CODE	: 226010_WW_May
SAMPLE CONDITION	: เหลือไม่ถึงตะกอน		

PARAMETER	UNIT	ANALYSIS METHOD	ND (non-detectable)	STATION	
				น้ำทิ้งหลังผ่านการบำบัดที่ Observation Basin	STANDARD
Flow Rate ^u	m ³ /hr	-	-	80	-
Ammonia Nitrogen	mg/l	Method 350.2	< 0.02	0.23	-
Benzene	μg/l	5030 C / 8260 D	< 0.20	ND	-

REFERENCE : US EPA 1983, Method for Chemical Analysis of Water and Waste, USEPA, EPA 600/4-79/020, Method 350.2.

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

Pornnapa Budthum

(Miss Pornnapa Budthum)

Analyst

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

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3. ^u Data from PTT Global Chemical Public Company Limited, Branch 6 (Refinery)

4. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0756/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 07/05/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 08/05/2026	SAMPLING TIME	: 11:30
ANALYTICAL DATE	: 08-16/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 16/05/2026		: 7-239-0-0025
SAMPLE CONDITION	: เหลือไม่ถึงตะกอน	FILE CODE	: 226010_WW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION บ่อบ LLOD-S	STANDARD ^{1/}
Temperature	°C	2550 B	< 0.5	32.5	≤ 40
pH	-	4500-H ⁺ B	< 0.10	7.75	5.5-9.0
Total Dissolved Solids	mg/l	2540 C	< 25	684	≤ 35,140 ^{2/}
Total Suspended Solids	mg/l	2540 D	< 2.5	2.7	≤ 50
Fat Oil & Grease	mg/l	5520 B	< 2.0	ND	≤ 5
BOD ₅	mg/l	5210 B	< 1.0	1.7	≤ 20
COD	mg/l	5220 C	< 15.00	22.57	≤ 120

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA APHA WEF)

(Miss Pornnapa Budthum)

Analyst

REG. NO. 7-239-0-0018

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-0-0005

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3. ^{1/} Notification of the Ministry of Industry, Regarding Industrial Effluent Standards, B.E.2560 (2017).

4. ^{2/} In case of discharging effluent into water resources containing TDS of more than 3,000 mg/l, TDS in the effluent to be discharged must exceed TDS in the water resources by not more than 5,000 mg/l (Measurement Results of Coastal Water on May 07,2026 found to be 30,140 mg/l therefore the Standard of TDS found to be 35,140 mg/l).

5. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 1025/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: -
SAMPLING DATE	: 12/06/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 13/06/2026	SAMPLING TIME	: 11:14
ANALYTICAL DATE	: 12,18/06/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 20/06/2026		: -
SAMPLE CONDITION	: ค่าขุ่น	FILE CODE	: 226010_WW_June

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION น้ำเสียก่อนผ่านเข้า Neutralization Basin	STANDARD
Flow Rate ^{1/}	m ³ /hr	-	-	38	-
Ammonia Nitrogen	mg/l	4500-NH ₃ B,C	< 0.02	33.6	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA APHA WEF)

(Miss Pornnapa Budthum)

Analyst

(Miss Khemchuda Insorn)

Technical Management Team

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3. ^{1/} Data from PTT Global Chemical Public Company Limited , Branch 6 (Refinery)

4. - Not available.



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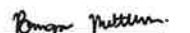
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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 1025/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 1-239
SAMPLING DATE	: 12/06/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 13/06/2026	SAMPLING TIME	: 11:14
ANALYTICAL DATE	: 13-20/06/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 20/06/2026		: 1-239-ท-0025
SAMPLE CONDITION	: ตัวอย่าง	FILE CODE	: 226010_WW_June

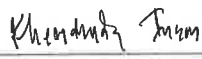
PARAMETER	UNIT	ANALYSIS	ND	STATION	STANDARD
		METHODS	(non-detectable)	น้ำเสียก่อนผ่านเข้า	
				Neutralization Basin	
Temperature	°C	2550 B	< 0.5	36.7	*
pH	-	4500-H ⁺ B	< 0.10	6.66	*
Total Dissolved Solids	mg/l	2540 C	< 25	728	*
Total Suspended Solids	mg/l	2540 D	< 2.5	98	*
Fat Oil & Grease	mg/l	5520 B	< 2.0	64.8	*
Sulfide as H ₂ S	mg/l	4500-S ²⁻ F	< 0.20	2.8	*
Phenols	mg/l	5530 B,D	< 0.10	2.4	*
BOD ₅	mg/l	5210 B	< 1.0	307	*
COD	mg/l	5220 C	< 15.00	766	*
Arsenic (As)	mg/l	3114 C	< 0.0001	3.39	*
Cadmium (Cd)	mg/l	3120 B	< 0.001	< 0.01	*
Lead (Pb)	mg/l	3120 B	< 0.008	ND	*
Mercury (Hg)	mg/l	3112 B	< 0.0005	0.1052	*

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 (AWWA APHA WEF)


(Miss Pornnapa Budthum)

Analyst

REG. NO. 1-239-ท-0018


(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 1-239-ท-0005

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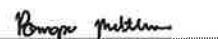
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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 1025/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 1-239
SAMPLING DATE	: 12/06/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 13/06/2026	SAMPLING TIME	: 11:25
ANALYTICAL DATE	: 12,18/06/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 20/06/2026		: 1-239-ท-0025
SAMPLE CONDITION	: เหลืองขุ่น	FILE CODE	: 226010_WW_June

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION		STANDARD
				น้ำเสียก่อนผ่านเข้า	CPI	
Flow Rate ¹⁾	m ³ /hr	-	-	42		*
Ammonia Nitrogen	mg/l	4500-NH ₃ B,C	< 0.02	25.9		*

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 (AWWA APHA WEF)


(Miss Pornnapa Budthum)

Analyst


(Miss Khemchuda Insorn)

Technical Management Team

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 3. ¹⁾ Data from PTT Global Chemical Public Company Limited , Branch 6 (Refinery)
 4. - Not available.



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SECOT CO., LTD.

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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No. :	1025/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No. :	จ-239
SAMPLING DATE	: 12/06/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 13/06/2026	SAMPLING TIME	: 11:25
ANALYTICAL DATE	: 13-20/06/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 20/06/2026		: จ-239-จ-0025
SAMPLE CONDITION	: เหลืองขุ่น	FILE CODE	: 226010_WW_June

PARAMETER	UNIT	ANALYSIS	ND	STATION	STANDARD
		METHODS		น้ำเสียก่อนผ่านเข้า CPI	
Temperature	°C	2550 B	< 0.5	37.9	-
pH	-	4500-H ⁺ B	< 0.10	6.72	-
Total Dissolved Solids	mg/l	2540 C	< 25	574	-
Total Suspended Solids	mg/l	2540 D	< 2.5	5.6	-
Fat Oil & Grease	mg/l	5520 B	< 2.0	45.0	-
Sulfide as H ₂ S	mg/l	4500-S ²⁻ F	< 0.20	1.4	-
Phenols	mg/l	5530 B,D	< 0.10	4.3	-
BOD ₅	mg/l	5210 B	< 1.0	225	-
COD	mg/l	5220 C	< 15.00	518	-
Arsenic (As)	mg/l	3114 C	< 0.0001	3.06	-
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	-
Lead (Pb)	mg/l	3120 B	< 0.008	ND	-
Mercury (Hg)	mg/l	3112 B	< 0.0005	0.0042	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA,APHA,WEF)

Pornnapa Budthum

(Miss Pornnapa Budthum)

Analyst

REG. NO. จ-239-จ-0018

Khemchuda Insom

(Miss Khemchuda Insom)

Technical Management Team

REG. NO. จ-239-จ-0005

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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 PCL, Branch 6 (Refinery)	REQUEST SERVICE No. :	1025/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No. :	จ-239
SAMPLING DATE	: 12/06/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 13/06/2026	SAMPLING TIME	: 11:08
ANALYTICAL DATE	: 13-20/06/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 20/06/2026		: จ-239-จ-0025
SAMPLE CONDITION	: เหลืองใสมีตะกอน	FILE CODE	: 226010_WW_June

PARAMETER	UNIT	ANALYSIS	ND	STATION	STANDARD ^{1/}
				น้ำทิ้งหลังผ่านการบำบัดที่ Observation Basin	
Temperature	°C	2550 B	< 0.5	32.1	≤ 40
pH	-	4500-H ⁺ B	< 0.10	6.81	5.5-9.0
Total Dissolved Solids	mg/l	2540 C	< 25	1,848	≤ 29,040 ^{2/}
Total Suspended Solids	mg/l	2540 D	< 2.5	< 2.5	≤ 50
Fat Oil & Grease	mg/l	5520 B	< 2.0	ND	≤ 5
Sulfide as H ₂ S	mg/l	4500-S ²⁻ F	< 0.20	ND	≤ 1
Phenols	mg/l	5530 B,C	< 0.001	ND	≤ 1
BOD ₅	mg/l	5210 B	< 1.0	< 1.0	≤ 20
COD	mg/l	5220 C	< 15.00	35.68	≤ 120
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0320	≤ 0.25
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 0.03
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 0.2
Mercury (Hg)	mg/l	3112 B	< 0.0005	ND	≤ 0.005

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA,APHA,WEF)

Pornnapa Budthum

(Miss Pornnapa Budthum)

Analyst

REG. NO. จ-239-จ-0018

Khemchuda Insom

(Miss Khemchuda Insom)

Technical Management Team

REG. NO. จ-239-จ-0005

- 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, Regarding Industrial Effluent Standards, B.E.2560 (2017).
4. ^{2/} In case of discharging effluent into water resources containing TDS of more than 3,000 mg/l, TDS in the effluent to be discharged must exceed TDS in the water resources by not more than 5,000 mg/l (Measurement Results of Coastal Water on June 25,2026 found to be 24,040 mg/l therefore the Standard of TDS found to be 29,040 mg/l).
5. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 1025/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: -
SAMPLING DATE	: 12/06/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 13/06/2026	SAMPLING TIME	: 11:08
ANALYTICAL DATE	: 12,15-16,18/06/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 20/06/2026	FILE CODE	: 226010_WW_June
SAMPLE CONDITION	: เหลืองใสมีตะกอน		

PARAMETER	UNIT	ANALYSIS METHOD	ND (non-detectable)	STATION	STANDARD
				น้ำทิ้งหลังผ่านการบำบัดที่ Observation Basin	
Flow Rate ^{1/}	m ³ /hr	-	-	80	-
Ammonia Nitrogen	mg/l	Method 350.2	< 0.02	0.05	-
Benzene	μg/l	5030 C / 8260 D	< 0.20	ND	-

REFERENCE : US EPA 1983, Method for Chemical Analysis of Water and Waste, USEPA, EPA 600/4-79/020, Method 350.2.

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

Pornapa Budthum
(Miss Pornapa Budthum)
Analyst

Khemchuda Insorn
(Miss Khemchuda Insorn)
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/} Data from PTT Global Chemical Public Company Limited, Branch 6 (Refinery)
 4. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 1076/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 2-239
SAMPLING DATE	: 25/06/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 26/06/2026	SAMPLING TIME	: 09:01
ANALYTICAL DATE	: 26/06/2026-01/07/2026	SITE OPERATOR	: Mr. Phongsiri Chakkaeo
REPORT DATE	: 01/07/2026	FILE CODE	: 2-239-9-0043
SAMPLE CONDITION	: เหลืองใสมีตะกอน		: 226010_WW_June

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	STANDARD ^{1/}
				น้ำ LLOD-S	
Temperature	°C	2550 B	< 0.5	32.1	≤ 40
pH	-	4500-H ⁺ B	< 0.10	7.11	5.5-9.0
Total Dissolved Solids	mg/l	2540 C	< 25	1,110	≤ 29,040 ^{2/}
Total Suspended Solids	mg/l	2540 D	< 2.5	3.4	≤ 50
Fat Oil & Grease	mg/l	5520 B	< 2.0	ND	≤ 5
BOD ₅	mg/l	5210 B	< 1.0	1.1	≤ 20
COD	mg/l	5220 C	< 15.00	23.97	≤ 120

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED., 2023 (AWWA APHA, WEF)

Pornapa Budthum
(Miss Pornapa Budthum)
Analyst
REG. NO. 2-239-9-0018

Khemchuda Insorn
(Miss Khemchuda Insorn)
Technical Management Team
REG. NO. 2-239-9-0005

- 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, Regarding Industrial Effluent Standards, B.E.2560 (2017).
 4. ^{2/} In case of discharging effluent into water resources containing TDS of more than 3,000 mg/l, TDS in the effluent to be discharged must exceed TDS in the water resources by not more than 5,000 mg/l (Measurement Results of Coastal Water on June 25, 2026 found to be 24,040 mg/l therefore the Standard of TDS found to be 29,040 mg/l).
 5. - Not available.

คุณภาพน้ำทะเล



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Company Limited ,	REQUEST SERVICE No.	: 0039/69
	Branch 6 (Refinery)		
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: -
SAMPLING DATE	: 08/01/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 09/01/2026	SAMPLING TIME	: 10:45
ANALYTICAL DATE	: 09-17/01/2026	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 17/01/2026		: -
SAMPLE CONDITION	: เหลืองปูน	FILE CODE	: 226010_CW_January

PARAMETER	UNIT	ANALYSIS METHODS	ND (non detectable)	STATION
				จุดปล่อยน้ำทิ้งที่ผ่านการบำบัด ทางด้านทิศใต้ของโรงกลั่นน้ำมัน
Temperature	°C	2550 B	< 0.5	27.0
pH	-	4500-H ⁺ B	< 0.10	7.58
Total Dissolved Solids	mg/l	2540 C	< 25	32,760
Total Suspended Solids	mg/l	2540 D	< 2.5	36
Fat Oil & Grease	mg/l	5520 B	< 2.0	ND
Fat Oil & Grease	-	Visual Testing	-	NV
BOD ₅	mg/l	5210 B	< 1.0	2.2
COD	mg/l	5220 C	< 15.00	144

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA APHA WEF)

Pornapa Budthum

(Miss Pornapa Budthum)

Analyst

Khemchuda Insom

(Miss Khemchuda Insom)

Technical Management Team

Remark :

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3. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Company Limited ,	REQUEST SERVICE No.	: 0187/69
	Branch 6 (Refinery)		
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: -
SAMPLING DATE	: 05/02/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 06/02/2026	SAMPLING TIME	: 11:10
ANALYTICAL DATE	: 06-13/02/2026	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 13/02/2026		: -
SAMPLE CONDITION	: เหลืองปูน	FILE CODE	: 226010_CW_February

PARAMETER	UNIT	ANALYSIS METHODS	ND (non detectable)	STATION
				จุดปล่อยน้ำทิ้งที่ผ่านการบำบัด ทางด้านทิศใต้ของโรงกลั่นน้ำมัน
Temperature	°C	2550 B	< 0.5	31.2
pH	-	4500-H ⁺ B	< 0.10	8.47
Total Dissolved Solids	mg/l	2540 C	< 25	27,200
Total Suspended Solids	mg/l	2540 D	< 2.5	26
Fat Oil & Grease	mg/l	5520 B	< 2.0	ND
Fat Oil & Grease	-	Visual Testing	-	NV
BOD ₅	mg/l	5210 B	< 1.0	3.0
COD	mg/l	5220 C	< 15.00	120

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA APHA WEF)

Pornapa Budthum

(Miss Pornapa Budthum)

Analyst

Khemchuda Insom

(Miss Khemchuda Insom)

Technical Management Team

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3. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Company Limited ,	REQUEST SERVICE No.	: 0390/69
	Branch 6 (Refinery)		
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: -
SAMPLING DATE	: 05/03/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 06/03/2026	SAMPLING TIME	: 10:40
ANALYTICAL DATE	: 06-12/03/2026	SITE OPERATOR	: Mr. Aniwat Pimwanna
REPORT DATE	: 12/03/2026	FILE CODE	: 226010_CW_March
SAMPLE CONDITION	: เหลืองปูน		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non detectable)	STATION
				จุดปล่อยน้ำทิ้งที่ผ่านการบำบัด ทางด้านทิศใต้ของโรงกลั่นน้ำมัน
Temperature	°C	2550 B	< 0.5	32.4
pH	-	4500-H ⁺ B	< 0.10	7.15
Total Dissolved Solids	mg/l	2540 C	< 25	30,560
Total Suspended Solids	mg/l	2540 D	< 2.5	35
Fat Oil & Grease	mg/l	5520 B	< 2.0	ND
Fat Oil & Grease	-	Visual Testing	-	NV
BOD ₅	mg/l	5210 B	< 1.0	2.7
COD	mg/l	5220 C	< 15.00	68.62

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 (AWWA, APHA, WEF)

Pornapa Budthum
(Miss Pornapa Budthum)
Analyst

Khemchuda Insorn
(Miss Khemchuda Insorn)
Technical Management Team

- Remark :
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 3. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Company Limited ,	REQUEST SERVICE No.	: 0545/69
	Branch 6 (Refinery)		
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: -
SAMPLING DATE	: 02/04/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 03/04/2026	SAMPLING TIME	: 11:30
ANALYTICAL DATE	: 03-10/04/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 10/04/2026	FILE CODE	: 226010_CW_April
SAMPLE CONDITION	: เหลืองปูน		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non detectable)	STATION
				จุดปล่อยน้ำทิ้งที่ผ่านการบำบัด ทางด้านทิศใต้ของโรงกลั่นน้ำมัน
Temperature	°C	2550 B	< 0.5	32.4
pH	-	4500-H ⁺ B	< 0.10	8.54
Total Dissolved Solids	mg/l	2540 C	< 25	26,960
Total Suspended Solids	mg/l	2540 D	< 2.5	28
Fat Oil & Grease	mg/l	5520 B	< 2.0	ND
Fat Oil & Grease	-	Visual Testing	-	NV
BOD ₅	mg/l	5210 B	< 1.0	3.2
COD	mg/l	5220 C	< 15.00	90.25

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 (AWWA, APHA, WEF)

Pornapa Budthum
(Miss Pornapa Budthum)
Analyst

Khemchuda Insorn
(Miss Khemchuda Insorn)
Technical Management Team

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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Company Limited , Branch 6 (Refinery)	REQUEST SERVICE No.	: 0751/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: -
SAMPLING DATE	: 07/05/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 08/05/2026	SAMPLING TIME	: 15:10
ANALYTICAL DATE	: 08-15/05/2026	SITE OPERATOR	: Miss Thipsuda Wannakran
REPORT DATE	: 15/05/2026		: -
SAMPLE CONDITION	: เหลืองขุ่น	FILE CODE	: 226010_CW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non detectable)	STATION
				จุดปล่อยน้ำทิ้งที่ผ่านการบำบัด ทางด้านทิศใต้ของโรงกลั่นน้ำมัน
Temperature	°C	2550 B	< 0.5	33.2
pH	-	4500-H ⁺ B	< 0.10	8.10
Total Dissolved Solids	mg/l	2540 C	< 25	30,140
Total Suspended Solids	mg/l	2540 D	< 2.5	88
Fat Oil & Grease	mg/l	5520 B	< 2.0	ND
Fat Oil & Grease	-	Visual Testing	-	NV
BOD ₅	mg/l	5210 B	< 1.0	2.7
COD	mg/l	5220 C	< 15.00	47.20

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 (AWWA APHA WEF)

Pornapa Budthum
(Miss Pornapa Budthum)
Analyst

Khemchuda Insorn
(Miss Khemchuda Insorn)
Technical Management Team

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 3. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical Public Company Limited , Branch 6 (Refinery)	REQUEST SERVICE No.	: 1077/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: -
SAMPLING DATE	: 25/06/2026	SAMPLING METHOD	: Grab
RECEIVED DATE	: 26/06/2026	SAMPLING TIME	: 10:00
ANALYTICAL DATE	: 26/06/2026-01/07/2026	SITE OPERATOR	: Mr. Chanapon Oakkharaplon
REPORT DATE	: 01/07/2026		: -
SAMPLE CONDITION	: เหลืองมีตะกอน	FILE CODE	: 226010_CW_June

PARAMETER	UNIT	ANALYSIS METHODS	ND (non detectable)	STATION
				จุดปล่อยน้ำทิ้งที่ผ่านการบำบัด ทางด้านทิศใต้ของโรงกลั่นน้ำมัน
Temperature	°C	2550 B	< 0.5	31.5
pH	-	4500-H ⁺ B	< 0.10	7.29
Total Dissolved Solids	mg/l	2540 C	< 25	24,040
Total Suspended Solids	mg/l	2540 D	< 2.5	18
Fat Oil & Grease	mg/l	5520 B	< 2.0	ND
Fat Oil & Grease	-	Visual Testing	-	NV
BOD ₅	mg/l	5210 B	< 1.0	2.6
COD	mg/l	5220 C	< 15.00	144

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 (AWWA APHA WEF)

Pornapa Budthum
(Miss Pornapa Budthum)
Analyst

Khemchuda Insorn
(Miss Khemchuda Insorn)
Technical Management Team

- Remark :
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 2. This report shall not be reproduced, except in full, without official approval.
 3. - Not available.

คุณภาพน้ำใต้ดิน



บริษัท ซีคอต จำกัด SECOT CO., LTD.

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	0843/69
SAMPLING BY	SECOT Co., Ltd.	REGISTRATION No.	7-239
SAMPLING DATE	13/05/2026	SAMPLING METHOD	Pneumatic Bladder Pump
RECEIVED DATE	16/05/2026	SAMPLING TIME	14:57-15:18
ANALYTICAL DATE	13, 18-22/05/2026	SITE OPERATOR	Mr. Jeerawat Khothamhan
REPORT DATE	26/05/2026	FILE CODE	7-239-9-0025
SAMPLE CONDITION	เก็บน้ำใต้ดิน		226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-1	STANDARD ¹⁾
pH	-	4500-H ⁺ B	< 0.10	6.45	U
Cadmium (Cd)	mg/l	3120 B	< 0.001	< 0.01	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA APHA WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Inorn

(Miss Khemchuda Inorn)

Technical Management Team

REG. NO. 7-239-9-0005

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) : Criteria on contamination in soil and groundwater, the examination of soil and groundwater quality, information including making the report of the result of soil and groundwater quality examination.

4. - Not available.



บริษัท ซีคอต จำกัด SECOT CO., LTD.

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	1026/69
SAMPLING BY	SECOT Co., Ltd.	REGISTRATION No.	7-239
SAMPLING DATE	12/06/2026	SAMPLING METHOD	Pneumatic Bladder Pump
RECEIVED DATE	13/06/2026	SAMPLING TIME	11:48-12:05
ANALYTICAL DATE	15, 17/06/2026	SITE OPERATOR	Mr. Jeerawat Khothamhan
REPORT DATE	20/06/2026	FILE CODE	7-239-9-0025
SAMPLE CONDITION	เก็บน้ำใต้ดิน		226010_GW_June

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-1	STANDARD ¹⁾
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0876	≤ 0.1

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA APHA WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Inorn

(Miss Khemchuda Inorn)

Technical Management Team

REG. NO. 7-239-9-0005

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

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3. ¹⁾ Notification of the Ministry of Industry, B.E.2559 (2016) : Criteria on contamination in soil and groundwater, the examination of soil and groundwater quality, information including making the report of the result of soil and groundwater quality examination.

4. - Not available.



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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: -
SAMPLING DATE	: 13/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 13/05/2026	SAMPLING TIME	: 14:57-15:18
ANALYTICAL DATE	: 13/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026		
SAMPLE CONDITION	: สัมผัสตะกอน	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	STANDARD
				MW-I	
Conductivity	µS/cm	2510 B	< 1.0	315	↗
Salinity	ppt	2520 B	< 0.01	0.08	↗

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA, APHA, WEF)

Pornapa Budthum

(Miss Pornapa Budthum)
Analyst

Khemchuda Insorn

(Miss Khemchuda Insorn)
Technical Management Team

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 13/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 14:57-15:18
ANALYTICAL DATE	: 18-23/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026		
SAMPLE CONDITION	: สัมผัสตะกอน	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	STANDARD ¹⁾
				MW-I	
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2021 (AWWA, APHA, WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)
Analyst

REG. NO. 7-239-7-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)
Technical Management Team

REG. NO. 7-239-7-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 2-239
SAMPLING DATE	: 13/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 14:57-15:18
ANALYTICAL DATE	: 18-24/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026	FILE CODE	: 2-239-ก-0025
SAMPLE CONDITION	: สัมผัสตะกอน		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-1	STANDARD ¹⁾
Total Petroleum Hydrocarbons					
- TPH (C ₅ -C ₆)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₈ -C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ -C ₃₀)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

REFERENCE : US EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE. 1st ED. 2020.

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 2-239-ก-0022

Khemchuda Insorn

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Technical Management Team

REG. NO. 2-239-ก-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 2-239
SAMPLING DATE	: 13/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 13:59-14:22
ANALYTICAL DATE	: 13, 18-22/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026	FILE CODE	: 2-239-ก-0025
SAMPLE CONDITION	: สัมผัส		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-2	STANDARD ¹⁾
pH	-	4500-H ⁺ B	< 0.10	6.13	M
Cadmium (Cd)	mg/l	3120 B	< 0.001	< 0.01	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	< 0.01	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2022 (AWWA APHA WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 2-239-ก-0022

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Technical Management Team

REG. NO. 2-239-ก-0005

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4. - Not available.



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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 1211/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 17/07/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 18/07/2026	SAMPLING TIME	: 10:08-10:20
ANALYTICAL DATE	: 18.20/07/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 21/07/2026		: 7-239-9-0025
SAMPLE CONDITION	: เหลือใส	FILE CODE	: 226010_GW_July

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-2	STANDARD ^{1/}
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0308	≤ 0.1

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 (AWWA, APHA, WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-9-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 13/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 13/05/2026	SAMPLING TIME	: 13:59-14:22
ANALYTICAL DATE	: 13/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026		: 7-239-9-0025
SAMPLE CONDITION	: ใสใส	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-2	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	551	-
Salinity	ppt	2520 B	< 0.01	0.20	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 (AWWA, APHA, WEF)

Bongsa Puthum

(Miss Pornnapa Budthum)

Analyst

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL. Branch 6 (Refinery) REQUEST SERVICE No : 0843/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 13/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 13:59-14:22
ANALYTICAL DATE : 18-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 26/05/2026 FILE CODE : 7-239-0-0025
SAMPLE CONDITION : สัมผัส FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	STANDARD ^{1/}
				MW-2	
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2023 (AWWA-APHA-WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-0-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL. Branch 6 (Refinery) REQUEST SERVICE No : 0843/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 13/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 13:59-14:22
ANALYTICAL DATE : 18-24/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 26/05/2026 FILE CODE : 7-239-0-0025
SAMPLE CONDITION : สัมผัส FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	STANDARD ^{1/}
				MW-2	
Total Petroleum Hydrocarbons					
- TPH (C ₃ - C ₈)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₉ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₇ - C ₃₅)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetatriacontane					
- Pentatriacontane					

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

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-0-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 13/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 11:12-11:30
ANALYTICAL DATE	: 13, 18-22/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026		: 7-239-0-0025
SAMPLE CONDITION	: เหลือใส	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-3	STANDARD ¹⁾
pH		4500-H ⁺ B	< 0.10	6.39	#
Cadmium (Cd)	mg/l	3120 B	< 0.001	< 0.01	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 (AWWA APHA WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn

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4. - Not available.



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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 1026/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 12/06/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 13/06/2026	SAMPLING TIME	: 12:44-12:56
ANALYTICAL DATE	: 15,17/06/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 20/06/2026		: 7-239-0-0025
SAMPLE CONDITION	: น้ำใสไม่มีตะกอน	FILE CODE	: 226010_GW_June

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-3	STANDARD ¹⁾
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0712	≤ 0.1

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 (AWWA APHA WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn

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Technical Management Team

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4. - Not available.



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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 13/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 13/05/2026	SAMPLING TIME	: 11:12-11:30
ANALYTICAL DATE	: 13/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026	FILE CODE	: 226010_GW_May
SAMPLE CONDITION	: เหลืองใส		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-3	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	571	+
Salinity	ppt	2520 B	< 0.01	0.21	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA, APHA, WEF)

Pornapa Buddum
(Miss Pornapa Buddum)
Analyst

Khemchuda Insorn
(Miss Khemchuda Insorn)
Technical Management Team

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GROUND WATER ANALYSIS REPORT

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SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 13/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 11:12-11:30
ANALYTICAL DATE	: 18-23/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026	FILE CODE	: 7-239-9-0025
SAMPLE CONDITION	: เหลืองใส		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-3	STANDARD ¹⁾
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2021 (AWWA, APHA, WEF)

Jutarat Jaemruen
(Miss Jutarat Jaemruen)
Analyst
REG. NO. 7-239-9-0022

Khemchuda Insorn
(Miss Khemchuda Insorn)
Technical Management Team
REG. NO. 7-239-9-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL. Branch 6 (Refinery)	REQUEST SERVICE No	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 13/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 11:12-11:30
ANALYTICAL DATE	: 18-24/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026		: 7-239-9-0025
SAMPLE CONDITION	: เหลืองใส	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-3	STANDARD ^U
Total Petroleum Hydrocarbons					
- TPH (C ₇ - C ₈)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₉ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₁₉)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- n-Pentatriacontane					

REFERENCE : US EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE 3rd ED. 2020.

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-9-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL. Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 13/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 10:32-10:45
ANALYTICAL DATE	: 13, 18-22/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026		: 7-239-9-0025
SAMPLE CONDITION	: เหลืองใส	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-4	STANDARD ^U
pH	-	4500-H ⁺ B	< 0.10	7.11	U
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0628	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA, APHA, WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-9-0005

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4. - Not available.



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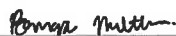
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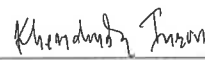
GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0843/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. :
SAMPLING DATE : 13/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 13/05/2026 SAMPLING TIME : 10:32-10:45
ANALYTICAL DATE : 13/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 26/05/2026
SAMPLE CONDITION : เหลืองใส FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS	ND	STATION	STANDARD
		METHODS	(non-detectable)	MW-4	
Conductivity	µS/cm	2510 B	< 1.0	482	-
Salinity	ppt	2520 B	< 0.01	0.17	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA, APHA, WEF)


(Miss Ponnapa Budthum)
Analyst


(Miss Khemchuda Insorn)
Technical Management Team

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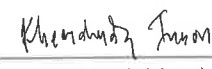
GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0843/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 2-239
SAMPLING DATE : 13/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 10:32-10:45
ANALYTICAL DATE : 18-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 26/05/2026
SAMPLE CONDITION : เหลืองใส FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS	ND	STATION	STANDARD ¹⁾
		METHODS	(non-detectable)	MW-4	
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2021 (AWWA, APHA, WEF)


(Miss Jutarat Jaemruen)
Analyst
REG. NO. 2-239-ก-0022


(Miss Khemchuda Insorn)
Technical Management Team
REG. NO. 2-239-ก-0005

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RECEIVED DATE : 16/05/2026 SAMPLING TIME : 10:32-10:45
ANALYTICAL DATE : 18-24/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 26/05/2026 FILE CODE : 7-239-0-0025
SAMPLE CONDITION : เหลืองใส FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-4	STANDARD "
Total Petroleum Hydrocarbons					
- TPH (C ₇ - C ₉)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₈ - C ₁₀)	mg/l	3510 C / 8015 D	< 0.025	0.028	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₀ - C ₂₅)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

REFERENCE : US EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE 3rd ED. 2020.

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn

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Technical Management Team

REG. NO. 7-239-0-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0843/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 13/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 09:47-10:03
ANALYTICAL DATE : 13, 18-22/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 26/05/2026 FILE CODE : 7-239-0-0025
SAMPLE CONDITION : ใส FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-5	STANDARD "
pH	-	4500-H ⁺ B	< 0.10	7.09	10
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0290	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA, APHA, WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn

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Technical Management Team

REG. NO. 7-239-0-0005

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SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 13/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 13/05/2026	SAMPLING TIME	: 09:47-10:03
ANALYTICAL DATE	: 13/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026	FILE CODE	: 226010_GW_May
SAMPLE CONDITION	: 18		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-5	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	873	-
Salinity	ppt	2520 B	< 0.01	0.38	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th Ed. 2021 (AWWA APHA WEF)

Pornapa Budthum

(Miss Pornapa Budthum)
Analyst

Khemchuda Insorn

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Technical Management Team

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ANALYTICAL DATE	: 18-23/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026	FILE CODE	: 226010_GW_May
SAMPLE CONDITION	: 18		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-5	STANDARD ^u
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th Ed. 2021 (AWWA APHA WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)
Analyst

REG. NO. 7-239-ก-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)
Technical Management Team

REG. NO. 7-239-ก-0005

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REPORT DATE : 26/05/2026 FILE CODE : 7-239-8-0025
SAMPLE CONDITION : ใส FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-5	STANDARD ¹⁾
Total Petroleum Hydrocarbons					
- TPH (C ₇ - C ₉)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Penlane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₈ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	0.027	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₃₅)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

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

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-8-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-8-0005

Remark : 1. Reported analysis refers to submitted sample only.
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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL. Branch 6 (Refinery) REQUEST SERVICE No. : 0843/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 12/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 10:15-10:33
ANALYTICAL DATE : 12, 18-22/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 26/05/2026 FILE CODE : 7-239-8-0025
SAMPLE CONDITION : ใส FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-6	STANDARD ¹⁾
pH	-	4500-H ⁺ B	< 0.10	6.38	1)
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0352	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	< 0.01	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER, 24th ED., 2021 (AWWA, APHA, WEF)

Jutarat Jaemruen

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Analyst

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Khemchuda Insorn

(Miss Khemchuda Insorn)

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REG. NO. 7-239-8-0005

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4. - Not available.



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GROUND WATER ANALYSIS REPORT

CLIENT NAME	PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	0843/69
SAMPLING BY	SECOT Co., Ltd.	REGISTRATION No.	
SAMPLING DATE	12/05/2026	SAMPLING METHOD	Pneumatic Bladder Pump
RECEIVED DATE	12/05/2026	SAMPLING TIME	10:15-10:33
ANALYTICAL DATE	12/05/2026	SITE OPERATOR	Mr. Jeerawat Khothamhan
REPORT DATE	26/05/2026	FILE CODE	226010_GW_May
SAMPLE CONDITION	ส้มใส		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-6	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	2,739	*
Salinity	ppt	2520 B	< 0.01	1.31	*

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA, APHA, WEF)

Pornapa Budthum

(Miss Pornapa Budthum)
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Khemchuda Insorn

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Technical Management Team

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	0843/69
SAMPLING BY	SECOT Co., Ltd.	REGISTRATION No.	2-239
SAMPLING DATE	12/05/2026	SAMPLING METHOD	Pneumatic Bladder Pump
RECEIVED DATE	16/05/2026	SAMPLING TIME	10:15-10:33
ANALYTICAL DATE	18-23/05/2026	SITE OPERATOR	Mr. Jeerawat Khothamhan
REPORT DATE	26/05/2026		2-239-ก-0025
SAMPLE CONDITION	ส้มใส	FILE CODE	226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-6	STANDARD "
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2021 (AWWA, APHA, WEF)

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(Miss Jutarat Jaemruen)
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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL. Branch 6 (Refinery)	REQUEST SERVICE No	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 2-239
SAMPLING DATE	: 12/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 10:15-10:33
ANALYTICAL DATE	: 18-24/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026		: 2-239-0-0025
SAMPLE CONDITION	: ทั่วไป	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-6	STANDARD ¹⁾
Total Petroleum Hydrocarbons					
- TPH (C ₇ - C ₉)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₉ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₃₅)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

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

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL. Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 2-239
SAMPLING DATE	: 12/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 11:07-11:28
ANALYTICAL DATE	: 12, 18-22/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026		: 2-239-0-0025
SAMPLE CONDITION	: ทั่วไป	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-7	STANDARD ¹⁾
pH	-	4500-H ⁺ B	< 0.10	6.82	1)
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0357	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED., 2021 (AWWA, ACHA, WEF)

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0843/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : -
SAMPLING DATE : 12/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 12/05/2026 SAMPLING TIME : 11:07-11:28
ANALYTICAL DATE : 12/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 26/05/2026 FILE CODE : 226010_GW_May
SAMPLE CONDITION : ใส

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-7	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	1.308	-
Salinity	ppt	2520 B	< 0.01	0.61	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA-APHA-WEF)

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0843/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 12/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 11:07-11:28
ANALYTICAL DATE : 18-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 26/05/2026 FILE CODE : 226010_GW_May
SAMPLE CONDITION : ใส

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-7	STANDARD ¹⁾
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2021 (AWWA-APHA-WEF)

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(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL. Branch 6 (Refinery) REQUEST SERVICE No. : 0843/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 12/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 11:07-11:28
ANALYTICAL DATE : 18-24/05/2026 : Mr. Jeerawat Khothamhan
REPORT DATE : 26/05/2026 SITE OPERATOR : 7-239-0-0025
SAMPLE CONDITION : 1st FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-7	STANDARD ^{1/}
Total Petroleum Hydrocarbons					
- TPH (C ₅ - C ₉)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₁₀ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₃₃)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

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

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

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REG. NO. 7-239-0-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL. Branch 6 (Refinery) REQUEST SERVICE No. : 0843/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 12/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 14:05-14:30
ANALYTICAL DATE : 12, 18-22/05/2026 : Mr. Jeerawat Khothamhan
REPORT DATE : 26/05/2026 SITE OPERATOR : 7-239-0-0025
SAMPLE CONDITION : 1st FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-8	STANDARD ^{1/}
pH	-	4500-H ⁺ B	< 0.10	6.94	M
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0172	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2011 (AWWA APHA WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn

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4. - Not available.



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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: -
SAMPLING DATE	: 12/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 12/05/2026	SAMPLING TIME	: 14:05-14:30
ANALYTICAL DATE	: 12/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026	FILE CODE	: 226010_GW_May
SAMPLE CONDITION	: ใส		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-8	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	956	*
Salinity	ppt	2520 B	< 0.01	0.42	*

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA, APHA, WEF)

Pornnapa Budthum
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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 12/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 14:05-14:30
ANALYTICAL DATE	: 18-23/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026	FILE CODE	: 7-239-0-0025
SAMPLE CONDITION	: ใส		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-8	STANDARD ¹⁾
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2021 (AWWA, APHA, WEF)

Jutarat Jaemruen
(Miss Jutarat Jaemruen)
Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn
(Miss Khemchuda Insorn)
Technical Management Team
REG. NO. 7-239-0-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL. Branch 6 (Refinery)	REQUEST SERVICE No. :	0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No. :	จ-239
SAMPLING DATE	: 12/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 14:05-14:30
ANALYTICAL DATE	: 18-24/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026		: จ-239-ก-0025
SAMPLE CONDITION	: ใส	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-8	STANDARD ^{1/}
Total Petroleum Hydrocarbons					
- TPH (C ₉ - C ₁₆)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₉ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₃₅)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

REFERENCE : US EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE 3rd ED. 2020.

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. จ-239-ก-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. จ-239-ก-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL. Branch 6 (Refinery)	REQUEST SERVICE No. :	0781/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No. :	จ-239
SAMPLING DATE	: 06/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 11/05/2026	SAMPLING TIME	: 10:09-10:34
ANALYTICAL DATE	: 06.11-16/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 22/05/2026		: จ-239-ก-0025
SAMPLE CONDITION	: ใส	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-9	STANDARD ^{1/}
pH	-	4500-H ⁺ B	< 0.10	7.11	^{1/}
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0023	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	< 0.01	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA, APHA, WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. จ-239-ก-0022

Khemchuda Insorn

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Technical Management Team

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0781/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. :
SAMPLING DATE : 06/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 06/05/2026 SAMPLING TIME : 10:09-10:34
ANALYTICAL DATE : 06/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 22/05/2026
SAMPLE CONDITION : ใส FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS	ND	STATION	STANDARD
		METHODS	(non-detectable)		
Conductivity	µS/cm	2510 B	< 1.0	1.414	✖
Salinity	ppt	2520 B	< 0.01	0.66	✖

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA APHA WEF)

Bong Puthum

(Miss Pornnapa Budithum)
Analyst

Khemchuda Inorn

(Miss Khemchuda Inorn)
Technical Management Team

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0781/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 2-239
SAMPLING DATE : 06/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 10:09-10:34
ANALYTICAL DATE : 12-17/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 22/05/2026
SAMPLE CONDITION : ใส FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS	ND	STATION	STANDARD ¹⁾
		METHODS	(non-detectable)		
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2021 (AWWA APHA WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)
Analyst

REG. NO. 2-239-ก-0022

Khemchuda Inorn

(Miss Khemchuda Inorn)
Technical Management Team

REG. NO. 2-239-ก-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No	: 0781/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 06/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 11/05/2026	SAMPLING TIME	: 10:09-10:34
ANALYTICAL DATE	: 13-15/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 22/05/2026		: 7-239-9-0025
SAMPLE CONDITION	: 18	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-9	STANDARD ^{1/}
Total Petroleum Hydrocarbons					
- TPH (C ₅ - C ₉)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₁₀ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₂₂)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

REFERENCE : US EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE 1st ED. 2020.

Jutarat Jaemruen
(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

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Technical Management Team

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 12/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 15:03-15:22
ANALYTICAL DATE	: 12, 18-22/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026		: 7-239-9-0025
SAMPLE CONDITION	: 18	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-10	STANDARD ^{1/}
pH	-	4500-H ⁺ B	< 0.10	7.46	11
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0076	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA, APHA, WEF)

Jutarat Jaemruen
(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Insorn
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Technical Management Team

REG. NO. 7-239-9-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: *
SAMPLING DATE	: 12/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 12/05/2026	SAMPLING TIME	: 15:03-15:22
ANALYTICAL DATE	: 12/05/2026	SITE OPERATOR	: Mr. Jeerawat Khotamhan
REPORT DATE	: 26/05/2026	FILE CODE	: 226010_GW_May
SAMPLE CONDITION	: ใส		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-10	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	2.929	≤
Salinity	ppt	2520 B	< 0.01	1.39	≤

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th Ed. 2021 (AWWA, APHA, WEF)

Pornapa Budthum

(Miss Pornapa Budthum)

Analyst

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

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GROUND WATER ANALYSIS REPORT

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SAMPLING DATE	: 12/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 15:03-15:22
ANALYTICAL DATE	: 18-23/05/2026	SITE OPERATOR	: Mr. Jeerawat Khotamhan
REPORT DATE	: 26/05/2026	FILE CODE	: 7-239-n-0025
SAMPLE CONDITION	: ใส		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-10	STANDARD ¹⁾
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th Ed. 2021 (AWWA, APHA, WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-n-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-n-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No : 0843/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
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RECEIVED DATE : 16/05/2026 SAMPLING TIME : 15:03-15:22
ANALYTICAL DATE : 18-24/05/2026 : Mr. Jeerawat Khothamhan
REPORT DATE : 26/05/2026 SITE OPERATOR : 7-239-0-0025
SAMPLE CONDITION : 18 FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-10	STANDARD ^{1/}
Total Petroleum Hydrocarbons					
- TPH (C ₇ - C ₁₆)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₇ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₇ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- n-Pentatriacontane					

REFERENCE : US EPA SW-846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE 1st ED. 2020

Jutarat Jaemruen
(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn
(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-0-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0781/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 06/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 10:52-11:24
ANALYTICAL DATE : 06.11-16/05/2026 : Mr. Jeerawat Khothamhan
REPORT DATE : 22/05/2026 SITE OPERATOR : 7-239-0-0025
SAMPLE CONDITION : 18 FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-11	STANDARD ^{1/}
pH	-	4500-H ⁺ B	< 0.10	7.40	W
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0015	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2022 (AWWA, APHA, WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-0-0005

Remark : 1. Reported analysis refers to submitted sample only.
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4. - Not available.



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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0781/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 2-239
SAMPLING DATE : 06/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 06/05/2026 SAMPLING TIME : 10:52-11:24
ANALYTICAL DATE : 06/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 22/05/2026
SAMPLE CONDITION : 1. FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-11	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	748	*
Salinity	ppt	2520 B	< 0.01	0.31	*

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA, APHA, WEF)

Bongna Puthum

(Miss Pornnapa Budthum)
Analyst

Khemchuda Insorn

(Miss Khemchuda Insorn)
Technical Management Team

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0781/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 2-239
SAMPLING DATE : 06/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 10:52-11:24
ANALYTICAL DATE : 12-17/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 22/05/2026
SAMPLE CONDITION : 1. FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-11	STANDARD ¹⁾
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2021 (AWWA, APHA, WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)
Analyst

REG. NO. 2-239-ก-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)
Technical Management Team

REG. NO. 2-239-ก-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0781/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 06/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 11/05/2026	SAMPLING TIME	: 10:52-11:24
ANALYTICAL DATE	: 13-15/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 22/05/2026		: 7-239-0-0025
SAMPLE CONDITION	: ใส	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-11	STANDARD ^{1/}
Total Petroleum Hydrocarbons					
- TPH (C ₇ - C ₈)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₉ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₃₅)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentacontane					

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

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-0-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 12/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 09:34-09:48
ANALYTICAL DATE	: 12, 18-22/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026		: 7-239-0-0025
SAMPLE CONDITION	: ใส	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-12	STANDARD ^{1/}
pH	-	4500-H ⁺ B	< 0.10	7.44	M
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0072	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	< 0.03	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA APHA, WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0843/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. :
SAMPLING DATE : 12/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 12/05/2026 SAMPLING TIME : 09:34-09:48
ANALYTICAL DATE : 12/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 26/05/2026
SAMPLE CONDITION : ใส FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND	STATION	STANDARD
			(non-detectable)	MW-12	
Conductivity	µS/cm	2510 B	< 1.0	8.156	-
Salinity	ppt	2520 B	< 0.01	4.04	-

REFERENCE: STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2001 (AWWA-APHA-WEF)


(Miss Pornnapa Budthum)

Analyst


(Miss Khemchuda Insorn)

Technical Management Team

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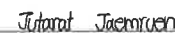
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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0843/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 12/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 09:34-09:48
ANALYTICAL DATE : 18-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 26/05/2026
SAMPLE CONDITION : ใส FILE CODE : 226010_GW_May

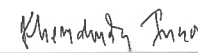
PARAMETER	UNIT	ANALYSIS METHODS	ND	STATION	STANDARD ¹⁾
			(non-detectable)	MW-12	
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
Toluene	mg/l	6200 B	< 0.0002	ND	≤ 5.0
m-Xylene	mg/l	6200 B	< 0.0002	ND	≤ 24
o-Xylene	mg/l	6200 B	< 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 24th ED. 2001 (AWWA-APHA-WEF)


(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022


(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-0-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No : 0843/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 12/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 09:34-09:48
ANALYTICAL DATE : 18-24/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 26/05/2026 FILE CODE : 7-239-9-0025
SAMPLE CONDITION : ใส FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-12	STANDARD "
Total Petroleum Hydrocarbons					
- TPH (C ₃ - C ₆)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₈ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₃₅)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

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

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Insom

(Miss Khemchuda Insom)

Technical Management Team

REG. NO. 7-239-R-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0781/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 06/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 11:37-11:56
ANALYTICAL DATE : 06,11-16/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 22/05/2026 FILE CODE : 7-239-9-0025
SAMPLE CONDITION : ใส FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-13	STANDARD "
pH	-	4500-H ⁺ B	< 0.10	7.53	"
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0023	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA, APHA, WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Insom

(Miss Khemchuda Insom)

Technical Management Team

REG. NO. 7-239-R-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0781/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: *
SAMPLING DATE	: 06/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 06/05/2026	SAMPLING TIME	: 11:37-11:56
ANALYTICAL DATE	: 06/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 22/05/2026	FILE CODE	: 226010_GW_May
SAMPLE CONDITION	: ใส		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-13	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	537	-
Salinity	ppt	2520 B	< 0.01	0.20	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA APHA WEF)

Pornnapa Budthum

(Miss Pornnapa Budthum)
Analyst

Khemchuda Insorn

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Technical Management Team

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0781/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 06/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 11/05/2026	SAMPLING TIME	: 11:37-11:56
ANALYTICAL DATE	: 12-17/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 22/05/2026	FILE CODE	: 7-239-0-0025
SAMPLE CONDITION	: ใส		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-13	STANDARD ^{1/}
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2021 (AWWA APHA WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)
Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn

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Technical Management Team

REG. NO. 7-239-0-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.:	0781/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.:	จ-239
SAMPLING DATE	: 06/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 11/05/2026	SAMPLING TIME	: 11:37-11:56
ANALYTICAL DATE	: 13-15/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 22/05/2026		: จ-239-ก-0025
SAMPLE CONDITION	: ใส	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-13	STANDARD ¹⁾
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Total Petroleum Hydrocarbons

- TPH (C ₅ - C ₆)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₇ - C ₁₀)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₂₁)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

REFERENCE : US EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE, 3rd Ed., 2020.

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. จ-239-ก-0001

Khemchuda Insom

(Miss Khemchuda Insom)

Technical Management Team

REG. NO. จ-239-ก-0005

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

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3. ¹⁾ Notification of the Ministry of Industry, B.E.2559 (2016) : Criteria on contamination in soil and groundwater, the examination of soil and groundwater quality, information including making the report of the result of soil and groundwater quality examination.



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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.:	0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.:	จ-239
SAMPLING DATE	: 12/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 15:51-16:20
ANALYTICAL DATE	: 12, 18-22/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026		: จ-239-ก-0025
SAMPLE CONDITION	: ใส	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-14	STANDARD ¹⁾
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pH	-	4500-H ⁺ B	< 0.10	7.80	1)
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0035	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th Ed., 2017 (AWWA APHA WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. จ-239-ก-0022

Khemchuda Insom

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Technical Management Team

REG. NO. จ-239-ก-0005

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4. - Not available.



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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0843/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : -
SAMPLING DATE : 12/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 12/05/2026 SAMPLING TIME : 15:51-16:20
ANALYTICAL DATE : 12/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 26/05/2026
SAMPLE CONDITION : 1st FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-14	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	1.938	✱
Salinity	ppt	2520 B	< 0.01	0.92	✱

REFERENCE: STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA, APHA, WEF)

Pornnapha Budihum

(Miss Pornnapha Budihum)
Analyst

Khemchuda Insom

(Miss Khemchuda Insom)
Technical Management Team

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3. - Not available.



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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0843/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 2-239
SAMPLING DATE : 12/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 15:51-16:20
ANALYTICAL DATE : 18-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 26/05/2026
SAMPLE CONDITION : 1st FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-14	STANDARD ¹⁾
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2021 (AWWA, APHA, WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)
Analyst

REG. NO. 2-239-ก-0022

Khemchuda Insom

(Miss Khemchuda Insom)
Technical Management Team

REG. NO. 2-239-ก-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No. :	0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No. :	จ-239
SAMPLING DATE	: 12/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 15:51-16:20
ANALYTICAL DATE	: 18-24/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026	FILE CODE	: 226010_GW_May
SAMPLE CONDITION	: ใส		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-14	STANDARD ^{1/}
Total Petroleum Hydrocarbons					
- TPH (C ₇ - C ₉)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₁₀ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₇ - C ₂₅)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetatriacontane					
- Pentatriacontane					

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

Jutarat Jaermuen
(Miss Jutarat Jaermuen)

Analyst

REG. NO. จ-239-ก-0022

Khemchuda Insorn

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Technical Management Team

REG. NO. จ-239-ก-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No. :	0781/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No. :	จ-239
SAMPLING DATE	: 06/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 11/05/2026	SAMPLING TIME	: 13:52-14:21
ANALYTICAL DATE	: 06.11-16/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 22/05/2026	FILE CODE	: จ-239-ก-0025
SAMPLE CONDITION	: ใส		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-15	STANDARD ^{1/}
pH		4500-H ⁺ B	< 0.10	7.31	1/
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0009	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA APHA WEF)

Jutarat Jaermuen
(Miss Jutarat Jaermuen)

Analyst

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4. - Not available.



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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0781/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. :
SAMPLING DATE : 06/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 06/05/2026 SAMPLING TIME : 13:52-14:21
ANALYTICAL DATE : 06/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 22/05/2026
SAMPLE CONDITION : ใส FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-15	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	962	-
Salinity	ppt	2520 B	< 0.01	0.42	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA-APHA-WEF)

Boonaporn Puthum

(Miss Pornnapa Budithum)

Analyst

Khemchuda Insom

(Miss Khemchuda Insom)

Technical Management Team

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3. - Not available.



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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0781/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 06/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 13:52-14:21
ANALYTICAL DATE : 12-17/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 22/05/2026
SAMPLE CONDITION : ใส FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-15	STANDARD ^u
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2021 (AWWA-APHA-WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Insom

(Miss Khemchuda Insom)

Technical Management Team

REG. NO. 7-239-9-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL. Branch 6 (Refinery)	REQUEST SERVICE No. :	0781/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No. :	จ-239
SAMPLING DATE	: 06/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 11/05/2026	SAMPLING TIME	: 13:52-14:21
ANALYTICAL DATE	: 13-15/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 22/05/2026		: จ-239-ก-0025
SAMPLE CONDITION	: ใส	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-15	STANDARD ¹⁾
Total Petroleum Hydrocarbons					
- TPH (C ₈ - C ₈)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₉ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₃₃)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

REFERENCE : U.S. EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE 3rd ED. 2020.

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. จ-239-ก-0022

Khemchuda Insom

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Technical Management Team

REG. NO. จ-239-ก-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL. Branch 6 (Refinery)	REQUEST SERVICE No. :	0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No. :	จ-239
SAMPLING DATE	: 11/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 14:46-15:07
ANALYTICAL DATE	: 12, 18-22/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026		: จ-239-ก-0025
SAMPLE CONDITION	: ใส	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-16	STANDARD ¹⁾
pH	-	4500-H ⁺ B	< 0.10	7.60	¹⁾
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0046	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA APHA WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. จ-239-ก-0022

Khemchuda Insom

(Miss Khemchuda Insom)

Technical Management Team

REG. NO. จ-239-ก-0005

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4. - Not available.



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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0843/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. :
SAMPLING DATE : 11/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 14:46-15:07
ANALYTICAL DATE : 11/05/2026 SITE OPERATOR : Mr. Jeerawat Khotamhan
REPORT DATE : 26/05/2026 FILE CODE : 226010_GW_May
SAMPLE CONDITION : 1๙

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-16	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	2.537	-
Salinity	ppt	2520 B	< 0.01	1.20	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA-APHA-WEF)

Pornnapa Budthum
(Miss Pornnapa Budthum)
Analyst

Khemchuda Insorn
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Technical Management Team

Remark : 1. Reported analysis refers to submitted sample only.
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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0843/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : ๓-239
SAMPLING DATE : 11/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 14:46-15:07
ANALYTICAL DATE : 18-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khotamhan
REPORT DATE : 26/05/2026 FILE CODE : ๓-239-๓-0025
SAMPLE CONDITION : 1๙

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-16	STANDARD ¹⁾
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2021 (AWWA-APHA-WEF)

Jutarat Jaemruen
(Miss Jutarat Jaemruen)
Analyst
REG. NO. ๓-239-๓-0022

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Technical Management Team
REG. NO. ๓-239-๓-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL. Branch 6 (Refinery)	REQUEST SERVICE No	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 11/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 14:46-15:07
ANALYTICAL DATE	: 18-24/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026		: 7-239-9-0025
SAMPLE CONDITION	: ใส	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-16	STANDARD ^{1/}
Total Petroleum Hydrocarbons					
- TPH (C ₇ - C ₁₆)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₇ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₇ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

REFERENCE : US EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE 1st ED. 2020

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Insorn

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Technical Management Team

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL. Branch 6 (Refinery)	REQUEST SERVICE No.	: 0781/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 06/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 11/05/2026	SAMPLING TIME	: 14:40-15:05
ANALYTICAL DATE	: 06.11-16/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 22/05/2026		: 7-239-9-0025
SAMPLE CONDITION	: ใส	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-17	STANDARD ^{1/}
pH		4500-H ⁺ B	< 0.10	7.35	1/
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0064	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 21st ED. 2017 (AWWA A/HA WEF)

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0781/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. :
SAMPLING DATE : 06/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 06/05/2026 SAMPLING TIME : 14:40-15:05
ANALYTICAL DATE : 06/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 22/05/2026
SAMPLE CONDITION : ใส FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-17	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	229	
Salinity	ppt	2520 B	< 0.01	0.03	

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA-APHA-WEF)

Pornpita Budthum

(Miss Pornnapa Budthum)

Analyst

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0781/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 06/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 14:40-15:05
ANALYTICAL DATE : 12-17/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 22/05/2026
SAMPLE CONDITION : ใส FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-17	STANDARD ^{1/}
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2021 (AWWA-APHA-WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL. Branch 6 (Refinery)	REQUEST SERVICE No.:	0781/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.:	จ-239
SAMPLING DATE	: 06/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 11/05/2026	SAMPLING TIME	: 14:40-15:05
ANALYTICAL DATE	: 13-15/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 22/05/2026		: 7-239-ก-0025
SAMPLE CONDITION	: ใส	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-17	STANDARD ¹⁾
Total Petroleum Hydrocarbons					
- TPH (C ₅ - C ₆)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₇ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₇ - C ₂₅)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

REFERENCE : U.S. EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE, 3rd ED. 2020.

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL. Branch 6 (Refinery)	REQUEST SERVICE No.:	0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.:	จ-239
SAMPLING DATE	: 11/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 14:09-14:30
ANALYTICAL DATE	: 11, 18-22/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026		: 7-239-ก-0025
SAMPLE CONDITION	: ใส มีตะกอน	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-18	STANDARD ¹⁾
pH	-	4500-H ⁺ B	< 0.10	7.47	¹⁾
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0047	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER, 23rd ED. 2021 (AWWA, APHA, WEF)

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4. - Not available.



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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: *
SAMPLING DATE	: 11/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 11/05/2026	SAMPLING TIME	: 14:09-14:30
ANALYTICAL DATE	: 11/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026	FILE CODE	: 226010_GW_May
SAMPLE CONDITION	: ใส มีตะกอน		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-18	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	631	*
Salinity	ppt	2520 B	< 0.01	0.25	*

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA, APHA, WEF)

Pornapa Budthum

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 11/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 14:09-14:30
ANALYTICAL DATE	: 18-23/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026	FILE CODE	: 7-239-0-0025
SAMPLE CONDITION	: ใส มีตะกอน		: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-18	STANDARD ^{1/}
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2021 (AWWA, APHA, WEF)

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 11/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 14:09-14:30
ANALYTICAL DATE	: 18-24/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026	FILE CODE	: 7-239-9-0025
SAMPLE CONDITION	: ใส มีตะกอน		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-18	STANDARD ^{1/}
Total Petroleum Hydrocarbons					
- TPH (C ₅ - C ₈)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₉ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₇ - C ₃₅)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- n-Pentatriacontane					

REFERENCE : US EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE 1st ED. 2020.

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Insorn

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0781/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 06/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 11/05/2026	SAMPLING TIME	: 15:22-15:54
ANALYTICAL DATE	: 06.11-16/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 22/05/2026	FILE CODE	: 7-239-9-0025
SAMPLE CONDITION	: ใส		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-19	STANDARD ^{1/}
pH		4500-H ⁺ B	< 0.10	7.47	1 ^{1/2}
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0017	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2003 (AWWA, APHA, WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-9-0005

- Remark :
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 4. - Not available.



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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0781/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: -
SAMPLING DATE	: 06/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 06/05/2026	SAMPLING TIME	: 15:22-15:54
ANALYTICAL DATE	: 06/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 22/05/2026	FILE CODE	: 226010_GW_May
SAMPLE CONDITION	: ใส		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-19	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	463	*
Salinity	ppt	2520 B	< 0.01	0.16	*

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 (AWWA APHA WEF)

Pornnapa Budthum
(Miss Pornnapa Budthum)
Analyst

Khemchuda Insorn
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Technical Management Team

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0781/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 06/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 11/05/2026	SAMPLING TIME	: 15:22-15:54
ANALYTICAL DATE	: 12-17/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 22/05/2026	FILE CODE	: 7-239-ก-0025
SAMPLE CONDITION	: ใส		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-19	STANDARD ¹⁾
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2023 (AWWA APHA WEF)

Jutarat Jaemruen
(Miss Jutarat Jaemruen)
Analyst
REG. NO. 7-239-ก-0022

Khemchuda Insorn
(Miss Khemchuda Insorn)
Technical Management Team
REG. NO. 7-239-ก-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL. Branch 6 (Refinery)	REQUEST SERVICE No	: 0781/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 06/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 11/05/2026	SAMPLING TIME	: 14:40-15:05
ANALYTICAL DATE	: 13-15/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 22/05/2026		: 7-239-9-0025
SAMPLE CONDITION	: ใส	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-19	STANDARD ¹⁾
Total Petroleum Hydrocarbons					
- TPH (C ₇ - C ₉)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Penlane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₁₀ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₃₁)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

REFERENCE : US EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE³⁾ ED. 2020.

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Insorn

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Technical Management Team

REG. NO. 7-239-9-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL. Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 11/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 11:16-11:38
ANALYTICAL DATE	: 11, 18-22/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026		: 7-239-9-0025
SAMPLE CONDITION	: ใส มีตะกอน	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-20	STANDARD ¹⁾
pH	-	4500-H ⁺ B	< 0.10	7.44	1)
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0039	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA, APHA, WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Insorn

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Technical Management Team

REG. NO. 7-239-9-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0843/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. :
SAMPLING DATE : 11/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 11:16-11:38
ANALYTICAL DATE : 11/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 26/05/2026
SAMPLE CONDITION : ใส มีตะกอน FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-20	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	1.058	-
Salinity	ppt	2520 B	< 0.01	0.48	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2022 (AWWA APHA WEF)

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Khemchuda Inorn

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0843/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 11/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 11:16-11:38
ANALYTICAL DATE : 18-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 26/05/2026
SAMPLE CONDITION : ใส มีตะกอน FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-20	STANDARD ^{1/}
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2022 (AWWA APHA WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)
Analyst

REG. NO. 7-239-7-0022

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REG. NO. 7-239-7-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No. :	0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No. :	จ-239
SAMPLING DATE	: 11/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 11:16-11:38
ANALYTICAL DATE	: 18-24/05/2026	SITE OPERATOR	: Mr. Jeerawat Khotamhan
REPORT DATE	: 26/05/2026		: จ-239-0-0025
SAMPLE CONDITION	: ใส มีตะกอน	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-20	STANDARD ^{1/}
Total Petroleum Hydrocarbons					
- TPH (C ₅ - C ₆)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₈ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₃₃)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetatriacontane					
- Pentatriacontane					

REFERENCE : US EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE.1st ED. 2018

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. จ-239-0-0022

Khemchuda Insorn

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Technical Management Team

REG. NO. จ-239-0-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No. :	0781/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No. :	จ-239
SAMPLING DATE	: 07/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 11/05/2026	SAMPLING TIME	: 09:28-09:40
ANALYTICAL DATE	: 07,11-16/05/2026	SITE OPERATOR	: Mr. Jeerawat Khotamhan
REPORT DATE	: 22/05/2026		: จ-239-0-0025
SAMPLE CONDITION	: ใส	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-21	STANDARD ^{1/}
pH		4500-H ⁺ B	< 0.10	7.15	W
Arsenic (As)	mg/l	3114 C	< 0.0001	< 0.0005	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA ACHA WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. จ-239-0-0022

Khemchuda Insorn

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Technical Management Team

REG. NO. จ-239-0-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0781/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. :
SAMPLING DATE : 06/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 06/05/2026 SAMPLING TIME : 09:28-09:40
ANALYTICAL DATE : 06/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 22/05/2026
SAMPLE CONDITION : 1# FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-21	STANDARD
Conductivity	µS/cm	2510 B	≤ 1.0	356	*
Salinity	ppt	2520 B	< 0.01	0.10	*

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2022 (AWWA, APHA, WEF)

Pornnapa Budthum

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Analyst

Khemchuda Insorn

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0781/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 06/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 09:28-09:40
ANALYTICAL DATE : 12-17/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 22/05/2026
SAMPLE CONDITION : 1# FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-21	STANDARD ¹⁾
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2022 (AWWA, APHA, WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)
Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)
Technical Management Team

REG. NO. 7-239-0-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL. Branch 6 (Refinery)	REQUEST SERVICE No	: 0781/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 06/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 11/05/2026	SAMPLING TIME	: 09:28-09:40
ANALYTICAL DATE	: 13-15/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 22/05/2026		: 7-239-9-0025
SAMPLE CONDITION	: ใส	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-21	STANDARD ¹⁾
Total Petroleum Hydrocarbons					
- TPH (C ₇ - C ₉)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₈ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	0.047	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₃₃)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- n-Pentatriacontane					

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

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Inorn

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Technical Management Team

REG. NO. 7-239-9-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL. Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 11/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 10:43-11:02
ANALYTICAL DATE	: 11, 18-22/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026		: 7-239-9-0025
SAMPLE CONDITION	: ใส มีตะกอน	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-22	STANDARD ¹⁾
pH	-	4500-H ⁺ B	< 0.10	7.47	¹⁾
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0061	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA, APHA, WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

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Technical Management Team

REG. NO. 7-239-9-0005

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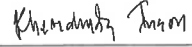
GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: *
SAMPLING DATE	: 11/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 11/05/2026	SAMPLING TIME	: 10:43-11:02
ANALYTICAL DATE	: 11/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026	FILE CODE	: *
SAMPLE CONDITION	: ใส มีตะกอน		: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-22	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	3.145	*
Salinity	ppt	2520 B	< 0.01	1.50	*

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA-APHA-WEF)


(Miss Pornnapa Budthum)
Analyst


(Miss Khemchuda Insorn)
Technical Management Team

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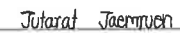
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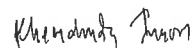
GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 11/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 10:43-11:02
ANALYTICAL DATE	: 18-23/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026	FILE CODE	: 7-239-0-0025
SAMPLE CONDITION	: ใส มีตะกอน		: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-22	STANDARD ^{1/}
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2021 (AWWA-APHA-WEF)


(Miss Jutarat Jaemruen)
Analyst
REG. NO. 7-239-0-0022


(Miss Khemchuda Insorn)
Technical Management Team
REG. NO. 7-239-0-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL. Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 11/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 10:43-11:02
ANALYTICAL DATE	: 18-24/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026		: 7-239-0-0025
SAMPLE CONDITION	: ใส มีตะกอน	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-22	STANDARD ^{1/}
Total Petroleum Hydrocarbons					
- TPH (C ₇ - C ₁₆)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₇ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₇ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

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

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-R-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL. Branch 6 (Refinery)	REQUEST SERVICE No.	: 0781/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 07/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 11/05/2026	SAMPLING TIME	: 10:10-10:22
ANALYTICAL DATE	: 07,11-16/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 22/05/2026		: 7-239-0-0025
SAMPLE CONDITION	: ใส มีตะกอน	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-23	STANDARD ^{1/}
pH	-	4500-H ⁺ B	< 0.10	7.32	1/
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0049	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2001 (AWWA ALPHA-WEP)

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(Miss Jutarat Jaemruen)

Analyst

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Technical Management Team

REG. NO. 7-239-R-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	0781/69
SAMPLING BY	SECOT Co., Ltd.	REGISTRATION No.	
SAMPLING DATE	07/05/2026	SAMPLING METHOD	Pneumatic Bladder Pump
RECEIVED DATE	07/05/2026	SAMPLING TIME	10:10-10:22
ANALYTICAL DATE	07/05/2026	SITE OPERATOR	Mr. Jeerawat Khothamhan
REPORT DATE	22/05/2026		
SAMPLE CONDITION	ใส มีตะกอน	FILE CODE	226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-23	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	840	+
Salinity	ppt	2520 B	< 0.01	0.35	+

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA-APHA-WEF)

Pornnapa Budthum

(Miss Pornnapa Budthum)
Analyst

Khemchuda Insorn

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Technical Management Team

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	0781/69
SAMPLING BY	SECOT Co., Ltd.	REGISTRATION No.	7-239
SAMPLING DATE	07/05/2026	SAMPLING METHOD	Pneumatic Bladder Pump
RECEIVED DATE	11/05/2026	SAMPLING TIME	10:10-10:22
ANALYTICAL DATE	12-17/05/2026	SITE OPERATOR	Mr. Jeerawat Khothamhan
REPORT DATE	22/05/2026		7-239-0-0025
SAMPLE CONDITION	ใส มีตะกอน	FILE CODE	226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-23	STANDARD ¹⁾
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2021 (AWWA-APHA-WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)
Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn

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Technical Management Team

REG. NO. 7-239-0-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL. Branch 6 (Refinery)	REQUEST SERVICE No	: 0781/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 07/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 11/05/2026	SAMPLING TIME	: 09:28-09:40
ANALYTICAL DATE	: 13-15/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 22/05/2026		: 7-239-0-0025
SAMPLE CONDITION	: ใส	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-23	STANDARD ^{1/}
Total Petroleum Hydrocarbons					
- TPH (C ₇ - C ₉)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₁₀ - C ₁₄)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₅ - C ₂₁)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

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

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-0-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL. Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 11/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 15:29-15:50
ANALYTICAL DATE	: 11, 18-22/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026		: 7-239-0-0025
SAMPLE CONDITION	: ใส มีตะกอน	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-24	STANDARD ^{1/}
pH		4500-H ⁺ B	< 0.10	7.54	^{1/}
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0142	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER, 24th ED., 2021 (AWWA, APHA, WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-0-0005

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4. - Not available.



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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: -
SAMPLING DATE	: 11/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 11/05/2026	SAMPLING TIME	: 15:29-15:50
ANALYTICAL DATE	: 11/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026	FILE CODE	: 226010_GW_May
SAMPLE CONDITION	: ใส มีตะกอน		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-24	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	3.515	*
Salinity	ppt	2520 B	< 0.01	1.68	*

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA APHA WEF)

Bongporn Puthum

(Miss Pornnapa Budthum)
Analyst

Khemchuda Insom

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Technical Management Team

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 2-239
SAMPLING DATE	: 11/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 15:29-15:50
ANALYTICAL DATE	: 18-23/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026	FILE CODE	: 2-239-ท-0025
SAMPLE CONDITION	: ใส มีตะกอน		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-24	STANDARD "
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2021 (AWWA APHA WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)
Analyst

REG. NO. 2-239-ท-0022

Khemchuda Insom

(Miss Khemchuda Insom)
Technical Management Team

REG. NO. 2-239-ท-0005

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RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 15:29-15:50
ANALYTICAL DATE	: 18-24/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026		: 7-239-9-0025
SAMPLE CONDITION	: ใส มีตะกอน	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-24	STANDARD ^{1/}
Total Petroleum Hydrocarbons					
- TPH (C ₇ - C ₉)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₁₀ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₁₇)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

REFERENCE : US EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE 1st ED. 2020.

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

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Technical Management Team

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SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 11/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 10:02-10:25
ANALYTICAL DATE	: 11, 18-22/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026		: 7-239-9-0025
SAMPLE CONDITION	: ใส มีตะกอน	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-25	STANDARD ^{1/}
pH	-	4500-H ⁺ B	< 0.10	7.18	1/
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0226	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA, APHA, WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

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GROUND WATER ANALYSIS REPORT

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SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: -
SAMPLING DATE	: 11/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 11/05/2026	SAMPLING TIME	: 10:02-10:25
ANALYTICAL DATE	: 11/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026	FILE CODE	: 226010_GW_May
SAMPLE CONDITION	: ไม่ มีตะกอน		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-25	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	436	-
Salinity	ppt	2520 B	< 0.01	0.14	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA APHA WEF)

Pornnapa Budthum
(Miss Pornnapa Budthum)
Analyst

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SAMPLING DATE	: 11/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 10:02-10:25
ANALYTICAL DATE	: 18-23/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026	FILE CODE	: 2-239-9-0025
SAMPLE CONDITION	: ไม่ มีตะกอน		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-25	STANDARD ¹⁾
Naphthalene	mg/l	6440 C	< 0.0005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2021 (AWWA APHA WEF)

Jutarat Jaemruen
(Miss Jutarat Jaemruen)
Analyst
REG. NO. 2-239-9-0022

Khemchuda Insorn
(Miss Khemchuda Insorn)
Technical Management Team
REG. NO. 2-239-9-0005

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GROUND WATER ANALYSIS REPORT

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SAMPLING DATE : 11/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 10:02-10:25
ANALYTICAL DATE : 18-24/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 26/05/2026 SITE OPERATOR : 7-239-0-0025
SAMPLE CONDITION : ใส มีตะกอน FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-25	STANDARD ¹⁾
Total Petroleum Hydrocarbons					
- TPH (C ₇ - C ₉)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₉ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₂₅)	mg/l	3510 C / 8015 D ¹⁾	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

REFERENCE : US EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE³⁾ ED. 2000

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-0-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0843/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 08/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 13:52-14:25
ANALYTICAL DATE : 08, 18-22/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 26/05/2026 SITE OPERATOR : 7-239-0-0025
SAMPLE CONDITION : ใส มีตะกอน FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-26	STANDARD ¹⁾
pH		4500-H ²⁾ B	< 0.10	7.32	11
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0157	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2003 (AWWA, APHA, WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

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SAMPLING DATE	: 08/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 08/05/2026	SAMPLING TIME	: 13:52-14:25
ANALYTICAL DATE	: 08/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026	FILE CODE	: 226010_GW_May
SAMPLE CONDITION	: ใส มีตะกอน		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-26	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	539	*
Salinity	ppt	2520 B	< 0.01	0.20	*

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA APHA WEF)

(Miss Pornnapa Budithum)
Analyst

(Miss Khemchuda Insorn)
Technical Management Team

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RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 13:52-14:25
ANALYTICAL DATE	: 18-23/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026	FILE CODE	: 7-239-0-0025
SAMPLE CONDITION	: ใส มีตะกอน		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-26	STANDARD ^u
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2021 (AWWA APHA WEF)

(Miss Jutarat Jaemruen)
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REG. NO. 7-239-0-0022

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 08/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 13:52-14:25
ANALYTICAL DATE	: 18-24/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026		: 7-239-0-0025
SAMPLE CONDITION	: ใส มีตะกอน	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-26	STANDARD ^U
Total Petroleum Hydrocarbons					
- TPH (C ₇ - C ₉)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₁₀ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	0.034	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₂₁)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- n-Pentatriacontane					

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

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-0-0005

Remark : 1. Reported analysis refers to submitted sample only.
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3. ^U Notification of the Ministry of Industry, B.E.2559 (2016) : Criteria on contamination in soil and groundwater, the examination of soil and groundwater quality, information including making the report of the result of soil and groundwater quality examination.



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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0781/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 07/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 11/05/2026	SAMPLING TIME	: 10:44-11:05
ANALYTICAL DATE	: 07.11-16/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 22/05/2026		: 7-239-0-0025
SAMPLE CONDITION	: ใส	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-27	STANDARD ^U
pH	-	4500-H ⁺ B	< 0.10	7.56	W
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0047	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED., 2011 (AWWA ALPHA-WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn

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Technical Management Team

REG. NO. 7-239-0-0005

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4. - Not available.



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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0781/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: -
SAMPLING DATE	: 07/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 07/05/2026	SAMPLING TIME	: 10:44-11:05
ANALYTICAL DATE	: 07/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 22/05/2026	FILE CODE	: 226010_GW_May
SAMPLE CONDITION	: 1๙		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-27	STANDARD
Conductivity	μS/cm	2510 B	< 1.0	603	-
Salinity	ppt	2520 B	< 0.01	0.23	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA APHA WEF)

Pornaporn Budthum
(Miss Pornaporn Budthum)
Analyst

Khemchuda Insorn
(Miss Khemchuda Insorn)
Technical Management Team

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0781/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: ๖-239
SAMPLING DATE	: 07/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 11/05/2026	SAMPLING TIME	: 10:44-11:05
ANALYTICAL DATE	: 12-17/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 22/05/2026	FILE CODE	: ๖-239-๖-0025
SAMPLE CONDITION	: 1๙		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-27	STANDARD ^{1/}
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2021 (AWWA APHA WEF)

Jutarat Jaemruen
(Miss Jutarat Jaemruen)
Analyst
REG. NO. ๖-239-๖-0022

Khemchuda Insorn
(Miss Khemchuda Insorn)
Technical Management Team
REG. NO. ๖-239-๖-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No : 0781/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 07/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 10:44-11:05
ANALYTICAL DATE : 13-15/05/2026 : Mr. Jeerawat Khothamhan
REPORT DATE : 22/05/2026 SITE OPERATOR : 7-239-0-0025
SAMPLE CONDITION : ใส FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-27	STANDARD ¹⁾
Total Petroleum Hydrocarbons					
- TPH (C ₇ - C ₆)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₈ - C ₁₄)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₃₃)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

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

Jutarat Jaemruen
(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn
(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-0-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0843/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 08/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 14:48-15:09
ANALYTICAL DATE : 08. 18-22/05/2026 : Mr. Jeerawat Khothamhan
REPORT DATE : 26/05/2026 SITE OPERATOR : 7-239-0-0025
SAMPLE CONDITION : ใส มีตะกอน FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-28	STANDARD ¹⁾
pH		4500-H ⁺ B	< 0.10	7.80	11
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0036	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER, 24th ED., 2023 (AWWA ALPHA-WEP)

Jutarat Jaemruen
(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0843/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : -
SAMPLING DATE : 08/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 08/05/2026 SAMPLING TIME : 14:48-15:09
ANALYTICAL DATE : 08/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 26/05/2026
SAMPLE CONDITION : ใส มีตะกอน FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-28	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	371	-
Salinity	ppt	2520 B	< 0.01	0.11	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED, 2021 (AWWA.APHA.WEF)

Pornnapa Budthum

(Miss Pornnapa Budthum)
Analyst

Khemchuda Insom

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Technical Management Team

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SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 08/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 14:48-15:09
ANALYTICAL DATE : 18-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 26/05/2026
SAMPLE CONDITION : ใส มีตะกอน FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-28	STANDARD ^{1/}
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED, 2021 (AWWA.APHA.WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)
Analyst

REG. NO. 7-239-ก-0022

Khemchuda Insom

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Technical Management Team

REG. NO. 7-239-ก-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL. Branch 6 (Refinery) REQUEST SERVICE No : 0843/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 08/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 14:48-15:09
ANALYTICAL DATE : 18-24/05/2026 : Mr. Jeerawat Khothamhan
REPORT DATE : 26/05/2026 SITE OPERATOR : 7-239-9-0025
SAMPLE CONDITION : ใส มีตะกอน FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-28	STANDARD ¹⁾
Total Petroleum Hydrocarbons					
- TPH (C ₇ - C ₉)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₉ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₂₅)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

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

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Insorn

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Technical Management Team

REG. NO. 7-239-9-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL. Branch 6 (Refinery) REQUEST SERVICE No. : 0781/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 07/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 14:00-14:16
ANALYTICAL DATE : 07,11-16/05/2026 : Mr. Jeerawat Khothamhan
REPORT DATE : 22/05/2026 SITE OPERATOR : 7-239-9-0025
SAMPLE CONDITION : ใส มีตะกอน FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-29	STANDARD ¹⁾
pH	-	4500-H ⁺ B	< 0.10	7.16	11
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0010	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (APHA, AWWA, WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-9-0004

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4. - Not available.



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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0781/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 07/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 07/05/2026	SAMPLING TIME	: 14:00-14:16
ANALYTICAL DATE	: 07/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 22/05/2026	FILE CODE	: 226010_GW_May
SAMPLE CONDITION	: ใส มีตะกอน		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-29	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	847	+
Salinity	ppt	2520 B	< 0.01	0.37	+

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA, APHA, WEF)

Bongsa puthum

(Miss Pornnapa Budthum)
Analyst

Khemchuda Insom

(Miss Khemchuda Insom)
Technical Management Team

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0781/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 07/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 11/05/2026	SAMPLING TIME	: 14:00-14:16
ANALYTICAL DATE	: 12-17/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 22/05/2026	FILE CODE	: 7-239-9-0025
SAMPLE CONDITION	: ใส มีตะกอน		: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-29	STANDARD ¹⁾
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2021 (AWWA, APHA, WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)
Analyst

REG. NO. 7-239-9-0022

Khemchuda Insom

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Technical Management Team

REG. NO. 7-239-9-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No	: 0781/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 07/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 11/05/2026	SAMPLING TIME	: 14:00-14:16
ANALYTICAL DATE	: 13-15/05/2026	SITE OPERATOR	: Mr. Jeerawat Kholthamhan
REPORT DATE	: 22/05/2026		: 7-239-9-0025
SAMPLE CONDITION	: ใส มีตะกอน	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-29	STANDARD ¹⁾
Total Petroleum Hydrocarbons					
- TPH (C ₇ - C ₉)	mg/l	5030 C / 8260 D	< 0.003	0.004	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₁₀ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₇ - C ₃₅)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

REFERENCE : US EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE 1st ED. 2020

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Insorn

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Technical Management Team

REG. NO. 7-239-9-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 08/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 15:32-16:02
ANALYTICAL DATE	: 08, 18-22/05/2026	SITE OPERATOR	: Mr. Jeerawat Kholthamhan
REPORT DATE	: 26/05/2026		: 7-239-9-0025
SAMPLE CONDITION	: เหลืองใส	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-30	STANDARD ¹⁾
pH	-	4500-H ⁺ B	< 0.10	7.26	#
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0097	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA, ACHA, WEF)

Jutarat Jaemruen

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	0843/69
SAMPLING BY	SECOT Co., Ltd.	REGISTRATION No.	
SAMPLING DATE	08/05/2026	SAMPLING METHOD	Pneumatic Bladder Pump
RECEIVED DATE	08/05/2026	SAMPLING TIME	15:32-16:02
ANALYTICAL DATE	08/05/2026	SITE OPERATOR	Mr. Jeerawat Khothamhan
REPORT DATE	26/05/2026		
SAMPLE CONDITION	เหลือใส	FILE CODE	226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-30	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	679	→
Salinity	ppt	2520 B	< 0.01	0.27	*

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER (AND WASTEWATER 24th ED. 2021 (AWWA-APHA-WEF)

Pornapa Budthum

(Miss Pornapa Budthum)
Analyst

Khemchuda Insom

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	0843/69
SAMPLING BY	SECOT Co., Ltd.	REGISTRATION No.	7-239
SAMPLING DATE	08/05/2026	SAMPLING METHOD	Pneumatic Bladder Pump
RECEIVED DATE	16/05/2026	SAMPLING TIME	15:32-16:02
ANALYTICAL DATE	18-23/05/2026	SITE OPERATOR	Mr. Jeerawat Khothamhan
REPORT DATE	26/05/2026		7-239-9-0025
SAMPLE CONDITION	เหลือใส	FILE CODE	226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-30	STANDARD ^u
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2021 (AWWA-APHA-WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)
Analyst

REG. NO. 7-239-9-0022

Khemchuda Insom

(Miss Khemchuda Insom)
Technical Management Team

REG. NO. 7-239-n-0005

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GROUND WATER ANALYSIS REPORT

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SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 08/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 15:32-16:02
ANALYTICAL DATE	: 18-24/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026		: 7-239-0-0025
SAMPLE CONDITION	: เหลืองใส	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-30	STANDARD ^{1/}
Total Petroleum Hydrocarbons					
- TPH (C ₇ - C ₉)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₉ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	0.025	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₃₅)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- n-Pentacontane					

REFERENCE : US EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE 1st ED. 2020

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0781/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 07/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 11/05/2026	SAMPLING TIME	: 14:43-15:08
ANALYTICAL DATE	: 07,11-16/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 22/05/2026		: 7-239-0-0025
SAMPLE CONDITION	: ไส้ มีตะกอน	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-31	STANDARD ^{1/}
pH		4500-H ⁺ B	< 0.10	6.76	M
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0027	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2003 (AWWA, APHA, WEF)

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	PTT Global Chemical PCL. Branch 6 (Refinery)	REQUEST SERVICE No.	0781/69
SAMPLING BY	SECOT Co., Ltd.	REGISTRATION No.	
SAMPLING DATE	07/05/2026	SAMPLING METHOD	Pneumatic Bladder Pump
RECEIVED DATE	07/05/2026	SAMPLING TIME	14:43-15:08
ANALYTICAL DATE	07/05/2026	SITE OPERATOR	Mr. Jeerawat Khothamhan
REPORT DATE	22/05/2026		
SAMPLE CONDITION	ใส่ มีตะกอน	FILE CODE	226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-31	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	984	✖
Salinity	ppt	2520 B	< 0.01	0.44	✖

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA APHA WEF)

Pornnapa Budthum

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Analyst

Khemchuda Inorn

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	PTT Global Chemical PCL. Branch 6 (Refinery)	REQUEST SERVICE No.	0781/69
SAMPLING BY	SECOT Co., Ltd.	REGISTRATION No.	7-239
SAMPLING DATE	07/05/2026	SAMPLING METHOD	Pneumatic Bladder Pump
RECEIVED DATE	11/05/2026	SAMPLING TIME	14:43-15:08
ANALYTICAL DATE	12-17/05/2026	SITE OPERATOR	Mr. Jeerawat Khothamhan
REPORT DATE	22/05/2026		7-239-9-0025
SAMPLE CONDITION	ใส่ มีตะกอน	FILE CODE	226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-31	STANDARD ¹⁾
Naphthalene	mg/l	6440 C	< 0.00005	0.00013	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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	0.0004	≤ 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 24th ED. 2021 (AWWA APHA WEF)

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(Miss Jutarat Jaemruen)
Analyst

REG. NO. 7-239-9-0022

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Technical Management Team

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No : 0781/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 07/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 14:43-15:08
ANALYTICAL DATE : 13-15/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 22/05/2026
SAMPLE CONDITION : ใส มีตะกอน FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-31	STANDARD ¹⁾
Total Petroleum Hydrocarbons					
- TPH (C ₇ - C ₉)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₁₀ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₂₅)	mg/l	3510 C / 8015 D	< 0.050	0.062	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

REFERENCE : US EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE 3rd ED. 2020.

Tutarat Jaemruen

(Miss Tutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

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Technical Management Team

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0781/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 08/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 11:21-11:37
ANALYTICAL DATE : 08,11-16/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 22/05/2026
SAMPLE CONDITION : ใส FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-32	STANDARD ¹⁾
pH		4500-H ⁺ B	< 0.10	7.58	11
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0117	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 (AWWA-APHA-WFPI)

Tutarat Jaemruen

(Miss Tutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-9-0004

Remark : 1. Reported analysis refers to submitted sample only.
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3. ¹⁾ Notification of the Ministry of Industry, B.E.2559 (2016) : Criteria on contamination in soil and groundwater, the examination of soil and groundwater quality, information including making the report of the result of soil and groundwater quality examination.
4. - Not available.



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GROUND WATER ANALYSIS REPORT

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SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : -
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RECEIVED DATE : 08/05/2026 SAMPLING TIME : 11:21-11:37
ANALYTICAL DATE : 08/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 22/05/2026 FILE CODE : 226010_GW_May
SAMPLE CONDITION : 15

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-32	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	836	*
Salinity	ppt	2520 B	< 0.01	0.35	*

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA APHA WEF)

Pornnapa Budithum

(Miss Pornnapa Budithum)
Analyst

Khemchuda Insom

(Miss Khemchuda Insom)
Technical Management Team

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GROUND WATER ANALYSIS REPORT

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RECEIVED DATE : 11/05/2026 SAMPLING TIME : 11:21-11:37
ANALYTICAL DATE : 12-17/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 22/05/2026 FILE CODE : 7-239-9-0025
SAMPLE CONDITION : 15

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-32	STANDARD ^{1/}
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2021 (AWWA APHA WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)
Analyst

REG. NO. 7-239-9-0022

Khemchuda Insom

(Miss Khemchuda Insom)
Technical Management Team

REG. NO. 7-239-9-0005

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GROUND WATER ANALYSIS REPORT

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RECEIVED DATE : 11/05/2026 SAMPLING TIME : 11:21-11:37
ANALYTICAL DATE : 13-15/05/2026 Mr. Jeerawat Khothamhan
REPORT DATE : 22/05/2026 SITE OPERATOR : 7-239-0-0025
SAMPLE CONDITION : ใส FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-32	STANDARD ^u
Total Petroleum Hydrocarbons					
- TPH (C ₇ - C ₁₄)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₇ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₇ - C ₂₁)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

REFERENCE : US EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE 3rd Ed. 2020

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-0-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0781/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 08/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 10:35-10:50
ANALYTICAL DATE : 08.11-16/05/2026 Mr. Jeerawat Khothamhan
REPORT DATE : 22/05/2026 SITE OPERATOR : 7-239-0-0025
SAMPLE CONDITION : ใส FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-33	STANDARD ^u
pH	-	4500-H ⁺ B	< 0.10	7.55	u
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0044	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th Ed. 2023 (AWWA ALPHA WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-0-0004

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0781/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : -
SAMPLING DATE : 08/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 08/05/2026 SAMPLING TIME : 10:35-10:50
ANALYTICAL DATE : 08/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 22/05/2026
SAMPLE CONDITION : ใส FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-33	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	420	-
Salinity	ppt	2520 B	< 0.01	0.14	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA ALPHA-WEP)

(Miss Pornnapa Budthum)
Analyst

(Miss Khemchuda Insorn)
Technical Management Team

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SAMPLING DATE : 08/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 10:35-10:50
ANALYTICAL DATE : 12-17/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 22/05/2026
SAMPLE CONDITION : ใส FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-33	STANDARD ^{1/}
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2021 (AWWA ALPHA-WEP)

(Miss Jutarat Jaemruen)
Analyst
REG. NO. 7-239-0-0022

(Miss Khemchuda Insorn)
Technical Management Team
REG. NO. 7-239-0-0005

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SAMPLING DATE : 08/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 10:35-10:50
ANALYTICAL DATE : 13-15/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 22/05/2026 FILE CODE : 7-239-9-0025
SAMPLE CONDITION : ใส FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-33	STANDARD "
Total Petroleum Hydrocarbons					
- TPH (C ₇ -C ₉)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₈ -C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ -C ₃₅)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

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

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-9-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0781/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 08/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 09:43-10:00
ANALYTICAL DATE : 08,11-16/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 22/05/2026 FILE CODE : 7-239-9-0025
SAMPLE CONDITION : ใส FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-34	STANDARD "
pH	*	4500-H ⁺ B	< 0.10	7.23	"
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0060	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 IAWQA, APHA, WEF

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Insorn

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Technical Management Team

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REPORT DATE : 22/05/2026
SAMPLE CONDITION : ใส FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-34	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	465	-
Salinity	ppt	2520 B	< 0.01	0.16	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA-APHA-WEF)

Pornnapa Budthum

(Miss Pornnapa Budthum)
Analyst

Khemchuda Insorn

(Miss Khemchuda Insorn)
Technical Management Team

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RECEIVED DATE : 11/05/2026 SAMPLING TIME : 09:43-10:00
ANALYTICAL DATE : 12-17/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 22/05/2026
SAMPLE CONDITION : ใส FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-34	STANDARD ¹⁾
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2021 (AWWA-APHA-WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)
Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)
Technical Management Team

REG. NO. 7-239-0-0005

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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 PCL. Branch 6 (Refinery) REQUEST SERVICE No : 0781/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 2-239
SAMPLING DATE : 08/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 09:43-10:00
ANALYTICAL DATE : 13-15/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 22/05/2026 FILE CODE : 226010_GW_May
SAMPLE CONDITION : 15

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-34	STANDARD ^{1/}
Total Petroleum Hydrocarbons					
- TPH (C ₅ - C ₉)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₁₀ - C ₁₄)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₂₅)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

REFERENCE : US EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE, 1st Ed., 2020

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 2-239-9-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 2-239-9-0005

Remark : 1. Reported analysis refers to submitted sample only.
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3. ^{1/} Notification of the Ministry of Industry, B.E.2559 (2016) : Criteria on contamination in soil and groundwater, the examination of soil and groundwater quality, information including making the report of the result of soil and groundwater quality examination.



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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL. Branch 6 (Refinery) REQUEST SERVICE No. : 0781/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 2-239
SAMPLING DATE : 07/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 15:35-15:52
ANALYTICAL DATE : 07.11-16/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 22/05/2026 FILE CODE : 226010_GW_May
SAMPLE CONDITION : 15

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-35	STANDARD ^{1/}
pH		4500-H ⁺ B	< 0.10	7.45	^{1/}
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0033	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER, 24th Ed., 2021 (AWWA, APHA, WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 2-239-9-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 2-239-9-0005

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4. - Not available.



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GROUND WATER ANALYSIS REPORT

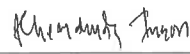
CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0781/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. :
SAMPLING DATE : 07/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 07/05/2026 SAMPLING TIME : 15:35-15:52
ANALYTICAL DATE : 07/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 22/05/2026 FILE CODE : 226010_GW_May
SAMPLE CONDITION : ใส

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-35	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	440	+
Salinity	ppt	2520 B	< 0.01	0.15	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2011 (AWWA, APHA, WEF)


(Miss Pornnapa Budthum)

Analyst


(Miss Khemchuda Insorn)

Technical Management Team

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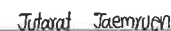
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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0781/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 07/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 15:35-15:52
ANALYTICAL DATE : 12-17/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 22/05/2026 FILE CODE : 7-239-0-0025
SAMPLE CONDITION : ใส

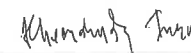
PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-35	STANDARD ^u
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
Toluene	mg/l	6200 B	< 0.0002	ND	≤ 5.0
m-Xylene	mg/l	6200 B	< 0.0002	ND	≤ 24
o-Xylene	mg/l	6200 B	< 0.0002	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 24th ED. 2011 (AWWA, APHA, WEF)


(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022


(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-0-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No	: 0781/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 07/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 11/05/2026	SAMPLING TIME	: 15:35-15:52
ANALYTICAL DATE	: 13-15/05/2026	SITE OPERATOR	: Mr. Jeerawat Khotamhan
REPORT DATE	: 22/05/2026		: 7-239-9-0025
SAMPLE CONDITION	: ใส	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-35	STANDARD ¹⁾
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Total Petroleum Hydrocarbons

- TPH (C ₇ - C ₉)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₁₀ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₃₃)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

REFERENCE : U.S EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE, 3rd ED., 2020.

Jutarat Jaemruen
(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Insorn
(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-9-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 14/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 10:45-11:09
ANALYTICAL DATE	: 14, 18-22/05/2026	SITE OPERATOR	: Mr. Jeerawat Khotamhan
REPORT DATE	: 26/05/2026		: 7-239-9-0025
SAMPLE CONDITION	: ใส	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-36	STANDARD ¹⁾
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pH	-	4500-H ⁺ B	< 0.10	6.73	#
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0207	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED., 2021 (AWWA, APHA, WEF)

Jutarat Jaemruen
(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Insorn
(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-9-0005

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4. - Not available.



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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0843/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. :
SAMPLING DATE : 14/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 14/05/2026 SAMPLING TIME : 10:45-11:09
ANALYTICAL DATE : 14/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 26/05/2026
SAMPLE CONDITION : ใส FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-36	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	2,317	+
Salinity	ppt	2520 B	< 0.01	1.09	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA APHA WEF)

Pornnapa Budthum

(Miss Pornnapa Budthum)
Analyst

Khemchuda Insorn

(Miss Khemchuda Insorn)
Technical Management Team

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GROUND WATER ANALYSIS REPORT

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SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 2-239
SAMPLING DATE : 14/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 10:45-11:09
ANALYTICAL DATE : 18-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 26/05/2026
SAMPLE CONDITION : ใส FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-36	STANDARD ¹⁾
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2021 (AWWA APHA WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)
Analyst

REG. NO. 2-239-ก-0022

Khemchuda Insorn

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Technical Management Team

REG. NO. 2-239-ก-0005

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GROUND WATER ANALYSIS REPORT

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SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 14/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 10:45-11:09
ANALYTICAL DATE	: 18-24/05/2026	SITE OPERATOR	: Mr. Jeerawat Khotamhan
REPORT DATE	: 26/05/2026		: 7-239-9-0025
SAMPLE CONDITION	: ใส	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-36	STANDARD ¹⁾
Total Petroleum Hydrocarbons					
- TPH (C ₇ - C ₁₀)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₉ - C ₁₀)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₂₂)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

REFERENCE : US EPA SW-846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE 1st ED. 2020.

Jutarat Jaemruen
(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Insorn
(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-9-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 14/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 11:33-11:45
ANALYTICAL DATE	: 14, 18-22/05/2026	SITE OPERATOR	: Mr. Jeerawat Khotamhan
REPORT DATE	: 26/05/2026		: 7-239-9-0025
SAMPLE CONDITION	: เหลืองปนสีเทา	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-37	STANDARD ¹⁾
pH		4500-H ⁺ B	< 0.10	7.22	8
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0439	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 (APHA, AWWA, WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Insorn

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4. - Not available.



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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: -
SAMPLING DATE	: 14/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 14/05/2026	SAMPLING TIME	: 11:33-11:45
ANALYTICAL DATE	: 14/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026	FILE CODE	: 226010_GW_May
SAMPLE CONDITION	: เหลืองใสสะอาด		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-37	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	2.206	-
Salinity	ppt	2520 B	< 0.01	1.05	-

REFERENCE: STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 (AWWA APHA WEF)

Pornnapha Budthum

(Miss Pornnapha Budthum)
Analyst

Khemchuda Insorn

(Miss Khemchuda Insorn)
Technical Management Team

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 14/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 11:33-11:45
ANALYTICAL DATE	: 18-23/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026	FILE CODE	: 226010_GW_May
SAMPLE CONDITION	: เหลืองใสสะอาด		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-37	STANDARD ^{1/}
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2023 (AWWA APHA WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)
Analyst
REG. NO. 7-239-9-0022

Khemchuda Insorn

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Technical Management Team
REG. NO. 7-239-9-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 14/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 11:33-11:45
ANALYTICAL DATE	: 18-24/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026		: 7-239-9-0025
SAMPLE CONDITION	: เหลือถังไนโตรเจนก่อน	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-37	STANDARD ¹⁾
Total Petroleum Hydrocarbons					
- TPH (C ₇ - C ₁₆)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₇₋₈ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₇₋₁₆ - C ₁₅)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

REFERENCE : US EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE, 7th ED., 2020.

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-9-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 14/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 09:56-10:18
ANALYTICAL DATE	: 14, 18-22/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026		: 7-239-9-0025
SAMPLE CONDITION	: ใสไม่มีตะกอน	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-38	STANDARD ¹⁾
pH	-	4500-H ⁺ B	< 0.10	6.87	1 ¹⁾
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0462	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	< 0.01	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 (AWWA, APHA, WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: *
SAMPLING DATE	: 14/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 14/05/2026	SAMPLING TIME	: 09:56-10:18
ANALYTICAL DATE	: 14/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026	FILE CODE	: *
SAMPLE CONDITION	: ใสมีตะกอน	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-38	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	1.441	-
Salinity	ppt	2520 B	< 0.01	0.68	-

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA, APHA, WEF)

Bongpud Budthum

(Miss Pornnapa Budthum)
Analyst

Khemchuda Insorn

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Technical Management Team

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 2-239
SAMPLING DATE	: 14/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 09:56-10:18
ANALYTICAL DATE	: 18-23/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026	FILE CODE	: 2-239-0-0025
SAMPLE CONDITION	: ใสมีตะกอน	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-38	STANDARD ^{1/}
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2021 (AWWA, APHA, WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)
Analyst

REG. NO. 2-239-0-0022

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ANALYTICAL DATE : 18-24/05/2026 : Mr. Jeerawat Khothamhan
REPORT DATE : 26/05/2026 : 7-239-0-0025
SAMPLE CONDITION : ใต้น้ำ : FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-38	STANDARD ¹⁾
Total Petroleum Hydrocarbons					
- TPH (C ₇ - C ₉)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₉ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₃₃)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

REFERENCE : U.S EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE 3rd ED. 2020.

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

Khemchuda Inorn

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REG. NO. 7-239-0-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0843/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 14/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 13:58-14:16
ANALYTICAL DATE : 14, 18-22/05/2026 : Mr. Jeerawat Khothamhan
REPORT DATE : 26/05/2026 : 7-239-0-0025
SAMPLE CONDITION : 1 : FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-39	STANDARD ¹⁾
pH	-	4500-H ⁺ B	< 0.10	6.76	1)
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0072	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2023 (AWWA APHA WEF)

Jutarat Jaemruen

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Analyst

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GROUND WATER ANALYSIS REPORT

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SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: *
SAMPLING DATE	: 14/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 14/05/2026	SAMPLING TIME	: 13:58-14:16
ANALYTICAL DATE	: 14/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026	FILE CODE	: *
SAMPLE CONDITION	: 18	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-39	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	3.504	*
Salinity	ppt	2520 B	< 0.01	1.68	*

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA, APHA, WEF)

Pornapa Budthum
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Analyst

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 14/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 13:58-14:16
ANALYTICAL DATE	: 18-23/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026	FILE CODE	: 7-239-0-0025
SAMPLE CONDITION	: 18	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-39	STANDARD ¹⁾
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2021 (AWWA, APHA, WEF)

Jutarat Jaemruen
(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn
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Technical Management Team

REG. NO. 7-239-0-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL. Branch 6 (Refinery)	REQUEST SERVICE No	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 14/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 13:58-14:16
ANALYTICAL DATE	: 18-24/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026		: 7-239-9-0025
SAMPLE CONDITION	: ใส	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-39	STANDARD ¹⁾
Total Petroleum Hydrocarbons					
- TPH (C ₇ - C ₉)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₁₀ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₂₅)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

REFERENCE : US EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE. 3rd ED. 2020.

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-9-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL. Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 14/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 14:47-15:27
ANALYTICAL DATE	: 14. 18-22/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026		: 7-239-9-0025
SAMPLE CONDITION	: ใส	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-40	STANDARD ¹⁾
pH	-	4500-H ⁺ B	< 0.10	7.08	1)
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0171	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	< 0.01	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2011 (AWWA ALPHA-WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-9-0005

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4. - Not available.



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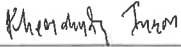
GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0843/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : -
SAMPLING DATE : 14/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 14/05/2026 SAMPLING TIME : 14:47-15:27
ANALYTICAL DATE : 14/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 26/05/2026
SAMPLE CONDITION : ใสมีตะกอน FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-40	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	1,220	×
Salinity	ppt	2520 B	< 0.01	0.57	×

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA, APHA, WEF)


(Miss Pornnapa Budthum)
Analyst


(Miss Khemchuda Insorn)
Technical Management Team

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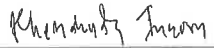
GROUND WATER ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0843/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 14/05/2026 SAMPLING METHOD : Pneumatic Bladder Pump
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 14:47-15:27
ANALYTICAL DATE : 18-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 26/05/2026
SAMPLE CONDITION : ใสมีตะกอน FILE CODE : 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-40	STANDARD ¹⁾
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2021 (AWWA, APHA, WEF)


(Miss Jutarat Jaemruen)
Analyst
REG. NO. 7-239-9-0022


(Miss Khemchuda Insorn)
Technical Management Team
REG. NO. 7-239-ก-0005

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GROUND WATER ANALYSIS REPORT

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SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 14/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 14:47-15:27
ANALYTICAL DATE	: 18-24/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026	FILE CODE	: 7-239-0-0025
SAMPLE CONDITION	: ใสมีตะกอน		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-40	STANDARD ^{1/}
Total Petroleum Hydrocarbons					
- TPH (C ₅ - C ₆)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₈ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	0.053	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₃₅)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- n-Pentatriacontane					

REFERENCE : US EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE 3rd Ed. 2020

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn

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Technical Management Team

REG. NO. 7-239-0-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 15/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 10:57-11:28
ANALYTICAL DATE	: 15, 18-22/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026	FILE CODE	: 7-239-0-0025
SAMPLE CONDITION	: เกลือใสมีตะกอน		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-41	STANDARD ^{1/}
pH		4500-H ⁺ B	< 0.10	7.12	^{1/}
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0077	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th Ed. 2021 (AWWA, APHA, WFP)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

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 4. - Not available.



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GROUND WATER ANALYSIS REPORT

CLIENT NAME	PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	0843/69
SAMPLING BY	SECOT Co., Ltd.	REGISTRATION No.	2-239
SAMPLING DATE	15/05/2026	SAMPLING METHOD	Pneumatic Bladder Pump
RECEIVED DATE	15/05/2026	SAMPLING TIME	10:57-11:28
ANALYTICAL DATE	15/05/2026	SITE OPERATOR	Mr. Jeerawat Khothamhan
REPORT DATE	26/05/2026	FILE CODE	226010_GW_May
SAMPLE CONDITION	เหลืองใสมีตะกอน		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-41	STANDARD
Conductivity	µS/cm	2510 B	< 1.0	17.800	≤
Salinity	ppt	2520 B	< 0.01	9.27	≤

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA APHA WEF)

Pornnapa Budthum

(Miss Pornnapa Budthum)
Analyst

Khemchuda Insorn

(Miss Khemchuda Insorn)
Technical Management Team

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GROUND WATER ANALYSIS REPORT

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SAMPLING DATE	15/05/2026	SAMPLING METHOD	Pneumatic Bladder Pump
RECEIVED DATE	16/05/2026	SAMPLING TIME	10:57-11:28
ANALYTICAL DATE	18-23/05/2026	SITE OPERATOR	Mr. Jeerawat Khothamhan
REPORT DATE	26/05/2026	FILE CODE	226010_GW_May
SAMPLE CONDITION	เหลืองใสมีตะกอน		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-41	STANDARD ¹⁾
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2021 (AWWA APHA WEF)

Jutarat Jaemruen

(Miss Jutarat Jaemruen)
Analyst

REG. NO. 2-239-9-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)
Technical Management Team

REG. NO. 2-239-9-0005

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SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 14/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 10:57-11:28
ANALYTICAL DATE	: 18-24/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026		: 7-239-0-0025
SAMPLE CONDITION	: เหลืองใต้ตะกอน	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-41	STANDARD ^{1/}
Total Petroleum Hydrocarbons					
- TPH (C ₅ - C ₆)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₈ - C ₁₆)	mg/l	3510 C / 8015 D	< 0.025	0.029	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₃₅)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetratriacontane					
- Pentatriacontane					

REFERENCE : US EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE, 1st Ed., 2020.

Jutarat Jaemruen
(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn
(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-0-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL. Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 15/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 09:51-10:24
ANALYTICAL DATE	: 15, 18-22/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026		: 7-239-0-0025
SAMPLE CONDITION	: ขาวฝุ่นใต้ตะกอน	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-42	STANDARD ^{1/}
pH	-	4500-H ⁺ B	< 0.10	7.26	"
Arsenic (As)	mg/l	3114 C	< 0.0001	0.0084	≤ 0.1
Cadmium (Cd)	mg/l	3120 B	< 0.001	ND	≤ 2.0
Lead (Pb)	mg/l	3120 B	< 0.008	ND	≤ 4.0
Mercury (Hg)	mg/l	3112 B	< 0.0001	ND	≤ 0.7
Nickel (Ni)	mg/l	3120 B	< 0.002	ND	≤ 5.0

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th Ed., 2023 (AWWA, APHA, WFP)

Jutarat Jaemruen
(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

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Technical Management Team

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4. - Not available.



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GROUND WATER ANALYSIS REPORT

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SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: -
SAMPLING DATE	: 15/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 15/05/2026	SAMPLING TIME	: 09:51-10:24
ANALYTICAL DATE	: 15/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026		
SAMPLE CONDITION	: ขาวขุ่นมีตะกอน	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-42	STANDARD
Conductivity	µS/cm	2510 B	≤ 1.0	49.190	*
Salinity	ppt	2520 B	≤ 0.01	28.21	*

REFERENCE : STANDARD METHODS FOR EXAMINATION OF WATER AND WASTEWATER 24th ED. 2021 (AWWA APHA WEF)

Pornapa Budthum
(Miss Pornapa Budthum)
Analyst

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(Miss Khemchuda Insom)
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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 15/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 09:51-10:24
ANALYTICAL DATE	: 18-23/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026		: 7-239-0-0025
SAMPLE CONDITION	: ขาวขุ่นมีตะกอน	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-42	STANDARD ^{1/}
Naphthalene	mg/l	6440 C	< 0.00005	ND	≤ 48
Benzene	mg/l	6200 B	< 0.0002	ND	≤ 0.2
Ethylbenzene	mg/l	6200 B	< 0.0002	ND	≤ 2.0
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 24th ED. 2021 (AWWA APHA WEF)

Jutarat Jaermuen
(Miss Jutarat Jaermuen)
Analyst

REG. NO. 7-239-0-0022

Khemchuda Insom
(Miss Khemchuda Insom)
Technical Management Team
REG. NO. 7-239-0-0005

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GROUND WATER ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No	: 0843/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 15/05/2026	SAMPLING METHOD	: Pneumatic Bladder Pump
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 09:51-10:24
ANALYTICAL DATE	: 18-24/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 26/05/2026		: 7-239-0-0025
SAMPLE CONDITION	: ขาวขุ่นมีตะกอน	FILE CODE	: 226010_GW_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-42	STANDARD ¹⁾
Total Petroleum Hydrocarbons					
- TPH (C ₆ - C ₆)	mg/l	5030 C / 8260 D	< 0.003	ND	≤ 1.4
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₈ - C ₁₀)	mg/l	3510 C / 8015 D	< 0.025	ND	≤ 1.7
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₄ - C ₃₃)	mg/l	3510 C / 8015 D	< 0.050	ND	≤ 0.1
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetratriacontane					
- Pentatriacontane					

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

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-0-0005

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คุณภาพดิน



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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0844/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 13/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 15:00
ANALYTICAL DATE : 16,18-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 23/05/2026 FILE CODE : 7-239-0-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาล

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	
				MW-1	STANDARD ¹⁾
pH	-	4500-H ⁺ B	-	8.51	-
Arsenic (As)	mg/kg	3050 B/6010 D	< 2.00	3.71	≤ 27
Cadmium (Cd)	mg/kg	3050 B/6010 D	< 1.00	ND	≤ 810
Lead (Pb)	mg/kg	3050 B/6010 D	< 3.00	5.94	≤ 750
Mercury (Hg)	mg/kg	7471 B	< 0.05	ND	≤ 610
Nickel (Ni)	mg/kg	3050 B/6010 D	< 1.00	1.63	≤ 41,000

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

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

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Technical Management Team

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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0844/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 13/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 15:00
ANALYTICAL DATE : 18, 20-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 23/05/2026 FILE CODE : 7-239-0-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาล

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	
				MW-1	STANDARD ¹⁾
Naphthalene	mg/kg	3540 C / 8270 E	< 0.005	ND	≤ 1,000
Benzene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 15
Ethylbenzene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 230
Toluene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 520
m-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
o-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
p-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
Total Xylenes	mg/kg	5035 A / 8260 D	< 0.00075	ND	≤ 210

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

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

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Technical Management Team

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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No : 0844/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
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ANALYTICAL DATE : 18-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 23/05/2026 FILE CODE : 7-239-0-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาล

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-1	STANDARD ^{1/}
Total Petroleum Hydrocarbon					
- TPH (C ₅ - C ₈)	mg/kg	5035 A / 8260 D	< 0.003	ND	≤ 25
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₉ - C ₁₆)	mg/kg	3540 C / 8015 D	< 0.25	0.45	≤ 25
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₃₅)	mg/kg	3540 C / 8015 D	< 1.85	3.17	≤ 8
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

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

Sudaporn S.

(Miss Sudaporn Soonthorn)

Analyst

REG. NO. 7-239-0-0001

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-0-0005

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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0844/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : -
SAMPLING DATE : 13/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 15:00
ANALYTICAL DATE : 16/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 23/05/2026 FILE CODE : -
SAMPLE CONDITION : ดินร่วนสีน้ำตาล

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-1	STANDARD
Conductivity	dS/m	EC25 (1:5) / Electrical Conductivity	-	0.033	-
Salinity	ppt	EC25 (1:5) / Electrical Conductivity	-	0.0	-

Reference method : Operation Manual Chemical Analysis in Soil, Land Development Department.

Pornnapha Budthum

(Miss Pornnapha Budthum)

Analyst

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0844/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 13/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 11:00
ANALYTICAL DATE : 16,18-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 23/05/2026 FILE CODE : 7-239-0-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาล

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-3	STANDARD ^{1/}
pH	-	4500-H ⁺ B	-	8.72	-
Arsenic (As)	mg/kg	3050 B/6010 D	< 2.00	ND	≤ 27
Cadmium (Cd)	mg/kg	3050 B/6010 D	< 1.00	ND	≤ 810
Lead (Pb)	mg/kg	3050 B/6010 D	< 3.00	ND	≤ 750
Mercury (Hg)	mg/kg	7471B	< 0.05	ND	≤ 610
Nickel (Ni)	mg/kg	3050 B/6010 D	< 1.00	ND	≤ 41,000

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

Jutarat Jaermuen

(Miss Jutarat Jaermuen)

Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-0-0005

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SAMPLING DATE : 13/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 11:00
ANALYTICAL DATE : 18, 20-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 23/05/2026 FILE CODE : 7-239-0-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาล

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-3	STANDARD ^{1/}
Naphthalene	mg/kg	3540 C / 8270 E	< 0.005	ND	≤ 1,000
Benzene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 15
Ethylbenzene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 230
Toluene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 520
m-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
o-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
p-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
Total Xylenes	mg/kg	5035 A / 8260 D	< 0.00075	ND	≤ 210

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

Jutarat Jaermuen

(Miss Jutarat Jaermuen)

Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn

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Technical Management Team

REG. NO. 7-239-0-0005

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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0844/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 13/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 11:00
ANALYTICAL DATE : 18-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 23/05/2026 FILE CODE : 7-239-9-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาล

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-3	STANDARD ¹⁾
Total Petroleum Hydrocarbon					
- TPH (C ₃ - C ₈)	mg/kg	5035 A / 8260 D	< 0.003	ND	≤ 25
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₉ - C ₁₆)	mg/kg	3540 C / 8015 D	< 0.25	0.24	≤ 25
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₃₃)	mg/kg	3540 C / 8015 D	< 1.85	2.40	≤ 8
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

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

Sudaporn S.

(Miss Sudaporn Soonthorn)

Analyst

REG. NO. 7-239-9-0001

Khemchuda Insom

(Miss Khemchuda Insom)

Technical Management Team

REG. NO. 7-239-9-0005

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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0844/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 13/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 11:00
ANALYTICAL DATE : 16/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 23/05/2026 FILE CODE : 7-239-9-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาล

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-3	STANDARD
Conductivity	dS/m	EC25 (1:5) / Electrical Conductivity	-	0.020	-
Salinity	ppt	EC25 (1:5) / Electrical Conductivity	-	0.0	-

Reference method : Operation Manual Chemical Analysis in Soil, Land Development Department.

Pornnapha Budithum

(Miss Pornnapha Budithum)

Analyst

Khemchuda Insom

(Miss Khemchuda Insom)

Technical Management Team

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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0780/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 06/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 10.05
ANALYTICAL DATE : 11-19/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 25/05/2026 FILE CODE : 7-239-ท-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาลแดง

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-09	STANDARD ^{1/}
pH	-	4500-H ⁺ B	-	7.36	-
Arsenic (As)	mg/kg	3050 B/6010 D	< 2.00	12.99	≤ 27
Cadmium (Cd)	mg/kg	3050 B/6010 D	< 1.00	ND	≤ 810
Lead (Pb)	mg/kg	3050 B/6010 D	< 3.00	6.35	≤ 750
Mercury (Hg)	mg/kg	7471 B	< 0.05	ND	≤ 610
Nickel (Ni)	mg/kg	3050 B/6010 D	< 1.00	2.59	≤ 41,000

REFERENCE : US EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE 3rd ED. 2020

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-ท-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-ท-0005

- Remark :**
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 4. - Not available.



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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0780/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 06/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 10:50
ANALYTICAL DATE : 12, 16-18/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 25/05/2026 FILE CODE : 7-239-ท-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาลแดง

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-09	STANDARD ^{1/}
Naphthalene	mg/kg	3540 C / 8270 E	< 0.005	ND	≤ 1,000
Benzene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 15
Ethylbenzene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 230
Toluene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 520
m-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
o-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
p-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
Total Xylenes	mg/kg	5035 A / 8260 D	< 0.00075	ND	≤ 210

REFERENCE : US EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE 3rd ED. 2020

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-ท-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-ท-0005

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SOIL SAMPLES ANALYSIS REPORT

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ANALYTICAL DATE : 16-22/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 25/05/2026 FILE CODE : 7-239-0-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาลแดง

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-09	STANDARD ¹⁾
Total Petroleum Hydrocarbon					
- TPH (C ₅ - C ₉)	mg/kg	5035 A / 8260 D	< 0.003	ND	≤ 25
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₈ - C ₁₆)	mg/kg	3540 C / 8015 D	< 0.25	ND	≤ 25
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₃₅)	mg/kg	3540 C / 8015 D	< 1.85	3.33	≤ 8
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- n-Pentatriacontane					

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

Sudaporn S.

(Miss Sudaporn Soonthorn)

Analyst

REG. NO. 7-239-0-0001

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-0-0005

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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0780/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : -
SAMPLING DATE : 06/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 10:50
ANALYTICAL DATE : 11/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 25/05/2026 FILE CODE : -
SAMPLE CONDITION : ดินร่วนสีน้ำตาลแดง

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-09	STANDARD
Conductivity	dS/m	EC25 (1:5) / Electrical Conductivity	-	0.077	-
Salinity	ppt	EC25 (1:5) / Electrical Conductivity	-	0.0	-

Reference method : Operation Manual Chemical Analysis in Soil, Land Development Department.

Pornnapha Budthum

(Miss Pornnapha Budthum)

Analyst

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

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3. - Not available.



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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0844/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 12/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 15:25
ANALYTICAL DATE : 16,18-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 23/05/2026 FILE CODE : 7-239-0-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาล

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-14	STANDARD ^{1/}
pH	-	4500-H B	-	8.86	-
Arsenic (As)	mg/kg	3050 B/6010 D	< 2.00	11.41	≤ 27
Cadmium (Cd)	mg/kg	3050 B/6010 D	< 1.00	ND	≤ 810
Lead (Pb)	mg/kg	3050 B/6010 D	< 3.00	7.19	≤ 750
Mercury (Hg)	mg/kg	7471 B	< 0.05	ND	≤ 610
Nickel (Ni)	mg/kg	3050 B/6010 D	< 1.00	3.23	≤ 41,000

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

Jutarat Jaermuen

(Miss Jutarat Jaermuen)

Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-0-0005

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CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0844/69
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ANALYTICAL DATE : 18, 20-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 23/05/2026 FILE CODE : 7-239-0-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาล

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-14	STANDARD ^{1/}
Naphthalene	mg/kg	3540 C / 8270 E	< 0.005	ND	≤ 1,000
Benzene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 15
Ethylbenzene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 230
Toluene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 520
m-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
o-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
p-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
Total Xylenes	mg/kg	5035 A / 8260 D	< 0.00075	ND	≤ 210

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

Jutarat Jaermuen

(Miss Jutarat Jaermuen)

Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-0-0005

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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No : 0844/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 2-239
SAMPLING DATE : 12/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 15:25
ANALYTICAL DATE : 18-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 23/05/2026 FILE CODE : 2-239-0-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาล

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-14	STANDARD ^u
Total Petroleum Hydrocarbon					
- TPH (C ₅ - C ₆)	mg/kg	5035 A / 8260 D	< 0.003	ND	≤ 25
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₈ - C ₁₆)	mg/kg	3540 C / 8015 D	< 0.25	ND	≤ 25
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₂₅)	mg/kg	3540 C / 8015 D	< 1.85	2.26	≤ 8
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetratriacontane					
- Pentatriacontane					

REFERENCE : US EPA SW 846 TEST METHODS FOR EVALUATING WATER AND SOLID WASTE 3rd ED. 2020

Sudaporn S.
(Miss Sudaporn Soonthorn)
Analyst

REG. NO. 2-239-0-0001

Khemchuda Insorn
(Miss Khemchuda Insorn)
Technical Management Team

REG. NO. 2-239-0-0005

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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0844/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 2-239
SAMPLING DATE : 12/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 15:25
ANALYTICAL DATE : 16/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 23/05/2026 FILE CODE : 2-239-0-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาล

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-14	STANDARD ^u
Conductivity	dS/m	EC25 (1:5) / Electrical Conductivity	-	0.060	-
Salinity	ppt	EC25 (1:5) / Electrical Conductivity	-	0.00	-

Reference method : Operation Manual Chemical Analysis in Soil, Land Development Department.

Rong Puthum.
(Miss Pornnapa Budthum)
Analyst

Khemchuda Insorn
(Miss Khemchuda Insorn)
Technical Management Team

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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0844/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 07/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 09:35
ANALYTICAL DATE : 16,18-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 23/05/2026 FILE CODE : 7-239-9-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาล

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	
				MW-23	STANDARD ¹⁾
pH		4500-H ⁺ B	-	8.28	-
Arsenic (As)	mg/kg	3050 B/6010 D	< 2.00	ND	≤ 27
Cadmium (Cd)	mg/kg	3050 B/6010 D	< 1.00	ND	≤ 810
Lead (Pb)	mg/kg	3050 B/6010 D	< 3.00	8.29	≤ 750
Mercury (Hg)	mg/kg	7471B	< 0.05	ND	≤ 610
Nickel (Ni)	mg/kg	3050 B/6010 D	< 1.00	11.49	≤ 41,000

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

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

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Technical Management Team

REG. NO. 7-239-9-0005

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RECEIVED DATE : 16/05/2026 SAMPLING TIME : 09:35
ANALYTICAL DATE : 18, 20-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 23/05/2026 FILE CODE : 7-239-9-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาล

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	
				MW-23	STANDARD ¹⁾
Naphthalene	mg/kg	3540 C / 8270 E	< 0.005	0.006	≤ 1,000
Benzene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 15
Ethylbenzene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 230
Toluene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 520
m-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
o-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
p-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
Total Xylenes	mg/kg	5035 A / 8260 D	< 0.00075	ND	≤ 210

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

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Insorn

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Technical Management Team

REG. NO. 7-239-9-0005

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SOIL SAMPLES ANALYSIS REPORT

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RECEIVED DATE : 16/05/2026 SAMPLING TIME : 09:35
ANALYTICAL DATE : 18-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 23/05/2026 FILE CODE : 7-239-9-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาล

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-23	STANDARD ^{1/}
Total Petroleum Hydrocarbon					
- TPH (C ₈ - C ₈)	mg/kg	5035 A / 8260 D	< 0.003	ND	≤ 25
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₈ - C ₁₆)	mg/kg	3540 C / 8015 D	< 0.25	1.95	≤ 25
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₃₅)	mg/kg	3540 C / 8015 D	< 1.85	ND	≤ 8
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

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

Sudaporn S.

(Miss Sudaporn Soonthorn)

Analyst

REG. NO. 7-239-9-0001

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-9-0005

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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0844/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. :
SAMPLING DATE : 07/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 09:35
ANALYTICAL DATE : 16/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 23/05/2026 FILE CODE :
SAMPLE CONDITION : ดินร่วนสีน้ำตาล

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-23	STANDARD ^{1/}
Conductivity	dS/m	EC25 (1:5) / Electrical Conductivity	+	0.044	-
Salinity	ppt	EC25 (1:5) / Electrical Conductivity	+	0.0	-

Reference method : Operation Manual Chemical Analysis in Soil, Land Development Department.

Pornpapa Budthum

(Miss Pornpapa Budthum)

Analyst

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0844/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 11/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 15:30
ANALYTICAL DATE : 16,18-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 23/05/2026 FILE CODE : 7-239-0-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาล

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	
				MW-24	STANDARD ^{1/}
pH	-	4500-H B	-	8.60	-
Arsenic (As)	mg/kg	3050 B/6010 D	< 2.00	ND	≤ 27
Cadmium (Cd)	mg/kg	3050 B/6010 D	< 1.00	ND	≤ 810
Lead (Pb)	mg/kg	3050 B/6010 D	< 3.00	ND	≤ 750
Mercury (Hg)	mg/kg	7471 B	< 0.05	ND	≤ 610
Nickel (Ni)	mg/kg	3050 B/6010 D	< 1.00	ND	≤ 41,000

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

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-0-0005

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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0844/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 11/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 15:30
ANALYTICAL DATE : 18, 20-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 23/05/2026 FILE CODE : 7-239-0-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาล

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	
				MW-24	STANDARD ^{1/}
Naphthalene	mg/kg	3540 C / 8270 E	< 0.005	ND	≤ 1,000
Benzene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 15
Ethylbenzene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 230
Toluene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 520
m-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
o-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
p-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
Total Xylenes	mg/kg	5035 A / 8260 D	< 0.00075	ND	≤ 210

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

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-0-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-0-0005

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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No : 0844/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 11/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 15:30
ANALYTICAL DATE : 18-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 23/05/2026 FILE CODE : 226010_Soil_May
SAMPLE CONDITION : ดินร่วนสีน้ำตาล

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-24	STANDARD ^u
Total Petroleum Hydrocarbon					
- TPH (C ₅ - C ₈)	mg/kg	5035 A / 8260 D	< 0.003	ND	≤ 25
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₉ - C ₁₆)	mg/kg	3540 C / 8015 D	< 0.25	ND	≤ 25
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₃₅)	mg/kg	3540 C / 8015 D	< 1.85	ND	≤ 8
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

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

Sudaporn S.

(Miss Sudaporn Soonthorn)

Analyst

REG. NO. 7-239-9-0001

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-9-0005

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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0844/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. :
SAMPLING DATE : 11/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 15:30
ANALYTICAL DATE : 16/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 23/05/2026 FILE CODE :
SAMPLE CONDITION : ดินร่วนสีน้ำตาล FILE CODE : 226010_Soil_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-24	STANDARD ^u
Conductivity	dS/m	EC25 (1:5) / Electrical Conductivity	-	0.015	-
Salinity	ppt	EC25 (1:5) / Electrical Conductivity	-	0.0	-

Reference method : Operation Manual Chemical Analysis in Soil, Land Development Department.

Pornnapha Budthum

(Miss Pornnapha Budthum)

Analyst

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0780/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 08/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 10:50
ANALYTICAL DATE : 11-19/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 25/05/2026 FILE CODE : 7-239-9-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาลแดง

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-32	STANDARD ¹⁾
pH	-	4500-H ⁺ B	-	8.13	-
Arsenic (As)	mg/kg	3050 B/6010 D	< 2.00	8.37	≤ 27
Cadmium (Cd)	mg/kg	3050 B/6010 D	< 1.00	ND	≤ 810
Lead (Pb)	mg/kg	3050 B/6010 D	< 3.00	7.46	≤ 750
Mercury (Hg)	mg/kg	7471 B	< 0.05	ND	≤ 610
Nickel (Ni)	mg/kg	3050 B/6010 D	< 1.00	5.48	≤ 41,000

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

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-9-0005

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SOIL SAMPLES ANALYSIS REPORT

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SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 08/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 10:50
ANALYTICAL DATE : 12, 16-18/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 25/05/2026 FILE CODE : 7-239-9-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาลแดง

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-32	STANDARD ¹⁾
Naphthalene	mg/kg	3540 C / 8270 E	< 0.005	ND	≤ 1,000
Benzene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 15
Ethylbenzene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 230
Toluene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 520
m-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
o-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
p-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
Total Xylenes	mg/kg	5035 A / 8260 D	< 0.00075	ND	≤ 210

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

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-9-0005

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SOIL SAMPLES ANALYSIS REPORT

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SAMPLING DATE : 08/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 10:50
ANALYTICAL DATE : 16-22/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 25/05/2026 FILE CODE : 7-239-9-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาลแดง

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-32	STANDARD ^{1/}
Total Petroleum Hydrocarbon					
- TPH (C ₈ - C ₁₆)	mg/kg	5035 A / 8260 D	< 0.003	ND	≤ 25
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₈ - C ₁₆)	mg/kg	3540 C / 8015 D	< 0.25	0.66	≤ 25
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₃₅)	mg/kg	3540 C / 8015 D	< 1.85	4.36	≤ 8
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetratriacontane					
- Pentatriacontane					

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

Sudaporn S.

(Miss Sudaporn Soonthorn)

Analyst

REG. NO. 7-239-9-0001

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-9-0005

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SOIL SAMPLES ANALYSIS REPORT

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SAMPLING DATE : 08/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 10:50
ANALYTICAL DATE : 11/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 25/05/2026 FILE CODE : 7-239-9-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาลแดง

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-32	STANDARD
Conductivity	dS/m	EC25 (1:5) / Electrical Conductivity	-	0.030	-
Salinity	ppt	EC25 (1:5) / Electrical Conductivity	-	0.0	-

Reference method : Operation Manual Chemical Analysis in Soil Land Development Department.

Pornpapa Buddhum

(Miss Pornpapa Buddhum)

Analyst

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

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SOIL SAMPLES ANALYSIS REPORT

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SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 08/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 09:30
ANALYTICAL DATE : 11-19/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 25/05/2026 FILE CODE : 7-239-ท-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาลแดง

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-34	STANDARD ^{1/}
pH	-	4500-H ⁺ B	-	8.20	-
Arsenic (As)	mg/kg	3050 B/6010 D	< 2.00	15.26	≤ 27
Cadmium (Cd)	mg/kg	3050 B/6010 D	< 1.00	ND	≤ 810
Lead (Pb)	mg/kg	3050 B/6010 D	< 3.00	6.44	≤ 750
Mercury (Hg)	mg/kg	7471 B	< 0.05	ND	≤ 610
Nickel (Ni)	mg/kg	3050 B/6010 D	< 1.00	ND	≤ 41,000

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

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-ท-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-ท-0005

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SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 08/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 09:30
ANALYTICAL DATE : 12, 16-18/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 25/05/2026 FILE CODE : 7-239-ท-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาลแดง

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-34	STANDARD ^{1/}
Naphthalene	mg/kg	3540 C / 8270 E	< 0.005	ND	≤ 1,000
Benzene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 15
Ethylbenzene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 230
Toluene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 520
m-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
o-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
p-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
Total Xylenes	mg/kg	5035 A / 8260 D	< 0.00075	ND	≤ 210

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

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-ท-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-ท-0005

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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No	: 0780/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 08/05/2026	SAMPLING METHOD	: Hand Auger
RECEIVED DATE	: 11/05/2026	SAMPLING TIME	: 09:30
ANALYTICAL DATE	: 16-22/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 25/05/2026	FILE CODE	: 7-239-9-0025
SAMPLE CONDITION	: ดินร่วนสีน้ำตาลแดง		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-34	STANDARD ^{1/}
Total Petroleum Hydrocarbon					
- TPH (C ₅ - C ₈)	mg/kg	5035 A / 8260 D	< 0.003	ND	≤ 25
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₈ - C ₁₆)	mg/kg	3540 C / 8015 D	< 0.25	0.85	≤ 25
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₃₅)	mg/kg	3540 C / 8015 D	< 1.85	2.82	≤ 8
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetatriacontane					
- Pentatriacontane					

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

Sudaporn S.

(Miss Sudaporn Soonthorn)

Analyst

REG. NO. 7-239-9-0001

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-9-0005

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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0780/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	: 7-239
SAMPLING DATE	: 08/05/2026	SAMPLING METHOD	: Hand Auger
RECEIVED DATE	: 11/05/2026	SAMPLING TIME	: 09:30
ANALYTICAL DATE	: 11/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 25/05/2026	FILE CODE	: 7-239-9-0025
SAMPLE CONDITION	: ดินร่วนสีน้ำตาลแดง		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-34	STANDARD ^{1/}
Conductivity	dS/m	EC25 (1:5) / Electrical Conductivity	-	0.014	-
Salinity	ppt	EC25 (1:5) / Electrical Conductivity	-	0.0	-

Reference method : Operation Manual Chemical Analysis in Soil, Land Development Department.

Bongpa puthum

(Miss Pornnapa Budthum)

Analyst

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0780/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 07/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 15:50
ANALYTICAL DATE : 11-19/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 25/05/2026 FILE CODE : 7-239-9-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาลแดง

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-35	STANDARD ¹⁾
pH		4500-H ⁺ B	-	8.68	-
Arsenic (As)	mg/kg	3050 B/6010 D	< 2.00	5.51	≤ 27
Cadmium (Cd)	mg/kg	3050 B/6010 D	< 1.00	ND	≤ 810
Lead (Pb)	mg/kg	3050 B/6010 D	< 3.00	4.33	≤ 750
Mercury (Hg)	mg/kg	7471 B	< 0.05	ND	≤ 610
Nickel (Ni)	mg/kg	3050 B/6010 D	< 1.00	1.66	≤ 41,000

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

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-9-0005

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SAMPLING DATE : 07/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 15:50
ANALYTICAL DATE : 12, 16-18/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 25/05/2026 FILE CODE : 7-239-9-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาลแดง

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-35	STANDARD ¹⁾
Naphthalene	mg/kg	3540 C / 8270 E	< 0.005	ND	≤ 1,000
Benzene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 15
Ethylbenzene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 230
Toluene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 520
m-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
o-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
p-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
Total Xylenes	mg/kg	5035 A / 8260 D	< 0.00075	ND	≤ 210

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

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

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SOIL SAMPLES ANALYSIS REPORT

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SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 07/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 15:50
ANALYTICAL DATE : 16-22/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 25/05/2026
SAMPLE CONDITION : ดินร่วนสีน้ำตาลแดง FILE CODE : 226010_Soil_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-35	STANDARD ¹⁾
Total Petroleum Hydrocarbon					
- TPH (C ₅ - C ₉)	mg/kg	5035 A / 8260 D	< 0.003	ND	≤ 25
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₈ - C ₁₆)	mg/kg	3540 C / 8015 D	< 0.25	ND	≤ 25
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₃₅)	mg/kg	3540 C / 8015 D	< 1.85	3.38	≤ 8
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

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

Sudaporn S.

(Miss Sudaporn Soonthorn)

Analyst

REG. NO. 7-239-ท-0001

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

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SOIL SAMPLES ANALYSIS REPORT

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SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 07/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 11/05/2026 SAMPLING TIME : 15:50
ANALYTICAL DATE : 11/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 25/05/2026
SAMPLE CONDITION : ดินร่วนสีน้ำตาลแดง FILE CODE : 226010_Soil_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-35	STANDARD ¹⁾
Conductivity	dS/m	EC25 (1:5) / Electrical Conductivity	+	0.040	+
Salinity	ppt	EC25 (1:5) / Electrical Conductivity	+	0.0	+

Reference method : Operation Manual Chemical Analysis in Soil, Land Development Department.

Pornpapa Budthum

(Miss Pornpapa Budthum)

Analyst

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0844/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 14/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 10:56
ANALYTICAL DATE : 16, 18-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 23/05/2026 FILE CODE : 7-239-ท-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาล

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-36	STANDARD ¹⁾
pH	-	4500-H B	-	8.49	-
Cadmium (Cd)	mg/kg	3050 B/6010 D	< 1.00	ND	≤ 810
Lead (Pb)	mg/kg	3050 B/6010 D	< 3.00	6.14	≤ 750
Mercury (Hg)	mg/kg	7471B	< 0.05	ND	≤ 610
Nickel (Ni)	mg/kg	3050 B/6010 D	< 1.00	5.83	≤ 41,000

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

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-ท-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-ท-0005

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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 1027/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 12/06/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 13/06/2026 SAMPLING TIME : 13:05-13:12
ANALYTICAL DATE : 17-18/06/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 20/06/2026 FILE CODE : 7-239-ท-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาล

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-36	STANDARD ¹⁾
Arsenic (As)	mg/kg	3050 B/6010 D	< 2.00	20.76	≤ 27

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

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-ท-0022

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Technical Management Team

REG. NO. 7-239-ท-0005

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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0844/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 14/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 10:56
ANALYTICAL DATE : 18, 20-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 23/05/2026 FILE CODE : 7-239-9-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาล

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-36	STANDARD ^{1/}
Naphthalene	mg/kg	3540 C / 8270 E	< 0.005	ND	≤ 1,000
Benzene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 15
Ethylbenzene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 230
Toluene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 520
m-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
o-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
p-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
Total Xylenes	mg/kg	5035 A / 8260 D	< 0.00075	ND	≤ 210

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

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-9-0022

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REPORT DATE : 23/05/2026 FILE CODE : 7-239-9-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาล

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-36	STANDARD ^{1/}
Total Petroleum Hydrocarbon					
- TPH (C ₃ - C ₈)	mg/kg	5035 A / 8260 D	< 0.003	ND	≤ 25
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₉ - C ₁₆)	mg/kg	3540 C / 8015 D	< 0.25	0.87	≤ 25
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₃₅)	mg/kg	3540 C / 8015 D	< 1.85	2.41	≤ 8
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetratriacontane					
- Pentatriacontane					

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

Sudaporn S.

(Miss Sudaporn Soonthorn)

Analyst

REG. NO. 7-239-9-0001

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-9-0005

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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0844/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : -
SAMPLING DATE : 14/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 10:56
ANALYTICAL DATE : 16/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 23/05/2026 FILE CODE : 226010_Soil_May
SAMPLE CONDITION : ดินร่วนสีน้ำตาล

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-36	STANDARD ²⁾
Conductivity	dS/m	EC25 (1:5) / Electrical Conductivity	-	0.071	-
Salinity	ppt	EC25 (1:5) / Electrical Conductivity	-	0.0	-

Reference method : Operation Manual Chemical Analysis in Soil, Land Development Department.

Bornapa Budthum

(Miss Pornnapa Budthum)
Analyst

Khemchuda Insom

(Miss Khemchuda Insom)
Technical Management Team

- Remark : 1. Reported analysis refers to submitted sample only.
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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0844/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 15/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 10:20
ANALYTICAL DATE : 16,18-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 23/05/2026 FILE CODE : 7-239-0-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาล

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-41	STANDARD ²⁾
pH	-	4500-H ⁺ B	-	8.53	-
Arsenic (As)	mg/kg	3050 B/6010 D	< 2.00	ND	≤ 27
Cadmium (Cd)	mg/kg	3050 B/6010 D	< 1.00	ND	≤ 810
Lead (Pb)	mg/kg	3050 B/6010 D	< 3.00	4.69	≤ 750
Mercury (Hg)	mg/kg	7471B	< 0.05	ND	≤ 610
Nickel (Ni)	mg/kg	3050 B/6010 D	< 1.00	39.35	≤ 41,000

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

Jutarat Jaemruen

(Miss Jutarat Jaemruen)
Analyst

REG. NO. 7-239-0-0022

Khemchuda Insom

(Miss Khemchuda Insom)
Technical Management Team

REG. NO. 7-239-0-0005

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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0844/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 15/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 10:20
ANALYTICAL DATE : 18, 20-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khotamhan
REPORT DATE : 23/05/2026 FILE CODE : 7-239-9-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาล

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-41	STANDARD ^{1/}
Naphthalene	mg/kg	3540 C / 8270 E	< 0.005	ND	≤ 1,000
Benzene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 15
Ethylbenzene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 230
Toluene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 520
m-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
o-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
p-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
Total Xylenes	mg/kg	5035 A / 8260 D	< 0.00075	ND	≤ 210

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

Jutaral Jaemruen

(Miss Jutaral Jaemruen)

Analyst

REG. NO. 7-239-9-0022

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-9-0005

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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0844/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 15/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 10:20
ANALYTICAL DATE : 18-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khotamhan
REPORT DATE : 23/05/2026 FILE CODE : 7-239-9-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาล

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-41	STANDARD ^{1/}
Total Petroleum Hydrocarbon					
- TPH (C ₃ - C ₈)	mg/kg	5035 A / 8260 D	< 0.003	ND	≤ 25
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₉ - C ₁₆)	mg/kg	3540 C / 8015 D	< 0.25	2.16	≤ 25
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₇ - C ₃₅)	mg/kg	3540 C / 8015 D	< 1.85	ND	≤ 8
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetratriacontane					
- Pentaatriacontane					

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

Sudaporn S.

(Miss Sudaporn Soonthorn)

Analyst

REG. NO. 7-239-9-0001

Khemchuda Insorn

(Miss Khemchuda Insorn)

Technical Management Team

REG. NO. 7-239-9-0005

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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0844/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : *
SAMPLING DATE : 15/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 10:20
ANALYTICAL DATE : 16/05/2026 SITE OPERATOR : Mr. Jeerawat Khotamhan
REPORT DATE : 23/05/2026
SAMPLE CONDITION : ดินร่วนสีน้ำตาล FILE CODE : 226010_Soil_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-41	STANDARD ^{1/}
Conductivity	dS/m	EC25 (1:5) / Electrical Conductivity	-	0.059	-
Salinity	ppt	EC25 (1:5) / Electrical Conductivity	-	0.00	-

Reference method : Operation Manual Chemical Analysis in Soil, Land Development Department.

Pornnapa Budthum

(Miss Pornnapa Budthum)
Analyst

Khemchuda Insom

(Miss Khemchuda Insom)
Technical Management Team

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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0844/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 15/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 09:42
ANALYTICAL DATE : 16,18-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khotamhan
REPORT DATE : 23/05/2026
SAMPLE CONDITION : ดินร่วนสีน้ำตาล FILE CODE : 226010_Soil_May

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-42	STANDARD ^{1/}
pH	-	4500-H ⁺ B	-	8.66	-
Arsenic (As)	mg/kg	3050 B/6010 D	< 2.00	ND	≤ 27
Cadmium (Cd)	mg/kg	3050 B/6010 D	< 1.00	ND	≤ 810
Lead (Pb)	mg/kg	3050 B/6010 D	< 3.00	3.38	≤ 750
Mercury (Hg)	mg/kg	7471 B	< 0.05	ND	≤ 610
Nickel (Ni)	mg/kg	3050 B/6010 D	< 1.00	ND	≤ 41,000

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

Jutarat Jaemruen

(Miss Jutarat Jaemruen)
Analyst

REG. NO. 7-239-ท-0022

Khemchuda Insom

(Miss Khemchuda Insom)
Technical Management Team

REG. NO. 7-239-ท-0025

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 4. - Not available.



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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0844/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 15/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 09:42
ANALYTICAL DATE : 18, 20-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 23/05/2026 FILE CODE : 7-239-8-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาล

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-42	STANDARD ¹⁾
Naphthalene	mg/kg	3540 C / 8270 E	< 0.005	ND	≤ 1,000
Benzene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 15
Ethylbenzene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 230
Toluene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 520
m-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
o-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
p-Xylene	mg/kg	5035 A / 8260 D	< 0.00025	ND	≤ 210
Total Xylenes	mg/kg	5035 A / 8260 D	< 0.00075	ND	≤ 210

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

Jutarat Jaemruen

(Miss Jutarat Jaemruen)

Analyst

REG. NO. 7-239-8-0022

Khemchuda Insom

(Miss Khemchuda Insom)

Technical Management Team

REG. NO. 7-239-8-0005

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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME : PTT Global Chemical PCL, Branch 6 (Refinery) REQUEST SERVICE No. : 0844/69
SAMPLING BY : SECOT Co., Ltd. REGISTRATION No. : 7-239
SAMPLING DATE : 15/05/2026 SAMPLING METHOD : Hand Auger
RECEIVED DATE : 16/05/2026 SAMPLING TIME : 09:42
ANALYTICAL DATE : 18-23/05/2026 SITE OPERATOR : Mr. Jeerawat Khothamhan
REPORT DATE : 23/05/2026 FILE CODE : 7-239-8-0025
SAMPLE CONDITION : ดินร่วนสีน้ำตาล

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION MW-42	STANDARD ¹⁾
Total Petroleum Hydrocarbon					
- TPH (C ₅ - C ₉)	mg/kg	5035 A / 8260 D	< 0.003	ND	≤ 25
- Pentane					
- Benzene					
- Toluene					
- m,p-Xylene					
- o-Xylene					
- Ethylbenzene					
- TPH (C ₈ - C ₁₆)	mg/kg	3540 C / 8015 D	< 0.25	0.44	≤ 25
- n-Nonane					
- n-Decane					
- n-Dodecane					
- n-Tetradecane					
- n-Hexadecane					
- TPH (C ₁₆ - C ₃₅)	mg/kg	3540 C / 8015 D	< 1.85	2.16	≤ 8
- n-Octadecane					
- n-Eicosane					
- n-Docosane					
- n-Tetracosane					
- n-Hexacosane					
- n-Octacosane					
- n-Triacontane					
- n-Dotriacontane					
- n-Tetracontane					
- Pentatriacontane					

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

Sudaporn S.

(Miss Sudaporn Soonthorn)

Analyst

REG. NO. 7-239-8-0001

Khemchuda Insom

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Technical Management Team

REG. NO. 7-239-8-0005

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SOIL SAMPLES ANALYSIS REPORT

CLIENT NAME	: PTT Global Chemical PCL, Branch 6 (Refinery)	REQUEST SERVICE No.	: 0844/69
SAMPLING BY	: SECOT Co., Ltd.	REGISTRATION No.	
SAMPLING DATE	: 15/05/2026	SAMPLING METHOD	: Hand Auger
RECEIVED DATE	: 16/05/2026	SAMPLING TIME	: 09:42
ANALYTICAL DATE	: 16/05/2026	SITE OPERATOR	: Mr. Jeerawat Khothamhan
REPORT DATE	: 23/05/2026	FILE CODE	: 226010_Soil_May
SAMPLE CONDITION	: ดินร่วนสีน้ำตาล		

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	STANDARD ¹
				MW-42	
Conductivity	dS/m	EC25 (1:5) / Electrical Conductivity	-	0.023	-
Salinity	ppt	EC25 (1:5) / Electrical Conductivity	-	0.0	-

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

(Miss Pornnapa Budthum)
Analyst

(Miss Khemchuda Insorn)
Technical Management Team

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3. - Not available.

ระดับเสียงในพื้นที่ทำงาน



Noise Monitoring Result : Working Noise MTR-PTTGC6-Refinery

Location : Air Compressor (K-1701 A, B and Spare) (Panel 3)		Monitor Period : Feb 24, 2026	
SLM Model : SCARLET ST-21D		Serial No : 820729	
Site Operator : Mr.Chanapon Oakkharaplon			
Calibrator Model : Cirrus CR:515		Serial No : 97097	
Calibration Ref dB(A) : 94.0		Certified Date : Oct 14 2025	
SLM Reading / Adjust dB(A) : 93.8/0.0		Expire Date : Oct 13 2026	
Cal Sheet No.: CR-515-2026-043			
Time	Equivalent Sound Pressure Level (dB(A))		
	Feb 24, 2026		
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	83.3		
09:00 - 10:00	83.0		
10:00 - 11:00	83.0		
11:00 - 12:00	82.9		
12:00 - 13:00	82.8		
13:00 - 14:00	82.8		
14:00 - 15:00	82.8		
15:00 - 16:00	82.9		
16:00 - 17:00			
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)*	82.9		
Lmax **	88.9		
Standard-8Hr	90 dB(A)		
Standard-Max	140 dB(A)		

Remark : * Average time between 08:00-16:00

** Maximum Sound Pressure Level between 08:00-16:00


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Sununta Sirawuttinanon)
Technical Management Team



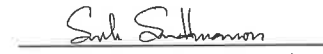
Noise Monitoring Result : Working Noise MTR-PTTGC6-Refinery

Location : Air Blower (K-1001 of K-1003) (Panel 1)		Monitor Period : Feb 24, 2026	
SLM Model : SCARLET ST-21D		Serial No : 821078	
Site Operator : Mr.Chanapon Oakkharaplon			
Calibrator Model : Cirrus CR:515		Serial No : 97097	
Calibration Ref dB(A) : 94.0		Certified Date : Oct 14 2025	
SLM Reading / Adjust dB(A) : 93.8/0.0		Expire Date : Oct 13 2026	
Cal Sheet No.: CR-515-2026-043			
Time	Equivalent Sound Pressure Level (dB(A))		
	Feb 24, 2026		
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	82.5		
09:00 - 10:00	82.5		
10:00 - 11:00	82.9		
11:00 - 12:00	84.1		
12:00 - 13:00	82.3		
13:00 - 14:00	82.4		
14:00 - 15:00	82.4		
15:00 - 16:00	82.4		
16:00 - 17:00			
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)*	82.7		
Lmax **	88.1		
Standard-8Hr	90 dB(A)		
Standard-Max	140 dB(A)		

Remark : * Average time between 08:00-16:00

** Maximum Sound Pressure Level between 08:00-16:00


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Sununta Sirawuttinanon)
Technical Management Team



Noise Monitoring Result : Working Noise

MTR-PTTGC6-Refinery

Location : Fan (Below E-1791) (Panel 3) Monitor Period : Feb 24, 2026
 SLM Model : SCARLET ST-21D Serial No : 820725
 Site Operator : Mr.Chanapon Oakkharaplon

Calibrator Model : Cirrus CR:515 Serial No : 97097
 Calibration Ref dB(A) : 94.0 Certified Date : Oct 14 2025
 SLM Reading / Adjust dB(A) : 93.8/0.0 Expire Date : Oct 13 2026
 Cal Sheet No.: CR-515-2026-043

Time	Equivalent Sound Pressure Level (dB(A))	
	Feb 24, 2026	
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	82.6	
09:00 - 10:00	80.4	
10:00 - 11:00	80.3	
11:00 - 12:00	80.4	
12:00 - 13:00	80.3	
13:00 - 14:00	80.3	
14:00 - 15:00	80.4	
15:00 - 16:00	80.4	
16:00 - 17:00		
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)*	80.7	
Lmax **	98.5	
Standard-8Hr	90 dB(A)	
Standard-Max	140 dB(A)	

Remark : * Average time between 08:00-16:00

** Maximum Sound Pressure Level between 08:00-16:00

(Miss Katesarin Vorradetwittaya)
 Environmental Scientist

(Miss Sununta Sirawuttinanon)
 Technical Management Team



Noise Monitoring Result : Working Noise

MTR-PTTGC6-Refinery

Location : Generator (Gas Turbine) (Panel 4) Monitor Period : Feb 24, 2026
 SLM Model : SCARLET ST-21D Serial No : 821079
 Site Operator : Mr.Chanapon Oakkharaplon

Calibrator Model : Cirrus CR:515 Serial No : 97097
 Calibration Ref dB(A) : 94.0 Certified Date : Oct 14 2025
 SLM Reading / Adjust dB(A) : 93.8/0.0 Expire Date : Oct 13 2026
 Cal Sheet No.: CR-515-2026-043

Time	Equivalent Sound Pressure Level (dB(A))	
	Feb 24, 2026	
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	80.2	
09:00 - 10:00	80.0	
10:00 - 11:00	80.0	
11:00 - 12:00	79.9	
12:00 - 13:00	79.9	
13:00 - 14:00	79.9	
14:00 - 15:00	80.0	
15:00 - 16:00	79.9	
16:00 - 17:00		
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)*	80.0	
Lmax **	88.5	
Standard-8Hr	90 dB(A)	
Standard-Max	140 dB(A)	

Remark : * Average time between 08:00-16:00

** Maximum Sound Pressure Level between 08:00-16:00

(Miss Katesarin Vorradetwittaya)
 Environmental Scientist

(Miss Sununta Sirawuttinanon)
 Technical Management Team



Noise Monitoring Result : Working Noise

MTR-PTTGC6-Refinery

Location : Steam Turbine (Steam Generators) (Panel 4)		Monitor Period : Feb 24, 2026	
SLM Model : SCARLET ST-21D		Serial No : 821080	
Site Operator : Mr.Chanapon Oakkharaplon			
Calibrator Model : Cirrus CR:515		Serial No : 97097	
Calibration Ref dB(A) : 94.0		Certified Date : Oct 14 2025	
SLM Reading / Adjust dB(A) : 93.8/0.0		Expire Date : Oct 13 2026	
Cal Sheet No.: CR-515-2026-043			

Time	Equivalent Sound Pressure Level (dB(A))	
	Feb 24, 2026	
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		83.2
08:00 - 09:00		83.1
09:00 - 10:00		83.1
10:00 - 11:00		83.0
11:00 - 12:00		83.1
12:00 - 13:00		83.1
13:00 - 14:00		83.3
14:00 - 15:00		83.1
15:00 - 16:00		
16:00 - 17:00		
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)*	83.1
Lmax **	90.3
Standard-8Hr	90 dB(A)
Standard-Max	140 dB(A)

Remark : * Average time between 07:00-15:00

** Maximum Sound Pressure Level between 07:00-15:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Sununta Sirawuttinanon)
Technical Management Team



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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. : 226010-TWA-2602-0068
Branch 6 (Refinery)

MEASUREMENT BY : SECOT Co., Ltd. MEASUREMENT DATE : 24/02/2026

OPERATOR : Miss Wiraya Patchimboon INSTRUMENT : Dosimeter

INSTRUMENT MODEL : PULSAR 22 INSTRUMENT SERIAL NO. : PB617

CALIBRATOR MODEL : PULSAR 22R CALIBRATOR SERIAL NO. : 79781

CALIBRATION REF. : 1,000 Hz, 114 dB CALIBRATION DATE : 01/04/2025

READING / ADJUST : 114.0/0.0 EXPIRE DATE : 31/03/2026

CAL SHEET NO. : NC-PULSAR-2026-018

LOCATION	TIME	%DOSE	SOUND PRESSURE LEVEL (dBA)	
			TWA (12 hr)	STANDARD*
Operator Panel 1	07.33-19.00	59.6	81.0	83.0

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Sununta Sirawuttinanon)
Technical Management Team

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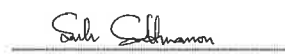
NOISE MEASUREMENT REPORT : NOISE DOSE

CLIENT NAME : PTT Global Chemical Public Co., Ltd. REFERENCE NO. : 226010-TWA-2603-0259
Branch 6 (Refinery)
MEASUREMENT BY : SECOT Co., Ltd. MEASUREMENT DATE : 31/03/2026
OPERATOR : Miss Wiraya Patchimboon INSTRUMENT : Dosimeter
INSTRUMENT MODEL : CR110A INSTRUMENT SERIAL NO. : CB1026

CALIBRATOR MODEL : CIRRUS CALIBRATOR SERIAL NO. : 95167
CALIBRATION REF. : 1,000 Hz, 114 dB CALIBRATION DATE : 02/03/2026
READING / ADJUST : 113.1/0.9 EXPIRE DATE : 01/03/2027
CAL SHEET NO. : NC-CIRRUS-2026-055

LOCATION	TIME	%DOSE	SOUND PRESSURE LEVEL (dBA)	
			TWA (12 hr)	STANDARD*
Operator Panel 2	07.57-19.03	42.6	79.6	83.0


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Sununta Sirawuttinanon)
Technical Management Team

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

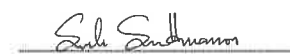
NOISE MEASUREMENT REPORT : NOISE DOSE

CLIENT NAME : PTT Global Chemical Public Co., Ltd. REFERENCE NO. : 226010-TWA-2602-0068
Branch 6 (Refinery)
MEASUREMENT BY : SECOT Co., Ltd. MEASUREMENT DATE : 24/02/2026
OPERATOR : Miss Wiraya Patchimboon INSTRUMENT : Dosimeter
INSTRUMENT MODEL : PULSAR 22 INSTRUMENT SERIAL NO. : PB621

CALIBRATOR MODEL : PULSAR 22R CALIBRATOR SERIAL NO. : 79781
CALIBRATION REF. : 1,000 Hz, 114 dB CALIBRATION DATE : 01/04/2025
READING / ADJUST : 113.6/0.4 EXPIRE DATE : 31/03/2026
CAL SHEET NO. : NC-PULSAR-2026-018

LOCATION	TIME	%DOSE	SOUND PRESSURE LEVEL (dBA)	
			TWA (12 hr)	STANDARD*
Operator Panel 3	07.28-19.00	22.6	76.8	83.0


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Sununta Sirawuttinanon)
Technical Management Team

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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. : 226010-TWA-2602-0068
Branch 6 (Refinery)

MEASUREMENT BY : SECOT Co., Ltd. MEASUREMENT DATE : 24/02/2026

OPERATOR : Miss Wiraya Patchimboon INSTRUMENT : Dosimeter

INSTRUMENT MODEL : PULSAR 22 INSTRUMENT SERIAL NO. : PB632

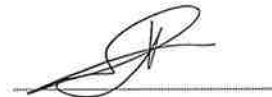
CALIBRATOR MODEL : PULSAR 22R CALIBRATOR SERIAL NO. : 79781

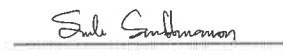
CALIBRATION REF. : 1,000 Hz, 114 dB CALIBRATION DATE : 01/04/2025

READING / ADJUST : 113.9/0.1 EXPIRE DATE : 31/03/2026

CAL SHEET NO. : NC-PULSAR-2026-018

LOCATION	TIME	%DOSE	SOUND PRESSURE LEVEL (dBA)	
			TWA (12 hr)	STANDARD*
Operator Panel 4	07.29-19.00	9.7	73.2	83.0


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Sununta Sirawuttinanon)
Technical Management Team

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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. : 226010-TWA-2602-0068
Branch 6 (Refinery)

MEASUREMENT BY : SECOT Co., Ltd. MEASUREMENT DATE : 24/02/2026

OPERATOR : Miss Wiraya Patchimboon INSTRUMENT : Dosimeter

INSTRUMENT MODEL : PULSAR 22 INSTRUMENT SERIAL NO. : PB638

CALIBRATOR MODEL : PULSAR 22R CALIBRATOR SERIAL NO. : 79781

CALIBRATION REF. : 1,000 Hz, 114 dB CALIBRATION DATE : 01/04/2025

READING / ADJUST : 113.9/0.1 EXPIRE DATE : 31/03/2026

CAL SHEET NO. : NC-PULSAR-2026-018

LOCATION	TIME	%DOSE	SOUND PRESSURE LEVEL (dBA)	
			TWA (12 hr)	STANDARD*
Operator Panel 5	07.27-19.00	77.0	82.1	83.0


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Sununta Sirawuttinanon)
Technical Management Team

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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	: EED/SECOT Co., Ltd.	Request Service No.	: 0282/69
For	: PTT Global Chemical Public Co., Ltd. Branch 6 (Refinery GC6)	Sampling Date	: 11/02/2026
Address	: No.8, I-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Mueang Rayong , Rayong Province 21150	Received Date	: 17/02/2026
		Test Date	: 24/02/2026
Tel/Fax	: 0-3897-1000 / -	Report Date	: 02/03/2026

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 ppm	RESULT ppm	STANDARD ppm
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Panel 1 :

Sour Water P-1108	11/02/2026 09:14-13:14	Hydrogen sulfide	NIOSH 6013/IC	< 0.03	ND	20
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Analyst By : Bongsa Budthum
(Miss Pornnapa Budthum)

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

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

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- ND = non-detectable.



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

ANALYSIS/TEST REPORT

Customer	: EED/SECOT Co., Ltd.	Request Service No.	: 0820/69
For	: PTT Global Chemical Public Co., Ltd. Branch 6 (Refinery GC6)	Sampling Date	: 11/05/2026
Address	: No.8, I-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Mueang Rayong , Rayong Province 21150	Received Date	: 14/05/2026
		Test Date	: 19/05/2026
Tel/Fax	: 0-3897-1000 / -	Report Date	: 25/05/2026

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 ppm	RESULT ppm	STANDARD ppm
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Panel 1 :

Sour Water P-1108	11/05/2026 11:59-15:59	Hydrogen sulfide	NIOSH 6013/IC	< 0.03	ND	20
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Analyst By : Bongsa Budthum
(Miss Pornnapa Budthum)

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

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

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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	: EED/SECOT Co., Ltd.	Request Service No.	: 0282/69
For	: PTT Global Chemical Public Co., Ltd, Branch 6 (Refinery GC6)	Sampling Date	: 11/02/2026
Address	: No.8, I-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Mueang Rayong , Rayong Province 21150	Received Date	: 17/02/2026
		Test Date	: 19/02/2026
Tel/Fax	: 0-3897-1000 / -	Report Date	: 02/03/2026

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 ppm	RESULT ppm	STANDARD ppm
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Panel 1 :

Sour Water P-1108	11/02/2026 09:14-09:29	Total Hydrocarbon	THC Analyzer / FID	≤ 0.10	7.52	-
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Analyst By : Sudaporn S.
(Miss Sudaporn Soonthorn)

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

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

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3. ND = non-detectable
4. - No Standard.



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

ANALYSIS/TEST REPORT

Customer	: EED/SECOT Co., Ltd.	Request Service No.	: 0820/69
For	: PTT Global Chemical Public Co., Ltd, Branch 6 (Refinery GC6)	Sampling Date	: 11/05/2026
Address	: No.8, I-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Mueang Rayong , Rayong Province 21150	Received Date	: 14/05/2026
		Test Date	: 23/05/2026
Tel/Fax	: 0-3897-1000 / -	Report Date	: 25/05/2026

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 ppm	RESULT ppm	STANDARD ppm
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Panel 1 :

Sour Water P-1108	11/05/2026 11:59-12:14	Total Hydrocarbon	THC Analyzer / FID	≤ 0.10	8.74	-
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Analyst By : Sudaporn S.
(Miss Sudaporn Soonthorn)

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

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

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4. - No Standard.



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ANALYSIS/TEST REPORT

Customer	: EED/SECOT Co., Ltd.	Request Service No.	: 0282/69
For	: PTT Global Chemical Public Co., Ltd, Branch 6 (Refinery GC6)	Sampling Date	: 11/02/2026
Address	: No.8, I-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Mueang Rayong , Rayong Province 21150	Received Date	: 17/02/2026
		Test Date	: 20/02/2026
Tel/Fax	: 0-3897-1000 / -	Report Date	: 02/03/2026

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
Panel 1 :						
Sour Water P-1108	11/02/2026 09:14-13:14	Benzene	OSHA 1005/ GC FID	<0.04	ND	1

Analyst By :

Sudaporn S.
(Miss Sudaporn Soonthorn)

Approved By :

Narisa Poowasanpetch
(Miss Narisa Poowasanpetch)
Technical Management Team

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

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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	: EED/SECOT Co., Ltd.	Request Service No.	: 0820/69
For	: PTT Global Chemical Public Co., Ltd, Branch 6 (Refinery GC6)	Sampling Date	: 11/05/2026
Address	: No.8, I-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Mueang Rayong , Rayong Province 21150	Received Date	: 14/05/2026
		Test Date	: 21/05/2026
Tel/Fax	: 0-3897-1000 / -	Report Date	: 25/05/2026

SAMPLE DESCRIPTION / SAMPLING INFORMATION

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

Sampling Location	Sampling	Compound	Analytical	ND	RESULT	STANDARD	
	Date/Time			Method	ppm	ppm	ppm
Panel 1 :							
Sour Water P-1108	11/05/2026 11:59-15:59	Benzene	OSHA 1005/ GC FID	< 0.04	ND	1	

Analyst By :

Sudaporn S.
(Miss Sudaporn Soonthorn)

Approved By :

Narisa Poowasanpetch
(Miss Narisa Poowasanpetch)
Technical Management Team

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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	: EED/SECOT Co., Ltd.	Request Service No.	: 0283/69
For	: PTT Global Chemical Public Co., Ltd, Branch 6 (Refinery GC6)	Sampling Date	: 12/02/2026
Address	: No.8, I-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Mueang Rayong , Rayong Province 21150	Received Date	: 17/02/2026
Tel/Fax	: 0-3897-1000 / -	Test Date	: 24/02/2026
		Report Date	: 05/03/2026

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 ppm	RESULT ppm	STANDARD ppm
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Panel 2 :

Naphtha Feed Pump (P-1052 A/B)	12/02/2026 09:03-13:03	Hydrogen sulfide	NIOSH 6013/IC	< 0.03	ND	20
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Analyst By : Bongpa mutthum
(Miss Pornnapa Budithum)

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

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

ANALYSIS/TEST REPORT

Customer	: EED/SECOT Co., Ltd.	Request Service No.	: 0820/69
For	: PTT Global Chemical Public Co., Ltd, Branch 6 (Refinery GC6)	Sampling Date	: 11/05/2026
Address	: No.8, I-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Mueang Rayong , Rayong Province 21150	Received Date	: 14/05/2026
Tel/Fax	: 0-3897-1000 / -	Test Date	: 19/05/2026
		Report Date	: 25/05/2026

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 ppm	RESULT ppm	STANDARD ppm
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Panel 2 :

Naphtha feed pump (P-1052 A/B)	11/05/2026 12:09-16:09	Hydrogen sulfide	NIOSH 6013/IC	< 0.03	ND	20
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Analyst By : Bongpa mutthum
(Miss Pornnapa Budithum)

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

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

ANALYSIS/TEST REPORT

Customer	: EED/SECOT Co., Ltd.	Request Service No.	: 0283/69
For	: PTT Global Chemical Public Co., Ltd, Branch 6 (Refinery GC6)	Sampling Date	: 12/02/2026
Address	: No 8, I-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Mueang Rayong , Rayong Province 21150	Received Date	: 17/02/2026
		Test Date	: 19/02/2026
Tel/Fax	: 0-3897-1000 / -	Report Date	: 05/03/2026

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
Panel 2 :						
Naptha Feed Pump (P-1052 A/B)	12/02/2026 09:15-09:30	Total Hydrocarbon	THC Analyzer / FID	< 0.10	5.77	-

Analyst By :

Sudaporn S.

(Miss Sudaporn Soonthorn)

Approved By :

Mairisa Poowasanpetch

(Miss Narisa Poowasanpetch)

Technical Management Team

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

ANALYSIS/TEST REPORT

Customer	: EED/SECOT Co., Ltd.	Request Service No.	: 0820/69
For	: PTT Global Chemical Public Co., Ltd, Branch 6 (Refinery GC6)	Sampling Date	: 11/05/2026
Address	: No.8, I-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Mueang Rayong , Rayong Province 21150	Received Date	: 14/05/2026
		Test Date	: 23/05/2026
Tel/Fax	: 0-3897-1000 / -	Report Date	: 25/05/2026

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
Panel 2 :						
Naphtha feed pump (P-1052 A/B)	11/05/2026 12:26-12:41	Total Hydrocarbon	THC Analyzer / FID	< 0.10	7.12	-

Analyst By :

Sudaporn S.

(Miss Sudaporn Soonthorn)

Approved By :

Mairisa Poowasanpetch

(Miss Narisa Poowasanpetch)

Technical Management Team

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

ANALYSIS/TEST REPORT

Customer	: EED/SECOT Co., Ltd.	Request Service No.	: 0282/69
For	: PTT Global Chemical Public Co., Ltd, Branch 6 (Refinery GC6)	Sampling Date	: 12/02/2026
Address	: No.8, I-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Mueang Rayong , Rayong Province 21150	Received Date	: 17/02/2026
Tel/Fax	: 0-3897-1000 / -	Test Date	: 20/02/2026
		Report Date	: 02/03/2026

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 ppm	RESULT ppm	STANDARD ppm
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Panel 2 :

Naphtha feed pump (P-1052 A/B)	12/02/2026 09:03-13:03	Benzene	OSHA 1005/ GC FID	< 0.04	ND	1
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Analyst By : Sudaporn S.
(Miss Sudaporn Soonthorn)

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

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ANALYSIS/TEST REPORT

Customer	: EED/SECOT Co., Ltd.	Request Service No.	: 0820/69
For	: PTT Global Chemical Public Co., Ltd, Branch 6 (Refinery GC6)	Sampling Date	: 11/05/2026
Address	: No.8, I-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Mueang Rayong , Rayong Province 21150	Received Date	: 14/05/2026
Tel/Fax	: 0-3897-1000 / -	Test Date	: 21/05/2026
		Report Date	: 25/05/2026

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 ppm	RESULT ppm	STANDARD ppm
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Panel 2 :

Naphtha feed pump (P-1052 A/B)	11/05/2026 12:09-16:09	Benzene	OSHA 1005/ GC FID	< 0.04	ND	1
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Analyst By : Sudaporn S.
(Miss Sudaporn Soonthorn)

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

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ANALYSIS/TEST REPORT

Customer	: EED/SECOT Co., Ltd.	Request Service No.	: 0283/69
For	: PTT Global Chemical Public Co., Ltd, Branch 6 (Refinery GC6)	Sampling Date	: 12/02/2026
Address	: No.8, I-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Mueang Rayong , Rayong Province 21150	Received Date	: 17/02/2026
		Test Date	: 19/02/2026
Tel/Fax	: 0-3897-1000 / -	Report Date	: 05/03/2026

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
Panel 2 :						
Naptha Feed Pump (P-1052)	12/02/2026 09:15-09:30	NMHC	NMHC Analyzer / FID	≤ 0.05	0.05	-

Analyst By :

Sudaporn S.

(Miss Sudaporn Soonthorn)

Approved By :

Narisa Poowasanpetch

(Miss Narisa Poowasanpetch)

Technical Management Team

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ANALYSIS/TEST REPORT

Customer	: EED/SECOT Co., Ltd.	Request Service No.	: 0820/69
For	: PTT Global Chemical Public Co., Ltd, Branch 6 (Refinery GC6)	Sampling Date	: 11/05/2026
Address	: No.8, I-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Mueang Rayong , Rayong Province 21150	Received Date	: 14/05/2026
		Test Date	: 23/05/2026
Tel/Fax	: 0-3897-1000 / -	Report Date	: 25/05/2026

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
Panel 2 :						
Naphtha feed pump (P-1052 A/B)	11/05/2026 12:09-12:24	NMHC	NMHC Analyzer / FID	< 0.05	1.53	0.05

Analyst By :

Sudaporn S.

(Miss Sudaporn Soonthorn)

Approved By :

Narisa Poowasanpetch

(Miss Narisa Poowasanpetch)

Technical Management Team

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

ANALYSIS/TEST REPORT

Customer	: EED/SECOT Co., Ltd.	Request Service No.	: 0283/69
For	: PTT Global Chemical Public Co., Ltd, Branch 6 (Refinery GC6)	Sampling Date	: 13/02/2026
Address	: No.8, I-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Mueang Rayong , Rayong Province 21150	Received Date	: 17/02/2026
Tel/Fax	: 0-3897-1000 / -	Test Date	: 24/02/2026
		Report Date	: 05/03/2026

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 ppm	RESULT ppm	STANDARD ppm
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Panel 3 :

Sour Water feed pump (P-2401)	13/02/2026 08:47-12:47	Hydrogen sulfide	NIOSH 6013/IC	≤ 0.03	ND	20
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Analyst By : Bongpa Puthum
(Miss Pornnapa Budthum)

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

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

ANALYSIS/TEST REPORT

Customer	: EED/SECOT Co., Ltd.	Request Service No.	: 0820/69
For	: PTT Global Chemical Public Co., Ltd, Branch 6 (Refinery GC6)	Sampling Date	: 11/05/2026
Address	: No.8, I-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Mueang Rayong , Rayong Province 21150	Received Date	: 14/05/2026
Tel/Fax	: 0-3897-1000 / -	Test Date	: 19/05/2026
		Report Date	: 25/05/2026

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 ppm	RESULT ppm	STANDARD ppm
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Panel 3 :

Sour Water feed pump (P-2401)	11/05/2026 11:46-15:46	Hydrogen sulfide	NIOSH 6013/IC	< 0.03	ND	20
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Analyst By : Bongpa Puthum
(Miss Pornnapa Budthum)

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

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

ANALYSIS/TEST REPORT

Customer	: EED/SECOT Co., Ltd.	Request Service No.	: 0282/69
For	: PTT Global Chemical Public Co., Ltd, Branch 6 (Refinery GC6)	Sampling Date	: 13/02/2026
Address	: No.8, I-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Mueang Rayong , Rayong Province 21150	Received Date	: 17/02/2026
Tel/Fax	: 0-3897-1000 / -	Test Date	: 19/02/2026
		Report Date	: 02/03/2026

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 ppm	RESULT ppm	STANDARD ppm
Panel 3 : Sour Water feed pump (P-2401)	13/02/2026 08:50-09:05	Total Hydrocarbon	THC Analyzer / FID	< 0.10	3.39	-

Analyst By :

Sudaporn S.

(Miss Sudaporn Soonthorn)

Approved By :

Miss Narisa Poowasanpetch

(Miss Narisa Poowasanpetch)

Technical Management Team

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

ANALYSIS/TEST REPORT

Customer	: EED/SECOT Co., Ltd.	Request Service No.	: 0820/69
For	: PTT Global Chemical Public Co., Ltd, Branch 6 (Refinery GC6)	Sampling Date	: 11/05/2026
Address	: No.8, I-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Mueang Rayong , Rayong Province 21150	Received Date	: 14/05/2026
Tel/Fax	: 0-3897-1000 / -	Test Date	: 23/05/2026
		Report Date	: 25/05/2026

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 ppm	RESULT ppm	STANDARD ppm
Panel 3 : Sour Water feed pump (P-2401)	11/05/2026 11:46-12:01	Total Hydrocarbon	THC Analyzer / FID	< 0.10	9.42	-

Analyst By :

Sudaporn S.

(Miss Sudaporn Soonthorn)

Approved By :

Miss Narisa Poowasanpetch

(Miss Narisa Poowasanpetch)

Technical Management Team

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

ANALYSIS/TEST REPORT

Customer	: EED/SECOT Co., Ltd.	Request Service No.	: 0283/69
For	: PTT Global Chemical Public Co., Ltd. Branch 6 (Refinery GC6)	Sampling Date	: 13/02/2026
Address	: No.8, I-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Mueang Rayong , Rayong Province 21150	Received Date	: 17/02/2026
Tel/Fax	: 0-3897-1000 / -	Test Date	: 20/02/2026
		Report Date	: 05/03/2026

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
Panel 3 :						
Sour Water feed pump (P-2401)	13/02/2026 08:47-12:47	Benzene	OSHA 1005/ GC FID	< 0.04	ND	1

Analyst By :

Sudaporn S.

(Miss Sudaporn Soonthorn)

Approved By :

Miss Narisa Poowasanpetch

(Miss Narisa Poowasanpetch)

Technical Management Team

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ANALYSIS/TEST REPORT

Customer	: EED/SECOT Co., Ltd.	Request Service No.	: 0820/69
For	: PTT Global Chemical Public Co., Ltd. Branch 6 (Refinery GC6)	Sampling Date	: 11/05/2026
Address	: No.8, I-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Mueang Rayong , Rayong Province 21150	Received Date	: 14/05/2026
Tel/Fax	: 0-3897-1000 / -	Test Date	: 21/05/2026
		Report Date	: 25/05/2026

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
Panel 3 :						
Sour Water feed pump (P-2401)	11/05/2026 11:46-15:46	Benzene	OSHA 1005/ GC FID	< 0.04	ND	1

Analyst By :

Sudaporn S.

(Miss Sudaporn Soonthorn)

Approved By :

Miss Narisa Poowasanpetch

(Miss Narisa Poowasanpetch)

Technical Management Team

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

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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	: EED/SECOT Co., Ltd.	Request Service No.	: 0282/69
For	: PTT Global Chemical Public Co., Ltd. Branch 6 (Refinery GC6)	Sampling Date	: 13/02/2026
Address	: No.8, 1-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Mueang Rayong, Rayong Province 21150	Received Date	: 17/02/2026
Tel/Fax	: 0-3897-1000 / -	Test Date	: 19/02/2026
		Report Date	: 02/03/2026

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 ppm	RESULT ppm	STANDARD ppm
Panel 4 : Refinery Fuel Gas (P-3861)	13/02/2026 09:20-09:35	Total Hydrocarbon	THC Analyzer / FID	< 0.10	5.68	-

Analyst By :

Sudaporn S.

(Miss Sudaporn Soonthorn)

Approved By :

Miss Narisa Poowasanpetch

(Miss Narisa Poowasanpetch)

Technical Management Team

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ANALYSIS/TEST REPORT

Customer	: EED/SECOT Co., Ltd.	Request Service No.	: 0820/69
For	: PTT Global Chemical Public Co., Ltd. Branch 6 (Refinery GC6)	Sampling Date	: 11/05/2026
Address	: No.8, 1-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Mueang Rayong, Rayong Province 21150	Received Date	: 14/05/2026
Tel/Fax	: 0-3897-1000 / -	Test Date	: 23/05/2026
		Report Date	: 25/05/2026

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 ppm	RESULT ppm	STANDARD ppm
Panel 4 : Refinery Fuel Gas (P-3861)	11/05/2026 12:02-12:17	Total Hydrocarbon	THC Analyzer / FID	< 0.10	7.23	-

Analyst By :

Sudaporn S.

(Miss Sudaporn Soonthorn)

Approved By :

Miss Narisa Poowasanpetch

(Miss Narisa Poowasanpetch)

Technical Management Team

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

ANALYSIS/TEST REPORT

Customer	: EED/SECOT Co., Ltd.	Request Service No.	: 0318/69
For	: PTT Global Chemical Public Co., Ltd, Branch 6 (Refinery GC6)	Sampling Date	: 17/02/2026
Address	: No.8, I-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Mueang Rayong , Rayong Province 21150	Received Date	: 23/02/2026
Tel/Fax	: 0-3897-1000 / -	Test Date	: 25/02/2026
		Report Date	: 05/03/2026

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 ppm	RESULT ppm	STANDARD ppm
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Panel 5 :

Sour Water Pump (P-2802)	17/02/2026 11:20-14:20	Hydrogen sulfide	NIOSH 6013/IC	< 0.03	ND	20
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Analyst By : Pornapa Budthum
(Miss Pornapa Budthum)

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

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

ANALYSIS/TEST REPORT

Customer	: EED/SECOT Co., Ltd.	Request Service No.	: 0820/69
For	: PTT Global Chemical Public Co., Ltd, Branch 6 (Refinery GC6)	Sampling Date	: 11/05/2026
Address	: No.8, I-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Mueang Rayong , Rayong Province 21150	Received Date	: 14/05/2026
Tel/Fax	: 0-3897-1000 / -	Test Date	: 19/05/2026
		Report Date	: 25/05/2026

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 ppm	RESULT ppm	STANDARD ppm
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Panel 5 :

Sour Water Pump (P-2802)	11/05/2026 11:52-15:52	Hydrogen sulfide	NIOSH 6013/IC	< 0.03	0.20	20
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Analyst By : Pornapa Budthum
(Miss Pornapa Budthum)

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

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

ANALYSIS/TEST REPORT

Customer	: EED/SECOT Co., Ltd.	Request Service No.	: 0318/69
For	: PTT Global Chemical Public Co., Ltd, Branch 6 (Refinery GC6)	Sampling Date	: 17/02/2026
Address	: No.8, I-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Mueang Rayong , Rayong Province 21150	Received Date	: 23/02/2026
		Test Date	: 25/02/2026
Tel/Fax	: 0-3897-1000 / -	Report Date	: 05/03/2026

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 ppm	RESULT ppm	STANDARD ppm
Panel 5 : Sour Water Pump (P-2802)	17/02/2026 11:30-11:45	Total Hydrocarbon	THC Analyzer / FID	< 0.10	5.28	-

Analyst By : Sudaporn S.
(Miss Sudaporn Soonthorn)

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

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ANALYSIS/TEST REPORT

Customer	: EED/SECOT Co., Ltd.	Request Service No.	: 0820/69
For	: PTT Global Chemical Public Co., Ltd, Branch 6 (Refinery GC6)	Sampling Date	: 11/05/2026
Address	: No.8, I-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Mueang Rayong , Rayong Province 21150	Received Date	: 14/05/2026
		Test Date	: 23/05/2026
Tel/Fax	: 0-3897-1000 / -	Report Date	: 25/05/2026

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 ppm	RESULT ppm	STANDARD ppm
Panel 5 : Sour Water Pump (P-2802)	11/05/2026 11:52-12:07	Total Hydrocarbon	THC Analyzer / FID	< 0.10	6.53	-

Analyst By : Sudaporn S.
(Miss Sudaporn Soonthorn)

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

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ANALYSIS/TEST REPORT

Customer	: EED/SECOT Co., Ltd.	Request Service No.	: 0318/69
For	: PTT Global Chemical Public Co., Ltd, Branch 6 (Refinery GC6)	Sampling Date	: 17/02/2026
Address	: No.8, I-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Mueang Rayong , Rayong Province 21150	Received Date	: 23/02/2026
		Test Date	: 25/02/2026
Tel/Fax	: 0-3897-1000 / -	Report Date	: 05/03/2026

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 ppm	RESULT ppm	STANDARD ppm
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Panel 6 :

Mogas Drain Vessel V5245	17/02/2026 10:04-10:19	Total Hydrocarbon	THC Analyzer / FID	< 0.10	6.89	-
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Analyst By : Sudaporn S.
(Miss Sudaporn Soonthorn)

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

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ANALYSIS/TEST REPORT

Customer	: EED/SECOT Co., Ltd.	Request Service No.	: 0820/69
For	: PTT Global Chemical Public Co., Ltd, Branch 6 (Refinery GC6)	Sampling Date	: 11/05/2026
Address	: No.8, I-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Mueang Rayong , Rayong Province 21150	Received Date	: 14/05/2026
		Test Date	: 23/05/2026
Tel/Fax	: 0-3897-1000 / -	Report Date	: 25/05/2026

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 ppm	RESULT ppm	STANDARD ppm
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Panel 6 :

Mogas Drain Vessel V5245	11/05/2026 11:25-11:40	Total Hydrocarbon	THC Analyzer / FID	< 0.10	9.64	-
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Analyst By : Sudaporn S.
(Miss Sudaporn Soonthorn)

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

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ANALYSIS/TEST REPORT

Customer	: EED/SECOT Co., Ltd.	Request Service No.	: 0318/69
For	: PTT Global Chemical Public Co., Ltd, Branch 6 (Refinery GC6)	Sampling Date	: 17/02/2026
Address	: No.8, I-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Mueang Rayong, Rayong Province 21150	Received Date	: 23/02/2026
		Test Date	: 02/03/2026
Tel/Fax	: 0-3897-1000 / -	Report Date	: 05/03/2026

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 ppm	RESULT ppm	STANDARD ppm
Panel 6 : Mogas Drain Vessel V5245	17/02/2026 10:04-13:04	Benzene	OSHA 1005/ GC FID	< 0.04	ND	1

Analyst By :

Sudaporn S.
(Miss Sudaporn Soonthorn)

Approved By :

Maiana Poonasapetch
(Miss Narisa Poowasanpetch)
Technical Management Team

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

ANALYSIS/TEST REPORT

Customer	: EED/SECOT Co., Ltd.	Request Service No.	: 0820/69
For	: PTT Global Chemical Public Co., Ltd, Branch 6 (Refinery GC6)	Sampling Date	: 11/05/2026
Address	: No.8, I-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Mueang Rayong, Rayong Province 21150	Received Date	: 14/05/2026
		Test Date	: 21/05/2026
Tel/Fax	: 0-3897-1000 / -	Report Date	: 25/05/2026

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 ppm	RESULT ppm	STANDARD ppm
Panel 6 : Mogas Drain Vessel V5245	11/05/2026 11:25-15:25	Benzene	OSHA 1005/ GC FID	< 0.04	ND	1

Analyst By :

Sudaporn S.
(Miss Sudaporn Soonthorn)

Approved By :

Maiana Poonasapetch
(Miss Narisa Poowasanpetch)
Technical Management Team

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ANALYSIS/TEST REPORT

Customer	: EED/SECOT Co., Ltd.	Request Service No.	: 0318/69
For	: PTT Global Chemical Public Co., Ltd. Branch 6 (Refinery GC6)	Sampling Date	: 18/02/2026
Address	: No.8, I-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Mueang Rayong, Rayong Province 21150	Received Date	: 23/02/2026
Tel/Fax	: 0-3897-1000 / -	Test Date	: 02/03/2026
		Report Date	: 05/03/2026

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 ppm	RESULT ppm	STANDARD ppm
สถานีขนถ่ายน้ำมันทางรถบรรทุก	18/02/2026 09:50-17:23	Benzene	OSHA 1005/ GC FID	< 0.04	ND	1

Analyst By :

Sudaporn S.

(Miss Sudaporn Soonthorn)

Approved By :

Manira Poowasanpetch

(Miss Narisa Poowasanpetch)

Technical Management Team

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

ANALYSIS/TEST REPORT

Customer	: EED/SECOT Co., Ltd.	Request Service No.	: 0820/69
For	: PTT Global Chemical Public Co., Ltd. Branch 6 (Refinery GC6)	Sampling Date	: 11/05/2026
Address	: No.8, I-8 Road, Map Ta Phut Industrial Estate, Map Ta Phut, Mueang Rayong, Rayong Province 21150	Received Date	: 14/05/2026
Tel/Fax	: 0-3897-1000 / -	Test Date	: 21/05/2026
		Report Date	: 25/05/2026

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 ppm	RESULT ppm	STANDARD ppm
สถานีขนถ่ายน้ำมันทางรถบรรทุก	11/05/2026 13:54-17:54	Benzene	OSHA 1005/ GC FID	< 0.04	ND	1

Analyst By :

Sudaporn S.

(Miss Sudaporn Soonthorn)

Approved By :

Manira Poowasanpetch

(Miss Narisa Poowasanpetch)

Technical Management Team

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