

# ภาคผนวก

ภาคผนวก ก

## ผลการติดตามตรวจสอบผลกระทบสิ่งแวดล้อม

ภาคผนวก ก1

ผลการติดตามตรวจสอบคุณภาพอากาศ  
ที่ระบายออกจากปล่อง แบบครั้งคราว

## ANALYSIS REPORT

**CUSTOMER NAME:** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS:** : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR, VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK  
 BANGKOK 10900  
**CONTACT INFORMATION:** : TEL : 0 3840 8500 EXT. 10502 e-mail : kitya@thaioilgroup.com  
**SAMPLING SOURCE:** : 42/1 MOO 1, SUKHUMVIT ROAD KM.12-4, TUNGSIKHA, SRIKACHA, CHONBURI 20230.  
**SAMPLE TYPE:** : STACK  
**SAMPLING DATE:** : MARCH 8, 2022  
**SAMPLING TIME:** : 11:20-12:20 HOUR  
**SAMPLING BY:** : MR. ATTHAPORN THEFTONG : 145-H-0008  
**ANALYZED BY:** : MISS SUWAN KONGTHONG : 145-H-0025

**RECEIVED DATE:** : MARCH 11, 2022  
**ANALYTICAL DATE:** : MARCH 11-17, 2022  
**REPORT NO.:** : 0022-0021188  
**WORK NO.:** : 2021-003222  
**ANALYSIS NO.:** : T22AEB17-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			FCC UNIT T22AEB17-0001	
			ACTUAL OXYGEN	7% OXYGEN
SULPHUR DIOXIDE	ppm	ABSORPTION, BARIUM THIORIN TITRIMETRIC METHOD AT SITE (US EPA METHOD 8)	88	458
OXIDE OF NITROGEN AS NITROGEN DIOXIDE	ppm	ABSORPTION, PHENOLDISULFONIC ACID METHOD (US EPA METHOD 7)	96.2	71.7
<b>SAMPLE CONDITION</b>			COMPLETE	

**REMARK:**
**RESULT:** : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.

*Budsakorn ✓*

(MISS BUDSAKORN LERDPANUMAS)

LABORATORY SUPERVISOR

: 145-H-0011

MARCH 24, 2022





## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAWADI RANGSIT ROAD CHITTOOMAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8580 EXT. 30502 e-mail : kitya@thaoilgroup.com  
**SAMPLING SOURCE** : 42/1 MOO 1, SI KHUMVET ROAD KM.124, TUNGSIKHA, SRI RACHA, CHONBURI 20230  
**SAMPLE TYPE** : STACK  
**SAMPLING DATE** : MAY 11, 2022  
**SAMPLING TIME** : 10:40-11:40 HOUR  
**SAMPLING BY** : MR. ATTAPORN THEPTONG s-145-e-0008  
**ANALYZED BY** : MISS SUWAN KONGTHONG s-145-e-0025  
**RECEIVED DATE** : MAY 11, 2022  
**ANALYTICAL DATE** : MAY 13-18, 2022  
**REPORT NO.** : 2022-0038533  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22A085-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			FCC UNIT T22A085-0001	
			ACTUAL OXYGEN	7% OXYGEN
SULPHUR DIOXIDE	ppm	ABSORPTION, BARIUM-THORN TITRIMETRIC METHOD AT SITE (US EPA METHOD 8)	600	490
OXIDE OF NITROGEN AS NITROGEN DIOXIDE	ppm	ABSORPTION, PHENOLDISULFONIC ACID METHOD (US EPA METHOD 7)	900	74.8
SAMPLE CONDITION			COMPLETE	

**REMARK**

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.

*Budsakorn ✓*

(MISS BUDSAKORN LERDPANUMAS)  
 LABORATORY SUPERVISOR  
 s-145-e-0011  
 MAY 28, 2022



## ANALYSIS REPORT

**CUSTOMER NAME:** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS:** : 155/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHITUCHAK CHITUCHAK  
 BANGKOK 10900  
**CONTACT INFORMATION:** : TEL : 0 2840 8530 EXT. 10502 e-mail : kroya@thaioilgroup.com  
**SAMPLING SOURCE:** : 42/1 MOO 1, SUKHUMVIT ROAD KM.134, TUNGSKULA, SRIRACHA, CHONBURI 20230.  
**SAMPLE TYPE:** : STACK  
**SAMPLING DATE:** : MARCH 9, 2022  
**SAMPLING TIME:** : 11:29-12:20 HOUR  
**SAMPLING BY:** : MR. ATTAPORN THEPTONG 3-145-W-0008  
**ANALYZED BY:** : MISS SUWAN KONGTHONG 3-145-W-0025  
**RECEIVED DATE:** : MARCH 11, 2022  
**ANALYTICAL DATE:** : MARCH 12-17, 2022  
**REPORT NO.:** : 2022-0021191  
**WORK NO.:** : 2021-003222  
**ANALYSIS NO.:** : T22AEB17-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			CDU-1 T22AEB17-0002	
			ACTUAL OXYGEN	7% OXYGEN
SULPHUR DIOXIDE	ppm	ABSORPTION, BARLUM-THORN TITRIMETRIC METHOD AT SITE (US EPA METHOD 6)	580	501
OXIDE OF NITROGEN AS NITROGEN DIOXIDE	ppm	ABSORPTION, PHENOLDISULFONIC ACID METHOD (US EPA METHOD 7)	46.8	38.8
SAMPLE CONDITION			COMPLETE	

REMARK:

RESULT: : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.

*Budsakorn ✓*

(MISS BUDSAKORN LEOPANUMAS)  
 LABORATORY SUPERVISOR  
 3-145-W-0011  
 MARCH 24, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 55/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI BANGSIT ROAD CHATUCHAK CHATUCHAK  
 BANGKOK 10000  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10502 e-mail : kalya@thaioilgroup.com  
**SAMPLING SOURCE** : 40/1 MOO 1, SUKHUMVIT ROAD KM 124, TUNGTHONG, SRIRACHA, CHONBURI 20230  
**SAMPLE TYPE** : STACK  
**SAMPLING DATE** : MAY 10, 2022  
**SAMPLING TIME** : 12:50-13:50 HOUR  
**SAMPLING BY** : MR.ATTAPORN THEFTONG S-145-W-0008  
**ANALYZED BY** : MISS SUWAN KONGTHONG S-145-W-0025

**RECEIVED DATE** : MAY 13, 2022  
**ANALYTICAL DATE** : MAY 13-15, 2022  
**REPORT NO.** : 2022-0038535  
**WORK NO.** : 2021-001223  
**ANALYSIS NO.** : T22A3085-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			CDU-1 T22A3085-0002	
			ACTUAL OXYGEN	7% OXYGEN
SULPHUR DIOXIDE	ppm	ABSORPTION, BARIUM-THORIN TITRIMETRIC METHOD AT SITE (US EPA METHOD 6)	365	382
DIOXIDE OF NITROGEN AS NITROGEN DIOXIDE	ppm	ABSORPTION, PHENOLDISULFONIC ACID METHOD (US EPA METHOD 7)	57.4	48.3
SAMPLE CONDITION			COMPLETE	

REMARK

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.

*Budsakorn ✓*

(MISS BUDSAKORN LERDPAUNUMAS)  
 LABORATORY SUPERVISOR  
 S-145-W-0011  
 MAY 28, 2022




### ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 551/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3846 8500 EXT. 10502 e-mail : kmya@thainigroup.com  
**SAMPLING SOURCE** : 42/1 MOO 1, SUKHUMVIT ROAD KM124, TUNGSIKULA, SARACHA, CHONBURI 20230  
**SAMPLE TYPE** : STACK  
**SAMPLING DATE** : MARCH 9, 2022  
**SAMPLING TIME** : 11:30-12:40 HOUR  
**SAMPLING BY** : MR. ATTAPORN THEPTONG > IAS-0000  
**ANALYZED BY** : MISS SUWAN RONGTHONG > IAS-0025

**RECEIVED DATE** : MARCH 11, 2022  
**ANALYTICAL DATE** : MARCH 11-17, 2022  
**REPORT NO.** : 2022-UG1194  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22AEB17-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			CDU-2 T22AEB17-0003	
			ACTUAL OXYGEN	7% OXYGEN
SULPHUR DIOXIDE	ppm	ABSORPTION, BARIUM-THORIUM TITRIMETRIC METHOD AT SITE (US EPA METHOD 6)	< 100	< 130
OXIDE OF NITROGEN AS NITROGEN DIOXIDE	ppm	ABSORPTION, PHENOLDISULFONIC ACID METHOD (US EPA METHOD 7)	88.0	88.8
<b>SAMPLE CONDITION</b>			COMPLETE	

**REMARK**
**RESULT** : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.



(MISS BUDSAKORN LERDMANUNAS)  
 LABORATORY SUPERVISOR  
 > IAS-0011  
 MARCH 24, 2022



### ANALYSIS REPORT

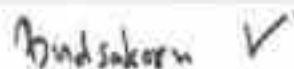
**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 155/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 5890 8500 EXT. 10502 e-mail : kitya@thaiogroup.com  
**SAMPLING SOURCE** : 42/1 MOO 1, SUKHUMVIT ROAD KM.134, TUNGTHAI, SRIRACHA, CHONBURI 20230  
**SAMPLE TYPE** : STACK  
**SAMPLING DATE** : MAY 10, 2022  
**SAMPLING TIME** : 11:00-11:50 HOUR  
**SAMPLING BY** : MR.ATTAKORN THEPTONG 1-145-0008  
**ANALYZED BY** : MISS SUWAN KONGTHONG 1-145-0025

**RECEIVED DATE** : MAY 13, 2022  
**ANALYTICAL DATE** : MAY 13-19, 2022  
**REPORT NO.** : 2022-U038537  
**WORK NO.** : 2021-000232  
**ANALYSIS NO.** : T22A3085-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			CDU-2 T22A3085-0003	
			ACTUAL OXYGEN	7% OXYGEN
SULPHUR DIOXIDE	ppm	Absorption Barium-Chromate Titrimetric Method at Site (US EPA Method 4)	425	435
Oxide of Nitrogen as Nitrogen Dioxide	ppm	Absorption Phenoldisulfonic Acid Method (US EPA Method 7)	30.3	30.6
SAMPLE CONDITION			COMPLETE	

REMARK:

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.



[MISS JUDSAKORN LEONGPANUMAS]  
LABORATORY SUPERVISOR  
1-145-0011  
MAY 28, 2022





## ANALYSIS REPORT

**CUSTOMER NAME :** THAI OIL PUBLIC COMPANY LIMITED

**ADDRESS :** 333/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900

**CONTACT INFORMATION :** TEL : 0 2840 8500 EXT. 12502 e-mail : kitya@thaiogroup.com

**SAMPLING SOURCE :** 421 PHO 1, SUKHUMVIT ROAD KM.124, TUNGSRULA, SRIRACHA, CHONBURI 20210

**SAMPLE TYPE :** STACK **RECEIVED DATE :** MARCH 11, 2022

**SAMPLING DATE :** MARCH 9, 2022 **ANALYTICAL DATE :** MARCH 11-17, 2022

**SAMPLING TIME :** 11:15-12:25 HOUR **REPORT NO. :** 2022-0021197

**SAMPLING BY :** MR. ATTHAPORN THEPTONG 1-145-W-0008 **WORK NO. :** 1021-003223

**ANALYZED BY :** MISS SUWAN KONGTHONG 1-145-W-0025 **ANALYSIS NO. :** T22AEB17-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			STACK TOC-3 T22AEB17-0004	
			ACTUAL OXYGEN	7% OXYGEN
SULPHUR DIOXIDE	ppm	ABSORPTION BARIUM THORN TITRIMETRIC METHOD AT SITE (US EPA METHOD 6)	4.130	4.130
OXIDE OF NITROGEN AS NITROGEN DIOXIDE	ppm	ABSORPTION PHENOLDISULFONIC ACID METHOD (US EPA METHOD 7)	16.0	16.3
SAMPLE CONDITION			COMPLETE	

**REMARK**

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.

*Budsakorn ✓*

(MISS BUDSAKORN LERDNUMAS)  
LABORATORY SUPERVISOR  
1-145-W-0011  
MARCH 24, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 55/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHITUCHAK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT: 10900 e-mail : ktiya@thaiogroup.com  
**SAMPLING SOURCE** : 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSAKULA, SAEJACHA, CHONBURI 20120.  
**SAMPLE TYPE** : STACK  
**SAMPLING DATE** : MAY 10, 2022  
**SAMPLING TIME** : 10:40-11:50 HOUR  
**SAMPLING BY** : MR.ATTAPORN THEPTONG >145-4-0008  
**ANALYZED BY** : MISS SUWAN KONGTHONG >145-4-0025

**RECEIVED DATE** : MAY 13, 2022  
**ANALYTICAL DATE** : MAY 13-26, 2022  
**REPORT NO.** : 2022-U03953H  
**WORK NO.** : 2021-000222  
**ANALYSIS NO.** : T22AX085-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			STACK TOC-3 T22AX085-0004	
			ACTUAL OXYGEN	7% OXYGEN
SULFUR DIOXIDE	ppm	ABSORPTION, BARIUM-THORIN TITRIMETRIC METHOD AT SITE (US EPA METHOD 6)	< 1.30	< 1.30
OXIDE OF NITROGEN AS NITROGEN DIOXIDE	ppm	ABSORPTION, PHENOLDISULFONIC ACID METHOD (US EPA METHOD 7)	12.2	11.8
SAMPLE CONDITION			COMPLETE	

REMARK

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.

*Budsakorn ✓*

(MISS BUDSAKORN LERDIANUMAS)  
LABORATORY SUPERVISOR  
>145-4-0011  
MAY 26, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED

**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAWADI RANGSIT ROAD CHATUCHAK CHATUCHAK  
BANGKOK 10000

**CONTACT INFORMATION** : TEL : 0 3940 8500 EXT. 10562 e-mail : ktiya@thaioilgroup.com

**SAMPLING SOURCE** : 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGTHUNG, SRIRACHA, CHONBURI 20230

**SAMPLE TYPE** : STACK

**SAMPLING DATE** : MARCH 2, 2022

**SAMPLING TIME** : 12:10-13:20 HOUR

**SAMPLING BY** : MR.ATTAPORN THEPTONG 1-145-H-0008

**ANALYZED BY** : MISS SUWAN KONGTHONG 1-145-H-0025

**RECEIVED DATE** : MARCH 11, 2022

**ANALYTICAL DATE** : MARCH 12-17, 2022

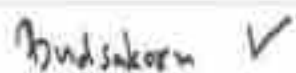
**REPORT NO.** : 2022-0021006

**WORK NO.** : 2021-003222

**ANALYSIS NO.** : T22AEB17-0005

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			HCU-2 T22AEB17-0005	
			ACTUAL OXYGEN	7% OXYGEN
SULPHUR DIOXIDE	ppm	Absorption Barium-Thion Titrimetric Method at Site (US EPA Method 6)	265	263
Oxide of Nitrogen as Nitrogen Dioxide	ppm	Absorption Phenoldisulfonic Acid Method (US EPA Method 7)	44.3	45.9
SAMPLE CONDITION			COMPLETE	

**REMARK**
**RESULT** : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS



(MISS BUDSAKORN LERPANUMAS)  
LABORATORY SUPERVISOR  
1-145-H-0011  
MARCH 24, 2022





## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING 8, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK  
 BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10502 e-mail : kitya@thoedgroup.com  
**SAMPLING SOURCE** : 42/1 MOO 1, SAKHURVIT ROAD KM.124, TUNGSLUA, SERRACHA, CHONBURI 20230  
**SAMPLE TYPE** : STACK  
**SAMPLING DATE** : MAY 10, 2022  
**SAMPLING TIME** : 10:50-12:10 HRS  
**SAMPLING BY** : MR ATTAPORN THEFTONG >145-n-0008  
**ANALYZED BY** : MISS SUWAN KONGTHONG >145-n-0025  
**RECEIVED DATE** : MAY 11, 2022  
**ANALYTICAL DATE** : MAY 11-18, 2022  
**REPORT NO.** : 2022-0039541  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22A085-0005

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			HCU-2 T22A085-0005	
			ACTUAL OXYGEN	% OXYGEN
SULFUR DIOXIDE	ppm	Absorption, Barium-Thion Titrimetric Method at Site (US EPA Method 8)	578	628
Oxide of Nitrogen as Nitrogen Dioxide	ppm	Absorption, Phenoldisulfonic Acid Method (US EPA Method 7)	25.2	27.5
SAMPLE CONDITION			COMPLETE	

REMARK

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.

*Budsakorn ✓*

(MISS BUDSAKORN LEHPANUMAS)  
 LABORATORY SUPERVISOR  
 >145-n-0021  
 MAY 28, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED

**ADDRESS** : 55/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK  
BANGKOK 10900

**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10582 e-mail : kbya@thaoilgroup.com

**SAMPLING SOURCE** : 42/1 MOO 1, SUKHUMVIT ROAD KM.124, THONGSUKLA, SRIRACHA, CHONBURI 20210

**SAMPLE TYPE** : STACK

**SAMPLING DATE** : MARCH 7, 2022

**SAMPLING TIME** : 11:50 HOUR

**SAMPLING BY** : MR.ATTAPORN THEPTONG S-145-a-0008

**ANALYZED BY** : MISS SUWAN KONGTHONG S-145-a-0025

**RECEIVED DATE** : MARCH 11, 2022

**ANALYTICAL DATE** : MARCH 11-17, 2022

**REPORT NO.** : 2022-UB21292

**WORK NO.** : 2021-005222

**ANALYSIS NO.** : T22AER17-0006

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			HDS-2 T22AER17-0006	
			ACTUAL OXYGEN	7% OXYGEN
OXIDE OF NITROGEN AS NITROGEN DIOXIDE	ppm	ABSORPTION, PHENOLDISULFONIC ACID METHOD (US EPA METHOD 7)	28.5	22.7
SAMPLE CONDITION			COMPLETE	

REMARK:

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.



(MISS BUDSAKORN LERPANUNAT)  
LABORATORY SUPERVISOR  
S-145-a-0011  
MARCH 24, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 55521 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10502 e-mail : kitya@thaioilgroup.com  
**SAMPLING SOURCE** : 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSKULA, SATHACHA, CHONBURI 20230  
**SAMPLE TYPE** : STACK  
**SAMPLING DATE** : MAY 5, 2022  
**SAMPLING TIME** : 12-25 HOUR  
**SAMPLING BY** : MR. ATTAPORN THEPTONG 1-145-4-0000  
**ANALYZED BY** : MISS SUWAN KONGTHONG 1-145-4-0025

**RECEIVED DATE** : MAY 11, 2022  
**ANALYTICAL DATE** : MAY 13-19, 2022  
**REPORT NO.** : 2022-1035559  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22A065-0007

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			HDS-2 T22A065-0007	
			ACTUAL OXYGEN	7% OXYGEN
OXIDE OF NITROGEN AS NITROGEN DIOXIDE	ppm	ABSORPTION, PHENOLDISULFONIC ACID METHOD (US EPA METHOD 7)	95.0	51.0
SAMPLE CONDITION			COMPLETE	

REMARK

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASES.

*Budsakorn ✓*

(MISS BUDSAKORN LEEDPANUMAS)  
 LABORATORY SUPERVISOR  
 1-145-4-0011  
 MAY 28, 2022



### ANALYSIS REPORT

**CUSTOMER NAME :** THAI OIL PUBLIC COMPANY LIMITED

**ADDRESS :** 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900

**CONTACT INFORMATION :** TEL : 0 3840 8500 EXT. 10500 e-mail : kitya@thaiogroup.com

**SAMPLING SOURCE :** 42/1 MOG 1, SUKHUMVIT ROAD KM.124, TUNGSRULA, SURACHA, CHONBURI 20130

**SAMPLE TYPE :** STACK

**SAMPLING DATE :** MARCH 7, 2022

**SAMPLING TIME :** 11:50 HOUR

**SAMPLING BY :** MR ATTAKORN THEPTONG 1-145-0008

**ANALYZED BY :** MISS SUNWAN KONGTHONG 1-145-0025

**RECEIVED DATE :** MARCH 11, 2022

**ANALYTICAL DATE :** MARCH 11-17, 2022

**REPORT NO. :** 2022-0031204

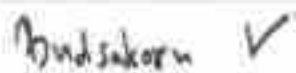
**WORK NO. :** 1021-003222

**ANALYSIS NO. :** T22AER17-0007

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			HDS-3 T22AER17-0007	
			ACTUAL OXYGEN	7% OXYGEN
OXIDE OF NITROGEN AS NITROGEN DIOXIDE	ppm	ABSORPTION PHENOLDISULFONIC ACID METHOD (U.S. EPA METHOD 7)	23.7	6.8
SAMPLE CONDITION			COMPLETE	

REMARK

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.



(MISS BUDSAKORN LERDIYANUMAS)  
LABORATORY SUPERVISOR  
1-145-0011  
MARCH 24, 2022









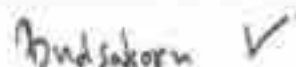
### ANALYSIS REPORT

**CUSTOMER NAME** : TOP SPR COMPANY LIMITED  
**ADDRESS** : 55/1 ENERGY COMPLEX BUILDING A, 4TH FLOOR VIBHAVADI BANGSEY ROAD CHATUCHAK CHATUCHAK  
 BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 06 1556 0557 e-mail : kinn@thecolgroup.com  
**SAMPLING SOURCE** : TOP SPR COMPANY LIMITED (42/1 FLOOR 1 SURHARVEST ROAD KM 124 THONG SUKHLA SE RACHA CHON BURI  
 20000)  
**SAMPLE TYPE** : STACK  
**SAMPLING DATE** : MAY 20, 2022  
**SAMPLING TIME** : 10:30 HOUR  
**SAMPLING BY** : HR KANSAKORN BAO 1-145-A-0037  
**ANALYZED BY** : MISS SUWAN KONGTHONG 1-145-A-0035  
**RECEIVED DATE** : MAY 15, 2022  
**ANALYTICAL DATE** : MAY 13-18, 2022  
**REPORT NO.** : 2022-U000938  
**WORK NO.** : 2021-000025  
**ANALYSIS NO.** : T22A006-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			TOC#19 G-5019 T22A006-0002	
			ACTUAL OXYGEN	7% OXYGEN
OXIDE OF NITROGEN AS NITROGEN DIOXIDE	ppm	Absorption, Phenoldisulfonic Acid Method (US EPA METHOD 7)	25.2	57.3
SAMPLE CONDITION			COMPLETE	

**REMARK**

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.



 (MISS INDRAKORN LEKDHANURAK)  
 LABORATORY SUPERVISOR  
 1-145-A-0033  
 MAY 30, 2022


### ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 5521 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI HANGSIY ROAD CHITJONAK CHATJONAK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10502 e-mail : kitya@maoigroup.com  
**SAMPLING SOURCE** : 421 PLO 1, SUKUMVIT ROAD KM.124, TUNGSKULA, SURACHA, CHONBURI 20235  
**SAMPLE TYPE** : STACK  
**SAMPLING DATE** : MARCH 7, 2022  
**SAMPLING TIME** : 12:25 HOUR  
**SAMPLING BY** : MR ATTAPORN THEPTONG 1-145-W-0008  
**ANALYZED BY** : MISS SUWAN KONGTHONG 1-145-W-0025  
**RECEIVED DATE** : MARCH 11, 2022  
**ANALYTICAL DATE** : MARCH 13-17, 2022  
**REPORT NO.** : 2022-0021209  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22AEB17-0010

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			G-HDS T22AEB17-0010	
			ACTUAL OXYGEN	% OXYGEN
OXIDE OF NITROGEN AS NITROGEN DIOXIDE	ppm	ABSORPTION PHENOLDISULFONIC ACID METHOD (US EPA METHOD 7)	46.2	52.5
SAMPLE CONDITION			COMPLETE	

REMARK

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.



 (MISS JITSAKORN LORDPANIMAS)  
 LABORATORY SUPERVISOR  
 1-145-W-0011  
 MARCH 24, 2022




## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 55/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAWADI RANGSIT ROAD CHATUCHAK CHATUCHAK  
 BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 12502 e-mail : kitya@thamgroup.com  
**SAMPLING SOURCE** : 42/1 MOO 1, SUKHUMVIT ROAD KM 124, TUNGTHAI, SONGKHA, CHONBURI 20230  
**SAMPLE TYPE** : STACK  
**SAMPLING DATE** : MAY 11, 2022  
**SAMPLING TIME** : 13:00 HOUR  
**SAMPLING BY** : MR ATTHAPORN THEPTONG S-145-W-0008  
**ANALYZED BY** : MISS SUWAN RONGTHONG S-145-W-0025

**RECEIVED DATE** : MAY 11, 2022  
**ANALYTICAL DATE** : MAY 12-19, 2022  
**REPORT NO.** : 2022-U039972  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22A065-0015

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			G-HDS T22A065-0015	
			ACTUAL OXYGEN	7% OXYGEN
OXIDE OF NITROGEN AS NITROGEN DIOXIDE	ppm	Absorption, Phosvel (Sulfuric Acid) Method (US EPA Method 7)	22.7	25.5
SAMPLE CONDITION			COMPLETE	

REMARK:

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.

*Budsakorn ✓*

(MISS BUDSAKORN LERDPAUMAS)  
 LABORATORY SUPERVISOR  
 S-145-W-0011  
 MAY 28, 2022



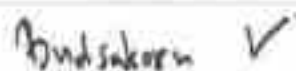
## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 55/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAWADI RANGSIT ROAD CHATUCHAK CHATUCHAK  
 BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10502 e-mail : xibye@thaioilgroup.com  
**SAMPLING SOURCE** : 42/1 MOO 1, SUNHUMYT ROAD KM.124, TUNGSAKLA, SRIRACHA, (CHONBURI) 20235  
**SAMPLE TYPE** : STACK  
**SAMPLING DATE** : MARCH 11, 2022  
**SAMPLING TIME** : 11:25-11:45 HOUR  
**SAMPLING BY** : MR.ATTAPORN THEPTONG ๙-145-๔-0008  
**ANALYZED BY** : MISS.SUNAN KONGTHONG ๙-145-๔-0025

**RECEIVED DATE** : MARCH 11, 2022  
**ANALYTICAL DATE** : MARCH 13-17, 2022  
**REPORT NO.** : 2022-U02234  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22AER17-0013

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			TGTU T22AER17-0013	
			ACTUAL OXYGEN	7% OXYGEN
SULFUR DIOXIDE	ppm	ABSORPTION BARIMATHORM TITRIMETRIC METHOD AT SITE (AS EPA METHOD 6)	88	80
SAMPLE CONDITION			COMPLETE	

**REMARK**
**RESULT** : REFERENCE CONDITION 25.25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.



(MISS BUDSAKORN LEEDIPANUMAS)  
 LABORATORY SUPERVISOR  
 ๙-145-๔-0011  
 MARCH 24, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 10521 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK  
 BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10532 e-mail : mliya@thaioilgroup.com  
**SAMPLING SOURCE** : 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGTHONG, SAKRAHA, CHONBURI 20230  
**SAMPLE TYPE** : STACK  
**SAMPLING DATE** : MAY 6, 2022  
**SAMPLING TIME** : 12:10-12:30 HOUR  
**SAMPLING BY** : MR. ATTHAPORN THEFTONG 3-145-W-0008  
**ANALYZED BY** : MISS SUWAN KONGTHONG 3-145-W-0025

**RECEIVED DATE** : MAY 13, 2022  
**ANALYTICAL DATE** : MAY 13-19, 2022  
**REPORT NO.** : 2022-UG39575  
**WORK NO.** : 2021-001222  
**ANALYSIS NO.** : T22A085-0018

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			TGTU T22A085-0018	
			ACTUAL OXYGEN	7% OXYGEN
SULFUR DIOXIDE	ppm	ABSORPTION BARIUM THORM TITRIMETRIC METHOD AT SITE (US EPA METHOD 6)	275	214
SAMPLE CONDITION			COMPLETE	

REMARK:

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.

*Wud Sakorn* ✓

(MISS WUDSAKORN LERDRANILMAS)  
 LABORATORY SUPERVISOR  
 3-145-W-0011  
 MAY 28, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED

**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RAMSIT ROAD CHATUCHAK CHATUCHAK  
BANGKOK 10900

**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 30502 e-mail : kbyy@thaioilgroup.com

**SAMPLING SOURCE** : 42/1 MOO 1, SUKUMVIT ROAD KM.124, TUNGSRUKA, SRIRACHA, CHONBURI 20130

**SAMPLE TYPE** : STACK

**SAMPLING DATE** : MARCH 8, 2022

**SAMPLING TIME** : 11:40-12:22 HOUR

**SAMPLING BY** : MR.ATTAPORN THEPTONG 3-145-4-0008

**ANALYZED BY** : MISS SILWAN KONGTHONG 3-145-4-0025

**RECEIVED DATE** : MARCH 11, 2022

**ANALYTICAL DATE** : MARCH 11-17, 2022


**REPORT NO.** : 2022-0021207

**WORK NO.** : 2021-003222

**ANALYSIS NO.** : T22AEB17-0009

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			CDU-3 T22AEB17-0009	
			ACTUAL OXYGEN	7% OXYGEN
TOTAL SUSPENDED PARTICULATE	mg/m <sup>3</sup>	ISOINETIC GRAVIMETRIC METHOD (US EPA METHOD 5)	63	50.8
SAMPLE CONDITION			COMPLETE	

**REMARK**
**RESULT** : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.



(MISS BUDSAKORN LERDPANUMAJ)  
LABORATORY SUPERVISOR  
3-145-4-0011  
MARCH 24, 2022



## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	: THAI OIL PUBLIC COMPANY LIMITED		
<b>ADDRESS</b>	: 559/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAWADI RANGSIT ROAD CHATUCHAK CHITUCHAK BANGKOK 10900		
<b>CONTACT INFORMATION</b>	: TEL : 0-3946 8500 EXT. 32582 e-mail : kmjad@uaecolgroup.com		
<b>SAMPLING SOURCE</b>	: 42/1 MOO 1, SUKHUMVIT ROAD KML24, TUNGSRULA, SRIKACHA, CHONBURI 20236		
<b>SAMPLE TYPE</b>	: STACK	<b>RECEIVED DATE</b>	: MARCH 11, 2022
<b>SAMPLING DATE</b>	: MARCH 8, 2022	<b>ANALYTICAL DATE</b>	: MARCH 11-17, 2022
<b>SAMPLING TIME</b>	: 12:00-13:00 HOUR	<b>REPORT NO.</b>	: 2022-UG21208
<b>SAMPLING BY</b>	: MR ATTAPORN THEPTONG 9-145-0-0000	<b>WORK NO.</b>	: 2022-003222
<b>ANALYZED BY</b>	: MISS SUWAN KONGTHONG 9-145-0-0025	<b>ANALYSIS NO.</b>	: T22AEB17-0009

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			CDU-3 T22AEB17-0009	
			ACTUAL OXYGEN	7% OXYGEN
SULFUR DIOXIDE	ppm	ABSORPTION, BARIUM-THIOMETHANOLITIC METHOD AT SITE (USE EPA METHOD 8)	4.96	362
OXIDE OF NITROGEN AS NITROGEN DIOXIDE	ppm	ABSORPTION, PHENOLDISULFONIC ACID METHOD (USE EPA METHOD 7)	98.0	910
SAMPLE CONDITION			COMPLETE	

REMARK

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.

*Budsakorn ✓*

(MISS BUDSARORN LERDPAWIMAS)  
LABORATORY SUPERVISOR  
9-145-0-0011  
MARCH 24, 2022





## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 55521 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAWADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10000  
**CONTACT INFORMATION** : TEL : 0 3840 8900 EXT. 10502 e-mail : kitiya@thoailgroup.com  
**SAMPLING SOURCE** : 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSRULA, SROACHA, CHONBURI 20230  
**SAMPLE TYPE** : STACK  
**SAMPLING DATE** : MAY 11, 2022  
**SAMPLING TIME** : 11:00-11:05 HOUR  
**SAMPLING BY** : MR.ATTAPORN THEPTONG s-145-s-0008  
**ANALYZED BY** : MISS SUWAN KONGTHONG s-145-s-0025

**RECEIVED DATE** : MAY 11, 2022  
**ANALYTICAL DATE** : MAY 13-19, 2022  
**REPORT NO.** : 2022-039540  
**WORK NO.** : 2021-051222  
**ANALYSIS NO.** : T22AJ065-0014

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			CDU-3 T22AJ065-0014	
			ACTUAL OXYGEN	7% OXYGEN
TOTAL SUSPENDED PARTICULATE	mg/m <sup>3</sup>	ISOKINETIC, GRAVIMETRIC METHOD (USE EPA METHOD II)	52.2	113
SAMPLE CONDITION			COMPLETE	

REMARK

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.

*Budsakorn ✓*

(MISS BUDSAKORN LERDPANUMAS)  
 LABORATORY SUPERVISOR  
 s-145-s-0011  
 MAY 26, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK  
 BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 2840 0000 EXT. 10502 e-mail : kitya@thoigroup.com  
**SAMPLING SOURCE** : 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGKULA, SRIRACHA, CHONBURI 35250.  
**SAMPLE TYPE** : STACK  
**SAMPLING DATE** : MAY 11, 2022  
**SAMPLING TIME** : 11:15-14:00 HOUR  
**SAMPLING BY** : MR ATTAPORN THEFTONG S-145-W-0008  
**ANALYZED BY** : MISS SUWAN KONGTHONG S-145-W-0025

**RECEIVED DATE** : MAY 11, 2022  
**ANALYTICAL DATE** : MAY 13-19, 2022  
**REPORT NO.** : 2022-1039571  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22A005-0014

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			CDU-3 T22A005-0014	
			ACTUAL OXYGEN	7% OXYGEN
SULPHUR DIOXIDE	ppm	ABSORPTION, BARIUM-THORN TITRIMETRIC METHOD AT SITE (US EPA METHOD 6)	445	434
OXIDE OF NITROGEN AS NITROGEN DIOXIDE	ppm	ABSORPTION, PHENOLDISULFONIC ACID METHOD (US EPA METHOD 7)	119	293
SAMPLE CONDITION			COMPLETE	

REMARK

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.

*Budsakorn ✓*

(MISS BUDSADORN LERDANUNPAG)  
 LABORATORY SUPERVISOR  
 S-145-W-0011  
 MAY 28, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3940 8500 EXT : 10522 e-mail : kmya@thoailgroup.com  
**SAMPLING SOURCE** : 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSRULA, SRIRACHA, CHONBURI 20250.  
**SAMPLE TYPE** : STACK  
**SAMPLING DATE** : MARCH 11, 2022  
**SAMPLING TIME** : 11:00-12:00 HOUR  
**SAMPLING BY** : MR.ATTAPORN THEPTONG 1-145-4-0000  
**ANALYZED BY** : MISS SUWAN KIMTHONG 1-145-4-0025  
**RECEIVED DATE** : MARCH 11, 2022  
**ANALYTICAL DATE** : MARCH 11/17, 2022  
**REPORT NO.** : 2022-U021310  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22AER17-0011

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			HVI 2 REVAMP,B-101 T22AER17-0011	
			ACTUAL OXYGEN	7% OXYGEN
TOTAL SUSPENDED PARTICULATE	mg/m <sup>3</sup>	ISOKINETIC, GRAVIMETRIC METHOD (US EPA METHOD 5)	7.20	20.6
SAMPLE CONDITION			COMPLETE	

REMARK

RESULT : REFERENCE CONDITION IS 25-DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.

*Budsakorn ✓*

(MISS BUDSAKORN LERDPANUMIS)  
LABORATORY SUPERVISOR  
1-145-4-0011  
MARCH 24, 2022





## ANALYSIS REPORT

**CUSTOMER NAME :** THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS :** 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10500  
**CONTACT INFORMATION :** TEL : 0 3540 8500 EXT. 10502 e-mail : kitiya@thaioilpublic.com  
**SAMPLING SOURCE :** 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSAHA, SADRACHA, CHONBURI 20230  
**SAMPLE TYPE :** STACK  
**SAMPLING DATE :** MARCH 11, 2022  
**SAMPLING TIME :** 11:10-12:20 HOUR  
**SAMPLING BY :** MR. ATTHAPORN THEPTONG 3-145-W-0008  
**ANALYZED BY :** MISS SUWAN ROKKITHONG 3-145-W-0025

**RECEIVED DATE :** MARCH 11, 2022  
**ANALYTICAL DATE :** MARCH 11-17, 2022  
**REPORT NO. :** 2022-1021211  
**WORK NO. :** 2021-003223  
**ANALYSIS NO. :** T22AEB17-0011

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			HVU 2 REVAMP, S-101 T22AEB17-0011	
			ACTUAL OXYGEN	7% OXYGEN
SULFUR DIOXIDE	ppm	ABSORPTION BARJALA-THORN THERMOMETRIC METHOD AT SITE (US EPA METHOD 5)	< 130	< 130
OXIDE OF NITROGEN AS NITROGEN DIOXIDE	ppm	ABSORPTION PHENOLDISULFONIC ACID METHOD (US EPA METHOD 7)	1.97	12.4
SAMPLE CONDITION			COMPLETE	

REMARK

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.

*Budsakorn ✓*

(MISS BUDSAKORN LERDRANUMAS)  
 LABORATORY SUPERVISOR  
 3-145-W-0011  
 MARCH 24, 2022





## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 553/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAWADI RANGSIT ROAD CHATUCHAK CHATUCHAK  
 BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10502 e-mail : kityee@phasetgroup.com  
**SAMPLING SOURCE** : 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSKULA, SRIRACHA, CHONBURI 20230  
**SAMPLE TYPE** : STACK  
**SAMPLING DATE** : MAY 11, 2022  
**SAMPLING TIME** : 11:00-12:20 HOUR  
**SAMPLING BY** : MR ATTAPORN THEPTONG >145-W-0008  
**ANALYZED BY** : MISS SUWAN KONGTHONG >145-W-0025

**RECEIVED DATE** : MAY 13, 2022  
**ANALYTICAL DATE** : MAY 13-15, 2022  
**REPORT NO.** : 2022-U099573  
**WORK NO.** : 2021-003227  
**ANALYSIS NO.** : T22A005-0016

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			HVU2 REVAMP, B-101 T22A005-0016	
			ACTUAL OXYGEN	7% OXYGEN
SULPHUR DIOXIDE	ppm	ABSORPTION, BARIUM THIOXIDE TITRIMETRIC METHOD AT SITE (US EPA METHOD 8)	< 1.00	< 1.30
OXIDE OF NITROGEN AS NITROGEN DIOXIDE	ppm	ABSORPTION, PHENOLDISULFONIC ACID METHOD (US EPA METHOD 7)	11.5	27.8
SAMPLE CONDITION			COMPLETE	

REMARK

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.

*Budsakorn ✓*

(MISS BUDSAKORN LERDPANURAS)

LABORATORY SUPERVISOR

>145-W-0011

MAY 31, 2022



### ANALYSIS REPORT

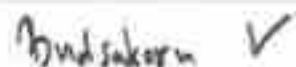
**CUSTOMER NAME:** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS:** : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSEI ROAD CHATUCHAK CHATUCHAK  
 BANGKOK 10900  
**CONTACT INFORMATION:** : TEL : 0-3940 8502 EXT. 2252 e-mail : kmya@thaoilgroup.com  
**SAMPLING SOURCE:** : 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSRULA, SRI RACHA, CHONBURI 20230  
**SAMPLE TYPE:** : STACK  
**SAMPLING DATE:** : MARCH 9, 2022  
**SAMPLING TIME:** : 11:30-12:30 HOUR  
**SAMPLING BY:** : MR ATTAPORN THEPTONG s-145-a-0008  
**ANALYZED BY:** : MISS SUWAN KONGTHONG s-145-a-0025

**RECEIVED DATE:** : MARCH 11, 2022  
**ANALYTICAL DATE:** : MARCH 11-17, 2022  
**REPORT NO.:** : 2022-U001212  
**WORK NO.:** : 2021-003222  
**ANALYSIS NO.:** : T22AEB17-0012

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			CCR-1 T22AEB17-0012	
			ACTUAL OXYGEN	7% OXYGEN
TOTAL SUSPENDED PARTICULATE	mg/m <sup>3</sup>	ISOMETRIC GRAVIMETRIC METHOD (US EPA METHOD 5)	42.6	33.9
SAMPLE CONDITION			COMPLETE	

REMARK

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.



(MISS BUDSAKORN LEEDPANUMAS)  
 LABORATORY SUPERVISOR  
 s-145-a-0011  
 MARCH 24, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 155/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADH RANGSIT ROAD CHATUCHAK CHATUCHAK  
 BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3845 8500 EXT. 10992 e-mail : kmj@thaioilgroup.com  
**SAMPLING SOURCE** : 42/1 MOO 3, SUKHUMVIT ROAD KM.124, TUNGTHUNG, SONGKHA, CHONBURI 20250  
**SAMPLE TYPE** : STACK  
**SAMPLING DATE** : MARCH 9, 2022  
**SAMPLING TIME** : 11:45-13:05 HOUR  
**SAMPLING BY** : MR.ATTAPORN THEFTONG 3-145-4-0008  
**ANALYZED BY** : MISS SUWAN KONGTHONG 3-145-4-0025

**RECEIVED DATE** : MARCH 11, 2022  
**ANALYTICAL DATE** : MARCH 11-17, 2022  
**REPORT NO.** : 2022-1031213  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22AEB17-0012

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			CCR-1 T22AEB17-0012	
			ACTUAL OXYGEN	7% OXYGEN
SULPHUR DIOXIDE	ppm	ABSORPTION BARIM-THORIN TITRIMETRIC METHOD AT SITE (US EPA METHOD 6)	298	205
OXIDE OF NITROGEN AS NITROGEN DIOXIDE	ppm	ABSORPTION PHENOLDISULFONIC ACID METHOD (US EPA METHOD 7)	32.2	20.6
SAMPLE CONDITION			COMPLETE	

REMARK:

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.

*Budsakorn ✓*

(MISS BUDSAKORN LERDPANUMAS)  
 LABORATORY SUPERVISOR  
 3-145-4-0011  
 MARCH 24, 2022





### ANALYSIS REPORT


**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK, BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10532 e-mail : kitoys@thainigroup.com  
**SAMPLING SOURCE** : 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGKUL, SRRACHA, CHONBURI 20250.  
**SAMPLE TYPE** : STACK  
**SAMPLING DATE** : MAY 6, 2022  
**SAMPLING TIME** : 12:15-13:15 HOUR  
**SAMPLING BY** : MR ATTAPORN THEPTONG >145-W-0008  
**ANALYZED BY** : MISS SUWAN KONGTHONG >145-W-0025

**RECEIVED DATE** : MAY 11, 2022  
**ANALYTICAL DATE** : MAY 13-15, 2022  
**REPORT NO.** : 2022-0019643  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22A3085-0017

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			CCR-1 T22A3085-0017	
			ACTUAL OXYGEN	7% OXYGEN
TOTAL SUSPENDED PARTICULATE	mg/m <sup>3</sup>	ISO-KINETIC, GRAVIMETRIC METHOD (U.S EPA METHOD II)	273	217
SAMPLE CONDITION			COMPLETE	

REMARK:

RESULT : REFERENCE CONDITION 25-25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.



(MISS RUSSAKORN LERDPANUMAS)  
LABORATORY SUPERVISOR  
>145-W-0011  
MAY 28, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 5521 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK  
 BANGKOK 10900  
**CONTACT INFORMATION** : TEL.: 0 3840 8500 EXT.: 10502 e-mail: kitya@thoailgroup.com  
**SAMPLING SOURCE** : 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGTHUNG, SONGKHA, CHONBURI 20230  
**SAMPLE TYPE** : STACK  
**SAMPLING DATE** : MAY 11, 2022  
**SAMPLING TIME** : 12:25-13:45 HOUR  
**SAMPLING BY** : MR. ATTAPORN THEPTONG S-145-W-0005  
**ANALYZED BY** : MISS SUWAN KONGTHONG S-145-W-0005

**RECEIVED DATE** : MAY 13, 2022  
**ANALYTICAL DATE** : MAY 13-19, 2022  
**REPORT NO.** : 2022-L039574  
**WORK NO.** : 2021-001222  
**ANALYSIS NO.** : T22A085-0017

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			CCR-1 T22A085-0017	
			ACTUAL OXYGEN	7% OXYGEN
SULFUR DIOXIDE	ppm	ABSORPTION, BARIUM THORIUM TITRIMETRIC METHOD AT SITE (US EPA METHOD 6)	53.6	42.7
OXIDE OF NITROGEN AS NITROGEN DIOXIDE	ppm	ABSORPTION, PHENOLDISULFONIC ACID METHOD (US EPA METHOD 7)	22.6	18.0
SAMPLE CONDITION			COMPLETE	

REMARK:

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.

*Budsakorn ✓*

(MISS BUDSAKORN LERDTHANUMAS)  
 LABORATORY SUPERVISOR  
 S-145-W-0011  
 MAY 26, 2022



ภาคผนวก ก2

ผลการติดตามตรวจสอบคุณภาพอากาศ  
ที่ระบายออกจากปล่อง แบบต่อเนื่อง



วันที่	เวลา	HCU-2 'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)
1	0:00:00	787.02	137.53	7.60	760.52	114.80	8.86	773.19	105.07	8.16	738.33	95.83	7.05	771.43	112.08	7.33	788.20	99.56	7.29
	1:00:00	794.68	137.81	7.53	768.56	116.43	9.05	783.88	104.89	7.98	740.84	94.73	6.66	769.47	112.00	7.23	785.57	99.48	7.27
1	2:00:00	788.65	137.50	7.64	769.85	116.20	9.03	775.79	103.26	7.90	729.01	95.27	6.97	775.85	114.17	7.24	784.31	99.92	7.28
1	3:00:00	784.84	138.03	7.72	771.48	115.13	8.78	781.58	102.93	7.56	732.45	94.74	6.98	786.30	116.55	7.46	780.54	99.46	7.22
1	4:00:00	780.56	137.51	7.69	769.64	114.04	8.63	781.38	102.76	7.77	731.28	94.88	6.94	786.28	117.64	7.77	785.07	97.46	6.93
1	5:00:00	785.44	138.34	7.74	769.42	114.92	8.84	781.46	103.76	7.88	732.93	94.89	6.94	784.54	118.63	7.83	791.09	98.05	7.20
1	6:00:00	782.96	138.80	7.78	770.71	115.61	8.88	790.66	104.72	7.90	736.29	95.65	7.05	783.62	118.85	7.84	796.29	98.39	7.15
1	7:00:00	784.75	138.10	7.69	785.04	117.12	8.87	790.73	103.92	7.85	734.04	95.02	7.01	786.31	118.21	7.84	801.60	98.00	7.13
1	8:00:00	791.56	138.38	7.74	790.55	117.95	8.97	805.78	104.80	7.92	736.15	95.74	7.06	777.35	116.12	7.76	805.44	98.41	7.15
1	9:00:00	787.66	137.91	7.70	800.79	119.95	9.22	796.82	101.93	7.85	738.11	96.62	7.13	773.59	116.39	7.74	803.39	99.01	7.20
1	10:00:00	770.55	137.76	7.82	785.59	119.86	9.40	756.28	99.76	8.13	688.97	88.05	6.27	767.63	114.49	7.56	794.89	99.28	7.14
1	11:00:00	794.18	140.31	7.77	789.84	120.96	9.54	761.77	99.81	8.15	750.38	125.61	7.40	772.84	112.13	7.22	795.43	99.80	7.32
1	12:00:00	805.29	142.91	8.13	794.83	120.73	9.43	765.39	100.17	8.17	764.60	127.46	7.28	782.67	111.50	7.77	792.73	99.67	7.26
1	13:00:00	802.50	142.98	8.23	800.95	123.56	9.93	759.65	99.02	8.12	778.31	133.05	7.61	782.10	113.00	7.69	796.21	99.83	7.23
1	14:00:00	800.18	141.37	8.03	748.22	119.22	9.97	754.49	98.56	8.11	776.89	129.51	7.42	777.05	112.80	7.64	796.49	98.96	7.19
1	15:00:00	778.58	139.30	7.86	738.17	117.69	9.87	747.79	97.60	8.03	769.50	128.67	7.31	782.78	113.29	7.69	790.31	99.26	7.22
1	16:00:00	775.27	139.49	7.90	739.43	116.60	9.68	742.90	97.40	7.95	770.44	128.45	7.29	788.53	115.03	7.85	785.82	100.01	7.28
1	17:00:00	778.56	140.96	8.03	744.98	116.04	9.44	746.77	97.98	8.00	762.09	125.59	7.08	787.90	114.31	7.70	785.29	100.25	7.31
1	18:00:00	789.43	143.63	8.32	772.98	116.89	9.03	749.82	98.00	7.98	776.95	127.59	6.88	793.26	117.04	7.58	787.94	99.64	7.20
1	19:00:00	801.91	142.61	8.09	751.00	116.32	9.35	749.15	97.74	7.95	764.22	127.17	7.32	780.63	117.68	8.00	787.34	100.92	7.40
1	20:00:00	802.13	143.37	8.20	760.27	118.32	9.49	744.60	97.81	8.07	768.95	126.92	7.30	782.19	118.48	8.06	786.88	100.83	7.41
1	21:00:00	797.83	143.08	8.24	781.58	119.01	9.20	747.57	98.24	8.05	767.61	128.86	7.39	773.62	117.39	8.02	789.57	99.88	7.36
1	22:00:00	797.43	143.02	8.23	779.22	117.57	8.93	746.74	97.82	8.07	766.84	125.53	7.27	764.35	115.97	7.95	781.57	99.82	7.32
1	23:00:00	801.52	143.24	8.19	763.68	117.58	9.03	747.96	98.11	8.05	758.55	123.61	7.13	758.05	115.72	7.92	782.51	99.01	7.25
2	0:00:00	802.27	143.58	8.23	770.13	118.02	8.95	748.53	98.26	8.09	766.96	125.54	6.86	749.66	114.85	7.83	778.23	99.33	7.24
2	1:00:00	805.64	142.73	7.99	791.94	118.51	8.66	749.48	97.99	8.07	757.04	126.48	7.27	741.47	115.32	7.82	782.29	98.93	7.17
2	2:00:00	801.22	143.45	8.24	793.47	122.58	8.95	746.48	96.07	7.59	755.83	125.48	7.18	735.54	114.37	7.74	778.31	100.05	7.37
2	3:00:00	799.90	143.53	8.20	764.05	120.09	9.08	739.95	96.46	7.92	758.94	127.11	7.26	742.53	114.18	7.42	775.43	99.36	7.32
2	4:00:00	801.58	142.63	8.13	781.99	120.79	8.96	737.55	96.65	7.90	758.35	126.60	7.26	732.57	115.01	7.78	774.52	99.55	7.32
2	5:00:00	799.65	142.83	8.21	800.28	121.81	8.71	741.09	97.45	7.94	755.57	124.26	7.21	722.67	114.21	7.66	775.36	99.98	7.36
2	6:00:00	797.78	142.66	8.20	805.35	124.08	8.70	737.54	97.01	7.86	753.86	125.13	7.22	721.43	114.87	7.74	776.39	99.47	7.33
2	7:00:00	802.93	143.07	8.23	796.70	121.66	8.56	741.80	97.44	7.97	752.89	127.01	7.22	721.68	113.89	7.68	776.80	99.85	7.36
2	8:00:00	807.64	143.99	8.34	802.00	120.20	8.67	746.00	97.92	8.09	752.83	125.21	7.17	727.44	115.01	7.78	772.81	100.04	7.37
2	9:00:00	813.35	144.07	8.30	764.22	126.44	8.46	739.79	97.50	8.03	754.26	124.68	7.15	741.38	116.22	7.85	773.84	100.20	7.36
2	10:00:00	806.46	142.01	8.13	768.31	123.46	7.73	734.00	95.50	7.58	763.01	123.94	7.28	747.20	117.31	7.91	770.88	100.62	7.42
2	11:00:00	807.42	142.53	8.16	761.59	125.35	8.06	Maintenanc	Maintenanc	Maintenanc	761.17	125.65	6.95	757.68	117.46	7.66	769.00	100.07	7.26
2	12:00:00	806.09	140.14	7.85	747.25	127.14	8.51	Maintenanc	Maintenanc	Maintenanc	753.45	128.44	7.31	758.06	118.71	7.99	767.74	100.14	7.38
2	13:00:00	811.86	141.69	8.08	751.33	126.97	8.48	Maintenanc	Maintenanc	Maintenanc	753.21	127.78	7.20	757.94	117.77	7.91	766.08	100.11	7.39
2	14:00:00	809.36	140.72	7.92	760.43	127.72	8.48	Maintenanc	Maintenanc	Maintenanc	754.46	127.15	7.16	755.10	116.68	7.81	774.11	100.28	7.37
2	15:00:00	791.23	138.82	7.76	758.87	126.44	8.22	391.86	57.23	4.05	752.36	127.12	7.15	757.97	116.45	7.82	781.12	98.75	7.19
2	16:00:00	792.27	138.96	7.76	754.81	125.68	8.17	746.01	104.59	8.05	751.04	127.69	7.14	755.54	117.16	7.83	780.27	98.97	7.21
2	17:00:00	794.91	139.80	7.85	763.29	126.65	8.19	741.96	102.20	8.06	753.72	128.48	7.19	755.03	116.47	7.79	777.61	98.55	7.20
2	18:00:00	803.40	141.19	8.01	777.50	128.26	8.30	734.98	99.81	7.93	761.93	130.99	7.24	760.34	117.81	7.89	784.08	99.16	7.09
2	19:00:00	804.88	141.70	8.02	795.41	128.09	8.10	737.92	100.53	7.96	772.17	128.68	6.88	757.32	117.30	7.80	786.37	99.69	7.31
2	20:00:00	806.21	141.88	8.06	800.36	126.13	7.75	734.45	98.65	7.64	782.16	135.19	7.53	756.70	117.70	7.76	779.00	99.06	7.21
2	21:00:00	803.22	140.91	8.04	814.23	127.22	7.67	735.12	101.12	8.02	797.79	134.57	7.50	749.94	117.95	7.94	778.18	99.15	7.21
2	22:00:00	792.64	140.22	8.12	816.87	128.55	7.63	731.86	100.59	7.99	801.89	134.95	7.48	752.73	118.12	7.97	788.79	99.37	7.20
2	23:00:00	792.66	140.56	8.10	805.26	128.30	7.58	734.25	101.17	8.03	802.03	134.07	7.45	751.43	117.46	7.91	796.21	99.44	7.18
3	0:00:00	788.09	140.15	8.17	800.55	126.67	7.37	735.74	100.98	8.02	796.37	134.67	7.48	750.35	118.51	7.95	805.35	98.91	7.15
3	1:00:00	778.74	140.52	8.20	795.15	125.98	7.36	737.92	101.22	8.00	805.37	133.78	7.28	751.83	117.84	7.56	805.58	99.07	7.12
3	2:00:00	785.89	141.44	8.41	787.76	126.37	7.45	742.60	101.12	7.86	798.91	130.41	7.51	745.11	118.71	7.97	802.75	99.57	7.15
3	3:00:00	786.28	140.80	8.32	790.15	126.48	7.42	733.05	100.45	8.10	801.75	131.87	7.51	746.90	117.99	7.91	803.88	100.88	7.33
3	4:00:00	777.33	139.74	8.29	789.48	127.66	7.66	729.22	99.90	7.99	807.90	132.96	7.55	747.02	117.54	7.89	799.72	100.21	7.28
3	5:00:00	771.67	138.27	8.24	793.00	127.88	7.68	734.93	100.77	8.05	811.00	132.73	7.48	748.69	118.48	7.94	799.78	100.90	7.35
3	6:00:00	775.14	138.64	8.28	792.87	127.68	7.61	753.78	102.00	7.99	814.12	133.29	7.60	749.82	118.79	7.99	805.24	100.24	7.30
3	7:00:00	776.95	138.24	8.23	801.22	127.93	7.59	764.07	103.91	8.08	809.80	132.71	7.55	751.09	118.56	8.02	808.76	99.26	7.23
3	8:00:00	779.35	138.80	8.32	802.69	128.24	7.64	768.52	104.50	8.22	813.95	132.							

วันที่	เวลา	HCU-2 'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)
4	23:00:00	753.07	132.64	8.20	786.40	126.36	7.75	752.50	100.45	8.11	775.07	126.73	7.50	242.92	45.90	7.51	788.35	105.36	7.58
5	0:00:00	755.22	132.71	8.20	782.46	125.67	7.76	747.37	99.48	8.10	771.31	125.87	7.42	241.95	45.57	7.46	792.21	105.67	7.56
5	1:00:00	760.56	131.95	7.96	790.95	126.76	7.78	749.16	98.64	8.01	782.36	125.58	7.12	244.01	45.94	7.48	794.32	106.19	7.60
5	2:00:00	753.73	132.87	8.21	795.50	126.72	7.72	752.15	98.92	7.81	783.24	128.32	7.62	242.64	45.58	7.44	801.24	106.69	7.53
5	3:00:00	751.00	132.81	8.18	789.74	125.90	7.68	741.69	98.95	8.03	784.23	127.42	7.55	243.33	45.32	7.34	808.11	108.69	7.60
5	4:00:00	747.98	132.14	8.18	780.32	126.17	7.83	741.67	98.09	7.88	788.80	128.76	7.60	241.57	46.19	7.85	803.18	108.76	7.65
5	5:00:00	750.29	132.82	8.26	767.09	126.74	8.05	745.42	97.98	7.83	796.08	127.31	7.58	242.16	45.65	7.72	806.18	108.49	7.60
5	6:00:00	750.04	132.86	8.20	772.72	128.25	8.22	742.29	99.26	7.94	795.51	126.84	7.57	241.41	46.04	7.76	807.82	109.50	7.62
5	7:00:00	750.10	132.16	8.17	775.83	129.04	8.20	740.36	98.88	7.90	794.62	126.97	7.60	234.82	45.33	7.74	811.86	109.94	7.61
5	8:00:00	758.45	133.44	8.31	776.45	128.61	8.17	757.93	101.06	8.15	796.93	126.98	7.61	214.07	43.35	7.73	808.70	109.35	7.46
5	9:00:00	766.22	134.24	8.32	782.81	128.82	8.19	759.13	101.33	8.22	799.08	124.68	7.22	179.47	40.31	7.80	808.79	110.13	7.78
5	10:00:00	754.66	131.79	8.08	781.84	128.47	8.15	757.68	100.55	8.12	799.96	127.63	7.67	172.82	39.38	7.67	808.50	110.10	7.71
5	11:00:00	748.10	128.92	7.79	785.11	129.63	8.31	768.83	102.34	8.22	799.35	125.83	7.58	174.76	38.88	7.52	823.27	109.57	7.70
5	12:00:00	751.98	131.11	8.05	790.61	128.43	8.06	761.42	100.59	7.86	803.69	127.19	7.62	173.59	39.06	7.72	822.66	110.08	7.67
5	13:00:00	752.33	130.07	7.89	799.20	130.95	8.42	755.50	100.40	8.18	806.41	126.95	7.59	173.77	38.13	7.68	817.64	109.45	7.64
5	14:00:00	748.94	130.43	7.98	779.90	129.00	8.29	756.22	100.07	8.10	810.05	125.19	7.44	172.50	37.61	7.49	812.34	109.10	7.63
5	15:00:00	742.64	129.45	7.88	739.97	125.31	8.73	747.46	98.36	7.95	800.18	123.26	7.26	173.96	38.09	7.55	813.04	109.00	7.62
5	16:00:00	744.66	130.07	7.95	701.12	121.47	9.30	750.43	98.79	7.92	803.34	124.16	7.34	174.49	38.11	7.60	814.95	109.75	7.64
5	17:00:00	750.92	130.44	8.00	657.86	115.09	9.60	749.65	98.68	7.94	795.26	123.04	7.21	174.71	38.22	7.72	818.51	109.62	7.61
5	18:00:00	756.61	129.69	7.84	733.11	69.65	10.34	755.63	99.47	7.99	813.93	127.29	7.17	178.90	36.86	7.16	814.39	109.35	7.47
5	19:00:00	752.94	129.99	8.07	99.21	27.44	10.56	761.88	99.99	7.77	807.78	126.83	7.50	180.45	36.39	7.37	816.12	110.80	7.72
5	20:00:00	753.16	130.49	8.12	Shutdown	Shutdown	Shutdown	752.47	99.28	8.07	797.32	123.91	7.24	591.31	84.15	7.58	819.38	111.79	7.82
5	21:00:00	750.79	130.10	8.06	Shutdown	Shutdown	Shutdown	752.35	99.54	8.02	807.33	125.40	7.40	816.75	107.81	7.50	820.98	109.96	7.63
5	22:00:00	750.46	130.58	8.07	Shutdown	Shutdown	Shutdown	757.11	100.30	8.10	802.75	123.43	7.20	819.67	107.98	7.41	814.87	110.12	7.63
5	23:00:00	747.87	129.94	8.03	Shutdown	Shutdown	Shutdown	758.51	99.67	8.09	804.15	124.29	7.21	820.16	108.43	7.42	810.08	109.64	7.64
6	0:00:00	750.42	130.42	8.11	Shutdown	Shutdown	Shutdown	756.46	99.47	8.08	797.02	123.38	7.14	826.40	108.98	7.42	809.49	108.32	7.56
6	1:00:00	753.52	130.87	8.08	Shutdown	Shutdown	Shutdown	759.15	99.55	7.93	789.90	119.71	6.89	822.17	108.23	7.38	803.18	108.46	7.63
6	2:00:00	755.10	130.41	7.94	Shutdown	Shutdown	Shutdown	756.76	99.10	7.97	782.67	119.16	7.14	823.08	108.30	7.38	799.75	107.80	7.65
6	3:00:00	750.72	131.19	8.11	Shutdown	Shutdown	Shutdown	750.34	98.36	7.96	792.67	119.53	7.19	823.14	107.80	7.41	803.04	107.82	7.64
6	4:00:00	745.47	130.44	8.12	Shutdown	Shutdown	Shutdown	752.23	99.00	8.13	788.74	120.10	7.25	819.95	107.44	7.26	802.78	107.33	7.47
6	5:00:00	749.23	130.84	8.12	Shutdown	Shutdown	Shutdown	743.89	97.48	7.92	787.97	118.98	7.18	804.62	107.88	7.66	797.85	108.05	7.72
6	6:00:00	740.13	130.81	8.18	Shutdown	Shutdown	Shutdown	740.89	97.36	7.90	787.91	121.33	7.15	798.89	106.23	7.49	800.94	106.56	7.62
6	7:00:00	734.66	130.75	8.21	Shutdown	Shutdown	Shutdown	756.52	99.83	8.12	784.08	123.27	7.23	803.99	107.10	7.51	800.12	107.28	7.63
6	8:00:00	737.53	128.55	7.90	Shutdown	Shutdown	Shutdown	755.02	100.25	8.26	780.78	120.66	7.21	808.38	107.41	7.55	799.50	107.71	7.49
6	9:00:00	800.24	152.10	10.65	Shutdown	Shutdown	Shutdown	761.07	100.72	8.29	781.36	119.05	6.87	806.75	106.53	7.44	799.01	109.49	7.81
6	10:00:00	618.78	136.14	11.32	Shutdown	Shutdown	Shutdown	762.08	100.31	8.02	797.40	121.95	7.37	804.96	104.24	7.37	799.82	108.17	7.75
6	11:00:00	525.21	111.07	9.86	Shutdown	Shutdown	Shutdown	755.94	100.20	8.28	791.63	121.82	7.26	772.42	104.39	7.82	800.14	107.95	7.74
6	12:00:00	546.64	109.68	9.35	Shutdown	Shutdown	Shutdown	753.93	99.71	8.25	800.18	122.02	7.18	777.37	106.24	8.11	792.49	107.69	7.73
6	13:00:00	572.50	109.56	9.22	Shutdown	Shutdown	Shutdown	762.41	93.85	8.23	798.39	119.27	7.01	763.75	104.50	7.95	785.72	107.33	7.72
6	14:00:00	616.69	107.17	8.50	Shutdown	Shutdown	Shutdown	758.95	93.71	8.19	796.28	118.11	6.80	791.15	107.12	8.02	784.40	106.77	7.70
6	15:00:00	615.92	107.77	8.31	Shutdown	Shutdown	Shutdown	755.86	92.64	8.11	794.86	119.24	6.77	805.02	107.43	7.74	785.11	106.49	7.72
6	16:00:00	606.51	107.49	8.26	Shutdown	Shutdown	Shutdown	751.26	92.46	8.09	801.50	119.87	6.82	802.62	107.48	7.70	782.30	107.53	7.76
6	17:00:00	612.66	109.68	8.45	Shutdown	Shutdown	Shutdown	761.76	94.52	8.13	798.12	118.83	6.70	805.94	107.92	7.80	784.66	107.82	7.78
6	18:00:00	621.77	109.88	8.43	Shutdown	Shutdown	Shutdown	771.28	95.43	8.05	803.38	118.85	6.74	813.40	107.27	7.64	789.09	107.64	7.62
6	19:00:00	627.14	112.42	8.85	Shutdown	Shutdown	Shutdown	769.37	94.45	7.89	815.46	119.61	6.84	813.78	106.87	7.41	785.21	110.11	8.06
6	20:00:00	628.31	112.41	8.82	Shutdown	Shutdown	Shutdown	770.15	95.99	8.21	812.88	122.05	7.13	806.69	107.25	7.63	792.34	109.52	7.94
6	21:00:00	634.04	111.18	8.54	Shutdown	Shutdown	Shutdown	771.25	95.93	8.20	800.66	117.81	6.90	803.83	107.48	7.76	800.01	109.33	7.90
6	22:00:00	638.00	112.31	8.43	Shutdown	Shutdown	Shutdown	771.42	98.67	8.21	784.26	116.93	6.85	803.70	106.82	7.73	802.48	109.08	7.91
6	23:00:00	636.52	113.77	8.49	Shutdown	Shutdown	Shutdown	766.37	102.03	8.18	788.40	120.56	7.02	805.00	106.41	7.76	803.97	108.04	7.85
7	0:00:00	641.33	117.78	8.50	Shutdown	Shutdown	Shutdown	766.47	100.71	8.12	789.91	119.22	6.93	809.33	107.07	7.75	794.88	108.57	7.87
7	1:00:00	645.70	119.81	8.66	Shutdown	Shutdown	Shutdown	759.87	100.84	8.06	789.09	119.64	6.94	803.06	105.76	7.67	783.83	106.92	7.80
7	2:00:00	654.42	119.72	8.41	Shutdown	Shutdown	Shutdown	754.79	98.35	7.82	795.40	118.52	6.60	808.88	105.68	7.53	785.71	106.23	7.63
7	3:00:00	660.03	122.94	8.45	Shutdown	Shutdown	Shutdown	758.64	99.18	7.83	786.53	119.66	6.97	803.10	107.08	7.73	779.39	108.84	8.08
7	4:00:00	677.27	122.06	8.06	Shutdown	Shutdown	Shutdown	760.83	100.18	8.02	780.40	117.83	6.80	802.24	107.93	7.70	778.05	107.19	7.84
7	5:00:00	692.89	122.76	7.89	Shutdown	Shutdown	Shutdown	763.47	100.88	8.11	784.20	119.33	6.91	804.82	108.41	7.78	778.69	107.45	7.81
7	6:00:00	693.20	124.67	8.02	Shutdown	Shutdown	Shutdown	753.89	99.34	7.93	782.59	118.73	6.88	800.18	107.59	7.68	789.93	107.81	7.77
7	7:00:00	705.16	125.47	8.01	Shutdown	Shutdown	Shutdown	759.08	100.04	8.01	786.48	120.05	6.83	800.51	107.64	7.73	793.02	107.54	7.77
7	8:00:00	709.54	125.09	8.01	Shutdown	Shutdown	Shutdown	765.02	101.09	8.18	786.69	120.44	6.93	809.45	107.81	7.81	790.05	105.51	7.49
7	9:00:00	704.19	123.52	7.89	Shutdown	Shutdown	Shutdown	767.18	1										

วันที่	เวลา	HCU-2'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)
8	21:00:00	704.53	121.90	8.05	Shutdown	Shutdown	Shutdown	770.18	97.98	8.11	792.67	123.66	7.21	797.43	100.20	8.18	797.55	98.92	7.74
8	22:00:00	695.40	120.92	7.90	Shutdown	Shutdown	Shutdown	771.58	98.84	8.13	784.72	120.81	6.86	791.36	100.76	8.13	797.59	99.26	7.72
8	23:00:00	695.71	121.21	7.94	Shutdown	Shutdown	Shutdown	770.54	98.90	7.95	780.84	121.40	6.93	785.23	102.92	8.11	782.33	98.84	7.67
9	0:00:00	695.21	121.72	7.95	Shutdown	Shutdown	Shutdown	764.63	97.52	7.93	777.06	120.73	6.76	768.12	100.84	8.12	787.32	99.05	7.70
9	1:00:00	703.03	122.47	8.00	Shutdown	Shutdown	Shutdown	769.30	96.72	7.62	775.77	120.85	6.70	763.20	99.64	7.97	783.62	97.28	7.56
9	2:00:00	700.04	122.73	8.07	Shutdown	Shutdown	Shutdown	768.44	99.35	8.04	777.33	122.44	7.04	762.67	99.62	7.95	771.19	89.53	6.76
9	3:00:00	696.20	122.47	8.06	Shutdown	Shutdown	Shutdown	767.17	99.40	8.01	769.82	120.18	6.83	761.14	99.82	7.90	779.91	90.38	6.98
9	4:00:00	700.93	123.73	8.12	Shutdown	Shutdown	Shutdown	765.80	99.29	8.01	767.13	120.35	6.74	766.04	100.57	7.91	778.47	95.30	7.10
9	5:00:00	699.70	125.32	8.36	Shutdown	Shutdown	Shutdown	766.16	99.86	8.03	786.85	122.23	6.81	767.74	101.96	8.21	778.25	96.20	7.24
9	6:00:00	697.52	124.65	8.28	Shutdown	Shutdown	Shutdown	762.03	99.12	8.04	797.55	122.08	6.83	767.95	102.13	8.21	783.52	96.54	7.18
9	7:00:00	700.25	125.20	8.35	Shutdown	Shutdown	Shutdown	773.55	99.89	8.22	797.86	121.72	6.78	761.29	102.09	8.15	786.45	97.26	7.23
9	8:00:00	677.01	120.93	8.38	Shutdown	Shutdown	Shutdown	780.12	100.67	8.30	780.98	121.03	6.83	773.53	102.85	8.12	789.65	95.51	6.99
9	9:00:00	639.80	115.05	8.32	Shutdown	Shutdown	Shutdown	784.96	100.82	7.82	780.61	121.88	6.91	828.41	109.28	8.18	778.31	96.37	7.34
9	10:00:00	536.06	101.49	8.03	Shutdown	Shutdown	Shutdown	778.39	100.81	8.15	786.43	121.71	6.80	808.27	106.55	8.14	781.95	96.68	7.33
9	11:00:00	412.17	87.17	8.31	Shutdown	Shutdown	Shutdown	778.89	99.51	8.17	788.40	122.02	6.91	806.52	107.38	8.44	786.28	96.76	7.26
9	12:00:00	372.96	82.49	8.41	Shutdown	Shutdown	Shutdown	771.59	98.45	8.06	779.53	121.66	6.93	807.05	108.30	8.61	786.57	96.29	7.27
9	13:00:00	362.19	80.99	8.31	Shutdown	Shutdown	Shutdown	766.03	99.18	8.12	784.59	122.30	6.97	808.18	106.66	8.44	778.65	96.13	7.19
9	14:00:00	355.39	80.20	8.23	Shutdown	Shutdown	Shutdown	776.87	100.44	8.15	777.17	120.00	6.76	813.38	104.56	8.44	781.96	95.13	7.10
9	15:00:00	346.99	78.88	8.04	Shutdown	Shutdown	Shutdown	772.61	99.27	8.08	776.58	120.84	6.75	794.47	101.74	8.27	777.83	96.20	7.10
9	16:00:00	337.27	78.12	8.01	Shutdown	Shutdown	Shutdown	754.69	97.53	7.97	783.50	122.21	6.83	792.94	103.20	8.47	779.79	95.62	7.11
9	17:00:00	338.92	77.69	8.05	Shutdown	Shutdown	Shutdown	766.68	96.80	7.98	791.98	121.43	6.58	803.63	103.80	8.38	783.72	95.22	7.09
9	18:00:00	354.76	77.78	8.07	Shutdown	Shutdown	Shutdown	780.87	99.95	8.25	798.84	123.34	7.04	803.72	103.07	8.29	779.92	95.21	6.98
9	19:00:00	359.82	79.39	8.36	Shutdown	Shutdown	Shutdown	788.47	98.89	7.95	790.22	123.53	7.16	803.00	104.88	8.53	784.10	96.40	7.13
9	20:00:00	361.40	79.05	8.27	Shutdown	Shutdown	Shutdown	783.93	100.83	8.25	795.27	123.62	7.22	810.74	106.17	8.43	776.78	96.61	7.28
9	21:00:00	363.28	78.63	8.17	Shutdown	Shutdown	Shutdown	779.47	99.60	8.29	795.36	122.69	7.19	807.20	106.04	8.45	771.22	97.87	7.35
9	22:00:00	359.35	77.81	8.04	Shutdown	Shutdown	Shutdown	779.61	99.31	8.26	800.12	122.35	7.15	805.62	104.90	8.37	771.85	97.29	7.32
9	23:00:00	350.49	77.67	8.14	Shutdown	Shutdown	Shutdown	773.46	99.04	8.23	790.31	121.61	7.03	803.97	102.48	8.23	773.58	96.69	7.25
10	0:00:00	446.98	88.52	8.08	Shutdown	Shutdown	Shutdown	776.22	100.13	8.27	782.39	120.92	6.93	789.78	102.77	8.22	763.63	96.51	7.17
10	1:00:00	460.51	90.09	8.03	Shutdown	Shutdown	Shutdown	785.02	99.30	8.18	779.92	120.97	6.86	783.74	101.80	8.11	759.89	95.08	6.90
10	2:00:00	649.13	112.90	7.84	Shutdown	Shutdown	Shutdown	768.78	97.94	7.81	790.64	119.99	6.59	783.33	102.22	8.01	755.23	92.30	7.00
10	3:00:00	757.48	127.81	7.93	Shutdown	Shutdown	Shutdown	757.97	97.88	8.12	774.97	119.71	6.81	779.89	103.44	7.92	763.11	94.95	7.08
10	4:00:00	760.64	128.65	7.94	Shutdown	Shutdown	Shutdown	779.55	98.52	7.98	777.70	119.46	6.81	771.53	103.95	8.14	769.19	96.16	7.10
10	5:00:00	768.40	129.32	7.98	Shutdown	Shutdown	Shutdown	780.56	97.49	7.84	779.84	119.59	6.82	755.56	102.87	8.05	765.46	95.26	7.07
10	6:00:00	769.71	129.25	7.95	Shutdown	Shutdown	Shutdown	780.70	98.40	7.90	779.89	119.50	6.81	758.96	104.07	8.16	762.94	96.16	7.11
10	7:00:00	780.82	131.26	8.12	Shutdown	Shutdown	Shutdown	792.51	99.59	7.96	778.68	119.30	6.80	794.04	107.57	8.13	761.44	95.64	7.09
10	8:00:00	771.68	128.70	8.17	Shutdown	Shutdown	Shutdown	801.85	100.76	8.19	782.18	120.03	6.91	792.43	107.33	8.05	764.59	96.16	7.13
10	9:00:00	529.70	98.87	7.99	Shutdown	Shutdown	Shutdown	804.43	100.43	8.01	792.65	121.80	7.07	802.52	107.96	8.03	794.53	102.43	7.50
10	10:00:00	189.31	51.96	7.89	Shutdown	Shutdown	Shutdown	800.39	100.64	8.01	791.99	121.51	7.00	807.82	108.54	8.04	782.31	102.69	7.59
10	11:00:00	185.49	51.59	8.12	Shutdown	Shutdown	Shutdown	797.79	100.65	8.14	801.15	122.83	6.99	799.03	107.95	8.16	725.06	97.46	7.71
10	12:00:00	183.20	50.76	8.08	Shutdown	Shutdown	Shutdown	796.57	100.41	8.13	805.29	125.52	7.41	797.16	108.43	8.18	733.19	95.39	7.52
10	13:00:00	182.17	50.56	8.11	Shutdown	Shutdown	Shutdown	801.08	100.46	8.09	799.75	123.83	7.29	805.55	108.98	8.15	732.83	95.72	7.50
10	14:00:00	179.16	51.84	8.05	Shutdown	Shutdown	Shutdown	802.55	100.84	8.13	793.06	122.89	7.14	813.24	110.27	8.21	749.46	96.47	7.52
10	15:00:00	178.52	50.68	7.89	Shutdown	Shutdown	Shutdown	787.63	99.25	8.09	783.41	121.68	7.01	816.85	110.72	8.29	761.72	98.17	7.59
10	16:00:00	180.38	50.87	8.05	Shutdown	Shutdown	Shutdown	784.31	98.23	8.04	788.19	123.39	7.14	815.41	109.96	8.23	772.41	98.43	7.49
10	17:00:00	178.86	51.25	8.09	Shutdown	Shutdown	Shutdown	780.12	98.78	8.07	787.68	123.28	7.07	822.78	110.60	8.09	781.78	100.28	7.71
10	18:00:00	180.26	51.88	8.27	Shutdown	Shutdown	Shutdown	788.69	97.86	7.75	793.81	121.79	6.71	822.50	111.27	8.30	787.19	100.26	7.67
10	19:00:00	181.81	50.39	8.02	Shutdown	Shutdown	Shutdown	783.09	98.83	8.24	791.40	122.92	7.19	815.53	109.61	8.39	791.46	99.98	7.64
10	20:00:00	178.45	49.64	8.07	Shutdown	Shutdown	Shutdown	788.60	100.24	8.24	788.69	122.93	7.09	819.43	110.87	8.53	789.47	99.98	7.65
10	21:00:00	176.10	49.78	8.03	Shutdown	Shutdown	Shutdown	785.29	98.99	8.19	786.81	121.92	7.07	813.29	109.12	8.42	792.73	99.35	7.62
10	22:00:00	177.82	50.62	8.17	Shutdown	Shutdown	Shutdown	784.75	98.63	8.03	787.76	122.52	7.05	800.17	107.57	8.34	789.83	97.33	7.26
10	23:00:00	177.43	49.90	8.07	Shutdown	Shutdown	Shutdown	778.40	97.72	7.93	785.39	122.48	7.05	804.57	108.83	8.42	778.04	99.02	7.71
11	0:00:00	174.96	50.04	8.12	Shutdown	Shutdown	Shutdown	769.26	97.10	7.95	775.59	120.32	6.85	793.40	107.47	8.36	785.72	98.71	7.53
11	1:00:00	177.95	49.68	8.06	Shutdown	Shutdown	Shutdown	771.56	98.01	7.96	785.54	119.81	6.57	785.98	106.69	8.28	786.90	98.47	7.52
11	2:00:00	178.26	49.94	7.94	Shutdown	Shutdown	Shutdown	771.34	97.52	8.11	774.22	120.01	6.86	776.93	105.67	8.27	782.87	99.98	7.61
11	3:00:00	176.35	50.36	8.02	Shutdown	Shutdown	Shutdown	772.73	96.98	7.88	775.44	120.05	6.84	779.20	104.63	7.99	790.42	99.44	7.55
11	4:00:00	175.83	50.65	8.08	Shutdown	Shutdown	Shutdown	772.96	98.35	8.08	775.42	119.52	6.79	779.73	103.31	8.19	787.59	99.27	7.54
11	5:00:00	175.96	50.59	8.00	Shutdown	Shutdown	Shutdown	778.01	97.14	7.99	776.90	119.77	6.80	781.88	103.74	8.11	792.71	98.78	7.46
11	6:00:00	176.02	50.96	8.03	Shutdown	Shutdown	Shutdown	773.34	96.98	7.93	780.53	119.73	6.82	783.57	103.33	8.05	786.78	99.58	7.52
11	7:00:00	178.01	51.63	8.12	Shutdown	Shutdown	Shutdown	768.94	96.97	7.98	776.32	118.57	6.78	780.80	103.32	8.10	788.49	99.52	7.55
11	8:00:00	179.49	51.31	8.13	Shutdown	Shutdown	Shutdown	783.71	98.51	8.19	783.19	120.55	6.93	791.11	105.26	8.25	783.10	100.03	7.59
11	9:00:00	180.70	51.63	8.21	Shutdown	Shutdown	Shutdown	784.95	98.81	8.14	787.66	122.48	7.08	794.08					

วันที่	เวลา	HCU-2'S STACK															มิตินายน	NOx (ppm)	O2 (%)			
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม								
		SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)						
12	19:00:00	648.20	114.64	8.07	Shutdown	Shutdown	Shutdown	763.77	96.73	8.13	793.80	121.47	6.90	807.68	108.46	8.17	807.51	95.57	7.55			
12	20:00:00	648.29	114.61	8.09	Shutdown	Shutdown	Shutdown	763.97	97.14	8.15	799.35	121.11	6.96	809.63	109.14	8.17	799.45	96.87	7.87			
12	21:00:00	652.22	114.95	8.12	Shutdown	Shutdown	Shutdown	763.62	90.77	8.12	799.41	121.29	6.88	809.07	108.86	8.18	800.64	96.55	7.76			
12	22:00:00	648.11	112.88	7.85	Shutdown	Shutdown	Shutdown	763.77	90.13	8.02	811.67	121.38	6.90	810.39	108.87	8.18	794.15	96.00	7.73			
12	23:00:00	645.06	112.69	7.84	Shutdown	Shutdown	Shutdown	763.29	90.48	8.01	797.70	120.15	6.89	805.65	107.84	8.07	795.88	95.76	7.74			
13	0:00:00	649.50	113.56	7.99	Shutdown	Shutdown	Shutdown	774.87	92.67	8.06	791.38	118.97	6.80	798.68	107.42	8.16	797.60	96.00	7.72			
13	1:00:00	646.07	112.96	7.91	Shutdown	Shutdown	Shutdown	777.18	91.88	7.77	792.63	119.62	6.87	808.06	106.92	8.02	801.39	95.11	7.55			
13	2:00:00	643.89	112.46	7.78	Shutdown	Shutdown	Shutdown	779.49	92.54	7.91	797.95	119.46	6.58	800.16	106.43	7.91	798.59	95.96	7.62			
13	3:00:00	640.78	112.32	7.88	Shutdown	Shutdown	Shutdown	773.12	92.05	7.90	793.68	119.99	6.85	794.31	107.62	8.19	783.04	96.93	7.79			
13	4:00:00	639.38	112.33	7.91	Shutdown	Shutdown	Shutdown	775.01	92.93	7.92	789.43	118.66	6.75	800.45	108.04	8.13	791.59	96.57	7.77			
13	5:00:00	644.31	112.53	7.91	Shutdown	Shutdown	Shutdown	773.52	92.78	7.93	797.10	119.73	6.86	807.34	108.65	8.11	801.49	96.46	7.75			
13	6:00:00	643.92	113.15	8.01	Shutdown	Shutdown	Shutdown	781.85	93.09	7.97	792.60	119.08	6.77	807.20	109.10	8.14	797.54	95.40	7.66			
13	7:00:00	646.71	113.16	7.94	Shutdown	Shutdown	Shutdown	782.34	93.52	7.95	799.51	119.81	6.88	809.02	109.31	8.17	794.01	95.50	7.60			
13	8:00:00	650.86	113.79	8.03	Shutdown	Shutdown	Shutdown	790.34	93.76	7.95	803.39	120.86	6.98	812.03	109.54	8.18	795.87	95.16	7.63			
13	9:00:00	654.15	114.05	8.01	Shutdown	Shutdown	Shutdown	787.58	94.30	8.14	809.69	120.88	7.02	803.30	108.73	8.27	791.27	94.50	7.57			
13	10:00:00	645.75	114.49	8.02	Shutdown	Shutdown	Shutdown	793.28	93.10	7.87	801.95	119.90	7.02	799.90	109.04	8.41	780.10	95.09	7.61			
13	11:00:00	643.41	114.94	8.02	Shutdown	Shutdown	Shutdown	783.69	92.50	8.01	793.86	119.05	7.04	782.11	108.19	8.74	788.10	96.07	7.76			
13	12:00:00	647.08	114.45	8.11	Shutdown	Shutdown	Shutdown	777.93	92.19	8.06	800.74	121.18	7.16	767.19	108.26	8.97	786.76	96.09	7.74			
13	13:00:00	652.12	114.71	8.13	Shutdown	Shutdown	Shutdown	746.46	88.29	7.61	800.72	120.79	7.13	778.10	107.13	8.73	784.53	95.83	7.69			
13	14:00:00	646.80	114.63	8.20	Shutdown	Shutdown	Shutdown	748.98	87.10	7.43	791.50	119.41	6.97	774.30	107.38	8.77	786.70	95.73	7.72			
13	15:00:00	642.71	113.53	8.02	Shutdown	Shutdown	Shutdown	742.38	88.85	7.91	794.20	120.88	7.04	773.40	106.28	8.54	793.99	95.38	7.75			
13	16:00:00	642.81	113.45	7.98	Shutdown	Shutdown	Shutdown	764.45	96.70	8.13	797.58	119.68	6.97	756.12	104.22	8.37	801.23	95.41	7.67			
13	17:00:00	639.87	113.51	8.00	Shutdown	Shutdown	Shutdown	767.16	95.69	7.95	794.45	119.52	6.92	755.66	104.53	8.25	809.14	95.32	7.63			
13	18:00:00	644.53	113.98	8.01	Shutdown	Shutdown	Shutdown	759.80	96.24	8.11	802.45	121.86	7.14	755.73	104.64	8.33	810.32	95.39	7.64			
13	19:00:00	647.23	114.36	8.00	Shutdown	Shutdown	Shutdown	770.72	97.37	8.23	791.47	119.86	7.03	758.23	104.75	8.48	819.04	95.36	7.63			
13	20:00:00	656.37	115.42	8.16	Shutdown	Shutdown	Shutdown	773.56	96.52	7.91	788.06	119.48	7.00	761.69	104.72	8.44	804.35	92.63	7.40			
13	21:00:00	656.44	115.13	8.12	Shutdown	Shutdown	Shutdown	762.48	96.56	8.16	791.71	120.35	7.07	767.13	104.20	8.35	780.45	93.23	7.72			
13	22:00:00	646.45	113.34	7.90	Shutdown	Shutdown	Shutdown	752.90	95.86	8.13	793.73	118.90	6.99	792.21	106.48	8.30	788.54	93.49	7.77			
13	23:00:00	640.90	112.89	7.93	Shutdown	Shutdown	Shutdown	735.17	94.47	8.03	792.06	120.21	7.06	806.91	107.83	8.26	795.56	93.59	7.69			
14	0:00:00	639.71	113.02	7.96	Shutdown	Shutdown	Shutdown	726.03	94.28	8.10	799.10	119.51	7.03	806.87	107.91	8.29	799.50	92.08	7.42			
14	1:00:00	646.58	113.12	7.92	Shutdown	Shutdown	Shutdown	738.81	94.79	8.14	795.60	120.07	7.01	804.06	108.21	8.33	795.34	93.81	7.64			
14	2:00:00	645.30	113.60	8.01	Shutdown	Shutdown	Shutdown	749.76	94.94	7.80	789.01	117.67	6.84	801.68	108.57	8.42	796.03	92.72	7.57			
14	3:00:00	647.22	113.62	8.02	Shutdown	Shutdown	Shutdown	740.37	95.27	8.10	789.43	116.39	6.34	813.11	107.79	8.15	797.27	92.77	7.56			
14	4:00:00	647.91	113.81	7.98	Shutdown	Shutdown	Shutdown	739.49	94.54	8.01	785.03	117.58	6.84	801.87	107.68	8.26	794.14	92.52	7.51			
14	5:00:00	650.99	114.21	8.02	Shutdown	Shutdown	Shutdown	742.19	95.51	8.08	781.54	116.55	6.70	793.14	107.61	8.36	793.58	91.93	7.49			
14	6:00:00	649.62	113.95	7.99	Shutdown	Shutdown	Shutdown	751.62	96.81	8.17	786.33	117.45	6.77	803.87	107.85	8.29	795.20	92.14	7.52			
14	7:00:00	649.28	114.27	8.05	Shutdown	Shutdown	Shutdown	748.67	96.21	8.14	792.12	116.53	6.77	787.58	107.79	8.48	796.20	91.93	7.50			
14	8:00:00	651.31	114.26	8.06	Shutdown	Shutdown	Shutdown	758.06	96.42	8.17	793.86	116.86	6.82	787.43	108.03	8.51	790.82	92.39	7.56			
14	9:00:00	651.83	115.50	8.26	Shutdown	Shutdown	Shutdown	762.95	98.70	8.35	791.82	116.87	6.97	784.56	108.13	8.60	794.78	92.78	7.65			
14	10:00:00	643.03	115.47	8.29	Shutdown	Shutdown	Shutdown	761.13	99.10	8.58	798.31	119.53	7.10	787.43	107.83	8.49	790.86	92.57	7.66			
14	11:00:00	641.89	115.75	8.34	Shutdown	Shutdown	Shutdown	760.69	97.67	8.34	800.66	120.61	7.16	787.00	108.15	8.63	791.34	92.90	7.52			
14	12:00:00	644.50	116.18	8.40	Shutdown	Shutdown	Shutdown	750.27	96.43	8.14	803.61	120.28	7.17	794.16	108.34	8.52	792.07	93.51	7.74			
14	13:00:00	653.95	117.60	8.53	Shutdown	Shutdown	Shutdown	755.09	96.33	8.40	797.21	118.36	6.95	788.18	107.76	8.51	796.67	93.58	7.72			
14	14:00:00	643.31	116.01	8.36	Shutdown	Shutdown	Shutdown	760.16	97.54	8.37	791.77	118.55	6.98	789.17	107.49	8.41	800.62	93.10	7.66			
14	15:00:00	640.06	115.35	8.31	Shutdown	Shutdown	Shutdown	764.64	96.47	8.16	794.46	120.34	7.07	791.99	107.26	8.36	799.83	93.17	7.66			
14	16:00:00	626.90	114.29	8.24	Shutdown	Shutdown	Shutdown	765.28	95.84	8.12	795.15	120.83	7.13	789.79	106.61	8.36	797.90	93.40	7.70			
14	17:00:00	614.21	113.54	8.27	Shutdown	Shutdown	Shutdown	770.99	96.62	8.08	791.57	119.06	6.93	791.46	107.07	8.38	797.98	92.57	7.65			
14	18:00:00	614.02	113.94	8.41	Shutdown	Shutdown	Shutdown	784.24	96.98	7.98	801.72	121.66	7.20	792.28	106.85	8.12	803.19	92.10	7.52			
14	19:00:00	611.40	112.84	8.32	Shutdown	Shutdown	Shutdown	787.64	97.06	8.07	796.16	119.88	7.03	790.36	108.98	8.58	798.76	92.87	7.73			
14	20:00:00	615.38	114.47	8.61	Shutdown	Shutdown	Shutdown	797.03	97.67	7.85	799.55	120.26	7.13	799.75	109.46	8.50	801.33	93.52	7.73			
14	21:00:00	619.70	115.13	8.56	Shutdown	Shutdown	Shutdown	795.27	96.64	7.77	799.73	119.86	7.19	801.60	109.14	8.45	800.19	93.29	7.71			
14	22:00:00	614.57	113.38	8.34	Shutdown	Shutdown	Shutdown	793.17	96.66	7.78	799.10	118.49	7.08	803.42	109.25	8.45	799.46	92.87	7.70			
14	23:00:00	617.86	114.06	8.38	Shutdown	Shutdown	Shutdown	796.07	97.11	7.79	799.32	118.20	7.01	797.06	108.26	8.40	801.61	92.72	7.64			
15	0:00:00	657.98	119.43	8.36	Shutdown	Shutdown	Shutdown	792.57	96.24	7.75	790.90	116.45	6.82	790.01	107.35	8.33	799.11	91.77	7.59			
15	1:00:00	672.81	121.49	8.34	Shutdown	Shutdown	Shutdown	781.95	96.38	7.85	794.32	116.94	6.87	791.06	107.07	8.31	800.65	92.33	7.67			
15	2:00:00	689.28	122.89	8.19	Shutdown	Shutdown	Shutdown	787.38	94.56	7.42	803.70	115.83	6.52	795.47	107.22	8.17	798.36	92.83	7.75			
15	3:00:00	700.77	124.98	8.33	Shutdown	Shutdown	Shutdown	768.88	93.56	7.55	787.79	113.95	6.61	792.84	107.96	8.46	800.87	92.48	7.72			
15	4:00:00	697.73	124.97	8.29	Shutdown	Shutdown	Shutdown	767.59	93.80	7.59	784.11	113.87	6.58	791.06	107.53	8.38	800.46	92.40	7.69			
15	5:00:00	699.04	125.45	8.35	Shutdown	Shutdown	Shutdown	770.86	92.98	7.46	789.80	115.46	6.72	795.59	107.63	8.34	798.63	92.48	7.68			
15	6:00:00	700.18	125.93	8.38	Shutdown	Shutdown	Shutdown	764.21	91.77	7.37	794.07	115.28	6.67	794.09	107.67	8.40	797.50	92.43	7.66			
15	7:00:00	702.16	126.22	8.46	Shutdown	Shutdown	Shutdown															

วันที่	เวลา	HCU-2 'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)
16	17:00:00	774.39	132.20	8.55	Shutdown	Shutdown	Shutdown	758.38	93.98	6.93	787.71	115.26	7.11	813.24	110.94	8.50	806.40	93.40	7.67
16	18:00:00	778.67	133.10	8.62	Shutdown	Shutdown	Shutdown	761.77	96.51	7.31	792.45	117.41	7.26	807.89	110.04	8.33	808.12	93.92	7.72
16	19:00:00	784.08	133.34	8.63	Shutdown	Shutdown	Shutdown	758.34	96.09	7.30	791.88	118.14	7.32	814.48	109.71	8.32	796.94	94.80	7.74
16	20:00:00	786.46	133.80	8.65	Shutdown	Shutdown	Shutdown	755.47	95.55	7.28	789.36	116.01	7.18	810.83	109.81	8.37	789.69	95.66	8.00
16	21:00:00	777.64	133.04	8.63	Shutdown	Shutdown	Shutdown	745.75	94.25	7.17	795.90	117.95	7.31	813.55	109.19	8.32	796.65	94.20	7.72
16	22:00:00	767.53	131.89	8.58	Shutdown	Shutdown	Shutdown	753.42	94.68	7.22	798.48	115.43	6.86	808.31	108.41	8.33	793.76	94.17	7.70
16	23:00:00	771.77	132.24	8.60	Shutdown	Shutdown	Shutdown	755.34	93.83	7.10	787.71	116.60	7.27	804.83	107.32	8.22	795.26	94.21	7.70
17	0:00:00	776.88	132.56	8.65	Shutdown	Shutdown	Shutdown	754.33	92.70	7.05	782.56	115.34	7.10	802.48	106.53	8.14	794.19	92.69	7.47
17	1:00:00	775.93	132.24	8.61	Shutdown	Shutdown	Shutdown	755.34	94.15	7.10	785.22	114.58	7.02	809.69	106.70	8.06	796.10	93.03	7.60
17	2:00:00	778.19	131.93	8.49	Shutdown	Shutdown	Shutdown	752.99	93.48	7.03	787.09	114.87	7.02	806.34	107.47	8.27	794.51	92.75	7.54
17	3:00:00	771.36	132.04	8.57	Shutdown	Shutdown	Shutdown	746.49	91.76	6.60	784.76	116.29	7.03	804.93	107.48	8.29	791.85	93.06	7.57
17	4:00:00	780.93	133.24	8.69	Shutdown	Shutdown	Shutdown	739.46	91.86	6.92	783.33	115.09	6.92	806.52	106.85	8.20	790.99	93.35	7.65
17	5:00:00	771.42	131.84	8.55	Shutdown	Shutdown	Shutdown	733.32	91.89	6.90	787.10	114.49	6.91	807.07	107.20	8.20	784.54	93.15	7.70
17	6:00:00	771.18	132.51	8.65	Shutdown	Shutdown	Shutdown	719.42	90.82	6.80	785.99	114.53	6.91	806.96	106.77	8.19	787.24	93.49	7.79
17	7:00:00	774.61	132.77	8.66	Shutdown	Shutdown	Shutdown	723.45	92.02	6.90	785.15	113.87	6.84	800.88	106.38	8.20	784.24	93.61	7.83
17	8:00:00	785.76	134.30	8.82	Shutdown	Shutdown	Shutdown	720.39	93.05	7.14	795.94	115.98	7.06	799.10	106.45	8.26	789.72	93.33	7.83
17	9:00:00	789.92	133.27	8.75	Shutdown	Shutdown	Shutdown	710.15	92.33	7.10	795.36	117.37	7.15	806.51	106.85	8.23	793.18	92.86	7.82
17	10:00:00	778.68	132.06	8.67	Shutdown	Shutdown	Shutdown	701.70	92.43	7.18	785.44	117.19	7.10	796.72	106.02	8.06	782.44	92.98	7.71
17	11:00:00	762.12	130.16	8.50	Shutdown	Shutdown	Shutdown	692.43	89.57	6.66	781.74	117.34	7.09	810.75	107.64	8.41	786.57	91.54	7.50
17	12:00:00	770.04	131.19	8.58	Shutdown	Shutdown	Shutdown	674.58	90.36	7.11	792.50	116.18	6.87	824.95	106.91	8.20	795.25	90.74	7.38
17	13:00:00	772.65	132.14	8.67	Shutdown	Shutdown	Shutdown	670.70	89.42	7.01	796.40	118.41	7.26	818.46	105.74	8.00	792.15	91.37	7.40
17	14:00:00	776.43	132.68	8.68	Shutdown	Shutdown	Shutdown	666.29	90.27	7.04	787.44	116.96	7.07	816.65	105.55	7.87	796.31	90.75	7.34
17	15:00:00	762.70	130.22	8.43	Shutdown	Shutdown	Shutdown	675.23	89.59	7.22	787.05	117.59	7.11	819.26	105.60	7.89	795.42	90.56	7.32
17	16:00:00	752.68	129.73	8.42	Shutdown	Shutdown	Shutdown	689.28	95.51	7.43	792.15	116.95	6.91	818.19	105.20	7.78	802.39	89.93	7.30
17	17:00:00	757.23	131.15	8.53	Shutdown	Shutdown	Shutdown	729.72	101.83	7.72	788.44	117.49	7.16	816.69	106.34	7.88	802.77	89.29	7.16
17	18:00:00	769.14	131.04	8.52	Shutdown	Shutdown	Shutdown	755.43	105.59	7.57	784.15	116.30	7.01	807.52	106.16	7.82	789.89	89.08	7.04
17	19:00:00	776.75	131.01	8.47	Shutdown	Shutdown	Shutdown	763.50	107.04	7.76	786.11	117.08	7.09	801.27	106.26	8.05	784.93	88.35	7.01
17	20:00:00	778.71	132.05	8.63	Shutdown	Shutdown	Shutdown	762.54	107.83	7.73	793.11	118.49	7.25	809.77	107.02	8.07	774.26	87.87	6.99
17	21:00:00	770.77	130.56	8.43	Shutdown	Shutdown	Shutdown	768.37	109.32	7.88	787.94	115.56	6.99	808.31	107.42	8.04	771.65	87.18	6.97
17	22:00:00	774.07	131.31	8.54	Shutdown	Shutdown	Shutdown	770.55	108.24	7.76	790.51	116.02	6.63	802.94	106.77	8.01	772.68	87.81	6.98
17	23:00:00	773.35	131.35	8.52	Shutdown	Shutdown	Shutdown	770.40	108.66	7.77	774.14	115.34	7.03	798.89	106.68	7.94	773.89	87.33	6.95
18	0:00:00	773.31	131.79	8.55	Shutdown	Shutdown	Shutdown	770.37	107.09	7.62	774.25	115.36	7.01	811.35	106.40	7.81	771.45	87.15	6.91
18	1:00:00	770.75	131.12	8.49	Shutdown	Shutdown	Shutdown	762.87	108.16	7.71	778.48	115.51	7.04	800.86	105.12	7.73	770.62	88.00	6.99
18	2:00:00	769.71	131.26	8.53	Shutdown	Shutdown	Shutdown	766.18	108.62	7.87	760.26	113.42	7.02	792.30	104.50	7.71	764.69	88.42	7.00
18	3:00:00	771.40	130.85	8.46	Shutdown	Shutdown	Shutdown	781.00	108.23	7.53	751.07	112.31	7.07	781.28	103.54	7.72	763.42	88.31	7.01
18	4:00:00	769.59	131.59	8.63	Shutdown	Shutdown	Shutdown	777.07	109.05	7.81	750.06	112.27	7.04	773.63	102.85	7.69	766.52	88.04	6.98
18	5:00:00	768.69	130.95	8.52	Shutdown	Shutdown	Shutdown	774.04	107.64	7.79	755.08	111.09	7.01	772.65	103.28	7.76	763.87	88.19	7.01
18	6:00:00	770.60	132.24	8.67	Shutdown	Shutdown	Shutdown	781.82	109.11	7.86	765.70	113.46	7.09	780.47	103.25	7.77	768.02	88.73	7.02
18	7:00:00	777.69	132.65	8.70	Shutdown	Shutdown	Shutdown	781.07	109.09	7.82	776.08	114.14	7.10	776.10	102.44	7.67	777.66	89.34	7.03
18	8:00:00	791.82	133.89	8.83	Shutdown	Shutdown	Shutdown	798.77	111.02	8.36	776.41	114.97	7.21	774.52	102.87	7.76	787.93	90.07	7.01
18	9:00:00	791.50	132.56	8.68	Shutdown	Shutdown	Shutdown	715.65	107.76	8.80	767.22	112.55	7.23	771.66	102.23	7.73	788.72	90.37	7.04
18	10:00:00	789.52	131.41	8.52	Shutdown	Shutdown	Shutdown	741.24	109.17	8.95	608.28	92.78	7.10	774.69	102.20	7.75	786.94	90.15	6.95
18	11:00:00	802.95	132.88	8.76	Shutdown	Shutdown	Shutdown	754.41	105.01	8.04	554.10	87.98	7.35	769.14	102.11	7.65	782.74	91.17	7.19
18	12:00:00	805.70	132.12	8.65	Shutdown	Shutdown	Shutdown	753.31	102.71	7.46	534.96	85.37	7.46	763.49	102.68	7.94	782.10	91.42	7.21
18	13:00:00	814.63	133.34	8.82	Shutdown	Shutdown	Shutdown	753.77	102.73	7.57	416.15	69.61	7.43	763.06	102.56	7.92	782.31	90.72	7.17
18	14:00:00	830.17	132.85	8.68	Shutdown	Shutdown	Shutdown	750.90	102.17	7.39	393.07	66.74	7.29	767.80	102.91	7.89	798.40	91.74	7.18
18	15:00:00	822.19	132.30	8.62	Shutdown	Shutdown	Shutdown	751.33	102.49	7.29	381.16	63.55	7.22	774.40	103.98	7.87	804.05	92.38	7.20
18	16:00:00	823.33	131.92	8.67	Shutdown	Shutdown	Shutdown	742.05	101.80	7.21	267.04	45.98	7.23	786.19	104.35	7.85	802.70	92.48	7.20
18	17:00:00	822.49	131.34	8.66	Shutdown	Shutdown	Shutdown	750.28	102.45	7.37	207.76	38.84	7.19	791.37	105.08	7.95	814.43	91.46	7.05
18	18:00:00	800.86	128.72	8.73	Shutdown	Shutdown	Shutdown	765.88	106.43	7.51	161.11	32.14	7.10	793.55	105.24	7.96	807.88	91.51	6.99
18	19:00:00	795.90	127.25	8.65	Shutdown	Shutdown	Shutdown	784.35	106.66	7.21	155.30	31.57	7.22	797.70	104.41	7.71	785.88	92.10	7.46
18	20:00:00	800.05	127.04	8.62	Shutdown	Shutdown	Shutdown	779.54	108.93	7.60	155.67	32.32	7.42	797.48	105.51	8.02	794.24	91.60	7.21
18	21:00:00	794.76	125.38	8.46	Shutdown	Shutdown	Shutdown	780.36	108.67	7.62	156.43	32.51	7.49	796.11	105.48	8.00	798.50	91.58	7.15
18	22:00:00	784.11	124.39	8.40	Shutdown	Shutdown	Shutdown	781.09	108.88	7.66	151.76	31.98	7.38	795.05	105.69	8.04	799.04	91.44	7.15
18	23:00:00	783.62	124.84	8.50	Shutdown	Shutdown	Shutdown	783.43	109.15	7.66	138.87	31.21	7.42	803.94	106.12	8.08	795.86	90.11	7.02
19	0:00:00	785.94	125.44	8.53	Shutdown	Shutdown	Shutdown	783.11	109.06	7.62	135.00	31.01	7.40	808.62	105.80	8.02	794.64	89.37	7.00
19	1:00:00	788.13	125.67	8.46	Shutdown	Shutdown	Shutdown	781.45	109.07	7.60	146.82	31.78	7.33	798.83	104.69	7.93	784.38	88.26	6.88
19	2:00:00	777.53	125.26	8.48	Shutdown	Shutdown	Shutdown	791.13	108.03	7.27	147.37	31.68	7.30	790.59	104.90	8.05	783.03	88.43	6.87
19	3:00:00	779.87	125.44	8.50	Shutdown	Shutdown	Shutdown	786.06	109.30	7.71	148.03	31.54	7.25	791.75	104.58	7.99	776.94	88.64	6.87
19	4:00:00	779.71	124.92	8.46	Shutdown	Shutdown	Shutdown	781.46	108.50	7.57	148.36	31.94	7.40	786.24	103.62	7.86	771.62	87.89	6.85
19	5:00:0																		

วันที่	เวลา	HCU-2'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)
20	15:00:00	797.45	125.78	8.39	Shutdown	Shutdown	Shutdown	776.44	105.07	7.38	159.33	32.65	7.73	790.29	98.54	7.40	750.19	104.09	7.01
20	16:00:00	788.34	124.74	8.33	Shutdown	Shutdown	Shutdown	774.92	105.32	7.30	150.68	31.07	7.73	798.38	98.48	7.53	757.22	104.59	7.02
20	17:00:00	787.85	124.85	8.36	Shutdown	Shutdown	Shutdown	765.26	106.01	7.50	151.40	29.84	7.45	788.44	98.07	7.59	757.21	103.85	6.86
20	18:00:00	798.28	126.20	8.47	Shutdown	Shutdown	Shutdown	768.86	105.36	7.41	148.51	30.04	7.68	797.05	99.97	7.67	771.17	105.52	7.02
20	19:00:00	803.44	126.17	8.37	Shutdown	Shutdown	Shutdown	769.64	105.90	7.51	151.17	30.98	7.74	801.65	101.50	7.83	776.15	104.10	6.87
20	20:00:00	808.47	126.79	8.55	Shutdown	Shutdown	Shutdown	772.38	106.92	7.61	150.98	29.63	7.68	791.34	102.86	8.24	778.26	104.60	6.85
20	21:00:00	789.08	123.91	8.50	Shutdown	Shutdown	Shutdown	779.45	106.65	7.64	153.54	30.09	7.72	794.59	103.16	8.28	785.78	105.18	6.81
20	22:00:00	801.95	125.49	8.51	Shutdown	Shutdown	Shutdown	772.60	107.05	7.69	158.88	31.38	7.39	787.09	102.40	8.27	786.73	104.89	6.80
20	23:00:00	804.98	125.87	8.44	Shutdown	Shutdown	Shutdown	771.34	107.81	7.78	149.76	30.92	7.35	786.01	102.67	8.33	775.62	105.46	6.86
21	0:00:00	805.32	125.80	8.40	Shutdown	Shutdown	Shutdown	766.91	107.58	7.76	149.99	30.63	7.50	788.47	102.23	8.25	776.58	105.96	6.92
21	1:00:00	804.17	124.84	8.33	Shutdown	Shutdown	Shutdown	767.43	108.27	7.74	148.72	30.57	7.42	785.26	102.01	8.22	771.05	105.87	6.89
21	2:00:00	802.54	124.46	8.34	Shutdown	Shutdown	Shutdown	772.02	109.36	7.61	150.82	30.80	7.50	781.60	102.82	8.26	772.81	104.83	6.80
21	3:00:00	807.16	126.00	8.46	Shutdown	Shutdown	Shutdown	754.99	109.06	8.02	150.29	30.63	7.39	786.50	101.50	8.02	782.12	104.51	6.71
21	4:00:00	809.41	126.98	8.53	Shutdown	Shutdown	Shutdown	757.79	105.06	7.77	149.35	30.21	7.36	781.24	101.71	7.99	776.92	103.84	6.71
21	5:00:00	813.10	126.42	8.44	Shutdown	Shutdown	Shutdown	758.30	106.47	7.80	148.67	30.06	7.25	784.48	100.11	7.85	776.33	103.50	6.73
21	6:00:00	811.67	125.88	8.32	Shutdown	Shutdown	Shutdown	759.31	106.54	8.26	149.55	30.57	7.38	787.66	100.24	7.85	778.42	102.74	6.65
21	7:00:00	808.46	125.28	8.28	Shutdown	Shutdown	Shutdown	742.27	105.07	8.28	148.54	30.18	7.17	791.19	100.56	7.90	776.51	102.49	6.66
21	8:00:00	807.38	124.84	8.24	Shutdown	Shutdown	Shutdown	749.23	105.52	8.52	152.10	31.22	7.80	786.06	100.30	7.90	777.72	102.74	6.73
21	9:00:00	819.19	126.54	8.40	Shutdown	Shutdown	Shutdown	763.97	108.58	8.81	151.52	31.25	7.85	782.97	100.39	7.87	772.84	103.34	6.66
21	10:00:00	815.86	124.25	8.03	Shutdown	Shutdown	Shutdown	799.76	112.28	8.74	152.46	31.54	7.89	782.72	99.46	7.72	770.07	102.76	6.72
21	11:00:00	815.83	125.96	8.29	Shutdown	Shutdown	Shutdown	799.70	109.00	8.45	156.12	31.62	7.79	775.96	99.96	7.87	772.13	102.85	6.55
21	12:00:00	818.42	126.74	8.37	Shutdown	Shutdown	Shutdown	785.22	106.22	8.10	177.55	33.00	7.89	776.23	100.38	7.87	767.39	104.52	6.73
21	13:00:00	821.58	126.51	8.38	Shutdown	Shutdown	Shutdown	794.01	106.58	8.12	198.47	34.22	7.77	779.74	100.00	7.85	770.65	104.77	6.72
21	14:00:00	812.18	125.66	8.29	Shutdown	Shutdown	Shutdown	788.14	104.19	7.85	191.53	32.94	7.64	774.83	100.49	7.86	781.63	105.29	6.70
21	15:00:00	802.54	124.23	8.16	Shutdown	Shutdown	Shutdown	780.43	103.08	7.76	155.28	30.55	7.40	776.60	100.43	7.82	786.21	104.71	6.67
21	16:00:00	797.27	123.52	8.08	Shutdown	Shutdown	Shutdown	776.53	103.81	7.94	149.84	29.92	7.34	777.52	102.84	8.07	788.85	105.95	6.68
21	17:00:00	802.48	125.02	8.23	Shutdown	Shutdown	Shutdown	770.45	104.64	8.06	148.82	29.98	7.51	809.95	104.36	8.00	799.10	106.74	6.72
21	18:00:00	807.06	125.63	8.30	Shutdown	Shutdown	Shutdown	778.54	102.95	7.68	161.53	31.40	7.57	819.38	103.27	7.81	803.62	105.51	6.57
21	19:00:00	816.51	126.07	8.29	Shutdown	Shutdown	Shutdown	780.49	106.19	8.18	794.48	110.18	7.73	817.91	101.96	7.61	795.59	106.61	6.83
21	20:00:00	815.89	124.78	8.09	Shutdown	Shutdown	Shutdown	786.12	106.31	8.04	808.82	111.21	7.65	798.63	103.75	8.05	795.60	106.18	6.79
21	21:00:00	805.72	125.64	8.41	Shutdown	Shutdown	Shutdown	781.74	104.53	7.83	813.40	112.02	7.75	806.82	103.70	8.00	794.47	105.92	6.79
21	22:00:00	814.09	125.42	8.29	Shutdown	Shutdown	Shutdown	778.01	104.20	7.79	816.68	112.49	7.71	804.48	103.18	7.96	789.99	107.09	6.87
21	23:00:00	810.96	125.35	8.25	Shutdown	Shutdown	Shutdown	775.62	104.50	7.86	822.30	112.77	7.82	809.07	103.37	7.95	786.96	105.04	6.83
22	0:00:00	812.10	125.33	8.29	819.95	112.31	7.54	778.33	105.64	8.00	807.85	110.65	7.79	802.86	103.48	7.91	788.27	104.93	6.79
22	1:00:00	807.10	123.15	8.00	810.32	111.21	7.49	784.85	105.57	7.90	785.45	107.92	7.49	802.81	103.44	7.86	793.36	105.48	6.77
22	2:00:00	797.19	123.19	8.16	812.36	111.22	7.38	785.15	106.36	8.05	791.74	106.88	7.18	802.90	103.22	8.05	791.41	104.31	6.71
22	3:00:00	793.24	122.65	8.12	814.00	109.87	7.20	790.83	103.56	7.73	778.49	107.39	7.58	809.73	102.58	7.93	792.13	104.50	6.73
22	4:00:00	799.79	123.40	8.25	809.12	112.88	7.54	791.60	102.26	7.52	773.45	108.08	7.61	805.43	103.31	7.93	784.59	103.24	6.71
22	5:00:00	804.67	124.12	8.24	820.23	113.98	7.52	791.10	103.76	7.67	768.04	107.53	7.59	804.84	103.13	7.94	783.61	103.21	6.66
22	6:00:00	801.89	124.15	8.24	818.53	112.13	7.38	793.09	104.10	7.66	754.02	105.96	7.56	804.94	103.16	7.98	780.02	103.09	6.64
22	7:00:00	800.37	124.55	8.31	807.56	111.61	7.47	798.35	105.27	7.68	752.60	106.60	7.72	806.59	102.37	7.92	785.95	102.57	6.68
22	8:00:00	801.65	124.52	8.39	805.26	111.37	7.49	800.43	103.95	7.55	775.85	109.73	8.01	806.30	100.94	7.79	785.68	103.00	6.70
22	9:00:00	802.39	124.97	8.40	800.76	109.98	7.41	808.27	104.85	7.68	772.96	109.22	7.96	796.35	101.82	7.90	780.09	103.92	6.72
22	10:00:00	786.74	121.99	8.01	806.16	110.76	7.17	795.29	103.76	7.58	784.13	111.28	8.12	796.65	101.86	7.84	774.18	102.87	6.70
22	11:00:00	778.19	122.07	8.25	805.98	111.39	7.40	801.69	104.31	7.87	787.50	109.52	7.74	795.66	102.10	7.95	774.91	101.96	6.51
22	12:00:00	774.41	121.54	8.21	810.33	111.31	7.35	802.65	102.33	7.51	778.23	109.61	8.10	778.91	101.39	7.95	767.51	103.28	6.81
22	13:00:00	778.12	122.50	8.32	814.68	112.46	7.41	811.59	103.14	7.55	765.28	107.53	7.82	785.35	101.25	7.97	761.56	102.87	6.82
22	14:00:00	779.86	121.98	8.18	816.80	112.26	7.31	802.98	103.43	7.56	761.60	107.00	7.70	784.72	101.97	8.02	754.69	102.40	6.80
22	15:00:00	768.38	120.81	8.04	796.92	111.97	7.50	824.90	104.17	7.67	763.16	106.89	7.70	790.21	101.04	7.95	750.95	102.14	6.74
22	16:00:00	760.07	119.88	8.00	786.37	111.81	7.53	825.18	104.11	7.55	768.30	106.13	7.55	796.51	100.95	7.94	763.55	103.68	6.58
22	17:00:00	754.07	120.16	8.16	785.28	112.09	7.52	801.60	102.03	6.96	795.08	111.72	7.86	796.27	101.53	7.93	762.25	106.16	6.82
22	18:00:00	764.97	121.73	8.31	784.52	112.56	7.61	819.14	105.40	7.28	798.40	112.26	7.90	796.03	101.41	7.84	755.82	106.18	6.81
22	19:00:00	765.60	120.86	8.13	774.93	109.45	7.33	836.93	110.23	7.57	804.56	111.03	7.59	798.34	101.13	7.83	768.17	107.54	6.83
22	20:00:00	757.82	122.10	8.53	782.09	110.37	7.62	818.71	110.76	7.50	797.34	111.82	7.97	797.96	102.90	8.07	778.09	109.89	6.87
22	21:00:00	753.09	122.23	8.58	785.12	111.82	7.83	813.16	109.41	7.65	789.18	110.61	7.78	795.71	102.05	7.96	776.88	110.04	6.90
22	22:00:00	761.81	122.61	8.45	782.87	112.65	7.98	792.34	109.84	7.70	794.32	111.10	7.77	797.06	102.28	7.96	776.72	110.00	6.86
22	23:00:00	800.39	127.96	8.60	782.51	112.53	7.95	790.23	111.73	7.82	791.82	110.52	7.65	802.20	102.29	7.90	775.06	109.79	6.82
23	0:00:00	805.30	128.99	8.67	784.07	112.39	7.96	778.01	107.25	7.56	798.09	110.62	7.75	806.47	101.61	7.72	771.22	108.58	6.80
23	1:00:00	812.09	127.56	8.35	784.71	112.75	7.96												



วันที่	เวลา	HCU-2 'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)
24	13:00:00	577.12	93.19	8.24	62.08	19.09	8.37	778.80	107.82	7.76	793.42	110.82	7.79	783.90	96.68	7.70	773.42	114.86	7.01
24	14:00:00	569.35	92.14	8.15	84.76	19.92	8.23	780.68	105.67	7.63	774.62	109.14	7.61	783.18	96.52	7.69	775.41	115.04	7.01
24	15:00:00	508.90	85.11	7.89	67.23	18.53	8.17	793.52	108.33	7.71	784.58	111.09	7.77	786.11	96.50	7.63	785.91	115.33	6.84
24	16:00:00	489.05	83.92	7.92	29.69	15.63	8.01	785.32	107.19	7.57	782.15	110.83	7.74	787.17	96.80	7.63	784.26	115.29	6.87
24	17:00:00	486.37	83.84	7.90	7.08	14.60	8.15	777.18	107.30	7.72	782.67	110.66	7.72	784.12	97.05	7.66	793.57	117.61	7.17
24	18:00:00	491.53	84.55	8.11	2.30	14.23	8.34	784.13	107.18	7.60	783.48	110.05	7.60	793.99	95.65	7.38	801.70	117.73	7.13
24	19:00:00	501.28	84.74	8.00	1.54	14.54	8.45	775.77	106.80	7.71	779.59	108.26	7.33	783.79	97.83	7.72	794.78	117.86	7.18
24	20:00:00	499.20	84.52	8.04	0.95	14.76	8.41	786.67	106.42	7.88	776.68	108.80	7.67	786.81	98.05	7.69	796.17	117.18	7.13
24	21:00:00	500.00	84.21	8.00	0.62	14.91	8.29	785.25	107.38	7.83	779.03	108.55	7.64	781.88	98.06	7.75	798.35	117.86	7.13
24	22:00:00	496.33	83.74	7.90	0.61	15.31	8.14	779.19	106.42	7.71	780.88	109.28	7.61	782.55	97.36	7.73	801.67	117.82	7.11
24	23:00:00	491.58	83.18	7.82	0.16	14.92	7.97	781.76	107.55	7.80	790.30	110.28	7.66	781.54	98.05	7.70	796.65	115.71	7.00
25	0:00:00	488.83	83.21	7.88	0.32	15.22	7.98	783.99	108.34	7.81	786.71	110.15	7.61	776.43	98.24	7.71	793.93	115.78	6.96
25	1:00:00	488.47	83.25	7.82	0.04	15.20	8.01	774.16	106.95	7.65	791.33	109.81	7.36	773.99	97.61	7.70	791.06	114.79	6.74
25	2:00:00	491.39	84.10	7.95	0.00	14.97	8.08	773.28	107.09	7.76	786.11	109.35	7.43	768.88	97.40	7.57	795.13	115.60	6.78
25	3:00:00	489.52	83.26	7.83	0.00	15.06	8.11	777.76	106.54	7.40	785.94	109.19	7.51	767.49	98.60	7.84	800.49	114.61	6.66
25	4:00:00	487.34	83.09	7.84	0.00	15.03	8.08	775.59	106.65	7.64	783.46	109.23	7.53	772.44	97.99	7.77	794.55	116.89	6.98
25	5:00:00	489.38	83.32	7.88	0.00	14.82	8.10	780.32	108.08	7.74	783.35	109.16	7.49	775.72	98.09	7.77	795.77	117.26	7.01
25	6:00:00	489.80	83.13	7.81	0.00	14.94	8.10	786.54	108.32	7.77	785.45	109.40	7.53	771.07	98.26	7.78	800.99	117.42	7.05
25	7:00:00	492.16	83.61	7.93	0.00	14.78	8.21	786.98	107.92	7.72	796.62	110.25	7.68	777.37	97.74	7.76	802.48	116.34	6.96
25	8:00:00	490.59	81.59	7.90	0.00	14.49	8.11	792.94	108.12	7.63	796.71	110.70	7.75	775.41	97.54	7.72	794.42	117.06	7.05
25	9:00:00	396.09	69.04	8.06	0.00	14.89	8.28	791.51	107.71	7.87	801.51	111.91	7.88	768.63	96.95	7.70	793.49	116.47	7.03
25	10:00:00	372.63	66.04	7.71	0.00	15.01	8.08	800.43	107.05	7.97	794.86	110.37	7.64	769.53	97.17	7.70	787.91	116.88	7.01
25	11:00:00	369.62	65.66	7.73	0.00	15.04	8.13	803.40	107.10	7.87	790.18	108.51	7.68	773.31	96.96	7.64	794.20	116.44	6.96
25	12:00:00	370.22	66.51	7.90	0.00	14.96	8.20	799.43	106.65	7.77	783.04	108.49	7.78	772.64	97.24	7.75	796.92	115.64	6.70
25	13:00:00	371.01	66.22	7.87	0.00	14.93	8.18	784.64	107.43	7.74	772.52	107.56	7.75	772.06	96.98	7.68	792.99	117.49	6.96
25	14:00:00	366.31	65.92	7.73	0.00	14.58	8.07	787.94	104.36	7.75	767.04	106.79	7.59	775.52	97.02	7.67	786.77	118.44	7.11
25	15:00:00	356.10	65.11	7.63	0.00	14.60	8.00	726.30	97.61	7.51	762.78	106.18	7.63	776.78	96.80	7.69	792.60	118.84	7.08
25	16:00:00	352.67	64.87	7.69	0.00	14.74	7.81	715.60	95.72	7.40	776.09	106.80	7.67	772.36	96.65	7.68	796.95	116.87	6.95
25	17:00:00	350.53	65.00	7.69	0.00	14.62	7.96	709.30	95.00	7.35	757.11	105.42	7.58	777.77	96.73	7.69	796.23	118.10	6.93
25	18:00:00	351.91	65.88	7.92	0.00	14.48	8.11	710.90	95.81	7.56	763.28	106.18	7.68	783.47	97.38	7.72	796.85	119.04	7.16
25	19:00:00	356.55	65.72	7.94	0.00	13.95	8.19	753.52	99.56	7.44	766.79	103.88	7.37	784.36	98.02	7.70	795.79	119.14	7.14
25	20:00:00	362.18	65.57	7.79	0.00	14.09	8.13	794.49	102.93	7.50	750.24	102.74	7.68	779.22	98.22	7.80	797.70	118.91	7.13
25	21:00:00	361.91	66.01	7.87	0.00	14.23	8.11	789.21	102.96	7.71	758.74	105.25	7.81	777.04	97.38	7.75	796.48	119.10	7.14
25	22:00:00	356.06	65.23	7.89	0.00	14.18	8.02	789.15	102.39	7.70	766.86	106.67	7.89	776.77	97.00	7.70	799.11	118.95	7.14
25	23:00:00	356.79	65.53	7.94	0.00	14.14	8.06	788.34	102.99	7.64	775.94	107.59	7.87	774.90	97.95	7.73	793.25	118.90	7.12
26	0:00:00	353.09	65.00	7.91	0.00	14.08	8.04	787.35	102.88	7.58	798.89	110.97	7.82	778.42	97.07	7.63	792.44	117.83	7.09
26	1:00:00	351.30	64.36	7.75	0.00	13.80	7.90	789.03	101.59	7.46	795.35	110.90	7.81	783.34	95.71	7.35	781.08	117.33	7.11
26	2:00:00	350.41	64.29	7.80	142.56	32.69	7.96	779.75	99.34	7.10	797.97	109.65	7.46	766.45	96.29	7.53	790.74	119.35	7.16
26	3:00:00	354.09	64.69	7.83	712.67	106.07	8.35	765.77	99.98	7.49	791.58	111.02	7.85	745.37	95.75	7.50	798.06	113.93	6.66
26	4:00:00	356.03	64.31	7.70	785.37	113.19	8.16	762.55	98.81	7.39	793.47	110.01	7.76	731.12	95.54	7.47	791.17	118.11	7.04
26	5:00:00	355.58	64.57	7.79	786.90	112.31	8.11	758.33	98.05	7.35	785.09	109.04	7.61	720.83	94.72	7.46	791.19	117.81	7.05
26	6:00:00	354.07	64.43	7.84	793.24	113.64	8.16	768.71	100.17	7.45	789.54	109.46	7.67	707.13	94.74	7.42	800.87	117.24	7.06
26	7:00:00	353.52	65.14	8.04	799.16	114.46	8.21	764.18	98.16	7.38	791.24	109.97	7.72	695.52	94.86	7.49	799.08	117.26	7.10
26	8:00:00	357.97	65.89	8.15	796.29	113.44	8.17	731.05	97.62	7.48	796.82	111.44	7.90	684.20	94.69	7.51	802.08	115.23	7.08
26	9:00:00	361.88	66.55	8.31	801.36	113.79	8.20	754.42	99.66	7.31	797.73	111.17	7.92	679.44	94.76	7.58	799.80	117.26	7.16
26	10:00:00	364.95	65.71	7.99	801.16	112.37	8.07	773.51	103.75	7.95	798.37	111.03	7.70	688.76	95.20	7.46	802.40	116.63	7.10
26	11:00:00	365.57	66.12	8.20	805.53	112.76	8.07	769.62	102.74	7.84	788.94	110.84	7.98	684.66	96.45	7.67	804.72	117.19	7.09
26	12:00:00	363.00	65.89	8.21	805.90	110.55	7.82	774.24	102.40	7.79	784.39	110.60	7.91	687.82					

วันที่	เวลา	HCU-2 'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)	SO2 (ppm)	NOx (ppm)	O2 (%)
28	11:00:00	816.13	124.01	8.15	553.65	82.50	8.13	743.48	89.41	7.13	810.26	108.15	7.56	800.31	105.76	7.73	789.70	115.16	7.16
28	12:00:00	812.82	124.16	8.19	555.40	82.67	8.10	748.23	90.98	7.26	798.01	106.66	7.49	801.36	105.27	7.68	791.83	113.48	6.96
28	13:00:00	817.52	123.76	8.16	561.06	81.76	7.81	751.53	91.09	7.26	787.35	107.79	7.85	797.46	106.04	7.71	797.30	113.96	6.95
28	14:00:00	816.26	122.64	8.08	553.17	80.24	8.06	743.52	91.67	7.08	783.06	107.68	7.70	795.84	105.39	7.66	800.22	114.67	7.00
28	15:00:00	802.88	121.49	7.96	550.81	79.81	7.97	743.10	91.71	7.04	775.09	108.94	7.51	799.08	104.42	7.59	794.09	114.98	7.18
28	16:00:00	789.64	119.09	7.70	546.48	79.26	7.87	743.55	92.39	7.06	777.34	109.01	7.47	798.83	104.42	7.42	796.24	115.69	7.27
28	17:00:00	794.53	120.32	7.98	692.28	99.80	7.94	748.32	90.90	7.02	773.08	108.47	7.44	808.08	103.94	7.41	799.45	116.48	7.35
28	18:00:00	804.10	121.71	8.04	806.23	110.43	7.69	755.41	91.73	6.99	780.71	108.74	7.53	806.07	104.02	7.41	803.95	117.22	7.39
28	19:00:00	807.80	122.30	8.09	810.30	111.08	8.04	746.40	89.75	6.79	779.06	108.00	7.09	805.66	106.34	7.51	799.49	116.25	7.34
28	20:00:00	808.97	122.36	8.13	807.95	108.75	8.04	745.40	91.71	7.06	773.37	109.79	7.63	792.38	104.65	7.34	801.98	115.94	7.28
28	21:00:00	816.50	122.71	8.05	803.38	108.60	8.10	748.42	93.34	7.10	776.71	110.04	7.66	796.95	105.54	7.54	805.87	116.38	7.31
28	22:00:00	815.05	122.54	8.06	786.59	106.41	8.07	743.60	91.57	6.95	777.48	107.01	7.69	795.23	106.42	7.54	803.75	116.38	7.38
28	23:00:00	815.43	122.67	8.08	775.22	105.81	8.13	746.03	92.00	6.94	778.26	107.41	7.77	795.31	104.60	7.47	803.21	115.83	7.39
29	0:00:00	812.45	122.09	8.02				755.61	92.62	7.09	786.28	108.91	7.74	792.56	105.40	7.52	801.73	113.96	7.22
29	1:00:00	810.83	121.42	7.95				748.52	92.60	7.01	787.33	109.70	7.81	787.20	105.90	7.47	793.82	114.70	7.22
29	2:00:00	805.05	119.90	7.67				742.89	89.42	6.39	781.77	108.35	7.59	787.90	105.84	7.50	793.78	113.32	6.98
29	3:00:00	799.28	120.64	7.92				735.53	91.24	6.90	778.72	107.43	7.46	789.69	105.44	7.57	789.35	113.95	7.19
29	4:00:00	800.40	120.66	7.91				735.50	92.78	6.97	766.61	108.02	7.57	787.21	106.30	7.60	789.12	113.20	7.17
29	5:00:00	801.55	120.99	7.95				733.31	93.48	6.97	773.37	110.52	7.53	788.39	106.75	7.62	792.77	113.76	7.18
29	6:00:00	800.15	120.57	7.89				734.18	93.50	6.95	759.80	108.34	7.46	787.80	106.90	7.63	789.97	112.94	7.11
29	7:00:00	800.95	120.86	7.95				732.71	92.82	6.94	749.41	110.65	7.44	792.30	106.41	7.65	785.43	113.38	7.14
29	8:00:00	809.75	122.24	8.08				728.42	91.89	6.95	744.36	110.44	7.45	798.25	107.14	7.64	785.48	113.77	7.13
29	9:00:00	815.84	122.43	8.17				734.92	91.51	6.65	739.73	110.90	7.52	796.92	106.81	7.62	791.66	113.11	6.89
29	10:00:00	819.27	121.63	7.89				731.75	94.47	7.18	740.94	110.81	7.33	798.51	106.65	7.61	789.37	114.95	7.25
29	11:00:00	817.81	122.63	8.11				731.28	94.42	7.16	731.85	109.72	7.52	796.44	106.57	7.65	790.68	114.32	7.19
29	12:00:00	813.07	121.70	7.99				737.95	95.69	7.07	733.26	110.15	7.59	799.28	105.79	7.45	788.21	114.95	7.19
29	13:00:00	815.50	121.80	8.05				749.68	96.87	7.08	729.36	109.76	7.51	802.05	106.45	7.73	789.88	114.80	7.19
29	14:00:00	822.50	122.99	8.16				752.51	95.67	7.09	723.33	108.86	7.36	798.55	106.89	7.73	792.65	114.94	7.28
29	15:00:00	800.48	121.66	8.15				750.85	96.50	7.13	728.45	108.63	7.25	804.39	106.51	7.65	793.38	114.69	7.22
29	16:00:00	798.62	121.72	8.11				748.99	95.18	7.04	755.92	112.72	7.41	808.54	107.17	7.65	794.07	115.01	7.31
29	17:00:00	806.00	122.61	8.15				754.16	96.43	7.14	773.09	113.53	7.29	808.01	107.01	7.71	794.02	113.79	7.02
29	18:00:00	814.66	123.83	8.23				746.88	95.20	7.06	771.12	113.34	7.29	809.71	104.01	7.49	797.99	115.12	7.34
29	19:00:00	810.12	121.18	7.87				748.14	94.92	7.05	769.43	114.01	7.63	808.30	106.64	7.75	797.12	114.15	7.34
29	20:00:00	806.14	122.18	8.15				752.37	95.86	6.98	768.61	113.09	7.56	813.07	106.41	7.74	793.63	114.60	7.31
29	21:00:00	806.90	122.83	8.26				748.47	95.52	6.90	764.18	112.99	7.51	819.75	106.70	7.68	796.26	113.88	7.24
29	22:00:00	790.81	121.74	8.30				745.77	95.78	7.14	770.74	113.48	7.44	821.47	105.87	7.61	796.54	114.41	7.25
29	23:00:00	794.81	121.87	8.26				742.83	97.37	7.14	774.74	113.37	7.41	817.54	105.18	7.51	787.42	112.21	7.19
30	0:00:00	784.10	120.16	8.05				744.88	95.97	7.11	777.20	112.27	7.04	810.56	106.49	7.56	784.52	112.02	7.18
30	1:00:00	787.25	119.33	7.93				746.82	96.45	7.09	778.59	112.70	7.16	815.54	105.87	7.42	786.71	111.52	7.13
30	2:00:00	783.84	119.51	8.02				748.42	97.49	7.11	787.38	112.57	7.07	818.01	105.95	7.57	793.38	109.57	6.78
30	3:00:00	788.38	119.87	8.00				753.00	97.16	6.78	791.61	112.71	7.07	816.08	105.96	7.54	787.33	114.13	7.05
30	4:00:00	788.45	119.79	7.97				745.35	97.21	7.13	803.92	114.50	7.18	820.00	105.81	7.54	792.71	114.46	7.08
30	5:00:00	790.47	119.71	7.94				749.20	96.52	7.17	799.21	113.41	7.07	819.69	105.13	7.48	797.77	116.36	7.16
30	6:00:00	794.47	119.97	7.93				744.99	97.53	7.16	797.58	114.91	7.12	818.05	105.42	7.51	794.20	115.97	7.15
30	7:00:00	793.96	119.84	7.95				751.25	97.98	7.22	798.41	115.27	7.15	816.20	105.88	7.54	795.05	116.63	7.20
30	8:00:00	796.69	120.59	8.05				749.75	97.77	7.23	809.48	116.30	7.34	816.14	104.98	7.51	793.97	114.58	7.04
30	9:00:00	801.96	121.88	8.19				748.87	97.56	7.22	799.55	115.11	7.41	816.05	104.26	7.45	789.23	116.24	7.20
30	10:00:00	803.51	122.59	8.20				750.01	97.11	7.09	785.07	115.63	7.34	815.45	103.49	7.35	793.20	117.62	7.32
30	11:00:00	806.91	122.89	8.37				765.81	99.19	7.31	785.35	118.42	7.76	814.63	104.05	7.53	793.83	117.02	7.28
30	12:00:00	805.32	122.81	8.28				760.07	97.82	7.45	795.41	114.95	7.85	820.64	102.77	7.43	798.78	117.49	7.32
30	13:00:00	812.70	124.20	8.38				746.22	96.21	7.15	788.36	112.01	7.69	818.67	103.21	7.47	795.52	117.03	7.29
30	14:00:00	811.72	124.32	8.35				746.44	96.90	7.07	785.79	113.63							

วันที่	เวลา	CDU-3 'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)
1	0:00:00	528.71	85.19	4.53	547.40	90.24	4.48	586.05	72.78	4.41	455.97	77.64	4.32	509.76	59.51	4.03	483.73	62.17	4.12
1	1:00:00	523.26	84.15	4.51	547.46	90.06	4.44	590.77	72.80	4.39	455.85	77.51	4.31	508.98	59.75	4.05	482.45	60.86	4.11
1	2:00:00	514.77	84.91	4.49	548.04	89.91	4.42	596.44	72.72	4.38	456.04	77.48	4.29	510.41	59.67	4.06	483.51	60.87	4.22
1	3:00:00	511.95	85.07	4.48	549.67	90.07	4.41	597.84	72.22	4.37	456.59	77.71	4.31	511.05	60.09	4.06	479.22	61.15	4.27
1	4:00:00	516.35	84.48	4.51	550.33	90.12	4.43	600.54	72.20	4.37	456.27	77.34	4.33	513.15	59.27	4.08	481.48	60.92	4.19
1	5:00:00	523.78	85.37	4.52	549.59	89.46	4.40	602.96	71.90	4.39	457.10	77.08	4.32	511.08	60.52	4.17	484.12	60.02	4.10
1	6:00:00	521.89	84.58	4.52	546.35	89.19	4.40	607.04	71.95	4.41	457.93	76.63	4.28	509.42	61.13	4.17	490.82	59.17	4.00
1	7:00:00	520.43	83.97	4.53	546.43	90.84	4.41	611.70	71.96	4.39	458.10	76.67	4.28	511.76	60.91	4.20	495.34	59.59	3.98
1	8:00:00	526.20	83.95	4.46	550.35	90.79	4.37	628.68	72.35	4.37	457.98	76.90	4.24	510.95	60.22	4.17	498.06	59.37	3.92
1	9:00:00	526.74	83.09	4.42	550.53	91.50	4.35	637.96	73.07	4.36	457.64	77.44	4.20	510.89	59.85	4.19	500.01	60.32	3.90
1	10:00:00	530.31	83.91	4.39	550.87	91.59	4.35	619.24	73.14	4.33	459.90	78.13	4.16	505.92	59.15	4.12	497.56	60.51	3.83
1	11:00:00	531.85	83.55	4.32	552.17	92.08	4.34	624.91	73.75	4.31	462.80	75.07	4.13	507.37	58.91	4.03	496.44	61.05	3.79
1	12:00:00	532.82	83.96	4.20	551.94	92.48	4.31	632.66	72.42	4.27	462.20	75.29	4.12	510.15	59.00	3.99	496.15	61.77	3.85
1	13:00:00	533.91	83.34	4.21	555.72	92.41	4.26	621.09	74.20	4.28	460.17	75.74	4.07	515.75	58.95	3.94	493.30	61.78	3.87
1	14:00:00	530.98	82.44	4.21	554.18	93.23	4.28	614.69	74.27	4.20	462.41	76.11	4.05	517.12	59.88	3.95	488.59	62.05	3.86
1	15:00:00	525.02	83.40	4.20	557.16	94.08	4.31	611.57	75.18	4.24	461.51	76.48	4.09	517.79	60.10	3.96	489.79	60.35	3.85
1	16:00:00	532.28	82.67	4.19	553.73	92.93	4.29	614.61	75.74	4.24	461.22	76.43	4.11	518.38	60.14	3.96	487.82	59.96	3.85
1	17:00:00	529.57	83.19	4.22	552.76	91.90	4.33	613.13	75.53	4.27	461.76	76.70	4.13	517.34	60.67	3.97	487.39	60.69	3.85
1	18:00:00	530.22	84.59	4.28	570.73	91.70	4.38	611.80	76.02	4.29	461.08	76.64	4.19	517.80	60.47	4.00	487.31	61.72	3.85
1	19:00:00	525.57	84.03	4.30	554.91	92.11	4.38	611.53	76.89	4.30	460.14	76.34	4.27	514.63	59.93	3.99	484.68	61.48	3.87
1	20:00:00	526.80	84.01	4.31	546.30	91.60	4.34	613.46	77.11	4.34	460.96	75.16	4.28	512.19	60.28	4.02	482.69	61.33	3.89
1	21:00:00	525.15	83.03	4.34	548.83	91.97	4.35	606.34	76.74	4.35	460.14	74.71	4.30	505.41	60.59	4.03	477.87	61.05	3.93
1	22:00:00	520.65	84.14	4.36	546.05	91.81	4.34	604.44	75.83	4.34	459.08	74.71	4.32	499.92	60.42	4.01	474.87	60.57	3.91
1	23:00:00	518.04	84.46	4.42	540.18	92.63	4.37	607.31	77.20	4.37	460.47	75.08	4.35	496.10	59.92	4.00	478.88	62.22	3.93
2	0:00:00	514.63	83.68	4.46	542.79	92.58	4.38	610.57	76.62	4.37	459.23	74.22	4.34	490.41	59.62	3.98	478.31	61.89	3.91
2	1:00:00	519.51	84.86	4.47	542.43	92.39	4.37	605.17	76.53	4.37	459.93	72.63	4.25	489.27	59.52	4.00	481.04	60.37	3.90
2	2:00:00	524.16	84.06	4.47	543.54	92.66	4.37	604.44	75.61	4.39	459.89	72.22	4.24	490.41	60.08	4.01	481.38	59.70	3.89
2	3:00:00	522.15	83.37	4.49	547.32	92.66	4.40	608.58	75.82	4.41	459.86	71.69	4.24	490.35	60.32	4.02	482.08	60.01	3.87
2	4:00:00	524.94	84.43	4.53	550.34	93.03	4.42	605.48	76.07	4.40	461.91	71.82	4.29	488.07	59.67	4.03	482.52	60.90	3.88
2	5:00:00	526.71	84.98	4.53	553.21	94.04	4.56	604.74	75.49	4.41	461.59	70.90	4.28	486.35	59.41	4.11	479.37	60.82	3.89
2	6:00:00	515.96	83.52	4.53	550.79	92.88	4.46	608.42	76.26	4.40	462.74	70.79	4.26	476.52	58.49	4.26	477.31	60.58	3.88
2	7:00:00	514.55	85.04	4.55	547.70	92.42	4.34	608.00	78.29	4.45	466.57	71.63	4.31	480.30	58.65	4.23	477.20	61.29	3.89
2	8:00:00	513.36	84.39	4.48	548.44	92.78	4.32	611.00	78.27	4.43	465.06	71.95	4.27	478.80	59.20	4.19	479.76	62.00	3.86
2	9:00:00	524.36	84.24	4.43	551.10	93.29	7.76	610.43	78.08	4.43	466.49	73.70	4.25	478.09	58.13	4.13	479.80	63.27	3.85
2	10:00:00	526.10	83.86	4.37	595.15	78.30	6.55	609.11	78.38	4.43	466.46	75.82	4.25	478.27	59.66	4.15	482.71	63.50	3.83
2	11:00:00	531.32	83.49	4.37	496.17	58.61	4.22	605.71	77.70	4.40	466.68	75.84	4.27	478.54	61.69	4.16	481.31	64.30	3.81
2	12:00:00	533.16	84.21	4.27	497.94	59.68	4.19	609.22	77.13	4.34	466.99	76.07	4.24	477.97	61.41	4.13	482.61	62.36	3.73
2	13:00:00	535.05	84.03	4.30	499.64	60.56	4.15	609.65	77.48	4.28	467.26	75.84	4.23	481.73	61.91	4.07	480.09	62.25	3.74
2	14:00:00	530.94	82.60	4.27	500.24	60.35	4.16	609.89	77.23	4.30	466.34	75.31	4.23	483.98	63.52	4.08	475.04	62.00	3.80
2	15:00:00	530.43	84.02	4.29	496.99	61.39	4.20	605.74	77.96	4.35	464.12	75.59	4.27	482.50	63.66	4.17	476.93	61.96	3.81
2	16:00:00	532.55	83.00	4.29	486.33	59.68	4.20	605.93	77.91	4.32	465.58	75.29	4.31	481.06	62.61	4.16	477.47	62.86	3.82
2	17:00:00	532.33	84.39	4.30	476.32	58.89	4.22	603.13	77.59	4.35	466.41	75.07	4.34	481.37	62.60	4.18	478.88	64.97	3.80
2	18:00:00	529.43	84.54	4.33	474.76	60.11	4.24	604.27	78.61	4.36	469.30	75.83	4.36	479.30	61.38	4.20	477.81	64.35	3.82
2	19:00:00	526.44	84.07	4.36	483.65	60.01	4.24	603.14	78.74	4.40	472.45	75.07	4.36	480.06	60.05	4.23	476.83	64.26	3.84
2	20:00:00	532.22	84.24	4.37	479.90	59.13	4.25	604.19	78.50	4.41	479.98	74.25	4.38	481.46	61.19	4.26	473.90	62.59	3.86
2	21:00:00	532.28	84.38	4.38	484.47	59.34	4.25	607.76	77.94	4.43	487.68	73.53	4.39	478.92	60.01	4.27	473.68	62.16	3.87
2	22:00:00	524.03	83.88	4.35	485.11	58.87	4.23	607.26	77.90	4.41	497.42	73.84	4.43	478.50	60.70	4.27	477.16	62.01	3.84
2	23:00:00	527.20	84.63	4.41	486.80	59.11	4.26	605.83	78.01	4.46	503.71	73.49	4.43	481.36	60				

วันที่	เวลา	CDU-3 'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)
4	23:00:00	510.02	86.42	4.43	502.68	61.53	4.29	600.36	78.55	4.22	528.26	79.87	4.44	589.95	58.98	3.88	482.29	67.01	3.96
5	0:00:00	508.62	85.84	4.43	500.92	61.08	4.31	598.69	78.19	4.24	527.24	80.00	4.45	592.99	60.55	3.84	483.33	67.40	3.95
5	1:00:00	500.94	86.01	4.48	502.94	58.82	4.36	595.70	77.37	4.24	523.20	79.68	4.50	594.16	59.95	3.83	484.84	68.22	3.98
5	2:00:00	505.57	85.26	4.49	503.96	58.01	4.36	596.24	78.51	4.22	531.57	80.52	4.47	590.90	60.82	3.83	486.30	66.84	4.02
5	3:00:00	499.98	84.22	4.48	504.22	58.02	4.36	595.67	78.02	4.22	518.58	77.44	4.47	595.41	60.35	3.83	490.78	66.82	3.99
5	4:00:00	501.26	85.98	4.48	503.79	58.42	4.40	595.73	77.71	4.25	513.91	79.26	4.48	596.12	60.66	3.83	493.24	67.18	4.01
5	5:00:00	498.72	85.40	4.51	504.58	58.74	4.42	597.98	73.28	4.31	515.67	77.30	4.47	596.32	59.99	3.86	495.49	66.48	4.00
5	6:00:00	493.84	85.19	4.47	501.68	60.52	4.40	599.92	71.29	4.25	508.93	76.20	4.49	595.96	59.99	3.88	492.71	66.44	3.97
5	7:00:00	504.98	86.26	4.50	502.95	60.51	4.44	609.32	73.21	4.26	512.91	77.73	4.54	592.82	59.57	3.90	502.97	67.78	3.99
5	8:00:00	498.34	85.34	8.46	502.20	59.08	4.45	598.96	72.12	4.27	521.48	80.67	4.53	600.26	60.43	3.85	504.04	67.18	3.96
5	9:00:00	Maintenance	Maintenance	Maintenance	503.18	59.53	4.41	600.87	72.70	4.20	521.53	81.11	4.50	600.69	61.98	3.82	506.62	69.22	3.93
5	10:00:00	504.49	80.20	8.79	506.28	60.27	4.38	609.18	73.55	4.15	525.89	81.37	4.48	601.78	62.31	3.83	517.09	71.00	3.82
5	11:00:00	493.44	58.47	4.05	510.29	57.74	4.33	618.02	74.32	4.21	535.75	81.28	4.41	602.48	62.28	3.81	526.31	71.45	3.77
5	12:00:00	497.26	62.78	4.00	507.90	61.32	4.31	610.20	74.93	4.20	538.19	79.76	4.34	604.06	62.71	3.85	533.18	70.42	3.75
5	13:00:00	499.67	63.77	4.00	508.06	62.86	4.31	620.18	75.02	4.19	540.24	77.75	4.34	603.59	62.03	3.80	523.69	70.16	3.73
5	14:00:00	498.19	65.30	3.98	507.23	63.15	4.30	618.65	71.51	4.18	539.19	77.30	4.25	600.30	61.56	3.74	509.39	68.47	3.77
5	15:00:00	500.60	65.60	4.03	506.53	63.47	4.36	612.58	71.10	4.28	544.48	75.89	4.18	603.85	60.69	3.75	513.40	68.71	3.86
5	16:00:00	499.46	64.74	4.02	504.87	62.74	4.34	607.97	69.45	4.27	540.76	75.92	4.16	599.79	59.82	3.75	515.46	70.45	3.91
5	17:00:00	499.10	64.74	4.04	506.14	62.51	4.34	612.28	70.29	4.24	539.29	76.00	4.14	603.27	59.85	3.74	516.46	69.77	3.91
5	18:00:00	498.80	64.43	4.07	505.11	62.42	4.34	610.33	71.17	4.27	538.83	77.20	4.18	607.09	59.72	3.93	514.99	68.48	3.93
5	19:00:00	496.76	63.74	4.07	504.85	62.27	4.37	608.37	70.92	4.30	539.07	75.96	4.17	606.91	59.27	4.02	508.27	68.59	3.93
5	20:00:00	496.01	64.60	4.06	504.87	62.09	4.35	607.07	70.42	4.35	537.56	76.08	4.17	603.26	58.75	3.95	497.79	67.84	4.14
5	21:00:00	493.56	64.13	4.03	502.91	61.81	4.35	604.47	70.08	4.36	538.60	75.28	4.18	601.50	58.73	3.95	483.06	66.89	3.98
5	22:00:00	492.03	64.52	4.02	502.85	61.50	4.31	603.32	69.81	4.35	537.11	73.77	4.14	599.81	57.31	3.93	500.79	66.07	3.97
5	23:00:00	491.83	65.34	4.07	503.21	61.96	4.33	602.22	69.87	4.36	535.00	73.62	4.20	598.93	56.87	3.93	508.65	65.96	3.99
6	0:00:00	493.27	64.97	4.07	503.25	61.96	4.29	604.74	70.07	4.32	537.73	73.56	4.19	603.84	56.88	3.92	512.73	64.23	3.91
6	1:00:00	493.36	64.15	4.12	503.37	61.71	4.26	601.91	69.88	4.31	537.34	73.48	4.23	604.77	56.81	3.94	510.87	64.26	3.86
6	2:00:00	493.49	66.04	4.15	502.86	61.98	4.34	604.57	70.11	4.32	538.16	73.58	4.21	605.17	56.56	3.93	518.05	65.15	3.84
6	3:00:00	493.25	67.05	4.18	502.03	62.29	4.35	603.92	69.61	4.30	537.36	73.91	4.25	608.72	57.17	3.95	520.43	66.22	3.87
6	4:00:00	491.13	67.01	4.20	500.25	62.89	4.46	605.74	69.37	4.28	539.09	74.85	4.27	608.33	57.07	3.92	518.57	67.29	3.91
6	5:00:00	488.40	66.61	4.20	500.48	62.97	4.44	605.70	69.46	4.32	536.19	75.04	4.30	609.67	58.18	3.92	518.29	65.99	3.88
6	6:00:00	480.98	66.73	4.21	493.36	63.15	4.46	606.52	69.34	4.31	532.63	76.55	4.33	605.87	58.74	3.96	516.88	65.42	3.87
6	7:00:00	474.25	67.06	4.22	488.77	64.19	4.51	609.80	71.05	4.32	535.97	76.56	4.33	606.85	59.47	4.00	520.92	66.65	3.84
6	8:00:00	475.11	67.02	4.17	487.30	64.09	4.43	609.94	75.15	4.25	535.97	77.30	4.27	608.95	59.25	3.96	521.70	66.71	3.85
6	9:00:00	478.35	67.25	4.11	484.93	64.49	4.39	607.71	76.11	4.22	539.97	79.01	4.27	607.36	59.06	3.91	523.05	66.40	3.83
6	10:00:00	478.67	67.73	4.03	482.62	65.49	4.37	608.71	76.75	4.20	544.41	80.54	4.28	608.82	59.33	3.87	525.19	67.33	3.72
6	11:00:00	474.17	66.31	4.07	483.95	65.76	4.34	608.36	77.04	4.15	548.51	80.12	4.26	608.12	60.37	3.86	530.16	66.73	3.65
6	12:00:00	474.08	65.38	4.10	482.12	65.04	4.30	609.14	78.21	4.21	556.49	78.72	4.18	609.52	61.07	3.86	528.42	68.30	3.66
6	13:00:00	473.06	67.54	4.08	479.96	64.10	4.26	608.61	78.32	4.22	554.99	79.29	4.16	609.45	59.91	4.07	521.11	68.86	3.66
6	14:00:00	471.45	67.71	4.07	481.73	63.66	4.22	607.59	78.07	4.23	557.72	80.65	4.14	607.59	59.44	4.10	515.61	67.64	3.65
6	15:00:00	467.91	68.29	4.09	474.73	64.32	4.28	602.30	78.26	4.27	558.05	80.48	4.12	607.24	57.67	4.07	513.81	68.59	3.69
6	16:00:00	467.76	67.84	4.08	474.42	63.75	4.26	604.50	73.26	4.32	562.00	79.64	4.11	609.51	56.32	4.01	515.83	68.41	3.70
6	17:00:00	466.44	67.88	4.12	472.90	64.11	4.29	603.96	72.82	4.31	557.45	78.23	4.11	611.71	56.26	3.93	517.39	69.00	3.72
6	18:00:00	464.72	67.12	4.12	469.79	63.69	4.33	604.30	72.74	4.37	555.82	80.55	4.09	612.08	57.26	3.96	514.32	68.66	3.74
6	19:00:00	464.59	67.05	4.08	468.41	63.30	4.37	603.02	72.44	4.38	557.91	80.06	4.12	615.05	58.76	4.00	514.24	69.37	3.92
6	20:00:00	461.59	64.93	4.13	468.36	63.48	4.43	605.42	71.91	4.38	556.97	77.24	4.16	616.57	60.68	3.98	513.53	68.11	3.89
6	21:00:00	461.97	66.86	4.14	469.80	62.84	4.41	603.76	71.41	4.35	561.54	76.91	4.18	617.20	60.09	4.00	512.46	67.30	3.87
6	22:00:00	459.63	67.77	4.18	466.98	62.17	4.42	602.60	70.73	4.29	561.51	76.69	4.25	616.16	60.31	3.96	511.54	65.28	3.83
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วันที่	เวลา	CDU-3 'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)
8	21:00:00	466.40	68.68	4.17	462.90	64.93	4.25	575.42	58.68	4.40	527.32	75.82	4.34	626.99	57.42	4.08	567.51	68.14	3.77
8	22:00:00	465.76	68.42	4.15	459.75	64.29	4.23	572.87	58.35	4.39	521.76	75.65	4.34	627.92	58.06	4.09	567.86	68.61	3.75
8	23:00:00	465.52	68.28	4.17	459.18	64.44	4.25	571.07	59.04	4.41	530.33	75.83	4.40	626.67	58.77	4.10	565.55	68.58	3.77
9	0:00:00	466.81	68.67	4.16	459.62	63.53	4.26	573.31	59.38	4.38	525.49	76.32	4.43	626.76	58.60	4.05	563.14	67.65	3.74
9	1:00:00	466.49	68.51	4.18	461.72	63.82	4.28	574.23	59.45	4.39	524.79	76.87	4.40	626.84	58.41	4.05	560.00	66.96	3.73
9	2:00:00	466.82	68.97	4.20	462.73	63.68	4.25	574.50	59.16	4.40	525.54	76.74	4.45	628.90	59.29	4.07	558.99	67.28	3.74
9	3:00:00	467.57	70.20	4.24	463.93	63.52	4.25	574.96	58.91	4.43	527.72	75.92	4.48	627.70	59.32	4.07	558.65	66.76	3.75
9	4:00:00	467.94	70.17	4.25	463.57	63.45	4.25	574.85	58.55	4.43	530.12	76.37	4.48	627.55	58.65	4.07	560.66	67.55	3.75
9	5:00:00	467.95	69.39	4.23	461.67	63.25	4.26	576.78	58.59	4.44	554.42	76.03	4.50	628.26	58.25	4.02	566.20	67.43	3.78
9	6:00:00	466.99	69.86	4.24	461.25	63.21	4.24	576.96	56.86	4.44	552.38	75.62	4.51	626.40	58.61	4.04	564.90	67.70	3.76
9	7:00:00	467.10	70.89	4.27	459.40	63.34	4.26	576.21	53.49	4.42	565.58	75.70	4.51	626.03	58.73	4.06	566.42	67.93	3.77
9	8:00:00	469.41	71.03	4.19	462.26	63.59	4.23	588.51	53.64	4.35	540.03	76.98	4.48	628.18	60.12	3.96	567.80	67.28	3.75
9	9:00:00	470.00	70.43	4.09	466.92	64.86	4.22	589.67	54.14	4.34	536.47	78.30	4.44	628.62	61.80	3.91	566.46	67.81	3.73
9	10:00:00	471.20	71.36	4.05	468.41	64.34	4.24	593.87	55.61	4.34	538.46	78.58	4.43	628.69	61.55	3.89	564.51	68.50	3.67
9	11:00:00	472.48	72.65	4.06	469.90	64.34	4.17	596.83	54.24	4.29	539.65	79.28	4.40	630.17	62.87	3.90	575.79	70.79	3.69
9	12:00:00	471.95	71.11	4.00	472.43	64.19	4.13	592.35	53.29	4.23	539.07	78.73	4.36	630.51	60.92	3.86	569.30	70.85	3.67
9	13:00:00	472.01	70.93	4.04	469.02	63.96	4.11	590.87	53.40	4.26	532.12	77.79	4.34	627.97	59.50	3.86	561.95	70.10	3.68
9	14:00:00	470.77	70.01	3.96	467.12	63.93	4.10	591.94	59.22	4.29	527.54	76.00	4.32	626.35	59.17	3.88	559.97	69.42	3.68
9	15:00:00	469.66	70.01	4.07	463.60	64.31	4.14	587.09	59.90	4.42	533.09	76.18	4.38	625.95	60.77	3.88	556.10	70.59	3.70
9	16:00:00	469.18	70.25	4.07	464.27	64.59	4.20	583.07	59.16	4.33	537.01	77.52	4.36	629.51	60.81	3.92	560.65	70.45	3.74
9	17:00:00	468.72	71.31	4.09	461.76	64.17	4.17	582.92	59.15	4.36	539.80	77.61	4.37	630.15	60.28	3.93	559.19	70.47	3.72
9	18:00:00	468.51	70.17	4.10	460.93	64.06	4.18	580.20	59.56	4.40	529.07	76.03	4.38	631.75	60.25	3.96	560.30	69.29	3.75
9	19:00:00	468.14	70.27	4.10	459.35	63.95	4.18	579.73	59.78	4.42	520.57	75.15	4.38	631.53	60.05	3.97	560.28	68.57	3.75
9	20:00:00	467.56	69.38	4.10	457.80	64.02	4.23	578.90	59.97	4.44	513.61	75.48	4.38	626.98	59.20	4.02	558.49	68.13	3.76
9	21:00:00	467.24	69.25	4.10	459.13	64.33	4.26	577.77	60.19	4.44	513.87	74.37	4.38	628.65	58.97	4.05	556.55	68.65	3.81
9	22:00:00	463.98	69.67	4.15	462.92	63.90	4.25	575.14	59.73	4.46	483.69	75.08	4.38	633.27	61.13	4.05	553.72	68.00	3.79
9	23:00:00	465.06	70.25	4.18	468.80	64.52	4.29	553.64	59.70	4.48	526.54	75.58	4.42	632.76	62.24	4.06	553.36	67.68	3.80
10	0:00:00	465.65	70.75	4.24	471.39	63.97	4.24	557.68	59.89	4.49	525.95	75.55	4.46	634.01	62.07	4.06	554.05	66.99	3.76
10	1:00:00	465.32	70.29	4.21	473.58	64.07	4.27	558.00	59.04	4.48	524.04	74.63	4.45	633.98	62.57	4.07	555.70	66.54	3.78
10	2:00:00	465.47	70.62	4.20	478.96	64.05	4.24	562.20	58.90	4.50	525.08	75.21	4.46	631.43	62.09	4.21	554.77	67.74	3.84
10	3:00:00	466.01	70.06	4.17	481.06	64.35	4.24	569.61	58.26	4.53	524.68	75.84	4.51	623.58	58.99	4.12	556.32	68.02	3.88
10	4:00:00	467.05	69.81	4.15	484.70	64.20	4.25	572.33	58.98	4.52	520.55	76.57	4.52	621.32	57.59	4.08	559.72	67.53	3.87
10	5:00:00	466.42	70.67	4.22	491.77	64.47	4.26	576.67	57.88	4.54	521.00	77.82	4.56	620.29	59.29	4.09	559.90	67.45	3.87
10	6:00:00	466.06	68.93	4.14	496.11	64.60	4.27	576.88	54.74	4.55	511.31	77.06	4.58	615.04	58.40	4.16	557.79	67.15	3.86
10	7:00:00	468.16	69.60	4.12	502.73	64.45	4.30	580.45	54.48	4.56	532.25	76.20	4.56	610.30	58.34	4.24	559.25	67.31	3.86
10	8:00:00	470.01	70.47	4.17	509.20	64.69	4.25	589.21	54.63	4.48	529.46	75.76	4.49	609.81	59.07	4.17	560.73	67.83	3.82
10	9:00:00	469.54	71.01	4.09	518.76	65.15	4.23	592.12	58.40	4.49	532.27	77.28	4.47	608.75	57.78	4.11	556.61	71.04	3.79
10	10:00:00	470.98	72.11	4.08	519.87	65.68	4.29	589.47	60.99	4.42	531.55	77.62	4.46	608.05	58.96	4.03	563.39	70.07	3.71
10	11:00:00	468.52	71.01	4.00	525.57	65.48	4.22	587.25	61.35	4.39	533.92	77.33	4.44	606.63	59.99	4.05	563.26	70.15	3.67
10	12:00:00	465.99	70.26	4.03	527.42	65.03	4.21	588.00	59.58	4.36	542.58	76.90	4.43	606.18	59.65	4.13	563.18	69.74	3.65
10	13:00:00	467.38	69.25	3.97	535.47	64.68	4.14	585.84	59.51	4.36	542.86	78.11	4.44	606.09	60.52	4.13	563.35	69.55	3.64
10	14:00:00	467.26	71.11	4.09	530.96	65.71	4.17	584.89	65.43	4.34	514.32	78.21	4.51	603.17	59.06	4.12	558.45	71.07	3.64
10	15:00:00	464.07	70.67	4.09	528.93	66.03	4.20	571.44	69.37	4.51	528.73	78.16	4.59	606.17	59.27	4.09	552.59	71.41	3.68
10	16:00:00	468.17	70.18	4.08	522.96	65.87	4.25	569.46	70.67	4.44	521.82	78.66	4.58	609.84	61.08	4.06	559.60	71.78	3.72
10	17:00:00	468.55	70.60	4.15	515.39	65.75	4.35	563.76	71.31	4.51	516.18	77.91	4.59	603.76	60.50	4.07	559.30	70.91	3.68
10	18:00:00	469.27	71.46	4.18	507.70	65.12	4.40	588.50	62.36	4.53	509.94	77.58	4.63	602.21	60.30	4.09	559.27	71.01	3.70
10	19:00:00	468.24	70.55	4.19	512.76	65.15	4.38	587.74	62.15	4.50	517.26	77.47	4.67	601.71	59.60	4.07	558.28	70.30	3.71
10	20:00:00	466.38	71.60	4.23	512.99	65.07	4.36	588.22	62.17	4.54	515.49	76.53	4.69	602.81	60.35	4.08	55		

วันที่	เวลา	CDU-3 'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)
12	19:00:00	498.18	73.96	4.13	524.51	67.98	4.32	568.82	68.05	5.50	506.17	57.55	4.26	584.07	49.31	4.04	597.67	71.49	3.92
12	20:00:00	497.08	73.89	4.11	523.98	67.85	4.30	568.92	68.10	5.54	510.74	57.38	4.29	579.88	50.06	4.11	596.17	70.53	3.93
12	21:00:00	494.60	73.96	4.11	524.76	68.06	4.34	571.32	67.91	5.57	512.83	57.07	4.30	579.96	49.37	4.09	594.54	70.23	3.91
12	22:00:00	493.92	73.85	4.08	524.48	67.52	4.33	566.76	67.77	5.58	511.84	57.77	4.30	580.02	48.34	4.04	597.29	70.88	3.88
12	23:00:00	493.04	74.45	4.14	523.68	67.56	4.36	567.97	67.68	5.64	514.29	58.21	4.34	581.49	49.34	4.11	598.06	71.45	3.93
13	0:00:00	493.87	74.67	4.12	523.85	67.70	4.36	565.42	67.27	5.63	516.99	57.89	4.35	591.15	49.31	4.06	600.36	71.62	3.93
13	1:00:00	497.35	74.49	4.15	523.95	67.67	4.36	532.17	67.58	5.64	520.43	57.37	4.34	587.82	48.44	4.09	600.26	71.41	3.91
13	2:00:00	497.65	74.99	4.16	524.23	66.68	4.34	562.16	68.08	5.69	522.77	57.75	4.33	588.32	47.92	4.08	601.17	72.35	4.06
13	3:00:00	497.15	75.23	4.19	525.16	66.85	4.32	574.26	68.16	5.71	525.61	57.94	4.32	587.47	47.37	4.09	596.93	72.18	4.22
13	4:00:00	497.32	74.21	4.18	524.25	67.17	4.33	572.00	68.19	5.71	526.39	57.47	4.33	588.00	48.45	4.12	600.71	71.13	4.12
13	5:00:00	496.77	74.98	4.21	522.61	67.77	4.37	575.31	68.79	5.75	529.68	57.06	4.35	587.22	47.52	4.18	601.33	71.77	4.06
13	6:00:00	497.95	74.68	4.22	522.39	66.97	4.35	571.69	69.03	5.77	533.88	57.15	4.34	585.75	47.73	4.16	600.04	71.59	3.96
13	7:00:00	496.42	74.98	4.24	522.16	67.13	4.36	571.96	68.96	5.84	528.23	58.33	4.36	592.62	48.83	4.12	602.22	71.27	3.93
13	8:00:00	497.52	74.97	4.19	523.93	67.53	4.30	548.62	69.68	5.76	530.67	58.67	4.31	598.00	49.18	4.12	602.62	70.34	3.83
13	9:00:00	498.31	75.94	4.17	525.07	67.82	4.26	572.95	70.53	5.72	540.51	58.71	4.32	602.34	48.89	4.03	602.99	71.72	3.79
13	10:00:00	500.03	76.95	4.15	524.64	68.25	4.33	585.17	71.47	5.69	537.26	59.38	4.31	602.37	50.33	3.99	605.91	71.48	3.70
13	11:00:00	500.87	78.33	4.19	525.03	68.51	4.22	585.33	72.29	5.65	537.54	59.03	4.28	600.83	51.64	3.98	603.46	69.89	3.69
13	12:00:00	501.53	76.26	4.11	526.05	67.51	4.22	592.66	72.57	5.69	541.19	60.52	4.29	602.45	51.29	3.93	604.84	70.54	3.69
13	13:00:00	501.57	75.07	4.05	526.84	67.16	4.17	592.93	72.38	5.81	540.69	61.00	4.28	602.15	50.19	3.89	604.06	68.91	3.71
13	14:00:00	499.17	73.37	4.06	526.05	67.52	4.17	572.26	70.57	5.87	532.12	61.78	4.31	600.25	50.12	3.88	603.49	71.56	3.88
13	15:00:00	498.68	73.80	4.12	528.66	70.43	4.23	637.19	72.89	7.33	536.16	61.43	4.32	604.45	50.68	3.94	603.89	72.14	3.95
13	16:00:00	498.32	73.96	4.14	527.34	70.98	4.23	Maintenance	Maintenance	Maintenance	537.16	60.84	4.29	602.34	51.02	3.96	601.56	70.58	3.88
13	17:00:00	497.85	75.12	4.19	526.61	69.80	4.27	Maintenance	Maintenance	Maintenance	534.96	59.93	4.25	601.50	50.82	3.96	604.39	69.72	3.81
13	18:00:00	496.71	75.35	4.20	527.08	70.01	4.26	811.74	47.89	14.19	531.59	59.96	4.27	600.65	50.18	3.98	601.77	68.12	3.73
13	19:00:00	493.75	75.55	4.24	526.15	69.61	4.26	615.67	50.65	14.09	530.57	60.12	4.35	606.47	51.78	3.99	599.66	70.33	3.76
13	20:00:00	493.26	75.44	4.25	521.98	68.41	4.28	542.49	53.36	14.20	529.80	60.35	4.38	602.92	50.63	3.96	603.55	70.55	3.81
13	21:00:00	493.70	75.99	4.25	525.11	69.29	4.31	511.54	53.26	14.28	530.92	59.54	4.39	601.36	50.51	3.98	610.02	70.78	3.79
13	22:00:00	491.66	76.03	4.25	524.30	69.30	4.30	484.39	53.62	14.19	523.35	59.80	4.39	597.63	49.02	4.00	605.85	69.60	3.80
13	23:00:00	491.65	76.65	4.33	523.79	68.80	4.32	462.93	53.69	14.07	521.77	59.20	4.35	594.14	49.29	4.04	604.51	70.14	3.86
14	0:00:00	495.40	76.82	4.35	524.26	67.85	4.34	454.23	54.03	14.07	523.76	59.18	4.32	597.26	49.01	4.02	606.05	69.96	3.86
14	1:00:00	495.73	75.99	4.32	526.99	69.07	4.33	463.56	55.06	14.27	524.55	59.04	4.32	597.70	50.13	4.05	611.01	70.31	3.84
14	2:00:00	496.16	76.45	4.32	526.21	69.13	4.33	468.90	54.92	14.36	523.65	58.65	4.33	597.84	49.03	4.04	610.66	69.83	3.87
14	3:00:00	498.64	76.59	4.31	523.46	68.60	4.31	474.15	55.42	14.56	524.51	58.76	4.36	599.14	49.26	4.06	614.81	69.50	3.86
14	4:00:00	499.81	76.24	4.32	519.30	68.89	4.32	460.76	54.78	14.53	524.51	58.27	4.36	598.62	49.08	4.06	615.21	69.84	3.90
14	5:00:00	500.24	76.32	4.34	515.69	68.62	4.34	451.41	54.00	14.48	520.05	58.55	4.40	597.75	49.56	4.07	613.98	70.37	3.89
14	6:00:00	500.60	76.25	4.33	511.66	68.30	4.33	457.23	55.46	14.61	515.71	58.88	4.38	597.92	50.42	4.08	609.59	69.87	3.88
14	7:00:00	500.07	76.52	4.33	508.67	68.54	4.37	474.01	57.85	14.82	514.84	59.86	4.37	600.66	51.39	4.05	607.42	70.45	3.86
14	8:00:00	501.02	76.89	4.27	504.74	69.28	4.31	468.90	56.99	14.74	519.56	59.79	4.33	600.90	51.34	4.01	616.14	70.12	3.78
14	9:00:00	501.72	77.44	4.21	505.78	70.13	4.31	488.12	57.77	16.47	518.30	60.49	4.33	601.64	52.33	4.00	613.05	74.16	3.75
14	10:00:00	501.84	77.95	4.21	503.71	69.72	4.35	364.59	72.21	17.09	520.83	60.54	4.29	600.59	53.01	3.99	638.73	87.01	3.48
14	11:00:00	499.19	77.61	4.21	505.32	69.10	4.32	581.51	69.67	4.18	521.73	61.12	4.27	599.90	52.08	3.92	598.35	71.88	3.20
14	12:00:00	497.57	77.12	4.18	503.17	69.43	4.35	583.78	73.17	4.12	520.82	62.13	4.29	599.67	52.87	3.89	597.94	70.21	3.31
14	13:00:00	497.78	76.57	4.10	501.67	67.18	4.44	585.24	74.93	4.18	521.98	62.69	4.31	601.14	52.63	3.89	593.36	70.28	3.23
14	14:00:00	496.46	76.78	4.07	507.44	67.51	4.36	582.44	75.16	4.14	519.89	64.95	4.38	597.69	50.92	3.84	588.72	68.74	3.13
14	15:00:00	498.43	75.65	4.13	505.35	67.52	4.37	580.63	75.23	4.18	521.75	63.84	4.35	598.28	50.66	3.87	579.54	67.98	3.18
14	16:00:00	499.81	76.92	4.11	499.37	66.99	4.34	580.10	74.24	4.19	519.50	64.54	4.40	596.81	51.37	3.91	582.11	68.69	3.21
14	17:00:00	493.25	76.33	4.17	500.81	67.18	4.31	575.79	73.78	4.20	518.33	64.02	4.32	598.98	51.89	3.94	584.92	68.32	3.23
14	18:00:00	489.72	77.64	4.25	501.73	68.24	4.35	573.57	71.56	4.21	518.64	63.65	4.33	599.20	52.60	3.97	586.43	68.33	3.28
14	19:00:00	488.42	77.01	4.22	500.03	67.89	4.35	572.08	71.05	4.20	517.87	63.69	4.40	597.11	51.60	3.96	587.21	68.95	3.29
14	20:00:00	487.13	78.52	4.28	501.45	68.75	4.37	569.69	71.13	4.22	518.39	63.06	4.41	598.19	51.05	4.00	586.49	69.16	3.30
14	21:00:00	486.15	77.31	4.29	502.09	69.85	4.36	569.97	71.50	4.25	519.13	61.65	4.35	596.66	50.58	4.03	586.41	69.49	3.32
14	22:00:00	484.86	76.97	4.23	499.38	68.36	4.32	571.05	72.72	4.22	517.50	60.57	4.32	593.37	50.92	4.02	582.96	69.38	3.31
14	23:00:00	487.55	77.48	4.27	495.78	68.73	4.37	579.87	74.06	4.25	516.17	59.91	4.32	595.44	51.56	4.03	586.75	68.94	3.33
15	0:00:00	490.92	78.21	4.30	496.32	69.36	4.37	578.81	74.31	4.25	513.64	59.10	4.31	595.28	50.97	4.00	586.83	66.32	3.32
15	1:00:00	490.49	78.04	4.30	497.23	70.10	4.38	580.67	74.65	4.25	513.13	58.17	4.29	598.98	50.47	4.01	589.83	66.45	3.31
15	2:00:00	490.27	77.58	4.27	496.95	69.33	4.39	579.90	74.38	4.23	510.03	57.29	4.26	599.91	50.19	4.00	589.12	67.30	3.29
15	3:00:00	491.24	78.05	4.31	498.45	70.73	4.40	578.11	74.25	4.26	511.08	57.19	4.23	595.96	50.00	3.99	592.47	66.54	3.30



วันที่	เวลา	CDU-3'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)
16	17:00:00	511.72	77.94	4.12	515.11	70.47	4.55	525.96	69.21	4.26	555.32	59.74	4.18	576.54	56.16	4.08	581.05	71.75	2.96
16	18:00:00	510.41	78.78	4.17	515.75	70.77	4.57	521.04	69.27	4.28	555.47	58.39	4.18	577.33	54.67	4.07	573.79	70.94	3.00
16	19:00:00	509.15	78.69	4.19	514.06	70.85	4.59	518.63	69.08	4.33	553.05	58.43	4.24	578.06	55.53	4.12	573.14	71.30	3.02
16	20:00:00	509.04	79.05	4.20	513.45	71.09	4.60	516.90	68.79	4.37	553.73	58.91	4.29	578.94	55.38	4.15	575.62	71.43	3.05
16	21:00:00	508.94	79.48	4.20	511.96	70.80	4.60	514.46	68.16	4.38	550.53	58.50	4.30	578.40	53.83	4.14	573.27	70.60	3.08
16	22:00:00	507.20	79.06	4.18	513.41	71.20	4.60	518.05	67.28	4.34	549.33	56.84	4.31	576.32	54.04	4.22	569.55	67.99	3.06
16	23:00:00	506.24	79.16	4.22	512.98	71.21	4.62	520.70	66.94	4.38	552.48	57.20	4.27	577.60	52.98	4.20	585.36	71.87	3.12
17	0:00:00	506.02	78.61	4.23	513.93	71.02	4.60	517.34	67.27	4.42	551.02	55.96	4.19	578.70	50.96	4.15	572.12	70.41	3.09
17	1:00:00	505.77	78.39	4.25	513.56	70.51	4.59	515.10	65.74	4.41	551.45	57.70	4.21	581.21	52.02	4.12	568.61	70.46	3.08
17	2:00:00	506.07	78.48	4.24	510.59	69.55	4.51	518.30	65.50	4.39	554.39	57.69	4.19	582.94	52.29	4.13	568.22	69.51	3.08
17	3:00:00	505.96	77.77	4.23	504.44	69.91	4.41	523.26	66.46	4.36	555.99	56.11	4.17	583.54	52.11	4.12	570.88	68.91	3.11
17	4:00:00	506.60	78.36	4.28	503.31	70.09	4.40	523.40	67.14	4.36	557.95	56.82	4.19	584.61	52.27	4.11	572.65	66.69	3.13
17	5:00:00	506.75	78.21	4.28	496.92	69.65	4.43	522.82	67.65	4.39	558.50	58.36	4.17	585.20	52.75	4.09	573.52	68.21	3.11
17	6:00:00	505.86	78.02	4.26	495.03	69.48	4.40	516.14	67.59	4.40	557.47	57.80	4.17	585.06	52.15	4.06	576.72	69.04	3.11
17	7:00:00	505.47	78.50	4.29	500.34	71.09	4.39	508.83	68.18	4.44	557.68	56.50	4.18	586.91	52.59	4.04	574.28	69.41	3.10
17	8:00:00	507.12	78.59	4.22	500.14	70.37	4.32	502.82	68.36	4.36	560.37	57.00	4.12	589.19	53.65	4.02	574.88	67.70	3.05
17	9:00:00	509.05	78.05	4.12	501.18	71.27	4.27	495.16	69.53	4.35	561.13	58.92	4.11	589.17	53.51	4.01	636.66	77.19	13.18
17	10:00:00	509.91	78.38	4.09	504.66	71.77	4.30	489.28	70.33	4.34	563.57	60.54	4.11	588.12	54.86	3.94	444.87	58.23	6.97
17	11:00:00	509.81	77.93	4.07	504.89	72.15	4.33	485.58	70.38	4.31	561.29	61.43	4.29	588.55	55.36	3.90	585.80	43.26	3.94
17	12:00:00	510.52	77.78	4.05	502.78	70.91	4.40	481.59	70.63	4.28	561.38	59.27	4.16	590.08	56.20	3.91	572.05	49.12	4.01
17	13:00:00	511.94	76.97	3.99	502.94	70.56	4.38	478.07	70.49	4.26	561.97	59.05	4.07	593.08	55.19	3.88	624.40	62.39	4.55
17	14:00:00	512.01	77.54	3.98	501.01	65.06	4.46	472.39	70.22	4.23	561.58	59.59	4.12	599.77	55.19	3.89	592.62	52.37	4.42
17	15:00:00	511.82	77.22	3.98	495.13	62.54	4.46	471.37	71.28	4.36	561.11	60.93	4.17	614.10	54.94	3.90	586.94	51.47	4.38
17	16:00:00	512.11	78.26	4.00	472.99	61.69	4.45	467.59	71.08	4.47	559.41	61.31	4.18	589.16	55.75	3.92	589.52	49.41	4.34
17	17:00:00	512.10	79.40	4.07	490.38	62.56	4.45	466.88	69.42	4.33	560.79	60.04	4.14	589.88	55.42	3.95	589.69	49.84	4.37
17	18:00:00	512.04	79.23	4.11	503.33	62.96	4.40	464.89	68.90	4.32	557.95	59.46	4.22	588.75	55.59	3.96	590.30	50.32	4.39
17	19:00:00	511.00	78.46	4.13	506.12	63.81	4.39	463.65	68.53	4.36	560.91	59.52	4.23	589.14	53.94	3.88	588.87	49.57	4.42
17	20:00:00	511.69	79.46	4.15	506.07	64.77	4.37	462.62	69.57	4.40	559.25	58.92	4.25	588.86	53.35	3.93	589.12	49.16	4.40
17	21:00:00	510.05	79.17	4.16	506.01	65.62	4.43	465.14	63.62	4.37	559.43	58.82	4.28	586.02	53.68	3.94	590.26	49.10	4.39
17	22:00:00	509.83	78.90	4.12	510.32	65.55	4.35	463.58	63.21	4.36	560.38	58.94	4.26	582.48	53.10	4.07	577.75	49.37	4.39
17	23:00:00	509.96	79.03	4.16	513.83	65.82	4.37	461.71	63.49	4.38	559.68	58.84	4.17	584.52	53.10	4.13	566.46	49.47	4.43
18	0:00:00	510.83	79.47	4.19	520.13	66.35	4.34	462.47	63.53	4.44	560.40	58.42	4.20	584.94	52.40	4.08	574.78	51.49	4.42
18	1:00:00	510.28	79.79	4.22	528.04	64.81	4.37	463.90	63.73	4.40	560.46	58.03	4.21	585.89	51.34	4.05	573.70	55.86	4.52
18	2:00:00	508.84	79.40	4.24	536.84	63.23	4.39	463.10	63.62	4.38	557.08	57.51	4.17	588.23	51.84	3.88	574.76	55.39	4.52
18	3:00:00	510.67	79.61	4.23	544.43	62.68	4.39	461.53	63.79	4.36	559.82	56.98	4.17	587.61	52.31	3.88	578.08	55.43	4.56
18	4:00:00	509.72	79.61	4.27	550.73	62.49	4.38	461.95	63.64	4.36	561.94	57.05	4.19	587.64	52.17	3.87	575.02	54.88	4.55
18	5:00:00	510.00	79.54	4.27	553.84	62.70	4.38	462.06	63.26	4.39	561.01	57.14	4.22	587.44	52.13	3.90	585.18	55.43	4.56
18	6:00:00	510.18	78.37	4.22	557.58	63.09	4.39	462.72	63.31	4.37	565.06	59.10	4.18	589.38	51.38	3.91	579.66	55.07	4.51
18	7:00:00	510.84	78.42	4.18	562.67	63.89	4.47	461.57	64.08	4.40	566.51	60.50	4.16	589.88	53.18	3.89	579.28	55.96	4.53
18	8:00:00	515.47	78.36	4.15	567.51	65.27	4.35	461.26	63.90	4.37	563.06	61.34	4.20	590.54	52.13	3.84	588.47	56.48	4.50
18	9:00:00	519.26	79.00	4.14	573.62	66.36	4.38	464.27	64.12	4.33	564.83	62.13	4.20	590.88	52.51	3.81	589.51	57.48	4.46
18	10:00:00	524.82	79.98	4.11	574.54	69.88	4.36	468.27	64.62	4.21	564.44	63.17	4.28	592.77	54.50	3.88	594.10	57.84	4.37
18	11:00:00	531.09	81.11	4.12	573.82	66.18	4.34	466.03	64.28	4.18	563.74	62.98	4.34	593.87	54.26	3.85	604.07	66.92	4.32
18	12:00:00	534.03	80.39	4.09	577.35	65.59	4.26	463.54	64.39	4.19	562.33	61.29	4.25	595.16	54.98	3.82	665.76	84.68	4.67
18	13:00:00	540.11	81.18	4.04	579.40	63.27	4.26	461.81	65.47	4.42	562.93	62.01	4.26	590.97	55.59	3.90	638.33	70.20	4.71
18	14:00:00	542.79	80.71	4.09	575.05	64.78	4.30	462.12	64.74	4.42	560.29	62.26	4.23	581.90	56.00	3.90	604.95	59.61	4.53
18	15:00:00	544.38	80.47	4.11	570.74	66.57	4.42	506.05	76.35	7.19	562.50	62.95	4.24	589.54	57.00	3.92	592.80	57.61	4.43
18	16:00:00	546.88	79.86	4.06	572.07	64.56	4.35	462.98	64.69	4.34	559.70	63.16	4.22	591.44	56.42	3.87	592.40	57.58	4.39
18	17:00:00	545.80	80.23	4.14	573.27	65.27	4.32	461.50	65.20	4.37	560.28	62.68	4.23	592.20	56.86	3.87	588.91	58.21	4.39
18	18:00:00	543.03	80.43	4.20	569.71	67.46	4.36	462.31	65.66	4.37	560.63	62.92	4.30	588.60	57.03	3.93	589.43	58.26	4.42
18	19:00:00	538.31	80.39	4.20	567.58	70.19	4.39	463.67	65.85	4.38	557.71	63.83	4.48	587.25	56.40	3.93	589.96	57.65	4.38
18	20:00:00	537.01	79.50	4.21	564.35	71.79	4.41	463.55	66.07	4.41	559.88	62.93	4.40	591.28	55.15	3.91	599.45	57.05	4.44
18	21:00:00	537.52	79.50	4.26	563.83	71.60	4.44	463.34	65.61	4.44	558.75	61.95	4.41	590.67	55.31	3.92	602.45	56.73	4.45
18	22:00:00	540.02	79.46	4.26	561.06	70.99	4.45	461.07	65.83	4.46	559.32	61.52	4.37	588.88	52.93	3.96	591.33	55.60	4.41
18	23:00:00	537.89	79.31	4.32	563.30	71.53	4.50	460.62	65.67	4.43	559.32	61.59	4.36	594.55	54.34	4.00	591.07	55.11	4.43
19	0:00:00	538.64	79.65	4.33	566.09	71.58	4.45	460.56	65.87	4.41	559.15	60.95	4.35	594.43	54.38	4.03	592.02	55.05	4.45
19	1:00:00	538.77	79.30	4.34	560.65	71.17	4.45	459.98	66.77	4.45	558.78	61.39	4.33	593.65	54.82	4.05	579.37	54.49	

วันที่	เวลา	CDU-3 'S STACK																	
		หมกรวม			กวนภาพนซ์			นิมตาม			เมษามย			พฤษภม			มิถุนายน		
		SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)
20	15:00:00	545.51	80.00	4.12	575.90	73.09	4.20	Maintenance	Maintenance	Maintenance	595.30	63.84	4.32	584.99	57.26	3.88	570.10	55.11	4.58
20	16:00:00	544.54	79.43	4.10	570.71	72.78	4.23	Maintenance	Maintenance	Maintenance	591.59	64.68	4.32	583.54	56.73	3.90	572.59	53.40	4.49
20	17:00:00	543.44	80.22	4.13	568.96	73.04	4.25	Maintenance	Maintenance	Maintenance	589.19	63.77	4.28	583.27	57.35	3.94	572.65	51.27	4.40
20	18:00:00	541.36	80.60	4.16	566.31	72.40	4.24	Maintenance	Maintenance	Maintenance	587.67	63.91	4.32	581.65	56.96	3.98	570.29	52.82	4.39
20	19:00:00	537.39	82.21	4.21	562.54	72.27	4.26	Maintenance	Maintenance	Maintenance	593.88	64.20	4.36	580.97	56.40	3.99	576.10	52.74	4.40
20	20:00:00	538.98	82.58	4.23	562.57	71.93	4.24	Maintenance	Maintenance	Maintenance	591.57	63.48	4.37	578.23	55.88	3.99	566.40	55.49	4.41
20	21:00:00	538.21	81.70	4.18	562.93	72.20	4.27	Maintenance	Maintenance	Maintenance	591.09	63.67	4.37	581.63	55.61	4.02	566.84	56.06	4.41
20	22:00:00	536.98	81.49	4.17	560.62	72.47	4.31	Maintenance	Maintenance	Maintenance	588.31	63.68	4.38	580.64	55.47	4.00	564.64	56.19	4.41
20	23:00:00	537.86	81.04	4.19	565.80	73.15	4.36	Maintenance	Maintenance	Maintenance	592.28	64.41	4.38	579.33	56.09	4.04	571.23	58.27	4.51
21	0:00:00	537.51	80.98	4.18	562.35	72.95	4.35	Maintenance	Maintenance	Maintenance	591.08	64.82	4.38	579.27	55.89	4.04	566.46	58.42	4.74
21	1:00:00	538.24	80.61	4.21	559.31	72.47	4.38	Maintenance	Maintenance	Maintenance	592.20	64.63	4.41	581.52	55.62	4.02	562.82	57.63	4.76
21	2:00:00	536.72	81.04	4.26	561.03	72.22	4.37	Maintenance	Maintenance	Maintenance	592.12	64.71	4.38	582.29	55.26	4.05	567.59	55.79	4.65
21	3:00:00	539.10	79.87	4.24	562.64	71.57	4.38	Maintenance	Maintenance	Maintenance	597.53	65.05	4.41	580.68	55.32	4.04	569.10	54.90	4.57
21	4:00:00	542.25	80.77	4.31	564.74	72.38	4.39	Maintenance	Maintenance	Maintenance	597.97	64.82	4.39	580.29	55.49	4.06	576.20	55.78	4.55
21	5:00:00	544.08	81.16	4.37	564.68	72.60	4.38	Maintenance	Maintenance	Maintenance	598.30	64.23	4.40	582.07	55.60	4.04	574.10	55.23	4.53
21	6:00:00	540.47	80.42	4.35	566.32	72.41	4.39	Maintenance	Maintenance	Maintenance	594.90	64.69	4.40	581.39	55.30	4.00	572.21	54.44	4.43
21	7:00:00	538.85	81.01	4.37	571.22	70.73	4.42	Maintenance	Maintenance	Maintenance	595.33	65.13	4.38	578.27	55.96	4.00	573.92	54.21	4.41
21	8:00:00	541.97	81.15	4.33	570.93	73.00	4.39	Maintenance	Maintenance	Maintenance	598.26	65.40	4.39	581.26	55.39	3.96	574.80	53.95	4.39
21	9:00:00	543.47	82.24	4.29	575.38	73.64	4.37	Maintenance	Maintenance	Maintenance	596.10	65.45	4.37	575.52	56.06	3.94	428.76	64.16	9.64
21	10:00:00	544.04	82.46	4.26	574.09	74.53	4.39	Maintenance	Maintenance	Maintenance	598.21	64.48	4.35	579.80	56.39	3.91	548.39	43.52	3.34
21	11:00:00	547.11	82.69	4.18	572.20	74.39	4.36	Maintenance	Maintenance	Maintenance	599.70	64.65	4.31	577.10	56.68	3.89	546.32	47.46	3.40
21	12:00:00	553.25	84.01	4.12	575.71	74.14	4.27	Maintenance	Maintenance	Maintenance	611.04	63.20	4.26	569.11	56.75	3.87	546.99	50.82	3.42
21	13:00:00	552.29	83.58	4.12	575.44	74.40	4.31	Maintenance	Maintenance	Maintenance	626.10	63.36	4.30	560.45	57.03	3.85	549.21	53.04	3.40
21	14:00:00	551.68	83.03	4.08	574.06	74.40	4.36	497.09	66.12	8.69	620.57	64.09	4.27	576.10	56.80	3.86	545.28	53.95	3.40
21	15:00:00	552.04	84.04	4.11	576.41	74.60	4.41	451.45	67.15	4.45	594.47	64.21	4.30	576.10	56.94	3.88	546.27	55.28	3.46
21	16:00:00	551.32	84.07	4.11	579.71	74.74	4.38	456.48	69.59	4.31	589.63	65.05	4.41	577.71	56.78	3.88	546.44	56.01	3.49
21	17:00:00	550.51	83.63	4.13	582.96	74.56	4.38	458.74	72.06	4.26	589.29	64.39	4.37	578.77	56.17	3.91	546.97	56.82	3.48
21	18:00:00	548.97	84.00	4.17	578.46	74.25	4.41	457.53	70.96	4.32	591.82	63.61	4.35	577.56	56.38	3.94	548.51	56.17	3.48
21	19:00:00	549.04	83.32	4.19	580.11	73.85	4.40	453.20	70.68	4.40	591.11	64.63	4.39	580.83	56.74	3.95	546.57	55.59	3.49
21	20:00:00	549.69	83.59	4.21	578.68	74.00	4.43	451.81	70.62	4.42	590.22	66.17	4.45	578.90	56.38	4.05	547.08	55.30	3.58
21	21:00:00	548.31	82.92	4.20	576.78	75.02	4.50	453.94	71.22	4.44	586.86	65.93	4.48	576.68	56.36	4.12	550.49	55.12	3.59
21	22:00:00	545.73	82.33	4.19	574.53	75.57	4.50	453.47	70.42	4.41	585.71	65.87	4.45	572.54	56.81	4.19	546.52	55.09	3.64
21	23:00:00	546.60	82.53	4.23	577.57	75.60	4.53	452.76	71.47	4.45	581.28	65.85	4.47	573.73	57.48	4.29	544.04	55.04	3.66
22	0:00:00	547.72	81.85	4.21	572.30	75.65	4.51	453.56	71.90	4.46	578.77	65.63	4.42	572.36	55.50	4.30	547.41	54.52	3.63
22	1:00:00	547.94	81.79	4.20	570.08	75.85	4.53	454.24	71.88	4.47	569.79	63.30	4.42	569.98	57.18	4.30	551.71	53.98	3.58
22	2:00:00	548.98	82.05	4.20	570.17	75.62	4.54	457.00	71.30	4.44	567.38	63.15	4.45	569.48	58.18	4.32	550.14	54.45	3.57
22	3:00:00	546.84	80.80	4.25	567.33	75.47	4.54	456.14	71.20	4.44	572.50	63.30	4.46	567.32	57.97	4.43	552.19	54.89	3.59
22	4:00:00	547.89	80.68	4.19	568.93	74.93	4.51	456.61	70.70	4.42	567.80	62.50	4.45	568.60	57.88	4.45	548.50	54.54	3.61
22	5:00:00	547.12	81.50	4.20	569.88	75.41	4.53	455.39	71.06	4.45	566.58	62.26	4.47	564.97	58.20	4.48	550.35	54.48	3.63
22	6:00:00	542.53	81.16	4.22	565.48	74.44	4.52	454.55	72.03	4.45	563.43	62.53	4.45	565.79	57.04	4.49	546.85	53.57	3.61
22	7:00:00	538.26	81.28	4.25	570.73	74.58	4.55	454.25	71.76	4.44	564.60	61.74	4.38	564.78	56.14	4.54	550.46	54.67	3.59
22	8:00:00	537.30	81.12	4.20	571.92	74.18	4.50	455.59	72.84	4.41	565.09	62.02	4.34	567.73	56.98	4.44	550.32	57.20	3.57
22	9:00:00	535.15	81.25	4.08	570.02	74.70	4.48	455.45	74.01	4.34	563.25	62.96	4.35	568.80	57.70	4.35	547.60	62.11	3.73
22	10:00:00	534.95	83.19	4.18	570.86	74.59	4.48	457.71	75.53	4.41	563.58	62.85	4.31	569.26	59.14	4.52	548.65	61.47	3.55
22	11:00:00	532.70	83.40	4.17	575.43	75.20	4.39	456.48	72.94	4.31	561.51	63.51	4.24	570.39	57.38	4.43	535.18	61.93	3.52
22	12:00:00	531.90	83.78	4.11	579.95	76.14	4.34	457.97	73.92	4.33	559.66	64.43	4.25	574.05	55.72	4.31	543.25	62.34	3.52
22	13:00:00	531.45	84.32	4.10	586.54	76.23	4.39	458.13	73.59	4.29	560.30	66.67	4.36	572.82	56.48	4.27	539.36	61.47	3.56
22	14:00:00	524.91	83.62	4.12	595.70	75.42	4.37	455.14	73.98	4.31	556.19	64.20	4.27	571.85	56.10	4.26	529.94	61.40	3.53
22	15:00:00	527.71	84.00	4.16	578.14	75.42	4.38	454.35	74.62	4.35	557.83	64.87	4.28	571.82	56.10	4.32	521.60	60.60	3.54
22	16:00:00	516.72	82.94	4.14	581.33	74.15	4.36	448.37	75.36	4.36	557.90	65.58	4.28	575.44	56.40	4.31	517.11	60.50	3.52
22	17:00:00	511.58	82.37	4.16	582.94	73.53	4.36	445.21	75.53	4.39	559.76	65.49	4.29	571.78	55.69	4.35	514.39	60.90	3.54
22	18:00:00	507.57	83.28	4.21	583.33	74.64	4.37	442.15	75.37	4.41	557.43	65.33	4.29	574.90	56.35	4.36	512.01	61.21	3.58
22	19:00:00	508.54	83.00	4.25	581.86	74.50	4.36	440.65	75.51	4.41	555.96	63.66	4.31	574.05	57.83	4.40	508.67	61.67	3.59
22	20:00:00	508.47	82.34	4.26	584.31	74.53	4.38	439.06	75.18	4.42	554.78	63.37	4.31	575.35	57.80	4.40	507.44	61.52	3.58
22	21:00:00	509.14	82.54	4.33	582.60	76.26	4.39	440.39	74.58	4.44	551.23	62.66	4.36	576.42	56.84	4.40	506.16	60.78	3.60
22	22:00:00	507.59	82.51	4.38	581.42	76.60	4.42	439.97	74.49	4.41	552.85	62.47	4.36	567.48	56.84	4.40	500.35	61.03	3.61
22	23:00:00	511.66	81.97	4.34	579.26	77.09	4.47	440.32	74.89	4.43	555.44	65.16	4.40	568.23	57.61	4.45	500.68	61.38	3.64
23	0:00:00	519.01	82.87	4.38	580.57	76.63	4.45	442.71	74.45	4.45	554.53	64.91	4.38	570.45	58.03	4.45	501.46	62.31	3.66
23	1:00:00	519.66	81.85	4.43</															

วันที่	เวลา	CDU-3 'S STACK																	
		นกคราม			กนกพันธ์			นิมาม			เมษาม			พฤษภาม			มิถุนาม		
		SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)
24	13:00:00	529.53	82.30	4.04	92.75	57.10	4.25	464.57	71.83	4.13	576.00	68.04	4.19	580.46	68.08	4.27	580.46	62.87	3.82
24	14:00:00	530.21	81.95	4.01	115.25	54.95	4.17	463.54	72.29	4.14	567.61	68.62	4.18	579.52	59.91	4.32	526.86	73.09	3.92
24	15:00:00	529.35	81.77	4.05	94.87	55.89	4.31	465.83	71.64	4.13	565.16	69.18	4.21	574.09	60.12	4.43	541.44	77.43	3.84
24	16:00:00	527.79	82.84	4.14	51.88	55.09	4.21	464.99	71.39	4.11	566.59	69.22	4.26	576.07	59.99	4.42	515.92	69.85	3.50
24	17:00:00	522.68	83.03	4.18	27.01	55.17	4.21	466.48	71.38	4.09	565.90	68.48	4.25	575.94	60.27	4.48	519.62	70.74	3.54
24	18:00:00	523.42	83.22	4.17	20.92	55.50	4.26	466.00	71.25	4.12	565.08	68.07	4.33	573.29	58.38	4.49	508.65	67.53	3.66
24	19:00:00	527.48	83.14	4.21	19.26	55.05	4.26	466.54	71.24	4.10	565.43	67.06	4.38	573.50	58.24	4.48	498.01	64.73	3.62
24	20:00:00	525.37	83.86	4.16	18.40	54.99	4.28	468.17	71.34	4.12	564.76	66.21	4.41	569.13	59.19	4.52	494.14	62.88	3.64
24	21:00:00	525.03	83.89	4.19	17.21	55.33	4.35	467.37	71.44	4.14	566.01	66.01	4.38	567.35	59.20	4.56	491.20	62.89	3.61
24	22:00:00	522.76	84.33	4.22	16.56	55.54	4.37	467.12	71.41	4.15	562.40	66.61	4.39	559.25	59.16	4.56	481.08	61.53	3.54
24	23:00:00	522.25	83.97	4.20	16.13	55.60	4.39	466.86	72.31	4.17	563.74	66.72	4.40	567.35	60.04	4.56	472.07	63.48	3.60
25	0:00:00	524.15	84.00	4.20	15.70	55.73	4.42	467.52	71.41	4.17	562.79	66.42	4.30	567.45	59.88	4.55	483.11	63.96	3.83
25	1:00:00	525.17	83.54	4.21	15.27	55.57	4.45	469.35	69.77	4.18	563.71	66.34	4.31	566.96	59.23	4.56	467.35	63.96	3.84
25	2:00:00	523.29	83.69	4.23	15.20	56.07	4.48	469.87	69.15	4.17	563.37	66.54	4.30	566.20	59.79	4.56	444.03	63.55	3.83
25	3:00:00	523.70	84.00	4.28	16.67	56.53	4.49	472.64	69.33	4.21	561.00	65.28	4.31	564.75	59.89	4.57	481.71	64.15	3.82
25	4:00:00	523.79	84.20	4.32	16.84	56.66	4.49	473.74	69.35	4.23	564.81	66.22	4.32	565.28	59.97	4.61	491.10	62.61	3.73
25	5:00:00	523.90	84.06	4.26	16.43	56.35	4.49	475.42	70.36	4.22	564.90	66.27	4.34	561.71	59.81	4.65	493.68	62.55	3.69
25	6:00:00	523.63	83.00	4.19	15.45	55.71	4.47	474.32	69.77	4.20	561.61	66.40	4.35	561.93	59.04	4.63	490.77	62.03	3.68
25	7:00:00	524.84	83.00	4.13	14.57	56.36	4.51	475.72	71.06	4.21	566.02	65.91	4.32	561.46	58.02	4.59	489.68	63.26	3.67
25	8:00:00	525.37	83.56	4.19	14.83	56.13	4.50	476.86	71.06	4.15	567.88	66.49	4.26	564.51	59.39	4.55	499.68	63.75	3.63
25	9:00:00	526.07	84.00	4.13	15.31	57.14	4.48	477.59	71.24	4.08	567.95	67.37	4.24	566.41	60.45	4.49	503.62	64.39	3.67
25	10:00:00	527.03	84.30	4.13	15.70	57.48	4.37	483.86	71.62	4.07	575.54	68.48	4.22	568.15	61.74	4.39	506.25	63.82	3.56
25	11:00:00	524.57	83.53	4.04	16.10	57.56	4.28	490.07	71.55	4.05	593.08	69.02	4.17	570.78	62.19	4.31	493.24	63.14	3.34
25	12:00:00	527.38	84.02	4.07	16.49	57.13	4.27	485.34	72.57	4.10	589.90	69.78	4.20	573.97	62.73	4.33	504.31	64.11	3.34
25	13:00:00	527.30	84.83	4.09	17.25	57.08	4.20	484.21	72.56	4.13	586.43	69.69	4.21	573.75	61.45	4.30	488.85	64.21	3.28
25	14:00:00	525.10	83.94	4.08	17.77	57.03	4.24	480.86	71.44	4.11	583.07	68.61	4.18	571.91	60.66	4.30	520.95	71.26	3.63
25	15:00:00	523.94	84.32	4.13	17.43	57.31	4.25	475.66	71.56	4.14	581.30	67.07	4.21	570.86	60.84	4.36	505.51	63.61	3.70
25	16:00:00	523.63	83.31	4.12	17.03	57.65	4.20	479.19	69.80	4.11	573.99	67.78	4.28	571.40	60.97	4.35	503.35	62.42	3.60
25	17:00:00	522.11	84.27	4.16	16.54	58.12	4.24	479.49	70.33	4.15	551.54	66.72	4.23	572.64	62.24	4.35	507.54	63.87	3.58
25	18:00:00	520.73	85.16	4.21	16.06	58.20	4.29	477.94	70.65	4.19	552.59	66.71	4.20	573.33	61.59	4.39	506.16	65.05	3.61
25	19:00:00	521.43	85.29	4.19	15.57	58.74	4.35	477.20	68.04	4.24	550.87	65.23	4.25	574.02	61.10	4.37	506.24	64.90	3.67
25	20:00:00	521.06	84.41	4.16	15.07	59.31	4.43	477.31	70.24	4.24	553.67	66.13	4.30	565.46	60.47	4.37	504.17	64.75	3.69
25	21:00:00	525.88	84.78	4.20	14.55	58.66	4.45	477.66	70.40	4.24	549.82	65.07	4.30	564.08	60.06	4.36	501.70	65.03	3.70
25	22:00:00	520.97	83.86	4.14	14.03	57.94	4.42	474.89	70.89	4.25	546.13	66.33	4.29	564.49	60.36	4.35	497.02	64.14	3.66
25	23:00:00	518.90	83.83	4.12	13.60	57.97	4.49	472.37	71.54	4.27	542.04	65.03	4.31	569.71	60.01	4.41	494.56	63.76	3.71
26	0:00:00	519.98	83.61	4.08	13.32	57.24	4.45	478.54	70.76	4.25	544.56	66.37	4.28	571.38	59.45	4.39	512.58	63.83	3.71
26	1:00:00	522.57	83.84	4.04	13.05	57.79	4.53	474.25	70.79	4.26	540.81	66.56	4.28	572.27	59.19	4.41	499.27	64.30	3.82
26	2:00:00	525.45	82.90	4.08	12.77	58.20	4.60	475.16	71.17	4.25	539.41	66.54	4.30	565.02	59.16	4.44	488.76	63.90	3.89
26	3:00:00	530.02	83.27	4.15	12.50	58.01	4.64	476.30	72.54	4.26	550.99	66.62	4.29	552.15	58.94	4.43	485.07	61.02	3.81
26	4:00:00	531.50	83.27	4.20	61.60	59.34	4.60	476.42	72.65	4.27	563.41	66.61	4.28	539.52	58.71	4.45	496.58	61.28	3.87
26	5:00:00	534.48	84.20	4.18	442.07	83.81	4.96	476.31	73.17	4.29	561.18	66.93	4.31	528.44	57.95	4.47	501.24	61.25	3.84
26	6:00:00	533.56	83.63	4.12	502.84	71.10	4.34	475.24	72.77	4.29	561.35	66.36	4.33	515.61	58.42	4.48	501.64	60.89	3.82
26	7:00:00	537.01	85.53	4.23	509.78	71.06	4.38	475.44	73.54	4.32	563.45	66.09	4.31	507.84	58.68	4.47	504.55	62.70	3.84
26	8:00:00	536.71	84.93	4.21	515.83	71.20	4.36	476.16	73.74	4.23	562.34	67.14	4.26	504.04	60.02	4.42	522.01	62.97	3.81
26	9:00:00	538.27	86.27	4.30	518.78	71.48	4.31	477.81	75.65	4.21	561.83	68.82	4.21	499.41	61.35	4.40	517.89	63.43	3.78
26	10:00:00	540.22	87.73	4.34	519.38	71.74	4.20	477.85	75.81	4.18	561.46	69.85	4.14	498.19	62.21	4.33	538.13	64.31	3.71
26	11:00:00	541.59	87.23	4.22	524.30	72.37	4.13	479.00	77.18	4.13	560.10	70.71	4.11	496.88	61.46	4.28	537.02	65.36	3.65
26	12:00:00	543.43	87.97	4.28	526.24	73.29	4.13	480.09	75.67	4.10	559.22	70.85	4.09	495.13	62.74	4.27	530.94	64.80	3.69
26	13:00:00	542.79	86.56	4.22	530.97	73.76	4.14	477.96	75.57	4.09	558.77	70.01	4.09	491.00	61.18	4.25	540.42	63.21	3.69
26	14:00:00	539.19	85.87	4.20	533.41	73.68	4.16	481.20	77.56	4.07	553.72	69.93	4.11	489.13	60.77	4.27	535.40	62.85	3.66
26	15:00:00	539.76	86.46	4.26	532.45	74.02	4.27	481.37	80.50	4.29	557.14	69.57	4.18	483.33	61.38	4.31	532.80	63.86	3.76
26	16:00:00	539.85	86.44	4.26	531.02	73.33	4.27	472.56	78.00	4.21	554.15	69.61	4.19	484.47	62.03	4.31	537.43	63.16	3.78
26	17:00:00	539.35	85.75	4.24	533.64	72.77	4.24	471.61	77.64	4.19	554.63	68.77	4.22	482.47	61.90	4.32	543.66	64.01	3.76
26	18:00:00	539.12	86.66	4.27	532.33	73.21	4.28	471.50	77.32	4.19	553.91	68.60	4.23	486.25	61.17	4.36	542.16	64.27	3.75
26	19:00:00	541.73	86.25	4.26	534.94	73.54	4.33	472.02	77.50	4.21	552.60	67.04	4.26	486.55	60.17	4.37	543.17	64.53	3.78
26	20:00:00	539.64	85.61	4.27	534.36	73.42	4.33	471.61	76.99	4.23	551.23	67.72	4.30	489.03	60.03	4.35	545.41	64.59	3.79
26	21:00:00	539.71	85.65	4.27	535.64	74.30	4.37	477.87	78.69	4.23	553.71	67.11	4.30	487.04	59.95	4.36	552.92	65.07	3.80
26	22:00:00	535.09	86.39	4.27	537.30	73.35	4.36	4											

วันที่	เวลา	CDU-3 'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)
28	11:00:00	553.19	87.49	4.24	536.04	71.30	4.24	476.35	78.27	4.29	589.45	67.49	4.73	487.80	63.29	3.92	554.50	69.80	3.71
28	12:00:00	554.71	87.52	4.19	539.09	71.16	4.20	475.94	76.98	4.22	577.88	56.00	3.78	487.15	62.79	3.91	554.76	69.91	3.67
28	13:00:00	555.89	87.84	4.19	539.95	72.20	4.29	477.79	78.47	4.15	582.25	58.24	3.85	486.69	62.33	3.92	551.71	69.78	3.68
28	14:00:00	556.01	87.48	4.16	537.55	71.88	4.38	475.93	77.77	4.12	583.11	60.31	3.88	484.61	61.32	3.94	551.42	68.97	3.66
28	15:00:00	556.78	87.76	4.22	533.78	72.35	4.43	478.27	79.31	4.30	587.27	61.60	3.97	479.55	61.63	3.96	550.58	70.26	3.72
28	16:00:00	556.19	87.11	4.22	537.10	72.04	4.41	479.48	79.27	4.30	587.01	59.85	3.97	477.12	61.57	3.96	550.89	70.76	3.72
28	17:00:00	557.23	87.79	4.24	541.15	71.70	4.41	476.70	78.24	4.19	587.11	61.00	4.00	479.49	61.22	4.00	549.92	70.61	3.74
28	18:00:00	558.43	88.40	4.30	552.11	71.86	4.42	477.30	79.20	4.22	583.93	60.96	4.03	477.33	60.50	3.99	553.48	70.38	3.76
28	19:00:00	556.02	87.94	4.29	562.30	72.15	4.45	474.95	78.65	4.26	587.33	60.72	4.05	475.70	61.74	4.25	552.40	68.87	3.74
28	20:00:00	554.74	88.22	4.29	571.74	71.75	4.46	475.43	78.39	4.29	585.69	60.58	4.10	477.78	60.46	4.19	552.98	68.41	3.76
28	21:00:00	556.56	88.86	4.39	578.78	71.68	4.46	475.37	77.89	4.29	584.99	62.73	4.26	481.23	60.03	4.20	550.84	67.61	3.76
28	22:00:00	554.64	87.83	4.33	583.21	71.72	4.45	474.13	77.29	4.30	583.15	62.01	4.31	481.67	59.45	4.19	547.39	66.54	3.75
28	23:00:00	552.43	87.86	4.35	587.16	72.37	4.46	474.61	77.67	4.34	587.88	61.10	4.20	484.19	59.27	4.16	545.41	66.66	3.82
29	0:00:00	553.22	87.77	4.36				475.38	77.11	4.31	588.54	58.94	4.10	486.14	59.05	4.15	551.83	65.94	3.81
29	1:00:00	553.21	87.58	4.37				475.20	77.09	4.30	587.43	58.13	4.06	486.53	59.22	4.15	552.03	66.64	3.81
29	2:00:00	553.06	87.43	4.36				475.53	77.28	4.31	581.38	56.91	4.01	487.00	58.86	4.11	550.13	67.53	3.80
29	3:00:00	553.19	87.88	4.36				473.58	77.24	4.32	567.65	57.57	3.98	480.48	58.76	4.14	554.07	67.64	3.83
29	4:00:00	554.22	87.61	4.39				472.73	78.39	4.33	559.04	56.95	3.97	477.96	59.68	4.14	554.87	66.49	3.85
29	5:00:00	556.89	87.61	4.38				471.75	77.58	4.34	549.58	57.24	3.94	474.58	60.32	4.17	550.70	65.90	3.88
29	6:00:00	558.89	88.22	4.38				469.16	77.60	4.33	538.63	57.53	3.94	469.74	60.31	4.15	547.82	65.29	3.83
29	7:00:00	557.88	88.62	4.40				466.17	78.53	4.35	531.35	58.06	4.03	481.66	60.20	4.18	551.48	65.73	3.83
29	8:00:00	559.57	88.09	4.34				468.13	78.56	4.30	526.88	57.56	4.04	485.38	60.34	4.13	555.91	65.37	3.79
29	9:00:00	563.17	88.32	4.32				469.83	79.70	4.31	523.16	58.44	4.04	485.93	61.12	4.09	548.27	66.30	3.76
29	10:00:00	565.40	89.19	4.33				470.79	80.21	4.31	516.73	59.18	4.01	489.29	63.24	4.03	560.68	67.58	3.74
29	11:00:00	565.33	89.14	4.29				469.90	79.29	4.33	516.45	57.41	3.94	488.70	62.70	3.94	557.17	67.45	3.69
29	12:00:00	567.84	89.61	4.26				469.59	79.61	4.37	518.84	56.36	3.83	488.83	63.98	3.99	555.67	67.17	3.66
29	13:00:00	569.59	89.09	4.23				469.07	79.78	4.45	517.60	56.03	3.85	484.37	63.74	4.07	543.23	66.11	3.64
29	14:00:00	567.09	88.49	4.22				468.69	79.26	4.40	516.08	56.42	3.89	480.24	62.73	4.08	554.23	66.11	3.63
29	15:00:00	566.18	89.84	4.27				468.20	79.43	4.38	517.34	57.32	3.93	482.67	63.63	4.15	547.13	65.60	3.67
29	16:00:00	564.42	90.21	4.26				467.25	77.84	4.33	518.72	57.19	3.91	485.17	64.29	4.17	555.14	66.18	3.69
29	17:00:00	564.52	91.40	4.34				468.47	77.49	4.31	518.29	56.77	3.92	483.03	63.42	4.18	555.28	66.64	3.70
29	18:00:00	565.27	90.87	4.35				468.25	78.32	4.35	516.57	56.96	3.96	481.66	63.18	4.16	556.31	67.04	3.72
29	19:00:00	562.62	89.46	4.30				468.76	77.57	4.35	517.80	57.39	3.97	485.94	62.81	4.18	554.63	67.15	3.73
29	20:00:00	559.67	89.73	4.33				468.51	77.30	4.31	516.94	57.85	3.99	483.00	62.97	4.20	556.37	66.80	3.76
29	21:00:00	558.88	89.29	4.31				468.62	77.34	4.32	518.48	57.43	3.98	482.09	61.96	4.21	554.61	66.32	3.77
29	22:00:00	557.08	88.53	4.33				469.26	77.02	4.32	516.62	57.03	3.97	481.49	62.09	4.20	551.41	65.65	3.76
29	23:00:00	553.89	89.14	4.35				468.05	76.26	4.33	516.07	58.99	4.04	485.16	60.86	4.23	554.88	65.60	3.79
30	0:00:00	556.10	88.40	4.31				469.20	75.95	4.30	516.32	57.23	3.99	486.66	60.95	4.26	553.83	65.37	3.77
30	1:00:00	555.95	88.81	4.32				469.93	75.97	4.29	512.12	56.01	3.98	487.40	61.06	4.24	557.98	65.65	3.76
30	2:00:00	557.45	88.56	4.31				470.57	75.59	4.28	514.07	56.44	3.95	490.24	61.29	4.12	558.05	65.66	3.79
30	3:00:00	558.37	88.42	4.31				470.64	75.58	4.26	513.26	55.98	3.96	488.94	62.14	4.18	561.15	65.30	3.76
30	4:00:00	560.10	89.04	4.31				470.51	76.05	4.27	515.88	55.77	3.98	487.39	61.94	4.21	568.87	65.47	3.78
30	5:00:00	559.55	88.43	4.33				471.91	75.52	4.28	514.50	55.31	3.95	490.80	61.51	4.19	560.52	65.96	3.86
30	6:00:00	557.88	88.52	4.33				471.15	76.49	4.31	510.92	56.56	3.97	490.87	61.11	4.17	560.55	65.07	3.78
30	7:00:00	559.15	89.12	4.36				470.83	76.32	4.29	512.99	55.99	3.99	495.57	62.68	4.20	562.38	65.26	3.77
30	8:00:00	560.65	89.41	4.37				471.52	76.19	4.26	514.31	57.80	3.95	493.94	62.63	4.14	562.12	65.61	3.73
30	9:00:00	562.27	89.53	4.38				471.82	77.32	4.25	513.80	58.09	3.94	496.59	63.05	4.12	558.99	67.80	3.69
30	10:00:00	562.53	89.53	4.35				471.39	77.51	4.23	510.97	58.41	3.97	494.85	63.17	4.05	566.67	68.82	3.68
30	11:00:00	564.83	88.59	4.25				472.00	77.49	4.15	508.48	57.58	3.94	496.61	63.24	4.00	560.24	68.51	3.60
30	12:00:00	567.81	90.88	4.27				473.39	77.56	4.12	512.55	56.82	3.84	495.50	62.39	3.95	565.72	68.83	3.58
30	13:00:00	567.71	91.36	4.28				472.52	77.98	4.18	515.35	56.54	3.81	494.97	62.48	3.94	563.37	67.92	3.56
30	14:00:00	567.87	91.24	4.27				471.74	79.04	4.21	512.06	60.03	3.95	491.96	62.86	3.98	560.99	68.77	3.61
30	15:00:00	567.59	91.98	4.35				470.05	79.06	4.27	511.07	60.48	4.03	494.82	62.22	3.95	562.17	69.03	3.62
30	16:00:00	566.03	91.11	4.33				470.48	77.20	4.22	510.92	60.05	3.96	493.30	62.31	3.98	559.97	69.05	3.61
30	17:00:00	564.86	90.77	4.30				470.32	76.63	4.21	510.54	59.40	3.96	491.74	62.00	3.98	561.18	69.30	3.62
30	18:00:00	562.33	90.49	4.32				470.22	76.75	4.24	508.82	59.14	3.96	494.58	62.66	3.98	553.67	69.90	3.65
30	19:00:00	559.01	91.10	4.33				470.51	77.45	4.25	510.54	59.94	3.99	493.18	62.85	3.99	563.87	69.71	3.66
30	20:00:00	556.85	90.58	4.38				470.08	76.49	4.25	507.35	59.18	3.98	493.97	63.07	4.05	558.30	69.15	3.67
30	21:00:00	555.99	89.97	4.38				470.54	76.72	4.25	506.03	58.90	4.00	492.73	61.67	4.04	562.50	68.60	3.69
30	22:00:00	555.40	90.06	4.38				468.20	78.21	4.27	504.78	58.78	4.02	491.61	60.53	4.02	562.80	67.91	3.70
30	23:00:00	558.54	89.98	4.42				469.07	78.69	4.30	510.07	59.28	4.05	486.55	60.87	4.05	559.26	67.96	3.76
31	0:00:00	555.04	89.33	4.42															

วันที่	เวลา	CCR-1 'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)
1	0:00:00	125.13	29.95	3.40	149.65	7.74	4.28	152.89	8.02	2.61	102.46	31.54	3.85	80.56	44.14	3.75	63.74	0.56	3.74
1	1:00:00	125.39	29.97	3.42	150.83	8.29	4.26	153.45	7.67	2.56	102.06	31.18	3.92	80.22	45.47	3.72	Maintenance	Maintenance	
1	2:00:00	125.79	29.11	3.35	148.82	8.64	4.26	154.03	7.64	2.56	101.09	31.00	4.01	80.41	45.07	3.72	59.63	0.03	3.83
1	3:00:00	124.11	29.48	3.37	142.90	8.58	4.26	155.80	7.80	2.53	100.51	30.69	4.28	80.29	44.24	3.77	58.71	1.45	3.74
1	4:00:00	123.45	29.66	3.38	147.10	8.43	4.39	156.15	7.40	2.52	100.14	30.01	4.68	79.02	45.10	3.74	63.35	0.76	3.79
1	5:00:00	124.85	29.95	3.42	145.70	8.09	4.50	157.85	7.31	2.55	98.54	29.53	5.10	85.80	47.36	3.81	63.01	0.09	3.83
1	6:00:00	126.35	30.29	3.39	147.01	8.21	4.48	159.17	7.13	2.62	95.14	28.35	5.67	90.90	47.08	3.83	66.05	0.42	3.67
1	7:00:00	126.95	30.92	3.39	149.00	8.41	4.52	159.63	7.40	2.61	91.20	26.71	6.48	90.17	46.64	3.89	72.61	0.54	3.68
1	8:00:00	124.69	30.77	3.37	148.70	8.11	4.56	181.85	6.83	2.62	89.92	23.56	7.52	86.97	46.86	3.88	Maintenance	Maintenance	Maintenance
1	9:00:00	125.31	30.07	3.37	149.81	8.55	4.60	192.38	7.27	2.69	87.76	21.83	7.83	82.18	44.96	3.84	Maintenance	Maintenance	Maintenance
1	10:00:00	122.12	30.24	3.42	148.95	8.04	4.54	163.36	7.67	2.69	109.92	27.29	11.64	80.72	43.26	3.85	Maintenance	Maintenance	Maintenance
1	11:00:00	119.12	30.18	3.44	148.15	6.98	4.59	161.69	7.78	2.71	111.50	32.49	3.72	77.53	44.29	3.81	Maintenance	Maintenance	Maintenance
1	12:00:00	122.73	30.27	3.48	150.64	6.97	4.53	182.06	7.35	2.76	103.50	27.52	3.56	76.77	44.36	3.83	17.86	32.08	2.80
1	13:00:00	121.69	29.62	3.45	150.30	7.61	4.55	176.58	7.78	2.71	107.48	28.61	3.53	75.98	42.69	3.84	19.75	32.35	2.82
1	14:00:00	114.45	29.74	3.39	150.92	9.16	4.62	167.28	7.28	2.70	107.19	30.63	3.50	81.27	45.62	3.87	21.11	31.62	2.79
1	15:00:00	123.97	29.40	3.37	151.87	8.07	4.63	161.65	7.13	2.70	108.06	31.30	3.51	81.48	45.68	3.84	21.88	31.84	2.82
1	16:00:00	126.69	28.86	3.39	154.90	6.76	4.59	160.43	6.58	2.67	100.74	30.30	3.47	72.79	42.95	3.82	21.74	34.55	2.86
1	17:00:00	126.41	29.62	3.38	155.07	8.62	4.59	160.67	8.04	2.67	116.19	33.05	3.49	78.93	45.86	3.86	21.42	35.61	2.85
1	18:00:00	125.49	29.98	3.38	188.79	8.69	4.52	161.01	8.94	2.62	116.86	32.38	3.42	78.23	45.90	3.81	20.71	36.10	2.84
1	19:00:00	124.78	30.04	3.35	162.38	8.54	4.44	159.66	9.35	2.65	116.14	31.38	3.39	77.26	43.70	3.77	19.85	35.99	2.83
1	20:00:00	121.94	30.25	3.37	149.47	8.26	4.38	159.57	9.32	2.65	114.47	30.95	3.45	76.90	44.69	3.75	19.05	35.92	2.84
1	21:00:00	120.95	29.85	3.32	155.47	8.19	4.39	159.48	8.89	2.66	113.08	31.22	3.46	75.34	45.21	3.81	18.89	36.52	2.86
1	22:00:00	124.32	29.99	3.34	153.55	8.32	4.37	160.55	8.77	2.66	112.68	30.75	3.46	73.43	44.50	3.80	19.27	38.49	2.88
1	23:00:00	127.34	30.44	3.39	149.68	8.91	4.38	160.67	8.69	2.66	115.39	30.38	3.42	72.52	43.77	3.75	19.05	36.29	2.85
2	0:00:00	125.81	30.18	3.41	147.56	8.29	4.37	161.17	8.87	2.66	116.06	30.31	3.46	73.19	42.91	3.64	19.21	35.43	2.84
2	1:00:00	125.65	29.86	3.39	147.05	8.42	4.35	160.91	8.37	2.64	114.43	30.13	3.41	73.27	42.40	3.59	19.59	36.52	2.88
2	2:00:00	129.41	29.76	3.39	146.35	8.28	4.36	161.76	8.17	2.64	114.88	30.34	3.41	72.08	42.31	3.63	19.69	38.35	2.87
2	3:00:00	127.73	30.44	3.47	147.93	8.46	4.41	161.76	8.42	2.67	114.77	30.68	3.43	72.09	42.16	3.65	19.42	37.25	2.88
2	4:00:00	127.12	30.49	3.49	150.89	8.98	4.49	160.83	7.98	2.70	114.67	31.09	3.41	70.95	41.14	3.68	19.09	37.08	2.87
2	5:00:00	123.83	30.65	3.48	150.53	9.76	4.57	160.85	8.39	2.67	115.33	31.53	3.43	70.56	40.21	3.63	19.06	37.21	2.90
2	6:00:00	124.35	30.84	3.50	151.87	9.98	4.57	160.38	8.56	2.70	113.87	31.67	3.44	80.03	45.54	3.47	18.97	38.45	2.90
2	7:00:00	123.01	30.13	3.52	150.22	9.67	4.49	161.19	8.31	2.70	113.37	31.43	3.44	84.68	47.79	3.68	19.58	38.75	2.94
2	8:00:00	123.73	30.28	3.51	152.21	9.19	4.49	160.08	8.09	2.70	113.40	30.39	3.41	84.35	47.07	3.71	20.68	38.65	2.95
2	9:00:00	124.81	29.95	3.54	157.53	10.28	4.50	158.90	8.38	2.71	113.80	29.91	3.41	85.74	44.97	3.73	20.86	40.00	2.97
2	10:00:00	126.74	29.11	3.54	153.24	10.35	4.51	159.66	8.67	2.73	114.54	30.29	3.42	85.53	44.73	3.71	19.94	38.83	3.05
2	11:00:00	123.95	29.95	3.53	151.38	7.45	4.49	153.18	6.15	2.86	115.28	29.65	3.41	84.19	46.24	3.72	19.33	38.41	2.99
2	12:00:00	127.59	29.34	3.52	150.35	7.73	4.48	152.13	8.10	2.67	115.41	29.10	3.38	84.25	45.66	3.76	19.65	39.57	2.96
2	13:00:00	128.85	29.74	3.45	151.68	8.89	4.43	154.37	8.20	2.69	115.12	29.40	3.37	83.74	46.02	3.77	19.52	38.96	2.91
2	14:00:00	122.68	29.61	3.41	152.33	8.95	4.40	156.06	8.12	2.66	114.15	29.59	3.34	83.50	45.12	3.76	22.06	38.32	2.92
2	15:00:00	125.11	29.43	3.45	154.40	7.54	4.36	157.71	9.53	2.62	115.71	28.87	3.31	82.06	46.68	3.75	22.01	37.52	2.88
2	16:00:00	125.18	29.20	3.45	154.94	7.85	4.35	155.28	9.90	2.58	115.90	29.69	3.32	81.29	46.49	3.78	21.16	39.19	2.92
2	17:00:00	126.69	29.79	3.44	153.44	9.20	4.30	158.23	9.54	2.55	115.73	31.35	3.41	81.96	47.32	3.74	20.55	40.27	2.93
2	18:00:00	126.21	30.17	3.47	153.42	8.90	4.30	156.51	8.41	2.54	116.27	32.16	3.52	82.19	46.52	3.72	19.98	40.58	2.99
2	19:00:00	122.14	30.45	3.49	151.38	8.22	4.31	156.62	8.69	2.50	116.35	31.34	3.49	81.73	46.26	3.74	20.08	37.50	2.86
2	20:00:00	126.20	30.63	3.51	154.16	8.31	4.29	157.65	8.61	2.53	117.52	30.73	3.48	81.30	47.68	3.82	19.59	37.06	2.90
2	21:00:00	126.89	30.90	3.51	153.32	9.36	4.32	157.20	8.64	2.52	119.82	30.66	3.55	80.52	46.39	3.80	18.88	38.76	2.91
2	22:00:00	126.25	30.96	3.51	153.76	9.02	4.29	157.63	9.09	2.55	120.66	30.93	3.53	81.28	46.82	3.84	18.45	39.72	2.91
2	23:00:00	129.93	30.55	3.53	155.14	9.19	4.27	157.94	9.20	2.57	120.86	30.83	3.51	81.87	47.76	3.82	18.13	39.62	2.90
3	0:00:00	130.62	30.53	3.54	154.67	8.85	4.27	157.45	9.44	2.54	121.79	30.98	3.54	80.93	46.63	3.83	17.79	36.52	2.89
3	1:00:00	130.22	30.50	3.54	154.30	9.28	4.28	157.44	9.92	2.54	124.14	31.40	3.63	80.47	46.40	3.80	17.94	37.21	2.91
3	2:00:00	126.16	30.43	3.53	155.17	9.55	4.26	156.66	8.85	2.53	125.41	31.11	3.66	79.90	47.00	3.82	17.63	37.87	2.92
3	3:00:00	127.25	30.75	3.55	156.57	9.52	4.26	157.79	8.67	2.56	124.63	30.69	3.59	79.43	45.99	3.83	17.68	38.77	2.91
3	4:00:00	127.23	30.69	3.49	155.88	8.73	4.26	156.39	8.36	2.54	124.98	30.89	3.58	79.79	45.64	3.83	17.53	39.72	2.91
3	5:00:00	126.73	31.06	3.48	154.70	9.05	4.29	157.09	8.75	2.56	124.66	31.26	3.55	79.76	46.96	3.88	17.35	39.35	2.92
3	6:00:00	125.42	31.97	3.54	154.78	9.13	4.29	157.14	8.37	2.56	121.34	31.72	3.59	81.16	47.15	3.87	16.98	36.97	2.94
3	7:00:00	127.02	33.21	3.58	158.46	9.25	4.31	158.06	8.27	2.59	105.57	30.42	3.71	82.34	46.41	3.84	17.11	38.29	3.00
3	8:00:00	129.17	32.22	3.59	156.67	9.00	4.31	158.56	8.34	2.61	7.86	17.89	3.15	82.35	46.90	3.87	20.85	40.00	3.05
3	9:00:00	115.59	32.33	3.93	158.89	7.76	4.34	191.80	8.29	2.63	9.30	17.15	3.14	82.40	47.17	3.89	22.22	38.27	3.06
3	10:00:00	108.28	30.78	3.64	242.05	38.81	8.13	159.32	7.99	2.66	8.97	16.79	3.19	81.80	45.65	3.87	23.92	39.32	3.24
3	11:00:00																		

วันที่	เวลา	CCR-1 'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)
5	8:00:00	120.79	31.05	3.57	127.29	8.57	3.55	155.85	7.54	2.48	122.13	30.45	3.76	0.00	35.33	3.44	145.56	50.19	3.38
5	9:00:00	120.64	30.54	3.59	131.42	8.25	3.58	155.64	7.53	2.52	121.56	29.77	3.76	0.00	34.60	3.42	147.22	50.46	3.38
5	10:00:00	120.46	30.01	3.55	129.76	7.73	3.57	162.91	7.28	2.55	122.78	29.10	3.70	0.00	36.43	3.44	146.32	51.07	3.61
5	11:00:00	117.71	29.62	3.55	134.06	7.32	3.61	165.09	5.79	2.75	123.47	28.56	3.67	0.00	36.34	3.43	159.82	50.89	3.42
5	12:00:00	122.19	29.96	3.56	135.29	7.08	3.68	151.63	7.87	2.56	124.45	28.50	3.65	0.00	35.95	3.42	170.61	50.97	3.41
5	13:00:00	123.95	30.18	3.51	137.93	7.10	3.64	151.71	8.08	2.54	124.60	29.46	3.64	0.00	33.24	3.36	160.20	52.07	3.44
5	14:00:00	124.14	29.81	3.56	139.67	7.99	3.63	153.91	7.92	2.55	125.50	28.82	3.64	0.00	35.66	3.33	146.27	52.80	3.43
5	15:00:00	125.02	30.56	3.58	136.97	9.24	3.59	153.82	7.20	2.47	126.78	29.80	3.63	0.00	36.66	3.41	145.75	51.58	3.41
5	16:00:00	122.99	30.34	3.55	136.07	9.26	3.60	156.13	6.64	2.44	124.96	29.12	3.66	4.56	34.37	3.40	146.65	51.02	3.41
5	17:00:00	122.76	30.48	3.54	136.60	9.13	3.63	154.43	7.63	2.40	125.56	28.55	3.66	5.00	35.91	3.33	147.95	52.05	3.38
5	18:00:00	121.95	30.29	3.54	138.31	9.31	3.64	154.35	8.28	2.40	126.21	29.32	3.65	4.96	35.08	3.36	145.48	49.91	3.36
5	19:00:00	122.92	30.46	3.51	136.92	9.29	3.65	154.99	7.66	2.46	126.47	29.37	3.59	5.37	32.34	3.25	145.64	50.61	3.35
5	20:00:00	121.91	30.21	3.47	137.37	8.54	3.65	153.85	7.11	2.44	126.61	29.30	3.58	5.14	32.22	3.14	143.06	50.47	3.35
5	21:00:00	119.27	30.40	3.51	135.44	8.08	3.64	154.16	7.34	2.46	127.92	29.88	3.59	4.69	33.86	3.21	141.53	49.10	3.18
5	22:00:00	124.96	30.57	3.50	136.83	7.04	3.59	155.56	8.14	2.48	127.21	29.22	3.57	5.07	32.68	3.21	147.33	50.08	3.37
5	23:00:00	124.50	29.99	3.52	138.45	7.32	3.64	156.32	8.52	2.49	127.34	29.49	3.56	4.38	32.09	3.21	150.06	49.78	3.40
6	0:00:00	124.34	30.10	3.54	137.69	7.86	3.65	156.28	8.95	2.49	128.31	29.39	3.58	3.64	33.51	3.20	148.93	50.00	3.37
6	1:00:00	124.12	30.53	3.57	136.00	8.18	3.62	155.38	8.78	2.46	129.92	29.64	3.63	11.65	34.24	3.39	146.30	50.15	3.28
6	2:00:00	113.26	31.29	3.61	136.96	8.02	3.61	154.70	8.51	2.47	128.68	29.36	3.61	66.12	40.16	3.57	150.26	49.47	3.34
6	3:00:00	106.46	31.56	3.60	137.74	8.36	3.62	154.98	8.46	2.48	128.11	29.57	3.65	84.87	41.22	3.54	149.52	49.01	3.35
6	4:00:00	113.41	30.75	3.56	134.17	9.19	3.62	155.67	8.68	2.51	125.75	29.68	3.64	88.61	40.56	3.53	149.01	49.90	3.34
6	5:00:00	109.96	30.64	3.61	132.72	9.51	3.68	153.03	8.76	2.52	124.36	30.06	3.70	102.15	40.02	3.54	149.79	51.08	3.37
6	6:00:00	111.69	30.85	3.63	130.89	10.46	3.68	154.06	8.76	2.55	125.30	29.55	3.72	106.72	41.54	3.65	147.97	49.61	3.37
6	7:00:00	115.97	31.24	3.63	129.03	10.06	3.64	152.86	8.33	2.55	125.22	29.14	3.70	106.14	42.54	3.79	148.30	48.77	3.35
6	8:00:00	116.58	30.89	3.64	127.45	8.72	3.67	154.67	8.83	2.59	124.48	28.11	3.70	107.41	40.77	3.78	155.34	48.82	3.35
6	9:00:00	249.04	63.66	8.40	134.84	8.45	3.70	154.22	8.20	2.61	124.66	27.60	3.66	109.30	40.59	3.79	156.32	49.45	3.37
6	10:00:00	113.11	21.85	3.88	133.45	6.81	3.69	155.07	7.95	2.63	126.70	27.85	3.52	109.68	41.02	3.74	154.31	50.24	3.50
6	11:00:00	110.19	18.96	3.86	126.63	3.05	3.77	154.32	7.71	2.62	136.18	30.22	3.45	108.79	42.16	3.79	159.30	50.65	3.33
6	12:00:00	114.05	19.13	3.84	126.19	6.76	3.59	154.81	7.63	2.61	147.98	30.38	3.40	111.48	42.18	3.75	157.68	48.64	3.23
6	13:00:00	111.63	18.86	3.85	129.55	7.39	3.56	153.40	8.05	2.56	144.08	31.83	3.41	105.70	44.67	3.66	148.01	50.07	3.16
6	14:00:00	105.23	18.82	3.80	136.34	8.14	3.57	155.99	8.90	2.57	147.72	33.00	3.33	107.51	45.04	3.63	146.72	50.51	3.17
6	15:00:00	99.70	19.02	3.85	134.28	7.59	3.56	155.10	8.18	2.55	139.54	32.74	3.43	109.32	42.97	3.68	147.89	49.16	3.13
6	16:00:00	104.35	19.85	3.80	134.10	6.43	3.58	155.57	8.53	2.54	143.45	30.96	3.41	113.85	45.07	4.44	148.22	47.53	3.16
6	17:00:00	106.03	21.86	3.75	137.97	12.25	3.61	155.38	8.97	2.54	138.85	30.69	3.40	110.56	43.54	3.58	148.97	49.39	3.10
6	18:00:00	109.31	18.78	3.70	138.61	9.88	3.55	155.52	8.42	2.59	138.59	31.06	3.35	107.35	40.11	3.56	151.83	50.27	3.11
6	19:00:00	114.46	18.83	3.63	137.13	8.84	3.51	154.72	8.59	2.58	137.19	29.85	3.35	105.62	40.35	3.58	150.78	49.45	3.15
6	20:00:00	112.71	18.80	3.64	139.04	8.94	3.53	156.47	9.46	2.59	136.81	30.01	3.37	113.57	41.89	3.63	147.71	48.63	3.13
6	21:00:00	Maintenance	Maintenance	Maintenance	140.10	9.35	3.64	156.54	9.11	2.60	137.15	29.34	3.41	114.28	42.42	3.63	148.41	49.25	3.11
6	22:00:00	Maintenance	Maintenance	Maintenance	144.26	9.74	3.55	156.53	9.40	2.62	137.03	28.86	3.48	114.44	42.49	3.69	145.28	48.46	3.14
6	23:00:00	Maintenance	Maintenance	Maintenance	136.96	9.43	3.49	157.87	9.49	2.63	139.04	28.49	3.62	111.54	41.13	3.73	145.39	47.98	3.17
7	0:00:00	Maintenance	Maintenance	Maintenance	134.54	9.43	3.47	156.29	8.89	2.59	137.56	28.10	3.72	109.93	42.74	3.70	146.61	48.53	3.22
7	1:00:00	Maintenance	Maintenance	Maintenance	132.10	9.26	3.48	154.72	8.93	2.59	137.14	27.94	4.05	107.30	43.23	3.70	145.54	49.37	3.20
7	2:00:00	Maintenance	Maintenance	Maintenance	132.35	9.83	3.55	155.22	8.90	2.59	136.90	27.54	4.42	106.88	42.79	3.68	147.54	48.89	3.21
7	3:00:00	Maintenance	Maintenance	Maintenance	134.15	10.17	3.58	155.19	9.18	2.61	135.40	27.33	4.85	106.25	42.82	3.70	147.17	48.74	3.23
7	4:00:00	Maintenance	Maintenance	Maintenance	134.85	10.27	3.56	155.88	9.06	2.57	130.02	27.07	5.25	111.12	43.39	3.72	145.34	49.90	3.23
7	5:00:00	Maintenance	Maintenance	Maintenance	134.24	9.60	3.53	156.38	9.01	2.60	123.08	27.56	5.29	115.01	43.35	3.71	145.41	50.00	3.19
7	6:00:00	Maintenance	Maintenance	Maintenance	134.43	9.77	3.50	155.62	8.77	2.61	119.99	27.99	5.77	113.35	43.80	3.72	147.67	48.16	3.19
7	7:00:00	Maintenance	Maintenance	Maintenance	135.14	7.73	3.47	156.17	8.61	2.62	118.90	27.54	6.30	107.13	43.75	3.77	149.72	46.94	3.19
7	8:00:00	Maintenance	Maintenance	Maintenance	137.66	8.92	3.46	153.88	8.52	2.66	116.57	26.85	6.97	106.62	41.57	3.76	146.84	48.34	3.17
7	9:00:00	Maintenance	Maintenance	Maintenance	142.27	7.98	3.48	155.43	7.73	2.73	112.48	27.38	7.20	101.84	39.54	3.74	146.46	48.84	3.17
7	10:00:00	Maintenance	Maintenance	Maintenance	147.10	7.39	3.43	154.65	7.40	2.75	108.68	26.95	7.88	99.42	42.78	3.71	139.97	49.52	3.30
7	11:00:00	Maintenance	Maintenance	Maintenance	151.91	6.55	3.44	158.65	7.39	2.67	123.23	24.98	4.64	101.06	41.99	3.67	143.79	48.84	3.21
7	12:00:00	Maintenance	Maintenance	Maintenance	155.70	6.64	3.45	155.39	6.47	2.55	127.69	30.71	3.52	114.75	43.34	3.30	148.75	49.75	3.21
7	13:00:00	Maintenance	Maintenance	Maintenance	162.28	8.90	3.47	155.81	7.26	2.57	126.93	33.65	3.54	146.97	43.98	3.29	145.85	51.26	3.23
7	14:00:00	Maintenance	Maintenance	Maintenance	167.43	9.16	3.49	156.00	7.25	2.53	127.96	36.03	3.57	117.02	44.83	3.50	143.65	51.18	3.21
7	15:00:00	Maintenance	Maintenance	Maintenance	175.34	8.12	3.49	157.44	7.48	2.48	128.36	35.59	3.56	113.95	43.94	3.55	143.45	50.53	3.21
7	16:00:00	Maintenance	Maintenance	Maintenance	177.34	5.60	3.47	155.48	7.88	2.49	128.51	33.56	3.60	106.44	43.41	3.58	144.22	49.11	3.17
7	17:00:00	Maintenance	Maintenance	Maintenance	174.59	9.33	3.46	156.13	7.99	2.47	127.61	34.02	3.68	106.82	40.48	3.53	144.08	49.31	3.16
7	18:00:00	Maintenance	Maintenance	Maintenance	167.14	9.71	3.46	156.82	8.65	2.51	128.06	34.07	3.66	106.50	42.37	3.56	142.40	49.80	3.17
7	19:00:00	Maintenance	Maintenance	Maintenance	160.89	9.49	3.47	155.79	8.75	2.55	127.66	32.53	3.						



วันที่	เวลา	CCR-1 'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)
9	16:00:00	Maintenance	Maintenance	Maintenance	131.50	10.11	3.33	166.40	31.60	3.31	130.76	26.01	5.78	112.47	43.89	3.98	164.93	50.82	3.25
9	17:00:00	Maintenance	Maintenance	Maintenance	129.79	9.60	3.28	167.58	33.02	3.26	134.49	27.09	5.93	111.54	45.03	3.33	166.10	49.55	3.22
9	18:00:00	Maintenance	Maintenance	Maintenance	129.25	9.83	3.27	162.56	34.18	3.27	126.28	28.19	6.26	111.23	44.11	3.35	163.22	47.42	3.19
9	19:00:00	Maintenance	Maintenance	Maintenance	132.12	10.08	3.26	163.00	34.34	3.28	122.87	29.37	6.69	112.80	43.68	3.47	163.19	48.04	3.15
9	20:00:00	Maintenance	Maintenance	Maintenance	130.39	9.35	3.32	162.37	34.17	3.30	120.41	29.96	7.09	97.98	43.35	3.69	167.10	49.68	3.21
9	21:00:00	Maintenance	Maintenance	Maintenance	132.52	9.66	3.32	161.62	33.78	3.31	116.57	29.96	7.54	125.22	45.17	3.68	169.33	49.80	3.21
9	22:00:00	Maintenance	Maintenance	Maintenance	132.83	9.66	3.28	162.26	33.62	3.29	110.95	30.21	7.98	128.03	44.08	3.72	167.42	47.81	3.22
9	23:00:00	Maintenance	Maintenance	Maintenance	138.38	9.57	3.26	162.02	33.81	3.30	105.11	30.91	8.42	126.01	44.11	3.70	167.31	47.11	3.20
10	0:00:00	Maintenance	Maintenance	Maintenance	139.87	8.96	3.25	161.56	33.54	3.31	100.60	31.30	9.42	126.75	43.65	3.68	165.83	47.21	3.13
10	1:00:00	Maintenance	Maintenance	Maintenance	137.87	9.10	3.21	159.30	33.52	3.26	93.87	34.86	11.03	123.38	42.01	3.69	166.58	49.30	3.18
10	2:00:00	Maintenance	Maintenance	Maintenance	137.57	9.16	3.18	158.87	33.11	3.21	87.64	39.59	11.94	130.65	43.78	3.51	168.46	49.58	3.19
10	3:00:00	Maintenance	Maintenance	Maintenance	138.59	9.42	3.19	159.70	32.68	3.21	85.20	43.22	12.37	129.21	43.06	3.60	165.83	49.59	3.21
10	4:00:00	Maintenance	Maintenance	Maintenance	140.02	9.48	3.18	160.11	32.82	3.24	84.51	47.71	12.69	124.67	41.66	3.58	164.03	48.27	3.17
10	5:00:00	Maintenance	Maintenance	Maintenance	144.50	9.66	3.19	160.75	32.83	3.24	84.21	50.59	12.86	128.25	42.83	3.62	162.92	49.28	3.16
10	6:00:00	Maintenance	Maintenance	Maintenance	146.79	9.43	3.21	162.37	32.73	3.25	83.12	52.33	13.04	132.83	44.43	3.66	160.97	49.11	3.22
10	7:00:00	Maintenance	Maintenance	Maintenance	150.70	8.97	3.22	166.88	32.62	3.28	83.03	52.23	13.06	132.52	43.25	3.71	160.63	47.36	3.23
10	8:00:00	Maintenance	Maintenance	Maintenance	155.12	8.70	3.25	175.54	32.47	3.30	82.36	52.98	13.20	131.71	41.81	3.68	160.47	48.43	3.25
10	9:00:00	Maintenance	Maintenance	Maintenance	162.19	8.18	3.30	175.78	33.29	3.31	79.20	53.52	13.62	126.93	41.91	3.71	161.24	49.63	3.25
10	10:00:00	Maintenance	Maintenance	Maintenance	159.47	7.89	3.31	171.90	32.79	3.24	79.55	56.77	13.76	121.67	43.49	3.72	157.13	50.75	3.36
10	11:00:00	Maintenance	Maintenance	Maintenance	170.77	7.70	3.26	165.93	31.73	3.18	115.55	38.70	5.81	116.24	44.21	3.67	157.42	49.55	3.28
10	12:00:00	Maintenance	Maintenance	Maintenance	176.55	8.05	3.24	166.51	31.16	3.18	127.33	31.65	4.03	117.27	44.78	3.57	160.22	50.14	3.31
10	13:00:00	Maintenance	Maintenance	Maintenance	182.94	7.47	3.21	167.65	31.73	3.17	129.66	30.86	3.98	119.07	44.20	3.66	162.62	50.03	3.31
10	14:00:00	Maintenance	Maintenance	Maintenance	171.61	8.79	3.21	168.86	32.87	3.20	130.64	31.13	4.04	116.50	44.15	3.70	163.01	48.04	3.30
10	15:00:00	Maintenance	Maintenance	Maintenance	167.36	9.03	3.17	170.71	32.69	3.20	128.08	30.71	4.07	113.72	43.83	3.72	164.90	49.45	3.28
10	16:00:00	Maintenance	Maintenance	Maintenance	159.69	9.42	3.15	165.44	31.79	3.18	127.94	30.27	4.08	95.40	39.33	3.68	163.97	50.67	3.29
10	17:00:00	Maintenance	Maintenance	Maintenance	158.96	9.62	3.10	163.89	32.58	3.15	128.74	29.44	4.04	98.89	39.70	3.67	157.77	50.27	3.26
10	18:00:00	Maintenance	Maintenance	Maintenance	155.04	9.60	3.12	162.89	32.96	3.17	127.88	30.24	4.13	98.20	40.04	3.69	156.19	48.73	3.21
10	19:00:00	Maintenance	Maintenance	Maintenance	151.63	9.64	3.13	162.54	33.09	3.21	127.17	30.23	4.20	97.94	39.66	3.68	156.80	49.12	3.24
10	20:00:00	Maintenance	Maintenance	Maintenance	151.30	9.77	3.10	162.10	32.00	3.19	127.30	29.24	4.16	98.93	39.26	3.71	158.38	49.87	3.27
10	21:00:00	Maintenance	Maintenance	Maintenance	148.88	9.37	3.11	161.07	31.93	3.17	128.18	29.65	4.23	96.75	39.31	3.75	157.54	48.36	3.21
10	22:00:00	Maintenance	Maintenance	Maintenance	149.67	8.74	3.15	162.11	32.82	3.18	127.73	29.23	4.23	99.76	39.64	3.78	157.88	46.93	3.20
10	23:00:00	Maintenance	Maintenance	Maintenance	149.64	8.63	3.13	161.29	32.30	3.12	128.59	29.22	4.27	98.16	39.33	3.80	158.83	47.99	3.22
11	0:00:00	Maintenance	Maintenance	Maintenance	146.37	8.16	3.11	161.86	32.61	3.13	127.80	29.17	4.26	97.54	39.00	3.76	158.43	49.52	3.21
11	1:00:00	Maintenance	Maintenance	Maintenance	146.80	8.28	3.10	163.12	32.84	3.11	127.55	29.07	4.27	95.10	40.00	3.74	156.94	49.79	3.25
11	2:00:00	Maintenance	Maintenance	Maintenance	144.86	8.45	3.09	162.82	32.57	3.10	127.41	29.17	4.29	93.49	40.37	3.74	160.16	49.80	3.26
11	3:00:00	Maintenance	Maintenance	Maintenance	147.41	8.29	3.12	163.25	32.18	3.08	128.21	28.91	4.31	95.36	39.84	3.73	157.28	48.44	3.24
11	4:00:00	Maintenance	Maintenance	Maintenance	147.78	8.68	3.13	163.04	32.16	3.09	127.06	29.04	4.40	105.20	40.62	3.65	159.89	48.44	3.27
11	5:00:00	Maintenance	Maintenance	Maintenance	148.13	8.98	3.20	163.81	32.13	3.12	126.55	28.84	4.45	107.20	42.24	3.69	160.38	47.29	3.31
11	6:00:00	Maintenance	Maintenance	Maintenance	146.50	8.62	3.19	162.73	32.31	3.14	126.08	28.88	4.49	106.86	42.87	3.71	158.88	48.02	3.33
11	7:00:00	Maintenance	Maintenance	Maintenance	145.35	8.05	3.20	163.96	32.15	3.16	126.98	28.40	4.54	104.15	43.01	3.71	156.50	49.75	3.35
11	8:00:00	Maintenance	Maintenance	Maintenance	147.01	7.26	3.18	164.51	32.07	3.15	127.47	28.00	4.52	99.21	42.31	3.72	155.96	49.94	3.34
11	9:00:00	Maintenance	Maintenance	Maintenance	146.56	7.65	3.24	164.30	33.18	3.23	128.11	27.67	4.55	95.87	41.01	3.73	155.74	50.18	3.39
11	10:00:00	Maintenance	Maintenance	Maintenance	146.00	7.86	3.23	164.04	32.62	3.20	131.65	27.30	4.56	92.15	42.57	3.75	148.63	51.02	3.52
11	11:00:00	Maintenance	Maintenance	Maintenance	147.98	7.00	3.19	152.49	29.07	3.41	132.05	26.82	4.61	87.96	43.19	3.77	147.91	50.66	3.40
11	12:00:00	Maintenance	Maintenance	Maintenance	148.50	6.12	3.18	151.91	31.37	3.15	133.92	25.85	4.65	84.01	42.11	3.75	157.86	48.49	3.42
11	13:00:00	Maintenance	Maintenance	Maintenance	150.38	6.44	3.17	154.31	32.28	3.11	129.26	25.42	4.58	82.59	40.34	3.75	155.74	47.92	3.41
11	14:00:00	Maintenance	Maintenance	Maintenance	149.30	6.18	3.12	155.29	33.13	3.11	126.59	26.10	4.61	81.69	41.11	3.74	151.29	49.08	3.37
11	15:00:00	Maintenance	Maintenance	Maintenance	145.78	6.80	3.11	158.23	33.54	3.11	127.33	26.23	4.63	79.22	41.92	3.72	151.62	50.25	3.36
11	16:00:00	Maintenance	Maintenance	Maintenance	144.89	7.62	3.15	158.28	32.66	3.11	126.91	24.75	4.72	63.72	39.35	3.71	154.06	51.04	3.41
11	17:00:00	Maintenance	Maintenance	Maintenance	143.34	7.22	3.14	157.92	33.30	3.09	126.34	25.51	4.82	60.79	39.45	3.60	152.56	50.09	3.39
11	18:00:00	Maintenance	Maintenance	Maintenance	142.13	7.44	3.15	161.67	33.72	3.08	123.82	25.63	5.06	81.85	42.59	3.68	151.31	46.62</	

วันที่	เวลา	CCR-1 'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)
14	0:00:00	144.65	19.64	3.79	151.72	10.05	3.34	162.72	31.90	3.01	129.87	29.29	3.87	104.28	10.42	3.49	147.13	47.18	3.12
14	1:00:00	143.58	20.09	3.78	152.41	10.13	3.22	162.15	31.64	3.00	129.62	28.94	3.88	104.23	10.42	3.47	116.41	45.32	3.23
14	2:00:00	143.66	20.25	3.74	152.84	9.91	3.22	161.10	31.64	2.97	128.86	28.69	3.92	102.51	10.09	3.50	138.72	45.19	3.19
14	3:00:00	144.12	19.27	3.72	150.85	9.59	3.16	161.41	31.74	2.98	129.48	28.38	3.98	103.22	10.11	3.51	165.73	47.83	3.16
14	4:00:00	144.27	19.36	3.71	149.42	8.96	3.17	162.57	31.91	3.02	128.95	28.46	3.99	101.91	9.21	3.49	163.21	46.05	3.21
14	5:00:00	144.88	19.40	3.69	147.43	8.89	3.16	160.79	31.34	3.03	127.29	28.62	4.08	101.24	8.92	3.51	165.93	46.27	3.19
14	6:00:00	143.92	19.36	3.67	146.21	9.21	3.21	163.38	31.48	3.05	126.00	28.42	4.23	100.32	9.18	3.62	166.00	48.25	3.21
14	7:00:00	145.58	19.43	3.67	147.42	8.74	3.22	162.32	31.15	3.04	127.95	27.90	4.42	96.76	9.35	3.65	166.76	48.69	3.24
14	8:00:00	144.99	19.13	3.67	145.68	7.86	3.19	160.92	31.12	3.03	123.77	27.01	4.58	96.71	8.45	3.67	169.91	48.65	3.23
14	9:00:00	143.37	18.03	3.68	144.75	7.31	3.20	162.94	31.25	3.09	122.38	26.55	4.80	95.60	7.46	3.69	167.39	49.18	3.26
14	10:00:00	143.97	18.55	3.69	144.01	8.34	3.14	168.97	30.77	3.07	120.90	25.58	4.92	94.55	6.87	3.72	162.58	46.08	3.45
14	11:00:00	144.48	19.63	3.63	145.91	8.31	3.16	159.62	30.15	3.14	118.01	25.10	5.06	100.93	8.03	3.72	165.43	44.43	3.21
14	12:00:00	143.65	19.00	3.56	146.65	8.03	3.09	159.07	31.64	2.98	115.89	24.25	5.08	99.66	8.76	3.74	165.35	48.03	3.21
14	13:00:00	143.78	17.88	3.54	150.38	9.84	2.96	158.94	32.63	3.02	116.29	24.61	5.08	97.87	9.27	3.71	168.37	48.64	3.21
14	14:00:00	142.94	18.45	3.57	155.20	10.88	3.07	160.42	32.66	3.04	114.90	25.62	5.27	98.82	9.33	3.72	168.45	48.95	3.23
14	15:00:00	145.77	17.77	3.58	160.73	9.42	3.16	158.95	31.77	2.97	112.49	25.31	5.15	100.05	8.96	3.68	165.86	47.69	3.21
14	16:00:00	142.28	17.67	3.65	156.02	8.47	3.12	160.70	31.25	2.95	114.14	25.02	5.16	99.54	9.11	3.67	166.56	45.64	3.00
14	17:00:00	140.28	18.89	3.59	154.79	8.23	3.02	158.22	31.69	2.92	118.96	26.14	5.13	97.24	8.60	3.69	166.67	45.17	2.98
14	18:00:00	139.60	18.92	3.50	151.20	8.83	3.20	158.86	32.69	2.98	118.45	26.69	5.17	96.71	9.18	3.68	172.36	46.28	3.01
14	19:00:00	140.98	19.52	3.59	148.91	10.01	3.29	156.82	31.87	2.94	113.78	25.91	5.32	98.07	9.32	3.68	171.25	48.04	3.03
14	20:00:00	140.79	19.92	3.59	145.84	10.10	3.30	159.22	31.60	2.94	114.41	26.01	5.30	101.30	9.01	3.62	168.92	48.75	3.06
14	21:00:00	139.79	19.80	3.58	144.34	9.78	3.26	159.19	31.42	2.93	114.27	25.46	5.28	103.20	9.83	3.59	168.90	48.54	3.03
14	22:00:00	140.14	19.26	3.56	145.30	9.89	3.25	160.00	31.50	2.94	115.94	25.11	5.48	99.10	10.04	3.68	166.94	48.30	3.01
14	23:00:00	139.65	18.42	3.55	146.82	9.93	3.26	160.16	31.48	2.93	116.14	24.91	5.57	97.06	8.33	3.61	166.54	46.34	3.01
15	0:00:00	140.39	18.53	3.60	145.88	10.02	3.28	159.83	31.23	2.90	118.57	24.78	5.62	86.65	6.99	3.55	165.73	45.42	2.98
15	1:00:00	139.91	18.85	3.62	143.61	10.21	3.27	160.37	31.59	2.96	116.72	25.01	5.68	76.85	6.35	3.56	163.83	46.62	2.97
15	2:00:00	140.39	19.17	3.63	144.22	10.75	3.30	161.02	31.49	2.96	115.13	25.14	5.72	95.60	8.81	3.49	164.46	47.95	3.00
15	3:00:00	140.88	19.41	3.63	145.41	10.31	3.31	160.45	31.43	2.96	114.04	24.81	5.68	101.30	8.41	3.46	163.94	47.74	2.98
15	4:00:00	141.19	18.96	3.64	141.99	9.71	3.30	161.17	31.48	2.96	112.98	25.16	5.73	101.06	7.74	3.45	162.63	47.89	3.00
15	5:00:00	139.70	18.41	3.62	140.24	10.00	3.32	160.20	31.54	2.96	113.27	25.58	5.78	101.04	8.33	3.51	160.57	46.07	3.01
15	6:00:00	140.78	18.52	3.63	140.55	9.67	3.33	161.39	31.83	2.99	115.74	25.52	5.76	100.07	8.29	3.52	165.48	45.77	3.04
15	7:00:00	141.02	18.44	3.63	137.89	9.69	3.32	161.78	31.46	2.97	118.09	24.52	5.71	96.64	8.25	3.55	166.70	46.77	3.04
15	8:00:00	141.14	18.16	3.67	136.16	9.57	3.30	161.38	31.06	2.98	157.16	24.21	5.67	94.74	8.06	3.60	164.20	48.37	3.06
15	9:00:00	141.47	18.17	3.68	144.53	9.32	3.15	161.02	31.17	3.02	170.49	24.09	5.67	93.11	6.95	3.55	162.29	48.47	3.07
15	10:00:00	142.88	18.98	3.66	142.36	8.99	3.20	161.06	30.95	3.00	180.84	23.57	5.65	95.40	5.99	3.61	162.17	49.16	3.31
15	11:00:00	147.13	19.27	3.67	135.29	6.69	3.32	164.01	29.99	3.02	178.92	23.09	5.61	97.17	8.08	3.61	163.43	48.17	3.06
15	12:00:00	144.92	18.09	3.65	138.04	9.35	3.46	166.32	29.66	3.06	199.15	22.61	5.50	93.07	9.42	3.59	166.29	45.96	3.04
15	13:00:00	143.86	18.30	3.61	142.49	10.31	3.64	164.49	30.16	3.03	162.04	23.82	5.41	93.01	9.74	3.58	168.29	46.54	2.99
15	14:00:00	143.72	17.90	3.62	140.93	10.35	3.46	161.64	30.95	2.99	142.85	24.44	4.90	93.86	9.93	3.57	168.81	47.92	2.97
15	15:00:00	142.42	16.89	3.62	145.02	10.71	3.41	161.91	31.45	2.94	169.40	28.24	3.74	94.94	9.37	3.55	167.35	48.57	3.03
15	16:00:00	142.86	15.94	3.59	142.97	10.51	3.35	161.09	30.27	2.91	160.74	28.63	3.70	101.30	9.26	4.55	167.12	48.42	2.98
15	17:00:00	141.81	17.79	3.59	141.23	10.28	3.35	161.27	30.60	2.89	159.74	29.20	3.68	101.96	10.59	3.47	165.25	47.25	3.00
15	18:00:00	139.06	18.39	3.60	144.15	9.80	3.36	161.13	31.49	2.89	158.27	29.96	3.70	101.62	9.58	3.49	164.76	45.10	2.99
15	19:00:00	140.48	18.96	3.64	141.54	10.18	3.33	159.95	30.50	2.88	157.42	29.08	3.72	100.97	9.66	3.51	165.77	46.66	3.04
15	20:00:00	142.30	18.28	3.62	139.46	10.82	3.37	161.55	30.24	2.89	162.68	27.42	3.67	101.17	9.68	3.49	169.68	48.30	3.04
15	21:00:00	145.15	17.99	3.56	142.29	10.44	3.35	159.83	30.73	2.93	161.39	27.65	3.69	100.10	9.52	3.49	170.59	48.26	3.01
15	22:00:00	145.59	18.55	3.56	144.91	10.45	3.35	158.18	30.54	2.93	160.89	28.75	3.73	99.04	10.22	3.58	167.96	48.08	3.06
15	23:00:00	147.98	19.17	3.64	145.47	9.51	3.29	157.90	30.63	2.93	158.90	28.67	3.74	99.12	10.15	3.57	159.74	45.33	3.

วันที่	เวลา	CCR-1 'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)
18	8:00:00	140.21	16.93	3.33	169.73	9.25	3.24	115.95	29.89	2.96	113.33	24.52	6.04	99.52	6.68	3.74	146.79	20.70	3.02
18	9:00:00	142.44	16.89	3.20	171.63	9.40	3.25	115.71	31.76	3.33	112.85	22.98	6.01	100.59	6.91	3.72	145.04	21.52	3.03
18	10:00:00	143.23	17.41	3.32	172.87	9.35	3.26	121.56	30.44	3.12	110.36	25.61	5.85	99.80	8.36	3.69	141.90	22.09	3.18
18	11:00:00	146.03	17.08	3.31	166.19	8.21	3.30	118.68	30.05	3.01	109.15	27.34	6.02	100.63	9.06	3.60	143.37	20.76	3.02
18	12:00:00	147.02	17.05	3.32	166.37	9.29	3.06	132.43	30.93	3.03	107.34	27.51	6.15	103.48	8.67	3.69	143.45	18.45	2.99
18	13:00:00	150.89	17.01	3.30	170.41	9.41	3.07	127.37	31.17	2.99	107.27	26.77	6.10	99.74	9.46	3.68	143.14	20.39	2.98
18	14:00:00	151.14	16.98	3.24	170.59	9.68	3.01	118.74	30.61	3.06	110.05	26.39	5.74	98.07	8.65	3.69	147.03	21.83	3.00
18	15:00:00	149.96	16.82	3.31	170.94	9.86	3.04	117.08	31.01	3.10	110.42	28.46	5.35	98.34	8.65	3.65	145.38	22.09	2.98
18	16:00:00	147.22	16.26	3.27	167.56	8.51	2.98	120.66	30.71	3.13	110.62	28.63	5.39	104.23	8.63	4.23	143.09	22.92	3.05
18	17:00:00	146.30	17.29	3.23	168.09	10.37	3.02	119.16	31.65	3.14	109.88	28.60	5.47	97.78	9.20	3.61	140.17	20.78	3.01
18	18:00:00	144.81	17.44	3.17	168.79	11.04	3.01	119.31	33.27	3.21	106.75	28.30	5.57	98.03	8.83	3.67	143.98	19.67	3.01
18	19:00:00	146.53	16.94	3.13	167.59	10.43	3.03	119.19	33.02	3.20	103.92	29.73	5.70	97.84	8.46	3.67	143.17	21.67	2.99
18	20:00:00	147.00	16.32	3.18	167.41	10.76	3.04	117.96	32.76	3.25	113.81	30.43	5.98	96.48	8.89	3.71	141.81	22.89	3.06
18	21:00:00	146.74	16.31	3.23	167.73	9.89	3.04	117.00	32.65	3.20	107.22	30.04	6.11	93.00	8.54	3.78	141.86	22.65	3.03
18	22:00:00	146.62	15.99	3.18	165.79	9.99	3.03	114.58	33.39	3.23	102.71	29.80	6.19	90.46	8.51	3.79	136.38	21.87	2.98
18	23:00:00	149.25	16.23	3.20	167.39	10.23	3.00	114.93	32.90	3.21	105.20	29.86	6.15	85.90	8.30	3.77	139.56	19.88	2.98
19	0:00:00	149.62	16.74	3.22	166.87	9.60	2.99	116.52	32.82	3.18	106.90	29.38	6.23	80.96	8.65	3.70	136.54	18.12	2.96
19	1:00:00	145.86	16.83	3.19	168.59	10.01	2.99	115.11	32.63	3.18	103.09	29.16	6.19	78.28	8.55	3.76	135.01	17.67	2.94
19	2:00:00	143.51	17.00	3.25	168.51	9.63	2.96	115.72	32.73	3.19	103.78	29.27	6.24	77.69	8.41	3.73	134.31	20.44	2.92
19	3:00:00	135.68	16.82	3.29	166.35	9.57	2.92	112.06	33.13	3.18	103.83	29.41	6.25	78.56	8.29	3.73	133.17	21.31	2.92
19	4:00:00	137.37	17.04	3.28	166.94	9.74	2.90	112.36	33.10	3.18	101.42	27.97	6.27	78.85	8.27	3.76	132.21	21.36	2.89
19	5:00:00	138.04	17.43	3.33	163.95	11.07	2.89	112.58	32.93	3.17	101.40	28.00	6.23	78.26	7.85	3.75	134.15	18.90	2.91
19	6:00:00	139.84	17.58	3.31	166.38	10.15	2.87	113.77	33.39	3.19	99.21	28.28	6.48	82.71	7.68	3.72	143.75	18.62	3.03
19	7:00:00	139.70	17.49	3.29	166.11	9.24	2.92	112.85	32.80	3.18	98.16	27.77	6.52	90.42	9.93	3.64	144.13	21.70	3.03
19	8:00:00	142.08	17.45	3.30	170.28	8.38	2.97	113.68	31.75	3.15	107.89	28.34	6.05	91.71	10.47	3.61	148.28	23.21	3.08
19	9:00:00	143.29	17.03	3.30	168.90	8.48	2.97	113.34	31.79	3.17	107.62	28.09	6.05	90.58	10.01	3.61	147.13	23.01	3.07
19	10:00:00	143.10	16.49	3.30	169.32	8.32	2.94	113.55	31.55	3.18	106.25	27.08	6.09	91.10	9.70	3.68	144.04	23.37	3.19
19	11:00:00	139.37	15.61	3.66	169.38	9.34	2.96	114.87	30.36	3.22	104.68	27.49	6.20	90.68	10.25	3.68	146.37	22.08	3.05
19	12:00:00	134.60	16.84	3.34	171.68	9.13	2.99	128.13	30.37	3.19	106.61	25.92	6.22	91.72	10.74	3.70	146.55	20.77	3.06
19	13:00:00	138.15	18.32	3.34	174.33	9.67	2.97	132.50	30.39	3.12	104.72	25.81	6.30	89.65	10.68	3.69	139.44	22.12	3.02
19	14:00:00	137.27	16.43	3.30	173.84	9.35	2.99	137.10	30.44	3.12	105.34	27.61	6.41	87.65	9.15	3.69	135.82	23.38	3.02
19	15:00:00	140.98	15.93	3.28	174.35	8.61	3.01	117.62	30.71	3.10	103.54	27.00	6.54	86.21	7.87	3.68	137.03	23.47	3.01
19	16:00:00	140.95	15.99	3.24	176.01	6.57	3.00	117.94	29.83	3.07	105.23	27.32	6.50	86.83	8.53	3.69	136.93	23.30	2.99
19	17:00:00	139.20	16.76	3.19	180.78	8.99	3.02	116.42	30.15	3.05	110.64	28.44	6.46	86.25	9.34	3.67	136.69	22.10	3.04
19	18:00:00	141.63	16.05	3.21	172.62	9.81	2.97	117.73	32.10	3.10	104.80	28.01	6.53	85.92	9.34	3.64	134.39	20.32	2.99
19	19:00:00	141.38	16.75	3.27	166.57	9.13	2.92	116.79	31.69	3.08	107.70	29.42	6.63	85.73	9.27	3.66	132.17	21.84	2.93
19	20:00:00	138.62	16.78	3.31	167.83	9.17	2.94	116.67	30.99	3.12	113.53	29.83	6.64	85.28	9.21	3.67	131.08	22.79	2.96
19	21:00:00	139.64	16.42	3.28	168.25	9.80	2.93	116.12	30.81	3.15	113.60	29.67	6.67	85.94	9.34	3.68	132.62	22.52	2.94
19	22:00:00	140.28	16.64	3.26	188.10	9.93	2.97	115.89	30.53	3.17	113.43	30.01	6.69	85.68	9.19	3.73	136.45	22.70	2.99
19	23:00:00	141.98	17.02	3.23	188.43	9.91	2.95	116.10	30.66	3.19	116.99	29.39	6.70	84.21	9.36	3.75	131.57	22.12	2.96
20	0:00:00	145.51	16.03	3.15	174.64	9.58	2.93	113.97	30.92	3.18	120.08	29.94	6.69	83.49	8.64	3.68	130.29	19.54	2.98
20	1:00:00	140.61	16.12	3.20	170.35	9.78	2.91	115.00	31.05	3.16	117.82	29.44	6.67	84.04	8.84	3.70	126.99	20.25	2.98
20	2:00:00	135.87	16.47	3.21	171.59	9.13	2.86	115.85	31.40	3.15	115.25	29.85	6.71	83.45	8.09	3.69	124.18	21.90	2.97
20	3:00:00	135.92	16.85	3.24	169.26	8.97	2.81	113.99	31.02	3.14	116.11	29.54	6.71	84.04	7.34	3.69	122.22	22.08	2.96
20	4:00:00	138.50	16.91	3.23	171.43	8.73	2.81	114.49	30.98	3.10	115.91	29.48	6.73	83.55	8.10	3.71	122.75	21.68	2.99
20	5:00:00	141.97	17.30	3.23	167.62	8.29	2.85	114.48	30.91	3.10	113.90	29.41	6.70	80.40	8.60	3.77	122.91	21.20	3.03
20	6:00:00	144.91	17.68	3.27	168.29	8.85	2.83	114.18	31.27	3.11	115.01	29.15	6.81	81.23	8.56	3.80	121.79	18.68	3.08
20	7:00:00	146.32	17.29	3.28	171.56	8.43	2.82	113.50	31.52	3.10	117.22	28.27	6.73	80.90	7.29	3.78	121.21	18.51	3.07
20	8:00:00	146.05																	

วันที่	เวลา	CCR-1 'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)
22	16:00:00	141.59	14.89	3.23	156.65	9.17	2.79	99.36	40.17	7.16	129.29	31.15	7.10	74.52	5.36	3.49	132.34	18.56	2.62
		142.31	16.26	3.21	156.95	9.38	2.84	98.01	38.94	7.21	128.84	33.71	7.06	73.81	6.03	3.48	133.60	17.37	2.47
22	18:00:00	142.45	16.04	3.20	157.61	9.19	2.86	95.20	39.29	7.12	129.11	35.25	7.16	73.58	5.28	3.49	132.87	19.41	2.54
22	19:00:00	140.75	16.24	3.19	156.83	9.10	2.86	95.83	40.79	7.16	128.80	36.64	7.37	73.39	5.22	3.51	127.50	21.76	2.84
22	20:00:00	141.33	16.35	3.21	158.59	8.99	2.91	97.57	40.33	7.16	127.97	37.28	7.48	72.36	5.44	3.53	124.29	21.76	2.93
22	21:00:00	140.23	16.59	3.18	158.44	9.47	2.89	96.65	39.65	7.17	128.20	37.48	7.46	71.29	4.78	3.54	121.70	21.45	2.94
22	22:00:00	141.12	16.91	3.16	156.38	9.46	2.95	95.73	39.90	7.18	131.83	37.41	7.42	71.46	4.58	3.60	119.85	20.59	2.92
22	23:00:00	141.63	16.12	3.06	157.46	9.62	2.93	99.49	40.95	7.20	132.06	38.41	7.46	73.64	4.37	3.58	120.90	18.63	2.89
23	0:00:00	142.22	16.49	3.17	155.54	9.27	2.93	97.30	39.46	7.15	129.79	39.34	7.42	75.41	4.91	3.58	119.15	14.87	2.87
23	1:00:00	142.56	16.71	3.15	156.24	9.22	2.93	96.56	39.83	7.18	126.06	39.67	7.51	84.06	6.25	3.58	121.04	15.94	2.82
23	2:00:00	141.75	16.99	3.14	152.95	9.48	2.93	98.19	39.63	7.16	124.24	40.27	7.67	83.16	6.56	3.58	118.72	18.82	2.82
23	3:00:00	143.05	17.43	3.15	153.70	9.38	2.91	96.54	39.86	7.15	122.65	40.95	7.76	81.73	6.25	3.63	120.08	18.67	2.81
23	4:00:00	143.02	17.28	3.13	155.26	9.76	2.94	95.18	38.78	7.06	130.86	41.45	7.75	83.84	5.83	3.63	119.37	18.72	2.79
23	5:00:00	144.86	17.78	3.19	150.29	10.31	2.95	97.32	38.86	6.97	127.62	42.08	7.86	84.39	5.65	3.60	118.08	18.35	2.78
23	6:00:00	142.76	18.05	3.22	149.87	10.48	2.97	97.86	38.89	7.09	125.86	42.43	8.03	84.38	5.67	3.64	119.72	18.62	2.79
23	7:00:00	143.53	17.93	3.26	157.76	10.42	2.99	97.18	39.28	7.16	123.62	42.33	8.15	84.10	5.05	3.62	121.81	15.98	2.84
23	8:00:00	144.74	17.70	3.27	156.21	9.14	3.02	95.92	38.79	7.18	121.62	41.67	8.11	83.73	4.59	3.60	122.04	14.73	2.78
23	9:00:00	144.58	17.54	3.29	155.93	8.71	3.04	95.82	38.98	7.17	121.06	41.07	7.93	82.43	3.73	3.59	120.90	16.32	2.86
23	10:00:00	145.36	17.64	3.31	159.55	9.29	3.08	95.15	40.11	7.12	123.96	40.70	7.68	81.81	3.02	3.63	117.89	18.11	3.03
23	11:00:00	146.27	16.31	3.29	158.17	9.73	3.05	90.72	38.66	7.20	125.04	40.10	7.64	81.26	3.24	3.67	120.74	18.90	2.86
23	12:00:00	146.02	16.37	3.30	164.70	8.08	3.02	91.24	42.02	7.11	127.03	39.29	7.46	76.34	4.40	3.70	122.74	19.76	3.12
23	13:00:00	147.84	16.94	3.31	178.08	8.08	3.08	91.05	41.45	7.10	125.94	39.15	7.46	73.30	5.56	3.73	123.55	21.22	3.43
23	14:00:00	147.33	17.38	3.34	184.25	8.92	2.94	92.51	41.05	7.05	126.59	39.17	7.47	74.28	4.86	3.70	121.52	19.95	3.50
23	15:00:00	148.81	17.11	3.37	172.08	8.45	3.02	94.12	41.17	7.12	126.57	39.77	7.57	73.25	5.09	3.73	122.43	18.01	3.50
23	16:00:00	149.08	17.08	3.34	166.24	8.05	3.02	94.98	41.62	7.09	128.58	38.79	7.68	73.74	6.17	3.73	124.62	18.51	3.41
23	17:00:00	149.38	19.75	3.33	158.26	11.85	3.00	94.49	41.09	6.96	127.91	38.37	7.83	73.35	6.34	3.75	126.62	20.22	3.42
23	18:00:00	146.93	17.84	3.34	158.58	11.90	2.96	95.54	41.11	6.99	125.06	39.20	8.02	73.48	6.92	3.74	126.41	20.63	3.48
23	19:00:00	146.31	17.55	3.30	156.06	10.56	2.95	94.83	40.21	6.73	126.51	39.21	8.11	74.02	7.04	3.74	126.47	20.34	3.31
23	20:00:00	143.59	16.35	3.16	156.37	9.94	2.93	93.22	38.57	6.26	128.85	38.04	7.87	75.21	6.25	3.73	127.37	19.45	3.13
23	21:00:00	141.02	16.68	3.18	154.54	10.85	2.96	92.31	37.69	5.93	132.35	38.01	7.83	75.86	5.63	3.73	127.19	17.93	3.08
23	22:00:00	137.15	17.11	3.23	155.10	11.33	2.97	91.03	36.30	5.59	131.34	38.15	7.93	76.95	5.64	3.79	124.96	17.01	3.06
23	23:00:00	140.82	17.47	3.23	153.02	11.33	2.94	90.65	34.67	5.12	131.18	38.09	8.08	75.71	5.86	3.78	127.31	17.40	3.04
24	0:00:00	141.47	17.78	3.22	153.40	10.75	2.94	90.11	33.90	4.87	129.93	37.64	8.13	74.34	5.97	3.77	126.09	18.72	3.03
24	1:00:00	141.14	18.18	3.26	151.92	11.67	2.97	88.19	32.08	4.41	132.07	38.09	8.23	74.78	6.04	3.76	125.17	18.43	3.02
24	2:00:00	141.16	18.32	3.26	164.52	11.90	2.99	86.97	31.06	3.97	132.53	38.24	8.27	74.45	6.02	3.73	128.36	18.00	3.02
24	3:00:00	139.69	17.71	3.28	222.78	12.16	2.99	84.32	30.32	3.65	130.53	37.60	8.29	73.48	5.81	3.73	124.03	17.95	3.01
24	4:00:00	139.52	17.60	3.29	188.42	12.19	2.94	81.67	30.71	3.61	132.63	37.81	8.28	73.52	5.84	3.77	118.81	18.02	3.04
24	5:00:00	136.01	17.76	3.28	149.64	12.25	2.98	80.88	29.84	3.33	133.76	37.77	8.27	72.91	5.92	3.77	117.11	16.43	2.97
24	6:00:00	139.22	17.75	3.29	149.35	11.95	2.96	81.31	28.84	3.05	133.70	37.77	8.26	73.35	6.24	3.79	116.65	16.09	2.90
24	7:00:00	141.85	17.91	3.31	147.81	11.24	2.97	81.21	27.24	2.74	131.56	37.21	8.29	72.89	5.84	3.77	122.45	16.59	2.96
24	8:00:00	135.31	16.86	3.33	150.08	10.34	3.02	80.66	26.26	2.50	127.83	37.14	8.28	73.22	5.06	3.76	122.16	17.71	3.00
24	9:00:00	130.22	16.48	3.34	153.31	9.53	3.05	79.43	27.94	2.88	126.23	36.17	8.19	72.42	4.86	3.79	122.31	18.36	3.03
24	10:00:00	128.25	16.37	3.35	162.73	7.99	3.03	79.47	28.33	2.95	126.16	35.56	8.08	72.26	4.61	3.78	122.23	18.78	3.29
24	11:00:00	26.04	8.23	3.36	186.35	6.06	3.11	79.63	28.02	2.95	126.98	34.69	7.98	71.97	4.67	3.74	126.73	19.03	3.02
24	12:00:00	10.15	7.45	3.27	192.41	8.05	2.87	79.18	29.04	3.00	125.62	33.47	7.70	73.16	5.44	3.71	128.89	18.81	3.09
24	13:00:00	11.52	7.85	3.20	204.31	8.84	2.72	79.41	28.96	3.02	133.32	34.05	7.72	73.67	4.72	3.70	128.08	16.73	3.17
24	14:00:00	12.39	7.72	3.24	226.10	9.70	2.60	79.45	29.12	3.02	126.65	34.55	7.74	73.50	3.60	3.71	129.37	15.89	3.21
24	15:00:00	11.92	6.54	3.20	210.61	7.92	2.54	80.38	29.13	3.03	125.81	34.31	7.84	71.85	5.52	3.75	128.71	16.99	3.23
24	16:00:00	12.72	5.55	3.14	173.18	6.94	2.58	79.37	29.10										

วันที่	เวลา	CCR-1 'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)
27	0:00:00	9.24	7.57	3.27	139.63	10.38	2.89	124.76	32.37	3.09	115.58	37.14	9.14	60.44	7.62	3.87	139.37	21.49	2.93
	1:00:00	9.56	7.10	3.21	138.55	11.04	2.92	124.65	32.50	3.07	115.87	36.49	9.28	60.46	7.52	3.90	139.92	21.42	2.92
	2:00:00	9.49	6.92	3.23	138.63	10.87	2.91	124.79	32.37	3.08	111.85	36.00	9.39	60.30	6.81	3.90	140.41	21.26	2.91
	3:00:00	9.16	7.15	3.23	138.73	10.91	2.89	125.11	32.48	3.10	113.40	37.02	8.98	59.80	7.64	3.91	138.05	20.97	2.89
	4:00:00	9.35	7.24	3.21	137.95	11.07	2.88	124.45	32.31	3.09	111.18	38.40	9.17	58.67	7.51	3.94	137.87	19.11	2.90
	5:00:00	9.46	7.44	3.23	138.31	11.48	2.90	125.32	32.82	3.11	112.85	37.90	9.10	58.82	7.10	3.93	136.13	16.34	2.90
	6:00:00	9.05	7.50	3.27	138.35	11.49	2.94	125.81	33.35	3.12	115.91	38.17	9.02	62.73	6.88	3.88	136.47	17.93	2.92
	7:00:00	8.82	6.54	3.25	138.83	11.15	2.95	124.90	32.18	3.10	116.09	37.24	9.04	63.67	6.72	3.85	137.50	20.46	2.95
	8:00:00	8.76	6.49	3.28	137.90	10.61	2.95	124.03	31.44	3.10	110.00	36.61	9.08	63.48	6.22	3.85	138.14	21.01	2.93
	9:00:00	8.92	6.54	3.32	137.50	9.61	2.91	124.47	31.81	3.13	105.99	35.89	8.94	62.63	6.13	3.87	139.09	21.54	3.01
	10:00:00	9.09	6.77	3.30	138.62	8.58	2.92	124.86	31.76	3.13	104.04	37.14	8.93	61.89	4.36	3.92	131.49	22.26	3.31
	11:00:00	10.22	6.80	3.26	132.94	5.52	3.13	124.67	31.50	3.13	104.63	36.23	9.07	60.95	5.84	4.07	127.62	22.28	3.09
	12:00:00	10.76	6.57	3.25	133.95	8.69	2.88	124.83	30.73	3.10	121.68	35.39	9.07	60.75	7.35	4.06	130.92	21.68	3.06
	13:00:00	11.15	6.81	3.23	134.66	10.95	2.84	125.46	30.70	3.08	105.51	36.18	8.90	59.21	8.21	4.03	132.02	19.22	3.12
	14:00:00	10.84	6.32	3.28	136.70	12.73	2.84	126.04	31.53	3.11	103.20	33.52	12.29	57.78	8.73	4.14	131.00	19.86	3.14
	15:00:00	10.91	5.81	3.25	138.08	9.85	2.79	126.47	31.62	3.10	170.38	72.02	8.94	58.38	8.95	4.05	132.33	21.37	3.16
	16:00:00	11.08	4.94	3.25	137.58	8.78	2.75	127.18	30.90	3.05	66.72	26.89	8.62	66.29	11.91	4.59	133.50	22.39	3.16
	17:00:00	10.81	7.02	3.24	137.33	10.64	2.71	127.18	31.12	3.05	68.54	17.24	8.02	73.40	11.71	3.64	130.55	22.62	3.19
	18:00:00	10.60	7.13	3.21	140.31	10.89	2.75	127.17	32.48	3.07	65.81	24.94	8.57	74.03	10.04	3.67	129.78	22.75	3.24
	19:00:00	10.45	6.70	3.24	139.80	10.67	2.75	127.98	32.41	3.02	70.30	29.20	8.46	72.94	9.79	3.68	131.08	22.48	3.27
	20:00:00	10.26	5.92	3.16	140.02	9.81	2.74	127.23	32.78	3.07	70.34	33.31	8.99	71.61	10.15	3.72	129.22	22.13	3.22
	21:00:00	10.03	5.75	3.16	139.99	9.23	2.74	127.07	31.58	3.07	71.25	39.24	9.42	71.09	9.70	3.74	128.10	22.07	3.23
	22:00:00	10.23	5.90	3.18	138.81	8.95	2.76	128.50	31.89	3.09	71.88	44.32	9.86	71.56	9.68	3.76	124.87	21.60	3.23
	23:00:00	9.95	5.89	3.20	138.39	9.33	2.79	127.54	31.63	3.07	69.30	47.28	10.15	70.60	9.50	3.77	119.17	19.21	3.21
28	0:00:00	9.67	6.15	3.22	139.12	9.73	2.78	126.78	31.71	3.07	80.59	48.68	8.88	70.08	9.11	3.76	115.39	19.36	3.16
28	1:00:00	9.49	6.89	3.22	139.25	9.62	2.80	126.22	31.59	3.05	81.37	50.81	9.05	69.32	8.95	3.75	115.41	20.81	3.14
28	2:00:00	9.45	6.27	3.18	139.67	9.79	2.78	125.27	31.03	3.06	81.41	50.95	9.21	69.10	9.34	3.74	115.13	21.39	3.16
28	3:00:00	9.20	6.18	3.19	139.27	10.01	2.74	124.99	31.12	3.06	82.23	51.03	9.29	69.04	9.55	3.74	115.21	21.25	3.16
28	4:00:00	9.10	6.08	3.17	138.30	9.75	2.74	123.33	31.22	3.07	82.87	53.08	9.36	69.27	9.51	3.72	115.68	21.21	3.17
28	5:00:00	9.13	6.14	3.18	139.07	9.48	2.75	121.56	31.28	3.08	85.17	53.43	9.24	69.66	9.42	3.72	115.49	21.22	3.17
28	6:00:00	8.88	6.78	3.21	137.52	9.28	2.73	121.78	31.03	3.11	86.78	54.28	9.34	70.32	9.06	3.75	118.46	21.32	3.20
28	7:00:00	8.73	6.98	3.21	138.91	9.02	2.73	124.78	30.80	3.15	86.81	55.16	9.43	66.38	8.03	3.77	122.44	21.84	3.21
28	8:00:00	8.90	6.14	3.23	139.65	8.06	2.80	124.13	30.14	3.17	86.12	53.90	9.31	65.64	6.80	3.77	124.10	21.74	3.26
28	9:00:00	9.04	6.20	3.24	138.51	6.65	2.81	124.57	29.16	3.14	86.48	52.94	9.32	66.08	6.97	3.76	120.94	21.16	3.31
28	10:00:00	9.15	6.33	3.24	139.74	7.33	2.85	123.51	29.23	3.18	86.45	53.02	9.32	65.62	7.38	3.77	119.93	21.37	3.75
28	11:00:00	Maintenance	Maintenance	Maintenance	137.98	7.91	2.75	124.89	30.23	3.11	86.45	53.02	9.32	64.61	8.19	3.79	121.07	19.68	3.42
28	12:00:00	67.90	5.37	3.97	138.10	7.63	2.74	123.31	29.32	3.03	86.44	53.02	9.32	63.49	8.31	3.81	118.78	19.10	3.44
28	13:00:00	130.97	10.27	4.09	138.04	7.78	2.80	122.55	28.92	3.09	86.44	53.02	9.32	63.02	9.15	3.78	119.83	21.48	3.44
28	14:00:00	141.39	9.97	4.14	139.53	7.11	2.63	123.01	28.94	3.12	98.57	49.10	4.05	63.78	9.21	3.79	120.89	22.47	3.47
28	15:00:00	147.14	9.28	4.15	139.74	6.96	2.62	123.23	30.02	3.18	101.50	44.17	3.44	62.27	8.75	3.77	117.22	22.37	3.53
28	16:00:00	147.85	7.83	4.14	138.46	5.60	2.60	122.27	29.85	3.19	104.69	42.68	3.36	62.66	8.73	3.74	118.67	22.09	3.56
28	17:00:00	152.21	10.26	4.08	139.76	7.21	2.58	122.44	29.15	3.21	99.65	42.87	3.38	62.84	8.83	3.73	118.88	22.26	3.56
28	18:00:00	154.72	11.05	4.05	143.07	8.79	2.57	123.45	30.04	3.18	99.57	43.80	3.51	64.00	8.12	3.72	117.14	22.33	3.55
28	19:00:00	157.08	10.68	4.08	144.05	8.62	2.57	122.03	29.63	3.19	100.44	43.93	3.58	65.54	8.81	3.73	117.58	22.11	3.51
28	20:00:00	156.42	10.65	4.11	146.79	8.22	2.66	119.45	29.95	3.20	101.31	44.49	3.63	68.14	9.43	3.59	117.20	21.91	3.47
28	21:00:00	156.51	10.35	4.11	148.76	7.76	2.66	118.75	30.12	3.24	101.89	46.06	3.69	67.47	9.82	3.79	116.55	21.46	3.43
28	22:00:00	157.28	10.20	4.02	150.99	7.54	2.65	118.93	30.19	3.25	101.92	46.76	3.75	69.16	9.64	3.76	117.74	21.29	3.31
28	23:00:00	154.28	10.10	4.02	152.56	7.80	2.64	120.49	29.99	3.25	104.62	48.20	3.89	67.07	8.50	3.83	117.22	18.41	3.27
29	0:00:00	154.39	9.63	4.03				119.06	30.99	3.23	107.40	48.23	3.97	65.86	7.65	3.81	119.72	19.51	3.23
29	1:00:00	155.27	9.52	4.10															

วันที่	เวลา	CCR-1 'S STACK														
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม		
		SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	SO <sub>2</sub> (ppm)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)
31	8:00:00	152.34	7.57	4.50				114.40	29.90	3.18				Maintenance	Maintenance	Maintenance
31	9:00:00	152.33	7.43	4.48				113.86	29.23	3.17				Maintenance	Maintenance	Maintenance
31	10:00:00	154.33	7.20	4.54				113.44	28.55	3.25				Maintenance	Maintenance	Maintenance
31	11:00:00	148.60	3.02	4.49				114.40	29.07	3.26				Maintenance	Maintenance	Maintenance
31	12:00:00	144.48	7.12	4.36				115.56	31.47	3.24				Maintenance	Maintenance	Maintenance
31	13:00:00	151.22	7.84	4.41				113.90	30.68	3.24				Maintenance	Maintenance	Maintenance
31	14:00:00	156.23	8.31	4.39				113.54	30.68	3.24				Maintenance	Maintenance	Maintenance
31	15:00:00	156.79	6.81	4.38				110.40	30.95	3.25				Maintenance	Maintenance	Maintenance
31	16:00:00	158.01	4.71	4.39				110.15	30.54	3.41				Maintenance	Maintenance	Maintenance
31	17:00:00	155.11	6.94	4.37				109.98	30.82	3.51				Maintenance	Maintenance	Maintenance
31	18:00:00	154.28	7.93	4.35				108.23	31.82	3.62				Maintenance	Maintenance	Maintenance
31	19:00:00	151.91	7.57	4.36				108.51	31.89	3.68				Maintenance	Maintenance	Maintenance
31	20:00:00	151.34	7.32	4.31				106.62	31.86	3.66				Maintenance	Maintenance	Maintenance
31	21:00:00	152.21	7.56	4.31				104.50	32.18	3.75				Maintenance	Maintenance	Maintenance
31	22:00:00	151.54	7.74	4.28				104.70	31.74	3.80				Maintenance	Maintenance	Maintenance
31	23:00:00	151.01	7.67	4.30				106.37	31.90	3.85				Maintenance	Maintenance	Maintenance



วันที่	เวลา	TOPSPP (G-5019) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)
1	0:00:00	Shutdown	Shutdown	66.04	15.58	70.25	15.33	67.21	15.45	74.32	13.50	58.92	15.20
1	1:00:00	Shutdown	Shutdown	64.71	15.58	71.09	15.18	67.34	15.39	75.86	13.35	58.75	15.13
1	2:00:00	Shutdown	Shutdown	65.95	15.57	68.39	15.34	67.36	15.53	75.71	13.34	59.52	15.11
1	3:00:00	Shutdown	Shutdown	65.56	15.56	67.31	15.41	66.80	15.54	75.27	13.40	60.07	15.15
1	4:00:00	Shutdown	Shutdown	65.73	15.56	67.56	15.43	67.06	15.52	75.89	13.40	60.27	15.17
1	5:00:00	Shutdown	Shutdown	65.03	15.56	67.58	15.37	66.92	15.46	78.42	13.51	62.18	15.13
1	6:00:00	Shutdown	Shutdown	67.41	15.55	67.42	15.37	66.67	15.50	76.75	13.55	63.66	15.21
1	7:00:00	Shutdown	Shutdown	66.12	15.55	66.03	15.43	65.41	15.58	75.78	13.64	64.35	15.20
1	8:00:00	Shutdown	Shutdown	66.97	15.56	91.49	14.61	65.24	15.57	76.67	13.55	96.79	14.48
1	9:00:00	Shutdown	Shutdown	65.70	15.56	96.53	14.59	66.37	15.53	75.57	13.53	97.21	14.39
1	10:00:00	Shutdown	Shutdown	67.01	15.55	96.22	14.60	94.19	14.69	76.40	13.62	98.31	14.39
1	11:00:00	Shutdown	Shutdown	65.20	15.55	96.90	14.60	99.59	14.64	76.19	13.48	97.12	14.39
1	12:00:00	Shutdown	Shutdown	64.63	15.53	95.82	14.59	96.98	14.64	75.30	13.39	97.15	14.38
1	13:00:00	Shutdown	Shutdown	95.41	14.63	93.94	14.57	98.89	14.65	74.26	13.32	96.75	14.38
1	14:00:00	Shutdown	Shutdown	99.67	14.64	93.70	14.57	100.04	14.67	74.40	13.30	97.41	14.38
1	15:00:00	Shutdown	Shutdown	99.77	14.62	92.78	14.56	101.50	14.67	73.94	13.36	97.81	14.37
1	16:00:00	Shutdown	Shutdown	98.67	14.61	94.11	14.56	101.12	14.67	73.40	13.37	99.09	14.39
1	17:00:00	Shutdown	Shutdown	96.51	14.58	92.16	14.54	102.88	14.69	72.55	13.37	98.19	14.39
1	18:00:00	Shutdown	Shutdown	95.87	14.59	92.96	14.56	102.61	14.68	87.77	12.80	97.62	14.39
1	19:00:00	Shutdown	Shutdown	98.88	14.58	94.36	14.56	102.56	14.67	96.22	12.65	101.42	14.43
1	20:00:00	Shutdown	Shutdown	94.09	14.55	93.20	14.56	101.62	14.65	96.67	12.68	100.11	14.43
1	21:00:00	Shutdown	Shutdown	94.71	14.54	93.01	14.55	102.08	14.65	97.04	12.69	99.54	14.43
1	22:00:00	Shutdown	Shutdown	97.41	14.58	93.21	14.55	99.50	14.62	94.84	12.75	99.57	14.43
1	23:00:00	Shutdown	Shutdown	97.95	14.57	83.38	14.80	72.79	15.43	73.85	13.29	76.14	14.89
2	0:00:00	Shutdown	Shutdown	99.00	14.56	64.54	15.39	Shutdown	Shutdown	73.87	13.31	62.70	15.21
2	1:00:00	Shutdown	Shutdown	100.52	14.56	64.57	15.42	Shutdown	Shutdown	75.06	13.37	65.13	15.12
2	2:00:00	Shutdown	Shutdown	98.61	14.56	63.13	15.42	Shutdown	Shutdown	74.96	13.13	63.92	15.12
2	3:00:00	Shutdown	Shutdown	98.95	14.55	63.05	15.44	Shutdown	Shutdown	73.67	13.15	64.81	15.14
2	4:00:00	Shutdown	Shutdown	98.10	14.55	63.70	15.41	Shutdown	Shutdown	74.18	13.36	63.65	15.17
2	5:00:00	Shutdown	Shutdown	97.45	14.54	64.57	15.36	Shutdown	Shutdown	75.61	13.30	63.42	15.20
2	6:00:00	Shutdown	Shutdown	96.72	14.54	64.02	15.39	Shutdown	Shutdown	97.28	13.65	63.65	15.26
2	7:00:00	Shutdown	Shutdown	96.09	14.54	63.35	15.42	Shutdown	Shutdown	79.42	13.55	64.65	15.28
2	8:00:00	Shutdown	Shutdown	96.10	14.55	88.36	14.57	Shutdown	Shutdown	77.68	13.49	98.32	14.48
2	9:00:00	Shutdown	Shutdown	98.85	14.56	93.22	14.54	Shutdown	Shutdown	77.68	13.44	103.13	14.51
2	10:00:00	Shutdown	Shutdown	80.32	14.80	93.59	14.55	Shutdown	Shutdown	77.99	13.49	102.02	14.49
2	11:00:00	Shutdown	Shutdown	67.03	15.38	94.06	14.55	Shutdown	Shutdown	78.87	13.47	101.61	14.49
2	12:00:00	Shutdown	Shutdown	64.80	15.40	93.14	14.54	Shutdown	Shutdown	79.28	13.39	99.60	14.47
2	13:00:00	Shutdown	Shutdown	85.93	14.62	93.64	14.54	Shutdown	Shutdown	81.18	13.35	96.59	14.47
2	14:00:00	Shutdown	Shutdown	94.82	14.53	94.17	14.55	Shutdown	Shutdown	81.41	13.34	98.20	14.44
2	15:00:00	Shutdown	Shutdown	95.74	14.53	92.61	14.54	Shutdown	Shutdown	80.73	13.34	97.17	14.43
2	16:00:00	Shutdown	Shutdown	95.34	14.53	91.17	14.53	Shutdown	Shutdown	81.36	13.35	101.34	14.47
2	17:00:00	Shutdown	Shutdown	97.18	14.53	94.81	14.55	Shutdown	Shutdown	81.46	13.42	100.02	14.43
2	18:00:00	Shutdown	Shutdown	98.22	14.55	95.94	14.56	Shutdown	Shutdown	97.81	12.90	100.81	14.41
2	19:00:00	Shutdown	Shutdown	96.92	14.54	96.32	14.56	Shutdown	Shutdown	110.34	12.68	100.89	14.42
2	20:00:00	Shutdown	Shutdown	95.27	14.53	94.80	14.56	Shutdown	Shutdown	111.73	12.68	98.67	14.41
2	21:00:00	Shutdown	Shutdown	96.19	14.52	92.86	14.55	Shutdown	Shutdown	110.65	12.71	101.44	14.46
2	22:00:00	Shutdown	Shutdown	91.20	14.63	93.99	14.55	Shutdown	Shutdown	105.28	12.80	102.37	14.47
2	23:00:00	Shutdown	Shutdown	62.42	15.40	81.87	14.79	Shutdown	Shutdown	83.33	13.32	80.49	14.91
3	0:00:00	Shutdown	Shutdown	63.67	15.33	65.29	15.33	Shutdown	Shutdown	82.77	13.31	Shutdown	Shutdown
3	1:00:00	Shutdown	Shutdown	63.32	15.37	65.21	15.34	Shutdown	Shutdown	87.29	13.27	Shutdown	Shutdown
3	2:00:00	Shutdown	Shutdown	63.20	15.37	63.24	15.37	Shutdown	Shutdown	85.64	13.33	Shutdown	Shutdown
3	3:00:00	Shutdown	Shutdown	63.87	15.26	63.95	15.37	Shutdown	Shutdown	86.34	13.33	Shutdown	Shutdown
3	4:00:00	Shutdown	Shutdown	63.95	15.28	63.54	15.37	Shutdown	Shutdown	84.62	13.45	Shutdown	Shutdown
3	5:00:00	Shutdown	Shutdown	62.90	15.33	64.12	15.39	Shutdown	Shutdown	84.07	13.46	Shutdown	Shutdown
3	6:00:00	Shutdown	Shutdown	64.46	15.35	63.76	15.38	Shutdown	Shutdown	83.41	13.43	Shutdown	Shutdown
3	7:00:00	Shutdown	Shutdown	62.99	15.38	62.96	15.42	Shutdown	Shutdown	82.65	13.49	Shutdown	Shutdown
3	8:00:00	Shutdown	Shutdown	64.46	15.35	87.11	14.63	Shutdown	Shutdown	83.94	13.44	Shutdown	Shutdown
3	9:00:00	Shutdown	Shutdown	65.07	15.38	96.62	14.58	Shutdown	Shutdown	95.01	13.05	Shutdown	Shutdown
3	10:00:00	Shutdown	Shutdown	65.68	15.33	98.55	14.59	Shutdown	Shutdown	111.57	12.65	Shutdown	Shutdown
3	11:00:00	Shutdown	Shutdown	64.33	15.31	99.08	14.59	Shutdown	Shutdown	111.32	12.67	Shutdown	Shutdown
3	12:00:00	Shutdown	Shutdown	65.47	15.25	98.44	14.59	Shutdown	Shutdown	110.86	12.67	Shutdown	Shutdown
3	13:00:00	Shutdown	Shutdown	90.88	14.51	97.07	14.59	Shutdown	Shutdown	110.11	12.67	Shutdown	Shutdown
3	14:00:00	Shutdown	Shutdown	95.25	14.50	96.67	14.59	Shutdown	Shutdown	109.39	12.69	Shutdown	Shutdown
3	15:00:00	Shutdown	Shutdown	100.32	14.54	98.65	14.60	Shutdown	Shutdown	110.76	12.65	Shutdown	Shutdown
3	16:00:00	Shutdown	Shutdown	99.60	14.54	98.39	14.60	Shutdown	Shutdown	111.22	12.66	Shutdown	Shutdown
3	17:00:00	Shutdown	Shutdown	94.96	14.52	97.93	14.60	Shutdown	Shutdown	111.82	12.64	Shutdown	Shutdown
3	18:00:00	Shutdown	Shutdown	95.24	14.52	97.87	14.60	Shutdown	Shutdown	111.58	12.63	Shutdown	Shutdown
3	19:00:00	Shutdown	Shutdown	93.90	14.52	97.68	14.60	Shutdown	Shutdown	112.61	12.65	Shutdown	Shutdown

วันที่	เวลา	TOPSPP (G-5019) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)
3	20:00:00	Shutdown	Shutdown	96.03	14.54	98.03	14.60	Shutdown	Shutdown	112.88	12.67	Shutdown	Shutdown
3	21:00:00	Shutdown	Shutdown	95.98	14.54	95.39	14.60	Shutdown	Shutdown	111.82	12.67	Shutdown	Shutdown
3	22:00:00	Shutdown	Shutdown	91.04	14.63	97.09	14.60	Shutdown	Shutdown	111.20	12.63	Shutdown	Shutdown
3	23:00:00	Shutdown	Shutdown	63.51	15.41	87.09	14.84	Shutdown	Shutdown	92.04	13.06	Shutdown	Shutdown
4	0:00:00	75.26	15.15	64.11	15.35	68.25	15.34	Shutdown	Shutdown	83.50	13.28	Shutdown	Shutdown
4	1:00:00	75.66	15.09	65.49	15.22	65.24	15.40	Shutdown	Shutdown	85.22	13.34	Shutdown	Shutdown
4	2:00:00	75.36	15.09	64.42	15.25	63.53	15.40	Shutdown	Shutdown	83.34	13.38	Shutdown	Shutdown
4	3:00:00	74.80	15.07	63.31	15.26	65.19	15.38	Shutdown	Shutdown	81.76	13.38	Shutdown	Shutdown
4	4:00:00	74.76	15.10	64.36	15.24	66.37	15.37	Shutdown	Shutdown	81.22	13.37	Shutdown	Shutdown
4	5:00:00	75.42	15.09	64.94	15.23	65.79	15.37	Shutdown	Shutdown	83.63	13.42	Shutdown	Shutdown
4	6:00:00	75.59	15.11	62.67	15.40	65.44	15.42	Shutdown	Shutdown	82.68	13.33	Shutdown	Shutdown
4	7:00:00	75.91	15.15	61.77	15.42	64.74	15.42	Shutdown	Shutdown	80.87	13.35	Shutdown	Shutdown
4	8:00:00	76.69	15.14	63.44	15.39	88.17	14.65	Shutdown	Shutdown	80.72	13.38	Shutdown	Shutdown
4	9:00:00	76.95	15.09	64.09	15.40	94.74	14.59	Shutdown	Shutdown	91.56	13.01	Shutdown	Shutdown
4	10:00:00	76.53	15.10	66.22	15.43	95.43	14.60	Shutdown	Shutdown	107.98	12.64	Shutdown	Shutdown
4	11:00:00	77.51	15.07	66.00	15.41	96.55	14.60	Shutdown	Shutdown	107.47	12.61	Shutdown	Shutdown
4	12:00:00	75.58	15.05	66.17	15.39	96.52	14.62	Shutdown	Shutdown	106.71	12.60	Shutdown	Shutdown
4	13:00:00	103.51	14.29	94.06	14.57	95.83	14.62	Shutdown	Shutdown	106.79	12.61	Shutdown	Shutdown
4	14:00:00	108.34	14.28	97.01	14.56	94.88	14.60	Shutdown	Shutdown	107.36	12.61	Shutdown	Shutdown
4	15:00:00	108.27	14.30	97.36	14.55	95.25	14.59	Shutdown	Shutdown	105.71	12.61	Shutdown	Shutdown
4	16:00:00	109.54	14.31	93.26	14.53	95.39	14.59	Shutdown	Shutdown	106.10	12.61	Shutdown	Shutdown
4	17:00:00	106.60	14.31	96.03	14.53	94.88	14.58	Shutdown	Shutdown	105.74	12.61	Shutdown	Shutdown
4	18:00:00	104.99	14.30	96.18	14.54	94.13	14.59	Shutdown	Shutdown	106.80	12.62	Shutdown	Shutdown
4	19:00:00	108.45	14.31	95.00	14.53	95.00	14.58	Shutdown	Shutdown	107.59	12.64	Shutdown	Shutdown
4	20:00:00	108.90	14.31	95.25	14.54	95.30	14.59	Shutdown	Shutdown	108.86	12.65	Shutdown	Shutdown
4	21:00:00	109.07	14.32	94.37	14.53	93.40	14.58	Shutdown	Shutdown	109.43	12.60	Shutdown	Shutdown
4	22:00:00	108.15	14.32	88.65	14.66	94.24	14.58	Shutdown	Shutdown	107.11	12.62	Shutdown	Shutdown
4	23:00:00	77.01	15.21	63.88	15.35	82.81	14.82	Shutdown	Shutdown	91.24	13.01	Shutdown	Shutdown
5	0:00:00	76.55	15.18	64.01	15.33	64.57	15.33	75.79	15.48	81.04	13.38	Shutdown	Shutdown
5	1:00:00	78.02	15.10	64.05	15.24	66.73	15.30	75.82	15.47	80.03	13.31	Shutdown	Shutdown
5	2:00:00	79.59	15.15	64.57	15.24	66.08	15.31	76.16	15.50	79.55	13.26	Shutdown	Shutdown
5	3:00:00	78.25	15.17	65.29	15.22	65.94	15.28	75.02	15.52	80.57	13.24	Shutdown	Shutdown
5	4:00:00	78.61	15.19	67.83	15.24	66.40	15.25	75.79	15.51	80.30	13.29	Shutdown	Shutdown
5	5:00:00	79.13	15.16	69.10	15.25	66.74	15.30	74.59	15.50	80.49	13.27	Shutdown	Shutdown
5	6:00:00	78.16	15.17	66.65	15.41	64.09	15.43	74.30	15.52	79.55	13.30	Shutdown	Shutdown
5	7:00:00	78.72	15.18	67.13	15.49	65.27	15.42	74.94	15.51	79.09	13.32	Shutdown	Shutdown
5	8:00:00	79.47	15.05	69.25	15.42	88.06	14.62	74.29	15.48	80.00	13.30	Shutdown	Shutdown
5	9:00:00	78.47	15.05	69.27	15.40	94.50	14.59	74.60	15.43	90.56	12.90	Shutdown	Shutdown
5	10:00:00	77.58	15.08	68.77	15.40	95.13	14.59	103.01	14.56	109.01	12.51	Shutdown	Shutdown
5	11:00:00	75.85	15.06	68.22	15.41	96.82	14.61	Maintenance	Maintenance	108.60	12.51	Shutdown	Shutdown
5	12:00:00	76.26	15.05	69.90	15.37	97.32	14.60	105.05	14.55	107.54	12.53	Shutdown	Shutdown
5	13:00:00	105.67	14.32	97.92	14.61	94.47	14.59	103.70	14.55	108.30	12.55	Shutdown	Shutdown
5	14:00:00	109.98	14.30	101.36	14.58	93.89	14.58	104.38	14.55	109.49	12.46	Shutdown	Shutdown
5	15:00:00	112.54	14.30	100.43	14.57	96.12	14.58	105.15	14.55	109.21	12.45	Shutdown	Shutdown
5	16:00:00	109.50	14.29	100.18	14.57	94.67	14.56	101.71	14.53	106.34	12.44	Shutdown	Shutdown
5	17:00:00	107.35	14.27	98.09	14.56	95.17	14.57	105.07	14.56	105.18	12.43	Shutdown	Shutdown
5	18:00:00	107.22	14.27	98.29	14.56	94.81	14.56	104.45	14.54	104.38	12.43	Shutdown	Shutdown
5	19:00:00	105.50	14.26	99.45	14.57	96.68	14.59	103.90	14.52	104.69	12.44	Shutdown	Shutdown
5	20:00:00	105.85	14.26	99.26	14.57	94.95	14.58	100.64	14.51	103.76	12.44	Shutdown	Shutdown
5	21:00:00	107.36	14.27	99.68	14.57	93.07	14.57	97.65	14.49	103.52	12.42	Shutdown	Shutdown
5	22:00:00	102.27	14.23	92.62	14.68	91.20	14.58	94.76	14.48	102.39	12.41	Shutdown	Shutdown
5	23:00:00	74.87	15.17	66.33	15.51	81.75	14.84	68.18	15.30	86.76	12.79	Shutdown	Shutdown
6	0:00:00	72.25	15.17	64.61	15.51	67.32	15.35	65.09	15.44	77.54	13.07	Shutdown	Shutdown
6	1:00:00	76.82	15.08	64.35	15.49	68.10	15.27	67.46	15.37	79.37	12.94	Shutdown	Shutdown
6	2:00:00	78.22	15.11	65.03	15.50	65.80	15.29	67.87	15.46	78.05	12.98	Shutdown	Shutdown
6	3:00:00	76.73	15.12	66.13	15.52	67.09	15.27	69.22	15.49	78.57	13.05	Shutdown	Shutdown
6	4:00:00	76.06	15.10	67.70	15.55	65.88	15.25	69.38	15.43	78.72	13.06	Shutdown	Shutdown
6	5:00:00	76.72	15.12	69.13	15.57	67.46	15.25	69.93	15.42	78.40	13.08	Shutdown	Shutdown
6	6:00:00	77.08	15.18	70.51	15.53	67.75	15.26	73.90	15.26	77.25	13.14	Shutdown	Shutdown
6	7:00:00	77.59	15.14	71.09	15.57	67.17	15.33	71.26	15.43	77.68	13.17	Shutdown	Shutdown
6	8:00:00	77.00	15.09	73.23	15.33	67.43	15.30	72.47	15.41	78.26	13.16	Shutdown	Shutdown
6	9:00:00	77.53	15.11	74.07	15.27	69.78	15.27	73.26	15.38	88.85	12.82	Shutdown	Shutdown
6	10:00:00	80.89	15.11	73.45	15.24	69.45	15.19	100.83	14.56	105.38	12.46	Shutdown	Shutdown
6	11:00:00	82.26	15.04	73.08	15.25	71.00	15.12	103.99	14.56	104.70	12.46	Shutdown	Shutdown
6	12:00:00	79.46	14.95	73.02	15.20	67.45	15.09	101.39	14.56	103.48	12.45	Shutdown	Shutdown
6	13:00:00	109.89	14.33	71.00	15.17	66.53	15.20	102.43	14.56	98.56	12.37	Shutdown	Shutdown
6	14:00:00	115.35	14.32	73.83	14.95	66.80	15.22	102.80	14.57	100.56	12.38	Shutdown	Shutdown
6	15:00:00	115.19	14.34	76.06	14.90	65.92	15.25	99.49	14.55	100.64	12.37	Shutdown	Shutdown

วันที่	เวลา	TOPSPP (G-5019) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)
6	16:00:00	116.20	14.33	76.94	14.82	67.93	15.24	102.51	14.58	100.25	12.38	Shutdown	Shutdown
6	17:00:00	116.46	14.33	86.37	14.69	67.39	15.25	102.11	14.56	100.13	12.36	Shutdown	Shutdown
6	18:00:00	112.13	14.30	89.50	14.48	95.17	14.52	98.83	14.54	98.51	12.36	Shutdown	Shutdown
6	19:00:00	109.99	14.27	93.36	14.49	98.85	14.48	96.03	14.51	99.49	12.37	Shutdown	Shutdown
6	20:00:00	109.63	14.27	91.91	14.48	95.78	14.46	95.57	14.52	99.47	12.38	Shutdown	Shutdown
6	21:00:00	110.76	14.27	79.11	14.75	95.03	14.47	97.04	14.53	100.67	12.38	Shutdown	Shutdown
6	22:00:00	103.97	14.37	66.55	15.21	94.68	14.47	97.14	14.53	101.04	12.40	Shutdown	Shutdown
6	23:00:00	77.67	15.16	67.30	15.23	78.12	14.88	73.57	15.20	85.36	12.82	Shutdown	Shutdown
7	0:00:00	77.09	15.12	65.36	15.46	66.43	15.22	68.79	15.31	75.47	13.09	Shutdown	Shutdown
7	1:00:00	78.40	15.00	65.27	15.47	66.29	15.14	69.55	15.23	76.70	13.07	Shutdown	Shutdown
7	2:00:00	78.09	15.02	64.69	15.46	68.82	15.16	70.27	15.23	76.28	13.07	Shutdown	Shutdown
7	3:00:00	78.90	15.00	65.70	15.45	66.31	15.23	70.65	15.21	77.24	13.08	Shutdown	Shutdown
7	4:00:00	79.54	15.02	65.66	15.39	67.73	15.17	69.93	15.24	77.20	13.11	Shutdown	Shutdown
7	5:00:00	79.28	15.01	63.17	15.37	67.14	15.17	70.67	15.26	76.70	13.15	Shutdown	Shutdown
7	6:00:00	79.17	15.01	64.55	15.36	68.75	15.18	71.58	15.32	76.91	13.09	Shutdown	Shutdown
7	7:00:00	78.97	15.03	65.51	15.35	68.75	15.21	71.83	15.40	76.93	13.09	Shutdown	Shutdown
7	8:00:00	78.29	15.02	62.93	15.32	94.21	14.48	71.99	15.37	77.93	13.07	Shutdown	Shutdown
7	9:00:00	78.68	14.96	62.96	15.28	98.44	14.47	73.58	15.32	88.27	12.76	Shutdown	Shutdown
7	10:00:00	79.63	14.94	62.71	15.27	97.20	14.48	99.54	14.60	100.63	12.38	Shutdown	Shutdown
7	11:00:00	77.79	14.91	63.22	15.26	97.69	14.48	104.21	14.60	98.53	12.36	Shutdown	Shutdown
7	12:00:00	80.15	14.90	64.60	15.24	96.21	14.47	103.82	14.61	99.80	12.38	Shutdown	Shutdown
7	13:00:00	106.46	14.20	93.18	14.49	95.03	14.46	102.61	14.60	99.88	12.38	Shutdown	Shutdown
7	14:00:00	110.43	14.20	98.47	14.49	95.14	14.45	103.28	14.59	104.38	12.41	Shutdown	Shutdown
7	15:00:00	109.21	14.20	101.94	14.50	92.97	14.44	101.89	14.58	102.00	12.41	Shutdown	Shutdown
7	16:00:00	105.25	14.19	101.83	14.48	93.86	14.44	104.18	14.59	104.19	12.42	Shutdown	Shutdown
7	17:00:00	103.55	14.17	103.52	14.50	95.41	14.45	105.04	14.60	102.21	12.40	Shutdown	Shutdown
7	18:00:00	104.96	14.17	101.10	14.47	97.24	14.46	105.83	14.61	101.87	12.39	Shutdown	Shutdown
7	19:00:00	104.70	14.16	97.04	14.43	97.58	14.47	Maintenance	Maintenance	102.16	12.40	Shutdown	Shutdown
7	20:00:00	106.39	14.17	96.42	14.42	98.44	14.46	Maintenance	Maintenance	102.11	12.41	Shutdown	Shutdown
7	21:00:00	107.89	14.19	98.98	14.46	97.64	14.46	Maintenance	Maintenance	101.32	12.41	Shutdown	Shutdown
7	22:00:00	96.11	14.28	93.72	14.55	97.87	14.46	Maintenance	Maintenance	103.48	12.43	Shutdown	Shutdown
7	23:00:00	76.54	15.00	64.48	15.38	88.22	14.69	79.09	15.32	84.21	12.95	Shutdown	Shutdown
8	0:00:00	74.36	14.97	66.49	15.40	73.75	15.15	75.53	15.39	84.98	13.35	Shutdown	Shutdown
8	1:00:00	77.40	14.86	65.98	15.40	69.83	15.29	78.45	15.31	81.38	13.21	Shutdown	Shutdown
8	2:00:00	75.38	14.89	65.83	15.40	70.48	15.34	78.48	15.34	80.54	13.16	Shutdown	Shutdown
8	3:00:00	76.25	14.89	64.99	15.39	70.49	15.32	76.21	15.38	79.58	13.13	Shutdown	Shutdown
8	4:00:00	75.30	14.93	66.44	15.39	69.97	15.33	76.56	15.45	80.73	13.13	Shutdown	Shutdown
8	5:00:00	75.23	14.90	64.35	15.38	71.00	15.34	76.63	15.47	78.51	13.16	Shutdown	Shutdown
8	6:00:00	76.80	14.89	64.79	15.37	69.65	15.38	77.82	15.55	78.35	13.18	Shutdown	Shutdown
8	7:00:00	79.00	14.92	63.91	15.36	71.00	15.32	78.36	15.49	78.32	13.20	Shutdown	Shutdown
8	8:00:00	78.94	14.93	62.37	15.34	95.25	14.47	79.88	15.48	76.47	13.21	Shutdown	Shutdown
8	9:00:00	79.03	14.96	63.64	15.32	100.48	14.47	79.96	15.44	77.34	13.17	Shutdown	Shutdown
8	10:00:00	80.40	14.91	65.89	15.33	103.83	14.50	100.90	14.52	78.57	13.13	Shutdown	Shutdown
8	11:00:00	81.58	14.90	68.18	15.33	102.81	14.50	Maintenance	Maintenance	77.99	13.13	Shutdown	Shutdown
8	12:00:00	79.94	14.84	67.47	15.30	102.18	14.50	Maintenance	Maintenance	78.94	13.14	Shutdown	Shutdown
8	13:00:00	107.63	14.22	92.37	14.47	102.31	14.50	Maintenance	Maintenance	71.74	13.19	Shutdown	Shutdown
8	14:00:00	112.83	14.21	100.64	14.45	100.85	14.49	Maintenance	Maintenance	72.60	13.34	Shutdown	Shutdown
8	15:00:00	111.23	14.20	103.91	14.47	98.52	14.49	104.85	14.58	70.28	13.30	Shutdown	Shutdown
8	16:00:00	111.46	14.22	103.06	14.46	98.48	14.49	103.78	14.56	67.91	13.21	Shutdown	Shutdown
8	17:00:00	113.94	14.22	96.58	14.40	99.94	14.50	102.88	14.55	69.00	13.20	Shutdown	Shutdown
8	18:00:00	110.99	14.20	90.46	14.35	104.27	14.51	100.07	14.52	84.27	12.67	Shutdown	Shutdown
8	19:00:00	102.97	14.15	90.21	14.35	102.88	14.51	99.67	14.52	100.44	12.43	Shutdown	Shutdown
8	20:00:00	102.59	14.14	90.20	14.35	103.80	14.51	101.79	14.55	100.46	12.45	Shutdown	Shutdown
8	21:00:00	103.47	14.14	89.30	14.35	103.97	14.52	100.73	14.55	99.41	12.46	Shutdown	Shutdown
8	22:00:00	101.77	14.22	86.32	14.43	102.74	14.51	97.49	14.49	95.23	12.53	Shutdown	Shutdown
8	23:00:00	75.62	15.03	63.07	15.35	89.45	14.81	74.78	15.29	76.10	13.14	Shutdown	Shutdown
9	0:00:00	74.66	15.04	62.78	15.34	70.81	15.33	73.78	15.41	75.76	13.20	Shutdown	Shutdown
9	1:00:00	76.35	14.98	61.96	15.33	71.21	15.30	74.03	15.39	75.49	13.12	Shutdown	Shutdown
9	2:00:00	77.90	14.93	62.29	15.33	70.08	15.35	76.01	15.38	76.26	13.12	Shutdown	Shutdown
9	3:00:00	76.11	14.92	61.48	15.33	70.71	15.36	74.42	15.37	74.43	13.17	Shutdown	Shutdown
9	4:00:00	77.98	14.97	61.73	15.33	71.25	15.39	74.00	15.42	74.28	13.24	Shutdown	Shutdown
9	5:00:00	78.33	14.93	62.03	15.33	70.20	15.43	73.85	15.44	75.41	13.27	Shutdown	Shutdown
9	6:00:00	79.62	14.97	61.73	15.34	70.03	15.41	73.25	15.42	75.96	13.28	Shutdown	Shutdown
9	7:00:00	78.29	15.02	62.46	15.34	71.36	15.38	74.13	15.36	74.26	13.29	Shutdown	Shutdown
9	8:00:00	79.16	15.03	62.49	15.34	97.12	14.50	77.12	15.35	75.12	13.25	Shutdown	Shutdown
9	9:00:00	80.23	14.97	63.90	15.34	98.78	14.51	79.59	15.30	87.90	12.87	Shutdown	Shutdown
9	10:00:00	82.24	14.92	62.50	15.34	102.39	14.53	Maintenance	Maintenance	103.40	12.45	Shutdown	Shutdown
9	11:00:00	81.17	14.88	62.64	15.32	102.34	14.52	Maintenance	Maintenance	103.12	12.47	Shutdown	Shutdown

วันที่	เวลา	TOPSPP (G-5019) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)
9	12:00:00	79.37	14.85	61.98	15.31	100.23	14.52	Maintenance	Maintenance	99.83	12.43	Shutdown	Shutdown
9	13:00:00	81.39	14.90	87.26	14.44	100.26	14.53	Maintenance	Maintenance	100.82	12.39	Shutdown	Shutdown
9	14:00:00	79.59	14.90	96.86	14.45	102.72	14.54	106.12	14.58	100.81	12.38	Shutdown	Shutdown
9	15:00:00	80.46	14.94	95.04	14.44	98.08	14.50	106.01	14.58	103.47	12.41	Shutdown	Shutdown
9	16:00:00	79.63	14.90	88.92	14.38	96.26	14.48	Maintenance	Maintenance	104.13	12.42	Shutdown	Shutdown
9	17:00:00	89.25	14.57	84.81	14.35	96.09	14.49	103.84	14.55	101.26	12.40	Shutdown	Shutdown
9	18:00:00	101.66	14.15	85.34	14.35	96.93	14.49	99.91	14.52	101.08	12.41	Shutdown	Shutdown
9	19:00:00	104.87	14.17	84.50	14.35	95.71	14.49	99.52	14.52	100.12	12.45	Shutdown	Shutdown
9	20:00:00	103.67	14.16	81.85	14.34	97.21	14.49	98.89	14.50	101.03	12.41	Shutdown	Shutdown
9	21:00:00	79.52	14.63	81.87	14.34	96.74	14.49	97.02	14.48	100.41	12.40	Shutdown	Shutdown
9	22:00:00	73.45	14.95	79.46	14.48	96.84	14.48	96.53	14.46	103.41	12.45	Shutdown	Shutdown
9	23:00:00	75.04	14.95	62.57	15.37	84.61	14.78	70.77	15.15	85.68	12.94	Shutdown	Shutdown
10	0:00:00	75.29	14.93	63.31	15.37	67.55	15.30	69.39	15.13	78.11	13.20	Shutdown	Shutdown
10	1:00:00	72.77	14.92	61.72	15.37	66.54	15.29	69.98	15.04	76.46	13.23	Shutdown	Shutdown
10	2:00:00	72.25	14.95	62.94	15.36	67.04	15.28	71.20	15.02	70.92	13.23	Shutdown	Shutdown
10	3:00:00	73.74	14.94	63.89	15.36	67.58	15.30	70.98	15.02	68.77	13.27	Shutdown	Shutdown
10	4:00:00	75.40	14.95	62.73	15.35	68.60	15.27	69.79	15.01	69.33	13.27	Shutdown	Shutdown
10	5:00:00	73.27	14.95	61.45	15.36	67.73	15.26	66.70	15.12	69.97	13.34	Shutdown	Shutdown
10	6:00:00	72.54	14.96	62.62	15.36	67.71	15.28	65.49	15.26	73.68	13.31	Shutdown	Shutdown
10	7:00:00	73.21	15.03	62.80	15.36	66.62	15.33	65.68	15.25	69.51	13.33	Shutdown	Shutdown
10	8:00:00	73.45	15.02	63.06	15.36	93.39	14.48	66.62	15.21	68.36	13.32	Shutdown	Shutdown
10	9:00:00	74.29	14.99	65.01	15.37	96.98	14.49	67.25	15.18	81.39	12.82	Shutdown	Shutdown
10	10:00:00	75.17	14.95	65.67	15.37	97.00	14.49	66.34	15.16	101.70	12.42	Shutdown	Shutdown
10	11:00:00	73.54	14.94	64.18	15.35	96.27	14.48	66.90	15.15	100.33	12.40	Shutdown	Shutdown
10	12:00:00	73.30	14.90	64.96	15.36	94.87	14.48	68.28	15.14	96.20	12.38	Shutdown	Shutdown
10	13:00:00	100.64	14.18	93.41	14.43	95.50	14.49	69.19	15.20	99.69	12.39	Shutdown	Shutdown
10	14:00:00	112.59	14.23	94.50	14.41	97.11	14.48	69.54	15.21	101.09	12.39	Shutdown	Shutdown
10	15:00:00	106.90	14.20	92.76	14.39	98.05	14.48	68.13	15.18	99.91	12.41	Shutdown	Shutdown
10	16:00:00	107.47	14.18	86.63	14.37	95.21	14.47	68.15	15.16	100.00	12.42	Shutdown	Shutdown
10	17:00:00	109.11	14.19	83.09	14.34	96.28	14.49	67.39	15.11	101.04	12.40	Shutdown	Shutdown
10	18:00:00	109.56	14.20	84.18	14.34	95.11	14.47	73.78	14.80	100.87	12.41	Shutdown	Shutdown
10	19:00:00	106.72	14.18	83.65	14.34	96.31	14.48	95.91	14.39	101.00	12.40	Shutdown	Shutdown
10	20:00:00	105.86	14.18	84.03	14.35	97.66	14.49	92.41	14.37	101.11	12.41	Shutdown	Shutdown
10	21:00:00	105.21	14.18	83.56	14.34	96.41	14.48	92.82	14.37	97.81	12.41	Shutdown	Shutdown
10	22:00:00	107.09	14.24	79.42	14.43	94.74	14.48	75.86	14.85	96.02	12.43	Shutdown	Shutdown
10	23:00:00	76.31	14.96	62.65	15.38	84.49	14.74	63.66	15.22	80.80	12.90	Shutdown	Shutdown
11	0:00:00	75.31	14.98	64.02	15.39	67.13	15.22	64.06	15.19	72.95	13.19	Shutdown	Shutdown
11	1:00:00	76.12	14.98	61.83	15.37	67.47	15.32	63.69	15.17	73.88	13.18	Shutdown	Shutdown
11	2:00:00	73.56	15.06	62.40	15.37	66.69	15.30	63.85	15.07	72.22	13.14	Shutdown	Shutdown
11	3:00:00	72.33	15.07	62.17	15.38	64.78	15.25	64.06	15.14	72.43	13.11	Shutdown	Shutdown
11	4:00:00	75.41	15.00	61.24	15.37	65.62	15.22	63.23	15.18	72.52	13.10	Shutdown	Shutdown
11	5:00:00	76.95	14.99	61.77	15.36	66.08	15.21	63.22	15.19	71.43	13.15	Shutdown	Shutdown
11	6:00:00	76.93	15.05	62.47	15.36	64.64	15.23	63.52	15.25	70.93	13.17	Shutdown	Shutdown
11	7:00:00	77.34	15.11	63.03	15.37	64.44	15.32	63.32	15.27	70.60	13.13	Shutdown	Shutdown
11	8:00:00	76.08	15.06	62.97	15.36	91.26	14.47	62.19	15.29	72.28	13.12	Shutdown	Shutdown
11	9:00:00	77.22	14.96	63.59	15.36	94.30	14.47	63.32	15.27	80.97	12.63	Shutdown	Shutdown
11	10:00:00	77.93	14.93	64.51	15.36	95.42	14.47	28.62	18.12	94.54	12.29	Shutdown	Shutdown
11	11:00:00	78.13	14.90	62.60	15.34	94.69	14.48	89.07	14.40	91.20	12.28	Shutdown	Shutdown
11	12:00:00	76.52	14.87	62.91	15.34	94.30	14.47	91.16	14.41	90.22	12.34	Shutdown	Shutdown
11	13:00:00	106.09	14.19	92.23	14.47	92.74	14.46	88.97	14.40	88.73	12.24	Shutdown	Shutdown
11	14:00:00	107.90	14.17	91.73	14.41	92.47	14.45	89.53	14.41	88.56	12.25	Shutdown	Shutdown
11	15:00:00	107.40	14.18	82.30	14.32	93.75	14.44	88.14	14.41	86.28	12.25	Shutdown	Shutdown
11	16:00:00	108.34	14.18	83.71	14.33	93.15	14.43	85.19	14.41	86.18	12.24	Shutdown	Shutdown
11	17:00:00	105.53	14.15	91.90	14.41	96.29	14.44	85.19	14.41	86.03	12.24	Shutdown	Shutdown
11	18:00:00	104.79	14.16	90.74	14.37	92.12	14.41	85.19	14.41	86.80	12.24	Shutdown	Shutdown
11	19:00:00	105.36	14.17	86.63	14.34	93.39	14.41	85.19	14.41	86.23	12.24	Shutdown	Shutdown
11	20:00:00	105.59	14.17	83.75	14.34	92.94	14.40	85.19	14.41	86.92	12.29	Shutdown	Shutdown
11	21:00:00	104.64	14.16	83.13	14.33	92.18	14.40	85.19	14.41	86.89	12.26	Shutdown	Shutdown
11	22:00:00	100.57	14.21	79.40	14.52	91.43	14.40	101.22	13.73	86.16	12.25	Shutdown	Shutdown
11	23:00:00	73.06	14.95	62.53	15.37	81.02	14.66	104.07	13.48	74.37	12.69	Shutdown	Shutdown
12	0:00:00	75.28	14.93	61.25	15.35	63.47	15.17	103.06	13.40	69.59	12.81	Shutdown	Shutdown
12	1:00:00	75.15	14.83	62.89	15.35	63.16	15.18	102.31	13.37	68.59	12.93	Shutdown	Shutdown
12	2:00:00	75.49	14.88	65.08	15.37	63.91	15.21	103.75	13.36	67.63	13.11	Shutdown	Shutdown
12	3:00:00	73.42	14.88	62.82	15.34	64.30	15.24	102.39	13.36	68.05	13.06	Shutdown	Shutdown
12	4:00:00	73.99	14.88	63.50	15.36	62.77	15.17	101.44	13.41	67.75	13.04	Shutdown	Shutdown
12	5:00:00	72.30	14.87	64.79	15.36	63.75	15.20	102.89	13.51	67.86	13.02	Shutdown	Shutdown
12	6:00:00	70.80	14.87	64.21	15.36	64.37	15.18	100.36	13.73	66.59	13.03	Shutdown	Shutdown
12	7:00:00	72.97	14.90	63.55	15.35	63.57	15.23	100.42	13.73	67.68	13.08	Shutdown	Shutdown

วันที่	เวลา	TOPSPP (G-5019) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)
12	8:00:00	73.90	14.86	64.11	15.36	88.22	14.36	101.70	13.75	68.94	13.02	Shutdown	Shutdown
12	9:00:00	73.57	14.84	65.02	15.35	95.67	14.38	102.89	13.72	75.93	12.60	Shutdown	Shutdown
12	10:00:00	76.09	14.85	63.06	15.31	97.28	14.39	103.43	13.75	88.53	12.24	Shutdown	Shutdown
12	11:00:00	72.72	14.83	62.14	15.29	97.67	14.40	103.69	13.71	88.39	12.21	Shutdown	Shutdown
12	12:00:00	74.40	14.82	61.89	15.27	91.71	14.36	101.75	13.70	87.96	12.21	Shutdown	Shutdown
12	13:00:00	102.21	14.09	91.72	14.37	90.76	14.35	102.43	13.70	89.14	12.22	Shutdown	Shutdown
12	14:00:00	106.37	14.10	94.94	14.36	90.50	14.35	101.84	13.71	89.38	12.24	Shutdown	Shutdown
12	15:00:00	113.07	14.12	95.93	14.37	89.49	14.34	102.85	13.75	88.64	12.23	Shutdown	Shutdown
12	16:00:00	109.19	14.08	85.68	14.26	90.41	14.35	101.78	13.76	88.12	12.28	Shutdown	Shutdown
12	17:00:00	106.87	14.08	79.59	14.22	86.53	14.31	100.69	13.73	86.07	12.28	Shutdown	Shutdown
12	18:00:00	108.49	14.08	80.10	14.21	89.25	14.33	99.86	13.69	84.57	12.15	Shutdown	Shutdown
12	19:00:00	101.63	14.07	80.07	14.21	88.45	14.33	100.12	13.70	83.92	12.16	Shutdown	Shutdown
12	20:00:00	102.92	14.06	79.22	14.22	89.60	14.34	101.51	13.72	83.97	12.16	Shutdown	Shutdown
12	21:00:00	103.47	14.06	80.34	14.22	90.41	14.34	94.30	13.67	83.61	12.14	Shutdown	Shutdown
12	22:00:00	98.50	14.13	76.16	14.43	88.78	14.33	98.04	13.75	83.70	12.13	Shutdown	Shutdown
12	23:00:00	74.45	14.89	62.56	15.27	79.87	14.62	98.71	13.73	74.82	12.66	Shutdown	Shutdown
13	0:00:00	74.10	14.81	62.30	15.26	61.30	15.19	98.32	13.73	68.08	12.99	Shutdown	Shutdown
13	1:00:00	76.35	14.72	62.22	15.26	59.83	15.20	98.22	13.73	66.59	12.91	Shutdown	Shutdown
13	2:00:00	72.73	14.71	61.48	15.25	60.69	15.19	98.64	13.75	67.35	12.94	Shutdown	Shutdown
13	3:00:00	71.89	14.74	62.84	15.25	59.79	15.22	98.49	13.77	68.93	12.95	Shutdown	Shutdown
13	4:00:00	72.86	14.76	62.15	15.25	60.49	15.13	99.01	13.76	68.02	12.95	Shutdown	Shutdown
13	5:00:00	77.30	14.74	61.04	15.24	62.15	15.11	99.94	13.79	68.91	12.95	Shutdown	Shutdown
13	6:00:00	72.53	14.87	62.93	15.25	59.48	15.19	98.46	13.77	69.50	13.01	Shutdown	Shutdown
13	7:00:00	73.16	14.90	61.54	15.23	60.64	15.18	98.65	13.74	69.87	12.98	Shutdown	Shutdown
13	8:00:00	73.31	14.89	61.56	15.23	60.35	15.19	96.74	13.76	70.58	12.99	Shutdown	Shutdown
13	9:00:00	77.16	14.83	62.29	15.22	64.36	15.10	97.57	13.75	77.35	12.62	Shutdown	Shutdown
13	10:00:00	83.11	14.83	61.60	15.21	60.79	15.08	95.79	13.78	89.23	12.24	Shutdown	Shutdown
13	11:00:00	82.88	14.82	61.96	15.21	62.43	15.06	94.98	13.69	89.00	12.24	Shutdown	Shutdown
13	12:00:00	77.67	14.79	61.05	15.18	62.15	15.05	99.23	13.70	87.83	12.24	Shutdown	Shutdown
13	13:00:00	100.09	14.08	62.47	15.19	65.47	14.87	102.37	13.75	88.84	12.25	Shutdown	Shutdown
13	14:00:00	103.35	14.04	61.91	15.18	70.40	14.78	102.08	13.72	88.66	12.23	Shutdown	Shutdown
13	15:00:00	102.54	14.05	60.49	15.18	64.05	14.96	103.21	13.73	89.58	12.23	Shutdown	Shutdown
13	16:00:00	105.18	14.05	62.61	15.20	65.69	14.97	102.89	13.74	87.26	12.23	Shutdown	Shutdown
13	17:00:00	106.44	14.06	70.89	14.71	64.01	14.94	99.36	13.77	86.38	12.24	Shutdown	Shutdown
13	18:00:00	106.24	14.06	86.52	14.25	87.18	14.32	98.02	13.79	86.82	12.28	Shutdown	Shutdown
13	19:00:00	105.29	14.07	92.89	14.31	90.89	14.33	101.22	13.78	85.56	12.24	Shutdown	Shutdown
13	20:00:00	105.57	14.06	79.24	14.17	89.55	14.32	100.62	13.78	84.53	12.23	Shutdown	Shutdown
13	21:00:00	106.31	14.06	66.70	14.92	90.33	14.33	94.43	13.70	84.08	12.26	Shutdown	Shutdown
13	22:00:00	102.19	14.12	62.14	15.23	89.21	14.32	91.72	13.78	86.85	12.30	Shutdown	Shutdown
13	23:00:00	77.43	14.85	61.84	15.24	72.12	14.76	93.01	13.70	76.88	12.72	Shutdown	Shutdown
14	0:00:00	76.05	14.83	60.34	15.24	61.50	15.03	92.27	13.72	67.46	13.13	Shutdown	Shutdown
14	1:00:00	76.94	14.75	62.16	15.22	61.81	14.97	92.51	13.77	68.76	13.00	Shutdown	Shutdown
14	2:00:00	76.18	14.75	61.23	15.22	61.86	14.99	92.99	13.68	69.07	13.04	Shutdown	Shutdown
14	3:00:00	76.50	14.77	62.09	15.23	61.51	15.13	93.14	13.68	69.70	13.05	Shutdown	Shutdown
14	4:00:00	73.99	14.87	61.25	15.22	61.32	15.14	92.34	13.73	68.91	13.05	Shutdown	Shutdown
14	5:00:00	73.70	14.88	62.51	15.23	60.28	15.14	91.41	13.89	68.43	13.04	Shutdown	Shutdown
14	6:00:00	74.78	14.89	62.68	15.20	61.47	15.14	92.16	13.83	68.59	13.10	Shutdown	Shutdown
14	7:00:00	74.75	14.93	62.46	15.20	60.82	15.26	92.88	13.96	69.64	13.11	Shutdown	Shutdown
14	8:00:00	74.92	14.88	61.92	15.17	85.58	14.34	93.37	13.80	69.65	13.11	Shutdown	Shutdown
14	9:00:00	75.67	14.92	63.65	15.18	91.82	14.37	95.57	13.72	79.52	12.70	Shutdown	Shutdown
14	10:00:00	76.41	14.89	61.98	15.18	92.46	14.39	96.32	13.70	90.39	12.35	Shutdown	Shutdown
14	11:00:00	75.38	14.88	61.95	15.18	89.79	14.37	96.41	13.74	89.82	12.35	Shutdown	Shutdown
14	12:00:00	75.19	14.81	59.90	15.16	87.80	14.36	100.73	13.80	89.37	12.31	Shutdown	Shutdown
14	13:00:00	100.34	14.11	79.74	14.23	90.79	14.38	103.85	13.63	88.35	12.28	Shutdown	Shutdown
14	14:00:00	101.51	14.04	82.83	14.20	90.37	14.37	Maintenance	Maintenance	87.39	12.32	Shutdown	Shutdown
14	15:00:00	94.93	13.98	83.21	14.20	88.07	14.36	Maintenance	Maintenance	86.79	12.23	Shutdown	Shutdown
14	16:00:00	93.75	13.97	83.52	14.20	88.64	14.37	Maintenance	Maintenance	86.32	12.24	Shutdown	Shutdown
14	17:00:00	98.23	14.00	85.13	14.23	89.16	14.36	Maintenance	Maintenance	86.08	12.28	Shutdown	Shutdown
14	18:00:00	95.85	13.98	93.72	14.32	88.30	14.37	Maintenance	Maintenance	88.52	12.32	Shutdown	Shutdown
14	19:00:00	97.30	13.99	94.80	14.33	90.21	14.37	103.05	13.79	91.16	12.33	Shutdown	Shutdown
14	20:00:00	98.69	14.00	92.17	14.31	89.27	14.37	98.70	13.72	90.52	12.34	Shutdown	Shutdown
14	21:00:00	97.71	14.00	83.18	14.23	88.78	14.37	95.91	13.74	89.38	12.36	Shutdown	Shutdown
14	22:00:00	95.42	14.12	81.48	14.41	88.11	14.36	94.71	13.74	88.79	12.32	Shutdown	Shutdown
14	23:00:00	77.47	14.88	61.33	15.28	77.45	14.65	92.67	13.81	76.48	12.80	Shutdown	Shutdown
15	0:00:00	74.66	14.95	63.19	15.28	61.65	15.16	90.00	13.59	Shutdown	Shutdown	33.77	11.61
15	1:00:00	75.97	14.86	62.76	15.29	62.88	15.11	90.55	13.62	Shutdown	Shutdown	30.89	11.23
15	2:00:00	74.58	14.83	63.86	15.30	61.52	15.13	93.77	13.68	Shutdown	Shutdown	29.64	10.83
15	3:00:00	75.74	14.84	65.63	15.30	62.14	15.08	96.40	13.69	Shutdown	Shutdown	29.21	10.48

วันที่	เวลา	TOPSPP (G-5019) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)
15	4:00:00	74.68	14.87	66.98	15.29	60.97	15.11	96.34	13.76	Shutdown	Shutdown	27.99	10.21
15	5:00:00	75.72	14.89	65.40	15.27	61.56	15.14	95.83	13.86	Shutdown	Shutdown	27.08	9.88
15	6:00:00	74.37	14.99	65.87	15.26	60.87	15.18	96.85	13.82	Shutdown	Shutdown	26.92	9.56
15	7:00:00	75.69	14.98	65.92	15.27	61.59	15.19	97.93	13.77	Shutdown	Shutdown	26.01	9.21
15	8:00:00	74.96	15.00	65.48	15.27	87.39	14.37	98.38	13.81	Shutdown	Shutdown	38.10	8.72
15	9:00:00	77.66	15.00	64.94	15.26	89.73	14.38	100.74	13.74	Shutdown	Shutdown	36.53	8.40
15	10:00:00	77.03	14.98	64.82	15.25	93.19	14.40	102.34	13.75	Shutdown	Shutdown	35.15	8.03
15	11:00:00	76.28	14.96	64.54	15.27	94.25	14.41	106.09	13.75	Shutdown	Shutdown	34.11	7.67
15	12:00:00	75.70	14.94	64.63	15.25	94.42	14.41	103.28	13.73	Shutdown	Shutdown	32.70	7.30
15	13:00:00	93.63	14.01	89.58	14.30	89.88	14.39	102.80	13.72	Shutdown	Shutdown	29.71	7.04
15	14:00:00	93.00	13.96	92.07	14.28	91.81	14.39	Maintenance	Maintenance	Shutdown	Shutdown	32.34	6.57
15	15:00:00	95.41	13.98	92.02	14.28	89.50	14.37	Maintenance	Maintenance	Shutdown	Shutdown	32.48	6.19
15	16:00:00	93.97	13.98	85.77	14.24	89.44	14.38	Maintenance	Maintenance	Shutdown	Shutdown	31.71	6.02
15	17:00:00	104.74	14.08	90.13	14.30	89.07	14.38	100.93	13.65	Shutdown	Shutdown	31.71	6.02
15	18:00:00	104.63	14.07	98.20	14.36	89.65	14.37	101.22	13.69	Shutdown	Shutdown	31.71	6.02
15	19:00:00	101.96	14.06	96.94	14.36	91.74	14.37	103.85	13.73	Shutdown	Shutdown	31.71	6.02
15	20:00:00	98.10	14.01	91.95	14.31	92.50	14.38	100.39	13.82	Shutdown	Shutdown	31.71	6.02
15	21:00:00	93.99	13.98	86.91	14.27	90.78	14.38	101.15	13.75	Shutdown	Shutdown	75.79	11.54
15	22:00:00	91.99	14.09	82.37	14.40	90.74	14.38	101.24	13.79	Shutdown	Shutdown	92.16	13.65
15	23:00:00	78.08	14.83	62.44	15.27	79.43	14.66	100.54	13.78	Shutdown	Shutdown	64.20	12.84
16	0:00:00	77.02	14.82	63.74	15.27	63.12	15.14	99.94	13.79	93.96	12.98	48.18	12.16
16	1:00:00	76.03	14.75	61.56	15.25	62.15	15.15	98.69	13.80	67.72	13.01	44.35	11.40
16	2:00:00	75.66	14.88	61.92	15.25	62.22	15.18	97.30	13.68	68.99	13.03	41.37	10.80
16	3:00:00	74.67	14.79	61.37	15.26	61.78	15.20	100.20	13.81	69.60	13.04	38.73	10.35
16	4:00:00	74.84	14.74	61.51	15.26	61.99	15.21	99.52	13.87	68.83	13.03	37.86	9.98
16	5:00:00	73.53	14.77	63.04	15.27	61.57	15.20	98.63	13.84	70.53	13.04	36.15	9.70
16	6:00:00	71.02	14.92	64.51	15.27	63.06	15.14	98.49	13.81	69.85	13.11	35.46	9.48
16	7:00:00	71.32	14.94	62.62	15.27	63.33	15.19	99.35	13.83	69.05	13.10	35.36	9.30
16	8:00:00	71.68	14.92	64.51	15.27	87.43	14.38	100.82	13.86	68.98	13.09	52.97	8.65
16	9:00:00	72.69	14.91	63.81	15.28	89.60	14.37	97.92	13.78	69.72	13.08	53.19	8.51
16	10:00:00	72.70	14.90	61.67	15.27	92.15	14.39	100.64	13.78	70.35	13.08	53.76	8.38
16	11:00:00	73.21	14.90	62.86	15.27	93.16	14.39	105.13	13.78	70.17	13.07	53.76	8.38
16	12:00:00	77.97	14.89	62.77	15.26	92.29	14.38	102.76	13.72	69.63	13.10	53.76	8.38
16	13:00:00	74.66	14.91	82.45	14.27	92.77	14.39	104.84	13.65	69.32	13.11	53.76	8.38
16	14:00:00	75.10	14.89	84.46	14.24	92.95	14.39	Maintenance	Maintenance	68.78	13.13	95.15	13.52
16	15:00:00	73.75	14.88	84.29	14.24	91.18	14.38	103.41	13.59	69.13	13.11	100.56	14.13
16	16:00:00	74.48	14.86	84.89	14.25	88.91	14.36	100.94	13.60	70.82	13.08	95.75	13.87
16	17:00:00	84.53	14.48	93.49	14.33	91.73	14.39	98.59	13.52	71.18	13.12	91.89	13.65
16	18:00:00	97.94	14.00	92.37	14.32	91.56	14.39	99.75	13.56	82.31	12.53	92.22	13.49
16	19:00:00	97.05	14.01	87.99	14.26	94.08	14.40	102.87	13.58	89.39	12.33	92.17	13.47
16	20:00:00	94.84	13.99	87.42	14.25	92.82	14.39	100.88	13.58	88.62	12.33	91.81	13.46
16	21:00:00	83.88	14.58	84.73	14.24	91.61	14.38	100.11	13.57	89.87	12.33	88.21	13.33
16	22:00:00	77.97	14.92	84.72	14.31	91.28	14.39	98.52	13.54	85.83	12.45	88.97	13.14
16	23:00:00	75.23	14.94	63.19	15.27	81.58	14.64	96.79	13.70	75.41	13.18	71.69	13.34
17	0:00:00	75.40	14.85	62.34	15.26	64.26	15.16	96.84	13.73	70.78	13.06	55.98	13.53
17	1:00:00	74.51	14.76	63.25	15.27	65.11	15.10	95.95	13.76	70.28	13.03	54.32	13.42
17	2:00:00	74.51	14.87	62.79	15.26	63.65	15.19	96.47	13.72	71.23	13.08	53.32	13.36
17	3:00:00	73.19	14.86	61.79	15.26	62.23	15.20	97.94	13.70	70.96	13.07	53.41	13.26
17	4:00:00	73.89	14.89	63.75	15.25	62.80	15.18	98.79	13.70	71.12	13.08	52.70	13.17
17	5:00:00	73.03	14.89	62.03	15.26	63.27	15.17	98.67	13.61	71.05	13.09	53.48	13.06
17	6:00:00	74.21	14.90	63.74	15.26	64.07	15.19	98.96	13.56	72.26	13.06	51.91	13.06
17	7:00:00	73.45	14.90	63.20	15.27	63.12	15.21	98.29	13.64	71.12	13.05	51.78	12.95
17	8:00:00	74.53	14.80	62.65	15.25	89.73	14.38	99.17	13.60	70.16	13.03	71.14	12.11
17	9:00:00	72.33	14.74	64.36	15.25	94.54	14.38	100.67	13.54	78.54	12.71	70.00	11.99
17	10:00:00	73.42	14.72	64.51	15.24	94.33	14.38	100.60	13.59	92.50	12.31	70.00	11.99
17	11:00:00	72.60	14.69	65.13	15.23	94.89	14.37	105.10	13.55	92.69	12.29	76.57	12.62
17	12:00:00	74.34	14.70	63.16	15.23	91.95	14.35	100.14	13.51	93.99	12.28	104.82	14.66
17	13:00:00	101.81	14.02	92.17	14.36	91.33	14.33	100.66	13.63	92.27	12.25	104.53	14.64
17	14:00:00	106.20	14.00	95.84	14.32	91.90	14.33	102.56	13.61	90.60	12.22	105.14	14.63
17	15:00:00	102.92	13.99	90.43	14.26	96.10	14.35	102.32	13.63	90.40	12.21	109.24	14.64
17	16:00:00	93.45	13.91	96.28	14.31	94.86	14.33	100.97	13.49	94.28	12.23	106.96	14.62
17	17:00:00	91.46	13.90	100.12	14.34	90.10	14.30	100.55	13.46	91.24	12.20	107.72	14.64
17	18:00:00	89.24	13.87	99.61	14.34	89.08	14.29	103.95	13.50	91.37	12.21	109.03	14.68
17	19:00:00	89.75	13.86	97.83	14.34	91.54	14.30	102.12	13.47	89.56	12.19	107.66	14.69
17	20:00:00	90.18	13.87	95.43	14.32	90.90	14.30	102.24	13.62	88.45	12.18	104.81	14.69
17	21:00:00	91.29	13.88	90.68	14.25	90.76	14.30	102.55	13.59	87.55	12.18	105.77	14.70
17	22:00:00	90.12	13.91	84.56	14.38	89.25	14.29	101.16	13.56	87.57	12.19	106.77	14.71
17	23:00:00	70.25	14.79	63.95	15.22	78.18	14.58	100.43	13.60	80.67	12.72	Maintenance	Maintenance

วันที่	เวลา	TOPSPP (G-5019) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)
18	0:00:00	71.44	14.79	64.58	15.18	60.90	15.07	96.92	13.65	70.66	12.98	Maintenance	Maintenance
18	1:00:00	72.62	14.73	63.20	15.17	62.60	15.00	79.57	13.98	68.70	13.02	Maintenance	Maintenance
18	2:00:00	72.56	14.74	61.55	15.19	61.34	15.07	76.01	14.14	67.85	13.03	Maintenance	Maintenance
18	3:00:00	72.13	14.78	62.71	15.17	60.84	15.09	75.70	14.13	68.91	13.01	Maintenance	Maintenance
18	4:00:00	73.13	14.68	62.12	15.18	60.29	15.08	74.14	14.14	68.19	13.00	Maintenance	Maintenance
18	5:00:00	74.12	14.66	63.14	15.17	61.28	15.06	74.54	14.13	67.70	13.01	Maintenance	Maintenance
18	6:00:00	73.19	14.65	62.96	15.16	61.89	15.08	73.88	14.13	67.59	13.02	Maintenance	Maintenance
18	7:00:00	71.33	14.69	62.85	15.08	62.95	15.04	74.02	14.23	67.81	12.94	78.44	15.60
18	8:00:00	71.50	14.68	64.08	15.00	86.79	14.27	74.95	14.11	67.30	12.98	112.86	14.83
18	9:00:00	75.79	14.77	64.89	14.93	89.94	14.26	77.01	14.09	74.77	12.57	116.15	14.80
18	10:00:00	77.45	14.81	64.23	15.00	89.70	14.26	99.86	13.60	87.31	12.13	116.87	14.80
18	11:00:00	74.77	14.79	62.94	15.08	89.67	14.25	103.01	13.50	86.11	12.13	116.46	14.79
18	12:00:00	75.32	14.77	62.94	14.96	90.25	14.26	103.66	13.40	88.10	12.13	114.11	14.77
18	13:00:00	105.36	14.01	90.17	14.25	93.60	14.28	105.35	13.42	86.21	12.10	113.88	14.75
18	14:00:00	106.10	13.99	92.80	14.23	93.27	14.28	104.92	13.43	87.64	12.10	114.16	14.79
18	15:00:00	111.19	14.03	94.47	14.24	94.65	14.27	Maintenance	Maintenance	88.46	12.11	115.11	14.77
18	16:00:00	102.46	13.96	93.80	14.24	94.35	14.27	105.57	13.47	88.52	12.12	Maintenance	Maintenance
18	17:00:00	96.85	13.88	93.74	14.24	96.37	14.28	101.52	13.40	88.22	12.12	Maintenance	Maintenance
18	18:00:00	93.56	13.87	96.04	14.25	98.07	14.28	104.45	13.47	88.17	12.14	Maintenance	Maintenance
18	19:00:00	92.97	13.87	95.85	14.25	97.93	14.29	Maintenance	Maintenance	87.84	12.10	Maintenance	Maintenance
18	20:00:00	92.08	13.87	92.93	14.24	97.59	14.29	Maintenance	Maintenance	86.56	12.10	Maintenance	Maintenance
18	21:00:00	91.86	13.87	94.53	14.24	96.70	14.29	Maintenance	Maintenance	88.47	12.11	Maintenance	Maintenance
18	22:00:00	90.35	14.03	91.70	14.34	99.10	14.30	Maintenance	Maintenance	88.96	12.14	Maintenance	Maintenance
18	23:00:00	72.08	14.87	64.71	15.09	87.13	14.59	85.32	13.67	77.38	12.63	95.28	15.20
19	0:00:00	72.02	14.88	64.96	15.03	67.35	15.06	78.62	13.78	70.85	12.92	80.47	15.53
19	1:00:00	73.60	14.86	65.01	14.99	66.14	15.15	78.67	13.72	69.13	12.95	79.42	15.51
19	2:00:00	73.51	14.87	63.09	15.06	66.28	15.11	78.06	13.71	69.74	13.10	79.48	15.52
19	3:00:00	75.05	14.89	61.18	15.02	68.13	15.07	78.68	13.72	69.23	13.03	80.89	15.51
19	4:00:00	76.60	14.90	63.91	15.01	68.53	15.01	77.27	13.73	68.53	12.99	78.58	15.49
19	5:00:00	77.07	14.90	64.00	15.05	68.38	15.03	78.39	13.74	68.30	13.04	79.67	15.51
19	6:00:00	77.00	14.83	64.23	15.07	68.40	15.06	80.32	13.62	70.15	12.98	85.49	15.53
19	7:00:00	78.08	14.85	63.26	15.14	67.96	15.11	79.60	13.67	69.64	13.01	87.00	15.52
19	8:00:00	77.65	14.83	62.14	15.12	96.22	14.27	79.01	13.70	69.91	13.01	87.43	15.53
19	9:00:00	78.08	14.78	62.10	15.10	97.69	14.27	78.25	13.74	77.80	12.59	86.64	15.56
19	10:00:00	79.35	14.75	62.60	15.04	96.93	14.27	103.63	12.97	90.35	12.21	87.07	15.56
19	11:00:00	79.49	14.76	64.23	14.94	98.29	14.27	Maintenance	Maintenance	90.56	12.15	85.44	15.59
19	12:00:00	79.25	14.72	63.01	14.95	96.17	14.27	Maintenance	Maintenance	90.46	12.14	85.50	15.55
19	13:00:00	107.76	14.04	91.86	14.23	92.76	14.27	Maintenance	Maintenance	90.83	12.22	84.41	15.54
19	14:00:00	105.07	14.00	94.16	14.22	92.73	14.27	Maintenance	Maintenance	90.66	12.12	82.87	15.53
19	15:00:00	106.02	14.01	94.22	14.22	90.82	14.24	Maintenance	Maintenance	90.13	12.14	83.94	15.55
19	16:00:00	105.59	14.01	92.59	14.21	91.21	14.25	105.63	13.10	89.51	12.20	84.46	15.55
19	17:00:00	105.24	14.01	95.91	14.24	91.63	14.25	105.25	13.10	90.97	12.24	88.97	15.55
19	18:00:00	104.15	14.00	96.46	14.24	90.09	14.26	102.98	13.10	90.61	12.20	116.09	14.83
19	19:00:00	108.91	14.03	95.25	14.22	91.07	14.26	104.23	13.12	88.76	12.21	114.19	14.75
19	20:00:00	109.28	14.04	93.98	14.22	90.23	14.26	104.35	13.14	90.59	12.28	114.13	14.79
19	21:00:00	103.76	14.00	94.05	14.22	91.05	14.26	104.86	13.15	88.74	12.22	116.29	14.83
19	22:00:00	99.87	14.03	88.63	14.32	92.05	14.27	104.50	13.17	89.47	12.27	115.34	14.80
19	23:00:00	72.50	14.85	64.49	14.90	79.36	14.60	79.94	13.76	76.66	12.78	82.74	15.59
20	0:00:00	72.41	14.85	65.93	14.76	61.21	15.12	78.50	13.85	68.18	13.01	82.87	15.56
20	1:00:00	72.67	14.84	65.52	14.81	62.75	15.05	77.05	13.87	68.57	13.05	82.02	15.49
20	2:00:00	71.10	14.84	64.61	14.87	63.14	15.02	77.36	13.88	68.90	13.06	82.51	15.47
20	3:00:00	72.20	14.82	63.95	15.03	63.28	15.02	77.17	13.86	69.36	13.03	81.58	15.55
20	4:00:00	72.17	14.79	61.88	15.06	63.91	15.03	76.11	13.90	70.02	13.02	81.35	15.51
20	5:00:00	74.26	14.79	63.00	15.09	63.00	15.05	76.16	13.94	68.91	12.97	80.75	15.51
20	6:00:00	73.58	14.83	63.11	15.09	62.19	15.09	76.00	13.95	70.34	13.02	80.65	15.57
20	7:00:00	75.45	14.79	61.95	15.09	62.29	15.11	77.26	13.88	70.07	13.03	80.75	15.51
20	8:00:00	76.63	14.77	61.94	15.04	62.46	15.10	78.92	13.92	70.14	13.05	111.85	14.75
20	9:00:00	76.73	14.72	63.58	15.04	64.12	15.08	82.19	13.91	78.14	12.62	111.20	14.74
20	10:00:00	77.98	14.68	63.77	15.03	66.83	15.08	Maintenance	Maintenance	89.69	12.23	110.19	14.74
20	11:00:00	77.34	14.67	63.00	15.01	65.77	15.08	Maintenance	Maintenance	89.80	12.18	113.10	14.74
20	12:00:00	73.53	14.72	64.68	15.01	67.70	15.08	Maintenance	Maintenance	89.59	12.15	111.58	14.72
20	13:00:00	93.72	13.93	64.85	15.02	64.49	15.08	Maintenance	Maintenance	87.87	12.19	113.17	14.71
20	14:00:00	94.38	13.90	64.48	15.06	62.27	15.06	Maintenance	Maintenance	86.50	12.15	82.52	13.39
20	15:00:00	96.75	13.91	63.85	15.07	65.75	15.05	Maintenance	Maintenance	89.04	12.17	112.03	14.27
20	16:00:00	100.45	13.97	63.76	15.04	65.66	15.06	Maintenance	Maintenance	90.87	12.19	Maintenance	Maintenance
20	17:00:00	102.02	13.98	74.82	14.61	64.28	15.11	Maintenance	Maintenance	89.34	12.19	116.98	14.88
20	18:00:00	101.11	13.98	93.46	14.24	84.78	14.30	Maintenance	Maintenance	89.21	12.20	112.45	14.87
20	19:00:00	104.23	14.00	95.94	14.25	90.96	14.28	Maintenance	Maintenance	89.59	12.23	115.19	14.91

วันที่	เวลา	TOPSPP (G-5019) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)
20	20:00:00	103.03	13.99	94.06	14.25	91.93	14.29	Maintenance	Maintenance	88.69	12.21	114.25	14.93
20	21:00:00	101.56	13.98	75.51	14.74	92.26	14.29	105.94	13.32	90.10	12.23	116.36	14.93
20	22:00:00	98.24	14.02	65.96	14.95	93.27	14.29	104.41	13.30	90.54	12.24	115.48	14.94
20	23:00:00	70.70	14.85	65.90	15.00	73.64	14.83	Maintenance	Maintenance	79.48	12.76	96.51	15.39
21	0:00:00	70.93	14.90	65.16	15.03	63.90	15.11	103.68	13.22	72.32	13.06	84.70	15.91
21	1:00:00	70.20	14.74	63.49	15.07	64.90	15.11	87.49	13.31	71.81	13.02	Maintenance	Maintenance
21	2:00:00	69.12	14.73	62.69	15.03	66.53	15.18	105.24	13.30	72.06	13.08	86.60	15.66
21	3:00:00	69.98	14.78	64.26	14.98	65.60	15.12	Maintenance	Maintenance	72.79	13.06	85.43	15.67
21	4:00:00	71.68	14.80	63.27	15.01	64.69	15.13	Maintenance	Maintenance	71.62	13.06	85.81	15.67
21	5:00:00	72.16	14.88	63.44	15.06	66.57	15.16	Maintenance	Maintenance	74.66	13.00	82.64	15.68
21	6:00:00	71.63	14.83	63.72	15.05	65.90	15.19	Maintenance	Maintenance	73.32	13.04	79.74	15.72
21	7:00:00	72.59	14.78	66.23	14.94	64.78	15.11	Maintenance	Maintenance	73.01	13.08	79.60	15.71
21	8:00:00	71.88	14.80	67.48	14.84	89.76	14.32	Maintenance	Maintenance	71.86	13.04	Maintenance	Maintenance
21	9:00:00	73.34	14.76	69.51	14.79	94.94	14.31	Maintenance	Maintenance	81.15	12.71	Maintenance	Maintenance
21	10:00:00	74.07	14.72	67.53	14.85	94.40	14.31	Maintenance	Maintenance	97.08	12.28	Maintenance	Maintenance
21	11:00:00	73.51	14.71	69.44	14.88	93.06	14.31	104.73	12.99	96.53	12.29	Maintenance	Maintenance
21	12:00:00	74.40	14.64	68.57	14.84	93.21	14.30	103.36	12.98	95.28	12.28	Maintenance	Maintenance
21	13:00:00	100.37	13.99	93.10	14.27	93.47	14.31	103.84	13.02	95.11	12.26	Maintenance	Maintenance
21	14:00:00	102.89	13.97	95.87	14.27	92.68	14.30	105.64	13.08	94.56	12.25	Maintenance	Maintenance
21	15:00:00	103.63	13.99	98.30	14.29	91.15	14.27	106.02	13.05	93.97	12.23	Maintenance	Maintenance
21	16:00:00	96.47	13.93	96.41	14.27	94.27	14.31	Maintenance	Maintenance	95.74	12.24	Maintenance	Maintenance
21	17:00:00	97.48	13.91	94.49	14.27	96.15	14.32	Maintenance	Maintenance	94.52	12.24	Maintenance	Maintenance
21	18:00:00	97.91	13.90	96.19	14.28	95.52	14.32	104.08	13.05	94.80	12.25	Maintenance	Maintenance
21	19:00:00	96.82	13.89	95.07	14.27	94.36	14.31	103.58	13.04	95.03	12.26	105.55	14.71
21	20:00:00	94.68	13.88	95.25	14.27	93.52	14.31	104.74	13.05	95.92	12.27	106.40	14.74
21	21:00:00	92.49	13.87	95.62	14.28	94.02	14.31	Maintenance	Maintenance	95.40	12.26	106.96	14.75
21	22:00:00	92.05	13.94	93.56	14.36	93.68	14.31	Maintenance	Maintenance	97.71	12.28	109.69	14.76
21	23:00:00	71.40	14.80	71.37	14.89	81.00	14.58	81.36	13.75	83.64	12.82	94.59	15.29
22	0:00:00	70.34	14.83	71.94	14.85	64.83	15.07	75.91	13.77	75.18	13.09	83.02	15.71
22	1:00:00	70.77	14.78	71.29	14.94	66.86	15.05	76.79	13.78	75.42	13.01	83.40	15.58
22	2:00:00	70.53	14.78	71.05	14.99	65.41	15.05	76.71	13.91	75.55	13.01	83.75	15.59
22	3:00:00	70.52	14.74	70.90	14.95	64.89	15.07	77.63	13.86	74.75	13.09	83.63	15.53
22	4:00:00	69.26	14.68	71.36	14.99	65.18	15.06	77.67	13.94	74.95	13.10	83.27	15.52
22	5:00:00	70.34	14.69	70.65	15.05	64.77	15.06	77.86	13.94	73.45	13.10	84.17	15.53
22	6:00:00	69.91	14.74	68.44	15.16	65.00	15.01	77.97	13.91	73.40	13.10	82.53	15.62
22	7:00:00	70.22	14.76	67.25	15.23	66.14	14.95	79.56	13.67	71.28	12.98	84.20	15.65
22	8:00:00	69.49	14.73	67.50	15.18	91.88	14.29	79.81	13.69	71.94	12.98	114.91	14.90
22	9:00:00	70.61	14.72	67.90	15.18	67.60	11.41	78.24	13.60	72.34	12.93	85.18	8.11
22	10:00:00	69.64	14.71	68.08	15.15	69.45	16.53	102.10	12.95	73.36	12.98	91.78	12.49
22	11:00:00	69.43	14.71	68.23	15.10	95.44	14.83	103.37	12.90	73.49	12.96	96.83	14.80
22	12:00:00	70.30	14.59	67.11	15.09	98.38	14.82	104.71	12.89	71.52	12.92	96.83	14.80
22	13:00:00	95.22	13.88	93.00	14.35	98.29	14.82	Maintenance	Maintenance	72.32	12.94	98.77	14.81
22	14:00:00	96.74	13.88	97.97	14.28	98.90	14.82	Maintenance	Maintenance	73.52	13.00	100.56	14.81
22	15:00:00	97.74	13.88	97.02	14.28	96.90	14.80	Maintenance	Maintenance	73.30	13.03	99.58	14.79
22	16:00:00	97.26	13.88	94.24	14.27	98.32	14.81	Maintenance	Maintenance	70.39	13.00	98.32	14.79
22	17:00:00	95.20	13.86	95.68	14.27	99.05	14.81	Maintenance	Maintenance	71.55	12.98	99.74	14.80
22	18:00:00	95.90	13.88	94.62	14.28	99.85	14.81	104.38	13.04	82.13	12.49	100.01	14.82
22	19:00:00	88.71	13.79	93.80	14.28	98.31	14.80	103.02	13.02	93.38	12.19	100.76	14.82
22	20:00:00	87.22	13.76	97.52	14.29	97.94	14.80	103.16	12.99	93.71	12.19	99.72	14.85
22	21:00:00	87.84	13.77	98.26	14.30	98.09	14.80	103.86	12.97	94.62	12.20	98.86	14.86
22	22:00:00	86.76	13.86	94.96	14.37	97.84	14.79	101.96	12.97	94.18	12.29	98.79	14.85
22	23:00:00	67.35	14.68	68.91	14.99	85.50	15.10	80.47	13.64	73.93	13.02	77.44	15.30
23	0:00:00	70.09	14.67	68.97	14.92	67.70	15.61	75.81	13.80	75.04	12.98	Maintenance	Maintenance
23	1:00:00	69.27	14.65	68.12	15.04	68.45	15.55	75.77	13.73	74.17	12.99	Maintenance	Maintenance
23	2:00:00	68.43	14.66	67.64	15.05	69.27	15.52	75.72	13.63	72.97	12.98	Maintenance	Maintenance
23	3:00:00	69.24	14.66	69.65	14.97	66.53	15.47	76.53	13.66	72.82	12.97	Maintenance	Maintenance
23	4:00:00	68.04	14.63	71.06	14.91	66.81	15.42	76.89	13.67	74.48	13.01	Maintenance	Maintenance
23	5:00:00	69.15	14.64	73.20	14.80	67.08	15.51	75.66	13.70	73.03	13.06	Maintenance	Maintenance
23	6:00:00	69.50	14.77	71.11	15.00	68.81	15.53	77.36	13.64	72.01	13.07	Maintenance	Maintenance
23	7:00:00	67.66	14.77	70.93	15.06	68.40	15.57	76.85	13.70	71.30	13.10	Maintenance	Maintenance
23	8:00:00	67.46	14.74	70.36	15.07	94.66	14.74	78.99	13.52	73.07	13.11	Maintenance	Maintenance
23	9:00:00	66.94	14.73	70.53	15.06	97.37	14.71	79.77	13.50	82.60	12.71	Maintenance	Maintenance
23	10:00:00	68.45	14.72	70.13	15.04	96.35	14.70	105.38	12.85	95.09	12.26	Maintenance	Maintenance
23	11:00:00	69.06	14.73	70.70	14.97	95.96	14.69	Maintenance	Maintenance	98.04	12.28	Maintenance	Maintenance
23	12:00:00	67.69	14.73	71.14	14.91	97.76	14.70	Maintenance	Maintenance	96.66	12.25	Maintenance	Maintenance
23	13:00:00	69.77	14.73	95.89	14.32	96.78	14.69	103.79	12.84	97.35	12.26	Maintenance	Maintenance
23	14:00:00	72.94	14.75	99.17	14.27	100.77	14.70	105.41	12.84	97.77	12.27	Maintenance	Maintenance
23	15:00:00	73.07	14.74	97.96	14.26	102.94	14.71	102.77	12.81	98.95	12.28	Maintenance	Maintenance



วันที่	เวลา	TOPSP (G-5019) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)
23	16:00:00	74.82	14.75	98.65	14.26	100.86	14.70	103.12	12.83	101.16	12.30	Maintenance	Maintenance
23	17:00:00	86.43	14.35	94.83	14.22	102.38	14.72	102.84	12.85	100.48	12.28	Maintenance	Maintenance
23	18:00:00	99.83	13.83	81.53	10.63	101.28	14.70	104.65	12.90	98.88	12.27	Maintenance	Maintenance
23	19:00:00	93.45	13.78	106.06	14.82	99.67	14.69	Maintenance	Maintenance	98.09	12.26	Maintenance	Maintenance
23	20:00:00	88.36	13.73	Maintenance	Maintenance	97.81	14.68	Maintenance	Maintenance	95.84	12.25	Maintenance	Maintenance
23	21:00:00	74.68	14.30	Maintenance	Maintenance	99.19	14.68	105.43	12.88	97.88	12.24	Maintenance	Maintenance
23	22:00:00	69.41	14.63	104.83	14.91	98.18	14.68	104.50	12.87	96.89	12.23	Maintenance	Maintenance
23	23:00:00	68.52	14.62	80.69	15.30	87.13	14.98	80.81	13.45	82.35	12.76	Maintenance	Maintenance
24	0:00:00	68.54	14.62	81.40	15.28	68.27	15.54	74.75	13.63	73.39	13.01	Maintenance	Maintenance
24	1:00:00	69.27	14.51	82.06	15.30	68.68	15.45	75.40	13.60	73.62	12.91	Maintenance	Maintenance
24	2:00:00	69.23	14.58	81.93	15.32	68.34	15.48	76.81	13.60	74.21	12.94	Maintenance	Maintenance
24	3:00:00	70.17	14.59	82.45	15.32	68.47	15.44	74.91	13.58	74.05	12.98	Maintenance	Maintenance
24	4:00:00	69.81	14.60	82.36	15.34	68.10	15.44	76.30	13.55	73.85	12.95	Maintenance	Maintenance
24	5:00:00	69.48	14.62	80.27	15.46	69.75	15.35	75.22	13.48	74.18	12.94	Maintenance	Maintenance
24	6:00:00	70.02	14.61	79.04	15.63	69.27	15.37	75.00	13.55	71.77	12.98	Maintenance	Maintenance
24	7:00:00	70.86	14.59	77.78	15.66	68.35	15.44	77.33	13.66	72.20	12.96	Maintenance	Maintenance
24	8:00:00	68.66	14.75	78.43	15.66	90.92	14.70	77.66	13.46	72.13	12.98	Maintenance	Maintenance
24	9:00:00	67.72	14.74	78.30	15.63	98.74	14.65	78.25	13.48	82.33	12.56	Maintenance	Maintenance
24	10:00:00	70.26	14.76	79.32	15.58	97.24	14.66	78.61	13.50	93.46	12.14	Maintenance	Maintenance
24	11:00:00	69.47	14.75	78.90	15.54	96.61	14.65	79.62	13.47	91.92	12.13	Maintenance	Maintenance
24	12:00:00	68.82	14.72	78.33	15.53	95.07	14.63	78.60	13.53	91.01	12.11	Maintenance	Maintenance
24	13:00:00	92.53	13.91	Maintenance	Maintenance	94.40	14.63	79.27	13.50	91.34	12.12	Maintenance	Maintenance
24	14:00:00	97.11	13.85	Maintenance	Maintenance	97.23	14.63	77.60	13.48	92.16	12.09	Maintenance	Maintenance
24	15:00:00	98.80	13.86	Maintenance	Maintenance	93.96	14.62	77.38	13.50	92.76	12.09	Maintenance	Maintenance
24	16:00:00	100.13	13.86	Maintenance	Maintenance	95.51	14.64	79.32	13.51	92.09	12.04	Maintenance	Maintenance
24	17:00:00	92.50	13.78	Maintenance	Maintenance	94.40	14.63	78.16	13.52	94.00	12.05	Maintenance	Maintenance
24	18:00:00	89.99	13.76	Maintenance	Maintenance	92.63	14.62	88.96	13.15	95.39	12.03	Maintenance	Maintenance
24	19:00:00	91.22	13.78	Maintenance	Maintenance	93.59	14.63	103.10	12.80	95.69	12.02	Maintenance	Maintenance
24	20:00:00	88.84	13.77	Maintenance	Maintenance	95.90	14.64	105.17	12.82	99.00	12.07	Maintenance	Maintenance
24	21:00:00	86.73	13.76	Maintenance	Maintenance	95.31	14.64	105.05	12.84	100.80	12.07	Maintenance	Maintenance
24	22:00:00	84.04	13.88	Maintenance	Maintenance	94.90	14.64	89.60	13.27	101.12	12.08	Maintenance	Maintenance
24	23:00:00	71.08	14.52	78.80	15.58	82.67	14.94	76.72	13.77	84.92	12.56	Maintenance	Maintenance
25	0:00:00	71.20	14.59	78.06	15.63	66.86	15.42	76.17	13.46	77.41	12.79	71.72	15.35
25	1:00:00	71.21	14.55	77.96	15.62	67.58	15.35	76.32	13.41	75.16	12.85	60.68	15.57
25	2:00:00	70.96	14.62	79.36	15.58	67.45	15.44	75.19	13.46	76.05	12.88	68.48	15.48
25	3:00:00	70.42	14.58	78.84	15.57	67.92	15.25	74.84	13.60	75.58	12.83	71.65	15.29
25	4:00:00	69.02	14.58	79.02	15.64	69.43	15.28	74.81	13.55	75.78	12.85	71.01	15.39
25	5:00:00	69.10	14.61	78.19	15.63	67.17	15.32	75.57	13.56	75.88	12.87	69.37	15.45
25	6:00:00	68.60	14.77	78.05	15.68	68.27	15.39	76.88	13.73	73.54	12.88	68.24	15.55
25	7:00:00	67.34	14.76	77.40	15.69	68.17	15.49	76.56	13.63	73.05	12.90	67.16	15.51
25	8:00:00	67.17	14.75	79.94	15.56	90.95	14.69	75.35	13.51	73.09	12.89	101.07	14.69
25	9:00:00	67.82	14.74	82.38	15.50	96.14	14.65	77.80	13.60	82.43	12.48	105.75	14.67
25	10:00:00	37.35	8.72	81.83	15.46	95.33	14.65	103.02	12.90	95.25	12.06	104.64	14.66
25	11:00:00	66.52	15.73	81.54	15.41	94.78	14.66	101.86	12.86	95.29	12.07	104.19	14.66
25	12:00:00	64.10	15.70	80.70	15.43	95.13	14.67	100.47	12.81	96.81	12.07	104.82	14.65
25	13:00:00	85.82	14.70	Maintenance	Maintenance	96.27	14.66	102.11	12.82	97.71	12.07	103.41	14.62
25	14:00:00	87.67	14.67	Maintenance	Maintenance	96.84	14.66	99.56	12.85	97.75	12.07	102.63	14.60
25	15:00:00	88.96	14.67	Maintenance	Maintenance	92.87	14.64	98.38	12.87	97.09	12.05	104.27	14.59
25	16:00:00	88.71	14.66	Maintenance	Maintenance	94.93	14.66	91.20	12.88	94.97	12.07	102.59	14.58
25	17:00:00	92.53	14.68	Maintenance	Maintenance	94.08	14.66	98.86	12.76	95.55	12.07	104.04	14.60
25	18:00:00	89.21	14.66	Maintenance	Maintenance	96.46	14.68	100.23	12.79	95.26	12.07	103.96	14.61
25	19:00:00	88.67	14.65	Maintenance	Maintenance	97.58	14.69	102.64	12.84	94.59	12.08	103.20	14.63
25	20:00:00	87.71	14.66	Maintenance	Maintenance	97.17	14.69	101.50	12.89	95.56	12.10	104.65	14.65
25	21:00:00	88.00	14.66	Maintenance	Maintenance	96.56	14.68	101.82	12.90	92.53	12.09	103.52	14.67
25	22:00:00	86.26	14.74	103.92	14.88	97.53	14.68	100.47	12.91	94.06	12.10	105.46	14.66
25	23:00:00	66.58	15.54	77.59	15.64	88.80	14.90	81.30	13.33	80.18	12.61	79.93	15.19
26	0:00:00	64.90	15.68	76.18	15.70	68.15	15.41	75.88	13.61	71.22	12.92	67.05	15.48
26	1:00:00	67.50	15.60	75.61	15.71	67.56	15.53	75.20	13.56	72.91	12.87	69.37	15.41
26	2:00:00	66.49	15.63	75.54	15.72	67.28	15.52	74.62	13.68	72.67	12.88	85.95	15.40
26	3:00:00	67.13	15.66	76.22	15.72	68.43	15.48	75.17	13.51	75.52	12.78	66.81	15.36
26	4:00:00	66.44	15.64	77.97	15.70	67.19	15.48	76.22	13.52	75.13	12.77	66.22	15.40
26	5:00:00	67.11	15.64	79.41	15.65	68.41	15.50	74.74	13.51	72.76	12.82	65.92	15.42
26	6:00:00	67.36	15.64	80.27	15.71	68.29	15.51	74.92	13.57	72.85	12.84	65.13	15.48
26	7:00:00	66.14	15.66	80.86	15.67	67.78	15.50	75.19	13.71	72.55	12.84	67.80	15.50
26	8:00:00	66.85	15.67	82.19	15.62	89.88	14.74	75.95	13.64	72.16	12.85	68.07	15.50
26	9:00:00	68.69	15.69	81.42	15.57	97.04	14.71	77.83	13.51	83.36	12.42	68.64	15.49
26	10:00:00	67.91	15.69	81.13	15.53	96.94	14.71	101.24	12.87	96.76	12.05	69.17	15.46
26	11:00:00	67.65	15.67	79.78	15.49	97.57	14.71	103.87	12.81	97.53	12.09	68.44	15.46

วันที่	เวลา	TOPSPP (G-5019) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)
26	12:00:00	68.08	15.66	79.39	15.42	96.41	14.71	101.63	12.76	98.83	12.12	66.85	15.48
26	13:00:00	87.66	14.68	Maintenance	Maintenance	97.93	14.70	101.17	12.76	97.82	12.08	65.42	15.49
26	14:00:00	89.76	14.66	Maintenance	Maintenance	95.52	14.70	102.25	12.81	96.65	12.07	66.59	15.48
26	15:00:00	90.50	14.66	Maintenance	Maintenance	82.06	14.65	100.84	12.91	96.07	12.06	65.39	15.46
26	16:00:00	90.01	14.65	Maintenance	Maintenance	89.26	14.66	102.63	12.85	95.31	12.06	65.74	15.47
26	17:00:00	89.33	14.65	Maintenance	Maintenance	89.15	14.67	102.38	12.89	94.92	12.10	66.18	15.49
26	18:00:00	89.39	14.64	Maintenance	Maintenance	95.36	14.70	99.39	12.75	95.05	12.11	97.79	14.64
26	19:00:00	89.30	14.64	Maintenance	Maintenance	99.77	14.72	99.68	12.79	95.48	12.09	104.42	14.66
26	20:00:00	88.84	14.63	Maintenance	Maintenance	97.80	14.70	101.66	12.85	94.02	12.12	99.24	14.64
26	21:00:00	89.99	14.64	Maintenance	Maintenance	96.56	14.69	101.41	12.94	94.70	12.10	101.88	14.69
26	22:00:00	88.54	14.79	104.69	14.89	95.39	14.69	101.77	12.83	96.39	12.12	95.57	14.82
26	23:00:00	67.22	15.52	78.61	15.40	87.10	14.93	82.70	13.39	80.16	12.57	66.06	15.57
27	0:00:00	66.39	15.51	79.84	15.40	67.79	15.49	73.50	13.60	72.94	12.86	67.69	15.54
27	1:00:00	66.10	15.52	83.17	15.32	68.11	15.42	74.21	13.64	73.51	12.85	68.72	15.43
27	2:00:00	65.39	15.54	82.44	15.30	67.44	15.41	74.79	13.59	72.61	12.87	66.85	15.51
27	3:00:00	66.52	15.55	83.58	15.30	68.97	15.40	74.43	13.53	72.93	12.84	65.70	15.53
27	4:00:00	66.92	15.51	80.05	15.43	69.55	15.39	74.00	13.57	73.54	12.86	66.01	15.53
27	5:00:00	67.72	15.51	77.94	15.59	70.51	15.41	75.19	13.56	73.50	12.85	66.28	15.55
27	6:00:00	67.01	15.67	77.48	15.62	69.20	15.46	74.79	13.62	72.16	12.95	67.04	15.57
27	7:00:00	65.80	15.67	78.03	15.65	69.15	15.48	74.43	13.65	73.58	12.84	65.97	15.57
27	8:00:00	65.31	15.65	79.31	15.54	66.85	15.47	75.62	13.54	73.58	12.50	101.01	14.75
27	9:00:00	64.91	15.64	79.38	15.45	67.55	15.45	76.28	13.54	66.15	11.36	106.09	14.73
27	10:00:00	64.27	15.62	78.25	15.41	68.98	15.43	99.69	12.85	93.44	14.55	101.97	14.72
27	11:00:00	64.88	15.61	77.78	15.38	68.77	15.53	102.01	12.80	97.37	14.64	107.02	14.71
27	12:00:00	64.67	15.60	76.71	15.38	66.71	15.48	99.47	12.77	98.83	14.62	104.64	14.70
27	13:00:00	85.05	14.60	77.14	15.32	66.61	15.49	102.81	12.80	97.85	14.60	105.58	14.69
27	14:00:00	86.88	14.59	75.65	15.30	67.79	15.41	103.16	12.80	99.41	14.60	106.90	14.67
27	15:00:00	87.17	14.59	75.13	15.34	64.83	15.39	101.34	12.77	95.90	14.58	108.45	14.66
27	16:00:00	91.78	14.60	72.78	15.37	65.19	15.39	100.93	12.76	99.00	14.61	107.40	14.65
27	17:00:00	88.88	14.58	83.58	15.03	62.17	15.41	100.70	12.78	100.32	14.61	108.29	14.66
27	18:00:00	87.58	14.56	97.48	14.70	87.75	14.64	100.88	12.77	96.84	14.63	109.10	14.67
27	19:00:00	86.51	14.55	98.88	14.71	91.54	14.66	100.29	12.77	97.33	14.63	105.23	14.66
27	20:00:00	85.49	14.55	97.77	14.71	92.42	14.67	98.38	12.78	97.07	14.64	105.24	14.67
27	21:00:00	86.53	14.54	81.70	15.13	92.74	14.67	97.94	12.79	97.21	14.64	105.67	14.68
27	22:00:00	84.13	14.63	68.74	15.56	90.82	14.67	99.73	12.81	96.35	14.63	104.39	14.68
27	23:00:00	65.63	15.41	68.46	15.52	73.75	15.10	81.30	13.39	73.12	15.17	80.05	15.18
28	0:00:00	63.67	15.39	68.33	15.49	64.07	15.46	74.26	13.51	62.09	15.47	68.55	15.46
28	1:00:00	65.18	15.46	69.18	15.44	63.69	15.38	72.70	13.59	63.19	15.37	66.36	15.49
28	2:00:00	65.17	15.35	68.60	15.48	64.54	15.39	73.01	13.61	62.58	15.37	65.57	15.52
28	3:00:00	64.24	15.25	69.34	15.52	64.23	15.40	73.40	13.54	60.60	15.41	66.75	15.48
28	4:00:00	64.25	15.30	67.20	15.50	64.72	15.40	74.21	13.60	60.80	15.43	65.43	15.50
28	5:00:00	66.00	15.31	67.54	15.52	65.30	15.41	73.61	13.54	60.53	15.49	66.40	15.52
28	6:00:00	65.16	15.54	67.75	15.52	64.33	15.43	73.16	13.64	60.49	15.43	66.11	15.57
28	7:00:00	63.59	15.56	65.98	15.58	64.41	15.50	74.06	13.60	61.41	15.43	67.47	15.52
28	8:00:00	63.88	15.55	66.02	15.59	86.08	14.73	73.70	13.58	61.47	15.41	97.88	14.76
28	9:00:00	63.00	15.55	68.77	15.57	94.06	14.69	73.74	13.64	73.89	15.02	104.70	14.71
28	10:00:00	63.67	15.55	65.46	15.58	94.97	14.71	93.92	12.82	91.29	14.60	106.01	14.72
28	11:00:00	64.49	15.54	63.48	15.52	93.12	14.68	95.23	12.71	90.19	14.58	108.35	14.72
28	12:00:00	66.05	15.53	64.92	15.52	93.02	14.68	93.92	12.70	92.21	14.59	107.93	14.70
28	13:00:00	86.26	14.56	91.27	14.76	93.58	14.68	95.40	12.71	92.24	14.59	104.82	14.65
28	14:00:00	86.58	14.52	96.63	14.70	93.18	14.68	95.42	12.72	92.52	14.60	104.44	14.63
28	15:00:00	88.61	14.55	97.62	14.69	97.65	14.71	95.85	12.72	91.36	14.61	108.27	14.62
28	16:00:00	94.31	14.61	102.03	14.71	96.24	14.69	94.59	12.70	88.84	14.56	109.46	14.61
28	17:00:00	94.86	14.61	102.56	14.71	95.68	14.67	96.05	12.70	89.51	14.57	108.50	14.61
28	18:00:00	95.01	14.61	98.97	14.71	93.39	14.64	95.46	12.71	90.19	14.57	105.58	14.61
28	19:00:00	84.70	14.50	100.85	14.70	94.02	14.64	98.40	12.74	98.57	14.63	103.70	14.61
28	20:00:00	85.12	14.51	101.17	14.69	92.87	14.63	100.67	12.77	94.75	14.62	102.22	14.61
28	21:00:00	84.94	14.51	101.49	14.68	92.15	14.62	Maintenance	Maintenance	100.29	14.64	100.34	14.61
28	22:00:00	83.84	14.62	97.69	14.73	92.93	14.62	Maintenance	Maintenance	96.96	14.64	102.52	14.63
28	23:00:00	66.02	15.44	71.34	15.29	82.36	14.84	90.25	13.37	75.94	15.11	78.92	15.19
29	0:00:00	65.06	15.35			63.75	15.40	83.56	13.36	61.19	15.38	65.66	15.46
29	1:00:00	65.79	15.28			64.15	15.29	83.37	13.29	61.82	15.44	66.49	15.43
29	2:00:00	66.62	15.25			65.22	15.25	81.67	13.32	61.26	15.40	66.95	15.42
29	3:00:00	64.25	15.41			65.75	15.25	78.86	13.28	61.11	15.37	66.82	15.39
29	4:00:00	65.93	15.43			66.20	15.27	77.61	13.31	62.45	15.38	66.86	15.35
29	5:00:00	64.68	15.44			65.52	15.29	78.67	13.29	60.87	15.40	67.08	15.35
29	6:00:00	63.91	15.43			65.92	15.32	79.05	13.35	59.67	15.44	66.50	15.42
29	7:00:00	64.27	15.42			64.44	15.34	78.39	13.38	59.70	15.45	68.40	15.40

วันที่	เวลา	TOPSPP (G-5019) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)	NO <sub>x</sub> (ppm)	O <sub>2</sub> (%)
29	8:00:00	63.99	15.47			88.45	14.60	77.84	13.39	61.54	15.42	99.55	14.64
29	9:00:00	64.72	15.30			93.48	14.56	78.83	13.45	63.78	15.43	103.31	14.62
29	10:00:00	66.76	15.34			92.45	14.56	103.78	13.00	64.05	15.39	104.11	14.62
29	11:00:00	65.56	15.34			94.35	14.57	103.97	12.74	61.71	15.38	103.43	14.61
29	12:00:00	65.32	15.34			96.97	14.57	104.64	12.74	62.09	15.41	106.75	14.61
29	13:00:00	87.39	14.61			98.73	14.58	104.88	12.71	63.43	15.39	108.06	14.59
29	14:00:00	96.59	14.62			98.29	14.57	102.13	12.67	62.77	15.39	108.86	14.58
29	15:00:00	94.63	14.61			99.18	14.58	100.58	12.64	62.70	15.39	83.20	10.07
29	16:00:00	95.85	14.62			96.65	14.56	100.95	12.64	62.21	15.41	87.93	15.69
29	17:00:00	100.72	14.65			97.88	14.56	99.19	12.62	61.85	15.40	107.80	14.72
29	18:00:00	98.47	14.64			98.10	14.56	98.86	12.62	83.72	14.74	108.67	14.74
29	19:00:00	95.71	14.63			97.42	14.55	100.24	12.64	95.00	14.59	107.03	14.75
29	20:00:00	91.82	14.59			96.51	14.55	98.60	12.66	95.23	14.60	105.69	14.76
29	21:00:00	86.20	14.53			96.01	14.55	98.04	12.69	92.11	14.58	102.53	14.75
29	22:00:00	84.29	14.61			95.19	14.55	100.05	12.75	84.86	14.64	103.41	14.78
29	23:00:00	62.35	15.53			86.70	14.81	80.08	13.37	60.08	15.49	84.12	15.26
30	0:00:00	64.00	15.36			67.02	15.40	74.65	13.50	62.99	15.47	70.79	15.55
30	1:00:00	65.21	15.34			66.47	15.32	75.26	13.46	64.72	15.38	69.06	15.59
30	2:00:00	65.00	15.37			65.56	15.30	75.37	13.49	64.68	15.42	70.15	15.57
30	3:00:00	65.64	15.40			64.69	15.29	76.81	13.56	63.24	15.46	70.25	15.53
30	4:00:00	64.32	15.34			66.32	15.26	75.82	13.52	64.13	15.29	69.87	15.51
30	5:00:00	65.33	15.34			66.02	15.27	75.03	13.52	63.89	15.30	71.05	15.52
30	6:00:00	64.70	15.37			65.54	15.30	72.59	13.52	63.82	15.32	72.15	15.58
30	7:00:00	63.17	15.47			66.50	15.21	73.99	13.58	63.11	15.33	73.96	15.57
30	8:00:00	63.20	15.35			89.51	14.54	75.88	13.60	62.68	15.33	101.96	14.82
30	9:00:00	65.55	15.34			93.29	14.54	76.76	13.27	74.69	14.92	106.41	14.78
30	10:00:00	65.36	15.35			94.56	14.55	96.95	12.65	93.68	14.49	107.93	14.79
30	11:00:00	65.58	15.31			94.90	14.55	99.58	12.67	92.86	14.48	108.25	14.79
30	12:00:00	70.16	15.33			95.36	14.56	98.48	12.68	93.42	14.47	107.50	14.77
30	13:00:00	69.72	15.42			95.65	14.55	97.22	12.66	92.59	14.44	107.83	14.75
30	14:00:00	71.19	15.45			95.56	14.54	97.14	12.65	93.72	14.44	108.06	14.74
30	15:00:00	74.22	15.49			94.81	14.52	97.52	12.69	94.04	14.43	106.52	14.72
30	16:00:00	69.79	15.46			97.22	14.54	95.91	12.70	92.73	14.41	104.75	14.70
30	17:00:00	74.30	15.05			94.53	14.54	95.94	12.78	95.77	14.42	103.51	14.69
30	18:00:00	89.34	14.56			96.67	14.54	97.56	12.82	96.60	14.43	104.07	14.70
30	19:00:00	91.04	14.58			94.41	14.54	96.28	12.75	97.21	14.45	100.60	14.70
30	20:00:00	89.11	14.56			93.35	14.53	96.85	12.73	97.07	14.48	101.55	14.74
30	21:00:00	73.11	15.17			95.09	14.55	95.97	12.76	96.09	14.46	104.08	14.76
30	22:00:00	65.34	15.59			96.53	14.56	96.97	12.78	95.52	14.46	105.75	14.78
30	23:00:00	63.83	15.58			84.23	14.82	77.82	13.40	73.14	14.90	86.27	15.34
31	0:00:00	64.52	15.59			68.39	15.28			59.39	15.17		
31	1:00:00	63.81	15.58			66.95	15.30			61.77	15.12		
31	2:00:00	63.71	15.58			66.46	15.38			62.95	15.16		
31	3:00:00	63.42	15.58			65.18	15.37			62.57	15.14		
31	4:00:00	62.61	15.56			64.73	15.39			62.98	15.15		
31	5:00:00	63.89	15.56			65.55	15.40			61.04	15.18		
31	6:00:00	63.31	15.56			65.99	15.35			58.62	15.27		
31	7:00:00	65.12	15.56			65.38	15.31			61.92	15.22		
31	8:00:00	65.75	15.56			88.90	14.56			62.56	15.17		
31	9:00:00	65.95	15.57			92.40	14.56			74.57	14.85		
31	10:00:00	65.75	15.56			92.37	14.58			91.89	14.43		
31	11:00:00	63.95	15.55			91.49	14.57			93.31	14.39		
31	12:00:00	64.44	15.54			92.55	14.57			95.56	14.36		
31	13:00:00	91.04	14.68			91.38	14.57			93.92	14.34		
31	14:00:00	97.17	14.64			91.72	14.58			92.11	14.33		
31	15:00:00	95.25	14.63			95.44	14.60			90.19	14.33		
31	16:00:00	94.62	14.63			98.08	14.62			89.93	14.34		
31	17:00:00	96.75	14.64			96.81	14.61			88.76	14.34		
31	18:00:00	96.26	14.64			98.71	14.62			87.72	14.34		
31	19:00:00	99.30	14.65			101.83	14.63			88.90	14.37		
31	20:00:00	91.69	14.58			102.08	14.64			91.59	14.40		
31	21:00:00	89.79	14.54			100.65	14.64			92.16	14.41		
31	22:00:00	83.05	14.72			99.10	14.61			90.98	14.40		
31	23:00:00	65.16	15.59			81.98	14.94			70.76	14.88		

วันที่	เวลา	TGTU'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		SO2 (ppm)	O2 (%)	SO2 (ppm)	O2 (%)	SO2 (ppm)	O2 (%)	SO2 (ppm)	O2 (%)	SO2 (ppm)	O2 (%)	SO2 (ppm)	O2 (%)
1	0:00:00	234.69	0.56	214.34	0.89	280.79	0.55	182.91	0.66	233.01	0.65	335.35	0.64
1	1:00:00	236.17	0.55	214.36	0.90	281.96	0.56	184.35	0.66	231.74	0.64	336.38	0.64
1	2:00:00	234.69	0.55	214.05	0.89	277.32	0.56	185.33	0.66	232.06	0.64	331.02	0.67
1	3:00:00	231.04	0.55	212.28	0.91	283.19	0.54	178.81	0.66	237.00	0.63	345.68	0.79
1	4:00:00	229.62	0.54	213.73	0.90	287.03	0.54	179.54	0.66	235.07	0.65	316.42	0.68
1	5:00:00	227.66	0.54	214.15	0.91	271.54	0.55	175.98	0.67	227.17	0.66	318.91	0.66
1	6:00:00	227.83	0.54	214.43	0.92	272.42	0.53	184.36	0.65	229.28	0.63	328.78	0.64
1	7:00:00	223.99	0.54	215.04	0.89	277.24	0.54	191.28	0.65	227.25	0.63	328.69	0.64
1	8:00:00	223.70	0.53	216.05	0.87	273.58	0.54	190.83	0.66	216.69	0.66	333.41	0.64
1	9:00:00	227.39	0.54	215.62	0.87	292.68	0.52	195.69	0.65	216.76	0.65	337.87	0.64
1	10:00:00	237.92	0.56	233.30	0.87	254.21	0.52	199.19	0.65	212.88	0.64	338.07	0.65
1	11:00:00	247.71	0.57	216.99	0.90	244.70	0.52	193.18	0.65	212.59	0.64	332.09	0.66
1	12:00:00	246.54	0.55	217.62	0.86	238.27	0.52	189.02	0.65	212.90	0.63	331.57	0.66
1	13:00:00	244.86	0.56	215.45	0.88	226.39	0.51	189.98	0.65	215.52	0.63	330.94	0.66
1	14:00:00	255.64	0.57	212.52	0.91	224.66	0.51	190.44	0.64	213.81	0.61	332.25	0.62
1	15:00:00	263.16	0.60	216.26	0.90	235.59	0.49	195.91	0.65	213.17	0.62	331.41	0.60
1	16:00:00	259.50	0.59	218.63	0.93	223.70	0.51	190.34	0.65	212.75	0.65	329.93	0.62
1	17:00:00	259.61	0.61	210.84	0.97	218.83	0.50	188.17	0.66	212.83	0.66	330.96	0.62
1	18:00:00	240.87	0.60	215.03	0.94	223.77	0.49	192.77	0.66	215.37	0.67	337.93	0.64
1	19:00:00	248.86	0.57	214.90	0.92	222.85	0.50	189.30	0.67	214.90	0.66	342.55	0.68
1	20:00:00	242.86	0.58	215.24	0.89	218.74	0.50	182.22	0.67	217.39	0.66	345.10	0.68
1	21:00:00	240.52	0.58	212.89	0.92	217.95	0.49	178.38	0.67	212.31	0.67	341.62	0.69
1	22:00:00	244.53	0.57	210.32	0.90	222.69	0.49	180.61	0.65	213.70	0.66	337.78	0.70
1	23:00:00	243.86	0.57	210.16	0.89	224.06	0.49	179.62	0.66	213.88	0.66	336.43	0.71
2	0:00:00	240.59	0.57	207.41	0.89	227.73	0.49	175.72	0.66	214.20	0.66	333.83	0.70
2	1:00:00	239.63	0.57	207.24	0.86	225.19	0.50	178.93	0.66	214.96	0.65	331.41	0.71
2	2:00:00	240.25	0.56	207.90	0.88	227.44	0.49	170.44	0.66	216.51	0.64	333.34	0.70
2	3:00:00	239.32	0.56	207.35	0.89	232.29	0.49	171.39	0.66	217.59	0.64	333.29	0.71
2	4:00:00	237.58	0.57	206.36	0.87	229.31	0.48	172.27	0.65	216.39	0.64	329.70	0.68
2	5:00:00	239.17	0.55	210.58	0.86	224.07	0.48	175.26	0.62	218.83	0.72	339.12	0.69
2	6:00:00	233.14	0.54	211.48	0.85	220.25	0.49	180.97	0.63	225.20	0.69	340.45	0.68
2	7:00:00	235.00	0.54	213.19	0.83	225.12	0.48	183.15	0.63	236.73	0.77	340.69	0.68
2	8:00:00	229.11	0.54	214.75	0.83	211.26	0.47	187.71	0.63	235.65	0.68	341.84	0.68
2	9:00:00	230.72	0.54	216.81	0.83	207.76	0.48	189.25	0.63	238.54	0.66	344.24	0.68
2	10:00:00	244.89	0.54	217.53	0.83	205.68	0.49	190.57	0.64	237.15	0.65	342.81	0.68
2	11:00:00	249.41	0.54	220.98	0.82	204.74	0.50	186.21	0.63	234.85	0.64	341.71	0.68
2	12:00:00	252.91	0.55	226.79	0.81	210.98	0.50	189.33	0.62	236.83	0.65	338.61	0.67
2	13:00:00	263.67	0.54	233.00	0.83	214.76	0.49	191.57	0.63	235.82	0.64	346.96	0.67
2	14:00:00	266.89	0.56	236.43	0.81	204.19	0.49	184.92	0.63	231.40	0.63	343.81	0.68
2	15:00:00	273.45	0.56	241.15	0.82	206.15	0.48	189.25	0.63	235.10	0.64	341.21	0.67
2	16:00:00	263.08	0.55	228.41	0.85	208.36	0.49	186.43	0.64	237.48	0.64	340.14	0.70
2	17:00:00	263.32	0.57	228.74	0.85	208.87	0.49	182.60	0.63	235.84	0.64	340.13	0.69
2	18:00:00	243.92	0.55	227.00	0.84	207.05	0.49	180.84	0.63	236.27	0.65	339.29	0.68
2	19:00:00	239.78	0.55	228.51	0.82	198.86	0.49	183.37	0.63	239.58	0.65	338.34	0.68
2	20:00:00	237.05	0.55	227.86	0.81	191.95	0.50	180.43	0.63	242.84	0.64	336.44	0.69
2	21:00:00	228.14	0.55	227.87	0.82	187.54	0.52	184.56	0.62	241.54	0.66	332.96	0.68
2	22:00:00	230.65	0.54	231.49	0.81	192.78	0.51	186.96	0.62	238.76	0.65	336.24	0.68
2	23:00:00	239.16	0.53	231.25	0.81	193.74	0.51	184.15	0.62	240.00	0.71	338.82	0.69
3	0:00:00	238.55	0.54	231.27	0.82	195.31	0.49	175.94	0.61	Shutdown	Shutdown	334.56	0.70
3	1:00:00	236.83	0.53	232.29	0.82	197.46	0.50	167.43	0.61	Shutdown	Shutdown	336.00	0.67
3	2:00:00	233.44	0.55	235.29	0.81	195.87	0.50	160.97	0.62	Shutdown	Shutdown	340.59	0.66
3	3:00:00	233.83	0.55	231.93	0.82	200.05	0.49	160.80	0.61	Shutdown	Shutdown	337.17	0.67
3	4:00:00	231.79	0.55	230.68	0.80	201.02	0.49	156.68	0.63	Shutdown	Shutdown	333.78	0.67
3	5:00:00	228.89	0.54	227.14	0.80	197.70	0.49	152.63	0.61	Shutdown	Shutdown	335.45	0.67
3	6:00:00	219.41	0.54	227.54	0.78	206.86	0.50	155.93	0.60	Shutdown	Shutdown	340.22	0.66
3	7:00:00	222.24	0.55	229.10	0.79	219.30	0.49	152.15	0.62	Shutdown	Shutdown	341.27	0.66
3	8:00:00	221.28	0.54	233.30	0.79	215.03	0.49	144.66	0.60	Shutdown	Shutdown	334.86	0.67
3	9:00:00	221.86	0.54	235.82	0.79	211.39	0.49	142.35	0.61	Shutdown	Shutdown	333.51	0.68
3	10:00:00	228.49	0.56	232.04	0.80	204.70	0.52	145.85	0.61	Shutdown	Shutdown	329.86	0.67
3	11:00:00	231.58	0.57	235.11	0.77	208.47	0.50	149.00	0.61	Shutdown	Shutdown	331.47	0.67
3	12:00:00	235.88	0.54	241.04	0.79	214.50	0.51	161.11	0.60	Shutdown	Shutdown	326.51	0.69
3	13:00:00	241.99	0.56	288.41	0.88	209.83	0.51	158.31	0.61	Shutdown	Shutdown	329.88	0.67
3	14:00:00	250.19	0.57	232.87	1.49	207.67	0.51	161.70	0.61	Shutdown	Shutdown	323.49	0.68
3	15:00:00	269.08	0.58	215.01	1.96	204.73	0.51	160.56	0.61	Shutdown	Shutdown	330.80	0.72
3	16:00:00	260.42	0.57	209.63	1.16	207.59	0.50	172.17	0.61	Shutdown	Shutdown	324.78	0.71
3	17:00:00	250.08	0.59	218.50	0.96	212.18	0.50	159.13	0.62	Shutdown	Shutdown	331.86	0.67
3	18:00:00	243.35	0.60	221.17	0.88	216.40	0.51	158.35	0.63	Shutdown	Shutdown	335.11	0.67
3	19:00:00	234.36	0.58	222.02	0.81	236.87	0.51	155.24	0.63	Shutdown	Shutdown	346.80	0.67
3	20:00:00	231.95	0.57	228.41	0.78	222.09	0.52	155.90	0.62	Shutdown	Shutdown	358.50	0.66
3	21:00:00	237.40	0.56	228.73	0.76	212.29	0.52	155.72	0.63	Shutdown	Shutdown	349.21	0.68
3	22:00:00	246.17	0.57	228.40	0.77	216.39	0.51	150.81	0.63	Shutdown	Shutdown	343.74	0.67
3	23:00:00	240.31	0.57	225.69	0.77	217.37	0.52	156.28	0.61	Shutdown	Shutdown	333.26	0.68
4	0:00:00	238.48	0.56	227.92	0.75	218.68	0.52	166.07	0.60	Shutdown	Shutdown	334.16	0.68
4	1:00:00	235.17	0.56	224.17	0.75	222.84	0.51	155.76	0.61	Shutdown	Shutdown	332.85	0.68
4	2:00:00	236.59	0.57	228.42	0.75	221.77	0.51	154.51	0.61	Shutdown	Shutdown	331.38	0.67
4	3:00:00	239.16	0.56	224.85	0.74	222.91	0.50	154.39	0.62	Shutdown	Shutdown	328.28	0.68
4	4:00:00	238.81	0.57	227.45	0.74	224.14	0.51	161.59	0.61	Shutdown	Shutdown	329.68	0.67

วันที่	เวลา	TGTU'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)
4	5:00:00	238.96	0.56	229.01	0.74	216.99	0.51	168.99	0.62	Shutdown	Shutdown	333.98	0.67
4	6:00:00	226.22	0.57	233.14	0.74	217.95	0.52	161.67	0.62	Shutdown	Shutdown	332.36	0.67
4	7:00:00	227.52	0.55	245.85	0.74	214.02	0.53	166.46	0.61	Shutdown	Shutdown	329.22	0.67
4	8:00:00	242.41	2.05	238.17	0.75	224.20	0.52	169.08	0.60	Shutdown	Shutdown	323.69	0.68
4	9:00:00	222.49	0.62	239.34	0.76	228.60	0.52	151.71	1.67	Shutdown	Shutdown	329.55	0.68
4	10:00:00	228.39	0.63	238.37	0.76	231.44	0.51	243.23	2.07	Shutdown	Shutdown	324.82	0.67
4	11:00:00	231.19	0.65	233.14	0.74	221.49	0.51	231.70	0.63	Shutdown	Shutdown	328.54	0.68
4	12:00:00	234.44	0.64	237.35	0.74	228.61	0.52	231.67	0.63	Shutdown	Shutdown	330.30	0.68
4	13:00:00	230.59	0.68	240.97	0.75	211.84	0.52	233.91	0.63	Shutdown	Shutdown	331.70	0.67
4	14:00:00	243.92	0.67	238.86	0.75	212.14	0.52	235.83	0.63	Shutdown	Shutdown	330.49	0.67
4	15:00:00	242.96	0.67	237.32	0.76	218.47	0.52	233.18	0.63	Shutdown	Shutdown	335.02	0.72
4	16:00:00	242.52	0.66	250.57	1.13	216.96	0.53	246.43	0.63	Shutdown	Shutdown	328.05	0.72
4	17:00:00	235.49	0.69	216.18	1.46	214.58	0.53	237.88	0.65	Shutdown	Shutdown	335.26	0.69
4	18:00:00	235.75	0.67	215.38	1.25	212.89	0.53	219.32	0.65	Shutdown	Shutdown	338.78	0.68
4	19:00:00	236.61	0.66	219.92	0.97	222.50	0.52	210.31	0.64	Shutdown	Shutdown	334.36	0.68
4	20:00:00	230.66	0.68	227.59	0.85	221.68	0.53	211.10	0.64	Shutdown	Shutdown	332.33	0.67
4	21:00:00	225.76	0.68	231.47	0.78	221.25	0.52	210.88	0.65	Shutdown	Shutdown	328.81	0.69
4	22:00:00	217.65	0.68	231.04	0.75	221.42	0.53	205.84	0.64	Shutdown	Shutdown	329.31	0.70
4	23:00:00	215.69	0.67	229.69	0.74	221.30	0.52	207.54	0.64	Shutdown	Shutdown	327.75	0.70
5	0:00:00	210.06	0.65	230.73	0.72	219.79	0.53	197.41	0.64	Shutdown	Shutdown	326.04	0.68
5	1:00:00	210.94	0.65	229.35	0.71	219.44	0.53	200.72	0.63	Shutdown	Shutdown	327.14	0.69
5	2:00:00	207.02	0.65	234.81	0.70	222.05	0.53	198.96	0.64	Shutdown	Shutdown	329.14	0.68
5	3:00:00	205.44	0.65	239.16	0.69	225.99	0.53	201.65	0.63	Shutdown	Shutdown	330.08	0.67
5	4:00:00	203.98	0.66	238.18	0.70	217.47	0.54	202.49	0.63	Shutdown	Shutdown	330.02	0.68
5	5:00:00	206.02	0.64	241.20	0.69	214.87	0.53	205.26	0.62	Shutdown	Shutdown	334.31	0.68
5	6:00:00	210.93	0.64	247.73	0.71	217.50	0.53	206.37	0.63	Shutdown	Shutdown	329.39	0.68
5	7:00:00	219.21	0.64	235.33	0.70	214.25	0.54	213.74	0.63	Shutdown	Shutdown	330.35	0.68
5	8:00:00	212.87	0.65	230.44	0.69	223.19	0.53	204.81	0.63	Shutdown	Shutdown	322.86	0.67
5	9:00:00	215.74	0.65	233.52	0.70	224.71	0.55	211.64	0.63	Shutdown	Shutdown	272.68	0.66
5	10:00:00	212.71	0.67	242.31	0.70	216.18	0.54	218.50	0.63	Shutdown	Shutdown	276.54	0.64
5	11:00:00	217.38	0.69	246.51	0.69	235.45	0.51	224.66	0.62	Shutdown	Shutdown	282.70	0.64
5	12:00:00	224.14	0.65	257.23	0.68	240.34	0.51	227.68	0.62	Shutdown	Shutdown	285.39	0.64
5	13:00:00	226.92	0.66	254.63	0.71	224.41	0.52	230.70	0.61	Shutdown	Shutdown	282.91	0.64
5	14:00:00	231.94	0.67	241.36	0.71	214.97	0.53	231.81	0.61	Shutdown	Shutdown	277.95	0.63
5	15:00:00	231.48	0.67	238.06	0.72	217.01	0.53	238.43	0.63	Shutdown	Shutdown	280.82	0.65
5	16:00:00	239.55	0.65	232.22	0.72	229.01	0.54	242.59	0.62	Shutdown	Shutdown	277.28	0.64
5	17:00:00	228.41	0.70	224.89	0.73	222.97	0.56	245.70	0.62	Shutdown	Shutdown	282.40	0.65
5	18:00:00	231.80	0.68	224.25	0.74	221.65	0.55	236.40	0.63	Shutdown	Shutdown	281.56	0.65
5	19:00:00	230.90	0.69	222.09	0.76	217.86	0.56	233.07	0.63	Shutdown	Shutdown	285.27	0.64
5	20:00:00	238.98	0.69	218.86	0.78	206.46	0.55	238.66	0.63	Shutdown	Shutdown	300.78	0.80
5	21:00:00	241.00	0.68	210.76	0.80	206.21	0.55	237.44	0.62	Shutdown	Shutdown	276.63	1.09
5	22:00:00	240.67	0.69	211.36	0.83	209.22	0.55	236.34	0.62	Shutdown	Shutdown	278.16	1.30
5	23:00:00	231.61	0.69	212.06	0.82	209.51	0.54	235.83	0.62	Shutdown	Shutdown	290.12	1.56
6	0:00:00	227.75	0.69	208.85	0.84	212.49	0.54	227.74	0.62	292.41	0.60	297.74	1.68
6	1:00:00	228.50	0.67	210.27	0.84	208.66	0.55	238.97	0.62	287.05	0.60	311.11	1.09
6	2:00:00	224.06	0.66	213.33	0.88	214.15	0.53	228.90	0.62	291.17	0.59	330.00	0.77
6	3:00:00	215.23	0.66	209.53	0.96	230.21	0.54	213.22	0.62	294.60	0.58	319.46	0.68
6	4:00:00	211.65	0.66	203.74	0.95	203.29	0.55	210.89	0.61	300.86	0.58	299.38	0.64
6	5:00:00	212.05	0.65	206.86	0.95	205.81	0.53	203.51	0.61	313.46	0.59	298.49	0.62
6	6:00:00	211.61	0.65	206.55	0.98	208.26	0.52	195.92	0.60	302.87	0.60	297.61	0.61
6	7:00:00	211.61	0.66	206.77	0.98	210.78	0.53	200.78	0.59	301.96	0.59	286.91	0.60
6	8:00:00	214.79	0.65	206.80	0.97	209.52	0.53	201.02	0.59	291.37	0.59	295.82	0.59
6	9:00:00	208.89	0.65	205.43	0.99	227.37	0.53	213.60	0.58	297.15	0.60	297.15	0.60
6	10:00:00	195.11	0.74	205.91	0.99	229.32	0.52	223.78	0.59	295.50	0.62	300.82	0.62
6	11:00:00	189.01	0.78	209.51	0.97	226.47	0.53	229.88	0.59	292.54	0.60	304.16	0.63
6	12:00:00	193.00	0.74	211.54	0.95	230.74	0.54	241.11	0.58	291.60	0.62	299.13	0.65
6	13:00:00	200.82	0.76	210.27	0.96	230.97	0.54	252.72	0.59	297.99	0.60	286.99	0.64
6	14:00:00	205.28	0.75	218.70	0.98	229.78	0.53	260.42	0.58	298.03	0.60	280.76	0.65
6	15:00:00	199.33	0.77	215.79	1.00	225.33	0.54	273.87	0.59	305.86	0.59	284.20	0.73
6	16:00:00	204.73	0.72	212.17	0.99	227.03	0.54	293.70	0.59	324.04	0.58	308.44	0.69
6	17:00:00	205.41	0.75	209.45	1.00	226.40	0.53	274.67	0.61	323.85	0.58	331.25	0.64
6	18:00:00	211.68	0.73	211.93	0.99	214.47	0.55	266.93	0.60	309.13	0.58	340.28	0.58
6	19:00:00	218.86	0.72	223.42	1.00	208.87	0.54	261.46	0.60	306.29	0.57	323.88	0.64
6	20:00:00	219.64	0.74	222.96	0.99	217.63	0.54	266.14	0.61	304.41	0.56	338.72	0.62
6	21:00:00	225.29	0.73	215.68	0.97	216.58	0.54	246.62	0.61	316.33	0.56	293.17	0.64
6	22:00:00	228.55	0.71	218.87	0.99	220.78	0.53	234.31	0.61	318.74	0.57	277.40	0.67
6	23:00:00	228.02	0.71	218.56	1.03	222.18	0.54	229.27	0.60	312.34	0.57	271.83	0.66
7	0:00:00	225.90	0.71	216.99	1.03	228.25	0.53	220.12	0.60	311.90	0.57	269.36	0.66
7	1:00:00	234.92	0.69	212.15	1.02	220.91	0.54	226.00	0.59	307.80	0.57	275.45	0.65
7	2:00:00	228.13	0.70	302.66	1.02	215.72	0.53	222.32	0.58	304.14	0.57	276.61	0.64
7	3:00:00	229.00	0.67	228.13	1.04	214.89	0.53	215.92	0.59	307.54	0.55	281.62	0.62
7	4:00:00	225.87	0.68	223.25	1.03	210.83	0.53	211.84	0.59	300.46	0.56	283.68	0.61
7	5:00:00	222.85	0.68	220.99	1.03	212.50	0.52	204.59	0.58	313.28	0.54	274.15	0.60
7	6:00:00	225.64	0.66	219.31	1.05	216.07	0.53	198.56	0.59	311.47	0.55	286.19	0.60
7	7:00:00	230.32	0.66	221.00	1.04	213.65	0.53	189.38	0.58	321.51	0.55	291.61	0.58
7	8:00:00	233.44	0.66	220.52	1.05	214.99	0.53	192.26	0.58	351.80	0.57	280.19	0.58

วันที่	เวลา	TGTU 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)
7	9:00:00	234.26	0.66	221.43	1.05	220.96	0.52	193.55	0.58	379.45	0.62	285.34	0.58
7	10:00:00	233.85	0.69	189.50	1.81	226.20	0.53	206.72	0.57	387.18	0.64	297.43	0.96
7	11:00:00	234.17	0.70	227.77	0.91	224.00	0.53	208.04	0.58	376.11	0.66	299.33	0.86
7	12:00:00	243.04	0.68	191.03	0.92	218.55	0.53	212.47	0.58	Maintenance	Maintenance	291.38	0.89
7	13:00:00	238.16	0.69	204.03	1.00	230.17	0.53	214.20	0.47	328.24	1.96	293.81	0.84
7	14:00:00	247.30	0.69	197.74	0.88	236.97	0.52	214.92	0.00	328.53	2.24	280.23	0.82
7	15:00:00	243.81	0.70	188.76	0.88	244.39	0.53	211.38	0.00	333.52	2.23	300.33	0.80
7	16:00:00	239.10	0.67	186.40	0.93	229.94	0.54	145.15	0.00	344.05	1.92	288.34	0.86
7	17:00:00	241.24	0.73	185.04	0.97	223.17	0.54	68.46	0.00	380.43	1.44	290.90	0.88
7	18:00:00	231.81	0.71	182.20	0.95	221.78	0.55	31.43	0.00	395.41	1.09	297.26	0.87
7	19:00:00	234.79	0.69	179.20	0.93	218.74	0.54	13.96	0.00	399.41	0.99	287.20	0.84
7	20:00:00	259.53	0.69	181.78	0.93	225.05	0.54	6.29	0.00	423.62	0.93	293.82	0.84
7	21:00:00	175.49	0.67	188.05	0.92	220.76	0.55	3.65	0.00	426.93	0.77	282.08	0.85
7	22:00:00	144.55	0.66	193.53	0.94	219.29	0.55	3.47	0.00	396.28	0.71	275.85	0.84
7	23:00:00	133.04	0.56	196.42	0.94	218.54	0.55	3.59	0.00	370.40	0.68	276.55	0.85
8	0:00:00	51.01	0.00	190.69	0.95	222.91	0.53	3.71	0.00	355.95	0.80	281.32	0.84
8	1:00:00	50.25	0.00	189.71	0.91	214.19	0.53	3.84	0.00	353.29	0.81	292.96	0.86
8	2:00:00	52.27	0.00	192.36	0.92	212.88	0.52	3.95	0.00	348.80	0.70	300.21	0.86
8	3:00:00	55.01	0.00	191.02	0.90	267.79	0.52	3.96	0.00	353.65	0.66	284.45	0.90
8	4:00:00	56.51	0.00	192.09	0.91	216.13	0.54	3.96	0.00	355.39	0.64	280.31	0.88
8	5:00:00	44.53	0.00	196.26	0.91	225.31	0.51	3.96	0.00	365.56	0.64	279.57	0.90
8	6:00:00	45.38	0.00	188.71	0.89	216.05	0.51	3.96	0.00	361.92	0.63	279.42	0.92
8	7:00:00	42.27	0.00	189.62	0.91	216.32	0.50	3.96	0.00	365.76	0.63	284.29	0.89
8	8:00:00	37.41	0.00	193.78	0.99	229.36	0.50	3.96	0.00	364.97	0.63	282.69	0.90
8	9:00:00	22.21	0.00	192.16	0.90	222.77	0.51	8.56	0.92	372.88	0.65	276.36	0.89
8	10:00:00	4.05	0.00	194.10	0.90	223.23	0.51	214.31	0.89	378.52	0.71	282.04	0.86
8	11:00:00	Maintenance	Maintenance	193.24	0.90	227.71	0.51	198.83	0.68	381.88	0.72	289.51	0.88
8	12:00:00	Maintenance	Maintenance	198.53	0.88	224.74	0.51	202.03	0.68	373.90	0.62	285.28	0.85
8	13:00:00	Maintenance	Maintenance	203.55	0.89	236.11	0.50	206.02	0.67	404.79	0.66	275.43	0.86
8	14:00:00	Maintenance	Maintenance	208.40	0.90	245.66	0.50	205.83	0.68	Maintenance	Maintenance	286.59	0.79
8	15:00:00	2.20	0.00	203.48	0.89	231.39	0.51	209.96	0.70	440.39	1.36	291.15	0.80
8	16:00:00	9.28	0.00	201.78	0.90	233.73	0.51	203.65	0.73	357.96	0.93	307.20	0.84
8	17:00:00	16.70	0.00	201.94	0.94	226.14	0.52	204.34	0.73	349.77	0.70	297.16	0.90
8	18:00:00	35.21	0.00	211.63	0.91	231.86	0.52	210.57	0.68	351.60	0.65	291.88	0.90
8	19:00:00	46.03	0.00	213.44	0.94	236.07	0.52	217.93	0.66	350.75	0.62	294.97	0.88
8	20:00:00	53.62	0.00	208.05	0.95	233.69	0.53	218.43	0.64	343.58	0.59	294.89	0.87
8	21:00:00	57.12	0.00	209.07	0.94	232.60	0.53	227.65	0.65	333.88	0.56	291.87	0.90
8	22:00:00	63.28	0.00	210.54	0.93	221.75	0.53	234.34	0.64	340.31	0.56	294.79	0.88
8	23:00:00	58.83	0.00	210.58	0.94	222.83	0.53	221.05	0.64	336.47	0.55	292.32	0.87
9	0:00:00	65.58	0.00	210.69	0.92	230.79	0.52	212.03	0.62	341.84	0.55	287.06	0.89
9	1:00:00	65.01	0.00	212.92	0.91	235.00	0.52	208.61	0.61	337.94	0.56	274.66	0.90
9	2:00:00	66.31	0.00	212.69	0.90	229.69	0.51	206.24	0.60	340.83	0.56	273.72	0.88
9	3:00:00	68.10	0.00	216.34	0.92	235.49	0.51	218.58	0.61	334.36	0.55	271.21	0.86
9	4:00:00	67.15	0.00	214.40	0.93	223.26	0.51	221.01	0.60	343.93	0.59	272.46	0.78
9	5:00:00	61.97	0.00	211.18	0.92	219.30	0.52	222.22	0.61	362.72	0.65	278.22	0.75
9	6:00:00	70.92	0.00	212.41	0.91	220.88	0.51	220.19	0.61	363.58	0.84	284.95	0.71
9	7:00:00	67.14	0.00	212.15	0.92	225.45	0.51	223.06	0.61	355.54	0.67	285.03	0.72
9	8:00:00	59.80	0.00	214.03	0.91	239.58	0.51	223.00	0.60	349.59	0.82	280.94	0.73
9	9:00:00	46.41	0.00	213.09	0.92	249.53	0.52	274.10	0.59	353.07	0.70	288.40	0.72
9	10:00:00	33.26	0.00	252.49	0.89	244.16	0.53	264.22	0.60	354.13	0.72	296.44	0.72
9	11:00:00	13.19	0.00	365.68	0.92	244.10	0.52	255.57	0.60	353.01	0.76	296.95	0.73
9	12:00:00	16.92	0.00	Maintenance	Maintenance	250.53	0.51	250.67	0.60	345.89	0.74	309.01	0.73
9	13:00:00	18.37	0.00	Maintenance	Maintenance	249.36	0.52	242.34	0.59	349.21	0.71	309.15	0.72
9	14:00:00	22.87	0.00	212.14	0.99	252.28	0.51	228.25	0.59	308.56	1.08	302.48	0.70
9	15:00:00	24.51	0.00	216.07	1.01	259.84	0.51	217.41	0.58	328.11	0.59	315.53	0.70
9	16:00:00	32.50	0.00	228.95	1.05	262.60	0.52	219.90	0.58	322.94	0.66	337.83	0.70
9	17:00:00	38.82	0.00	211.41	1.02	272.62	0.54	222.40	0.58	321.68	0.64	330.01	0.73
9	18:00:00	59.76	0.00	209.43	1.03	252.51	0.54	217.10	0.59	319.50	0.68	332.25	0.66
9	19:00:00	74.78	0.00	207.94	1.03	258.32	0.53	207.36	0.59	315.87	0.62	331.02	0.61
9	20:00:00	82.39	0.00	210.27	1.02	257.64	0.53	210.19	0.59	312.39	0.62	324.41	0.61
9	21:00:00	87.73	0.00	210.62	0.99	244.87	0.55	215.19	0.59	311.12	0.63	323.49	0.60
9	22:00:00	89.61	0.00	207.16	0.98	233.61	0.53	210.90	0.59	307.83	0.64	312.39	0.61
9	23:00:00	83.91	0.00	206.23	0.97	231.66	0.53	207.45	0.59	307.55	0.63	314.51	0.60
10	0:00:00	88.19	0.00	205.16	0.98	230.00	0.53	203.80	0.58	307.90	0.63	317.36	0.60
10	1:00:00	91.69	0.00	203.49	1.00	248.17	0.51	194.85	0.58	314.35	0.67	306.15	0.60
10	2:00:00	92.50	0.00	208.82	0.94	232.44	0.51	185.09	0.56	337.22	0.88	289.87	0.61
10	3:00:00	99.71	0.00	205.23	0.96	220.79	0.50	172.84	0.56	313.34	0.78	279.71	0.61
10	4:00:00	101.91	0.00	219.97	0.95	225.36	0.50	172.46	0.55	308.04	0.75	274.69	0.61
10	5:00:00	94.78	0.00	207.74	0.90	220.53	0.50	174.02	0.56	308.92	0.68	274.69	0.61
10	6:00:00	103.66	0.00	205.06	0.89	216.80	0.50	175.71	0.57	307.19	0.79	284.44	0.61
10	7:00:00	108.28	0.00	205.39	0.90	213.72	0.50	177.11	0.55	303.84	0.76	286.05	0.62
10	8:00:00	62.80	0.00	207.91	0.85	217.12	0.50	185.87	0.56	307.45	0.71	293.12	0.61
10	9:00:00	19.09	0.02	206.19	0.88	220.35	0.51	204.20	0.56	305.40	0.64	299.83	0.62
10	10:00:00	59.08	10.44	206.53	0.89	215.95	0.50	206.77	0.55	304.99	0.94	297.45	0.62
10	11:00:00	31.21	0.00	207.95	0.86	222.19	0.50	202.22	0.55	327.00	0.76	304.72	0.62
10	12:00:00	28.42	0.00	205.68	0.86	222.90	0.51	195.76	0.56	423.01	0.98	308.86	0.61

วันที่	เวลา	TGTU'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)
10	13:00:00	25.66	0.00	210.76	0.82	218.69	0.49	201.46	0.55	339.56	0.74	306.12	0.62
10	14:00:00	23.89	0.00	219.29	0.83	216.13	0.49	199.13	0.53	346.65	0.68	308.45	0.61
10	15:00:00	22.18	0.00	217.92	0.82	218.43	0.50	196.34	0.54	353.32	0.63	309.76	0.61
10	16:00:00	67.76	0.70	219.39	0.85	219.64	0.49	187.01	0.54	397.89	0.66	308.77	0.63
10	17:00:00	180.39	0.55	218.26	0.87	217.44	0.51	186.76	0.54	369.49	0.69	314.19	0.62
10	18:00:00	188.79	0.56	217.84	0.88	217.05	0.50	191.55	0.55	311.50	0.63	309.22	0.63
10	19:00:00	198.25	0.58	206.80	0.90	222.19	0.49	189.14	0.55	313.69	0.60	317.19	0.63
10	20:00:00	204.64	0.59	206.81	0.91	213.55	0.50	194.39	0.55	315.87	0.60	312.48	0.65
10	21:00:00	206.72	0.59	206.73	0.89	204.95	0.51	198.39	0.55	313.58	0.60	308.17	0.65
10	22:00:00	210.38	0.58	207.54	0.86	212.69	0.51	195.20	0.55	316.58	0.60	303.66	0.66
10	23:00:00	206.91	0.59	207.36	0.84	218.11	0.50	195.35	0.55	307.54	0.59	305.28	0.65
11	0:00:00	202.06	0.57	209.69	0.85	212.44	0.50	192.82	0.55	308.21	0.59	304.78	0.66
11	1:00:00	202.68	0.56	210.82	0.88	212.88	0.50	195.06	0.55	306.55	0.58	308.37	0.65
11	2:00:00	206.43	0.56	211.76	0.86	232.59	0.48	193.88	0.54	305.64	0.63	304.66	0.64
11	3:00:00	207.40	0.57	212.11	0.86	232.94	0.47	197.09	0.55	305.44	0.60	305.99	0.64
11	4:00:00	205.77	0.56	213.63	0.84	230.59	0.47	202.79	0.55	311.01	0.59	296.88	0.65
11	5:00:00	204.20	0.54	213.53	0.83	225.01	0.48	195.30	0.56	311.96	0.60	306.08	0.64
11	6:00:00	208.98	0.54	213.01	0.85	224.38	0.48	191.67	0.55	314.05	0.61	313.17	0.65
11	7:00:00	209.39	0.54	212.06	0.85	229.77	0.47	193.97	0.57	317.15	0.68	306.83	0.65
11	8:00:00	213.07	0.53	214.14	0.83	245.28	0.47	199.28	0.56	310.52	0.62	302.92	0.64
11	9:00:00	216.73	0.54	214.39	0.84	239.15	0.48	208.41	0.57	315.78	0.61	290.91	0.65
11	10:00:00	240.35	0.65	213.65	0.86	234.13	0.49	219.46	0.56	319.24	0.60	305.08	0.63
11	11:00:00	231.67	0.72	211.57	0.87	241.97	0.49	219.55	0.57	321.96	0.61	323.80	0.63
11	12:00:00	236.25	0.69	211.98	0.85	240.29	0.50	217.78	0.56	320.63	0.61	323.82	0.64
11	13:00:00	242.46	0.71	214.52	0.84	240.43	0.49	219.31	0.56	316.26	0.60	311.44	0.63
11	14:00:00	233.32	0.70	222.00	0.82	236.56	0.49	211.88	0.56	322.90	0.60	311.57	0.62
11	15:00:00	230.48	0.72	214.36	0.85	235.53	0.49	212.65	0.56	328.26	0.60	301.12	0.64
11	16:00:00	229.27	0.68	217.81	0.86	237.48	0.50	218.18	0.57	324.20	0.61	311.92	0.63
11	17:00:00	230.22	0.72	218.02	0.88	227.51	0.50	218.02	0.57	324.55	0.59	315.14	0.64
11	18:00:00	227.36	0.71	212.02	0.90	233.72	0.50	226.10	0.58	336.51	0.60	314.23	0.64
11	19:00:00	227.06	0.70	209.72	0.87	240.93	0.50	214.17	0.59	334.87	0.61	319.71	0.64
11	20:00:00	227.09	0.70	212.83	0.84	228.82	0.50	207.23	0.58	330.07	0.61	316.33	0.65
11	21:00:00	225.37	0.70	211.22	0.86	225.50	0.51	201.91	0.59	331.40	0.62	313.04	0.66
11	22:00:00	228.23	0.69	214.49	0.87	225.84	0.50	199.34	0.59	337.93	0.60	298.32	0.67
11	23:00:00	231.09	0.68	215.03	0.96	227.04	0.50	196.66	0.59	339.73	0.60	298.63	0.65
12	0:00:00	226.44	0.68	213.53	1.00	234.93	0.50	192.91	0.59	340.76	0.61	304.00	0.66
12	1:00:00	226.30	0.68	210.73	1.03	226.63	0.50	199.03	0.58	354.40	0.60	303.02	0.66
12	2:00:00	224.99	0.67	215.92	1.02	215.61	0.49	200.36	0.58	349.66	0.60	313.23	0.65
12	3:00:00	224.84	0.68	206.15	1.03	212.84	0.50	199.10	0.58	354.21	0.59	321.40	0.65
12	4:00:00	226.40	0.68	204.43	1.10	207.72	0.51	196.51	0.58	344.88	0.59	306.23	0.66
12	5:00:00	238.99	0.67	207.70	1.04	209.15	0.50	197.59	0.58	340.11	0.59	304.78	0.65
12	6:00:00	236.83	0.68	198.85	0.99	210.93	0.49	199.43	0.58	337.21	0.61	310.51	0.63
12	7:00:00	237.24	0.67	200.41	0.88	221.66	0.48	202.85	0.58	347.08	0.60	310.96	0.63
12	8:00:00	239.37	0.67	197.35	0.82	222.95	0.49	215.92	0.58	359.87	0.59	313.91	0.64
12	9:00:00	241.59	0.68	215.02	0.82	224.70	0.48	223.50	0.58	348.12	0.60	317.40	0.63
12	10:00:00	238.74	0.71	224.24	0.79	223.71	0.48	228.41	0.57	339.91	0.60	316.25	0.65
12	11:00:00	239.40	0.69	230.60	0.80	223.44	0.49	226.48	0.58	329.52	0.60	324.48	0.64
12	12:00:00	244.82	0.69	231.04	0.81	228.58	0.49	211.58	0.57	340.34	0.60	327.95	0.63
12	13:00:00	236.47	0.68	237.00	0.81	240.99	0.50	215.92	0.57	340.88	0.59	345.10	0.62
12	14:00:00	235.89	0.69	226.85	0.84	237.00	0.49	206.46	0.57	336.48	0.59	343.95	0.63
12	15:00:00	229.07	0.69	233.11	0.81	238.19	0.50	207.30	0.56	327.94	0.60	340.00	0.65
12	16:00:00	227.47	0.67	229.33	0.82	219.05	0.50	214.60	0.56	327.50	0.60	349.34	0.64
12	17:00:00	228.06	0.70	228.58	0.81	214.61	0.50	221.17	0.58	334.12	0.60	320.70	0.65
12	18:00:00	231.82	0.71	227.86	0.81	218.45	0.51	206.53	0.57	350.83	0.61	308.07	0.65
12	19:00:00	228.54	0.70	226.13	0.82	229.01	0.51	212.00	0.58	353.11	0.60	326.36	0.64
12	20:00:00	235.74	0.70	230.69	0.81	228.48	0.50	208.33	0.58	345.81	0.60	323.48	0.65
12	21:00:00	235.69	0.70	232.09	0.81	220.96	0.50	205.01	0.58	345.21	0.60	317.22	0.65
12	22:00:00	232.26	0.71	225.96	0.81	216.78	0.50	208.43	0.58	345.02	0.61	325.66	0.64
12	23:00:00	234.09	0.71	223.99	0.82	217.73	0.50	206.32	0.58	345.74	0.62	325.83	0.65
13	0:00:00	234.56	0.70	226.39	0.80	229.37	0.50	202.32	0.57	349.10	0.61	321.92	0.66
13	1:00:00	230.31	0.70	226.05	0.80	225.84	0.49	201.58	0.57	352.23	0.62	315.19	0.65
13	2:00:00	232.32	0.70	231.08	0.80	220.16	0.47	203.39	0.57	358.99	0.60	310.25	0.73
13	3:00:00	235.91	0.70	229.61	0.80	219.53	0.47	209.07	0.56	351.32	0.61	288.16	1.01
13	4:00:00	231.59	0.69	223.32	0.80	228.69	0.47	202.49	0.57	351.07	0.60	297.90	0.83
13	5:00:00	235.52	0.68	228.49	0.79	219.62	0.47	203.60	0.57	346.42	0.61	293.90	0.74
13	6:00:00	230.04	0.69	224.90	0.80	219.56	0.48	194.70	0.57	348.28	0.61	302.21	0.67
13	7:00:00	231.83	0.68	224.50	0.81	221.71	0.48	201.04	0.57	356.64	0.60	301.09	0.66
13	8:00:00	232.93	0.68	221.82	0.83	223.61	0.48	217.07	0.57	347.96	0.62	306.03	0.65
13	9:00:00	229.49	0.69	226.79	0.81	230.05	0.48	229.70	0.59	338.22	0.62	207.18	1.16
13	10:00:00	226.39	0.68	228.87	0.82	234.26	0.48	233.50	0.57	340.64	0.61	325.63	0.73
13	11:00:00	216.82	0.69	225.86	0.83	231.38	0.49	236.55	0.57	349.98	0.61	323.06	0.63
13	12:00:00	225.36	0.65	226.93	0.81	224.99	0.49	246.43	0.54	335.20	0.61	322.25	0.64
13	13:00:00	232.41	0.67	233.03	0.82	268.23	0.62	208.45	0.53	333.72	0.60	313.82	0.64
13	14:00:00	236.12	0.69	227.19	0.81	240.43	1.13	205.91	0.53	336.16	0.59	317.23	0.62
13	15:00:00	228.23	0.72	233.42	0.80	224.87	1.69	206.45	0.53	346.68	0.60	313.65	0.65
13	16:00:00	239.04	0.69	227.31	0.83	202.26	1.45	216.21	0.52	351.44	0.61	304.40	0.66

วันที่	เวลา	TGTU'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)
13	17:00:00	228.37	0.71	227.01	0.84	194.48	0.90	199.77	0.53	354.10	0.61	308.78	0.65
13	18:00:00	225.13	0.69	225.91	0.84	197.81	0.68	193.15	0.54	353.20	0.61	312.54	0.66
13	19:00:00	227.90	0.68	227.43	0.83	197.99	0.58	189.30	0.53	354.78	0.62	310.42	0.66
13	20:00:00	226.61	0.69	244.85	0.79	200.31	0.53	186.62	0.54	360.25	0.62	301.95	0.66
13	21:00:00	230.90	0.68	238.15	0.79	215.93	0.50	180.14	0.55	361.10	0.63	306.68	0.65
13	22:00:00	228.80	0.69	235.80	0.80	211.49	0.48	183.92	0.54	353.47	0.63	304.39	0.66
13	23:00:00	225.63	0.68	234.23	0.81	210.07	0.48	184.71	0.55	350.25	0.63	301.06	0.66
14	0:00:00	223.09	0.70	232.47	0.83	207.63	0.48	190.47	0.55	350.82	0.63	302.48	0.65
14	1:00:00	223.23	0.67	233.44	0.82	209.12	0.53	196.26	0.55	360.47	0.62	306.39	0.65
14	2:00:00	223.14	0.68	232.78	0.83	215.57	0.47	182.51	0.56	351.89	0.62	296.23	0.66
14	3:00:00	219.51	0.67	230.93	0.84	207.83	0.49	189.53	0.59	351.61	0.62	300.54	0.65
14	4:00:00	221.26	0.66	234.45	0.84	207.10	0.50	174.45	0.57	356.72	0.62	304.37	0.64
14	5:00:00	220.17	0.66	236.91	0.84	211.17	0.50	177.37	0.55	362.98	0.63	306.23	0.64
14	6:00:00	220.60	0.66	227.89	0.85	217.56	0.50	174.86	0.54	358.62	0.64	295.14	0.65
14	7:00:00	234.28	0.63	237.15	0.84	242.98	0.51	182.20	0.55	359.88	0.63	317.00	0.63
14	8:00:00	227.99	0.66	234.21	0.85	237.91	0.51	199.70	0.54	363.16	0.63	321.15	0.65
14	9:00:00	237.61	0.64	232.03	0.93	225.44	0.50	192.73	0.54	352.26	0.70	359.93	0.62
14	10:00:00	240.57	0.67	227.03	0.91	239.15	0.50	188.56	0.55	351.64	0.75	356.82	0.63
14	11:00:00	227.52	0.69	227.13	0.91	243.99	0.53	185.03	0.55	349.53	0.73	353.88	0.64
14	12:00:00	250.12	0.66	224.08	0.99	228.84	0.51	186.08	0.55	357.96	0.62	352.14	0.62
14	13:00:00	244.97	0.68	241.48	1.56	215.24	0.48	189.76	0.54	365.13	0.62	345.50	0.62
14	14:00:00	241.04	0.67	202.66	2.20	227.33	0.50	173.12	0.53	355.90	0.63	338.85	0.61
14	15:00:00	244.75	0.70	199.19	2.32	230.40	0.58	165.37	0.53	361.40	0.62	344.84	0.61
14	16:00:00	237.04	0.71	192.24	2.34	238.30	0.65	173.99	0.53	365.27	0.63	344.36	0.61
14	17:00:00	233.37	0.74	196.03	2.21	241.49	1.01	172.88	0.54	361.53	0.65	335.91	0.63
14	18:00:00	228.78	0.72	188.01	1.69	228.37	1.28	170.75	0.54	358.25	0.65	330.13	0.63
14	19:00:00	225.29	0.69	191.97	1.31	231.90	0.70	175.21	0.53	356.66	0.69	328.34	0.62
14	20:00:00	226.17	0.69	192.59	1.11	223.01	0.80	172.81	0.53	355.38	0.67	328.09	0.63
14	21:00:00	227.21	0.68	192.79	1.03	220.08	0.78	179.82	0.53	351.72	0.69	328.02	0.62
14	22:00:00	232.27	0.69	195.98	0.97	225.74	0.77	181.66	0.54	355.47	0.67	331.88	0.62
14	23:00:00	230.87	0.68	192.19	0.92	225.60	0.81	178.89	0.54	358.88	0.62	332.97	0.62
15	0:00:00	227.66	0.68	196.51	0.87	233.24	0.79	183.95	0.55	360.00	0.63	313.33	0.64
15	1:00:00	223.70	0.67	201.37	0.83	219.19	0.86	177.15	0.56	354.72	0.63	311.66	0.62
15	2:00:00	224.09	0.68	197.89	0.84	226.04	0.83	180.92	0.54	352.96	0.63	321.54	0.62
15	3:00:00	228.61	0.66	199.25	0.80	219.89	0.83	180.25	0.54	355.97	0.63	349.93	0.62
15	4:00:00	222.31	0.66	196.87	0.80	218.75	0.82	180.13	0.54	353.27	0.63	352.69	0.64
15	5:00:00	223.34	0.67	194.50	0.81	218.60	0.86	183.84	0.53	352.33	0.64	331.91	0.64
15	6:00:00	223.74	0.67	197.74	0.84	216.86	0.87	186.56	0.53	353.50	0.64	333.14	0.62
15	7:00:00	229.81	0.67	199.53	0.83	225.50	0.80	191.34	0.52	363.44	0.62	343.74	0.61
15	8:00:00	235.32	0.65	205.06	0.83	229.73	0.55	201.41	0.51	384.94	0.65	347.41	0.61
15	9:00:00	231.78	0.69	213.27	0.82	226.15	0.53	210.83	0.50	355.78	0.62	351.42	0.61
15	10:00:00	237.48	0.68	221.12	0.84	224.38	0.54	205.38	0.50	352.92	0.60	343.46	0.62
15	11:00:00	240.11	0.69	216.58	0.84	225.30	0.54	205.48	0.50	360.88	0.60	337.18	0.60
15	12:00:00	248.86	0.66	210.97	0.79	217.21	0.53	197.33	0.50	365.34	0.61	332.25	0.61
15	13:00:00	250.67	0.66	207.78	0.79	221.56	0.55	204.30	0.50	367.20	0.61	321.67	0.63
15	14:00:00	252.65	0.63	220.18	0.80	225.27	0.55	216.70	0.50	359.04	0.61	303.84	0.62
15	15:00:00	253.14	0.66	230.11	0.82	219.23	0.56	206.84	0.49	362.45	0.60	326.40	0.60
15	16:00:00	247.04	0.65	237.14	0.79	217.05	0.56	186.68	0.48	365.59	0.60	338.13	0.61
15	17:00:00	234.91	0.70	226.07	0.79	221.63	0.56	196.59	0.49	369.11	0.61	322.01	0.62
15	18:00:00	234.64	0.67	228.88	0.79	217.74	0.56	187.30	0.50	369.13	0.61	316.27	0.62
15	19:00:00	230.94	0.66	224.10	0.82	215.62	0.56	176.32	0.49	364.49	0.61	319.60	0.60
15	20:00:00	233.20	0.64	232.63	0.81	212.11	0.56	193.09	0.51	362.74	0.61	313.21	0.61
15	21:00:00	237.40	0.64	231.55	0.80	204.94	0.56	183.66	0.51	363.18	0.62	319.45	0.60
15	22:00:00	234.23	0.66	241.96	0.80	198.00	0.57	164.68	0.50	353.94	0.61	317.61	0.61
15	23:00:00	235.56	0.66	233.00	0.82	199.41	0.58	166.08	0.50	351.84	0.61	325.44	0.61
16	0:00:00	229.77	0.67	227.97	0.80	194.94	0.57	167.02	0.49	343.63	0.61	306.09	0.60
16	1:00:00	229.70	0.66	224.05	0.81	196.88	0.55	165.24	0.50	343.61	0.60	303.07	0.59
16	2:00:00	230.05	0.67	224.08	0.79	205.64	0.56	166.38	0.50	342.78	0.61	308.36	0.59
16	3:00:00	231.88	0.66	217.24	0.81	197.71	0.57	166.62	0.50	342.91	0.61	307.48	0.59
16	4:00:00	230.84	0.66	208.38	0.82	198.84	0.56	162.91	0.51	339.93	0.61	301.34	0.61
16	5:00:00	227.67	0.68	200.50	0.82	199.80	0.57	158.58	0.52	334.70	0.61	292.70	0.61
16	6:00:00	226.75	0.66	200.09	0.81	195.69	0.56	157.53	0.52	333.00	0.62	297.08	0.60
16	7:00:00	223.99	0.66	215.24	0.81	204.33	0.55	162.70	0.52	336.50	0.62	315.26	0.60
16	8:00:00	219.67	0.67	210.72	0.82	208.31	0.56	162.65	0.53	336.96	0.62	318.82	0.60
16	9:00:00	221.77	0.69	208.13	0.82	257.87	1.97	168.02	0.53	333.04	0.61	296.08	0.73
16	10:00:00	216.91	0.69	211.12	0.94	207.50	0.57	168.45	0.52	335.59	0.62	301.48	0.73
16	11:00:00	215.71	0.70	214.95	0.94	205.42	0.58	164.07	0.52	341.15	0.61	314.63	0.65
16	12:00:00	219.67	0.68	215.86	0.87	207.44	0.58	162.29	0.52	343.01	0.62	319.39	0.61
16	13:00:00	218.19	0.68	215.35	0.86	210.64	0.60	165.77	0.52	341.67	0.61	326.26	0.59
16	14:00:00	221.34	0.68	226.27	0.82	205.24	0.58	167.43	0.52	341.39	0.62	285.93	2.41
16	15:00:00	220.46	0.69	227.78	0.82	211.88	0.58	168.98	0.52	345.30	0.61	319.63	0.57
16	16:00:00	217.78	0.69	230.36	0.82	204.62	0.58	188.24	0.53	344.71	0.61	325.17	0.60
16	17:00:00	218.95	0.69	227.46	0.84	199.17	0.60	174.50	0.54	341.05	0.61	322.66	0.61
16	18:00:00	216.83	0.68	221.85	0.83	211.53	0.60	180.03	0.53	331.82	0.62	329.91	0.61
16	19:00:00	221.73	0.68	225.03	0.82	197.71	0.60	173.78	0.54	333.94	0.62	318.84	0.62
16	20:00:00	220.37	0.69	230.86	0.82	189.79	0.59	183.63	0.54	336.33	0.62	314.87	0.61



วันที่	เวลา	TGTU'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)
16	21:00:00	222.66	0.68	226.19	0.84	192.01	0.59	163.12	0.53	343.05	0.61	316.26	0.60
16	22:00:00	219.06	0.68	225.48	0.83	193.26	0.59	152.36	0.52	405.34	0.69	313.01	0.61
16	23:00:00	220.43	0.67	236.01	0.84	196.05	0.59	147.43	0.53	343.72	0.67	327.36	0.60
17	0:00:00	222.47	0.68	228.39	0.85	193.81	0.59	143.45	0.53	346.01	0.62	311.88	0.61
17	1:00:00	225.38	0.71	221.16	0.84	193.00	0.58	140.76	0.53	340.75	0.60	310.77	0.61
17	2:00:00	221.45	0.69	225.30	0.82	195.90	0.58	141.57	0.53	332.27	0.60	308.00	0.61
17	3:00:00	221.62	0.67	204.63	0.84	196.97	0.59	149.71	0.52	329.65	0.60	310.69	0.61
17	4:00:00	219.51	0.67	195.79	0.84	194.26	0.59	148.58	0.53	324.56	0.59	292.64	0.63
17	5:00:00	219.58	0.66	194.94	0.80	190.98	0.59	148.89	0.52	326.78	0.59	298.48	0.61
17	6:00:00	223.23	0.67	187.80	0.82	190.79	0.60	153.07	0.52	325.19	0.60	Maintenance	Maintenance
17	7:00:00	222.81	0.68	188.46	0.81	194.57	0.60	154.74	0.52	331.33	0.58	Maintenance	Maintenance
17	8:00:00	225.95	0.67	188.80	0.82	191.98	0.61	159.05	0.52	335.68	0.57	Maintenance	Maintenance
17	9:00:00	232.01	0.68	192.17	0.79	198.03	0.61	167.74	0.52	333.36	0.58	Maintenance	Maintenance
17	10:00:00	233.62	0.71	200.37	0.79	212.82	0.62	161.79	0.52	329.83	0.59	Maintenance	Maintenance
17	11:00:00	235.92	0.72	192.91	0.85	207.77	0.62	149.88	0.55	325.94	0.58	338.62	0.58
17	12:00:00	231.08	0.70	208.13	0.94	217.14	0.62	153.17	0.52	328.04	0.58	328.99	0.60
17	13:00:00	240.99	0.70	199.04	0.92	215.86	0.63	170.08	0.51	336.59	0.58	315.38	0.61
17	14:00:00	234.24	0.69	198.70	1.08	211.50	0.64	177.19	0.49	331.84	0.59	305.42	0.60
17	15:00:00	235.26	0.70	202.38	1.37	205.40	0.66	166.65	0.51	351.13	0.60	305.81	0.60
17	16:00:00	237.37	0.70	194.01	1.69	209.92	0.64	185.17	0.52	345.75	0.70	311.60	0.59
17	17:00:00	233.26	0.71	193.60	1.96	213.28	0.63	175.45	0.54	347.31	0.60	310.12	0.63
17	18:00:00	233.25	0.71	198.20	1.94	222.86	0.63	168.09	0.54	342.39	0.57	308.14	0.63
17	19:00:00	234.53	0.72	207.96	1.45	214.47	0.65	164.02	0.53	349.00	0.58	289.33	0.61
17	20:00:00	234.26	0.72	208.26	1.17	200.89	0.65	166.40	0.53	341.86	0.58	293.86	0.60
17	21:00:00	231.83	0.72	220.43	0.95	202.37	0.64	168.40	0.53	342.04	0.58	303.13	0.61
17	22:00:00	230.28	0.72	219.40	0.86	207.21	0.63	169.39	0.53	334.28	0.59	302.23	0.62
17	23:00:00	234.76	0.72	220.46	0.82	207.84	0.64	173.99	0.53	339.19	0.79	300.52	0.62
18	0:00:00	232.06	0.73	218.43	0.78	207.00	0.63	165.89	0.53	339.58	0.75	285.94	0.63
18	1:00:00	230.14	0.71	213.00	0.76	217.61	0.63	157.45	0.54	332.33	0.63	285.28	0.62
18	2:00:00	229.86	0.70	210.75	0.75	210.01	0.63	158.78	0.54	333.82	0.58	271.03	0.59
18	3:00:00	229.28	0.70	202.35	0.80	213.50	0.63	155.50	0.54	338.37	0.57	277.40	0.59
18	4:00:00	229.97	0.70	199.89	0.80	208.45	0.63	158.15	0.54	349.65	0.56	268.66	0.61
18	5:00:00	237.38	0.69	218.53	0.70	210.05	0.63	161.52	0.54	345.01	0.56	269.12	0.59
18	6:00:00	241.00	0.73	219.33	0.68	212.82	0.63	160.10	0.54	339.56	0.56	267.49	0.59
18	7:00:00	239.47	0.70	226.92	0.69	208.81	0.64	163.18	0.54	345.19	0.55	257.76	0.59
18	8:00:00	246.30	0.69	229.16	0.68	216.06	0.64	171.91	0.54	347.42	0.55	266.99	0.60
18	9:00:00	251.20	0.71	231.43	0.70	213.25	0.65	188.16	0.54	344.71	0.55	279.82	0.60
18	10:00:00	246.35	0.71	230.91	0.71	210.07	0.65	174.82	0.54	349.96	0.57	273.25	0.61
18	11:00:00	238.25	0.70	244.07	0.69	214.73	0.65	161.70	0.56	351.48	0.55	276.73	0.60
18	12:00:00	246.40	0.64	228.33	0.71	226.54	0.64	164.95	0.55	350.63	0.56	281.90	0.59
18	13:00:00	249.38	0.66	233.15	0.71	200.92	0.66	166.20	0.55	344.86	0.56	280.48	0.59
18	14:00:00	265.56	0.65	237.20	0.70	193.80	0.64	167.47	0.54	348.09	0.55	281.45	0.59
18	15:00:00	268.51	0.67	236.40	0.71	202.40	0.63	169.96	0.53	348.32	0.56	291.59	0.57
18	16:00:00	267.99	0.63	246.20	0.68	197.19	0.65	174.20	0.54	348.60	0.56	289.53	0.61
18	17:00:00	259.28	0.67	245.01	0.68	195.74	0.65	172.19	0.55	346.26	0.57	281.09	0.63
18	18:00:00	257.30	0.69	239.10	0.69	193.42	0.63	172.00	0.56	344.33	0.57	280.97	0.60
18	19:00:00	249.29	0.69	227.70	0.70	187.69	0.62	147.78	0.56	345.33	0.56	280.26	0.60
18	20:00:00	249.87	0.69	227.75	0.69	195.97	0.63	142.51	0.55	345.31	0.56	278.19	0.59
18	21:00:00	257.42	0.68	215.98	0.68	194.23	0.63	150.29	0.53	350.22	0.56	268.01	0.59
18	22:00:00	255.86	0.67	213.34	0.67	189.68	0.63	155.04	0.55	344.05	0.57	275.18	0.59
18	23:00:00	247.09	0.67	211.10	0.66	193.03	0.61	161.21	0.55	343.52	0.56	278.75	0.60
19	0:00:00	239.14	0.68	216.24	0.65	195.60	0.61	165.59	0.54	339.89	0.57	260.52	0.62
19	1:00:00	235.58	0.66	225.37	0.64	193.82	0.62	169.51	0.53	334.55	0.58	265.22	0.61
19	2:00:00	237.43	0.64	224.84	0.65	195.46	0.62	171.08	0.54	333.04	0.57	273.37	0.61
19	3:00:00	233.61	0.65	233.35	0.64	198.84	0.62	167.33	0.54	337.11	0.57	271.49	0.62
19	4:00:00	228.40	0.63	250.90	0.70	197.25	0.63	169.41	0.52	334.71	0.57	275.24	0.62
19	5:00:00	228.19	0.62	219.26	0.80	196.89	0.63	168.40	0.50	339.91	0.58	268.81	0.64
19	6:00:00	222.68	0.64	231.76	1.10	203.01	0.63	175.64	0.49	344.19	0.57	272.94	0.61
19	7:00:00	218.48	0.65	218.38	1.50	202.97	0.62	184.59	0.48	341.92	0.57	268.30	0.60
19	8:00:00	215.55	0.65	223.50	1.59	211.09	0.63	191.50	0.47	342.30	0.57	253.12	0.62
19	9:00:00	219.76	0.65	226.89	1.14	209.33	0.65	190.45	0.48	359.27	0.56	256.02	0.60
19	10:00:00	222.86	0.67	222.33	0.87	211.52	0.65	206.14	0.47	357.98	0.56	259.20	0.60
19	11:00:00	225.83	0.67	217.02	0.72	211.37	0.65	212.76	0.47	338.05	0.56	260.49	0.60
19	12:00:00	229.09	0.63	219.11	0.65	211.03	0.64	194.87	0.48	339.06	0.56	263.73	0.59
19	13:00:00	228.92	0.66	212.74	0.64	215.40	0.64	196.21	0.48	338.45	0.55	261.92	0.60
19	14:00:00	239.83	0.65	206.28	0.63	222.37	0.64	192.94	0.49	339.28	0.55	271.66	0.57
19	15:00:00	251.44	0.67	197.78	0.62	207.01	0.63	198.86	0.50	341.02	0.56	269.79	0.60
19	16:00:00	251.08	0.67	206.03	0.62	199.92	0.64	197.85	0.49	339.60	0.56	269.72	0.63
19	17:00:00	245.28	0.69	198.70	0.66	200.78	0.66	186.76	0.49	336.02	0.56	264.43	0.62
19	18:00:00	242.23	0.70	197.41	0.64	195.19	0.67	182.51	0.50	336.98	0.56	273.30	0.59
19	19:00:00	244.65	0.68	195.52	0.63	192.65	0.66	178.03	0.50	337.29	0.56	280.05	0.60
19	20:00:00	237.68	0.67	195.19	0.63	211.96	0.65	192.06	0.50	340.43	0.56	273.63	0.63
19	21:00:00	231.55	0.67	195.03	0.63	212.26	0.66	196.23	0.50	342.70	0.57	260.14	0.62
19	22:00:00	234.06	0.68	198.36	0.62	212.93	0.65	191.91	0.50	341.56	0.57	261.12	0.61
19	23:00:00	230.87	0.68	200.80	0.61	211.23	0.66	191.52	0.51	338.13	0.55	248.49	0.62
20	0:00:00	219.40	0.70	199.27	0.62	214.49	0.66	194.32	0.50	339.70	0.56	255.51	0.62

วันที่	เวลา	TGTU'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)
20	1:00:00	223.25	0.70	198.15	0.62	228.30	0.66	189.01	0.49	341.61	0.56	250.10	0.61
20	2:00:00	223.00	0.69	194.22	0.63	215.07	0.66	187.47	0.50	336.58	0.57	241.88	0.61
20	3:00:00	225.36	0.67	200.26	0.59	219.44	0.64	188.86	0.50	346.89	0.56	233.86	0.61
20	4:00:00	226.97	0.66	201.43	0.60	213.55	0.64	185.20	0.50	335.37	0.57	234.98	0.62
20	5:00:00	230.89	0.66	200.97	0.61	224.14	0.64	198.27	0.49	338.20	0.56	237.42	0.61
20	6:00:00	226.51	0.66	211.12	0.60	213.47	0.65	204.67	0.48	340.16	0.55	242.24	0.62
20	7:00:00	221.30	0.68	224.54	0.60	215.44	0.64	204.42	0.49	343.24	0.56	253.22	0.62
20	8:00:00	225.47	0.65	236.70	0.60	221.03	0.64	210.95	0.50	345.16	0.57	253.23	0.65
20	9:00:00	230.54	0.66	244.19	0.61	229.87	0.65	225.98	0.50	345.79	0.56	257.58	0.65
20	10:00:00	235.72	0.67	249.87	0.61	230.74	0.65	307.86	0.55	343.83	0.56	265.72	0.64
20	11:00:00	235.59	0.66	237.84	0.62	229.58	0.64	155.66	6.25	344.25	0.57	273.04	0.64
20	12:00:00	236.16	0.66	246.21	0.60	221.21	0.65	153.41	4.08	346.30	0.57	284.44	0.62
20	13:00:00	241.67	0.68	257.04	0.59	208.48	0.65	278.50	3.04	350.73	0.57	275.98	0.64
20	14:00:00	229.97	0.38	241.66	0.59	274.94	1.06	206.89	2.98	350.51	0.57	246.85	0.60
20	15:00:00	223.63	0.00	228.14	0.59	195.53	1.00	217.07	2.90	353.38	0.58	246.97	0.61
20	16:00:00	222.85	0.00	204.61	0.57	177.85	0.63	230.64	2.90	340.73	0.57	271.51	0.60
20	17:00:00	215.24	0.00	203.87	0.58	188.54	0.62	231.78	2.92	330.97	0.58	278.06	0.60
20	18:00:00	215.37	0.00	230.55	0.57	183.72	0.63	214.11	2.93	331.32	0.58	277.01	0.61
20	19:00:00	213.68	0.00	226.33	0.56	190.08	0.63	195.91	2.97	333.62	0.57	284.56	0.60
20	20:00:00	214.60	0.00	227.03	0.56	189.73	0.64	192.41	2.94	337.11	0.57	281.55	0.62
20	21:00:00	214.62	0.00	230.19	0.55	189.97	0.64	199.28	2.92	344.23	0.57	291.84	0.62
20	22:00:00	217.86	0.00	238.45	0.55	200.42	0.65	183.02	2.82	331.94	0.57	294.73	0.61
20	23:00:00	217.41	0.00	234.68	0.55	198.15	0.64	173.03	1.17	330.29	0.57	265.99	0.65
21	0:00:00	210.62	0.00	227.33	0.54	191.91	0.65	165.88	1.12	330.70	0.57	235.37	0.67
21	1:00:00	208.87	0.00	224.78	0.54	203.92	0.69	209.11	3.00	329.52	0.56	231.47	0.97
21	2:00:00	208.17	0.00	220.94	0.53	198.98	0.70	177.26	3.20	326.84	0.57	217.00	0.84
21	3:00:00	205.44	0.00	221.80	0.52	188.41	0.74	174.47	3.04	329.54	0.56	218.58	0.70
21	4:00:00	202.12	0.00	222.79	0.53	182.59	0.80	175.89	2.98	328.60	0.56	219.14	0.62
21	5:00:00	201.47	0.00	225.67	0.52	185.44	0.72	172.11	2.86	330.40	0.56	223.72	0.60
21	6:00:00	206.24	0.00	225.77	0.52	180.48	0.70	165.36	2.75	329.15	0.56	225.73	0.59
21	7:00:00	205.16	0.00	232.58	0.52	179.42	0.68	167.07	2.77	328.09	0.56	227.90	0.58
21	8:00:00	211.53	0.00	245.00	0.52	187.09	0.66	176.48	2.73	331.07	0.57	236.52	0.59
21	9:00:00	214.90	2.46	256.46	0.52	191.73	0.65	196.65	2.07	328.87	0.58	240.42	0.59
21	10:00:00	218.85	0.77	245.73	0.51	190.37	0.67	187.63	0.49	323.51	0.57	243.54	0.59
21	11:00:00	227.90	0.76	244.70	0.51	185.95	0.67	197.89	0.49	324.60	0.57	244.34	0.60
21	12:00:00	236.57	0.75	235.14	0.51	185.20	0.83	195.53	0.50	323.27	0.57	251.16	0.59
21	13:00:00	235.19	0.77	219.81	0.53	178.30	0.83	187.57	0.50	319.39	0.57	256.38	0.59
21	14:00:00	236.28	0.77	216.91	0.53	190.42	0.68	191.32	0.49	317.40	0.57	268.79	0.56
21	15:00:00	232.97	0.79	218.38	0.52	192.77	0.78	197.76	0.50	322.20	0.56	261.44	0.61
21	16:00:00	227.87	0.79	219.38	0.51	185.35	0.70	185.57	0.51	325.57	0.57	260.45	0.60
21	17:00:00	228.01	0.81	212.80	0.53	181.18	0.68	171.91	0.51	328.13	0.57	263.15	0.61
21	18:00:00	228.08	0.79	216.48	0.53	175.55	0.69	192.35	0.50	329.26	0.57	266.60	0.60
21	19:00:00	228.70	0.78	226.02	0.54	171.04	0.68	199.73	0.52	328.94	0.57	275.89	0.60
21	20:00:00	229.76	0.78	214.79	0.55	173.84	0.67	178.14	0.51	327.13	0.56	273.17	0.62
21	21:00:00	230.88	0.78	212.17	0.54	172.96	0.68	179.52	0.50	323.81	0.57	251.86	0.63
21	22:00:00	237.18	0.78	200.82	0.52	175.79	0.66	178.34	0.51	322.39	0.56	242.82	0.62
21	23:00:00	237.27	0.78	201.48	0.50	177.88	0.66	185.44	0.51	327.97	0.56	242.38	0.59
22	0:00:00	236.57	0.78	198.75	0.50	175.04	0.66	180.43	0.51	323.79	0.56	241.99	0.61
22	1:00:00	238.70	0.77	200.67	0.50	175.38	0.66	176.68	0.52	325.96	0.55	236.69	0.61
22	2:00:00	234.51	0.78	218.23	0.50	171.22	0.68	173.05	0.51	328.68	0.56	236.58	0.61
22	3:00:00	250.42	0.91	219.79	0.50	177.22	0.66	171.58	0.51	328.26	0.57	235.51	0.60
22	4:00:00	234.12	0.87	216.64	0.51	182.18	0.65	171.24	0.51	324.63	0.57	240.89	0.60
22	5:00:00	236.80	0.79	223.27	0.51	183.33	0.64	166.93	0.51	322.95	0.58	242.93	0.61
22	6:00:00	230.34	0.77	229.38	0.49	189.74	0.64	166.34	0.51	325.74	0.59	249.84	0.61
22	7:00:00	226.48	0.75	233.96	0.49	190.36	0.63	172.12	0.52	329.78	0.68	249.72	0.62
22	8:00:00	228.70	0.74	226.89	0.50	195.48	0.64	177.20	0.52	327.88	0.67	251.30	0.62
22	9:00:00	233.25	0.74	225.63	0.50	197.52	0.65	166.83	0.52	331.54	0.59	245.19	0.61
22	10:00:00	232.34	0.73	230.25	0.50	231.30	0.88	172.81	0.52	319.33	0.58	242.62	0.61
22	11:00:00	225.84	0.74	240.66	0.50	187.18	1.42	177.00	0.52	317.32	0.56	252.52	0.61
22	12:00:00	225.48	0.72	231.03	0.50	188.36	1.10	176.27	0.52	329.30	0.56	255.88	0.64
22	13:00:00	226.61	0.75	224.12	0.50	193.92	0.82	167.73	0.52	331.50	0.55	250.08	0.63
22	14:00:00	226.47	0.75	223.06	0.51	192.77	0.70	168.29	0.51	329.86	0.55	250.27	0.61
22	15:00:00	228.27	0.76	222.42	0.50	193.78	0.65	165.55	0.50	327.67	0.56	245.03	0.62
22	16:00:00	228.84	0.75	221.03	0.51	191.37	0.63	149.92	0.50	328.06	0.56	247.15	0.65
22	17:00:00	235.48	0.76	222.71	0.52	199.99	0.61	141.77	0.51	330.36	0.55	250.16	0.62
22	18:00:00	226.97	0.77	227.52	0.52	192.50	0.61	137.15	0.51	330.60	0.55	251.17	0.62
22	19:00:00	222.72	0.76	228.40	0.52	196.14	0.59	148.10	0.51	331.49	0.55	246.53	0.62
22	20:00:00	219.14	0.76	228.08	0.51	199.55	0.59	158.17	0.50	334.79	0.55	247.73	0.62
22	21:00:00	218.98	0.76	219.70	0.51	198.09	0.59	143.72	0.48	334.07	0.55	249.14	0.62
22	22:00:00	218.18	0.75	218.33	0.50	188.46	0.59	146.51	0.47	338.42	0.56	249.86	0.62
22	23:00:00	228.22	0.73	221.08	0.50	187.08	0.59	151.27	0.47	333.28	0.56	241.60	0.63
23	0:00:00	230.94	0.74	222.19	0.49	189.14	0.58	159.45	0.48	334.50	0.56	246.56	0.62
23	1:00:00	217.99	0.74	222.59	0.50	188.82	0.58	169.69	0.48	332.38	0.57	242.81	0.62
23	2:00:00	211.18	0.74	223.06	0.50	188.84	0.59	170.77	0.47	325.52	0.56	252.64	0.61
23	3:00:00	216.17	0.73	224.12	0.49	190.11	0.59	171.83	0.48	332.66	0.57	249.78	0.61
23	4:00:00	227.89	0.72	222.19	0.49	209.52	0.63	170.66	0.48	332.24	0.56	242.77	0.62

วันที่	เวลา	TGTU'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)
23	5:00:00	230.00	0.73	215.39	0.49	208.47	0.75	167.16	0.49	331.02	0.56	240.19	0.63
23	6:00:00	228.85	0.73	217.79	0.49	195.01	0.66	167.83	0.49	333.60	0.56	246.22	0.63
23	7:00:00	228.91	0.72	223.66	0.50	195.81	0.63	171.29	0.49	332.58	0.56	244.03	0.62
23	8:00:00	237.64	0.71	226.33	0.49	198.25	0.62	175.98	0.49	328.73	0.56	243.07	0.64
23	9:00:00	237.18	0.72	235.09	0.52	195.07	0.63	173.07	0.49	328.62	0.56	249.58	0.62
23	10:00:00	236.90	0.74	220.20	0.51	195.77	0.61	169.81	0.50	329.00	0.56	252.71	0.61
23	11:00:00	234.90	0.74	219.28	0.50	196.29	0.62	167.92	0.50	325.17	0.57	251.63	0.63
23	12:00:00	229.98	0.72	236.75	0.50	195.39	0.60	168.44	0.50	322.19	0.56	253.30	0.64
23	13:00:00	231.47	0.74	230.66	0.49	195.10	0.60	170.87	0.50	322.40	0.60	244.24	0.64
23	14:00:00	229.92	0.73	213.17	0.48	198.21	0.59	168.86	0.50	320.33	0.86	243.34	0.61
23	15:00:00	221.61	0.74	213.82	0.48	196.35	0.59	168.02	0.50	322.24	0.98	245.62	0.59
23	16:00:00	223.88	0.73	217.40	0.49	206.58	0.58	163.51	0.51	325.28	0.70	262.81	0.61
23	17:00:00	222.71	0.76	218.74	0.50	209.44	0.60	165.48	0.51	328.21	0.62	248.20	0.62
23	18:00:00	223.36	0.73	210.36	0.50	212.44	0.60	164.25	0.51	326.65	0.59	250.20	0.62
23	19:00:00	226.69	0.73	205.46	0.51	209.28	0.59	177.06	0.51	325.29	0.59	249.32	0.60
23	20:00:00	236.46	0.74	200.71	0.49	210.11	0.60	183.35	0.51	327.14	0.59	246.33	0.62
23	21:00:00	233.95	0.77	193.63	0.49	206.44	0.61	174.60	0.51	329.59	0.58	244.93	0.63
23	22:00:00	224.90	0.77	189.02	0.49	208.34	0.60	181.05	0.51	329.32	0.58	249.65	0.62
23	23:00:00	224.34	0.76	189.54	0.50	208.95	0.59	176.96	0.52	333.91	0.58	253.50	0.62
24	0:00:00	228.90	0.76	195.40	0.49	Shutdown	Shutdown	175.21	0.51	334.86	0.57	251.38	0.62
24	1:00:00	226.00	0.75	212.30	0.49	Shutdown	Shutdown	178.23	0.51	328.80	0.59	252.22	0.63
24	2:00:00	226.55	0.76	217.94	0.48	Shutdown	Shutdown	177.19	0.51	326.46	0.58	246.15	0.62
24	3:00:00	227.20	0.75	229.70	0.48	Shutdown	Shutdown	169.93	0.51	320.84	0.58	245.54	0.64
24	4:00:00	230.15	0.74	241.13	0.47	Shutdown	Shutdown	170.56	0.52	318.56	0.58	253.11	0.62
24	5:00:00	226.83	0.75	242.49	0.48	Shutdown	Shutdown	170.14	0.52	318.36	0.59	271.20	0.82
24	6:00:00	227.24	0.73	237.44	0.46	Shutdown	Shutdown	167.30	0.51	318.04	0.59	220.78	1.25
24	7:00:00	232.03	0.74	212.57	0.46	Shutdown	Shutdown	170.58	0.51	318.44	0.59	220.94	1.30
24	8:00:00	236.14	0.73	216.23	0.46	Shutdown	Shutdown	176.10	0.51	314.14	0.58	224.85	0.99
24	9:00:00	236.53	0.74	217.77	0.47	Shutdown	Shutdown	153.90	0.51	316.13	0.58	231.88	0.80
24	10:00:00	234.06	0.75	218.02	0.47	Shutdown	Shutdown	170.49	0.51	319.25	0.60	239.68	0.72
24	11:00:00	234.63	0.76	215.64	0.48	Shutdown	Shutdown	180.09	0.50	322.91	0.59	242.35	0.70
24	12:00:00	239.56	0.75	218.07	0.47	Shutdown	Shutdown	201.96	0.49	324.52	0.59	247.33	0.67
24	13:00:00	242.03	0.76	219.49	0.48	Shutdown	Shutdown	202.01	0.49	329.40	0.59	247.95	0.65
24	14:00:00	235.31	0.77	221.39	0.47	Shutdown	Shutdown	206.44	0.47	331.08	0.59	238.81	0.61
24	15:00:00	241.00	0.76	235.53	0.47	Shutdown	Shutdown	204.96	0.48	322.39	0.60	248.18	0.61
24	16:00:00	237.25	0.78	232.80	0.47	Shutdown	Shutdown	193.10	0.56	322.56	0.59	256.05	0.64
24	17:00:00	230.59	0.80	219.36	0.48	Shutdown	Shutdown	193.89	0.48	317.65	0.59	256.80	0.63
24	18:00:00	228.97	0.78	218.78	0.48	Shutdown	Shutdown	195.16	0.48	320.06	0.59	261.90	0.60
24	19:00:00	238.33	0.78	219.66	0.49	Shutdown	Shutdown	197.00	0.49	320.15	0.60	268.53	0.61
24	20:00:00	233.13	0.78	209.90	0.48	Shutdown	Shutdown	192.42	0.49	311.87	0.60	264.86	0.61
24	21:00:00	233.41	0.78	206.84	0.49	Shutdown	Shutdown	190.48	0.51	313.04	0.59	260.52	0.62
24	22:00:00	236.59	0.78	205.01	0.49	Shutdown	Shutdown	188.20	0.50	309.38	0.61	256.55	0.62
24	23:00:00	236.96	0.79	206.72	0.49	Shutdown	Shutdown	191.17	0.49	309.60	0.60	250.31	0.63
25	0:00:00	237.78	0.78	207.12	0.48	Shutdown	Shutdown	195.96	0.49	309.06	0.60	307.23	0.85
25	1:00:00	234.44	0.76	205.21	0.48	Shutdown	Shutdown	191.49	0.51	310.27	0.61	244.76	1.01
25	2:00:00	233.66	0.76	203.93	0.49	Shutdown	Shutdown	188.79	0.51	307.96	0.60	234.95	0.87
25	3:00:00	229.36	0.76	221.34	0.48	Shutdown	Shutdown	193.34	0.51	311.38	0.60	225.75	0.77
25	4:00:00	231.73	0.77	214.30	0.48	Shutdown	Shutdown	195.29	0.51	311.69	0.60	231.43	0.69
25	5:00:00	232.43	0.76	213.50	0.49	Shutdown	Shutdown	188.36	0.51	312.33	0.60	233.73	0.68
25	6:00:00	231.35	0.76	216.21	0.50	Shutdown	Shutdown	182.64	0.50	308.21	0.60	230.81	0.67
25	7:00:00	234.82	0.76	216.92	0.50	Shutdown	Shutdown	189.25	0.50	316.86	0.60	226.53	0.66
25	8:00:00	240.09	0.77	212.95	0.51	Shutdown	Shutdown	200.02	0.50	320.33	0.59	230.94	0.66
25	9:00:00	240.59	0.78	209.70	0.52	Shutdown	Shutdown	194.57	0.50	313.73	0.61	242.57	0.64
25	10:00:00	246.80	0.78	220.07	0.52	Shutdown	Shutdown	176.99	0.50	313.37	0.60	240.88	0.64
25	11:00:00	249.33	0.78	222.71	0.52	Shutdown	Shutdown	220.43	0.50	310.39	0.59	241.01	0.64
25	12:00:00	261.85	0.78	218.73	0.52	Shutdown	Shutdown	388.62	0.54	312.21	0.60	246.51	0.63
25	13:00:00	255.27	0.79	221.41	0.54	Shutdown	Shutdown	172.42	0.50	314.43	0.60	254.11	0.63
25	14:00:00	250.96	0.78	231.04	0.53	Shutdown	Shutdown	142.68	0.48	317.46	0.58	256.21	0.64
25	15:00:00	243.81	0.79	235.16	0.54	Shutdown	Shutdown	159.68	0.49	318.93	0.59	260.06	0.62
25	16:00:00	236.06	0.79	241.30	0.56	Shutdown	Shutdown	181.96	0.52	319.55	0.60	264.00	0.64
25	17:00:00	237.25	0.81	218.72	0.57	Shutdown	Shutdown	199.15	0.50	325.45	0.61	260.41	0.66
25	18:00:00	235.71	0.80	215.66	0.57	Shutdown	Shutdown	203.63	0.51	340.38	0.61	260.54	0.65
25	19:00:00	239.91	0.79	210.39	0.56	Shutdown	Shutdown	194.44	0.51	339.52	0.61	256.71	0.65
25	20:00:00	241.53	0.79	201.89	0.57	Shutdown	Shutdown	178.80	0.54	340.18	0.62	258.14	0.64
25	21:00:00	242.31	0.79	201.84	0.56	Shutdown	Shutdown	170.16	0.57	345.46	0.62	258.65	0.66
25	22:00:00	238.82	0.78	215.97	0.56	Shutdown	Shutdown	166.52	0.57	343.15	0.63	246.75	0.68
25	23:00:00	240.43	0.79	219.96	0.55	Shutdown	Shutdown	177.36	0.52	336.73	0.63	249.82	0.67
26	0:00:00	238.71	0.79	224.60	0.55	Shutdown	Shutdown	174.44	0.51	330.08	0.63	279.58	0.72
26	1:00:00	237.76	0.79	217.75	0.56	Shutdown	Shutdown	306.98	0.58	326.88	0.64	263.41	0.65
26	2:00:00	237.47	0.78	214.63	0.55	Shutdown	Shutdown	178.32	0.56	319.71	0.64	249.09	0.65
26	3:00:00	241.48	0.78	205.54	0.54	Shutdown	Shutdown	173.50	0.57	313.53	0.65	244.83	0.68
26	4:00:00	237.83	0.78	204.45	0.53	Shutdown	Shutdown	164.52	0.58	313.70	0.65	246.59	0.68
26	5:00:00	239.36	0.78	209.35	0.53	Shutdown	Shutdown	158.71	0.58	308.84	0.65	247.89	0.66
26	6:00:00	243.00	0.77	197.00	0.53	Shutdown	Shutdown	158.13	0.58	314.10	0.65	264.75	0.66
26	7:00:00	245.69	0.77	197.66	0.54	Shutdown	Shutdown	159.19	0.58	309.90	0.65	254.54	0.67
26	8:00:00	246.93	0.78	201.24	0.54	Shutdown	Shutdown	175.56	0.59	310.84	0.65	252.49	0.68

วันที่	เวลา	TGTU 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		SO2 (ppm)	O2 (%)	SO2 (ppm)	O2 (%)	SO2 (ppm)	O2 (%)	SO2 (ppm)	O2 (%)	SO2 (ppm)	O2 (%)	SO2 (ppm)	O2 (%)
26	9:00:00	255.73	0.78	201.01	0.54	Shutdown	Shutdown	187.31	0.60	314.37	0.65	264.04	0.65
26	10:00:00	258.65	0.77	219.33	0.55	Shutdown	Shutdown	184.50	0.59	315.38	0.65	270.95	0.65
26	11:00:00	258.67	0.78	235.77	0.55	Shutdown	Shutdown	174.48	0.58	315.60	0.66	268.72	0.67
26	12:00:00	256.45	0.79	235.09	0.56	Shutdown	Shutdown	182.05	0.58	315.57	0.64	268.33	0.68
26	13:00:00	257.71	0.78	229.28	0.58	Shutdown	Shutdown	184.82	0.58	315.20	0.64	262.27	0.67
26	14:00:00	267.15	0.78	230.02	0.56	Shutdown	Shutdown	189.49	0.58	317.69	0.64	259.59	0.68
26	15:00:00	263.88	0.79	218.63	0.56	Shutdown	Shutdown	204.15	0.59	317.33	0.65	260.41	0.67
26	16:00:00	261.44	0.78	211.39	0.58	Shutdown	Shutdown	222.49	0.60	324.02	0.67	265.09	0.68
26	17:00:00	253.46	0.80	226.49	0.58	Shutdown	Shutdown	215.44	0.59	324.39	0.66	254.56	0.68
26	18:00:00	254.36	0.79	221.65	0.57	Shutdown	Shutdown	216.06	0.59	321.65	0.65	251.78	0.68
26	19:00:00	258.03	0.79	217.02	0.58	Shutdown	Shutdown	212.49	0.60	321.75	0.64	264.65	0.71
26	20:00:00	262.74	0.78	225.67	0.61	Shutdown	Shutdown	210.90	0.59	323.35	0.65	267.27	0.66
26	21:00:00	261.42	0.79	201.13	0.60	Shutdown	Shutdown	218.02	0.59	328.73	0.65	269.69	0.67
26	22:00:00	261.73	0.78	225.59	0.55	Shutdown	Shutdown	206.03	0.60	321.04	0.65	290.49	0.66
26	23:00:00	252.48	0.80	228.09	0.53	Shutdown	Shutdown	215.02	0.60	321.79	0.65	274.90	0.68
27	0:00:00	252.63	0.77	213.66	0.55	Shutdown	Shutdown	224.74	0.59	323.00	0.65	267.69	0.69
27	1:00:00	257.78	0.77	211.55	0.55	Shutdown	Shutdown	251.38	0.60	317.27	0.65	262.04	0.69
27	2:00:00	251.91	0.79	204.76	0.56	Shutdown	Shutdown	264.31	0.61	318.00	0.63	274.59	0.67
27	3:00:00	244.88	0.78	207.90	0.55	Shutdown	Shutdown	256.22	0.60	316.82	0.64	269.53	0.69
27	4:00:00	244.88	0.76	211.33	0.55	Shutdown	Shutdown	248.35	0.61	314.91	0.64	273.41	0.68
27	5:00:00	245.80	0.75	213.64	0.56	Shutdown	Shutdown	257.30	0.60	320.00	0.64	268.64	0.68
27	6:00:00	231.67	0.76	198.71	0.55	Shutdown	Shutdown	260.13	0.60	320.74	0.63	266.16	0.68
27	7:00:00	237.16	0.74	194.94	0.55	Shutdown	Shutdown	273.36	0.61	320.71	0.65	266.94	0.69
27	8:00:00	237.57	0.75	204.64	0.55	Shutdown	Shutdown	284.53	0.60	318.65	0.66	271.34	0.67
27	9:00:00	240.18	0.76	218.79	0.55	Shutdown	Shutdown	265.93	0.60	325.11	0.64	285.07	0.67
27	10:00:00	236.81	0.75	232.05	0.56	Shutdown	Shutdown	247.92	0.62	318.49	0.65	279.14	0.80
27	11:00:00	232.93	0.76	243.72	0.56	Shutdown	Shutdown	243.32	0.62	318.16	0.65	266.21	1.20
27	12:00:00	232.21	0.76	250.81	0.57	Shutdown	Shutdown	250.70	0.59	319.63	0.63	266.82	0.95
27	13:00:00	234.05	0.76	258.48	0.59	Shutdown	Shutdown	250.16	0.59	318.86	0.63	266.54	0.77
27	14:00:00	236.79	0.75	240.95	0.58	Shutdown	Shutdown	235.09	0.58	322.04	0.65	415.69	6.46
27	15:00:00	240.09	0.76	235.71	0.57	Shutdown	Shutdown	226.99	0.60	317.88	0.74	308.74	4.75
27	16:00:00	233.16	0.77	223.90	0.59	Shutdown	Shutdown	235.04	0.58	371.95	0.84	279.52	2.29
27	17:00:00	226.40	0.79	215.93	0.59	Shutdown	Shutdown	232.61	0.59	332.91	0.67	282.04	1.43
27	18:00:00	216.56	0.77	206.89	0.58	Shutdown	Shutdown	234.21	0.60	327.71	0.68	277.63	0.68
27	19:00:00	219.90	0.75	205.83	0.58	Shutdown	Shutdown	230.83	0.59	330.03	0.67	275.93	0.69
27	20:00:00	220.27	0.77	212.94	0.57	Shutdown	Shutdown	227.02	0.59	327.52	0.67	284.19	0.70
27	21:00:00	222.19	0.78	212.61	0.57	Shutdown	Shutdown	241.85	0.61	323.80	0.67	281.50	0.71
27	22:00:00	220.61	0.76	208.28	0.57	Shutdown	Shutdown	228.69	0.60	326.74	0.66	289.81	0.72
27	23:00:00	216.45	0.77	213.92	0.58	Shutdown	Shutdown	220.86	0.59	330.41	0.64	288.67	0.72
28	0:00:00	213.94	0.76	205.82	0.58	Shutdown	Shutdown	221.41	0.55	328.27	0.65	289.10	0.72
28	1:00:00	215.91	0.77	193.81	0.57	Shutdown	Shutdown	209.23	0.49	324.29	0.65	291.48	0.71
28	2:00:00	219.91	0.76	197.36	0.57	Shutdown	Shutdown	209.83	0.48	326.64	0.65	287.08	0.71
28	3:00:00	218.81	0.77	185.08	0.57	Shutdown	Shutdown	204.67	0.49	326.77	0.65	291.64	0.71
28	4:00:00	216.61	0.77	189.20	0.58	Shutdown	Shutdown	219.71	0.50	323.52	0.64	297.10	0.71
28	5:00:00	216.96	0.75	185.04	0.58	Shutdown	Shutdown	221.05	0.51	322.67	0.64	292.42	0.71
28	6:00:00	218.86	0.76	185.24	0.58	Shutdown	Shutdown	220.64	0.51	324.17	0.64	288.37	0.72
28	7:00:00	218.96	0.76	188.99	0.58	Shutdown	Shutdown	238.70	0.51	326.27	0.64	287.28	0.72
28	8:00:00	248.49	0.76	208.05	0.57	Shutdown	Shutdown	237.83	0.57	329.62	0.65	281.85	0.73
28	9:00:00	224.89	0.79	223.78	0.59	Shutdown	Shutdown	238.54	0.64	329.30	0.65	288.41	0.71
28	10:00:00	227.55	0.75	230.98	0.59	Shutdown	Shutdown	245.07	0.49	329.35	0.65	292.18	0.71
28	11:00:00	231.53	0.76	221.99	0.60	Shutdown	Shutdown	248.62	0.79	326.23	0.64	291.46	0.70
28	12:00:00	225.32	0.77	224.06	0.60	Shutdown	Shutdown	247.49	0.74	326.77	0.64	294.03	0.70
28	13:00:00	224.58	0.78	219.38	0.59	Shutdown	Shutdown	254.64	0.67	322.75	0.64	292.27	0.69
28	14:00:00	223.98	0.77	221.04	0.58	Shutdown	Shutdown	254.47	0.61	329.86	0.62	297.63	0.65
28	15:00:00	225.24	0.77	229.53	0.56	Shutdown	Shutdown	245.45	0.60	328.38	0.64	300.90	0.67
28	16:00:00	221.44	0.75	234.92	0.57	Shutdown	Shutdown	246.79	0.62	332.71	0.66	303.48	0.68
28	17:00:00	221.99	0.78	243.63	0.56	Shutdown	Shutdown	224.11	0.68	332.82	0.65	312.15	0.70
28	18:00:00	224.97	0.78	243.65	0.57	Shutdown	Shutdown	219.86	0.80	331.86	0.65	306.05	0.69
28	19:00:00	229.34	0.77	255.43	0.56	Shutdown	Shutdown	135.65	0.74	317.89	0.71	305.72	0.68
28	20:00:00	233.60	0.76	266.08	0.55	Shutdown	Shutdown	145.03	0.69	348.11	0.70	306.91	0.69
28	21:00:00	230.86	0.78	271.09	0.55	Shutdown	Shutdown	155.13	0.74	325.28	0.68	304.03	0.70
28	22:00:00	229.07	0.77	268.01	0.55	Shutdown	Shutdown	165.42	0.65	324.70	0.67	299.97	0.71
28	23:00:00	228.74	0.77	272.36	0.55	Shutdown	Shutdown	172.80	0.61	321.26	0.65	293.44	0.69
29	0:00:00	224.38	0.77			Shutdown	Shutdown	166.34	0.59	320.27	0.63	288.40	0.69
29	1:00:00	222.96	0.77			Shutdown	Shutdown	148.77	0.58	323.78	0.64	293.62	0.69
29	2:00:00	227.91	0.76			Shutdown	Shutdown	156.79	0.60	321.19	0.64	290.43	0.69
29	3:00:00	238.25	0.77			Shutdown	Shutdown	164.27	0.64	319.89	0.63	283.44	0.70
29	4:00:00	235.64	0.76			Shutdown	Shutdown	159.20	0.65	318.17	0.64	281.94	0.68
29	5:00:00	232.63	0.78			Shutdown	Shutdown	157.84	0.66	320.86	0.64	286.10	0.68
29	6:00:00	226.62	0.78			Shutdown	Shutdown	159.46	0.67	319.18	0.64	284.69	0.69
29	7:00:00	219.68	0.76			Shutdown	Shutdown	159.01	0.63	323.93	0.62	285.09	0.70
29	8:00:00	216.33	0.76			Shutdown	Shutdown	161.30	0.67	328.36	0.62	287.31	0.72
29	9:00:00	224.92	0.76			Shutdown	Shutdown	172.36	0.65	324.62	0.62	291.54	0.71
29	10:00:00	222.96	0.79			Shutdown	Shutdown	173.35	0.65	324.25	0.61	298.23	0.69
29	11:00:00	218.35	0.78			Shutdown	Shutdown	299.53	0.64	326.83	0.61	287.49	0.70
29	12:00:00	225.92	0.75			Shutdown	Shutdown	243.16	0.68	326.61	0.61	286.36	0.69

วันที่	เวลา	TGTU'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)	SO2 (ppm)	O <sub>2</sub> (%)
29	13:00:00	228.91	0.76			Shutdown	Shutdown	192.60	0.65	325.77	0.62	289.23	0.67
29	14:00:00	228.46	0.76			Shutdown	Shutdown	202.58	0.60	327.04	0.60	291.39	0.65
29	15:00:00	232.47	0.75			Shutdown	Shutdown	198.37	0.58	326.14	0.60	287.62	0.67
29	16:00:00	233.53	0.77			Shutdown	Shutdown	199.37	0.57	326.60	0.61	282.97	0.69
29	17:00:00	230.58	0.79			Shutdown	Shutdown	199.20	0.56	324.21	0.63	294.72	0.70
29	18:00:00	228.82	0.76			Shutdown	Shutdown	199.95	0.56	323.04	0.62	290.39	0.71
29	19:00:00	232.79	0.77			Shutdown	Shutdown	198.48	0.55	327.61	0.80	300.10	0.67
29	20:00:00	234.86	0.78			Shutdown	Shutdown	191.76	0.56	328.51	0.63	297.37	0.69
29	21:00:00	235.77	0.77			Shutdown	Shutdown	191.53	0.56	323.78	0.63	288.27	0.71
29	22:00:00	234.09	0.77			Shutdown	Shutdown	198.01	0.55	327.18	0.62	284.80	0.71
29	23:00:00	231.76	0.76			Shutdown	Shutdown	303.18	0.57	329.48	0.63	295.78	0.68
30	0:00:00	228.34	0.77			Shutdown	Shutdown	Maintenance	Maintenance	317.27	0.61	288.59	0.71
30	1:00:00	238.11	0.76			Shutdown	Shutdown	166.19	0.67	313.40	0.62	285.00	0.73
30	2:00:00	225.48	0.75			Shutdown	Shutdown	168.09	0.59	315.23	0.61	291.48	0.70
30	3:00:00	216.40	0.76			Shutdown	Shutdown	172.31	0.59	313.54	0.62	281.84	0.72
30	4:00:00	226.34	0.75			Shutdown	Shutdown	179.29	0.60	312.98	0.61	283.23	0.72
30	5:00:00	221.01	0.76			Shutdown	Shutdown	183.09	0.62	316.32	0.62	286.24	0.70
30	6:00:00	221.20	0.76			Shutdown	Shutdown	187.43	0.63	323.30	0.63	281.19	0.71
30	7:00:00	225.34	0.76			Shutdown	Shutdown	188.90	0.64	322.60	0.62	283.76	0.70
30	8:00:00	227.24	0.76			Shutdown	Shutdown	185.96	0.64	319.90	0.61	282.10	0.71
30	9:00:00	229.00	0.76			Shutdown	Shutdown	184.99	0.63	321.43	0.62	284.40	0.69
30	10:00:00	223.14	0.77			Shutdown	Shutdown	287.34	0.64	317.92	0.61	286.05	0.70
30	11:00:00	222.22	0.77			Shutdown	Shutdown	221.65	0.64	319.41	0.63	290.47	0.68
30	12:00:00	230.31	0.76			Shutdown	Shutdown	183.53	0.60	316.52	0.62	287.43	0.67
30	13:00:00	224.12	0.75			Shutdown	Shutdown	182.57	0.61	320.99	0.62	292.13	0.67
30	14:00:00	223.51	0.75			Shutdown	Shutdown	182.24	0.62	316.08	0.60	291.29	0.67
30	15:00:00	214.80	0.75			Shutdown	Shutdown	184.80	0.63	323.32	0.62	291.05	0.67
30	16:00:00	209.11	0.74			Shutdown	Shutdown	194.86	0.61	323.53	0.64	299.18	0.68
30	17:00:00	222.93	0.77			Shutdown	Shutdown	200.46	0.63	323.38	0.62	302.01	0.70
30	18:00:00	228.35	0.79			Shutdown	Shutdown	203.15	0.64	327.52	0.62	295.31	0.70
30	19:00:00	226.73	0.79			Shutdown	Shutdown	228.52	0.64	328.67	0.62	295.77	0.69
30	20:00:00	219.43	0.77			Shutdown	Shutdown	251.82	0.64	325.26	0.63	300.44	0.69
30	21:00:00	222.15	0.77			Shutdown	Shutdown	239.17	0.65	325.51	0.63	303.47	0.70
30	22:00:00	225.84	0.77			Shutdown	Shutdown	236.78	0.65	329.55	0.62	301.44	0.71
30	23:00:00	226.19	0.77			Shutdown	Shutdown	234.51	0.65	332.51	0.63	297.59	0.70
31	0:00:00	231.35	0.76			Shutdown	Shutdown			333.35	0.63		
31	1:00:00	224.56	0.77			Shutdown	Shutdown			332.13	0.62		
31	2:00:00	225.35	0.78			Shutdown	Shutdown			330.01	0.62		
31	3:00:00	225.97	0.76			Shutdown	Shutdown			326.27	0.62		
31	4:00:00	226.12	0.77			Shutdown	Shutdown			325.55	0.62		
31	5:00:00	228.50	0.77			Shutdown	Shutdown			328.26	0.62		
31	6:00:00	230.71	0.78			Shutdown	Shutdown			324.39	0.63		
31	7:00:00	232.13	0.79			Shutdown	Shutdown			327.87	0.63		
31	8:00:00	233.38	0.80			Shutdown	Shutdown			323.89	0.63		
31	9:00:00	230.18	0.81			Shutdown	Shutdown			327.34	0.62		
31	10:00:00	228.82	0.83			Shutdown	Shutdown			325.27	0.63		
31	11:00:00	224.22	0.83			Shutdown	Shutdown			323.29	0.63		
31	12:00:00	221.97	0.82			Shutdown	Shutdown			324.95	0.62		
31	13:00:00	227.11	0.82			Shutdown	Shutdown			330.70	0.61		
31	14:00:00	231.48	0.83			Shutdown	Shutdown			329.74	0.62		
31	15:00:00	231.87	0.83			Shutdown	Shutdown			334.23	0.62		
31	16:00:00	227.13	0.84			Shutdown	Shutdown			334.45	0.62		
31	17:00:00	228.20	0.86			Shutdown	Shutdown			342.13	0.63		
31	18:00:00	234.89	0.84			Shutdown	Shutdown			338.20	0.63		
31	19:00:00	234.14	0.83			Shutdown	Shutdown			338.54	0.63		
31	20:00:00	228.30	0.86			Shutdown	Shutdown			336.64	0.63		
31	21:00:00	220.63	0.90			Shutdown	Shutdown			335.66	0.64		
31	22:00:00	218.93	0.89			Shutdown	Shutdown			330.08	0.64		
31	23:00:00	219.03	0.89			Shutdown	Shutdown			336.27	0.64		

วันที่	เวลา	CCG HDS 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)
1	0:00:00	58.78	8.10	51.07	6.46	53.48	7.32	53.08	6.42	51.40	5.88	52.29	6.40
1	1:00:00	58.69	8.25	50.77	5.84	53.27	7.54	52.60	6.13	51.32	6.49	51.70	6.31
1	2:00:00	58.45	8.45	50.76	6.09	53.69	6.82	53.02	6.11	51.72	6.69	50.93	6.28
1	3:00:00	58.99	8.15	50.83	5.69	52.91	7.27	52.74	6.11	51.81	7.14	48.22	5.21
1	4:00:00	58.16	8.41	50.63	5.74	52.52	7.23	52.85	6.13	51.29	6.68	50.80	6.33
1	5:00:00	57.72	8.56	50.70	6.53	51.94	7.66	52.91	6.12	53.48	6.36	50.78	6.43
1	6:00:00	58.38	8.16	50.48	6.84	52.13	7.40	52.59	6.09	52.67	6.06	51.56	6.49
1	7:00:00	58.12	8.13	50.58	7.50	52.25	7.38	52.29	6.18	52.37	6.51	51.81	6.40
1	8:00:00	58.08	8.10	50.92	7.24	52.98	7.46	52.83	6.33	51.96	6.85	51.45	6.28
1	9:00:00	58.37	8.35	52.14	5.92	54.22	7.63	53.86	6.43	51.95	7.05	52.13	6.11
1	10:00:00	57.64	8.65	52.44	5.89	54.41	7.61	55.40	6.43	51.73	6.39	52.40	6.24
1	11:00:00	57.94	8.90	53.18	6.42	53.75	6.31	55.18	6.10	52.02	6.61	51.96	5.82
1	12:00:00	59.64	8.82	52.89	6.65	54.61	7.25	55.16	6.61	51.84	6.32	52.59	5.81
1	13:00:00	58.94	8.77	52.10	7.00	54.47	6.58	53.61	8.06	52.46	6.16	52.44	5.89
1	14:00:00	56.24	8.43	53.94	7.20	54.29	6.23	55.07	7.07	53.38	5.84	52.10	6.05
1	15:00:00	57.05	7.93	54.00	7.04	54.48	6.98	56.01	6.86	53.19	5.97	51.74	6.50
1	16:00:00	57.81	8.27	52.83	7.08	54.23	7.53	55.70	6.50	52.83	6.02	53.07	6.81
1	17:00:00	59.31	8.45	51.88	6.97	53.87	6.82	55.67	6.30	52.08	5.81	52.82	6.43
1	18:00:00	60.23	7.92	51.66	6.61	53.71	6.70	55.04	6.10	50.99	5.97	52.07	5.99
1	19:00:00	59.67	7.76	51.01	6.44	53.66	6.80	53.99	6.15	51.04	5.84	51.68	5.71
1	20:00:00	59.39	8.23	50.93	6.65	53.81	6.97	53.64	6.25	51.73	5.86	51.89	5.76
1	21:00:00	57.92	8.64	50.93	6.45	53.19	6.72	53.65	6.40	51.76	5.99	52.06	6.25
1	22:00:00	58.37	8.30	50.69	6.20	52.89	6.84	53.37	6.46	51.13	5.97	51.99	6.41
1	23:00:00	57.86	8.34	50.94	5.91	53.02	6.80	53.39	6.48	50.72	5.84	51.82	6.39
2	0:00:00	57.90	7.80	50.86	6.53	53.30	6.64	53.30	6.19	50.66	5.62	51.45	6.28
2	1:00:00	57.52	7.96	50.17	6.19	53.32	7.00	52.76	5.53	50.89	6.14	51.18	5.75
2	2:00:00	57.85	8.13	49.94	6.64	53.20	7.14	53.70	6.26	50.90	6.34	50.79	5.64
2	3:00:00	57.67	8.05	50.50	6.45	53.10	7.00	53.50	5.89	50.58	5.90	51.52	5.89
2	4:00:00	57.60	8.01	51.05	6.42	53.06	7.09	53.31	5.60	50.43	5.89	51.62	6.10
2	5:00:00	57.67	8.05	53.61	6.04	52.81	7.09	53.15	5.47	50.91	6.30	51.68	6.19
2	6:00:00	57.58	8.26	52.97	7.37	52.84	7.18	53.46	5.89	49.14	5.54	52.03	6.10
2	7:00:00	57.74	8.22	52.20	6.41	52.75	7.20	54.01	5.98	49.78	6.08	52.92	5.92
2	8:00:00	58.12	8.09	51.52	6.10	53.42	7.16	54.71	6.27	51.02	6.35	53.11	6.03
2	9:00:00	58.93	8.03	52.21	6.31	53.63	7.35	55.14	6.73	51.68	5.84	54.33	6.14
2	10:00:00	59.20	8.23	52.07	6.60	53.33	7.33	55.18	6.92	52.69	5.91	55.26	6.32
2	11:00:00	57.67	8.15	51.42	6.80	53.07	7.27	54.54	5.66	52.18	5.60	55.47	6.71
2	12:00:00	59.37	8.08	51.83	6.82	53.67	7.17	54.83	5.69	52.78	5.84	54.07	6.40
2	13:00:00	56.98	8.10	51.51	7.00	54.22	7.29	55.06	5.78	53.62	5.83	53.75	6.08
2	14:00:00	56.40	7.84	51.10	7.63	54.39	7.49	55.24	6.02	54.08	6.05	52.43	5.62
2	15:00:00	56.54	7.98	50.14	7.95	53.76	7.57	54.79	5.80	53.61	5.94	52.47	5.64
2	16:00:00	56.67	8.07	50.14	7.30	53.52	6.95	54.91	6.07	52.99	5.72	54.88	6.21
2	17:00:00	56.67	8.39	50.64	7.11	53.94	6.97	54.85	5.97	52.94	5.96	53.66	5.75
2	18:00:00	57.21	8.55	50.75	7.37	54.41	7.58	54.61	5.83	52.65	5.80	53.39	5.80
2	19:00:00	57.73	8.39	49.80	7.70	54.51	7.68	54.28	5.78	52.81	5.74	53.13	5.94
2	20:00:00	58.28	8.05	49.57	7.68	54.14	6.85	54.27	5.74	53.04	5.82	52.49	5.98
2	21:00:00	59.07	7.24	49.67	7.48	53.76	7.11	54.62	5.76	52.99	5.92	52.02	5.87
2	22:00:00	59.36	6.52	49.46	7.20	53.75	7.13	54.66	5.70	53.14	5.80	51.73	5.83
2	23:00:00	59.61	6.79	49.30	7.21	53.45	7.55	54.89	5.69	53.54	6.04	52.11	6.04
3	0:00:00	59.44	7.46	49.42	7.02	53.47	7.25	54.93	5.64	53.39	6.11	52.23	6.28
3	1:00:00	59.29	7.78	49.51	6.78	53.16	7.28	54.79	5.57	53.56	6.07	52.22	5.83
3	2:00:00	59.18	7.75	49.53	7.41	52.77	7.33	54.54	5.51	53.62	6.07	52.23	5.72
3	3:00:00	59.76	7.46	49.73	7.34	53.05	7.11	53.38	5.02	53.77	6.11	52.22	5.67
3	4:00:00	58.86	7.43	49.74	7.36	53.10	7.17	53.97	5.19	53.77	6.07	52.29	5.58
3	5:00:00	59.59	7.50	50.01	7.33	53.20	7.51	54.39	6.10	53.79	6.02	52.44	5.67
3	6:00:00	59.66	7.36	49.91	7.30	53.05	7.27	52.95	5.58	53.50	5.84	52.41	5.68
3	7:00:00	59.67	7.22	50.22	7.24	53.27	7.42	52.59	5.48	54.33	6.12	52.33	5.69
3	8:00:00	60.41	7.20	50.26	7.60	54.34	7.27	52.79	5.47	54.94	6.04	52.41	5.49
3	9:00:00	61.22	7.23	50.60	7.50	55.12	7.20	53.31	5.13	55.08	6.05	52.72	5.49
3	10:00:00	61.49	7.51	50.42	7.32	55.58	7.38	54.34	5.41	54.95	6.47	53.46	5.57
3	11:00:00	61.29	7.48	50.31	7.29	54.80	7.43	55.71	6.07	55.73	6.81	53.95	5.74
3	12:00:00	59.81	7.55	50.25	7.30	54.64	7.37	56.63	5.88	56.25	6.60	54.05	5.93
3	13:00:00	58.66	7.61	48.89	7.53	54.69	7.29	56.63	6.03	57.26	6.73	54.48	6.15
3	14:00:00	58.37	7.39	47.21	5.99	54.06	7.42	55.69	6.42	56.54	6.73	54.83	6.18
3	15:00:00	58.39	7.13	49.95	7.16	54.90	7.57	56.02	5.94	57.08	6.70	54.19	5.60
3	16:00:00	58.26	7.11	50.55	7.47	55.05	7.42	55.22	5.84	56.79	6.49	54.88	5.42
3	17:00:00	58.80	7.38	49.77	7.18	55.30	7.55	54.93	5.90	56.73	6.52	53.54	5.53
3	18:00:00	61.20	7.47	49.34	7.25	54.43	7.36	55.10	5.82	56.59	6.62	52.94	5.57
3	19:00:00	60.94	7.18	49.31	7.44	53.96	7.15	55.31	5.89	56.28	6.72	52.85	5.74
3	20:00:00	60.85	7.19	50.09	7.08	54.40	7.18	55.57	5.95	56.18	6.76	52.55	5.63
3	21:00:00	60.36	7.41	50.20	6.78	53.98	7.44	55.29	5.94	55.95	6.87	52.85	5.78
3	22:00:00	59.16	7.48	49.49	7.39	53.77	7.37	55.71	6.02	56.08	7.01	53.94	5.95
3	23:00:00	60.05	7.23	49.60	7.32	53.14	7.47	55.28	5.98	56.13	6.94	54.49	5.96
4	0:00:00	60.50	6.81	49.68	7.08	52.71	7.25	55.01	6.02	56.13	6.89	54.23	5.75
4	1:00:00	60.63	6.79	49.70	6.88	52.06	7.46	54.97	6.00	55.66	7.49	54.17	5.60
4	2:00:00	60.39	6.64	49.50	7.24	52.68	7.19	54.78	5.94	55.68	6.68	54.18	5.65
4	3:00:00	59.89	6.90	49.12	7.25	52.91	7.21	54.63	5.99	55.72	7.25	54.27	5.73
4	4:00:00	59.68	7.08	49.07	7.28	52.49	7.30	54.84	5.94	55.64	7.28	54.48	5.85

วันที่	เวลา	CCG HDS 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)
4	5:00:00	59.55	7.10	49.02	7.20	52.45	7.41	55.43	5.90	56.20	7.04	54.02	5.85
4	6:00:00	60.26	7.03	49.06	7.22	52.40	7.33	56.27	6.00	56.29	6.63	54.05	6.00
4	7:00:00	60.27	6.96	48.95	7.24	52.05	7.46	56.06	5.95	56.46	6.68	54.15	6.11
4	8:00:00	60.59	6.90	49.41	7.33	52.91	7.41	56.21	5.96	56.09	6.66	54.31	5.99
4	9:00:00	61.33	7.12	50.31	7.27	53.81	7.35	56.42	6.28	56.15	6.83	54.43	5.78
4	10:00:00	61.30	7.75	51.67	7.48	54.72	7.54	55.77	6.09	56.26	6.93	54.30	5.74
4	11:00:00	59.94	7.74	50.88	7.58	54.99	7.50	55.69	6.26	55.05	6.94	54.28	5.49
4	12:00:00	58.76	6.82	48.96	8.20	55.47	7.52	55.21	6.27	55.62	6.90	54.98	5.80
4	13:00:00	57.92	7.04	49.78	7.24	56.05	7.44	54.58	6.50	55.90	6.44	55.23	5.85
4	14:00:00	57.99	7.06	50.53	7.53	55.11	7.39	54.67	7.28	55.62	6.64	55.32	5.82
4	15:00:00	58.26	7.15	51.01	7.52	55.04	7.30	55.09	6.69	55.57	6.68	55.16	5.78
4	16:00:00	57.90	7.14	48.66	6.69	54.30	7.32	55.32	6.42	55.43	6.83	54.89	5.71
4	17:00:00	58.05	7.08	49.24	6.86	54.01	7.11	55.84	6.89	55.69	6.78	54.36	5.50
4	18:00:00	58.68	6.93	47.99	7.80	53.90	7.07	57.62	6.99	55.95	6.74	54.09	5.71
4	19:00:00	59.74	6.82	47.81	7.95	53.79	7.15	56.96	6.82	55.43	6.92	54.01	5.77
4	20:00:00	60.00	6.71	48.06	7.50	53.93	7.19	55.91	6.75	54.95	7.16	52.88	5.30
4	21:00:00	60.54	6.87	48.00	7.68	54.14	7.37	55.85	6.82	55.09	6.91	53.89	5.92
4	22:00:00	60.60	7.07	48.30	7.79	54.04	7.24	56.10	6.92	55.47	6.46	53.66	5.84
4	23:00:00	60.34	7.10	48.57	7.90	53.97	7.13	56.46	6.72	55.57	6.34	53.62	5.83
5	0:00:00	60.53	7.42	48.24	7.75	54.13	7.49	56.54	6.97	55.75	7.19	53.92	6.35
5	1:00:00	60.37	6.78	47.90	6.10	53.86	7.34	56.25	7.55	55.69	6.96	54.85	6.08
5	2:00:00	60.64	6.36	48.12	6.29	53.73	6.99	56.36	7.24	55.23	7.12	54.71	6.01
5	3:00:00	61.97	6.92	48.82	6.74	54.08	7.26	56.61	6.69	55.37	7.08	54.87	6.22
5	4:00:00	61.03	6.95	50.52	6.79	53.69	7.48	56.47	7.05	55.92	6.93	54.41	6.26
5	5:00:00	60.81	6.78	51.03	6.71	54.06	7.21	56.74	7.00	56.08	6.70	54.91	6.40
5	6:00:00	60.39	6.91	50.83	6.78	54.10	7.34	56.55	7.28	55.99	6.69	54.84	6.65
5	7:00:00	61.10	6.89	51.71	6.75	54.39	7.26	56.53	7.34	56.04	6.83	54.61	6.43
5	8:00:00	61.53	6.78	52.27	6.72	54.32	7.93	56.69	6.95	56.34	6.83	55.06	6.33
5	9:00:00	61.17	6.87	52.40	6.85	54.51	8.44	56.90	7.08	56.77	7.00	56.11	6.29
5	10:00:00	59.78	6.96	52.33	6.89	54.97	8.52	56.96	7.25	56.99	6.82	56.14	6.31
5	11:00:00	58.73	7.03	52.96	6.97	55.87	8.65	57.23	7.09	57.07	6.76	57.07	6.20
5	12:00:00	58.99	7.20	53.49	7.10	55.22	8.49	56.98	6.97	57.47	6.85	57.23	6.27
5	13:00:00	59.56	7.32	53.01	6.98	54.54	8.24	55.61	6.87	57.21	6.70	58.45	6.30
5	14:00:00	59.96	6.89	52.45	6.95	54.33	8.27	55.81	7.02	54.59	6.78	57.55	6.46
5	15:00:00	60.00	6.76	51.67	6.70	52.44	8.65	56.57	6.89	55.19	7.16	57.32	6.31
5	16:00:00	59.59	6.84	51.33	6.75	52.10	8.49	56.43	6.76	54.65	6.67	58.10	6.30
5	17:00:00	59.09	6.90	51.61	6.83	51.56	8.44	55.23	7.28	54.33	6.84	56.73	6.27
5	18:00:00	58.71	6.92	50.86	6.81	51.71	8.21	55.16	7.24	53.55	7.06	55.03	6.21
5	19:00:00	57.92	6.98	50.98	6.71	52.72	8.23	54.61	6.96	52.27	6.94	54.45	6.21
5	20:00:00	56.73	6.82	51.05	6.32	51.92	8.27	54.58	7.03	52.13	6.66	52.70	6.40
5	21:00:00	56.65	6.66	50.51	6.66	51.74	8.21	53.20	7.16	52.42	6.99	48.53	4.76
5	22:00:00	56.87	6.80	50.11	6.58	51.64	8.25	51.97	7.74	52.54	7.12	51.95	6.21
5	23:00:00	56.95	7.05	49.90	6.62	51.89	8.15	51.36	7.77	52.55	7.46	52.09	6.16
6	0:00:00	56.77	6.66	50.74	6.82	51.88	8.24	51.45	7.44	52.83	6.47	52.46	6.27
6	1:00:00	56.94	6.74	50.96	6.62	51.67	8.38	51.83	7.46	52.76	6.98	52.29	5.79
6	2:00:00	58.35	6.64	51.23	6.74	52.26	8.05	51.41	7.48	52.46	7.36	52.46	5.82
6	3:00:00	60.10	6.63	52.78	6.73	52.31	8.14	52.65	7.39	52.61	7.31	53.44	6.51
6	4:00:00	60.27	6.44	52.94	6.73	52.44	8.13	53.97	6.77	52.71	7.03	53.37	6.37
6	5:00:00	60.22	6.16	53.84	6.49	52.37	8.24	54.31	7.63	52.86	6.75	53.36	6.27
6	6:00:00	60.61	6.81	54.09	6.66	52.50	8.09	54.81	7.76	53.38	6.67	52.47	6.34
6	7:00:00	60.86	7.19	54.09	6.70	52.80	7.94	55.11	7.62	54.19	6.63	52.80	6.31
6	8:00:00	60.44	7.00	54.38	6.66	53.59	8.13	55.50	7.68	53.99	5.43	53.08	6.37
6	9:00:00	62.29	7.13	55.06	6.75	54.00	8.34	56.33	7.80	54.28	5.35	54.52	6.33
6	10:00:00	65.76	7.35	55.19	7.00	53.74	8.41	54.95	8.48	54.95	6.18	55.09	6.66
6	11:00:00	62.38	8.09	54.96	7.05	54.39	8.33	54.80	7.35	55.78	6.14	55.87	6.53
6	12:00:00	61.38	7.57	53.65	5.73	53.98	8.44	54.89	6.32	55.24	6.26	56.35	6.51
6	13:00:00	59.86	6.94	50.25	4.09	53.25	8.61	55.06	6.84	52.26	7.05	57.31	7.06
6	14:00:00	60.69	6.78	47.14	3.34	52.79	8.79	55.29	6.86	50.25	5.91	57.59	6.90
6	15:00:00	61.26	6.89	48.57	3.58	53.38	8.38	55.38	6.77	50.65	5.82	57.14	6.32
6	16:00:00	60.56	7.08	54.70	5.75	54.31	7.49	55.60	6.97	51.18	5.99	57.82	6.43
6	17:00:00	60.75	6.87	55.63	6.74	54.77	7.03	55.41	7.06	50.76	5.83	56.96	6.62
6	18:00:00	60.80	6.92	54.03	6.20	55.50	7.17	55.81	7.14	51.07	6.03	55.63	6.17
6	19:00:00	58.89	6.63	52.13	6.69	55.33	6.94	53.57	6.71	50.66	6.02	54.74	6.37
6	20:00:00	58.61	6.63	51.03	5.45	54.76	7.15	53.10	6.55	50.83	6.16	53.94	6.13
6	21:00:00	59.22	6.73	53.26	5.77	54.37	7.58	53.03	7.00	50.69	6.46	53.78	6.50
6	22:00:00	58.88	6.86	52.69	6.90	53.91	7.64	52.93	6.84	51.14	6.05	53.48	6.42
6	23:00:00	59.85	7.02	52.19	5.54	53.86	7.71	52.84	6.31	51.32	6.09	53.85	6.75
7	0:00:00	59.92	6.86	52.43	5.42	53.12	8.22	52.83	6.65	51.78	6.04	54.26	6.51
7	1:00:00	59.71	6.77	52.96	5.36	52.65	8.49	52.74	6.75	51.46	5.70	53.87	6.17
7	2:00:00	59.67	6.93	53.01	5.39	52.89	8.18	52.74	6.67	51.43	6.00	54.63	5.98
7	3:00:00	60.62	7.09	54.17	5.77	53.35	7.80	53.29	6.79	52.05	6.48	54.77	6.20
7	4:00:00	60.14	7.06	52.94	5.29	53.12	8.02	53.77	7.10	52.09	6.11	55.91	6.13
7	5:00:00	59.69	7.02	53.27	6.00	52.66	8.51	54.04	7.16	51.66	5.43	56.11	6.46
7	6:00:00	60.50	7.20	53.05	6.65	52.53	8.66	54.82	6.93	51.85	6.26	56.26	6.45
7	7:00:00	60.55	6.92	51.44	5.85	52.83	8.58	55.34	6.43	52.75	6.36	55.89	6.07
7	8:00:00	61.05	7.19	51.32	5.75	54.00	8.41	55.01	6.74	53.06	6.18	56.42	6.11

วันที่	เวลา	CCG HDS 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)
7	9:00:00	61.49	7.52	51.92	6.61	53.60	8.91	54.99	6.57	52.89	6.34	56.46	6.41
7	10:00:00	58.90	7.72	50.09	8.21	55.20	8.83	55.31	6.63	52.60	6.27	56.50	6.50
7	11:00:00	57.97	6.78	51.00	7.62	54.58	8.74	55.92	6.66	51.73	5.98	56.51	6.44
7	12:00:00	58.28	6.32	52.99	7.27	52.31	8.97	56.18	6.86	45.56	4.76	56.74	6.29
7	13:00:00	58.23	6.92	53.70	7.51	53.82	8.69	56.55	6.87	48.24	5.28	57.99	6.60
7	14:00:00	57.78	6.84	55.24	6.72	53.61	8.47	56.22	6.47	50.60	6.86	57.93	6.78
7	15:00:00	58.95	6.66	56.08	5.75	53.58	8.29	56.67	6.63	50.39	6.52	57.51	5.87
7	16:00:00	58.43	6.39	29.67	12.94	53.13	8.09	58.08	6.81	50.48	6.41	57.31	6.05
7	17:00:00	56.88	6.13	35.23	11.63	51.55	5.93	58.22	6.57	50.18	6.29	56.48	5.99
7	18:00:00	56.28	5.74	53.06	4.52	49.54	4.98	58.01	6.68	50.15	6.33	56.40	6.19
7	19:00:00	55.39	5.97	50.47	3.87	50.39	5.11	57.27	6.82	50.20	6.47	56.14	6.35
7	20:00:00	56.68	6.17	54.67	8.04	49.58	4.95	57.02	6.62	50.43	6.48	55.57	6.09
7	21:00:00	59.12	6.24	54.79	7.85	49.16	4.87	56.55	6.40	49.72	7.02	55.38	6.33
7	22:00:00	58.65	5.82	54.64	7.20	51.41	5.40	56.15	6.25	50.59	6.04	55.76	6.38
7	23:00:00	58.70	5.93	54.15	7.10	52.96	6.19	56.03	7.11	50.80	5.97	56.31	6.27
8	0:00:00	58.34	6.43	53.90	7.70	52.60	5.92	56.63	6.80	50.49	6.23	55.87	6.19
8	1:00:00	58.28	6.38	54.17	7.24	50.57	5.46	57.04	6.60	50.93	5.99	54.92	6.08
8	2:00:00	57.72	6.20	54.37	6.48	49.38	4.98	57.37	6.65	51.41	6.45	56.25	6.07
8	3:00:00	57.64	6.01	54.00	6.03	50.76	5.68	57.02	6.67	51.49	6.41	56.73	6.15
8	4:00:00	57.81	6.10	53.37	7.59	51.22	5.68	56.63	6.99	50.95	6.39	56.01	6.42
8	5:00:00	58.06	6.09	52.97	8.06	52.02	5.51	56.64	6.52	50.96	6.34	55.14	6.06
8	6:00:00	59.82	5.78	53.19	7.32	50.93	4.97	57.05	6.50	50.35	6.32	55.93	6.41
8	7:00:00	60.10	5.43	52.33	7.02	51.95	5.54	57.97	6.82	50.21	6.21	55.53	6.32
8	8:00:00	61.01	5.83	52.31	6.41	51.56	5.72	58.96	6.32	51.19	6.51	55.81	6.39
8	9:00:00	62.74	6.34	52.05	7.55	52.15	5.42	60.32	6.65	51.91	6.81	56.51	6.22
8	10:00:00	63.61	7.29	53.46	7.70	54.13	5.72	61.46	6.59	51.90	6.90	58.24	6.18
8	11:00:00	62.72	7.57	55.30	7.43	54.13	5.95	59.67	6.86	52.54	6.64	58.39	6.49
8	12:00:00	61.61	6.83	54.70	7.80	53.22	6.52	59.78	6.56	53.24	6.62	58.60	7.35
8	13:00:00	58.75	6.59	54.10	7.38	52.42	6.14	57.44	6.86	51.08	6.57	58.93	7.81
8	14:00:00	58.57	5.86	56.21	7.34	44.77	4.03	56.06	6.84	47.30	5.12	59.56	7.22
8	15:00:00	59.34	6.41	56.94	7.39	48.10	4.49	56.15	6.60	48.55	5.70	59.39	7.26
8	16:00:00	59.14	6.38	56.63	7.42	45.65	4.07	55.92	6.83	49.77	6.50	58.20	7.12
8	17:00:00	61.02	6.57	55.51	7.36	49.51	4.78	55.18	6.58	50.40	6.84	56.87	6.71
8	18:00:00	61.01	6.71	54.17	7.42	50.93	5.04	54.09	6.36	50.84	6.34	56.90	6.38
8	19:00:00	56.65	6.09	53.44	7.38	50.07	4.83	54.50	6.49	50.55	6.59	57.10	7.00
8	20:00:00	55.77	5.40	53.49	7.53	49.64	4.76	54.60	6.88	50.95	6.61	56.31	6.86
8	21:00:00	55.46	5.34	53.69	6.64	51.06	4.76	54.25	7.03	50.60	6.46	55.95	6.75
8	22:00:00	56.68	5.53	53.03	7.22	51.90	5.00	54.23	6.31	50.45	6.50	55.82	6.87
8	23:00:00	57.47	5.47	52.51	7.01	51.48	4.88	55.35	6.68	50.76	6.74	55.53	6.83
9	0:00:00	58.15	5.55	52.13	7.14	50.10	4.69	56.32	6.87	50.34	6.66	55.17	6.93
9	1:00:00	57.63	5.59	52.29	7.33	50.01	4.68	56.55	6.59	50.09	6.74	54.74	6.89
9	2:00:00	56.63	4.67	51.74	7.06	51.15	4.89	56.89	6.43	50.07	6.75	54.66	6.91
9	3:00:00	61.24	5.12	51.75	7.04	50.43	4.76	56.50	6.85	50.40	6.55	54.53	7.00
9	4:00:00	61.95	5.32	51.55	7.06	49.64	4.54	55.91	7.20	50.50	6.45	54.76	6.99
9	5:00:00	62.45	5.66	51.47	7.06	50.60	4.77	55.88	5.93	50.64	6.58	55.96	7.53
9	6:00:00	63.15	5.80	51.32	6.98	50.85	4.90	56.03	6.99	50.30	6.66	55.57	7.03
9	7:00:00	63.76	5.80	51.22	7.06	50.96	4.80	56.74	6.90	50.63	6.70	55.94	6.56
9	8:00:00	62.94	5.53	52.17	7.00	49.21	4.62	57.34	6.40	51.37	6.68	55.76	7.00
9	9:00:00	64.12	5.73	53.51	7.11	50.96	4.81	58.33	6.70	50.08	7.91	55.69	6.78
9	10:00:00	66.00	6.51	53.62	7.34	51.32	4.81	57.27	6.85	49.09	8.57	56.60	6.65
9	11:00:00	63.64	6.80	54.01	6.64	50.28	4.77	56.16	6.57	51.29	7.97	57.16	6.37
9	12:00:00	62.20	5.89	53.77	7.15	50.65	4.90	56.36	7.04	50.37	7.23	57.70	6.81
9	13:00:00	60.20	5.45	53.51	8.03	51.56	4.96	56.58	6.93	49.87	7.84	57.31	7.26
9	14:00:00	60.44	5.96	53.55	8.09	50.42	4.72	56.65	6.48	49.06	7.33	57.23	6.49
9	15:00:00	60.83	6.79	53.26	7.97	49.67	4.69	56.95	6.32	50.88	7.33	57.65	6.58
9	16:00:00	61.23	7.36	52.76	7.71	48.46	4.56	57.15	6.30	51.25	7.83	58.59	6.94
9	17:00:00	60.90	7.06	52.72	7.18	49.17	4.82	56.35	5.84	50.25	7.66	58.37	6.98
9	18:00:00	58.20	6.05	52.44	6.67	49.14	4.64	54.44	6.61	49.51	7.53	55.84	6.79
9	19:00:00	58.19	5.85	51.88	7.37	47.03	4.36	53.97	6.50	48.97	7.24	55.08	6.60
9	20:00:00	56.44	5.26	52.12	6.91	47.69	4.45	53.61	6.29	48.90	7.58	55.64	6.76
9	21:00:00	56.40	4.89	52.09	6.63	47.16	4.34	53.00	6.49	48.90	7.73	55.11	6.68
9	22:00:00	57.46	5.26	51.69	7.40	46.50	4.32	52.79	6.70	48.96	7.88	54.55	6.68
9	23:00:00	58.00	5.76	51.70	6.59	47.11	4.34	53.54	6.47	48.57	8.09	54.07	6.84
10	0:00:00	58.49	5.94	51.10	7.23	47.69	4.50	53.51	6.26	48.66	7.95	53.59	6.58
10	1:00:00	58.41	5.75	50.97	6.57	45.70	4.19	53.42	6.31	48.46	7.76	54.11	6.65
10	2:00:00	58.65	5.66	51.44	6.59	47.86	4.78	53.43	6.35	47.87	6.84	54.04	6.85
10	3:00:00	57.30	5.45	51.45	6.34	47.91	4.88	53.01	6.42	48.32	7.61	54.93	6.89
10	4:00:00	56.76	5.43	50.98	5.80	41.88	3.76	52.96	6.44	47.53	8.02	53.85	6.95
10	5:00:00	56.76	5.34	51.38	5.85	46.41	4.38	52.98	6.31	47.22	7.71	53.87	7.10
10	6:00:00	56.11	5.39	51.37	6.16	47.65	4.60	52.38	6.21	47.11	7.34	54.05	7.27
10	7:00:00	56.84	5.42	51.57	6.28	45.87	4.30	52.75	6.41	47.82	7.50	54.78	6.89
10	8:00:00	57.27	5.44	51.97	6.45	45.57	4.15	53.20	6.26	48.03	7.43	55.33	6.82
10	9:00:00	57.82	5.56	53.27	6.25	48.00	4.52	53.96	6.58	48.79	7.37	55.92	6.91
10	10:00:00	59.29	5.67	53.09	6.08	48.79	4.53	53.68	6.27	49.52	7.55	55.91	6.89
10	11:00:00	58.94	6.11	53.25	6.27	47.37	4.41	53.67	6.28	48.65	7.53	56.32	6.83
10	12:00:00	57.56	5.87	53.57	6.02	48.22	4.68	54.27	6.37	46.99	6.67	56.82	7.11



วันที่	เวลา	CCG HDS 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)
10	13:00:00	58.07	6.08	54.02	6.67	47.80	4.60	55.39	6.40	47.84	7.64	57.96	7.01
10	14:00:00	60.65	6.10	54.24	6.69	47.96	4.50	56.62	6.50	48.26	7.74	58.45	6.99
10	15:00:00	59.85	5.98	53.30	6.55	48.60	4.59	56.26	6.31	48.72	7.02	58.29	6.97
10	16:00:00	59.62	6.22	52.82	6.37	47.30	4.41	56.62	6.16	50.37	5.43	57.89	6.90
10	17:00:00	58.54	6.27	52.52	6.56	46.53	4.28	54.24	6.03	50.01	5.32	57.06	7.14
10	18:00:00	59.20	6.16	52.41	7.19	46.74	4.39	53.38	5.81	50.24	5.28	55.31	6.42
10	19:00:00	58.60	6.05	52.49	6.50	46.28	4.39	54.43	6.09	49.76	5.24	55.32	6.70
10	20:00:00	59.60	6.10	52.08	6.09	46.46	4.43	53.47	6.55	50.48	5.54	55.19	7.13
10	21:00:00	57.67	5.20	51.90	6.24	46.27	4.41	53.24	6.51	50.44	5.71	54.27	6.89
10	22:00:00	58.28	5.51	50.99	5.54	45.41	4.29	52.67	6.17	50.30	5.76	54.10	6.87
10	23:00:00	59.13	6.34	50.91	5.79	45.75	4.36	52.74	6.22	50.26	5.86	53.93	6.90
11	0:00:00	58.73	5.46	50.94	6.16	45.33	4.27	52.48	6.19	50.12	5.83	53.99	6.98
11	1:00:00	59.55	5.54	51.10	6.35	44.64	4.13	51.46	5.29	50.08	5.78	53.60	6.94
11	2:00:00	59.41	5.45	51.16	6.26	40.45	3.61	52.24	6.28	50.11	5.63	54.16	7.04
11	3:00:00	59.37	5.64	51.25	6.27	47.22	4.65	52.02	6.02	49.92	5.70	53.98	6.79
11	4:00:00	61.03	6.13	51.05	6.37	46.33	4.40	51.92	6.10	50.11	5.82	54.46	7.03
11	5:00:00	60.76	5.85	50.81	6.17	46.20	4.38	51.58	5.91	49.81	5.70	53.99	7.22
11	6:00:00	60.10	4.97	50.75	6.58	46.14	4.29	51.55	5.89	49.88	5.74	54.42	7.14
11	7:00:00	60.47	5.01	50.91	6.85	42.04	3.65	51.81	6.11	49.54	5.59	55.17	7.07
11	8:00:00	60.41	5.12	51.07	6.60	43.80	3.82	52.29	6.22	50.49	5.46	55.88	6.86
11	9:00:00	61.19	5.33	53.22	6.69	50.35	5.62	53.25	6.27	50.80	5.50	56.83	7.04
11	10:00:00	59.02	5.68	53.25	6.59	54.19	7.26	53.57	6.45	49.59	4.84	57.10	7.39
11	11:00:00	59.58	5.97	51.92	6.69	54.12	7.88	54.21	6.37	50.08	5.10	56.91	7.16
11	12:00:00	58.31	5.81	52.26	6.57	53.59	6.29	54.09	6.86	49.99	6.65	57.04	7.04
11	13:00:00	59.32	6.00	52.36	7.10	53.40	5.98	53.28	6.83	48.69	5.43	56.96	6.99
11	14:00:00	59.30	5.55	51.75	7.26	54.25	6.85	52.95	6.16	49.97	5.47	56.86	6.98
11	15:00:00	58.68	5.61	52.00	7.05	53.88	7.08	52.52	6.01	49.22	5.09	57.47	6.98
11	16:00:00	58.38	5.73	53.23	6.83	54.06	6.39	52.79	6.27	49.53	5.10	58.57	7.04
11	17:00:00	57.63	5.69	52.28	6.75	54.94	6.60	51.02	6.08	48.44	4.81	57.98	6.99
11	18:00:00	56.97	5.30	51.93	6.43	53.63	6.24	50.38	5.99	48.57	4.81	56.40	6.44
11	19:00:00	57.62	5.10	51.34	6.38	53.76	6.43	51.03	6.23	49.55	5.25	55.58	6.53
11	20:00:00	59.14	5.58	51.61	6.85	53.41	6.43	50.53	6.14	49.75	5.33	55.34	7.02
11	21:00:00	56.96	5.19	50.55	6.92	53.25	6.42	50.21	6.23	49.84	5.55	55.23	7.37
11	22:00:00	57.78	5.55	51.12	7.15	52.78	6.45	50.19	6.40	50.21	5.83	55.25	6.89
11	23:00:00	56.54	5.23	53.29	6.61	52.82	6.46	49.73	6.10	49.81	5.82	54.50	7.03
12	0:00:00	57.17	5.26	54.11	6.64	52.46	6.34	49.57	5.96	50.10	5.86	53.99	6.97
12	1:00:00	56.68	5.20	56.85	7.11	52.69	6.52	49.93	6.20	50.00	5.79	53.84	6.89
12	2:00:00	56.38	5.12	58.35	6.80	52.72	6.66	49.16	5.68	49.46	5.77	54.52	6.87
12	3:00:00	56.30	5.00	58.41	6.79	52.85	6.47	48.88	5.38	49.87	5.48	53.82	7.10
12	4:00:00	56.76	5.10	58.35	6.93	52.68	6.41	49.47	6.15	49.50	5.01	54.30	6.82
12	5:00:00	56.82	5.35	56.50	7.20	52.49	6.47	49.22	5.76	49.79	5.26	53.99	6.74
12	6:00:00	56.58	5.38	55.32	7.11	52.36	6.42	49.30	5.52	50.04	6.27	54.14	6.82
12	7:00:00	56.35	5.45	55.52	6.92	52.69	6.43	49.31	5.52	50.53	6.01	53.62	6.73
12	8:00:00	56.59	5.23	56.26	6.58	53.55	6.46	50.45	6.23	50.89	6.30	55.67	6.67
12	9:00:00	57.70	5.30	57.26	6.75	55.69	6.61	51.00	6.47	51.48	6.31	56.06	6.96
12	10:00:00	58.34	5.43	57.49	6.69	56.66	6.66	51.71	6.18	51.71	6.35	55.88	6.63
12	11:00:00	57.09	5.60	57.07	7.04	57.07	6.70	52.03	5.57	51.77	6.49	56.62	6.71
12	12:00:00	56.84	5.73	56.62	7.52	54.91	6.76	50.61	5.19	51.72	6.27	56.07	7.14
12	13:00:00	57.77	5.79	55.58	7.52	54.88	6.77	51.75	5.53	52.42	6.08	56.48	7.10
12	14:00:00	59.15	5.95	55.30	7.38	54.45	6.77	51.77	5.49	52.51	6.08	56.81	7.04
12	15:00:00	60.06	5.93	56.11	7.22	53.75	6.73	51.31	5.34	51.89	6.08	55.83	6.90
12	16:00:00	58.82	5.42	56.60	7.51	54.48	6.53	51.13	5.59	52.14	6.17	55.20	6.58
12	17:00:00	56.89	5.16	56.56	7.16	53.78	6.52	50.63	5.73	50.60	6.01	55.64	6.48
12	18:00:00	55.84	5.22	56.29	7.13	52.93	6.28	49.98	5.60	49.81	5.53	54.21	7.21
12	19:00:00	56.65	5.14	56.11	7.47	52.88	6.35	50.42	5.73	49.87	5.80	53.49	7.44
12	20:00:00	54.95	4.76	56.40	7.55	53.26	6.46	50.11	5.73	49.86	5.80	54.13	7.18
12	21:00:00	54.40	4.76	56.21	7.54	53.12	6.53	49.63	5.70	49.85	5.68	54.16	7.05
12	22:00:00	56.46	5.41	56.06	7.34	53.02	6.79	49.43	5.62	49.87	5.78	54.27	6.89
12	23:00:00	56.51	5.52	55.71	7.32	52.78	6.37	49.53	5.65	49.27	5.53	54.53	6.91
13	0:00:00	55.52	4.92	55.82	7.30	52.79	6.41	49.17	5.49	49.86	6.10	54.36	7.03
13	1:00:00	55.84	4.90	55.70	7.20	52.58	6.49	49.05	5.53	49.72	6.08	54.19	7.03
13	2:00:00	56.21	5.05	55.72	7.06	52.31	6.46	49.01	5.52	49.05	5.80	53.71	6.92
13	3:00:00	56.97	5.28	55.94	7.18	52.25	6.39	49.19	5.48	49.77	5.87	53.07	6.15
13	4:00:00	56.17	5.01	55.65	7.17	52.26	6.31	49.42	5.55	50.27	5.78	54.49	7.01
13	5:00:00	54.60	4.48	55.58	7.29	52.41	6.47	49.31	5.55	50.11	5.81	54.42	7.57
13	6:00:00	55.75	4.86	55.24	7.54	52.18	6.38	49.75	5.85	50.54	5.98	54.35	6.84
13	7:00:00	55.49	4.80	55.49	7.33	52.14	6.28	50.07	5.73	50.98	6.10	54.62	6.54
13	8:00:00	54.81	4.47	56.07	7.24	52.87	6.50	49.96	5.59	51.07	6.07	55.11	6.64
13	9:00:00	57.10	4.51	57.84	7.26	54.09	6.55	51.11	5.80	51.99	6.27	55.23	6.97
13	10:00:00	61.04	4.97	56.78	7.40	53.75	6.49	51.20	5.69	52.12	5.99	56.24	6.93
13	11:00:00	62.84	5.39	56.56	7.32	54.37	6.47	50.43	5.55	52.27	5.79	57.08	6.91
13	12:00:00	58.72	5.40	56.78	7.70	53.89	6.66	52.93	5.64	52.73	5.92	57.96	7.34
13	13:00:00	57.58	5.21	57.68	7.06	51.71	6.86	53.94	5.83	51.13	5.71	57.69	7.03
13	14:00:00	56.29	4.87	57.41	7.04	48.32	7.63	54.27	5.71	51.90	4.99	57.40	6.87
13	15:00:00	55.88	4.79	57.04	6.91	48.38	6.92	54.32	5.76	52.48	5.06	55.76	6.77
13	16:00:00	56.08	4.65	57.30	8.15	49.84	5.60	53.60	5.78	53.10	5.70	54.86	6.59

วันที่	เวลา	CCG HDS 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)
13	17:00:00	56.53	4.75	56.85	7.93	51.02	8.13	52.33	5.51	50.92	4.65	55.11	6.79
13	18:00:00	56.90	4.95	56.43	7.32	49.81	9.37	52.49	5.57	50.56	4.91	55.00	6.67
13	19:00:00	57.38	5.30	56.76	7.31	51.60	8.41	53.19	6.07	49.94	4.95	55.23	6.91
13	20:00:00	57.61	5.50	56.40	7.31	51.00	8.37	51.95	5.85	49.78	5.32	55.37	6.96
13	21:00:00	56.55	5.10	55.94	7.59	50.97	8.38	50.79	5.77	49.37	5.31	54.66	6.75
13	22:00:00	56.77	4.96	55.55	7.55	50.39	8.75	50.43	5.98	48.64	5.00	54.43	7.15
13	23:00:00	56.76	4.85	54.86	7.62	49.86	8.93	49.78	5.68	49.07	5.12	54.64	7.26
14	0:00:00	57.12	4.88	54.73	7.48	49.65	8.93	49.31	5.40	48.97	5.05	54.00	6.87
14	1:00:00	56.75	4.77	54.74	7.51	50.77	7.79	48.85	5.10	49.07	5.04	54.15	6.60
14	2:00:00	56.61	4.70	54.77	7.40	50.41	7.99	49.13	5.42	49.50	5.04	54.03	6.93
14	3:00:00	57.01	4.82	55.49	7.21	49.92	8.48	49.47	5.60	48.54	4.84	53.93	6.62
14	4:00:00	56.42	4.67	55.16	7.05	49.98	8.18	49.07	5.49	47.46	4.67	53.72	6.68
14	5:00:00	57.35	4.96	55.20	7.12	49.55	8.23	49.45	5.92	48.60	4.96	53.41	6.71
14	6:00:00	57.40	5.00	54.83	7.72	49.71	8.37	49.29	5.90	49.86	5.27	53.68	6.75
14	7:00:00	57.72	5.02	55.05	7.54	50.23	8.29	49.09	5.28	50.26	4.81	53.56	6.63
14	8:00:00	58.07	5.17	55.35	7.63	50.54	8.27	49.78	5.53	51.55	5.50	54.28	6.65
14	9:00:00	57.03	7.28	56.18	7.55	52.51	8.31	51.00	5.84	51.89	5.28	55.03	6.87
14	10:00:00	57.56	7.94	56.00	7.15	53.96	8.39	51.29	6.69	51.35	4.91	55.41	7.10
14	11:00:00	56.21	8.11	56.98	7.29	52.98	8.47	52.11	6.99	50.85	5.02	55.52	6.65
14	12:00:00	55.74	7.83	54.13	7.97	52.95	8.33	53.32	6.45	52.20	5.63	54.50	6.74
14	13:00:00	56.38	8.14	53.28	5.61	53.53	8.32	53.33	6.29	50.65	5.46	54.28	6.47
14	14:00:00	58.53	8.13	55.77	6.33	53.06	8.41	56.18	6.28	56.53	6.16	54.72	6.64
14	15:00:00	56.62	8.66	55.04	7.73	52.15	8.42	56.92	6.58	55.65	5.92	54.59	6.55
14	16:00:00	56.74	8.26	55.32	7.47	51.16	8.28	57.02	6.36	55.51	5.98	54.11	6.56
14	17:00:00	55.55	8.09	55.95	7.34	50.64	8.18	56.97	6.20	55.64	6.02	53.47	6.67
14	18:00:00	54.50	8.27	56.81	7.16	50.23	8.31	57.16	6.35	55.86	5.99	53.39	6.79
14	19:00:00	53.92	8.59	56.68	7.43	50.85	7.65	57.31	6.40	49.29	6.54	53.06	6.53
14	20:00:00	53.92	7.78	57.01	7.74	50.39	7.87	56.60	6.41	48.39	6.18	53.45	6.55
14	21:00:00	54.14	8.06	56.90	7.56	50.29	7.96	52.37	6.47	47.28	6.27	53.32	6.80
14	22:00:00	53.72	8.23	57.02	7.78	50.33	7.98	50.94	6.07	46.58	6.65	52.78	6.64
14	23:00:00	53.36	7.97	56.75	7.76	50.40	8.00	50.20	6.02	46.77	6.99	52.44	6.43
15	0:00:00	53.54	7.75	57.51	7.86	50.31	8.05	50.30	6.14	46.34	7.24	51.72	6.64
15	1:00:00	56.32	5.48	57.83	6.97	50.18	8.14	49.72	5.99	46.16	7.18	51.20	6.70
15	2:00:00	55.29	4.99	57.36	8.08	50.40	8.19	49.56	6.08	46.15	6.73	51.13	6.77
15	3:00:00	54.43	4.57	57.71	8.42	50.72	8.10	49.83	6.12	45.82	6.47	51.34	6.66
15	4:00:00	55.88	5.43	58.29	8.05	50.71	8.12	49.44	6.16	45.63	6.50	51.51	6.67
15	5:00:00	54.62	5.06	58.09	7.93	50.59	8.11	49.71	6.15	45.79	6.70	51.22	6.43
15	6:00:00	54.58	5.13	58.31	7.84	50.78	7.92	49.91	6.17	45.43	6.57	51.47	6.50
15	7:00:00	54.22	4.96	58.32	7.99	50.88	7.92	50.20	6.14	46.36	6.68	52.09	6.70
15	8:00:00	55.38	5.06	57.93	7.86	51.66	7.99	51.46	6.27	46.75	7.02	52.73	6.75
15	9:00:00	56.81	5.23	58.01	7.73	51.79	8.13	52.87	6.43	46.79	6.93	53.18	6.64
15	10:00:00	56.03	5.35	57.44	8.29	53.78	7.38	54.32	6.29	47.30	6.79	61.49	8.68
15	11:00:00	56.43	5.43	55.27	9.12	54.63	5.92	54.68	6.32	47.85	7.02	55.72	6.76
15	12:00:00	56.20	5.62	56.74	8.15	53.99	6.20	54.78	6.60	48.02	7.33	55.14	6.92
15	13:00:00	55.60	5.30	57.69	6.53	53.47	6.27	54.94	6.59	47.83	7.49	52.61	6.82
15	14:00:00	56.59	5.44	57.70	6.37	53.09	6.07	55.74	6.64	46.97	7.13	51.83	6.26
15	15:00:00	56.29	5.49	57.48	7.07	52.69	6.09	55.57	6.67	46.47	7.10	53.17	6.47
15	16:00:00	55.75	5.31	56.73	7.25	51.95	6.06	55.14	6.11	46.23	6.48	53.52	7.04
15	17:00:00	55.14	5.23	57.59	6.99	51.41	5.81	54.15	6.03	45.88	6.21	53.75	6.92
15	18:00:00	55.26	5.19	58.20	6.87	50.37	5.58	53.48	6.29	45.69	6.13	53.32	6.85
15	19:00:00	54.43	4.57	58.15	6.68	50.74	5.91	53.03	6.57	45.78	6.26	53.59	6.78
15	20:00:00	56.99	5.86	58.41	7.10	50.89	5.79	51.16	6.31	45.96	6.58	53.50	7.14
15	21:00:00	56.15	5.88	58.40	6.41	50.75	5.86	50.70	5.92	45.76	6.68	53.22	6.64
15	22:00:00	55.49	5.50	59.12	6.05	50.52	5.85	50.48	5.82	46.32	6.78	53.29	6.70
15	23:00:00	55.67	5.58	58.79	5.65	50.17	5.73	50.42	5.86	46.82	6.59	52.47	6.83
16	0:00:00	54.37	5.26	58.92	5.56	50.27	5.91	50.09	5.88	46.06	6.50	53.01	6.63
16	1:00:00	54.73	5.48	58.53	6.05	49.84	5.68	49.72	5.72	45.91	6.52	52.76	6.52
16	2:00:00	54.27	5.21	58.97	6.78	49.84	5.67	49.64	6.09	46.02	6.49	53.17	6.51
16	3:00:00	54.67	5.40	58.57	6.38	50.03	5.71	49.64	5.97	45.90	6.28	53.15	6.87
16	4:00:00	54.35	5.59	59.67	6.63	50.24	5.92	49.69	5.87	46.38	6.91	52.95	6.67
16	5:00:00	53.85	5.37	59.97	6.21	49.85	5.62	49.29	5.60	46.12	6.95	53.13	6.63
16	6:00:00	53.83	5.29	60.88	5.91	49.88	5.52	48.68	4.97	46.26	6.96	53.16	6.49
16	7:00:00	53.88	5.24	60.26	5.88	50.42	5.91	48.69	4.88	46.78	6.88	53.64	6.83
16	8:00:00	54.32	5.26	60.61	6.14	50.56	5.89	50.51	6.35	46.73	6.76	54.45	6.84
16	9:00:00	54.13	5.12	60.01	6.17	51.00	6.13	50.35	5.45	47.12	6.66	54.18	6.85
16	10:00:00	54.38	5.23	57.76	5.37	51.58	6.04	52.15	5.78	47.63	7.20	53.93	5.92
16	11:00:00	54.58	5.51	60.10	6.36	52.24	6.27	54.49	6.20	47.94	7.04	55.47	7.05
16	12:00:00	56.11	5.93	60.58	6.98	52.17	6.34	53.31	6.21	47.26	7.02	55.71	7.06
16	13:00:00	56.44	5.89	59.85	5.55	52.63	6.26	53.35	6.09	46.83	6.87	55.65	7.32
16	14:00:00	55.83	5.43	60.63	6.09	52.64	6.13	54.03	6.51	46.61	6.45	56.46	6.80
16	15:00:00	56.37	5.57	59.81	6.01	52.02	6.13	54.08	5.69	46.49	6.42	55.97	7.08
16	16:00:00	56.54	5.58	59.88	6.20	51.04	5.84	52.68	5.71	47.08	6.67	55.28	7.09
16	17:00:00	56.08	5.57	60.31	6.48	51.22	5.75	50.61	5.28	47.32	6.79	54.56	6.89
16	18:00:00	55.54	5.59	60.21	6.32	51.43	5.93	50.81	5.59	46.81	6.87	55.18	6.86
16	19:00:00	56.35	5.93	60.09	6.21	51.74	6.07	51.76	6.12	46.48	6.88	55.69	7.27
16	20:00:00	56.65	5.46	59.82	6.09	51.21	5.94	51.36	6.11	46.17	7.08	54.88	7.61

วันที่	เวลา	CCG HDS 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)
16	21:00:00	56.42	5.34	59.55	6.19	50.88	6.03	50.76	5.89	45.97	7.16	54.82	6.91
16	22:00:00	55.49	5.02	60.39	6.81	50.90	6.07	50.41	5.71	45.47	7.03	54.78	6.75
16	23:00:00	54.05	4.67	60.22	6.96	50.89	6.16	49.90	5.51	44.42	5.93	54.15	6.74
17	0:00:00	54.36	5.01	59.51	6.44	50.90	6.08	50.27	5.56	45.09	6.61	53.89	6.76
17	1:00:00	54.71	5.16	59.17	6.02	50.99	5.88	50.65	5.65	45.04	6.31	53.36	6.45
17	2:00:00	54.85	5.17	58.96	6.11	50.96	6.02	50.47	5.61	45.88	6.70	53.63	6.70
17	3:00:00	55.52	5.29	59.10	6.36	51.41	6.10	50.73	5.57	46.21	6.91	53.40	7.03
17	4:00:00	55.59	5.25	59.10	6.01	51.05	6.03	50.89	5.63	46.14	6.76	53.05	6.98
17	5:00:00	55.57	5.30	56.19	5.88	51.27	6.03	50.68	5.38	45.88	6.48	53.26	6.89
17	6:00:00	55.09	5.27	53.81	5.95	51.52	6.09	51.16	5.57	46.05	6.27	53.29	6.74
17	7:00:00	54.91	5.16	55.54	6.29	51.39	5.99	51.37	5.58	46.57	6.80	53.59	6.82
17	8:00:00	55.38	5.13	56.07	6.03	52.31	6.07	52.13	5.75	46.96	7.35	54.17	6.96
17	9:00:00	53.09	5.40	57.28	6.78	52.95	6.09	52.96	5.82	46.99	7.18	53.74	7.10
17	10:00:00	50.29	6.27	57.33	7.34	53.28	6.10	53.29	5.77	47.44	6.54	53.60	6.72
17	11:00:00	56.63	7.10	56.46	7.12	53.75	6.17	52.87	5.83	47.77	6.38	54.70	6.72
17	12:00:00	56.63	6.49	52.94	6.25	53.22	6.09	52.14	5.29	47.93	6.68	54.29	7.23
17	13:00:00	58.14	6.41	52.55	5.93	53.15	6.03	53.84	5.84	48.02	6.93	52.99	7.11
17	14:00:00	58.60	6.31	50.76	5.87	53.32	6.08	54.45	5.88	47.80	6.95	52.66	6.77
17	15:00:00	58.72	6.99	52.41	5.88	55.06	6.24	54.34	5.87	48.15	6.70	53.90	7.02
17	16:00:00	58.53	6.28	53.95	5.95	52.36	6.07	53.92	5.88	48.66	6.75	55.07	7.15
17	17:00:00	59.40	7.12	56.28	6.32	51.97	5.71	52.96	5.65	47.88	6.33	54.64	7.07
17	18:00:00	57.24	6.28	57.49	6.45	51.10	5.84	54.56	5.89	47.38	6.00	54.91	6.85
17	19:00:00	56.31	5.96	58.22	6.27	51.85	5.99	53.49	5.78	46.42	6.33	54.10	6.92
17	20:00:00	56.82	6.28	58.47	6.60	51.87	6.12	53.00	5.83	46.46	6.47	53.11	6.86
17	21:00:00	57.22	5.99	58.12	6.53	51.80	5.94	53.45	5.90	46.49	6.44	52.91	6.80
17	22:00:00	56.69	5.75	58.22	6.92	51.30	5.79	52.52	5.63	45.00	6.47	53.32	7.06
17	23:00:00	56.23	5.41	57.44	6.90	51.92	6.12	52.23	5.61	43.33	5.62	53.45	7.06
18	0:00:00	56.40	5.40	56.99	6.52	51.54	6.65	52.54	5.79	45.40	6.27	53.17	6.80
18	1:00:00	57.82	5.95	56.83	6.55	51.52	5.41	51.80	5.36	46.27	7.60	54.75	7.06
18	2:00:00	57.67	6.09	56.36	6.45	51.64	6.28	51.87	5.36	46.28	6.87	53.49	6.92
18	3:00:00	57.73	5.99	56.00	6.27	51.48	5.75	52.73	5.76	46.32	6.64	53.38	7.02
18	4:00:00	57.96	6.48	55.48	5.86	51.51	6.44	52.42	5.52	46.36	6.27	53.28	7.10
18	5:00:00	56.63	5.58	55.62	6.34	50.98	5.89	52.25	5.38	46.68	6.55	53.01	7.02
18	6:00:00	56.65	5.97	56.02	7.10	51.41	5.91	52.78	5.56	45.74	6.27	52.81	7.39
18	7:00:00	56.40	5.97	58.45	7.19	51.81	6.18	52.79	5.54	46.95	6.78	52.72	7.46
18	8:00:00	55.66	5.61	60.15	6.61	51.17	6.09	53.05	5.46	47.61	7.04	53.32	7.04
18	9:00:00	57.59	5.79	61.18	7.06	52.72	6.43	54.38	5.53	49.10	7.11	53.90	7.13
18	10:00:00	60.92	5.96	61.60	6.40	53.71	6.03	54.35	6.64	50.41	6.84	53.95	7.17
18	11:00:00	60.11	6.11	60.32	6.14	52.72	6.37	52.13	5.71	50.45	6.31	54.98	6.81
18	12:00:00	60.18	5.95	58.87	6.32	53.52	6.25	51.19	4.83	51.93	6.33	55.34	6.94
18	13:00:00	60.89	5.97	58.36	6.92	53.61	6.08	49.60	4.18	50.02	6.62	55.73	7.13
18	14:00:00	58.36	5.90	55.82	6.79	52.76	5.49	54.83	6.26	64.41	5.99	55.64	7.05
18	15:00:00	61.49	6.12	56.37	6.40	52.85	5.16	54.77	5.60	52.85	6.58	56.30	6.99
18	16:00:00	59.97	5.73	56.61	6.10	54.42	6.66	54.12	5.21	53.14	6.61	57.17	7.11
18	17:00:00	58.46	5.94	56.16	5.75	54.15	6.39	54.39	5.70	53.20	6.35	57.36	7.11
18	18:00:00	58.16	5.83	56.55	5.86	54.90	5.68	55.07	5.74	52.29	5.73	57.20	6.94
18	19:00:00	57.65	6.17	56.45	6.11	55.17	6.28	52.58	5.24	51.69	5.72	56.38	6.85
18	20:00:00	56.01	5.23	55.34	6.30	55.54	6.18	52.09	4.79	52.65	6.13	57.41	7.03
18	21:00:00	56.86	5.77	55.05	6.06	54.94	6.15	54.46	5.91	52.74	6.21	57.02	7.48
18	22:00:00	57.26	5.96	55.21	6.02	55.48	6.11	53.73	5.29	52.09	6.43	54.55	7.03
18	23:00:00	57.31	5.84	54.74	6.02	55.52	6.10	54.21	5.44	52.05	6.50	53.76	6.44
19	0:00:00	57.61	5.94	55.22	5.84	55.48	6.12	53.66	5.17	51.50	6.45	53.79	6.93
19	1:00:00	57.87	5.87	54.45	5.44	55.48	6.26	54.36	5.80	51.99	6.53	52.79	6.46
19	2:00:00	58.69	5.96	53.96	5.72	55.20	6.21	54.04	5.77	51.76	6.59	53.10	6.30
19	3:00:00	59.64	5.93	53.88	5.89	55.21	6.03	53.68	5.42	51.30	6.28	52.97	6.09
19	4:00:00	59.67	5.90	52.81	5.95	55.64	6.19	53.56	5.62	50.75	6.04	52.21	6.56
19	5:00:00	59.74	5.89	51.75	5.32	55.33	6.23	52.45	5.44	50.82	6.05	52.70	6.55
19	6:00:00	59.84	6.11	52.55	5.66	55.68	6.24	52.07	5.30	51.03	6.29	54.26	6.74
19	7:00:00	59.80	6.16	53.12	5.79	54.96	6.19	52.75	5.45	51.27	6.33	54.64	7.11
19	8:00:00	59.80	5.70	54.24	6.74	54.32	6.13	53.50	5.52	51.78	6.32	55.21	6.96
19	9:00:00	60.66	5.81	54.06	7.69	53.95	6.14	54.20	5.72	52.50	6.13	55.06	6.68
19	10:00:00	60.90	5.82	54.65	7.48	53.75	6.12	54.48	5.75	53.31	5.92	55.72	6.83
19	11:00:00	62.00	6.10	55.89	8.28	53.20	5.22	54.35	5.74	53.75	5.90	55.90	6.77
19	12:00:00	62.69	6.49	55.35	7.88	54.35	6.10	55.86	5.87	54.06	6.05	56.35	6.70
19	13:00:00	60.81	6.70	55.75	7.50	54.17	6.33	55.61	5.88	53.77	5.76	56.63	6.81
19	14:00:00	59.51	6.44	55.28	7.45	54.50	6.21	54.90	5.68	54.04	6.02	57.03	6.91
19	15:00:00	58.43	6.07	55.53	7.44	54.07	6.19	55.02	5.50	54.70	6.59	57.25	6.72
19	16:00:00	59.04	6.34	55.28	7.79	53.49	6.08	53.81	5.35	54.41	6.37	57.40	6.75
19	17:00:00	58.70	6.15	55.97	7.70	53.18	6.37	53.42	5.65	53.68	6.28	58.68	6.67
19	18:00:00	58.42	5.98	55.58	7.62	52.16	5.49	52.64	6.03	52.96	6.24	56.86	6.60
19	19:00:00	59.62	6.00	54.50	7.48	52.34	5.71	51.93	5.79	52.14	6.12	54.08	5.61
19	20:00:00	60.87	6.11	54.12	7.40	52.35	6.05	52.39	5.37	51.74	5.85	54.30	6.11
19	21:00:00	58.32	6.27	54.04	7.14	52.21	5.88	52.91	5.57	51.65	5.68	53.48	6.86
19	22:00:00	57.52	5.66	54.36	7.20	52.11	5.85	53.27	5.86	52.54	5.74	53.57	6.62
19	23:00:00	57.31	5.60	54.16	7.40	52.45	5.91	52.45	5.50	53.22	6.03	53.29	6.12
20	0:00:00	57.72	5.74	53.79	7.80	52.52	5.99	52.95	5.53	51.68	6.16	54.23	6.44

วันที่	เวลา	CCG HDS 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)
20	1:00:00	57.19	5.83	53.31	7.74	52.32	6.01	52.94	5.72	52.09	6.11	53.67	6.42
20	2:00:00	57.30	5.96	54.01	7.66	51.94	5.99	52.32	5.58	52.44	6.38	53.72	6.33
20	3:00:00	57.07	5.74	54.84	7.73	51.86	6.07	52.35	5.54	52.52	6.55	54.17	6.46
20	4:00:00	56.76	5.66	54.06	7.76	51.72	6.15	51.91	5.28	52.23	6.32	54.22	6.75
20	5:00:00	57.43	5.61	53.53	7.41	51.63	5.90	52.68	5.68	52.25	5.87	53.79	6.55
20	6:00:00	57.69	5.69	53.56	7.43	51.67	6.05	52.20	5.39	51.76	5.62	53.42	6.21
20	7:00:00	58.54	5.80	53.67	7.42	51.79	6.00	52.42	5.34	51.97	5.63	53.26	6.31
20	8:00:00	59.23	5.75	53.57	7.40	52.36	5.93	53.77	5.53	52.48	5.73	53.49	6.47
20	9:00:00	60.97	5.86	54.38	7.99	53.74	6.14	55.38	5.63	53.02	5.80	53.24	6.40
20	10:00:00	62.99	6.27	53.88	8.06	54.28	6.23	55.09	5.94	53.52	5.85	53.41	6.29
20	11:00:00	64.06	6.27	52.69	7.94	55.11	6.26	54.85	5.67	53.16	5.79	55.19	6.46
20	12:00:00	60.99	6.24	54.29	7.77	53.66	6.02	54.72	5.42	53.85	6.27	55.07	6.52
20	13:00:00	60.30	6.20	54.37	7.79	52.27	5.81	55.18	5.52	52.07	5.42	55.89	6.46
20	14:00:00	60.23	6.39	54.60	7.83	49.69	5.38	55.12	5.46	51.58	5.77	56.78	6.63
20	15:00:00	59.95	6.43	54.30	7.65	50.73	5.22	56.53	6.23	52.83	5.99	56.66	6.68
20	16:00:00	59.15	5.94	54.14	7.79	52.04	6.25	54.74	5.59	53.15	5.88	56.64	6.10
20	17:00:00	58.97	5.87	54.04	7.71	51.16	6.00	54.71	5.69	52.75	5.60	55.84	6.18
20	18:00:00	58.83	5.98	52.51	5.64	51.39	6.14	53.29	5.40	51.57	5.25	54.63	6.41
20	19:00:00	60.15	6.40	52.69	5.62	50.96	5.87	54.26	5.61	51.47	5.37	53.41	6.07
20	20:00:00	59.41	6.14	51.52	4.85	52.30	6.12	54.01	5.69	52.08	5.71	52.54	6.12
20	21:00:00	58.85	6.14	53.38	6.10	52.30	5.99	53.71	5.47	52.30	5.87	53.05	6.46
20	22:00:00	58.59	6.24	53.72	6.93	51.65	5.75	53.53	5.61	51.99	5.54	53.03	6.35
20	23:00:00	58.08	6.09	53.12	5.43	51.12	5.82	53.94	5.94	52.41	5.58	53.04	6.19
21	0:00:00	58.15	6.10	51.71	4.74	50.58	5.79	53.38	5.57	52.26	5.53	52.08	6.04
21	1:00:00	57.27	6.28	52.69	5.71	50.59	5.84	53.82	5.79	52.09	5.53	51.25	5.10
21	2:00:00	55.00	6.22	52.20	5.71	49.17	5.53	53.47	5.50	52.79	5.65	52.84	6.48
21	3:00:00	56.26	5.81	48.78	4.23	47.84	5.40	53.79	5.87	52.35	5.49	53.36	6.66
21	4:00:00	57.27	5.75	50.49	5.03	48.05	5.38	53.31	5.52	52.41	5.63	53.60	6.56
21	5:00:00	57.92	5.88	52.43	6.05	48.61	5.91	53.92	5.60	53.11	5.84	53.98	6.31
21	6:00:00	58.03	6.13	52.00	5.67	49.22	5.81	53.96	5.65	53.06	5.90	53.63	6.12
21	7:00:00	58.29	5.88	52.18	5.71	49.04	5.97	54.11	5.61	52.94	6.04	53.86	6.23
21	8:00:00	58.33	5.99	51.77	5.13	48.98	5.72	54.27	5.46	52.18	5.74	54.74	6.16
21	9:00:00	59.41	6.03	52.82	5.23	49.68	5.78	54.48	5.32	52.61	5.83	53.84	6.28
21	10:00:00	60.41	6.04	53.56	5.45	50.07	5.83	55.41	5.71	52.73	5.68	54.19	6.32
21	11:00:00	60.73	5.76	54.41	5.46	50.05	5.79	55.26	6.18	52.52	5.48	55.50	6.54
21	12:00:00	61.26	5.81	54.13	5.42	48.34	5.46	55.04	5.91	52.56	5.58	55.72	6.45
21	13:00:00	61.31	6.50	53.29	5.78	47.70	4.69	54.86	5.96	53.27	5.68	55.84	6.50
21	14:00:00	60.99	6.75	53.72	5.79	48.98	5.39	54.82	6.58	54.30	6.45	56.10	6.35
21	15:00:00	61.67	6.46	54.92	5.39	48.38	6.38	54.39	5.88	53.53	6.05	55.79	6.47
21	16:00:00	60.40	6.32	54.67	5.34	51.71	5.47	55.36	5.63	52.61	5.66	56.15	6.36
21	17:00:00	60.53	6.29	53.08	5.08	54.35	6.13	53.26	4.91	52.77	5.58	57.83	6.42
21	18:00:00	60.06	6.43	54.81	5.34	52.54	6.14	53.58	5.76	52.71	5.63	55.41	6.45
21	19:00:00	59.49	6.28	54.77	5.40	49.52	5.80	53.29	5.58	52.76	5.61	54.67	6.20
21	20:00:00	59.55	6.06	54.83	5.56	48.89	5.55	51.99	4.87	53.65	5.82	53.95	6.45
21	21:00:00	58.80	5.76	54.11	5.23	48.72	5.61	52.93	5.27	53.36	5.93	53.07	6.32
21	22:00:00	58.67	6.05	53.79	4.92	48.96	5.65	52.75	5.21	53.70	6.14	53.97	6.49
21	23:00:00	58.36	5.94	54.04	4.70	48.97	5.74	52.73	5.36	54.34	6.36	52.64	6.32
22	0:00:00	58.10	6.03	55.44	5.21	49.04	5.80	52.37	5.32	53.92	6.11	52.65	6.43
22	1:00:00	57.98	5.91	54.73	4.85	49.18	5.73	52.46	5.24	53.71	5.81	52.87	6.26
22	2:00:00	57.53	5.67	55.91	6.43	49.34	5.63	52.19	5.21	53.03	5.60	53.04	6.25
22	3:00:00	56.07	5.56	56.14	7.49	49.08	5.87	52.09	5.13	52.72	5.59	53.25	6.43
22	4:00:00	56.52	5.64	56.14	6.52	48.64	5.76	51.83	5.12	52.90	5.94	52.81	6.34
22	5:00:00	56.62	5.73	55.63	5.62	48.44	5.39	52.18	5.15	53.00	5.92	52.64	6.09
22	6:00:00	56.82	5.64	55.65	5.98	48.58	5.65	52.08	5.21	51.75	5.98	53.02	6.05
22	7:00:00	57.11	5.67	55.66	6.02	48.79	5.76	52.64	5.26	51.11	6.46	54.61	6.22
22	8:00:00	57.47	5.79	55.70	6.05	48.62	5.63	53.53	5.37	50.98	5.35	54.78	6.25
22	9:00:00	58.81	5.73	56.62	6.78	49.17	5.68	53.72	5.52	51.87	5.62	54.48	6.08
22	10:00:00	59.32	6.12	56.74	7.03	47.94	5.77	53.14	5.34	51.32	5.74	54.06	6.19
22	11:00:00	58.62	6.05	57.01	6.70	46.16	4.62	53.48	5.48	50.01	5.36	54.22	6.47
22	12:00:00	58.59	6.40	57.41	7.16	48.92	5.91	54.04	5.57	51.36	5.59	54.48	6.54
22	13:00:00	58.59	6.71	56.40	7.66	48.80	5.59	54.30	5.63	51.67	5.61	53.94	6.48
22	14:00:00	58.63	6.83	56.43	7.81	49.14	5.91	53.35	5.20	51.74	5.56	54.15	6.33
22	15:00:00	58.32	6.45	56.67	7.20	48.67	5.62	53.96	5.35	51.71	5.48	54.04	6.32
22	16:00:00	57.94	6.20	56.98	7.26	48.81	5.65	54.79	5.61	51.58	5.35	54.02	6.55
22	17:00:00	56.95	5.86	56.12	7.44	49.14	5.46	54.99	5.35	50.26	5.10	54.42	6.47
22	18:00:00	57.23	5.71	56.02	6.37	49.14	5.70	52.82	5.19	51.85	5.75	54.38	6.35
22	19:00:00	56.72	5.62	56.49	7.67	48.60	5.54	52.02	5.23	52.03	5.76	53.85	6.28
22	20:00:00	57.05	5.66	57.20	7.07	48.31	5.56	51.55	5.22	52.11	5.79	53.47	6.15
22	21:00:00	56.75	5.45	57.39	7.21	48.25	5.57	51.32	5.20	51.47	5.59	53.33	6.34
22	22:00:00	56.23	5.73	57.86	7.13	48.22	5.51	51.51	5.23	52.04	5.86	52.98	6.37
22	23:00:00	55.48	6.25	57.76	7.03	48.55	5.77	51.28	5.21	51.48	5.62	52.72	6.27
23	0:00:00	57.87	5.90	57.89	6.91	48.26	5.66	51.00	5.18	51.76	5.45	52.90	7.02
23	1:00:00	56.79	5.68	58.04	6.99	48.01	5.55	51.18	5.42	51.85	5.76	52.70	6.63
23	2:00:00	56.24	5.45	58.29	6.97	48.31	5.74	50.90	5.23	52.54	6.36	52.57	6.41
23	3:00:00	57.10	5.50	57.63	7.25	48.29	5.65	51.29	5.29	52.83	6.21	52.60	6.27
23	4:00:00	56.76	5.65	58.22	6.83	46.45	5.27	51.11	5.22	49.79	4.75	52.67	6.59

วันที่	เวลา	CCG HDS 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)
23	5:00:00	57.68	5.72	58.25	6.94	44.94	4.16	51.24	5.24	48.00	4.30	52.46	6.58
23	6:00:00	57.99	5.87	58.71	6.80	47.51	5.64	51.70	5.46	52.95	5.98	52.85	6.41
23	7:00:00	57.91	5.95	58.82	6.78	48.52	5.56	51.54	5.22	52.81	6.00	54.13	6.41
23	8:00:00	58.08	5.97	59.39	6.78	48.55	6.02	52.77	5.33	52.37	5.64	53.49	6.55
23	9:00:00	57.34	5.77	59.99	6.71	48.48	5.90	54.17	5.59	52.93	5.70	53.80	6.47
23	10:00:00	57.55	5.86	60.36	6.92	48.22	5.69	54.21	5.47	53.59	5.76	53.13	6.37
23	11:00:00	58.30	5.65	60.59	7.28	48.67	5.72	53.74	5.46	54.86	5.70	52.88	6.19
23	12:00:00	59.34	5.81	60.34	7.09	49.41	5.72	53.86	5.59	55.02	5.69	54.02	6.33
23	13:00:00	60.40	6.22	59.62	6.98	48.83	5.43	53.71	5.60	55.15	5.88	57.16	6.49
23	14:00:00	61.43	6.28	58.49	7.30	50.43	5.79	53.82	5.17	55.11	5.80	57.54	6.47
23	15:00:00	62.31	6.19	58.04	7.47	50.95	5.86	53.71	5.37	54.62	5.63	57.65	6.59
23	16:00:00	62.00	6.18	58.27	7.30	50.62	5.42	53.59	5.14	53.80	5.44	57.80	6.60
23	17:00:00	62.27	6.19	57.87	7.01	51.16	5.94	52.93	5.15	53.22	5.27	56.11	6.31
23	18:00:00	62.18	5.98	59.08	7.20	51.15	5.92	51.83	4.97	53.08	5.63	57.22	6.51
23	19:00:00	60.42	6.11	59.19	7.67	50.07	5.73	51.59	4.79	53.15	6.01	58.10	6.57
23	20:00:00	57.34	6.19	57.94	8.53	49.25	5.92	52.36	5.13	52.37	6.01	55.75	6.62
23	21:00:00	57.25	6.17	59.94	7.03	50.26	5.92	51.23	4.88	52.75	6.12	53.67	6.41
23	22:00:00	57.56	5.83	59.51	5.94	49.90	5.54	50.78	4.81	51.72	5.71	53.12	6.15
23	23:00:00	57.61	5.84	59.92	6.84	49.94	5.87	50.92	4.88	50.47	4.96	53.06	6.40
24	0:00:00	58.01	5.78	60.37	6.54	50.36	5.80	50.36	4.80	51.74	5.36	52.75	6.29
24	1:00:00	58.57	5.81	60.66	6.50	50.41	5.96	50.16	4.75	52.63	5.91	52.65	5.91
24	2:00:00	58.71	5.55	60.61	6.94	50.82	5.95	50.59	4.93	51.70	5.58	52.63	5.80
24	3:00:00	58.02	5.41	61.58	6.57	50.75	5.73	49.93	4.78	52.62	5.78	53.01	6.49
24	4:00:00	58.36	5.63	61.14	6.86	49.88	5.58	49.79	4.69	52.67	5.65	52.43	6.26
24	5:00:00	58.20	5.59	60.95	6.78	49.85	5.50	49.87	4.73	52.55	5.64	51.00	6.11
24	6:00:00	57.89	5.51	60.40	6.73	48.46	4.52	49.90	4.76	51.28	5.31	47.12	4.43
24	7:00:00	58.01	5.30	60.49	6.57	51.52	6.38	50.33	4.71	51.98	5.47	50.48	5.83
24	8:00:00	58.21	5.28	60.95	6.60	53.18	6.67	51.16	4.80	52.99	5.78	51.34	6.34
24	9:00:00	58.67	5.82	61.09	6.78	51.64	4.61	52.07	4.83	53.00	5.65	51.73	5.97
24	10:00:00	57.74	4.99	61.26	7.12	51.62	5.45	53.47	4.88	52.82	5.78	51.01	5.41
24	11:00:00	59.75	5.82	61.63	6.92	51.82	6.49	53.70	4.94	52.96	5.92	51.30	5.54
24	12:00:00	59.11	6.03	61.07	6.75	51.08	5.50	53.16	4.95	52.08	5.62	53.14	5.71
24	13:00:00	58.72	5.95	60.17	6.96	50.99	5.23	53.95	4.92	52.08	5.66	55.68	5.98
24	14:00:00	59.05	6.79	58.60	6.85	52.16	6.11	53.01	4.78	52.06	5.88	57.10	6.77
24	15:00:00	58.41	6.37	58.26	6.76	51.91	6.26	52.22	4.65	50.69	5.14	56.08	6.82
24	16:00:00	58.73	5.97	57.90	6.68	51.94	5.89	53.61	4.73	50.70	5.19	54.53	5.79
24	17:00:00	58.43	5.91	59.45	6.80	52.15	6.10	52.56	4.70	52.03	5.68	54.53	5.74
24	18:00:00	59.35	6.06	59.43	6.73	51.77	6.90	51.12	4.60	51.58	5.69	53.37	5.73
24	19:00:00	59.63	5.92	59.45	6.62	50.55	5.24	50.74	4.75	52.06	5.76	53.31	6.11
24	20:00:00	58.35	5.64	59.44	6.71	52.22	6.33	51.07	5.01	53.63	5.79	52.80	6.24
24	21:00:00	57.97	5.69	59.65	6.75	51.51	5.67	50.05	4.71	53.11	5.92	52.25	6.04
24	22:00:00	58.26	6.50	60.50	6.58	51.59	5.80	49.97	4.67	52.66	5.87	52.34	5.95
24	23:00:00	58.19	6.51	60.55	6.59	51.78	6.02	49.81	4.66	52.67	5.73	51.99	5.94
25	0:00:00	57.74	5.77	60.56	6.73	51.43	6.23	50.96	5.01	53.03	5.84	50.83	5.67
25	1:00:00	58.20	5.85	60.52	6.57	51.56	6.22	50.63	4.89	52.68	5.83	48.47	4.56
25	2:00:00	58.20	5.95	60.53	6.72	51.18	5.95	50.72	4.99	52.48	5.74	51.59	6.70
25	3:00:00	58.47	5.96	60.65	6.62	51.24	5.99	51.04	5.09	52.42	5.94	52.03	6.04
25	4:00:00	58.52	5.92	60.35	6.55	51.21	5.98	50.92	5.08	52.92	5.71	52.17	5.85
25	5:00:00	58.37	5.99	60.24	6.40	51.26	6.05	49.03	4.36	52.74	5.78	52.12	5.83
25	6:00:00	58.20	6.02	60.63	6.68	51.11	6.02	50.90	5.11	52.00	5.81	51.76	5.51
25	7:00:00	57.95	5.85	60.20	6.59	51.17	5.87	50.71	4.91	52.21	5.91	50.75	5.21
25	8:00:00	58.21	5.79	60.09	6.40	52.02	6.18	51.13	4.91	52.97	5.89	52.48	5.84
25	9:00:00	57.74	5.87	60.53	6.59	52.57	6.27	52.41	5.16	53.03	5.80	54.16	7.49
25	10:00:00	58.32	5.98	61.13	6.63	61.50	7.25	53.12	5.11	53.52	5.80	53.82	6.88
25	11:00:00	57.82	5.62	60.90	6.79	52.75	6.00	51.08	4.88	54.05	6.08	54.19	6.54
25	12:00:00	57.91	5.83	60.53	6.70	53.63	6.10	52.37	5.56	53.06	5.64	54.83	6.75
25	13:00:00	57.64	5.72	60.42	7.07	52.33	5.41	54.73	6.26	53.38	5.63	55.40	6.72
25	14:00:00	58.41	6.08	60.28	6.63	50.89	5.06	54.10	5.81	53.51	5.42	54.85	6.76
25	15:00:00	58.45	6.28	61.46	6.83	52.19	7.35	53.33	5.95	53.95	5.50	54.76	6.66
25	16:00:00	58.38	6.40	61.57	6.95	52.19	6.58	53.01	5.99	54.10	5.80	54.55	7.00
25	17:00:00	58.63	6.02	60.64	7.47	51.85	6.38	52.06	5.86	52.82	5.47	54.78	7.18
25	18:00:00	58.56	5.90	60.86	7.12	52.88	6.64	51.90	5.76	52.25	5.47	54.44	7.05
25	19:00:00	57.76	6.38	56.76	9.54	52.96	6.17	52.43	5.94	52.23	5.62	54.54	7.12
25	20:00:00	58.18	6.70	56.36	9.50	52.67	6.48	52.32	6.13	51.66	5.66	54.06	7.03
25	21:00:00	57.99	6.36	58.11	8.56	52.29	6.69	52.17	6.09	51.06	6.07	53.69	7.02
25	22:00:00	57.51	6.11	59.81	7.40	52.11	6.33	52.09	6.12	50.60	5.65	53.54	7.19
25	23:00:00	57.04	6.06	59.26	8.07	52.13	6.39	51.46	5.83	51.57	5.80	54.32	7.37
26	0:00:00	56.71	5.56	58.54	8.35	51.96	6.39	51.69	6.07	51.16	5.78	54.66	7.27
26	1:00:00	57.61	6.05	58.59	8.61	51.67	6.34	52.11	6.54	50.86	5.62	53.92	6.64
26	2:00:00	57.51	6.09	58.53	8.46	51.66	6.32	51.87	6.19	51.33	5.86	52.96	6.70
26	3:00:00	57.66	5.93	59.19	8.00	51.76	6.35	51.52	5.81	51.75	6.00	52.38	6.90
26	4:00:00	57.70	5.93	59.28	7.96	51.53	6.46	51.05	5.95	52.04	6.03	52.83	7.13
26	5:00:00	58.20	6.11	60.81	8.00	51.58	6.19	51.04	6.25	51.55	5.93	52.61	6.86
26	6:00:00	58.13	5.94	61.26	7.83	51.39	6.08	51.16	6.12	51.47	5.91	52.67	6.84
26	7:00:00	58.19	5.67	61.18	7.74	51.83	6.51	51.41	6.16	51.90	5.72	53.36	6.96
26	8:00:00	57.83	5.47	60.87	7.68	52.33	6.71	52.50	6.37	52.23	5.52	53.53	6.91

วันที่	เวลา	CCG HDS 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)
26	9:00:00	58.29	5.37	60.73	7.89	53.63	6.17	53.70	6.51	52.65	5.54	54.58	6.98
26	10:00:00	59.28	5.96	59.57	8.57	53.43	6.22	54.44	6.37	52.81	5.79	54.93	7.04
26	11:00:00	59.51	6.12	60.49	8.07	53.56	6.51	54.92	6.43	52.91	5.71	54.93	6.94
26	12:00:00	59.45	6.76	60.60	7.80	53.23	6.66	54.51	6.14	53.81	5.72	53.15	6.91
26	13:00:00	58.54	6.37	60.06	8.15	52.58	6.76	53.48	6.00	53.26	5.77	52.91	6.35
26	14:00:00	58.39	6.34	60.04	8.15	53.09	6.51	53.92	6.13	53.75	6.07	53.16	7.15
26	15:00:00	58.16	6.36	57.79	8.21	53.43	6.60	52.19	6.07	52.04	5.52	52.18	7.06
26	16:00:00	57.53	6.34	56.92	8.15	52.81	6.30	52.51	5.81	52.11	5.48	52.85	7.06
26	17:00:00	57.28	5.82	59.98	7.94	51.96	6.16	52.47	6.03	51.90	5.45	53.04	7.24
26	18:00:00	57.53	5.56	60.07	7.96	51.87	6.15	51.83	6.01	51.51	5.33	53.04	7.11
26	19:00:00	57.74	5.87	59.84	8.22	53.04	6.38	51.17	5.95	51.10	5.45	52.78	7.01
26	20:00:00	57.97	6.22	59.35	8.12	52.24	6.48	51.98	6.14	51.02	5.72	52.97	6.95
26	21:00:00	58.02	6.18	59.31	7.68	51.90	6.34	51.52	6.19	50.99	5.73	52.85	6.91
26	22:00:00	57.54	6.15	59.18	7.15	51.98	6.47	51.53	6.26	51.12	5.87	52.39	6.98
26	23:00:00	57.63	6.10	58.02	8.41	51.59	6.40	50.99	6.02	51.05	5.90	50.83	5.22
27	0:00:00	57.54	5.85	58.80	8.09	51.44	6.30	50.82	6.09	51.29	5.75	51.92	5.17
27	1:00:00	57.35	5.97	60.38	7.83	51.26	6.25	50.59	6.22	50.83	5.60	51.38	5.06
27	2:00:00	56.72	5.79	59.95	7.89	51.40	6.38	50.22	5.92	51.35	5.83	52.72	5.87
27	3:00:00	56.88	5.89	60.15	7.77	51.61	6.50	50.27	6.02	51.32	5.84	51.02	4.92
27	4:00:00	56.50	5.70	58.72	8.07	51.20	6.31	50.24	6.00	51.44	5.85	53.73	5.92
27	5:00:00	56.72	6.03	60.12	7.77	51.38	6.30	50.32	6.26	51.34	5.83	53.84	5.70
27	6:00:00	56.69	5.93	60.60	8.14	51.53	6.46	50.50	6.37	51.79	5.76	53.96	6.02
27	7:00:00	56.57	5.72	61.20	7.97	51.58	6.36	50.68	5.73	51.62	5.75	54.48	6.45
27	8:00:00	57.15	5.88	61.44	7.65	51.59	6.35	51.85	6.45	51.95	5.67	54.82	6.63
27	9:00:00	57.32	5.99	60.96	7.74	52.36	6.39	52.59	6.48	51.88	5.60	54.76	8.10
27	10:00:00	56.48	5.64	60.32	8.01	52.79	6.38	52.70	6.26	52.28	5.56	53.44	7.06
27	11:00:00	55.97	5.66	59.51	8.13	53.64	6.49	52.42	6.23	52.72	5.74	52.99	6.16
27	12:00:00	56.29	6.00	59.61	8.06	53.07	6.56	51.78	6.67	53.01	5.58	53.10	6.34
27	13:00:00	56.53	5.71	59.08	7.90	52.71	6.62	51.78	6.21	54.05	5.85	53.73	6.45
27	14:00:00	57.44	6.22	57.41	8.05	53.42	6.63	52.28	6.22	54.11	5.83	54.48	6.48
27	15:00:00	57.33	6.19	58.31	7.76	53.55	6.52	51.62	6.62	52.88	5.94	55.24	6.49
27	16:00:00	57.36	5.98	57.69	7.83	52.11	6.39	51.33	6.08	45.58	4.21	55.44	6.56
27	17:00:00	56.41	5.40	56.56	7.66	52.15	6.33	51.28	6.14	50.43	5.40	55.90	6.65
27	18:00:00	54.91	5.37	56.67	7.50	51.78	6.25	51.41	6.07	51.63	6.02	55.93	6.56
27	19:00:00	56.21	6.32	56.10	7.67	50.57	6.08	51.47	5.98	51.08	5.79	55.64	6.45
27	20:00:00	55.75	7.14	55.49	7.53	51.49	6.32	51.63	5.98	51.25	5.94	54.55	6.65
27	21:00:00	55.22	5.61	55.49	7.86	51.37	6.50	52.44	6.18	50.79	5.73	54.80	6.78
27	22:00:00	55.35	5.52	55.55	7.91	51.22	6.44	52.82	6.28	50.62	5.83	54.61	6.58
27	23:00:00	55.70	5.94	55.45	7.78	51.07	6.38	52.28	6.30	51.51	5.92	54.33	6.61
28	0:00:00	55.49	5.70	55.52	7.79	51.04	6.35	51.41	6.17	51.66	6.12	54.10	6.68
28	1:00:00	55.31	5.59	55.18	7.67	50.97	6.32	50.84	6.27	51.35	5.88	54.06	6.59
28	2:00:00	54.84	5.54	55.07	7.73	50.94	6.30	50.83	6.32	51.29	5.54	53.88	6.67
28	3:00:00	55.17	5.79	54.23	8.31	50.83	6.18	51.14	6.32	51.35	5.46	53.50	6.82
28	4:00:00	55.17	5.87	55.22	7.40	50.83	6.38	51.14	6.27	51.49	5.54	53.76	6.49
28	5:00:00	54.77	5.38	55.29	7.24	51.13	6.35	50.80	6.21	51.24	5.61	53.79	6.58
28	6:00:00	55.39	5.78	54.93	7.18	51.09	6.56	50.71	6.44	51.57	5.79	53.68	6.66
28	7:00:00	55.30	5.63	54.99	7.04	51.22	6.56	51.04	6.21	51.13	5.57	53.37	6.75
28	8:00:00	55.97	5.77	55.46	7.11	51.62	6.49	51.70	6.31	51.51	5.57	54.01	6.69
28	9:00:00	55.10	5.68	64.33	7.43	52.14	6.43	67.48	6.33	52.11	5.84	54.35	6.72
28	10:00:00	54.53	5.34	57.23	7.61	53.11	6.59	52.57	6.26	52.10	5.83	55.18	6.83
28	11:00:00	56.28	5.67	56.07	7.10	51.44	6.56	52.86	6.54	52.38	5.74	56.35	6.88
28	12:00:00	56.35	6.89	55.78	7.41	51.39	6.36	52.55	6.43	52.61	5.71	56.38	6.83
28	13:00:00	54.04	8.98	56.38	7.81	51.97	6.49	52.59	6.20	53.12	5.88	56.14	6.92
28	14:00:00	54.55	8.16	55.36	7.25	52.47	6.55	52.65	6.68	53.10	5.76	56.03	6.90
28	15:00:00	56.96	7.27	55.43	7.05	54.53	6.50	52.35	6.24	51.68	5.39	57.30	6.83
28	16:00:00	56.10	7.31	54.47	7.06	54.14	6.59	51.76	6.34	50.40	5.12	57.83	6.98
28	17:00:00	55.42	6.63	54.85	6.93	53.36	6.31	51.50	6.17	49.86	4.99	57.27	6.97
28	18:00:00	55.60	6.13	54.98	6.97	52.92	6.42	50.97	5.86	50.71	5.62	56.32	6.42
28	19:00:00	55.77	6.98	54.77	7.01	52.32	6.36	52.35	5.83	51.70	6.31	55.37	6.40
28	20:00:00	56.45	7.34	54.67	7.21	52.24	6.38	52.76	7.05	49.27	5.41	54.91	6.27
28	21:00:00	55.21	6.98	54.87	7.56	52.28	6.75	52.60	6.83	51.38	6.03	54.35	6.31
28	22:00:00	54.96	7.41	54.49	7.13	52.07	6.41	51.48	6.84	50.70	5.87	54.36	6.21
28	23:00:00	54.66	7.42	54.14	7.14	51.80	6.12	52.01	6.58	50.42	5.78	54.26	6.47
29	0:00:00	54.41	7.24			51.65	6.34	52.75	6.64	49.95	5.37	53.56	7.38
29	1:00:00	54.43	7.04			51.67	6.63	53.14	6.96	50.41	5.22	53.82	6.24
29	2:00:00	54.13	6.81			51.61	6.15	52.44	6.80	51.75	5.68	54.49	6.06
29	3:00:00	54.77	7.12			52.06	6.81	51.52	6.79	51.52	5.88	54.05	6.73
29	4:00:00	54.38	7.10			51.74	6.79	50.92	6.79	51.71	5.87	54.02	5.95
29	5:00:00	54.42	7.08			51.41	7.20	50.76	7.03	51.59	6.10	53.73	6.36
29	6:00:00	54.49	7.09			51.36	6.56	51.31	6.96	51.67	6.25	53.41	6.36
29	7:00:00	54.56	7.06			51.59	6.81	51.13	6.86	51.23	5.61	54.66	6.19
29	8:00:00	54.65	7.28			52.66	6.68	52.16	6.15	51.99	5.42	54.84	6.45
29	9:00:00	54.83	7.33			52.94	6.70	53.43	6.38	52.86	5.52	55.12	6.32
29	10:00:00	55.22	7.37			52.44	6.65	53.41	6.23	53.79	5.68	55.56	5.97
29	11:00:00	55.92	7.34			52.52	6.68	52.66	6.10	53.46	5.77	55.40	5.74
29	12:00:00	55.58	7.53			53.71	6.54	52.47	6.17	53.88	6.32	57.02	5.94

วันที่	เวลา	CCG HDS 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)	NOx (ppm)	O <sub>2</sub> (%)
29	13:00:00	55.96	7.55			54.11	5.82	53.23	6.60	55.99	7.04	57.24	5.86
29	14:00:00	57.02	7.43			53.93	7.13	53.08	6.74	55.74	6.75	58.03	6.03
29	15:00:00	56.12	7.35			54.61	7.14	53.04	6.53	55.38	6.29	57.83	6.05
29	16:00:00	56.64	7.33			54.20	6.87	53.43	6.18	55.06	6.42	56.90	5.72
29	17:00:00	58.26	7.28			54.32	6.60	52.58	6.18	54.57	6.81	57.64	5.75
29	18:00:00	58.70	7.53			54.26	6.60	52.86	6.27	54.35	6.52	57.49	5.99
29	19:00:00	55.53	7.45			53.74	6.50	52.96	6.23	53.85	6.66	56.71	5.88
29	20:00:00	55.20	7.33			53.55	6.32	53.27	6.33	53.52	6.92	56.30	5.77
29	21:00:00	54.95	6.91			53.26	6.37	52.43	6.35	52.76	6.52	54.80	5.32
29	22:00:00	54.79	7.26			53.28	6.51	52.10	5.65	51.79	6.47	54.63	5.69
29	23:00:00	54.49	7.41			53.59	6.58	53.14	6.54	52.54	6.62	54.26	5.72
30	0:00:00	54.70	7.46			53.29	6.91	52.69	6.23	53.95	6.65	54.10	5.83
30	1:00:00	54.57	7.31			53.03	6.53	52.15	6.01	53.63	6.68	53.62	5.81
30	2:00:00	54.51	7.29			52.55	6.84	51.78	6.40	53.57	6.65	53.94	5.79
30	3:00:00	54.53	7.18			52.20	7.71	51.99	6.15	52.62	6.65	53.77	5.75
30	4:00:00	54.19	7.22			52.10	7.56	51.68	5.87	52.24	6.49	53.30	5.83
30	5:00:00	54.08	7.16			52.89	7.08	51.72	6.00	52.64	6.64	52.94	5.62
30	6:00:00	54.00	7.15			52.58	7.21	51.28	5.96	53.68	6.64	53.50	6.20
30	7:00:00	53.90	7.30			52.61	7.30	51.90	6.19	53.92	6.52	54.46	6.58
30	8:00:00	54.48	7.33			52.04	7.55	52.42	6.12	54.32	6.55	55.89	5.92
30	9:00:00	54.66	7.29			51.24	6.84	53.26	6.20	54.05	6.52	56.22	5.84
30	10:00:00	56.24	7.20			52.13	7.33	52.52	6.17	54.25	6.13	56.41	5.66
30	11:00:00	55.53	7.29			53.26	7.69	52.54	6.04	54.05	6.61	56.12	4.89
30	12:00:00	57.59	7.58			53.13	7.79	52.64	5.94	54.40	6.53	56.19	5.24
30	13:00:00	58.39	7.67			53.47	7.72	53.05	6.43	54.81	6.65	56.65	5.24
30	14:00:00	58.98	7.63			53.99	6.96	52.44	6.34	54.44	6.70	56.18	5.17
30	15:00:00	60.15	7.51			53.08	6.09	51.86	5.89	54.05	6.26	55.87	4.85
30	16:00:00	59.34	7.23			53.02	6.28	51.22	5.92	53.20	5.92	55.48	4.91
30	17:00:00	56.20	7.25			53.60	6.47	51.09	6.04	54.20	6.34	55.42	5.13
30	18:00:00	56.73	7.15			53.56	6.72	51.29	5.87	54.16	6.41	55.24	4.86
30	19:00:00	57.68	7.24			52.85	6.47	51.15	5.97	53.43	6.71	54.18	4.49
30	20:00:00	57.34	7.17			52.17	6.04	51.25	5.97	52.96	6.57	54.87	5.00
30	21:00:00	56.44	7.12			52.56	5.59	51.79	6.16	52.55	6.42	55.33	5.35
30	22:00:00	55.96	7.14			53.17	5.66	51.68	6.03	52.41	6.42	54.92	4.92
30	23:00:00	55.69	7.24			53.44	6.06	51.85	5.94	51.81	6.40	55.09	4.88
31	0:00:00	55.58	7.33			53.15	6.15			52.26	6.49		
31	1:00:00	54.96	7.23			52.42	5.84			53.03	6.46		
31	2:00:00	54.75	7.44			51.89	5.63			52.76	6.23		
31	3:00:00	54.61	7.25			52.69	6.00			52.88	6.25		
31	4:00:00	54.18	7.38			52.45	6.38			52.37	6.15		
31	5:00:00	54.16	7.36			52.15	6.28			52.08	5.87		
31	6:00:00	53.85	7.18			51.82	6.04			52.32	6.00		
31	7:00:00	54.27	7.22			51.53	5.66			52.32	6.26		
31	8:00:00	55.01	7.29			51.66	5.84			52.13	6.24		
31	9:00:00	54.94	7.55			52.02	6.11			53.30	6.21		
31	10:00:00	54.78	7.57			52.20	6.32			53.23	6.14		
31	11:00:00	54.35	7.50			52.39	6.46			53.89	6.21		
31	12:00:00	55.18	7.53			52.69	6.34			54.61	6.04		
31	13:00:00	53.98	7.65			52.76	6.01			54.75	6.13		
31	14:00:00	54.03	7.56			53.66	6.35			54.41	6.18		
31	15:00:00	66.32	8.57			54.22	6.11			53.62	5.97		
31	16:00:00	52.86	7.20			54.67	5.66			53.46	6.17		
31	17:00:00	52.29	7.02			54.95	5.89			53.24	6.40		
31	18:00:00	52.08	7.12			55.03	6.27			52.86	6.24		
31	19:00:00	52.80	6.90			55.10	6.68			52.65	6.08		
31	20:00:00	52.15	5.56			54.68	6.54			52.76	6.09		
31	21:00:00	47.97	3.98			54.70	6.16			52.53	6.03		
31	22:00:00	47.15	3.82			53.55	5.86			52.46	6.21		
31	23:00:00	50.29	5.02			53.21	6.04			52.26	6.45		

ภาคผนวก ก3

ผลการติดตามตรวจสอบคุณภาพอากาศ  
ในบรรยากาศ แบบครั้งคราว



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK  
 BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10502 e-mail : hbya@thaiogroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KHL124, TUNGSOKEA, SRIRACHA, CHONBURI  
 20236  
**SAMPLE TYPE** : AMBIENT  
**SAMPLING DATE** : 1, 2, 3  
**SAMPLING TIME** : 1, 2, 3  
**SAMPLING BY** : MR SRIPAT JONGPHADUNGKIT  
**ANALYZED BY** : MISS SETJARN TUMSA-AT  
**RECEIVED DATE** : MAY 11, 2022  
**ANALYTICAL DATE** : MAY 13-20, 2022  
**REPORT NO.** : 2022-41037268  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22A3067-0032 - T22A3067-0034

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		
			มาตรฐานกรมมาตรฐานสิ่งแวดล้อม		
			*	**	***
TOTAL SUSPENDED PARTICULATE	mg/m <sup>3</sup>	GRAVIMETRIC (HIGH VOLUME METHOD)	T22A3067-0032	T22A3067-0033	T22A3067-0034
PARTICULATE MATTER (≤ 10 µm)	mg/m <sup>3</sup>	GRAVIMETRIC (HIGH VOLUME METHOD)	0.046	0.022	0.025
			0.005	0.011	0.016
SAMPLE CONDITION			COMPLETE	COMPLETE	COMPLETE

### REMARK

TSP, PM10 : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE  
 TSP : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER 1 PART 50, APPENDIX B.  
 PM10 : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER 1 PART 50, APPENDIX J.  
 \* : SAMPLING FROM 10:30 HOUR ON MAY 6, 2022 TO 10:30 HOUR ON MAY 7, 2022.  
 \*\* : SAMPLING FROM 10:30 HOUR ON MAY 7, 2022 TO 10:30 HOUR ON MAY 8, 2022.  
 \*\*\* : SAMPLING FROM 10:30 HOUR ON MAY 8, 2022 TO 10:30 HOUR ON MAY 9, 2022.

*Piyapat S.*

(MRS PIYAPAT SUTTAMANUTWONG)  
 LABORATORY SUPERVISOR

MAY 25, 2022



## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	THAI OIL PUBLIC COMPANY LIMITED		
<b>ADDRESS</b>	355/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900		
<b>CONTACT INFORMATION</b>	TEL : ( 0 3040 8500 EXT. 10502 ) E-MAIL : nitaya@thaioilgroup.com		
<b>SAMPLING SOURCE</b>	THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGTHUYA, SRIRACHA, CHONBURI 20230		
<b>SAMPLE TYPE</b>	AMBIENT	<b>RECEIVED DATE</b>	MAY 10, 2022
<b>SAMPLING DATE</b>	10, 11, 12, 13 MAY 2022	<b>ANALYTICAL DATE</b>	MAY 10-20, 2022
<b>SAMPLING TIME</b>	10:30 - 11:30 HRS	<b>REPORT NO.</b>	2022-UG37770
<b>SAMPLING BY</b>	MR. SRIAPAT JONGPHADUNWONG	<b>WORK NO.</b>	2021-003222
<b>ANALYZED BY</b>	MISS JETJARN TUMSA-AT	<b>ANALYSIS NO.</b>	T22AUG67-0026 - T22AUG67-0028

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT			
			หน่วยวิเคราะห์มลพิษทางอากาศ (หน่วยผลวิเคราะห์)			
			I	II	III	IV
			T22AUG67-0026	T22AUG67-0027	T22AUG67-0028	T22AUG67-0029
TOTAL SUSPENDED PARTICULATE	mg/m <sup>3</sup>	GRAVIMETRIC (HIGH VOLUME METHOD)	0.037	0.025	0.036	0.043
PARTICULATE MATTER (≤ 10 µm)	mg/m <sup>3</sup>	GRAVIMETRIC (HIGH VOLUME METHOD)	0.020	0.014	0.025	0.032
SAMPLE CONDITION			COMPLETE	COMPLETE	COMPLETE	COMPLETE

**REMARK**

TSP, PM10 : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.  
 TSP : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR CHAPTER 1 PART 50, APPENDIX B.  
 PM10 : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR CHAPTER 1 PART 50, APPENDIX 1.  
 I : SAMPLING FROM 10:30 HOUR ON MAY 9, 2022 TO 10:30 HOUR ON MAY 10, 2022.  
 II : SAMPLING FROM 10:30 HOUR ON MAY 10, 2022 TO 10:30 HOUR ON MAY 11, 2022.  
 III : SAMPLING FROM 10:30 HOUR ON MAY 11, 2022 TO 10:30 HOUR ON MAY 12, 2022.  
 IV : SAMPLING FROM 10:30 HOUR ON MAY 12, 2022 TO 10:30 HOUR ON MAY 13, 2022.

*Piyaput S.*

(MRS PIYAPUT SUTTAMANUTWONG)  
LABORATORY SUPERVISOR

MAY 25, 2022



## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	THAI OIL PUBLIC COMPANY LIMITED	<b>RECEIVED DATE</b>	MAY 6-13, 2022
<b>ADDRESS</b>	42/1 MOO 1, SUKHUMVIT ROAD KM. 124, THUNG SUKHA SI RACHA CHON BURI 20230	<b>ANALYTICAL DATE</b>	MAY 6-13, 2022
<b>CONTACT INFORMATION</b>	TEL : 0 3840 8500 EXT. 10502 e-mail : krlisa@thaiolgroup.com	<b>REPORT NO.</b>	2022-UO41160
<b>MEASURING PLACE</b>	สถานีวัดมลพิษทางอากาศ โรงงานผลิต	<b>WORK NO.</b>	2021-003222
<b>MEASURING TYPE</b>	AMBIENT (AIR)	<b>ANALYSIS NO.</b>	T22AJ067-0022 - T22AJ067-0024
<b>MEASURING DATE</b>	MAY 6-13, 2022		
<b>MEASURING TIME</b>	7		
<b>MEASURING METHOD</b>	UV FLUORESCENCE		
<b>MEASURED BY</b>	MR. SURAT JONGPHADUNGET		

เวลา *	RESULT (ppm)		
	SULPHUR DIOXIDE		
	สถานีวัดมลพิษทางอากาศ โรงงานผลิต		
	MAY 6-7, 2022 T22AJ067-0022	MAY 7-8, 2022 T22AJ067-0023	MAY 8-9, 2022 T22AJ067-0024
08:00-09:00 HOUR	0.0021	0.0023	0.0022
09:00-10:00 HOUR	0.0021	0.0028	0.0021
10:00-11:00 HOUR	0.0021	0.0028	0.0021
11:00-12:00 HOUR	0.0020	0.0029	0.0024
12:00-13:00 HOUR	0.0021	0.0029	0.0025
13:00-14:00 HOUR	0.0020	0.0029	0.0028
14:00-15:00 HOUR	0.0021	0.0031	0.0028
15:00-16:00 HOUR	0.0020	0.0031	0.0027
16:00-17:00 HOUR	0.0018	0.0027	0.0026
17:00-18:00 HOUR	0.0017	0.0025	0.0025
18:00-19:00 HOUR	0.0018	0.0020	0.0028
19:00-20:00 HOUR	0.0018	0.0020	0.0028
20:00-21:00 HOUR	0.0019	0.0020	0.0029
21:00-22:00 HOUR	0.0017	0.0020	0.0028
22:00-23:00 HOUR	0.0018	0.0020	0.0025
23:00-00:00 HOUR	0.0020	0.0018	0.0023
00:00-01:00 HOUR	0.0023	0.0019	0.0022
01:00-02:00 HOUR	0.0022	0.0019	0.0020
02:00-03:00 HOUR	0.0020	0.0023	0.0020
03:00-04:00 HOUR	0.0018	0.0021	0.0018
04:00-05:00 HOUR	0.0018	0.0022	0.0018
05:00-06:00 HOUR	0.0019	0.0020	0.0018
06:00-07:00 HOUR	0.0021	0.0021	0.0018
07:00-08:00 HOUR	0.0023	0.0021	0.0018
AVERAGE 24 HOUR	0.0020	0.0023	0.0023



DATE	RESULT (ppm)			
	SULPHUR DIOXIDE			
	หน่วยการวัด: มิลลิกรัมต่อลูกบาศก์เมตร (มิลลิกรัม/ลูกบาศก์เมตร)			
	MAY 9-10, 2022 T22A3067-0025	MAY 10-11, 2022 T22A3067-0026	MAY 11-12, 2022 T22A3067-0027	MAY 12-13, 2022 T22A3067-0028
08:00-09:00 HOUR	0.0017	0.0032	0.0020	0.0031
09:00-10:00 HOUR	0.0017	0.0033	0.0021	0.0029
10:00-11:00 HOUR	0.0020	0.0021	0.0021	0.0027
11:00-12:00 HOUR	0.0023	0.0025	0.0030	0.0030
12:00-13:00 HOUR	0.0025	0.0038	0.0019	0.0033
13:00-14:00 HOUR	0.0024	0.0025	0.0019	0.0031
14:00-15:00 HOUR	0.0025	0.0022	0.0022	0.0028
15:00-16:00 HOUR	0.0024	0.0022	0.0023	0.0026
16:00-17:00 HOUR	0.0030	0.0022	0.0024	0.0027
17:00-18:00 HOUR	0.0030	0.0021	0.0023	0.0027
18:00-19:00 HOUR	0.0011	0.0020	0.0022	0.0024
19:00-20:00 HOUR	0.0031	0.0021	0.0020	0.0021
20:00-21:00 HOUR	0.0033	0.0021	0.0017	0.0019
21:00-22:00 HOUR	0.0033	0.0020	0.0016	0.0018
22:00-23:00 HOUR	0.0032	0.0019	0.0019	0.0021
23:00-00:00 HOUR	0.0031	0.0021	0.0024	0.0022
00:00-01:00 HOUR	0.0032	0.0021	0.0030	0.0023
01:00-02:00 HOUR	0.0031	0.0019	0.0030	0.0023
02:00-03:00 HOUR	0.0032	0.0019	0.0029	0.0028
03:00-04:00 HOUR	0.0029	0.0019	0.0028	0.0031
04:00-05:00 HOUR	0.0030	0.0019	0.0031	0.0032
05:00-06:00 HOUR	0.0027	0.0018	0.0032	0.0029
06:00-07:00 HOUR	0.0027	0.0018	0.0031	0.0038
07:00-08:00 HOUR	0.0028	0.0020	0.0031	0.0026
AVERAGE 24 HOUR	0.0028	0.0023	0.0024	0.0026

*hit 7p*

(MR. SULA BANJONGSAIRUK)  
LABORATORY SUPERVISOR

JUNE 3, 2022



## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	THAI OIL PUBLIC COMPANY LIMITED	<b>RECEIVED DATE</b>	MAY 6-11, 2022
<b>ADDRESS</b>	42/1 HDO 2, SUKHUMVIT ROAD KM. 224, THUNG SUKPLA SI RACHA CHON BURI 20335	<b>ANALYTICAL DATE</b>	MAY 6-11, 2022
<b>CONTACT INFORMATION</b>	TEL : 0 2845 8500 EXT. 10532 e-mail : kitya@thaioilgroup.com	<b>REPORT NO.</b>	2022-0541154
<b>MEASURING PLACE</b>	www.thaioilpublic.com/air/airquality	<b>WORK NO.</b>	2021-003222
<b>MEASURING TYPE</b>	APPROX (AIR)	<b>ANALYSIS NO.</b>	T22A067-0022 - T22A067-0028
<b>MEASURING DATE</b>	MAY 6-23, 2022		
<b>MEASURING TIME</b>	-		
<b>MEASURING METHOD</b>	CHEMILUMINESCENCE		
<b>MEASURED BY</b>	MR SIRAPAT JONGPHADUNGSET		

TIME *	RESULT (ppm)		
	NITROGEN DIOXIDE		
	หน่วยวัดปริมาณก๊าซไนโตรเจนไดออกไซด์		
	MAY 6-7, 2022 T22A067-0022	MAY 7-8, 2022 T22A067-0023	MAY 8-9, 2022 T22A067-0024
08:00-09:00 HOUR	0.0216	0.0277	0.0252
09:00-10:00 HOUR	0.0234	0.0258	0.0247
10:00-11:00 HOUR	0.0236	0.0224	0.0235
11:00-12:00 HOUR	0.0283	0.0198	0.0279
12:00-13:00 HOUR	0.0264	0.0196	0.0250
13:00-14:00 HOUR	0.0288	0.0209	0.0249
14:00-15:00 HOUR	0.0230	0.0212	0.0245
15:00-16:00 HOUR	0.0258	0.0212	0.0240
16:00-17:00 HOUR	0.0256	0.0241	0.0241
17:00-18:00 HOUR	0.0258	0.0253	0.0241
18:00-19:00 HOUR	0.0263	0.0274	0.0248
19:00-20:00 HOUR	0.0284	0.0264	0.0248
20:00-21:00 HOUR	0.0254	0.0262	0.0265
21:00-22:00 HOUR	0.0260	0.0246	0.0258
22:00-23:00 HOUR	0.0236	0.0235	0.0252
23:00-00:00 HOUR	0.0249	0.0231	0.0232
00:00-01:00 HOUR	0.0218	0.0220	0.0218
01:00-02:00 HOUR	0.0211	0.0199	0.0206
02:00-03:00 HOUR	0.0213	0.0198	0.0211
03:00-04:00 HOUR	0.0220	0.0194	0.0217
04:00-05:00 HOUR	0.0240	0.0206	0.0207
05:00-06:00 HOUR	0.0243	0.0217	0.0200
06:00-07:00 HOUR	0.0277	0.0230	0.0213
07:00-08:00 HOUR	0.0268	0.0249	0.0216



TIME *	RESULT (ppm)			
	NITROGEN DIOXIDE			
	หน่วยวัดปริมาณมลพิษมาตรฐาน ไทยมาตรฐานสหประชาชาติ			
	MAY 9-10, 2022 T22A067-0025	MAY 10-11, 2022 T22A067-0026	MAY 11-12, 2022 T22A067-0027	MAY 12-13, 2022 T22A067-0028
08:00-09:00 HOUR	0.0223	0.0235	0.0193	0.0218
09:00-10:00 HOUR	0.0204	0.0235	0.0199	0.0210
10:00-11:00 HOUR	0.0204	0.0232	0.0197	0.0224
11:00-12:00 HOUR	0.0220	0.0236	0.0205	0.0230
12:00-13:00 HOUR	0.0256	0.0231	0.0221	0.0224
13:00-14:00 HOUR	0.0284	0.0231	0.0223	0.0214
14:00-15:00 HOUR	0.0298	0.0237	0.0239	0.0215
15:00-16:00 HOUR	0.0264	0.0250	0.0226	0.0223
16:00-17:00 HOUR	0.0249	0.0250	0.0235	0.0225
17:00-18:00 HOUR	0.0229	0.0229	0.0230	0.0233
18:00-19:00 HOUR	0.0257	0.0223	0.0249	0.0231
19:00-20:00 HOUR	0.0248	0.0221	0.0247	0.0223
20:00-21:00 HOUR	0.0244	0.0226	0.0256	0.0223
21:00-22:00 HOUR	0.0247	0.0224	0.0242	0.0224
22:00-23:00 HOUR	0.0236	0.0214	0.0240	0.0232
23:00-00:00 HOUR	0.0259	0.0216	0.0236	0.0228
00:00-01:00 HOUR	0.0267	0.0211	0.0224	0.0226
01:00-02:00 HOUR	0.0274	0.0223	0.0234	0.0211
02:00-03:00 HOUR	0.0264	0.0215	0.0258	0.0195
03:00-04:00 HOUR	0.0271	0.0204	0.0282	0.0184
04:00-05:00 HOUR	0.0266	0.0188	0.0263	0.0186
05:00-06:00 HOUR	0.0256	0.0182	0.0251	0.0201
06:00-07:00 HOUR	0.0231	0.0186	0.0241	0.0206
07:00-08:00 HOUR	0.0230	0.0194	0.0231	0.0222



(MR. SILA BANONGMAIRUK)  
LABORATORY SUPERVISOR

JUNE 3, 2022

## ANALYSIS REPORT

**CUSTOMER NAME :** THAI OIL PUBLIC COMPANY LIMITED

**ADDRESS :** 55/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RAMSIT ROAD CHATUOAK CHATUOAK BANGKOK 10900

**CONTACT INFORMATION :** TEL : 0 3040 8500 EXT. 10502 e-mail : kitya@thaioilgroup.com

**SAMPLING SOURCE :** THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KM 124, TUNGSIKLA, SRIRACHA, CHONBURI 20230.

**SAMPLE TYPE :** AMBIENT

**SAMPLING DATE :** \* \*\* \*\*\*

**SAMPLING TIME :** \* \*\* \*\*\*

**SAMPLING BY :** MR. SIRAPAT JONGPHADUNGIET

**ANALYZED BY :** MISS SUWAN KONGTHONG

**RECEIVED DATE :** MAY 13, 2022

**ANALYTICAL DATE :** MAY 13-20, 2022

**REPORT NO. :** 2022-0037769

**WORK NO. :** 2021-003222

**ANALYSIS NO. :** T22A067-0022 - T22A067-0024

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		
			ผลการวิเคราะห์ข้อมูลการตรวจวิเคราะห์		
			* T22A067-0022	** T22A067-0023	*** T22A067-0024
HYDROGEN SULPHIDE	mg/m <sup>3</sup>	METHYLENE BLUE METHOD (ALPHA METHOD) TDS	< 0.001	< 0.001	< 0.001
SAMPLE CONDITION			COMPLETE	COMPLETE	COMPLETE

**REMARK**
**RESULT :** REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.

\* : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 6, 2022.

\*\* : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 7, 2022.

\*\*\* : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 8, 2022.



(MRS PIYAPAT SUTTAMALUTWONG)  
LABORATORY SUPERVISOR

MAY 21, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI KANGSEI ROAD CHATUCHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10502 e-mail : ktiye@thoailgroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSIKLA, SURACHA, CHONBURI 20230.  
**SAMPLE TYPE** : AMBIENT  
**SAMPLING DATE** : 9, 10, 11, 12 MAY 2022  
**SAMPLING TIME** : 8:00 - 10:00 HOURS  
**SAMPLING BY** : MRS STRIPAT JONGPHADUNGET  
**ANALYZED BY** : MISS SUNAN RONGTHONG  
**RECEIVED DATE** : MAY 10, 2022  
**ANALYTICAL DATE** : MAY 10-20, 2022  
**REPORT NO.** : 2022-UG37771  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22A067-0025 - T22A067-0028

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT			
			หน่วยวัดปริมาณมลพิษทางอากาศ (ในหน่วยค่าดัชนี)			
			I	II	III	IV
			T22A067-0025	T22A067-0026	T22A067-0027	T22A067-0028
HYDROGEN SULPHIDE	mg/m <sup>3</sup>	METHYLENE BLUE METHOD (APHA METHOD 701)	< 0.001	< 0.001	< 0.001	< 0.001
SAMPLE CONDITION			COMPLETE	COMPLETE	COMPLETE	COMPLETE

### REMARK

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.  
 \* : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 9, 2022.  
 \*\* : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 10, 2022.  
 \*\*\* : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 11, 2022.  
 \*\*\*\* : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 12, 2022.

*Piyapat S.*

(MRS PIYAPAT SUTTANANUTWONG)  
LABORATORY SUPERVISOR

MAY 25, 2022





## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 42/1 MOO 1, SUKUMVIT ROAD KM. 124, THUNG SUKHEA SI RACHA CHON BURI 20230  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 12502 e-mail : kinye@thoilgroup.com  
**MEASURING PLACE** : สวิตช์แก๊สเชื้อเพลิงเครื่องจักร  
**MEASURING TYPE** : AMBIENT (AIR)  
**MEASURING DATE** : MAY 6-13, 2022  
**MEASURING TIME** : \*  
**MEASURING METHOD** : FLAME IONIZATION DETECTOR  
**MEASURED BY** : MR SIRAPAT JONGPHADUNGDET  
**RECEIVED DATE** : MAY 6-13, 2022  
**ANALYTICAL DATE** : MAY 6-13, 2022  
**REPORT NO.** : 2022-U041172  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22A067-0022 - T22A067-0028

DATE	TIME *	RESULT (ppm)
		TOTAL HYDROCARBONS
		ผลการตรวจวัดมลพิษทางอากาศ ณ สถานีตรวจวัด
MAY 6-7, 2022 T22A067-0022	08:00-08:00 HOUR	2.15
MAY 7-8, 2022 T22A067-0023	08:00-08:00 HOUR	2.15
MAY 8-9, 2022 T22A067-0024	08:00-08:00 HOUR	2.10
MAY 9-10, 2022 T22A067-0025	08:00-08:00 HOUR	2.09
MAY 10-11, 2022 T22A067-0026	08:00-08:00 HOUR	2.12
MAY 11-12, 2022 T22A067-0027	08:00-08:00 HOUR	2.06
MAY 12-13, 2022 T22A067-0028	08:00-08:00 HOUR	2.14



(MR. SILA BANONGSA) (THU)  
LABORATORY SUPERVISOR

JUNE 3, 2022



## ANALYSIS REPORT

**CUSTOMER NAME:** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS:** : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHITTOCHAK CHITTOCHAK BANGKOK 10900  
**CONTACT INFORMATION:** : TEL : 0 3840 8500 EXT. 10502 e-mail : kroya@thaiogroup.com  
**SAMPLING SOURCE:** : THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KM 124, TUNGSKULA, SRIRACHA, CHONBURI 20230  
**SAMPLE TYPE:** : AMBIENT  
**SAMPLING DATE:** : \*  
**SAMPLING TIME:** : \*  
**SAMPLING BY:** : MR. SERAFAT JONGPHADUNGKIT  
**ANALYZED BY:** : MISS WORKKON PADSONGCHAN  
**RECEIVED DATE:** : JANUARY 7, 2022  
**ANALYTICAL DATE:** : JANUARY 7-17, 2022  
**REPORT NO.:** : 2022-U004167  
**WORK NO.:** : 2021-003222  
**ANALYSIS NO.:** : T22AA312-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			ผลการวิเคราะห์ผลการ วิเคราะห์ผลการ T22AA312-0004
BENZENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	1.08
TOLUENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	12.8
m,p-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.35
o-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	< 0.17
SAMPLE CONDITION			COMPLETE

### REMARK

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.

\* : SAMPLING FROM 10:00 HOUR ON JANUARY 6, 2022 TO 10:00 HOUR ON JANUARY 7, 2022.

*Benjawan V.*

(MISS BENJAWAN VIKYOTHA)  
LABORATORY SUPERVISOR

JANUARY 21, 2022



## ANALYSIS REPORT

**CUSTOMER NAME:** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS:** : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION:** : TEL : 0 2840 8500 EXT. 10502 e-mail : kinye@thaiogroup.com  
**SAMPLING SOURCE:** : THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSKULA, SPRACHA, CHONBURI 20230.  
**SAMPLE TYPE:** : AMBIENT  
**SAMPLING DATE:** : \*  
**SAMPLING TIME:** : \*  
**SAMPLING BY:** : MR. SIRAPAT JONGPHADUNGKIE  
**ANALYZED BY:** : MISS WIRAKORN PADSONGCHIAN  
**RECEIVED DATE:** : FEBRUARY 8, 2022  
**ANALYTICAL DATE:** : FEBRUARY 8-18, 2022  
**REPORT NO.:** : 2022-0012115  
**WORK NO.:** : 2021-003222  
**ANALYSIS NO.:** : T22AC192-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			ผลการวิเคราะห์ผลการตรวจ วิเคราะห์ผลการตรวจ T22AC192-0004
BENZENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	1.31
TOLUENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.66
m,p-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.47
o-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.23
SAMPLE CONDITION			COMPLETE

**REMARK:**
**RESULT:** : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.

\*: SAMPLING FROM 10:00 HOUR ON FEBRUARY 7, 2022 TO 10:00 HOUR ON FEBRUARY 8, 2022.



(MISS BENJAWAN VITTHAYAT)  
LABORATORY SUPERVISOR

FEBRUARY 23, 2022



## ANALYSIS REPORT

**CUSTOMER NAME:** THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS:** 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHITLUK BANGKOK 10900  
**CONTACT INFORMATION:** TEL : 0 3840 8500 EXT. 10500 e-mail : kitya@thaoilgroup.com  
**SAMPLING SOURCE:** THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSIKHA, SRIRACHA, CHONBURI 20230  
**SAMPLE TYPE:** AMBIENT  
**SAMPLING DATE:** \*  
**SAMPLING TIME:** \*  
**SAMPLING BY:** MR. SERAPAT JONGPHADUNKEET  
**ANALYZED BY:** MISS WORARON PADSONGCHAN

**RECEIVED DATE:** MARCH 8, 2022  
**ANALYTICAL DATE:** MARCH 8-18, 2022  
**REPORT NO.:** 2022-U019542  
**WORK NO.:** 2021-003222  
**ANALYSIS NO.:** T22AE364-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			ผลการวิเคราะห์ผลการวิเคราะห์ วิเคราะห์ผลการวิเคราะห์ T22AE364-0004
BENZENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.90
TOLUENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	2.57
m,p-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.37
o-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	< 0.17
SAMPLE CONDITION			COMPLETE

### REMARK

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.

\* : SAMPLING FROM 10:00 HOUR ON MARCH 7, 2022 TO 10:00 HOUR ON MARCH 8, 2022.

*Peyawan V.*

(MISS BENJAWAN VIKIYOTHA)  
 LABORATORY SUPERVISOR

MARCH 17, 2022



## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	: THAI OIL PUBLIC COMPANY LIMITED		
<b>ADDRESS</b>	: 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSET ROAD CHATUCHAK CHATUCHAK BANGKOK 10900		
<b>CONTACT INFORMATION</b>	: TEL : 0 3840 8500 EXT. 10502 e-mail : kitiya@thaioilgroup.com		
<b>SAMPLING SOURCE</b>	: THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSIKLA, SRIRACHA, CHONBURI 20220		
<b>SAMPLE TYPE</b>	: AMBIENT	<b>RECEIVED DATE</b>	: APRIL 8, 2022
<b>SAMPLING DATE</b>	: *	<b>ANALYTICAL DATE</b>	: APRIL 8-22, 2022
<b>SAMPLING TIME</b>	: *	<b>REPORT NO.</b>	: 2022-0029897
<b>SAMPLING BY</b>	: MR. SORAPAT JONGPHADUMKOT	<b>WORK NO.</b>	: 2021-003222
<b>ANALYZED BY</b>	: MISS WIRAKON PIDSONGCHAN	<b>ANALYSIS NO.</b>	: T22AG787-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			ผลการวิเคราะห์ผลวิเคราะห์ สารมลพิษที่ตรวจพบ T22AG787-0004
BENZENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.53
TOLUENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	1.52
m,p-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	< 0.35
o-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	< 0.17
SAMPLE CONDITION			COMPLETE

**REMARK**

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.  
 \* : SAMPLING FROM 10:00 HOUR ON APRIL 7, 2022 TO 10:00 HOUR ON APRIL 8, 2022.

*Benjawan V.*

(MISS BENJAWAN VIRIYOTHAI)  
LABORATORY SUPERVISOR

APRIL 27, 2022





## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10992 e-mail : kitya@thaioilgroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KM 124, TUNGSIKLA, SRIRACHA, CHONBURI 20220  
**SAMPLE TYPE** : AMBIENT  
**SAMPLING DATE** : \*  
**SAMPLING TIME** : \*  
**SAMPLING BY** : MR. SIRAPAT JONGPHADUNGSET  
**ANALYZED BY** : MISS WORAKON PADSONGCHAN  
**RECEIVED DATE** : MAY 10, 2022  
**ANALYTICAL DATE** : MAY 10-17, 2022  
**REPORT NO.** : 2022-0036047  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22A1776-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			ผลการวิเคราะห์พบค่าเฉลี่ย ของสารมลพิษทั้งหมด T22A1776-0004
BENZENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.58
TOLUENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	14.5
m,p-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.85
o-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.41
SAMPLE CONDITION			COMPLETE

### REMARK

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.  
 \* : SAMPLING FROM 10:00 HOUR ON MAY 9, 2022 TO 10:00 HOUR ON MAY 10, 2022.

*Benjawan V.*

(MISS BENJAWAN VIRIYOTHAI)  
LABORATORY SUPERVISOR

MAY 18, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAWADI BANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3040 8900 EXT. 10932 e-mail: witye@thaiogroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSKULA, SRIRACHA, CHONBURI 20230.  
**SAMPLE TYPE** : AMBIENT  
**SAMPLING DATE** : \*  
**SAMPLING TIME** : \*  
**SAMPLING BY** : MR. SRIARAT JONGPHADUNGOET  
**ANALYZED BY** : MISS WORARON RADSONGCHAN  
**RECEIVED DATE** : JUNE 7, 2022  
**ANALYTICAL DATE** : JUNE 7-14, 2022  
**REPORT NO.** : 2022-U045033  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22AKBS8-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			ผลการวิเคราะห์และตรวจวัด ในภาชนะเก็บตัวอย่าง T22AKBS8-0004
BENZENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.82
TOLUENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	2.08
m,p-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	< 0.70
o-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	< 0.35
SAMPLE CONDITION			COMPLETE

### REMARK

**RESULT** : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.  
 \* : SAMPLING FROM 10:00 HOUR ON JUNE 5, 2022 TO 10:00 HOUR ON JUNE 7, 2022.

*Benjawan V.*

(MISS BENJAWAN VIRIYOTHAT)  
LABORATORY SUPERVISOR

JUNE 20, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK  
BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 2840 8500 EXT. 10502 e-mail : kitya@thaiogroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED 42/3 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSKULA, SONGKHA, CHONBURI  
20230.  
**SAMPLE TYPE** : AMBIENT  
**SAMPLING DATE** : \* \*\* \*\*\*  
**SAMPLING TIME** : \* \*\* \*\*\*  
**SAMPLING BY** : MR. STRAPAT JONGTHANONGKIT  
**ANALYZED BY** : MISS JETJARN TUMSA-AT  
**RECEIVED DATE** : MAY 13, 2022  
**ANALYTICAL DATE** : MAY 13-20, 2022  
**REPORT NO.** : J0522-UG7764  
**WORK NO.** : 2022-053222  
**ANALYSIS NO.** : T22A067-0015 - T22A067-0017

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		
			Division		
			*	**	***
TOTAL SUSPENDED PARTICULATE	mg/m <sup>3</sup>	GRAVIMETRIC (HIGH VOLUME METHOD)	T22A067-0015	T22A067-0016	T22A067-0017
PARTICULATE MATTER (≤ 10 µm)	mg/m <sup>3</sup>	GRAVIMETRIC (HIGH VOLUME METHOD)	0.030	0.031	0.039
			0.030	0.031	0.025
SAMPLE CONDITION			COMPLETE	COMPLETE	COMPLETE

### REMARK

TSP, PM10 : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE  
TSP : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER 1 PART 50, APPENDIX B.  
PM10 : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER 1 PART 50, APPENDIX 3.  
\* : SAMPLING FROM 08:30 HOUR ON MAY 6, 2022 TO 08:30 HOUR ON MAY 7, 2022.  
\*\* : SAMPLING FROM 08:30 HOUR ON MAY 7, 2022 TO 08:30 HOUR ON MAY 8, 2022.  
\*\*\* : SAMPLING FROM 08:30 HOUR ON MAY 8, 2022 TO 08:30 HOUR ON MAY 9, 2022.

*Piyapatch S.*

(MRS PIYAPAT SUTTAMANUTWONG)  
LABORATORY SUPERVISOR

MAY 25, 2022





## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 155/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSEI ROAD CHATUCHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 2640 8500 EXT. 10502 e-mail: kitya@thaoilgroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKUMVIT ROAD KM 124, TUNGSIKLA, SRIRACHA, CHONBURI 20230  
**SAMPLE TYPE** : AMBIENT  
**SAMPLING DATE** : \* \*\* \*\* \*\* \*\*  
**SAMPLING TIME** : \* \*\* \*\* \*\* \*\*  
**SAMPLING BY** : MIL SRIRAKT JONGPHADUNGKEE  
**ANALYZED BY** : MISS JETJARN TUNSA-AT  
**RECEIVED DATE** : MAY 10, 2022  
**ANALYTICAL DATE** : MAY 10-20, 2022  
**REPORT NO.** : 2022-031778  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22A-067-001B - T22A-067-0021

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT			
			สัปดาห์ที่ ๑๑			
			*	**	***	****
			T22A-067-001B	T22A-067-001B	T22A-067-002B	T22A-067-0021
TOTAL SUSPENDED PARTICULATE	mg/m <sup>3</sup>	GRAVIMETRIC (HIGH VOLUME METHOD)	0.038	0.023	0.025	0.029
PARTICULATE MATTER (≤ 10 µm)	mg/m <sup>3</sup>	GRAVIMETRIC (HIGH VOLUME METHOD)	0.016	0.013	0.011	0.017
SAMPLE CONDITION			COMPLETE	COMPLETE	COMPLETE	COMPLETE

### REMARK

TSP, PM10 : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.  
 TSP : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER 1 PART 50, APPENDIX B.  
 PM10 : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER 1 PART 50, APPENDIX 1.  
 \* : SAMPLING FROM 08:30 HOUR ON MAY 9, 2022 TO 08:30 HOUR ON MAY 10, 2022.  
 \*\* : SAMPLING FROM 08:30 HOUR ON MAY 10, 2022 TO 08:30 HOUR ON MAY 11, 2022.  
 \*\*\* : SAMPLING FROM 08:30 HOUR ON MAY 11, 2022 TO 08:30 HOUR ON MAY 12, 2022.  
 \*\*\*\* : SAMPLING FROM 08:30 HOUR ON MAY 12, 2022 TO 08:30 HOUR ON MAY 13, 2022.



(MRS PIYAPAT SUTTAMANUTWONG)  
LABORATORY SUPERVISOR

MAY 25, 2022



## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	: TNAI CO. PUBLIC COMPANY LIMITED	<b>RECEIVED DATE</b>	: MAY 6-11, 2022
<b>ADDRESS</b>	: 42/1 MOO 1, SUKHUMVIT ROAD KM. 124, THUNG SUKHLA SI RACHA CHON BURI 20230	<b>ANALYTICAL DATE</b>	: MAY 6-11, 2022
<b>CONTACT INFORMATION</b>	: TEL : 0 3940 8500 EXT. 10302 e-mail : kitya@thaisigroup.com	<b>REPORT NO.</b>	: 2022-U041158
<b>MEASURING PLACE</b>	: SITE110000	<b>WORK NO.</b>	: 2021-003222
<b>MEASURING TYPE</b>	: AMBIENT (AIR)	<b>ANALYSIS NO.</b>	: T22A067-0015 - T22A067-0021
<b>MEASURING DATE</b>	: MAY 6-11, 2022		
<b>MEASURING TIME</b>	: *		
<b>MEASURING METHOD</b>	: UV FLUORESCENCE		
<b>MEASURED BY</b>	: MR. SRINAT SONGPHADUNGKIT		

TIME *	RESULT (ppm)		
	SULPHUR DIOXIDE		
	SITESTATION		
	MAY 6-7, 2022 T22A067-0015	MAY 7-8, 2022 T22A067-0016	MAY 8-9, 2022 T22A067-0017
08:00-09:00 HOUR	0.0019	0.0024	0.0031
09:00-10:00 HOUR	0.0020	0.0020	0.0026
10:00-11:00 HOUR	0.0019	0.0022	0.0025
11:00-12:00 HOUR	0.0020	0.0023	0.0020
12:00-13:00 HOUR	0.0020	0.0027	0.0019
13:00-14:00 HOUR	0.0024	0.0028	0.0016
14:00-15:00 HOUR	0.0025	0.0028	0.0017
15:00-16:00 HOUR	0.0025	0.0028	0.0017
16:00-17:00 HOUR	0.0021	0.0024	0.0018
17:00-18:00 HOUR	0.0019	0.0025	0.0019
18:00-19:00 HOUR	0.0019	0.0023	0.0018
19:00-20:00 HOUR	0.0021	0.0023	0.0019
20:00-21:00 HOUR	0.0025	0.0021	0.0018
21:00-22:00 HOUR	0.0027	0.0021	0.0020
22:00-23:00 HOUR	0.0033	0.0022	0.0019
23:00-00:00 HOUR	0.0034	0.0025	0.0021
00:00-01:00 HOUR	0.0039	0.0033	0.0020
01:00-02:00 HOUR	0.0039	0.0038	0.0023
02:00-03:00 HOUR	0.0041	0.0044	0.0024
03:00-04:00 HOUR	0.0037	0.0044	0.0028
04:00-05:00 HOUR	0.0035	0.0045	0.0031
05:00-06:00 HOUR	0.0032	0.0042	0.0033
06:00-07:00 HOUR	0.0033	0.0039	0.0032
07:00-08:00 HOUR	0.0028	0.0033	0.0032
AVERAGE 24 HOUR	0.0027	0.0029	0.0023



วันที่	RESULT (ppm)			
	SULPHUR DIOXIDE			
	ตามวันเวลา			
	MAY 9-10, 2022 T22AJ067-0018	MAY 10-11, 2022 T22AJ067-0019	MAY 11-12, 2022 T22AJ067-0020	MAY 12-13, 2022 T22AJ067-0021
08:00-09:00 HOUR	0.0029	0.0021	0.0023	0.0024
09:00-10:00 HOUR	0.0028	0.0030	0.0023	0.0025
10:00-11:00 HOUR	0.0026	0.0019	0.0021	0.0029
11:00-12:00 HOUR	0.0027	0.0019	0.0018	0.0032
12:00-13:00 HOUR	0.0028	0.0022	0.0021	0.0032
13:00-14:00 HOUR	0.0028	0.0027	0.0026	0.0031
14:00-15:00 HOUR	0.0035	0.0030	0.0031	0.0031
15:00-16:00 HOUR	0.0040	0.0032	0.0041	0.0030
16:00-17:00 HOUR	0.0045	0.0033	0.0046	0.0028
17:00-18:00 HOUR	0.0045	0.0037	0.0048	0.0029
18:00-19:00 HOUR	0.0040	0.0042	0.0040	0.0029
19:00-20:00 HOUR	0.0036	0.0046	0.0049	0.0028
20:00-21:00 HOUR	0.0029	0.0051	0.0052	0.0024
21:00-22:00 HOUR	0.0028	0.0052	0.0045	0.0024
22:00-23:00 HOUR	0.0030	0.0052	0.0037	0.0023
23:00-00:00 HOUR	0.0033	0.0047	0.0029	0.0021
00:00-01:00 HOUR	0.0038	0.0040	0.0027	0.0018
01:00-02:00 HOUR	0.0038	0.0038	0.0025	0.0016
02:00-03:00 HOUR	0.0038	0.0031	0.0024	0.0017
03:00-04:00 HOUR	0.0037	0.0029	0.0021	0.0019
04:00-05:00 HOUR	0.0039	0.0028	0.0021	0.0020
05:00-06:00 HOUR	0.0036	0.0028	0.0022	0.0021
06:00-07:00 HOUR	0.0030	0.0025	0.0022	0.0022
07:00-08:00 HOUR	0.0023	0.0023	0.0025	0.0023
AVERAGE 24 HOUR	0.0034	0.0033	0.0031	0.0025



(MR. SILA BANJONGKATRIUK)  
LABORATORY SUPERVISOR

JUNE 3, 2022

### ANALYSIS REPORT

<b>CUSTOMER NAME</b>	: THAI OIL PUBLIC COMPANY LIMITED	<b>RECEIVED DATE</b>	: MAY 6-11, 2022
<b>ADDRESS</b>	: 42/1 MOO 1, SUKUMVIT ROAD KM. 124, THUNG SUKHA SE RACHA CHON BURI 20230	<b>ANALYTICAL DATE</b>	: MAY 6-11, 2022
<b>CONTACT INFORMATION</b>	: TEL : 0 2840 8500 EXT. 10502 e-mail : kanya@thaoilgroup.com	<b>REPORT NO.</b>	: 2022-0041153
<b>MEASURING PLACE</b>	: 1THUNG	<b>WORK NO.</b>	: 2021-003223
<b>MEASURING TYPE</b>	: AMBIENT (AIR)	<b>ANALYSIS NO.</b>	: T22AX067-0015 - T22AX067-0017
<b>MEASURING DATE</b>	: MAY 6-11, 2022		
<b>MEASURING TIME</b>	: *		
<b>MEASURING METHOD</b>	: CHEMILUMINESCENCE		
<b>MEASURED BY</b>	: MR SURAPAT JONGPHADUNGSET		

TIME *	RESULT (ppm)		
	NITROGEN DIOXIDE		
	ไนโตรเจนไดออกไซด์		
	MAY 6-7, 2022 T22AX067-0015	MAY 7-8, 2022 T22AX067-0016	MAY 8-9, 2022 T22AX067-0017
08:00-09:00 HOUR	0.0158	0.0211	0.0210
09:00-10:00 HOUR	0.0153	0.0184	0.0214
10:00-11:00 HOUR	0.0160	0.0183	0.0211
11:00-12:00 HOUR	0.0165	0.0150	0.0210
12:00-13:00 HOUR	0.0165	0.0175	0.0178
13:00-14:00 HOUR	0.0158	0.0188	0.0144
14:00-15:00 HOUR	0.0158	0.0185	0.0185
15:00-16:00 HOUR	0.0162	0.0185	0.0109
16:00-17:00 HOUR	0.0171	0.0172	0.0129
17:00-18:00 HOUR	0.0176	0.0173	0.0148
18:00-19:00 HOUR	0.0179	0.0168	0.0167
19:00-20:00 HOUR	0.0188	0.0161	0.0166
20:00-21:00 HOUR	0.0173	0.0169	0.0163
21:00-22:00 HOUR	0.0175	0.0159	0.0161
22:00-23:00 HOUR	0.0170	0.0167	0.0169
23:00-00:00 HOUR	0.0174	0.0158	0.0170
00:00-01:00 HOUR	0.0179	0.0150	0.0172
01:00-02:00 HOUR	0.0190	0.0155	0.0183
02:00-03:00 HOUR	0.0188	0.0159	0.0223
03:00-04:00 HOUR	0.0183	0.0181	0.0247
04:00-05:00 HOUR	0.0182	0.0190	0.0266
05:00-06:00 HOUR	0.0181	0.0206	0.0261
06:00-07:00 HOUR	0.0187	0.0207	0.0318
07:00-08:00 HOUR	0.0197	0.0211	0.0338





TIME *	RESULT (ppm)			
	NITROGEN DIOXIDE			
	STATION			
	MAY 9-10, 2022 T22A3067-0018	MAY 10-11, 2022 T22A3067-0019	MAY 11-12, 2022 T22A3067-0020	MAY 12-13, 2022 T22A3067-0021
08:00-09:00 HOUR	0.0324	0.0139	0.0228	0.0221
09:00-10:00 HOUR	0.0294	0.0105	0.0227	0.0200
10:00-11:00 HOUR	0.0252	0.0071	0.0216	0.0199
11:00-12:00 HOUR	0.0202	0.0064	0.0206	0.0190
12:00-13:00 HOUR	0.0187	0.0063	0.0185	0.0203
13:00-14:00 HOUR	0.0148	0.0078	0.0180	0.0222
14:00-15:00 HOUR	0.0139	0.0082	0.0169	0.0225
15:00-16:00 HOUR	0.0203	0.0091	0.0190	0.0232
16:00-17:00 HOUR	0.0238	0.0107	0.0186	0.0244
17:00-18:00 HOUR	0.0285	0.0123	0.0194	0.0253
18:00-19:00 HOUR	0.0261	0.0140	0.0177	0.0263
19:00-20:00 HOUR	0.0239	0.0160	0.0189	0.0230
20:00-21:00 HOUR	0.0248	0.0184	0.0151	0.0209
21:00-22:00 HOUR	0.0227	0.0217	0.0147	0.0164
22:00-23:00 HOUR	0.0229	0.0238	0.0150	0.0142
23:00-00:00 HOUR	0.0208	0.0251	0.0167	0.0125
00:00-01:00 HOUR	0.0206	0.0267	0.0193	0.0110
01:00-02:00 HOUR	0.0207	0.0277	0.0222	0.0104
02:00-03:00 HOUR	0.0206	0.0306	0.0223	0.0094
03:00-04:00 HOUR	0.0220	0.0293	0.0241	0.0087
04:00-05:00 HOUR	0.0218	0.0292	0.0250	0.0077
05:00-06:00 HOUR	0.0212	0.0270	0.0263	0.0073
06:00-07:00 HOUR	0.0194	0.0258	0.0257	0.0068
07:00-08:00 HOUR	0.0171	0.0238	0.0234	0.0074



(MR. SILA BANOONESAIRUN)  
LABORATORY SUPERVISOR

JUNE 1, 2022

## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI KANGSEI ROAD CHATUCHAK (CHATUCHAK) BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10502 e-mail: ktiye@thaoilgroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED 42/3 MOO 1, SUKAPUNET ROAD KM.124, TUNGSAKLA, SURACHA, CHONBURI 20230.  
**SAMPLE TYPE** : AMBIENT  
**SAMPLING DATE** : \* \*\* \*\*\*  
**SAMPLING TIME** : \* \*\* \*\*\*  
**SAMPLING BY** : MR. SIVAKIT JONGPHASUNGKET  
**ANALYZED BY** : MISS SUWAN KONGTHONG  
**RECEIVED DATE** : MAY 15, 2022  
**ANALYTICAL DATE** : MAY 15-20, 2022  
**REPORT NO.** : 2022-UGT7765  
**WORK NO.** : 2022-003222  
**ANALYSIS NO.** : T22A067-0015 - T22A067-0017

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		
			ค่ามาตรฐาน		
			*	**	***
			T22A067-0015	T22A067-0016	T22A067-0017
HYDROGEN SULPHIDE	mg/m <sup>3</sup>	METHYLENE BLUE METHOD (APHA METHOD 101)	< 0.001	< 0.001	< 0.001
SAMPLE CONDITION			COMPLETE	COMPLETE	COMPLETE

### REMARK

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.  
\* : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 5, 2022.  
\*\* : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 7, 2022.  
\*\*\* : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 8, 2022.

*Piyapich S.*

(MRS PIYAPAT SUTTAMANUTWONG)  
LABORATORY SUPERVISOR

MAY 25, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/2 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK  
 BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3846 8500 EXT. 10502 E-mail : kitya@thaioilgroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED 42/1, ROAD 1, SUKHUMVIT ROAD KM.124, TUNGSIKHA, SRIRACHA, CHONBURI 20230  
**SAMPLE TYPE** : AMBIENT  
**SAMPLING DATE** : 01 MAY 2022  
**SAMPLING TIME** : 08:00-10:00  
**SAMPLING BY** : MR. SORAPAT JONGPHADUNGKIJET  
**ANALYZED BY** : MISS SUWAN KONGTHONG  
**RECEIVED DATE** : MAY 11, 2022  
**ANALYTICAL DATE** : MAY 13-20, 2022  
**REPORT NO.** : 2022/UN17757  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22A067-0018 - T22A067-0021

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT			
			Unit: mg/m <sup>3</sup>			
			I	II	III	IV
			T22A067-0018	T22A067-0019	T22A067-0020	T22A067-0021
HYDROGEN SULPHIDE	mg/m <sup>3</sup>	METHYLENE BLUE METHOD (APHA METHOD 701)	< 0.001	< 0.001	< 0.001	< 0.001
SAMPLE CONDITION			COMPLETE	COMPLETE	COMPLETE	COMPLETE

### REMARK

- RESULT** : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.  
 \* : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 9, 2022.  
 \*\* : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 10, 2022.  
 \*\*\* : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 11, 2022.  
 \*\*\*\* : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 12, 2022.

*Piyapol S.*

(MRS. PIYAPAT SUTTAMANUTWONG)  
LABORATORY SUPERVISOR

MAY 25, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 42/1 MOO 1, SUKHUMVIT ROAD KM. 124, THUNG SUKHLA SI RACHA CHON BURI 20230  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10502 e-mail : ktiya@thoigroup.com  
**MEASURING PLACE** : สี่แยกบาง  
**MEASURING TYPE** : AMBIENT (AIR)  
**MEASURING DATE** : MAY 6-13, 2022  
**MEASURING TIME** : \*  
**MEASURING METHOD** : FLAME IONIZATION DETECTOR  
**MEASURED BY** : MR STRPAT JONGPHADUNGSAT  
**RECEIVED DATE** : MAY 6-13, 2022  
**ANALYTICAL DATE** : MAY 6-13, 2022  
**REPORT NO.** : 2022-0041160  
**WORK NO.** : 2022-003222  
**ANALYSIS NO.** : T22A067-0015 - T22A067-0021

DATE	TIME *	RESULT (ppm)
		TOTAL HYDROCARBONS
		µg/m <sup>3</sup> (ppb)
MAY 6-7, 2022 T22A067-0015	08:00-08:00 HOUR	2.13
MAY 7-8, 2022 T22A067-0016	08:00-08:00 HOUR	2.15
MAY 8-9, 2022 T22A067-0017	08:00-08:00 HOUR	2.12
MAY 9-10, 2022 T22A067-0018	08:00-08:00 HOUR	2.14
MAY 10-11, 2022 T22A067-0019	08:00-08:00 HOUR	2.16
MAY 11-12, 2022 T22A067-0020	08:00-08:00 HOUR	2.10
MAY 12-13, 2022 T22A067-0021	08:00-08:00 HOUR	2.12



(MR SILA BANDOONGMAEK)  
LABORATORY SUPERVISOR

JUNE 3, 2022





## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	: THAI OIL PUBLIC COMPANY LIMITED		
<b>ADDRESS</b>	: 333/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAWAD RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900		
<b>CONTACT INFORMATION</b>	: TEL : 0 2845 8300 EXT. 10553 e-mail : nitya@uaecgroup.com		
<b>SAMPLING SOURCE</b>	: THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KM 124, TUNGSKULA, SRIRACHA, CHONBURI 20200		
<b>SAMPLE TYPE</b>	: AMBIENT	<b>RECEIVED DATE</b>	: JANUARY 7, 2022
<b>SAMPLING DATE</b>	: *	<b>ANALYTICAL DATE</b>	: JANUARY 7-17, 2022
<b>SAMPLING TIME</b>	: *	<b>REPORT NO.</b>	: 2022-U004164
<b>SAMPLING BY</b>	: MR. SIRAPAT JONGPHADUNGDET	<b>WORK NO.</b>	: 2021-003222
<b>ANALYZED BY</b>	: MISS WORAKON PACHONGCHAN	<b>ANALYSIS NO.</b>	: T22AA313-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			UNIT/TEST/NO. T22AA313-0003
BENZENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	1.85
TOLUENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	8.54
m,p-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.35
o-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	< 0.12
SAMPLE CONDITION			COMPLETE

**REMARK**
**RESULT** : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.

\*: SAMPLING FROM 09:00 HOUR ON JANUARY 6, 2022 TO 00:00 HOUR ON JANUARY 7, 2022.



(MISS BENJAWAN VIRZYOTHAJ)  
LABORATORY SUPERVISOR

JANUARY 21, 2022



## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	THAI OIL PUBLIC COMPANY LIMITED
<b>ADDRESS</b>	555/1 ENERGY COMPLEX BUILDING 8, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10000
<b>CONTACT INFORMATION</b>	TEL : 0 3840 8500 EXT. 10502 e-mail : kitya@thoilgroup.com
<b>SAMPLING SOURCE</b>	THAI OIL PUBLIC COMPANY LIMITED K2/1, PLO 1, SUKHUMVIT ROAD KM. 124, TUNGSIKHA, SRIRACHA, CHONBURI 35230
<b>SAMPLE TYPE</b>	AMBIENT
<b>SAMPLING DATE</b>	*
<b>SAMPLING TIME</b>	*
<b>SAMPLING BY</b>	MR. SIRAPAT JONGPHADUNKEET
<b>ANALYZED BY</b>	MISS WORAKON PADSONGCHAN
<b>RECEIVED DATE</b>	FEBRUARY 8, 2022
<b>ANALYTICAL DATE</b>	FEBRUARY 8-10, 2022
<b>REPORT NO.</b>	2022-US12112
<b>WORK NO.</b>	2023-003222
<b>ANALYSIS NO.</b>	T22AC192-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			UINSTRUM T22AC192-0003
BENZENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	1.11
TOLUENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	14.2
m,p-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.39
o-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.35
<b>SAMPLE CONDITION</b>			COMPLETE

### REMARK

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.

\* : SAMPLING FROM 00:00 HOUR ON FEBRUARY 7, 2022 TO 09:00 HOUR ON FEBRUARY 8, 2022.



(MISS BENJAWAN VIRIYOTHAI)  
LABORATORY SUPERVISOR

FEBRUARY 23, 2022



## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	: THAI OIL PUBLIC COMPANY LIMITED		
<b>ADDRESS</b>	: 55/1 ENERGY COMPLEX BUILDING 4, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900		
<b>CONTACT INFORMATION</b>	: TEL : 0 3845 8500 EXT. 10101 E-mail : kitiya@thaiogroup.com		
<b>SAMPLING SOURCE</b>	: THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KM 124, TUNGSRUKA, SRIRACHA, CHONBURI 20230		
<b>SAMPLE TYPE</b>	: AMBIENT	<b>RECEIVED DATE</b>	: MARCH 8, 2022
<b>SAMPLING DATE</b>	: *	<b>ANALYTICAL DATE</b>	: MARCH 8-16, 2022
<b>SAMPLING TIME</b>	: *	<b>REPORT NO.</b>	: 2022-0019937
<b>SAMPLING BY</b>	: MR. SRIARAT JONGPHADUNGET	<b>WORK NO.</b>	: 2021-003222
<b>ANALYZED BY</b>	: MISS WIRAKON PADSONGCHAN	<b>ANALYSIS NO.</b>	: T22AE364-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			เลขที่วิเคราะห์ T22AE364-0003
BENZENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	1.08
TOLUENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	2.77
m,p-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.90
o-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.06
SAMPLE CONDITION			COMPLETE

**REMARK:**

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.

\* : SAMPLING FROM 09:00 HOUR ON MARCH 7, 2022 TO 09:00 HOUR ON MARCH 8, 2022.



 (MISS BENJAWAN VIRIYUTHAI)  
LABORATORY SUPERVISOR

MARCH 17, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI BANGSIT ROAD CHITUCHAK CHATUCHAK BANGKOK 10700  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10582 e-mail : kitya@thoailgroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSRULA, SRRACHA, CHONBURI 20230  
**SAMPLE TYPE** : AMBIENT  
**SAMPLING DATE** : \*  
**SAMPLING TIME** : \*  
**SAMPLING BY** : MR. SIRARAT JONGPHADUNGKEET  
**ANALYZED BY** : MISS WIRAKON PONGSANGCHAN  
**RECEIVED DATE** : APRIL 8, 2022  
**ANALYTICAL DATE** : APRIL 8-22, 2022  
**REPORT NO.** : 2022-U029894  
**WORK NO.** : 2021-003223  
**ANALYSIS NO.** : T22AGN7-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			วิภาวดี ๒๕๕๕ T22AG787-0003
BENZENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.57
TOLUENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	1.67
m,p-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	< 0.25
o-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	< 0.17
SAMPLE CONDITION			COMPLETE

### REMARK

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.  
 \* : SAMPLING FROM 09:00 HOUR ON APRIL 7, 2022 TO 09:00 HOUR ON APRIL 8, 2022.

*Benjawan V.*

(MISS BENJAWAN VIRIYOTHAT)  
LABORATORY SUPERVISOR

APRIL 27, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 352/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR, VISHAVADEE RAMESIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10502 e-mail : kitua@thaoilgroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 3, SUNHUMVIT ROAD KM.124, TUNGSIKLA, SRIRACHA, CHONBURI 20230  
**SAMPLE TYPE** : AMBIENT  
**SAMPLING DATE** : \*  
**SAMPLING TIME** : \*  
**SAMPLING BY** : MR. SIRAPAT JONGPHADUNGKIT  
**ANALYZED BY** : MISS WORAKORN PADSICHCHAN

**RECEIVED DATE** : MAY 10, 2022  
**ANALYTICAL DATE** : MAY 10-17, 2022  
**REPORT NO.** : 2022-U036544  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22A1776-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			U/NAET1776RM T22A1776-0003
BENZENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.01
TOLUENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.2
m,p-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	1.01
o-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.43
SAMPLE CONDITION			COMPLETE

**REMARK**

**RESULT** : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.  
 \* : SAMPLING FROM 09:00 HOUR ON MAY 9, 2022 TO 09:00 HOUR ON MAY 10, 2022.

*Benjawan V.*

(MISS BENJAWAN VIRIYOTHA)  
LABORATORY SUPERVISOR

MAY 19, 2022





## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/2 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR, VIBHAVADI RAMSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10000  
**CONTACT INFORMATION** : TEL : 0 3846 8500 EXT. 10502 e-mail : kitya@thaioilgroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSIKLA, SRIRACHA, CHONBURI 20230  
**SAMPLE TYPE** : AMBIENT  
**SAMPLING DATE** : \*  
**SAMPLING TIME** : \*  
**SAMPLING BY** : MR. SIRAPAT JONGHIMADUNOKIET  
**ANALYZED BY** : MISS WORMON PADSONGCHAN  
**RECEIVED DATE** : JUNE 7, 2022  
**ANALYTICAL DATE** : JUNE 7-14, 2022  
**REPORT NO.** : 2022-0045028  
**WORK NO.** : 2021-000222  
**ANALYSIS NO.** : T22AK858-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			หน่วยงาน T22AK858-0003
BENZENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.01
TOUENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	3.78
m,p-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	< 0.70
o-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	< 0.05
SAMPLE CONDITION			COMPLETE

### REMARK

**RESULT** :  
\* REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.  
\* SAMPLING FROM 09:00 HOUR ON JUNE 6, 2022 TO 09:00 HOUR ON JUNE 7, 2022.

*Benjawan V.*

(MISS BENJAWAN VIRIYOTHA)  
LABORATORY SUPERVISOR

JUNE 20, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 55/5 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAWADI RANGSIT ROAD CHITLOHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3040 8500 (EXT. 10502) e-mail : kitiya@thaioilgroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSIKLA, SRIRACHA, CHONBURI 20230  
**SAMPLE TYPE** : AMBIENT  
**SAMPLING DATE** : 5, 7, 8 MAY 2022  
**SAMPLING TIME** : 5, 7, 8 MAY 2022  
**SAMPLING BY** : MR. SIRAPAT JONGPHADUNGOET  
**ANALYZED BY** : MISS JETJARN TUMSA-AT  
**RECEIVED DATE** : MAY 13, 2022  
**ANALYTICAL DATE** : MAY 13-20, 2022  
**REPORT NO.** : 2022-0037760  
**WORK NO.** : 2022-003222  
**ANALYSIS NO.** : T22A067-0008 - T22A067-0010

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		
			µg/m³		
			* T22A067-0008	** T22A067-0009	*** T22A067-0010
TOTAL SUSPENDED PARTICULATE	mg/m³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.125	0.061	0.140
PARTICULATE MATTER (≤ 10 µm)	mg/m³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.061	0.038	0.029
SAMPLE CONDITION			COMPLETE	COMPLETE	COMPLETE

### REMARK

- TSP, PM10 : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.  
TSP : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER 1 PART 50, APPENDIX B.  
PM10 : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER 1 PART 50, APPENDIX 1.  
\* : SAMPLING FROM 06:30 HOUR ON MAY 6, 2022 TO 08:30 HOUR ON MAY 7, 2022.  
\*\* : SAMPLING FROM 06:30 HOUR ON MAY 7, 2022 TO 08:30 HOUR ON MAY 8, 2022.  
\*\*\* : SAMPLING FROM 08:30 HOUR ON MAY 8, 2022 TO 08:30 HOUR ON MAY 9, 2022.



(MRS PIYAPAT SUTTAMANUTWONG)  
LABORATORY SUPERVISOR

MAY 25, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 55/1, ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAWADI RANGSIT ROAD CHATUCHAK CHATUCHAK  
 BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10502 e-mail : kitiya@thaiogroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED 42/1, MOO 1, SUKHUMVIT ROAD KM.124, TUNGSIKHA, SADRACHA, CHONBURI 20230.  
**SAMPLE TYPE** : AMBIENT  
**SAMPLING DATE** :  
**SAMPLING TIME** :  
**SAMPLING BY** : HR SIRAPAT JONGPHADUNKEET  
**ANALYZED BY** : MISS JETJAREN TUMSA-AT  
**RECEIVED DATE** : MAY 10, 2022  
**ANALYTICAL DATE** : MAY 10-26, 2022  
**REPORT NO.** : 2022-UX07762  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22A067-0011 - T22A067-0014

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT			
			µg/m³			
			I	II	III	IV
			T22A067-0011	T22A067-0012	T22A067-0013	T22A067-0014
TOTAL SUSPENDED PARTICULATE	mg/m³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.060	0.078	0.071	0.073
PARTICULATE MATTER (≤ 10 µm)	mg/m³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.024	0.032	0.030	0.031
SAMPLE CONDITION			COMPLETE	COMPLETE	COMPLETE	COMPLETE

### REMARK

- TSP, PM10 : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.  
 TSP : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER 1 PART 50, APPENDIX B.  
 PM10 : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER 1 PART 50, APPENDIX 1.  
 \* : SAMPLING FROM 08:30 HOUR ON MAY 9, 2022 TO 08:30 HOUR ON MAY 10, 2022.  
 \*\* : SAMPLING FROM 08:30 HOUR ON MAY 10, 2022 TO 08:30 HOUR ON MAY 11, 2022.  
 \*\*\* : SAMPLING FROM 08:30 HOUR ON MAY 11, 2022 TO 08:30 HOUR ON MAY 12, 2022.  
 \*\*\*\* : SAMPLING FROM 08:30 HOUR ON MAY 12, 2022 TO 08:30 HOUR ON MAY 13, 2022.

*Piyapat S.*

(MRS PIYAPAT SUITAMANTWONG)  
 LABORATORY SUPERVISOR

MAY 25, 2022





### ANALYSIS REPORT

<b>CUSTOMER NAME</b>	: THAI OIL PUBLIC COMPANY LIMITED	<b>RECEIVED DATE</b>	: MAY 6-13, 2022
<b>ADDRESS</b>	: 42/1 MOO 1, SUKHUMVIT ROAD KM. 224, THUNG SUKHLA SI RACHA CHON BURI 20230	<b>ANALYTICAL DATE</b>	: MAY 6-13, 2022
<b>CONTACT INFORMATION</b>	: TEL : 0 2640 8300 EXT. 10502 e-mail : kitye@thaiogroup.com	<b>REPORT NO.</b>	: 2022-0043158
<b>MEASURING PLACE</b>	: Study	<b>WORK NO.</b>	: 2021-003222
<b>MEASURING TYPE</b>	: AMBIENT (AIR)	<b>ANALYSIS NO.</b>	: T22A067-0008 - T22A067-0014
<b>MEASURING DATE</b>	: MAY 6-13, 2022		
<b>MEASURING TIME</b>	: *		
<b>MEASURING METHOD</b>	: UV FLUORESCENCE		
<b>MEASURED BY</b>	: MR SIRAPAT JONGPHASUNGRIT		

วันที่ *	RESULT (ppm)		
	SULPHUR DIOXIDE		
	Study		
	MAY 6-7, 2022 T22A067-0008	MAY 7-8, 2022 T22A067-0009	MAY 8-9, 2022 T22A067-0010
08:00-09:00 HOUR	0.0041	0.0041	0.0041
09:00-10:00 HOUR	0.0044	0.0042	0.0042
10:00-11:00 HOUR	0.0045	0.0044	0.0043
11:00-12:00 HOUR	0.0043	0.0044	0.0042
12:00-13:00 HOUR	0.0044	0.0042	0.0043
13:00-14:00 HOUR	0.0040	0.0043	0.0043
14:00-15:00 HOUR	0.0041	0.0043	0.0044
15:00-16:00 HOUR	0.0044	0.0046	0.0046
16:00-17:00 HOUR	0.0046	0.0047	0.0048
17:00-18:00 HOUR	0.0045	0.0043	0.0048
18:00-19:00 HOUR	0.0041	0.0043	0.0045
19:00-20:00 HOUR	0.0040	0.0046	0.0044
20:00-21:00 HOUR	0.0039	0.0043	0.0042
21:00-22:00 HOUR	0.0038	0.0041	0.0041
22:00-23:00 HOUR	0.0036	0.0040	0.0038
23:00-00:00 HOUR	0.0032	0.0039	0.0037
00:00-01:00 HOUR	0.0034	0.0037	0.0034
01:00-02:00 HOUR	0.0036	0.0038	0.0037
02:00-03:00 HOUR	0.0037	0.0036	0.0035
03:00-04:00 HOUR	0.0037	0.0033	0.0032
04:00-05:00 HOUR	0.0037	0.0032	0.0038
05:00-06:00 HOUR	0.0039	0.0032	0.0037
06:00-07:00 HOUR	0.0039	0.0037	0.0034
07:00-08:00 HOUR	0.0040	0.0039	0.0039
AVERAGE 24 HOUR	0.0040	0.0040	0.0041



TIME	RESULT (ppm)			
	SULPHUR DIOXIDE			
	STATION 4			
	MAY 9-10, 2022 T22A067-0011	MAY 10-11, 2022 T22A067-0012	MAY 11-12, 2022 T22A067-0013	MAY 12-13, 2022 T22A067-0014
08:00-09:00 HOUR	0.0041	0.0041	0.0043	0.0041
09:00-10:00 HOUR	0.0045	0.0046	0.0041	0.0047
10:00-11:00 HOUR	0.0047	0.0041	0.0042	0.0048
11:00-12:00 HOUR	0.0043	0.0048	0.0049	0.0048
12:00-13:00 HOUR	0.0046	0.0042	0.0048	0.0046
13:00-14:00 HOUR	0.0045	0.0043	0.0047	0.0046
14:00-15:00 HOUR	0.0042	0.0044	0.0049	0.0049
15:00-16:00 HOUR	0.0047	0.0046	0.0045	0.0048
16:00-17:00 HOUR	0.0045	0.0047	0.0046	0.0043
17:00-18:00 HOUR	0.0041	0.0046	0.0045	0.0042
18:00-19:00 HOUR	0.0043	0.0048	0.0042	0.0048
19:00-20:00 HOUR	0.0047	0.0048	0.0043	0.0042
20:00-21:00 HOUR	0.0042	0.0049	0.0039	0.0039
21:00-22:00 HOUR	0.0038	0.0042	0.0032	0.0038
22:00-23:00 HOUR	0.0034	0.0039	0.0038	0.0034
23:00-00:00 HOUR	0.0034	0.0036	0.0037	0.0033
00:00-01:00 HOUR	0.0039	0.0037	0.0032	0.0035
01:00-02:00 HOUR	0.0038	0.0039	0.0036	0.0032
02:00-03:00 HOUR	0.0039	0.0038	0.0038	0.0033
03:00-04:00 HOUR	0.0032	0.0039	0.0038	0.0033
04:00-05:00 HOUR	0.0035	0.0039	0.0035	0.0034
05:00-06:00 HOUR	0.0038	0.0040	0.0029	0.0036
06:00-07:00 HOUR	0.0039	0.0041	0.0041	0.0038
07:00-08:00 HOUR	0.0041	0.0042	0.0042	0.0041
AVERAGE 24 HOUR	0.0041	0.0042	0.0041	0.0041

*Sil Sila*

(MR. SILA BANGONGJAIJUK)  
LABORATORY SUPERVISOR

JUNE 3, 2022

## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	: THAI EEL PUBLIC COMPANY LIMITED	<b>RECEIVED DATE</b>	: MAY 6-11, 2022
<b>ADDRESS</b>	: 42/1 HOO L, SUKHUMVIT ROAD KM. 124, THUNG SUKHEA SI RACHA CHON BURI 20230	<b>ANALYTICAL DATE</b>	: MAY 6-11, 2022
<b>CONTACT INFORMATION</b>	: TEL : 0 3840 8500 EXT: 10502 e-mail : kitya@thaeilgroup.com	<b>REPORT NO.</b>	: 2022-U041136
<b>MEASURING PLACE</b>	: WATER	<b>WORK NO.</b>	: 2021-003222
<b>MEASURING TYPE</b>	: AMBIENT (AIR)	<b>ANALYSIS NO.</b>	: T22A3067-0006 - T22A3067-0014
<b>MEASURING DATE</b>	: MAY 6-11, 2022		
<b>MEASURING TIME</b>	: *		
<b>MEASURING METHOD</b>	: CHEMILUMINESCENCE		
<b>MEASURED BY</b>	: MR SURAPAT JONGPHADUNGIET		

TIME *	RESULT (ppm)		
	NITROGEN DIOXIDE		
	Unit:ppm		
	MAY 6-7, 2022 T22A3067-0006	MAY 7-8, 2022 T22A3067-0009	MAY 8-9, 2022 T22A3067-0010
08:00-09:00 HOUR	0.0291	0.0287	0.0298
09:00-10:00 HOUR	0.0289	0.0290	0.0282
10:00-11:00 HOUR	0.0294	0.0284	0.0269
11:00-12:00 HOUR	0.0273	0.0274	0.0273
12:00-13:00 HOUR	0.0268	0.0282	0.0292
13:00-14:00 HOUR	0.0279	0.0281	0.0288
14:00-15:00 HOUR	0.0278	0.0271	0.0288
15:00-16:00 HOUR	0.0279	0.0271	0.0283
16:00-17:00 HOUR	0.0283	0.0281	0.0276
17:00-18:00 HOUR	0.0288	0.0284	0.0272
18:00-19:00 HOUR	0.0292	0.0271	0.0279
19:00-20:00 HOUR	0.0282	0.0264	0.0257
20:00-21:00 HOUR	0.0265	0.0258	0.0250
21:00-22:00 HOUR	0.0262	0.0241	0.0232
22:00-23:00 HOUR	0.0241	0.0233	0.0243
23:00-00:00 HOUR	0.0223	0.0247	0.0249
00:00-01:00 HOUR	0.0225	0.0244	0.0234
01:00-02:00 HOUR	0.0206	0.0238	0.0232
02:00-03:00 HOUR	0.0222	0.0211	0.0213
03:00-04:00 HOUR	0.0249	0.0241	0.0241
04:00-05:00 HOUR	0.0244	0.0242	0.0243
05:00-06:00 HOUR	0.0259	0.0257	0.0270
06:00-07:00 HOUR	0.0266	0.0264	0.0296
07:00-08:00 HOUR	0.0266	0.0282	0.0303



TIME *	RESULT (ppm)			
	NITROGEN DIOXIDE			
	วิธีที่ ๑			
	MAY 9-10, 2022 T22A3067-0011	MAY 10-11, 2022 T22A3067-0012	MAY 11-12, 2022 T22A3067-0013	MAY 12-13, 2022 T22A3067-0014
08:00-09:00 HOUR	0.0286	0.0293	0.0305	0.0303
09:00-10:00 HOUR	0.0288	0.0279	0.0293	0.0280
10:00-11:00 HOUR	0.0273	0.0269	0.0298	0.0288
11:00-12:00 HOUR	0.0294	0.0275	0.0292	0.0293
12:00-13:00 HOUR	0.0290	0.0268	0.0284	0.0290
13:00-14:00 HOUR	0.0284	0.0276	0.0275	0.0293
14:00-15:00 HOUR	0.0205	0.0291	0.0284	0.0283
15:00-16:00 HOUR	0.0290	0.0299	0.0291	0.0276
16:00-17:00 HOUR	0.0294	0.0294	0.0295	0.0294
17:00-18:00 HOUR	0.0270	0.0272	0.0285	0.0289
18:00-19:00 HOUR	0.0285	0.0286	0.0273	0.0297
19:00-20:00 HOUR	0.0283	0.0283	0.0259	0.0276
20:00-21:00 HOUR	0.0261	0.0261	0.0253	0.0261
21:00-22:00 HOUR	0.0245	0.0248	0.0243	0.0262
22:00-23:00 HOUR	0.0222	0.0236	0.0233	0.0254
23:00-00:00 HOUR	0.0251	0.0217	0.0239	0.0247
00:00-01:00 HOUR	0.0259	0.0258	0.0248	0.0240
01:00-02:00 HOUR	0.0229	0.0243	0.0234	0.0223
02:00-03:00 HOUR	0.0247	0.0251	0.0225	0.0219
03:00-04:00 HOUR	0.0258	0.0226	0.0244	0.0232
04:00-05:00 HOUR	0.0257	0.0250	0.0248	0.0248
05:00-06:00 HOUR	0.0261	0.0252	0.0270	0.0262
06:00-07:00 HOUR	0.0271	0.0262	0.0281	0.0274
07:00-08:00 HOUR	0.0293	0.0295	0.0290	0.0291



 (MR. SELA BANJONGJARUK)  
LABORATORY SUPERVISOR

JUNE 3, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 55/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT : 10592 e-mail : kloya@thaiolgroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSIKLA, SRIRACHA, CHONBURI 20230.  
**SAMPLE TYPE** : AMBIENT  
**SAMPLING DATE** : \*, \*\*, \*\*\*  
**SAMPLING TIME** : \*, \*\*, \*\*\*  
**SAMPLING BY** : MR SIRAPAT JONGPHADUNGIET  
**ANALYZED BY** : MISS SUWAN KONGTHONG  
**RECEIVED DATE** : MAY 13, 2022  
**ANALYTICAL DATE** : MAY 13-20, 2022  
**REPORT NO.** : 2022-0037794  
**WORK NO.** : 2023-003222  
**ANALYSIS NO.** : T22A067-0008 - T22A067-0010

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		
			µg/m <sup>3</sup>		
			* T22A067-0008	** T22A067-0009	*** T22A067-0010
HYDROGEN SULPHIDE	mg/m <sup>3</sup>	METHYLENE BLUE METHOD (APHA METHOD 75.5)	< 0.001	< 0.001	< 0.001
SAMPLE CONDITION			COMPLETE	COMPLETE	COMPLETE

### REMARK

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.  
 \* : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 6, 2022.  
 \*\* : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 7, 2022.  
 \*\*\* : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 8, 2022.

*Piyapat S.*

(MRS PIYAPAT SUTTAMANUTWONG)  
LABORATORY SUPERVISOR

MAY 25, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSETH ROAD CHATUCHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10502 e-mail : htiya@thaiogroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGTHUKLA, SRIRACHA, CHONBURI 21235  
**SAMPLE TYPE** : AMBIENT  
**SAMPLING DATE** : \* \*\* \*\* \*\*  
**SAMPLING TIME** : \* \*\* \*\* \*\*  
**SAMPLING BY** : MR. SIRAPAT JONGPHADUNGRAT  
**ANALYZED BY** : MISS SUWAN KONGTHONG

**RECEIVED DATE** : MAY 13, 2022  
**ANALYTICAL DATE** : MAY 12-20, 2022  
**REPORT NO.** : 2022-UG07703  
**WORK NO.** : 2021-003223  
**ANALYSIS NO.** : T22AJ017-0011 - T22AJ017-0014

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT			
			µg/m <sup>3</sup>			
			I	II	III	IV
			T22AJ017-0011	T22AJ017-0012	T22AJ017-0013	T22AJ017-0014
HYDROGEN SULPHIDE	mg/m <sup>3</sup>	METHYLENE BLUE METHOD (APHA METHOD 701)	< 0.001	< 0.001	< 0.001	< 0.001
SAMPLE CONDITION			COMPLETE	COMPLETE	COMPLETE	COMPLETE

### REMARK

**RESULT** : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.  
 \* : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 9, 2022.  
 \*\* : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 10, 2022.  
 \*\*\* : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 11, 2022.  
 \*\*\*\* : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 12, 2022.

*Pirapat S.*

(MR. PIYAPAT SUTTAMANUTWONG)  
LABORATORY SUPERVISOR

MAY 25, 2022



### ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 12/1 MOO 1, SUKHUMVIT ROAD KM. 124, THUNG SUKHU-SI RACHA CHON BURI 20230  
**CONTACT INFORMATION** : TEL : 0 3940 9503 EXT. 18502 e-mail : wtiya@thaioilgroup.com  
**MEASURING PLACE** : สี่แยก  
**MEASURING TYPE** : AMBIENT (AIR)  
**MEASURING DATE** : MAY 6-13, 2022  
**MEASURING TIME** : \*  
**MEASURING METHOD** : FLAME IONIZATION DETECTOR  
**MEASURED BY** : MR. SHRAPAT XONGPHADUNGSET  
**RECEIVED DATE** : MAY 6-13, 2022  
**ANALYTICAL DATE** : MAY 6-13, 2022  
**REPORT NO.** : 2022-UO41166  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22A067-0008 - T22A067-0014

DATE	TIME *	RESULT (ppm)
		TOTAL HYDROCARBONS
		Unit:ppm
MAY 6-7, 2022 T22A067-0008	08:00-08:00 HOUR	2.21
MAY 7-8, 2022 T22A067-0009	08:00-08:00 HOUR	2.19
MAY 8-9, 2022 T22A067-0010	08:00-08:00 HOUR	2.17
MAY 9-10, 2022 T22A067-0011	08:00-08:00 HOUR	2.30
MAY 10-11, 2022 T22A067-0012	08:00-08:00 HOUR	2.31
MAY 11-12, 2022 T22A067-0013	08:00-08:00 HOUR	2.19
MAY 12-13, 2022 T22A067-0014	08:00-08:00 HOUR	2.22



(MR. SILA BANJONGJAJIRUK)  
LABORATORY SUPERVISOR

JUNE 3, 2022





## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VISHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10502 e-mail : kitiya@thoailgroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SIKHUMVIT ROAD KM.124, TUNGKHA, SRIRACHA, CHONBURI 20130  
**SAMPLE TYPE** : AMBIENT  
**SAMPLING DATE** : \*  
**SAMPLING TIME** : \*  
**SAMPLING BY** : MR. SURAPAT JONGPHADUNGKIT  
**ANALYZED BY** : MISS WORANON PADSONGCHAN

**RECEIVED DATE** : JANUARY 7, 2022  
**ANALYTICAL DATE** : JANUARY 7-17, 2022  
**REPORT NO.** : 2022-0004160  
**WORK NO.** : 2021-001222  
**ANALYSIS NO.** : T22AA312-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			UPMHE T22AA312-0002
BENZENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	108
TOLUENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	434
m,p-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	< 0.35
o-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	< 0.17
SAMPLE CONDITION			COMPLETE

**REMARK**

**RESULT** : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.

\* : SAMPLING FROM 08:30 HOUR ON JANUARY 6, 2022 TO 08:30 HOUR ON JANUARY 7, 2022.



(MISS BENJAWAN VIKIYOTHA)  
LABORATORY SUPERVISOR

JANUARY 21, 2022



## ANALYSIS REPORT

**CUSTOMER NAME:** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS:** : 55/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RAMSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION:** : TEL : 0 3845 8500 EXT. 10502 e-mail : kitya@thaiolgroup.com  
**SAMPLING SOURCE:** : THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSKULA, SRIRACHA, CHONBURI 20230  
**SAMPLE TYPE:** : AMBIENT  
**SAMPLING DATE:** : \*  
**SAMPLING TIME:** : \*  
**SAMPLING BY:** : MR. SIRAPAT JONGPHADUNGET  
**ANALYZED BY:** : MISS WIRARON PADISONGCHAN  
**RECEIVED DATE:** : FEBRUARY 8, 2022  
**ANALYTICAL DATE:** : FEBRUARY 8-16, 2022  
**REPORT NO.:** : 2022-U012109  
**WORK NO.:** : 2021-003222  
**ANALYSIS NO.:** : T22AC192-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			วิธีตรวจ T22AC192-0002
BENZENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	1.34
TOLUENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	4.58
m,p-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	< 0.35
o-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	< 0.17
SAMPLE CONDITION			COMPLETE

**REMARK:**

**RESULT:** : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.

\* : SAMPLING FROM 08:30 HOUR ON FEBRUARY 7, 2022 TO 08:30 HOUR ON FEBRUARY 8, 2022.

*Benjawan V.*

(MISS BENJAWAN VITTYOTHA)  
LABORATORY SUPERVISOR

FEBRUARY 23, 2022




## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	: THAI OIL PUBLIC COMPANY LIMITED		
<b>ADDRESS</b>	: 55/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHITTOCHAK CHATUCHAK BANGKOK 10300		
<b>CONTACT INFORMATION</b>	: TEL : 0 3840 8500 EXT. 10502 E-mail : kitye@thuaigroup.com		
<b>SAMPLING SOURCE</b>	: THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGTHUNG, SRIRACHA, CHONBURI 30230		
<b>SAMPLE TYPE</b>	: AMBIENT	<b>RECEIVED DATE</b>	: MARCH 8, 2022
<b>SAMPLING DATE</b>	: *	<b>ANALYTICAL DATE</b>	: MARCH 8-15, 2022
<b>SAMPLING TIME</b>	: *	<b>REPORT NO.</b>	: T22AE354-0003
<b>SAMPLING BY</b>	: MR. SIRAPAT JONGPHADUNGSET	<b>WORK NO.</b>	: 2021-003222
<b>ANALYZED BY</b>	: MISS WORAKON PADSONGCHAN	<b>ANALYSIS NO.</b>	: T22AE354-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			สำเนา T22AE354-0003
BENZENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	1.31
TOLUENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	4.08
m,p-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	1.20
o-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.47
SAMPLE CONDITION			COMPLETE

**REMARK**
**RESULT** : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.

\*: SAMPLING FROM 08:30 HOUR ON MARCH 7, 2022 TO 08:30 HOUR ON MARCH 8, 2022.



(MISS BENJAWAN VIRZYOTHA)  
LABORATORY SUPERVISOR

MARCH 17, 2022



## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	THAI OIL PUBLIC COMPANY LIMITED		
<b>ADDRESS</b>	355/3 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10000		
<b>CONTACT INFORMATION</b>	TEL : 0 3840 8500 EXT. 10502 e-mail : ktiya@thaiogroup.com		
<b>SAMPLING SOURCE</b>	THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSIKLA, SRIRACHA, CHONBURI 20230.		
<b>SAMPLE TYPE</b>	AMBIENT	<b>RECEIVED DATE</b>	APRIL 8, 2022
<b>SAMPLING DATE</b>	*	<b>ANALYTICAL DATE</b>	APRIL 8-22, 2022
<b>SAMPLING TIME</b>	*	<b>REPORT NO.</b>	2022-0029891
<b>SAMPLING BY</b>	MR. SIRIPAT JONGPIMDUNGRIET	<b>WORK NO.</b>	2021-003222
<b>ANALYZED BY</b>	MISS WORAKIN PAOSONGCHAN	<b>ANALYSIS NO.</b>	T22AG787-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			Urbair T22AG787-0002
BENZENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.58
TOLUENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	1.31
m,p-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	< 0.35
o-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	< 0.17
SAMPLE CONDITION			COMPLETE

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\* REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.  
- SAMPLING FROM 08:30 HOUR ON APRIL 7, 2022 TO 08:30 HOUR ON APRIL 8, 2022.

\* - SANTA TRIS FROM 08:30 HOUR ON APRIL 7, 2022 TO 08:30 HOUR ON APRIL 8, 2022.

Peygamber V.

(MISS SINDAWAN VITRIYOTHA)  
LABORATORY SUPERVISOR

APR 17 2012



## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	THAI OIL PUBLIC COMPANY LIMITED		
<b>ADDRESS</b>	555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900		
<b>CONTACT INFORMATION</b>	TEL : 0 3840 8500 EXT. 10502 e-mail : kalya@thoilgroup.com		
<b>SAMPLING SOURCE</b>	THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSIKHA, SRIRACHA, CHONBURI 20230		
<b>SAMPLE TYPE</b>	AMBIENT	<b>RECEIVED DATE</b>	MAY 10, 2022
<b>SAMPLING DATE</b>	"	<b>ANALYTICAL DATE</b>	MAY 10-17, 2022
<b>SAMPLING TIME</b>	"	<b>REPORT NO.</b>	2022-U036041
<b>SAMPLING BY</b>	MR SIRAPAT JONGPHADUNOKIET	<b>WORK NO.</b>	2021-003222
<b>ANALYZED BY</b>	MISS WORARON PAISONGCHAN	<b>ANALYSIS NO.</b>	T22AI776-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			THUHA T22AI776-0002
BENZENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.87
TOLUENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	15.3
m,p-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	1.10
o-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.47
SAMPLE CONDITION			COMPLETE

**REMARK**

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.  
 \* SAMPLING FROM 08:30 HOUR ON MAY 9, 2022 TO 08:30 HOUR ON MAY 11, 2022.



(MISS BENJAWAN VIRIYOTHAI)  
LABORATORY SUPERVISOR

MAY 19, 2022





## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 55/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 5500 EXT. 10502 e-mail : ktiye@thaoilgroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KIL 124, TUNGSIKHA, SONGKHA, CHONBURI 20210.  
**SAMPLE TYPE** : AMBIENT  
**SAMPLING DATE** : \*  
**SAMPLING TIME** : \*  
**SAMPLING BY** : MR. SIRARAT JONGPHADUNGIET  
**ANALYZED BY** : MISS WORAKON PADSONGCHAN

**RECEIVED DATE** : JUNE 7, 2022  
**ANALYTICAL DATE** : JUNE 7-14, 2022  
**REPORT NO.** : 2022-0045020  
**WORK NO.** : 2022-005222  
**ANALYSIS NO.** : T22AKB58-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			สำเนา T22AKB58-0002
BENZENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.83
TOLUENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	2.82
m,p-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	< 0.70
o-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	< 0.38
SAMPLE CONDITION			COMPLETE

### REMARK

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.  
 \* : SAMPLING FROM 08:30 HOUR ON JUNE 6, 2022 TO 08:30 HOUR ON JUNE 7, 2022.

*Benawan V.*

(MISS BENAWAN VIRLYOTHAI)  
LABORATORY SUPERVISOR

JUNE 20, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED

**ADDRESS** : 55/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSI ROAD CHATUCHAK CHATUCHAK, BANGKOK 10900

**CONTACT INFORMATION** : TEL : 0 2640 8300 EXT. 10502 e-mail : kitiya@thaiolgroup.com

**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSIKLA, SRIRACHA, CHONBURI 20230

**SAMPLE TYPE** : AMBIENT

**SAMPLING DATE** : 1. \*\*, \*\*\*

**SAMPLING TIME** : 1. \*\*, \*\*\*

**SAMPLING BY** : MR. STRAET JONGPHADUNGKET

**ANALYZED BY** : MISS JETSAKH TUMSA-AT

**RECEIVED DATE** : MAY 13, 2022

**ANALYTICAL DATE** : MAY 13-20, 2022

**REPORT NO.** : 2022-0037772

**WORK NO.** : 2022-000222

**ANALYSIS NO.** : T22A067-0029 - T22A067-0031

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		
			รายงานผลการตรวจวัด		
			*	**	***
			T22A067-0029	T22A067-0030	T22A067-0031
TOTAL SUSPENDED PARTICULATE	mg/m <sup>3</sup>	GRAVIMETRIC (HIGH VOLUME METHOD)	0.106	0.046	0.067
PARTICULATE MATTER (≤ 10 µm)	mg/m <sup>3</sup>	GRAVIMETRIC (HIGH VOLUME METHOD)	0.055	0.028	0.018
SAMPLE CONDITION			COMPLETE	COMPLETE	COMPLETE

**REMARK**

- TSP, PM10 : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.
- TSP : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER 1 PART 50, APPENDIX B.
- PM10 : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER 1 PART 50, APPENDIX J.
- \*
- \*\*
- \*\*\*
- : SAMPLING FROM 09:00 HOUR ON MAY 6, 2022 TO 09:00 HOUR ON MAY 7, 2022.
- : SAMPLING FROM 09:00 HOUR ON MAY 7, 2022 TO 09:00 HOUR ON MAY 8, 2022.
- : SAMPLING FROM 09:00 HOUR ON MAY 8, 2022 TO 09:00 HOUR ON MAY 9, 2022.

*Piyapat S.*

(MRS PIYAPAT SUTTAMANI/TWONG)  
LABORATORY SUPERVISOR

MAY 23, 2022





## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	THAI OIL PUBLIC COMPANY LIMITED
<b>ADDRESS</b>	155/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUACHAK CHATUACHAK BANGKOK 10900
<b>CONTACT INFORMATION</b>	TEL : 0 2640 8500 EXT. 10502 e-mail : kellye@thaioilgroup.com
<b>SAMPLING SOURCE</b>	THAI OIL PUBLIC COMPANY LIMITED 40/1 MOO 1, SUKUMVIT ROAD KM.124, TUNGSAKHA, SRIRACHA, CHONBURI 20230
<b>SAMPLE TYPE</b>	AMBIENT
<b>SAMPLING DATE</b>	MAY 9, 2022
<b>SAMPLING TIME</b>	09:00 - 12:00
<b>SAMPLING BY</b>	MR. SIRAPAT JONGPHADUNOKIT
<b>ANALYZED BY</b>	MISS JETJARN TUMSA-AT
<b>RECEIVED DATE</b>	MAY 11, 2022
<b>ANALYTICAL DATE</b>	MAY 13-20, 2022
<b>REPORT NO.</b>	2022-4007774
<b>WORK NO.</b>	2021-003222
<b>ANALYSIS NO.</b>	T22A.067-0012 - T22A.067-0035

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT			
			รายงานผล			
			*	**	***	****
			T22A.067-0012	T22A.067-0023	T22A.067-0034	T22A.067-0035
TOTAL SUSPENDED PARTICULATE	mg/m <sup>3</sup>	GRAVIMETRIC (HIGH VOLUME METHOD)	0.047	0.009	0.044	0.040
PARTICULATE MATTER (≤ 10 µm)	mg/m <sup>3</sup>	GRAVIMETRIC (HIGH VOLUME METHOD)	0.026	0.009	0.026	0.026
SAMPLE CONDITION			COMPLETE	COMPLETE	COMPLETE	COMPLETE

### REMARK

TSP, PM10	REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.
TSP	US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER 1 PART 50, APPENDIX B.
PM10	US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER 1 PART 50, APPENDIX 1.
*	SAMPLING FROM 09:00 HOUR ON MAY 9, 2022 TO 09:00 HOUR ON MAY 10, 2022.
**	SAMPLING FROM 09:00 HOUR ON MAY 10, 2022 TO 09:00 HOUR ON MAY 11, 2022.
***	SAMPLING FROM 09:00 HOUR ON MAY 11, 2022 TO 09:00 HOUR ON MAY 12, 2022.
****	SAMPLING FROM 09:00 HOUR ON MAY 12, 2022 TO 09:00 HOUR ON MAY 13, 2022.

*Piyapich S.*

(MRS PIYAPICH SUTTAMANI/TWONG)  
LABORATORY SUPERVISOR

MAY 25, 2022



## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	: THAI OIL PUBLIC COMPANY LIMITED	<b>RECEIVED DATE</b>	: MAY 6-13, 2022
<b>ADDRESS</b>	: 42/1 MOO 1, SUKRAJIT ROAD KM. 124, THUNG SUKHLA SI RACHA CHON BURI 26230	<b>ANALYTICAL DATE</b>	: MAY 6-13, 2022
<b>CONTACT INFORMATION</b>	: TEL : 0 3840 6500 EXT. 10582 e-mail : ktive@thaiogroup.com	<b>REPORT NO.</b>	: 2022-0941462
<b>MEASURING PLACE</b>	: อู่เรือกรุงเทพ	<b>WORK NO.</b>	: 2021-003222
<b>MEASURING TYPE</b>	: AMBIENT (AIR)	<b>ANALYSIS NO.</b>	: T22A067-0029 - T22A067-0035
<b>MEASURING DATE</b>	: MAY 6-13, 2022		
<b>MEASURING TIME</b>	: *		
<b>MEASURING METHOD</b>	: UV FLUORESCENCE		
<b>MEASURED BY</b>	: MR SERAPAT JONGPHADUNGKET		

Date *	RESULT (ppm)		
	SULPHUR DIOXIDE		
	ซัลเฟอร์ไดออกไซด์		
	MAY 6-7, 2022 T22A067-0029	MAY 7-8, 2022 T22A067-0030	MAY 8-9, 2022 T22A067-0031
08:00-09:00 HOUR	0.0038	0.0034	0.0040
09:00-10:00 HOUR	0.0041	0.0028	0.0042
10:00-11:00 HOUR	0.0042	0.0042	0.0041
11:00-12:00 HOUR	0.0040	0.0044	0.0035
12:00-13:00 HOUR	0.0038	0.0046	0.0026
13:00-14:00 HOUR	0.0036	0.0048	0.0021
14:00-15:00 HOUR	0.0025	0.0048	0.0019
15:00-16:00 HOUR	0.0017	0.0043	0.0021
16:00-17:00 HOUR	0.0040	0.0037	0.0021
17:00-18:00 HOUR	0.0040	0.0035	0.0020
18:00-19:00 HOUR	0.0039	0.0036	0.0020
19:00-20:00 HOUR	0.0028	0.0040	0.0020
20:00-21:00 HOUR	0.0028	0.0041	0.0020
21:00-22:00 HOUR	0.0038	0.0041	0.0018
22:00-23:00 HOUR	0.0038	0.0037	0.0017
23:00-00:00 HOUR	0.0034	0.0036	0.0016
00:00-01:00 HOUR	0.0039	0.0033	0.0017
01:00-02:00 HOUR	0.0036	0.0024	0.0018
02:00-03:00 HOUR	0.0035	0.0020	0.0022
03:00-04:00 HOUR	0.0032	0.0020	0.0025
04:00-05:00 HOUR	0.0030	0.0022	0.0028
05:00-06:00 HOUR	0.0027	0.0025	0.0028
06:00-07:00 HOUR	0.0028	0.0032	0.0028
07:00-08:00 HOUR	0.0030	0.0037	0.0029
AVERAGE 24 HOUR	0.0036	0.0036	0.0025



วันที่ *	RESULT (ppm)			
	SULPHUR DIOXIDE			
	สารมลพิษทางอากาศ			
	MAY 9-10, 2022 T22A3067-0032	MAY 10-11, 2022 T22A3067-0033	MAY 11-12, 2022 T22A3067-0034	MAY 12-13, 2022 T22A3067-0035
08:00-09:00 HOUR	0.0032	0.0038	0.0045	0.0048
09:00-10:00 HOUR	0.0033	0.0031	0.0043	0.0054
10:00-11:00 HOUR	0.0033	0.0034	0.0041	0.0054
11:00-12:00 HOUR	0.0032	0.0038	0.0040	0.0053
12:00-13:00 HOUR	0.0032	0.0041	0.0038	0.0052
13:00-14:00 HOUR	0.0034	0.0049	0.0036	0.0050
14:00-15:00 HOUR	0.0035	0.0054	0.0038	0.0050
15:00-16:00 HOUR	0.0038	0.0053	0.0041	0.0045
16:00-17:00 HOUR	0.0039	0.0055	0.0045	0.0048
17:00-18:00 HOUR	0.0038	0.0052	0.0041	0.0044
18:00-19:00 HOUR	0.0037	0.0048	0.0037	0.0044
19:00-20:00 HOUR	0.0034	0.0041	0.0035	0.0043
20:00-21:00 HOUR	0.0035	0.0035	0.0034	0.0042
21:00-22:00 HOUR	0.0036	0.0029	0.0036	0.0043
22:00-23:00 HOUR	0.0037	0.0028	0.0039	0.0041
23:00-00:00 HOUR	0.0037	0.0031	0.0040	0.0042
00:00-01:00 HOUR	0.0032	0.0033	0.0037	0.0042
01:00-02:00 HOUR	0.0032	0.0034	0.0037	0.0043
02:00-03:00 HOUR	0.0027	0.0031	0.0038	0.0051
03:00-04:00 HOUR	0.0028	0.0033	0.0037	0.0054
04:00-05:00 HOUR	0.0025	0.0034	0.0035	0.0060
05:00-06:00 HOUR	0.0027	0.0036	0.0033	0.0062
06:00-07:00 HOUR	0.0038	0.0042	0.0036	0.0065
07:00-08:00 HOUR	0.0035	0.0044	0.0041	0.0069
AVERAGE 24 HOUR	0.0033	0.0039	0.0039	0.0050

*Sila Banongjareuk*

(MR SILA BANONGJAREUK)  
LABORATORY SUPERVISOR

JUNE 3, 2022

## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	THAI OIL PUBLIC COMPANY LIMITED	<b>RECEIVED DATE</b>	MAY 6-13, 2022
<b>ADDRESS</b>	42/1 HCO 1, SUKHUMVIT ROAD KM. 124, THUNG SUKOLAK SI HACHA CHON BURI 20230	<b>ANALYTICAL DATE</b>	MAY 6-13, 2022
<b>CONTACT INFORMATION</b>	TEL : 0 2840 8500 EXT. 12502 e-mail : kitta@thaoilgroup.com	<b>REPORT NO.</b>	2022-U041156
<b>MEASURING PLACE</b>	กรุงเทพมหานคร	<b>WORK NO.</b>	2022-003222
<b>MEASURING TYPE</b>	AMBIENT (AIR)	<b>ANALYSIS NO.</b>	T22A067-0029 - T22A067-0035
<b>MEASURING DATE</b>	MAY 6-13, 2022		
<b>MEASURING TIME</b>	-		
<b>MEASURING METHOD</b>	CHEMILUMINESCENCE		
<b>MEASURED BY</b>	MR SIRAPAT JONGHACONGKIJET		

TIME *	RESULT (ppm)		
	NITROGEN DIOXIDE		
	กรุงเทพมหานคร		
	MAY 6-7, 2022 T22A067-0029	MAY 7-8, 2022 T22A067-0030	MAY 8-9, 2022 T22A067-0031
06:00-09:00 HOUR	0.0242	0.0238	0.0267
09:00-10:00 HOUR	0.0236	0.0233	0.0267
10:00-11:00 HOUR	0.0259	0.0233	0.0252
11:00-12:00 HOUR	0.0272	0.0231	0.0245
12:00-13:00 HOUR	0.0290	0.0208	0.0241
13:00-14:00 HOUR	0.0273	0.0217	0.0230
14:00-15:00 HOUR	0.0386	0.0233	0.0244
15:00-16:00 HOUR	0.0347	0.0248	0.0245
16:00-17:00 HOUR	0.0234	0.0253	0.0231
17:00-18:00 HOUR	0.0184	0.0255	0.0205
18:00-19:00 HOUR	0.0177	0.0265	0.0199
19:00-20:00 HOUR	0.0170	0.0267	0.0191
20:00-21:00 HOUR	0.0155	0.0257	0.0197
21:00-22:00 HOUR	0.0207	0.0247	0.0211
22:00-23:00 HOUR	0.0233	0.0229	0.0248
23:00-00:00 HOUR	0.0249	0.0215	0.0262
00:00-01:00 HOUR	0.0256	0.0212	0.0257
01:00-02:00 HOUR	0.0264	0.0239	0.0255
02:00-03:00 HOUR	0.0261	0.0256	0.0260
03:00-04:00 HOUR	0.0266	0.0276	0.0269
04:00-05:00 HOUR	0.0355	0.0274	0.0279
05:00-06:00 HOUR	0.0248	0.0279	0.0266
06:00-07:00 HOUR	0.0253	0.0263	0.0257
07:00-08:00 HOUR	0.0246	0.0263	0.0210





TIME *	RESULT (ppm)			
	NITROGEN DIOXIDE			
	SYSTEM NUMBER			
	MAY 9-10, 2022 T22AX067-0032	MAY 10-11, 2022 T22AX067-0033	MAY 11-12, 2022 T22AX067-0034	MAY 12-13, 2022 T22AX067-0035
08:00-09:00 HOUR	0.0204	0.0181	0.0252	0.0165
09:00-10:00 HOUR	0.0204	0.0186	0.0244	0.0166
10:00-11:00 HOUR	0.0225	0.0201	0.0242	0.0166
11:00-12:00 HOUR	0.0238	0.0210	0.0243	0.0166
12:00-13:00 HOUR	0.0230	0.0226	0.0242	0.0171
13:00-14:00 HOUR	0.0255	0.0260	0.0238	0.0179
14:00-15:00 HOUR	0.0271	0.0268	0.0229	0.0180
15:00-16:00 HOUR	0.0279	0.0290	0.0229	0.0180
16:00-17:00 HOUR	0.0247	0.0290	0.0247	0.0182
17:00-18:00 HOUR	0.0221	0.0305	0.0254	0.0202
18:00-19:00 HOUR	0.0229	0.0272	0.0263	0.0186
19:00-20:00 HOUR	0.0239	0.0244	0.0246	0.0188
20:00-21:00 HOUR	0.0260	0.0231	0.0220	0.0151
21:00-22:00 HOUR	0.0270	0.0250	0.0191	0.0176
22:00-23:00 HOUR	0.0280	0.0267	0.0189	0.0212
23:00-00:00 HOUR	0.0274	0.0264	0.0191	0.0228
00:00-01:00 HOUR	0.0258	0.0261	0.0205	0.0243
01:00-02:00 HOUR	0.0233	0.0251	0.0199	0.0243
02:00-03:00 HOUR	0.0208	0.0246	0.0199	0.0247
03:00-04:00 HOUR	0.0186	0.0261	0.0194	0.0230
04:00-05:00 HOUR	0.0179	0.0258	0.0181	0.0232
05:00-06:00 HOUR	0.0173	0.0255	0.0190	0.0229
06:00-07:00 HOUR	0.0171	0.0246	0.0172	0.0242
07:00-08:00 HOUR	0.0167	0.0246	0.0171	0.0227



(MR SILA BANNONGJATURK)  
LABORATORY SUPERVISOR

JUNE 3, 2022

## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	THAI OIL PUBLIC COMPANY LIMITED		
<b>ADDRESS</b>	555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900		
<b>CONTACT INFORMATION</b>	TEL : 0 3840 8500 EXT. 10502 e-mail : kitiya@thaioilgroup.com		
<b>SAMPLING SOURCE</b>	THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKUMVIT ROAD KM.124, TUNGSAKHA, SRIRACHA, CHONBURI 20230		
<b>SAMPLE TYPE</b>	AMBIENT	<b>RECEIVED DATE</b>	MAY 23, 2022
<b>SAMPLING DATE</b>	*, **, ***	<b>ANALYTICAL DATE</b>	MAY 25-26, 2022
<b>SAMPLING TIME</b>	*, **, ***	<b>REPORT NO.</b>	2022-U037773
<b>SAMPLING BY</b>	MR. SIVANAT JONGTHONGKIEET	<b>WORK NO.</b>	2021-001222
<b>ANALYZED BY</b>	MISS SUWAN KONGTHONG	<b>ANALYSIS NO.</b>	T22A067-0029 - T22A067-0031

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		
			รายงานผล		
			* T22A067-0029	** T22A067-0030	*** T22A067-0031
HYDROGEN SULPHIDE	mg/m <sup>3</sup>	METHYLENE BLUE METHOD (APHA METHOD 701)	< 0.001	< 0.001	< 0.001
SAMPLE CONDITION			COMPLETE	COMPLETE	COMPLETE

**REMARK**

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.  
 \* : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 6, 2022.  
 \*\* : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 7, 2022.  
 \*\*\* : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 8, 2022.

*Piyapat S.*

(MRS PIYAPAT SUTYAHANUTWONG)  
LABORATORY SUPERVISOR

MAY 25, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK  
 BANGKOK 10000  
**CONTACT INFORMATION** : TEL : 0 2840 8500 EXT. 10502 e-mail : kitiya@thaoilgroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSIKHA, SRIHACHA, CHONBURI 20230  
**SAMPLE TYPE** : AMBIENT  
**SAMPLING DATE** : \* \*\* \*\* \*\* \*\*  
**SAMPLING TIME** : \* \*\* \*\* \*\* \*\*  
**SAMPLING BY** : MR. SIKKAPAT JONGPHADUNOKET  
**ANALYZED BY** : MISS SUWAN KONGTHONG

**RECEIVED DATE** : MAY 11, 2022  
**ANALYTICAL DATE** : MAY 12-20, 2022  
**REPORT NO.** : 2022-UG37775  
**WORK NO.** : 2021-000222  
**ANALYSIS NO.** : T22A067-0032 - T22A067-0135

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT			
			*****			
			* T22A067-0032	** T22A067-0032	*** T22A067-0034	**** T22A067-0035
HYDROGEN SULFIDE	mg/m <sup>3</sup>	METHYLENE BLUE METHOD (APHA METHOD 701)	< 0.001	< 0.001	= 0.001	< 0.001
SAMPLE CONDITION			COMPLETE	COMPLETE	COMPLETE	COMPLETE

**REMARK**

**RESULT** : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.  
 \* : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 9, 2022.  
 \*\* : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 10, 2022.  
 \*\*\* : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 11, 2022.  
 \*\*\*\* : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 12, 2022.



(MRS. PIYARAT SUTTHANUTWONG)  
LABORATORY SUPERVISOR

MAY 25, 2022





## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 42/1 MOO 1, SUKUMVIT ROAD KM. 124, TRUNG SUKHEA SI RACHA CHON BURI 20230  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10502 E-mail : ktiye@thoilgroup.com  
**MEASURING PLACE** : กรุงเทพมหานคร  
**MEASURING TYPE** : AMBIENT (AIR)  
**MEASURING DATE** : MAY 6-13, 2022  
**MEASURING TIME** : \*  
**MEASURING METHOD** : FLAME IONIZATION DETECTOR  
**MEASURED BY** : MR SURAT JONGPHADUNGKOT  
**RECEIVED DATE** : MAY 6-13, 2022  
**ANALYTICAL DATE** : MAY 6-13, 2022  
**REPORT NO.** : 2022-0041176  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22A067-0029 - T22A067-0035

DATE	TIME *	RESULT (ppm)
		TOTAL HYDROCARBONS
		ทั้งหมดรวม
MAY 6-7, 2022 T22A067-0029	06:00-08:00 HOUR	2.23
MAY 7-8, 2022 T22A067-0030	08:00-08:00 HOUR	2.24
MAY 8-9, 2022 T22A067-0031	08:00-08:00 HOUR	2.14
MAY 9-10, 2022 T22A067-0032	08:00-08:00 HOUR	2.32
MAY 10-11, 2022 T22A067-0033	08:00-08:00 HOUR	2.28
MAY 11-12, 2022 T22A067-0034	08:00-08:00 HOUR	2.15
MAY 12-13, 2022 T22A067-0035	08:00-08:00 HOUR	2.28

(MR SILA BANONGJADIRUK)  
LABORATORY SUPERVISOR

JUNE 3, 2022



## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	THAI OIL PUBLIC COMPANY LIMITED
<b>ADDRESS</b>	555/11 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSI ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
<b>CONTACT INFORMATION</b>	TEL : 0 3840 8500 EXT. 10500 e-mail : kbfja@thaioilgroup.com
<b>SAMPLING SOURCE</b>	THAI OIL PUBLIC COMPANY LIMITED R201 MDO 1, SUNHURVIT ROAD KM.124, TUNGSAKHA, SRIRACHA, CHONBURI 20220
<b>SAMPLE TYPE</b>	AMBIENT
<b>SAMPLING DATE</b>	•
<b>SAMPLING TIME</b>	•
<b>SAMPLING BY</b>	MR. SIRAPAT JONGPHADUNGIET
<b>ANALYZED BY</b>	MISS WORANON PADISONGCHAN
	<b>RECEIVED DATE</b> : JANUARY 7, 2022
	<b>ANALYTICAL DATE</b> : JANUARY 7-17, 2022
	<b>REPORT NO.</b> : 2022-UB04170
	<b>WORK NO.</b> : 2021-003222
	<b>ANALYSIS NO.</b> : T22AA312-0005

PARAMETER	UNIT	METHOD OF ANALYSES	RESULT
			สารประกอบอินทรีย์ T22AA312-0005
BENZENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	1.16
TOLUENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	8.12
m,p-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	< 0.25
o-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.17
SAMPLE CONDITION			COMPLETE

**REMARK**
**RESULT** : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.

• : SAMPLING FROM 09:15 HOUR ON JANUARY 6, 2022 TO 09:15 HOUR ON JANUARY 7, 2022.



(MISS BENJAWAN VIRIYUTHAI)  
LABORATORY SUPERVISOR

JANUARY 21, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED

**ADDRESS** : 55/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI KANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900

**CONTACT INFORMATION** : TEL : 0 2843 8500 EXT. 10502 e-mail : nitaya@thoelgroup.com

**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGTHONG, SONGKHA, CHONBURI 20230.

**SAMPLE TYPE** : AMBIENT

**SAMPLING DATE** : \*

**SAMPLING TIME** : \*

**SAMPLING BY** : MR. SRIAPAT JONGPHADUNGRAT

**ANALYZED BY** : MISS WIRAWON PADSONGCHAN

**RECEIVED DATE** : FEBRUARY 8, 2022

**ANALYTICAL DATE** : FEBRUARY 8-10, 2022

**REPORT NO.** : 2022-0012118

**WORK NO.** : 2021-003222

**ANALYSIS NO.** : T22AC192-0005

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			อ้างอิงมาตรฐาน T22AC192-0005
BENZENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	1.16
TOLUENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.44
m,p-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	<0.25
o-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	<0.17
SAMPLE CONDITION			COMPLETE

**REMARK**

- RESULT** : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.
- \* : SAMPLING FROM 08:15 HOUR ON FEBRUARY 7, 2022 TO 09:15 HOUR ON FEBRUARY 8, 2022.

*Pajawan V.*

(MISS BENJAWAN VIKIYOTHA)  
LABORATORY SUPERVISOR

FEBRUARY 23, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10502 e-mail : kitiya@thaioilgroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SURHEPVIET ROAD KULITH, TUNGSIKLA, SRIRACHA, CHONBURI 20230  
**SAMPLE TYPE** : AMBIENT  
**SAMPLING DATE** : \*  
**SAMPLING TIME** : \*  
**SAMPLING BY** : MR. SORAPAT JONGPHADUNGKIT  
**ANALYZED BY** : MISS WIRAKON PADSONGCHAN

**RECEIVED DATE** : MARCH 8, 2022  
**ANALYTICAL DATE** : MARCH 8-16, 2022  
**REPORT NO.** : 2022-U019546  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22AE364-0005

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			รายงานผลการตรวจ T22AE364-0005
BENZENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	1.10
TOLUENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	2.71
m-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.92
p-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.38
SAMPLE CONDITION			COMPLETE

**REMARK**  
**RESULT** : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.  
 \* : SAMPLING FROM 09:15 HOUR ON MARCH 7, 2022 TO 09:15 HOUR ON MARCH 8, 2022.

*Pajawan V.*

(MISS BENJAWAN VORAYOTHAI)  
LABORATORY SUPERVISOR

MARCH 17, 2022



## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	: THAI OIL PUBLIC COMPANY LIMITED		
<b>ADDRESS</b>	: 555/5 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSET ROAD CHUTUCHAK CHATUCHAK BANGKOK 10900		
<b>CONTACT INFORMATION</b>	: TEL : 0 2840 8500 EXT. 1552 E-mail: korya@thoilgroup.com		
<b>SAMPLING SOURCE</b>	: THAI OIL PUBLIC COMPANY LIMITED 43/5 HOO 1, SUKHUMVIT ROAD KM.124, TUNGTHUNG, SRIRACHA, CHONBURI 20220.		
<b>SAMPLE TYPE</b>	: AMBIENT	<b>RECEIVED DATE</b>	: APRIL 8, 2022
<b>SAMPLING DATE</b>	: *	<b>ANALYTICAL DATE</b>	: APRIL 11-22, 2022
<b>SAMPLING TIME</b>	: *	<b>REPORT NO.</b>	: 2022-UG29000
<b>SAMPLING BY</b>	: MR. SUDHAT JONGPHADUNGKIE	<b>WORK NO.</b>	: 3021-003222
<b>ANALYZED BY</b>	: MISS WIRAKON PADSONGCHAN	<b>ANALYSIS NO.</b>	: T22AG787-0005

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			สารประกอบอินทรีย์ T22AG787-0005
BENZENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.55
TOLUENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	1.29
m,p-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	< 0.35
o-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	< 0.17
SAMPLE CONDITION			COMPLETE

**REMARK**
**RESULT**

: REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.

: SAMPLING FROM 09:15 HOUR ON APRIL 7, 2022 TO 09:15 HOUR ON APRIL 8, 2022.



(MISS BENJAWAN VIRIYOTHA)  
LABORATORY SUPERVISOR

APRIL 27, 2022





## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10502 e-mail : kitya@thaiogroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED 43/1 MOO 1, SUKHUMVIT ROAD KM 124, TUNGTHONGLA, SRIRACHA, CHONBURI 20230  
**SAMPLE TYPE** : AMBIENT  
**SAMPLING DATE** : \*  
**SAMPLING TIME** : \*  
**SAMPLING BY** : MR SIRAPAT JONGPHADUNGSEET  
**ANALYZED BY** : MISS WORAKON PADSONGCHAN

**RECEIVED DATE** : MAY 10, 2022  
**ANALYTICAL DATE** : MAY 10-17, 2022  
**REPORT NO.** : 2022-U036090  
**WORK NO.** : 2022-005222  
**ANALYSIS NO.** : T22A2776-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			ผลการตรวจพบ T22A1776-0005
BENZENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.58
TOLUENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	12.4
m,p-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.92
o-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.38
SAMPLE CONDITION			COMPLETE

**REMARK**

**RESULT** : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.  
 \* : SAMPLING FROM 08:15 HOUR ON MAY 9, 2022 TO 09:15 HOUR ON MAY 10, 2022.

*Benjawan V.*

(MISS BENJAWAN VIRIYOTHAI)  
LABORATORY SUPERVISOR

MAY 19, 2022



## ANALYSIS REPORT

**CUSTOMER NAME:** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS:** : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION:** : TEL : 0 3840 8500 EXT. 10502 e-mail : kitiya@thaioilgroup.com  
**SAMPLING SOURCE:** : THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TURKUSUKLA, SRIRACHA, CHONBURI 20250  
**SAMPLE TYPE:** : AMBIENT  
**SAMPLING DATE:** : \*  
**SAMPLING TIME:** : \*  
**SAMPLING BY:** : MR. SAKPAT JONGPHADUNGSET  
**ANALYZED BY:** : MISS WORAKON PADSONGCHAN  
**RECEIVED DATE:** : JUNE 7, 2022  
**ANALYTICAL DATE:** : JUNE 7-14, 2022  
**REPORT NO.:** : 2022-UO45038  
**WORK NO.:** : 2021-007022  
**ANALYSIS NO.:** : T22AK858-0005

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			สารประกอบอินทรีย์ T22AK858-0005
BENZENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.71
TOLUENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	2.11
m,p-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	< 0.70
o-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	< 0.25
SAMPLE CONDITION			COMPLETE

### REMARK

**RESULT:** : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.  
 \* : SAMPLING FROM 09:15 HOUR ON JUNE 8, 2022 TO 09:15 HOUR ON JUNE 7, 2022.

*Benjawan V.*

(MISS BENJAWAN VIRIYOTHAI)  
LABORATORY SUPERVISOR

JUNE 20, 2022





## ANALYSIS REPORT

**CUSTOMER NAME:** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS:** : 350/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK  
BANGKOK 10900  
**CONTACT INFORMATION:** : TEL : 0 2840 8500 EXT. 10502 e-mail : kitiya@thoigroup.com  
**SAMPLING SOURCE:** : THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGTHUA, SRIKACHA, CHONBURI  
30130  
**SAMPLE TYPE:** : AMBIENT  
**SAMPLING DATE:** : 1, 2, 3  
**SAMPLING TIME:** : 1, 2, 3  
**SAMPLING BY:** : MR. SARAT JONGPHADUMKIJET  
**ANALYZED BY:** : MISS JETARIN TUMSA-AT  
**RECEIVED DATE:** : MAY 13, 2022  
**ANALYTICAL DATE:** : MAY 13-20, 2022  
**REPORT NO.:** : 2022-U037753  
**WORK NO.:** : 2021-003222  
**ANALYSIS NO.:** : T22A067-0001 - T22A067-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		
			ตามลำดับหมายเลข		
			1 T22A067-0001	2 T22A067-0002	3 T22A067-0003
TOTAL SUSPENDED PARTICULATE	mg/m <sup>3</sup>	GRAVIMETRIC (HIGH VOLUME METHOD)	0.98	0.98	0.97
PARTICULATE MATTER (≤ 10 µm)	mg/m <sup>3</sup>	GRAVIMETRIC (HIGH VOLUME METHOD)	0.054	0.066	0.040
SAMPLE CONDITION			COMPLETE	COMPLETE	COMPLETE

### REMARK

- TSP, PM10 : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.  
TSP : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER 1 PART 51, APPENDIX B.  
PM10 : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER 1 PART 51, APPENDIX 1.  
1 : SAMPLING FROM 10:00 HOUR ON MAY 6, 2022 TO 10:00 HOUR ON MAY 7, 2022.  
2 : SAMPLING FROM 10:00 HOUR ON MAY 7, 2022 TO 10:00 HOUR ON MAY 8, 2022.  
3 : SAMPLING FROM 10:00 HOUR ON MAY 8, 2022 TO 10:00 HOUR ON MAY 9, 2022.

*Piyapat S.*

(MRS PIYAPAT SUITAMANUTWONG)  
LABORATORY SUPERVISOR

MAY 25, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK  
 BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT : 10500 e-mail : kitya@thaiogroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED HQ3, FLOOR 1, SUKHUMVIT ROAD KM.124, TUNGSIKLA, SRIRACHA, CHONBURI 20230.  
**SAMPLE TYPE** : AMBIENT  
**SAMPLING DATE** : MAY 10, 2022  
**SAMPLING TIME** : 10:00 - 16:00  
**SAMPLING BY** : MR. SIRAPAT JONGPHADUNGKIJET  
**ANALYZED BY** : MISS JETSAKUN TUNSA-AT  
**RECEIVED DATE** : MAY 12, 2022  
**ANALYTICAL DATE** : MAY 13-20, 2022  
**REPORT NO.** : 2022-LR07767  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22AJ067-0004 - T22AJ067-0007

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT			
			รายงานผลการวิเคราะห์			
			I	II	III	IV
TOTAL SUSPENDED PARTICULATE	mg/m <sup>3</sup>	GRAVIMETRIC (HIGH VOLUME METHOD)	T22AJ067-0004	T22AJ067-0005	T22AJ067-0006	T22AJ067-0007
			0.108	0.108	0.233	0.252
PARTICULATE MATTER (≤ 10 µm)	mg/m <sup>3</sup>	GRAVIMETRIC (HIGH VOLUME METHOD)				
			0.068	0.068	0.167	0.003
SAMPLE CONDITION			COMPLETE	COMPLETE	COMPLETE	COMPLETE

### REMARK

TSP, PM10 : REFERENCE CONDITION IS 25-DEGREE CELSIUS AT 1 ATMOSPHERE.  
 TSP : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER 1 PART 50, APPENDIX B.  
 PM10 : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER 1 PART 50, APPENDIX 3.  
 I : SAMPLING FROM 10:00 HOUR ON MAY 9, 2022 TO 10:00 HOUR ON MAY 10, 2022.  
 II : SAMPLING FROM 10:00 HOUR ON MAY 10, 2022 TO 10:00 HOUR ON MAY 11, 2022.  
 III : SAMPLING FROM 10:00 HOUR ON MAY 11, 2022 TO 10:00 HOUR ON MAY 12, 2022.  
 IV : SAMPLING FROM 10:00 HOUR ON MAY 12, 2022 TO 10:00 HOUR ON MAY 13, 2022.

*Piyapat S.*

(MRS PIYAPAT SUTTAMANUTWONG)  
LABORATORY SUPERVISOR

MAY 23, 2022



## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	THAI OIL PUBLIC COMPANY LIMITED	<b>RECEIVED DATE</b>	MAY 6-13, 2022
<b>ADDRESS</b>	42/1 PLO 1, SUKHUMVIT ROAD KM. 124, THUNG SUKHA SI RACHA CHON BURI 20210	<b>ANALYTICAL DATE</b>	MAY 6-13, 2022
<b>CONTACT INFORMATION</b>	TEL : 0 3840 8500 EXT. 10602 e-mail : khiva@thoigroup.com	<b>REPORT NO.</b>	2022-U041157
<b>MEASURING PLACE</b>	โรงงานผลิตปิโตรเลียม	<b>WORK NO.</b>	2021-003222
<b>MEASURING TYPE</b>	AMBIENT (AIR)	<b>ANALYSIS NO.</b>	T22A067-0001 - T22A067-0007
<b>MEASURING DATE</b>	MAY 6-13, 2022		
<b>MEASURING TIME</b>	-		
<b>MEASURING METHOD</b>	UV FLUORESCENCE		
<b>MEASURED BY</b>	MR SURAT JONGHADUNGKET		

DAY #	RESULT (ppm)		
	SULPHUR DIOXIDE		
	โรงงานผลิตปิโตรเลียม		
	MAY 6-7, 2022 T22A067-0001	MAY 7-8, 2022 T22A067-0002	MAY 8-9, 2022 T22A067-0003
08:00-09:00 HOUR	0.0067	0.0051	0.0063
09:00-10:00 HOUR	0.0052	0.0052	0.0063
10:00-11:00 HOUR	0.0065	0.0055	0.0063
11:00-12:00 HOUR	0.0066	0.0059	0.0066
12:00-13:00 HOUR	0.0063	0.0064	0.0062
13:00-14:00 HOUR	0.0062	0.0064	0.0066
14:00-15:00 HOUR	0.0061	0.0068	0.0068
15:00-16:00 HOUR	0.0059	0.0066	0.0062
16:00-17:00 HOUR	0.0058	0.0066	0.0059
17:00-18:00 HOUR	0.0056	0.0065	0.0058
18:00-19:00 HOUR	0.0053	0.0068	0.0058
19:00-20:00 HOUR	0.0054	0.0063	0.0053
20:00-21:00 HOUR	0.0054	0.0062	0.0053
21:00-22:00 HOUR	0.0057	0.0065	0.0059
22:00-23:00 HOUR	0.0058	0.0063	0.0051
23:00-00:00 HOUR	0.0058	0.0059	0.0053
00:00-01:00 HOUR	0.0052	0.0051	0.0052
01:00-02:00 HOUR	0.0045	0.0051	0.0054
02:00-03:00 HOUR	0.0048	0.0059	0.0055
03:00-04:00 HOUR	0.0043	0.0058	0.0059
04:00-05:00 HOUR	0.0042	0.0057	0.0058
05:00-06:00 HOUR	0.0047	0.0057	0.0052
06:00-07:00 HOUR	0.0047	0.0053	0.0051
07:00-08:00 HOUR	0.0048	0.0057	0.0052
AVERAGE 24 HOUR	0.0055	0.0060	0.0058



วันที่ *	RESULT (ppm)			
	SULPHUR DIOXIDE			
	หน่วยวัดค่ามลพิษทางอากาศ			
	MAY 9-10, 2022 T22A067-0004	MAY 10-11, 2022 T22A067-0005	MAY 11-12, 2022 T22A067-0006	MAY 12-13, 2022 T22A067-0007
08:00-09:00 HOUR	0.0057	0.0063	0.0056	0.0058
09:00-10:00 HOUR	0.0063	0.0067	0.0058	0.0059
10:00-11:00 HOUR	0.0066	0.0067	0.0062	0.0063
11:00-12:00 HOUR	0.0064	0.0065	0.0067	0.0065
12:00-13:00 HOUR	0.0067	0.0064	0.0063	0.0068
13:00-14:00 HOUR	0.0066	0.0062	0.0067	0.0064
14:00-15:00 HOUR	0.0067	0.0058	0.0064	0.0068
15:00-16:00 HOUR	0.0062	0.0058	0.0063	0.0065
16:00-17:00 HOUR	0.0062	0.0056	0.0062	0.0063
17:00-18:00 HOUR	0.0067	0.0054	0.0059	0.0057
18:00-19:00 HOUR	0.0062	0.0053	0.0059	0.0058
19:00-20:00 HOUR	0.0059	0.0051	0.0058	0.0057
20:00-21:00 HOUR	0.0056	0.0047	0.0052	0.0057
21:00-22:00 HOUR	0.0058	0.0044	0.0053	0.0053
22:00-23:00 HOUR	0.0056	0.0045	0.0058	0.0052
23:00-00:00 HOUR	0.0055	0.0044	0.0055	0.0058
00:00-01:00 HOUR	0.0057	0.0046	0.0057	0.0053
01:00-02:00 HOUR	0.0056	0.0047	0.0058	0.0058
02:00-03:00 HOUR	0.0057	0.0046	0.0058	0.0062
03:00-04:00 HOUR	0.0053	0.0047	0.0058	0.0059
04:00-05:00 HOUR	0.0058	0.0049	0.0051	0.0053
05:00-06:00 HOUR	0.0061	0.0052	0.0059	0.0054
06:00-07:00 HOUR	0.0064	0.0055	0.0051	0.0057
07:00-08:00 HOUR	0.0068	0.0057	0.0054	0.0061
AVERAGE 24 HOUR	0.0061	0.0054	0.0059	0.0059

*Sila Banongjaiyuk*

(MR SILA BANONGJAIYUK)  
LABORATORY SUPERVISOR

JUNE 2, 2022



## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	: THAI OIL PUBLIC COMPANY LIMITED		
<b>ADDRESS</b>	: 42/1 MOO 1, SUKHUMVIT ROAD KM. 124, THUNG SUKHA SI RACHA CHON BURI 20230		
<b>CONTACT INFORMATION</b>	: TEL : 0 3840 8500 EXT. 10502 e-mail : kitya@thaoilgroup.com		
<b>MEASURING PLACE</b>	: สถานีบริการน้ำมัน		
<b>MEASURING TYPE</b>	: AMBIENT (AIR)	<b>RECEIVED DATE</b>	: MAY 6-13, 2022
<b>MEASURING DATE</b>	: MAY 8-13, 2022	<b>ANALYTICAL DATE</b>	: MAY 6-13, 2022
<b>MEASURING TIME</b>	: *	<b>REPORT NO.</b>	: 2022-0041133
<b>MEASURING METHOD</b>	: CHEMILUMINESCENCE	<b>WORK NO.</b>	: 2021-003222
<b>MEASURED BY</b>	: MR. SIRAT JONGPHADUNGKIT	<b>ANALYSIS NO.</b>	: T22A067-0001 - T22A067-0007

TIME *	RESULT (ppm)		
	NITROGEN DIOXIDE		
	ไนโตรเจนไดออกไซด์		
	MAY 6-7, 2022 T22A067-0001	MAY 7-8, 2022 T22A067-0002	MAY 8-9, 2022 T22A067-0003
08:00-09:00 HOUR	0.0283	0.0306	0.0299
09:00-10:00 HOUR	0.0282	0.0307	0.0295
10:00-11:00 HOUR	0.0307	0.0303	0.0294
11:00-12:00 HOUR	0.0307	0.0281	0.0294
12:00-13:00 HOUR	0.0297	0.0288	0.0289
13:00-14:00 HOUR	0.0307	0.0294	0.0279
14:00-15:00 HOUR	0.0294	0.0294	0.0289
15:00-16:00 HOUR	0.0292	0.0275	0.0287
16:00-17:00 HOUR	0.0296	0.0293	0.0294
17:00-18:00 HOUR	0.0275	0.0291	0.0292
18:00-19:00 HOUR	0.0293	0.0296	0.0290
19:00-20:00 HOUR	0.0289	0.0290	0.0275
20:00-21:00 HOUR	0.0274	0.0308	0.0258
21:00-22:00 HOUR	0.0269	0.0277	0.0236
22:00-23:00 HOUR	0.0262	0.0258	0.0213
23:00-00:00 HOUR	0.0228	0.0220	0.0246
00:00-01:00 HOUR	0.0261	0.0231	0.0257
01:00-02:00 HOUR	0.0220	0.0222	0.0238
02:00-03:00 HOUR	0.0273	0.0247	0.0269
03:00-04:00 HOUR	0.0267	0.0220	0.0255
04:00-05:00 HOUR	0.0271	0.0238	0.0252
05:00-06:00 HOUR	0.0213	0.0255	0.0263
06:00-07:00 HOUR	0.0246	0.0264	0.0269
07:00-08:00 HOUR	0.0282	0.0278	0.0298



TIME *	RESULT (ppm)			
	NITROGEN DIOXIDE			
	ปริมาณไนโตรเจนไดออกไซด์			
	MAY 9-10, 2022 T22A3067-0004	MAY 10-11, 2022 T22A3067-0005	MAY 11-12, 2022 T22A3067-0006	MAY 12-13, 2022 T22A3067-0007
08:00-09:00 HOUR	0.0281	0.0302	0.0299	0.0300
09:00-10:00 HOUR	0.0304	0.0278	0.0275	0.0295
10:00-11:00 HOUR	0.0302	0.0300	0.0308	0.0304
11:00-12:00 HOUR	0.0283	0.0281	0.0284	0.0288
12:00-13:00 HOUR	0.0282	0.0298	0.0298	0.0299
13:00-14:00 HOUR	0.0286	0.0279	0.0280	0.0304
14:00-15:00 HOUR	0.0302	0.0275	0.0288	0.0280
15:00-16:00 HOUR	0.0283	0.0282	0.0280	0.0289
16:00-17:00 HOUR	0.0276	0.0305	0.0299	0.0286
17:00-18:00 HOUR	0.0288	0.0300	0.0279	0.0283
18:00-19:00 HOUR	0.0286	0.0298	0.0284	0.0279
19:00-20:00 HOUR	0.0270	0.0282	0.0272	0.0290
20:00-21:00 HOUR	0.0281	0.0278	0.0281	0.0283
21:00-22:00 HOUR	0.0282	0.0270	0.0290	0.0235
22:00-23:00 HOUR	0.0282	0.0288	0.0226	0.0232
23:00-00:00 HOUR	0.0248	0.0246	0.0218	0.0242
00:00-01:00 HOUR	0.0281	0.0259	0.0217	0.0259
01:00-02:00 HOUR	0.0285	0.0224	0.0252	0.0230
02:00-03:00 HOUR	0.0223	0.0248	0.0221	0.0264
03:00-04:00 HOUR	0.0260	0.0248	0.0234	0.0234
04:00-05:00 HOUR	0.0239	0.0246	0.0264	0.0238
05:00-06:00 HOUR	0.0264	0.0256	0.0220	0.0266
06:00-07:00 HOUR	0.0281	0.0259	0.0262	0.0277
07:00-08:00 HOUR	0.0288	0.0292	0.0285	0.0278



(MR. SILA BANDONGMAURUK)  
LABORATORY SUPERVISOR

JUNE 3, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 55/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADE RANGSIT ROAD CHATUCHAK CHATUCHAK  
 BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 0840 8500 EXT. 10302 e-mail : kitya@thaioilgroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKUMVIT ROAD KM.12H, TUNGSIKHA, SRIRACHA, CHONBURI  
 20230  
**SAMPLE TYPE** : AQUEOUS  
**RECEIVED DATE** : MAY 13, 2022  
**SAMPLING DATE** : \*\*, \*\*\*  
**ANALYTICAL DATE** : MAY 13-20, 2022  
**SAMPLING TIME** : \*\*, \*\*\*  
**REPORT NO.** : 2022-U037755  
**SAMPLING BY** : MR. SIRAPAT JONGPHADUNGKEET  
**WORK NO.** : 2021-000222  
**ANALYZED BY** : MISS SUWAN KONGTHONG  
**ANALYSIS NO.** : T22A067-0001 - T22A067-0005

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		
			หน่วยเป็นไมโครกรัม		
			* T22A067-0001	** T22A067-0002	*** T22A067-0003
HYDROGEN SULPHIDE	mg/m <sup>3</sup>	METHYLENE BLUE METHOD (ALPHA METHOD) 70%	< 0.001	< 0.001	< 0.001
SAMPLE CONDITION			COMPLETE	COMPLETE	COMPLETE

**REMARK**

**RESULT** : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.  
 \* : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 6, 2022.  
 \*\* : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 7, 2022.  
 \*\*\* : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 8, 2022.

*Piyapat S.*

(MRS PIYAPAT SUTTAMANITWONG)  
LABORATORY SUPERVISOR

MAY 25, 2022



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 • REPORTED ANALYSIS REFERS TO SUBMITTED SAMPLE ONLY.



## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	THAI OIL PUBLIC COMPANY LIMITED		
<b>ADDRESS</b>	559/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900		
<b>CONTACT INFORMATION</b>	TEL : 0 3940 8500 EXT: 10502 e-mail : kitya@thaioilgroup.com		
<b>SAMPLING SOURCE</b>	THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SANGHUVIT ROAD 49/124, TUNGSRUKA, SRIRACHA, CHONBURI 20230.		
<b>SAMPLE TYPE</b>	AMBIENT	<b>RECEIVED DATE</b>	MAY 11, 2022
<b>SAMPLING DATE</b>	* ** *** ****	<b>ANALYTICAL DATE</b>	MAY 13-20, 2022
<b>SAMPLING TIME</b>	* ** *** ****	<b>REPORT NO.</b>	2022-1007758
<b>SAMPLING BY</b>	MR. SPRAT JONGPHADUNGRIT	<b>WORK NO.</b>	2022-003222
<b>ANALYZED BY</b>	MISS SUWAN KONGTHONG	<b>ANALYSIS NO.</b>	T22AJ067-0004 - T22AJ067-0007

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT			
			มาตรฐานวิธีปฏิบัติกรมอนามัย			
			I T22AJ067-0004	II T22AJ067-0005	III T22AJ067-0006	IV T22AJ067-0007
HYDROGEN SULPHIDE	mg/m <sup>3</sup>	METHYLENE BLUE METHOD (APHA METHOD 201)	< 0.001	< 0.001	< 0.001	< 0.001
SAMPLE CONDITION			COMPLETE	COMPLETE	COMPLETE	COMPLETE

**REMARK**
**RESULT** : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.

**I** : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 9, 2022.

**II** : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 10, 2022.

**III** : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 11, 2022.

**IV** : SAMPLING FROM 08:00 HOUR TO 10:00 HOUR ON MAY 12, 2022.

*Piyapet S.*

(MRS PIYAPAT SITTAMANUTWONG)  
LABORATORY SUPERVISOR

MAY 25, 2022



## ANALYSIS REPORT

CUSTOMER NAME : THAI OIL PUBLIC COMPANY LIMITED  
ADDRESS : 42/1 MOO 1, SUKHUMVIT ROAD KPI. 124, THUNG SUKHA SI RACHA CHON BURI 20230  
CONTACT INFORMATION : TEL : 0 3840 8500 EXT. 18562 e-mail : kitya@thoelgroup.com  
MEASURING PLACE : 1sunthawithyabon  
MEASURING TYPE : AMBIENT (AIR)  
MEASURING DATE : MAY 6-15, 2022  
MEASURING TIME : \*  
MEASURING METHOD : FLAME IONIZATION DETECTOR  
MEASURED BY : MR STRAT JONGPHADUNGKET  
RECEIVED DATE : MAY 6-13, 2022  
ANALYTICAL DATE : MAY 6-13, 2022  
REPORT NO. : 2022-0041164  
WORK NO. : 2021-003222  
ANALYSIS NO. : T22A067-0001 - T22A067-0007

DATE	TIME *	RESULT (ppm)
		TOTAL HYDROCARBONS
		รวมไฮโดรคาร์บอนทั้งหมด
MAY 6-7, 2022 T22A067-0001	08:00-08:00 HOUR	2.40
MAY 7-8, 2022 T22A067-0002	08:00-08:00 HOUR	2.38
MAY 8-9, 2022 T22A067-0003	08:00-08:00 HOUR	2.37
MAY 9-10, 2022 T22A067-0004	08:00-08:00 HOUR	2.40
MAY 10-11, 2022 T22A067-0005	08:00-08:00 HOUR	2.41
MAY 11-12, 2022 T22A067-0006	08:00-08:00 HOUR	2.36
MAY 12-13, 2022 T22A067-0007	08:00-08:00 HOUR	2.40



(MR SILA BANCHOINGRUX)  
LABORATORY SUPERVISOR

JUNE 1, 2022



## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	THAI OIL PUBLIC COMPANY LIMITED		
<b>ADDRESS</b>	42/1 MOO 1, SUKHUMVIT ROAD KM. 124, THUNG SUKHA SI RACHA CHON BURI 20230		
<b>CONTACT INFORMATION</b>	TEL : 0 2640 8500 EXT: 10502 e-mail : kitya@thoigroup.com		
<b>MEASURING PLACE</b>	สถานีวัดความเร็วลม		
<b>MEASURING TYPE</b>	AMBIENT (AIR)	<b>RECEIVED DATE</b>	MAY 6-13, 2022
<b>MEASURING DATE</b>	MAY 6-13, 2022	<b>ANALYTICAL DATE</b>	MAY 6-13, 2022
<b>MEASURING TIME</b>	*	<b>REPORT NO.</b>	2022-U041180
<b>MEASURING METHOD</b>	WIND SPEED & WIND DIRECTION EQUIPMENT	<b>WORK NO.</b>	2021-00322
<b>MEASURED BY</b>	MR. STRAHT JONGMAHABHUKIT	<b>ANALYSIS NO.</b>	T22AJ067-0001 - T22AJ067-0007

TIME *	RESULT (m/s)					
	จากสถานีวัดความเร็วลม					
	MAY 6-7, 2022 T22AJ067-0001		MAY 7-8, 2022 T22AJ067-0002		MAY 8-9, 2022 T22AJ067-0003	
	WIND SPEED	WIND DIRECTION	WIND SPEED	WIND DIRECTION	WIND SPEED	WIND DIRECTION
08:00-09:00 HOUR	1.8	SE	1.4	NE	3.4	ESE
09:00-10:00 HOUR	1.1	ESE	2.7	NNE	0.5	SSW
10:00-11:00 HOUR	3.0	SE	2.1	NNE	1.4	S
11:00-12:00 HOUR	0.4	ESE	3.4	NE	2.5	S
12:00-13:00 HOUR	1.8	SSE	2.1	N	2.9	S
13:00-14:00 HOUR	0.6	S	3.3	N	1.3	S
14:00-15:00 HOUR	1.3	E	2.9	E	2.4	ESE
15:00-16:00 HOUR	2.6	E	1.8	SE	2.2	ESE
16:00-17:00 HOUR	1.8	SE	2.8	SE	3.3	SSE
17:00-18:00 HOUR	2.4	SE	0.5	SSE	2.2	SE
18:00-19:00 HOUR	3.3	ESE	1.5	SSE	2.3	SSW
19:00-20:00 HOUR	1.4	SSE	2.3	SE	1.4	SSW
20:00-21:00 HOUR	0.7	SSW	3.4	ESE	3.4	SW
21:00-22:00 HOUR	3.1	SSE	1.5	ESE	2.1	SSW
22:00-23:00 HOUR	2.1	SSE	1.6	SSE	3.1	SW
23:00-00:00 HOUR	1.0	ESE	3.0	ESE	1.4	WSW
00:00-01:00 HOUR	3.2	SE	1.0	SSE	1.4	WSW
01:00-02:00 HOUR	1.7	SSW	2.6	SSW	0.6	WSW
02:00-03:00 HOUR	0.7	ESE	0.7	SSW	1.8	WSW
03:00-04:00 HOUR	0.7	ESE	2.7	S	1.9	WNW
04:00-05:00 HOUR	1.2	E	2.8	SSE	2.1	WSW
05:00-06:00 HOUR	1.3	ENE	2.9	SSE	0.5	WNW
06:00-07:00 HOUR	0.6	ENE	1.3	S	2.9	SSW
07:00-08:00 HOUR	3.2	ENE	2.8	ESE	2.8	WNW





TIME *	RESULT (m/s)							
	ผลการตรวจวัดความเร็วลม							
	MAY 9-10, 2022		MAY 10-11, 2022		MAY 11-12, 2022		MAY 12-13, 2022	
	T22AJ067-0004		T22AJ067-0005		T22AJ067-0006		T22AJ067-0007	
	WIND SPEED	WIND DIRECTION	WIND SPEED	WIND DIRECTION	WIND SPEED	WIND DIRECTION	WIND SPEED	WIND DIRECTION
08:00-09:00 HOUR	0.3	W	0.3	W	1.0	NNW	1.7	WNW
09:00-10:00 HOUR	2.5	WSW	2.3	WSW	0.5	N	1.6	SW
10:00-11:00 HOUR	2.9	WSW	2.8	WNW	0.3	NW	3.1	W
11:00-12:00 HOUR	2.7	WSW	2.3	W	2.0	NNW	2.5	W
12:00-13:00 HOUR	3.0	W	0.6	WSW	1.3	N	2.8	W
13:00-14:00 HOUR	1.6	SW	2.4	WSW	2.3	N	1.8	WSW
14:00-15:00 HOUR	2.8	WNW	0.8	WSW	1.5	NNW	1.7	WSW
15:00-16:00 HOUR	1.9	WNW	2.4	W	1.5	NNW	3.1	WSW
16:00-17:00 HOUR	0.8	WSW	2.8	WSW	2.1	NNW	1.5	SSW
17:00-18:00 HOUR	0.9	WSW	0.5	WNW	1.4	NW	3.1	W
18:00-19:00 HOUR	2.5	W	2.1	W	3.2	NW	2.4	WSW
19:00-20:00 HOUR	2.0	WNW	0.3	SSW	3.2	NNW	0.6	W
20:00-21:00 HOUR	2.5	SW	3.0	SW	0.7	NW	2.8	WNW
21:00-22:00 HOUR	1.9	W	3.2	SW	2.4	N	0.7	WSW
22:00-23:00 HOUR	0.4	SSW	0.6	WNW	3.2	N	1.7	W
23:00-00:00 HOUR	3.0	SW	2.5	WSW	2.5	NW	2.4	WSW
00:00-01:00 HOUR	2.8	WNW	1.1	WSW	2.9	NW	0.3	WSW
01:00-02:00 HOUR	2.1	WNW	0.7	W	1.5	NW	3.3	WSW
02:00-03:00 HOUR	2.6	WSW	2.7	WSW	2.9	NNW	1.6	W
03:00-04:00 HOUR	3.3	WSW	2.4	SW	1.1	NNW	3.2	WNW
04:00-05:00 HOUR	0.8	SSW	3.1	W	0.4	NW	1.0	WNW
05:00-06:00 HOUR	1.9	W	2.4	WNW	0.9	WNW	2.4	W
06:00-07:00 HOUR	3.1	SW	0.9	WNW	1.8	W	1.3	SW
07:00-08:00 HOUR	1.5	W	3.3	NW	2.5	WSW	2.1	SW



(MR. SILA SAMOKKAJATRUK)  
LABORATORY SUPERVISOR

JUNE 3, 2022

## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/3 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUOKHAT CHATUOKHAT BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10502 e-mail : kitya@thaioilgroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED K2/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSIKHA, SRIKACHA, CHONBURI 20230  
**SAMPLE TYPE** : AMBIENT  
**SAMPLING DATE** : \*  
**SAMPLING TIME** : \*  
**SAMPLING BY** : MR. SUPAT JONGPHADUNGSIT  
**ANALYZED BY** : MISS WIRAKON PIDSONGCHAN

**RECEIVED DATE** : JANUARY 7, 2022  
**ANALYTICAL DATE** : JANUARY 7-17, 2022  
**REPORT NO.** : 2022-0004157  
**WORK NO.** : 2021-033222  
**ANALYSIS NO.** : T22AA312-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			วิเคราะห์และแปลผล T22AA312-0001
BENZENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	1.24
TOLUENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.70
m,p-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.48
o-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.21
SAMPLE CONDITION			COMPLETE

### REMARK

**RESULT** : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.  
 \* : SAMPLING FROM 08:45 HOUR ON JANUARY 6, 2022 TO 08:45 HOUR ON JANUARY 7, 2022.

*Beyawari V.*

(MISS BEYAWAN VIRIYOTHAI)  
LABORATORY SUPERVISOR

JANUARY 21, 2022





## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 EMEK COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3940 6500 EXT. 10500 e-mail : kkiya@thaiogroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SURPHUMVIT ROAD KHL.124, TUNGSKULA, SRIRACHA, CHONBURI 20230  
**SAMPLE TYPE** : AMBIENT  
**SAMPLING DATE** : \*  
**SAMPLING TIME** : \*  
**SAMPLING BY** : MR. SURAPAT JONGPHADUNGKIE  
**ANALYZED BY** : MISS WUJAKON PADSONGCHAN

**RECEIVED DATE** : FEBRUARY 8, 2022  
**ANALYTICAL DATE** : FEBRUARY 8-10, 2022  
**REPORT NO.** : 2022-0012106  
**WORK NO.** : 2022-002222  
**ANALYSIS NO.** : T22AC192-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			วิเคราะห์ในห้องทดลอง T22AC192-0001
BENZENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	1.13
TOLUENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.92
m-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.03
p-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	< 0.17
SAMPLE CONDITION			COMPLETE

**REMARK**

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.

\* : SAMPLING FROM 08:45 HOUR ON FEBRUARY 7, 2022 TO 08:45 HOUR ON FEBRUARY 8, 2022.



(MISS BENJAWAN VIKITJOTHA)  
LABORATORY SUPERVISOR

FEBRUARY 23, 2022



## ANALYSIS REPORT

**CUSTOMER NAME:** THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS:** 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VITHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION:** TEL: 0 3840 8500 EXT. 10502 e-mail: kitya@thoilgroup.com  
**SAMPLING SOURCE:** THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSIKHA, SONGKHA, CHONBURI 20230  
**SAMPLE TYPE:** AMBIENT  
**SAMPLING DATE:** \*  
**SAMPLING TIME:** \*  
**SAMPLING BY:** MR. SIRAPAT JONGPHADUNGKIT  
**ANALYZED BY:** MISS WORAKON FIDSONGCHAN  
**RECEIVED DATE:** MARCH 8, 2022  
**ANALYTICAL DATE:** MARCH 8-16, 2022  
**REPORT NO.:** 2022-0019531  
**WORK NO.:** 2022-003222  
**ANALYSIS NO.:** T22AE364-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			หน่วยวัด: ไมโครกรัมต่อลูกบาศก์เมตร T22AE364-0001
BENZENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.66
TOLUENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	1.26
m,p-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	< 0.30
o-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	< 0.17
SAMPLE CONDITION			COMPLETE

### REMARK

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.

\* : SAMPLING FROM 08:45 HOUR ON MARCH 7, 2022 TO 08:45 HOUR ON MARCH 8, 2022.

*Benjawan V.*

(MISS BENJAWAN VITAYOTHAI)  
LABORATORY SUPERVISOR

MARCH 17, 2022



## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	THAI OIL PUBLIC COMPANY LIMITED		
<b>ADDRESS</b>	55/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900		
<b>CONTACT INFORMATION</b>	TEL : 0 3840 8500 EXT. : 10502 e-mail : mtye@thaioilgroup.com		
<b>SAMPLING SOURCE</b>	THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KM 124, TUNGSIKLA, SRIRACHA, CHONBURI 20230.		
<b>SAMPLE TYPE</b>	AMBIENT	<b>RECEIVED DATE</b>	APRIL 8, 2022
<b>SAMPLING DATE</b>	*	<b>ANALYTICAL DATE</b>	APRIL 8-22, 2022
<b>SAMPLING TIME</b>	*	<b>REPORT NO.</b>	2022-U029888
<b>SAMPLING BY</b>	MR. SUWAT KONGPHADUNGKIT	<b>WORK NO.</b>	2021-003222
<b>ANALYZED BY</b>	MISS WIRAWAN KADSONCHAN	<b>ANALYSIS NO.</b>	T22AG787-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			ไทยออยล์/ไทยออยล์ T22AG787-0001
BENZENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.57
TOLUENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	1.18
m,p-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	< 0.55
o-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	< 0.57
SAMPLE CONDITION			COMPLETE

**REMARK**
**RESULT**

\*

REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.

SAMPLING FROM 08:45 HOUR ON APRIL 7, 2022 TO 08:45 HOUR ON APRIL 8, 2022.



(MISS BENAWAN VIRIYOTHAI)  
LABORATORY SUPERVISOR

APRIL 27, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 355/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 2846 8500 EXT. 30502 e-mail : kitiya@thoilgroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 3, SUKHEPVIT ROAD KM.124, TUNGSIKLA, SRIRACHA, CHONBURI 20230  
**SAMPLE TYPE** : AMBIENT  
**SAMPLING DATE** : \*  
**SAMPLING TIME** : \*  
**SAMPLING BY** : MR. SERAPAT JONGPHADUNGSIT  
**ANALYZED BY** : MISS WIRAKON PADJONGCHAN

**RECEIVED DATE** : MAY 10, 2022  
**ANALYTICAL DATE** : MAY 10-17, 2022  
**REPORT NO.** : T22A1776-0001  
**WORK NO.** : T221-003222  
**ANALYSIS NO.** : T22A1776-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			มาตรฐานกรมโรงงานอุตสาหกรรม T22A1776-0001
BENZENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.05
TOLUENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	5.0
m,p-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	108
o-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.48
SAMPLE CONDITION			COMPLETE

### REMARK

**RESULT** : REFERENCE CONDITION 25 DEGREE CELSIUS AT 1 ATMOSPHERE AND DRY BASIS.  
 \* : SAMPLING FROM 08:45 HOUR ON MAY 9, 2022 TO 08:45 HOUR ON MAY 10, 2022.

*Benjawan V.*

(MISS BENJAWAN VIRJITTHAI)  
LABORATORY SUPERVISOR

MAY 15, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 155/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSET ROAD, CHATUCHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10502 e-mail : htye@thaiogroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED 42/1 MDG 1, SUKHUMVIT ROAD KM.124, TUNGSIKLA, SRIRACHA, CHONBURI 20230  
**SAMPLE TYPE** : AMBIENT  
**SAMPLING DATE** : \*  
**SAMPLING TIME** : \*  
**SAMPLING BY** : MR. SIRAPAT JONGPHADUNGEET  
**ANALYZED BY** : MISS WORAKON PADSONOCHAN

**RECEIVED DATE** : JUNE 7, 2022  
**ANALYTICAL DATE** : JUNE 7-14, 2022  
**REPORT NO.** : 2022-UOHS014  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22AK858-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			วิเคราะห์ในห้องปฏิบัติการ T22AK858-0001
BENZENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	0.00
TOLUENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	2.35
m,p-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	< 0.70
o-XYLENE	µg/m <sup>3</sup>	US EPA METHOD TO-15	< 0.35
SAMPLE CONDITION			COMPLETE

**REMARK**

**RESULT** : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.  
 \* : SAMPLING FROM 08:45 HOUR ON JUNE 6, 2022 TO 08:45 HOUR ON JUNE 7, 2022.

*Benjawan V.*

(MISS BENJAWAN VIRIYOTHAI)  
LABORATORY SUPERVISOR

JUNE 20, 2022





ภาคผนวก ก4

ผลการติดตามตรวจสอบคุณภาพอากาศ  
ในบรรยากาศ แบบต่อเนื่อง



ผลการติดตามตรวจสอบคุณภาพอากาศในบรรยากาศด้วยเครื่องตรวจวัดอากาศแบบเคลื่อนที่ (AQMs) ระหว่างเดือนมกราคม-มิถุนายน 2565

Y-2022	Results	Jan	Feb	Mar	Apr	May	Jun
1. Ambient Temperature, Deg C	Min. (Hourly)	22.66	23.19	24.67	19.16	15.37	24.33
	Max. (Hourly)	33.49	33.87	33.65	35.79	33.62	34.16
	Average (Hourly)	27.73	27.86	28.96	29.14	24.14	29.60
2. Wind Speed, m/s	Min. (Hourly)	0.03	0.02	0.02	0.04	0.03	0.02
	Max. (Hourly)	3.28	3.54	3.61	3.48	3.18	2.79
	Average (Hourly)	1.10	1.06	1.12	1.38	1.32	1.16
3. Rain, mm/Hr.	Min. (Hourly)	0.00	0.00	0.00	0.00	0.00	0.00
	Max. (Hourly)	6.20	21.40	40.80	6.80	30.60	23.80
	Average (Hourly)	0.01	0.12	0.13	0.02	0.13	0.09
4. PM-10, µg/m3	Min. (Hourly)	6.97	10.94	10.46	8.49	8.02	7.58
	Max. (Hourly)	236.47	191.95	248.11	299.71	121.33	96.12
	Average (Hourly)	59.25	51.56	40.74	49.81	32.04	27.89
5. SO <sub>2</sub> , ppb	Min. (Hourly)	0.00	0.00	0.09	0.00	0.00	0.01
	Max. (Hourly)	47.59	28.91	4.15	52.01	9.61	7.69
	Average (Hourly)	2.60	1.79	1.67	0.66	1.56	3.84
6. NO <sub>2</sub> , ppb	Min. (Hourly)	4.96	7.82	6.95	5.20	3.83	0.22
	Max. (Hourly)	92.89	103.60	65.28	126.19	62.63	49.83
	Average (Hourly)	16.85	23.23	20.39	26.83	16.70	15.97

**Remark:**

PM-10 standard

- 24 hour average = 120 µg/m3
- Yearly average = 50 µg/m3

SO2 standard

- Hourly average = 300 ppb
- 24 hour average = 120 ppb
- Yearly Average = 40 ppb

NO<sub>2</sub> standard

- Hourly average = 170 ppb
- Yearly average = 30 ppb

ภาคผนวก ก5

ผลการติดตามตรวจสอบคุณภาพอากาศ  
ในสถานประกอบการ

## ANALYSIS REPORT

**CUSTOMER NAME:** THAI OIL PUBLIC COMPANY LIMITED

**ADDRESS:** 5551 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIRHAJADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900

**CONTACT INFORMATION:** TEL : 0 3840 8500 EXT. 10500 e-mail : ktiye@thoailgroup.com

**SAMPLING SOURCE:** THAI OIL PUBLIC COMPANY LIMITED 43/1 MOO 1, SAKHUMVIT ROAD KM.124, TUNGSIKLA, SRIRACHA, CHONBURI 20230.

**SAMPLE TYPE:** WORKPLACE

**SAMPLING DATE:** MAY 9, 2022

**SAMPLING TIME:** 08:35-09:15 HOUR

**SAMPLING BY:** MR. PIYANAT SRIPOOROTE

**ANALYZED BY:** MISS SUWAN KONGTHONG

**RECEIVED DATE:** MAY 13, 2022

**ANALYTICAL DATE:** MAY 13-26, 2022

**REPORT NO.:** 2022-U040954

**WORK NO.:** 2021-003222

**ANALYSIS NO.:** T22A2119-0015

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			UNIT 8900 SUBSTATION 75 (H052, H053) (P-8953) T22A2119-0015
BENZENE	ppm	GAS CHROMATOGRAPHIC (FID) METHOD (NIOSH METHOD 1501)	< 0.001
HYDROGEN SULPHIDE	ppm	ION CHROMATOGRAPHIC METHOD (NIOSH METHOD 1033)	< 0.01
SAMPLE CONDITION			COMPLETE

**REMARK**

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.



(MISS BENJAWAN VIRIYOTHAJ)  
LABORATORY SUPERVISOR

JUNE 2, 2022



## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	THAI OIL PUBLIC COMPANY LIMITED		
<b>ADDRESS</b>	555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900		
<b>CONTACT INFORMATION</b>	TEL : 0-2840-8500 EXT. 10502 e-mail : ktiya@thoailgroup.com		
<b>SAMPLING SOURCE</b>	THAI OIL PUBLIC COMPANY LIMITED 42/1 PLO 1, SUKUMVIT ROAD KM.124, TUNGSIKLA, SRIRACHA, CHONBURI 20230		
<b>SAMPLE TYPE</b>	WORKPLACE	<b>RECEIVED DATE</b>	JUNE 13, 2022
<b>SAMPLING DATE</b>	JUNE 6, 2022	<b>ANALYTICAL DATE</b>	JUNE 13-20, 2022
<b>SAMPLING TIME</b>	10:58-11:08 HOUR	<b>REPORT NO.</b>	2022-06-1428
<b>SAMPLING BY</b>	MR. PORNWADON MONGKONGDOONG	<b>WORK NO.</b>	2021-003222
<b>ANALYZED BY</b>	MISS LADDAWAN PHORHAN	<b>ANALYSIS NO.</b>	T22AL361-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			UNIT 8900 SUBSTATION 79 (HDS-2, HDS-3) (P-8953) T22AL361-0002
BENZENE	ppm	GAS CHROMATOGRAPHIC (GC) METHOD (NOSH METHOD 150)	0.05
HYDROGEN SULPHIDE	ppm	ION CHROMATOGRAPHIC METHOD (NOSH METHOD 6013)	< 0.01
SAMPLE CONDITION			COMPLETE

**REMARK**
**RESULT :** REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.



(MISS BENJAWAN VIRIYOTHAJ)  
LABORATORY SUPERVISOR

JUNE 22, 2022

NO SIGNATURE  
NO SIGNATURE  
BY: BN GROUP (THAILAND) CO., LTD.

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- REPORTED ANALYSIS REFERS TO SUBMITTED SAMPLE ONLY.



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : SES1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATLICHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3845 8500 EXT. 30302 e-mail : kitya@thaoilgroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGKULUA, SRIRACHA, CHONBURI 30230  
**SAMPLE TYPE** : WORKPLACE  
**SAMPLING DATE** : MAY 11, 2022  
**SAMPLING TIME** : 08:12-08:22 HOUR  
**SAMPLING BY** : MRS PIYAPAT SUTTHANUTWONG  
**ANALYZED BY** : MISS SURAN KONGTHONG  
**RECEIVED DATE** : MAY 13, 2022  
**ANALYTICAL DATE** : MAY 13-25, 2022  
**REPORT NO.** : 2022-U040958  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22A3119-0040

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			UNIT 9670 SCOT (P-9671A) T22A3119-0040
HYDROGEN SULPHIDE	ppm	ION CHROMATOGRAPHIC METHOD (NOSH METHOD 8015)	<0.01
SAMPLE CONDITION			COMPLETE

### REMARK

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.

*Piyapat S.*

(MRS PIYAPAT SUTTHANUTWONG)  
LABORATORY SUPERVISOR

JUNE 7, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAT OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK  
 BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 2840 8500 EXT. 10502 e-mail : hillya@thaoilgroup.com  
**SAMPLING SOURCE** : THAT OIL PUBLIC COMPANY LIMITED 43/1 MOG 1, SUKHUMVIT ROAD KM.124, TUNGSIKHA, SUTACHA, CHONBURI 20230.  
**SAMPLE TYPE** : WORKPLACE  
**SAMPLING DATE** : JUNE 6, 2022  
**SAMPLING TIME** : 10:55-11:05 HOUR  
**SAMPLING BY** : MR. POONADORN MONKONGSOONG  
**ANALYZED BY** : MISS SUWAN KONGTHONG

**RECEIVED DATE** : JUNE 13, 2022  
**ANALYTICAL DATE** : JUNE 13-17, 2022  
**REPORT NO.** : 2022-UD47427  
**WORK NO.** : 2022-003222  
**ANALYSIS NO.** : T22AL361-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			UNIT 9670 SCOT (P-9671A) T22AL361-0001
HYDROGEN SULPHIDE	µmH	ION CHROMATOGRAPHIC METHOD (NOSH METHOD 8013)	< 0.01
SAMPLE CONDITION			COMPLETE

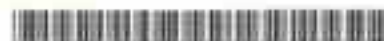
### REMARK

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.

*Piyapat S.*

(MRS PIYAPAT SUTTAMANUTWONG)  
LABORATORY SUPERVISOR

JUNE 22, 2022





## ANALYSIS REPORT

**CUSTOMER NAME:** THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS:** 55/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAWADI RANGSIT ROAD CHATUCHAK CHITUCHAK BANGKOK 10900  
**CONTACT INFORMATION:** TEL : 0 3840 8500 EXT. 10503 e-mail : ktiya@thoailgroup.com  
**SAMPLING SOURCE:** THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSIKLA, SRIRACHA, CHONBURI 20230  
**SAMPLE TYPE:** WORKPLACE  
**SAMPLING DATE:** MAY 10, 2022  
**SAMPLING TIME:** 08:42-08:52 HOUR  
**SAMPLING BY:** MR PIYANAT SRIPOOROTE  
**ANALYZED BY:** MISS SUWAN RONGTHONG

**RECEIVED DATE:** MAY 13, 2022  
**ANALYTICAL DATE:** MAY 13-26, 2022  
**REPORT NO.:** 2022-UGA0957  
**WORK NO.:** 2021-003222  
**ANALYSIS NO.:** T22A2119-0035

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			UNIT 8670 TESTU (P-86718) T22A2119-0035
HYDROGEN SULPHIDE	ppm	ION CHROMATOGRAPHIC METHOD (NIOSH METHOD 6013)	< 0.01
SAMPLE CONDITION			COMPLETE

**REMARK:**
**RESULT:** REFERENCE CONDITION IS 25 DEGREE (CELSIUS AT 1) ATMOSPHERE.



(MRS PIYANAT SUTTAMANUTWONGS)  
LABORATORY SUPERVISOR

JUNE 2, 2022



## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	THAI OIL PUBLIC COMPANY LIMITED		
<b>ADDRESS</b>	555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900		
<b>CONTACT INFORMATION</b>	TEL : 0 3840 8500 EXT. 10502 e-mail : ktiya@thaioilgroup.com		
<b>SAMPLING SOURCE</b>	THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUNVIT ROAD KM.124, TUNGSIKLA, SI RACHA, CHONBURI 20230.		
<b>SAMPLE TYPE</b>	WORKPLACE	<b>RECEIVED DATE</b>	: JUNE 13, 2022
<b>SAMPLING DATE</b>	: JUNE 5, 2022	<b>ANALYTICAL DATE</b>	: JUNE 13-17, 2022
<b>SAMPLING TIME</b>	: 11:10-11:20 HOUR	<b>REPORT NO.</b>	: T22AL361-0003
<b>SAMPLING BY</b>	MR POOWADON HONGKONGSONG	<b>WORK NO.</b>	: 2021-003222
<b>ANALYZED BY</b>	MISS SUWAN KONGTHONG	<b>ANALYSIS NO.</b>	: T22AL361-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			UNIT 8679 TGTU (P-8673A)
			<b>T22AL361-0003</b>
HYDROGEN SULPHIDE	ppm	ION CHROMATOGRAPHIC METHOD (NIOSH METHOD 6312)	< 0.01
SAMPLE CONDITION			COMPLETE

**REMARK**
**RESULT** : REFERENCE CONDITION 25 25 DEGREE CELSIUS AT 1 ATMOSPHERE.



(MRS PIYAPAT SITTAMANITWONG)  
LABORATORY SUPERVISOR

JUNE 22, 2022



## ANALYSIS REPORT

<b>CUSTOMER NAME:</b>	THAI OIL PUBLIC COMPANY LIMITED		
<b>ADDRESS:</b>	555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900		
<b>CONTACT INFORMATION:</b>	TEL : 0 2840 8500 EXT. 18502 e-mail : kitya@thoilgroup.com		
<b>SAMPLING SOURCE:</b>	THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KM. 134, TUNGSIKLA, SIEMACHA, CHONBURI 20230		
<b>SAMPLE TYPE:</b>	WORKPLACE	<b>RECEIVED DATE:</b>	MAY 13, 2022
<b>SAMPLING DATE:</b>	MAY 10, 2022	<b>ANALYTICAL DATE:</b>	MAY 13-20, 2022
<b>SAMPLING TIME:</b>	08:15-08:55 HOUR	<b>REPORT NO.:</b>	2022-0398180
<b>SAMPLING BY:</b>	MR. PIYANAT SRIPOOROTE	<b>WORK NO.:</b>	3021-00222
<b>ANALYZED BY:</b>	MISS LADDAWAN PHOPHAN	<b>ANALYSIS NO.:</b>	T22A1119-0022

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			CCR-1/UNIT 2789 (PLATFORMA 27-SC-121) T22A1119-0022
TOLUENE	ppm	GAS CHROMATOGRAPHIC (FID) METHOD (NOSH METHOD 1501)	< 0.001
XYLENE	ppm	GAS CHROMATOGRAPHIC (FID) METHOD (NOSH METHOD 1501)	< 0.001
SAMPLE CONDITION			COMPLETE

**REMARK:**
**RESULT :** REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.



(MISS BENJAWAN VIRYOTHAD)  
LABORATORY SUPERVISOR

MAY 30, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK  
 BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10502 e-mail : kitiya@thaioilgroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGKULA, SRIRACHA, CHONBURI 20230.  
**SAMPLE TYPE** : WORKPLACE  
**SAMPLING DATE** : JUNE 6, 2022  
**SAMPLING TIME** : 11:30-12:15 HOUR  
**SAMPLING BY** : MR. POOWADON MONKONGSOM  
**ANALYZED BY** : MISS LADDAKAN PHOPHAM  
**RECEIVED DATE** : JUNE 11, 2022  
**ANALYTICAL DATE** : JUNE 13-20, 2022  
**REPORT NO.** : 2022-0047434  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22AL361-0005

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			CCR-1/UNIT 2700 (PLATFORMATE 27-SC-123) T22AL361-0005
TOLUENE	ppm	GAS CHROMATOGRAPHIC (PID) METHOD (NOSH METHOD ISO1)	< 0.001
XYLENE	ppm	GAS CHROMATOGRAPHIC (PID) METHOD (NOSH METHOD ISO1)	< 0.001
SAMPLE CONDITION			COMPLETE

**REMARK**

RESULT : REFERENCE CONDITION 25-25 DEGREE CELSIUS AT 1 ATMOSPHERE.



(MISS BENJAWAN VIRIVITHAI)  
LABORATORY SUPERVISOR

JUNE 22, 2022



## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	: THAI OIL PUBLIC COMPANY LIMITED		
<b>ADDRESS</b>	: 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900		
<b>CONTACT INFORMATION</b>	: TEL : 0 3946 8500 EXT. 10512 e-mail : kitya@thaoilgroup.com		
<b>SAMPLING SOURCE</b>	: THAI OIL PUBLIC COMPANY LIMITED HQ1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSKULA, SRIRACHA, CHONBURI 20230		
<b>SAMPLE TYPE</b>	: WORKPLACE	<b>RECEIVED DATE</b>	: MAY 13, 2022
<b>SAMPLING DATE</b>	: MAY 10, 2022	<b>ANALYTICAL DATE</b>	: MAY 13-20, 2022
<b>SAMPLING TIME</b>	: 08:27-08:07 HOUR	<b>REPORT NO.</b>	: 2022-039886
<b>SAMPLING BY</b>	: MR. PIYANKI SRINODOTE	<b>WORK NO.</b>	: 2021-003222
<b>ANALYZED BY</b>	: MISS LADAWAN PHOPHAN	<b>ANALYSIS NO.</b>	: T22A7119-0028

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			CCR-3/UNIT 9700 SAMPLING POINT (PLATFORMATE XT-9C-123) T22A7119-0028
TOLUENE	ppm	(GAS CHROMATOGRAPHIC (FID) METHOD (NIOSH METHOD 1501)	< 0.001
XYLENE	ppm	(GAS CHROMATOGRAPHIC (FID) METHOD (NIOSH METHOD 1501)	< 0.001
SAMPLE CONDITION			COMPLETE

REMARK

RESULT : REFERENCE CONDITION 25-25 DEGREE CELSIUS AT 1 ATMOSPHERE.



 (MISS BENJAWAN VITAYOTHAI)  
LABORATORY SUPERVISOR

MAY 30, 2022



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## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVACE RANGSI ROAD CHATUCHAR CHATUCHAR BANGKOK 10000  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10502 e-mail : kity@thaiogroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED 42/1 MOO 1, SUKHUMVIT ROAD KM 124, TUNGKULA, SRIRACHA, CHONBURI 20230  
**SAMPLE TYPE** : WORKPLACE  
**SAMPLING DATE** : JUNE 5, 2022  
**SAMPLING TIME** : 11:44-12:34 HOUR  
**SAMPLING BY** : MR. POOWADON MONEKONSOONG  
**ANALYZED BY** : MISS LADAWAN PHOPHAN

**RECEIVED DATE** : JUNE 13, 2022  
**ANALYTICAL DATE** : JUNE 13-30, 2022  
**REPORT NO.** : 2022-1047436  
**WORK NO.** : 2022-003222  
**ANALYSIS NO.** : T22AL361-0006

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			CCR-1/UNIT 8700 (SAMPLING POINT PLATFORMATE 97-SC-121) T22AL361-0006
TOLUENE	ppm	GAS CHROMATOGRAPHIC (FID) METHOD (NIOSH METHOD 1001)	< 0.001
XYLENE	ppm	GAS CHROMATOGRAPHIC (FID) METHOD (NIOSH METHOD 1001)	< 0.001
SAMPLE CONDITION			COMPLETE

### REMARK

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.

*Benjawan V.*

(MISS BENJAWAN VERIYOTHAI)  
LABORATORY SUPERVISOR

JUNE 22, 2022





ภาคผนวก ก6

## ผลการติดตามตรวจสอบระดับเสียงโดยทั่วไป

### ANALYSIS REPORT

<b>CUSTOMER NAME</b>	: THAI OIL PUBLIC COMPANY LIMITED	<b>RECEIVED DATE</b>	: MAY 6-13, 2022
<b>ADDRESS</b>	: 42/1, MOO 1, SUKHUMVIT ROAD KM. 124, THUNG SUKHLA-SI RACHA CHON (BURI 20231)	<b>ANALYTICAL DATE</b>	: MAY 6-13, 2022
<b>CONTACT INFORMATION</b>	: TEL : 0 2840 8500 EXT. 10502 e-mail : kbiye@thaoilgroup.com	<b>REPORT NO.</b>	: 2022-0041183
<b>MEASURING SOURCE</b>	: HCU-2 AREA	<b>WORK NO.</b>	: 21021-003222
<b>MEASURING TYPE</b>	: AMBIENT (NOISE)	<b>ANALYSIS NO.</b>	: T22A068-0000 - T22A068-0014
<b>MEASURING DATE</b>	: MAY 6-13, 2022		
<b>MEASURING TIME</b>	: *		
<b>MEASURING METHOD</b>	: INTEGRATED SOUND LEVEL METER		
<b>MEASURED BY</b>	: MR SIRAPAT JONGPHADUNGSET		

TIME*	RESULT dB(A)		
	HCU-2 AREA		
	MAY 6-7, 2022		
	T22A068-0008		
	L <sub>avg</sub> 1 hour	L <sub>max</sub> 1 hour	L <sub>eq</sub> 1 hour
07:00-08:00 HOUR	61.6	70.8	57.8
08:00-09:00 HOUR	63.4	82.1	58.2
09:00-10:00 HOUR	59.3	76.4	57.1
10:00-11:00 HOUR	62.8	83.1	57.0
11:00-12:00 HOUR	59.3	75.3	56.9
12:00-13:00 HOUR	63.0	83.4	57.8
13:00-14:00 HOUR	67.1	88.0	58.2
14:00-15:00 HOUR	63.2	79.2	58.0
15:00-16:00 HOUR	62.0	81.1	56.2
16:00-17:00 HOUR	64.2	84.1	58.2
17:00-18:00 HOUR	62.0	77.0	58.4
18:00-19:00 HOUR	60.9	78.4	58.0
19:00-20:00 HOUR	58.1	73.1	58.6
20:00-21:00 HOUR	59.1	72.9	58.4
21:00-22:00 HOUR	58.0	69.1	57.1
22:00-23:00 HOUR	57.2	70.7	56.7
23:00-00:00 HOUR	58.3	64.3	57.9
00:00-01:00 HOUR	58.3	65.4	57.1
01:00-02:00 HOUR	58.1	67.2	57.3
02:00-03:00 HOUR	57.9	61.3	57.0
03:00-04:00 HOUR	57.1	62.0	56.6
04:00-05:00 HOUR	57.3	68.3	56.8
05:00-06:00 HOUR	58.4	82.6	56.9
06:00-07:00 HOUR	60.7	79.8	57.0
L <sub>avg</sub> 24 hours		61.0	
L <sub>day</sub>		65.3	



TIME*	RESULT (B)(A)		
	HCU-2 AREA		
	MAY 7-8, 2022		
	T22AX068-0009		
	Long 1 hour	Long 2 hour	Long 3 hour
07:00-08:00 HOUR	82.1	80.0	56.8
08:00-09:00 HOUR	60.3	83.8	56.8
09:00-10:00 HOUR	59.0	71.8	56.8
10:00-11:00 HOUR	61.7	83.8	57.1
11:00-12:00 HOUR	61.9	81.2	57.1
12:00-13:00 HOUR	62.4	91.4	57.3
13:00-14:00 HOUR	61.5	79.4	57.8
14:00-15:00 HOUR	60.5	78.7	57.8
15:00-16:00 HOUR	61.5	80.9	57.8
16:00-17:00 HOUR	60.7	79.5	57.4
17:00-18:00 HOUR	63.0	85.1	57.6
18:00-19:00 HOUR	59.6	78.2	56.8
19:00-20:00 HOUR	58.7	70.8	57.0
20:00-21:00 HOUR	57.4	70.3	56.9
21:00-22:00 HOUR	57.2	65.7	56.7
22:00-23:00 HOUR	57.3	61.1	56.8
23:00-00:00 HOUR	57.5	69.1	56.9
00:00-01:00 HOUR	57.5	69.0	57.0
01:00-02:00 HOUR	57.3	71.3	56.8
02:00-03:00 HOUR	57.4	65.1	56.9
03:00-04:00 HOUR	63.0	84.5	56.8
04:00-05:00 HOUR	58.8	73.8	57.2
05:00-06:00 HOUR	60.1	81.8	58.3
06:00-07:00 HOUR	59.2	73.8	58.2
Long 24 hours		80.4	
Avg		65.8	

TIME*	RESULT 08(A)		
	HCU-2 AREA		
	MAY 8-9, 2022		
	T22A068-0010		
	Long 1 hour	Lower 1 hour	Long 1 hour
07:00-08:00 HOUR	60.1	77.0	56.8
08:00-09:00 HOUR	61.3	85.3	56.7
09:00-10:00 HOUR	59.0	74.1	56.7
10:00-11:00 HOUR	60.2	83.8	56.9
11:00-12:00 HOUR	60.6	77.4	56.9
12:00-13:00 HOUR	60.6	77.4	57.8
13:00-14:00 HOUR	61.9	79.2	57.8
14:00-15:00 HOUR	58.4	75.5	56.8
15:00-16:00 HOUR	62.5	78.8	57.2
16:00-17:00 HOUR	61.1	85.3	57.3
17:00-18:00 HOUR	60.0	70.7	57.3
18:00-19:00 HOUR	61.3	83.4	57.7
19:00-20:00 HOUR	62.7	88.4	57.8
20:00-21:00 HOUR	58.8	76.8	56.5
21:00-22:00 HOUR	58.4	75.2	56.6
22:00-23:00 HOUR	60.2	84.1	56.6
23:00-00:00 HOUR	58.7	72.3	56.8
00:00-01:00 HOUR	60.2	80.1	56.3
01:00-02:00 HOUR	60.8	81.5	55.9
02:00-03:00 HOUR	56.6	68.3	55.5
03:00-04:00 HOUR	56.3	81.4	55.4
04:00-05:00 HOUR	58.8	74.1	55.9
05:00-06:00 HOUR	63.2	77.5	57.1
06:00-07:00 HOUR	62.1	80.9	56.8
Long 24 hours		60.5	
Long		66.7	

TIME*	RESULT dB(A)		
	HCU-2 AREA		
	MAY 9-10, 2022		
	T22A068-0011		
	Long 1 hour	Short 1 hour	Long 1 hour
07:00-08:00 HOUR	61.5	65.1	57.4
08:00-09:00 HOUR	60.9	79.2	57.1
09:00-10:00 HOUR	64.1	88.0	57.3
10:00-11:00 HOUR	62.6	91.8	56.7
11:00-12:00 HOUR	61.5	86.0	58.5
12:00-13:00 HOUR	59.0	88.3	56.1
13:00-14:00 HOUR	60.7	78.6	56.2
14:00-15:00 HOUR	63.0	88.3	56.8
15:00-16:00 HOUR	58.1	73.0	56.1
16:00-17:00 HOUR	56.9	66.2	56.0
17:00-18:00 HOUR	60.7	88.5	56.4
18:00-19:00 HOUR	62.6	79.9	57.6
19:00-20:00 HOUR	62.8	79.2	57.4
20:00-21:00 HOUR	61.0	74.4	57.5
21:00-22:00 HOUR	60.9	79.7	57.4
22:00-23:00 HOUR	58.3	72.6	57.4
23:00-00:00 HOUR	57.7	68.0	57.1
00:00-01:00 HOUR	57.7	88.9	57.1
01:00-02:00 HOUR	57.8	88.0	56.9
02:00-03:00 HOUR	58.2	76.8	57.0
03:00-04:00 HOUR	61.4	76.0	57.4
04:00-05:00 HOUR	58.1	72.8	57.4
05:00-06:00 HOUR	57.8	63.5	57.3
06:00-07:00 HOUR	57.8	65.4	57.3
Long 24 hours		60.5	
Total		65.4	



TIME*	RESULT dB(A)		
	HCU-2 AREA		
	MAY 10-11, 2022		
	T22A3068-0012		
	Long 1 hour	Long 1 hour	Long 1 hour
07:00-08:00 HOUR	58.2	60.0	57.5
08:00-09:00 HOUR	62.1	78.3	57.7
09:00-10:00 HOUR	58.7	72.4	57.6
10:00-11:00 HOUR	58.2	70.2	57.4
11:00-12:00 HOUR	58.3	75.1	57.2
12:00-13:00 HOUR	58.9	74.0	57.3
13:00-14:00 HOUR	62.9	79.6	57.1
14:00-15:00 HOUR	60.7	78.3	57.0
15:00-16:00 HOUR	60.8	76.7	57.0
16:00-17:00 HOUR	61.0	77.4	57.3
17:00-18:00 HOUR	61.4	82.6	57.5
18:00-19:00 HOUR	63.0	84.3	57.5
19:00-20:00 HOUR	64.1	94.0	58.0
20:00-21:00 HOUR	60.8	75.5	57.8
21:00-22:00 HOUR	58.8	69.2	58.8
22:00-23:00 HOUR	58.4	68.1	58.2
23:00-00:00 HOUR	58.1	71.2	58.1
00:00-01:00 HOUR	61.1	79.2	57.8
01:00-02:00 HOUR	58.0	71.0	57.3
02:00-03:00 HOUR	59.7	75.8	57.1
03:00-04:00 HOUR	61.9	80.4	57.1
04:00-05:00 HOUR	59.8	80.0	56.7
05:00-06:00 HOUR	61.1	78.7	56.7
06:00-07:00 HOUR	61.8	65.7	60.8
Long 24 hours		65.9	
Index		67.2	



TIME*	RESULT (dB(A))		
	HCU-2 AREA		
	MAY 11-12, 2022		
	T22AX068-0013		
	Long 1 hour	Long 1 hour	Long 1 hour
07:00-08:00 HOUR	62.3	65.6	61.0
08:00-09:00 HOUR	62.2	68.1	63.5
09:00-10:00 HOUR	61.5	70.6	69.8
10:00-11:00 HOUR	61.4	75.5	69.5
11:00-12:00 HOUR	61.1	77.0	68.4
12:00-13:00 HOUR	62.4	79.4	67.5
13:00-14:00 HOUR	58.9	78.8	67.2
14:00-15:00 HOUR	59.3	79.8	67.1
15:00-16:00 HOUR	61.3	76.4	66.8
16:00-17:00 HOUR	59.8	75.3	66.8
17:00-18:00 HOUR	61.1	68.3	66.9
18:00-19:00 HOUR	61.2	81.3	67.4
19:00-20:00 HOUR	63.1	85.5	67.4
20:00-21:00 HOUR	60.8	79.6	67.3
21:00-22:00 HOUR	63.6	96.5	67.2
22:00-23:00 HOUR	60.3	70.6	67.2
23:00-00:00 HOUR	60.2	82.8	67.0
00:00-01:00 HOUR	58.1	71.3	66.7
01:00-02:00 HOUR	58.1	72.7	67.1
02:00-03:00 HOUR	57.8	67.0	66.8
03:00-04:00 HOUR	58.0	70.7	66.8
04:00-05:00 HOUR	57.5	67.1	66.8
05:00-06:00 HOUR	58.3	64.1	67.8
06:00-07:00 HOUR	59.8	64.9	69.3
Long 24 hours		60.7	
Leq		65.7	

TIME*	RESULT (B/A)		
	HCU-2 AREA		
	MAY 12-13, 2022		
	T22A0068-0014		
	Layer 1 hour	Layer 1 hour	Layer 1 hour
07:00-08:00 HOUR	61.7	77.8	59.7
08:00-09:00 HOUR	61.8	79.7	59.6
09:00-10:00 HOUR	60.0	63.1	59.6
10:00-11:00 HOUR	59.3	65.2	59.5
11:00-12:00 HOUR	64.7	84.2	59.9
12:00-13:00 HOUR	60.7	80.3	58.5
13:00-14:00 HOUR	60.0	78.0	58.3
14:00-15:00 HOUR	62.2	84.6	58.0
15:00-16:00 HOUR	60.3	77.0	57.8
16:00-17:00 HOUR	62.2	87.2	57.6
17:00-18:00 HOUR	60.4	80.7	57.3
18:00-19:00 HOUR	62.0	83.8	57.5
19:00-20:00 HOUR	63.4	83.5	57.7
20:00-21:00 HOUR	58.7	76.2	57.4
21:00-22:00 HOUR	58.7	77.1	58.0
22:00-23:00 HOUR	58.7	65.1	58.2
23:00-00:00 HOUR	59.0	68.2	58.3
00:00-01:00 HOUR	55.2	64.1	58.7
01:00-02:00 HOUR	59.6	74.3	58.0
02:00-03:00 HOUR	59.9	66.8	59.4
03:00-04:00 HOUR	62.9	79.3	59.6
04:00-05:00 HOUR	60.3	66.4	59.8
05:00-06:00 HOUR	60.8	61.5	60.2
06:00-07:00 HOUR	61.0	65.5	60.5
Layer 24 hours		61.1	
Layer		66.9	



 (MR. SILA BANJONGJAIRUK)  
LABORATORY SUPERVISOR

JUNE 3, 2022

- DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL.
- REPORTED ANALYSIS REFERS TO SUBMITTED SAMPLE ONLY.

### ANALYSIS REPORT

<b>CUSTOMER NAME</b>	: THAI OIL PUBLIC COMPANY LIMITED		
<b>ADDRESS</b>	: 42/1 MOO 1, SUKHUMVIT ROAD KM. 124, THUNG-SUKHILA SI RACHA CHON BURI 20230		
<b>CONTACT INFORMATION</b>	: TEL : 0 3846 8500 EXT. 10502 e-mail : titya@thaiogroup.com		
<b>MEASURING SOURCE</b>	: 170104		
<b>MEASURING TYPE</b>	: AMBIENT (NOISE)	<b>RECEIVED DATE</b>	: MAY 6-13, 2022
<b>MEASURING DATE</b>	: MAY 6-13, 2022	<b>ANALYTICAL DATE</b>	: MAY 6-13, 2022
<b>MEASURING TIME</b>	: *	<b>REPORT NO.</b>	: 2022-0041182
<b>MEASURING METHOD</b>	: INTEGRATED SOUND LEVEL METER	<b>WORK NO.</b>	: 2021-003222
<b>MEASURED BY</b>	: MR STRAPAT JONGPHADJONGKIE	<b>ANALYSIS NO.</b>	: T22AJ068-0001 - T22AJ068-0007

TIME*	RESULT dB(A)		
	170104		
	MAY 6-7, 2022		
	T22AJ068-0001		
	L <sub>avg</sub> 1 hour	L <sub>max</sub> 1 hour	L <sub>eq</sub> 1 hour
07:00-08:00 HOUR	60.2	74.5	51.7
08:00-09:00 HOUR	61.1	76.4	52.2
09:00-10:00 HOUR	65.4	79.0	52.4
10:00-11:00 HOUR	53.3	70.8	51.3
11:00-12:00 HOUR	54.2	68.8	51.6
12:00-13:00 HOUR	61.6	79.7	54.4
13:00-14:00 HOUR	58.2	72.7	53.4
14:00-15:00 HOUR	57.3	70.8	53.0
15:00-16:00 HOUR	57.8	71.2	53.3
16:00-17:00 HOUR	58.0	79.6	53.6
17:00-18:00 HOUR	60.0	77.4	55.1
18:00-19:00 HOUR	55.5	69.0	53.0
19:00-20:00 HOUR	58.7	79.3	54.1
20:00-21:00 HOUR	59.1	75.3	53.7
21:00-22:00 HOUR	59.6	74.5	53.6
22:00-23:00 HOUR	58.3	70.8	52.2
23:00-00:00 HOUR	56.0	75.4	51.4
00:00-01:00 HOUR	52.0	62.5	50.6
01:00-02:00 HOUR	52.2	67.0	50.7
02:00-03:00 HOUR	51.8	71.7	50.4
03:00-04:00 HOUR	53.2	76.4	50.4
04:00-05:00 HOUR	51.9	72.0	50.7
05:00-06:00 HOUR	52.7	74.6	50.7
06:00-07:00 HOUR	51.5	66.0	50.6
L <sub>avg</sub> 24 hours		57.3	
L <sub>eq</sub>		51.4	



TIME*	RESULT dB(A)		
	STATION		
	MAY 7-8, 2022		
	T22A306B-0002		
	Leq 1 hour	Leq 1 hour	Leq 1 hour
07:00-08:00 HOUR	53.2	76.2	50.8
08:00-09:00 HOUR	52.8	78.4	52.5
09:00-10:00 HOUR	59.8	78.4	53.2
10:00-11:00 HOUR	56.2	75.5	52.8
11:00-12:00 HOUR	60.4	80.6	53.7
12:00-13:00 HOUR	58.1	75.4	52.0
13:00-14:00 HOUR	54.0	73.4	51.4
14:00-15:00 HOUR	55.4	71.8	50.9
15:00-16:00 HOUR	54.2	65.4	52.5
16:00-17:00 HOUR	60.1	77.4	54.1
17:00-18:00 HOUR	59.8	81.7	53.5
18:00-19:00 HOUR	55.8	81.7	52.4
19:00-20:00 HOUR	56.6	74.8	52.5
20:00-21:00 HOUR	52.8	67.1	51.7
21:00-22:00 HOUR	53.5	70.0	51.7
22:00-23:00 HOUR	53.2	72.4	51.9
23:00-00:00 HOUR	52.8	71.7	51.5
00:00-01:00 HOUR	52.7	75.8	51.4
01:00-02:00 HOUR	52.8	75.0	51.2
02:00-03:00 HOUR	52.3	73.2	50.8
03:00-04:00 HOUR	54.6	68.1	52.6
04:00-05:00 HOUR	57.9	75.7	52.8
05:00-06:00 HOUR	54.8	70.0	52.6
06:00-07:00 HOUR	55.2	71.0	52.1
Leq 24 hours		57.0	
Leq		51.6	

TIME*	RESULT (B/A)		
	STATION		
	MAY 8-9, 2022		
	T22AX068-0003		
	Long 1 hour	Latex 1 hour	Latex 1 hour
07:00-08:00 HOUR	80.3	80.1	53.2
08:00-09:00 HOUR	57.7	72.3	52.0
09:00-10:00 HOUR	58.4	77.4	52.1
10:00-11:00 HOUR	58.5	79.4	52.3
11:00-12:00 HOUR	55.8	67.5	51.0
12:00-13:00 HOUR	57.1	76.4	52.7
13:00-14:00 HOUR	58.1	74.4	51.0
14:00-15:00 HOUR	56.6	75.7	53.0
15:00-16:00 HOUR	56.4	73.3	52.9
16:00-17:00 HOUR	58.6	77.9	54.1
17:00-18:00 HOUR	58.7	76.7	55.3
18:00-19:00 HOUR	58.8	75.3	54.2
19:00-20:00 HOUR	62.8	79.9	54.8
20:00-21:00 HOUR	60.4	68.7	55.2
21:00-22:00 HOUR	57.6	74.5	51.3
22:00-23:00 HOUR	56.7	75.7	53.6
23:00-00:00 HOUR	58.2	73.0	51.7
00:00-01:00 HOUR	56.9	66.8	51.4
01:00-02:00 HOUR	53.9	65.7	52.5
02:00-03:00 HOUR	53.7	67.1	52.2
03:00-04:00 HOUR	52.8	62.4	51.9
04:00-05:00 HOUR	52.1	63.1	50.8
05:00-06:00 HOUR	52.4	58.9	51.4
06:00-07:00 HOUR	53.7	78.2	51.7
Long 24 hours		57.7	
Index		62.2	



TIME*	RESULT d3(A)		
	สรุปผล		
	MAY 9-10, 2022		
	T22A306B-0004		
	Long 1 hour	Long 1 hour	Long 1 hour
07:00-08:00 HOUR	52.4	60.0	51.5
08:00-09:00 HOUR	54.1	78.1	51.8
09:00-10:00 HOUR	60.1	84.3	52.2
10:00-11:00 HOUR	60.0	88.9	52.8
11:00-12:00 HOUR	56.1	60.4	53.4
12:00-13:00 HOUR	57.2	72.3	54.0
13:00-14:00 HOUR	60.9	79.0	53.7
14:00-15:00 HOUR	63.8	75.2	57.1
15:00-16:00 HOUR	54.2	77.8	57.2
16:00-17:00 HOUR	50.5	79.5	55.0
17:00-18:00 HOUR	61.4	85.9	55.6
18:00-19:00 HOUR	60.4	72.9	54.3
19:00-20:00 HOUR	59.7	75.0	54.2
20:00-21:00 HOUR	58.3	81.0	54.3
21:00-22:00 HOUR	58.7	72.7	54.6
22:00-23:00 HOUR	55.2	60.8	53.8
23:00-00:00 HOUR	55.8	65.8	54.1
00:00-01:00 HOUR	54.8	72.4	52.7
01:00-02:00 HOUR	53.0	65.2	51.7
02:00-03:00 HOUR	53.3	63.9	51.5
03:00-04:00 HOUR	52.6	64.2	51.3
04:00-05:00 HOUR	53.0	63.6	51.6
05:00-06:00 HOUR	52.8	65.9	51.7
06:00-07:00 HOUR	53.8	72.3	52.1
Long 24 hours		58.6	
Long		61.9	



TIME*	RESULT dB(A)		
	U10314		
	MAY 10-11, 2022		
	T22A06B-0005		
	L <sub>avg</sub> 1 hour	L <sub>max</sub> 1 hour	L <sub>eq</sub> 1 hour
07:00-08:00 HOUR	55.1	62.9	52.8
08:00-09:00 HOUR	56.8	71.0	53.1
09:00-10:00 HOUR	58.2	73.1	53.4
10:00-11:00 HOUR	56.0	70.7	53.3
11:00-12:00 HOUR	55.7	72.2	53.2
12:00-13:00 HOUR	60.8	65.1	53.3
13:00-14:00 HOUR	61.3	61.1	55.0
14:00-15:00 HOUR	61.8	60.0	55.8
15:00-16:00 HOUR	58.8	61.9	51.8
16:00-17:00 HOUR	60.1	78.6	54.9
17:00-18:00 HOUR	62.4	76.3	55.4
18:00-19:00 HOUR	56.1	74.2	52.6
19:00-20:00 HOUR	56.2	75.3	53.0
20:00-21:00 HOUR	55.8	74.1	53.0
21:00-22:00 HOUR	55.1	71.0	52.3
22:00-23:00 HOUR	57.1	75.2	51.2
23:00-00:00 HOUR	54.3	72.8	52.1
00:00-01:00 HOUR	53.5	68.6	51.3
01:00-02:00 HOUR	53.9	70.0	51.3
02:00-03:00 HOUR	52.9	66.1	50.7
03:00-04:00 HOUR	52.7	67.4	50.8
04:00-05:00 HOUR	52.4	66.4	50.2
05:00-06:00 HOUR	54.5	63.9	51.3
06:00-07:00 HOUR	52.1	61.0	51.3
L <sub>avg</sub> 24 hours		57.3	
L <sub>eq</sub>		61.5	

TIME*	RESULT dB(A)		
	L75dB		
	MAY 11-12, 2022		
	T22A306B-0006		
	L <sub>max</sub> 1 hour	L <sub>max</sub> 1 hour	L <sub>avg</sub> 1 hour
07:00-08:00 HOUR	53.4	74.8	52.3
08:00-09:00 HOUR	58.6	71.4	55.1
09:00-10:00 HOUR	59.1	81.3	55.4
10:00-11:00 HOUR	61.4	77.5	57.0
11:00-12:00 HOUR	61.7	75.0	57.6
12:00-13:00 HOUR	60.8	72.0	56.2
13:00-14:00 HOUR	61.2	79.5	57.5
14:00-15:00 HOUR	62.2	77.4	58.0
15:00-16:00 HOUR	61.7	75.3	55.7
16:00-17:00 HOUR	60.4	70.2	55.5
17:00-18:00 HOUR	60.0	72.7	54.8
18:00-19:00 HOUR	61.9	80.9	55.8
19:00-20:00 HOUR	55.8	73.1	52.9
20:00-21:00 HOUR	54.7	65.9	51.1
21:00-22:00 HOUR	56.1	69.3	53.8
22:00-23:00 HOUR	52.8	64.0	51.4
23:00-00:00 HOUR	52.5	62.8	51.8
00:00-01:00 HOUR	52.5	71.5	51.4
01:00-02:00 HOUR	52.2	72.3	50.7
02:00-03:00 HOUR	51.4	58.7	50.8
03:00-04:00 HOUR	51.6	60.3	51.0
04:00-05:00 HOUR	52.8	69.7	51.1
05:00-06:00 HOUR	52.0	65.6	50.9
06:00-07:00 HOUR	51.7	76.0	50.9
L <sub>avg</sub> 24 hours		58.3	
L <sub>avg</sub>		60.9	

TIME*	RESULT dB(A)		
	SPM09		
	MAY 12-13, 2022		
	T22A3068-0007		
	L <sub>avg</sub> 1 hour	L <sub>max</sub> 1 hour	L <sub>eq</sub> 1 hour
07:00-08:00 HOUR	52.1	73.0	50.8
08:00-09:00 HOUR	51.9	60.8	51.2
09:00-10:00 HOUR	58.9	72.9	53.4
10:00-11:00 HOUR	58.8	76.9	53.0
11:00-12:00 HOUR	59.8	74.5	53.0
12:00-13:00 HOUR	60.4	75.8	55.0
13:00-14:00 HOUR	60.9	72.6	54.7
14:00-15:00 HOUR	64.0	74.1	55.2
15:00-16:00 HOUR	54.7	68.7	52.4
16:00-17:00 HOUR	54.8	68.3	52.4
17:00-18:00 HOUR	55.1	70.5	52.7
18:00-19:00 HOUR	54.9	70.7	52.6
19:00-20:00 HOUR	56.6	74.4	53.7
20:00-21:00 HOUR	55.8	71.8	52.1
21:00-22:00 HOUR	52.5	73.6	51.3
22:00-23:00 HOUR	51.8	61.1	50.8
23:00-00:00 HOUR	52.0	61.2	51.0
00:00-01:00 HOUR	51.6	61.9	51.0
01:00-02:00 HOUR	51.2	58.3	50.6
02:00-03:00 HOUR	51.5	70.6	50.7
03:00-04:00 HOUR	51.6	58.1	51.1
04:00-05:00 HOUR	52.1	62.3	51.2
05:00-06:00 HOUR	51.9	59.8	51.0
06:00-07:00 HOUR	52.2	75.9	51.2
L <sub>avg</sub> 24 hours		58.7	
L <sub>eq</sub>		59.9	

*hit 78*

(MR. SULA SANUCHAJIRUK)  
LABORATORY SUPERVISOR

JUNE 3, 2022

ภาคผนวก ก7

ผลการติดตามตรวจสอบระดับเสียง  
ในสถานประกอบการ

## ANALYSIS REPORT

CUSTOMER NAME	: THAI OIL PUBLIC COMPANY LIMITED	RECEIVED DATE	: MARCH 7, 2022
ADDRESS	: 555/1 ENERGY COMPLEX BUILDING A, 11 <sup>TH</sup> FLOOR, VIBHAVADI RANGSIT ROAD, CHATUCHAK, BANGKOK 10900	ANALYTICAL DATE	: MARCH 7, 2022
CONTACT INFORMATION	: TEL : 0 2825-1555 e-mail : ktiya@thaioilgroup.com	REPORT NO.	: 2022-0021327
MEASURING PLACE	: 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSKULA, SIURACHA, CHONBURI 20230	WORK NO.	: 2021-003222
MEASURING TYPE	: WORKPLACE (NOISE)	ANALYSIS NO.	: T22AEB21-0002
MEASURING DATE	: MARCH 7, 2022		
MEASURING TIME	: 08:25-16:25 HOUR		
MEASURING EQUIPMENT	: INTEGRATED SOUND LEVEL METER		
MEASURED BY	: PRL WORAWUT JITHALKASEH		

### RESULT

ผลการตรวจวัด K-86038

T22AEB21-0002

	L <sub>max</sub> 1 hour	L <sub>max</sub>	FREQUENCY										
			16 Hz	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	16 kHz
08:25-09:25 HOUR	82.8	84.4	17.1	19.6	57.3	57.2	72.9	72.3	73.5	74.2	67.8	58.7	39.6
09:25-10:25 HOUR	81.5	84.2	16.9	19.4	57.3	57.0	72.7	72.3	72.9	73.8	67.1	58.0	39.4
10:25-11:25 HOUR	81.8	84.2	16.7	19.4	57.2	56.9	72.8	72.3	72.8	73.7	66.9	58.0	39.5
11:25-12:25 HOUR	82.4	84.1	16.8	19.3	57.2	56.9	72.7	72.2	72.7	73.0	66.8	57.9	39.5
12:25-13:25 HOUR	82.8	84.3	16.9	19.3	57.2	57.0	72.8	72.3	72.7	73.9	66.8	58.0	39.7
13:25-14:25 HOUR	82.5	84.3	16.7	19.4	56.9	56.8	72.8	72.2	73.0	73.8	66.9	58.1	40.0
14:25-15:25 HOUR	83.6	84.4	16.9	19.3	56.7	56.8	72.9	72.0	72.9	73.9	67.1	58.1	40.0
15:25-16:25 HOUR	83.6	84.3	16.8	19.5	56.9	56.8	73.0	72.1	73.1	73.8	67.0	58.1	40.1
1 Hour & 1 hour	83.5	-	16.9	19.4	57.1	56.9	72.8	72.3	73.0	73.9	67.1	58.1	39.7
MAX OF 1 hour	-	84.4	-	-	-	-	-	-	-	-	-	-	-
UNIT							dB(A)						

*Nattawat*

(MR NATTAWAT DANGSAWAT)  
LABORATORY SUPERVISOR  
MARCH 24, 2022

- DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL.
- REPORTED ANALYSIS REFERS TO SUBMITTED SAMPLE ONLY.



## ANALYSIS REPORT

CUSTOMER NAME	: THAI OIL PUBLIC COMPANY LIMITED		
ADDRESS	: 555/1 ENERGY COMPLEX BUILDING A, 11 <sup>TH</sup> FLOOR, VIBHAVADI RANGSIT ROAD, CHATUCHAK, BANGKOK 10900		
CONTACT INFORMATION	: TEL : 0 3835 1555 e-mail : kitya@thaoilgroup.com		
MEASURING PLACE	: 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSKULA, SATHACHA, CHONBURI 26230		
MEASURING TYPE	: WORKPLACE (NOISE)	RECEIVED DATE	: MAY 11, 2022
MEASURING DATE	: MAY 11, 2022	ANALYTICAL DATE	: MAY 11, 2022
MEASURING TIME	: 08:05-16:05 HOUR	REPORT NO.	: 2022-0038972
MEASURING EQUIPMENT	: INTEGRATED SOUND LEVEL METER	WORK NO.	: 2021-003222
MEASURED BY	: NOSS SUMITTRA NAMPHADIKUL	ANALYSIS NO.	: T22A1120-0002

TIME	RESULT												
	พื้นที่ตรวจวัด K-86038												
	T22A1120-0002												
	FREQUENCY												
	L <sub>eq</sub> 1 hour	L <sub>max</sub>	16 Hz	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	16 kHz
08:05-09:05 HOUR	83.8	86.0	17.5	38.7	60.5	58.7	60.3	74.8	74.2	72.8	66.2	58.3	41.8
09:05-10:05 HOUR	83.8	85.8	17.5	38.9	60.9	58.8	58.2	74.6	74.1	72.8	65.8	58.2	40.0
10:05-11:05 HOUR	83.8	86.1	17.4	38.4	61.0	58.9	60.7	74.7	74.5	72.5	65.8	58.0	38.9
11:05-12:05 HOUR	83.3	84.0	17.3	38.6	60.3	58.1	58.4	74.5	73.7	71.5	64.8	57.6	38.7
12:05-13:05 HOUR	83.2	84.0	17.3	38.5	60.3	58.0	58.3	74.5	73.4	71.5	64.8	57.5	38.8
13:05-14:05 HOUR	83.2	84.0	17.6	38.7	60.2	58.0	60.2	74.3	73.7	71.7	64.8	57.5	38.8
14:05-15:05 HOUR	83.3	84.1	17.5	38.7	60.3	58.0	58.1	74.3	73.9	71.9	64.8	57.5	38.7
15:05-16:05 HOUR	83.3	84.0	17.6	38.7	60.6	58.1	60.1	74.4	73.9	71.9	64.8	57.5	38.7
L <sub>max</sub> 8 hours	83.5	-	17.5	38.7	60.5	58.3	60.3	74.5	73.9	72.1	65.2	57.8	39.3
MAX OF L <sub>max</sub>	-	86.1	-	-	-	-	-	-	-	-	-	-	-
UNIT	dB(A)												

*Nattawat.*

(MR. NATTAWAT DANGSAWAT)  
LABORATORY SUPERVISOR  
MAY 25, 2022

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- REPORTED ANALYSIS REFERS TO SUBMITTED SAMPLE ONLY.



## ANALYSIS REPORT

CUSTOMER NAME	: THAI OIL PUBLIC COMPANY LIMITED		
ADDRESS	: 555/1 ENERGY COMPLEX BUILDING A, 11 <sup>TH</sup> FLOOR, VIBHAVADI KANISIT ROAD, CHATUCHAK, BANGKOK 10900		
CONTACT INFORMATION	: TEL : 0 3835 1555 e-mail : kttya@thaiogroup.com		
MEASURING PLACE	: 42/1 MOG 7, SUKHUMVIT ROAD KM.124, TUNGSKULA, SRIKACHA, CHONBURI 26210		
MEASURING TYPE	: WORKPLACE (NOISE)	RECEIVED DATE	: MARCH 7, 2022
MEASURING DATE	: MARCH 7, 2022	ANALYTICAL DATE	: MARCH 7, 2022
MEASURING TIME	: 08:20-18:20 HOUR	REPORT NO.	: 2022-0021326
MEASURING EQUIPMENT	: INTEGRATED SOUND LEVEL METER	WORK NO.	: 2021-003222
MEASURED BY	: MR WORAWUT JITHULASEM	ANALYSIS NO.	: T22AEB21-0001

### RESULT

ผลการตรวจวัด K-8001A

T22AEB21-0001

TIME	FREQUENCY												
	$L_{Aeq,1 hour}$	$L_{Amax}$	16 Hz	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	16 kHz
08:20-09:20 HOUR	83.4	88.3	12.4	20.3	51.3	58.9	63.4	65.0	70.8	78.0	72.1	61.3	35.9
09:20-10:20 HOUR	83.5	88.1	11.9	20.2	51.4	58.5	63.5	64.7	70.7	78.4	71.6	61.0	34.6
10:20-11:20 HOUR	83.4	88.8	11.6	20.2	51.7	58.6	63.4	64.6	70.8	78.2	71.2	60.8	34.6
11:20-12:20 HOUR	83.4	89.3	12.6	20.7	51.6	58.3	63.7	64.4	70.6	78.1	71.0	60.3	34.5
12:20-13:20 HOUR	83.3	85.1	14.9	20.7	51.4	58.3	64.0	64.2	70.4	78.0	70.8	60.3	34.8
13:20-14:20 HOUR	83.3	84.1	12.7	20.4	51.3	58.4	63.3	64.3	70.5	78.1	70.9	60.5	35.1
14:20-15:20 HOUR	83.3	84.3	13.7	20.2	51.5	58.4	63.7	64.4	70.5	78.1	71.1	60.4	35.8
15:20-16:20 HOUR	83.5	84.6	12.3	20.1	51.1	58.6	63.5	64.6	70.5	78.6	71.1	60.7	35.2
$L_{Aeq,8 hours}$	83.4	-	12.6	20.0	51.4	58.5	63.6	64.5	70.6	78.2	71.2	60.7	35.0
MAX OF $L_{Amax}$	-	88.1	-	-	-	-	-	-	-	-	-	-	-
UNIT													

(dB(A))

*Nattawat*

(MR NATTAWAT DANGSAWAT)  
LABORATORY SUPERVISOR  
MARCH 24, 2022

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## ANALYSIS REPORT

CUSTOMER NAME	THAI OIL PUBLIC COMPANY LIMITED		
ADDRESS	555/1 ENERGY COMPLEX BUILDING A, 11 <sup>TH</sup> FLOOR, VIBHAVADI RANGSIT ROAD, CHATUCHAK, BANGKOK 10900		
CONTACT INFORMATION	TEL : 0 3035 1555 e-mail : koya@thaiogroup.com		
MEASURING PLACE	42/1 MOO 3, SUKHUMVIT ROAD KM.124, TUNGSRULA, SRIRACHA, CHONBURI 20230		
MEASURING TYPE	WORKPLACE (NOISE)	RECEIVED DATE	MAY 11, 2022
MEASURING DATE	MAY 11, 2022	ANALYTICAL DATE	MAY 11, 2022
MEASURING TIME	08:00-18:00 HOUR	REPORT NO.	2022-0038971
MEASURING EQUIPMENT	INTEGRATED SOUND LEVEL METER	WORK NO.	2021-003222
MEASURED BY	MISS SUNITTTRA NAMPRADOKUL	ANALYSIS NO.	T22A3120-0001

### RESULT

เครื่องวัดความดัน K-B601A

T22A3120-0001

TIME	FREQUENCY												
	$L_{Aeq,1hr}$	$L_{Amax}$	16 Hz	31.5 Hz	63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz	16 kHz
08:00-09:00 HOUR	82.1	81.2	72.2	72.8	69.5	55.2	62.4	63.1	69.3	76.5	71.2	58.6	36.0
09:00-10:00 HOUR	82.2	85.3	71.8	72.8	69.1	55.3	62.8	63.8	69.4	76.6	71.3	58.6	36.0
10:00-11:00 HOUR	82.1	83.3	71.8	72.6	68.7	55.2	62.4	62.9	69.4	76.5	71.3	58.7	36.0
11:00-12:00 HOUR	82.0	83.3	71.8	72.4	68.8	55.0	62.1	62.2	69.2	76.5	71.2	58.7	36.0
12:00-13:00 HOUR	82.0	82.8	71.6	72.3	68.6	55.0	62.4	62.3	69.2	76.5	71.3	58.9	36.4
13:00-14:00 HOUR	82.1	82.8	71.8	72.2	68.6	55.1	62.4	62.5	69.1	76.6	71.4	58.6	36.0
14:00-15:00 HOUR	82.1	82.8	71.8	72.4	68.8	55.3	62.6	62.5	69.1	76.6	71.4	58.6	36.0
15:00-16:00 HOUR	82.1	83.7	71.5	72.8	68.9	55.4	62.6	62.6	69.2	76.7	71.0	58.6	36.1
$L_{Aeq,8hr}$	82.1	-	71.7	72.8	68.8	55.2	62.5	62.7	69.3	76.6	71.3	58.7	36.1
MAX OF $L_{Amax}$	-	85.3	-	-	-	-	-	-	-	-	-	-	-
UNIT	dB(A)												

*Nattawat*

(MR NATTAWAT DANGSAWAT)  
LABORATORY SUPERVISOR  
MAY 25, 2022

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## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, 11TH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK, CHATUCHAK (BANGKOK) 10900  
**CONTACT INFORMATION** : TEL : 0 2763 2600 EXT. 10882 e-mail : kitya@thaiogroup.com  
**MEASURING PLACE** : 42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSRINGA, SONGKHA, CHONBURI 20230  
**MEASURING TYPE** : WORKPLACE (NOISE DOSE) **RECEIVED DATE** : MARCH 7, 2022  
**MEASURING DATE** : MARCH 7, 2022 **ANALYTICAL DATE** : MARCH 7, 2022  
**MEASURING TIME** : \* **REPORT NO.** : 2022-0011375  
**MEASURING EQUIPMENT** : NOISE DOSE METER **WORK NO.** : 2021-053322  
**MEASURED BY** : MR. WIRAWUT JITMAKASEM **ANALYSIS NO.** : T22A0220-0001 - T22A0220-0002

ANALYSIS NO.	MEASURING SITE	TIME* (HOUR)	RESULT		
			TWA <sub>8 HOUR</sub> (dB(A))	L <sub>max</sub> (dB(A))	DOSE (%)
T22A0220-0001	TOC-3 (Anumanak Station)	14:00-22:00	81.5	105.0	45.2
T22A0220-0002	TOC-3 (Anumanak Station)	14:02-22:02	80.8	112.8	38.1



(MR. NATTAWAT DANGSAWAT)  
LABORATORY SUPERVISOR

MARCH 24, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 55/51 ENERGY COMPLEX BUILDING A, 11TH FLOOR VIBHAWADI RANGSIT ROAD CHATUOHAH CHATUOHAH BANGKOK 10000  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10502 e-mail : kitya@thaoilgroup.com  
**MEASURING PLACE** : 40/1 MOO 1, SUKHUMVIT ROAD KM124, TUNGSIKHA, SRIRACHA, CHONBURI 20130  
**MEASURING TYPE** : WORKPLACE (NOISE DOSE) **RECEIVED DATE** : MAY 11, 2022  
**MEASURING DATE** : MAY 11, 2022 **ANALYTICAL DATE** : MAY 11, 2022  
**MEASURING TIME** : \* **REPORT NO.** : 1022-0018973  
**MEASURING EQUIPMENT** : NOISE DOSE METER **WORK NO.** : 1021-011222  
**MEASURED BY** : MISS SUMITTRA NAMPAWONGKUL **ANALYSIS NO.** : T22A121-0001

ANALYSIS NO.	MEASURING SITE	TIME* (HOUR)	RESULT		
			TWA $L_{Aeq,8hr}$ (dB(A))	$L_{Amax}$ (dB(A))	DOSE (%)
T22A121-0001	TOC-3 (audiotape deposited)	14:00-22:00	80.7	101.2	27.4

*Nattawat*

(MR NATTAWAT DANGSAWAT)  
LABORATORY SUPERVISOR

MAY 25, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : SSET ENERGY COMPLEX BUILDING A, 11TH FLOOR VIBHAVADI RAMSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3940 8500 EXT. 10503 e-mail : kitya@thaoilgroup.com  
**MEASURING PLACE** : 40/1 MOD 1, SUKHUMVIT ROAD KM124, TUNGSRUKA, SRIRACHA, CHONBURI 20230  
**MEASURING TYPE** : WORKPLACE (NOISE DOSE) **RECEIVED DATE** : MAY 12, 2022  
**MEASURING DATE** : MAY 12, 2022 **ANALYTICAL DATE** : MAY 12, 2022  
**MEASURING TIME** : \* **REPORT NO.** : 2022-U038974  
**MEASURING EQUIPMENT** : NOISE DOSE METER **WORK NO.** : 2021-011222  
**MEASURED BY** : MISS SUMETTRA NAMPRATYOKUL **ANALYSIS NO.** : T22K1121-0002

ANALYSIS NO.	MEASURING SITE	TIME* (HOUR)	RESULT		
			TWA $L_{Aeq,T}$ (dB(A))	$L_{Amax}$ (dB(A))	DOSE (%)
T22K1121-0002	TOC-3 (อาคาร 3B 3F)	14:00-22:00	82.2	102.2	52.5

*Nattawat*

(MR NATTAWAT DANGSAWAT)  
LABORATORY SUPERVISOR

MAY 25, 2022



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ผลการติดตามตรวจสอบคุณภาพน้ำทะเล



## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	THAI OIL PUBLIC COMPANY LIMITED
<b>ADDRESS</b>	555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI-RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10950
<b>CONTACT INFORMATION</b>	TEL : 0 3840 8500 EXT. 10522 e-mail : kitiya@thaiogroup.com
<b>SAMPLING SOURCE</b>	IN FRONT OF THAI OIL PUBLIC COMPANY LIMITED (43/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSIKHA, SATHA, CHONBURI 20230)
<b>SAMPLE TYPE</b>	SEAWATER
<b>SAMPLING DATE</b>	APRIL 12, 2022
<b>SAMPLING TIME</b>	12:00 HOUR
<b>SAMPLING METHOD</b>	COMPOSITE
<b>SAMPLING BY</b>	MR. ANUSART SURYDEE
<b>ANALYZED BY</b>	MISS KANIKAR SUNLEETHA
	<b>RECEIVED DATE</b> : APRIL 12, 2022
	<b>ANALYTICAL DATE</b> : APRIL 12-27, 2022
	<b>REPORT NO.</b> : 2022-U000832
	<b>WORK NO.</b> : 2022-003222
	<b>ANALYSIS NO.</b> : T22AH003-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			CONVENTIONAL BODY HOBBING T22AH003-0002	
pH <sup>o</sup>	-	ELECTROMETRIC METHOD AT SITE (SM-4500-HC B)	8.2 (30°C)	-
TEMPERATURE <sup>o</sup>	°C	THERMOMETER AT SITE (SM-2550 B)	30	-
PHENOLS <sup>o</sup>	mg/L	DISTILLATION, 4-AMINOANTIPYRINE METHOD (SM-5530 B AND 5530 C)	0.007	0.005
DISSOLVED OXYGEN <sup>o</sup>	mg/L	MEMBRANE ELECTRODE METHOD AT SITE (SM-4500-O G)	5.2	0.5
BIOCHEMICAL OXYGEN DEMAND <sup>o</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM-4500-O G AND 5210 B)	14	0.5
CHEMICAL OXYGEN DEMAND <sup>o</sup>	mg/L	CLOSED REFLUX, TITRIMETRIC METHOD (SM-5220 C)	62.8	25.0
TOTAL AMMONIA <sup>o</sup>	µg/L N	IN-HOUSE METHOD: UAE TP WAT-001 BASED ON STANDARD METHODS FOR THE DETERMINATION OF WATER AND WASTEWATER, APHA, AWWA&WEF, 23rd ED. 2017, PART 4500-NH <sub>4</sub> H	154	50.0
AMMONIA NITROGEN (UNIONIZED) <sup>o</sup>	µg/L N	IN-HOUSE METHOD: UAE TP WAT-001 BASED ON STANDARD METHODS FOR THE DETERMINATION OF WATER AND WASTEWATER, APHA, AWWA&WEF, 23rd ED. 2017, PART 4500-NH <sub>4</sub> H AND CALCULATION	15.2	0.30
SULPHIDE <sup>o</sup>	µg/L	METHYLENE BLUE COLOURIMETRIC METHOD (METHOD OF SEAWATER ANALYSIS, GRASSHOFF, 1996, CHAPTER 5)	ND	10



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			CONVENTIONAL BUOY MOORING T224H293-0002	
FAT, OIL AND GREASE <sup>a</sup>	mg/L	SONDLET EXTRACTION METHOD (SAS 5821.0)	ND	3
<b>SAMPLE CONDITION</b>				
WATER'S COLOUR/TURBID			COLOURLESS/CLEAR	
SEDIMENT			YELLOW	

<sup>a</sup> : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

<sup>b</sup> : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

<sup>c</sup> : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>rd</sup> EDITION, 2017.

ND : NON-DETECTABLE



(PVEE PAVEENA CHARASCHOTEPINT)  
LABORATORY SUPERVISOR

APRIL 29, 2022

## ANALYSIS REPORT

**CUSTOMER NAME:** THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS:** 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI BANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION:** TEL : 0 2640 8500 EXT. 10502 e-mail : ktiye@thaioilgroup.com  
**SAMPLING SOURCE:** IN FRONT OF THAI OIL PUBLIC COMPANY LIMITED (4371 MOG 1, SUKHUMVIT ROAD KM.124, TUNGSIKLA, SRIRACHA, CHONBURI 20230)  
**SAMPLE TYPE:** SEAWATER  
**SAMPLING DATE:** APRIL 12, 2022  
**SAMPLING TIME:** 12.00 HOUR  
**SAMPLING METHOD:** COMPOSITE  
**SAMPLING BY:** MR. ANUSART SURYDEE  
**ANALYZED BY:** MISS THANEETHORN KUNANUPHANOAI  
**RECEIVED DATE:** APRIL 12, 2022  
**ANALYTICAL DATE:** APRIL 12-22, 2022  
**REPORT NO.:** 2022-0030813  
**WORK NO.:** 2021-003222  
**ANALYSIS NO.:** T22AH093-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			CONVENTIONAL RISKY MONITORING T22AH093-0002	
CYANIDE	µg/L CN	DISTILLATION, PYRIDINE-BARBITURIC ACID METHOD (SMP 4500-CN C AND 4500-CN E)	ND	5
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS, CLEAR YELLOW	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>RD</sup> EDITION, 2017.

ND : NON-DETECTABLE

*Paweena Ch.*

(MISS PAWEENA CHARASCHOTEPINT)  
LABORATORY SUPERVISOR

APRIL 26, 2022



## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	THAI OIL PUBLIC COMPANY LIMITED
<b>ADDRESS</b>	355/1 ENERGY COMPLEX BUILDING 4, ELEVENTH FLOOR VIBHAVADI KANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
<b>CONTACT INFORMATION</b>	TEL : 0 3840 8500 EXT. 10502 e-mail : kitya@thaoilgroup.com
<b>SAMPLING SOURCE</b>	IN FRONT OF THAI OIL PUBLIC COMPANY LIMITED (42/1 HOO 1, SUKHUMVIT ROAD KM.124, TUNGSKULA, SRIRACHA, CHONBURI 20230.)
<b>SAMPLE TYPE</b>	SEAWATER
<b>SAMPLING DATE</b>	APRIL 12, 2022
<b>SAMPLING TIME</b>	12-45 HOUR
<b>SAMPLING METHOD</b>	COMPOSITE
<b>SAMPLING BY</b>	MS ANUSART SUAYDEE
<b>ANALYZED BY</b>	MISS KANNIKAR SUMLEETHA
<b>RECEIVED DATE</b>	APRIL 12, 2022
<b>ANALYTICAL DATE</b>	APRIL 12-22, 2022
<b>REPORT NO.</b>	2022-0030830
<b>WORK NO.</b>	2021-003222
<b>ANALYSIS NO.</b>	T22AH093-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			JETTY # 3 T22AH093-0001	
pH <sup>a</sup>	-	ELECTROMETRIC METHOD AT SITE (SM 4500 H <sup>+</sup> B)	6.2 (30%)	-
TEMPERATURE <sup>a</sup>	°C	THERMOMETER AT SITE (SM 2550 B)	30	-
PHENOLS <sup>a</sup>	mg/L	DISTILLATION-4-AMINOCANTHRACENE METHOD (SM 5530 B AND 5530 C)	0.008	0.005
DISSOLVED OXYGEN <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD AT SITE (SM 4500 O <sub>2</sub> G)	5.2	0.0
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM 4500 O <sub>2</sub> G AND 5210 B)	18	0.5
CHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	CLOSED REFLUX, TITRIMETRIC METHOD (SM 5220 C)	912	25.0
TOTAL AMMONIA <sup>b</sup>	µg/L N	IN-HOUSE METHOD: DIETP-WAT.001 BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA&WEF, 23rd ED., 2017, PART 4500-NH <sub>3</sub> H	162	10.0
AMMONIA NITROGEN (UNIONIZED) <sup>c</sup>	µg/L N	IN-HOUSE METHOD: DIETP-WAT.001 BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA&WEF, 23rd ED., 2017, PART 4500-NH <sub>3</sub> H AND CALCULATION	10.8	0.30
SULPHIDE <sup>d</sup>	µg/L	METHYLENE BLUE COLOURIMETRIC METHOD (METHOD OF SEAWATER ANALYSIS, GRASSHOFF, 1998 CHAPTER 5)	ND	10



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			JETTY # 3 T23AH093-0001	
FAT, OIL AND GREASE <sup>a</sup>	mg/L	SCHMIDT EXTRACTION METHOD (SM 5520 D)	ND	2
<b>SAMPLE CONDITION</b>				
WATER'S COLOUR/TURBID			COLOURLESS/CLEAR	
SEDIMENT			YELLOW	

<sup>a</sup> : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

<sup>b</sup> : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

<sup>c</sup> : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

 SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>RD</sup> EDITIONAL, 2017.

ND : NON-DETECTABLE



 (MISS PAWEENA CHAIASCHITEFINT)  
LABORATORY SUPERVISOR

APRIL 28, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK  
 BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10502 e-mail : kitya@thoilgroup.com  
**SAMPLING SOURCE** : IN FRONT OF THAI OIL PUBLIC COMPANY LIMITED  
 (42/1 MDO 1, SUKHUMVIT ROAD KM.124, TUNGKULA, SRIRACHA, CHONBURI 20230)  
**SAMPLE TYPE** : SEAWATER  
**SAMPLING DATE** : APRIL 12, 2022  
**SAMPLING TIME** : 12:45 HOUR  
**SAMPLING METHOD** : COMPOSITE  
**SAMPLING BY** : MR ANUSART SUAYORE  
**ANALYZED BY** : MISS THANATHORN KUNRUPHANOMAI  
**RECEIVED DATE** : APRIL 12, 2022  
**ANALYTICAL DATE** : APRIL 12-22, 2022  
**REPORT NO.** : 2022-U030801  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22AH093-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			JETTY # 3 T22AH093-0001	
CYANIDE	µg/L CN	DISTILLATION, PYRIDINE-BARBITURIC ACID METHOD (SM 4500-CN C AND 4500-CN E)	ND	5
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR YELLOW	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>RD</sup> EDITION, 2017.

ND : NON-DETECTABLE



(MISS PAWEENA CHIRASCHOTEPUNT)  
LABORATORY SUPERVISOR

APRIL 29, 2022





## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	: THAI OIL PUBLIC COMPANY LIMITED	<b>RECEIVED DATE</b>	: APRIL 12, 2022
<b>ADDRESS</b>	: 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATLICHAK CHATLICHAK BANGKOK 10900	<b>ANALYTICAL DATE</b>	: APRIL 12-27, 2022
<b>CONTACT INFORMATION</b>	: TEL : 0 3840 8500 EXT. 10502 e-mail : kitya@thaioilgroup.com	<b>REPORT NO.</b>	: 2022-U030838
<b>SAMPLING SOURCE</b>	: IN FRONT OF THAI OIL PUBLIC COMPANY LIMITED (42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGKUL, SRIRACHA, CHONBURI 20210.)	<b>WORK NO.</b>	: 2021-003222
<b>SAMPLE TYPE</b>	: SEAWATER	<b>ANALYSIS NO.</b>	: T22AH093-0004
<b>SAMPLING DATE</b>	: APRIL 12, 2022		
<b>SAMPLING TIME</b>	: 12:20 HOUR		
<b>SAMPLING METHOD</b>	: COMPOSITE		
<b>SAMPLING BY</b>	: MR. ANUSART SURYEE		
<b>ANALYZED BY</b>	: MISS KANNIKAR SUKLEETHA		

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			REFINERY OUTFALL T22AH093-0004	
pH <sup>a</sup>	-	ELECTROMETRIC METHOD AT SITE (SM 4500-H <sup>+</sup> B)	8.1 (32°C)	-
TEMPERATURE <sup>b</sup>	°C	THERMOMETER AT SITE (SM 2550 K)	32	-
DISSOLVED OXYGEN <sup>c</sup>	mg/L	MEMBRANE ELECTRODE METHOD AT SITE (SM 4500-O <sub>2</sub> I)	5.5	0.5
BIOCHEMICAL OXYGEN DEMAND <sup>d</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM 4500-O <sub>2</sub> I AND 5210 B)	11	0.5
CHEMICAL OXYGEN DEMAND <sup>e</sup>	mg/L	CLOSED REFLUX, TITRIMETRIC METHOD (SM 5220 C)	75.2	25.0
TOTAL AMMONIA <sup>f</sup>	µg/L N	IN-HOUSE METHOD: UAETP-WAT.001 BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA&WEF, 23rd ED., 2017, PART 4500-NH <sub>3</sub> H	25	10.0
AMMONIA NITROGEN (UNIONIZED) <sup>g</sup>	µg/L N	IN-HOUSE METHOD: UAETP-WAT.001 BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA&WEF, 23rd ED., 2017, PART 4500-NH <sub>3</sub> H AND CALCULATION	0.8	0.30
PHENOLS <sup>h</sup>	mg/L	DISTILLATION, 4-AMINOANTIPYRINE METHOD (SM 5530 B AND 5530 C)	0.007	0.005
SULPHIDE <sup>i</sup>	µg/L	METHYLENE BLUE COLOURIMETRIC METHOD (METHOD OF SEAWATER ANALYSIS, GRASSHOFF, 1999, CHAPTER 5)	ND	50



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			REFINERY OUTFALL T22AH093-0004	
FAT, OIL AND GREASE*	mg/L	SOXHLET EXTRACTION METHOD (SM 5520 D)	ND	3
<b>SAMPLE CONDITION</b>				
WATER'S COLOUR/TURBID			COLORLESS/CLEAR	
SEDIMENT			YELLOW	

\* : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

\* : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

\* : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

 SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>RD</sup> EDITION, 2017.

ND : NON-DETECTABLE



 (MISS PAVEENA CHAIASCHOTEPINET)  
LABORATORY SUPERVISOR

APRIL 26, 2022

## ANALYSIS REPORT

**CUSTOMER NAME:** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS:** : 55/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR, VIBHAVAD RANGSIT ROAD CHATUCHAK CHATUCHAK  
 BANGKOK 10900  
**CONTACT INFORMATION:** : TEL : 0 3840 8500 EXT. 10502 e-mail : kitya@thaoilgroup.com  
**SAMPLING SOURCE:** : IN FRONT OF THAI OIL PUBLIC COMPANY LIMITED  
 (421 MOO 3, SUKHUMVIT ROAD KM.124, TUESUNLA, SRIRACHA, CHONBURI 20230)  
**SAMPLE TYPE:** : SEAWATER  
**SAMPLING DATE:** : APRIL 12, 2022  
**SAMPLING TIME:** : 13:20 HOUR  
**SAMPLING METHOD:** : COMPOSITE  
**SAMPLING BY:** : MR. ANUSART SUJAYDIE  
**ANALYZED BY:** : MISS THAKETHORN KUNANUPHANCHAI

**RECEIVED DATE:** : APRIL 12, 2022  
**ANALYTICAL DATE:** : APRIL 12-22, 2022  
**REPORT NO.:** : 2022-0030817  
**WORK NO.:** : 2021-003222  
**ANALYSIS NO.:** : T22AH053-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			REFINERY OUTFALL T22AH053-0004	
CYANIDE	µg/L CN	DISTILLATION, PYRIDINE BARBITURIC ACID METHOD (SM 4500-CN C AND 4500-CN E)	ND	5
<b>SAMPLE CONDITION</b>				
WATER'S COLOUR/TURBID			COLORLESS/CLEAR	
SEDIMENT			YELLOW	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>RD</sup> EDITION, 2017.

ND : NON-DETECTABLE

*Paweena Ch.*

(MISS) PAWEENA CHANASCHOTEPUNT  
 LABORATORY SUPERVISOR

APRIL 29, 2022



## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	THAI OIL PUBLIC COMPANY LIMITED
<b>ADDRESS</b>	555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
<b>CONTACT INFORMATION</b>	TEL : 0 3840 8500 EXT. 10502 e-mail : kitya@thaioilgroup.com
<b>SAMPLING SOURCE</b>	ON FRONT OF THAI OIL PUBLIC COMPANY LIMITED (42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGGRUEA, SATHA, CHONBURI 20230.)
<b>SAMPLE TYPE</b>	SEAWATER
<b>SAMPLING DATE</b>	APRIL 12, 2022
<b>SAMPLING TIME</b>	11:30 HOUR
<b>SAMPLING METHOD</b>	COMPOSITE
<b>SAMPLING BY</b>	MR. ANUSART SUJADEE
<b>ANALYZED BY</b>	MISS KANWRAR SUMLEETHA
<b>RECEIVED DATE</b>	APRIL 12, 2022
<b>ANALYTICAL DATE</b>	APRIL 12-27, 2022
<b>REPORT NO.</b>	2022-U030834
<b>WORK NO.</b>	2021-003322
<b>ANALYSIS NO.</b>	T22AH093-0063

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			SINGLE BUOY MOORING 1 T22AH093-0063	
pH *	-	ELECTROMETRIC METHOD AT SITE (SM 4500-11 B)	8.1 (20°C)	-
TEMPERATURE *	°C	THERMOMETER AT SITE (SM 2500 B)	30	-
DISSOLVED OXYGEN *	mg/L	MEMBRANE ELECTRODE METHOD AT SITE (SM 4500-O D)	4.5	0.5
BIO-CHEMICAL OXYGEN DEMAND *	mg/L	MEMBRANE ELECTRODE METHOD (SM 4500-O D AND 5210 B)	0.6	0.5
CHEMICAL OXYGEN DEMAND *	mg/L	CLOSED REFLUX, TITRIMETRIC METHOD (SM 5200 C)	85.8	25.0
TOTAL AMMONIA *	µg/L N	IN-HOUSE METHOD: UAE TP WAT.001 BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA&WEF, 23rd ED., 2017, PART 4500-NH <sub>4</sub> -H	108	100
AMMONIA NITROGEN (UNIONIZED) *	µg/L N	IN-HOUSE METHOD: UAE TP WAT.001 BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA&WEF, 23rd ED., 2017, PART 4500-NH <sub>4</sub> -H AND CALCULATION	9.67	0.30
PHENOLS *	mg/L	DISTILLATION, 4-AMINOCANTHOPYRINE METHOD (SM 5530 B AND 5530 C)	0.005	0.005
SULPHIDE *	µg/L	METHYLENE BLUE COLOURIMETRIC METHOD (METHOD OF SEAWATER ANALYSIS, GRASSHOFF, 1998, CHAPTER 5)	ND	ND



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			SINGLE BUDY MOORING 2 T22AH015-0003	
FAT, OIL AND GREASE <sup>a</sup>	mg/L	SORHLET EXTRACTION METHOD (SM 5520 (c))	ND	3
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR YELLOW	

<sup>a</sup> : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

<sup>b</sup> : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

<sup>c</sup> : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>RD</sup> EDITION, 2012

ND : NON-DETECTABLE



(MISS PAWEENA CHAKACHOTE)
  
LABORATORY SUPERVISOR

APRIL 28, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VITHAWAT RANGSIT ROAD CHITUAH CHATUAH BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 2840 8500 EXT. 10502 e-mail : kbya@thaioilgroup.com  
**SAMPLING SOURCE** : IN FRONT OF THAI OIL PUBLIC COMPANY LIMITED (42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSKULA, SRIRACHA, CHONBURI 20030.)  
**SAMPLE TYPE** : SEAWATER  
**SAMPLING DATE** : APRIL 12, 2022  
**SAMPLING TIME** : 11:30 HOUR  
**SAMPLING METHOD** : COMPOSITE  
**SAMPLING BY** : MR ANUSANT SUAYDEE  
**ANALYZED BY** : MISS THANATHORN KUNANUPHANCHAI  
**RECEIVED DATE** : APRIL 12, 2022  
**ANALYTICAL DATE** : APRIL 12-22, 2022  
**REPORT NO.** : 2022-UD00815  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22AH093-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			SINGLE BODY HOORING 1. T22AH093-0003	
CYANIDE	µg/L CN	DISTILLATION, PYRIDINE-BARBITURIC ACID METHOD (SM 4500-CN C AND 4500-CN E)	ND	5
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR YELLOW	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>RD</sup> EDITION, 2017.

ND : NON-DETECTABLE

  
 (MISS PAWEENA CHAMASOCHOTEPINT)  
 LABORATORY SUPERVISOR

APRIL 29, 2022





## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	: THAI OIL PUBLIC COMPANY LIMITED
<b>ADDRESS</b>	: 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD, CHATUCHAK CHATUCHAK BANGKOK 10900
<b>CONTACT INFORMATION</b>	: TEL : 0 2840 8500 EXT. 10502 e-mail : kitya@thaioilgroup.com
<b>SAMPLING SOURCE</b>	: IN FRONT OF THAI OIL PUBLIC COMPANY LIMITED (42/1 MOO 1, SUKHUMVIT ROAD, KM.124, TUNGSKULA, SRIRACHA, CHONBURI 20230.)
<b>SAMPLE TYPE</b>	: SEAWATER
<b>SAMPLING DATE</b>	: APRIL 12, 2022
<b>SAMPLING TIME</b>	: 13:00 HOUR
<b>SAMPLING METHOD</b>	: COMPOSITE
<b>SAMPLING BY</b>	: MR. ANUSART SUAYDEE
<b>ANALYZED BY</b>	: MISS KANWIRAK SUMLEETHA
	<b>RECEIVED DATE</b> : APRIL 12, 2022
	<b>ANALYTICAL DATE</b> : APRIL 12-27, 2022
	<b>REPORT NO.</b> : 2022-0030818
	<b>WORK NO.</b> : 2021-003222
	<b>ANALYSIS NO.</b> : T22AH083-0005

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			JETTY 1/2 NORTH 100 m T22AH083-0005	
pH <sup>a</sup>	-	ELECTROMETRIC METHOD AT SITE (SM-4500-F1 B)	8.2 (25°C)	-
TEMPERATURE <sup>c</sup>	°C	THERMOMETER AT SITE (SM-2500 B)	21	-
DISSOLVED OXYGEN <sup>b</sup>	mg/L	MEMBRANE ELECTRODE METHOD AT SITE (SM-4500-O G)	8.0	0.5
BIO-CHEMICAL OXYGEN DEMAND <sup>d</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM-4500-O G AND 5210 B)	1.7	0.5
CHEMICAL OXYGEN DEMAND <sup>e</sup>	mg/L	CLOSED REFLUX, TITRIMETRIC METHOD (SM-5200 C)	80.0	25.0
TOTAL AMMONIA <sup>g</sup>	µg/L N	IN-HOUSE METHOD: UAE/TP-WAT-001 BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA&WEF, 23rd ED., 2017, PART 4505-NAL, H	56	10.0
AMMONIA NITROGEN (UNIONIZED) <sup>h</sup>	µg/L N	IN-HOUSE METHOD: UAE/TP-WAT-001 BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA&WEF, 23rd ED., 2017, PART 4505-NAL, H AND CALCULATION	81.8	0.30
PHENOLS <sup>f</sup>	mg/L	DISTILLATION, 4-AMINOCANTHRAPYRINE METHOD (SM-5530 B AND 5530 C)	2.008	0.005
SULPHIDE <sup>i</sup>	µg/L	METHYLENE BLUE COLOURIMETRIC METHOD (METHOD OF SEAWATER ANALYSIS, GRASSHOFF, 1998, CHAPTER 5)	ND	10



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			JETTY 1/2 NORTH 300 m T23AH083-0005	
FAT, OIL AND GREASE <sup>a</sup>	mg/L	SOXHLET EXTRACTION METHOD (SM-5620 G)	ND	3
<b>SAMPLE CONDITION</b>				
WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR YELLOW	

<sup>a</sup> : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

<sup>b</sup> : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

<sup>c</sup> : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

 SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>rd</sup> EDITION, 2017.

ND : NON-DETECTABLE



 (MISS PAVEENA CHANASCHOTEPINET)  
LABORATORY SUPERVISOR

APRIL 29, 2022

## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI (ANGSIT) ROAD CHATUOHK CHATUOHK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 2840 8500 EXT. 10502 e-mail : kbya@thaioilgroup.com  
**SAMPLING SOURCE** : IN FRONT OF THAI OIL PUBLIC COMPANY LIMITED (KQ1) MOO 1, SUKHUMVIT ROAD KM.124, TUNGSKULA, SATHACHA, CHONBURI 20230 )  
**SAMPLE TYPE** : SEAWATER  
**SAMPLING DATE** : APRIL 12, 2022  
**SAMPLING TIME** : 13:00 HOUR  
**SAMPLING METHOD** : COMPOSITE  
**SAMPLING BY** : MR ANUSANT SUAYDEE  
**ANALYZED BY** : MISS THANATHORN KUNANUPHANCHAI  
**RECEIVED DATE** : APRIL 12, 2022  
**ANALYTICAL DATE** : APRIL 12-22, 2022  
**REPORT NO.** : 2022-L1030819  
**WORK NO.** : 2022-003222  
**ANALYSIS NO.** : T22AH093-0005

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			JETTY 1/2 NORTH 100 m T22AH093-0005	
CYANIDE	µg/L CN	DISTILLATION, PYRIDINE-BARBITURIC ACID METHOD (SM 4500-CN C AND 4500-CN E)	ND	5
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			COLORLESS/CLEAR YELLOW	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>RD</sup> EDITION, 2017.

ND : NON-DETECTABLE



(MISS PAWEENA CHARASCHOTEPINET)  
LABORATORY SUPERVISOR

APRIL 26, 2022



## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	THAI OIL PUBLIC COMPANY LIMITED		
<b>ADDRESS</b>	555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAWADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10260		
<b>CONTACT INFORMATION</b>	TEL : 0 3840 5500 EXT. 10502 e-mail : kbya@thoicgroup.com		
<b>SAMPLING SOURCE</b>	IN FRONT OF THAI OIL PUBLIC COMPANY LIMITED (42/1 MOO 1 SUKHUMVIT ROAD KM.124, TUNGSKULA, SRIRACHA, CHONBURI 20230.)		
<b>SAMPLE TYPE</b>	SEAWATER	<b>RECEIVED DATE</b>	APRIL 12, 2022
<b>SAMPLING DATE</b>	APRIL 12, 2022	<b>ANALYTICAL DATE</b>	APRIL 12-27, 2022
<b>SAMPLING TIME</b>	12:45 HOUR	<b>REPORT NO.</b>	2022-0030844
<b>SAMPLING METHOD</b>	COMPOSITE	<b>WORK NO.</b>	2021-003222
<b>SAMPLING BY</b>	MR. ANUSART SUAYDEE	<b>ANALYSIS NO.</b>	T22AH093-0008
<b>ANALYZED BY</b>	MISS KANNYAN SUMLEETHA		

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			JETTY 4 EAST 100 m T22AH093-0008	
pH *	-	ELECTROMETRIC METHOD AT SITE (SM 4500-HP B)	8.2 (21°C)	-
TEMPERATURE *	°C	THERMOMETER AT SITE (SM 2550 B)	31	-
DISSOLVED OXYGEN *	mg/L	MEMBRANE ELECTRODE METHOD AT SITE (SM 4500-O G)	3.2	0.5
BIOCHEMICAL OXYGEN DEMAND *	mg/L	MEMBRANE ELECTRODE METHOD (SM 4500-O G AND 5210 B)	1.6	0.5
CHEMICAL OXYGEN DEMAND *	mg/L	CLOSED REFLUX, TITRIMETRIC METHOD (SM 5220 C)	89.8	25.0
TOTAL AMMONIA *	µg/L N	IN-HOUSE METHOD LAE/TP/WAT 001 BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA&WEF, 23rd ED., 2017, PART 4500-NH <sub>4</sub> H	170	10.0
AMMONIA NITROGEN (UNIONIZED) *	µg/L N	IN-HOUSE METHOD LAE/TP/WAT 001 BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA&WEF, 23rd ED., 2017, PART 4500-NH <sub>4</sub> H AND CALCULATION	20.7	0.30
PHENOLS *	mg/L	DISTILLATION, 4-AMINOANTIPYRINE METHOD (SM 5530 B AND 5530 C)	0.008	0.005
SULPHIDE *	µg/L	METHYLENE BLUE COLOURMETRIC METHOD (METHOD OF SEAWATER ANALYSIS, GRASSHOFF, 1998, CHAPTER 5)	ND	10



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			JETTY 4 EAST 100 m T22AH093-0008	
FAT, OIL AND GREASE <sup>1</sup>	mg/L	SOMMELET EXTRACTION METHOD (SMA 9520 D)	ND	3
<b>SAMPLE CONDITION</b>				
WATER'S COLOUR/TURBID			COLOUR IS CLEAR	
SEDIMENT			YELLOW	

<sup>1</sup> : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

<sup>2</sup> : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

<sup>3</sup> : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

 SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>rd</sup> EDITION, 2017.

ND : NON-DETECTABLE



 (MISS PAWEENA CHARASCHOTEPIN(T)  
 LABORATORY SUPERVISOR

APRIL 29, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUOHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10502 e-mail : kitye@thaioilgroup.com  
**SAMPLING SOURCE** : IN FRONT OF THAI OIL PUBLIC COMPANY LIMITED (42/1 MOO 1, SUKHUMVIT ROAD KM. 224, TUNGTHUKLA, SRIRACHA, CHONBURI 20230)  
**SAMPLE TYPE** : SEAWATER  
**SAMPLING DATE** : APRIL 12, 2022  
**SAMPLING TIME** : 12:45 HOUR  
**SAMPLING METHOD** : COMPOSITE  
**SAMPLING BY** : MR. ANUSART SURYDEE  
**ANALYZED BY** : MISS THANATHORN KUNANUPHANCHAI

**RECEIVED DATE** : APRIL 12, 2022  
**ANALYTICAL DATE** : APRIL 12-22, 2022  
**REPORT NO.** : 2022-U030845  
**WORK NO.** : 2022-003222  
**ANALYSIS NO.** : T22AH093-0006

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			JETTY 4 EAST 100 m T22AH093-0006	
CYANIDE	µg/L CN	DISTILLATION, PYRIDINE-BARBITURIC ACID METHOD (SM 4500-CN C AND 4500-CN E)	ND	5
<b>SAMPLE CONDITION</b>				
WATER'S COLOUR/TURBID			COLOURLESS/CLEAR	
SEDIMENT			YELLOW	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>rd</sup> EDITION, 2017.

ND : NON-DETECTABLE

*Paweena Ch.*

(MISS PAWEENA CHARASCHOTERINET)  
LABORATORY SUPERVISOR

APRIL 29, 2022





## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	THAI OIL PUBLIC COMPANY LIMITED
<b>ADDRESS</b>	33/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
<b>CONTACT INFORMATION</b>	TEL : 0 3840 8500 EXT. 10502 e-mail : ktjw@thaoilgroup.com
<b>SAMPLING SOURCE</b>	IN FRONT OF THAI OIL PUBLIC COMPANY LIMITED (42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSKULA, SIRACHA, CHONBURI 20230.)
<b>SAMPLE TYPE</b>	SEAWATER
<b>SAMPLING DATE</b>	APRIL 12, 2022
<b>SAMPLING TIME</b>	12:30 HOUR
<b>SAMPLING METHOD</b>	COMPOSITE
<b>SAMPLING BY</b>	MILANUSANT SUAYDEE
<b>ANALYZED BY</b>	MISS KANNIKAR SUJHEETHA
<b>RECEIVED DATE</b>	APRIL 12, 2022
<b>ANALYTICAL DATE</b>	APRIL 12-27, 2022
<b>REPORT NO.</b>	2022-0030846
<b>WORK NO.</b>	2021-003222
<b>ANALYSIS NO.</b>	T22AH082-0000

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			JETTY 5/5 SOUTH 100 m T22AH082-0000	
pH <sup>a</sup>	-	ELECTROMETRIC METHOD AT SITE (SM 4500-H <sup>+</sup> B)	8.1 (31°C)	-
TEMPERATURE <sup>a</sup>	°C	THERMOMETER AT SITE (SM 2551 B)	31	-
DISSOLVED OXYGEN <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD AT SITE (SM 4500-O <sub>2</sub> D)	5.1	0.5
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM 4500-O <sub>2</sub> G AND 5210 B)	15	0.5
CHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	CLOSED REFUX, TITRIMETRIC METHOD (SM 5220 C)	70.4	25.0
TOTAL AMMONIA <sup>b</sup>	µg/L N	IN HOUSE METHOD: LAE TP: WAT.001 BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA&WEF, 23rd ED. 2017, PART 4505-NH <sub>3</sub> H	56	10.0
AMMONIA NITROGEN (UNIONIZED) <sup>b</sup>	µg/L N	IN HOUSE METHOD: LAE TP: WAT.001 BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA&WEF, 23rd ED. 2017, PART 4505-NH <sub>3</sub> H AND CALCULATION	15.4	5.30
PHENOLS <sup>c</sup>	mg/L	DISTILLATION, 4-AMINOCANTHRACENE METHOD (SM 5530 B AND 5530 C)	0.030	0.005
SULPHIDE <sup>c</sup>	mg/L	METHYLENE BLUE COLOURIMETRIC METHOD (METHOD OF SEAWATER ANALYSIS, GRASSHOFF, 1999, CHAPTER 5)	ND	50



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			JETTY 5/6 SOUTH 100 m T22AH003-0009	
FAT, OIL AND GREASE <sup>a</sup>	mg/L	SOLVENT EXTRACTION METHOD (SM 5520 D)	ND	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR YELLOW	

<sup>a</sup> : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

<sup>b</sup> : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

<sup>c</sup> : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>RD</sup> EDITION, 2017.

ND : NON-DETECTABLE



(PHEE PAWEENA CHAKASCHOTEPINAT)  
LABORATORY SUPERVISOR

APRIL 29, 2022

## ANALYSIS REPORT

**CUSTOMER NAME :** THAI OIL PUBLIC COMPANY LIMITED

**ADDRESS :** 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR, VITHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK  
BANGKOK 10900

**CONTACT INFORMATION :** TEL : 0 3846 8500 EXT. 10502 e-mail : kitya@thaiogroup.com

**SAMPLING SOURCE :** IN FRONT OF THAI OIL PUBLIC COMPANY LIMITED  
(42/1 MOO 1, SURGAPHYIT ROAD KM.124, TUNGKULA, SRRACHA, CHONBURI 20230)

**SAMPLE TYPE :** SEAWATER

**SAMPLING DATE :** APRIL 12, 2022

**SAMPLING TIME :** 12:30 HOUR

**SAMPLING METHOD :** COMPOSITE

**SAMPLING BY :** MR ANDSART SUAYTEE

**ANALYZED BY :** MISS THANATHORN KUMNUPHARONAI

**RECEIVED DATE :** APRIL 12, 2022

**ANALYTICAL DATE :** APRIL 12-22, 2022

**REPORT NO. :** 2022-U030847

**WORK NO. :** 2021-003222

**ANALYSIS NO. :** T22AH093-0009

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			JETTY 5/8 SOUTH 100 m T22AH093-0009	
CYANIDE	µg/L CN	DISTILLATION, PYRIDINE-SARBITURIC ACID METHOD (SM 4500-CN C AND 4500-CN E)	ND	5
<b>SAMPLE CONDITION</b>				
WATER'S COLOUR/TURBID			COLORLESS/CLEAR	
SEDIMENT			YELLOW	

SM : STANDARD METHODS FOR THE DETERMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>rd</sup> EDITION, 2017.

ND : NON-DETECTABLE.



(MISS PAVEENA CHARASCHOTEPINIT)  
LABORATORY SUPERVISOR

APRIL 25, 2022



## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	: THAI OIL PUBLIC COMPANY LIMITED	<b>RECEIVED DATE</b>	: APRIL 12, 2022
<b>ADDRESS</b>	: 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900	<b>ANALYTICAL DATE</b>	: APRIL 12-27, 2022
<b>CONTACT INFORMATION</b>	: TEL : 0 2840 8500 EXT. 10552 e-mail : kttya@thaiolgroup.com	<b>REPORT NO.</b>	: 2022-U030840
<b>SAMPLING SOURCE</b>	: IN FRONT OF THAI OIL PUBLIC COMPANY LIMITED (42/1 RD 1, SUKHUMVIT ROAD KM.124, TUNGSRUKA, SRIRACHA, CHONBURI 20235)	<b>WORK NO.</b>	: 2021-003222
<b>SAMPLE TYPE</b>	: SEAWATER	<b>ANALYSIS NO.</b>	: T22NH093-0006
<b>SAMPLING DATE</b>	: APRIL 12, 2022		
<b>SAMPLING TIME</b>	: 12:10 HOUR		
<b>SAMPLING METHOD</b>	: COMPOSITE		
<b>SAMPLING BY</b>	: MR. ANUSART SUAYOKE		
<b>ANALYZED BY</b>	: MISS KANNIKAE SUNLEETHA		

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			CRM NORTH 100 in T22NH093-0006	
pH <sup>a</sup>	-	ELECTROMETRIC METHOD AT SITE (SM 4500-H <sup>+</sup> B)	8.2 (20°C)	-
TEMPERATURE <sup>a</sup>	°C	THERMOMETER AT SITE (SM 2200 B)	30	-
DISSOLVED OXYGEN <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD AT SITE (SM 4500-O <sub>2</sub> C)	5.2	0.5
BIOCHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM 4500-O <sub>2</sub> C AND 5293 B)	1.1	0.5
CHEMICAL OXYGEN DEMAND <sup>a</sup>	mg/L	CLOSED REFLUX, TITRIMETRIC METHOD (SM 5220 C)	94.4	25.0
TOTAL AMMONIA <sup>b</sup>	µg/L N	IN-HOUSE METHOD: UAE TP WAT.001 BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA&WEF, 23rd ED., 2017, PART 4500-NH <sub>3</sub> H	120	10.0
AMMONIA NITROGEN (NITROGEN) <sup>b</sup>	µg/L N	IN-HOUSE METHOD: UAE TP WAT.001 BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA&WEF, 23rd ED., 2017, PART 4500-NH <sub>3</sub> H AND CALCULATION	13.6	0.30
PHENOLS <sup>c</sup>	mg/L	DISTILLATION, 4-AMINOCANTHRACINE METHOD (SM 5530 B AND 5530 C)	0.009	0.005
SULPHIDE <sup>c</sup>	µg/L	METHYLENE BLUE COLOURIMETRIC METHOD (METHOD OF SEAWATER ANALYSIS, GRASSHOFF, 1999, CHAPTER 6)	ND	10



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			CBH NORTH 100 m T22AH003-0006	
FAT, OIL AND GREASE *	mg/L	SOXHLET EXTRACTION METHOD (SM 5620 D)	ND	3
<b>SAMPLE CONDITION</b>				
WATER'S COLOUR/TURBID			COLOURLESS/CLEAR	
SEDIMENT			YELLOW	

\* : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

\* : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

\* : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>RD</sup> EDITION, 2012.

ND : NON-DETECTABLE



(MISS PAWEENA CHARASCHOTEPINITT)  
LABORATORY SUPERVISOR

APRIL 29, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 55/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK  
 BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10522 e-mail : kitya@thaiolgroup.com  
**SAMPLING SOURCE** : IN FRONT OF THAI OIL PUBLIC COMPANY LIMITED  
 (42'S MOO 1, SUKHUMVIT ROAD KM.124, TUNGSKULA, SRIRACHA, CHONBURI 20230.)  
**SAMPLE TYPE** : SEAWATER  
**SAMPLING DATE** : APRIL 12, 2022  
**SAMPLING TIME** : 12:10 HOUR  
**SAMPLING METHOD** : COMPOSITE  
**SAMPLING BY** : MR. ANUSART SURYDEE  
**ANALYZED BY** : MISS THANATHORN KIJANUPHANCHAI  
**RECEIVED DATE** : APRIL 12, 2022  
**ANALYTICAL DATE** : APRIL 12-22, 2022  
**REPORT NO.** : 2022-UB30841  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22AH093-0006

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			CDM NORTH 100 m T22AH093-0006	
CYANIDE	µg/L CV	DISTILLATION, PYRIDINE-BARBITURIC ACID METHOD (SM-4500-CN-C AND 4500-CN-E)	ND	5
<b>SAMPLE CONDITION</b>				
WATER'S COLOUR/TURBID			COLOURLESS/CLEAR	
SEDIMENT			YELLOW	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>RD</sup> EDITION, 2017.  
 ND : NON-DETECTABLE

*Paveana Ch.*

(MISS PAVEANA CHARASCHOTEPINIT)  
LABORATORY SUPERVISOR

APRIL 28, 2022





## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	: THAI OIL PUBLIC COMPANY LIMITED
<b>ADDRESS</b>	: 550/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAWADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
<b>CONTACT INFORMATION</b>	: TEL : 0 3840 8500 EXT. 30502 e-mail : kitiya@thaioilgroup.com
<b>SAMPLING SOURCE</b>	: IN FRONT OF THAI OIL PUBLIC COMPANY LIMITED (42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSAHULA, SRRACHA, CHONBURI 20230.)
<b>SAMPLE TYPE</b>	: SEAWATER
<b>SAMPLING DATE</b>	: APRIL 12, 2022
<b>SAMPLING TIME</b>	: 12:20 HOUR
<b>SAMPLING METHOD</b>	: COMPOSITE
<b>SAMPLING BY</b>	: MR. ANUSART SUJAYEE
<b>ANALYZED BY</b>	: MISS KANNIKAR SUMLEETHA
	<b>RECEIVED DATE</b> : APRIL 12, 2022
	<b>ANALYTICAL DATE</b> : APRIL 12-27, 2022
	<b>REPORT NO.</b> : 2022-U030842
	<b>WORK NO.</b> : 2022-003222
	<b>ANALYSIS NO.</b> : T22AH093-0007

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			CRM SOUTH 100 m T22AH093-0007	
PH <sup>o</sup>	-	ELECTROMETRIC METHOD AT SITE (SM 4500-IF B)	8.1 (21°C)	-
TEMPERATURE <sup>o</sup>	°C	THERMOMETER AT SITE (SM 2550 B)	31	-
DISSOLVED OXYGEN <sup>o</sup>	mg/L	MEMBRANE ELECTRODE METHOD AT SITE (SM 4500-O G)	5.2	0.5
BIOCHEMICAL OXYGEN DEMAND <sup>o</sup>	mg/L	MEMBRANE ELECTRODE METHOD (SM 4500-O G AND 5210 B)	0.0	0.5
CHEMICAL OXYGEN DEMAND <sup>o</sup>	mg/L	CLOSED REFLUX, TITRIMETRIC METHOD (SM 5220 C)	92.6	25.0
TOTAL AMMONIA <sup>o</sup>	µg/L N	IN-HOUSE METHOD: LAE.TP.WAT.001 BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA&WEF, 23rd ED., 2017. PART 4500-NH <sub>4</sub> H	103	100
AMMONIA NITROGEN (UNIONIZED) <sup>o</sup>	µg/L N	IN-HOUSE METHOD: LAE.TP.WAT.001 BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA&WEF, 23rd ED., 2017. PART 4500-NH <sub>4</sub> H AND CALCULATION	100	0.30
PHENOLS <sup>o</sup>	mg/L	DISTILLATION, 4-AMINOANTHRACENE METHOD (SM 5530 B AND 5530 C)	0.009	0.006
SULPHIDE <sup>o</sup>	mg/L	METHYLENE BLUE COLOURIMETRIC METHOD (METHOD OF SEAWATER ANALYSIS, GRASSHOFF, 1999 CHAPTER 5)	ND	90



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			CBH SOUTH 100 m T22AH083-0007	
FAT, OIL AND GREASE <sup>a</sup>	mg/L	SOXHLET EXTRACTION METHOD (SM 5520 D)	ND	3
SAMPLE CONDITION				
WATER'S COLOUR/TURBID			COLOURLESS/CLEAR	
SEDIMENT			YELLOW	

<sup>a</sup> : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

<sup>b</sup> : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

<sup>c</sup> : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>rd</sup> EDITION, 2017.

ND : NON-DETECTABLE

*Paveera Ch.*

(MISS PAWEERA CHARASCHOTEPINUT)  
LABORATORY SUPERVISOR

APRIL 29, 2022

NO REVISION OFFERED  
NO MODIFICATION  
BY THE GROUP (THAI) (03/03/2022)

• DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL.

• REPORTED ANALYSIS REFERS TO SUBMITTED SAMPLE ONLY.

## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 553/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR, VIBHAUDE RANGSIT ROAD CHATUCHAK CHATUCHAK  
 BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10502 e-mail : kitua@thaioilgroup.com  
**SAMPLING SOURCE** : IN FRONT OF THAI OIL PUBLIC COMPANY LIMITED  
 (42/1 MOO 1, SUKHUMVIT ROAD KM. 124, TUNGTHUNGSA, SRIRACHA, CHONBURI 20230)  
**SAMPLE TYPE** : SEAWATER  
**SAMPLING DATE** : APRIL 12, 2022  
**SAMPLING TIME** : 12:20 HOUR  
**SAMPLING METHOD** : COMPOSITE  
**SAMPLING BY** : MR. ANUSANT SUKSYEE  
**ANALYZED BY** : MISS THAWATORN XLINANUPHACHAI  
**RECEIVED DATE** : APRIL 12, 2022  
**ANALYTICAL DATE** : APRIL 12-22, 2022  
**REPORT NO.** : 2022-UO30843  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22AH093-0007

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			CRM SOUTH 100 m T22AH093-0007	
CYANIDE	µg/L CN	DISTILLATION, PYRIDINE-BARBITURIC ACID METHOD (SM 4500-CN-C AND 4500-CN-E)	ND	5
<b>SAMPLE CONDITION</b>				
WATER'S COLOUR/TURBID			COLOURLESS/CLEAR	
SEDIMENT			YELLOW	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>rd</sup> EDITION, 2017.

ND : NON-DETECTABLE

*Paveena Ch.*

(MISS PAWEENA CHARASCHOTEPINET)  
LABORATORY SUPERVISOR

APRIL 29, 2022



ภาคผนวก ก9

## ผลการติดตามตรวจสอบนิเวศทางทะเล

## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED

**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, 11TH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900

**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10502 e-mail : siriyu@thaioilgroup.com

**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED  
(42/1 WDO 1, SUKHUMVIT ROAD KM.124, TUNGSRUA, SABAHA, CHONBURI 20230)

**SAMPLE TYPE** : SEAWATER

**SAMPLING DATE** : APRIL 12, 2022

**SAMPLING TIME** : \*

**SAMPLING METHOD** : PLANKTON NET

**SAMPLING BY** : MR. ANUSART SUAYDEE

**ANALYZED BY** : MISS NARAPORN PURATANG

**RECEIVED DATE** : APRIL 12, 2022

**ANALYTICAL DATE** : APRIL 12-17, 2022

**REPORT NO.** : 2022-UE31523

**WORK NO.** : 2021-003222

**ANALYSIS NO.** : T22AH093-0010 - T22AH093-0013

PHYTOPLANKTON (Natural Unit/mL)	COUNTING UNIT	RESULT			
		SAMPLE NO. 1 12:05 HOUR * T22AH093-0010	SAMPLE NO. 2 12:50 HOUR * T22AH093-0011	SAMPLE NO. 3 13:35 HOUR * T22AH093-0012	SAMPLE NO. 4 13:25 HOUR * T22AH093-0013
Division Cyanophyta					
Class Cyanophyceae					
Family Oscillatoraceae					
Oscillatoria spp.	FILAMENT	2,250	562	1,062	47
Division Chromophyta					
Class Bacillariophyceae					
Family Thalassiosiraceae					
Thalassiosira spp.	CELL	81	184	40	14
Family Melosiraceae					
Paralella subata	CELL	27	52	18	43
Family Leptocythiraceae					
Corethron ciliatum	CELL	0	5	17	5
Family Coscinodiscaceae					
Coscinodiscus spp.	CELL	46	52	82	70
Paralella hantzschii	CELL	7	12	26	34
Family Rhizosoleniaceae					
Gyrodinium spp.	CELL	5,086	10,307	408	1,862
Rhizosolenia spp.	CELL	1,421	1,225	526	1,388
Family Hemidysideaceae					
Oltrocodium spp.	CELL	0	0	26	0
Elateropsis spp.	CELL	714	779	62	32
Hemidyside spp.	CELL	543	210	82	45
Family Chaetocerotaceae					
Bacillariastrum spp.	FILAMENT	338	300	80	282
Chaetoceros spp.	FILAMENT	10,534	15,527	87	16,075
Family Lichodactylaceae					
Oikopleura spp.	CELL	362	354	9	60
Helicodactylus lamellus	CELL	415	506	0	27





PHYTOPLANKTON (Natural Units/ml.)	COUNTING UNIT	RESULT			
		SAMPLE NO. 1	SAMPLE NO. 2	SAMPLE NO. 3	SAMPLE NO. 4
		12:05 HOUR *	12:50 HOUR *	11:35 HOUR *	13:25 HOUR *
		T22AH093-0010	T22AH093-0011	T22AH093-0012	T22AH093-0013
Family Eupodidae					
<i>Eupodia</i> spp.	CELL	34	42	12	25
Family Thalassiommatidae					
<i>Thalassiomma frauenfeldi</i>	CELL	221	298	34	26
<i>T. nitidocauda</i>	CELL	44	58	31	43
<i>Thalassiosira</i> spp.	CELL	44	58	12	32
Family Naviculae					
<i>Navicula</i> spp.	CELL	9	24	53	112
<i>Diplostron</i> spp.	CELL	6	7	12	14
<i>Microneis subaenariensis</i>	CELL	9	18	13	5
<i>Navicula</i> spp.	CELL	48	25	16	47
<i>Phaeocystis</i> spp.	CELL	12	12	0	0
<i>Phaeocystis</i> spp.	CELL	862	875	73	43
<i>Thalassiosira</i> spp.	CELL	9	22	32	24
Family Bacillariaceae					
<i>Bacillaria paxillifer</i>	CELL	405	422	0	87
<i>Navicula</i> spp.	CELL	5	5	5	18
<i>N. longissima</i>	CELL	13	10	0	0
<i>Pseudo-nitzschia</i> spp.	CELL	542	242	53	43
Family Surirellaceae					
<i>Surirella</i> spp.	CELL	13	15	0	0
<i>Surirella</i> spp.	CELL	20	18	28	73
Class Dictyochophyceae					
Family Dictyochophyceae					
<i>Dictyocha</i> spp.	CELL	6	5	16	14
Class Dinophyceae					
Family Prorocentracae					
<i>Prorocentrum</i> spp.	CELL	30	42	37	9
Family Dinophyceae					
<i>Dinophysis</i> spp.	CELL	9	17	16	0
<i>Dinophysis</i> spp.	CELL	0	0	4	0
<i>Phaeocystis</i> spp.	CELL	0	5	0	0
Family Ceratocaryaceae					
<i>Ceratium</i> spp.	CELL	36	60	13	0
<i>C. furc</i>	CELL	30	48	12	12
Family Pyrosomaceae					
<i>Pyrosoma</i> spp.	CELL	48	56	21	28
Family Pfiesteriaceae					
<i>Pfiesteria</i> spp.	CELL	68	58	62	52



PHYTOPLANKTON (Natural Unit/mL)	COUNTING UNIT	RESULT			
		SAMPLE NO. 1 12:05 HOUR * T22AH093-0010	SAMPLE NO. 2 12:50 HOUR * T22AH093-0011	SAMPLE NO. 3 11:35 HOUR * T22AH093-0012	SAMPLE NO. 4 13:25 HOUR * T22AH093-0013
Family Pteridopodaceae Pteridopodum spp.	CELL	81	60	42	40
TOTAL ABUNDANCE (Natural Unit/mL)		24,012	32,598	3,767	20,667
AMOUNT OF SPECIES		37	40	36	35
SAMPLE VOLUME (mL)		228	220	214	216
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT		COLOURLESS/CLEAR GREEN	COLOURLESS/CLEAR GREEN	COLOURLESS/CLEAR GREEN	COLOURLESS/CLEAR BROWN

REMARK : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF 23<sup>RD</sup> EDITION, 2017 PART 18205 F.

- SAMPLE NO. 1 CONVENTIONAL BUOY MOORING  
 SAMPLE NO. 2 JETTY #3  
 SAMPLE NO. 3 SINGLE BUOY MOORING 1  
 SAMPLE NO. 4 REFINERY CUTTAIL



(MISS CHAWEEVAN BOONLA)  
LABORATORY SUPERVISOR

APRIL 25, 2022

## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	THAI OIL PUBLIC COMPANY LIMITED		
<b>ADDRESS</b>	355/1 ENERGY COMPLEX BUILDING A, 11TH FLOOR VIBHAVADI RANGSIT ROAD CHITUCHAK CHATUCHAK BANGKOK 10900		
<b>CONTACT INFORMATION</b>	TEL : 0 3840 9500 EXT. 10502 e-mail : kmya@thaioilgroup.com		
<b>SAMPLING SOURCE</b>	THAI OIL PUBLIC COMPANY LIMITED (4Q/1 MOD 1, SURASUMMIT ROAD KM.124, TUNGSRUKA, SRIRACHA, CHONBURI 20230)		
<b>SAMPLE TYPE</b>	SEAWATER	<b>RECEIVED DATE</b>	APRIL 12, 2022
<b>SAMPLING DATE</b>	APRIL 12, 2022	<b>ANALYTICAL DATE</b>	APRIL 12-26, 2022
<b>SAMPLING TIME</b>	-	<b>REPORT NO.</b>	2022-031524
<b>SAMPLING METHOD</b>	PLANKTON NET	<b>WORK NO.</b>	2021-000222
<b>SAMPLING BY</b>	MR ANUSART SUAYDEE	<b>ANALYSIS NO.</b>	T22AH093-0010 - T22AH093-0013
<b>ANALYZED BY</b>	MISS NARAPORN PURATANG		

ZOOPLANKTON (UNIT/HP)	COUNTING UNIT	RESULT			
		SAMPLE NO. 1 12:05 HOUR *	SAMPLE NO. 2 12:50 HOUR *	SAMPLE NO. 3 11:35 HOUR *	SAMPLE NO. 4 13:25 HOUR *
		T22AH093-0010	T22AH093-0011	T22AH093-0012	T22AH093-0013
<b>Phylum Protozoa</b>					
Class Sarcodina					
Foraminifera	CELL	0	2,872	0	972
Family Ammonidae					
Ammonia aptulensis	CELL	260	0	0	1,072
Class Ciliata					
Family Vorticellidae					
Vorticella sp.	CELL	78,819	11,589	5,945	0
Family Codonellidae					
Trinopsis sp.	CELL	0	1,072	84	0
Family Codonellidae					
Codonellidae sp.	CELL	527	0	0	0
Family Cylindrocapsidae					
Favella sp.	CELL	1,040	8,798	332	0
<b>Phylum Annelida</b>					
Class Polychaeta					
Polychaete Larva	INDIVIDUAL	3,402	0	0	10,806
<b>Phylum Arthropoda</b>					
Class Crustacea					
Cyclopoid Copepod	INDIVIDUAL	11,529	27,718	5,118	71,830
Calanoid Copepod	INDIVIDUAL	19,113	29,802	4,298	25,526
Harpacticoid Copepod	INDIVIDUAL	1,821	17,096	498	13,748
Nauplius of Copepod	INDIVIDUAL	70,175	188,488	34,183	218,934
Copepoda Nauplius	INDIVIDUAL	527	0	0	45,134
<b>Phylum Mollusca</b>					
Class Gastropoda					
Gastropod Larva	INDIVIDUAL	2,884	2,128	0	1,216
Class Bivalvia					
Bivalvia Larva	INDIVIDUAL	14,400	27,101	0	0



ZOOPLANKTON (UNITS/m <sup>3</sup> )	COUNTING UNIT	RESULT			
		SAMPLE NO. 1 12:05 HOUR * T22AH093-0010	SAMPLE NO. 2 12:50 HOUR * T22AH093-0011	SAMPLE NO. 3 13:35 HOUR * T22AH093-0012	SAMPLE NO. 4 13:25 HOUR * T22AH093-0013
Phylum Echinodermata Class Echinoidea Echinopluteus Larva	INDIVIDUAL	527	0	332	0
Phylum Chordata Class Larvacea Family Oikopleuridae Oikopleura sp.	INDIVIDUAL	13,614	36,911	3,130	6,860
TOTAL ABUNDANCE (UNITS/m <sup>3</sup> )		210,548	363,482	34,002	500,489
AMOUNT OF SPECIES		14	11	9	13
SAMPLE CONDITION WATER'S COLOUR/TURBID- SEDIMENT		COLOURLESS/CLEAR GREEN	COLOURLESS/CLEAR GREEN	COLOURLESS/CLEAR GREEN	COLOURLESS/CLEAR BROWN

REMARK : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF 23<sup>RD</sup> EDITION, 2017 PART 10200 F.

SAMPLE NO. 1 : CONVENTIONAL BUOY MOORING

SAMPLE NO. 2 : JETTY # 3

SAMPLE NO. 3 : SINGLE-BUOY MOORING 1

SAMPLE NO. 4 : REFINERY OUTFALL

  
(MISS CHAWEEVAN BOONLA)  
LABORATORY SUPERVISOR

APRIL 29, 2022

ภาคผนวก ก10

ผลการติดตามตรวจสอบคุณภาพน้ำทิ้ง

## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, 11TH FLOOR, VIBHAVADIRANGSIT ROAD, CHATUCHAK, CHATUCHAK, BANGKOK 10260  
**CONTACT INFORMATION** : TEL : 0 3840 8500-EXT. 10552 e-mail : kitya@thaiogroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED  
 (402) HOO 1, SUKHEKHOT ROAD, KM.124, TUNGSIKULA, SRIRACHA, CHONBURI 20230)  
**SAMPLE TYPE** : EFFLUENT  
**SAMPLING DATE** : JANUARY 5, 2022  
**SAMPLING TIME** : 08:05 HOUR  
**SAMPLING METHOD** : GRAB  
**SAMPLING BY** : CUSTOMER  
**ANALYZED BY** : MISS WIRAKON PADSONGCHAN

**RECEIVED DATE** : JANUARY 6, 2022  
**ANALYTICAL DATE** : JANUARY 6-14, 2022  
**REPORT NO.** : 2022-0023520  
**WORK NO.** : 2021-003322  
**ANALYSIS NO.** : T22AA125-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			Instrument API T22AA125-0002	
AMMONIA NITROGEN	mg/L NH <sub>3</sub> -N	KJELDAHL METHOD (SM 4500-NH <sub>3</sub> B AND 4500-NH <sub>3</sub> C)	CL	15
METALS				
MERCURY	mg/L Hg	COLD VAPOUR AAS METHOD (SM 3112 B)	ND	0.0005
VOLATILE ORGANIC COMPOUNDS				
BENZENE	mg/L	PURGE AND TRAP GAS CHROMATOGRAPH/MASS SPECTROMETRIC METHOD (SM 8200 B)	NS	0.0003
<b>SAMPLE CONDITION</b>				
WATER'S COLOUR/TURBID			YELLOW/TURBID	
SEDIMENT			YELLOW	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>RD</sup> EDITION, 2017.

ND : NON-DETECTABLE.

*Bengawan V.*

(MISS BENGAWAN VRIYUTHAI)  
LABORATORY SUPERVISOR

JANUARY 18, 2022





## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, 11TH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10502 e-mail : kitiya@thaioilgroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED  
(K2) MOO 1, SUKHUMVIT ROAD KM.124, TUNGSOOKLA, SRIRACHA, CHONBURI 20200)  
**SAMPLE TYPE** : EFFLUENT  
**SAMPLING DATE** : JANUARY 19, 2022  
**SAMPLING TIME** : 06:01 HOUR  
**SAMPLING METHOD** : GRAE  
**SAMPLING BY** : CUSTOMER  
**ANALYZED BY** : MISS WIRUKON PADSONGCHAN  
**RECEIVED DATE** : JANUARY 19, 2022  
**ANALYTICAL DATE** : JANUARY 19-22, 2022  
**REPORT NO.** : 2022-0006961  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22AB009-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			Standard Methods AP5 T22AB009-0002	
AMMONIA NITROGEN	mg/L NH <sub>3</sub> -N	KJELDAHL METHOD (SM 4500-NH <sub>3</sub> B AND 4500-NH <sub>3</sub> C)	25.8	1.0
METALS				
MERCURY	mg/L Hg	COLD VAPOUR AAS METHOD (SM 3112 B)	0.0020	0.0005
VOLATILE ORGANIC COMPOUNDS				
BENZENE	mg/L	PURGE AND TRAP GAS CHROMATOGRAPHY/MASS SPECTROMETRIC METHOD (SM 8210 B)	6.12	0.0003
<b>SAMPLE CONDITION</b>				
WATER'S COLOUR/TURBID			YELLOW/TURBID	
SEDIMENT			YELLOW	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>rd</sup> EDITION, 2017.

*Benjawan V.*

(MISS BENJAWAN VIRIYOTHA)  
LABORATORY SUPERVISOR

JANUARY 31, 2022





## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	THAI OIL PUBLIC COMPANY LIMITED		
<b>ADDRESS</b>	5521 ENERGY COMPLEX BUILDING A, 11TH FLOOR VIBHAVADI RANGSEI ROAD CHITUCHAK CHATUCHAK BANGKOK 10900		
<b>CONTACT INFORMATION</b>	TEL : 0 2840 8500 EXT. 10502 e-mail : kitya@thaioilgroup.com		
<b>SAMPLING SOURCE</b>	THAI OIL PUBLIC COMPANY LIMITED (K2) MOO 1, SUKHUMVIT ROAD KM.124, TUNGSIKLA, SRIRACHA, CHONBURI 20231)		
<b>SAMPLE TYPE</b>	EFLUENT	<b>RECEIVED DATE</b>	FEBRUARY 10, 2022
<b>SAMPLING DATE</b>	FEBRUARY 9, 2022	<b>ANALYTICAL DATE</b>	FEBRUARY 10-17, 2022
<b>SAMPLING TIME</b>	09:01 HOUR	<b>REPORT NO.</b>	2022-UO11640
<b>SAMPLING METHOD</b>	GRAB	<b>WORK NO.</b>	2022-003222
<b>SAMPLING BY</b>	CUSTOMER	<b>ANALYSIS NO.</b>	T22AC343-0052
<b>ANALYZED BY</b>	MISS WOKAKON PADSONGCHAN		

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			U-1646700000 APE T22AC343-0002	
AMMONIA-NITROGEN	mg/L NH <sub>3</sub> -N	KJELDAHL METHOD (SM 4500-NH <sub>3</sub> B AND 4500-NH <sub>3</sub> C)	25.8	1.5
METALS				
MERCURY	mg/L Hg	COLD VAPOUR AAS METHOD (SM 3112 B)	0.0050	0.0005
VOLATILE ORGANIC COMPOUNDS				
BENZENE	mg/L	PURGE AND TRAP GAS CHROMATOGRAPHY/MASS SPECTROMETRIC METHOD (SM 8210 B)	25.0	0.0002
<b>SAMPLE CONDITION</b>				
WATER'S COLOUR/TURBID			YELLOW/TURBID	
SEDIMENT			YELLOW	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, KWWA, WEF, 23<sup>RD</sup> EDITION, 2017.

*Benjawan V.*

(MISS BENJAWAN VIRIYOTHAJ)  
LABORATORY SUPERVISOR

FEBRUARY 18, 2022



## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	THAI OIL PUBLIC COMPANY LIMITED
<b>ADDRESS</b>	555/1 ENERGY COMPLEX BUILDING A, 11TH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
<b>CONTACT INFORMATION</b>	TEL : 0 3840 8500 EXT. 10502 e-mail : kitiya@thaioilgroup.com
<b>SAMPLING SOURCE</b>	THAI OIL PUBLIC COMPANY LIMITED (42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSIKLA, SRIRACHA, CHONBURI 20130.)
<b>SAMPLE TYPE</b>	EFFLUENT
<b>SAMPLING DATE</b>	FEBRUARY 23, 2022
<b>SAMPLING TIME</b>	08:01 HOUR
<b>SAMPLING METHOD</b>	GRAB
<b>SAMPLING BY</b>	CUSTOMER
<b>ANALYZED BY</b>	MISS WIRAWAN PADSONGCHAN
	<b>RECEIVED DATE</b> : FEBRUARY 23, 2022
	<b>ANALYTICAL DATE</b> : FEBRUARY 23-MARCH 3, 2022
	<b>REPORT NO.</b> : 2022-0015527
	<b>WORK NO.</b> : 2022-003222
	<b>ANALYSIS NO.</b> : T22AC258-0052

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			จากผลการตรวจ API T22AD098-0082	
NITROGEN	mg/L NH <sub>3</sub> -N	KJELDAHL METHOD (SM 4500-NH <sub>3</sub> B AND 4500-NH <sub>3</sub> C)	32.6	1.0
METALS				
MERCURY	mg/L Hg	COLD VAPOUR AAS METHOD (SM 3112 B)	0.0207	0.0006
VOLATILE ORGANIC COMPOUNDS				
BENZENE	mg/L	PURGE AND TRAP GAS CHROMATOGRAPHIC MASS SPECTROMETRIC METHOD (SM 6200 B)	25.0	0.0002
SAMPLE CONDITION				
WATER'S COLOUR/TURBID			YELLOW/TURBID	
SEDIMENT			YELLOW	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>RD</sup> EDITION, 2017.

*Benjawan V.*

(MISS BENJAWAN VEEYOTHAI)  
LABORATORY SUPERVISOR

MARCH 9, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 55/21 ENERGY COMPLEX BUILDING-A, 11TH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 2840 8500 EXT. 10502 e-mail : kitiya@thaioilgroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED  
 (K2/1 NDO 1, SUKHUMVIT ROAD KM.124, TUNGTHUNGSA, SRIRACHA, CHONBURI 20200)  
**SAMPLE TYPE** : EFFLUENT  
**SAMPLING DATE** : MARCH 2, 2022  
**SAMPLING TIME** : 08:05 HOUR  
**SAMPLING METHOD** : GRAB  
**SAMPLING BY** : CUSTOMER  
**ANALYZED BY** : MISS WIRAKON PONGSANGCHAN

**RECEIVED DATE** : MARCH 3, 2022  
**ANALYTICAL DATE** : MARCH 3-8, 2022  
**REPORT NO.** : 2022-U027244  
**WORK NO.** : 2022-003222  
**ANALYSIS NO.** : T22AD668-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			วิธีมาตรฐาน API T22AD668-0002	
AMMONIA-NITROGEN	mg/L NH <sub>3</sub> -N	KJELDAHL METHOD (SM 4500-NH <sub>3</sub> B AND 4500-NH <sub>3</sub> C)	25.8	15
METALS				
MERCURY	mg/L Hg	COLD VAPOUR AAS METHOD (SM 3112 B)	0.0208	0.0025
VOLATILE ORGANIC COMPOUNDS				
BENZENE	mg/L	PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM 8200 B)	ND	0.0002
<b>SAMPLE CONDITION</b>				
WATER'S COLOUR/TURBID			YELLOW/TURBID	
SEDIMENT			YELLOW	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>RD</sup> EDITION, 2017

*Benjawan V.*

(MISS BENJAWAN VIKIYOTHA)  
LABORATORY SUPERVISOR

MARCH 11, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 15521 ENERGY COMPLEX BUILDING A, 11TH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10502 e-mail : lubya@thaoilgroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED  
 (42/1 MOD 1, SUKHUMVIT ROAD KM.124, TUNGSRUKA, SRIRACHA, CHONBURI 20230.)  
**SAMPLE TYPE** : EFFLUENT  
**SAMPLING DATE** : MARCH 16, 2022  
**SAMPLING TIME** : 08:01 HOUR  
**SAMPLING METHOD** : GRAB  
**SAMPLING BY** : CUSTOMER  
**ANALYZED BY** : MISS WORAKON PADSONGCHAN  
**RECEIVED DATE** : MARCH 16, 2022  
**ANALYTICAL DATE** : MARCH 16-22, 2022  
**REPORT NO.** : 2022-0022340  
**WORK NO.** : 2021-003372  
**ANALYSIS NO.** : TZ2AF099-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			วิธีตรวจสอบตาม API T22AF099-0002	
AMMONIA-NITROGEN	mg/L NH <sub>3</sub> -N	KJELDAHL METHOD (DM 4500-NH <sub>3</sub> B AND 4100-NH <sub>3</sub> C)	21.5	15
METAL				
MERCURY	mg/L Hg	COLD VAPOUR AAS METHOD (DM 2100 B)	0.019	0.0005
VOLATILE ORGANIC COMPOUNDS				
BENZENE	mg/L	PURGE AND TRAP GAS CHROMATOGRAPHIC MASS SPECTROMETRIC METHOD (DM 6200 B)	24.5	0.0005
<b>SAMPLE CONDITION</b>				
WATER'S COLOUR/TURBID			YELLOW/TURBID	
SEDIMENT			YELLOW	

SM : STANDARD METHODS FOR THE DRAINAGE OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>RD</sup> EDITION, 2017.

*Payawan V.*

(MISS BENJAWAN VIKITZITHAI)  
LABORATORY SUPERVISOR

MARCH 30, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 155/1 ENERGY COMPLEX BUILDING A, 11TH FLOOR VIBHAVANJ BANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 2840 8500 EXT. 30502 e-mail : kitya@thaoilgroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED  
 (42/1 MDO 1, SUKUMVIT ROAD KM.124, TUNGSAKA, SRIRACHA, CHONBURI 20202)  
**SAMPLE TYPE** : EFFLUENT  
**SAMPLING DATE** : APRIL 20, 2022  
**SAMPLING TIME** : 08:01 HOUR  
**SAMPLING METHOD** : GRAB  
**SAMPLING BY** : CUSTOMER  
**ANALYZED BY** : MISS WORAKON PRASONGCHAN  
**RECEIVED DATE** : APRIL 20, 2022  
**ANALYTICAL DATE** : APRIL 20-27, 2022  
**REPORT NO.** : 2022-0031549  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22AH362-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			มาตรฐานวิธี APT T22AH362-0002	
AMMONIA-NITROGEN	mg/L NH <sub>3</sub> -N	KJELDAHL METHOD (SM 4500-NH <sub>3</sub> B AND 4500-NH <sub>3</sub> C)	N.S	1.5
METALS				
MERCURY	mg/L Hg	COLD VAPOUR AAS METHOD (SM 3152 B)	0.0012	0.0009
VOLATILE ORGANIC COMPOUNDS				
BENZENE	mg/L	PURGE AND TRAP GAS CHROMATOGRAPHY/MASS SPECTROMETRIC METHOD (SM 8200 B)	N.B	0.0002
<b>SAMPLE CONDITION</b>				
WATERS COLOUR/TURBID			YELLOW/TURBID	
SEDIMENT			YELLOW	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>rd</sup> EDITION, 2017.

*Benjawan V.*

(MISS BENJAWAN VITTYOTHA)  
LABORATORY SUPERVISOR

APRIL 20, 2022





## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, 11TH FLOOR 133HVAHAI RANGSIT ROAD CHATUCHAK, CHATUCHAK, BANGKOK 10000  
**CONTACT INFORMATION** : TEL : 0 2840 8500-EXT. 10502 e-mail : kityee@thaioilgroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED  
 (42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSRULA, SRIRACHA, CHONBURI 20230)  
**SAMPLE TYPE** : EFFLUENT  
**SAMPLING DATE** : APRIL 27, 2022  
**SAMPLING TIME** : 08:05 HOUR  
**SAMPLING METHOD** : GRAB  
**SAMPLING BY** : CUSTOMER  
**ANALYZED BY** : MISS WIRAKORN PADSONGCHAN  
**RECEIVED DATE** : APRIL 27, 2022  
**ANALYTICAL DATE** : APRIL 27 - MAY 6, 2022  
**REPORT NO.** : 2022-1033254  
**WORK NO.** : 2022-003222  
**ANALYSIS NO.** : T22AH915-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			ค่าตามมาตรฐาน API T22AH915-0002	
AMMONIA-NITROGEN	mg/L NH <sub>3</sub> -N	HJELDAHL METHOD (SM 4500-NH <sub>3</sub> B AND 4500-NH <sub>3</sub> C)	52.3	1.0
METALS				
MERCURY	mg/L Hg	COLD VAPOUR AAS METHOD (SM 3101 B)	0.0008	0.0005
VOLATILE ORGANIC COMPOUNDS				
BENZENE	mg/L	FLURGE AND TRAP GAS CHROMATOGRAPHY/MASS SPECTROMETRIC METHOD (SM 6000 B)	85.0	0.0002
<b>SAMPLE CONDITION</b>				
WATER'S COLOUR/TURBID			YELLOW/CLEAR	
SEDIMENT			YELLOW	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>RD</sup> EDITIONAL, 2017.

*Benjawan V.*

(MISS BENJAWAN VIRIYOTHAI)  
LABORATORY SUPERVISOR

MAY 11, 2022





## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, 11TH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 30502 e-mail : kitya@thaioilgroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED  
 (42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGTHUNG, SRIRACHA, CHONBURI 20230.)  
**SAMPLE TYPE** : EFFLUENT  
**SAMPLING DATE** : MAY 11, 2022  
**SAMPLING TIME** : 08:05 HOUR  
**SAMPLING METHOD** : GRAB  
**SAMPLING BY** : CUSTOMER  
**ANALYZED BY** : MISS WIRAKON PADSONCHAN  
**RECEIVED DATE** : MAY 11, 2022  
**ANALYTICAL DATE** : MAY 11-19, 2022  
**REPORT NO.** : 2022-U037850  
**WORK NO.** : 2023-003222  
**ANALYSIS NO.** : T22A383-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			Standard Method AP1 T22A383-0002	
AMMONIA-NITROGEN	mg/L NH <sub>3</sub> -N	KJELDAHL METHOD (SM 4500-NH <sub>3</sub> B AND 4500-NH <sub>3</sub> C)	0.3	1.5
METALS				
MERCURY	mg/L Hg	COLD VAPOUR AS METHOD (SM 3150-B)	ND	0.0005
VOLATILE ORGANIC COMPOUNDS				
BENZENE	mg/L	PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM 8200-B)	0.42	0.0002
<b>SAMPLE CONDITION</b>				
WATER'S COLOUR/TURBID			YELLOW/TURBID	
SEDIMENT			YELLOW	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 22<sup>ND</sup> EDITION, 2017.

ND : NON-DETECTABLE.

*Benjawan V.*

(MISS BENJAWAN VORITTHAI)  
LABORATORY SUPERVISOR

MAY 24, 2022



## ANALYSIS REPORT

<b>CUSTOMER NAME:</b>	: THAI OIL PUBLIC COMPANY LIMITED		
<b>ADDRESS:</b>	: 555/1 ENERGY COMPLEX BUILDING A, 11TH FLOOR VIBHAVADI RANGIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900		
<b>CONTACT INFORMATION:</b>	: TEL : 0 2840 8500 EXT. 10332 e-mail : kitye@thaiogroup.com		
<b>SAMPLING SOURCE:</b>	: THAI OIL PUBLIC COMPANY LIMITED		
	: (42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGKHA, SRIRACHA, CHONBURI 20230.)		
<b>SAMPLE TYPE:</b>	: EFFLUENT	<b>RECEIVED DATE:</b>	: MAY 25, 2022
<b>SAMPLING DATE:</b>	: MAY 25, 2022	<b>ANALYTICAL DATE:</b>	: MAY 25-27, 2022
<b>SAMPLING TIME:</b>	: 08.05 HOUR	<b>REPORT NO.:</b>	: 2022-0041455
<b>SAMPLING METHOD:</b>	: GRAB	<b>WORK NO.:</b>	: 2021-003222
<b>SAMPLING BY:</b>	: CUSTOMER	<b>ANALYSIS NO.:</b>	: T22A951-0002
<b>ANALYZED BY:</b>	: MISS WIRAKON PADSONGCHAN		

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			วิธีมาตรฐาน APT T22A951-0002	
AMMONIA-NITROGEN	mg/L NH <sub>3</sub> -N	COLORIMETRIC METHOD (SM 4500-NH <sub>3</sub> B AND 4500-NH <sub>3</sub> C)	24.9	15
METALS				
MERCURY	mg/L Hg	COLD VAPOUR AAS METHOD (SM 3112 B)	0.0067	0.0025
VOLATILE ORGANIC COMPOUNDS				
BENZENE	mg/L	PURGE AND TRAP GAS CHROMATOGRAPHY-MASS SPECTROMETRIC METHOD (SM 6200 B)	0.01	0.0002
SAMPLE CONDITION				
WATER'S COLOUR/TURBID			YELLOW/TURBID	
SEDIMENT			YELLOW	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>RD</sup> EDITION, 2017.



(MISS BERJAWAN VORVUTHAI)  
LABORATORY SUPERVISOR

JUNE 2, 2022



## ANALYSIS REPORT

**CUSTOMER NAME:** THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS:** 555/1 ENERGY COMPLEX BUILDING A, 11TH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION:** TEL : 0 2849 8500 EXT. 10502 e-mail : kinye@thaioilpublic.com  
**SAMPLING SOURCE:** THAI OIL PUBLIC COMPANY LIMITED  
(40/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGKUNLA, SRIRACHA, CHONBURI 20230.)  
**SAMPLE TYPE:** EFFLUENT  
**SAMPLING DATE:** JUNE 1, 2022  
**SAMPLING TIME:** 08:05 HOUR  
**SAMPLING METHOD:** GRAE  
**SAMPLING BY:** CUSTOMER  
**ANALYZED BY:** MOSS WIRAKON PADSONGCHAN

**RECEIVED DATE:** JUNE 1, 2022  
**ANALYTICAL DATE:** JUNE 1-10, 2022  
**REPORT NO.:** 2022-UO43845  
**WORK NO.:** 2022-003222  
**ANALYSIS NO.:** T22AK405-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			วิเคราะห์ตามวิธี API T22AK405-0002	
AMMONIA-NITROGEN	mg/L NH <sub>3</sub> -N	KJELDAHL METHOD (SM 4500-NH <sub>3</sub> B AND 4500-NH <sub>3</sub> C)	22.0	1.0
METALS				
MERCURY	mg/L Hg	COLD VAPOUR AAS METHOD (SM 3113 B)	0.0485	0.0005
VOLATILE ORGANIC COMPOUNDS				
BENZENE	mg/L	PURGE AND TRAP GAS CHROMATOGRAPHY/MASS SPECTROMETRIC METHOD (SM 8200 B)	17.3	0.0002
<b>SAMPLE CONDITION</b>				
WATER'S COLOUR/TURBID			YELLOW/TURBID	
SEDIMENT			YELLOW	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>RD</sup> EDITION, 2017.

*Benjawan V.*

(MOSS BENJAWAN VIRIYOTHAI)  
LABORATORY SUPERVISOR

JUNE 13, 2022



## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	THAI OIL PUBLIC COMPANY LIMITED		
<b>ADDRESS</b>	555/1 ENERGY COMPLEX BUILDING A, 11TH FLOOR VIBHAWAS RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900		
<b>CONTACT INFORMATION</b>	TEL : 0 3840 8500 EXT. 10302 e-mail : kitya@thoilgroup.com		
<b>SAMPLING SOURCE</b>	THAI OIL PUBLIC COMPANY LIMITED (42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSIKHA, SURACHA, CHONBURI 20230.)		
<b>SAMPLE TYPE</b>	EFFLUENT	<b>RECEIVED DATE</b>	JANUARY 6, 2022
<b>SAMPLING DATE</b>	JANUARY 5, 2022	<b>ANALYTICAL DATE</b>	JANUARY 6-14, 2022
<b>SAMPLING TIME</b>	08:00 HOUR	<b>REPORT NO.</b>	2022-U000524
<b>SAMPLING METHOD</b>	GRAB	<b>WORK NO.</b>	2021-003222
<b>SAMPLING BY</b>	CUSTOMER	<b>ANALYSIS NO.</b>	T23AA125-0004
<b>ANALYZED BY</b>	MISS WORAKON PADSONGSCHAN		

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			THAI OIL PUBLIC COMPANY LIMITED T23AA125-0004	
AMMONIA NITROGEN	mg/L NH <sub>3</sub> -N	KJELDAHL METHOD (SM 4500-NH <sub>3</sub> B AND 4500-NH <sub>3</sub> C)	ND	15
<b>METALS</b>				
MERCURY	mg/L Hg	COLD VAPOUR AS METHOD (SM 3112 B)	ND	0.0005
<b>VOLATILE ORGANIC COMPOUNDS</b>				
BENZENE	mg/L	PURGE AND TRAP GAS CHROMATOGRAPHY/MASS SPECTROMETRIC METHOD (SM 8200 B)	< 0.0002	0.0002
<b>SAMPLE CONDITION</b>				
WATER'S COLOUR/TURBID			YELLOW/CLEAR	
SEDIMENT			YELLOW	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>rd</sup> EDITION, 2017.

ND : NON-DETECTABLE.



(MISS BENJAWAN VERITYOTHA)  
LABORATORY SUPERVISOR

JANUARY 15, 2022





## ANALYSIS REPORT

**CUSTOMER NAME** : THAT OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 55/1 ENERGY COMPLEX BUILDING A, 11TH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10700  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10502 e-mail : kitya@thaiolgroup.com  
**SAMPLING SOURCE** : THAT OIL PUBLIC COMPANY LIMITED  
 (42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSIKLA, SRIRACHA, CHONBURI 30230)  
**SAMPLE TYPE** : EFFLUENT  
**SAMPLING DATE** : JANUARY 19, 2022  
**SAMPLING TIME** : 08:00 HOUR  
**SAMPLING METHOD** : GRAB  
**SAMPLING BY** : CUSTOMER  
**ANALYZED BY** : MISS WIRAKON PADSONGCHAN

**RECEIVED DATE** : JANUARY 19, 2022  
**ANALYTICAL DATE** : JANUARY 19-27, 2022  
**REPORT NO.** : 2022-U005963  
**WORK NO.** : 2023-003222  
**ANALYSIS NO.** : T22AB009-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			BY LABORATORY T22AB009-0004	
AMMONIA-NITROGEN	mg/L NH <sub>3</sub> -N	FIELDAHL METHOD (SM 4500-NH <sub>3</sub> B AND 4500-NH <sub>3</sub> C)	ND	1.5
METALS				
MERCURY	mg/L Hg	COLD VAPOUR AAS METHOD (SM 3112 B)	ND	0.0001
VOLATILE ORGANIC COMPOUNDS				
BENZENE	mg/L	PURGE AND TRAP GAS CHROMATOGRAPHIC MASS SPECTROMETRIC METHOD (SM 8200 B)	< 0.0002	0.0002
SAMPLE CONDITION				
WATER'S COLOUR/TURBID			YELLOW/CLEAR	
SEDIMENT			YELLOW	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>RD</sup> EDITION, 2017.

ND : NON-DETECTABLE.

*Benjawan V.*

(MISS BENJAWAN VADYOTHA)  
LABORATORY SUPERVISOR

JANUARY 31, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1, ENERGY COMPLEX BUILDING A, 11TH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10500  
**CONTACT INFORMATION** : TEL.: 0-3840 8500 EXT. 10532 e-mail: ktlpe@thoilgroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED  
(42) MOO 1, SUKHUMVIT ROAD KM.124, TUNGSIKHA, SRIRACHA, CHONBURI 20230  
**SAMPLE TYPE** : EFFLUENT  
**SAMPLING DATE** : FEBRUARY 9, 2022  
**SAMPLING TIME** : 08:00 HOUR  
**SAMPLING METHOD** : GRAB  
**SAMPLING BY** : CUSTOMER  
**ANALYZED BY** : MISS WIRAWAN PADSINGCHAN  
**RECEIVED DATE** : FEBRUARY 10, 2022  
**ANALYTICAL DATE** : FEBRUARY 10-17, 2022  
**REPORT NO.** : 2022-0011642  
**WORK NO.** : 2021-003322  
**ANALYSIS NO.** : TZ2AC343-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			Information TZ2AC343-0004	
AMMONIA-NITROGEN	mg/L NH <sub>3</sub> -N	KJELDAHL METHOD (SM 4500-NH <sub>3</sub> B AND 4500-NH <sub>3</sub> C)	ND	15
METAL				
MERCURY	mg/L Hg	COLD VAPOUR AAS METHOD (SM 2112 B)	ND	0.0005
VOLATILE ORGANIC COMPOUNDS				
BENZENE	mg/L	PURGE AND TRAP GAS CHROMATOGRAPHY-MASS SPECTROMETRIC METHOD (SM 6200 B)	< 0.0002	0.0002
<b>SAMPLE CONDITION</b>				
WATER'S COLOUR/TURBID			YELLOW/CLEAR	
SEDIMENT			YELLOW	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>RD</sup> EDITION, 2017.

ND : NON-DETECTABLE.

*Wirawan V.*

(MISS WIRAWAN VIRATTHAN)  
LABORATORY SUPERVISOR

FEBRUARY 18, 2022





## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	THAI OIL PUBLIC COMPANY LIMITED		
<b>ADDRESS</b>	155/1 ENERGY COMPLEX BUILDING A, 11TH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900		
<b>CONTACT INFORMATION</b>	TEL : 0 3940 8500 EXT. 10502 e-mail : tuiya@thaioilgroup.com		
<b>SAMPLING SOURCE</b>	THAI OIL PUBLIC COMPANY LIMITED		
<b>SAMPLE TYPE</b>	EFFLUENT	<b>RECEIVED DATE</b>	FEBRUARY 23, 2022
<b>SAMPLING DATE</b>	FEBRUARY 23, 2022	<b>ANALYTICAL DATE</b>	FEBRUARY 23-MARCH 3, 2022
<b>SAMPLING TIME</b>	08:00 HOUR	<b>REPORT NO.</b>	2022-U015529
<b>SAMPLING METHOD</b>	GRAB	<b>WORK NO.</b>	2021-003223
<b>SAMPLING BY</b>	CUSTOMER	<b>ANALYSIS NO.</b>	T22AC258-0004
<b>ANALYZED BY</b>	MISS WORAKON PADSONGCHAN		

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			วิธีวิเคราะห์ตามวิธีมาตรฐาน T22AD208-0004	
AMMONIA-NITROGEN	mg/L NH <sub>3</sub> -N	KJELDAHL METHOD (SM 4500-NH <sub>3</sub> B AND 4500-NH <sub>3</sub> C)	ND	15
<b>METALS</b>				
MERCURY	mg/L Hg	COLD VAPOUR AAS METHOD (SM 3112 B)	0.0007	0.0005
<b>VOLATILE ORGANIC COMPOUNDS</b>				
BENZENE	mg/L	PURGE AND TRAP GAS CHROMATOGRAPH/MASS SPECTROMETRIC METHOD (SM 8200 B)	< 0.0002	0.0002
<b>SAMPLE CONDITION</b>				
WATER'S COLOUR/TURBID			YELLOW/CLEAR	
SEDIMENT			YELLOW	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 22<sup>nd</sup> EDITION, 2017.

ND : NON DETECTABLE.



(MISS BENJAWAN VIRIYOTHA)  
LABORATORY SUPERVISOR

MARCH 9, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, 11TH FLOOR VIBHAWADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8506 EXT. 10502 e-mail : kitya@thoicgroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED  
 (42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGTHURA, SATHA, CHONGKRI 20230)  
**SAMPLE TYPE** : EFFLUENT  
**SAMPLING DATE** : MARCH 2, 2022  
**SAMPLING TIME** : 08:00 HOUR  
**SAMPLING METHOD** : GRAVE  
**SAMPLING BY** : CUSTOMER  
**ANALYZED BY** : MISS WORAKON PAKSANGCHAI

**RECEIVED DATE** : MARCH 3, 2022  
**ANALYTICAL DATE** : MARCH 3-8, 2022  
**REPORT NO.** : 2022-UD17248  
**WORK NO.** : 2021-003222  
**ANALYSIS NO.** : T22AC068-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			วิธีมาตรฐาน T22AC068-0004	
AMMONIA-NITROGEN	mg/L NH <sub>3</sub> -N	KJELDAHL METHOD (SM 4500-NH <sub>3</sub> B AND 4500-NH <sub>3</sub> C)	ND	15
METALS				
MERCURY	mg/L Hg	COLD VAPOUR AAS METHOD (SM 3112 B)	ND	0.0005
VOLATILE ORGANIC COMPOUNDS				
BENZENE	mg/L	PURGE AND TRAP GAS CHROMATOGRAPHY/MASS SPECTROMETRIC METHOD (SM 8260 B)	< 0.0002	0.0002
SAMPLE CONDITION				
WATER'S COLOUR/TURBID			YELLOW/CLEAR	
SEDIMENT			YELLOW	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AMWA, WEF, 23<sup>RD</sup> EDITION, 2017

ND : NON-DETECTABLE

*Benjawan V.*

(MISS BENJAWAN VIKYOTHA)  
LABORATORY SUPERVISOR

MARCH 11, 2022



## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	THAI OIL PUBLIC COMPANY LIMITED
<b>ADDRESS</b>	555/1 ENERGY COMPLEX BUILDING A, 11TH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
<b>CONTACT INFORMATION</b>	TEL : 0 3840 8500 EXT. 10502 e-mail : ktiyw@thoigroup.com
<b>SAMPLING SOURCE</b>	THAI OIL PUBLIC COMPANY LIMITED (42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSIKHA, SRIKACHA, CHONBURI 20230)
<b>SAMPLE TYPE</b>	EFFLUENT
<b>SAMPLING DATE</b>	MARCH 16, 2022
<b>SAMPLING TIME</b>	09:00 HOUR
<b>SAMPLING METHOD</b>	GRAB
<b>SAMPLING BY</b>	CUSTOMER
<b>ANALYZED BY</b>	MISS WIRAWON PABSONGCHAN
<b>RECEIVED DATE</b>	MARCH 16, 2022
<b>ANALYTICAL DATE</b>	MARCH 18-22, 2022
<b>REPORT NO.</b>	2022-0022142
<b>WORK NO.</b>	2021-003222
<b>ANALYSIS NO.</b>	T22AF090-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			Standard method T22AF090-0004	
AMMONIA-NITROGEN	mg/L NH <sub>3</sub> -N	KJELDAHL METHOD (SM 4500-NH <sub>3</sub> B AND 4500-NH <sub>3</sub> C)	ND	1.0
METALS				
MERCURY	mg/L Hg	COLD VAPOUR AAS METHOD (SM 310 B)	0.0005	0.0005
VOLATILE ORGANIC COMPOUNDS				
BENZENE	mg/L	PURGE AND TRAP GAS CHROMATOGRAPHIC/MASS SPECTROMETRIC METHOD (SM 6200 B)	< 0.0002	0.0002
<b>SAMPLE CONDITION</b>				
WATER'S COLOUR/TURBID			YELLOW/CLEAR	
SEDIMENT			YELLOW	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>RD</sup> EDITION, 2017.

ND : NON-DETECTABLE.

*Peyawan V.*

(MISS BENJAWAN VIRYOTHAI)  
LABORATORY SUPERVISOR

MARCH 30, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, 11TH FLOOR VIBHAVADIRANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10300  
**CONTACT INFORMATION** : TEL : 0 3840 8500 (EXT. 10302) E-mail : info@thoilgroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED  
 (42/1 HDO 1, SUKHUMVIT ROAD KHL12H, TUNGSRUKA, SRIRACHA, CHONBURI 30330)  
**SAMPLE TYPE** : EFFLUENT  
**SAMPLING DATE** : APRIL 20, 2022  
**SAMPLING TIME** : 08:00 HOUR  
**SAMPLING METHOD** : GRAB  
**SAMPLING BY** : CUSTOMER  
**ANALYZED BY** : MISS WORAKON PADJONGCHAN

**RECEIVED DATE** : APRIL 20, 2022  
**ANALYTICAL DATE** : APRIL 20-27, 2022  
**REPORT NO.** : 2022-U031151  
**WORK NO.** : 2023-00322  
**ANALYSIS NO.** : T22AH362-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			Reference Code T22AH362-0004	
AMMONIA-NITROGEN	mg/L NH <sub>3</sub> -N	KJELDAHL METHOD (SM 4500-NH <sub>3</sub> B AND 4500-NH <sub>3</sub> C)	ND	1.5
METALS				
MERCURY	mg/L Hg	COLD VAPOUR AAS METHOD (SM 3112 B)	0.0014	0.0005
VOLATILE ORGANIC COMPOUNDS				
BENZENE	mg/L	PURGE AND TRAP GAS CHROMATOGRAPHY/MASS SPECTROMETRIC METHOD (SM 8260 B)	< 0.0002	0.0002
<b>SAMPLE CONDITION</b>				
WATER'S COLOUR/TURBID			YELLOW/CLEAR	
SEDIMENT			YELLOW	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>RD</sup> EDITION, 2017.

ND : NON-DETECTABLE.

*Peyawan V.*

(MISS) PEYAWAN VORJYOTHA  
LABORATORY SUPERVISOR

APRIL 26, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 5521 ENERGY COMPLEX BUILDING A, 11TH FLOOR VIBHAVADI-RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900  
**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10502 e-mail : kitiya@thaiogroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED  
 (4371 MOO 1, SUKHUMVIT ROAD KM.124, TUNGTHUKLA, SRIRACHA, CHONBURI 36230.5)  
**SAMPLE TYPE** : EFFLUENT  
**SAMPLING DATE** : APRIL 22, 2022  
**SAMPLING TIME** : 09:00 HOUR  
**SAMPLING METHOD** : GRAB  
**SAMPLING BY** : CUSTOMER  
**ANALYZED BY** : MISS WORNON PADSONGCHAI

**RECEIVED DATE** : APRIL 27, 2022  
**ANALYTICAL DATE** : APRIL 27 - MAY 6, 2022  
**REPORT NO.** : 2022-0033296  
**WORK NO.** : 2022-003322  
**ANALYSIS NO.** : T22AH515-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			วิธีวิเคราะห์ในห้อง T22AH515-0004	
AMMONIA-NITROGEN	mg/L NH <sub>4</sub> -N	KJELDAHL METHOD (SM 4500-NH <sub>4</sub> B AND 4500-NH <sub>4</sub> C)	ND	1.5
METALS				
MERCURY	mg/L Hg	COLD VAPOUR AAS METHOD (SM 3112 B)	ND	0.0005
VOLATILE ORGANIC COMPOUNDS				
BENZENE	mg/L	PURGE AND TRAP GAS CHROMATOGRAPHY/MASS SPECTROMETRIC METHOD (SM 6200 B)	< 0.0002	0.0002
SAMPLE CONDITION			COLOURLESS/CLEAR	
WATER'S COLOUR/TURBID SEDIMENT			-	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>RD</sup> EDITION, 2017.

ND : NON-DETECTABLE.

*Benjawan V.*

(MISS BENJAWAN VITTYUTTHAI)  
LABORATORY SUPERVISOR

MAY 11, 2022





## ANALYSIS REPORT

**CUSTOMER NAME:** THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS:** 555/1 ENERGY COMPLEX BUILDING A, 11TH FLOOR VIBHAVADI KANGSEET ROAD CHATUCHAK CHITUCHAK BANGKOK 10900  
**CONTACT INFORMATION:** TEL: 0 3840 8500 EXT.: 10502 e-mail: ntiye@thaioilgroup.com  
**SAMPLING SOURCE:** THAI OIL PUBLIC COMPANY LIMITED  
 (42/1 MOO 1, SUKHUMVIT ROAD KM.124, TUNGSRUKA, SRIRACHA, CHONBURI 20230)  
**SAMPLE TYPE:** EFFLUENT  
**SAMPLING DATE:** MAY 11, 2022  
**SAMPLING TIME:** 08:00 HOUR  
**SAMPLING METHOD:** CRAB  
**SAMPLING BY:** CUSTOMER  
**ANALYZED BY:** MISS WORAKON PADSONGKARN

**RECEIVED DATE:** MAY 11, 2022  
**ANALYTICAL DATE:** MAY 12-13, 2022  
**REPORT NO.:** 2022-0037652  
**WORK NO.:** 2022-003222  
**ANALYSIS NO.:** T22A0003-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			วิเคราะห์ตามมาตรฐาน T22A0003-0004	
AMMONIA-NITROGEN	mg/L NH <sub>3</sub> -N	KJELDAHL METHOD (SM 4500-NH <sub>3</sub> B AND 4500-NH <sub>3</sub> C)	ND	1.0
METALS				
MERCURY	mg/L Hg	COLD VAPOUR AAS METHOD (SM 2112 B)	ND	0.0005
VOLATILE ORGANIC COMPOUNDS				
BENZENE	mg/L	PURGE AND TRAP GAS CHROMATOGRAPHY/MASS SPECTROMETRIC METHOD (SM 6200 B)	< 0.0002	0.0002
<b>SAMPLE CONDITION</b>				
WATER'S COLOUR/TURBID			YELLOW/CLEAR	
SEDIMENT			YELLOW	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>RD</sup> EDITION, 2017.

ND : NON-DETECTABLE.

*Peyawan V.*

(MISS PEYAWAN VITAYOTHA)  
LABORATORY SUPERVISOR

MAY 24, 2022





## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED  
**ADDRESS** : 55/21 ENERGY COMPLEX BUILDING A, 12TH FLOOR VIBHAVADI RANGSIT ROAD CHATLICHAK CHATLICHAK BANGKOK 10100  
**CONTACT INFORMATION** : TEL : 0 2840 8500 (EXT. 10502) e-mail : kitiya@thaioilgroup.com  
**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED  
 (42/1 MOO 1, SUNGJITVIT ROAD KM.124, TUNGKHA, SRIRACHA, CHONBURI 20230.)  
**SAMPLE TYPE** : EFFLUENT  
**SAMPLING DATE** : MAY 25, 2022  
**SAMPLING TIME** : 08:00 HOUR  
**SAMPLING METHOD** : GRAB  
**SAMPLING BY** : CUSTOMER  
**ANALYZED BY** : MISS WIRAKON PADSONGCHAN

**RECEIVED DATE** : MAY 25, 2022  
**ANALYTICAL DATE** : MAY 25-27, 2022  
**REPORT NO.** : 2022-041461  
**WORK NO.** : 2021-003232  
**ANALYSIS NO.** : T22A951-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			Substantiation T22A951-0004	
AMMONIA-NITROGEN	mg/L NH <sub>3</sub> -N	KJELDAHL METHOD (SM 4500-NH <sub>3</sub> B AND 4500-NH <sub>3</sub> C)	ND	10
METALS				
MERCURY	mg/L Hg	COLD VAPOUR ASS METHOD (SM 3112 B)	ND	0.0005
VOLATILE ORGANIC COMPOUNDS				
BENZENE	mg/L	PURGE AND TRAP GAS CHROMATOGRAPHY/MASS SPECTROMETRIC METHOD (SM 8200 B)	< 0.0002	0.0002
<b>SAMPLE CONDITION</b> WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLAY YELLOW	

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 22<sup>nd</sup> EDITION, 2017.

ND : NON-DETECTABLE.

*Benjawan V.*

(MISS BENJAWAN WIRYUTHAI)  
LABORATORY SUPERVISOR

JUNE 2, 2022



## ANALYSIS REPORT

**CUSTOMER NAME** : THAI OIL PUBLIC COMPANY LIMITED

**ADDRESS** : 555/1 ENERGY COMPLEX BUILDING A, 11TH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900

**CONTACT INFORMATION** : TEL : 0 3840 8500 EXT. 10552 e-mail : kitya@thoilgroup.com

**SAMPLING SOURCE** : THAI OIL PUBLIC COMPANY LIMITED  
(K21 PLO 1, SUKHUMVIT ROAD KM.124, TUNGSKULA, SRI RACHA, CHONBURI 20230.)

**SAMPLE TYPE** : EFFLUENT

**SAMPLING DATE** : JUNE 1, 2022

**SAMPLING TIME** : 08:00 HOUR

**SAMPLING METHOD** : DRAB

**SAMPLING BY** : CUSTOMER

**ANALYZED BY** : MISS WIRAKORN RASCHONGCHAI

**RECEIVED DATE** : JUNE 1, 2022

**ANALYTICAL DATE** : JUNE 1-10, 2022

**REPORT NO.** : 2022-US43842

**WORK NO.** : 2021-003222

**ANALYSIS NO.** : T22AK05-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			นำส่งตรวจวิเคราะห์ T22AK405-0004	
AMMONIA-NITROGEN	mg/L NH <sub>3</sub> -N	KJELDAHL METHOD (SM 4500-NH <sub>3</sub> B AND 4500-NH <sub>3</sub> C)	17	15
METALS				
MERCURY	mg/L Hg	COLD VAPOUR AAS METHOD (SM 3112 B)	0.0008	0.0005
VOLATILE ORGANIC COMPOUNDS				
BENZENE	mg/L	PURGE AND TRAP GAS CHROMATOGRAPHY/MASS SPECTROMETRIC METHOD (SM 8200 B)	< 0.0002	0.0002
SAMPLE CONDITION			COLOURLESS/CLEAR	
WATER'S COLOUR/TURBID				
SEDIMENT				

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>rd</sup> EDITION, 2017.



(MISS BENJAWAN VIKIYOTHAJ)  
LABORATORY SUPERVISOR

JUNE 13, 2022



COD Online						
วันที่	มกราคม	กุมภาพันธ์	มีนาคม	เมษายน	พฤษภาคม	มิถุนายน
1	32.83	36.34	30.75	24.11	22.10	76.00
2	29.34	35.72	32.44	24.21	21.81	68.23
3	27.51	35.50	33.98	24.52	22.60	62.72
4	27.31	36.47	34.94	26.44	24.97	63.63
5	26.39	37.25	36.38	28.90	23.75	64.18
6	25.66	36.87	37.64	31.39	25.27	61.68
7	26.08	36.50	38.21	31.13	28.12	53.05
8	25.65	37.84	37.39	28.20	27.98	48.24
9	27.01	38.11	36.88	28.47	27.93	45.31
10	31.58	40.13	35.35	31.06	23.17	48.72
11	33.13	40.16	34.58	27.28	22.40	60.51
12	30.69	41.25	35.88	26.30	21.25	60.61
13	28.45	39.67	34.72	27.31	21.19	58.61
14	29.20	37.73	31.84	29.36	21.90	60.60
15	33.09	36.68	31.65	31.10	21.38	64.90
16	36.32	34.58	31.75	32.11	22.38	66.74
17	38.04	34.35	31.91	32.97	24.29	59.40
18	38.80	33.45	30.19	34.44	22.12	52.61
19	37.96	31.69	28.96	33.30	29.39	51.95
20	35.97	33.27	29.54	30.47	40.86	53.77
21	35.67	33.37	29.29	33.46	49.14	60.86
22	37.15	31.46	28.86	32.56	54.36	65.99
23	38.80	30.07	28.53	32.21	59.70	63.58
24	41.13	31.07	28.62	30.90	59.91	61.78
25	42.32	27.90	29.40	30.42	63.35	54.27
26	42.52	28.79	29.90	30.57	65.76	53.60
27	42.16	29.78	29.73	28.38	65.59	55.37
28	40.62	29.54	29.34	26.79	65.06	59.30
29	38.91		32.32	23.97	70.39	58.13
30	35.89		30.49	22.02	76.67	51.13
31	35.87		27.01		77.77	

ตารางผลวิเคราะห์ปริมาณสารมลพิษในตัวอย่างน้ำผ่านหน่วย API (ก่อนเข้าระบบบำบัด)

Date	Flowrate m3/h	Temp deg C	pH blank	TSS mg/l	TDS mg/l	HCN mg/l	Pb mg/l	BOD mg/l	COD mg/l	O&G mg/l	Sulfide mg/l	Ammonia* mg/l	Phenol mg/l	Benzene* mg/l	Mercury* mg/L Hg
5-ม.ค.-22	281	32.13	8.9	20	500	0.03	<0.05	121	1,070	74	2	13.9	15	18.5	<0.0005
12-ม.ค.-22	284	32.11	9.1	36	480	0.04	<0.05	89	470	41	2	-	18	-	-
19-ม.ค.-22	295	34.57	10.5	54	1,600	0.05	<0.05	141	790	35	8	26.8	10	6.12	0.0020
26-ม.ค.-22	286	34.43	9.4	51	1,550	0.05	<0.05	231	1,150	65	8	-	12	-	-
2-ก.พ.-22	257	34.49	9.6	83	1,150	0.06	<0.05	221	800	92	6	-	12	-	-
9-ก.พ.-22	223	33.10	9.7	70	1,250	0.05	<0.05	260	950	216	6	26.6	11	25.0	0.0059
16-ก.พ.-22	วันหยุดราชการ														
23-ก.พ.-22	242	35.27	11.0	36	1,150	0.05	<0.05	142	1,000	45	17	30.6	14	20.0	0.0217
2-มี.ค.-22	237	32.92	10.6	30	1,300	0.05	<0.05	142	890	51	13	26.6	14	10.3	0.0209
9-มี.ค.-22	272	33.53	9.8	26	1,050	0.05	<0.05	142	640	69	3	-	12	-	-
16-มี.ค.-22	283	34.55	9.4	72	1,400	0.05	<0.05	226	1,320	80	4	21.5	12	24.5	0.0119
23-มี.ค.-22	296	32.69	9.3	28	220	0.05	<0.05	164	620	80	10	-	12	-	-
30-มี.ค.-22	254	33.80	9.1	44	760	0.04	<0.05	150	410	18	1	-	11	-	-
6-เม.ย.-22	วันหยุดราชการ														
13-เม.ย.-22	วันหยุดราชการ														
20-เม.ย.-22	285	34.22	8.8	14	830	0.05	<0.05	105	1,810	34	8	14.9	12	14.9	0.0012
27-เม.ย.-22	290	35.70	8.4	64	510	0.05	<0.05	108	2,150	100	4	12.3	12	15.0	0.0008
4-พ.ค.-22	H														
11-พ.ค.-22	282	33.04	9.3	64	400	0.05	<0.05	123	1,460	56	3	12.3	12	9.42	<0.0005
18-พ.ค.-22	367	32.89	8.6	45	650	0.05	<0.05	150	560	79	25	-	12	-	-
25-พ.ค.-22	315	35.06	9.0	113	1,050	0.05	<0.05	75	950	102	0.3	24.9	12	6.01	0.0067
1-มิ.ย.-22	295	38.60	8.6	58	2,900	0.05	<0.05	152	730	46	6	22.0	12	17.3	0.0465
8-มิ.ย.-22	276	37.78	8.3	30	1,400	0.05	<0.05	156	600	76	7	-	12	-	-
15-มิ.ย.-22	295	31.05	8.4	63	2,900	0.05	<0.05	162	740	73	4	31.3	14	24.4	0.0007
22-มิ.ย.-22	283	30.89	8.6	70	1,400	0.05	<0.05	170	600	70	22	-	10	-	-
29-มิ.ย.-22	276	36.73	8.1	67	2,750	0.05	<0.05	109	740	39	6	-	12	-	-

\*ผลตรวจวัดจาก UAE

ตารางวิเคราะห์ปริมาณสารมลพิษในตัวอย่างน้ำทิ้งผ่านระบบบำบัดแล้ว

Date	Flowrate m3/h	Temp deg C	pH blank	TSS mg/l	TDS mg/l	HCN mg/l	Pb mg/l	BOD mg/l	COD mg/l	O&G mg/l	Sulfide mg/l	Ammonia* mg/l	Phenol mg/l	Benzene* mg/l	Mercury* mg/L Hg
5-ม.ค.-22	312	26.96	7.7	12	860	<0.02	<0.05	5	26.8	0.5	0.3	<1.5	0.3	<0.0002	<0.0005
12-ม.ค.-22	316	27.38	7.5	13	880	<0.02	<0.05	9	28.0	0.6	0.2	-	0.3	-	-
19-ม.ค.-22	308	29.32	7.4	14	880	<0.02	<0.05	11	23.0	0.5	0.2	<1.5	0.4	<0.0002	<0.0005
26-ม.ค.-22	300	29.99	7.3	16	1,100	<0.02	<0.05	10	26.9	<0.5	0.3	-	0.4	-	-
2-ก.พ.-22	260	30.53	7.8	13	970	<0.02	<0.05	9	22.3	0.6	0.2	-	0.3	-	-
9-ก.พ.-22	219	30.12	7.4	17	500	<0.02	<0.05	12	39.7	0.9	0.5	<1.5	0.4	<0.0002	<0.0005
16-ก.พ.-22	วันหยุดราชการ														
23-ก.พ.-22	242	29.55	7.7	4.3	1,100	<0.02	<0.05	9	23.1	1.2	0.7	<1.5	0.6	<0.0002	0.0007
2-มี.ค.-22	238	29.70	7.6	6.0	400	<0.02	<0.05	10	40.8	0.9	0.7	<1.5	0.6	<0.0002	<0.0005
9-มี.ค.-22	273	29.00	8.0	14	980	<0.02	<0.05	9	30.5	1.4	0.5	-	0.4	-	-
16-มี.ค.-22	283	29.80	7.5	12	380	<0.02	<0.05	7	27.0	0.5	0.2	<1.5	0.4	<0.0002	0.0005
23-มี.ค.-22	291	28.50	7.8	17	660	<0.02	<0.05	8	28.0	<0.5	0.2	-	0.4	-	-
30-มี.ค.-22	294	29.36	7.5	16	660	<0.02	<0.05	8	29.7	0.6	0.7	-	0.3	-	-
6-เม.ย.-22	วันหยุดราชการ														
13-เม.ย.-22	วันหยุดราชการ														
20-เม.ย.-22	281	28.95	7.6	8.4	930	<0.02	<0.05	10	45.2	1.3	0.7	<1.5	0.4	<0.0002	0.0014
27-เม.ย.-22	284	31.51	7.5	16	570	<0.02	<0.05	10	29.8	1.1	0.6	<1.5	0.4	<0.0002	<0.0005
4-พ.ค.-22	H														
11-พ.ค.-22	285	28.20	7.4	10	36	<0.02	<0.05	5	30.3	0.6	0.4	<1.5	0.4	<0.0002	<0.0005
18-พ.ค.-22	370	30.16	7.6	11	790	<0.02	<0.05	5	24.0	0.6	0.6	-	0.4	-	-
25-พ.ค.-22	327	31.30	7.4	12	860	<0.02	<0.05	8	47.0	1.0	0.6	<1.5	0.4	<0.0002	<0.0005
1-มิ.ย.-22	310	31.63	7.4	11	1900	<0.02	<0.05	10	64.4	0.6	0.7	1.7	0.4	<0.0002	0.0006
8-มิ.ย.-22	310	30.46	7.5	6.8	790	<0.02	<0.05	8	38.4	1.6	0.6	-	0.4	-	-
15-มิ.ย.-22	303	31.01	7.6	17	1050	<0.02	<0.05	12	52.1	1.3	0.4	<1.5	0.6	<0.0002	<0.0005
22-มิ.ย.-22	317	30.66	7.2	43	1450	<0.02	<0.05	11	64	2.0	0.4	-	0.5	-	-
29-มิ.ย.-22	304	30.94	7.5	8	1400	<0.02	<0.05	10	59.7	1.0	0.4	-	0.4	-	-
มาตรฐาน		40	5.5-9.0	50	น้ำทะเล+5000	0.2	0.2	20	120	5	1	100	1	-	0.005

\*ผลตรวจวัดจาก UAE



ที่ สมญ.09/0247

วันที่ 28 เมษายน 2565

เรื่อง รายงานผลการตรวจวัดคุณภาพน้ำทิ้งที่ผ่านระบบบำบัดและท่อน้ำทิ้งน้ำทะเล รวมถึงผลการติดตามตรวจสอบคุณภาพน้ำทิ้งทะเล ประจำปีเดือนมกราคมถึงเดือนมีนาคม 2565

เรียน สหิบริกรรมเจ้าท่า

อ้างถึง 1. หนังสือรับรองตรวจสภาพท่าเทียบเรือ ขนาดเกินกว่า 500 ตันกรอสส์ ท่าหมายเลข 1 - 8 ท่าผูกจอดเรือ CDM, SBM-1 และ SBM-2 เลขที่ 102 ถึง 112/2564 ของบริษัท ไทยออยล์ จำกัด (มหาชน)  
2. ใบอนุญาตให้ทิ้งน้ำหรือระบายน้ำออกสู่ทะเล เลขที่ คค 0310/สปว 411/2564

สิ่งที่ส่งมาด้วย รายงานผลการตรวจวัดคุณภาพน้ำทิ้งที่ผ่านระบบบำบัดและท่อน้ำทิ้งน้ำทะเล ประจำปีเดือนมกราคมถึงเดือนมีนาคม 2565 รวมถึงผลการติดตามตรวจสอบคุณภาพน้ำทิ้งทะเลเดือนพฤศจิกายน 2564

ตามหนังสือรับรองตรวจสภาพท่าเทียบเรือท่าเทียบเรือที่อ้างถึง 1. กรมเจ้าท่าได้อนุญาตให้บริษัท ไทยออยล์ จำกัด (มหาชน) ใช้ท่าเทียบเรือขนาดเกินกว่า 500 ตันกรอสส์ ท่าหมายเลข 1 - 8 และท่าผูกจอดเรือ CDM, SBM-1 และ SBM-2 โดยมีเงื่อนไขให้บริษัทฯ ต้องติดตามตรวจสอบคุณภาพน้ำทิ้งจากทุกจุดที่ปล่อยออกจากโครงการท่อส่งหล่องน้ำ โดยดัชนีคุณภาพที่ตรวจวัด ได้แก่ ความเป็นกรดด่าง ปริมาณความสกปรกหรือบีโอดี (BOD5) ปริมาณสารแขวนลอย และปริมาณน้ำมันและไขมัน โดยทำการตรวจวัด 4 เดือนต่อครั้งและต้องรายงานผลการวิเคราะห์ให้กรมเจ้าท่าทราบ และตามใบอนุญาตที่อ้างถึง 2. กรมเจ้าท่าได้อนุญาตให้บริษัทฯ เททิ้งหรือระบายน้ำทิ้งตามค่ามาตรฐานควบคุมการระบายน้ำที่กำหนดไว้ในประกาศกระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อมหรือประกาศกรมเจ้าท่าออกสู่ทะเล รวมถึงให้บริษัทฯ ต้องตรวจสอบคุณภาพน้ำทิ้งอย่างน้อย สัปดาห์ละ 1 ครั้ง และรายงานให้กรมเจ้าท่าทราบทุก 3 เดือน ตามความละเอียดของแบบยื่น

ในการนี้ บริษัทฯ ขอเรียนว่าได้ปฏิบัติตามเงื่อนไขดังกล่าวอย่างครบถ้วน พร้อมทั้งได้จัดทำรายงานผลการตรวจวัดคุณภาพน้ำทิ้งที่ผ่านระบบบำบัดและท่อน้ำทิ้งน้ำทะเล ประจำปีเดือนมกราคมถึงเดือนมีนาคม 2565 รวมถึงผลการติดตามตรวจสอบคุณภาพน้ำทิ้งทะเลเดือนพฤศจิกายน 2564 เสร็จเรียบร้อยแล้ว ทั้งนี้ บริษัทฯ จึงขอแนบส่งรายงานฯ ดังกล่าว เพื่อรายงานผลการปฏิบัติตามเงื่อนไข โดยมีรายละเอียดปรากฏตามสิ่งที่ส่งมาด้วย

จึงเรียนมาเพื่อโปรดทราบ

ได้พิมพ์หนังสือและแนบ  
ให้เรียนถึงกรมเจ้าท่า  
จริง  
วันที่ 28 เมษายน 65  
(นายโรจน์ มีนะพันธ์)

ขอแสดงความนับถือ  
บริษัท ไทยออยล์ จำกัด (มหาชน)

(นายโรจน์ มีนะพันธ์)  
ผู้รับผิดชอบงาน

แผนกธุรกิจสัมพันธ์

โทร 0 2797 2999 ต่อ 43031

บริษัท ไทยออยล์ จำกัด (มหาชน) | 60th Anniversary  
555/1 ถนนสุขุมวิท แขวงคลองเตย เขต 11 กรุงเทพมหานคร 10600  
www.thai-oil.com | 12880

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555/1 Energy Complex Building A, 11th Floor, Witthayu-Rangsit Road,  
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โรงงาน: 421 หมู่ 1 ถนนสุขุมวิท กม. 124 ตำบลคลองเตย อำเภอคลองเตย  
จังหวัดกรุงเทพฯ 10110

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Chonburi 36100, Thailand  
Telephone: +662 5847-8500, +662 5825 9000, +662 5825 1000  
Fax: +662 5825 1004, +662 5825 1444, +662 5825 9019



[illegible]

UDC 62-50+78.01+78.02

[illegible]

എന്നും അദ്ദേഹം പറയുകയും ചെയ്തു.

- [illegible]

(1)  $\frac{1}{2} \log \frac{1}{2}$  (2)  $\frac{1}{2} \log \frac{1}{2}$  (3)  $\frac{1}{2} \log \frac{1}{2}$  (4)  $\frac{1}{2} \log \frac{1}{2}$

॥ ॐ नमो भगवते वासुदेवाय ॥

[illegible]

doi:10.1017/S0022292412001653

$$\frac{d}{dt} \left( \frac{\partial L}{\partial \dot{x}} \right) = \frac{\partial L}{\partial x}, \quad \text{where } L = T - V.$$

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K. H. M.

**ผลการตรวจสอบการดำเนินงานตามแผนปฏิบัติการประจำปี ๒๕๖๖ : แผนปฏิบัติการ ประจำปี ๒๕๖๖ : แผนปฏิบัติการประจำปี (ภาคชนบท)**  
**โครงการประจำปีเพื่อสร้างเกษตรกรผู้ปลูกผลไม้คุณภาพสู่ตลาด (ภาคชนบท) ระยะที่ ๒ (ปีงบประมาณ ๒๕๖๖) ประจำปีงบประมาณ ๒๕๖๖**

จุด /	การดำเนินงานเป็นค่า	จุดรวม	แหล่งปฏิบัติงานทั้งหมด		จุดปฏิบัติงานทั้งหมด	พื้นที่	จุดปฏิบัติงานทั้งหมด	ไร่	ไร่/ไร่/ไร่
	(ไร่)	(ไร่/ไร่/ไร่)	(ไร่/ไร่)	(ไร่/ไร่)	(ไร่/ไร่/ไร่/ไร่)	(ไร่/ไร่/ไร่/ไร่)	(ไร่/ไร่/ไร่/ไร่)	(ไร่/ไร่)	(ไร่/ไร่/ไร่/ไร่)
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๑. ผลการดำเนินงาน : ผลการดำเนินงานตามแผนปฏิบัติการประจำปี ๒๕๖๖ : ผลการดำเนินงานตามแผนปฏิบัติการประจำปี ๒๕๖๖

ผลการดำเนินงานตามแผนปฏิบัติการประจำปี ๒๕๖๖ : ผลการดำเนินงานตามแผนปฏิบัติการประจำปี ๒๕๖๖

๒. ผลการดำเนินงานตามแผนปฏิบัติการประจำปี ๒๕๖๖ : ผลการดำเนินงานตามแผนปฏิบัติการประจำปี ๒๕๖๖

ผู้จัดทำแผน : ...  
 (ชื่อและนามสกุล : ...)  
 ตำแหน่ง : ...

ผู้จัดทำแผน : ...  
 (ชื่อและนามสกุล : ...)  
 ตำแหน่ง : ...

ผู้จัดทำแผน : ...  
 (ชื่อและนามสกุล : ...)  
 ตำแหน่ง : ...

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