

ANALYSIS REPORT

CUSTOMER NAME : TOP SPP COMPANY LIMITED
ADDRESS : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 08 1556 0557 e-mail : kitiya@thaioilgroup.com
SAMPLING SOURCE : TOP SPP COMPANY LIMITED (42/1 MOO 1 SUKHUMVIT ROAD KM.124 THUNG SUKHLA SI RACHA CHON BURI 20230)
SAMPLE TYPE : STACK
SAMPLING DATE : MAY 10, 2022
SAMPLING TIME : 10:50 HOUR
SAMPLING BY : MR KANNIKORN RASO ๖-145-๖-0037
ANALYZED BY : MISS SUWAN KONGTHONG ๖-145-๖-0025

RECEIVED DATE : MAY 13, 2022
ANALYTICAL DATE : MAY 13-19, 2022
REPORT NO. : 2022-U038918
WORK NO. : 2021-003226
ANALYSIS NO. : T22AJ086-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			TOC#19 G-5019 T22AJ086-0002	
			ACTUAL OXYGEN	7% OXYGEN
OXIDE OF NITROGEN AS NITROGEN DIOXIDE	ppm	ABSORPTION, PHENOLDISULFONIC ACID METHOD (US EPA METHOD 7)	23.2	57.3
SAMPLE CONDITION			COMPLETE	

REMARK

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

Budsakorn ✓
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(MISS BUDSAKORN LERDPANUMAS)
LABORATORY SUPERVISOR
๖-145-๖-0011
MAY 30, 2022



ANALYSIS REPORT

CUSTOMER NAME : TOP SPP COMPANY LIMITED
ADDRESS : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 08 1556 0557 e-mail : kitiya@thaioilgroup.com
SAMPLING SOURCE : TOP SPP COMPANY LIMITED (42/1 MOO 1 SUKHUMVIT ROAD KM.124 THUNG SUKHLA SI RACHA CHON BURI 20230)
SAMPLE TYPE : STACK
SAMPLING DATE : MAY 10, 2022
SAMPLING TIME : 11:25-11:45 HOUR
SAMPLING BY : MR KANNIKORN RASO ๓-145-๓-0037
ANALYZED BY : MISS SUWAN KONGTHONG ๓-145-๓-0025

RECEIVED DATE : MAY 13, 2022
ANALYTICAL DATE : MAY 13-19, 2022
REPORT NO. : 2022-U038917
WORK NO. : 2021-003226
ANALYSIS NO. : T22AJ086-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			TOC#19 G-5019 T22AJ086-0001	
			ACTUAL OXYGEN	7% OXYGEN
SULPHUR DIOXIDE	ppm	ABSORPTION, BARIUM-THORIN TITRIMETRIC METHOD AT SITE (US EPA METHOD 6)	< 1.30	< 1.30
SAMPLE CONDITION			COMPLETE	

REMARK

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

Budsakorn ✓

(MISS BUDSAKORN LERDPANUMAS)
LABORATORY SUPERVISOR
๓-145-๓-0011
MAY 30, 2022



ANALYSIS REPORT

CUSTOMER NAME : TOP SPP COMPANY LIMITED
ADDRESS : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 08 1556 0557 e-mail : kitiya@thaioilgroup.com
SAMPLING SOURCE : TOP SPP COMPANY LIMITED (42/1 MOO 1 SUKHUMVIT ROAD KM.124 THUNG SUKHLA SI RACHA CHON BURI 20230)
SAMPLE TYPE : STACK
SAMPLING DATE : MAY 12, 2022
SAMPLING TIME : 11:20-12:20 HOUR
SAMPLING BY : MR KANNIKORN RASO ๖-145-๖-0037
ANALYZED BY : MISS SUWAN KONGTHONG ๖-145-๖-0025

RECEIVED DATE : MAY 13, 2022
ANALYTICAL DATE : MAY 13-19, 2022
REPORT NO. : 2022-U038920
WORK NO. : 2021-003226
ANALYSIS NO. : T22AJ086-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			TOC#23 G-5051 T22AJ086-0003	
			ACTUAL OXYGEN	7% OXYGEN
SULPHUR 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)	1.78	4.24
SAMPLE CONDITION			COMPLETE	

REMARK

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

Budsakorn ✓

(MISS BUDSAKORN LERDPANUMAS)
LABORATORY SUPERVISOR
๖-145-๖-0011
MAY 30, 2022



ANALYSIS REPORT

CUSTOMER NAME : TOP SPP COMPANY LIMITED
ADDRESS : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 08 1556 0557 e-mail : kitiya@thaioilgroup.com
SAMPLING SOURCE : TOP SPP COMPANY LIMITED (42/1 MOO 1 SUKHUMVIT ROAD KM.124 THUNG SUKHLA SI RACHA CHON BURI 20230)
SAMPLE TYPE : STACK
SAMPLING DATE : MAY 12, 2022
SAMPLING TIME : 11:15-12:10 HOUR
SAMPLING BY : MR KANNIKORN RASO ๖-145-๖-0037
ANALYZED BY : MISS SUWAN KONGTHONG ๖-145-๖-0025

RECEIVED DATE : MAY 13, 2022
ANALYTICAL DATE : MAY 13-19, 2022
REPORT NO. : 2022-U038923
WORK NO. : 2021-003226
ANALYSIS NO. : T22AJ086-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			TOC#24 G-5052 T22AJ086-0004	
			ACTUAL OXYGEN	7% OXYGEN
SULPHUR 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)	1.86	4.48
SAMPLE CONDITION			COMPLETE	

REMARK

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

Budsakorn ✓

(MISS BUDSAKORN LERDPANUMAS)
LABORATORY SUPERVISOR
๖-145-๖-0011
MAY 30, 2022



ANALYSIS REPORT

CUSTOMER NAME : TOP SPP COMPANY LIMITED
ADDRESS : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 08 1556 0557 e-mail : kitiya@thaioilgroup.com
SAMPLING SOURCE : TOP SPP COMPANY LIMITED (42/1 MOO 1 SUKHUMVIT ROAD KM.124 THUNG SUKHLA SI RACHA CHON BURI 20230)
SAMPLE TYPE : STACK
SAMPLING DATE : MAY 12, 2022
SAMPLING TIME : 12:30-13:35 HOUR
SAMPLING BY : MR KANNIKORN RASO ๓-145-๓-0037
ANALYZED BY : MISS SUWAN KONGTHONG ๓-145-๓-0025

RECEIVED DATE : MAY 13, 2022
ANALYTICAL DATE : MAY 13-19, 2022
REPORT NO. : 2022-U038925
WORK NO. : 2021-003226
ANALYSIS NO. : T22AJ086-0005

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			TOC#25 G-5053 T22AJ086-0005	
			ACTUAL OXYGEN	7% OXYGEN
SULPHUR 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)	2.87	5.89
SAMPLE CONDITION			COMPLETE	

REMARK

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

Budsakorn ✓

(MISS BUDSAKORN LERDPANUMAS)
LABORATORY SUPERVISOR
๓-145-๓-0011
MAY 30, 2022



ANALYSIS REPORT

CUSTOMER NAME : TOP SPP COMPANY LIMITED
ADDRESS : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 08 1556 0557 e-mail : kitiya@thaioilgroup.com
SAMPLING SOURCE : TOP SPP COMPANY LIMITED (42/1 MOO 1 SUKHUMVIT ROAD KM.124 THUNG SUKHLA SI RACHA CHON BURI 20230)
SAMPLE TYPE : STACK
SAMPLING DATE : MAY 12, 2022
SAMPLING TIME : 11:40-12:50 HOUR
SAMPLING BY : MR KANNIKORN RASO ๓-145-๓-0037
ANALYZED BY : MISS SUWAN KONGTHONG ๓-145-๓-0025

RECEIVED DATE : MAY 13, 2022
ANALYTICAL DATE : MAY 13-19, 2022
REPORT NO. : 2022-U038927
WORK NO. : 2021-003226
ANALYSIS NO. : T22AJ086-0006

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			TOC#26 G-5054 T22AJ086-0006	
			ACTUAL OXYGEN	7% OXYGEN
SULPHUR 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)	5.15	12.5
SAMPLE CONDITION			COMPLETE	

REMARK

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

Budsakorn ✓

(MISS BUDSAKORN LERDPANUMAS)
LABORATORY SUPERVISOR
๓-145-๓-0011
MAY 30, 2022



ผลการติดตามตรวจสอบคุณภาพอากาศที่ระบายออกจากปล่องแบบต่อเนื่อง ระหว่างเดือนมกราคม-มิถุนายน 2565

วันที่	เวลา	TOPSPP (G-5019) 'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)
1	0:00:00	Shutdown	Shutdown	Shutdown	0.54	66.04	15.58	0.00	70.25	15.33	2.33	67.21	15.45	2.89	74.32	13.50	0.00	58.92	15.20
1	1:00:00	Shutdown	Shutdown	Shutdown	0.44	64.71	15.58	0.00	71.09	15.18	2.50	67.34	15.39	2.78	75.86	13.35	0.00	58.75	15.13
1	2:00:00	Shutdown	Shutdown	Shutdown	0.48	65.95	15.57	0.00	68.39	15.34	2.53	67.36	15.53	2.81	75.71	13.34	0.00	59.52	15.11
1	3:00:00	Shutdown	Shutdown	Shutdown	0.24	65.56	15.56	0.00	67.31	15.41	2.60	66.80	15.54	2.87	75.27	13.40	0.00	60.07	15.15
1	4:00:00	Shutdown	Shutdown	Shutdown	0.06	65.73	15.56	0.03	67.56	15.43	2.79	67.06	15.52	2.88	75.89	13.40	0.00	60.27	15.17
1	5:00:00	Shutdown	Shutdown	Shutdown	0.12	65.03	15.56	0.02	67.58	15.37	2.79	66.92	15.46	2.83	78.42	13.51	0.00	62.18	15.13
1	6:00:00	Shutdown	Shutdown	Shutdown	0.45	67.41	15.55	0.02	67.42	15.37	2.59	66.67	15.50	2.76	76.75	13.55	0.00	63.66	15.21
1	7:00:00	Shutdown	Shutdown	Shutdown	0.00	66.12	15.55	0.00	66.03	15.43	2.81	65.41	15.58	2.87	75.78	13.64	0.00	64.35	15.20
1	8:00:00	Shutdown	Shutdown	Shutdown	0.00	66.97	15.56	0.00	91.49	14.61	2.83	65.24	15.57	2.92	76.67	13.55	0.00	96.79	14.48
1	9:00:00	Shutdown	Shutdown	Shutdown	0.00	65.70	15.56	0.00	96.53	14.59	2.62	66.37	15.53	2.77	75.57	13.53	0.00	97.21	14.39
1	10:00:00	Shutdown	Shutdown	Shutdown	0.00	67.01	15.55	0.00	96.22	14.60	2.33	94.19	14.69	2.89	76.40	13.62	0.00	98.31	14.39
1	11:00:00	Shutdown	Shutdown	Shutdown	0.00	65.20	15.55	0.00	96.90	14.60	2.20	99.59	14.64	2.81	76.19	13.48	0.00	97.12	14.39
1	12:00:00	Shutdown	Shutdown	Shutdown	0.24	64.63	15.53	0.00	95.82	14.59	1.81	96.98	14.64	2.98	75.30	13.39	0.00	97.15	14.38
1	13:00:00	Shutdown	Shutdown	Shutdown	0.00	95.41	14.63	0.00	93.94	14.57	2.01	98.89	14.65	2.83	74.26	13.32	0.00	96.75	14.38
1	14:00:00	Shutdown	Shutdown	Shutdown	0.00	99.67	14.64	0.00	93.70	14.57	1.99	100.04	14.67	2.68	74.40	13.30	0.00	97.41	14.38
1	15:00:00	Shutdown	Shutdown	Shutdown	0.00	99.77	14.62	0.00	92.78	14.56	1.80	101.50	14.67	2.87	73.94	13.36	0.00	97.81	14.37
1	16:00:00	Shutdown	Shutdown	Shutdown	0.00	98.67	14.61	0.00	94.11	14.56	2.01	101.12	14.67	2.84	73.40	13.37	0.00	99.09	14.39
1	17:00:00	Shutdown	Shutdown	Shutdown	0.00	96.51	14.58	0.00	92.16	14.54	1.84	102.88	14.69	2.74	72.55	13.37	0.00	98.19	14.39
1	18:00:00	Shutdown	Shutdown	Shutdown	0.00	95.87	14.59	0.00	92.96	14.56	1.87	102.61	14.68	2.44	87.77	12.80	0.00	97.62	14.39
1	19:00:00	Shutdown	Shutdown	Shutdown	0.00	98.88	14.58	0.00	94.36	14.56	2.13	102.56	14.67	2.43	96.22	12.65	0.00	101.42	14.43
1	20:00:00	Shutdown	Shutdown	Shutdown	0.00	94.09	14.55	0.00	93.20	14.56	2.20	101.62	14.65	2.26	96.67	12.68	0.00	100.11	14.43
1	21:00:00	Shutdown	Shutdown	Shutdown	0.00	94.71	14.54	0.00	93.01	14.55	2.23	102.08	14.65	2.29	97.04	12.69	0.00	99.54	14.43
1	22:00:00	Shutdown	Shutdown	Shutdown	0.00	97.41	14.58	0.00	93.21	14.55	2.30	99.50	14.62	2.40	94.84	12.75	0.00	99.57	14.43
1	23:00:00	Shutdown	Shutdown	Shutdown	0.00	97.95	14.57	0.00	83.38	14.80	2.82	72.79	15.43	2.65	73.85	13.29	0.00	76.14	14.89
2	0:00:00	Shutdown	Shutdown	Shutdown	0.00	99.00	14.56	0.00	64.54	15.39	Shutdown	Shutdown	Shutdown	2.64	73.87	13.31	0.00	62.70	15.21
2	1:00:00	Shutdown	Shutdown	Shutdown	0.00	100.52	14.56	0.00	64.57	15.42	Shutdown	Shutdown	Shutdown	2.78	75.06	13.37	0.00	65.13	15.12
2	2:00:00	Shutdown	Shutdown	Shutdown	0.00	98.61	14.56	0.00	63.13	15.42	Shutdown	Shutdown	Shutdown	2.70	74.96	13.13	0.00	63.92	15.12
2	3:00:00	Shutdown	Shutdown	Shutdown	0.12	98.95	14.55	0.00	63.05	15.44	Shutdown	Shutdown	Shutdown	2.59	73.67	13.15	0.00	64.81	15.14
2	4:00:00	Shutdown	Shutdown	Shutdown	0.00	98.10	14.55	0.00	63.70	15.41	Shutdown	Shutdown	Shutdown	2.82	74.18	13.36	0.00	63.65	15.17
2	5:00:00	Shutdown	Shutdown	Shutdown	0.27	97.45	14.54	0.00	64.57	15.36	Shutdown	Shutdown	Shutdown	2.81	75.61	13.30	0.00	63.42	15.20
2	6:00:00	Shutdown	Shutdown	Shutdown	0.29	96.72	14.54	0.00	64.02	15.39	Shutdown	Shutdown	Shutdown	11.42	97.28	13.65	0.00	63.65	15.26
2	7:00:00	Shutdown	Shutdown	Shutdown	0.58	96.09	14.54	0.00	63.35	15.42	Shutdown	Shutdown	Shutdown	4.52	79.42	13.55	0.00	64.65	15.28
2	8:00:00	Shutdown	Shutdown	Shutdown	0.93	96.10	14.55	0.00	88.36	14.57	Shutdown	Shutdown	Shutdown	3.24	77.68	13.49	0.00	98.32	14.48
2	9:00:00	Shutdown	Shutdown	Shutdown	0.78	98.85	14.56	0.00	93.22	14.54	Shutdown	Shutdown	Shutdown	2.85	77.68	13.44	0.00	103.13	14.51
2	10:00:00	Shutdown	Shutdown	Shutdown	0.87	80.32	14.80	0.00	93.59	14.55	Shutdown	Shutdown	Shutdown	2.88	77.99	13.49	0.00	102.02	14.49
2	11:00:00	Shutdown	Shutdown	Shutdown	1.58	67.03	15.38	0.00	94.06	14.55	Shutdown	Shutdown	Shutdown	2.76	78.87	13.47	0.00	101.61	14.49
2	12:00:00	Shutdown	Shutdown	Shutdown	1.79	64.80	15.40	0.00	93.14	14.54	Shutdown	Shutdown	Shutdown	2.66	79.28	13.39	0.00	99.60	14.47
2	13:00:00	Shutdown	Shutdown	Shutdown	1.55	85.93	14.62	0.00	93.64	14.54	Shutdown	Shutdown	Shutdown	2.69	81.18	13.35	0.00	96.59	14.47
2	14:00:00	Shutdown	Shutdown	Shutdown	1.54	94.82	14.53	0.00	94.17	14.55	Shutdown	Shutdown	Shutdown	2.63	81.41	13.34	0.00	98.20	14.44
2	15:00:00	Shutdown	Shutdown	Shutdown	1.53	95.74	14.53	0.00	92.61	14.54	Shutdown	Shutdown	Shutdown	2.59	80.73	13.34	0.00	97.17	14.43
2	16:00:00	Shutdown	Shutdown	Shutdown	1.21	95.34	14.53	0.00	91.17	14.53	Shutdown	Shutdown	Shutdown	2.61	81.36	13.35	0.00	101.34	14.47
2	17:00:00	Shutdown	Shutdown	Shutdown	1.10	97.18	14.53	0.00	94.81	14.55	Shutdown	Shutdown	Shutdown	2.68	81.46	13.42	0.00	100.02	14.43
2	18:00:00	Shutdown	Shutdown	Shutdown	0.97	98.22	14.55	0.00	95.94	14.56	Shutdown	Shutdown	Shutdown	2.53	97.81	12.90	0.00	100.81	14.41
2	19:00:00	Shutdown	Shutdown	Shutdown	1.03	96.92	14.54	0.00	96.32	14.56	Shutdown	Shutdown	Shutdown	2.47	110.34	12.68	0.00	100.89	14.42
2	20:00:00	Shutdown	Shutdown	Shutdown	1.50	95.27	14.53	0.00	94.80	14.56	Shutdown	Shutdown	Shutdown	2.42	111.73	12.68	0.00	98.67	14.41
2	21:00:00	Shutdown	Shutdown	Shutdown	1.61	96.19	14.52	0.00	92.86	14.55	Shutdown	Shutdown	Shutdown	2.33	110.65	12.71	0.00	101.44	14.46
2	22:00:00	Shutdown	Shutdown	Shutdown	1.73	91.20	14.63	0.00	93.99	14.55	Shutdown	Shutdown	Shutdown	2.26	105.28	12.80	0.00	102.37	14.47
2	23:00:00	Shutdown	Shutdown	Shutdown	2.23	62.42	15.40	0.00	81.87	14.79	Shutdown	Shutdown	Shutdown	2.39	83.33	13.32	0.00	80.49	14.91
3	0:00:00	Shutdown	Shutdown	Shutdown	2.30	63.67	15.33	0.00	65.29	15.33	Shutdown	Shutdown	Shutdown	2.33	82.77	13.31	Shutdown	Shutdown	Shutdown

วันที่	เวลา	TOPSP (G-5019) 'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)
3	1:00:00	Shutdown	Shutdown	Shutdown	2.42	63.32	15.37	0.00	65.21	15.34	Shutdown	Shutdown	Shutdown	2.54	87.29	13.27	Shutdown	Shutdown	Shutdown
3	2:00:00	Shutdown	Shutdown	Shutdown	2.41	63.20	15.37	0.00	63.24	15.37	Shutdown	Shutdown	Shutdown	2.45	85.64	13.33	Shutdown	Shutdown	Shutdown
3	3:00:00	Shutdown	Shutdown	Shutdown	2.24	63.87	15.26	0.00	63.95	15.37	Shutdown	Shutdown	Shutdown	2.79	86.34	13.33	Shutdown	Shutdown	Shutdown
3	4:00:00	Shutdown	Shutdown	Shutdown	2.38	63.95	15.28	0.00	63.54	15.37	Shutdown	Shutdown	Shutdown	2.90	84.62	13.45	Shutdown	Shutdown	Shutdown
3	5:00:00	Shutdown	Shutdown	Shutdown	2.33	62.90	15.33	0.00	64.12	15.39	Shutdown	Shutdown	Shutdown	2.58	84.07	13.46	Shutdown	Shutdown	Shutdown
3	6:00:00	Shutdown	Shutdown	Shutdown	2.51	64.46	15.35	0.00	63.76	15.38	Shutdown	Shutdown	Shutdown	2.24	83.41	13.43	Shutdown	Shutdown	Shutdown
3	7:00:00	Shutdown	Shutdown	Shutdown	2.35	62.99	15.38	0.00	62.96	15.42	Shutdown	Shutdown	Shutdown	2.24	82.65	13.49	Shutdown	Shutdown	Shutdown
3	8:00:00	Shutdown	Shutdown	Shutdown	2.31	64.46	15.35	0.00	87.11	14.63	Shutdown	Shutdown	Shutdown	2.15	83.94	13.44	Shutdown	Shutdown	Shutdown
3	9:00:00	Shutdown	Shutdown	Shutdown	2.31	65.07	15.38	0.00	96.62	14.58	Shutdown	Shutdown	Shutdown	1.95	95.01	13.05	Shutdown	Shutdown	Shutdown
3	10:00:00	Shutdown	Shutdown	Shutdown	2.25	65.68	15.33	0.00	98.55	14.59	Shutdown	Shutdown	Shutdown	1.82	111.57	12.65	Shutdown	Shutdown	Shutdown
3	11:00:00	Shutdown	Shutdown	Shutdown	2.24	64.33	15.31	0.00	99.08	14.59	Shutdown	Shutdown	Shutdown	1.86	111.32	12.67	Shutdown	Shutdown	Shutdown
3	12:00:00	Shutdown	Shutdown	Shutdown	2.23	65.47	15.25	0.00	98.44	14.59	Shutdown	Shutdown	Shutdown	1.92	110.86	12.67	Shutdown	Shutdown	Shutdown
3	13:00:00	Shutdown	Shutdown	Shutdown	1.79	90.88	14.51	0.00	97.07	14.59	Shutdown	Shutdown	Shutdown	2.02	110.11	12.67	Shutdown	Shutdown	Shutdown
3	14:00:00	Shutdown	Shutdown	Shutdown	1.83	95.25	14.50	0.00	96.67	14.59	Shutdown	Shutdown	Shutdown	2.02	109.39	12.69	Shutdown	Shutdown	Shutdown
3	15:00:00	Shutdown	Shutdown	Shutdown	1.68	100.32	14.54	0.00	98.65	14.60	Shutdown	Shutdown	Shutdown	2.20	110.76	12.65	Shutdown	Shutdown	Shutdown
3	16:00:00	Shutdown	Shutdown	Shutdown	1.77	99.60	14.54	0.00	98.39	14.60	Shutdown	Shutdown	Shutdown	2.18	111.22	12.66	Shutdown	Shutdown	Shutdown
3	17:00:00	Shutdown	Shutdown	Shutdown	1.80	94.96	14.52	0.00	97.93	14.60	Shutdown	Shutdown	Shutdown	2.28	111.82	12.64	Shutdown	Shutdown	Shutdown
3	18:00:00	Shutdown	Shutdown	Shutdown	1.85	95.24	14.52	0.00	97.87	14.60	Shutdown	Shutdown	Shutdown	2.30	111.58	12.63	Shutdown	Shutdown	Shutdown
3	19:00:00	Shutdown	Shutdown	Shutdown	1.79	93.90	14.52	0.00	97.68	14.60	Shutdown	Shutdown	Shutdown	2.08	112.61	12.65	Shutdown	Shutdown	Shutdown
3	20:00:00	Shutdown	Shutdown	Shutdown	1.78	96.03	14.54	0.00	98.03	14.60	Shutdown	Shutdown	Shutdown	2.20	112.88	12.67	Shutdown	Shutdown	Shutdown
3	21:00:00	Shutdown	Shutdown	Shutdown	1.74	95.98	14.54	0.00	95.39	14.60	Shutdown	Shutdown	Shutdown	2.15	111.82	12.67	Shutdown	Shutdown	Shutdown
3	22:00:00	Shutdown	Shutdown	Shutdown	1.81	91.04	14.63	0.00	97.09	14.60	Shutdown	Shutdown	Shutdown	2.09	111.20	12.63	Shutdown	Shutdown	Shutdown
3	23:00:00	Shutdown	Shutdown	Shutdown	2.14	63.51	15.41	0.00	87.09	14.84	Shutdown	Shutdown	Shutdown	2.19	92.04	13.06	Shutdown	Shutdown	Shutdown
4	0:00:00	2.65	75.26	15.15	2.20	64.11	15.35	0.00	68.25	15.34	Shutdown	Shutdown	Shutdown	2.28	83.50	13.28	Shutdown	Shutdown	Shutdown
4	1:00:00	2.55	75.66	15.09	2.22	65.49	15.22	0.00	65.24	15.40	Shutdown	Shutdown	Shutdown	2.29	85.22	13.34	Shutdown	Shutdown	Shutdown
4	2:00:00	2.43	75.36	15.09	2.01	64.42	15.25	0.00	63.53	15.40	Shutdown	Shutdown	Shutdown	2.34	83.34	13.38	Shutdown	Shutdown	Shutdown
4	3:00:00	2.65	74.80	15.07	1.71	63.31	15.26	0.00	65.19	15.38	Shutdown	Shutdown	Shutdown	2.45	81.76	13.38	Shutdown	Shutdown	Shutdown
4	4:00:00	2.58	74.76	15.10	1.78	64.36	15.24	0.00	66.37	15.37	Shutdown	Shutdown	Shutdown	2.30	81.22	13.37	Shutdown	Shutdown	Shutdown
4	5:00:00	2.48	75.42	15.09	1.91	64.94	15.23	0.00	65.79	15.37	Shutdown	Shutdown	Shutdown	2.43	83.63	13.42	Shutdown	Shutdown	Shutdown
4	6:00:00	2.31	75.59	15.11	1.94	62.67	15.40	0.00	65.44	15.42	Shutdown	Shutdown	Shutdown	2.26	82.68	13.33	Shutdown	Shutdown	Shutdown
4	7:00:00	2.37	75.91	15.15	1.91	61.77	15.42	0.00	64.74	15.42	Shutdown	Shutdown	Shutdown	2.26	80.87	13.35	Shutdown	Shutdown	Shutdown
4	8:00:00	2.47	76.69	15.14	2.18	63.44	15.39	0.00	88.17	14.65	Shutdown	Shutdown	Shutdown	2.34	80.72	13.38	Shutdown	Shutdown	Shutdown
4	9:00:00	2.41	76.95	15.09	2.21	64.09	15.40	0.00	94.74	14.59	Shutdown	Shutdown	Shutdown	2.25	91.56	13.01	Shutdown	Shutdown	Shutdown
4	10:00:00	2.38	76.53	15.10	2.03	66.22	15.43	0.00	95.43	14.60	Shutdown	Shutdown	Shutdown	2.10	107.98	12.64	Shutdown	Shutdown	Shutdown
4	11:00:00	2.63	77.51	15.07	2.05	66.00	15.41	0.00	96.55	14.60	Shutdown	Shutdown	Shutdown	2.26	107.47	12.61	Shutdown	Shutdown	Shutdown
4	12:00:00	2.79	75.58	15.05	2.19	66.17	15.39	0.00	96.52	14.62	Shutdown	Shutdown	Shutdown	2.20	106.71	12.60	Shutdown	Shutdown	Shutdown
4	13:00:00	2.83	103.51	14.29	1.78	94.06	14.57	0.00	95.83	14.62	Shutdown	Shutdown	Shutdown	2.29	106.79	12.61	Shutdown	Shutdown	Shutdown
4	14:00:00	2.88	108.34	14.28	1.86	97.01	14.56	0.00	94.88	14.60	Shutdown	Shutdown	Shutdown	2.45	107.36	12.61	Shutdown	Shutdown	Shutdown
4	15:00:00	2.83	108.27	14.30	1.79	97.36	14.55	0.00	95.25	14.59	Shutdown	Shutdown	Shutdown	2.32	105.71	12.61	Shutdown	Shutdown	Shutdown
4	16:00:00	2.59	109.54	14.31	1.79	93.26	14.53	0.00	95.39	14.59	Shutdown	Shutdown	Shutdown	2.56	106.10	12.61	Shutdown	Shutdown	Shutdown
4	17:00:00	2.54	106.60	14.31	1.73	96.03	14.53	0.00	94.88	14.58	Shutdown	Shutdown	Shutdown	2.44	105.74	12.61	Shutdown	Shutdown	Shutdown
4	18:00:00	2.57	104.99	14.30	1.82	96.18	14.54	0.00	94.13	14.59	Shutdown	Shutdown	Shutdown	2.36	106.80	12.62	Shutdown	Shutdown	Shutdown
4	19:00:00	2.67	108.45	14.31	1.71	95.00	14.53	0.00	95.00	14.58	Shutdown	Shutdown	Shutdown	2.31	107.59	12.64	Shutdown	Shutdown	Shutdown
4	20:00:00	2.78	108.90	14.31	1.86	95.25	14.54	0.00	95.30	14.59	Shutdown	Shutdown	Shutdown	2.35	108.86	12.65	Shutdown	Shutdown	Shutdown
4	21:00:00	2.49	109.07	14.32	1.80	94.37	14.53	0.00	93.40	14.58	Shutdown	Shutdown	Shutdown	2.40	109.43	12.60	Shutdown	Shutdown	Shutdown
4	22:00:00	2.48	108.15	14.32	1.97	88.65	14.66	0.00	94.24	14.58	Shutdown	Shutdown	Shutdown	2.35	107.11	12.62	Shutdown	Shutdown	Shutdown
4	23:00:00	2.72	77.01	15.21	2.32	63.88	15.35	0.00	82.81	14.82	Shutdown	Shutdown	Shutdown	2.52	91.24	13.01	Shutdown	Shutdown	Shutdown
5	0:00:00	2.54	76.55	15.18	2.30	64.01	15.33	0.00	64.57	15.33	1.26	75.79	15.48	2.62	81.04	13.38	Shutdown	Shutdown	Shutdown
5	1:00:00	2.50	78.02	15.10	2.07	64.05	15.24	0.00	66.73	15.30	1.05	75.82	15.47	2.46	80.03	13.31	Shutdown	Shutdown	Shutdown
5	2:00:00	2.65	79.59	15.15	2.20	64.57	15.24	0.00	66.08	15.31	1.01	76.16	15.50	2.46	79.55	13.26	Shutdown	Shutdown	Shutdown
5	3:00:00	2.39	78.25	15.17	2.20	65.29	15.22	0.00	65.94	15.28	0.98	75.02	15.52	2.52	80.57	13.24	Shutdown	Shutdown	Shutdown
5	4:00:00	2.36	78.61	15.19	2.14	67.83	15.24	0.00	66.40	15.25	0.95	75.79	15.51	2.57	80.30	13.29	Shutdown	Shutdown	Shutdown

วันที่	เวลา	TOPSPP (G-5019) 'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)
5	5:00:00	2.38	79.13	15.16	2.13	69.10	15.25	0.00	66.74	15.30	0.96	74.59	15.50	2.58	80.49	13.27	Shutdown	Shutdown	Shutdown
5	6:00:00	2.39	78.16	15.17	1.95	66.65	15.41	0.00	64.09	15.43	0.93	74.30	15.52	2.47	79.55	13.30	Shutdown	Shutdown	Shutdown
5	7:00:00	2.61	78.72	15.18	1.65	67.13	15.49	0.00	65.27	15.42	1.13	74.94	15.51	2.38	79.09	13.32	Shutdown	Shutdown	Shutdown
5	8:00:00	2.36	79.47	15.05	1.38	69.25	15.42	0.00	88.06	14.62	1.03	74.29	15.48	2.48	80.00	13.30	Shutdown	Shutdown	Shutdown
5	9:00:00	2.54	78.47	15.05	1.34	69.27	15.40	0.00	94.50	14.59	1.04	74.60	15.43	2.26	90.56	12.90	Shutdown	Shutdown	Shutdown
5	10:00:00	2.79	77.58	15.08	1.24	68.77	15.40	0.00	95.13	14.59	0.86	103.01	14.56	2.11	109.01	12.51	Shutdown	Shutdown	Shutdown
5	11:00:00	2.86	75.85	15.06	1.31	68.22	15.41	0.00	96.82	14.61	Maintenance	Maintenance	Maintenance	2.29	108.60	12.51	Shutdown	Shutdown	Shutdown
5	12:00:00	2.92	76.26	15.05	1.35	69.90	15.37	0.00	97.32	14.60	1.23	105.05	14.55	2.33	107.54	12.53	Shutdown	Shutdown	Shutdown
5	13:00:00	2.56	105.67	14.32	1.43	97.92	14.61	0.00	94.47	14.59	1.29	103.70	14.55	2.43	108.30	12.55	Shutdown	Shutdown	Shutdown
5	14:00:00	2.45	109.98	14.30	1.52	101.36	14.58	0.00	93.89	14.58	1.42	104.38	14.55	2.66	109.49	12.46	Shutdown	Shutdown	Shutdown
5	15:00:00	2.66	112.54	14.30	1.59	100.43	14.57	0.00	96.12	14.58	1.51	105.15	14.55	2.55	109.21	12.45	Shutdown	Shutdown	Shutdown
5	16:00:00	2.64	109.50	14.29	1.60	100.18	14.57	0.00	94.67	14.56	1.28	101.71	14.53	2.44	106.34	12.44	Shutdown	Shutdown	Shutdown
5	17:00:00	2.90	107.35	14.27	1.63	98.09	14.56	0.00	95.17	14.57	1.45	105.07	14.56	2.42	105.18	12.43	Shutdown	Shutdown	Shutdown
5	18:00:00	3.06	107.22	14.27	1.68	98.29	14.56	0.00	94.81	14.56	1.54	104.45	14.54	2.50	104.38	12.43	Shutdown	Shutdown	Shutdown
5	19:00:00	3.14	105.50	14.26	1.69	99.45	14.57	0.00	96.68	14.59	1.70	103.90	14.52	2.54	104.69	12.44	Shutdown	Shutdown	Shutdown
5	20:00:00	3.26	105.85	14.26	1.65	99.26	14.57	0.00	94.95	14.58	1.78	100.64	14.51	2.45	103.76	12.44	Shutdown	Shutdown	Shutdown
5	21:00:00	3.48	107.36	14.27	1.84	99.68	14.57	0.00	93.07	14.57	1.88	97.65	14.49	2.53	103.52	12.42	Shutdown	Shutdown	Shutdown
5	22:00:00	3.13	102.27	14.23	1.88	92.62	14.68	0.00	91.20	14.58	2.03	94.76	14.48	2.48	102.39	12.41	Shutdown	Shutdown	Shutdown
5	23:00:00	3.82	74.87	15.17	2.49	66.33	15.51	0.00	81.75	14.84	2.61	68.18	15.30	2.59	86.76	12.79	Shutdown	Shutdown	Shutdown
6	0:00:00	3.76	72.25	15.17	2.44	64.61	15.51	0.00	67.32	15.35	2.82	65.09	15.44	2.70	77.54	13.07	Shutdown	Shutdown	Shutdown
6	1:00:00	3.72	76.82	15.08	2.43	64.35	15.49	0.00	68.10	15.27	2.78	67.46	15.37	2.72	79.37	12.94	Shutdown	Shutdown	Shutdown
6	2:00:00	3.46	78.22	15.11	2.45	65.03	15.50	0.00	65.80	15.29	2.66	67.87	15.46	2.65	78.05	12.98	Shutdown	Shutdown	Shutdown
6	3:00:00	3.01	76.73	15.12	2.11	66.13	15.52	0.00	67.09	15.27	2.81	69.22	15.49	2.75	78.57	13.05	Shutdown	Shutdown	Shutdown
6	4:00:00	2.68	76.06	15.10	1.85	67.70	15.55	0.00	65.88	15.25	2.61	69.38	15.43	2.90	78.72	13.06	Shutdown	Shutdown	Shutdown
6	5:00:00	2.66	76.72	15.12	1.51	69.13	15.57	0.00	67.46	15.25	2.41	69.93	15.42	2.89	78.40	13.08	Shutdown	Shutdown	Shutdown
6	6:00:00	2.54	77.08	15.18	1.14	70.51	15.53	0.00	67.75	15.26	2.20	73.90	15.26	2.73	77.25	13.14	Shutdown	Shutdown	Shutdown
6	7:00:00	2.54	77.59	15.14	1.01	71.09	15.57	0.00	67.17	15.33	2.18	71.26	15.43	2.63	77.68	13.17	Shutdown	Shutdown	Shutdown
6	8:00:00	2.52	77.00	15.09	0.81	73.23	15.33	0.00	67.43	15.30	2.08	72.47	15.41	2.65	78.26	13.16	Shutdown	Shutdown	Shutdown
6	9:00:00	2.48	77.53	15.11	0.76	74.07	15.27	0.00	69.78	15.27	1.70	73.26	15.38	2.50	88.85	12.82	Shutdown	Shutdown	Shutdown
6	10:00:00	2.29	80.89	15.11	0.80	73.45	15.24	0.00	69.45	15.19	1.51	100.83	14.56	2.46	105.38	12.46	Shutdown	Shutdown	Shutdown
6	11:00:00	2.20	82.26	15.04	1.05	73.08	15.25	0.00	71.00	15.12	1.80	103.99	14.56	2.39	104.70	12.46	Shutdown	Shutdown	Shutdown
6	12:00:00	2.43	79.46	14.95	1.23	73.02	15.20	0.00	67.45	15.09	1.86	101.39	14.56	2.46	103.48	12.45	Shutdown	Shutdown	Shutdown
6	13:00:00	2.41	109.89	14.33	1.70	71.00	15.17	0.00	66.53	15.20	2.01	102.43	14.56	2.43	98.56	12.37	Shutdown	Shutdown	Shutdown
6	14:00:00	2.39	115.35	14.32	1.65	73.83	14.95	0.00	66.80	15.22	1.80	102.80	14.57	2.59	100.56	12.38	Shutdown	Shutdown	Shutdown
6	15:00:00	2.28	115.19	14.34	1.84	76.06	14.90	0.00	65.92	15.25	1.58	99.49	14.55	2.59	100.64	12.37	Shutdown	Shutdown	Shutdown
6	16:00:00	2.41	116.20	14.33	1.68	76.94	14.82	0.00	67.93	15.24	1.75	102.51	14.58	2.59	100.25	12.38	Shutdown	Shutdown	Shutdown
6	17:00:00	2.51	116.46	14.33	1.68	86.37	14.69	0.00	67.39	15.25	1.75	102.11	14.56	2.54	100.13	12.36	Shutdown	Shutdown	Shutdown
6	18:00:00	2.62	112.13	14.30	1.68	89.50	14.48	0.00	95.17	14.52	1.89	98.83	14.54	2.43	98.51	12.36	Shutdown	Shutdown	Shutdown
6	19:00:00	3.01	109.99	14.27	1.99	93.36	14.49	0.00	98.85	14.48	2.03	96.03	14.51	2.45	99.49	12.37	Shutdown	Shutdown	Shutdown
6	20:00:00	3.04	109.63	14.27	1.67	91.91	14.48	0.00	95.78	14.46	1.96	95.57	14.52	2.38	99.47	12.38	Shutdown	Shutdown	Shutdown
6	21:00:00	3.04	110.76	14.27	1.71	79.11	14.75	0.00	95.03	14.47	2.04	97.04	14.53	2.35	100.67	12.38	Shutdown	Shutdown	Shutdown
6	22:00:00	2.80	103.97	14.37	2.03	66.55	15.21	0.00	94.68	14.47	2.07	97.14	14.53	2.41	101.04	12.40	Shutdown	Shutdown	Shutdown
6	23:00:00	3.13	77.67	15.16	2.12	67.30	15.23	0.00	78.12	14.88	2.29	73.57	15.20	2.66	85.36	12.82	Shutdown	Shutdown	Shutdown
7	0:00:00	2.87	77.09	15.12	2.29	65.36	15.46	0.00	66.43	15.22	2.50	68.79	15.31	2.67	75.47	13.09	Shutdown	Shutdown	Shutdown
7	1:00:00	2.87	78.40	15.00	2.19	65.27	15.47	0.00	66.29	15.14	2.40	69.55	15.23	2.71	76.70	13.07	Shutdown	Shutdown	Shutdown
7	2:00:00	2.71	78.09	15.02	2.22	64.69	15.46	0.00	68.82	15.16	2.61	70.27	15.23	2.69	76.28	13.07	Shutdown	Shutdown	Shutdown
7	3:00:00	2.77	78.90	15.00	2.16	65.70	15.45	0.00	66.31	15.23	2.66	70.65	15.21	2.77	77.24	13.08	Shutdown	Shutdown	Shutdown
7	4:00:00	2.56	79.54	15.02	2.05	65.66	15.39	0.00	67.73	15.17	2.63	69.93	15.24	2.67	77.20	13.11	Shutdown	Shutdown	Shutdown
7	5:00:00	2.54	79.28	15.01	2.06	63.17	15.37	0.00	67.14	15.17	2.69	70.67	15.26	2.64	76.70	13.15	Shutdown	Shutdown	Shutdown
7	6:00:00	2.53	79.17	15.01	2.16	64.55	15.36	0.00	68.75	15.18	2.74	71.58	15.32	2.60	76.91	13.09	Shutdown	Shutdown	Shutdown
7	7:00:00	2.52	78.97	15.03	2.15	65.51	15.35	0.00	68.75	15.21	2.69	71.83	15.40	2.59	76.93	13.09	Shutdown	Shutdown	Shutdown
7	8:00:00	2.68	78.29	15.02	2.30	62.93	15.32	0.00	94.21	14.48	2.59	71.99	15.37	2.50	77.93	13.07	Shutdown	Shutdown	Shutdown

วันที่	เวลา	TOPSPP (G-5019) 'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)
7	9:00:00	2.57	78.68	14.96	2.39	62.96	15.28	0.00	98.44	14.47	2.54	73.58	15.32	2.46	88.27	12.76	Shutdown	Shutdown	Shutdown
7	10:00:00	2.72	79.63	14.94	2.32	62.71	15.27	0.00	97.20	14.48	2.20	99.54	14.60	2.34	100.63	12.38	Shutdown	Shutdown	Shutdown
7	11:00:00	2.91	77.79	14.91	2.34	63.22	15.26	0.00	97.69	14.48	2.16	104.21	14.60	2.38	98.53	12.36	Shutdown	Shutdown	Shutdown
7	12:00:00	3.13	80.15	14.90	2.30	64.60	15.24	0.00	96.21	14.47	2.10	103.82	14.61	2.56	99.80	12.38	Shutdown	Shutdown	Shutdown
7	13:00:00	2.86	106.46	14.20	1.99	93.18	14.49	0.00	95.03	14.46	1.87	102.61	14.60	2.60	99.88	12.38	Shutdown	Shutdown	Shutdown
7	14:00:00	3.08	110.43	14.20	1.92	98.47	14.49	0.00	95.14	14.45	1.90	103.28	14.59	2.38	104.38	12.41	Shutdown	Shutdown	Shutdown
7	15:00:00	3.03	109.21	14.20	1.94	101.94	14.50	0.00	92.97	14.44	1.92	101.89	14.58	2.21	102.00	12.41	Shutdown	Shutdown	Shutdown
7	16:00:00	2.77	105.25	14.19	2.06	101.83	14.48	0.00	93.86	14.44	1.75	104.18	14.59	2.31	104.19	12.42	Shutdown	Shutdown	Shutdown
7	17:00:00	3.20	103.55	14.17	1.89	103.52	14.50	0.00	95.41	14.45	1.57	105.04	14.60	2.19	102.21	12.40	Shutdown	Shutdown	Shutdown
7	18:00:00	3.28	104.96	14.17	1.73	101.10	14.47	0.00	97.24	14.46	1.41	105.83	14.61	2.37	101.87	12.39	Shutdown	Shutdown	Shutdown
7	19:00:00	3.44	104.70	14.16	1.64	97.04	14.43	0.00	97.58	14.47	Maintenance	Maintenance	Maintenance	2.27	102.16	12.40	Shutdown	Shutdown	Shutdown
7	20:00:00	3.48	106.39	14.17	1.68	96.42	14.42	0.00	98.44	14.46	Maintenance	Maintenance	Maintenance	2.19	102.11	12.41	Shutdown	Shutdown	Shutdown
7	21:00:00	3.07	107.89	14.19	1.80	98.98	14.46	0.00	97.64	14.46	Maintenance	Maintenance	Maintenance	2.15	101.32	12.41	Shutdown	Shutdown	Shutdown
7	22:00:00	2.94	96.11	14.28	1.92	93.72	14.55	0.00	97.87	14.46	Maintenance	Maintenance	Maintenance	2.11	103.48	12.43	Shutdown	Shutdown	Shutdown
7	23:00:00	3.48	76.54	15.00	2.36	64.48	15.38	0.00	88.22	14.69	1.81	79.09	15.32	2.33	84.21	12.95	Shutdown	Shutdown	Shutdown
8	0:00:00	3.20	74.36	14.97	2.52	66.49	15.40	0.00	73.75	15.15	1.47	75.53	15.39	2.78	84.98	13.35	Shutdown	Shutdown	Shutdown
8	1:00:00	3.43	77.40	14.86	2.39	65.98	15.40	0.00	69.83	15.29	1.26	78.45	15.31	2.39	81.38	13.21	Shutdown	Shutdown	Shutdown
8	2:00:00	3.30	75.38	14.89	2.26	65.83	15.40	0.00	70.48	15.34	1.10	78.48	15.34	2.36	80.54	13.16	Shutdown	Shutdown	Shutdown
8	3:00:00	3.46	76.25	14.89	2.20	64.99	15.39	0.00	70.49	15.32	1.05	76.21	15.38	2.38	79.58	13.13	Shutdown	Shutdown	Shutdown
8	4:00:00	3.44	75.30	14.93	2.37	66.44	15.39	0.00	69.97	15.33	1.15	76.56	15.45	2.57	80.73	13.13	Shutdown	Shutdown	Shutdown
8	5:00:00	3.16	75.23	14.90	2.33	64.35	15.38	0.00	71.00	15.34	0.77	76.63	15.47	2.68	78.51	13.16	Shutdown	Shutdown	Shutdown
8	6:00:00	2.85	76.80	14.89	2.40	64.79	15.37	0.00	69.65	15.38	0.63	77.82	15.55	2.49	78.35	13.18	Shutdown	Shutdown	Shutdown
8	7:00:00	2.65	79.00	14.92	2.54	63.91	15.36	0.00	71.00	15.32	0.45	78.36	15.49	2.38	78.32	13.20	Shutdown	Shutdown	Shutdown
8	8:00:00	2.63	78.94	14.93	2.66	62.37	15.34	0.00	95.25	14.47	0.31	79.88	15.48	2.30	76.47	13.21	Shutdown	Shutdown	Shutdown
8	9:00:00	2.44	79.03	14.96	2.41	63.64	15.32	0.00	100.48	14.47	0.29	79.96	15.44	2.41	77.34	13.17	Shutdown	Shutdown	Shutdown
8	10:00:00	2.37	80.40	14.91	2.16	65.89	15.33	0.00	103.83	14.50	0.22	100.90	14.52	2.44	78.57	13.13	Shutdown	Shutdown	Shutdown
8	11:00:00	2.41	81.58	14.90	1.94	68.18	15.33	0.00	102.81	14.50	Maintenance	Maintenance	Maintenance	2.41	77.99	13.13	Shutdown	Shutdown	Shutdown
8	12:00:00	2.32	79.94	14.84	2.08	67.47	15.30	0.00	102.18	14.50	Maintenance	Maintenance	Maintenance	2.43	78.94	13.14	Shutdown	Shutdown	Shutdown
8	13:00:00	2.37	107.63	14.22	1.93	92.37	14.47	0.00	102.31	14.50	Maintenance	Maintenance	Maintenance	2.48	71.74	13.19	Shutdown	Shutdown	Shutdown
8	14:00:00	2.74	112.83	14.21	1.88	100.64	14.45	0.00	100.85	14.49	Maintenance	Maintenance	Maintenance	3.31	72.60	13.34	Shutdown	Shutdown	Shutdown
8	15:00:00	2.53	111.23	14.20	1.91	103.91	14.47	0.00	98.52	14.49	1.19	104.85	14.58	2.93	70.28	13.30	Shutdown	Shutdown	Shutdown
8	16:00:00	2.56	111.46	14.22	1.76	103.06	14.46	0.00	98.48	14.49	1.18	103.78	14.56	2.70	67.91	13.21	Shutdown	Shutdown	Shutdown
8	17:00:00	2.63	113.94	14.22	1.76	96.58	14.40	0.00	99.94	14.50	1.25	102.88	14.55	2.70	69.00	13.20	Shutdown	Shutdown	Shutdown
8	18:00:00	2.70	110.99	14.20	1.91	90.46	14.35	0.00	104.27	14.51	1.50	100.07	14.52	2.51	84.27	12.67	Shutdown	Shutdown	Shutdown
8	19:00:00	2.94	102.97	14.15	1.80	90.21	14.35	0.00	102.88	14.51	1.72	99.67	14.52	2.38	100.44	12.43	Shutdown	Shutdown	Shutdown
8	20:00:00	3.30	102.59	14.14	1.77	90.20	14.35	0.00	103.80	14.51	1.83	101.79	14.55	2.35	100.46	12.45	Shutdown	Shutdown	Shutdown
8	21:00:00	3.30	103.47	14.14	1.71	89.30	14.35	0.00	103.97	14.52	1.90	100.73	14.55	2.30	99.41	12.46	Shutdown	Shutdown	Shutdown
8	22:00:00	3.44	101.77	14.22	1.84	86.32	14.43	0.00	102.74	14.51	1.96	97.49	14.49	2.35	95.23	12.53	Shutdown	Shutdown	Shutdown
8	23:00:00	3.81	75.62	15.03	2.33	63.07	15.35	0.00	89.45	14.81	2.20	74.78	15.29	2.55	76.10	13.14	Shutdown	Shutdown	Shutdown
9	0:00:00	3.68	74.66	15.04	2.38	62.78	15.34	0.00	70.81	15.33	2.18	73.78	15.41	2.64	75.76	13.20	Shutdown	Shutdown	Shutdown
9	1:00:00	3.45	76.35	14.98	2.29	61.96	15.33	0.00	71.21	15.30	1.60	74.03	15.39	2.51	75.49	13.12	Shutdown	Shutdown	Shutdown
9	2:00:00	3.58	77.90	14.93	2.41	62.29	15.33	0.00	70.08	15.35	1.12	76.01	15.38	2.63	76.26	13.12	Shutdown	Shutdown	Shutdown
9	3:00:00	3.05	76.11	14.92	2.52	61.48	15.33	0.00	70.71	15.36	1.05	74.42	15.37	2.65	74.43	13.17	Shutdown	Shutdown	Shutdown
9	4:00:00	2.81	77.98	14.97	2.38	61.73	15.33	0.00	71.25	15.39	1.11	74.00	15.42	2.67	74.28	13.24	Shutdown	Shutdown	Shutdown
9	5:00:00	2.45	78.33	14.93	2.42	62.03	15.33	0.00	70.20	15.43	1.37	73.85	15.44	2.66	75.41	13.27	Shutdown	Shutdown	Shutdown
9	6:00:00	2.54	79.62	14.97	2.36	61.73	15.34	0.00	70.03	15.41	1.35	73.25	15.42	2.58	75.96	13.28	Shutdown	Shutdown	Shutdown
9	7:00:00	2.51	78.29	15.02	2.31	62.46	15.34	0.00	71.36	15.38	1.48	74.13	15.36	2.49	74.26	13.29	Shutdown	Shutdown	Shutdown
9	8:00:00	2.33	79.16	15.03	2.32	62.49	15.34	0.00	97.12	14.50	1.35	77.12	15.35	2.44	75.12	13.25	Shutdown	Shutdown	Shutdown
9	9:00:00	2.30	80.23	14.97	2.17	63.90	15.34	0.00	98.78	14.51	1.27	79.59	15.30	2.31	87.90	12.87	Shutdown	Shutdown	Shutdown
9	10:00:00	2.16	82.24	14.92	2.09	62.50	15.34	0.00	102.39	14.53	Maintenance	Maintenance	Maintenance	2.12	103.40	12.45	Shutdown	Shutdown	Shutdown
9	11:00:00	1.94	81.17	14.88	2.07	62.64	15.32	0.00	102.34	14.52	Maintenance	Maintenance	Maintenance	2.10	103.12	12.47	Shutdown	Shutdown	Shutdown
9	12:00:00	2.61	79.37	14.85	2.05	61.98	15.31	0.00	100.23	14.52	Maintenance	Maintenance	Maintenance	2.36	99.83	12.43	Shutdown	Shutdown	Shutdown

วันที่	เวลา	TOPSPP (G-5019) 'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)
9	13:00:00	2.73	81.39	14.90	1.86	87.26	14.44	0.00	100.26	14.53	Maintenance	Maintenance	Maintenance	2.36	100.82	12.39	Shutdown	Shutdown	Shutdown
9	14:00:00	2.65	79.59	14.90	1.76	96.86	14.45	0.00	102.72	14.54	1.37	106.12	14.58	2.27	100.81	12.38	Shutdown	Shutdown	Shutdown
9	15:00:00	2.89	80.46	14.94	1.77	95.04	14.44	0.00	98.08	14.50	1.53	106.01	14.58	2.19	103.47	12.41	Shutdown	Shutdown	Shutdown
9	16:00:00	2.47	79.63	14.90	1.79	88.92	14.38	0.00	96.26	14.48	Maintenance	Maintenance	Maintenance	2.20	104.13	12.42	Shutdown	Shutdown	Shutdown
9	17:00:00	2.58	89.25	14.57	1.78	84.81	14.35	0.00	96.09	14.49	1.59	103.84	14.55	2.26	101.26	12.40	Shutdown	Shutdown	Shutdown
9	18:00:00	3.07	101.66	14.15	1.78	85.34	14.35	0.00	96.93	14.49	1.91	99.91	14.52	2.23	101.08	12.41	Shutdown	Shutdown	Shutdown
9	19:00:00	3.29	104.87	14.17	1.82	84.50	14.35	0.00	95.71	14.49	1.89	99.52	14.52	2.38	100.12	12.45	Shutdown	Shutdown	Shutdown
9	20:00:00	3.40	103.67	14.16	1.68	81.85	14.34	0.00	97.21	14.49	1.85	98.89	14.50	2.44	101.03	12.41	Shutdown	Shutdown	Shutdown
9	21:00:00	3.49	79.52	14.63	1.71	81.87	14.34	0.00	96.74	14.49	1.92	97.02	14.48	2.22	100.41	12.40	Shutdown	Shutdown	Shutdown
9	22:00:00	3.80	73.45	14.95	1.78	79.46	14.48	0.00	96.84	14.48	1.95	96.53	14.46	2.26	103.41	12.45	Shutdown	Shutdown	Shutdown
9	23:00:00	3.89	75.04	14.95	2.30	62.57	15.37	0.00	84.61	14.78	2.18	70.77	15.15	2.50	85.68	12.94	Shutdown	Shutdown	Shutdown
10	0:00:00	3.71	75.29	14.93	2.34	63.31	15.37	0.00	67.55	15.30	2.15	69.39	15.13	2.74	78.11	13.20	Shutdown	Shutdown	Shutdown
10	1:00:00	3.60	72.77	14.92	2.39	61.72	15.37	0.00	66.54	15.29	2.11	69.98	15.04	2.79	76.46	13.23	Shutdown	Shutdown	Shutdown
10	2:00:00	3.52	72.25	14.95	2.61	62.94	15.36	0.00	67.04	15.28	2.19	71.20	15.02	2.98	70.92	13.23	Shutdown	Shutdown	Shutdown
10	3:00:00	3.78	73.74	14.94	2.67	63.89	15.36	0.00	67.58	15.30	2.27	70.98	15.02	2.77	68.77	13.27	Shutdown	Shutdown	Shutdown
10	4:00:00	3.77	75.40	14.95	2.45	62.73	15.35	0.00	68.60	15.27	2.35	69.79	15.01	2.82	69.33	13.27	Shutdown	Shutdown	Shutdown
10	5:00:00	3.41	73.27	14.95	2.20	61.45	15.36	0.00	67.73	15.26	2.35	66.70	15.12	2.93	69.97	13.34	Shutdown	Shutdown	Shutdown
10	6:00:00	3.51	72.54	14.96	2.26	62.62	15.36	0.00	67.71	15.28	2.62	65.49	15.26	3.10	73.68	13.31	Shutdown	Shutdown	Shutdown
10	7:00:00	3.57	73.21	15.03	2.19	62.80	15.36	0.00	66.62	15.33	2.35	65.68	15.25	2.91	69.51	13.33	Shutdown	Shutdown	Shutdown
10	8:00:00	4.02	73.45	15.02	2.20	63.06	15.36	0.00	93.39	14.48	2.27	66.62	15.21	2.80	68.36	13.32	Shutdown	Shutdown	Shutdown
10	9:00:00	3.58	74.29	14.99	2.20	65.01	15.37	0.00	96.98	14.49	2.30	67.25	15.18	2.51	81.39	12.82	Shutdown	Shutdown	Shutdown
10	10:00:00	3.28	75.17	14.95	2.28	65.67	15.37	0.00	97.00	14.49	2.31	66.34	15.16	2.34	101.70	12.42	Shutdown	Shutdown	Shutdown
10	11:00:00	3.56	73.54	14.94	2.37	64.18	15.35	0.00	96.27	14.48	2.08	66.90	15.15	2.47	100.33	12.40	Shutdown	Shutdown	Shutdown
10	12:00:00	3.77	73.30	14.90	2.25	64.96	15.36	0.00	94.87	14.48	2.05	68.28	15.14	2.46	96.20	12.38	Shutdown	Shutdown	Shutdown
10	13:00:00	3.30	100.64	14.18	1.89	93.41	14.43	0.00	95.50	14.49	2.16	69.19	15.20	2.39	99.69	12.39	Shutdown	Shutdown	Shutdown
10	14:00:00	3.12	112.59	14.23	1.73	94.50	14.41	0.00	97.11	14.48	2.10	69.54	15.21	2.48	101.09	12.39	Shutdown	Shutdown	Shutdown
10	15:00:00	2.93	106.90	14.20	1.66	92.76	14.39	0.00	98.05	14.48	1.90	68.13	15.18	2.41	99.91	12.41	Shutdown	Shutdown	Shutdown
10	16:00:00	3.04	107.47	14.18	1.67	86.63	14.37	0.00	95.21	14.47	1.86	68.15	15.16	2.58	100.00	12.42	Shutdown	Shutdown	Shutdown
10	17:00:00	3.05	109.11	14.19	1.68	83.09	14.34	0.00	96.28	14.49	2.08	67.39	15.11	2.49	101.04	12.40	Shutdown	Shutdown	Shutdown
10	18:00:00	3.02	109.56	14.20	1.66	84.18	14.34	0.00	95.11	14.47	1.80	73.78	14.80	2.47	100.87	12.41	Shutdown	Shutdown	Shutdown
10	19:00:00	3.37	106.72	14.18	1.63	83.65	14.34	0.00	96.31	14.48	1.56	95.91	14.39	2.62	101.00	12.40	Shutdown	Shutdown	Shutdown
10	20:00:00	3.34	105.86	14.18	1.72	84.03	14.35	0.00	97.66	14.49	1.52	92.41	14.37	2.59	101.11	12.41	Shutdown	Shutdown	Shutdown
10	21:00:00	3.26	105.21	14.18	1.75	83.56	14.34	0.00	96.41	14.48	1.52	92.82	14.37	2.46	97.81	12.41	Shutdown	Shutdown	Shutdown
10	22:00:00	3.21	107.09	14.24	1.82	79.42	14.43	0.00	94.74	14.48	1.86	75.86	14.85	2.51	96.02	12.43	Shutdown	Shutdown	Shutdown
10	23:00:00	3.56	76.31	14.96	2.40	62.65	15.38	0.00	84.49	14.74	2.01	63.66	15.22	2.79	80.80	12.90	Shutdown	Shutdown	Shutdown
11	0:00:00	3.38	75.31	14.98	2.63	64.02	15.39	0.00	67.13	15.22	2.09	64.06	15.19	2.91	72.95	13.19	Shutdown	Shutdown	Shutdown
11	1:00:00	3.35	76.12	14.98	2.35	61.83	15.37	0.00	67.47	15.32	2.11	63.69	15.17	2.95	73.88	13.18	Shutdown	Shutdown	Shutdown
11	2:00:00	3.20	73.56	15.06	2.42	62.40	15.37	0.00	66.69	15.30	1.99	63.85	15.07	2.77	72.22	13.14	Shutdown	Shutdown	Shutdown
11	3:00:00	3.07	72.33	15.07	2.43	62.17	15.38	0.00	64.78	15.25	2.20	64.06	15.14	2.55	72.43	13.11	Shutdown	Shutdown	Shutdown
11	4:00:00	3.07	75.41	15.00	2.45	61.24	15.37	0.00	65.62	15.22	2.25	63.23	15.18	2.53	72.52	13.10	Shutdown	Shutdown	Shutdown
11	5:00:00	2.79	76.95	14.99	2.58	61.77	15.36	0.00	66.08	15.21	2.20	63.22	15.19	2.56	71.43	13.15	Shutdown	Shutdown	Shutdown
11	6:00:00	2.71	76.93	15.05	2.51	62.47	15.36	0.00	64.64	15.23	2.19	63.52	15.25	2.64	70.93	13.17	Shutdown	Shutdown	Shutdown
11	7:00:00	2.68	77.34	15.11	2.58	63.03	15.37	0.00	64.44	15.32	2.40	63.32	15.27	2.66	70.60	13.13	Shutdown	Shutdown	Shutdown
11	8:00:00	2.94	76.08	15.06	2.43	62.97	15.36	0.00	91.26	14.47	2.35	62.19	15.29	2.73	72.28	13.12	Shutdown	Shutdown	Shutdown
11	9:00:00	2.93	77.22	14.96	2.40	63.59	15.36	0.00	94.30	14.47	2.28	63.32	15.27	2.55	80.97	12.63	Shutdown	Shutdown	Shutdown
11	10:00:00	3.12	77.93	14.93	2.40	64.51	15.36	0.00	95.42	14.47	0.79	28.62	18.12	2.35	94.54	12.29	Shutdown	Shutdown	Shutdown
11	11:00:00	3.27	78.13	14.90	2.24	62.60	15.34	0.00	94.69	14.48	1.63	89.07	14.40	2.33	91.20	12.28	Shutdown	Shutdown	Shutdown
11	12:00:00	3.58	76.52	14.87	2.21	62.91	15.34	0.00	94.30	14.47	1.67	91.16	14.41	2.56	90.22	12.34	Shutdown	Shutdown	Shutdown
11	13:00:00	3.11	106.09	14.19	1.89	92.23	14.47	0.00	92.74	14.46	1.66	88.97	14.40	2.44	88.73	12.24	Shutdown	Shutdown	Shutdown
11	14:00:00	3.33	107.90	14.17	1.95	91.73	14.41	0.00	92.47	14.45	1.80	89.53	14.41	2.45	88.56	12.25	Shutdown	Shutdown	Shutdown
11	15:00:00	3.24	107.40	14.18	1.81	82.30	14.32	0.00	93.75	14.44	1.53	88.14	14.41	2.38	86.28	12.25	Shutdown	Shutdown	Shutdown
11	16:00:00	3.13	108.34	14.18	1.76	83.71	14.33	0.00	93.15	14.43	1.09	85.19	14.41	2.37	86.18	12.24	Shutdown	Shutdown	Shutdown

วันที่	เวลา	TOPSPP (G-5019) 'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)
11	17:00:00	3.26	105.53	14.15	1.90	91.90	14.41	0.00	96.29	14.44	1.11	85.19	14.41	2.39	86.03	12.24	Shutdown	Shutdown	Shutdown
11	18:00:00	3.27	104.79	14.16	1.94	90.74	14.37	0.00	92.12	14.41	1.12	85.19	14.41	2.47	86.80	12.24	Shutdown	Shutdown	Shutdown
11	19:00:00	3.17	105.36	14.17	1.92	86.63	14.34	0.00	93.39	14.41	1.13	85.19	14.41	2.29	86.23	12.24	Shutdown	Shutdown	Shutdown
11	20:00:00	3.06	105.59	14.17	1.89	83.75	14.34	0.00	92.94	14.40	1.15	85.19	14.41	2.47	86.92	12.29	Shutdown	Shutdown	Shutdown
11	21:00:00	3.11	104.64	14.16	1.95	83.13	14.33	0.00	92.18	14.40	1.16	85.19	14.41	2.45	86.89	12.26	Shutdown	Shutdown	Shutdown
11	22:00:00	3.15	100.57	14.21	2.07	79.40	14.52	0.00	91.43	14.40	0.64	101.22	13.73	2.48	86.16	12.25	Shutdown	Shutdown	Shutdown
11	23:00:00	3.72	73.06	14.95	2.49	62.53	15.37	0.00	81.02	14.66	0.00	104.07	13.48	2.70	74.37	12.69	Shutdown	Shutdown	Shutdown
12	0:00:00	3.70	75.28	14.93	2.46	61.25	15.35	0.00	63.47	15.17	0.00	103.06	13.40	2.72	69.59	12.81	Shutdown	Shutdown	Shutdown
12	1:00:00	3.59	75.15	14.83	2.62	62.89	15.35	0.00	63.16	15.18	0.00	102.31	13.37	2.76	68.59	12.93	Shutdown	Shutdown	Shutdown
12	2:00:00	3.76	75.49	14.88	2.68	65.08	15.37	0.00	63.91	15.21	2.56	103.75	13.36	2.94	67.63	13.11	Shutdown	Shutdown	Shutdown
12	3:00:00	3.92	73.42	14.88	2.68	62.82	15.34	0.00	64.30	15.24	3.35	102.39	13.36	3.00	68.05	13.06	Shutdown	Shutdown	Shutdown
12	4:00:00	3.93	73.99	14.88	2.59	63.50	15.36	0.00	62.77	15.17	3.36	101.44	13.41	2.81	67.75	13.04	Shutdown	Shutdown	Shutdown
12	5:00:00	3.77	72.30	14.87	2.53	64.79	15.36	0.00	63.75	15.20	3.40	102.89	13.51	2.77	67.86	13.02	Shutdown	Shutdown	Shutdown
12	6:00:00	3.75	70.80	14.87	2.69	64.21	15.36	0.00	64.37	15.18	3.36	100.36	13.73	2.75	66.59	13.03	Shutdown	Shutdown	Shutdown
12	7:00:00	4.10	72.97	14.90	2.69	63.55	15.35	0.00	63.57	15.23	3.45	100.42	13.73	2.95	67.68	13.08	Shutdown	Shutdown	Shutdown
12	8:00:00	4.17	73.90	14.86	2.53	64.11	15.36	0.00	88.22	14.36	3.36	101.70	13.75	2.79	68.94	13.02	Shutdown	Shutdown	Shutdown
12	9:00:00	3.87	73.57	14.84	2.55	65.02	15.35	0.00	95.67	14.38	3.30	102.89	13.72	2.51	75.93	12.60	Shutdown	Shutdown	Shutdown
12	10:00:00	3.97	76.09	14.85	2.63	63.06	15.31	0.00	97.28	14.39	3.36	103.43	13.75	2.44	88.53	12.24	Shutdown	Shutdown	Shutdown
12	11:00:00	4.00	72.72	14.83	2.58	62.14	15.29	0.00	97.67	14.40	3.30	103.69	13.71	2.57	88.39	12.21	Shutdown	Shutdown	Shutdown
12	12:00:00	3.91	74.40	14.82	2.51	61.89	15.27	0.00	91.71	14.36	2.99	101.75	13.70	2.51	87.96	12.21	Shutdown	Shutdown	Shutdown
12	13:00:00	3.46	102.21	14.09	2.00	91.72	14.37	0.00	90.76	14.35	2.99	102.43	13.70	2.45	89.14	12.22	Shutdown	Shutdown	Shutdown
12	14:00:00	1.87	106.37	14.10	2.07	94.94	14.36	0.00	90.50	14.35	3.13	101.84	13.71	2.46	89.38	12.24	Shutdown	Shutdown	Shutdown
12	15:00:00	1.54	113.07	14.12	2.06	95.93	14.37	0.00	89.49	14.34	3.04	102.85	13.75	2.41	88.64	12.23	Shutdown	Shutdown	Shutdown
12	16:00:00	1.27	109.19	14.08	2.12	85.68	14.26	0.00	90.41	14.35	3.01	101.78	13.76	2.44	88.12	12.28	Shutdown	Shutdown	Shutdown
12	17:00:00	2.06	106.87	14.08	1.94	79.59	14.22	0.00	86.53	14.31	2.86	100.69	13.73	2.63	86.07	12.28	Shutdown	Shutdown	Shutdown
12	18:00:00	2.50	108.49	14.08	1.99	80.10	14.21	0.00	89.25	14.33	2.85	99.86	13.69	2.51	84.57	12.15	Shutdown	Shutdown	Shutdown
12	19:00:00	2.18	101.63	14.07	2.02	80.07	14.21	0.00	88.45	14.33	2.83	100.12	13.70	2.62	83.92	12.16	Shutdown	Shutdown	Shutdown
12	20:00:00	1.90	102.92	14.06	1.88	79.22	14.22	0.00	89.60	14.34	2.82	101.51	13.72	2.53	83.97	12.16	Shutdown	Shutdown	Shutdown
12	21:00:00	2.49	103.47	14.06	1.94	80.34	14.22	0.00	90.41	14.34	2.65	94.30	13.67	2.46	83.61	12.14	Shutdown	Shutdown	Shutdown
12	22:00:00	2.62	98.50	14.13	2.05	76.16	14.43	0.00	88.78	14.33	2.57	98.04	13.75	2.38	83.70	12.13	Shutdown	Shutdown	Shutdown
12	23:00:00	2.02	74.45	14.89	2.52	62.56	15.27	0.00	79.87	14.62	2.53	98.71	13.73	2.64	74.82	12.66	Shutdown	Shutdown	Shutdown
13	0:00:00	2.13	74.10	14.81	2.52	62.30	15.26	0.00	61.30	15.19	2.49	98.32	13.73	2.85	68.08	12.99	Shutdown	Shutdown	Shutdown
13	1:00:00	2.28	76.35	14.72	2.51	62.22	15.26	0.00	59.83	15.20	2.69	98.22	13.73	2.68	66.59	12.91	Shutdown	Shutdown	Shutdown
13	2:00:00	1.68	72.73	14.71	2.51	61.48	15.25	0.00	60.69	15.19	2.66	98.64	13.75	2.84	67.35	12.94	Shutdown	Shutdown	Shutdown
13	3:00:00	2.32	71.89	14.74	2.66	62.84	15.25	0.00	59.79	15.22	2.71	98.49	13.77	3.02	68.93	12.95	Shutdown	Shutdown	Shutdown
13	4:00:00	1.80	72.86	14.76	2.32	62.15	15.25	0.00	60.49	15.13	2.81	99.01	13.76	2.85	68.02	12.95	Shutdown	Shutdown	Shutdown
13	5:00:00	1.59	77.30	14.74	2.47	61.04	15.24	0.00	62.15	15.11	2.99	99.94	13.79	2.86	68.91	12.95	Shutdown	Shutdown	Shutdown
13	6:00:00	2.53	72.53	14.87	2.70	62.93	15.25	0.00	59.48	15.19	2.77	98.46	13.77	2.92	69.50	13.01	Shutdown	Shutdown	Shutdown
13	7:00:00	3.44	73.16	14.90	2.49	61.54	15.23	0.00	60.64	15.18	2.87	98.65	13.74	2.89	69.87	12.98	Shutdown	Shutdown	Shutdown
13	8:00:00	3.33	73.31	14.89	2.36	61.56	15.23	0.00	60.35	15.19	2.80	96.74	13.76	2.88	70.58	12.99	Shutdown	Shutdown	Shutdown
13	9:00:00	2.86	77.16	14.83	2.38	62.29	15.22	0.00	64.36	15.10	2.75	97.57	13.75	2.64	77.35	12.62	Shutdown	Shutdown	Shutdown
13	10:00:00	2.22	83.11	14.83	2.08	61.60	15.21	0.00	60.79	15.08	2.98	95.79	13.78	2.49	89.23	12.24	Shutdown	Shutdown	Shutdown
13	11:00:00	1.14	82.88	14.82	2.12	61.96	15.21	0.00	62.43	15.06	2.78	94.98	13.69	2.39	89.00	12.24	Shutdown	Shutdown	Shutdown
13	12:00:00	1.37	77.67	14.79	2.03	61.05	15.18	0.00	62.15	15.05	2.68	99.23	13.70	2.43	87.83	12.24	Shutdown	Shutdown	Shutdown
13	13:00:00	1.73	100.09	14.08	2.12	62.47	15.19	0.00	65.47	14.87	2.80	102.37	13.75	2.40	88.84	12.25	Shutdown	Shutdown	Shutdown
13	14:00:00	1.94	103.35	14.04	2.08	61.91	15.18	0.00	70.40	14.78	2.79	102.08	13.72	2.50	88.66	12.23	Shutdown	Shutdown	Shutdown
13	15:00:00	1.87	102.54	14.05	1.96	60.49	15.18	0.00	64.05	14.96	2.70	103.21	13.73	2.48	89.58	12.23	Shutdown	Shutdown	Shutdown
13	16:00:00	1.80	105.18	14.05	2.08	62.61	15.20	0.00	65.69	14.97	2.93	102.89	13.74	2.47	87.26	12.23	Shutdown	Shutdown	Shutdown
13	17:00:00	1.98	106.44	14.06	1.89	70.89	14.71	0.00	64.01	14.94	2.79	99.36	13.77	2.40	86.38	12.24	Shutdown	Shutdown	Shutdown
13	18:00:00	2.15	106.24	14.06	1.58	86.52	14.25	0.00	87.18	14.32	2.65	98.02	13.79	2.53	86.82	12.28	Shutdown	Shutdown	Shutdown
13	19:00:00	1.86	105.29	14.07	1.67	92.89	14.31	0.00	90.89	14.33	2.60	101.22	13.78	2.49	85.56	12.24	Shutdown	Shutdown	Shutdown
13	20:00:00	2.11	105.57	14.06	1.59	79.24	14.17	0.00	89.55	14.32	2.78	100.62	13.78	2.44	84.53	12.23	Shutdown	Shutdown	Shutdown

วันที่	เวลา	TOPSPP (G-5019) 'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)
13	21:00:00	1.95	106.31	14.06	1.86	66.70	14.92	0.00	90.33	14.33	2.65	94.43	13.70	2.40	84.08	12.26	Shutdown	Shutdown	Shutdown
13	22:00:00	2.14	102.19	14.12	2.12	62.14	15.23	0.00	89.21	14.32	2.74	91.72	13.78	2.50	86.85	12.30	Shutdown	Shutdown	Shutdown
13	23:00:00	2.61	77.43	14.85	2.22	61.84	15.24	0.00	72.12	14.76	2.76	93.01	13.70	2.74	76.88	12.72	Shutdown	Shutdown	Shutdown
14	0:00:00	1.99	76.05	14.83	2.18	60.34	15.24	0.00	61.50	15.03	2.68	92.27	13.72	2.97	67.46	13.13	Shutdown	Shutdown	Shutdown
14	1:00:00	1.64	76.94	14.75	2.30	62.16	15.22	0.00	61.81	14.97	2.77	92.51	13.77	3.01	68.76	13.00	Shutdown	Shutdown	Shutdown
14	2:00:00	2.22	76.18	14.75	2.26	61.23	15.22	0.00	61.86	14.99	2.80	92.99	13.68	2.86	69.07	13.04	Shutdown	Shutdown	Shutdown
14	3:00:00	1.64	76.50	14.77	2.36	62.09	15.23	0.00	61.51	15.13	2.84	93.14	13.68	2.93	69.70	13.05	Shutdown	Shutdown	Shutdown
14	4:00:00	1.72	73.99	14.87	2.23	61.25	15.22	0.00	61.32	15.14	2.86	92.34	13.73	2.96	68.91	13.05	Shutdown	Shutdown	Shutdown
14	5:00:00	1.18	73.70	14.88	2.34	62.51	15.23	0.00	60.28	15.14	2.79	91.41	13.89	2.95	68.43	13.04	Shutdown	Shutdown	Shutdown
14	6:00:00	0.79	74.78	14.89	2.37	62.68	15.20	0.00	61.47	15.14	2.92	92.16	13.83	2.85	68.59	13.10	Shutdown	Shutdown	Shutdown
14	7:00:00	1.21	74.75	14.93	2.31	62.46	15.20	0.00	60.82	15.26	3.01	92.88	13.96	2.91	69.64	13.11	Shutdown	Shutdown	Shutdown
14	8:00:00	0.98	74.92	14.88	2.47	61.92	15.17	0.00	85.58	14.34	2.97	93.37	13.80	2.81	69.65	13.11	Shutdown	Shutdown	Shutdown
14	9:00:00	1.44	75.67	14.92	2.39	63.65	15.18	0.00	91.82	14.37	2.88	95.57	13.72	2.71	79.52	12.70	Shutdown	Shutdown	Shutdown
14	10:00:00	1.44	76.41	14.89	2.28	61.98	15.18	0.00	92.46	14.39	3.09	96.32	13.70	2.51	90.39	12.35	Shutdown	Shutdown	Shutdown
14	11:00:00	1.18	75.38	14.88	2.32	61.95	15.18	0.00	89.79	14.37	2.99	96.41	13.74	2.57	89.82	12.35	Shutdown	Shutdown	Shutdown
14	12:00:00	1.75	75.19	14.81	2.43	59.90	15.16	0.00	87.80	14.36	3.00	100.73	13.80	2.42	89.37	12.31	Shutdown	Shutdown	Shutdown
14	13:00:00	1.40	100.34	14.11	1.83	79.74	14.23	0.00	90.79	14.38	2.91	103.85	13.63	2.52	88.35	12.28	Shutdown	Shutdown	Shutdown
14	14:00:00	2.07	101.51	14.04	1.93	82.83	14.20	0.00	90.37	14.37	Maintenance	Maintenance	Maintenance	2.63	87.39	12.32	Shutdown	Shutdown	Shutdown
14	15:00:00	1.78	94.93	13.98	1.84	83.21	14.20	0.00	88.07	14.36	Maintenance	Maintenance	Maintenance	2.64	86.79	12.23	Shutdown	Shutdown	Shutdown
14	16:00:00	2.41	93.75	13.97	1.98	83.52	14.20	0.00	88.64	14.37	Maintenance	Maintenance	Maintenance	2.57	86.32	12.24	Shutdown	Shutdown	Shutdown
14	17:00:00	2.47	98.23	14.00	1.96	85.13	14.23	0.00	89.16	14.36	Maintenance	Maintenance	Maintenance	2.58	86.08	12.28	Shutdown	Shutdown	Shutdown
14	18:00:00	2.06	95.85	13.98	2.00	93.72	14.32	0.00	88.30	14.37	Maintenance	Maintenance	Maintenance	2.60	88.52	12.32	Shutdown	Shutdown	Shutdown
14	19:00:00	2.29	97.30	13.99	1.93	94.80	14.33	0.00	90.21	14.37	2.28	103.05	13.79	2.50	91.16	12.33	Shutdown	Shutdown	Shutdown
14	20:00:00	1.92	98.69	14.00	1.99	92.17	14.31	0.00	89.27	14.37	2.26	98.70	13.72	2.34	90.52	12.34	Shutdown	Shutdown	Shutdown
14	21:00:00	1.75	97.71	14.00	1.78	83.18	14.23	0.00	88.78	14.37	2.73	95.91	13.74	2.47	89.38	12.36	Shutdown	Shutdown	Shutdown
14	22:00:00	1.84	95.42	14.12	1.97	81.48	14.41	0.00	88.11	14.36	2.88	94.71	13.74	2.52	88.79	12.32	Shutdown	Shutdown	Shutdown
14	23:00:00	2.29	77.47	14.88	2.24	61.33	15.28	0.00	77.45	14.65	2.87	92.67	13.81	2.70	76.48	12.80	Shutdown	Shutdown	Shutdown
15	0:00:00	1.92	74.66	14.95	2.29	63.19	15.28	0.00	61.65	15.16	2.75	90.00	13.59	Shutdown	Shutdown	Shutdown	0.44	33.77	11.61
15	1:00:00	1.93	75.97	14.86	2.16	62.76	15.29	0.00	62.88	15.11	2.83	90.55	13.62	Shutdown	Shutdown	Shutdown	0.55	30.89	11.23
15	2:00:00	1.92	74.58	14.83	2.38	63.86	15.30	0.00	61.52	15.13	2.97	93.77	13.68	Shutdown	Shutdown	Shutdown	0.45	29.64	10.83
15	3:00:00	2.11	75.74	14.84	2.75	65.63	15.30	0.00	62.14	15.08	2.97	96.40	13.69	Shutdown	Shutdown	Shutdown	0.47	29.21	10.48
15	4:00:00	1.46	74.68	14.87	2.88	66.98	15.29	0.00	60.97	15.11	2.71	96.34	13.76	Shutdown	Shutdown	Shutdown	0.41	27.99	10.21
15	5:00:00	1.49	75.72	14.89	2.38	65.40	15.27	0.00	61.56	15.14	2.79	95.83	13.86	Shutdown	Shutdown	Shutdown	0.39	27.08	9.88
15	6:00:00	0.84	74.37	14.99	2.54	65.87	15.26	0.00	60.87	15.18	2.65	96.85	13.82	Shutdown	Shutdown	Shutdown	0.49	26.92	9.56
15	7:00:00	1.00	75.69	14.98	2.40	65.92	15.27	0.00	61.59	15.19	2.71	97.93	13.77	Shutdown	Shutdown	Shutdown	0.47	26.01	9.21
15	8:00:00	1.14	74.96	15.00	2.30	65.48	15.27	0.00	87.39	14.37	2.64	98.38	13.81	Shutdown	Shutdown	Shutdown	0.33	38.10	8.72
15	9:00:00	0.88	77.66	15.00	2.35	64.94	15.26	0.00	89.73	14.38	2.65	100.74	13.74	Shutdown	Shutdown	Shutdown	0.34	36.53	8.40
15	10:00:00	1.27	77.03	14.98	2.21	64.82	15.25	0.00	93.19	14.40	2.53	102.34	13.75	Shutdown	Shutdown	Shutdown	0.26	35.15	8.03
15	11:00:00	1.44	76.28	14.96	2.38	64.54	15.27	0.00	94.25	14.41	2.61	106.09	13.75	Shutdown	Shutdown	Shutdown	0.28	34.11	7.67
15	12:00:00	2.16	75.70	14.94	2.45	64.63	15.25	0.00	94.42	14.41	2.78	103.28	13.73	Shutdown	Shutdown	Shutdown	0.22	32.70	7.30
15	13:00:00	1.45	93.63	14.01	1.84	89.58	14.30	0.00	89.88	14.39	2.69	102.80	13.72	Shutdown	Shutdown	Shutdown	0.27	29.71	7.04
15	14:00:00	1.44	93.00	13.96	1.92	92.07	14.28	0.00	91.81	14.39	Maintenance	Maintenance	Maintenance	Shutdown	Shutdown	Shutdown	0.26	32.34	6.57
15	15:00:00	1.61	95.41	13.98	2.00	92.02	14.28	0.00	89.50	14.37	Maintenance	Maintenance	Maintenance	Shutdown	Shutdown	Shutdown	0.24	32.48	6.19
15	16:00:00	1.49	93.97	13.98	2.03	85.77	14.24	0.00	89.44	14.38	Maintenance	Maintenance	Maintenance	Shutdown	Shutdown	Shutdown	0.47	31.71	6.02
15	17:00:00	1.93	104.74	14.08	1.97	90.13	14.30	0.00	89.07	14.38	2.69	100.93	13.65	Shutdown	Shutdown	Shutdown	0.47	31.71	6.02
15	18:00:00	1.71	104.63	14.07	2.07	98.20	14.36	0.00	89.65	14.37	2.69	101.22	13.69	Shutdown	Shutdown	Shutdown	0.48	31.71	6.02
15	19:00:00	1.35	101.96	14.06	2.04	96.94	14.36	0.00	91.74	14.37	2.77	103.85	13.73	Shutdown	Shutdown	Shutdown	0.48	31.71	6.02
15	20:00:00	1.38	98.10	14.01	2.05	91.95	14.31	0.00	92.50	14.38	2.71	100.39	13.82	Shutdown	Shutdown	Shutdown	0.49	31.71	6.02
15	21:00:00	1.28	93.99	13.98	2.05	86.91	14.27	0.00	90.78	14.38	2.73	101.15	13.75	Shutdown	Shutdown	Shutdown	2.73	75.79	11.54
15	22:00:00	1.24	91.99	14.09	2.18	82.37	14.40	0.00	90.74	14.38	2.73	101.24	13.79	Shutdown	Shutdown	Shutdown	2.98	92.16	13.65
15	23:00:00	1.67	78.08	14.83	2.53	62.44	15.27	0.00	79.43	14.66	2.77	100.54	13.78	Shutdown	Shutdown	Shutdown	2.40	64.20	12.84
16	0:00:00	1.65	77.02	14.82	2.65	63.74	15.27	0.00	63.12	15.14	2.81	99.94	13.79	2.97	93.96	12.98	2.03	48.18	12.16

วันที่	เวลา	TOPSPP (G-5019) 'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)
16	1:00:00	1.49	76.03	14.75	2.64	61.56	15.25	0.00	62.15	15.15	2.93	98.69	13.80	2.88	67.72	13.01	1.80	44.35	11.40
16	2:00:00	1.25	75.66	14.88	2.74	61.92	15.25	0.00	62.22	15.18	2.88	97.30	13.68	2.92	68.99	13.03	1.55	41.37	10.80
16	3:00:00	1.24	74.67	14.79	2.60	61.37	15.26	0.00	61.78	15.20	2.86	100.20	13.81	2.96	69.60	13.04	1.29	38.73	10.35
16	4:00:00	1.52	74.84	14.74	2.62	61.51	15.26	0.00	61.99	15.21	2.86	99.52	13.87	2.86	68.83	13.03	1.40	37.86	9.98
16	5:00:00	1.73	73.53	14.77	2.68	63.04	15.27	0.00	61.57	15.20	2.76	98.63	13.84	2.93	70.53	13.04	1.22	36.15	9.70
16	6:00:00	2.44	71.02	14.92	2.75	64.51	15.27	0.00	63.06	15.14	2.69	98.49	13.81	3.00	69.85	13.11	1.19	35.46	9.48
16	7:00:00	1.94	71.32	14.94	2.49	62.62	15.27	0.00	63.33	15.19	2.88	99.35	13.83	3.02	69.05	13.10	1.11	35.36	9.30
16	8:00:00	1.70	71.68	14.92	2.68	64.51	15.27	0.00	87.43	14.38	3.00	100.82	13.86	3.09	68.98	13.09	0.96	52.97	8.65
16	9:00:00	1.90	72.69	14.91	2.72	63.81	15.28	0.00	89.60	14.37	2.67	97.92	13.78	3.00	69.72	13.08	1.09	53.19	8.51
16	10:00:00	2.63	72.70	14.90	2.62	61.67	15.27	0.00	92.15	14.39	2.71	100.64	13.78	3.06	70.35	13.08	1.20	53.76	8.38
16	11:00:00	1.89	73.21	14.90	2.66	62.86	15.27	0.00	93.16	14.39	2.81	105.13	13.78	3.01	70.17	13.07	1.20	53.76	8.38
16	12:00:00	1.95	77.97	14.89	2.54	62.77	15.26	0.00	92.29	14.38	2.74	102.76	13.72	3.09	69.63	13.10	1.20	53.76	8.38
16	13:00:00	1.90	74.66	14.91	2.12	82.45	14.27	0.00	92.77	14.39	2.85	104.84	13.65	3.10	69.32	13.11	1.20	53.76	8.38
16	14:00:00	1.44	75.10	14.89	2.12	84.46	14.24	0.00	92.95	14.39	Maintenance	Maintenance	Maintenance	3.07	68.78	13.13	1.64	95.15	13.52
16	15:00:00	1.98	73.75	14.88	2.13	84.29	14.24	0.00	91.18	14.38	2.43	103.41	13.59	3.02	69.13	13.11	1.23	100.56	14.13
16	16:00:00	1.80	74.48	14.86	2.15	84.89	14.25	0.00	88.91	14.36	2.55	100.94	13.60	2.93	70.82	13.08	1.17	95.75	13.87
16	17:00:00	1.38	84.53	14.48	2.21	93.49	14.33	0.00	91.73	14.39	2.61	98.59	13.52	3.13	71.18	13.12	1.02	91.89	13.65
16	18:00:00	0.99	97.94	14.00	2.19	92.37	14.32	0.00	91.56	14.39	2.49	99.75	13.56	2.96	82.31	12.53	1.04	92.22	13.49
16	19:00:00	1.69	97.05	14.01	2.17	87.99	14.26	0.00	94.08	14.40	2.54	102.87	13.58	2.90	89.39	12.33	1.39	92.17	13.47
16	20:00:00	1.20	94.84	13.99	2.24	87.42	14.25	0.00	92.82	14.39	2.57	100.88	13.58	2.76	88.62	12.33	1.22	91.81	13.46
16	21:00:00	1.41	83.88	14.58	2.17	84.73	14.24	0.00	91.61	14.38	2.71	100.11	13.57	2.93	89.87	12.33	5.45	88.21	13.33
16	22:00:00	0.98	77.97	14.92	2.19	84.72	14.31	0.00	91.28	14.39	2.77	98.52	13.54	2.93	85.83	12.45	5.90	88.97	13.14
16	23:00:00	1.11	75.23	14.94	2.81	63.19	15.27	0.00	81.58	14.64	2.87	96.79	13.70	3.73	75.41	13.18	3.47	71.69	13.34
17	0:00:00	1.19	75.40	14.85	2.79	62.34	15.26	0.00	64.26	15.16	2.97	96.84	13.73	3.26	70.78	13.06	3.34	55.98	13.53
17	1:00:00	0.97	74.51	14.76	2.89	63.25	15.27	0.00	65.11	15.10	2.95	95.95	13.76	3.15	70.28	13.03	2.96	54.32	13.42
17	2:00:00	1.25	74.51	14.87	2.87	62.79	15.26	0.00	63.65	15.19	2.98	96.47	13.72	3.04	71.23	13.08	2.75	53.32	13.36
17	3:00:00	1.32	73.19	14.86	2.66	61.79	15.26	0.00	62.23	15.20	3.00	97.94	13.70	2.99	70.96	13.07	2.70	53.41	13.26
17	4:00:00	1.42	73.89	14.89	2.96	63.75	15.25	0.00	62.80	15.18	3.13	98.79	13.70	3.04	71.12	13.08	2.64	52.70	13.17
17	5:00:00	1.11	73.03	14.89	2.77	62.03	15.26	0.00	63.27	15.17	3.06	98.67	13.61	2.99	71.05	13.09	2.73	53.48	13.06
17	6:00:00	1.25	74.21	14.90	2.93	63.74	15.26	0.00	64.07	15.19	3.02	98.96	13.56	3.13	72.26	13.06	2.54	51.91	13.06
17	7:00:00	1.18	73.45	14.90	2.85	63.20	15.27	0.00	63.12	15.21	2.98	98.29	13.64	3.07	71.12	13.05	2.69	51.78	12.95
17	8:00:00	0.87	74.53	14.80	2.26	62.65	15.25	0.00	89.73	14.38	2.94	99.17	13.60	2.93	70.16	13.03	2.07	71.14	12.11
17	9:00:00	1.62	72.33	14.74	2.52	64.36	15.25	0.00	94.54	14.38	2.91	100.67	13.54	2.85	78.54	12.71	3.57	70.00	11.99
17	10:00:00	1.59	73.42	14.72	2.45	64.51	15.24	0.00	94.33	14.38	2.92	100.60	13.59	2.77	92.50	12.31	3.57	70.00	11.99
17	11:00:00	2.01	72.60	14.69	2.75	65.13	15.23	0.00	94.89	14.37	3.10	105.10	13.55	2.69	92.69	12.29	3.16	76.57	12.62
17	12:00:00	1.57	74.34	14.70	2.70	63.16	15.23	0.00	91.95	14.35	2.99	100.14	13.51	2.72	93.99	12.28	0.00	104.82	14.66
17	13:00:00	0.90	101.81	14.02	2.10	92.17	14.36	0.00	91.33	14.33	3.11	100.66	13.63	2.84	92.27	12.25	0.00	104.53	14.64
17	14:00:00	1.16	106.20	14.00	1.98	95.84	14.32	0.00	91.90	14.33	3.12	102.56	13.61	2.84	90.60	12.22	5.17	105.14	14.63
17	15:00:00	1.61	102.92	13.99	1.94	90.43	14.26	0.00	96.10	14.35	3.02	102.32	13.63	2.81	90.40	12.21	7.17	109.24	14.64
17	16:00:00	1.70	93.45	13.91	2.15	96.28	14.31	0.00	94.86	14.33	2.91	100.97	13.49	2.72	94.28	12.23	4.73	106.96	14.62
17	17:00:00	1.15	91.46	13.90	2.29	100.12	14.34	0.00	90.10	14.30	2.93	100.55	13.46	2.71	91.24	12.20	4.98	107.72	14.64
17	18:00:00	1.07	89.24	13.87	2.15	99.61	14.34	0.00	89.08	14.29	2.87	103.95	13.50	2.58	91.37	12.21	16.27	109.03	14.68
17	19:00:00	1.34	89.75	13.86	1.99	97.83	14.34	0.00	91.54	14.30	2.94	102.12	13.47	2.70	89.56	12.19	13.97	107.66	14.69
17	20:00:00	1.41	90.18	13.87	1.95	95.43	14.32	0.00	90.90	14.30	3.05	102.24	13.62	2.72	88.45	12.18	17.40	104.81	14.69
17	21:00:00	1.19	91.29	13.88	2.01	90.68	14.25	0.00	90.76	14.30	2.89	102.55	13.59	2.63	87.55	12.18	16.57	105.77	14.70
17	22:00:00	1.13	90.12	13.91	2.08	84.56	14.38	0.00	89.25	14.29	2.80	101.16	13.56	2.61	87.57	12.19	16.78	106.77	14.71
17	23:00:00	1.44	70.25	14.79	2.72	63.95	15.22	0.00	78.18	14.58	2.95	100.43	13.60	3.47	80.67	12.72	Maintenance	Maintenance	Maintenance
18	0:00:00	1.39	71.44	14.79	2.86	64.58	15.18	0.00	60.90	15.07	3.12	96.92	13.65	3.05	70.66	12.98	Maintenance	Maintenance	Maintenance
18	1:00:00	1.13	72.62	14.73	2.77	63.20	15.17	0.00	62.60	15.00	3.37	79.57	13.98	3.13	68.70	13.02	Maintenance	Maintenance	Maintenance
18	2:00:00	0.98	72.56	14.74	2.66	61.55	15.19	0.00	61.34	15.07	3.55	76.01	14.14	3.05	67.85	13.03	Maintenance	Maintenance	Maintenance
18	3:00:00	1.11	72.13	14.78	2.68	62.71	15.17	0.00	60.84	15.09	3.48	75.70	14.13	3.08	68.91	13.01	Maintenance	Maintenance	Maintenance
18	4:00:00	1.25	73.13	14.68	2.74	62.12	15.18	0.00	60.29	15.08	3.36	74.14	14.14	3.00	68.19	13.00	Maintenance	Maintenance	Maintenance

วันที่	เวลา	TOPSPP (G-5019) 'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)
18	5:00:00	1.36	74.12	14.66	2.87	63.14	15.17	0.00	61.28	15.06	3.30	74.54	14.13	3.07	67.70	13.01	Maintenance	Maintenance	Maintenance
18	6:00:00	1.58	73.19	14.65	2.83	62.96	15.16	0.00	61.89	15.08	3.31	73.88	14.13	3.16	67.59	13.02	Maintenance	Maintenance	Maintenance
18	7:00:00	1.74	71.33	14.69	2.89	62.85	15.08	0.00	62.95	15.04	3.42	74.02	14.23	3.01	67.81	12.94	16.27	78.44	15.60
18	8:00:00	1.74	71.50	14.68	2.89	64.08	15.00	0.00	86.79	14.27	3.35	74.95	14.11	3.05	67.30	12.98	17.14	112.86	14.83
18	9:00:00	1.82	75.79	14.77	2.64	64.89	14.93	0.00	89.94	14.26	3.31	77.01	14.09	2.74	74.77	12.57	16.08	116.15	14.80
18	10:00:00	1.17	77.45	14.81	2.55	64.23	15.00	0.00	89.70	14.26	3.12	99.86	13.60	2.61	87.31	12.13	16.28	116.87	14.80
18	11:00:00	1.04	74.77	14.79	2.57	62.94	15.08	0.00	89.67	14.25	3.14	103.01	13.50	2.56	86.11	12.13	14.79	116.46	14.79
18	12:00:00	1.30	75.32	14.77	2.50	62.94	14.96	0.00	90.25	14.26	3.11	103.66	13.40	2.64	88.10	12.13	15.80	114.11	14.77
18	13:00:00	0.18	105.36	14.01	2.20	90.17	14.25	0.00	93.60	14.28	2.98	105.35	13.42	2.59	86.21	12.10	12.98	113.88	14.75
18	14:00:00	0.78	106.10	13.99	2.33	92.80	14.23	0.00	93.27	14.28	2.95	104.92	13.43	2.67	87.64	12.10	4.96	114.16	14.79
18	15:00:00	0.45	111.19	14.03	2.30	94.47	14.24	0.00	94.65	14.27	Maintenance	Maintenance	Maintenance	2.78	88.46	12.11	3.83	115.11	14.77
18	16:00:00	0.41	102.46	13.96	2.22	93.80	14.24	0.00	94.35	14.27	3.08	105.57	13.47	2.74	88.52	12.12	Maintenance	Maintenance	Maintenance
18	17:00:00	0.87	96.85	13.88	2.17	93.74	14.24	0.00	96.37	14.28	3.08	101.52	13.40	2.64	88.22	12.12	Maintenance	Maintenance	Maintenance
18	18:00:00	0.65	93.56	13.87	2.21	96.04	14.25	0.00	98.07	14.28	3.14	104.45	13.47	2.53	88.17	12.14	Maintenance	Maintenance	Maintenance
18	19:00:00	1.02	92.97	13.87	2.16	95.85	14.25	0.00	97.93	14.29	Maintenance	Maintenance	Maintenance	2.78	87.84	12.10	Maintenance	Maintenance	Maintenance
18	20:00:00	1.11	92.08	13.87	2.14	92.93	14.24	0.00	97.59	14.29	Maintenance	Maintenance	Maintenance	2.72	86.56	12.10	Maintenance	Maintenance	Maintenance
18	21:00:00	1.14	91.86	13.87	2.20	94.53	14.24	0.00	96.70	14.29	Maintenance	Maintenance	Maintenance	2.51	88.47	12.11	Maintenance	Maintenance	Maintenance
18	22:00:00	1.20	90.35	14.03	2.35	91.70	14.34	0.00	99.10	14.30	Maintenance	Maintenance	Maintenance	2.43	88.96	12.14	Maintenance	Maintenance	Maintenance
18	23:00:00	1.80	72.08	14.87	2.72	64.71	15.09	0.00	87.13	14.59	3.28	85.32	13.67	2.60	77.38	12.63	2.20	95.28	15.20
19	0:00:00	0.89	72.02	14.88	2.70	64.96	15.03	0.00	67.35	15.06	3.27	78.62	13.78	2.73	70.85	12.92	2.06	80.47	15.53
19	1:00:00	1.51	73.60	14.86	2.71	65.01	14.99	0.00	66.14	15.15	3.25	78.67	13.72	2.70	69.13	12.95	1.86	79.42	15.51
19	2:00:00	1.33	73.51	14.87	2.75	63.09	15.06	0.00	66.28	15.11	3.36	78.06	13.71	3.03	69.74	13.10	2.07	79.48	15.52
19	3:00:00	1.01	75.05	14.89	2.63	61.18	15.02	0.00	68.13	15.07	3.37	78.68	13.72	3.00	69.23	13.03	2.20	80.89	15.51
19	4:00:00	0.30	76.60	14.90	2.74	63.91	15.01	0.00	68.53	15.01	3.35	77.27	13.73	2.95	68.53	12.99	2.06	78.58	15.49
19	5:00:00	0.50	77.07	14.90	2.64	64.00	15.05	0.00	68.38	15.03	3.46	78.39	13.74	3.08	68.30	13.04	1.81	79.67	15.51
19	6:00:00	0.17	77.00	14.83	2.75	64.23	15.07	0.00	68.40	15.06	3.37	80.32	13.62	3.09	70.15	12.98	1.39	85.49	15.53
19	7:00:00	0.40	78.08	14.85	2.77	63.26	15.14	0.00	67.96	15.11	3.25	79.60	13.67	3.01	69.64	13.01	1.47	87.00	15.52
19	8:00:00	0.35	77.65	14.83	2.88	62.14	15.12	0.00	96.22	14.27	2.91	79.01	13.70	3.04	69.91	13.01	1.70	87.43	15.53
19	9:00:00	0.14	78.08	14.78	3.07	62.10	15.10	0.00	97.69	14.27	2.96	78.25	13.74	2.87	77.80	12.59	1.63	86.64	15.56
19	10:00:00	0.00	79.35	14.75	2.82	62.60	15.04	0.00	96.93	14.27	2.62	103.63	12.97	2.77	90.35	12.21	1.53	87.07	15.56
19	11:00:00	0.05	79.49	14.76	2.77	64.23	14.94	0.00	98.29	14.27	Maintenance	Maintenance	Maintenance	2.66	90.56	12.15	1.96	85.44	15.59
19	12:00:00	0.00	79.25	14.72	2.46	63.01	14.95	0.00	96.17	14.27	Maintenance	Maintenance	Maintenance	2.54	90.46	12.14	1.68	85.50	15.55
19	13:00:00	0.08	107.76	14.04	2.13	91.86	14.23	0.00	92.76	14.27	Maintenance	Maintenance	Maintenance	2.76	90.83	12.22	1.42	84.41	15.54
19	14:00:00	0.51	105.07	14.00	2.22	94.16	14.22	0.00	92.73	14.27	Maintenance	Maintenance	Maintenance	2.65	90.66	12.12	1.42	82.87	15.53
19	15:00:00	0.76	106.02	14.01	2.18	94.22	14.22	0.00	90.82	14.24	Maintenance	Maintenance	Maintenance	2.57	90.13	12.14	1.43	83.94	15.55
19	16:00:00	0.58	105.59	14.01	2.14	92.59	14.21	0.00	91.21	14.25	2.82	105.63	13.10	2.73	89.51	12.20	1.56	84.46	15.55
19	17:00:00	0.72	105.24	14.01	2.13	95.91	14.24	0.00	91.63	14.25	2.90	105.25	13.10	2.78	90.97	12.24	1.38	88.97	15.55
19	18:00:00	0.81	104.15	14.00	2.10	96.46	14.24	0.00	90.09	14.26	2.84	102.98	13.10	2.80	90.61	12.20	1.17	116.09	14.83
19	19:00:00	0.67	108.91	14.03	2.18	95.25	14.22	0.00	91.07	14.26	3.04	104.23	13.12	2.78	88.76	12.21	1.03	114.19	14.75
19	20:00:00	0.34	109.28	14.04	2.17	93.98	14.22	0.00	90.23	14.26	2.83	104.35	13.14	3.02	90.59	12.28	0.86	114.13	14.79
19	21:00:00	0.68	103.76	14.00	2.21	94.05	14.22	0.00	91.05	14.26	2.94	104.86	13.15	2.86	88.74	12.22	1.04	116.29	14.83
19	22:00:00	0.77	99.87	14.03	2.23	88.63	14.32	0.00	92.05	14.27	2.99	104.50	13.17	2.94	89.47	12.27	1.00	115.34	14.80
19	23:00:00	1.28	72.50	14.85	2.47	64.49	14.90	0.00	79.36	14.60	3.35	79.94	13.76	3.14	76.66	12.78	0.97	82.74	15.59
20	0:00:00	1.43	72.41	14.85	2.45	65.93	14.76	0.00	61.21	15.12	3.43	78.50	13.85	3.24	68.18	13.01	1.30	82.87	15.56
20	1:00:00	1.35	72.67	14.84	2.56	65.52	14.81	0.00	62.75	15.05	3.37	77.05	13.87	3.23	68.57	13.05	1.49	82.02	15.49
20	2:00:00	1.40	71.10	14.84	2.56	64.61	14.87	0.00	63.14	15.02	3.44	77.36	13.88	3.26	68.90	13.06	1.20	82.51	15.47
20	3:00:00	1.35	72.20	14.82	2.74	63.95	15.03	0.00	63.28	15.02	3.39	77.17	13.86	3.28	69.36	13.03	1.27	81.58	15.55
20	4:00:00	1.51	72.17	14.79	2.66	61.88	15.06	0.00	63.91	15.03	3.41	76.11	13.90	3.33	70.02	13.02	1.41	81.35	15.51
20	5:00:00	1.39	74.26	14.79	2.80	63.00	15.09	0.00	63.00	15.05	3.46	76.16	13.94	3.33	68.91	12.97	1.38	80.75	15.51
20	6:00:00	0.97	73.58	14.83	2.84	63.11	15.09	0.00	62.19	15.09	3.53	76.00	13.95	3.43	70.34	13.02	1.22	80.65	15.57
20	7:00:00	0.75	75.45	14.79	2.85	61.95	15.09	0.00	62.29	15.11	3.42	77.26	13.88	3.33	70.07	13.03	1.33	80.75	15.51
20	8:00:00	0.46	76.63	14.77	2.79	61.94	15.04	0.00	62.46	15.10	3.23	78.92	13.92	3.42	70.14	13.05	0.99	111.85	14.75

วันที่	เวลา	TOPSPP (G-5019) 'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)
20	9:00:00	0.48	76.73	14.72	2.72	63.58	15.04	0.00	64.12	15.08	3.27	82.19	13.91	3.10	78.14	12.62	1.18	111.20	14.74
20	10:00:00	0.34	77.98	14.68	2.42	63.77	15.03	0.00	66.83	15.08	Maintenance	Maintenance	Maintenance	2.90	89.69	12.23	1.10	110.19	14.74
20	11:00:00	0.49	77.34	14.67	2.40	63.00	15.01	0.00	65.77	15.08	Maintenance	Maintenance	Maintenance	2.99	89.80	12.18	0.99	113.10	14.74
20	12:00:00	0.39	73.53	14.72	2.58	64.68	15.01	0.00	67.70	15.08	Maintenance	Maintenance	Maintenance	2.83	89.59	12.15	1.40	111.58	14.72
20	13:00:00	0.49	93.72	13.93	2.59	64.85	15.02	0.00	64.49	15.08	Maintenance	Maintenance	Maintenance	2.91	87.87	12.19	0.94	113.17	14.71
20	14:00:00	0.73	94.38	13.90	2.49	64.48	15.06	0.00	62.27	15.06	Maintenance	Maintenance	Maintenance	2.86	86.50	12.15	8.22	82.52	13.39
20	15:00:00	0.97	96.75	13.91	2.65	63.85	15.07	0.00	65.75	15.05	Maintenance	Maintenance	Maintenance	2.82	89.04	12.17	4.50	112.03	14.27
20	16:00:00	0.85	100.45	13.97	2.52	63.76	15.04	0.00	65.66	15.06	Maintenance	Maintenance	Maintenance	2.94	90.87	12.19	Maintenance	Maintenance	Maintenance
20	17:00:00	0.93	102.02	13.98	2.18	74.82	14.61	0.00	64.28	15.11	Maintenance	Maintenance	Maintenance	2.79	89.34	12.19	2.08	116.98	14.88
20	18:00:00	1.10	101.11	13.98	2.11	93.46	14.24	0.00	84.78	14.30	Maintenance	Maintenance	Maintenance	2.76	89.21	12.20	1.63	112.45	14.87
20	19:00:00	1.09	104.23	14.00	2.27	95.94	14.25	0.00	90.96	14.28	Maintenance	Maintenance	Maintenance	2.88	89.59	12.23	1.46	115.19	14.91
20	20:00:00	1.42	103.03	13.99	2.17	94.06	14.25	0.00	91.93	14.29	Maintenance	Maintenance	Maintenance	2.79	88.69	12.21	1.34	114.25	14.93
20	21:00:00	0.86	101.56	13.98	2.51	75.51	14.74	0.00	92.26	14.29	3.02	105.94	13.32	2.87	90.10	12.23	1.38	116.36	14.93
20	22:00:00	1.25	98.24	14.02	2.53	65.96	14.95	0.00	93.27	14.29	2.98	104.41	13.30	2.81	90.54	12.24	1.57	115.48	14.94
20	23:00:00	1.92	70.70	14.85	2.51	65.90	15.00	0.00	73.64	14.83	Maintenance	Maintenance	Maintenance	3.11	79.48	12.76	1.37	96.51	15.39
21	0:00:00	1.91	70.93	14.90	2.67	65.16	15.03	0.00	63.90	15.11	3.06	103.68	13.22	3.29	72.32	13.06	1.64	84.70	15.91
21	1:00:00	2.03	70.20	14.74	2.70	63.49	15.07	0.00	64.90	15.11	3.03	87.49	13.31	3.25	71.81	13.02	Maintenance	Maintenance	Maintenance
21	2:00:00	2.01	69.12	14.73	2.63	62.69	15.03	0.00	66.53	15.18	2.88	105.24	13.30	3.23	72.06	13.08	1.52	86.60	15.66
21	3:00:00	2.13	69.98	14.78	2.79	64.26	14.98	0.00	65.60	15.12	Maintenance	Maintenance	Maintenance	3.34	72.79	13.06	1.81	85.43	15.67
21	4:00:00	1.99	71.68	14.80	2.71	63.27	15.01	0.00	64.69	15.13	Maintenance	Maintenance	Maintenance	3.21	71.62	13.06	1.96	85.81	15.67
21	5:00:00	1.93	72.16	14.88	2.72	63.44	15.06	0.00	66.57	15.16	Maintenance	Maintenance	Maintenance	3.39	74.66	13.00	1.53	82.64	15.68
21	6:00:00	1.74	71.63	14.83	2.68	63.72	15.05	0.00	65.90	15.19	Maintenance	Maintenance	Maintenance	3.29	73.32	13.04	1.69	79.74	15.72
21	7:00:00	1.71	72.59	14.78	2.68	66.23	14.94	0.00	64.78	15.11	Maintenance	Maintenance	Maintenance	3.26	73.01	13.08	1.50	79.60	15.71
21	8:00:00	1.35	71.88	14.80	2.54	67.48	14.84	0.00	89.76	14.32	Maintenance	Maintenance	Maintenance	3.36	71.86	13.04	Maintenance	Maintenance	Maintenance
21	9:00:00	1.33	73.34	14.76	2.60	69.51	14.79	0.00	94.94	14.31	Maintenance	Maintenance	Maintenance	3.10	81.15	12.71	Maintenance	Maintenance	Maintenance
21	10:00:00	1.20	74.07	14.72	2.44	67.53	14.85	0.00	94.40	14.31	Maintenance	Maintenance	Maintenance	3.04	97.08	12.28	Maintenance	Maintenance	Maintenance
21	11:00:00	1.47	73.51	14.71	2.53	69.44	14.88	0.00	93.06	14.31	2.76	104.73	12.99	3.04	96.53	12.29	Maintenance	Maintenance	Maintenance
21	12:00:00	1.59	74.40	14.64	2.54	68.57	14.84	0.00	93.21	14.30	2.82	103.36	12.98	2.99	95.28	12.28	Maintenance	Maintenance	Maintenance
21	13:00:00	1.22	100.37	13.99	2.38	93.10	14.27	0.00	93.47	14.31	2.85	103.84	13.02	2.88	95.11	12.26	Maintenance	Maintenance	Maintenance
21	14:00:00	1.20	102.89	13.97	2.27	95.87	14.27	0.00	92.68	14.30	2.93	105.64	13.08	2.91	94.56	12.25	Maintenance	Maintenance	Maintenance
21	15:00:00	1.33	103.63	13.99	2.15	98.30	14.29	0.00	91.15	14.27	2.95	106.02	13.05	2.80	93.97	12.23	Maintenance	Maintenance	Maintenance
21	16:00:00	1.01	96.47	13.93	2.39	96.41	14.27	0.00	94.27	14.31	Maintenance	Maintenance	Maintenance	2.76	95.74	12.24	Maintenance	Maintenance	Maintenance
21	17:00:00	0.99	97.48	13.91	2.38	94.49	14.27	0.00	96.15	14.32	Maintenance	Maintenance	Maintenance	2.84	94.52	12.24	Maintenance	Maintenance	Maintenance
21	18:00:00	1.14	97.91	13.90	2.27	96.19	14.28	0.00	95.52	14.32	2.84	104.08	13.05	2.94	94.80	12.25	Maintenance	Maintenance	Maintenance
21	19:00:00	0.77	96.82	13.89	2.22	95.07	14.27	0.00	94.36	14.31	2.93	103.58	13.04	2.90	95.03	12.26	1.05	105.55	14.71
21	20:00:00	1.00	94.68	13.88	2.23	95.25	14.27	0.00	93.52	14.31	3.03	104.74	13.05	2.99	95.92	12.27	1.02	106.40	14.74
21	21:00:00	0.59	92.49	13.87	2.17	95.62	14.28	0.00	94.02	14.31	Maintenance	Maintenance	Maintenance	2.92	95.40	12.26	0.97	106.96	14.75
21	22:00:00	1.06	92.05	13.94	2.29	93.56	14.36	0.00	93.68	14.31	Maintenance	Maintenance	Maintenance	2.99	97.71	12.28	0.82	109.69	14.76
21	23:00:00	1.40	71.40	14.80	2.73	71.37	14.89	0.00	81.00	14.58	3.38	81.36	13.75	3.17	83.64	12.82	0.82	94.59	15.29
22	0:00:00	1.36	70.34	14.83	2.74	71.94	14.85	0.00	64.83	15.07	3.42	75.91	13.77	3.28	75.18	13.09	0.93	83.02	15.71
22	1:00:00	0.97	70.77	14.78	2.54	71.29	14.94	0.00	66.86	15.05	3.40	76.79	13.78	3.23	75.42	13.01	1.06	83.40	15.58
22	2:00:00	2.09	70.53	14.78	2.22	71.05	14.99	0.00	65.41	15.05	3.43	76.71	13.91	3.24	75.55	13.01	1.13	83.75	15.59
22	3:00:00	1.87	70.52	14.74	1.86	70.90	14.95	0.00	64.89	15.07	3.45	77.63	13.86	3.21	74.75	13.09	1.17	83.63	15.53
22	4:00:00	1.33	69.26	14.68	1.76	71.36	14.99	0.00	65.18	15.06	3.55	77.67	13.94	3.26	74.95	13.10	1.17	83.27	15.52
22	5:00:00	1.82	70.34	14.69	1.73	70.65	15.05	0.00	64.77	15.06	3.67	77.86	13.94	3.17	73.45	13.10	1.24	84.17	15.53
22	6:00:00	1.76	69.91	14.74	1.64	68.44	15.16	0.00	65.00	15.01	3.69	77.97	13.91	3.50	73.40	13.10	1.05	82.53	15.62
22	7:00:00	1.64	70.22	14.76	1.68	67.25	15.23	0.00	66.14	14.95	3.44	79.56	13.67	3.47	71.28	12.98	1.32	84.20	15.65
22	8:00:00	1.40	69.49	14.73	1.56	67.50	15.18	0.00	91.88	14.29	3.39	79.81	13.69	3.26	71.94	12.98	1.06	114.91	14.90
22	9:00:00	1.57	70.61	14.72	1.60	67.90	15.18	5.38	67.60	11.41	3.18	78.24	13.60	3.13	72.34	12.93	3.91	85.18	8.11
22	10:00:00	1.76	69.64	14.71	1.60	68.08	15.15	4.81	69.45	16.53	2.97	102.10	12.95	3.10	73.36	12.98	6.80	91.78	12.49
22	11:00:00	1.70	69.43	14.71	1.67	68.23	15.10	1.75	95.44	14.83	2.74	103.37	12.90	3.10	73.49	12.96	1.70	96.83	14.80
22	12:00:00	1.55	70.30	14.59	1.65	67.11	15.09	1.54	98.38	14.82	2.85	104.71	12.89	3.12	71.52	12.92	2.05	96.83	14.80

วันที่	เวลา	TOPSPP (G-5019) 'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)
22	13:00:00	1.15	95.22	13.88	1.70	93.00	14.35	1.41	98.29	14.82	Maintenance	Maintenance	Maintenance	3.08	72.32	12.94	1.69	98.77	14.81
22	14:00:00	1.25	96.74	13.88	1.92	97.97	14.28	1.94	98.90	14.82	Maintenance	Maintenance	Maintenance	3.11	73.52	13.00	1.64	100.56	14.81
22	15:00:00	1.32	97.74	13.88	1.97	97.02	14.28	1.69	96.90	14.80	Maintenance	Maintenance	Maintenance	3.15	73.30	13.03	1.50	99.58	14.79
22	16:00:00	0.95	97.26	13.88	1.90	94.24	14.27	1.41	98.32	14.81	Maintenance	Maintenance	Maintenance	2.96	70.39	13.00	1.49	98.32	14.79
22	17:00:00	1.10	95.20	13.86	2.16	95.68	14.27	1.35	99.05	14.81	Maintenance	Maintenance	Maintenance	3.12	71.55	12.98	1.37	99.74	14.80
22	18:00:00	1.28	95.90	13.88	2.23	94.62	14.28	1.33	99.85	14.81	2.85	104.38	13.04	2.88	82.13	12.49	1.87	100.01	14.82
22	19:00:00	1.39	88.71	13.79	2.25	93.80	14.28	2.00	98.31	14.80	2.84	103.02	13.02	2.70	93.38	12.19	1.78	100.76	14.82
22	20:00:00	1.25	87.22	13.76	2.13	97.52	14.29	1.45	97.94	14.80	2.84	103.16	12.99	2.61	93.71	12.19	1.35	99.72	14.85
22	21:00:00	1.21	87.84	13.77	2.01	98.26	14.30	1.17	98.09	14.80	2.89	103.86	12.97	2.63	94.62	12.20	1.62	98.86	14.86
22	22:00:00	1.50	86.76	13.86	1.80	94.96	14.37	1.70	97.84	14.79	2.97	101.96	12.97	2.60	94.18	12.29	1.70	98.79	14.85
22	23:00:00	1.70	67.35	14.68	2.01	68.91	14.99	1.54	85.50	15.10	3.27	80.47	13.64	2.89	73.93	13.02	1.93	77.44	15.30
23	0:00:00	1.88	70.09	14.67	1.86	68.97	14.92	2.18	67.70	15.61	3.38	75.81	13.80	2.94	75.04	12.98	Maintenance	Maintenance	Maintenance
23	1:00:00	2.13	69.27	14.65	1.90	68.12	15.04	1.82	68.45	15.55	3.29	75.77	13.73	2.90	74.17	12.99	Maintenance	Maintenance	Maintenance
23	2:00:00	1.71	68.43	14.66	1.73	67.64	15.05	2.13	69.27	15.52	3.18	75.72	13.63	2.77	72.97	12.98	Maintenance	Maintenance	Maintenance
23	3:00:00	1.71	69.24	14.66	1.69	69.65	14.97	2.38	66.53	15.47	3.21	76.53	13.66	2.78	72.82	12.97	Maintenance	Maintenance	Maintenance
23	4:00:00	1.54	68.04	14.63	1.55	71.06	14.91	2.08	66.81	15.42	3.27	76.89	13.67	2.90	74.48	13.01	Maintenance	Maintenance	Maintenance
23	5:00:00	1.32	69.15	14.64	1.33	73.20	14.80	2.21	67.08	15.51	3.18	75.66	13.70	2.84	73.03	13.06	Maintenance	Maintenance	Maintenance
23	6:00:00	1.19	69.50	14.77	1.27	71.11	15.00	1.77	68.81	15.53	3.34	77.36	13.64	2.81	72.01	13.07	Maintenance	Maintenance	Maintenance
23	7:00:00	1.57	67.66	14.77	1.27	70.93	15.06	1.36	68.40	15.57	3.35	76.85	13.70	2.82	71.30	13.10	Maintenance	Maintenance	Maintenance
23	8:00:00	1.50	67.46	14.74	1.13	70.36	15.07	1.29	94.66	14.74	3.22	78.99	13.52	2.92	73.07	13.11	Maintenance	Maintenance	Maintenance
23	9:00:00	2.13	66.94	14.73	1.05	70.53	15.06	1.53	97.37	14.71	3.07	79.77	13.50	2.64	82.60	12.71	Maintenance	Maintenance	Maintenance
23	10:00:00	1.84	68.45	14.72	1.02	70.13	15.04	1.36	96.35	14.70	2.83	105.38	12.85	2.50	95.09	12.26	Maintenance	Maintenance	Maintenance
23	11:00:00	1.45	69.06	14.73	1.12	70.70	14.97	1.89	95.96	14.69	Maintenance	Maintenance	Maintenance	2.51	98.04	12.28	Maintenance	Maintenance	Maintenance
23	12:00:00	1.94	67.69	14.73	1.22	71.14	14.91	1.93	97.76	14.70	Maintenance	Maintenance	Maintenance	2.43	96.66	12.25	Maintenance	Maintenance	Maintenance
23	13:00:00	1.59	69.77	14.73	1.07	95.89	14.32	1.68	96.78	14.69	2.68	103.79	12.84	2.47	97.35	12.26	Maintenance	Maintenance	Maintenance
23	14:00:00	1.03	72.94	14.75	1.18	99.17	14.27	1.70	100.77	14.70	2.56	105.41	12.84	2.47	97.77	12.27	Maintenance	Maintenance	Maintenance
23	15:00:00	1.33	73.07	14.74	1.28	97.96	14.26	1.67	102.94	14.71	2.53	102.77	12.81	2.46	98.95	12.28	Maintenance	Maintenance	Maintenance
23	16:00:00	1.02	74.82	14.75	1.45	98.65	14.26	1.55	100.86	14.70	2.66	103.12	12.83	2.49	101.16	12.30	Maintenance	Maintenance	Maintenance
23	17:00:00	0.80	86.43	14.35	1.55	94.83	14.22	1.46	102.38	14.72	2.69	102.84	12.85	2.39	100.48	12.28	Maintenance	Maintenance	Maintenance
23	18:00:00	0.66	99.83	13.83	4.63	81.53	10.63	1.57	101.28	14.70	2.82	104.65	12.90	2.41	98.88	12.27	Maintenance	Maintenance	Maintenance
23	19:00:00	1.14	93.45	13.78	0.00	106.06	14.82	1.61	99.67	14.69	Maintenance	Maintenance	Maintenance	2.42	98.09	12.26	Maintenance	Maintenance	Maintenance
23	20:00:00	1.46	88.36	13.73	Maintenance	Maintenance	Maintenance	1.33	97.81	14.68	Maintenance	Maintenance	Maintenance	2.43	95.84	12.25	Maintenance	Maintenance	Maintenance
23	21:00:00	2.22	74.68	14.30	Maintenance	Maintenance	Maintenance	1.12	99.19	14.68	2.59	105.43	12.88	2.52	97.88	12.24	Maintenance	Maintenance	Maintenance
23	22:00:00	1.84	69.41	14.63	0.00	104.83	14.91	0.83	98.18	14.68	2.62	104.50	12.87	2.42	96.89	12.23	Maintenance	Maintenance	Maintenance
23	23:00:00	1.71	68.52	14.62	0.00	80.69	15.30	0.81	87.13	14.98	2.91	80.81	13.45	2.71	82.35	12.76	Maintenance	Maintenance	Maintenance
24	0:00:00	1.64	68.54	14.62	0.00	81.40	15.28	0.97	68.27	15.54	2.93	74.75	13.63	2.66	73.39	13.01	Maintenance	Maintenance	Maintenance
24	1:00:00	1.71	69.27	14.51	0.00	82.06	15.30	1.33	68.68	15.45	3.02	75.40	13.60	2.65	73.62	12.91	Maintenance	Maintenance	Maintenance
24	2:00:00	1.88	69.23	14.58	0.00	81.93	15.32	1.29	68.34	15.48	3.24	76.81	13.60	2.83	74.21	12.94	Maintenance	Maintenance	Maintenance
24	3:00:00	1.39	70.17	14.59	0.00	82.45	15.32	1.54	68.47	15.44	3.11	74.91	13.58	2.74	74.05	12.98	Maintenance	Maintenance	Maintenance
24	4:00:00	1.37	69.81	14.60	0.00	82.36	15.34	0.96	68.10	15.44	3.32	76.30	13.55	2.71	73.85	12.95	Maintenance	Maintenance	Maintenance
24	5:00:00	2.00	69.48	14.62	0.00	80.27	15.46	1.51	69.75	15.35	3.04	75.22	13.48	2.83	74.18	12.94	Maintenance	Maintenance	Maintenance
24	6:00:00	2.19	70.02	14.61	0.00	79.04	15.63	1.68	69.27	15.37	3.01	75.00	13.55	2.83	71.77	12.98	Maintenance	Maintenance	Maintenance
24	7:00:00	2.06	70.86	14.59	0.00	77.78	15.66	1.85	68.35	15.44	3.25	77.33	13.66	2.71	72.20	12.96	Maintenance	Maintenance	Maintenance
24	8:00:00	1.26	68.66	14.75	0.00	78.43	15.66	0.95	90.92	14.70	3.10	77.66	13.46	2.78	72.13	12.98	Maintenance	Maintenance	Maintenance
24	9:00:00	1.61	67.72	14.74	0.00	78.30	15.63	0.40	98.74	14.65	2.98	78.25	13.48	2.53	82.33	12.56	Maintenance	Maintenance	Maintenance
24	10:00:00	1.33	70.26	14.76	0.00	79.32	15.58	1.34	97.24	14.66	2.89	78.61	13.50	2.45	93.46	12.14	Maintenance	Maintenance	Maintenance
24	11:00:00	1.08	69.47	14.75	0.00	78.90	15.54	1.30	96.61	14.65	2.89	79.62	13.47	2.40	91.92	12.13	Maintenance	Maintenance	Maintenance
24	12:00:00	1.73	68.82	14.72	0.00	78.33	15.53	1.44	95.07	14.63	2.94	78.60	13.53	2.46	91.01	12.11	Maintenance	Maintenance	Maintenance
24	13:00:00	1.21	92.53	13.91	Maintenance	Maintenance	Maintenance	1.78	94.40	14.63	2.68	79.27	13.50	2.43	91.34	12.12	Maintenance	Maintenance	Maintenance
24	14:00:00	1.09	97.11	13.85	Maintenance	Maintenance	Maintenance	1.55	97.23	14.63	2.82	77.60	13.48	2.42	92.16	12.09	Maintenance	Maintenance	Maintenance
24	15:00:00	0.78	98.80	13.86	Maintenance	Maintenance	Maintenance	1.62	93.96	14.62	2.86	77.38	13.50	2.39	92.76	12.09	Maintenance	Maintenance	Maintenance
24	16:00:00	0.25	100.13	13.86	Maintenance	Maintenance	Maintenance	1.71	95.51	14.64	2.78	79.32	13.51	2.49	92.09	12.04	Maintenance	Maintenance	Maintenance

วันที่	เวลา	TOPSPP (G-5019) 'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)
24	17:00:00	0.64	92.50	13.78	Maintenance	Maintenance	Maintenance	1.44	94.40	14.63	2.76	78.16	13.52	2.49	94.00	12.05	Maintenance	Maintenance	Maintenance
24	18:00:00	0.69	89.99	13.76	Maintenance	Maintenance	Maintenance	1.62	92.63	14.62	2.64	88.96	13.15	2.47	95.39	12.03	Maintenance	Maintenance	Maintenance
24	19:00:00	0.92	91.22	13.78	Maintenance	Maintenance	Maintenance	1.67	93.59	14.63	2.37	103.10	12.80	2.29	95.69	12.02	Maintenance	Maintenance	Maintenance
24	20:00:00	0.91	88.84	13.77	Maintenance	Maintenance	Maintenance	1.60	95.90	14.64	2.54	105.17	12.82	2.17	99.00	12.07	Maintenance	Maintenance	Maintenance
24	21:00:00	1.02	86.73	13.76	Maintenance	Maintenance	Maintenance	1.55	95.31	14.64	2.61	105.05	12.84	2.25	100.80	12.07	Maintenance	Maintenance	Maintenance
24	22:00:00	1.32	84.04	13.88	Maintenance	Maintenance	Maintenance	2.30	94.90	14.64	2.81	89.60	13.27	2.28	101.12	12.08	Maintenance	Maintenance	Maintenance
24	23:00:00	0.95	71.08	14.52	0.00	78.80	15.58	2.88	82.67	14.94	3.13	76.72	13.77	2.40	84.92	12.56	Maintenance	Maintenance	Maintenance
25	0:00:00	0.28	71.20	14.59	0.00	78.06	15.63	2.12	66.86	15.42	2.97	76.17	13.46	2.48	77.41	12.79	1.16	71.72	15.35
25	1:00:00	0.65	71.21	14.55	0.00	77.96	15.62	2.37	67.58	15.35	2.91	76.32	13.41	2.41	75.16	12.85	0.97	60.68	15.57
25	2:00:00	1.05	70.96	14.62	0.00	79.36	15.58	2.54	67.45	15.44	2.97	75.19	13.46	2.53	76.05	12.88	0.00	68.48	15.48
25	3:00:00	1.17	70.42	14.58	0.00	78.84	15.57	1.69	67.92	15.25	3.01	74.84	13.60	2.41	75.58	12.83	0.00	71.65	15.29
25	4:00:00	1.83	69.02	14.58	0.00	79.02	15.64	2.04	69.43	15.28	3.02	74.81	13.55	2.40	75.78	12.85	0.02	71.01	15.39
25	5:00:00	1.98	69.10	14.61	0.00	78.19	15.63	2.20	67.17	15.32	2.94	75.57	13.56	2.48	75.88	12.87	0.00	69.37	15.45
25	6:00:00	1.88	68.60	14.77	0.00	78.05	15.68	1.79	68.27	15.39	3.18	76.88	13.73	2.44	73.54	12.88	0.81	68.24	15.55
25	7:00:00	1.89	67.34	14.76	0.00	77.40	15.69	1.83	68.17	15.49	3.19	76.56	13.63	2.51	73.05	12.90	0.92	67.16	15.51
25	8:00:00	1.63	67.17	14.75	0.00	79.94	15.56	1.24	90.95	14.69	3.03	75.35	13.51	2.60	73.09	12.89	0.00	101.07	14.69
25	9:00:00	1.90	67.82	14.74	0.00	82.38	15.50	1.28	96.14	14.65	3.12	77.80	13.60	2.35	82.43	12.48	0.13	105.75	14.67
25	10:00:00	7.47	37.35	8.72	0.00	81.83	15.46	0.79	95.33	14.65	2.81	103.02	12.90	2.18	95.25	12.06	0.00	104.64	14.66
25	11:00:00	1.45	66.52	15.73	0.00	81.54	15.41	0.95	94.78	14.66	2.64	101.86	12.86	2.29	95.29	12.07	0.00	104.19	14.66
25	12:00:00	1.28	64.10	15.70	0.00	80.70	15.43	0.58	95.13	14.67	2.50	100.47	12.81	2.22	96.81	12.07	0.00	104.82	14.65
25	13:00:00	0.71	85.82	14.70	Maintenance	Maintenance	Maintenance	0.17	96.27	14.66	2.59	102.11	12.82	2.28	97.71	12.07	0.00	103.41	14.62
25	14:00:00	0.53	87.67	14.67	Maintenance	Maintenance	Maintenance	0.47	96.84	14.66	2.63	99.56	12.85	2.17	97.75	12.07	0.00	102.63	14.60
25	15:00:00	0.12	88.96	14.67	Maintenance	Maintenance	Maintenance	0.52	92.87	14.64	2.55	98.38	12.87	2.22	97.09	12.05	0.73	104.27	14.59
25	16:00:00	0.00	88.71	14.66	Maintenance	Maintenance	Maintenance	0.71	94.93	14.66	2.54	91.20	12.88	2.25	94.97	12.07	0.33	102.59	14.58
25	17:00:00	0.21	92.53	14.68	Maintenance	Maintenance	Maintenance	0.74	94.08	14.66	2.46	98.86	12.76	2.23	95.55	12.07	0.06	104.04	14.60
25	18:00:00	0.04	89.21	14.66	Maintenance	Maintenance	Maintenance	1.63	96.46	14.68	2.41	100.23	12.79	2.16	95.26	12.07	1.15	103.96	14.61
25	19:00:00	0.38	88.67	14.65	Maintenance	Maintenance	Maintenance	1.08	97.58	14.69	2.45	102.64	12.84	2.09	94.59	12.08	1.14	103.20	14.63
25	20:00:00	0.12	87.71	14.66	Maintenance	Maintenance	Maintenance	1.26	97.17	14.69	2.44	101.50	12.89	2.27	95.56	12.10	0.45	104.65	14.65
25	21:00:00	0.05	88.00	14.66	Maintenance	Maintenance	Maintenance	1.02	96.56	14.68	2.63	101.82	12.90	2.29	92.53	12.09	1.01	103.52	14.67
25	22:00:00	0.24	86.26	14.74	0.00	103.92	14.88	0.84	97.53	14.68	2.58	100.47	12.91	2.41	94.06	12.10	0.00	105.46	14.66
25	23:00:00	0.79	66.58	15.54	0.00	77.59	15.64	1.11	88.80	14.90	2.85	81.30	13.33	2.50	80.18	12.61	0.37	79.93	15.19
26	0:00:00	0.44	64.90	15.68	0.00	76.18	15.70	1.63	68.15	15.41	3.04	75.88	13.61	2.58	71.22	12.92	0.05	67.05	15.48
26	1:00:00	0.80	67.50	15.60	0.00	75.61	15.71	1.74	67.56	15.53	2.97	75.20	13.56	2.63	72.91	12.87	0.00	69.37	15.41
26	2:00:00	0.68	66.49	15.63	0.00	75.54	15.72	1.75	67.28	15.52	3.10	74.62	13.68	2.67	72.67	12.88	0.46	85.95	15.40
26	3:00:00	0.78	67.13	15.66	0.00	76.22	15.72	1.76	68.43	15.48	3.00	75.17	13.51	2.83	75.52	12.78	0.61	66.81	15.36
26	4:00:00	1.07	66.44	15.64	0.00	77.97	15.70	1.58	67.19	15.48	3.01	76.22	13.52	2.63	75.13	12.77	0.96	66.22	15.40
26	5:00:00	0.88	67.11	15.64	0.00	79.41	15.65	1.93	68.41	15.50	2.85	74.74	13.51	2.65	72.76	12.82	0.10	65.92	15.42
26	6:00:00	1.04	67.36	15.64	0.00	80.27	15.71	1.93	68.29	15.51	3.01	74.92	13.57	2.74	72.85	12.84	0.64	65.13	15.48
26	7:00:00	0.90	66.14	15.66	0.00	80.86	15.67	1.30	67.78	15.50	3.11	75.19	13.71	2.63	72.55	12.84	0.00	67.80	15.50
26	8:00:00	0.85	66.85	15.67	0.00	82.19	15.62	1.66	89.88	14.74	2.96	75.95	13.64	2.64	72.16	12.85	0.27	68.07	15.50
26	9:00:00	0.33	68.69	15.69	0.00	81.42	15.57	1.70	97.04	14.71	2.93	77.83	13.51	2.43	83.36	12.42	2.11	68.64	15.49
26	10:00:00	0.31	67.91	15.69	0.00	81.13	15.53	1.52	96.94	14.71	2.62	101.24	12.87	2.40	96.76	12.05	0.00	69.17	15.46
26	11:00:00	0.16	67.65	15.67	0.00	79.78	15.49	1.28	97.57	14.71	2.65	103.87	12.81	2.44	97.53	12.09	3.63	68.44	15.46
26	12:00:00	0.00	68.08	15.66	0.00	79.39	15.42	2.37	96.41	14.71	2.48	101.63	12.76	2.35	98.83	12.12	0.22	66.85	15.48
26	13:00:00	0.14	87.66	14.68	Maintenance	Maintenance	Maintenance	2.11	97.93	14.70	2.50	101.17	12.76	2.36	97.82	12.08	0.65	65.42	15.49
26	14:00:00	0.10	89.76	14.66	Maintenance	Maintenance	Maintenance	1.22	95.52	14.70	2.50	102.25	12.81	2.32	96.65	12.07	0.00	66.59	15.48
26	15:00:00	0.17	90.50	14.66	Maintenance	Maintenance	Maintenance	1.62	82.06	14.65	2.65	100.84	12.91	2.36	96.07	12.06	0.00	65.39	15.46
26	16:00:00	0.24	90.01	14.65	Maintenance	Maintenance	Maintenance	1.16	89.26	14.66	2.54	102.63	12.85	2.34	95.31	12.06	0.51	65.74	15.47
26	17:00:00	0.12	89.33	14.65	Maintenance	Maintenance	Maintenance	1.21	89.15	14.67	2.56	102.38	12.89	2.20	94.92	12.10	0.00	66.18	15.49
26	18:00:00	0.09	89.39	14.64	Maintenance	Maintenance	Maintenance	1.09	95.36	14.70	2.56	99.39	12.75	2.21	95.05	12.11	1.59	97.79	14.64
26	19:00:00	0.11	89.30	14.64	Maintenance	Maintenance	Maintenance	1.42	99.77	14.72	2.55	99.68	12.79	2.25	95.48	12.09	0.11	104.42	14.66
26	20:00:00	0.00	88.84	14.63	Maintenance	Maintenance	Maintenance	1.16	97.80	14.70	2.58	101.66	12.85	2.26	94.02	12.12	0.00	99.24	14.64

วันที่	เวลา	TOPSPP (G-5019) 'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)
26	21:00:00	0.26	89.99	14.64	Maintenance	Maintenance	Maintenance	1.47	96.56	14.69	2.60	101.41	12.94	2.30	94.70	12.10	0.00	101.88	14.69
26	22:00:00	0.34	88.54	14.79	0.00	104.69	14.89	1.62	95.39	14.69	2.62	101.77	12.83	2.30	96.39	12.12	0.48	95.57	14.82
26	23:00:00	0.77	67.22	15.52	0.00	78.61	15.40	1.88	87.10	14.93	2.91	82.70	13.39	2.59	80.16	12.57	0.47	66.06	15.57
27	0:00:00	0.76	66.39	15.51	0.00	79.84	15.40	2.21	67.79	15.49	2.86	73.50	13.60	2.55	72.94	12.86	0.55	67.69	15.54
27	1:00:00	1.33	66.10	15.52	0.00	83.17	15.32	1.82	68.11	15.42	2.96	74.21	13.64	2.46	73.51	12.85	0.00	68.72	15.43
27	2:00:00	1.62	65.39	15.54	0.00	82.44	15.30	2.04	67.44	15.41	3.09	74.79	13.59	2.61	72.61	12.87	0.46	66.85	15.51
27	3:00:00	1.78	66.52	15.55	0.00	83.58	15.30	1.61	68.97	15.40	2.96	74.43	13.53	2.71	72.93	12.84	0.00	65.70	15.53
27	4:00:00	1.18	66.92	15.51	0.00	80.05	15.43	1.81	69.55	15.39	2.92	74.00	13.57	2.68	73.54	12.86	0.73	66.01	15.53
27	5:00:00	0.61	67.72	15.51	0.00	77.94	15.59	1.37	70.51	15.41	2.93	75.19	13.56	2.63	73.50	12.85	0.65	66.28	15.55
27	6:00:00	0.81	67.01	15.67	0.00	77.48	15.62	1.68	69.20	15.46	2.85	74.79	13.62	2.71	72.16	12.95	0.58	67.04	15.57
27	7:00:00	0.73	65.80	15.67	0.00	78.03	15.65	1.70	69.15	15.48	2.84	74.43	13.65	2.85	73.58	12.84	1.93	65.97	15.57
27	8:00:00	0.85	65.31	15.65	0.00	79.31	15.54	2.64	66.85	15.47	2.69	75.62	13.54	2.88	73.58	12.50	0.00	101.01	14.75
27	9:00:00	1.29	64.91	15.64	0.00	79.38	15.45	2.20	67.55	15.45	2.70	76.28	13.54	6.67	66.15	11.36	0.00	106.09	14.73
27	10:00:00	1.11	64.27	15.62	0.00	78.25	15.41	2.02	68.98	15.43	2.36	99.69	12.85	0.20	93.44	14.55	0.00	101.97	14.72
27	11:00:00	1.04	64.88	15.61	0.00	77.78	15.38	2.14	68.77	15.53	2.29	102.01	12.80	0.00	97.37	14.64	0.00	107.02	14.71
27	12:00:00	0.86	64.67	15.60	0.00	76.71	15.38	1.99	66.71	15.48	2.40	99.47	12.77	0.00	98.83	14.62	0.27	104.64	14.70
27	13:00:00	0.56	85.05	14.60	0.00	77.14	15.32	2.22	66.61	15.49	2.42	102.81	12.80	0.00	97.85	14.60	0.36	105.58	14.69
27	14:00:00	0.87	86.88	14.59	0.00	75.65	15.30	1.48	67.79	15.41	2.43	103.16	12.80	0.00	99.41	14.60	0.69	106.90	14.67
27	15:00:00	0.60	87.17	14.59	0.00	75.13	15.34	2.40	64.83	15.39	2.44	101.34	12.77	0.00	95.90	14.58	0.00	108.45	14.66
27	16:00:00	0.75	91.78	14.60	0.00	72.78	15.37	1.96	65.19	15.39	2.44	100.93	12.76	0.00	99.00	14.61	0.97	107.40	14.65
27	17:00:00	0.36	88.88	14.58	0.00	83.58	15.03	2.14	62.17	15.41	2.40	100.70	12.78	0.00	100.32	14.61	0.00	108.29	14.66
27	18:00:00	0.52	87.58	14.56	0.00	97.48	14.70	1.35	87.75	14.64	2.37	100.88	12.77	0.00	96.84	14.63	0.24	109.10	14.67
27	19:00:00	0.99	86.51	14.55	0.00	98.88	14.71	1.73	91.54	14.66	2.35	100.29	12.77	0.00	97.33	14.63	0.00	105.23	14.66
27	20:00:00	1.06	85.49	14.55	0.00	97.77	14.71	1.94	92.42	14.67	2.32	98.38	12.78	0.00	97.07	14.64	0.56	105.24	14.67
27	21:00:00	0.96	86.53	14.54	0.00	81.70	15.13	1.22	92.74	14.67	2.26	97.94	12.79	0.00	97.21	14.64	0.17	105.67	14.68
27	22:00:00	1.09	84.13	14.63	0.00	68.74	15.56	2.05	90.82	14.67	2.39	99.73	12.81	0.00	96.35	14.63	0.00	104.39	14.68
27	23:00:00	1.48	65.63	15.41	0.00	68.46	15.52	2.11	73.75	15.10	2.68	81.30	13.39	0.00	73.12	15.17	0.00	80.05	15.18
28	0:00:00	1.36	63.67	15.39	0.00	68.33	15.49	2.22	64.07	15.46	2.68	74.26	13.51	0.00	62.09	15.47	0.51	68.55	15.46
28	1:00:00	0.99	65.18	15.46	0.00	69.18	15.44	2.33	63.69	15.38	2.77	72.70	13.59	0.00	63.19	15.37	0.24	66.36	15.49
28	2:00:00	1.28	65.17	15.35	0.00	68.60	15.48	2.25	64.54	15.39	2.71	73.01	13.61	0.00	62.58	15.37	1.46	65.57	15.52
28	3:00:00	1.75	64.24	15.25	0.00	69.34	15.52	2.03	64.23	15.40	2.81	73.40	13.54	0.00	60.60	15.41	0.84	66.75	15.48
28	4:00:00	1.29	64.25	15.30	0.00	67.20	15.50	2.14	64.72	15.40	2.95	74.21	13.60	0.00	60.80	15.43	0.73	65.43	15.50
28	5:00:00	0.48	66.00	15.31	0.00	67.54	15.52	2.42	65.30	15.41	2.83	73.61	13.54	0.00	60.53	15.49	2.69	66.40	15.52
28	6:00:00	0.55	65.16	15.54	0.00	67.75	15.52	2.54	64.33	15.43	2.82	73.16	13.64	0.00	60.49	15.43	1.20	66.11	15.57
28	7:00:00	0.78	63.59	15.56	0.00	65.98	15.58	2.73	64.41	15.50	2.85	74.06	13.60	0.00	61.41	15.43	1.82	67.47	15.52
28	8:00:00	0.84	63.88	15.55	0.00	66.02	15.59	2.22	86.08	14.73	2.71	73.70	13.58	0.00	61.47	15.41	0.47	97.88	14.76
28	9:00:00	1.18	63.00	15.55	0.00	68.77	15.57	2.34	94.06	14.69	2.75	73.74	13.64	0.00	73.89	15.02	0.24	104.70	14.71
28	10:00:00	1.45	63.67	15.55	0.00	65.46	15.58	2.04	94.97	14.71	2.44	93.92	12.82	0.00	91.29	14.60	0.00	106.01	14.72
28	11:00:00	1.56	64.49	15.54	0.00	63.48	15.52	2.09	93.12	14.68	2.30	95.23	12.71	0.00	90.19	14.58	0.00	108.35	14.72
28	12:00:00	0.36	66.05	15.53	0.00	64.92	15.52	2.12	93.02	14.68	2.30	93.92	12.70	0.00	92.21	14.59	0.49	107.93	14.70
28	13:00:00	0.17	86.26	14.56	0.00	91.27	14.76	2.05	93.58	14.68	2.34	95.40	12.71	0.00	92.24	14.59	0.87	104.82	14.65
28	14:00:00	0.29	86.58	14.52	0.00	96.63	14.70	1.95	93.18	14.68	2.26	95.42	12.72	0.00	92.52	14.60	0.00	104.44	14.63
28	15:00:00	0.19	88.61	14.55	0.00	97.62	14.69	1.84	97.65	14.71	2.27	95.85	12.72	0.00	91.36	14.61	0.62	108.27	14.62
28	16:00:00	1.14	94.31	14.61	0.00	102.03	14.71	1.74	96.24	14.69	2.26	94.59	12.70	0.00	88.84	14.56	0.90	109.46	14.61
28	17:00:00	0.63	94.86	14.61	0.00	102.56	14.71	2.09	95.68	14.67	2.27	96.05	12.70	0.00	89.51	14.57	0.61	108.50	14.61
28	18:00:00	0.52	95.01	14.61	0.00	98.97	14.71	2.08	93.39	14.64	2.21	95.46	12.71	0.00	90.19	14.57	0.05	105.58	14.61
28	19:00:00	0.66	84.70	14.50	0.00	100.85	14.70	2.28	94.02	14.64	2.27	98.40	12.74	0.00	98.57	14.63	0.00	103.70	14.61
28	20:00:00	0.49	85.12	14.51	0.00	101.17	14.69	2.35	92.87	14.63	2.40	100.67	12.77	0.00	94.75	14.62	0.00	102.22	14.61
28	21:00:00	0.43	84.94	14.51	0.00	101.49	14.68	2.40	92.15	14.62	Maintenance	Maintenance	Maintenance	0.00	100.29	14.64	0.32	100.34	14.61
28	22:00:00	0.00	83.84	14.62	0.00	97.69	14.73	2.74	92.93	14.62	Maintenance	Maintenance	Maintenance	0.00	96.96	14.64	1.60	102.52	14.63
28	23:00:00	0.03	66.02	15.44	0.00	71.34	15.29	2.70	82.36	14.84	3.18	90.25	13.37	0.00	75.94	15.11	0.18	78.92	15.19
29	0:00:00	0.45	65.06	15.35				3.06	63.75	15.40	2.80	83.56	13.36	0.00	61.19	15.38	1.32	65.66	15.46

วันที่	เวลา	TOPSP (G-5019) 'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)
29	1:00:00	0.75	65.79	15.28				3.04	64.15	15.29	2.62	83.37	13.29	0.00	61.82	15.44	2.46	66.49	15.43
29	2:00:00	1.29	66.62	15.25				3.04	65.22	15.25	2.72	81.67	13.32	0.00	61.26	15.40	0.17	66.95	15.42
29	3:00:00	0.19	64.25	15.41				2.98	65.75	15.25	2.66	78.86	13.28	0.00	61.11	15.37	1.21	66.82	15.39
29	4:00:00	0.69	65.93	15.43				3.08	66.20	15.27	2.69	77.61	13.31	0.00	62.45	15.38	0.94	66.86	15.35
29	5:00:00	1.31	64.68	15.44				3.10	65.52	15.29	2.75	78.67	13.29	0.00	60.87	15.40	1.18	67.08	15.35
29	6:00:00	1.45	63.91	15.43				3.18	65.92	15.32	2.64	79.05	13.35	0.00	59.67	15.44	1.85	66.50	15.42
29	7:00:00	1.14	64.27	15.42				3.13	64.44	15.34	2.64	78.39	13.38	0.00	59.70	15.45	1.44	68.40	15.40
29	8:00:00	1.76	63.99	15.47				2.81	88.45	14.60	2.60	77.84	13.39	0.00	61.54	15.42	0.15	99.55	14.64
29	9:00:00	2.10	64.72	15.30				2.63	93.48	14.56	2.61	78.83	13.45	0.00	63.78	15.43	0.78	103.31	14.62
29	10:00:00	2.17	66.76	15.34				2.60	92.45	14.56	2.72	103.78	13.00	0.00	64.05	15.39	0.00	104.11	14.62
29	11:00:00	2.37	65.56	15.34				2.76	94.35	14.57	2.46	103.97	12.74	0.00	61.71	15.38	0.32	103.43	14.61
29	12:00:00	2.22	65.32	15.34				2.43	96.97	14.57	2.52	104.64	12.74	0.00	62.09	15.41	0.75	106.75	14.61
29	13:00:00	1.77	87.39	14.61				2.45	98.73	14.58	2.47	104.88	12.71	0.00	63.43	15.39	0.62	108.06	14.59
29	14:00:00	1.85	96.59	14.62				2.47	98.29	14.57	2.43	102.13	12.67	0.00	62.77	15.39	1.02	108.86	14.58
29	15:00:00	1.82	94.63	14.61				2.29	99.18	14.58	2.41	100.58	12.64	0.00	62.70	15.39	1.53	83.20	10.07
29	16:00:00	1.78	95.85	14.62				2.37	96.65	14.56	2.47	100.95	12.64	0.00	62.21	15.41	8.88	87.93	15.69
29	17:00:00	1.73	100.72	14.65				2.38	97.88	14.56	2.40	99.19	12.62	0.00	61.85	15.40	4.58	107.80	14.72
29	18:00:00	1.64	98.47	14.64				2.35	98.10	14.56	2.41	98.86	12.62	0.00	83.72	14.74	5.83	108.67	14.74
29	19:00:00	1.67	95.71	14.63				2.40	97.42	14.55	2.37	100.24	12.64	0.00	95.00	14.59	5.88	107.03	14.75
29	20:00:00	1.73	91.82	14.59				2.45	96.51	14.55	2.36	98.60	12.66	0.00	95.23	14.60	5.16	105.69	14.76
29	21:00:00	1.65	86.20	14.53				2.43	96.01	14.55	2.40	98.04	12.69	0.00	92.11	14.58	6.26	102.53	14.75
29	22:00:00	1.80	84.29	14.61				2.36	95.19	14.55	2.36	100.05	12.75	0.00	84.86	14.64	5.54	103.41	14.78
29	23:00:00	2.26	62.35	15.53				2.75	86.70	14.81	2.72	80.08	13.37	0.00	60.08	15.49	6.29	84.12	15.26
30	0:00:00	2.26	64.00	15.36				3.10	67.02	15.40	2.69	74.65	13.50	0.00	62.99	15.47	6.23	70.79	15.55
30	1:00:00	1.27	65.21	15.34				2.98	66.47	15.32	2.62	75.26	13.46	0.00	64.72	15.38	6.74	69.06	15.59
30	2:00:00	0.36	65.00	15.37				2.94	65.56	15.30	2.73	75.37	13.49	0.00	64.68	15.42	6.70	70.15	15.57
30	3:00:00	0.84	65.64	15.40				3.08	64.69	15.29	3.06	76.81	13.56	0.00	63.24	15.46	4.90	70.25	15.53
30	4:00:00	0.48	64.32	15.34				3.03	66.32	15.26	3.07	75.82	13.52	0.00	64.13	15.29	5.92	69.87	15.51
30	5:00:00	0.49	65.33	15.34				3.06	66.02	15.27	2.92	75.03	13.52	0.00	63.89	15.30	6.27	71.05	15.52
30	6:00:00	0.58	64.70	15.37				2.99	65.54	15.30	2.71	72.59	13.52	0.00	63.82	15.32	6.85	72.15	15.58
30	7:00:00	0.98	63.17	15.47				3.05	66.50	15.21	2.90	73.99	13.58	0.00	63.11	15.33	6.48	73.96	15.57
30	8:00:00	0.98	63.20	15.35				2.54	89.51	14.54	2.95	75.88	13.60	0.00	62.68	15.33	5.38	101.96	14.82
30	9:00:00	0.65	65.55	15.34				2.51	93.29	14.54	2.72	76.76	13.27	0.00	74.69	14.92	6.15	106.41	14.78
30	10:00:00	1.04	65.36	15.35				2.41	94.56	14.55	2.46	96.95	12.65	0.00	93.68	14.49	4.22	107.93	14.79
30	11:00:00	1.13	65.58	15.31				2.47	94.90	14.55	2.47	99.58	12.67	0.00	92.86	14.48	6.24	108.25	14.79
30	12:00:00	1.06	70.16	15.33				2.58	95.36	14.56	2.54	98.48	12.68	0.00	93.42	14.47	5.13	107.50	14.77
30	13:00:00	0.39	69.72	15.42				2.37	95.65	14.55	2.51	97.22	12.66	0.00	92.59	14.44	5.40	107.83	14.75
30	14:00:00	0.85	71.19	15.45				2.43	95.56	14.54	2.48	97.14	12.65	0.00	93.72	14.44	4.83	108.06	14.74
30	15:00:00	0.26	74.22	15.49				2.46	94.81	14.52	2.49	97.52	12.69	0.00	94.04	14.43	7.81	106.52	14.72
30	16:00:00	0.00	69.79	15.46				2.64	97.22	14.54	2.46	95.91	12.70	0.00	92.73	14.41	4.98	104.75	14.70
30	17:00:00	0.13	74.30	15.05				2.26	94.53	14.54	2.59	95.94	12.78	0.00	95.77	14.42	4.97	103.51	14.69
30	18:00:00	0.20	89.34	14.56				2.45	96.67	14.54	2.69	97.56	12.82	0.00	96.60	14.43	6.35	104.07	14.70
30	19:00:00	0.38	91.04	14.58				2.47	94.41	14.54	2.50	96.28	12.75	0.00	97.21	14.45	5.38	100.60	14.70
30	20:00:00	0.66	89.11	14.56				2.49	93.35	14.53	2.52	96.85	12.73	0.00	97.07	14.48	5.17	101.55	14.74
30	21:00:00	1.26	73.11	15.17				2.39	95.09	14.55	2.38	95.97	12.76	0.00	96.09	14.46	5.19	104.08	14.76
30	22:00:00	1.68	65.34	15.59				2.61	96.53	14.56	2.47	96.97	12.78	0.00	95.52	14.46	4.91	105.75	14.78
30	23:00:00	1.49	63.83	15.58				2.53	84.23	14.82	2.87	77.82	13.40	0.00	73.14	14.90	6.25	86.27	15.34
31	0:00:00	1.32	64.52	15.59				2.94	68.39	15.28				0.00	59.39	15.17			
31	1:00:00	1.50	63.81	15.58				2.97	66.95	15.30				0.00	61.77	15.12			
31	2:00:00	1.63	63.71	15.58				3.08	66.46	15.38				0.00	62.95	15.16			
31	3:00:00	1.77	63.42	15.58				2.91	65.18	15.37				0.00	62.57	15.14			
31	4:00:00	1.96	62.61	15.56				2.89	64.73	15.39				0.00	62.98	15.15			

วันที่	เวลา	TOPSPP (G-5019) 'S STACK																	
		มกราคม			กุมภาพันธ์			มีนาคม			เมษายน			พฤษภาคม			มิถุนายน		
		SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)	SO ₂ (ppm)	NO _x (ppm)	O ₂ (%)
31	5:00:00	1.35	63.89	15.56				3.06	65.55	15.40				0.00	61.04	15.18			
31	6:00:00	0.99	63.31	15.56				3.02	65.99	15.35				0.00	58.62	15.27			
31	7:00:00	0.79	65.12	15.56				3.02	65.38	15.31				0.00	61.92	15.22			
31	8:00:00	0.96	65.75	15.56				2.56	88.90	14.56				0.00	62.56	15.17			
31	9:00:00	0.63	65.95	15.57				2.70	92.40	14.56				0.00	74.57	14.85			
31	10:00:00	0.67	65.75	15.56				2.76	92.37	14.58				0.00	91.89	14.43			
31	11:00:00	0.45	63.95	15.55				2.76	91.49	14.57				0.00	93.31	14.39			
31	12:00:00	0.29	64.44	15.54				2.73	92.55	14.57				0.00	95.56	14.36			
31	13:00:00	0.22	91.04	14.68				2.71	91.38	14.57				0.00	93.92	14.34			
31	14:00:00	0.14	97.17	14.64				2.77	91.72	14.58				0.00	92.11	14.33			
31	15:00:00	0.61	95.25	14.63				2.72	95.44	14.60				0.00	90.19	14.33			
31	16:00:00	0.93	94.62	14.63				2.69	98.08	14.62				0.00	89.93	14.34			
31	17:00:00	0.63	96.75	14.64				2.69	96.81	14.61				0.00	88.76	14.34			
31	18:00:00	0.61	96.26	14.64				2.15	98.71	14.62				0.00	87.72	14.34			
31	19:00:00	0.61	99.30	14.65				1.70	101.83	14.63				0.00	88.90	14.37			
31	20:00:00	0.57	91.69	14.58				1.71	102.08	14.64				0.00	91.59	14.40			
31	21:00:00	0.42	89.79	14.54				1.70	100.65	14.64				0.00	92.16	14.41			
31	22:00:00	0.54	83.05	14.72				1.88	99.10	14.61				0.00	90.98	14.40			
31	23:00:00	0.76	65.16	15.59				2.05	81.98	14.94				0.00	70.76	14.88			

ผลการติดตามตรวจสอบคุณภาพอากาศที่ระบายออกจากปล่องแบบต่อเนื่อง ระหว่างเดือนมกราคม-มิถุนายน 2565

วันที่	เวลา	TOPSPP (G-85051) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
1	0:00:00	24.06	14.04	Shutdown	Shutdown	19.94	14.26	19.56	14.85	21.03	15.40	14.94	14.76
1	1:00:00	23.27	14.10	Shutdown	Shutdown	17.59	14.68	19.91	14.86	20.88	15.38	15.07	14.75
1	2:00:00	22.83	14.23	Shutdown	Shutdown	15.69	14.91	19.77	14.85	20.78	15.28	16.28	14.78
1	3:00:00	24.27	13.96	Shutdown	Shutdown	15.62	14.91	18.63	14.85	21.45	15.14	16.39	14.80
1	4:00:00	24.79	13.69	Shutdown	Shutdown	15.17	14.94	17.90	14.90	21.02	15.14	16.16	14.80
1	5:00:00	24.97	14.11	Shutdown	Shutdown	15.25	14.95	17.42	14.95	22.42	15.04	16.21	14.81
1	6:00:00	24.66	14.14	Shutdown	Shutdown	14.89	14.97	17.76	14.95	21.81	15.15	17.08	14.80
1	7:00:00	23.65	14.21	Shutdown	Shutdown	15.72	14.92	17.94	14.96	22.17	15.07	17.57	14.79
1	8:00:00	23.45	14.37	Shutdown	Shutdown	17.14	15.02	18.88	14.94	22.14	15.13	17.17	14.89
1	9:00:00	23.75	14.28	Shutdown	Shutdown	17.14	15.06	19.15	14.95	22.87	15.02	16.36	14.93
1	10:00:00	24.39	14.21	Shutdown	Shutdown	16.81	15.07	19.82	15.05	24.06	15.00	16.96	14.96
1	11:00:00	24.65	14.19	Shutdown	Shutdown	16.50	15.05	20.16	15.03	24.22	14.92	16.96	14.96
1	12:00:00	23.93	14.24	Shutdown	Shutdown	16.02	15.02	19.79	14.99	23.06	14.88	17.11	14.94
1	13:00:00	22.65	14.49	Shutdown	Shutdown	16.79	15.01	19.52	14.99	22.83	14.86	17.01	14.92
1	14:00:00	22.30	14.24	Shutdown	Shutdown	17.27	15.00	20.09	15.00	23.28	14.85	17.61	14.90
1	15:00:00	21.00	14.39	Shutdown	Shutdown	17.00	14.94	20.47	15.00	21.97	14.84	17.73	14.86
1	16:00:00	21.54	14.40	Shutdown	Shutdown	17.05	14.97	20.79	14.93	22.63	14.82	17.76	14.82
1	17:00:00	21.97	14.55	Shutdown	Shutdown	16.11	14.98	20.59	14.97	22.52	14.83	17.76	14.89
1	18:00:00	22.35	14.52	Shutdown	Shutdown	16.04	14.97	19.66	14.99	20.71	15.06	17.33	14.91
1	19:00:00	22.89	14.36	Shutdown	Shutdown	15.06	14.99	20.24	14.96	21.67	15.10	17.25	14.93
1	20:00:00	23.64	14.28	Shutdown	Shutdown	17.19	15.04	21.74	15.00	22.20	15.01	16.68	14.93
1	21:00:00	23.77	14.25	Shutdown	Shutdown	16.21	15.05	21.67	15.03	22.21	14.91	16.82	14.93
1	22:00:00	23.85	14.12	Shutdown	Shutdown	16.95	15.04	21.31	15.02	22.75	14.74	17.25	14.93
1	23:00:00	23.20	14.27	Shutdown	Shutdown	16.95	14.96	20.08	15.00	19.22	15.42	17.74	14.86
2	0:00:00	22.69	14.31	Shutdown	Shutdown	16.99	14.84	18.93	15.07	18.96	15.54	18.09	14.79
2	1:00:00	23.42	13.92	Shutdown	Shutdown	17.17	14.83	18.81	15.07	17.75	15.69	17.07	14.79
2	2:00:00	23.62	14.08	Shutdown	Shutdown	17.57	14.83	18.64	15.07	17.26	15.85	17.73	14.76
2	3:00:00	23.95	13.79	Shutdown	Shutdown	17.19	14.82	19.21	15.01	17.16	15.81	17.65	14.77
2	4:00:00	24.16	13.59	Shutdown	Shutdown	17.19	14.84	20.11	15.03	18.47	15.81	17.23	14.78
2	5:00:00	24.38	13.92	Shutdown	Shutdown	16.28	14.85	19.86	15.05	20.79	15.30	17.03	14.79
2	6:00:00	23.63	14.11	Shutdown	Shutdown	16.36	14.86	19.63	15.02	23.75	14.41	17.48	14.79
2	7:00:00	21.72	14.52	Shutdown	Shutdown	17.17	14.85	20.00	15.06	24.07	14.60	17.66	14.79
2	8:00:00	23.34	14.06	Shutdown	Shutdown	16.63	15.03	20.01	15.09	23.78	14.68	17.82	14.94
2	9:00:00	22.11	14.38	Shutdown	Shutdown	15.81	15.06	19.48	15.11	23.89	14.92	17.76	14.96
2	10:00:00	22.35	14.45	Shutdown	Shutdown	15.41	15.04	21.05	15.14	23.48	14.85	17.37	14.97

วันที่	เวลา	TOPSPP (G-85051) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
2	11:00:00	22.67	14.33	Shutdown	Shutdown	15.62	15.04	21.29	15.10	24.40	14.70	18.04	14.96
2	12:00:00	22.63	14.39	Shutdown	Shutdown	15.11	15.03	20.39	15.09	24.71	14.72	17.61	14.95
2	13:00:00	21.46	14.35	Shutdown	Shutdown	15.48	15.03	20.98	15.07	25.74	14.70	18.00	14.95
2	14:00:00	22.40	13.98	Shutdown	Shutdown	16.14	14.95	21.15	15.06	25.09	14.79	18.37	14.95
2	15:00:00	21.57	14.21	Shutdown	Shutdown	16.13	14.94	21.26	15.07	25.40	14.63	17.74	14.94
2	16:00:00	22.10	14.05	Shutdown	Shutdown	16.57	14.93	21.16	15.04	25.59	14.82	17.64	14.90
2	17:00:00	22.11	14.19	Shutdown	Shutdown	16.84	14.99	21.09	15.11	24.95	14.68	17.10	14.95
2	18:00:00	22.07	14.27	Shutdown	Shutdown	17.71	14.98	21.03	15.13	23.81	15.02	16.99	14.94
2	19:00:00	22.48	14.18	Shutdown	Shutdown	17.03	15.01	21.52	15.05	24.36	14.78	17.28	14.93
2	20:00:00	23.40	14.20	Shutdown	Shutdown	16.96	15.02	22.32	14.97	24.53	14.74	17.24	14.88
2	21:00:00	22.54	14.34	Shutdown	Shutdown	16.85	15.03	23.02	15.07	25.12	14.61	18.08	14.94
2	22:00:00	23.26	14.06	Shutdown	Shutdown	17.53	15.02	23.45	15.09	25.04	14.58	17.67	14.96
2	23:00:00	22.08	14.25	Shutdown	Shutdown	17.04	14.94	23.94	14.34	25.47	14.84	17.02	14.89
3	0:00:00	22.52	14.11	18.80	15.02	17.41	14.83	24.73	14.35	25.25	14.88	16.70	14.83
3	1:00:00	22.09	14.10	18.93	15.02	17.44	14.83	24.86	14.34	24.07	14.58	17.09	14.83
3	2:00:00	23.19	13.80	18.04	14.99	16.62	14.81	24.68	14.35	24.00	14.44	17.04	14.83
3	3:00:00	22.97	13.33	18.58	14.97	16.29	14.83	25.05	14.26	21.13	14.95	16.37	14.82
3	4:00:00	23.13	13.23	19.26	14.94	15.97	14.85	25.16	14.28	18.66	15.51	16.60	14.83
3	5:00:00	22.05	14.66	19.21	14.90	16.32	14.86	24.85	14.37	18.98	15.52	16.67	14.82
3	6:00:00	20.00	14.97	19.20	14.92	16.37	14.86	24.54	14.42	18.93	15.55	16.44	14.83
3	7:00:00	20.40	14.99	20.05	14.95	17.03	14.84	24.11	14.51	18.59	15.59	16.75	14.83
3	8:00:00	20.81	14.79	19.94	14.97	16.62	15.05	23.39	14.81	18.45	15.62	17.72	14.83
3	9:00:00	22.75	14.21	20.44	14.97	17.01	15.06	23.19	14.83	19.14	15.59	17.67	14.83
3	10:00:00	21.17	14.51	20.64	14.93	16.82	15.06	23.83	14.79	20.94	15.53	18.13	14.82
3	11:00:00	19.95	14.87	20.84	14.91	16.98	15.04	23.22	14.68	21.01	15.50	17.83	14.81
3	12:00:00	19.29	14.84	21.42	14.88	16.85	15.02	23.17	14.85	21.12	15.50	17.42	14.81
3	13:00:00	19.19	14.79	21.54	14.97	16.72	14.97	23.15	14.86	22.10	15.49	17.47	14.81
3	14:00:00	18.71	14.77	22.12	14.96	17.16	14.92	22.64	14.80	21.05	15.48	17.67	14.81
3	15:00:00	18.36	14.77	22.31	14.99	17.17	14.90	22.62	14.87	20.88	15.47	17.39	14.83
3	16:00:00	18.57	14.79	22.24	15.02	17.20	15.01	22.41	14.83	20.48	15.41	17.93	14.84
3	17:00:00	18.50	14.85	21.88	15.01	17.11	15.03	22.90	14.76	21.35	15.47	18.35	14.84
3	18:00:00	18.86	14.89	21.73	14.99	16.68	15.01	22.98	14.78	21.93	15.47	17.90	14.90
3	19:00:00	19.57	14.95	21.75	14.99	16.88	15.06	23.85	14.72	21.44	15.49	16.94	14.99
3	20:00:00	19.88	14.95	21.67	14.98	17.05	15.09	24.26	14.82	21.40	15.45	17.35	15.03
3	21:00:00	18.92	14.91	22.14	15.00	17.18	15.08	24.23	14.75	21.31	15.45	17.05	15.05
3	22:00:00	18.11	14.91	21.96	15.00	17.07	15.07	24.61	14.31	20.96	15.51	17.92	15.06
3	23:00:00	18.23	14.95	18.47	15.01	17.59	14.99	21.95	14.78	19.41	15.56	20.37	14.32
4	0:00:00	18.49	14.95	18.96	15.03	16.99	14.88	21.28	14.73	17.55	15.59	20.72	14.38

วันที่	เวลา	TOPSPP (G-85051) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
4	1:00:00	18.93	14.92	18.63	15.03	16.84	14.87	21.90	14.65	18.18	15.58	20.61	14.47
4	2:00:00	20.02	14.88	19.33	14.98	16.79	14.86	23.18	14.48	17.92	15.49	19.81	14.45
4	3:00:00	19.34	14.89	18.63	14.96	16.69	14.89	22.65	14.60	18.15	15.42	20.67	14.12
4	4:00:00	19.06	14.91	18.82	14.96	16.89	14.90	22.54	14.51	18.42	15.43	19.91	14.40
4	5:00:00	18.69	14.92	18.79	14.96	16.67	14.91	22.77	14.60	18.47	15.45	17.77	15.01
4	6:00:00	18.72	14.97	19.23	14.92	16.17	14.90	22.92	14.41	18.53	15.46	18.42	15.02
4	7:00:00	18.88	15.01	19.00	14.94	17.36	14.88	23.03	14.64	17.69	15.49	17.65	15.01
4	8:00:00	18.84	14.99	19.14	14.96	15.77	14.98	22.48	14.70	17.70	15.52	18.67	14.96
4	9:00:00	19.67	14.96	19.07	14.98	17.21	14.87	22.87	14.76	17.67	15.50	18.57	15.03
4	10:00:00	20.22	14.89	20.62	14.96	17.11	14.89	22.68	15.00	19.79	15.46	18.83	15.03
4	11:00:00	19.81	14.85	21.02	14.91	17.06	14.91	22.06	15.14	19.81	15.43	18.10	15.03
4	12:00:00	19.73	14.81	21.33	14.88	15.83	15.08	22.02	15.14	19.67	15.45	17.72	15.03
4	13:00:00	20.25	14.87	21.93	14.78	16.06	15.06	21.32	15.10	18.93	15.44	17.93	15.03
4	14:00:00	20.44	14.88	21.70	14.77	16.59	14.91	20.72	15.09	18.87	15.44	18.13	15.02
4	15:00:00	20.36	14.83	20.69	14.88	15.88	14.98	20.70	15.10	18.60	15.44	18.24	15.01
4	16:00:00	20.87	14.91	21.10	14.71	16.06	14.96	21.48	15.04	18.84	15.37	18.09	14.95
4	17:00:00	20.55	14.91	21.38	14.88	16.02	15.00	21.10	15.11	19.33	15.43	18.30	15.00
4	18:00:00	20.79	14.89	21.24	14.90	14.99	15.02	21.82	15.13	20.34	15.42	18.02	14.99
4	19:00:00	20.84	14.95	21.88	14.85	15.50	15.02	21.21	15.12	20.27	15.43	17.44	14.99
4	20:00:00	21.12	14.97	21.22	14.95	15.56	15.03	20.73	15.09	20.16	15.44	17.73	15.01
4	21:00:00	20.95	14.98	21.39	14.95	15.24	15.07	20.84	15.05	20.30	15.45	17.26	15.01
4	22:00:00	20.29	14.99	20.72	14.96	15.39	15.05	20.92	15.14	19.17	15.47	17.63	15.01
4	23:00:00	19.19	14.95	17.59	15.03	15.51	15.00	19.37	15.09	18.94	15.47	18.07	15.01
5	0:00:00	19.50	14.94	17.14	15.05	15.82	14.87	19.34	15.11	17.52	15.47	17.99	15.01
5	1:00:00	20.04	14.95	17.63	15.06	14.98	14.88	19.69	15.16	17.13	15.46	18.64	15.04
5	2:00:00	20.31	14.92	18.48	15.00	14.86	14.91	19.80	15.15	17.09	15.41	18.13	15.03
5	3:00:00	20.19	14.93	18.66	14.97	15.59	14.91	20.48	15.11	17.18	15.40	18.00	15.03
5	4:00:00	20.84	14.92	19.69	15.03	15.34	14.90	20.71	15.12	16.97	15.39	17.17	15.03
5	5:00:00	20.75	14.92	19.66	15.04	14.75	14.91	19.92	15.13	17.80	15.39	17.12	15.03
5	6:00:00	20.56	14.96	19.98	14.99	15.02	14.90	20.24	15.13	17.00	15.43	18.11	15.00
5	7:00:00	20.10	15.01	20.40	15.04	15.40	14.90	19.78	15.14	17.11	15.44	18.47	14.99
5	8:00:00	20.82	15.00	19.71	15.10	16.57	15.04	19.61	15.16	17.64	15.45	17.76	15.01
5	9:00:00	20.89	14.95	20.47	15.10	16.10	15.07	19.84	15.16	18.78	15.44	18.93	15.02
5	10:00:00	20.62	14.89	21.02	14.95	15.91	15.08	21.59	15.16	21.24	15.13	18.63	15.03
5	11:00:00	20.15	14.89	20.59	15.01	16.09	15.08	21.46	15.14	19.85	15.37	19.13	15.03
5	12:00:00	20.20	14.87	21.09	14.99	16.53	15.04	21.18	15.12	19.41	15.40	18.81	15.00
5	13:00:00	20.56	14.93	21.75	15.06	16.63	15.01	20.94	15.09	19.22	15.38	18.64	15.00
5	14:00:00	21.97	14.67	21.29	15.05	16.80	14.98	21.31	15.08	19.43	15.40	18.41	14.99

วันที่	เวลา	TOPSPP (G-85051) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
5	15:00:00	21.01	14.73	20.59	15.04	17.17	14.97	20.72	15.02	19.31	15.33	19.12	14.96
5	16:00:00	20.03	14.94	20.66	15.02	16.78	14.96	20.82	15.08	17.37	15.38	18.70	14.96
5	17:00:00	19.67	14.90	19.86	15.07	16.31	14.91	21.24	15.08	17.46	15.35	18.49	14.97
5	18:00:00	18.66	14.86	20.96	15.02	16.98	14.68	21.06	15.08	17.20	15.33	18.16	14.97
5	19:00:00	18.76	14.88	20.81	14.99	17.69	14.65	21.19	15.08	17.45	15.33	19.44	14.65
5	20:00:00	17.70	14.88	21.19	14.97	18.01	14.62	21.37	15.04	17.26	15.33	21.35	13.56
5	21:00:00	17.44	14.91	21.35	15.00	17.02	14.63	20.87	15.04	17.07	15.33	22.55	14.10
5	22:00:00	17.71	14.94	22.13	14.76	16.53	14.69	20.49	15.05	16.93	15.37	22.94	14.07
5	23:00:00	15.76	14.90	23.96	13.62	16.69	14.48	18.74	15.02	15.83	15.33	21.82	14.57
6	0:00:00	16.06	14.89	24.17	13.90	17.36	14.28	17.77	15.00	16.15	15.31	20.84	14.48
6	1:00:00	16.96	14.87	22.37	14.19	17.74	14.27	18.65	15.03	16.29	15.30	20.38	14.56
6	2:00:00	17.89	14.86	23.25	13.38	17.17	14.29	18.93	15.02	16.49	15.26	20.13	14.61
6	3:00:00	18.68	14.88	24.81	13.64	16.67	14.34	18.84	15.02	16.47	15.25	20.10	14.60
6	4:00:00	18.61	14.88	25.38	13.51	17.19	14.36	19.35	15.03	17.17	15.26	20.51	14.54
6	5:00:00	18.78	14.91	24.60	13.52	16.55	14.51	20.24	15.07	17.90	15.28	18.96	14.64
6	6:00:00	19.05	14.96	22.48	14.72	18.54	14.16	19.93	15.03	17.71	15.30	19.17	14.47
6	7:00:00	18.79	14.99	22.15	14.73	18.90	14.16	19.90	15.02	18.37	15.32	18.67	14.57
6	8:00:00	19.09	14.99	22.15	14.69	18.70	14.14	20.93	15.02	19.11	15.33	20.39	14.13
6	9:00:00	13.83	12.52	22.68	14.69	18.87	14.35	22.02	14.99	19.34	15.31	20.76	14.19
6	10:00:00	29.98	10.77	22.62	14.60	18.95	14.28	21.88	15.10	19.78	15.37	20.44	14.24
6	11:00:00	20.27	14.96	21.93	14.55	18.51	14.48	21.93	15.09	19.09	15.38	21.63	13.96
6	12:00:00	18.46	14.94	22.57	14.42	18.98	14.25	21.37	15.05	19.01	15.35	21.90	13.95
6	13:00:00	19.16	14.99	20.96	14.61	18.93	13.84	21.60	15.04	18.74	15.22	22.03	13.71
6	14:00:00	19.58	14.80	21.05	14.49	18.81	14.03	21.40	15.02	18.93	15.28	23.02	13.87
6	15:00:00	19.53	14.94	20.64	14.58	16.66	14.76	20.95	14.98	17.87	15.22	22.28	13.75
6	16:00:00	18.28	14.96	21.51	14.38	16.78	14.90	21.03	14.98	18.39	15.29	21.24	13.54
6	17:00:00	18.63	15.00	21.69	14.55	17.09	14.86	20.53	15.02	18.10	15.31	21.17	13.66
6	18:00:00	18.08	14.98	22.29	14.58	18.59	14.39	20.82	15.01	18.34	15.27	20.59	13.53
6	19:00:00	17.23	14.97	21.84	14.60	19.77	13.75	20.96	14.96	18.63	15.24	20.56	13.93
6	20:00:00	17.95	14.97	22.10	14.79	19.95	13.74	20.76	14.98	18.78	15.28	19.70	14.29
6	21:00:00	19.20	15.00	21.32	14.69	19.38	13.69	21.12	15.00	18.83	15.29	19.34	14.12
6	22:00:00	18.45	15.03	20.75	14.61	19.60	13.68	20.11	15.04	18.93	15.29	19.65	13.92
6	23:00:00	16.94	15.02	21.04	14.52	19.04	13.65	20.00	14.93	17.90	15.24	20.33	13.81
7	0:00:00	17.49	15.03	21.65	14.49	17.94	14.71	20.67	14.92	17.98	15.20	20.56	13.92
7	1:00:00	18.75	14.98	21.88	14.50	17.58	14.86	21.69	14.53	17.82	15.18	20.72	14.06
7	2:00:00	19.55	14.96	23.95	14.06	17.23	14.89	22.22	14.29	17.15	15.16	20.80	14.16
7	3:00:00	20.71	14.78	23.64	14.21	16.98	14.90	22.04	14.37	17.80	15.17	21.10	14.03
7	4:00:00	22.89	14.31	23.04	14.22	16.90	14.90	21.87	14.43	17.53	15.18	21.64	14.21

วันที่	เวลา	TOPSPP (G-85051) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
7	5:00:00	22.90	14.39	22.35	14.22	16.90	14.92	22.40	14.30	17.67	15.19	21.70	13.96
7	6:00:00	20.07	14.98	22.46	14.17	17.00	14.93	22.25	14.35	17.79	15.21	21.09	13.72
7	7:00:00	19.54	15.12	20.97	14.52	16.85	14.95	21.69	14.61	18.68	15.23	20.73	14.07
7	8:00:00	18.75	15.10	21.23	14.53	17.43	15.08	21.97	14.61	18.48	15.24	20.98	13.47
7	9:00:00	19.42	15.04	20.92	14.55	17.84	15.12	22.26	14.58	17.94	15.27	20.97	13.60
7	10:00:00	18.77	15.00	21.53	14.36	17.29	15.12	23.18	14.53	18.70	15.33	21.23	13.69
7	11:00:00	18.94	15.00	22.53	14.22	17.26	15.11	22.80	14.76	18.15	15.32	20.29	13.69
7	12:00:00	18.85	14.97	22.69	14.12	16.45	15.06	22.21	14.77	20.96	14.30	20.39	13.58
7	13:00:00	19.38	15.02	22.34	14.67	17.11	15.04	22.15	14.77	19.38	15.27	20.30	13.64
7	14:00:00	18.66	15.03	22.58	14.51	17.34	15.01	20.78	14.89	19.29	15.35	20.69	13.29
7	15:00:00	18.43	15.03	22.92	14.24	16.72	14.99	20.19	15.01	19.44	15.35	21.09	13.48
7	16:00:00	19.10	15.03	22.64	14.49	17.49	14.95	20.31	14.96	19.11	15.31	20.67	13.45
7	17:00:00	19.10	14.99	23.14	14.43	18.06	15.01	21.00	15.02	18.81	15.32	20.10	13.44
7	18:00:00	18.04	14.98	23.36	14.45	17.33	15.03	21.14	15.03	19.29	15.31	20.95	13.66
7	19:00:00	18.31	14.99	23.36	14.56	17.34	15.04	20.43	15.04	19.62	15.32	20.56	13.74
7	20:00:00	18.87	14.99	21.99	14.77	16.69	15.02	20.34	15.03	19.61	15.33	21.29	13.93
7	21:00:00	19.58	14.98	22.89	13.64	17.48	15.07	20.69	15.07	19.38	15.37	21.68	13.86
7	22:00:00	20.18	14.87	22.99	13.54	18.66	15.07	20.56	15.08	19.26	15.40	22.00	13.82
7	23:00:00	20.79	14.39	21.73	12.73	18.74	14.83	19.57	14.98	18.97	15.35	21.96	14.04
8	0:00:00	20.87	14.40	22.08	12.80	22.08	13.93	20.15	15.01	19.62	15.28	20.84	14.27
8	1:00:00	20.60	14.41	22.13	12.79	21.99	13.98	20.61	15.02	18.92	15.39	20.58	14.21
8	2:00:00	20.63	14.42	22.23	12.90	21.29	14.04	20.25	15.02	18.58	15.33	21.09	14.02
8	3:00:00	20.55	14.25	23.58	14.16	20.60	14.24	20.81	15.01	18.33	15.29	20.81	14.03
8	4:00:00	21.29	14.11	23.15	14.32	20.98	14.25	20.49	15.00	18.08	15.29	20.37	13.98
8	5:00:00	21.67	14.19	22.39	14.36	20.25	14.35	20.59	15.03	17.51	15.30	19.86	13.90
8	6:00:00	21.23	14.26	22.83	14.13	21.64	13.87	20.60	15.08	17.98	15.31	20.88	13.88
8	7:00:00	22.18	14.35	22.32	14.29	22.07	13.84	21.45	15.14	17.75	15.34	21.56	13.88
8	8:00:00	21.42	14.50	20.71	14.57	20.63	14.53	21.65	15.13	19.00	14.64	20.41	13.46
8	9:00:00	22.51	14.46	21.26	14.54	20.75	14.58	21.32	15.13	20.40	13.46	20.56	13.49
8	10:00:00	22.72	14.44	21.78	14.51	21.88	14.11	22.46	15.11	21.11	14.96	20.47	13.56
8	11:00:00	21.76	14.54	22.90	14.57	21.35	13.69	22.11	15.11	20.41	14.97	21.00	13.74
8	12:00:00	21.95	13.96	22.98	14.40	20.60	13.57	21.86	15.12	20.67	14.99	20.74	13.51
8	13:00:00	22.27	14.20	21.37	14.73	21.12	13.77	21.54	15.08	20.96	14.92	21.47	13.51
8	14:00:00	23.33	13.59	21.47	14.64	22.17	13.88	20.72	15.04	21.86	14.07	21.97	13.48
8	15:00:00	23.11	13.67	22.08	14.66	22.25	13.88	20.89	15.02	21.24	14.33	22.39	13.46
8	16:00:00	22.45	13.72	21.83	14.72	21.08	13.83	20.23	15.01	20.36	14.76	21.74	13.40
8	17:00:00	22.88	13.91	21.78	14.64	21.58	13.89	19.82	15.04	20.38	14.81	21.41	13.62
8	18:00:00	22.16	13.78	21.12	14.67	22.14	13.90	19.94	15.02	20.75	14.88	21.41	13.55

วันที่	เวลา	TOPSPP (G-85051) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
8	19:00:00	21.33	13.91	21.78	14.56	21.75	13.93	19.42	15.00	21.72	14.97	21.33	13.69
8	20:00:00	21.29	14.09	21.86	14.58	20.70	13.76	19.54	15.00	21.11	15.14	21.23	13.76
8	21:00:00	20.98	13.85	21.85	14.47	21.76	13.96	18.89	15.04	19.32	15.32	21.77	14.00
8	22:00:00	21.43	14.24	22.01	14.46	21.96	14.19	19.18	15.08	19.72	15.34	21.23	13.95
8	23:00:00	21.17	14.40	22.67	14.00	21.46	13.89	19.32	14.98	18.46	15.30	21.14	13.86
9	0:00:00	21.19	14.34	22.53	14.17	21.72	13.81	19.68	14.97	18.18	15.27	21.35	13.95
9	1:00:00	21.79	14.30	21.20	14.33	22.30	13.80	19.00	14.97	17.87	15.26	20.80	14.16
9	2:00:00	21.64	14.38	21.62	14.18	21.82	13.88	18.83	14.99	17.43	15.23	20.36	14.02
9	3:00:00	22.11	14.40	21.84	14.14	21.34	14.19	20.01	14.83	17.45	15.23	19.83	14.15
9	4:00:00	22.72	14.21	21.07	14.33	21.23	14.16	22.23	14.52	18.03	15.24	20.44	14.20
9	5:00:00	21.91	14.44	21.61	14.14	21.58	14.18	22.36	14.44	18.17	15.24	21.16	14.21
9	6:00:00	22.00	14.47	21.46	14.17	21.72	14.13	21.09	14.49	18.97	15.25	21.91	14.08
9	7:00:00	21.73	14.60	20.51	14.49	20.91	14.23	19.77	14.64	18.49	15.26	21.27	14.22
9	8:00:00	21.63	14.66	19.98	14.55	19.90	14.58	21.10	14.68	18.55	15.27	21.24	13.73
9	9:00:00	22.01	14.56	20.32	14.56	22.60	10.13	22.48	14.63	18.74	15.31	21.44	13.84
9	10:00:00	22.08	14.63	20.67	14.54	21.39	14.17	22.14	14.90	19.29	15.39	22.02	13.82
9	11:00:00	21.01	14.64	20.48	14.53	21.79	13.98	21.16	15.08	18.98	15.38	22.41	13.80
9	12:00:00	20.07	14.58	20.62	14.33	21.28	13.87	20.72	15.06	18.41	15.37	22.15	13.76
9	13:00:00	20.55	14.60	20.07	14.66	21.17	13.77	20.17	15.03	18.49	15.37	21.99	13.57
9	14:00:00	21.05	14.40	20.33	14.64	20.97	13.72	19.46	15.04	18.78	15.45	22.59	13.52
9	15:00:00	20.68	14.57	20.16	14.55	20.72	13.66	20.30	14.99	18.74	15.58	22.41	14.05
9	16:00:00	20.05	14.72	19.81	14.57	19.14	14.35	20.59	15.01	20.29	15.14	21.97	13.90
9	17:00:00	18.67	14.88	20.48	14.64	19.69	14.11	19.93	15.01	19.78	14.66	23.07	13.87
9	18:00:00	17.66	14.92	21.02	14.61	20.59	13.75	20.44	14.99	18.28	15.47	22.76	13.70
9	19:00:00	18.67	14.99	21.27	14.58	19.65	13.75	20.50	14.99	18.44	15.41	22.63	13.54
9	20:00:00	19.18	14.98	21.05	14.50	20.20	13.75	20.15	14.95	18.78	15.49	22.45	13.91
9	21:00:00	18.29	14.94	21.65	14.34	20.22	13.81	20.43	14.97	18.33	15.51	21.90	13.88
9	22:00:00	17.29	14.97	21.41	14.29	19.92	13.79	19.99	15.02	19.36	15.52	21.62	13.78
9	23:00:00	17.27	14.99	20.83	14.29	19.49	13.91	21.58	14.23	18.68	15.45	20.73	13.91
10	0:00:00	17.44	15.00	21.78	14.02	19.89	13.94	21.13	14.31	17.97	15.41	20.58	14.30
10	1:00:00	16.66	14.91	20.36	14.42	19.83	13.98	21.24	14.30	18.18	15.25	20.73	14.36
10	2:00:00	15.90	14.89	20.91	14.34	19.57	14.04	23.37	13.93	20.04	14.70	20.76	14.47
10	3:00:00	15.90	14.87	18.53	14.87	19.85	14.01	21.91	14.13	18.41	15.21	21.45	14.35
10	4:00:00	16.15	14.90	18.25	14.89	19.20	14.22	22.32	14.14	17.87	15.33	20.39	14.45
10	5:00:00	16.71	14.97	18.43	14.88	19.14	14.33	22.74	13.93	17.16	15.39	21.31	14.29
10	6:00:00	17.12	15.00	18.41	14.91	20.67	14.01	21.15	14.45	16.98	15.49	21.86	14.21
10	7:00:00	16.61	15.02	17.60	14.96	20.62	13.91	20.89	14.57	16.34	15.58	21.54	14.51
10	8:00:00	17.31	15.00	18.06	14.98	20.04	14.23	21.02	14.54	16.03	15.64	22.03	14.22

วันที่	เวลา	TOPSPP (G-85051) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
10	9:00:00	19.56	14.93	17.99	14.96	20.38	13.96	21.70	14.48	17.50	15.52	20.48	11.04
10	10:00:00	20.07	14.90	22.03	6.87	19.74	13.74	21.22	14.48	19.52	15.20	25.63	9.53
10	11:00:00	17.58	14.88	18.58	14.59	19.16	13.61	21.48	14.45	19.98	14.68	18.96	13.57
10	12:00:00	17.19	14.85	17.09	14.96	19.47	13.48	21.67	14.46	18.65	15.27	18.72	13.41
10	13:00:00	17.95	14.95	17.40	15.01	19.88	13.61	21.83	14.50	17.51	15.67	20.03	13.25
10	14:00:00	18.83	15.00	17.58	14.99	19.89	13.66	21.31	14.53	17.20	15.68	20.65	13.26
10	15:00:00	18.06	14.97	17.38	14.96	20.15	13.62	21.49	14.44	17.01	15.68	21.49	13.74
10	16:00:00	17.89	14.95	17.58	14.91	19.69	13.58	21.72	14.39	16.52	15.63	20.78	13.39
10	17:00:00	19.35	14.99	17.68	14.99	20.29	13.63	21.16	14.31	18.52	15.65	20.01	13.29
10	18:00:00	18.43	15.00	17.73	14.99	19.31	13.63	21.28	14.37	18.56	15.65	20.28	13.52
10	19:00:00	17.85	14.95	18.29	14.96	20.16	13.68	22.00	14.25	17.85	15.63	19.52	13.62
10	20:00:00	18.01	14.98	17.92	14.94	19.67	13.70	22.20	13.95	17.74	15.62	19.99	14.04
10	21:00:00	18.40	15.01	16.74	14.94	20.24	13.50	22.91	13.96	17.78	15.68	19.04	14.29
10	22:00:00	18.34	15.03	16.49	14.96	20.60	13.77	22.17	13.60	18.07	15.68	19.42	13.99
10	23:00:00	16.45	15.00	15.15	14.96	20.04	13.73	21.05	14.16	17.37	15.47	18.11	14.14
11	0:00:00	16.76	15.01	15.20	14.93	19.17	14.20	Shutdown	Shutdown	19.77	14.15	16.62	14.48
11	1:00:00	17.96	14.94	15.82	14.88	18.90	14.07	Shutdown	Shutdown	19.65	13.98	16.68	14.53
11	2:00:00	17.18	14.93	16.36	14.88	17.95	14.29	Shutdown	Shutdown	19.93	14.02	18.05	14.34
11	3:00:00	17.57	14.94	16.75	14.87	17.66	14.33	Shutdown	Shutdown	19.27	14.03	17.37	14.39
11	4:00:00	17.84	14.96	16.36	14.87	17.68	14.28	Shutdown	Shutdown	17.59	14.89	16.60	14.47
11	5:00:00	18.72	15.06	16.68	14.88	18.46	14.25	Shutdown	Shutdown	15.52	15.55	16.81	14.47
11	6:00:00	18.23	15.10	17.27	14.92	19.75	14.08	Shutdown	Shutdown	15.20	15.57	17.15	14.42
11	7:00:00	18.16	15.12	16.67	14.92	19.99	14.01	Shutdown	Shutdown	16.52	15.58	17.23	14.59
11	8:00:00	17.78	15.10	17.27	14.93	18.40	14.58	Shutdown	Shutdown	17.09	15.59	18.09	14.13
11	9:00:00	18.79	14.99	17.78	14.91	19.07	14.28	Shutdown	Shutdown	18.02	15.62	19.12	14.12
11	10:00:00	18.51	14.97	17.72	14.89	18.94	13.68	Shutdown	Shutdown	17.87	15.70	19.94	14.01
11	11:00:00	18.77	14.96	17.13	14.86	19.63	13.83	Shutdown	Shutdown	17.79	15.69	19.71	13.81
11	12:00:00	18.33	14.92	17.67	14.85	19.74	13.89	Shutdown	Shutdown	17.36	15.67	19.56	13.54
11	13:00:00	19.17	15.02	17.45	14.89	18.46	14.26	Shutdown	Shutdown	17.28	15.65	19.23	13.40
11	14:00:00	19.04	15.02	18.09	14.87	19.07	14.18	Shutdown	Shutdown	16.89	15.63	19.20	13.25
11	15:00:00	18.48	15.02	17.64	14.91	18.52	14.42	Shutdown	Shutdown	17.46	15.63	18.72	13.87
11	16:00:00	18.44	14.99	17.48	14.92	18.48	14.47	Shutdown	Shutdown	17.08	15.54	19.05	13.75
11	17:00:00	18.68	14.97	18.00	14.87	18.96	14.52	Shutdown	Shutdown	17.11	15.61	18.57	13.79
11	18:00:00	18.78	14.99	18.32	14.89	18.70	14.45	Shutdown	Shutdown	17.55	15.61	17.68	13.84
11	19:00:00	19.05	14.96	18.41	14.89	18.72	14.71	Shutdown	Shutdown	16.60	15.64	17.61	14.00
11	20:00:00	19.64	14.97	18.21	14.98	18.49	14.57	Shutdown	Shutdown	16.06	15.58	17.67	14.15
11	21:00:00	18.15	15.00	18.02	14.99	18.77	14.64	Shutdown	Shutdown	16.34	15.63	17.68	14.08
11	22:00:00	18.31	15.01	17.97	14.94	18.41	14.74	Shutdown	Shutdown	17.24	15.63	18.35	13.92

วันที่	เวลา	TOPSPP (G-85051) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
11	23:00:00	16.97	14.96	17.88	14.92	18.53	14.64	Shutdown	Shutdown	16.56	15.56	17.90	13.94
12	0:00:00	17.55	14.94	18.43	14.89	18.17	14.43	Shutdown	Shutdown	18.81	14.47	16.59	14.51
12	1:00:00	17.69	14.87	18.55	14.86	18.08	14.36	Shutdown	Shutdown	19.83	14.35	15.62	14.55
12	2:00:00	17.57	14.87	18.31	14.88	18.06	14.38	Shutdown	Shutdown	19.71	14.21	15.50	14.65
12	3:00:00	17.71	14.86	18.59	14.84	17.26	14.39	Shutdown	Shutdown	19.44	14.25	14.80	14.77
12	4:00:00	17.22	14.89	18.24	14.84	17.17	14.42	Shutdown	Shutdown	17.60	15.14	15.11	14.76
12	5:00:00	17.21	14.94	16.82	14.87	17.65	14.42	Shutdown	Shutdown	16.48	15.52	15.63	14.70
12	6:00:00	17.02	14.96	16.56	14.90	18.51	14.34	Shutdown	Shutdown	16.83	15.53	16.82	14.40
12	7:00:00	17.63	14.98	15.83	14.95	18.24	14.46	Shutdown	Shutdown	17.16	15.54	15.90	14.56
12	8:00:00	18.55	14.95	16.82	14.98	17.94	14.57	Shutdown	Shutdown	17.65	15.57	16.13	14.58
12	9:00:00	18.56	14.90	18.51	14.93	17.92	14.74	Shutdown	Shutdown	18.00	15.61	16.91	14.58
12	10:00:00	18.03	14.90	18.40	14.87	19.47	14.61	Shutdown	Shutdown	18.26	15.69	18.38	14.31
12	11:00:00	17.78	14.89	18.23	14.87	18.05	14.96	Shutdown	Shutdown	17.80	15.69	18.66	14.28
12	12:00:00	18.20	14.86	17.95	14.84	17.98	14.56	Shutdown	Shutdown	17.87	15.65	17.31	14.46
12	13:00:00	18.80	14.97	17.30	14.87	17.46	14.57	Shutdown	Shutdown	18.25	15.64	16.89	14.41
12	14:00:00	18.77	14.99	17.37	14.86	17.44	14.47	Shutdown	Shutdown	18.65	15.64	16.92	14.64
12	15:00:00	18.86	15.00	17.20	14.78	17.30	14.63	Shutdown	Shutdown	18.59	15.62	17.01	14.59
12	16:00:00	18.94	14.96	16.43	14.87	17.75	14.54	Shutdown	Shutdown	18.64	15.61	17.68	14.53
12	17:00:00	18.17	14.94	16.67	14.85	17.56	14.52	Shutdown	Shutdown	18.16	15.59	16.83	14.68
12	18:00:00	18.29	14.96	17.15	14.87	17.30	14.57	Shutdown	Shutdown	17.06	15.53	17.85	14.47
12	19:00:00	19.01	14.98	17.20	14.86	17.23	14.61	Shutdown	Shutdown	17.58	15.60	18.29	14.34
12	20:00:00	18.45	14.93	17.66	14.89	16.58	14.68	Shutdown	Shutdown	16.97	15.57	17.61	14.47
12	21:00:00	18.56	15.00	17.63	14.99	17.17	14.67	Shutdown	Shutdown	16.07	15.63	18.70	14.19
12	22:00:00	18.43	15.02	17.02	14.98	17.05	14.61	Shutdown	Shutdown	16.24	15.64	19.26	13.85
12	23:00:00	16.24	14.98	16.01	14.91	18.27	14.20	Shutdown	Shutdown	16.02	15.57	17.88	14.58
13	0:00:00	16.27	14.94	16.48	14.88	17.82	14.30	Shutdown	Shutdown	15.85	15.52	16.27	14.74
13	1:00:00	16.99	14.90	16.84	14.84	17.88	14.50	Shutdown	Shutdown	17.94	15.08	16.18	14.72
13	2:00:00	16.70	14.89	17.62	14.84	18.12	14.48	Shutdown	Shutdown	19.86	14.49	19.05	14.38
13	3:00:00	16.89	14.89	17.79	14.83	19.04	14.33	Shutdown	Shutdown	19.58	14.51	21.12	14.07
13	4:00:00	16.77	14.91	17.18	14.82	18.76	14.30	Shutdown	Shutdown	17.11	15.13	21.18	13.99
13	5:00:00	16.41	14.94	17.03	14.84	19.38	14.22	Shutdown	Shutdown	19.00	14.48	21.56	13.99
13	6:00:00	16.55	14.97	16.89	14.88	20.33	13.90	Shutdown	Shutdown	20.14	14.35	21.18	13.80
13	7:00:00	16.39	14.99	17.09	14.89	20.42	13.91	Shutdown	Shutdown	20.42	14.35	19.94	13.83
13	8:00:00	17.45	14.95	18.19	14.88	20.27	14.01	Shutdown	Shutdown	21.06	14.35	20.04	13.58
13	9:00:00	19.54	14.96	18.86	14.84	19.88	14.17	Shutdown	Shutdown	20.80	14.53	18.59	13.18
13	10:00:00	20.02	14.98	18.25	14.85	19.62	14.25	Shutdown	Shutdown	20.58	14.41	19.38	13.38
13	11:00:00	19.74	14.96	17.94	14.84	19.53	14.14	Shutdown	Shutdown	20.14	14.34	19.30	14.43
13	12:00:00	18.43	14.88	18.42	14.80	19.80	14.22	Shutdown	Shutdown	19.70	14.32	19.15	14.26

วันที่	เวลา	TOPSPP (G-85051) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
13	13:00:00	18.45	14.96	17.87	14.77	20.37	13.62	Shutdown	Shutdown	19.43	14.32	19.45	13.07
13	14:00:00	18.72	14.96	17.98	14.76	21.56	13.64	Shutdown	Shutdown	19.67	14.44	19.50	12.93
13	15:00:00	18.66	14.93	18.27	14.74	20.96	14.01	Shutdown	Shutdown	20.28	14.43	19.39	12.94
13	16:00:00	19.10	14.93	17.87	14.76	21.74	13.72	Shutdown	Shutdown	20.13	14.28	18.73	13.51
13	17:00:00	19.01	14.97	17.77	14.79	20.89	13.96	Shutdown	Shutdown	20.29	14.27	18.91	13.69
13	18:00:00	19.01	14.98	17.69	14.84	19.13	14.63	Shutdown	Shutdown	19.87	14.11	18.96	13.83
13	19:00:00	19.00	14.93	17.77	14.85	19.01	14.65	Shutdown	Shutdown	19.30	13.66	19.39	13.72
13	20:00:00	19.20	15.00	17.49	14.87	19.15	14.46	Shutdown	Shutdown	18.89	13.75	19.38	13.79
13	21:00:00	18.88	15.03	17.53	14.85	19.19	14.51	Shutdown	Shutdown	19.28	13.85	18.84	13.94
13	22:00:00	19.24	15.03	17.06	14.85	19.88	14.18	Shutdown	Shutdown	19.12	13.84	19.29	13.75
13	23:00:00	16.65	14.99	17.17	14.87	19.92	13.78	Shutdown	Shutdown	19.05	13.70	19.76	14.10
14	0:00:00	17.13	14.94	17.01	14.86	19.70	13.86	Shutdown	Shutdown	19.57	14.11	18.78	14.54
14	1:00:00	17.22	14.92	17.87	14.83	20.12	13.61	Shutdown	Shutdown	19.87	14.40	17.63	14.85
14	2:00:00	17.22	14.92	17.82	14.83	19.27	13.25	Shutdown	Shutdown	19.74	14.39	18.52	14.67
14	3:00:00	17.05	14.92	17.76	14.82	20.05	13.62	Shutdown	Shutdown	19.19	14.20	19.00	14.40
14	4:00:00	17.21	14.94	17.16	14.83	19.69	13.61	Shutdown	Shutdown	19.38	14.29	18.43	14.24
14	5:00:00	17.17	15.00	17.21	14.86	20.72	13.68	Shutdown	Shutdown	19.61	14.37	17.80	14.37
14	6:00:00	17.26	15.05	16.93	14.88	21.16	13.82	Shutdown	Shutdown	19.56	14.45	18.18	14.18
14	7:00:00	17.37	15.07	16.17	14.90	21.57	13.91	Shutdown	Shutdown	20.63	14.54	17.95	14.32
14	8:00:00	17.91	15.00	17.35	14.89	20.31	14.57	Shutdown	Shutdown	20.57	14.48	18.87	13.64
14	9:00:00	18.81	14.98	18.91	14.86	20.21	14.69	Shutdown	Shutdown	19.99	14.27	18.96	13.28
14	10:00:00	18.88	14.99	17.30	14.87	20.19	14.71	Shutdown	Shutdown	19.70	14.32	18.88	13.27
14	11:00:00	18.79	14.97	17.53	14.87	20.03	14.65	Shutdown	Shutdown	19.25	14.24	18.84	13.26
14	12:00:00	18.64	14.94	17.11	14.80	20.93	14.14	Shutdown	Shutdown	18.71	14.33	17.48	14.70
14	13:00:00	19.35	14.80	19.67	14.14	21.32	14.28	Shutdown	Shutdown	19.23	14.31	18.25	14.04
14	14:00:00	20.79	14.42	18.60	14.94	21.16	14.07	Shutdown	Shutdown	19.30	14.22	18.84	13.57
14	15:00:00	20.41	14.59	18.01	14.94	20.87	14.35	Shutdown	Shutdown	18.50	13.83	18.83	13.37
14	16:00:00	19.51	14.89	17.98	14.90	20.90	14.33	Shutdown	Shutdown	18.94	13.62	18.10	13.33
14	17:00:00	19.54	14.92	18.06	14.87	20.28	14.41	Shutdown	Shutdown	19.30	13.81	18.01	13.31
14	18:00:00	19.50	14.98	17.92	14.83	20.47	14.43	Shutdown	Shutdown	19.82	13.53	18.32	13.30
14	19:00:00	19.92	14.93	17.51	14.83	19.69	14.44	Shutdown	Shutdown	19.07	13.58	19.07	13.38
14	20:00:00	19.50	14.95	18.03	14.84	20.32	14.26	Shutdown	Shutdown	18.82	13.51	18.27	13.33
14	21:00:00	19.45	15.04	17.84	14.84	19.90	14.44	Shutdown	Shutdown	19.04	13.45	18.73	13.39
14	22:00:00	19.44	15.04	17.18	14.86	21.28	14.03	Shutdown	Shutdown	18.50	13.41	19.31	13.54
14	23:00:00	17.37	15.02	15.93	14.88	21.17	13.55	Shutdown	Shutdown	19.08	13.95	18.87	13.52
15	0:00:00	17.43	14.96	15.57	14.96	20.72	14.16	Shutdown	Shutdown	17.56	14.85	18.57	13.71
15	1:00:00	18.26	14.93	16.52	14.89	21.47	13.81	Shutdown	Shutdown	15.32	15.34	18.67	13.72
15	2:00:00	18.03	14.93	15.82	14.89	21.48	13.56	Shutdown	Shutdown	15.34	15.34	19.02	13.70

วันที่	เวลา	TOPSPP (G-85051) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
15	3:00:00	18.26	14.93	15.81	14.88	21.24	13.73	Shutdown	Shutdown	15.56	15.33	19.02	13.70
15	4:00:00	17.93	14.96	16.18	14.88	21.13	13.90	Shutdown	Shutdown	15.49	15.33	18.51	13.70
15	5:00:00	18.05	15.02	15.76	14.93	21.50	13.77	Shutdown	Shutdown	14.88	15.33	19.31	13.67
15	6:00:00	18.23	15.05	15.95	14.96	21.05	13.79	Shutdown	Shutdown	14.95	15.33	17.85	13.26
15	7:00:00	18.81	15.04	15.31	14.99	21.32	13.89	Shutdown	Shutdown	16.34	15.35	18.25	13.66
15	8:00:00	19.05	14.93	14.94	15.00	20.08	14.47	Shutdown	Shutdown	16.73	15.38	18.20	13.75
15	9:00:00	19.96	14.91	16.08	14.94	19.53	14.64	Shutdown	Shutdown	16.90	15.40	18.41	13.37
15	10:00:00	19.91	14.88	16.00	14.94	20.73	14.44	Shutdown	Shutdown	16.67	15.36	18.94	13.33
15	11:00:00	20.53	14.86	15.27	14.94	20.22	14.72	Shutdown	Shutdown	16.34	15.36	18.88	13.32
15	12:00:00	20.01	14.84	15.04	14.93	19.71	14.65	Shutdown	Shutdown	16.30	15.35	18.03	13.31
15	13:00:00	19.81	14.99	16.57	14.99	20.43	14.49	Shutdown	Shutdown	15.79	15.34	17.30	13.33
15	14:00:00	19.65	15.00	16.32	14.99	20.65	14.30	Shutdown	Shutdown	16.88	15.04	17.30	13.42
15	15:00:00	19.43	14.98	16.94	14.99	20.28	14.41	Shutdown	Shutdown	18.50	14.61	17.64	13.61
15	16:00:00	19.76	14.91	17.17	14.96	20.42	14.38	Shutdown	Shutdown	17.69	14.80	17.62	13.61
15	17:00:00	19.75	14.89	17.76	14.89	19.30	14.46	Shutdown	Shutdown	18.05	14.78	18.56	13.61
15	18:00:00	19.48	14.92	17.40	14.94	19.69	14.46	Shutdown	Shutdown	18.39	14.69	18.78	13.41
15	19:00:00	19.90	14.91	17.13	14.94	19.49	14.55	Shutdown	Shutdown	19.47	14.37	19.62	13.48
15	20:00:00	20.25	14.96	17.14	14.89	20.18	14.47	Shutdown	Shutdown	18.79	14.54	18.99	13.60
15	21:00:00	19.60	15.00	17.00	14.90	19.77	14.58	Shutdown	Shutdown	18.63	14.58	19.30	13.89
15	22:00:00	19.88	15.00	16.85	14.92	20.14	14.22	Shutdown	Shutdown	18.72	14.01	18.25	13.66
15	23:00:00	21.55	14.33	15.23	14.93	20.47	13.94	Shutdown	Shutdown	18.89	14.47	18.19	13.62
16	0:00:00	22.40	14.24	15.30	14.92	20.89	13.75	Shutdown	Shutdown	15.83	15.36	18.08	13.67
16	1:00:00	23.26	14.17	15.33	14.85	20.20	13.47	Shutdown	Shutdown	15.76	15.34	18.22	13.61
16	2:00:00	22.95	14.18	15.59	14.84	20.13	13.35	Shutdown	Shutdown	15.79	15.34	18.96	13.79
16	3:00:00	22.97	14.19	16.39	14.69	19.35	13.20	Shutdown	Shutdown	15.48	15.34	18.87	13.56
16	4:00:00	23.00	14.07	16.65	14.68	20.32	13.46	Shutdown	Shutdown	14.71	15.35	18.41	13.25
16	5:00:00	22.83	14.03	15.44	14.89	20.41	13.25	Shutdown	Shutdown	14.54	15.39	18.39	13.42
16	6:00:00	22.60	13.87	16.93	14.69	20.93	13.85	Shutdown	Shutdown	14.66	15.39	18.39	13.26
16	7:00:00	20.96	14.20	17.16	14.63	19.93	14.43	Shutdown	Shutdown	15.06	15.37	18.70	13.52
16	8:00:00	19.29	14.35	16.84	14.73	19.55	14.76	Shutdown	Shutdown	15.76	15.34	19.20	13.74
16	9:00:00	20.59	14.30	15.89	14.90	19.54	14.62	Shutdown	Shutdown	15.66	15.35	18.88	13.38
16	10:00:00	21.86	14.01	16.04	14.90	19.74	14.46	Shutdown	Shutdown	15.82	15.35	18.58	13.22
16	11:00:00	22.02	14.03	15.97	14.89	19.42	14.26	Shutdown	Shutdown	15.60	15.34	17.87	13.28
16	12:00:00	21.76	14.08	16.02	14.89	19.53	14.39	Shutdown	Shutdown	16.21	15.30	17.87	13.21
16	13:00:00	21.50	14.04	17.38	14.96	20.39	14.18	Shutdown	Shutdown	15.46	15.30	18.28	13.19
16	14:00:00	22.33	14.01	17.09	14.97	21.06	14.11	Shutdown	Shutdown	15.01	15.30	18.58	13.18
16	15:00:00	20.70	14.36	17.06	14.97	20.23	14.36	Shutdown	Shutdown	16.12	15.29	18.98	13.23
16	16:00:00	20.85	14.34	16.76	14.89	19.74	14.35	Shutdown	Shutdown	17.38	15.30	18.56	13.33

วันที่	เวลา	TOPSPP (G-85051) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
16	17:00:00	20.67	14.44	17.54	14.88	19.90	14.21	Shutdown	Shutdown	17.03	15.29	18.56	13.48
16	18:00:00	20.80	14.45	17.98	14.86	19.97	14.38	Shutdown	Shutdown	16.48	15.31	18.75	13.45
16	19:00:00	19.97	14.66	17.52	14.90	19.93	14.41	Shutdown	Shutdown	16.73	15.38	19.00	13.19
16	20:00:00	19.86	14.55	17.36	14.91	19.64	14.38	Shutdown	Shutdown	17.10	15.39	17.96	13.25
16	21:00:00	20.28	14.51	16.87	14.93	21.04	14.28	Shutdown	Shutdown	17.41	15.46	18.20	13.48
16	22:00:00	20.25	14.39	17.44	14.80	21.15	14.30	Shutdown	Shutdown	17.57	15.28	18.50	13.59
16	23:00:00	19.77	14.55	17.49	14.68	20.81	14.09	Shutdown	Shutdown	16.07	15.28	18.90	13.73
17	0:00:00	19.48	14.50	16.34	14.87	21.30	13.63	Shutdown	Shutdown	15.66	15.43	19.11	13.77
17	1:00:00	19.05	14.46	16.21	14.83	21.29	13.71	Shutdown	Shutdown	16.59	15.40	18.76	13.78
17	2:00:00	21.15	14.38	15.89	14.83	21.00	13.62	Shutdown	Shutdown	16.12	15.42	18.29	13.75
17	3:00:00	22.17	14.31	16.03	14.82	20.92	13.62	Shutdown	Shutdown	16.99	15.43	19.12	13.60
17	4:00:00	17.73	14.91	16.29	14.80	20.85	13.71	Shutdown	Shutdown	16.16	15.43	19.46	13.63
17	5:00:00	16.80	15.04	16.08	14.84	21.66	13.74	Shutdown	Shutdown	16.77	15.43	19.48	13.60
17	6:00:00	17.12	15.06	17.45	14.71	21.11	13.92	Shutdown	Shutdown	15.93	15.51	18.82	13.62
17	7:00:00	17.48	15.07	19.71	14.32	20.89	14.13	Shutdown	Shutdown	16.20	15.54	18.47	13.72
17	8:00:00	17.43	15.03	19.58	14.30	19.91	14.53	Shutdown	Shutdown	16.50	15.53	18.43	13.55
17	9:00:00	21.06	13.63	19.23	14.36	20.19	14.52	Shutdown	Shutdown	17.51	15.53	17.72	13.11
17	10:00:00	20.01	14.06	19.98	14.35	19.57	14.54	Shutdown	Shutdown	18.14	15.59	18.08	13.12
17	11:00:00	17.53	14.95	19.91	14.11	20.20	14.32	Shutdown	Shutdown	18.37	15.58	17.80	13.08
17	12:00:00	17.40	14.94	19.01	14.50	19.97	14.36	Shutdown	Shutdown	18.40	15.58	18.33	12.86
17	13:00:00	18.92	14.94	18.38	14.94	19.63	14.30	Shutdown	Shutdown	18.54	15.55	18.15	12.80
17	14:00:00	18.76	15.00	17.69	14.94	20.41	14.37	Shutdown	Shutdown	18.27	15.55	17.62	12.95
17	15:00:00	18.73	14.96	17.30	14.96	20.35	14.58	Shutdown	Shutdown	18.02	15.54	18.74	13.17
17	16:00:00	18.92	14.89	18.18	14.93	20.42	14.38	Shutdown	Shutdown	18.21	15.52	18.75	13.30
17	17:00:00	19.40	14.95	19.20	14.87	18.21	14.61	Shutdown	Shutdown	18.34	15.49	18.23	13.41
17	18:00:00	19.32	14.95	19.40	14.91	18.89	14.41	Shutdown	Shutdown	18.31	15.55	18.21	13.25
17	19:00:00	18.99	14.89	18.44	14.91	19.69	14.40	Shutdown	Shutdown	18.55	15.54	18.69	13.37
17	20:00:00	18.59	14.89	18.90	14.94	19.13	14.47	Shutdown	Shutdown	17.78	15.54	17.98	13.40
17	21:00:00	19.81	14.66	17.99	14.93	19.14	14.45	Shutdown	Shutdown	17.59	15.56	18.09	13.45
17	22:00:00	20.15	14.47	18.15	14.98	19.55	14.43	Shutdown	Shutdown	17.49	15.57	18.04	13.45
17	23:00:00	20.08	14.45	16.60	14.97	20.36	13.84	Shutdown	Shutdown	15.72	15.59	17.83	13.15
18	0:00:00	21.22	14.38	17.06	14.95	20.15	13.78	Shutdown	Shutdown	16.16	15.50	17.75	13.25
18	1:00:00	21.98	14.49	17.44	14.89	20.07	13.78	Shutdown	Shutdown	15.84	15.48	19.02	13.52
18	2:00:00	21.65	14.49	16.76	14.88	20.13	13.83	Shutdown	Shutdown	16.60	15.49	19.18	13.41
18	3:00:00	21.94	14.43	16.55	14.87	20.13	13.78	Shutdown	Shutdown	16.71	15.48	19.22	13.42
18	4:00:00	21.31	14.45	16.21	14.88	20.65	13.89	Shutdown	Shutdown	16.24	15.47	19.52	13.45
18	5:00:00	21.45	14.45	16.85	14.92	20.54	13.55	Shutdown	Shutdown	16.03	15.49	19.52	13.39
18	6:00:00	20.86	14.46	18.05	14.52	20.20	13.82	Shutdown	Shutdown	16.52	15.54	18.85	13.37

วันที่	เวลา	TOPSPP (G-85051) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
18	7:00:00	19.89	14.53	18.33	14.44	20.36	14.09	Shutdown	Shutdown	16.59	15.57	18.54	13.53
18	8:00:00	20.37	14.51	18.31	14.51	19.58	14.43	Shutdown	Shutdown	17.05	15.55	18.71	13.78
18	9:00:00	21.51	14.58	18.64	14.48	20.30	14.29	Shutdown	Shutdown	18.21	15.52	19.69	13.46
18	10:00:00	22.32	14.41	19.23	14.41	20.25	14.32	Shutdown	Shutdown	18.64	15.56	20.02	13.19
18	11:00:00	21.39	14.48	18.60	14.47	19.66	14.32	Shutdown	Shutdown	17.78	15.57	19.34	13.19
18	12:00:00	20.69	14.41	19.32	14.34	21.07	14.14	Shutdown	Shutdown	18.39	15.60	19.02	13.12
18	13:00:00	20.91	14.67	18.81	14.66	21.84	14.08	Shutdown	Shutdown	18.44	15.58	18.91	12.96
18	14:00:00	20.71	14.70	19.14	14.60	20.25	14.20	Shutdown	Shutdown	17.77	15.57	19.42	12.93
18	15:00:00	21.34	14.72	19.33	14.66	19.85	14.35	Shutdown	Shutdown	17.87	15.58	19.61	12.92
18	16:00:00	20.65	14.48	18.50	14.64	20.08	14.38	Shutdown	Shutdown	17.89	15.52	19.60	12.90
18	17:00:00	21.91	14.18	18.41	14.62	19.56	14.38	Shutdown	Shutdown	18.47	15.57	19.87	12.97
18	18:00:00	21.33	14.36	18.43	14.70	20.94	14.35	Shutdown	Shutdown	18.28	15.58	19.95	13.19
18	19:00:00	20.87	14.51	18.60	14.67	19.44	14.37	Shutdown	Shutdown	18.36	15.58	19.89	13.22
18	20:00:00	20.67	14.58	18.33	14.77	19.35	14.46	Shutdown	Shutdown	18.11	15.59	19.52	13.12
18	21:00:00	21.09	14.56	18.18	14.76	20.49	14.36	Shutdown	Shutdown	18.04	15.63	19.83	13.46
18	22:00:00	21.65	14.35	19.44	14.50	22.33	14.21	Shutdown	Shutdown	18.53	15.64	18.98	13.15
18	23:00:00	20.58	14.49	18.90	14.43	22.82	13.74	Shutdown	Shutdown	17.79	15.62	18.89	13.07
19	0:00:00	20.93	14.59	18.94	14.45	23.15	13.81	20.20	16.10	15.95	15.60	19.44	13.73
19	1:00:00	22.89	14.44	19.13	14.33	23.00	13.95	19.49	15.90	15.82	15.60	17.93	13.93
19	2:00:00	22.70	14.60	19.40	14.41	21.95	13.89	17.96	15.76	15.52	15.59	18.20	13.90
19	3:00:00	23.60	14.56	19.73	14.15	21.58	14.14	19.07	15.76	15.50	15.58	18.58	14.06
19	4:00:00	23.22	14.55	20.00	14.07	21.50	14.11	18.81	15.76	15.91	15.58	18.61	14.01
19	5:00:00	22.95	14.62	21.70	13.77	22.19	14.03	18.44	15.78	15.50	15.57	18.33	14.09
19	6:00:00	23.19	14.57	19.43	14.52	22.18	13.73	18.44	15.80	15.25	15.61	19.16	14.00
19	7:00:00	22.79	14.62	18.66	14.57	22.29	14.04	19.15	15.76	15.17	15.62	19.06	14.17
19	8:00:00	24.59	14.41	18.94	14.49	20.60	14.65	21.35	15.69	16.05	15.59	18.50	14.30
19	9:00:00	23.71	14.57	19.30	14.40	20.00	14.70	21.14	15.71	16.84	15.59	18.59	14.21
19	10:00:00	24.25	14.43	19.85	14.29	20.69	14.40	21.08	15.86	18.15	15.67	18.98	14.09
19	11:00:00	23.94	14.47	20.19	14.44	20.00	14.56	22.06	15.84	17.72	15.66	19.04	13.99
19	12:00:00	23.62	14.51	20.28	14.51	19.80	14.53	21.85	15.85	17.96	15.64	18.74	14.20
19	13:00:00	23.51	14.64	20.71	14.42	19.69	14.37	20.81	15.81	18.01	15.60	18.56	14.17
19	14:00:00	22.46	14.54	20.67	14.23	19.46	14.23	20.74	15.81	17.80	15.57	18.62	14.10
19	15:00:00	21.63	14.59	19.16	14.52	20.11	14.32	20.93	15.82	17.80	15.55	19.02	14.13
19	16:00:00	21.53	14.60	18.62	14.67	20.00	14.25	21.40	15.81	18.19	15.52	18.52	14.23
19	17:00:00	21.78	14.59	18.95	14.60	20.04	14.28	21.38	15.74	18.40	15.53	19.45	14.18
19	18:00:00	21.70	14.63	19.32	14.32	20.64	14.16	21.35	15.78	18.04	15.58	18.57	13.96
19	19:00:00	22.46	14.67	20.53	13.75	20.15	14.25	21.94	15.79	17.70	15.58	17.42	13.50
19	20:00:00	22.68	14.65	19.70	14.17	20.56	14.33	21.40	15.76	17.92	15.56	18.40	13.59

วันที่	เวลา	TOPSPP (G-85051) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
19	21:00:00	22.30	14.63	20.71	13.85	21.56	14.03	20.35	15.77	17.25	15.59	17.95	14.20
19	22:00:00	22.16	14.58	20.40	13.59	21.31	13.97	21.15	15.86	17.58	15.61	17.42	14.44
19	23:00:00	22.16	14.51	19.75	12.77	21.01	13.81	19.58	15.76	18.10	15.57	17.81	14.02
20	0:00:00	21.75	14.49	20.11	12.98	20.62	14.26	18.56	15.72	16.65	15.51	17.85	14.14
20	1:00:00	21.41	14.51	19.29	12.63	20.83	14.12	19.64	15.69	17.03	15.50	17.46	14.35
20	2:00:00	21.65	14.51	19.76	13.57	20.49	14.07	19.60	15.71	16.89	15.49	16.89	14.30
20	3:00:00	21.96	14.51	18.97	14.34	20.42	14.14	19.88	15.70	16.42	15.50	17.05	14.32
20	4:00:00	21.90	14.52	18.97	14.83	20.89	13.83	18.84	15.71	16.39	15.51	17.11	14.30
20	5:00:00	22.39	14.57	18.28	14.84	21.10	13.86	18.51	15.71	16.67	15.53	17.07	14.16
20	6:00:00	23.03	14.54	19.13	14.68	19.36	14.27	18.72	15.71	16.95	15.54	18.05	13.97
20	7:00:00	23.21	14.54	19.39	14.53	18.77	14.53	18.14	15.74	16.13	15.55	16.04	14.40
20	8:00:00	21.15	14.87	19.83	14.41	19.24	14.42	20.33	15.78	16.04	15.52	17.78	14.12
20	9:00:00	19.74	15.04	20.26	14.38	21.58	14.05	21.50	15.79	17.65	15.44	18.22	13.76
20	10:00:00	20.56	15.04	21.25	14.14	21.86	14.17	22.69	15.78	19.16	15.30	19.11	13.39
20	11:00:00	20.41	14.98	20.63	14.06	22.22	14.11	21.95	15.83	18.87	14.98	18.96	13.19
20	12:00:00	19.37	14.94	19.95	14.47	21.69	14.18	21.12	15.87	18.13	15.12	18.87	13.04
20	13:00:00	21.44	14.96	19.95	14.54	21.29	14.09	21.12	15.87	17.92	15.57	18.24	13.06
20	14:00:00	20.78	14.96	20.46	14.36	21.85	13.66	21.66	15.88	17.95	15.52	19.17	13.06
20	15:00:00	20.43	14.90	20.66	14.33	21.55	14.17	21.89	15.84	17.91	15.53	19.24	13.02
20	16:00:00	20.73	14.93	19.44	14.58	21.68	14.09	21.78	15.81	18.44	15.49	19.90	13.21
20	17:00:00	20.38	14.92	18.24	14.89	20.71	14.24	21.61	15.82	18.64	15.54	19.77	13.28
20	18:00:00	19.56	14.86	18.53	14.96	19.68	14.59	21.72	15.81	18.30	15.53	19.14	13.25
20	19:00:00	19.82	14.93	17.95	15.01	19.18	14.69	21.29	15.79	17.77	15.54	18.26	13.20
20	20:00:00	19.82	15.01	18.27	14.99	19.69	14.48	21.73	15.82	18.49	15.50	18.62	13.32
20	21:00:00	19.32	15.01	18.51	14.79	20.20	14.23	23.23	15.60	18.05	15.54	18.55	13.38
20	22:00:00	19.59	14.99	20.44	14.21	20.84	13.83	23.40	15.58	17.43	15.55	17.95	13.07
20	23:00:00	20.21	14.83	19.02	14.70	20.70	14.14	Shutdown	Shutdown	16.70	15.50	18.40	12.98
21	0:00:00	20.58	14.83	18.59	14.86	21.40	13.85	Shutdown	Shutdown	16.89	15.45	18.70	13.28
21	1:00:00	19.27	14.89	19.78	14.25	21.27	13.81	Shutdown	Shutdown	16.63	15.44	19.11	13.25
21	2:00:00	18.55	14.85	20.41	14.02	20.52	13.70	Shutdown	Shutdown	16.88	15.42	19.27	13.47
21	3:00:00	18.30	14.90	19.89	14.01	20.99	13.91	Shutdown	Shutdown	16.14	15.41	19.63	13.51
21	4:00:00	18.28	14.99	19.97	13.91	21.58	13.91	Shutdown	Shutdown	16.25	15.45	19.79	13.56
21	5:00:00	18.28	15.04	20.01	13.89	21.44	13.99	Shutdown	Shutdown	16.59	15.47	19.02	13.56
21	6:00:00	18.16	15.08	19.51	13.96	21.51	13.77	Shutdown	Shutdown	17.42	15.50	18.72	13.55
21	7:00:00	19.35	15.04	19.30	14.37	21.10	13.95	Shutdown	Shutdown	17.08	15.51	19.24	13.74
21	8:00:00	19.07	15.01	18.81	14.61	20.45	14.55	Shutdown	Shutdown	15.91	15.50	19.11	13.68
21	9:00:00	19.17	15.04	19.37	14.63	18.89	14.88	Shutdown	Shutdown	16.31	15.52	18.72	13.28
21	10:00:00	19.07	15.05	20.22	14.64	17.51	15.09	Shutdown	Shutdown	16.82	15.59	18.84	13.25

วันที่	เวลา	TOPSPP (G-85051) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
21	11:00:00	19.97	14.97	19.26	14.67	17.30	15.08	Shutdown	Shutdown	17.27	15.59	19.07	12.96
21	12:00:00	19.49	14.98	18.90	14.68	19.98	14.33	Shutdown	Shutdown	16.86	15.58	19.34	12.89
21	13:00:00	22.95	14.31	18.77	14.91	20.22	14.26	Shutdown	Shutdown	17.45	15.58	18.79	12.86
21	14:00:00	23.54	14.27	18.81	15.02	20.80	14.25	Shutdown	Shutdown	17.73	15.57	19.51	12.86
21	15:00:00	23.09	14.63	18.43	15.02	20.24	14.33	Shutdown	Shutdown	18.39	15.55	19.77	12.85
21	16:00:00	22.59	14.75	18.26	15.01	20.21	14.67	Shutdown	Shutdown	17.33	15.49	19.82	12.81
21	17:00:00	21.57	14.99	17.89	15.03	20.06	14.68	Shutdown	Shutdown	17.86	15.54	20.19	12.87
21	18:00:00	22.04	15.00	17.85	15.03	19.65	14.48	Shutdown	Shutdown	18.38	15.54	19.95	12.87
21	19:00:00	21.41	15.01	17.58	15.04	19.72	14.59	Shutdown	Shutdown	18.69	15.58	19.66	12.90
21	20:00:00	22.43	15.03	16.96	15.03	19.61	14.52	Shutdown	Shutdown	18.11	15.60	19.03	12.96
21	21:00:00	21.05	15.00	17.58	15.05	20.18	14.48	Shutdown	Shutdown	18.11	15.59	19.40	13.15
21	22:00:00	20.91	15.03	18.74	15.10	19.48	14.40	Shutdown	Shutdown	18.21	15.59	19.31	13.18
21	23:00:00	20.76	14.84	16.76	15.12	20.57	14.05	Shutdown	Shutdown	19.08	15.61	18.50	13.34
22	0:00:00	21.31	14.81	16.96	15.06	19.38	14.43	Shutdown	Shutdown	18.44	15.57	17.50	14.22
22	1:00:00	21.27	14.81	17.16	15.04	19.41	14.26	Shutdown	Shutdown	17.89	15.55	17.57	14.37
22	2:00:00	20.82	14.79	17.12	15.05	19.28	14.31	Shutdown	Shutdown	18.97	15.55	18.04	14.33
22	3:00:00	20.59	14.79	17.33	15.07	19.45	14.32	Shutdown	Shutdown	18.28	15.55	18.63	14.32
22	4:00:00	18.08	14.92	16.65	15.13	18.56	14.57	Shutdown	Shutdown	18.35	15.54	18.48	14.29
22	5:00:00	18.05	14.93	16.27	15.16	17.45	14.86	Shutdown	Shutdown	17.79	15.57	18.71	14.17
22	6:00:00	17.63	14.98	17.44	15.07	18.42	14.63	Shutdown	Shutdown	17.99	15.56	18.54	14.07
22	7:00:00	18.55	14.92	18.12	14.97	19.31	14.50	Shutdown	Shutdown	17.31	15.56	18.38	14.18
22	8:00:00	19.03	14.88	18.31	14.93	18.48	14.73	Shutdown	Shutdown	17.36	15.50	19.01	13.96
22	9:00:00	19.47	14.90	18.53	14.94	18.07	14.84	Shutdown	Shutdown	17.21	15.50	20.06	13.97
22	10:00:00	19.61	14.89	18.45	14.94	19.26	14.14	Shutdown	Shutdown	17.59	15.57	20.07	13.89
22	11:00:00	20.05	14.88	18.05	14.95	17.97	14.65	Shutdown	Shutdown	16.92	15.54	19.64	13.27
22	12:00:00	19.99	14.83	18.09	14.97	19.81	14.37	Shutdown	Shutdown	16.82	15.53	19.84	13.33
22	13:00:00	20.37	14.96	17.68	15.12	19.01	14.37	Shutdown	Shutdown	17.03	15.52	20.19	13.37
22	14:00:00	20.18	14.94	17.63	15.12	19.21	14.35	Shutdown	Shutdown	17.22	15.52	20.17	13.50
22	15:00:00	20.36	14.92	17.81	15.12	18.29	14.77	Shutdown	Shutdown	17.48	15.51	20.26	13.46
22	16:00:00	20.09	14.88	17.41	15.01	18.75	14.72	Shutdown	Shutdown	16.26	15.47	19.32	13.24
22	17:00:00	20.24	14.93	17.91	15.08	18.73	14.71	Shutdown	Shutdown	17.03	15.48	19.48	13.29
22	18:00:00	20.77	14.93	18.01	15.08	19.02	14.70	Shutdown	Shutdown	16.84	15.49	19.30	13.29
22	19:00:00	20.23	14.94	17.72	15.07	19.39	14.67	Shutdown	Shutdown	17.83	15.55	18.48	13.18
22	20:00:00	20.37	14.95	18.20	15.09	19.81	14.45	Shutdown	Shutdown	17.51	15.58	18.57	13.63
22	21:00:00	20.56	14.88	17.74	15.14	18.28	14.57	Shutdown	Shutdown	17.72	15.62	19.18	13.73
22	22:00:00	20.84	14.92	17.79	15.16	19.14	14.32	Shutdown	Shutdown	17.80	15.61	18.95	13.60
22	23:00:00	22.53	14.23	15.68	15.17	20.04	13.96	Shutdown	Shutdown	16.88	15.58	18.55	13.57
23	0:00:00	22.58	14.38	16.77	15.08	19.74	14.07	21.71	15.43	16.90	15.52	18.69	13.97

วันที่	เวลา	TOPSPP (G-85051) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
23	1:00:00	22.39	14.31	17.16	15.06	20.21	14.03	20.89	15.40	17.56	15.51	18.29	14.05
23	2:00:00	21.81	14.34	16.95	15.07	20.05	14.04	19.99	15.39	16.99	15.51	17.86	14.07
23	3:00:00	21.56	14.45	16.02	15.08	19.75	14.04	19.66	15.38	17.41	15.49	18.40	13.90
23	4:00:00	21.29	14.50	15.68	15.14	20.66	13.87	21.28	15.29	18.57	15.54	18.29	14.04
23	5:00:00	21.70	14.53	16.18	15.19	20.56	13.93	22.68	15.29	18.38	15.50	18.45	14.05
23	6:00:00	23.53	14.26	18.44	15.06	20.54	13.87	23.84	15.30	18.47	15.52	18.64	13.83
23	7:00:00	23.78	14.26	19.31	15.04	20.99	13.77	23.35	15.33	18.73	15.51	17.76	14.17
23	8:00:00	23.39	14.37	20.10	14.99	19.35	14.58	22.58	15.41	18.88	15.49	18.02	13.97
23	9:00:00	23.37	14.33	19.79	15.00	17.49	15.10	22.31	15.44	23.15	7.90	18.34	13.68
23	10:00:00	23.02	14.31	19.73	15.00	17.02	15.09	22.76	15.65	16.40	15.09	18.41	13.54
23	11:00:00	22.63	14.31	19.50	14.99	17.06	15.08	22.68	15.64	17.43	15.10	18.44	13.49
23	12:00:00	21.53	14.58	18.97	14.99	17.88	15.05	22.48	15.59	16.83	15.10	19.64	13.61
23	13:00:00	22.98	14.33	19.87	15.06	17.67	15.03	22.60	15.56	17.17	15.08	21.00	13.47
23	14:00:00	23.88	14.35	18.53	15.12	18.37	15.04	23.03	15.55	17.78	14.94	20.82	13.24
23	15:00:00	24.41	14.19	18.60	15.09	18.37	15.03	22.89	15.47	18.87	14.79	20.62	13.10
23	16:00:00	21.64	14.78	19.19	15.06	17.83	15.04	22.62	15.53	17.39	14.99	19.80	13.15
23	17:00:00	21.69	14.95	19.27	15.05	18.66	15.03	22.38	15.56	17.47	15.04	20.63	13.22
23	18:00:00	22.34	14.98	18.73	15.10	18.59	15.02	21.64	15.56	17.01	15.03	21.27	13.38
23	19:00:00	21.10	14.99	19.06	15.11	18.71	15.06	21.97	15.54	16.87	15.03	21.89	13.28
23	20:00:00	20.92	15.01	19.53	15.15	18.58	15.03	22.79	15.52	16.12	15.02	20.55	12.93
23	21:00:00	19.75	14.97	19.44	15.19	18.75	15.05	23.02	15.49	16.44	15.06	20.06	13.00
23	22:00:00	18.92	14.95	20.04	15.00	18.46	15.06	23.72	15.45	16.53	15.07	19.42	13.15
23	23:00:00	20.06	14.89	21.87	14.36	19.72	14.90	22.75	15.35	16.02	15.01	19.13	13.39
24	0:00:00	20.03	14.90	21.82	14.49	21.82	13.99	21.38	15.40	16.24	14.98	20.73	13.87
24	1:00:00	19.36	14.90	22.14	14.57	20.53	14.32	20.44	15.38	15.68	14.98	19.93	13.84
24	2:00:00	20.52	14.83	21.88	14.51	19.61	14.24	20.86	15.37	16.44	14.98	19.61	13.89
24	3:00:00	20.48	14.85	21.89	14.46	19.86	14.25	20.31	15.36	15.03	14.99	20.34	13.76
24	4:00:00	19.84	14.88	22.57	14.37	20.42	14.23	21.13	15.33	15.37	15.01	19.72	14.03
24	5:00:00	20.08	14.89	23.54	14.24	20.67	14.23	20.56	15.31	15.57	15.04	20.86	13.69
24	6:00:00	20.35	14.90	23.27	14.25	21.18	14.11	21.21	15.29	15.36	15.05	19.67	12.83
24	7:00:00	20.64	14.86	22.29	14.36	20.10	14.24	22.19	15.30	15.75	15.04	20.08	13.68
24	8:00:00	19.90	14.92	22.90	14.47	20.64	14.73	22.14	15.37	16.19	15.04	19.85	13.80
24	9:00:00	19.19	14.92	22.48	14.50	20.92	14.73	22.76	15.43	16.03	15.07	20.33	13.61
24	10:00:00	19.53	14.94	21.61	14.73	20.99	14.59	21.93	15.45	15.99	15.14	19.26	13.04
24	11:00:00	19.34	14.94	21.73	14.62	21.01	14.53	22.21	15.40	16.15	15.13	19.02	13.19
24	12:00:00	18.89	14.91	21.57	14.73	21.82	14.09	23.22	15.34	16.64	15.14	19.22	13.27
24	13:00:00	19.80	14.97	20.02	15.13	22.40	13.77	23.61	15.35	16.93	15.12	20.14	12.96
24	14:00:00	20.48	14.97	18.26	15.13	22.33	13.66	24.05	15.31	15.97	15.09	19.82	12.87

วันที่	เวลา	TOPSPP (G-85051) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
24	15:00:00	20.30	14.95	18.32	15.11	22.23	14.04	23.15	15.30	16.12	15.05	20.16	12.85
24	16:00:00	20.72	14.97	18.13	15.03	22.02	14.18	22.78	15.34	17.35	15.05	19.78	12.87
24	17:00:00	21.48	14.92	18.92	15.11	21.77	14.06	21.66	15.34	16.50	15.04	19.68	12.85
24	18:00:00	21.16	14.96	19.63	15.13	21.60	13.93	22.25	15.39	16.62	15.05	19.96	12.87
24	19:00:00	21.13	15.00	19.22	15.14	21.03	14.21	21.76	15.39	16.71	15.09	18.86	12.85
24	20:00:00	20.88	15.00	18.25	15.15	20.78	14.30	22.42	15.41	16.68	15.11	19.19	12.89
24	21:00:00	20.26	14.97	18.60	15.19	21.22	14.41	22.48	15.41	17.06	15.16	18.97	12.90
24	22:00:00	20.36	14.98	19.59	15.12	21.00	14.32	22.62	15.34	16.79	15.15	18.93	12.97
24	23:00:00	18.80	14.85	21.69	14.35	21.16	13.97	22.90	15.26	16.47	15.09	19.01	13.22
25	0:00:00	18.95	14.87	22.96	14.24	20.89	14.25	22.04	15.26	16.25	15.06	19.46	13.31
25	1:00:00	18.56	14.87	23.55	14.10	21.17	14.13	21.60	15.25	16.15	15.05	19.76	13.13
25	2:00:00	18.72	14.87	23.86	14.05	20.71	14.17	21.48	15.24	16.50	15.04	19.89	13.14
25	3:00:00	18.49	14.92	23.33	14.21	19.72	14.21	21.30	15.22	17.11	15.04	20.54	13.26
25	4:00:00	18.60	14.95	22.79	14.22	21.11	14.13	22.54	15.18	17.12	15.07	20.40	13.32
25	5:00:00	19.05	14.98	23.44	14.09	21.14	14.26	22.89	15.16	16.52	15.02	19.27	13.48
25	6:00:00	18.29	14.98	23.53	14.11	21.12	14.18	23.53	15.14	16.02	14.95	19.16	13.38
25	7:00:00	18.52	14.91	23.53	14.30	21.33	14.20	22.93	15.19	15.67	14.89	18.54	13.46
25	8:00:00	18.51	14.90	23.83	14.30	20.17	14.80	21.89	15.26	15.29	14.87	18.93	13.71
25	9:00:00	19.22	14.90	24.49	14.33	19.29	14.95	21.49	15.31	15.12	14.88	19.21	13.31
25	10:00:00	19.00	14.89	23.97	14.36	18.77	15.10	21.88	15.54	16.56	14.93	19.62	13.26
25	11:00:00	19.90	14.89	23.99	14.39	18.62	15.08	21.77	15.88	16.67	14.93	19.16	13.09
25	12:00:00	19.96	14.85	22.26	14.53	18.95	15.05	22.11	15.78	17.01	14.93	18.99	12.91
25	13:00:00	20.57	14.95	21.67	14.84	19.19	15.02	20.97	15.76	16.53	14.92	18.76	12.86
25	14:00:00	21.07	14.95	21.67	14.93	19.16	15.00	21.91	15.55	16.92	14.92	19.03	12.85
25	15:00:00	20.65	14.93	21.92	14.89	18.29	14.99	21.79	15.68	17.18	14.93	18.60	12.80
25	16:00:00	21.69	14.89	20.58	15.06	18.43	14.99	20.99	15.67	17.07	14.90	18.67	12.81
25	17:00:00	21.89	14.96	20.36	15.14	18.66	14.98	21.83	15.68	17.30	14.96	19.55	12.84
25	18:00:00	21.42	14.97	20.77	15.14	19.40	14.96	21.06	15.66	17.20	14.98	19.30	12.76
25	19:00:00	20.78	14.99	21.38	15.16	19.56	15.03	20.35	15.68	17.11	14.98	19.97	12.71
25	20:00:00	20.85	14.96	20.15	15.16	19.75	15.04	21.26	15.72	16.15	14.98	20.05	13.12
25	21:00:00	20.62	14.93	21.11	15.18	20.00	15.04	20.85	15.73	16.57	15.00	19.73	13.22
25	22:00:00	20.36	14.97	21.44	15.12	20.29	15.02	20.33	15.74	17.52	15.02	19.30	13.18
25	23:00:00	19.43	14.86	22.21	14.65	21.57	14.48	19.31	15.61	16.47	14.96	19.02	13.43
26	0:00:00	19.38	14.88	21.96	14.67	22.41	14.00	20.27	15.57	16.38	14.87	19.84	13.63
26	1:00:00	19.35	14.90	22.55	14.43	21.69	13.99	19.67	15.57	16.56	14.86	19.71	13.68
26	2:00:00	18.79	14.89	23.71	14.26	21.57	13.92	19.21	15.55	16.22	14.87	19.09	13.56
26	3:00:00	19.09	14.90	23.61	14.15	21.60	13.91	19.27	15.55	16.33	14.89	18.91	13.32
26	4:00:00	19.32	14.92	24.41	14.13	21.79	13.91	19.09	15.56	15.68	14.90	19.40	13.59

วันที่	เวลา	TOPSPP (G-85051) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
26	5:00:00	18.78	14.95	24.50	14.05	22.06	13.92	18.88	15.57	15.71	14.88	19.53	13.63
26	6:00:00	19.43	14.94	24.67	14.20	22.81	13.88	19.34	15.57	14.97	14.88	19.60	13.49
26	7:00:00	20.25	14.91	25.02	14.15	22.15	14.05	20.00	15.58	14.90	14.86	18.90	13.76
26	8:00:00	20.26	14.93	25.14	14.28	20.76	14.55	20.30	15.61	15.59	14.84	19.06	13.84
26	9:00:00	20.16	14.93	24.71	14.31	22.03	14.55	20.54	15.63	16.28	14.90	17.99	13.90
26	10:00:00	20.33	14.91	23.99	14.36	21.51	14.69	21.16	15.79	16.71	14.99	18.87	13.72
26	11:00:00	20.90	14.89	23.19	14.34	22.06	14.52	21.87	15.80	16.12	14.97	19.17	13.55
26	12:00:00	20.09	14.86	22.76	14.34	22.31	14.45	22.10	15.81	16.26	14.97	19.18	13.69
26	13:00:00	20.25	14.95	20.06	15.06	22.07	14.36	22.02	15.80	16.59	14.94	18.72	13.51
26	14:00:00	20.15	14.97	19.79	15.13	21.79	14.29	21.36	15.79	16.62	14.93	18.98	13.52
26	15:00:00	20.07	14.97	19.13	15.08	21.15	14.22	20.74	15.71	16.12	14.89	19.52	13.65
26	16:00:00	19.59	14.91	19.06	15.06	21.98	14.20	21.37	15.73	16.17	14.88	19.95	13.53
26	17:00:00	20.78	14.96	19.68	15.10	21.28	14.13	21.58	15.76	15.63	14.91	20.02	13.69
26	18:00:00	21.13	14.96	20.38	15.11	20.94	14.30	21.33	15.75	16.51	14.90	18.47	13.77
26	19:00:00	21.32	14.97	20.10	15.14	21.15	14.36	20.87	15.75	16.49	14.91	19.13	13.34
26	20:00:00	20.88	14.98	18.84	15.13	21.65	14.37	20.68	15.77	16.07	14.93	19.33	13.31
26	21:00:00	21.36	14.99	18.97	15.10	20.76	14.47	19.65	15.78	16.55	14.95	19.34	13.35
26	22:00:00	21.46	14.98	20.36	14.92	20.40	14.36	20.08	15.78	16.70	14.94	19.29	13.38
26	23:00:00	20.21	14.88	21.69	14.55	20.22	14.35	19.75	15.65	15.19	14.88	19.43	13.66
27	0:00:00	19.92	14.89	21.47	14.59	20.62	14.22	20.76	15.59	15.35	14.83	20.15	13.67
27	1:00:00	20.36	14.88	22.46	14.61	20.62	14.07	19.80	15.57	15.09	14.82	19.40	13.92
27	2:00:00	20.39	14.88	22.79	14.62	20.59	13.98	19.23	15.56	14.57	14.80	19.67	13.51
27	3:00:00	19.68	14.88	23.02	14.45	20.85	14.07	20.10	15.57	13.99	14.82	20.48	13.80
27	4:00:00	20.04	14.90	22.55	14.66	20.58	13.77	20.14	15.57	14.43	14.82	19.53	13.67
27	5:00:00	19.40	14.91	22.76	14.58	21.18	13.97	20.52	15.58	14.42	14.83	19.45	13.79
27	6:00:00	19.16	14.91	23.66	14.59	21.30	13.96	20.08	15.58	14.92	14.84	19.40	13.74
27	7:00:00	19.91	14.88	23.03	14.61	20.82	14.21	20.86	15.60	15.78	14.81	19.10	13.86
27	8:00:00	20.51	14.90	23.35	14.33	18.89	14.46	19.97	15.62	15.25	14.82	19.11	14.02
27	9:00:00	20.97	14.88	21.61	14.50	19.51	14.32	19.80	15.61	14.78	14.85	19.82	13.52
27	10:00:00	19.88	14.90	20.66	14.66	19.17	14.57	20.62	15.77	15.06	14.95	19.34	13.17
27	11:00:00	19.64	14.90	20.90	14.70	18.49	14.59	21.34	15.80	14.77	14.93	19.98	13.52
27	12:00:00	19.80	14.88	20.37	14.58	19.00	14.45	20.05	15.75	15.02	14.95	19.46	13.46
27	13:00:00	20.13	14.97	19.77	14.59	20.44	14.23	19.63	15.74	15.15	14.93	19.62	13.51
27	14:00:00	21.32	14.97	21.57	14.14	21.51	14.16	19.45	15.75	15.33	14.93	19.15	13.41
27	15:00:00	21.41	14.95	20.72	14.46	19.79	14.41	19.43	15.70	14.82	14.86	18.92	13.35
27	16:00:00	21.42	14.92	21.56	14.22	19.10	14.37	19.63	15.65	16.06	14.86	18.41	13.15
27	17:00:00	21.67	14.98	21.54	14.42	20.58	14.16	19.25	15.70	14.99	14.86	19.43	13.14
27	18:00:00	20.78	14.98	21.29	14.57	19.68	14.61	18.83	15.70	15.03	14.88	19.16	13.56

วันที่	เวลา	TOPSPP (G-85051) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
27	19:00:00	20.76	14.96	20.06	14.63	19.58	14.65	18.48	15.72	15.07	14.91	17.60	14.75
27	20:00:00	21.07	15.00	21.20	14.38	20.85	14.67	18.65	15.70	15.75	14.93	17.19	14.79
27	21:00:00	20.83	15.03	20.82	14.41	21.11	14.67	18.90	15.71	15.78	14.93	18.32	14.57
27	22:00:00	21.13	15.00	21.10	14.21	21.53	14.43	18.91	15.71	16.51	14.92	18.53	14.59
27	23:00:00	19.99	14.87	20.76	14.31	20.60	14.40	17.71	15.57	15.82	14.89	18.75	13.73
28	0:00:00	19.48	14.90	20.69	14.31	19.62	14.49	17.39	15.50	15.55	14.86	19.26	13.08
28	1:00:00	19.60	14.87	21.39	14.42	19.24	14.51	18.29	15.50	15.18	14.85	19.37	13.19
28	2:00:00	19.62	14.85	21.47	14.47	19.51	14.39	18.17	15.51	14.91	14.85	18.70	13.19
28	3:00:00	19.86	14.87	21.39	14.28	18.83	14.53	18.38	15.50	15.08	14.85	18.50	13.19
28	4:00:00	20.35	14.89	21.10	14.29	18.66	14.52	18.33	15.50	14.29	14.86	18.42	13.22
28	5:00:00	19.22	14.91	21.07	14.28	18.99	14.51	18.20	15.49	13.82	14.85	18.52	13.21
28	6:00:00	20.16	14.89	21.30	14.28	19.59	14.44	18.36	15.50	13.62	14.88	18.40	13.14
28	7:00:00	21.08	14.88	21.10	14.28	18.47	14.55	19.39	15.55	14.52	14.85	18.09	12.90
28	8:00:00	21.38	14.89	21.05	14.31	18.64	14.97	18.85	15.58	15.06	14.85	18.77	12.99
28	9:00:00	21.14	14.92	21.27	14.39	18.98	15.07	18.79	15.58	15.85	14.87	19.34	12.90
28	10:00:00	21.10	14.92	20.54	14.36	19.14	15.06	19.14	15.73	15.43	14.96	19.13	12.91
28	11:00:00	21.56	14.90	19.72	14.36	19.15	15.03	18.16	15.75	15.52	14.95	20.23	12.91
28	12:00:00	21.10	14.85	19.90	14.29	19.18	15.02	17.18	15.75	15.57	14.95	20.31	12.90
28	13:00:00	21.53	14.79	18.44	14.97	18.62	15.01	17.26	15.75	15.80	14.95	19.73	12.87
28	14:00:00	22.38	14.60	17.68	15.02	18.70	15.00	17.12	15.74	16.71	14.95	19.75	12.86
28	15:00:00	22.40	14.66	18.01	14.97	19.62	15.03	17.39	15.71	16.00	14.91	20.56	12.88
28	16:00:00	21.83	14.93	18.57	15.02	19.20	14.97	17.33	15.84	16.03	14.85	20.60	12.85
28	17:00:00	21.30	14.91	18.81	15.02	19.43	14.92	18.57	15.95	16.21	14.90	20.74	13.08
28	18:00:00	21.43	14.92	18.50	15.00	19.09	14.97	18.50	15.96	15.96	14.92	20.79	13.24
28	19:00:00	21.61	14.91	18.58	15.04	18.83	14.99	18.92	15.95	16.87	14.91	20.40	13.11
28	20:00:00	22.10	14.99	18.28	15.05	18.64	14.97	20.57	15.94	15.78	14.72	20.46	13.18
28	21:00:00	22.12	15.00	17.75	15.08	18.40	14.95	21.33	15.98	15.45	14.93	20.36	13.24
28	22:00:00	22.18	14.98	19.66	14.74	18.21	14.92	20.78	15.93	14.47	14.95	20.31	13.23
28	23:00:00	20.86	14.88	20.14	14.24	19.32	14.42	21.43	15.58	14.91	14.88	20.21	13.35
29	0:00:00	21.36	14.88			18.12	14.54	18.80	15.95	15.11	14.86	20.61	13.71
29	1:00:00	20.49	14.86			18.71	14.54	18.78	15.92	14.64	14.87	21.22	13.69
29	2:00:00	20.29	14.86			18.26	14.46	18.30	15.88	14.58	14.85	20.40	13.53
29	3:00:00	19.89	14.89			18.61	14.55	19.00	15.77	13.77	14.86	19.86	13.90
29	4:00:00	20.43	14.91			18.52	14.50	18.30	15.77	14.93	14.87	19.64	13.98
29	5:00:00	20.60	14.91			18.33	14.44	18.69	15.77	14.83	14.86	19.81	14.02
29	6:00:00	19.93	14.89			18.40	14.36	18.81	15.82	14.07	14.88	19.34	13.98
29	7:00:00	19.51	14.89			19.36	14.42	18.83	15.84	14.55	14.85	19.56	13.95
29	8:00:00	20.81	14.87			19.01	14.59	18.46	15.92	15.43	14.87	20.18	13.22

วันที่	เวลา	TOPSPP (G-85051) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
29	9:00:00	20.81	14.88			19.93	14.41	19.66	15.91	15.52	14.88	20.06	13.08
29	10:00:00	20.55	14.88			19.66	14.72	20.39	15.98	15.77	14.87	20.15	13.17
29	11:00:00	21.11	14.86			19.91	14.57	21.66	15.98	15.73	14.85	19.59	13.10
29	12:00:00	21.51	14.82			20.21	14.43	22.08	15.97	15.53	14.82	20.05	13.05
29	13:00:00	21.68	14.94			20.65	14.41	21.06	15.94	15.32	14.80	20.60	12.87
29	14:00:00	22.10	14.95			21.00	14.30	22.06	15.75	16.27	14.78	21.27	12.86
29	15:00:00	21.55	14.90			20.16	14.62	22.98	14.83	16.06	14.77	21.21	12.85
29	16:00:00	21.92	14.90			19.31	14.69	23.30	14.81	16.41	14.76	21.01	12.84
29	17:00:00	22.53	14.96			20.19	14.61	22.99	14.81	16.50	14.78	20.95	12.81
29	18:00:00	21.78	14.96			20.59	14.38	23.05	14.82	15.84	14.84	21.20	12.84
29	19:00:00	21.29	14.96			20.45	14.49	23.47	14.99	16.00	14.94	21.40	12.74
29	20:00:00	21.65	14.93			20.39	14.43	23.24	15.17	15.97	14.95	21.51	12.88
29	21:00:00	21.12	14.94			20.25	14.77	22.18	15.17	15.83	14.91	19.95	12.86
29	22:00:00	21.08	14.93			19.22	15.01	23.00	14.86	15.22	14.93	19.95	12.87
29	23:00:00	19.67	14.85			19.26	14.96	23.68	14.84	15.51	14.85	20.59	12.98
30	0:00:00	19.05	14.90			18.47	14.88	23.20	14.27	16.23	14.87	20.73	13.35
30	1:00:00	18.62	14.90			18.52	14.88	23.41	14.00	15.71	14.86	20.59	13.39
30	2:00:00	18.76	14.88			18.91	14.89	22.73	14.62	16.39	14.85	20.79	13.18
30	3:00:00	17.81	14.88			19.33	14.82	21.10	15.67	15.94	14.85	20.00	12.95
30	4:00:00	17.30	14.89			19.19	14.81	21.31	15.66	15.57	14.85	18.93	14.21
30	5:00:00	17.22	14.89			19.32	14.81	21.05	15.66	16.35	14.84	18.00	14.78
30	6:00:00	18.19	14.87			19.08	14.83	20.33	15.64	15.86	14.85	18.68	14.81
30	7:00:00	18.37	14.89			18.32	14.90	19.33	15.68	15.04	14.84	19.40	14.83
30	8:00:00	17.68	14.92			17.86	15.01	20.51	15.71	15.29	14.84	18.94	14.97
30	9:00:00	18.39	14.93			16.96	15.07	20.98	15.73	15.52	14.88	18.83	14.99
30	10:00:00	19.03	14.94			17.29	15.09	20.43	15.87	16.14	14.96	19.80	15.00
30	11:00:00	19.03	14.92			17.61	15.06	21.34	15.90	16.29	14.94	18.89	14.98
30	12:00:00	20.47	14.92			17.20	15.04	21.70	15.64	15.31	14.95	19.11	14.97
30	13:00:00	20.57	14.89			18.09	15.00	22.61	15.01	15.58	14.94	19.36	14.94
30	14:00:00	21.33	14.86			17.97	15.00	22.66	14.86	16.26	14.90	18.84	14.93
30	15:00:00	22.64	14.86			17.92	14.99	22.96	14.88	16.26	14.87	17.59	14.93
30	16:00:00	21.77	14.84			17.86	14.94	22.37	14.81	16.10	14.84	17.94	14.86
30	17:00:00	21.10	14.87			18.05	15.00	22.38	14.85	16.60	14.90	17.88	14.92
30	18:00:00	22.10	14.92			18.21	15.01	22.98	14.87	16.19	14.92	18.51	14.93
30	19:00:00	22.44	14.99			17.73	14.94	22.90	14.87	16.58	14.91	18.36	14.93
30	20:00:00	21.35	14.98			17.45	14.94	22.67	14.89	16.64	14.93	17.61	14.97
30	21:00:00	20.68	14.87			18.38	15.00	22.38	14.89	16.43	14.93	18.39	14.99
30	22:00:00	19.41	14.89			18.52	15.02	22.82	14.89	16.69	14.93	18.05	14.99

วันที่	เวลา	TOPSPP (G-85051) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
30	23:00:00	19.20	14.90			18.62	14.97	22.07	14.98	16.17	14.85	18.49	14.89
31	0:00:00	18.87	14.90			18.62	14.88			15.82	14.79		
31	1:00:00	19.01	14.90			18.58	14.87			16.11	14.80		
31	2:00:00	18.71	14.89			18.93	14.86			15.65	14.79		
31	3:00:00	18.22	14.90			19.34	14.80			15.43	14.78		
31	4:00:00	18.26	14.89			18.77	14.80			15.13	14.79		
31	5:00:00	18.67	14.90			18.26	14.80			15.21	14.80		
31	6:00:00	18.78	14.87			17.31	14.88			14.96	14.80		
31	7:00:00	19.70	14.88			17.06	14.90			16.67	14.80		
31	8:00:00	19.89	14.88			17.50	15.02			16.06	14.81		
31	9:00:00	21.63	14.89			18.13	15.05			16.20	14.86		
31	10:00:00	20.99	14.90			17.79	15.05			15.44	14.93		
31	11:00:00	21.23	14.86			17.66	15.00			15.34	14.93		
31	12:00:00	21.07	14.82			17.71	14.97			16.28	14.92		
31	13:00:00	20.91	14.93			18.01	14.97			15.87	14.91		
31	14:00:00	21.13	14.94			17.41	14.96			15.76	14.91		
31	15:00:00	20.88	14.90			18.42	14.96			15.81	14.90		
31	16:00:00	21.16	14.88			18.92	14.93			15.28	14.89		
31	17:00:00	21.72	14.94			18.93	14.98			15.14	14.88		
31	18:00:00	21.46	14.94			19.00	14.99			15.44	14.89		
31	19:00:00	21.31	14.94			20.38	14.98			15.13	14.90		
31	20:00:00	21.22	14.91			20.06	15.01			14.51	14.84		
31	21:00:00	21.59	14.96			19.65	15.05			14.92	14.91		
31	22:00:00	21.10	14.95			19.30	15.00			14.81	14.91		
31	23:00:00	19.56	14.87			19.43	14.85			15.02	14.82		

ผลการติดตามตรวจสอบคุณภาพอากาศที่ระบายออกจากปล่องแบบต่อเนื่อง ระหว่างเดือนมกราคม-มิถุนายน 2565

วันที่	เวลา	TOPSPP (G-85052) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
1	0:00:00	25.18	13.80	26.66	14.27	23.13	12.74	23.30	14.31	24.92	14.49	19.76	14.13
1	1:00:00	24.95	13.87	25.80	14.28	22.22	13.47	23.29	14.29	24.70	14.47	20.06	14.12
1	2:00:00	25.13	13.81	25.63	14.29	21.92	13.69	23.48	14.35	24.97	14.39	20.38	13.87
1	3:00:00	25.17	13.80	25.70	14.24	21.67	13.63	23.96	14.29	24.53	14.46	20.51	13.94
1	4:00:00	25.13	13.75	25.91	14.29	21.78	13.71	23.73	14.31	25.18	14.26	20.70	14.09
1	5:00:00	25.26	13.64	25.71	14.30	21.76	13.76	23.53	14.40	27.17	14.14	20.91	14.08
1	6:00:00	25.11	13.43	25.70	14.33	21.86	13.79	24.00	14.20	26.38	14.30	21.16	14.13
1	7:00:00	25.25	13.36	25.95	14.29	21.73	13.78	23.42	14.43	25.63	14.57	20.87	14.16
1	8:00:00	24.60	13.17	25.53	14.41	20.77	14.00	23.27	14.46	25.93	14.54	20.52	14.35
1	9:00:00	24.09	13.11	25.53	14.44	20.49	14.13	23.58	14.45	25.61	14.61	20.20	14.42
1	10:00:00	23.81	13.12	25.76	14.44	20.60	14.18	24.39	14.29	25.40	14.59	20.64	14.42
1	11:00:00	23.35	13.00	25.81	14.46	20.58	14.12	22.94	14.73	25.40	14.47	20.42	14.43
1	12:00:00	24.33	13.41	25.53	14.36	19.96	14.14	22.73	14.76	24.40	14.62	19.98	14.42
1	13:00:00	24.06	13.35	24.93	14.62	20.07	14.07	22.81	14.66	24.72	14.45	19.97	14.39
1	14:00:00	23.67	13.30	24.53	14.63	19.84	14.07	23.46	14.52	24.94	14.40	19.79	14.34
1	15:00:00	23.32	13.27	24.52	14.66	19.63	14.06	23.63	14.57	24.24	14.51	19.74	14.35
1	16:00:00	23.40	13.29	24.68	14.64	19.68	14.08	23.43	14.63	24.35	14.44	19.68	14.35
1	17:00:00	23.99	13.44	24.73	14.64	19.98	13.99	23.51	14.75	24.03	14.53	19.60	14.35
1	18:00:00	24.22	13.44	24.86	14.65	19.89	14.05	23.50	14.61	24.52	14.30	19.65	14.25
1	19:00:00	24.04	13.37	24.98	14.64	20.28	13.85	23.60	14.60	25.01	14.09	19.89	14.34
1	20:00:00	24.40	13.55	24.93	14.67	19.98	14.06	23.72	14.65	25.30	14.19	19.77	14.34
1	21:00:00	24.52	13.57	25.11	14.66	20.29	13.91	23.88	14.64	24.19	14.53	19.55	14.38
1	22:00:00	24.76	13.53	24.85	14.45	19.93	14.04	24.39	14.49	24.64	14.23	19.96	14.28
1	23:00:00	24.54	13.44	24.68	14.07	20.68	13.87	24.60	14.39	24.85	14.03	20.05	14.19
2	0:00:00	24.53	13.48	24.95	14.57	21.13	13.79	24.77	14.34	24.41	14.37	20.23	14.05
2	1:00:00	24.57	13.43	24.78	14.65	21.09	13.79	24.60	14.42	24.47	14.34	20.61	14.06
2	2:00:00	24.58	13.41	25.23	14.61	21.33	13.75	24.71	14.41	25.14	14.08	20.68	14.07
2	3:00:00	24.73	13.39	25.26	14.65	21.19	13.81	25.14	14.34	25.23	13.97	20.64	14.05
2	4:00:00	24.90	13.35	25.56	14.64	21.52	13.80	25.75	14.23	25.21	13.86	20.59	14.08
2	5:00:00	24.97	13.36	25.34	14.54	21.51	13.79	25.84	14.26	25.43	14.11	20.41	14.05
2	6:00:00	24.35	12.98	25.63	14.18	21.67	13.78	25.96	14.15	26.34	14.01	20.48	14.09
2	7:00:00	24.03	12.83	25.74	14.30	21.87	13.75	24.90	14.47	25.50	14.43	20.56	14.12
2	8:00:00	23.94	12.84	25.15	14.63	20.79	14.01	25.33	14.43	25.66	14.47	20.34	14.34
2	9:00:00	23.81	12.81	24.97	14.71	20.44	14.11	25.28	14.50	25.70	14.49	20.15	14.46
2	10:00:00	23.89	12.96	25.15	14.06	20.38	14.08	26.34	14.55	26.05	14.47	20.28	14.44
2	11:00:00	23.89	13.04	24.64	13.69	20.17	14.12	25.88	14.63	26.07	14.46	20.14	14.44

วันที่	เวลา	TOPSPP (G-85052) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
2	12:00:00	23.16	12.85	25.51	14.54	20.37	14.10	25.39	14.68	25.96	14.52	20.09	14.44
2	13:00:00	23.27	12.90	24.83	14.75	20.38	14.04	25.73	14.67	25.95	14.52	19.66	14.37
2	14:00:00	23.39	13.00	24.44	14.77	19.46	14.16	25.60	14.63	26.06	14.38	19.61	14.35
2	15:00:00	23.41	13.01	24.25	14.79	20.00	13.94	25.42	14.68	25.68	14.50	19.49	14.35
2	16:00:00	23.72	13.19	24.84	14.67	19.98	14.02	25.90	14.56	25.95	14.54	19.60	14.39
2	17:00:00	23.83	13.24	25.12	14.71	20.26	14.07	25.94	14.66	26.30	14.53	19.65	14.37
2	18:00:00	23.63	13.16	25.14	14.69	20.83	13.98	26.25	14.61	26.68	14.37	20.14	14.36
2	19:00:00	23.61	13.16	25.39	14.63	20.63	14.02	26.53	14.61	26.13	14.50	20.59	14.34
2	20:00:00	23.65	13.13	25.60	14.55	20.73	14.02	26.55	14.76	26.36	14.63	20.25	14.28
2	21:00:00	23.67	13.13	25.53	14.50	20.70	14.01	26.95	14.62	26.34	14.81	20.33	14.32
2	22:00:00	23.94	13.15	25.56	14.51	20.87	14.01	27.29	14.52	26.77	14.58	20.04	14.32
2	23:00:00	24.01	13.14	26.12	14.22	21.29	13.90	27.83	14.45	26.90	14.41	19.90	14.23
3	0:00:00	24.15	13.16	26.24	14.28	21.60	13.81	27.37	14.63	26.57	14.50	20.19	14.08
3	1:00:00	24.16	13.67	26.16	14.45	21.64	13.82	27.25	14.58	26.87	14.37	20.49	14.12
3	2:00:00	23.98	13.39	26.21	14.42	21.59	13.77	26.68	14.73	26.99	14.31	20.37	14.10
3	3:00:00	23.89	13.26	26.37	14.41	21.41	13.77	26.73	14.64	27.31	14.19	20.43	14.10
3	4:00:00	23.99	13.37	26.44	14.40	21.20	13.81	26.61	14.63	27.37	14.29	20.37	14.08
3	5:00:00	23.63	14.49	26.37	14.45	21.59	13.82	26.36	14.72	27.92	14.23	20.37	14.15
3	6:00:00	24.55	14.34	26.42	14.47	22.25	13.63	26.72	14.53	27.83	14.40	20.29	14.14
3	7:00:00	24.70	14.38	26.41	14.48	21.95	13.76	26.65	14.65	27.51	14.55	20.15	14.17
3	8:00:00	24.36	13.90	26.33	14.51	21.16	13.94	27.15	14.53	27.78	14.51	20.37	14.19
3	9:00:00	24.03	13.27	26.24	14.56	20.74	14.12	26.71	14.67	27.54	14.61	20.69	14.17
3	10:00:00	23.95	13.73	26.24	14.57	20.92	14.15	26.52	14.75	26.92	14.73	20.34	14.22
3	11:00:00	24.26	14.16	25.96	14.57	20.59	14.12	26.00	14.75	27.17	14.71	20.33	14.21
3	12:00:00	24.04	14.14	25.73	14.58	20.73	14.13	26.08	14.84	26.82	14.70	20.27	14.16
3	13:00:00	23.60	14.19	25.11	14.62	20.45	14.07	25.85	14.85	26.49	14.69	20.31	14.22
3	14:00:00	23.48	14.15	25.56	14.39	21.04	14.01	25.46	14.83	25.80	14.70	20.03	14.15
3	15:00:00	23.51	14.13	25.51	14.58	21.49	13.96	25.80	14.83	25.70	14.80	20.25	14.18
3	16:00:00	23.45	14.13	24.88	14.54	20.88	14.02	25.70	14.82	25.95	14.76	20.48	14.07
3	17:00:00	23.50	14.17	24.83	14.64	21.02	14.02	25.73	14.83	25.86	14.77	20.33	14.10
3	18:00:00	23.36	14.45	25.09	14.68	21.00	13.96	25.67	14.85	26.82	14.66	20.44	14.27
3	19:00:00	23.41	14.51	25.36	14.54	21.49	13.82	25.98	14.82	26.88	14.69	20.46	14.27
3	20:00:00	23.63	14.47	25.56	14.67	21.11	13.98	26.16	14.77	27.09	14.65	20.20	14.16
3	21:00:00	24.25	13.99	25.92	14.57	21.44	13.92	26.18	14.75	27.16	14.66	20.28	14.23
3	22:00:00	24.27	14.10	26.05	14.61	21.89	13.82	26.30	14.50	27.89	14.36	20.88	14.42
3	23:00:00	24.46	14.15	26.37	14.43	21.84	13.76	21.98	15.09	27.52	14.40	21.32	14.21
4	0:00:00	24.50	14.06	26.44	14.40	21.64	13.79	22.17	15.09	27.44	14.40	21.63	14.43
4	1:00:00	24.48	14.01	26.46	14.39	21.67	13.80	22.96	15.02	28.20	14.10	21.48	14.20
4	2:00:00	24.29	14.21	26.27	14.47	21.35	13.77	22.20	15.07	27.54	14.35	21.22	14.38

วันที่	เวลา	TOPSPP (G-85052) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
4	3:00:00	24.25	14.17	26.46	14.43	21.30	13.75	22.17	15.06	27.97	14.29	21.17	14.41
4	4:00:00	24.43	14.20	26.44	14.40	21.37	13.79	22.03	15.06	28.37	14.11	21.36	14.40
4	5:00:00	24.37	14.16	26.35	14.31	21.47	13.77	22.29	15.08	28.33	14.25	21.70	13.63
4	6:00:00	24.80	14.00	26.38	14.41	21.56	13.81	22.55	15.11	28.26	14.26	21.66	13.47
4	7:00:00	24.65	14.17	26.55	14.44	21.81	13.80	22.85	15.10	27.52	14.51	21.67	13.73
4	8:00:00	24.47	14.13	26.29	14.43	20.30	14.14	23.19	15.09	27.13	14.56	21.76	13.41
4	9:00:00	24.46	14.22	26.44	14.51	19.22	14.36	23.31	15.07	27.11	14.61	21.61	13.69
4	10:00:00	24.20	14.20	26.54	14.54	18.96	14.37	25.42	14.81	26.51	14.66	21.65	13.65
4	11:00:00	23.97	14.23	26.36	14.57	18.95	14.31	26.69	14.41	26.18	14.64	21.41	13.49
4	12:00:00	23.50	14.14	26.22	14.55	20.34	14.10	26.27	14.48	25.76	14.77	21.21	13.33
4	13:00:00	23.34	13.96	22.82	14.99	20.42	14.06	25.40	14.54	25.64	14.73	21.23	13.21
4	14:00:00	23.36	13.77	22.58	14.98	19.59	14.15	24.71	14.68	25.56	14.72	21.00	12.98
4	15:00:00	23.10	13.99	24.21	14.78	20.12	14.00	24.44	14.73	25.16	14.79	21.23	13.34
4	16:00:00	22.79	14.25	24.98	14.24	20.32	13.93	24.52	14.71	24.95	14.77	21.24	13.22
4	17:00:00	22.91	14.10	25.80	14.72	20.30	13.88	24.32	14.76	25.11	14.77	21.55	13.28
4	18:00:00	23.00	14.31	25.55	14.64	20.09	13.97	24.84	14.78	25.46	14.80	21.48	13.37
4	19:00:00	23.01	14.39	26.06	14.50	20.36	13.85	25.20	14.80	25.81	14.82	21.61	13.30
4	20:00:00	23.36	14.43	26.55	14.44	20.28	13.94	24.67	14.75	25.99	14.79	21.10	13.31
4	21:00:00	23.67	14.27	26.51	14.40	20.05	14.02	25.11	14.73	25.99	14.81	21.41	13.45
4	22:00:00	24.11	14.16	26.33	14.50	20.19	14.00	25.63	14.61	26.51	14.63	20.75	13.01
4	23:00:00	24.37	13.82	26.90	14.36	20.77	13.82	25.67	14.39	26.56	14.54	20.97	13.25
5	0:00:00	24.47	14.01	26.66	14.36	21.40	13.73	25.68	14.42	26.79	14.54	21.07	13.58
5	1:00:00	24.69	14.05	26.54	14.42	21.35	13.71	26.90	14.28	26.64	14.54	21.20	13.84
5	2:00:00	24.51	14.15	26.44	14.44	21.03	13.76	26.46	14.51	26.66	14.53	20.97	13.95
5	3:00:00	24.74	14.22	26.61	14.44	21.01	13.80	26.71	14.50	26.94	14.39	20.92	14.10
5	4:00:00	24.54	14.18	26.98	14.42	21.28	13.78	26.47	14.51	26.95	14.51	20.99	14.34
5	5:00:00	24.57	13.97	27.09	14.43	21.45	13.78	26.21	14.54	26.89	14.51	20.99	14.29
5	6:00:00	24.69	14.07	27.05	14.49	21.38	13.73	25.90	14.52	26.85	14.50	20.43	14.09
5	7:00:00	24.89	14.14	27.22	14.51	21.53	13.70	25.45	14.51	27.07	14.55	20.37	14.33
5	8:00:00	24.90	14.24	27.53	14.47	20.58	13.98	25.28	14.58	26.94	14.58	20.75	14.15
5	9:00:00	24.48	14.08	27.62	14.51	20.41	14.07	25.28	14.60	26.69	14.62	20.75	14.38
5	10:00:00	24.52	13.57	27.66	14.53	20.23	14.09	26.08	14.61	26.28	14.80	20.69	14.37
5	11:00:00	24.12	13.65	27.53	14.56	20.28	14.11	25.33	14.79	25.66	14.82	20.83	14.32
5	12:00:00	24.17	13.89	27.35	14.57	20.57	13.84	24.76	14.84	26.28	14.84	20.51	14.16
5	13:00:00	23.73	13.89	26.39	14.78	19.93	14.04	24.87	14.69	26.09	14.82	21.03	14.11
5	14:00:00	23.32	14.09	25.88	14.65	19.90	13.97	24.16	14.81	25.93	14.68	20.74	13.68
5	15:00:00	23.43	14.24	26.14	14.67	20.21	13.71	24.50	14.78	25.66	14.70	20.80	13.86
5	16:00:00	23.11	14.07	26.14	14.58	20.37	13.73	24.33	14.80	25.25	14.72	20.74	13.90
5	17:00:00	22.88	14.15	26.32	14.49	20.30	13.75	24.17	14.84	25.02	14.54	20.53	13.86

วันที่	เวลา	TOPSPP (G-85052) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
5	18:00:00	23.02	13.88	26.34	14.47	19.04	14.15	24.03	14.82	25.01	14.77	20.72	13.18
5	19:00:00	22.86	14.20	26.50	14.48	18.95	14.28	24.03	14.80	24.83	14.77	20.54	13.08
5	20:00:00	23.30	14.32	26.65	14.61	19.11	14.22	24.02	14.76	25.02	14.73	21.02	13.63
5	21:00:00	23.46	13.77	26.41	14.26	18.86	14.28	23.81	14.75	24.87	14.60	22.06	13.26
5	22:00:00	23.43	13.63	26.33	14.32	19.07	14.25	23.67	14.53	25.11	14.59	22.07	13.26
5	23:00:00	24.05	13.51	24.45	12.84	22.13	12.82	23.71	14.49	26.14	14.23	21.11	13.84
6	0:00:00	24.02	13.79	23.46	12.51	21.97	11.86	23.76	14.46	25.80	14.50	20.77	14.06
6	1:00:00	24.03	14.07	23.25	12.36	22.00	12.05	24.38	14.45	25.77	14.44	20.47	14.10
6	2:00:00	24.38	13.92	23.52	12.16	22.00	12.02	24.69	14.42	25.66	14.51	20.49	14.03
6	3:00:00	24.27	14.16	23.93	12.36	21.96	11.99	24.96	14.42	25.65	14.45	20.58	13.92
6	4:00:00	24.25	14.07	24.66	12.39	21.82	11.91	25.04	14.47	25.52	14.43	20.49	14.00
6	5:00:00	24.70	13.91	25.76	12.59	22.17	12.01	25.18	14.39	25.42	14.51	20.51	13.98
6	6:00:00	24.99	13.70	30.93	13.52	22.52	12.25	25.22	14.49	25.43	14.51	20.94	13.86
6	7:00:00	24.90	13.91	31.66	13.81	22.56	12.28	24.87	14.49	26.22	14.53	20.88	13.88
6	8:00:00	24.58	14.14	31.25	13.94	22.49	12.30	25.49	14.45	26.30	14.58	21.04	13.67
6	9:00:00	24.68	14.11	30.42	14.08	22.06	12.17	25.66	14.44	25.75	14.70	20.49	14.08
6	10:00:00	24.52	14.19	29.66	14.15	21.94	12.19	24.73	14.76	25.66	14.77	20.54	14.34
6	11:00:00	24.42	14.32	28.43	14.06	21.98	12.28	24.19	14.89	25.76	14.80	20.60	14.44
6	12:00:00	24.30	14.02	28.11	13.84	21.93	12.28	23.94	14.87	25.33	14.81	20.66	14.34
6	13:00:00	24.40	13.78	28.27	14.01	21.92	12.31	23.95	14.79	24.83	14.55	20.76	14.45
6	14:00:00	19.33	1.46	28.16	13.99	22.00	12.27	24.06	14.83	25.17	14.35	21.33	13.74
6	15:00:00	29.34	11.92	27.16	13.98	21.38	13.60	23.99	14.83	24.70	14.61	20.28	14.14
6	16:00:00	23.40	14.07	26.64	14.24	21.62	13.63	24.26	14.81	24.45	14.63	21.11	14.37
6	17:00:00	22.91	14.32	26.48	14.52	21.50	13.59	23.95	14.84	24.08	14.59	20.69	14.34
6	18:00:00	22.71	14.34	25.90	14.49	22.31	13.46	23.37	14.82	24.53	14.61	20.81	14.36
6	19:00:00	22.26	14.61	26.17	14.38	22.97	12.84	23.00	14.72	24.53	14.54	21.84	14.36
6	20:00:00	22.44	14.51	26.23	14.51	22.59	12.92	23.15	14.78	24.55	14.52	21.81	14.42
6	21:00:00	22.81	13.86	26.61	13.81	22.75	13.20	23.69	14.71	24.80	14.64	21.20	14.40
6	22:00:00	22.34	13.31	26.07	13.43	22.83	12.91	24.54	14.55	24.76	14.64	21.29	14.39
6	23:00:00	23.51	13.78	27.06	13.76	22.46	12.23	24.79	14.38	24.82	14.55	21.33	14.29
7	0:00:00	23.73	13.57	27.87	13.75	22.02	13.30	24.91	14.30	25.22	14.48	21.69	14.41
7	1:00:00	24.22	14.18	28.16	13.70	21.30	13.82	24.60	14.33	25.17	14.46	21.34	14.39
7	2:00:00	24.21	13.92	27.91	13.82	21.12	13.82	23.05	14.85	25.16	14.39	21.22	14.36
7	3:00:00	23.70	14.33	28.27	13.67	21.39	13.79	23.15	14.86	25.38	14.46	21.65	14.38
7	4:00:00	22.27	15.00	27.72	13.49	21.51	13.81	23.17	14.86	25.53	14.48	21.48	14.43
7	5:00:00	22.67	15.01	28.04	13.46	21.87	13.72	23.03	14.85	25.48	14.50	21.34	14.43
7	6:00:00	24.62	14.38	27.98	13.41	22.56	13.51	23.61	14.87	25.69	14.51	21.13	14.33
7	7:00:00	24.42	14.42	27.52	13.36	22.28	13.72	23.83	14.90	25.72	14.47	21.39	14.43
7	8:00:00	23.96	14.51	26.47	13.39	21.66	13.92	23.81	14.94	25.44	14.54	21.11	14.24

วันที่	เวลา	TOPSPP (G-85052) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
7	9:00:00	23.86	14.66	26.10	13.43	21.50	14.01	23.82	14.95	25.25	14.66	21.22	14.46
7	10:00:00	23.40	14.57	26.33	13.45	21.45	14.00	23.73	15.06	24.80	14.80	20.98	14.40
7	11:00:00	23.22	14.53	26.29	13.48	21.18	13.98	23.66	15.08	24.22	14.79	21.14	14.45
7	12:00:00	23.07	14.35	26.15	13.47	20.54	14.07	23.81	15.09	26.12	13.82	21.64	14.43
7	13:00:00	22.78	14.57	26.19	13.80	20.17	14.08	23.76	15.08	25.26	14.69	21.06	14.36
7	14:00:00	22.80	14.70	26.21	13.90	20.55	13.90	24.28	14.79	25.49	14.57	20.85	14.32
7	15:00:00	22.58	14.75	25.84	14.00	20.26	13.99	24.19	14.80	25.18	14.65	20.98	14.36
7	16:00:00	22.01	14.66	25.96	13.85	20.24	13.94	24.60	14.82	24.73	14.68	21.12	14.35
7	17:00:00	21.80	14.47	25.42	13.67	20.20	13.97	24.47	14.85	24.65	14.69	21.12	14.28
7	18:00:00	21.81	14.35	25.32	13.62	20.35	14.00	25.12	14.84	24.26	14.72	21.29	14.35
7	19:00:00	21.73	14.57	25.62	13.96	20.61	13.99	25.13	14.85	24.80	14.72	21.33	14.30
7	20:00:00	22.16	14.54	26.19	14.73	21.08	13.88	25.47	14.79	24.99	14.70	20.79	14.37
7	21:00:00	23.02	13.80	24.63	13.36	21.09	13.93	25.49	14.79	24.58	14.76	21.05	14.38
7	22:00:00	22.95	14.03	23.42	12.55	21.63	13.94	26.80	14.40	25.08	14.77	21.34	14.47
7	23:00:00	22.80	14.79	23.81	11.63	22.95	13.62	26.49	14.22	25.58	14.55	21.91	14.27
8	0:00:00	22.10	14.96	23.69	11.96	23.81	12.28	25.91	14.51	26.17	14.52	21.69	14.31
8	1:00:00	21.75	14.96	23.85	11.97	23.49	12.11	27.05	14.26	26.02	14.45	21.05	14.37
8	2:00:00	21.53	14.93	23.95	11.91	23.43	11.86	26.85	14.53	25.86	14.44	21.09	14.34
8	3:00:00	21.45	14.92	26.80	13.30	23.76	11.31	27.24	14.37	25.73	14.46	21.17	14.43
8	4:00:00	21.77	14.93	27.47	13.43	23.74	11.29	26.80	14.48	25.87	14.48	21.24	14.35
8	5:00:00	22.33	14.96	27.37	13.51	24.02	11.26	27.78	14.23	25.63	14.48	21.38	14.34
8	6:00:00	22.37	14.99	29.28	13.71	24.37	11.14	27.16	14.48	25.78	14.43	21.26	14.21
8	7:00:00	22.20	15.00	28.96	13.62	23.52	11.63	26.56	14.53	25.77	14.48	20.94	14.31
8	8:00:00	22.27	15.01	27.74	13.73	23.53	12.34	27.08	14.56	25.38	14.51	20.82	14.10
8	9:00:00	22.09	15.03	26.88	13.74	23.64	12.65	27.33	14.50	25.49	14.56	21.14	14.00
8	10:00:00	21.83	15.04	26.37	13.67	23.46	13.59	27.39	14.84	24.17	14.89	21.08	14.28
8	11:00:00	21.47	15.04	26.84	13.91	22.48	14.00	26.91	14.88	24.12	14.89	20.84	14.26
8	12:00:00	23.56	13.86	26.25	13.70	22.24	14.05	26.00	14.83	24.24	14.90	21.08	14.29
8	13:00:00	22.52	13.49	25.00	14.29	22.35	13.91	25.38	14.70	24.75	14.35	21.35	14.42
8	14:00:00	22.21	13.38	25.07	14.57	23.22	13.35	25.23	14.66	25.72	14.20	21.78	14.19
8	15:00:00	22.56	13.50	25.64	14.70	23.00	13.34	24.81	14.77	24.61	14.64	21.20	14.33
8	16:00:00	22.50	13.50	26.28	14.71	23.17	13.35	25.19	14.80	23.96	14.79	21.18	14.45
8	17:00:00	22.40	13.44	26.08	14.68	22.93	13.45	24.67	14.82	24.00	14.79	21.35	14.37
8	18:00:00	21.95	13.31	25.64	14.66	22.82	13.48	24.00	14.78	23.95	14.90	20.99	14.29
8	19:00:00	20.96	13.17	25.51	14.74	22.59	13.54	24.05	14.78	24.24	14.98	21.10	14.29
8	20:00:00	21.00	13.13	25.53	14.72	22.06	13.82	24.09	14.73	24.29	14.93	20.84	14.34
8	21:00:00	21.00	13.13	25.68	14.77	22.85	13.72	24.35	14.67	24.73	14.63	20.61	14.38
8	22:00:00	22.22	14.00	25.80	14.66	23.20	13.54	24.33	14.76	25.01	14.75	20.76	14.38
8	23:00:00	22.18	14.95	26.76	14.08	24.17	12.55	25.62	14.31	25.74	14.52	21.20	14.22

วันที่	เวลา	TOPSPP (G-85052) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
9	0:00:00	22.62	14.95	26.92	13.88	23.58	11.59	25.85	14.44	25.66	14.51	21.44	14.33
9	1:00:00	22.43	14.93	26.63	13.66	23.60	11.50	25.95	14.47	25.49	14.43	21.14	14.36
9	2:00:00	22.23	14.93	26.57	13.65	23.50	11.60	26.40	14.44	24.94	14.50	21.40	14.28
9	3:00:00	22.09	14.95	26.65	13.64	23.94	11.28	26.38	14.49	24.82	14.49	21.32	14.32
9	4:00:00	22.51	14.96	26.63	13.64	24.20	11.16	24.30	14.92	24.96	14.55	20.93	14.30
9	5:00:00	22.62	14.97	26.66	13.65	24.21	11.17	24.09	14.93	25.37	14.49	20.97	14.38
9	6:00:00	23.08	14.98	26.53	13.60	24.24	11.17	24.28	14.92	25.24	14.57	20.67	14.32
9	7:00:00	23.24	15.01	26.51	13.52	23.75	11.29	24.79	14.91	25.14	14.60	20.78	14.41
9	8:00:00	22.81	15.02	26.26	13.54	22.88	12.64	25.26	14.96	25.17	14.62	20.76	14.25
9	9:00:00	22.43	15.02	26.30	13.66	23.14	12.75	25.29	14.98	25.27	14.71	20.38	14.42
9	10:00:00	22.37	15.04	26.53	14.13	22.61	13.52	25.67	14.96	25.41	14.82	20.20	14.28
9	11:00:00	22.17	15.03	26.21	14.29	30.19	8.57	25.17	14.88	25.34	14.83	20.27	14.33
9	12:00:00	21.66	14.98	25.92	14.36	21.16	14.45	25.17	14.85	24.76	14.77	20.31	14.27
9	13:00:00	21.87	14.97	25.29	14.64	20.68	14.51	24.77	14.84	24.61	14.76	20.12	14.18
9	14:00:00	21.92	14.96	25.66	14.59	21.47	14.36	25.12	14.59	24.74	14.65	20.26	14.25
9	15:00:00	22.03	14.95	25.33	14.66	20.63	14.48	25.13	14.61	25.69	14.52	20.36	14.44
9	16:00:00	23.50	14.66	25.45	14.61	21.64	13.44	25.29	14.67	25.10	14.81	20.41	14.42
9	17:00:00	23.71	14.39	25.43	14.62	20.72	13.97	24.53	14.56	25.16	14.61	20.57	14.45
9	18:00:00	22.80	14.10	25.54	14.61	20.06	14.50	23.88	14.59	25.38	14.73	20.16	14.30
9	19:00:00	23.16	14.38	25.43	14.60	20.99	14.08	24.11	14.48	24.83	14.72	19.89	14.40
9	20:00:00	23.26	14.29	25.53	14.73	20.72	14.29	24.03	14.45	25.28	14.71	20.37	14.44
9	21:00:00	23.96	14.27	25.44	14.76	21.27	14.15	23.83	14.45	25.67	14.67	20.19	14.35
9	22:00:00	24.47	14.30	25.45	14.59	20.72	14.25	23.81	14.60	25.59	14.73	20.07	14.29
9	23:00:00	24.63	14.44	25.99	13.98	22.00	13.29	25.18	14.02	25.86	14.65	20.04	14.33
10	0:00:00	24.79	14.34	25.91	14.29	22.15	12.42	24.77	14.25	26.13	14.56	20.05	14.40
10	1:00:00	24.58	14.48	25.65	13.56	22.10	12.46	24.52	14.31	25.89	14.49	20.17	14.43
10	2:00:00	24.59	14.20	26.11	14.19	22.65	12.17	24.41	14.38	26.26	14.26	20.37	14.44
10	3:00:00	24.65	14.16	24.93	14.81	22.15	12.38	24.04	14.49	25.57	14.51	20.79	14.45
10	4:00:00	24.92	14.25	25.17	14.81	22.69	12.17	24.03	14.49	25.38	14.58	20.83	14.39
10	5:00:00	25.04	14.32	24.93	14.81	22.74	12.21	24.03	14.49	25.35	14.56	20.94	14.44
10	6:00:00	24.98	14.32	25.27	14.82	22.52	12.43	25.11	14.14	25.62	14.43	20.80	14.38
10	7:00:00	24.88	14.41	25.37	14.85	22.23	12.79	24.34	14.32	25.62	14.53	20.72	14.49
10	8:00:00	24.46	14.56	25.26	14.87	21.76	13.91	24.06	14.38	25.30	14.58	21.03	14.40
10	9:00:00	24.45	14.61	25.03	14.89	19.72	14.63	24.09	14.46	25.06	14.66	21.33	14.46
10	10:00:00	24.35	14.62	18.58	11.17	19.77	14.59	24.02	14.49	24.95	14.71	23.46	9.95
10	11:00:00	23.88	14.44	25.24	8.21	19.29	14.73	24.42	14.25	24.26	14.73	20.62	10.79
10	12:00:00	23.63	14.50	18.01	14.23	19.24	14.72	24.30	14.36	24.25	14.67	20.88	15.00
10	13:00:00	23.36	14.60	17.45	14.27	19.20	14.74	24.62	14.34	24.38	14.65	20.72	15.12
10	14:00:00	23.79	14.29	17.60	14.26	19.70	14.63	25.03	14.32	24.58	14.61	21.38	15.06

วันที่	เวลา	TOPSPP (G-85052) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
10	15:00:00	23.20	14.29	17.52	14.22	19.74	14.66	24.24	14.46	24.38	14.63	21.28	15.12
10	16:00:00	23.20	14.27	17.59	14.19	19.23	14.64	24.23	14.46	24.22	14.63	21.10	14.82
10	17:00:00	23.28	14.30	17.47	14.21	19.10	14.73	23.66	14.41	24.32	14.64	20.20	15.11
10	18:00:00	23.01	14.63	17.95	14.19	19.27	14.62	24.34	14.28	24.48	14.60	19.29	15.11
10	19:00:00	22.73	14.50	17.90	14.20	19.40	14.65	24.82	14.30	24.29	14.68	19.59	14.97
10	20:00:00	23.29	14.69	17.84	14.33	19.66	14.70	23.13	14.71	24.93	14.73	19.33	15.09
10	21:00:00	23.47	14.29	17.67	14.33	19.76	14.64	23.27	14.64	24.53	14.64	19.15	15.10
10	22:00:00	23.54	14.10	17.24	14.32	19.71	14.66	24.50	14.06	24.75	14.62	20.01	14.97
10	23:00:00	24.15	14.29	18.15	14.15	20.62	14.07	24.01	14.45	24.47	14.59	19.59	15.03
11	0:00:00	24.78	14.37	18.27	14.14	21.91	12.43	24.38	14.32	25.36	14.02	19.31	15.06
11	1:00:00	24.56	14.44	18.21	14.12	21.61	12.44	24.51	14.23	25.15	14.20	19.86	15.11
11	2:00:00	24.43	14.38	18.21	14.12	21.57	12.46	23.75	14.40	25.22	14.29	20.54	15.05
11	3:00:00	24.76	14.55	18.18	14.11	21.61	12.43	24.08	14.34	25.55	14.13	20.68	15.08
11	4:00:00	24.88	14.42	18.16	14.11	21.84	12.35	24.01	14.42	25.26	14.30	20.64	15.02
11	5:00:00	25.59	14.37	18.09	14.11	21.96	12.46	24.21	14.35	25.16	14.42	20.23	15.04
11	6:00:00	26.11	14.47	18.21	14.12	22.15	12.55	24.35	14.27	25.25	14.42	20.69	15.09
11	7:00:00	25.94	14.52	18.14	14.14	22.03	12.80	23.83	14.46	24.83	14.51	20.61	15.15
11	8:00:00	25.46	14.58	18.10	14.16	22.08	13.65	23.69	14.45	24.89	14.55	20.89	15.18
11	9:00:00	24.79	14.59	18.01	14.20	21.25	14.15	23.58	14.53	24.28	14.65	21.23	15.22
11	10:00:00	24.22	14.61	17.91	14.21	19.62	14.72	24.39	14.30	24.07	14.78	21.37	15.22
11	11:00:00	23.99	14.56	17.73	14.19	19.50	14.77	24.32	14.38	23.58	14.75	21.25	15.20
11	12:00:00	23.85	14.49	17.57	14.20	19.59	14.75	25.09	14.03	23.54	14.76	20.52	15.11
11	13:00:00	23.48	14.73	16.70	14.32	19.97	14.72	24.89	13.82	23.25	14.74	19.98	15.07
11	14:00:00	23.10	14.68	16.60	14.27	19.71	14.68	24.88	13.88	23.40	14.58	19.97	15.11
11	15:00:00	23.23	14.67	16.54	14.31	19.81	14.66	24.74	14.03	22.58	14.75	20.85	15.10
11	16:00:00	23.19	14.78	16.89	14.26	20.02	14.54	23.63	14.52	22.67	14.70	21.42	15.13
11	17:00:00	22.63	14.45	17.46	14.22	20.29	14.60	22.39	14.71	22.67	14.68	20.64	15.11
11	18:00:00	22.75	14.60	18.26	14.20	19.76	14.59	22.68	14.71	22.92	14.66	20.24	15.14
11	19:00:00	22.83	14.52	18.37	14.17	20.01	14.60	23.74	14.56	22.92	14.72	20.46	15.05
11	20:00:00	23.15	14.52	18.04	14.18	19.83	14.55	22.73	14.66	23.43	14.71	20.56	15.04
11	21:00:00	23.30	14.32	17.86	14.18	20.13	14.57	22.65	14.68	24.04	14.44	20.78	15.11
11	22:00:00	23.56	14.10	17.36	14.23	20.50	14.48	22.80	14.67	23.52	14.64	21.32	14.92
11	23:00:00	23.77	14.30	17.47	14.19	21.15	14.06	24.53	14.00	23.51	14.58	21.31	14.75
12	0:00:00	23.92	14.50	17.66	14.15	21.91	13.24	24.93	13.57	24.00	14.35	20.21	15.11
12	1:00:00	24.02	14.18	17.76	14.14	22.28	13.45	24.91	13.58	23.85	14.37	20.21	15.11
12	2:00:00	24.20	14.36	17.84	14.17	22.33	13.36	24.36	14.12	23.71	14.37	20.48	15.10
12	3:00:00	24.64	14.47	17.38	14.15	22.29	13.30	24.01	14.24	24.20	14.27	20.14	15.12
12	4:00:00	24.66	14.41	17.66	14.16	22.14	13.24	23.90	14.27	24.10	14.37	20.99	15.10
12	5:00:00	24.73	14.47	17.77	14.17	22.18	13.20	23.90	14.33	24.12	14.38	20.55	15.13

วันที่	เวลา	TOPSPP (G-85052) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
12	6:00:00	24.92	14.39	17.55	14.18	22.36	13.13	23.87	14.28	24.12	14.30	20.65	15.14
12	7:00:00	25.12	14.41	17.21	14.20	22.34	13.18	23.46	14.45	23.67	14.52	20.58	15.16
12	8:00:00	24.54	14.54	17.57	14.24	20.80	14.41	23.20	14.47	24.01	14.48	21.31	15.19
12	9:00:00	24.26	14.56	17.70	14.24	19.73	14.91	23.21	14.46	23.99	14.59	21.53	15.21
12	10:00:00	24.28	14.45	17.89	14.20	19.61	15.03	23.43	14.47	23.58	14.79	21.35	15.23
12	11:00:00	24.08	14.57	17.53	14.19	20.90	14.63	23.73	14.36	23.82	14.80	21.11	15.22
12	12:00:00	23.97	14.47	17.50	14.15	20.17	14.66	23.78	14.23	23.77	14.73	20.57	15.20
12	13:00:00	23.34	14.63	17.02	14.22	19.83	14.69	23.91	14.34	23.58	14.77	20.38	15.16
12	14:00:00	23.34	14.78	16.94	14.19	19.98	14.65	23.33	14.40	23.72	14.73	20.24	15.13
12	15:00:00	23.42	14.80	17.45	14.15	19.75	14.64	23.26	14.48	23.48	14.73	20.59	15.13
12	16:00:00	23.12	14.57	17.45	14.21	19.44	14.66	23.12	14.51	23.47	14.71	20.50	15.10
12	17:00:00	22.97	14.48	17.46	14.21	18.45	14.91	23.23	14.38	23.40	14.52	20.37	15.10
12	18:00:00	23.29	14.65	17.42	14.27	18.47	14.92	23.03	14.42	23.39	14.51	20.15	14.99
12	19:00:00	23.66	14.69	17.75	14.26	18.41	14.92	22.96	14.61	23.11	14.53	20.68	14.73
12	20:00:00	23.65	14.66	18.18	14.19	18.72	14.92	23.21	14.45	23.59	14.50	20.56	14.81
12	21:00:00	23.63	14.68	17.92	14.20	18.82	14.93	22.78	14.55	23.90	14.53	20.80	14.84
12	22:00:00	24.17	14.62	18.19	14.16	18.87	14.94	22.85	14.55	23.72	14.58	20.56	14.72
12	23:00:00	24.40	14.55	18.45	14.12	19.57	14.78	22.79	14.50	23.76	14.56	19.98	15.02
13	0:00:00	24.25	14.55	18.39	14.10	22.39	13.50	23.09	14.46	23.78	14.48	20.09	15.04
13	1:00:00	24.13	14.56	18.44	14.11	21.96	13.43	22.95	14.46	24.24	14.14	19.62	15.04
13	2:00:00	24.25	14.54	18.25	14.10	21.95	13.37	22.71	14.53	24.69	13.73	20.35	14.93
13	3:00:00	24.39	14.50	18.29	14.10	22.19	13.56	22.91	14.45	24.97	13.65	22.40	14.69
13	4:00:00	24.63	14.51	18.16	14.08	22.25	13.66	22.97	14.49	24.42	14.18	21.86	14.61
13	5:00:00	24.71	14.51	18.16	14.09	22.22	13.44	23.13	14.41	24.73	14.29	22.06	14.54
13	6:00:00	24.83	14.17	18.44	14.10	21.67	13.95	23.53	14.27	25.27	14.05	22.20	14.52
13	7:00:00	24.81	14.44	18.27	14.11	20.55	14.40	23.16	14.46	24.47	14.42	21.51	14.94
13	8:00:00	24.55	14.49	18.23	14.12	20.38	14.44	23.01	14.46	24.19	14.44	21.08	14.87
13	9:00:00	24.63	14.54	18.12	14.16	20.73	14.42	22.89	14.58	24.60	14.53	20.98	14.64
13	10:00:00	24.83	14.64	18.09	14.15	20.65	14.41	22.40	14.55	25.64	13.98	22.53	13.83
13	11:00:00	24.87	14.68	17.67	14.15	20.70	14.43	22.43	14.52	25.56	14.13	18.31	13.53
13	12:00:00	24.02	14.51	17.43	14.13	20.55	14.41	22.93	14.60	25.58	13.85	16.80	13.16
13	13:00:00	23.25	14.75	17.38	14.13	22.22	13.38	22.97	14.63	25.60	13.70	20.09	13.29
13	14:00:00	22.83	14.83	17.44	14.12	23.89	12.40	22.93	14.58	24.99	13.27	20.66	14.07
13	15:00:00	23.08	14.77	17.51	14.10	22.50	13.08	22.86	14.60	25.19	13.52	19.05	14.47
13	16:00:00	23.47	14.73	17.53	14.12	21.62	14.21	22.54	14.57	24.71	13.52	17.57	14.80
13	17:00:00	23.34	14.70	17.71	14.13	21.18	14.22	22.36	14.56	24.34	13.36	17.43	14.88
13	18:00:00	23.63	14.60	17.34	14.17	19.41	14.86	22.70	14.47	24.58	13.55	17.63	14.85
13	19:00:00	23.17	14.48	17.52	14.19	19.15	14.89	23.27	14.45	23.92	14.24	17.83	14.87
13	20:00:00	24.16	14.70	17.24	14.21	18.93	14.94	23.33	14.43	24.36	14.02	18.75	14.88

วันที่	เวลา	TOPSPP (G-85052) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
13	21:00:00	24.08	14.59	17.62	14.20	19.05	14.95	23.10	14.45	24.20	14.12	18.94	14.90
13	22:00:00	24.87	14.48	17.52	14.16	20.36	14.58	22.81	14.51	24.79	13.96	20.24	14.45
13	23:00:00	24.89	14.41	17.37	14.16	20.76	14.45	22.84	14.56	24.02	14.37	18.89	14.79
14	0:00:00	25.29	14.54	17.58	14.14	21.80	14.11	22.56	14.57	23.55	14.45	18.29	14.91
14	1:00:00	24.91	14.46	17.56	14.15	20.84	14.43	22.64	14.58	23.37	14.43	18.02	14.86
14	2:00:00	25.11	14.52	17.75	14.13	21.15	14.20	22.89	14.54	23.95	14.46	18.36	14.81
14	3:00:00	25.09	14.44	17.53	14.13	20.58	14.31	23.01	14.46	23.89	14.43	18.46	14.87
14	4:00:00	25.54	14.50	17.46	14.14	20.65	14.34	22.64	14.53	23.74	14.49	18.51	14.78
14	5:00:00	25.85	14.49	17.54	14.14	20.70	14.34	22.91	14.48	23.83	14.50	18.77	14.74
14	6:00:00	25.63	14.31	17.66	14.16	21.58	14.18	22.94	14.47	24.08	14.38	18.46	14.90
14	7:00:00	25.80	14.51	17.68	14.17	21.28	14.23	22.81	14.50	23.78	14.50	18.44	14.92
14	8:00:00	25.29	14.50	18.08	14.17	19.99	14.63	22.67	14.54	23.81	14.48	20.50	14.26
14	9:00:00	25.18	14.46	18.16	14.19	19.85	14.76	22.60	14.64	24.39	14.36	20.50	14.15
14	10:00:00	24.96	14.53	18.12	14.19	19.41	14.94	22.98	14.59	25.36	13.98	20.82	13.93
14	11:00:00	24.80	14.29	18.17	14.17	18.79	15.01	23.01	14.58	24.76	13.88	20.26	14.03
14	12:00:00	24.72	14.32	18.45	13.97	18.48	14.99	23.41	14.56	24.55	14.16	17.76	14.83
14	13:00:00	22.82	14.70	22.09	12.91	18.84	14.98	23.59	14.55	24.77	13.90	19.26	14.32
14	14:00:00	20.76	15.08	21.35	13.45	18.69	14.97	24.52	14.53	24.61	13.89	19.49	14.19
14	15:00:00	21.94	14.86	18.90	14.03	18.65	14.89	23.85	14.70	23.59	14.41	17.82	14.76
14	16:00:00	24.22	14.50	18.68	14.07	18.66	14.94	24.34	14.69	23.47	14.43	17.26	14.85
14	17:00:00	23.81	14.52	18.28	14.11	18.71	14.94	24.27	14.69	23.85	14.35	17.60	14.83
14	18:00:00	24.50	14.61	18.35	14.12	18.91	14.94	24.47	14.62	24.29	14.35	18.05	14.75
14	19:00:00	24.11	14.58	17.90	14.17	19.14	14.96	24.43	14.62	24.25	14.60	17.67	14.87
14	20:00:00	24.72	14.67	18.24	14.17	19.22	14.96	23.95	14.71	24.09	14.64	17.66	14.90
14	21:00:00	24.86	14.54	17.76	14.21	19.16	14.96	22.97	14.52	24.25	14.53	17.75	14.86
14	22:00:00	24.99	14.48	17.34	14.27	18.98	14.96	23.28	14.39	24.42	14.37	19.30	14.57
14	23:00:00	25.38	14.45	16.87	14.20	19.75	14.60	22.58	14.50	24.23	14.13	19.04	14.68
15	0:00:00	25.46	14.20	16.96	14.20	22.30	13.50	22.66	14.56	23.61	14.41	20.64	14.22
15	1:00:00	25.51	14.35	17.32	14.19	21.80	14.02	22.45	14.54	23.40	14.51	19.16	14.56
15	2:00:00	25.41	14.34	17.20	14.19	21.17	14.23	22.90	14.45	23.61	14.41	19.34	14.52
15	3:00:00	25.27	14.40	17.41	14.19	21.13	14.31	22.81	14.50	23.68	14.49	18.88	14.55
15	4:00:00	25.55	14.45	17.49	14.19	21.53	14.21	23.25	14.37	23.59	14.48	19.05	14.52
15	5:00:00	25.44	14.42	17.46	14.20	21.14	14.29	23.36	14.40	23.57	14.45	19.22	14.50
15	6:00:00	25.66	14.26	17.51	14.21	21.05	14.36	23.73	14.37	24.11	14.08	19.22	14.63
15	7:00:00	25.83	14.44	17.60	14.23	20.94	14.37	23.43	14.45	23.12	14.54	18.67	14.78
15	8:00:00	25.61	14.51	17.69	14.24	20.23	14.68	23.34	14.51	23.57	14.48	18.81	14.77
15	9:00:00	25.44	14.54	17.78	14.24	19.72	14.81	23.00	14.61	23.55	14.53	19.87	14.44
15	10:00:00	25.16	14.36	18.07	14.24	19.24	15.01	23.22	14.66	23.88	14.55	19.52	14.54
15	11:00:00	24.51	14.51	17.40	14.24	19.15	15.02	23.74	14.68	23.52	14.57	20.09	14.46

วันที่	เวลา	TOPSPP (G-85052) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
15	12:00:00	24.49	14.42	17.55	14.21	18.84	15.00	23.51	14.62	23.20	14.55	20.50	14.26
15	13:00:00	23.65	14.30	18.48	14.15	18.71	14.97	23.29	14.59	23.18	14.52	20.58	14.15
15	14:00:00	23.48	14.36	18.30	14.13	18.98	14.96	23.93	14.59	23.66	14.38	18.25	14.79
15	15:00:00	23.52	14.40	18.18	14.13	18.99	14.93	23.95	14.63	22.98	14.73	18.15	14.91
15	16:00:00	23.99	14.58	18.33	14.11	19.09	14.88	23.92	14.53	22.98	14.74	17.32	14.92
15	17:00:00	24.02	14.53	18.19	14.12	19.15	14.93	23.43	14.50	22.93	14.74	18.05	14.85
15	18:00:00	24.25	14.54	18.47	14.13	18.97	14.92	23.70	14.40	22.85	14.65	18.20	14.84
15	19:00:00	24.34	14.58	18.20	14.13	19.20	14.93	23.69	14.48	23.15	14.67	18.14	14.91
15	20:00:00	24.44	14.46	18.11	14.21	18.97	14.95	23.46	14.41	22.93	14.69	18.19	14.91
15	21:00:00	24.47	14.57	17.70	14.24	19.27	14.94	23.51	14.46	22.97	14.71	18.27	14.99
15	22:00:00	24.86	14.48	17.51	14.27	19.25	14.95	23.12	14.57	24.09	14.34	18.91	14.86
15	23:00:00	25.24	13.78	17.56	14.17	21.17	14.33	22.69	14.68	23.45	14.59	19.33	14.76
16	0:00:00	24.93	13.63	17.68	14.17	22.14	13.95	22.43	14.67	23.41	14.54	19.99	14.54
16	1:00:00	24.83	13.52	17.54	14.14	20.81	14.30	22.74	14.67	22.99	14.50	19.69	14.66
16	2:00:00	25.02	13.62	17.50	14.14	20.48	14.39	22.66	14.64	23.33	14.50	20.15	14.55
16	3:00:00	24.71	13.49	17.64	14.11	20.72	14.37	22.48	14.64	23.78	14.50	19.74	14.65
16	4:00:00	24.92	13.54	18.30	14.08	20.94	14.31	22.57	14.61	23.56	14.50	19.96	14.57
16	5:00:00	25.23	13.61	18.39	14.10	20.83	14.39	22.70	14.63	23.93	14.52	19.69	14.63
16	6:00:00	25.40	13.81	18.52	14.11	21.66	14.12	22.63	14.68	23.90	14.50	19.50	14.68
16	7:00:00	25.20	13.70	18.43	14.12	22.53	13.78	22.87	14.63	24.02	14.49	19.25	14.75
16	8:00:00	24.49	13.56	18.91	14.03	21.09	14.42	22.85	14.72	23.77	14.53	19.53	14.70
16	9:00:00	24.38	13.60	21.40	13.39	19.79	14.80	22.88	14.70	23.93	14.50	19.77	14.69
16	10:00:00	24.13	13.56	22.09	12.97	19.24	15.01	23.39	14.70	23.83	14.53	18.99	14.81
16	11:00:00	23.99	13.56	20.71	13.50	19.23	15.00	23.73	14.74	23.76	14.53	19.51	14.78
16	12:00:00	23.48	13.36	21.37	13.23	19.01	14.99	23.34	14.76	23.58	14.45	21.33	14.25
16	13:00:00	23.49	13.38	20.07	13.58	19.06	14.98	23.42	14.68	23.57	14.46	21.04	14.24
16	14:00:00	24.04	13.36	19.28	13.78	19.00	14.96	23.71	14.65	23.70	14.44	21.24	14.34
16	15:00:00	23.80	13.21	19.19	13.77	18.89	14.94	23.16	14.67	23.43	14.43	19.50	14.63
16	16:00:00	23.82	13.28	19.49	13.73	18.84	14.87	22.89	14.55	23.79	14.47	17.99	14.93
16	17:00:00	23.85	13.45	19.43	13.74	19.01	14.94	22.58	14.68	23.96	14.47	17.92	14.96
16	18:00:00	22.17	13.07	19.22	13.80	19.18	14.94	23.24	14.51	23.88	14.43	18.71	14.98
16	19:00:00	23.35	13.58	19.30	13.82	19.56	14.95	23.63	14.58	24.02	14.64	19.43	14.85
16	20:00:00	23.92	13.78	19.17	13.86	19.50	14.94	23.67	14.65	24.20	14.63	19.09	14.90
16	21:00:00	24.70	13.49	19.39	13.86	19.61	14.96	23.60	14.63	24.02	14.65	19.24	14.91
16	22:00:00	27.85	13.74	20.05	13.68	19.89	14.92	23.47	14.68	24.53	14.48	20.04	14.70
16	23:00:00	27.74	13.53	20.04	13.59	21.97	14.22	23.49	14.68	24.34	14.40	20.28	14.60
17	0:00:00	28.28	13.79	20.21	13.52	21.15	14.38	23.15	14.68	24.03	14.43	20.33	14.51
17	1:00:00	27.99	13.71	20.64	13.40	20.71	14.49	23.21	14.62	24.40	14.37	19.61	14.69
17	2:00:00	28.23	13.63	21.35	13.15	20.83	14.49	23.54	14.55	24.56	14.35	19.40	14.74

วันที่	เวลา	TOPSPP (G-85052) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
17	3:00:00	28.47	13.69	21.59	12.98	20.98	14.39	23.46	14.59	24.31	14.44	19.54	14.64
17	4:00:00	25.90	14.44	21.88	12.84	20.74	14.45	23.46	14.57	24.59	14.45	19.77	14.70
17	5:00:00	25.75	14.50	21.94	12.93	21.43	14.29	23.64	14.55	24.54	14.45	19.47	14.67
17	6:00:00	25.89	14.50	21.83	12.62	21.64	14.32	23.43	14.61	24.62	14.46	19.37	14.71
17	7:00:00	25.86	14.48	20.70	13.45	21.79	14.33	23.40	14.72	24.37	14.50	19.60	14.74
17	8:00:00	25.61	14.50	18.28	14.12	20.62	14.74	23.42	14.72	24.03	14.54	19.41	14.79
17	9:00:00	23.25	13.24	17.90	14.17	19.92	15.00	23.64	14.67	24.09	14.60	18.65	15.01
17	10:00:00	24.29	13.67	17.57	14.18	19.60	15.02	24.00	14.62	24.47	14.71	19.05	14.87
17	11:00:00	24.55	14.23	18.20	14.07	19.69	15.02	24.40	14.66	24.61	14.84	18.41	14.95
17	12:00:00	24.57	14.14	19.91	13.48	19.55	14.99	23.67	14.72	24.61	14.85	19.64	14.71
17	13:00:00	24.31	14.36	20.12	13.61	19.99	14.85	23.10	14.75	24.74	14.68	19.57	14.73
17	14:00:00	23.97	14.46	20.35	13.50	20.89	14.57	23.47	14.65	24.29	14.68	18.67	14.97
17	15:00:00	24.28	14.56	19.54	13.78	21.60	14.60	23.31	14.72	24.21	14.72	19.32	14.99
17	16:00:00	23.61	14.59	19.98	13.70	21.52	14.64	23.34	14.68	24.96	14.81	18.75	14.91
17	17:00:00	23.44	14.63	20.32	13.65	20.24	14.59	23.11	14.69	24.61	14.76	19.16	14.95
17	18:00:00	23.66	14.59	20.51	13.71	20.56	14.58	24.02	14.73	25.09	14.79	19.86	14.91
17	19:00:00	23.60	14.60	20.45	13.68	21.23	14.62	23.81	14.65	24.70	14.74	19.27	14.93
17	20:00:00	23.80	14.77	20.29	13.72	20.97	14.57	23.79	14.67	24.26	14.65	18.40	14.94
17	21:00:00	22.00	15.02	19.80	13.83	20.92	14.68	24.03	14.65	24.01	14.68	18.51	14.99
17	22:00:00	21.39	15.05	20.43	13.63	20.65	14.71	24.60	14.42	23.66	14.76	18.65	14.97
17	23:00:00	22.81	15.01	21.05	13.25	21.29	14.42	24.03	14.63	24.76	14.18	19.63	14.76
18	0:00:00	22.92	15.01	21.02	13.32	21.00	14.48	24.60	14.34	24.36	14.62	19.27	14.72
18	1:00:00	23.20	15.02	20.83	13.37	20.86	14.48	25.46	13.87	24.03	14.60	19.79	14.74
18	2:00:00	23.24	15.01	20.96	13.35	20.89	14.48	24.62	14.22	24.35	14.60	19.63	14.74
18	3:00:00	23.13	15.01	21.10	13.20	20.83	14.47	24.08	14.42	24.35	14.59	19.50	14.71
18	4:00:00	23.37	15.01	21.26	13.11	21.06	14.45	24.03	14.44	24.23	14.61	19.87	14.71
18	5:00:00	23.32	15.02	20.99	13.29	20.17	14.73	24.41	14.38	24.26	14.59	20.07	14.71
18	6:00:00	24.01	14.99	19.63	13.64	21.60	14.35	24.81	14.32	25.00	14.35	20.45	14.66
18	7:00:00	23.98	14.97	18.17	14.10	21.94	14.24	24.64	14.36	24.39	14.56	20.04	14.73
18	8:00:00	23.33	14.97	18.06	14.12	20.90	14.66	24.48	14.46	24.50	14.48	19.17	14.90
18	9:00:00	23.38	15.00	17.82	14.15	20.26	14.86	24.76	14.46	24.31	14.59	19.35	14.86
18	10:00:00	23.62	15.02	17.76	14.16	19.58	15.01	24.18	14.70	23.98	14.69	18.71	14.97
18	11:00:00	23.22	15.00	17.69	14.15	19.37	14.99	23.62	14.73	23.81	14.78	19.91	14.71
18	12:00:00	23.21	14.98	17.37	14.15	19.64	14.98	23.34	14.79	24.11	14.79	19.62	14.72
18	13:00:00	22.28	15.02	16.90	14.29	20.87	14.97	23.70	14.79	24.02	14.71	19.82	14.72
18	14:00:00	22.12	14.96	16.88	14.28	21.41	14.76	24.28	14.58	24.06	14.73	19.66	14.79
18	15:00:00	22.27	15.00	17.58	14.27	21.59	14.59	24.31	14.61	23.93	14.77	19.85	14.88
18	16:00:00	20.96	15.07	17.55	14.27	21.68	14.65	24.12	14.68	23.78	14.74	21.60	14.49
18	17:00:00	20.91	15.06	17.36	14.22	21.69	14.66	24.06	14.65	23.91	14.74	20.75	14.60

วันที่	เวลา	TOPSPP (G-85052) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
18	18:00:00	21.16	15.00	17.55	14.29	22.17	14.67	25.64	14.51	24.13	14.75	19.60	14.95
18	19:00:00	20.97	15.06	17.70	14.31	22.48	14.57	26.49	14.40	23.90	14.68	19.42	14.89
18	20:00:00	20.92	15.05	18.24	14.14	22.33	14.61	26.13	14.49	24.10	14.72	20.14	14.95
18	21:00:00	21.48	15.06	19.12	13.97	22.49	14.71	26.13	14.56	24.37	14.64	19.86	15.02
18	22:00:00	21.95	15.04	18.01	14.30	22.86	14.72	26.30	14.47	24.49	14.46	18.82	14.99
18	23:00:00	23.38	14.91	18.49	14.16	23.02	14.51	26.55	14.26	24.31	14.52	18.86	14.79
19	0:00:00	23.35	14.91	18.55	14.14	23.15	14.26	25.89	14.45	24.75	14.45	19.38	14.72
19	1:00:00	23.10	14.94	18.64	14.13	23.01	14.24	25.72	14.44	25.18	14.45	19.12	14.68
19	2:00:00	23.45	14.92	18.58	14.13	22.96	14.21	25.46	14.44	25.27	14.45	18.82	14.71
19	3:00:00	24.14	15.03	18.26	14.12	23.08	14.21	25.57	14.44	25.13	14.51	18.55	14.76
19	4:00:00	24.34	15.05	19.23	13.85	23.17	14.20	25.21	14.39	25.09	14.51	18.69	14.72
19	5:00:00	24.74	15.06	20.53	13.62	23.13	14.20	25.26	14.40	25.14	14.45	18.95	14.71
19	6:00:00	24.59	14.97	21.18	13.47	23.11	14.19	25.53	14.29	24.90	14.43	20.19	14.73
19	7:00:00	24.19	14.96	21.44	13.40	23.24	14.18	25.12	14.45	24.79	14.53	20.07	14.82
19	8:00:00	24.62	14.98	20.44	13.63	22.17	14.73	25.68	14.40	25.07	14.57	20.08	14.82
19	9:00:00	24.52	15.00	18.40	14.14	20.79	14.99	25.46	14.50	24.65	14.65	20.15	14.81
19	10:00:00	23.92	15.01	19.35	13.76	20.30	15.00	24.88	14.69	24.73	14.66	20.57	14.80
19	11:00:00	23.89	15.02	21.22	12.54	20.08	14.99	25.05	14.63	24.30	14.79	20.35	14.73
19	12:00:00	23.51	15.01	21.43	12.83	20.24	14.97	24.71	14.76	24.23	14.85	20.30	14.83
19	13:00:00	22.65	15.08	18.13	14.21	19.89	14.95	24.68	14.74	24.39	14.84	20.13	14.81
19	14:00:00	22.00	15.06	17.27	14.30	19.62	14.94	24.35	14.69	24.05	14.75	19.77	14.74
19	15:00:00	21.89	15.02	17.23	14.25	19.42	14.91	24.16	14.73	24.36	14.79	19.87	14.81
19	16:00:00	21.75	15.01	17.10	14.30	19.52	14.87	24.11	14.69	24.39	14.73	20.14	14.79
19	17:00:00	21.55	15.05	17.43	14.30	19.50	14.92	24.28	14.63	24.03	14.71	20.78	14.84
19	18:00:00	21.90	15.01	17.98	14.21	19.72	14.93	23.87	14.70	23.58	14.78	20.17	14.88
19	19:00:00	22.53	15.05	21.16	12.09	19.64	14.93	24.69	14.43	23.74	14.77	18.79	14.98
19	20:00:00	22.33	15.10	21.08	11.65	19.85	14.95	23.90	14.57	23.87	14.66	19.11	14.97
19	21:00:00	22.07	15.05	20.90	12.04	21.52	14.48	24.02	14.67	23.59	14.76	18.70	14.97
19	22:00:00	22.26	15.02	21.14	11.83	22.54	14.17	24.25	14.67	24.26	14.64	20.46	14.64
19	23:00:00	24.33	14.91	20.71	11.75	22.95	13.37	24.80	14.48	24.57	14.51	20.05	14.71
20	0:00:00	23.61	14.99	21.01	11.40	22.88	12.32	25.04	14.42	24.42	14.42	20.17	14.73
20	1:00:00	23.57	14.99	20.50	11.88	22.76	12.48	24.81	14.46	25.01	14.33	20.16	14.71
20	2:00:00	23.56	14.96	19.62	13.03	22.75	12.65	24.28	14.47	25.26	14.37	20.61	14.65
20	3:00:00	23.61	14.92	20.00	13.25	22.99	13.27	24.36	14.48	24.76	14.51	20.30	14.68
20	4:00:00	23.44	14.96	21.12	12.91	23.43	13.65	24.79	14.44	24.99	14.50	20.54	14.54
20	5:00:00	24.02	14.97	21.22	12.75	23.22	13.63	24.70	14.42	24.72	14.50	20.18	14.67
20	6:00:00	24.68	14.98	21.30	12.58	22.83	13.07	24.84	14.25	24.67	14.49	20.64	14.66
20	7:00:00	24.87	14.98	20.92	13.17	22.64	13.03	24.76	14.37	24.70	14.57	19.36	14.73
20	8:00:00	26.43	14.52	20.54	13.37	22.93	13.42	25.32	14.31	24.31	14.60	18.79	14.85

วันที่	เวลา	TOPSPP (G-85052) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
20	9:00:00	26.04	14.42	19.44	13.83	23.38	13.60	25.62	14.50	24.15	14.63	18.57	14.89
20	10:00:00	25.80	14.41	18.06	14.20	23.24	13.94	24.41	14.88	23.63	15.03	18.19	14.92
20	11:00:00	25.62	14.55	17.72	14.18	23.14	14.07	24.43	14.82	23.19	15.02	18.27	14.92
20	12:00:00	25.13	14.36	20.16	13.52	22.74	14.05	24.26	14.76	23.63	14.93	20.06	14.45
20	13:00:00	24.79	14.54	20.37	13.42	22.68	13.79	23.86	14.82	23.95	14.65	21.32	14.17
20	14:00:00	24.45	14.52	19.93	13.50	22.88	13.20	24.63	14.66	23.50	14.64	21.49	14.02
20	15:00:00	24.76	14.55	19.53	13.64	23.52	13.41	24.59	14.79	23.95	14.77	19.05	14.84
20	16:00:00	24.24	14.64	19.77	13.52	23.47	13.52	24.04	14.70	24.31	14.58	19.52	14.82
20	17:00:00	24.33	14.60	19.53	13.71	23.48	13.53	24.25	14.58	24.27	14.58	19.53	14.77
20	18:00:00	24.20	14.61	18.93	13.98	21.59	14.38	23.95	14.66	24.25	14.52	18.41	14.88
20	19:00:00	24.76	14.59	19.08	13.88	21.22	14.61	24.17	14.73	24.20	14.68	18.63	14.76
20	20:00:00	25.46	14.43	19.17	13.86	21.38	14.51	24.35	14.77	24.40	14.55	18.29	14.86
20	21:00:00	25.31	14.52	20.73	13.24	21.30	14.68	23.12	14.99	24.61	14.59	18.55	14.89
20	22:00:00	25.37	14.47	21.03	13.31	21.87	14.50	22.82	14.96	24.45	14.67	18.65	14.86
20	23:00:00	25.70	14.27	21.58	13.11	23.04	13.87	24.91	14.28	24.86	14.53	19.57	14.62
21	0:00:00	25.51	14.31	21.90	12.92	23.38	13.68	25.29	14.21	25.13	14.47	20.89	14.51
21	1:00:00	25.06	14.41	19.46	13.77	23.55	13.56	26.01	13.59	25.06	14.54	20.50	14.60
21	2:00:00	25.21	14.34	18.39	14.10	23.41	13.36	25.15	14.32	25.03	14.53	20.26	14.55
21	3:00:00	25.65	14.41	18.33	14.09	23.01	12.76	24.84	14.37	25.22	14.47	20.14	14.54
21	4:00:00	26.13	14.35	18.30	14.10	22.87	12.99	24.23	14.53	25.43	14.43	20.34	14.55
21	5:00:00	26.43	14.37	18.43	14.11	22.89	12.85	24.52	14.55	25.39	14.54	20.76	14.54
21	6:00:00	26.72	14.06	18.53	14.11	23.41	13.07	25.14	14.46	25.75	14.36	21.08	14.50
21	7:00:00	26.70	14.35	18.80	14.13	23.61	13.32	24.57	14.58	25.45	14.41	20.22	14.58
21	8:00:00	26.85	14.31	18.66	14.15	23.04	14.08	24.01	14.69	24.91	14.53	19.84	14.88
21	9:00:00	26.36	14.47	18.42	14.19	22.91	14.16	24.15	14.67	24.95	14.54	19.54	14.96
21	10:00:00	26.11	14.38	18.30	14.21	22.75	14.19	25.45	14.36	25.49	14.24	19.17	14.95
21	11:00:00	25.94	14.21	18.34	14.23	21.84	14.52	25.18	14.38	23.98	14.88	19.71	14.77
21	12:00:00	25.47	14.32	17.94	14.21	22.59	14.57	25.25	14.37	24.62	14.78	20.21	14.67
21	13:00:00	21.91	14.94	18.83	14.03	21.09	14.89	25.18	14.34	24.85	14.76	20.99	14.38
21	14:00:00	21.27	15.05	19.29	14.06	20.26	14.94	25.41	14.25	24.46	14.68	21.76	14.32
21	15:00:00	21.27	15.03	19.92	14.07	20.97	14.66	25.73	14.14	24.58	14.75	19.66	14.81
21	16:00:00	22.32	14.91	19.72	14.04	20.21	14.89	26.33	14.26	24.27	14.69	19.86	14.89
21	17:00:00	24.82	14.60	19.35	14.04	20.74	14.96	25.26	14.50	24.22	14.74	20.67	14.71
21	18:00:00	25.32	14.56	19.62	13.88	20.75	14.96	25.45	14.27	24.40	14.75	20.46	14.52
21	19:00:00	25.68	14.55	19.69	13.96	20.89	14.96	25.86	14.10	25.01	14.71	19.06	14.91
21	20:00:00	25.86	14.52	19.80	14.03	20.72	14.96	26.07	13.96	25.36	14.72	19.17	14.92
21	21:00:00	25.60	14.61	20.57	13.89	20.91	14.98	24.82	14.55	24.64	14.77	19.66	14.89
21	22:00:00	25.73	14.46	21.42	13.60	21.12	14.98	24.47	14.68	25.33	14.65	21.05	14.63
21	23:00:00	26.09	14.25	22.68	13.30	21.86	14.66	24.59	14.53	25.94	14.53	20.60	14.43

วันที่	เวลา	TOPSPP (G-85052) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
22	0:00:00	25.92	14.33	22.60	13.44	23.61	13.17	24.34	14.47	25.83	14.52	20.27	14.49
22	1:00:00	25.69	14.43	23.01	13.42	23.81	13.24	24.52	14.50	25.60	14.46	19.97	14.49
22	2:00:00	25.78	14.30	22.92	13.53	24.11	13.60	24.77	14.48	25.54	14.44	20.22	14.47
22	3:00:00	25.64	14.25	23.19	13.46	24.02	13.40	24.71	14.45	25.32	14.49	19.91	14.51
22	4:00:00	25.35	14.28	23.09	13.52	23.60	13.06	24.77	14.46	25.49	14.43	20.23	14.44
22	5:00:00	25.39	14.38	23.47	13.37	23.75	12.61	24.96	14.47	25.45	14.47	20.29	14.43
22	6:00:00	25.74	14.43	23.61	13.33	23.61	12.76	24.67	14.46	25.23	14.41	19.44	14.60
22	7:00:00	25.91	14.27	23.32	13.47	23.89	13.37	24.33	14.50	24.98	14.45	19.53	14.65
22	8:00:00	25.64	14.35	23.18	13.50	22.19	14.67	24.34	14.56	24.78	14.44	18.96	14.91
22	9:00:00	25.40	14.50	22.97	13.58	20.56	15.01	24.50	14.54	24.28	14.49	19.12	14.94
22	10:00:00	25.02	14.47	22.61	13.68	21.51	14.39	23.21	15.01	25.38	14.35	18.83	14.99
22	11:00:00	24.82	14.53	21.98	13.86	22.38	14.36	22.95	15.06	25.42	14.46	18.57	14.84
22	12:00:00	24.79	14.38	21.69	13.89	20.69	15.00	23.54	14.79	24.41	14.48	18.75	14.82
22	13:00:00	24.33	14.42	20.61	14.05	20.25	15.00	24.52	14.70	24.76	14.41	18.78	14.95
22	14:00:00	24.32	14.60	20.09	14.09	20.62	14.95	24.46	14.65	25.18	14.39	19.65	14.76
22	15:00:00	24.18	14.56	20.10	14.10	21.32	14.66	23.66	14.73	24.76	14.45	19.23	14.87
22	16:00:00	24.17	14.51	20.10	14.08	21.54	14.73	23.72	14.76	24.31	14.45	19.03	14.77
22	17:00:00	24.20	14.49	19.91	14.12	21.55	14.71	24.10	14.76	24.35	14.45	18.64	14.90
22	18:00:00	24.72	14.47	19.77	14.14	21.62	14.69	23.36	14.74	24.13	14.59	18.84	14.88
22	19:00:00	24.78	14.60	20.12	14.00	21.10	14.89	23.45	14.72	23.97	14.66	19.31	14.95
22	20:00:00	24.96	14.64	20.97	13.97	20.67	14.98	23.60	14.71	23.98	14.69	19.19	14.81
22	21:00:00	24.74	14.62	21.04	14.11	20.83	14.98	24.25	14.57	24.02	14.71	19.38	14.69
22	22:00:00	25.84	14.44	22.21	13.76	20.78	14.99	24.43	14.54	24.80	14.45	19.34	14.78
22	23:00:00	24.66	13.26	22.86	13.58	21.75	14.49	24.69	14.30	25.23	14.40	19.84	14.62
23	0:00:00	23.95	12.92	22.84	13.58	23.33	13.41	24.45	14.44	25.15	14.45	19.74	14.59
23	1:00:00	23.14	12.72	23.16	13.48	23.46	13.70	24.43	14.41	24.93	14.51	19.88	14.53
23	2:00:00	23.47	12.76	23.57	13.33	23.51	13.62	24.46	14.42	24.83	14.51	20.57	14.38
23	3:00:00	23.63	12.77	23.35	13.28	23.57	13.49	24.38	14.38	24.50	14.51	20.22	14.55
23	4:00:00	23.67	12.77	23.77	13.38	23.32	13.12	24.22	14.37	24.84	14.51	20.41	14.57
23	5:00:00	23.75	12.79	23.52	13.55	23.13	13.02	24.17	14.37	24.87	14.43	20.59	14.56
23	6:00:00	27.50	13.09	23.92	13.42	23.70	13.37	25.17	13.98	24.87	14.48	21.01	14.58
23	7:00:00	28.00	13.20	24.02	13.53	23.91	13.81	24.52	14.32	24.90	14.52	20.86	14.70
23	8:00:00	27.00	13.19	23.21	13.89	22.08	14.65	24.30	14.45	24.99	14.52	19.62	14.90
23	9:00:00	25.87	13.22	23.06	13.96	22.76	14.43	24.86	14.49	24.88	14.61	19.47	15.02
23	10:00:00	25.20	13.22	23.87	13.56	21.91	14.59	24.46	14.64	24.99	14.76	19.02	14.98
23	11:00:00	25.12	13.21	23.09	13.73	22.02	14.67	24.52	14.52	25.16	14.81	19.36	14.98
23	12:00:00	24.78	13.19	22.65	13.70	22.30	14.62	23.79	14.67	24.66	14.80	20.35	15.00
23	13:00:00	24.69	13.19	20.97	14.14	22.65	14.43	23.55	14.61	24.61	14.81	21.16	15.02
23	14:00:00	24.79	13.21	20.83	14.10	23.35	14.31	23.94	14.59	24.35	8.69	21.83	14.80

วันที่	เวลา	TOPSPP (G-85052) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
23	15:00:00	24.56	13.22	20.41	14.17	22.59	14.64	23.77	14.54	17.23	14.53	21.00	14.84
23	16:00:00	25.35	14.40	20.61	14.13	22.93	14.50	23.35	14.70	18.54	14.29	20.65	14.92
23	17:00:00	25.68	14.56	20.71	14.12	22.38	14.61	23.61	14.68	18.50	14.36	20.75	14.87
23	18:00:00	25.72	14.62	21.02	14.13	22.50	14.59	23.84	14.70	18.54	14.32	21.53	14.77
23	19:00:00	25.37	14.66	21.18	14.10	22.22	14.70	23.78	14.71	18.13	14.34	21.57	14.73
23	20:00:00	25.31	14.56	21.57	14.15	22.31	14.56	23.73	14.71	18.35	14.30	19.59	14.96
23	21:00:00	25.88	14.44	22.69	13.98	22.76	14.46	24.33	14.70	18.59	14.37	19.30	14.98
23	22:00:00	25.85	14.45	22.89	13.91	22.68	14.48	24.31	14.68	18.55	14.36	19.77	14.81
23	23:00:00	25.94	14.41	24.03	13.50	23.82	13.78	24.51	14.49	18.86	14.25	19.76	14.81
24	0:00:00	25.90	14.32	25.13	13.29	24.08	13.35	24.73	14.37	18.88	14.19	19.83	14.75
24	1:00:00	25.87	14.37	24.30	13.61	24.05	13.07	24.54	14.44	18.75	14.15	19.60	14.76
24	2:00:00	26.01	14.42	24.09	13.67	24.11	13.22	24.48	14.43	18.76	14.22	19.65	14.78
24	3:00:00	26.22	14.38	24.70	13.55	23.88	13.07	24.16	14.43	19.18	14.25	19.95	14.66
24	4:00:00	26.31	14.41	23.82	13.80	24.35	13.53	24.03	14.45	19.21	14.23	20.47	14.60
24	5:00:00	26.51	14.34	24.69	13.70	23.89	13.31	24.40	14.43	19.05	14.23	22.28	13.92
24	6:00:00	26.42	14.39	25.49	13.41	23.91	13.39	24.94	14.20	19.12	14.15	21.73	14.41
24	7:00:00	26.25	14.47	24.71	13.84	23.89	13.73	24.60	14.43	19.01	14.18	21.14	14.65
24	8:00:00	25.90	14.38	24.71	13.84	22.10	14.47	24.94	14.35	19.44	14.21	20.81	14.93
24	9:00:00	25.72	14.52	24.29	13.89	20.45	15.02	24.94	14.51	19.31	14.28	20.74	14.98
24	10:00:00	25.72	14.46	24.26	13.92	20.45	15.03	24.98	14.46	18.93	14.42	20.42	14.96
24	11:00:00	25.55	14.57	23.75	14.00	20.39	15.02	25.26	14.18	18.82	14.43	19.91	14.96
24	12:00:00	25.23	14.50	23.33	13.96	20.47	14.99	24.41	14.51	18.71	14.42	20.15	14.96
24	13:00:00	24.93	14.52	22.37	14.16	20.62	14.97	24.77	14.53	18.53	14.36	21.76	14.91
24	14:00:00	24.57	14.60	21.61	14.21	21.11	14.95	24.20	14.52	18.47	14.36	23.61	14.25
24	15:00:00	24.56	14.57	21.57	14.19	20.64	14.88	24.35	14.46	18.82	14.35	22.35	14.39
24	16:00:00	24.64	14.58	21.76	14.12	20.62	14.93	24.52	14.50	18.45	14.37	20.26	14.60
24	17:00:00	24.88	14.62	21.99	14.17	20.77	14.95	24.14	14.49	18.71	14.39	20.26	14.92
24	18:00:00	25.05	14.52	21.70	14.12	20.72	14.95	24.12	14.50	18.96	14.41	19.95	14.88
24	19:00:00	25.04	14.50	22.08	14.03	20.77	14.95	23.94	14.68	19.20	14.44	19.58	14.91
24	20:00:00	24.98	14.55	22.19	14.16	20.81	14.97	24.19	14.68	19.82	14.46	19.45	14.93
24	21:00:00	24.80	14.58	23.01	13.97	21.01	14.98	24.18	14.62	19.74	14.47	19.41	14.91
24	22:00:00	25.18	14.26	23.19	14.06	21.04	14.98	24.81	14.37	19.66	14.41	19.60	14.86
24	23:00:00	25.54	14.08	23.97	13.93	22.10	14.53	24.48	14.37	19.70	14.30	20.73	14.59
25	0:00:00	25.75	14.19	24.79	13.64	23.85	13.59	24.44	14.41	20.05	14.27	22.84	14.05
25	1:00:00	25.62	14.28	24.53	13.73	23.77	13.52	24.74	14.28	19.88	14.28	21.90	14.38
25	2:00:00	25.85	14.34	25.10	13.54	23.50	13.33	24.32	14.32	19.97	14.17	21.24	14.57
25	3:00:00	25.99	14.35	25.90	13.28	23.91	13.61	24.05	14.40	20.19	14.26	21.38	14.43
25	4:00:00	26.26	14.25	25.84	13.34	24.11	13.63	23.89	14.38	20.45	14.26	21.20	14.54
25	5:00:00	26.38	14.32	25.90	13.31	24.05	13.28	24.16	14.40	20.11	14.25	21.88	14.50

วันที่	เวลา	TOPSPP (G-85052) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
25	6:00:00	26.38	14.33	25.88	13.33	23.91	13.17	24.93	14.33	20.18	14.20	21.97	14.49
25	7:00:00	26.16	14.41	26.12	13.34	23.81	13.31	24.69	14.43	19.91	14.28	21.28	14.61
25	8:00:00	25.78	14.44	25.63	13.53	23.51	14.20	24.62	14.41	19.83	14.23	20.02	14.94
25	9:00:00	25.38	14.47	26.18	13.40	22.66	14.55	24.42	14.45	19.84	14.28	19.44	14.99
25	10:00:00	25.34	14.48	25.30	13.69	22.73	14.40	24.44	14.60	19.53	14.45	19.38	14.98
25	11:00:00	25.18	14.38	24.19	13.90	22.94	14.34	24.19	14.61	19.42	14.40	19.93	14.73
25	12:00:00	24.99	14.40	23.85	13.90	22.76	14.39	24.46	14.42	19.37	14.42	19.64	14.91
25	13:00:00	24.58	14.57	21.53	14.46	22.91	14.33	24.40	14.42	19.73	14.41	19.80	14.69
25	14:00:00	24.71	14.63	21.29	14.48	22.95	14.16	23.76	14.50	19.21	14.42	20.67	14.41
25	15:00:00	24.56	14.61	21.31	14.48	22.24	14.34	23.39	14.74	18.85	14.41	20.09	14.60
25	16:00:00	24.69	14.57	23.07	14.30	21.66	14.43	22.72	14.65	18.76	14.39	19.40	14.78
25	17:00:00	24.84	14.51	23.44	14.22	21.92	14.41	23.42	14.68	18.94	14.41	20.10	14.87
25	18:00:00	24.84	14.58	23.76	14.18	22.58	14.41	23.88	14.64	19.57	14.38	19.88	14.91
25	19:00:00	24.90	14.57	23.03	14.19	22.37	14.46	23.92	14.72	19.32	14.35	20.05	14.96
25	20:00:00	24.86	14.61	23.17	14.14	22.66	14.42	23.62	14.76	18.98	14.39	19.90	14.91
25	21:00:00	24.85	14.62	23.06	14.04	22.56	14.41	23.49	14.75	18.63	14.38	20.32	14.94
25	22:00:00	25.06	14.46	23.22	13.94	23.21	14.25	23.91	14.71	18.75	14.38	20.41	14.94
25	23:00:00	25.19	14.41	23.85	13.71	23.60	13.98	24.39	14.52	19.55	14.25	20.55	14.75
26	0:00:00	25.21	14.47	24.30	13.47	23.79	13.94	24.03	14.52	19.64	14.15	20.69	14.60
26	1:00:00	25.54	14.38	23.43	13.68	23.02	14.16	23.83	14.56	19.63	14.07	20.82	14.64
26	2:00:00	25.64	14.32	23.60	13.69	23.48	13.96	23.83	14.50	19.65	14.14	20.94	14.59
26	3:00:00	25.69	14.30	23.46	13.87	23.16	14.17	23.73	14.50	19.98	14.13	20.26	14.59
26	4:00:00	25.79	14.33	24.33	13.85	22.62	14.35	24.00	14.46	19.98	14.14	20.88	14.55
26	5:00:00	25.90	14.43	25.22	13.78	22.99	14.28	24.44	14.42	19.91	14.14	21.01	14.55
26	6:00:00	26.25	14.34	26.30	13.38	23.64	14.02	24.31	14.50	19.88	14.09	20.95	14.59
26	7:00:00	26.06	14.46	25.65	13.67	23.36	14.15	24.14	14.53	19.61	14.16	21.03	14.68
26	8:00:00	25.71	14.48	26.26	13.46	21.81	14.70	24.15	14.59	19.22	14.14	20.68	14.71
26	9:00:00	25.49	14.38	26.32	13.43	21.13	15.06	24.43	14.60	19.32	14.24	20.33	14.72
26	10:00:00	25.41	14.44	25.66	13.53	20.79	15.07	24.77	14.54	19.19	14.42	19.86	14.76
26	11:00:00	25.19	14.53	24.60	13.69	21.02	15.07	25.72	14.09	18.91	14.44	20.19	14.75
26	12:00:00	24.99	14.50	24.43	13.59	20.79	15.05	25.67	14.19	19.61	14.43	20.96	14.69
26	13:00:00	24.67	14.60	22.81	14.18	20.58	15.03	25.37	13.56	18.74	14.46	20.42	14.68
26	14:00:00	24.69	14.62	22.98	14.04	20.40	15.01	24.19	14.45	18.89	14.39	20.94	14.69
26	15:00:00	24.59	14.64	22.55	14.05	19.36	14.97	23.52	14.72	18.55	14.39	21.00	14.64
26	16:00:00	24.52	14.61	22.06	14.12	19.81	14.92	23.80	14.70	18.44	14.36	21.08	14.62
26	17:00:00	24.49	14.64	22.46	14.21	19.87	14.97	24.03	14.70	18.59	14.35	20.68	14.67
26	18:00:00	24.67	14.63	24.03	13.65	20.42	14.98	23.52	14.66	18.64	14.35	19.88	14.92
26	19:00:00	24.91	14.61	24.22	13.47	20.87	14.97	23.50	14.62	18.93	14.34	19.58	14.95
26	20:00:00	24.79	14.65	22.51	14.18	20.95	14.95	23.99	14.67	18.65	14.30	20.11	14.92

วันที่	เวลา	TOPSPP (G-85052) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
26	21:00:00	24.91	14.63	22.32	14.19	20.91	14.99	23.49	14.72	18.94	14.26	20.38	14.89
26	22:00:00	25.10	14.54	20.74	14.47	21.31	14.95	23.94	14.66	18.97	14.34	20.27	14.79
26	23:00:00	25.32	14.25	21.27	14.33	23.15	14.30	24.01	14.52	19.07	14.22	20.86	14.68
27	0:00:00	25.27	14.37	21.65	14.32	23.76	13.99	23.59	14.47	19.36	14.03	20.99	14.65
27	1:00:00	25.30	14.36	21.90	14.32	22.91	14.22	23.84	14.41	19.59	14.09	21.20	14.59
27	2:00:00	25.44	14.33	21.81	14.32	22.36	14.36	23.69	14.42	19.34	14.07	20.67	14.59
27	3:00:00	25.41	14.36	24.28	13.46	22.78	14.35	23.91	14.43	19.44	14.05	20.71	14.67
27	4:00:00	25.66	14.36	24.63	13.39	22.95	14.33	23.87	14.43	19.63	14.05	20.88	14.65
27	5:00:00	26.01	14.40	25.17	13.29	22.79	14.32	24.22	14.31	19.45	14.06	21.18	14.65
27	6:00:00	25.88	14.25	25.67	13.17	23.35	14.14	24.22	14.36	19.37	14.14	20.86	14.69
27	7:00:00	26.00	14.40	25.21	13.45	23.74	14.09	24.06	14.47	19.23	14.13	20.79	14.72
27	8:00:00	25.60	14.49	24.28	13.79	23.51	14.04	23.98	14.51	19.28	14.18	19.92	15.01
27	9:00:00	25.41	14.51	23.97	13.77	23.49	14.05	24.10	14.54	19.14	14.19	19.44	15.10
27	10:00:00	25.43	14.46	23.42	13.79	23.64	14.07	24.43	14.80	19.31	14.31	20.67	14.83
27	11:00:00	25.27	14.49	22.97	13.78	23.59	14.12	25.48	14.39	19.01	14.33	20.49	14.90
27	12:00:00	25.01	14.45	22.43	13.79	22.45	14.33	25.06	14.19	19.18	14.38	19.81	14.98
27	13:00:00	24.44	14.61	21.88	13.89	22.18	14.40	25.92	13.94	18.82	14.38	19.33	15.03
27	14:00:00	24.22	14.62	21.62	13.89	22.23	14.39	26.01	13.98	19.10	14.31	19.66	14.92
27	15:00:00	24.36	14.68	21.67	13.90	21.99	14.38	24.98	14.30	19.14	14.19	19.84	14.96
27	16:00:00	24.43	14.66	21.29	13.86	21.72	14.30	24.19	14.45	20.40	14.00	20.06	14.86
27	17:00:00	24.46	14.73	21.15	13.93	21.69	14.28	23.92	14.74	19.35	14.18	20.96	14.66
27	18:00:00	24.56	14.69	21.10	14.09	21.23	14.56	24.00	14.73	19.59	14.21	22.05	14.32
27	19:00:00	24.62	14.65	20.68	14.12	21.10	14.69	24.16	14.61	19.41	14.17	20.35	14.95
27	20:00:00	24.67	14.72	20.64	14.08	21.42	14.72	23.73	14.69	19.70	14.21	20.28	14.99
27	21:00:00	24.74	14.69	21.67	13.82	21.01	14.86	23.55	14.61	19.75	14.20	20.22	14.99
27	22:00:00	25.26	14.59	22.50	13.53	21.30	14.76	24.22	14.42	19.83	14.01	19.98	14.93
27	23:00:00	25.68	14.36	21.36	13.82	21.54	14.48	23.87	14.48	19.38	13.94	20.95	14.27
28	0:00:00	25.93	14.46	22.03	13.71	21.67	14.36	23.92	14.46	19.70	14.13	23.07	13.42
28	1:00:00	25.62	14.30	22.41	13.69	21.91	14.35	23.25	14.45	19.75	14.00	22.94	13.95
28	2:00:00	25.32	14.48	22.21	13.77	22.31	14.33	23.52	14.44	19.73	14.10	23.00	13.70
28	3:00:00	25.42	14.47	22.27	13.71	22.16	14.34	23.40	14.48	19.51	14.10	22.67	13.94
28	4:00:00	25.65	14.45	22.50	13.63	22.14	14.33	23.49	14.47	19.74	14.13	22.00	14.14
28	5:00:00	25.61	14.42	22.58	13.60	22.35	14.33	23.47	14.46	19.41	14.15	22.14	14.12
28	6:00:00	25.81	14.37	23.10	13.49	22.39	14.33	23.58	14.48	19.53	14.10	22.24	14.03
28	7:00:00	25.76	14.49	22.10	13.77	22.39	14.36	23.60	14.52	19.36	14.09	20.79	14.62
28	8:00:00	25.64	14.54	21.62	13.82	21.41	14.70	23.63	14.54	19.42	14.09	21.77	14.40
28	9:00:00	25.36	14.55	22.02	13.88	21.66	14.78	23.57	14.59	19.03	14.10	21.89	14.36
28	10:00:00	25.21	14.39	21.29	13.85	22.10	14.80	23.91	14.44	18.63	14.35	22.06	14.29
28	11:00:00	24.98	14.56	20.96	13.84	21.92	14.66	24.63	14.05	18.21	14.39	23.44	14.14

วันที่	เวลา	TOPSPP (G-85052) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
28	12:00:00	24.69	14.40	21.11	13.70	21.31	14.77	24.77	13.62	18.22	14.37	23.43	14.09
28	13:00:00	23.20	14.79	20.97	13.88	21.65	14.66	25.04	13.88	18.46	14.31	22.68	13.89
28	14:00:00	21.20	15.02	20.88	13.82	22.10	14.40	24.91	13.69	18.28	14.31	22.84	13.45
28	15:00:00	21.43	14.97	20.74	13.96	22.78	14.34	25.00	13.91	18.24	14.21	23.41	13.41
28	16:00:00	24.35	14.52	20.50	14.03	21.74	14.52	24.34	14.14	18.33	14.05	23.59	13.28
28	17:00:00	24.81	14.53	21.06	13.95	21.73	14.58	23.68	14.47	18.40	14.16	24.10	12.94
28	18:00:00	24.81	14.50	21.32	13.75	21.71	14.59	23.25	14.74	18.52	14.24	23.24	13.10
28	19:00:00	24.74	14.61	20.76	14.10	21.61	14.61	23.48	14.77	20.41	14.07	22.59	13.30
28	20:00:00	25.06	14.57	21.53	13.88	21.85	14.66	24.79	14.68	19.93	14.16	22.77	13.40
28	21:00:00	24.99	14.65	22.68	13.43	22.11	14.58	25.81	14.72	20.71	14.08	22.31	13.09
28	22:00:00	24.96	14.55	22.10	13.61	22.89	14.35	26.13	14.65	20.11	14.14	21.75	14.21
28	23:00:00	25.43	14.44	22.98	13.25	22.54	14.49	26.87	14.14	19.53	14.14	20.18	14.71
29	0:00:00	25.26	14.47			22.50	14.41	27.39	14.20	19.36	14.09	20.11	14.70
29	1:00:00	25.22	14.46			22.15	14.43	27.43	14.21	19.55	14.01	20.31	14.72
29	2:00:00	25.35	14.42			22.46	14.39	26.96	14.09	19.73	13.99	19.97	14.73
29	3:00:00	25.53	14.44			22.74	14.37	26.42	13.94	19.58	14.04	20.27	14.71
29	4:00:00	25.59	14.42			22.73	14.36	26.08	14.12	19.74	14.05	20.21	14.70
29	5:00:00	25.69	14.44			22.86	14.34	25.76	14.18	19.51	14.03	20.86	14.61
29	6:00:00	25.65	14.33			22.93	14.37	26.99	13.83	19.62	14.07	21.61	14.36
29	7:00:00	25.65	14.46			22.81	14.39	26.91	14.13	19.24	14.09	20.54	14.73
29	8:00:00	25.22	14.46			21.67	14.86	27.10	14.20	19.26	14.11	20.73	14.88
29	9:00:00	25.02	14.50			21.05	15.01	26.89	14.32	19.81	14.17	20.61	14.78
29	10:00:00	24.94	14.48			20.86	14.98	26.82	14.24	19.80	14.19	19.79	14.98
29	11:00:00	24.94	14.56			20.99	15.01	27.00	13.87	19.43	14.18	19.57	14.91
29	12:00:00	24.66	14.51			21.66	15.00	26.81	13.73	19.33	14.16	20.72	14.87
29	13:00:00	24.24	14.61			22.20	14.99	26.74	13.81	19.43	14.17	21.72	14.67
29	14:00:00	24.34	14.66			21.81	14.96	26.47	13.63	19.42	13.94	23.04	14.23
29	15:00:00	24.30	14.62			22.03	14.95	26.33	13.68	19.14	14.05	22.52	14.33
29	16:00:00	24.26	14.48			21.79	14.88	26.07	13.91	19.42	14.03	22.37	13.92
29	17:00:00	24.66	14.60			21.59	14.92	25.62	14.09	19.54	13.98	22.85	13.70
29	18:00:00	24.68	14.59			21.72	14.92	25.61	14.13	19.33	14.10	22.52	14.21
29	19:00:00	24.46	14.46			21.71	14.93	25.34	14.28	19.36	14.33	22.18	14.18
29	20:00:00	24.76	14.52			21.28	14.94	25.91	13.96	19.01	14.39	22.04	14.24
29	21:00:00	24.62	14.68			21.52	14.92	26.16	13.71	18.68	14.27	22.15	13.87
29	22:00:00	25.03	14.57			23.06	14.64	26.52	13.86	18.21	14.28	22.03	13.84
29	23:00:00	24.98	14.48			23.48	14.47	26.81	13.76	19.07	14.05	20.42	14.47
30	0:00:00	25.11	14.44			23.55	14.43	26.67	13.94	19.70	14.08	19.36	14.70
30	1:00:00	25.07	14.37			23.30	14.40	25.58	14.20	19.90	13.97	19.16	14.69
30	2:00:00	25.22	14.38			23.14	14.39	24.80	14.42	20.07	14.12	19.40	14.69

วันที่	เวลา	TOPSPP (G-85052) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
30	3:00:00	25.12	14.30			23.15	14.38	25.93	13.93	20.00	14.14	19.83	14.69
30	4:00:00	25.19	14.35			23.19	14.37	25.90	14.03	19.94	14.12	19.71	14.68
30	5:00:00	25.31	14.40			23.21	14.39	26.05	13.93	19.80	14.12	20.38	14.75
30	6:00:00	25.39	14.30			23.86	14.14	25.87	13.88	19.89	14.11	20.68	14.62
30	7:00:00	25.38	14.43			22.88	14.38	25.82	14.00	20.06	14.10	20.68	14.71
30	8:00:00	25.35	14.46			22.68	14.49	25.67	14.22	20.02	14.14	19.81	14.79
30	9:00:00	25.18	14.50			22.78	14.51	25.31	14.38	19.44	14.24	19.19	15.04
30	10:00:00	25.27	14.48			22.67	14.65	25.54	14.21	19.44	14.40	19.50	15.07
30	11:00:00	25.20	14.53			22.65	14.55	26.15	13.91	19.07	14.43	19.54	15.04
30	12:00:00	25.25	14.55			22.50	14.54	25.77	13.94	19.36	14.42	21.40	14.54
30	13:00:00	25.44	14.55			23.03	14.38	25.43	14.05	18.67	14.44	20.10	14.77
30	14:00:00	25.41	14.51			23.06	14.47	24.56	14.38	19.15	14.34	20.83	14.61
30	15:00:00	25.45	14.54			22.58	14.55	24.44	14.42	18.84	14.36	18.99	14.89
30	16:00:00	25.28	14.51			22.77	14.53	24.25	14.50	19.24	14.24	18.90	14.92
30	17:00:00	24.76	14.43			22.58	14.54	24.38	14.42	19.28	14.30	19.89	14.64
30	18:00:00	24.93	14.19			22.77	14.57	24.97	14.19	19.52	14.34	20.72	14.34
30	19:00:00	25.30	14.52			22.65	14.64	25.09	14.20	19.62	14.30	19.06	14.85
30	20:00:00	25.54	14.50			22.66	14.65	24.36	14.38	19.40	14.31	19.65	14.91
30	21:00:00	25.73	14.40			23.16	14.54	24.89	14.45	19.60	14.29	20.40	14.81
30	22:00:00	25.82	14.40			23.34	14.56	25.54	14.28	19.46	14.32	19.84	14.90
30	23:00:00	25.93	14.45			23.45	14.47	25.95	14.17	19.07	14.17	21.35	14.47
31	0:00:00	25.94	14.29			23.22	14.42			19.36	14.01		
31	1:00:00	25.84	14.40			23.08	14.41			19.75	14.11		
31	2:00:00	25.92	14.37			23.29	14.37			20.03	14.08		
31	3:00:00	26.14	14.40			23.42	14.38			20.10	14.07		
31	4:00:00	25.99	14.39			23.32	14.38			19.89	14.09		
31	5:00:00	26.02	14.35			23.03	14.40			19.47	14.15		
31	6:00:00	25.95	14.39			23.31	14.36			19.53	14.14		
31	7:00:00	26.20	14.28			23.06	14.35			19.74	14.09		
31	8:00:00	25.67	14.45			21.78	14.57			19.85	14.14		
31	9:00:00	25.56	14.43			21.93	14.65			19.49	14.28		
31	10:00:00	25.33	14.46			22.09	14.54			18.89	14.39		
31	11:00:00	25.18	14.55			21.92	14.54			19.36	14.44		
31	12:00:00	25.00	14.51			21.96	14.56			19.72	14.37		
31	13:00:00	24.73	14.64			21.67	14.53			19.57	14.34		
31	14:00:00	24.38	14.54			22.05	14.41			19.22	14.35		
31	15:00:00	24.41	14.59			22.03	14.52			19.40	14.34		
31	16:00:00	24.53	14.65			21.93	14.72			19.02	14.28		
31	17:00:00	24.61	14.58			21.91	14.76			18.61	14.34		

วันที่	เวลา	TOPSPP (G-85052) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
31	18:00:00	24.72	14.57			22.29	14.71			18.88	14.32		
31	19:00:00	25.27	14.57			23.82	14.32			19.44	14.33		
31	20:00:00	25.43	14.61			23.29	14.71			19.62	14.31		
31	21:00:00	25.67	14.56			23.69	14.49			19.33	14.37		
31	22:00:00	25.38	14.53			24.40	14.22			19.16	14.29		
31	23:00:00	26.57	14.14			23.37	14.48			19.57	14.22		

ผลการติดตามตรวจสอบคุณภาพอากาศที่ระบายออกจากปล่องแบบต่อเนื่อง ระหว่างเดือนมกราคม-มิถุนายน 2565

วันที่	เวลา	TOPSPP (G-85053) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
1	0:00:00	53.01	14.22	42.74	14.13	38.48	14.19	16.68	14.14	21.29	13.76	19.10	14.15
1	1:00:00	53.01	14.21	33.38	14.07	39.93	14.11	19.30	13.99	21.36	13.73	19.03	14.17
1	2:00:00	52.31	14.19	22.41	14.03	44.96	14.26	20.49	13.93	21.34	13.73	19.63	14.14
1	3:00:00	53.47	14.18	22.63	14.02	44.74	14.26	20.22	13.91	21.33	13.73	21.84	14.07
1	4:00:00	52.66	14.17	24.05	13.99	44.97	14.23	20.25	13.91	21.41	13.68	22.04	14.05
1	5:00:00	52.08	14.17	22.97	13.99	45.19	14.23	19.65	13.96	22.81	13.73	20.45	14.09
1	6:00:00	52.80	14.18	22.75	14.01	45.90	14.23	18.87	13.97	22.73	13.73	19.86	14.17
1	7:00:00	52.42	14.18	22.72	14.02	45.94	14.25	19.08	14.00	22.48	13.74	19.06	14.19
1	8:00:00	53.14	14.20	23.07	14.05	47.26	14.14	18.98	14.01	22.43	13.78	21.33	14.19
1	9:00:00	53.07	14.22	23.57	14.07	46.38	14.16	19.61	14.04	22.32	13.76	21.30	14.24
1	10:00:00	53.05	14.24	24.04	14.07	45.33	14.19	25.94	13.98	22.62	13.75	21.48	14.26
1	11:00:00	53.00	14.24	23.67	14.07	46.08	14.16	27.36	13.95	22.30	13.74	21.26	14.20
1	12:00:00	Maintenance	Maintenance	22.96	14.06	44.36	14.14	27.13	13.95	21.89	13.73	21.77	14.19
1	13:00:00	53.94	14.23	28.22	14.16	45.12	14.12	27.14	13.93	21.36	13.74	21.94	14.18
1	14:00:00	51.99	14.17	29.57	14.16	44.98	14.12	26.98	13.92	21.11	13.75	21.82	14.16
1	15:00:00	51.90	14.16	28.19	14.14	43.99	14.10	27.11	13.91	20.19	13.74	21.94	14.14
1	16:00:00	52.34	14.17	26.59	14.13	43.70	14.10	27.48	13.90	20.66	13.73	21.56	14.14
1	17:00:00	Maintenance	Maintenance	25.68	14.08	43.79	14.10	27.31	13.91	21.15	13.72	21.15	14.18
1	18:00:00	Maintenance	Maintenance	25.63	14.07	43.68	14.09	27.58	13.92	24.66	13.70	20.79	14.20
1	19:00:00	Maintenance	Maintenance	25.12	14.06	44.52	14.10	27.58	13.93	26.99	13.67	21.07	14.20
1	20:00:00	Maintenance	Maintenance	25.43	14.07	44.44	14.11	27.94	13.94	27.05	13.67	21.82	14.20
1	21:00:00	Maintenance	Maintenance	25.30	14.09	44.37	14.11	28.16	13.95	26.95	13.69	21.68	14.17
1	22:00:00	53.76	14.20	25.38	14.11	44.14	14.12	27.70	13.98	25.35	13.73	21.55	14.21
1	23:00:00	52.94	14.19	22.59	14.03	41.33	14.14	22.15	13.97	23.40	13.61	19.61	14.21
2	0:00:00	52.52	14.19	22.50	14.03	41.67	14.24	22.44	13.92	23.75	13.56	18.67	14.14
2	1:00:00	53.02	14.17	23.39	14.01	42.93	14.22	21.35	13.94	23.85	13.54	18.38	14.15
2	2:00:00	52.47	14.15	22.65	14.00	43.16	14.21	20.95	13.96	24.07	13.55	17.70	14.22
2	3:00:00	52.28	14.15	23.12	14.00	43.60	14.26	20.84	13.97	23.89	13.53	18.69	14.20
2	4:00:00	51.85	14.14	23.15	14.00	44.58	14.29	21.70	13.97	23.67	13.51	18.08	14.19
2	5:00:00	51.33	14.15	22.77	14.01	45.01	14.28	22.88	13.92	24.43	13.54	17.78	14.16
2	6:00:00	51.82	14.15	22.82	14.02	45.39	14.29	22.33	13.94	24.69	13.56	18.20	14.15
2	7:00:00	52.20	14.17	22.48	14.03	44.31	14.30	22.52	13.96	24.66	13.57	17.79	14.22
2	8:00:00	52.28	14.19	22.75	14.05	45.10	14.15	20.62	14.06	24.88	13.58	20.82	14.19
2	9:00:00	52.59	14.15	23.39	14.10	41.48	14.17	17.90	14.19	25.20	13.59	21.60	14.23
2	10:00:00	44.54	10.58	30.05	14.25	41.29	14.17	26.89	13.99	25.41	13.59	21.66	14.26
2	11:00:00	51.94	14.15	46.36	14.39	41.16	14.17	28.19	13.99	22.32	13.72	22.04	14.26
2	12:00:00	52.61	14.16	46.11	14.37	40.96	14.18	28.74	14.00	21.12	13.77	21.42	14.25
2	13:00:00	50.84	14.11	28.63	14.18	40.96	14.18	29.14	14.00	21.05	13.77	21.47	14.23
2	14:00:00	49.63	14.08	29.12	14.16	41.47	14.17	28.84	13.98	21.25	13.77	21.61	14.22

วันที่	เวลา	TOPSPP (G-85053) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O2 (%)	NOx (ppm)	O2 (%)	NOx (ppm)	O2 (%)	NOx (ppm)	O2 (%)	NOx (ppm)	O2 (%)
2	15:00:00	49.71	14.08	29.06	14.15	40.90	14.15	29.26	13.97	21.06	13.74	21.26	14.19
2	16:00:00	49.74	14.08	28.96	14.15	40.42	14.13	29.26	13.95	21.58	13.75	21.29	14.20
2	17:00:00	49.93	14.09	29.28	14.16	40.71	14.13	29.72	13.95	22.03	13.77	21.48	14.20
2	18:00:00	51.02	14.13	29.12	14.16	41.16	14.12	29.58	13.94	26.26	13.72	21.66	14.22
2	19:00:00	51.97	14.15	29.03	14.16	40.86	14.12	29.78	13.95	28.63	13.68	21.67	14.21
2	20:00:00	51.85	14.14	29.26	14.15	40.91	14.13	29.96	13.97	28.86	13.69	21.47	14.19
2	21:00:00	51.55	14.15	28.83	14.15	40.73	14.13	30.29	13.97	29.06	13.70	21.96	14.17
2	22:00:00	52.01	14.15	28.11	14.14	40.88	14.14	29.78	13.98	28.07	13.73	21.19	14.21
2	23:00:00	52.20	14.15	34.39	14.22	39.47	14.13	23.31	14.03	26.41	13.59	19.48	14.21
3	0:00:00	52.31	14.15	44.17	14.25	40.29	14.17	24.37	13.95	24.05	13.66	18.48	14.18
3	1:00:00	Maintenance	Maintenance	44.64	14.26	41.39	14.15	24.28	13.93	23.91	13.65	18.08	14.21
3	2:00:00	Maintenance	Maintenance	44.83	14.24	41.72	14.13	24.05	13.90	23.94	13.63	18.68	14.17
3	3:00:00	Maintenance	Maintenance	43.50	14.18	40.89	14.13	24.29	13.90	24.12	13.63	17.27	14.24
3	4:00:00	Maintenance	Maintenance	44.91	14.24	40.82	14.13	24.28	13.91	24.20	13.64	17.33	14.21
3	5:00:00	53.75	14.17	44.05	14.20	40.99	14.14	23.99	13.89	23.76	13.67	18.03	14.20
3	6:00:00	51.31	14.12	44.59	14.21	41.34	14.14	23.29	13.91	23.67	13.70	18.63	14.20
3	7:00:00	50.28	14.12	44.10	14.20	41.07	14.17	23.34	13.91	23.13	13.73	18.10	14.21
3	8:00:00	50.02	14.14	43.70	14.24	43.41	14.17	24.20	13.90	23.03	13.77	18.28	14.22
3	9:00:00	51.17	14.14	45.05	14.30	41.62	14.19	25.08	13.90	25.14	13.76	18.62	14.26
3	10:00:00	51.56	14.14	44.65	14.29	41.93	14.21	24.63	13.92	28.97	13.75	17.06	14.35
3	11:00:00	48.33	14.17	43.48	14.29	41.37	14.19	24.07	13.97	28.87	13.75	18.34	14.27
3	12:00:00	49.05	14.13	42.30	14.24	41.13	14.19	23.71	13.98	28.63	13.75	17.41	14.32
3	13:00:00	49.10	14.09	24.37	14.12	40.41	14.18	23.93	13.97	28.36	13.74	18.03	14.24
3	14:00:00	49.40	14.07	25.48	14.12	41.06	14.15	23.62	13.98	28.26	13.73	18.51	14.21
3	15:00:00	44.98	14.09	26.38	14.16	41.59	14.15	24.41	13.92	28.28	13.71	18.29	14.20
3	16:00:00	44.21	14.11	24.66	14.09	41.56	14.13	22.95	13.94	28.49	13.70	17.88	14.20
3	17:00:00	52.65	14.16	23.62	14.05	41.40	14.13	22.90	13.95	28.34	13.69	17.22	14.21
3	18:00:00	Maintenance	Maintenance	23.49	14.05	41.16	14.12	22.98	14.01	28.78	13.69	19.96	14.24
3	19:00:00	Maintenance	Maintenance	24.18	14.08	40.05	14.12	29.35	13.94	28.74	13.71	20.00	14.27
3	20:00:00	Maintenance	Maintenance	24.60	14.08	40.37	14.13	29.59	13.95	29.03	13.72	20.61	14.26
3	21:00:00	50.56	14.18	24.80	14.10	40.12	14.13	29.94	13.95	28.32	13.73	20.50	14.25
3	22:00:00	47.93	14.12	25.06	14.10	39.93	14.13	25.42	13.99	27.68	13.74	21.19	14.28
3	23:00:00	47.71	14.13	26.17	14.14	37.64	14.10	20.31	14.08	26.90	13.65	21.65	14.16
4	0:00:00	47.96	14.13	26.68	14.15	37.29	14.14	18.86	14.13	26.28	13.59	21.77	14.13
4	1:00:00	47.54	14.11	24.42	14.09	36.56	14.13	19.95	14.06	25.83	13.58	22.18	14.15
4	2:00:00	47.35	14.11	24.68	14.10	35.94	14.14	19.90	14.04	26.09	13.56	21.82	14.17
4	3:00:00	46.66	14.09	25.29	14.10	35.58	14.15	18.96	14.10	25.90	13.56	21.64	14.17
4	4:00:00	46.42	14.09	25.96	14.11	36.11	14.15	18.98	14.12	26.24	13.57	21.56	14.15
4	5:00:00	46.66	14.10	26.59	14.13	36.13	14.15	19.35	14.13	26.29	13.57	21.67	14.14
4	6:00:00	50.26	14.15	40.33	14.17	36.29	14.15	19.19	14.18	26.83	13.58	22.48	14.11
4	7:00:00	49.08	14.16	44.10	14.23	37.11	14.14	19.00	14.16	26.08	13.59	21.25	14.11
4	8:00:00	45.86	14.19	44.32	14.26	38.02	14.06	19.75	14.18	24.81	13.65	20.77	14.29

วันที่	เวลา	TOPSPP (G-85053) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O2 (%)	NOx (ppm)	O2 (%)	NOx (ppm)	O2 (%)	NOx (ppm)	O2 (%)	NOx (ppm)	O2 (%)
4	9:00:00	45.24	14.20	44.67	14.26	38.19	14.08	43.70	14.21	25.78	13.73	21.39	14.34
4	10:00:00	40.53	12.66	44.62	14.28	39.06	14.11	28.73	13.97	27.31	13.77	21.15	14.35
4	11:00:00	39.63	8.87	43.57	14.27	42.45	14.13	29.00	14.00	26.53	13.77	22.34	14.33
4	12:00:00	40.39	14.15	44.45	14.29	43.77	14.13	29.07	14.03	24.92	13.75	21.28	14.31
4	13:00:00	Maintenance	Maintenance	24.54	14.12	42.57	14.12	28.74	13.99	26.71	13.76	20.53	14.29
4	14:00:00	Maintenance	Maintenance	23.47	14.08	42.65	14.10	28.67	13.99	26.26	13.76	20.61	14.28
4	15:00:00	Maintenance	Maintenance	26.87	14.13	42.67	14.10	28.65	13.95	25.77	13.73	20.94	14.25
4	16:00:00	Maintenance	Maintenance	27.50	14.09	42.24	14.09	28.21	13.89	25.49	13.71	21.07	14.25
4	17:00:00	Maintenance	Maintenance	27.43	14.10	42.59	14.07	28.22	13.90	25.75	13.72	21.26	14.30
4	18:00:00	Maintenance	Maintenance	27.25	14.12	42.53	14.07	29.22	13.92	25.72	13.72	21.85	14.31
4	19:00:00	Maintenance	Maintenance	27.59	14.12	42.07	14.07	29.14	13.93	25.95	13.69	21.56	14.32
4	20:00:00	Maintenance	Maintenance	27.73	14.12	43.00	14.09	28.65	13.92	25.63	13.70	21.83	14.30
4	21:00:00	Maintenance	Maintenance	27.51	14.11	42.86	14.09	29.32	13.97	25.94	13.71	21.68	14.27
4	22:00:00	Maintenance	Maintenance	24.86	14.11	41.67	14.10	28.33	14.01	26.12	13.73	21.49	14.28
4	23:00:00	41.38	14.17	39.69	14.18	37.66	14.15	22.97	13.96	23.92	13.71	21.83	14.15
5	0:00:00	41.56	14.16	Shutdown	Shutdown	36.25	14.19	21.02	14.00	23.17	13.73	22.21	14.12
5	1:00:00	43.65	14.16	Shutdown	Shutdown	35.75	14.19	21.95	13.94	23.10	13.70	22.51	14.19
5	2:00:00	43.51	14.15	Shutdown	Shutdown	35.49	14.19	22.08	13.93	22.56	13.69	22.47	14.19
5	3:00:00	44.13	14.15	Shutdown	Shutdown	35.63	14.17	22.58	13.92	22.91	13.65	22.32	14.20
5	4:00:00	44.47	14.14	Shutdown	Shutdown	35.64	14.14	22.99	13.90	22.69	13.65	22.94	14.19
5	5:00:00	42.72	14.15	Shutdown	Shutdown	35.97	14.13	22.06	13.94	23.20	13.66	22.37	14.17
5	6:00:00	42.19	14.13	Shutdown	Shutdown	35.43	14.14	22.61	13.91	22.94	13.66	21.84	14.13
5	7:00:00	42.89	14.14	Shutdown	Shutdown	35.74	14.16	22.19	13.93	23.41	13.67	22.48	14.12
5	8:00:00	41.43	14.19	Shutdown	Shutdown	39.38	14.11	22.43	13.92	22.67	13.72	22.53	14.14
5	9:00:00	40.72	14.21	Shutdown	Shutdown	40.22	14.14	23.18	13.91	23.74	13.74	22.09	14.20
5	10:00:00	39.64	14.19	Shutdown	Shutdown	41.08	14.15	28.42	13.93	26.70	13.72	21.93	14.20
5	11:00:00	40.54	14.16	Shutdown	Shutdown	43.30	14.12	28.93	13.92	26.67	13.73	21.99	14.22
5	12:00:00	39.12	14.16	Shutdown	Shutdown	41.83	14.10	28.97	13.95	26.46	13.73	22.51	14.19
5	13:00:00	Maintenance	Maintenance	Shutdown	Shutdown	41.38	14.09	29.20	13.96	26.55	13.72	22.54	14.18
5	14:00:00	Maintenance	Maintenance	Shutdown	Shutdown	40.57	14.09	29.36	13.97	26.42	13.72	21.87	14.15
5	15:00:00	Maintenance	Maintenance	Shutdown	Shutdown	37.70	14.09	28.96	13.91	25.99	13.74	21.63	14.14
5	16:00:00	Maintenance	Maintenance	Shutdown	Shutdown	38.96	14.08	28.55	13.88	25.55	13.69	22.48	14.16
5	17:00:00	53.89	14.20	Shutdown	Shutdown	33.77	13.97	28.63	13.87	25.77	13.67	22.04	14.18
5	18:00:00	53.59	14.20	Shutdown	Shutdown	33.17	13.94	28.23	13.86	26.21	13.69	22.73	14.26
5	19:00:00	52.92	14.19	Shutdown	Shutdown	35.34	14.02	28.54	13.86	25.72	13.67	21.72	14.30
5	20:00:00	52.74	14.19	Shutdown	Shutdown	34.93	14.01	28.76	13.85	25.62	13.67	21.36	14.29
5	21:00:00	53.57	14.20	Shutdown	Shutdown	34.17	14.01	28.17	13.86	25.45	13.67	22.10	14.26
5	22:00:00	50.10	14.21	Shutdown	Shutdown	34.91	14.03	26.45	13.87	25.63	13.69	22.14	14.25
5	23:00:00	49.58	14.13	Shutdown	Shutdown	37.86	14.08	19.37	13.94	23.72	13.66	22.45	14.17
6	0:00:00	50.05	14.14	Shutdown	Shutdown	42.21	14.08	18.70	13.93	21.36	13.63	22.03	14.19
6	1:00:00	51.31	14.14	Shutdown	Shutdown	41.05	14.06	19.05	13.91	21.27	13.65	22.03	14.20
6	2:00:00	48.63	14.15	Shutdown	Shutdown	40.91	14.05	18.71	13.93	20.35	13.70	22.12	14.21

วันที่	เวลา	TOPSPP (G-85053) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
6	3:00:00	39.82	14.09	Shutdown	Shutdown	40.36	14.04	18.72	13.93	20.25	13.67	21.94	14.16
6	4:00:00	40.29	14.09	Shutdown	Shutdown	40.88	14.04	20.25	13.93	20.82	13.62	22.62	14.19
6	5:00:00	39.81	14.09	Shutdown	Shutdown	41.14	14.03	20.60	13.95	20.11	13.65	22.79	14.17
6	6:00:00	40.39	14.12	Shutdown	Shutdown	40.93	14.03	20.78	13.98	20.59	13.68	22.68	14.13
6	7:00:00	40.23	14.14	Shutdown	Shutdown	41.01	14.05	23.08	13.85	21.11	13.68	22.38	14.14
6	8:00:00	40.25	14.16	Shutdown	Shutdown	41.31	14.09	23.10	13.87	20.10	13.74	22.66	14.22
6	9:00:00	41.04	14.18	Shutdown	Shutdown	41.79	14.12	21.51	13.96	21.57	13.76	23.75	14.26
6	10:00:00	42.33	14.20	Shutdown	Shutdown	41.71	14.12	27.85	13.88	25.59	13.74	23.95	14.27
6	11:00:00	41.86	14.20	Shutdown	Shutdown	41.56	14.14	27.87	13.89	25.61	13.73	23.58	14.27
6	12:00:00	40.75	14.16	Shutdown	Shutdown	40.76	14.12	27.75	13.90	26.25	13.70	24.13	14.25
6	13:00:00	Maintenance	Maintenance	Shutdown	Shutdown	37.80	14.07	27.94	13.90	25.21	13.71	24.03	14.25
6	14:00:00	Maintenance	Maintenance	Shutdown	Shutdown	29.28	14.04	27.44	13.89	24.96	13.71	24.64	14.24
6	15:00:00	Maintenance	Maintenance	Shutdown	Shutdown	27.17	14.10	27.01	13.84	24.78	13.69	24.18	14.21
6	16:00:00	Maintenance	Maintenance	Shutdown	Shutdown	27.01	14.08	27.07	13.82	24.49	13.65	24.51	14.25
6	17:00:00	Maintenance	Maintenance	Shutdown	Shutdown	27.40	14.09	27.46	13.81	24.56	13.73	24.70	14.27
6	18:00:00	Maintenance	Maintenance	Shutdown	Shutdown	41.06	14.11	27.28	13.79	25.18	13.75	24.94	14.29
6	19:00:00	51.56	14.25	Shutdown	Shutdown	41.93	14.10	26.97	13.76	24.92	13.67	24.94	14.30
6	20:00:00	51.18	14.26	Shutdown	Shutdown	41.85	14.09	27.20	13.79	25.02	13.71	24.85	14.30
6	21:00:00	52.24	14.28	Shutdown	Shutdown	42.00	14.10	27.28	13.82	25.28	13.74	24.87	14.27
6	22:00:00	49.85	14.24	Shutdown	Shutdown	42.09	14.10	27.55	13.81	25.10	13.76	24.72	14.27
6	23:00:00	49.38	14.17	Shutdown	Shutdown	34.00	14.13	20.39	13.92	22.62	13.72	23.22	14.24
7	0:00:00	51.79	14.17	Shutdown	Shutdown	30.11	14.17	17.23	13.97	20.61	13.70	23.12	14.22
7	1:00:00	50.41	14.14	Shutdown	Shutdown	28.99	14.14	17.45	13.95	20.32	13.72	23.28	14.19
7	2:00:00	48.10	14.13	Shutdown	Shutdown	30.96	14.17	17.89	13.91	20.41	13.73	23.31	14.22
7	3:00:00	48.80	14.14	Shutdown	Shutdown	28.83	14.10	18.40	13.90	20.38	13.66	23.26	14.20
7	4:00:00	48.04	14.15	Shutdown	Shutdown	27.34	14.08	18.46	13.94	20.60	13.69	23.12	14.22
7	5:00:00	48.18	14.16	Shutdown	Shutdown	28.76	14.11	18.35	13.94	20.54	13.74	22.91	14.23
7	6:00:00	49.18	14.17	Shutdown	Shutdown	30.10	14.13	19.29	13.92	20.69	13.75	23.25	14.21
7	7:00:00	47.23	14.20	Shutdown	Shutdown	28.11	14.12	19.62	13.93	20.68	13.75	23.56	14.21
7	8:00:00	43.41	14.22	Shutdown	Shutdown	33.09	14.14	19.76	13.97	20.61	13.78	22.59	14.32
7	9:00:00	38.20	14.23	Shutdown	Shutdown	41.01	14.18	20.99	13.93	22.59	13.81	22.63	14.34
7	10:00:00	35.35	14.24	Shutdown	Shutdown	34.76	14.15	26.24	13.89	26.42	13.80	22.52	14.34
7	11:00:00	34.12	14.21	Shutdown	Shutdown	40.14	14.17	27.44	13.86	26.21	13.74	22.44	14.34
7	12:00:00	33.71	14.20	Shutdown	Shutdown	40.39	14.11	27.08	13.89	27.39	13.72	22.93	14.32
7	13:00:00	48.01	14.27	Shutdown	Shutdown	40.71	14.10	28.14	13.88	27.20	13.71	22.45	14.31
7	14:00:00	49.67	14.28	Shutdown	Shutdown	40.84	14.08	27.62	13.88	27.12	13.72	22.57	14.30
7	15:00:00	51.20	14.27	Shutdown	Shutdown	41.70	14.07	27.14	13.84	26.38	13.71	22.27	14.26
7	16:00:00	50.92	14.25	Shutdown	Shutdown	41.95	14.07	27.90	13.81	25.60	13.68	22.66	14.30
7	17:00:00	47.22	14.23	Shutdown	Shutdown	41.87	14.07	27.76	13.82	25.23	13.65	23.03	14.31
7	18:00:00	47.00	14.23	Shutdown	Shutdown	42.27	14.07	28.33	13.81	25.04	13.67	22.91	14.33
7	19:00:00	50.50	14.21	Shutdown	Shutdown	42.82	14.07	27.61	13.87	24.89	13.64	22.78	14.36
7	20:00:00	48.51	14.24	Shutdown	Shutdown	42.79	14.08	27.63	13.88	25.25	13.68	22.97	14.34

วันที่	เวลา	TOPSPP (G-85053) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
7	21:00:00	49.00	14.26	Shutdown	Shutdown	43.45	14.09	27.51	13.88	25.02	13.72	23.04	14.34
7	22:00:00	47.58	14.24	Shutdown	Shutdown	43.56	14.10	27.75	13.86	25.28	13.74	23.58	14.37
7	23:00:00	45.74	14.21	Shutdown	Shutdown	38.76	14.14	25.92	13.75	22.79	13.76	23.45	14.33
8	0:00:00	49.96	14.17	Shutdown	Shutdown	44.63	14.10	25.99	13.72	21.41	13.75	22.38	14.27
8	1:00:00	46.26	14.16	Shutdown	Shutdown	44.19	14.07	25.57	13.75	21.29	13.73	21.83	14.25
8	2:00:00	35.26	14.11	Shutdown	Shutdown	44.12	14.06	21.50	13.93	21.39	13.71	22.05	14.24
8	3:00:00	35.20	14.11	Shutdown	Shutdown	43.71	14.04	20.95	13.93	21.14	13.70	22.08	14.25
8	4:00:00	36.16	14.12	Shutdown	Shutdown	43.40	14.03	22.36	13.87	21.33	13.70	22.09	14.23
8	5:00:00	38.99	14.12	Shutdown	Shutdown	43.65	14.05	22.65	13.86	21.25	13.71	22.35	14.20
8	6:00:00	37.91	14.15	Shutdown	Shutdown	43.80	14.08	24.63	13.78	21.28	13.71	23.42	14.22
8	7:00:00	28.34	14.18	Shutdown	Shutdown	43.24	14.07	23.72	13.84	21.30	13.72	23.34	14.21
8	8:00:00	25.57	14.20	Shutdown	Shutdown	43.27	14.09	24.36	13.88	20.02	13.82	23.65	14.26
8	9:00:00	26.15	14.23	Shutdown	Shutdown	44.25	14.12	23.90	13.90	16.87	14.05	23.47	14.28
8	10:00:00	26.20	14.24	Shutdown	Shutdown	42.30	14.16	28.46	13.93	20.54	13.87	23.36	14.29
8	11:00:00	25.97	14.24	Shutdown	Shutdown	36.54	14.15	28.41	13.94	20.43	13.84	23.31	14.29
8	12:00:00	24.98	14.22	Shutdown	Shutdown	34.82	14.12	28.83	13.91	20.47	13.83	22.75	14.29
8	13:00:00	31.83	14.27	Shutdown	Shutdown	35.68	14.12	28.68	13.88	20.59	13.81	23.21	14.28
8	14:00:00	32.75	14.25	Shutdown	Shutdown	35.65	14.10	27.62	13.86	20.94	13.78	23.47	14.27
8	15:00:00	33.04	14.25	Shutdown	Shutdown	35.02	14.10	27.61	13.78	20.30	13.77	23.22	14.24
8	16:00:00	32.95	14.25	Shutdown	Shutdown	34.77	14.12	26.59	13.70	20.33	13.75	23.02	14.28
8	17:00:00	32.79	14.25	Shutdown	Shutdown	35.27	14.11	26.43	13.68	20.75	13.75	22.85	14.29
8	18:00:00	32.79	14.25	Shutdown	Shutdown	35.04	14.11	25.81	13.65	23.48	13.69	22.91	14.29
8	19:00:00	30.68	14.18	Shutdown	Shutdown	35.06	14.13	25.89	13.63	23.98	13.57	23.08	14.29
8	20:00:00	30.38	14.19	Shutdown	Shutdown	34.48	14.13	25.62	13.64	23.87	13.60	24.56	14.27
8	21:00:00	29.61	14.18	Shutdown	Shutdown	35.38	14.14	25.35	13.64	24.26	13.64	24.61	14.26
8	22:00:00	28.71	14.21	Shutdown	Shutdown	33.97	14.13	25.83	13.64	24.43	13.74	24.37	14.26
8	23:00:00	28.04	14.15	Shutdown	Shutdown	33.94	14.11	23.64	13.72	20.62	13.79	23.49	14.23
9	0:00:00	29.32	14.14	Shutdown	Shutdown	34.63	14.09	21.80	13.87	20.79	13.77	23.42	14.21
9	1:00:00	29.40	14.14	Shutdown	Shutdown	34.31	14.08	18.30	13.99	20.89	13.77	23.18	14.21
9	2:00:00	29.32	14.13	Shutdown	Shutdown	33.82	14.06	18.69	13.94	19.98	13.77	23.20	14.21
9	3:00:00	29.28	14.15	Shutdown	Shutdown	33.64	14.07	18.26	13.94	18.61	13.77	22.99	14.20
9	4:00:00	30.12	14.16	Shutdown	Shutdown	33.66	14.07	17.15	13.97	18.47	13.82	23.23	14.18
9	5:00:00	29.27	14.18	Shutdown	Shutdown	33.77	14.07	18.04	13.97	18.83	13.84	23.45	14.20
9	6:00:00	29.97	14.19	Shutdown	Shutdown	34.93	14.09	18.88	13.94	18.97	13.85	23.61	14.20
9	7:00:00	29.60	14.21	Shutdown	Shutdown	35.33	14.11	20.27	13.96	18.77	13.86	23.65	14.21
9	8:00:00	28.94	14.24	Shutdown	Shutdown	35.28	14.15	19.90	13.99	18.62	13.92	23.20	14.31
9	9:00:00	28.41	14.25	Shutdown	Shutdown	35.01	14.17	19.56	14.04	22.34	13.89	23.18	14.34
9	10:00:00	27.42	14.27	Shutdown	Shutdown	30.74	15.17	26.72	13.78	27.03	13.82	23.02	14.33
9	11:00:00	25.95	14.25	Shutdown	Shutdown	37.86	10.86	27.07	13.74	27.07	13.81	22.58	14.34
9	12:00:00	24.33	14.22	Shutdown	Shutdown	33.92	13.95	26.79	13.74	26.16	13.77	22.85	14.30
9	13:00:00	24.52	14.20	Shutdown	Shutdown	34.26	13.95	26.61	13.77	26.22	13.78	22.41	14.29
9	14:00:00	25.17	14.18	Shutdown	Shutdown	33.12	14.01	26.85	13.69	26.06	13.76	22.98	14.24

วันที่	เวลา	TOPSPP (G-85053) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
9	15:00:00	24.75	14.18	Shutdown	Shutdown	32.46	14.10	26.83	13.68	26.34	13.78	24.22	14.20
9	16:00:00	25.13	14.19	Shutdown	Shutdown	33.07	14.11	26.60	13.72	27.29	13.79	24.73	14.24
9	17:00:00	26.14	14.18	Shutdown	Shutdown	33.88	14.10	25.81	13.69	27.69	13.79	23.64	14.27
9	18:00:00	28.45	14.17	Shutdown	Shutdown	34.22	14.09	25.38	13.61	27.03	13.77	21.44	14.32
9	19:00:00	29.11	14.17	Shutdown	Shutdown	33.37	14.08	25.35	13.61	26.75	13.75	22.45	14.32
9	20:00:00	28.82	14.17	Shutdown	Shutdown	33.76	14.09	25.27	13.63	26.99	13.77	22.94	14.30
9	21:00:00	26.21	14.13	Shutdown	Shutdown	33.21	14.10	25.11	13.62	26.98	13.77	22.91	14.30
9	22:00:00	25.55	14.13	Shutdown	Shutdown	31.46	14.08	25.45	13.66	26.11	13.82	22.20	14.28
9	23:00:00	26.71	14.12	Shutdown	Shutdown	30.60	14.08	21.73	13.72	22.45	13.80	22.33	14.21
10	0:00:00	28.23	14.12	Shutdown	Shutdown	30.89	14.07	23.45	13.61	19.85	13.87	22.48	14.21
10	1:00:00	28.47	14.11	Shutdown	Shutdown	31.32	14.06	23.56	13.59	19.58	13.86	22.88	14.23
10	2:00:00	27.69	14.10	Shutdown	Shutdown	30.74	14.03	23.46	13.58	20.03	13.82	23.50	14.27
10	3:00:00	27.02	14.09	Shutdown	Shutdown	30.97	14.03	23.62	13.57	19.87	13.78	23.40	14.27
10	4:00:00	28.13	14.10	Shutdown	Shutdown	31.03	14.03	23.38	13.57	19.63	13.78	22.72	14.20
10	5:00:00	28.98	14.11	Shutdown	Shutdown	30.57	14.02	23.32	13.59	19.43	13.79	23.18	14.21
10	6:00:00	27.28	14.11	Shutdown	Shutdown	31.16	14.03	23.04	13.60	19.41	13.81	23.56	14.20
10	7:00:00	26.81	14.12	Shutdown	Shutdown	32.09	14.06	22.96	13.63	19.62	13.82	23.49	14.22
10	8:00:00	24.65	14.17	Shutdown	Shutdown	32.48	14.09	23.15	13.65	19.64	13.84	24.65	14.31
10	9:00:00	25.24	14.21	Shutdown	Shutdown	33.95	14.13	24.67	13.74	22.59	13.83	23.57	14.35
10	10:00:00	26.34	14.23	Shutdown	Shutdown	32.91	14.14	24.74	13.75	26.39	13.80	23.48	14.35
10	11:00:00	26.20	14.19	Shutdown	Shutdown	31.55	14.13	25.01	13.74	25.79	13.74	24.54	14.31
10	12:00:00	26.38	14.17	Shutdown	Shutdown	32.02	14.14	25.19	13.78	25.70	13.71	23.83	14.29
10	13:00:00	28.31	14.22	Shutdown	Shutdown	32.87	14.14	25.47	13.84	25.79	13.71	24.37	14.27
10	14:00:00	30.07	14.25	Shutdown	Shutdown	32.30	14.12	25.72	13.78	26.11	13.71	24.45	14.24
10	15:00:00	28.79	14.22	Shutdown	Shutdown	31.70	14.10	25.35	13.70	26.46	13.69	24.93	14.21
10	16:00:00	28.93	14.22	Shutdown	Shutdown	33.36	14.04	23.78	13.68	26.46	13.72	24.05	14.26
10	17:00:00	29.43	14.23	Shutdown	Shutdown	35.37	14.03	23.51	13.63	26.80	13.73	23.28	14.31
10	18:00:00	28.97	14.22	Shutdown	Shutdown	35.08	14.02	24.92	13.69	27.19	13.74	22.69	14.31
10	19:00:00	28.28	14.20	Shutdown	Shutdown	34.98	14.03	25.32	13.80	26.57	13.70	22.75	14.32
10	20:00:00	27.84	14.21	Shutdown	Shutdown	35.35	14.04	25.10	13.79	26.54	13.70	23.11	14.28
10	21:00:00	28.30	14.22	Shutdown	Shutdown	35.65	14.04	25.11	13.79	26.34	13.71	23.13	14.26
10	22:00:00	27.14	14.23	Shutdown	Shutdown	35.55	14.04	23.82	13.71	25.00	13.74	23.08	14.24
10	23:00:00	24.62	14.16	Shutdown	Shutdown	35.23	14.03	24.29	13.60	21.80	13.76	22.63	14.22
11	0:00:00	26.43	14.16	Shutdown	Shutdown	35.04	14.02	24.39	13.59	19.66	13.81	22.85	14.20
11	1:00:00	26.89	14.15	Shutdown	Shutdown	34.47	14.00	24.20	13.57	20.08	13.77	22.57	14.23
11	2:00:00	27.27	14.14	Shutdown	Shutdown	34.78	14.00	24.15	13.58	21.25	13.68	22.58	14.22
11	3:00:00	28.52	14.14	Shutdown	Shutdown	35.24	13.99	24.06	13.58	21.36	13.62	22.62	14.19
11	4:00:00	29.05	14.15	Shutdown	Shutdown	35.14	13.99	24.06	13.59	20.64	13.63	22.58	14.15
11	5:00:00	30.57	14.16	Shutdown	Shutdown	35.35	14.01	24.09	13.62	20.48	13.66	22.33	14.16
11	6:00:00	31.10	14.17	Shutdown	Shutdown	35.52	14.01	24.37	13.59	20.10	13.68	23.13	14.20
11	7:00:00	30.41	14.20	Shutdown	Shutdown	35.89	14.01	24.85	13.60	19.99	13.72	23.28	14.21
11	8:00:00	26.48	14.21	Shutdown	Shutdown	35.68	14.04	24.43	13.63	19.28	13.81	22.95	14.30

วันที่	เวลา	TOPSPP (G-85053) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
11	9:00:00	25.21	14.24	Shutdown	Shutdown	35.62	14.07	24.11	13.64	21.08	13.86	22.85	14.35
11	10:00:00	25.01	14.24	Shutdown	Shutdown	34.92	14.08	25.14	13.77	25.57	13.77	23.41	14.33
11	11:00:00	25.72	14.24	Shutdown	Shutdown	33.95	14.07	25.18	13.79	24.71	13.75	23.00	14.33
11	12:00:00	24.55	14.19	Shutdown	Shutdown	33.37	14.06	25.38	13.85	25.17	13.70	23.21	14.30
11	13:00:00	27.95	14.24	Shutdown	Shutdown	33.89	14.04	25.15	13.81	25.10	13.67	23.36	14.28
11	14:00:00	28.46	14.22	Shutdown	Shutdown	34.11	14.03	25.20	13.76	25.21	13.65	23.20	14.27
11	15:00:00	27.31	14.24	Shutdown	Shutdown	34.73	14.00	25.16	13.72	25.03	13.65	23.62	14.22
11	16:00:00	26.77	14.25	Shutdown	Shutdown	34.30	14.00	25.52	13.74	25.19	13.68	24.04	14.28
11	17:00:00	25.95	14.21	Shutdown	Shutdown	34.81	14.00	24.26	13.78	25.28	13.69	23.27	14.35
11	18:00:00	25.99	14.21	Shutdown	Shutdown	33.87	13.98	24.37	13.76	25.26	13.69	22.59	14.34
11	19:00:00	26.46	14.21	Shutdown	Shutdown	33.89	14.00	24.83	13.72	25.22	13.69	22.15	14.33
11	20:00:00	26.26	14.21	Shutdown	Shutdown	34.11	14.00	24.54	13.74	25.45	13.70	22.09	14.29
11	21:00:00	26.86	14.23	Shutdown	Shutdown	34.11	14.00	24.37	13.77	25.78	13.69	22.50	14.29
11	22:00:00	26.27	14.22	Shutdown	Shutdown	34.09	14.00	24.75	13.74	24.43	13.72	22.34	14.28
11	23:00:00	24.80	14.13	Shutdown	Shutdown	34.13	14.00	24.70	13.60	21.59	13.73	22.82	14.20
12	0:00:00	24.34	14.14	Shutdown	Shutdown	33.76	13.98	24.26	13.58	20.01	13.71	23.13	14.21
12	1:00:00	24.66	14.13	Shutdown	Shutdown	34.26	13.97	24.24	13.57	20.71	13.66	22.93	14.21
12	2:00:00	25.60	14.12	Shutdown	Shutdown	34.18	13.97	24.42	13.58	20.54	13.62	22.67	14.22
12	3:00:00	26.44	14.11	Shutdown	Shutdown	34.03	13.96	24.28	13.58	20.37	13.61	22.63	14.21
12	4:00:00	26.20	14.11	Shutdown	Shutdown	34.30	13.96	24.69	13.63	20.48	13.61	22.84	14.19
12	5:00:00	26.79	14.12	Shutdown	Shutdown	34.26	13.97	24.62	13.69	20.43	13.62	23.48	14.18
12	6:00:00	26.75	14.12	Shutdown	Shutdown	34.52	13.97	24.36	13.63	19.56	13.65	22.98	14.17
12	7:00:00	26.84	14.13	Shutdown	Shutdown	34.33	13.98	24.23	13.64	19.14	13.73	21.84	14.18
12	8:00:00	24.51	14.16	Shutdown	Shutdown	34.21	14.02	24.25	13.66	19.28	13.79	21.49	14.26
12	9:00:00	24.03	14.19	Shutdown	Shutdown	34.63	14.05	24.75	13.68	21.29	13.86	21.35	14.28
12	10:00:00	24.30	14.20	Shutdown	Shutdown	30.35	14.08	24.63	13.69	25.32	13.75	20.90	14.29
12	11:00:00	23.68	14.19	Shutdown	Shutdown	26.82	14.08	24.95	13.77	24.65	13.71	20.89	14.24
12	12:00:00	23.46	14.17	Shutdown	Shutdown	25.88	14.04	24.71	13.79	24.56	13.69	20.45	14.22
12	13:00:00	26.97	14.22	Shutdown	Shutdown	25.22	14.01	24.84	13.78	24.53	13.67	19.85	14.20
12	14:00:00	28.19	14.22	Shutdown	Shutdown	25.03	14.00	24.97	13.75	24.14	13.67	20.26	14.19
12	15:00:00	28.54	14.24	Shutdown	Shutdown	25.42	13.98	24.74	13.71	24.55	13.65	20.13	14.17
12	16:00:00	27.87	14.22	Shutdown	Shutdown	25.70	13.98	24.62	13.70	24.61	13.68	20.71	14.19
12	17:00:00	27.55	14.20	Shutdown	Shutdown	25.45	13.96	24.28	13.69	24.40	13.68	21.05	14.21
12	18:00:00	27.48	14.19	Shutdown	Shutdown	25.64	13.97	23.51	13.72	24.37	13.65	20.88	14.21
12	19:00:00	27.68	14.20	Shutdown	Shutdown	25.02	13.99	25.08	13.78	24.64	13.63	19.78	14.24
12	20:00:00	27.37	14.20	Shutdown	Shutdown	25.25	14.01	25.03	13.81	24.85	13.65	19.43	14.25
12	21:00:00	27.16	14.20	Shutdown	Shutdown	25.48	14.00	24.93	13.80	24.93	13.67	19.22	14.26
12	22:00:00	25.70	14.21	Shutdown	Shutdown	25.25	13.98	24.07	13.69	24.43	13.68	20.64	14.22
12	23:00:00	34.69	14.24	Shutdown	Shutdown	25.26	13.98	23.03	13.62	20.81	13.74	22.60	14.15
13	0:00:00	51.86	14.30	Shutdown	Shutdown	25.18	13.97	21.89	13.65	17.61	13.79	22.78	14.19
13	1:00:00	50.95	14.28	Shutdown	Shutdown	25.55	13.95	18.42	13.84	17.84	13.77	22.28	14.18
13	2:00:00	50.99	14.26	Shutdown	Shutdown	25.42	13.94	18.79	13.83	19.49	13.65	22.65	14.19

วันที่	เวลา	TOPSPP (G-85053) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O2 (%)	NOx (ppm)	O2 (%)	NOx (ppm)	O2 (%)	NOx (ppm)	O2 (%)	NOx (ppm)	O2 (%)
13	3:00:00	51.51	14.25	Shutdown	Shutdown	25.25	13.93	18.84	13.85	19.61	13.66	23.38	14.24
13	4:00:00	51.60	14.24	Shutdown	Shutdown	25.12	13.93	18.94	13.90	19.65	13.66	23.31	14.21
13	5:00:00	51.30	14.24	Shutdown	Shutdown	25.23	13.93	18.96	13.92	19.68	13.68	23.38	14.17
13	6:00:00	51.96	14.27	Shutdown	Shutdown	25.24	13.95	19.17	13.84	19.53	13.69	22.94	14.17
13	7:00:00	52.42	14.27	Shutdown	Shutdown	25.42	13.97	18.81	13.85	19.84	13.71	22.82	14.17
13	8:00:00	52.26	14.29	Shutdown	Shutdown	25.47	13.99	18.58	13.89	20.17	13.76	22.37	14.25
13	9:00:00	52.92	14.30	Shutdown	Shutdown	26.40	14.02	18.68	13.93	22.39	13.77	22.41	14.29
13	10:00:00	45.68	14.27	Shutdown	Shutdown	26.31	14.03	19.04	13.93	23.79	13.75	22.99	14.30
13	11:00:00	46.54	14.29	Shutdown	Shutdown	26.20	14.03	18.92	13.97	24.01	13.76	23.59	14.29
13	12:00:00	44.48	14.25	Shutdown	Shutdown	25.16	14.02	19.80	14.01	24.67	13.72	23.86	14.28
13	13:00:00	27.52	14.23	Shutdown	Shutdown	25.29	13.99	19.72	14.00	23.96	13.74	23.16	14.25
13	14:00:00	28.01	14.20	Shutdown	Shutdown	26.46	13.94	19.95	13.97	23.73	13.73	22.53	14.21
13	15:00:00	27.91	14.19	Shutdown	Shutdown	26.21	13.94	19.68	13.91	23.47	13.74	22.32	14.20
13	16:00:00	28.28	14.20	Shutdown	Shutdown	26.23	13.95	19.40	13.88	23.70	13.71	23.33	14.23
13	17:00:00	28.11	14.20	Shutdown	Shutdown	25.88	13.94	19.63	13.90	23.76	13.70	23.37	14.25
13	18:00:00	27.48	14.21	Shutdown	Shutdown	26.05	13.95	21.98	13.85	23.50	13.67	23.65	14.25
13	19:00:00	27.79	14.21	Shutdown	Shutdown	25.84	13.97	25.75	13.81	23.70	13.72	24.00	14.25
13	20:00:00	27.72	14.22	Shutdown	Shutdown	25.33	13.97	25.59	13.78	23.49	13.72	24.11	14.24
13	21:00:00	27.51	14.22	Shutdown	Shutdown	25.33	13.97	25.08	13.76	23.77	13.71	23.53	14.23
13	22:00:00	27.44	14.21	Shutdown	Shutdown	25.18	13.97	21.71	13.79	23.53	13.71	22.12	14.26
13	23:00:00	43.67	14.28	Shutdown	Shutdown	25.64	13.97	18.74	13.83	23.16	13.64	22.46	14.21
14	0:00:00	51.37	14.24	Shutdown	Shutdown	25.71	13.95	18.34	13.82	23.19	13.60	22.29	14.22
14	1:00:00	50.62	14.23	Shutdown	Shutdown	25.73	13.94	18.32	13.81	23.31	13.60	22.38	14.21
14	2:00:00	51.35	14.24	Shutdown	Shutdown	25.03	13.95	18.42	13.80	22.90	13.58	22.16	14.23
14	3:00:00	52.56	14.22	Shutdown	Shutdown	24.75	13.94	18.45	13.82	22.77	13.56	22.46	14.19
14	4:00:00	52.66	14.20	Shutdown	Shutdown	25.24	13.94	18.95	13.85	23.00	13.59	22.42	14.16
14	5:00:00	51.88	14.19	Shutdown	Shutdown	25.03	13.95	19.34	13.85	22.59	13.59	21.28	14.14
14	6:00:00	52.31	14.19	Shutdown	Shutdown	25.39	13.96	19.40	13.80	23.01	13.61	20.59	14.12
14	7:00:00	51.56	14.19	Shutdown	Shutdown	25.63	13.97	18.98	13.82	23.29	13.64	20.20	14.18
14	8:00:00	50.34	14.23	Shutdown	Shutdown	25.50	14.00	18.85	13.87	23.81	13.68	20.05	14.30
14	9:00:00	51.57	14.27	Shutdown	Shutdown	26.43	14.04	19.09	13.91	24.40	13.73	30.81	5.97
14	10:00:00	50.70	14.28	Shutdown	Shutdown	26.52	14.05	19.04	13.93	25.22	13.73	19.52	13.74
14	11:00:00	52.14	14.33	Shutdown	Shutdown	26.19	14.04	19.90	13.97	25.31	13.73	19.33	14.08
14	12:00:00	49.75	14.28	Shutdown	Shutdown	25.86	14.03	19.61	14.01	25.28	13.73	18.82	14.04
14	13:00:00	27.27	14.25	Shutdown	Shutdown	25.70	14.03	19.53	14.00	24.92	13.72	18.45	14.06
14	14:00:00	26.39	14.26	Shutdown	Shutdown	25.77	14.00	19.97	14.01	24.56	13.70	18.15	14.06
14	15:00:00	26.61	14.25	Shutdown	Shutdown	25.68	14.00	19.55	14.00	24.38	13.68	17.80	14.08
14	16:00:00	25.87	14.24	Shutdown	Shutdown	25.55	13.99	20.13	14.00	24.86	13.69	17.90	14.10
14	17:00:00	25.83	14.23	Shutdown	Shutdown	25.44	13.98	20.06	13.98	24.98	13.70	18.19	14.10
14	18:00:00	26.73	14.25	Shutdown	Shutdown	25.03	13.99	23.29	13.93	25.22	13.68	18.39	14.08
14	19:00:00	26.64	14.24	Shutdown	Shutdown	25.35	14.00	27.24	13.88	25.37	13.70	18.35	14.08
14	20:00:00	27.30	14.26	Shutdown	Shutdown	25.54	14.01	27.19	13.86	25.29	13.70	18.55	14.09

วันที่	เวลา	TOPSPP (G-85053) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
14	21:00:00	28.63	14.23	Shutdown	Shutdown	25.39	14.00	25.48	13.75	25.48	13.71	18.35	14.10
14	22:00:00	27.34	14.22	Shutdown	Shutdown	25.29	14.00	22.77	13.81	24.71	13.75	18.86	14.06
14	23:00:00	29.51	14.22	Shutdown	Shutdown	25.07	13.99	20.23	13.88	21.96	13.74	17.69	14.04
15	0:00:00	30.10	14.20	Shutdown	Shutdown	25.42	13.98	19.57	13.88	20.07	13.76	17.38	14.04
15	1:00:00	30.27	14.20	Shutdown	Shutdown	25.52	13.97	19.33	13.86	19.03	13.80	18.91	14.04
15	2:00:00	29.86	14.19	Shutdown	Shutdown	25.47	13.95	19.36	13.86	18.48	13.75	18.48	14.02
15	3:00:00	30.01	14.19	Shutdown	Shutdown	25.96	13.94	18.88	13.84	18.19	13.77	18.74	14.00
15	4:00:00	30.31	14.18	Shutdown	Shutdown	25.86	13.93	19.00	13.84	17.63	13.79	19.03	13.96
15	5:00:00	30.93	14.19	Shutdown	Shutdown	25.23	13.93	19.58	13.84	17.45	13.77	18.99	13.96
15	6:00:00	31.49	14.20	Shutdown	Shutdown	25.17	13.94	19.43	13.81	17.42	13.78	18.97	13.96
15	7:00:00	31.49	14.22	Shutdown	Shutdown	25.45	13.95	19.47	13.85	17.92	13.82	18.85	14.02
15	8:00:00	33.06	14.28	Shutdown	Shutdown	25.59	13.99	19.03	13.88	18.23	13.88	19.12	14.11
15	9:00:00	51.82	14.31	Shutdown	Shutdown	26.00	14.02	18.80	13.91	18.38	13.90	18.62	14.16
15	10:00:00	47.41	14.26	Shutdown	Shutdown	26.93	14.04	18.83	13.96	18.34	13.88	17.76	14.14
15	11:00:00	46.44	14.25	Shutdown	Shutdown	26.45	14.04	19.55	14.01	18.27	13.86	18.05	14.13
15	12:00:00	45.40	14.22	Shutdown	Shutdown	25.91	14.02	19.28	14.00	18.55	13.84	18.29	14.09
15	13:00:00	27.11	14.23	Shutdown	Shutdown	25.59	13.99	19.03	13.96	18.07	13.83	18.91	14.04
15	14:00:00	27.95	14.22	Shutdown	Shutdown	26.35	13.99	19.82	13.93	17.74	13.80	18.88	14.02
15	15:00:00	27.71	14.21	Shutdown	Shutdown	26.14	13.96	19.55	13.91	19.00	13.71	18.05	14.12
15	16:00:00	27.52	14.20	Shutdown	Shutdown	25.78	13.96	19.59	13.91	19.38	13.72	18.07	14.14
15	17:00:00	27.98	14.19	Shutdown	Shutdown	25.98	13.95	19.56	13.89	19.84	13.73	18.69	14.12
15	18:00:00	27.94	14.21	Shutdown	Shutdown	25.93	13.95	22.49	13.82	23.10	13.67	19.03	14.12
15	19:00:00	28.66	14.23	Shutdown	Shutdown	25.77	13.97	27.24	13.73	24.24	13.65	18.63	14.13
15	20:00:00	28.48	14.23	Shutdown	Shutdown	25.58	13.98	26.39	13.77	24.26	13.65	18.64	14.14
15	21:00:00	28.06	14.22	Shutdown	Shutdown	25.54	13.98	25.51	13.80	24.08	13.65	18.21	14.14
15	22:00:00	27.44	14.21	Shutdown	Shutdown	25.47	13.97	21.90	13.79	23.73	13.70	18.47	14.14
15	23:00:00	27.95	14.21	Shutdown	Shutdown	25.37	13.98	18.80	13.84	18.08	13.84	18.92	14.09
16	0:00:00	27.56	14.19	Shutdown	Shutdown	25.48	13.97	18.18	13.83	17.32	13.88	19.33	14.06
16	1:00:00	28.12	14.18	Shutdown	Shutdown	25.69	13.96	18.30	13.82	16.87	13.87	19.00	14.05
16	2:00:00	28.68	14.16	Shutdown	Shutdown	25.51	13.96	18.32	13.81	16.99	13.83	17.98	14.06
16	3:00:00	28.09	14.15	Shutdown	Shutdown	25.55	13.95	18.24	13.83	17.41	13.85	17.52	14.04
16	4:00:00	28.94	14.15	Shutdown	Shutdown	25.83	13.95	18.69	13.83	17.32	13.85	16.96	14.03
16	5:00:00	28.43	14.16	Shutdown	Shutdown	25.96	13.95	18.80	13.83	17.00	13.85	18.12	14.04
16	6:00:00	27.78	14.17	Shutdown	Shutdown	26.28	13.96	18.43	13.82	17.45	13.85	17.33	14.07
16	7:00:00	28.21	14.18	Shutdown	Shutdown	25.99	13.98	18.28	13.82	17.30	13.88	18.10	14.09
16	8:00:00	27.34	14.21	Shutdown	Shutdown	26.17	14.00	18.37	13.85	17.73	13.92	17.01	14.16
16	9:00:00	26.11	14.24	Shutdown	Shutdown	26.54	14.02	18.25	13.87	17.75	13.96	17.77	14.17
16	10:00:00	25.33	14.24	Shutdown	Shutdown	26.28	14.04	18.62	13.91	17.77	13.91	19.23	14.15
16	11:00:00	25.02	14.24	Shutdown	Shutdown	26.31	14.03	19.05	13.99	17.77	13.92	17.82	14.14
16	12:00:00	25.22	14.25	Shutdown	Shutdown	26.19	14.01	18.73	14.00	17.71	13.89	18.16	14.12
16	13:00:00	24.12	14.23	Shutdown	Shutdown	25.76	14.00	18.63	13.97	17.29	13.84	17.45	14.08
16	14:00:00	24.21	14.21	Shutdown	Shutdown	26.07	13.98	18.72	13.92	17.28	13.82	16.65	14.09

วันที่	เวลา	TOPSPP (G-85053) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
16	15:00:00	23.62	14.20	Shutdown	Shutdown	26.22	13.96	18.37	13.88	17.32	13.83	17.97	14.16
16	16:00:00	23.99	14.21	Shutdown	Shutdown	25.75	13.94	18.27	13.87	17.74	13.86	17.79	14.17
16	17:00:00	25.48	14.22	Shutdown	Shutdown	26.08	13.95	18.08	13.86	17.77	13.84	18.21	14.14
16	18:00:00	28.54	14.22	Shutdown	Shutdown	26.57	13.96	21.29	13.80	19.97	13.68	18.59	14.14
16	19:00:00	28.66	14.22	Shutdown	Shutdown	26.45	13.99	26.30	13.75	23.42	13.58	17.10	14.16
16	20:00:00	28.57	14.25	Shutdown	Shutdown	26.63	14.01	26.16	13.76	23.43	13.57	16.68	14.17
16	21:00:00	26.67	14.21	Shutdown	Shutdown	26.04	14.01	26.31	13.73	23.55	13.60	16.91	14.16
16	22:00:00	25.93	14.17	Shutdown	Shutdown	26.36	14.00	21.78	13.77	23.48	13.64	16.57	14.16
16	23:00:00	24.40	14.15	Shutdown	Shutdown	26.14	13.98	18.28	13.84	20.95	13.59	17.14	14.08
17	0:00:00	24.80	14.15	Shutdown	Shutdown	26.26	13.98	17.98	13.82	21.04	13.58	17.03	14.04
17	1:00:00	24.97	14.15	Shutdown	Shutdown	25.94	13.96	17.71	13.83	22.35	13.52	16.90	14.03
17	2:00:00	25.14	14.14	Shutdown	Shutdown	25.82	13.96	17.56	13.82	23.43	13.48	16.72	14.03
17	3:00:00	25.10	14.14	Shutdown	Shutdown	25.85	13.95	18.15	13.83	23.09	13.48	16.75	14.02
17	4:00:00	29.12	14.19	Shutdown	Shutdown	25.68	13.95	18.34	13.84	23.18	13.46	16.46	14.00
17	5:00:00	29.39	14.21	Shutdown	Shutdown	26.10	13.95	18.18	13.85	23.36	13.47	16.43	14.01
17	6:00:00	29.48	14.21	Shutdown	Shutdown	26.00	13.94	18.36	13.84	22.83	13.52	16.34	14.04
17	7:00:00	29.86	14.23	Shutdown	Shutdown	25.74	13.96	18.55	13.85	23.07	13.52	16.05	14.05
17	8:00:00	29.33	14.26	Shutdown	Shutdown	25.92	13.98	18.20	13.87	21.96	13.59	16.11	14.14
17	9:00:00	26.01	14.26	Shutdown	Shutdown	26.65	14.01	18.52	13.90	21.46	13.69	15.49	14.19
17	10:00:00	25.76	14.25	Shutdown	Shutdown	26.76	14.04	18.93	13.99	24.33	13.71	16.81	14.14
17	11:00:00	44.05	14.35	Shutdown	Shutdown	26.86	14.03	19.46	13.99	23.92	13.71	16.74	14.13
17	12:00:00	51.37	14.35	Shutdown	Shutdown	26.27	14.01	19.01	13.96	24.03	13.74	16.83	14.12
17	13:00:00	29.80	14.23	Shutdown	Shutdown	25.89	13.99	18.49	13.96	23.70	13.71	15.51	14.12
17	14:00:00	28.86	14.22	Shutdown	Shutdown	26.39	13.98	18.24	13.95	24.79	13.65	15.34	14.12
17	15:00:00	28.00	14.19	Shutdown	Shutdown	27.17	13.97	18.19	13.95	25.36	13.70	16.23	14.15
17	16:00:00	28.28	14.19	Shutdown	Shutdown	27.18	13.93	18.58	13.94	25.91	13.74	16.19	14.14
17	17:00:00	27.44	14.19	Shutdown	Shutdown	26.13	13.93	18.46	13.93	25.03	13.75	15.65	14.15
17	18:00:00	27.49	14.18	Shutdown	Shutdown	25.78	13.94	22.74	13.87	26.11	13.71	16.23	14.17
17	19:00:00	27.51	14.17	Shutdown	Shutdown	26.42	13.95	27.16	13.80	26.06	13.73	15.75	14.15
17	20:00:00	27.17	14.19	Shutdown	Shutdown	26.52	13.97	27.53	13.80	25.88	13.73	16.84	14.14
17	21:00:00	27.45	14.19	Shutdown	Shutdown	26.32	13.98	27.70	13.79	25.59	13.73	16.13	14.13
17	22:00:00	26.67	14.19	Shutdown	Shutdown	26.60	13.99	22.58	13.83	24.84	13.72	15.76	14.15
17	23:00:00	26.03	14.20	Shutdown	Shutdown	26.50	13.97	19.94	13.88	20.45	13.82	14.20	14.14
18	0:00:00	25.65	14.21	Shutdown	Shutdown	26.25	13.94	18.96	13.88	17.75	13.90	11.81	14.16
18	1:00:00	25.75	14.20	Shutdown	Shutdown	26.46	13.95	19.23	13.87	17.69	13.88	12.48	14.17
18	2:00:00	26.57	14.18	Shutdown	Shutdown	26.01	13.95	18.95	13.87	17.48	13.85	11.81	14.17
18	3:00:00	26.32	14.19	Shutdown	Shutdown	25.79	13.93	18.85	13.87	17.29	13.85	11.91	14.15
18	4:00:00	26.75	14.18	Shutdown	Shutdown	25.89	13.91	18.39	13.91	17.73	13.85	13.27	14.14
18	5:00:00	26.78	14.18	Shutdown	Shutdown	26.49	13.92	19.61	13.84	17.76	13.85	13.37	14.11
18	6:00:00	26.55	14.19	Shutdown	Shutdown	26.28	13.93	19.42	13.83	19.10	13.80	12.53	14.13
18	7:00:00	25.70	14.20	Shutdown	Shutdown	26.05	13.96	19.40	13.86	21.02	13.71	13.33	14.13
18	8:00:00	24.98	14.23	Shutdown	Shutdown	25.99	13.98	19.04	13.94	18.80	13.83	17.06	14.13

วันที่	เวลา	TOPSPP (G-85053) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
18	9:00:00	26.01	14.29	Shutdown	Shutdown	26.25	14.01	18.48	14.01	20.63	13.78	17.10	14.19
18	10:00:00	26.46	14.31	Shutdown	Shutdown	26.80	14.02	26.13	13.85	25.04	13.68	17.67	14.17
18	11:00:00	24.78	14.29	Shutdown	Shutdown	26.51	14.00	26.73	13.82	24.86	13.72	17.92	14.16
18	12:00:00	24.74	14.28	Shutdown	Shutdown	26.73	14.01	26.86	13.82	25.34	13.73	16.35	14.15
18	13:00:00	27.79	14.26	Shutdown	Shutdown	27.78	14.00	27.24	13.80	25.17	13.70	17.32	14.13
18	14:00:00	28.42	14.21	Shutdown	Shutdown	27.40	13.97	27.34	13.77	25.63	13.69	18.21	14.11
18	15:00:00	28.95	14.24	Shutdown	Shutdown	27.17	13.94	27.63	13.75	25.51	13.68	17.19	14.13
18	16:00:00	28.54	14.20	Shutdown	Shutdown	27.80	13.93	27.59	13.77	25.21	13.68	17.36	14.14
18	17:00:00	28.46	14.18	Shutdown	Shutdown	27.71	13.94	27.11	13.78	25.52	13.68	16.96	14.15
18	18:00:00	29.63	14.18	Shutdown	Shutdown	27.89	13.95	28.04	13.80	25.56	13.66	16.75	14.18
18	19:00:00	29.51	14.18	Shutdown	Shutdown	28.05	13.96	28.39	13.76	25.44	13.68	17.75	14.16
18	20:00:00	28.87	14.18	Shutdown	Shutdown	27.97	13.97	28.33	13.75	25.59	13.69	17.54	14.20
18	21:00:00	29.08	14.18	Shutdown	Shutdown	28.19	13.97	28.20	13.77	25.22	13.72	17.44	14.20
18	22:00:00	28.39	14.20	Shutdown	Shutdown	28.49	13.99	28.00	13.77	24.39	13.74	16.79	14.16
18	23:00:00	29.83	14.25	Shutdown	Shutdown	28.91	13.99	23.05	13.76	22.51	13.74	15.14	14.14
19	0:00:00	30.04	14.27	Shutdown	Shutdown	29.36	13.98	21.56	13.78	20.74	13.78	12.64	14.15
19	1:00:00	29.45	14.28	Shutdown	Shutdown	28.96	13.97	21.42	13.74	20.82	13.75	12.05	14.13
19	2:00:00	30.02	14.25	Shutdown	Shutdown	28.51	13.95	20.70	13.80	20.66	13.73	11.12	14.15
19	3:00:00	30.62	14.25	Shutdown	Shutdown	28.71	13.96	20.58	13.79	20.59	13.71	11.10	14.14
19	4:00:00	31.20	14.26	Shutdown	Shutdown	28.83	13.95	20.65	13.77	20.55	13.71	11.72	14.11
19	5:00:00	28.32	14.21	Shutdown	Shutdown	28.61	13.94	21.09	13.72	20.33	13.72	11.90	14.10
19	6:00:00	29.24	14.23	Shutdown	Shutdown	28.50	13.94	20.72	13.73	20.39	13.72	12.61	14.16
19	7:00:00	29.13	14.24	Shutdown	Shutdown	28.25	13.96	20.69	13.76	20.75	13.75	12.74	14.20
19	8:00:00	36.53	14.32	Shutdown	Shutdown	28.51	13.99	19.76	13.90	20.53	13.78	13.19	14.21
19	9:00:00	51.37	14.28	Shutdown	Shutdown	27.76	14.02	19.03	13.95	22.21	13.75	12.87	14.21
19	10:00:00	49.20	14.28	Shutdown	Shutdown	27.78	14.02	24.39	13.69	25.29	13.72	12.94	14.23
19	11:00:00	51.84	14.34	Shutdown	Shutdown	27.26	14.00	24.94	13.71	25.70	13.73	13.33	14.20
19	12:00:00	52.05	14.35	Shutdown	Shutdown	27.21	13.98	25.52	13.72	26.10	13.73	11.94	14.18
19	13:00:00	27.61	14.25	Shutdown	Shutdown	27.12	13.96	25.48	13.65	25.68	13.72	10.97	14.18
19	14:00:00	26.28	14.19	Shutdown	Shutdown	27.18	13.94	24.75	13.64	25.59	13.69	10.59	14.19
19	15:00:00	25.45	14.19	Shutdown	Shutdown	26.73	13.92	25.01	13.65	25.67	13.68	10.85	14.21
19	16:00:00	25.48	14.19	Shutdown	Shutdown	26.17	13.91	24.52	13.66	26.04	13.71	11.53	14.21
19	17:00:00	25.85	14.19	Shutdown	Shutdown	26.03	13.91	24.46	13.64	25.83	13.69	11.89	14.22
19	18:00:00	25.53	14.17	Shutdown	Shutdown	26.35	13.93	24.48	13.62	25.32	13.68	17.48	14.14
19	19:00:00	26.50	14.21	Shutdown	Shutdown	26.32	13.95	24.73	13.64	25.46	13.69	17.58	14.10
19	20:00:00	26.90	14.20	Shutdown	Shutdown	26.07	13.96	24.57	13.69	25.30	13.70	18.33	14.11
19	21:00:00	25.26	14.10	Shutdown	Shutdown	26.62	13.95	24.66	13.61	25.29	13.72	18.60	14.11
19	22:00:00	25.61	14.15	Shutdown	Shutdown	26.63	13.94	24.68	13.66	24.41	13.77	18.87	14.09
19	23:00:00	26.74	14.23	Shutdown	Shutdown	26.95	13.93	19.90	13.82	22.45	13.70	17.83	13.99
20	0:00:00	25.64	14.17	Shutdown	Shutdown	26.96	13.92	19.33	13.82	21.75	13.64	17.74	13.99
20	1:00:00	24.66	14.17	Shutdown	Shutdown	27.15	13.90	19.38	13.79	21.80	13.60	17.72	13.97
20	2:00:00	25.25	14.17	Shutdown	Shutdown	26.64	13.88	19.97	13.78	21.72	13.60	17.34	13.94

วันที่	เวลา	TOPSPP (G-85053) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
20	3:00:00	26.60	14.21	Shutdown	Shutdown	26.68	13.88	20.44	13.79	21.66	13.60	16.93	13.94
20	4:00:00	27.19	14.18	Shutdown	Shutdown	26.38	13.89	20.20	13.81	21.70	13.60	16.88	13.93
20	5:00:00	26.94	14.18	Shutdown	Shutdown	26.53	13.89	19.99	13.76	21.70	13.61	17.92	13.91
20	6:00:00	31.10	14.23	Shutdown	Shutdown	26.33	13.89	20.05	13.75	21.73	13.63	18.07	13.91
20	7:00:00	49.34	14.23	Shutdown	Shutdown	26.78	13.91	19.28	13.84	21.87	13.64	17.58	13.94
20	8:00:00	47.07	14.21	Shutdown	Shutdown	26.98	13.94	18.81	13.94	22.05	13.68	17.98	14.11
20	9:00:00	28.29	14.24	Shutdown	Shutdown	27.36	13.96	19.92	13.95	22.17	13.71	18.18	14.11
20	10:00:00	27.20	14.27	Shutdown	Shutdown	27.42	13.97	25.16	13.80	24.21	13.74	18.10	14.09
20	11:00:00	27.92	14.32	Shutdown	Shutdown	27.28	13.99	25.44	13.83	23.85	13.74	18.07	14.08
20	12:00:00	24.85	14.25	Shutdown	Shutdown	26.70	13.97	25.55	13.85	24.64	13.71	17.28	14.06
20	13:00:00	25.50	14.19	Shutdown	Shutdown	26.27	13.94	25.80	13.83	24.06	13.68	17.67	14.05
20	14:00:00	25.61	14.16	Shutdown	Shutdown	26.95	13.90	26.10	13.80	24.64	13.66	18.72	14.06
20	15:00:00	25.84	14.12	Shutdown	Shutdown	27.49	13.89	26.19	13.79	25.00	13.68	18.62	14.08
20	16:00:00	25.35	14.14	Shutdown	Shutdown	27.27	13.89	25.86	13.76	24.52	13.73	18.44	14.09
20	17:00:00	25.68	14.13	Shutdown	Shutdown	26.89	13.89	26.08	13.75	24.72	13.69	17.71	14.07
20	18:00:00	26.45	14.12	Shutdown	Shutdown	26.67	13.89	26.03	13.74	24.59	13.66	17.45	14.06
20	19:00:00	26.72	14.16	Shutdown	Shutdown	26.41	13.89	26.21	13.79	24.77	13.70	17.36	14.04
20	20:00:00	26.38	14.16	Shutdown	Shutdown	26.51	13.93	26.02	13.84	25.29	13.69	17.26	14.03
20	21:00:00	26.57	14.12	Shutdown	Shutdown	26.76	13.94	26.38	13.81	24.89	13.73	17.31	14.03
20	22:00:00	26.66	14.13	Shutdown	Shutdown	26.41	13.94	26.09	13.79	25.11	13.71	16.23	14.10
20	23:00:00	25.85	14.20	Shutdown	Shutdown	26.57	13.94	21.21	13.92	24.46	13.61	15.82	14.06
21	0:00:00	26.32	14.17	Shutdown	Shutdown	26.58	13.93	17.07	14.01	23.64	13.56	16.57	13.98
21	1:00:00	24.74	14.14	Shutdown	Shutdown	27.01	13.94	17.23	13.99	23.57	13.53	16.52	13.97
21	2:00:00	26.10	14.11	Shutdown	Shutdown	26.92	13.94	17.10	13.99	23.53	13.53	16.62	13.95
21	3:00:00	25.93	14.07	Shutdown	Shutdown	26.64	13.95	17.40	13.99	23.36	13.51	16.62	13.94
21	4:00:00	24.55	14.08	Shutdown	Shutdown	26.54	13.93	17.25	14.00	23.34	13.53	16.67	13.94
21	5:00:00	24.69	14.09	Shutdown	Shutdown	26.72	13.91	17.31	13.95	23.07	13.53	16.43	13.94
21	6:00:00	25.75	14.11	Shutdown	Shutdown	27.11	13.93	18.60	13.93	22.90	13.53	16.50	13.95
21	7:00:00	26.32	14.13	Shutdown	Shutdown	27.05	13.92	18.87	13.94	22.63	13.54	16.36	13.96
21	8:00:00	26.04	14.16	Shutdown	Shutdown	27.19	13.94	18.67	13.98	22.42	13.57	17.09	14.11
21	9:00:00	26.06	14.20	Shutdown	Shutdown	27.15	13.98	20.83	13.92	22.79	13.63	17.64	14.12
21	10:00:00	25.97	14.23	Shutdown	Shutdown	27.16	14.00	26.62	13.85	25.38	13.65	17.02	14.11
21	11:00:00	39.35	14.34	Shutdown	Shutdown	27.15	14.00	27.06	13.85	25.61	13.67	17.12	14.09
21	12:00:00	27.41	14.29	Shutdown	Shutdown	27.18	13.96	26.85	13.84	25.49	13.66	16.92	14.08
21	13:00:00	24.45	14.19	Shutdown	Shutdown	27.14	13.94	27.02	13.81	25.45	13.67	15.45	14.09
21	14:00:00	25.13	14.20	Shutdown	Shutdown	26.73	13.92	26.28	13.75	25.19	13.63	16.86	14.06
21	15:00:00	25.47	14.22	Shutdown	Shutdown	26.61	13.89	26.36	13.75	25.59	13.63	16.58	14.08
21	16:00:00	25.27	14.19	Shutdown	Shutdown	27.13	13.93	27.37	13.82	25.71	13.64	15.24	14.13
21	17:00:00	25.36	14.19	Shutdown	Shutdown	27.41	13.95	27.03	13.80	25.66	13.60	15.60	14.14
21	18:00:00	25.69	14.18	Shutdown	Shutdown	27.09	13.95	25.74	13.81	25.50	13.60	15.56	14.12
21	19:00:00	25.91	14.16	Shutdown	Shutdown	26.98	13.95	25.92	13.78	25.77	13.64	15.71	14.11
21	20:00:00	25.75	14.17	Shutdown	Shutdown	27.05	13.97	26.26	13.80	26.20	13.66	15.40	14.12

วันที่	เวลา	TOPSPP (G-85053) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O2 (%)	NOx (ppm)	O2 (%)	NOx (ppm)	O2 (%)	NOx (ppm)	O2 (%)	NOx (ppm)	O2 (%)
21	21:00:00	25.87	14.12	Shutdown	Shutdown	26.99	13.97	26.13	13.68	26.01	13.65	15.61	14.13
21	22:00:00	25.88	14.13	Shutdown	Shutdown	27.12	13.96	25.70	13.69	25.05	13.68	15.98	14.15
21	23:00:00	25.84	14.22	Shutdown	Shutdown	27.16	13.95	22.16	13.77	24.31	13.59	14.32	14.09
22	0:00:00	Shutdown	Shutdown	Shutdown	Shutdown	27.34	13.94	21.11	13.74	23.73	13.53	12.32	14.05
22	1:00:00	Shutdown	Shutdown	Shutdown	Shutdown	27.22	13.94	21.79	13.69	23.47	13.50	12.94	14.01
22	2:00:00	Shutdown	Shutdown	Shutdown	Shutdown	27.14	13.94	22.98	13.66	23.64	13.48	12.60	14.01
22	3:00:00	Shutdown	Shutdown	Shutdown	Shutdown	27.09	13.94	21.25	13.74	23.37	13.48	13.04	13.99
22	4:00:00	Shutdown	Shutdown	Shutdown	Shutdown	26.98	13.92	21.30	13.78	23.27	13.48	12.90	13.98
22	5:00:00	Shutdown	Shutdown	Shutdown	Shutdown	27.16	13.93	24.59	13.59	22.90	13.48	13.47	13.97
22	6:00:00	Shutdown	Shutdown	Shutdown	Shutdown	27.27	13.93	23.29	13.64	22.98	13.47	13.84	13.97
22	7:00:00	Shutdown	Shutdown	Shutdown	Shutdown	27.11	13.93	21.40	13.76	22.85	13.46	13.80	14.02
22	8:00:00	Shutdown	Shutdown	Shutdown	Shutdown	27.12	13.94	20.22	13.89	22.37	13.49	15.50	14.14
22	9:00:00	Shutdown	Shutdown	Shutdown	Shutdown	27.32	13.97	19.79	13.95	22.50	13.51	16.41	14.14
22	10:00:00	Shutdown	Shutdown	Shutdown	Shutdown	26.93	13.97	24.67	13.86	22.58	13.52	17.66	14.13
22	11:00:00	Shutdown	Shutdown	Shutdown	Shutdown	27.12	13.97	25.61	13.89	23.20	13.52	15.96	14.14
22	12:00:00	Shutdown	Shutdown	Shutdown	Shutdown	26.86	13.99	25.53	13.88	22.83	13.53	16.02	14.13
22	13:00:00	Shutdown	Shutdown	Shutdown	Shutdown	26.59	13.98	26.24	13.79	22.36	13.52	16.20	14.11
22	14:00:00	Shutdown	Shutdown	Shutdown	Shutdown	26.46	13.95	26.37	13.80	22.31	13.51	15.96	14.11
22	15:00:00	Shutdown	Shutdown	Shutdown	Shutdown	26.76	13.93	27.35	13.79	22.43	13.50	16.30	14.11
22	16:00:00	Shutdown	Shutdown	Shutdown	Shutdown	27.08	13.91	27.46	13.78	22.66	13.51	15.70	14.10
22	17:00:00	Shutdown	Shutdown	Shutdown	Shutdown	26.99	13.92	27.82	13.80	22.72	13.48	15.73	14.13
22	18:00:00	Shutdown	Shutdown	Shutdown	Shutdown	26.68	13.94	27.45	13.78	24.42	13.54	15.98	14.12
22	19:00:00	Shutdown	Shutdown	Shutdown	Shutdown	26.70	13.94	27.53	13.79	25.24	13.55	15.98	14.11
22	20:00:00	Shutdown	Shutdown	Shutdown	Shutdown	26.55	13.95	27.38	13.78	25.22	13.57	15.96	14.11
22	21:00:00	Shutdown	Shutdown	Shutdown	Shutdown	26.84	13.94	27.28	13.74	25.20	13.58	17.26	14.10
22	22:00:00	Shutdown	Shutdown	Shutdown	Shutdown	26.96	13.95	26.71	13.74	24.29	13.61	17.50	14.11
22	23:00:00	Shutdown	Shutdown	Shutdown	Shutdown	26.88	13.95	18.21	13.94	21.51	13.62	17.08	14.04
23	0:00:00	Shutdown	Shutdown	Shutdown	Shutdown	26.92	13.93	16.41	13.97	21.34	13.61	17.06	13.98
23	1:00:00	Shutdown	Shutdown	Shutdown	Shutdown	26.71	13.92	16.20	13.96	21.13	13.59	16.94	13.97
23	2:00:00	Shutdown	Shutdown	Shutdown	Shutdown	26.52	13.91	16.31	13.96	21.32	13.58	17.30	13.95
23	3:00:00	Shutdown	Shutdown	Shutdown	Shutdown	26.54	13.91	16.30	13.98	20.88	13.58	16.86	13.96
23	4:00:00	Shutdown	Shutdown	Shutdown	Shutdown	26.45	13.92	16.41	13.96	20.98	13.61	17.37	13.95
23	5:00:00	Shutdown	Shutdown	Shutdown	Shutdown	26.84	13.91	16.34	13.94	20.47	13.61	17.48	13.93
23	6:00:00	Shutdown	Shutdown	Shutdown	Shutdown	27.08	13.92	16.79	13.97	21.06	13.62	17.57	13.96
23	7:00:00	Shutdown	Shutdown	Shutdown	Shutdown	27.22	13.94	16.66	13.99	21.27	13.63	17.97	14.03
23	8:00:00	Shutdown	Shutdown	Shutdown	Shutdown	27.65	13.97	17.00	14.03	21.12	13.69	18.47	14.10
23	9:00:00	Shutdown	Shutdown	Shutdown	Shutdown	27.48	13.98	17.18	14.07	19.51	12.41	17.89	14.11
23	10:00:00	Shutdown	Shutdown	Shutdown	Shutdown	27.14	13.97	25.19	13.86	29.23	9.84	17.30	14.09
23	11:00:00	Shutdown	Shutdown	Shutdown	Shutdown	27.50	13.96	26.76	13.84	22.06	14.24	17.49	14.08
23	12:00:00	Shutdown	Shutdown	Shutdown	Shutdown	27.27	13.95	26.10	13.82	21.50	14.23	17.84	14.09
23	13:00:00	Shutdown	Shutdown	Shutdown	Shutdown	27.32	13.95	25.63	13.77	21.67	14.22	19.06	14.12
23	14:00:00	Shutdown	Shutdown	Shutdown	Shutdown	27.65	13.95	25.82	13.75	21.63	14.18	18.12	14.11

วันที่	เวลา	TOPSPP (G-85053) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O2 (%)	NOx (ppm)	O2 (%)	NOx (ppm)	O2 (%)	NOx (ppm)	O2 (%)	NOx (ppm)	O2 (%)
23	15:00:00	Shutdown	Shutdown	Shutdown	Shutdown	27.51	13.94	25.79	13.74	22.20	14.15	16.72	14.11
23	16:00:00	Shutdown	Shutdown	Shutdown	Shutdown	28.07	13.94	26.15	13.75	21.90	14.17	16.44	14.12
23	17:00:00	Shutdown	Shutdown	Shutdown	Shutdown	27.87	13.95	26.61	13.76	21.77	14.13	16.51	14.11
23	18:00:00	Shutdown	Shutdown	Shutdown	Shutdown	28.07	13.94	26.86	13.75	21.61	14.18	16.85	14.13
23	19:00:00	Shutdown	Shutdown	Shutdown	Shutdown	27.53	13.94	27.10	13.75	21.31	14.19	17.40	14.17
23	20:00:00	Shutdown	Shutdown	Shutdown	Shutdown	27.11	13.94	27.37	13.75	21.24	14.16	16.59	14.11
23	21:00:00	Shutdown	Shutdown	Shutdown	Shutdown	27.28	13.95	26.92	13.73	21.49	14.16	16.01	14.08
23	22:00:00	Shutdown	Shutdown	Shutdown	Shutdown	27.45	13.95	26.51	13.78	21.43	14.21	16.12	14.14
23	23:00:00	Shutdown	Shutdown	Shutdown	Shutdown	26.80	13.94	18.67	13.96	19.08	14.19	16.98	14.05
24	0:00:00	Maintenance	Maintenance	Shutdown	Shutdown	26.67	13.92	16.68	14.00	17.60	14.22	16.52	14.02
24	1:00:00	Maintenance	Maintenance	Shutdown	Shutdown	26.65	13.92	16.65	13.99	17.70	14.17	15.97	14.00
24	2:00:00	Maintenance	Maintenance	Shutdown	Shutdown	26.29	13.91	16.72	13.96	16.62	14.23	16.32	13.97
24	3:00:00	Maintenance	Maintenance	Shutdown	Shutdown	26.49	13.90	16.24	13.96	17.10	14.26	16.44	13.94
24	4:00:00	Maintenance	Maintenance	Shutdown	Shutdown	26.62	13.89	16.09	13.95	17.57	14.25	16.44	13.94
24	5:00:00	Maintenance	Maintenance	Shutdown	Shutdown	26.20	13.90	16.32	13.93	17.19	14.26	17.11	13.93
24	6:00:00	Maintenance	Maintenance	Shutdown	Shutdown	26.50	13.90	16.27	13.96	17.71	14.25	17.34	13.92
24	7:00:00	52.98	14.13	Shutdown	Shutdown	26.63	13.93	19.08	13.87	17.77	14.24	17.09	13.95
24	8:00:00	45.47	14.11	Shutdown	Shutdown	27.29	13.96	20.47	13.84	18.10	14.25	16.12	14.07
24	9:00:00	44.55	14.13	Shutdown	Shutdown	27.43	13.98	20.28	13.86	19.24	14.24	15.95	14.09
24	10:00:00	42.30	14.13	Shutdown	Shutdown	27.45	13.99	19.47	13.87	20.93	14.25	16.12	14.07
24	11:00:00	41.20	14.15	Shutdown	Shutdown	26.98	13.98	19.46	13.89	21.19	14.24	15.51	14.06
24	12:00:00	40.62	14.12	Shutdown	Shutdown	26.76	13.95	19.98	13.88	21.22	14.24	16.76	14.09
24	13:00:00	52.13	14.17	Shutdown	Shutdown	26.66	13.92	20.17	13.86	20.72	14.21	18.71	14.07
24	14:00:00	51.01	14.16	Shutdown	Shutdown	26.96	13.89	19.31	13.78	21.28	14.21	16.90	14.05
24	15:00:00	50.29	14.15	Shutdown	Shutdown	27.32	13.87	19.52	13.77	21.56	14.18	15.83	14.09
24	16:00:00	50.63	14.16	Shutdown	Shutdown	27.38	13.89	19.68	13.79	21.60	14.13	16.00	14.10
24	17:00:00	50.87	14.15	Shutdown	Shutdown	27.04	13.90	19.61	13.77	22.11	14.13	16.55	14.10
24	18:00:00	50.41	14.13	Shutdown	Shutdown	26.87	13.91	22.12	13.75	21.74	14.21	16.40	14.07
24	19:00:00	50.22	14.15	Shutdown	Shutdown	26.72	13.91	25.96	13.73	21.93	14.19	16.54	14.06
24	20:00:00	49.53	14.14	Shutdown	Shutdown	26.90	13.93	26.23	13.71	22.61	14.26	16.61	14.07
24	21:00:00	49.60	14.14	Shutdown	Shutdown	27.09	13.93	26.44	13.70	22.63	14.26	16.49	14.04
24	22:00:00	47.67	14.13	Shutdown	Shutdown	27.40	13.93	21.69	13.85	22.76	14.25	16.62	14.10
24	23:00:00	50.14	14.14	Shutdown	Shutdown	27.07	13.92	17.60	13.94	19.72	14.31	17.42	13.98
25	0:00:00	Maintenance	Maintenance	Shutdown	Shutdown	27.29	13.91	17.01	13.93	17.41	14.37	17.23	14.01
25	1:00:00	Maintenance	Maintenance	Shutdown	Shutdown	27.05	13.89	16.72	13.91	16.34	14.38	17.72	13.95
25	2:00:00	Maintenance	Maintenance	Shutdown	Shutdown	26.99	13.89	16.75	13.89	16.08	14.37	17.45	13.93
25	3:00:00	Maintenance	Maintenance	Shutdown	Shutdown	27.17	13.88	16.84	13.91	17.37	14.31	17.36	13.91
25	4:00:00	Maintenance	Maintenance	Shutdown	Shutdown	27.42	13.87	16.89	13.89	18.55	14.29	17.13	13.90
25	5:00:00	Maintenance	Maintenance	Shutdown	Shutdown	27.68	13.88	16.78	13.87	19.07	14.26	17.15	13.89
25	6:00:00	52.65	14.09	Shutdown	Shutdown	27.93	13.90	19.25	13.78	18.32	14.24	17.20	13.89
25	7:00:00	52.21	14.09	Shutdown	Shutdown	27.70	13.92	20.10	13.80	17.32	14.26	17.07	13.89
25	8:00:00	48.45	14.12	Shutdown	Shutdown	28.23	13.96	19.53	13.84	17.12	14.29	16.65	14.05

วันที่	เวลา	TOPSPP (G-85053) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O2 (%)	NOx (ppm)	O2 (%)	NOx (ppm)	O2 (%)	NOx (ppm)	O2 (%)	NOx (ppm)	O2 (%)
25	9:00:00	43.29	14.14	Shutdown	Shutdown	27.62	13.98	17.79	13.93	18.72	14.25	16.70	14.09
25	10:00:00	42.39	14.14	Shutdown	Shutdown	27.77	13.99	24.38	13.84	21.28	14.20	16.73	14.11
25	11:00:00	41.20	14.15	Shutdown	Shutdown	27.76	13.99	26.11	13.80	21.42	14.17	16.76	14.10
25	12:00:00	40.15	14.13	Shutdown	Shutdown	27.75	13.98	25.69	13.78	21.59	14.16	16.82	14.09
25	13:00:00	52.27	14.17	Shutdown	Shutdown	27.85	13.95	25.53	13.76	21.46	14.18	16.62	14.04
25	14:00:00	51.52	14.16	Shutdown	Shutdown	27.68	13.93	25.25	13.72	21.71	14.20	16.27	14.08
25	15:00:00	50.76	14.14	Shutdown	Shutdown	27.21	13.91	25.16	13.70	21.70	14.16	16.25	14.10
25	16:00:00	50.61	14.14	Shutdown	Shutdown	27.32	13.92	25.37	13.67	21.61	14.13	16.11	14.09
25	17:00:00	51.03	14.15	Shutdown	Shutdown	27.16	13.92	25.96	13.71	21.57	14.12	17.07	14.10
25	18:00:00	50.93	14.14	Shutdown	Shutdown	28.07	13.93	26.21	13.74	21.58	14.17	16.08	14.09
25	19:00:00	49.78	14.13	Shutdown	Shutdown	27.95	13.95	26.80	13.76	22.04	14.16	16.44	14.07
25	20:00:00	49.85	14.13	Shutdown	Shutdown	28.23	13.96	27.02	13.75	21.74	14.13	16.86	14.08
25	21:00:00	50.51	14.14	Shutdown	Shutdown	27.56	13.95	26.82	13.72	20.85	14.15	16.93	14.07
25	22:00:00	48.33	14.15	Shutdown	Shutdown	27.61	13.95	26.17	13.78	21.26	14.20	16.67	14.10
25	23:00:00	53.94	14.26	Shutdown	Shutdown	27.40	13.94	19.39	13.91	19.14	14.25	17.62	14.02
26	0:00:00	Maintenance	Maintenance	Shutdown	Shutdown	27.53	13.93	17.49	13.96	16.16	14.30	17.67	14.00
26	1:00:00	Maintenance	Maintenance	Shutdown	Shutdown	27.17	13.92	17.73	13.93	15.79	14.31	17.44	14.00
26	2:00:00	Maintenance	Maintenance	Shutdown	Shutdown	27.16	13.91	17.58	13.93	15.98	14.33	17.81	13.96
26	3:00:00	Maintenance	Maintenance	Shutdown	Shutdown	27.23	13.91	17.51	13.93	16.60	14.28	17.10	13.94
26	4:00:00	Maintenance	Maintenance	Shutdown	Shutdown	27.04	13.91	17.44	13.91	16.15	14.31	17.65	13.93
26	5:00:00	Maintenance	Maintenance	Shutdown	Shutdown	27.31	13.90	17.55	13.88	17.88	14.24	17.55	13.91
26	6:00:00	52.75	14.13	Shutdown	Shutdown	27.44	13.90	17.65	13.92	17.94	14.19	17.16	13.92
26	7:00:00	50.95	14.10	Shutdown	Shutdown	27.39	13.92	17.43	13.94	17.05	14.22	17.08	13.96
26	8:00:00	48.19	14.13	Shutdown	Shutdown	27.96	13.97	17.63	13.98	16.82	14.25	17.61	13.98
26	9:00:00	39.95	11.54	Shutdown	Shutdown	27.97	14.00	17.80	14.00	18.03	14.26	17.45	13.99
26	10:00:00	48.46	12.11	Shutdown	Shutdown	27.83	14.00	24.94	13.85	21.33	14.23	17.36	14.01
26	11:00:00	50.97	14.20	Shutdown	Shutdown	27.90	13.98	25.12	13.82	21.57	14.18	17.25	13.99
26	12:00:00	47.19	14.18	Shutdown	Shutdown	27.35	13.97	25.45	13.80	21.27	14.23	17.29	13.95
26	13:00:00	51.58	14.18	Shutdown	Shutdown	27.31	13.96	25.60	13.76	21.25	14.19	17.09	13.93
26	14:00:00	50.60	14.16	Shutdown	Shutdown	26.96	13.94	25.29	13.73	21.27	14.18	16.93	13.98
26	15:00:00	50.26	14.15	Shutdown	Shutdown	26.59	13.90	25.77	13.70	21.47	14.14	16.51	13.95
26	16:00:00	49.95	14.14	Shutdown	Shutdown	26.94	13.91	25.90	13.73	21.47	14.11	17.22	13.94
26	17:00:00	49.69	14.14	Shutdown	Shutdown	27.29	13.91	26.24	13.75	21.71	14.10	17.85	13.94
26	18:00:00	49.48	14.13	Shutdown	Shutdown	27.46	13.92	26.38	13.75	21.74	14.16	17.90	14.06
26	19:00:00	49.57	14.14	Shutdown	Shutdown	28.28	13.96	26.65	13.77	21.73	14.12	17.56	14.06
26	20:00:00	49.42	14.14	Shutdown	Shutdown	27.97	13.95	27.26	13.74	21.57	14.15	17.14	14.05
26	21:00:00	49.45	14.15	Shutdown	Shutdown	27.66	13.95	26.87	13.73	21.62	14.16	17.36	14.05
26	22:00:00	47.33	14.16	Shutdown	Shutdown	27.64	13.94	26.38	13.78	21.75	14.18	17.81	14.05
26	23:00:00	51.97	14.22	Shutdown	Shutdown	27.89	13.92	19.66	13.91	19.19	14.23	18.69	13.95
27	0:00:00	52.00	14.22	Shutdown	Shutdown	27.49	13.92	17.61	13.95	17.64	14.25	19.31	13.96
27	1:00:00	52.49	14.25	Shutdown	Shutdown	27.42	13.92	17.44	13.91	17.51	14.25	18.43	13.93
27	2:00:00	52.42	14.23	Shutdown	Shutdown	27.08	13.91	17.46	13.91	17.14	14.27	16.94	13.93

วันที่	เวลา	TOPSPP (G-85053) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
27	3:00:00	52.40	14.23	Shutdown	Shutdown	27.14	13.91	17.55	13.92	17.61	14.25	17.03	13.92
27	4:00:00	52.40	14.22	Shutdown	Shutdown	27.11	13.90	17.55	13.89	18.21	14.23	17.31	13.92
27	5:00:00	52.33	14.21	Shutdown	Shutdown	27.27	13.91	17.75	13.88	18.13	14.21	17.08	13.90
27	6:00:00	51.45	14.14	Shutdown	Shutdown	27.14	13.91	18.69	13.87	18.37	14.20	17.03	13.92
27	7:00:00	51.48	14.15	Shutdown	Shutdown	27.56	13.93	18.73	13.89	18.07	14.20	17.36	13.95
27	8:00:00	50.79	14.18	Shutdown	Shutdown	27.61	13.96	19.03	13.92	17.79	14.21	17.93	14.06
27	9:00:00	50.90	14.20	Shutdown	Shutdown	27.76	13.97	18.20	13.97	18.52	14.23	18.25	14.07
27	10:00:00	49.99	14.21	Shutdown	Shutdown	27.64	13.98	24.25	13.86	21.18	14.25	18.49	14.08
27	11:00:00	49.61	14.20	Shutdown	Shutdown	27.13	13.97	25.69	13.81	21.93	14.23	18.74	14.05
27	12:00:00	48.96	14.19	Shutdown	Shutdown	26.23	13.94	24.74	13.78	21.82	14.25	17.80	14.03
27	13:00:00	49.56	14.16	Shutdown	Shutdown	26.40	13.92	25.36	13.76	22.69	14.20	18.16	14.02
27	14:00:00	49.49	14.15	Shutdown	Shutdown	26.77	13.91	25.44	13.73	22.10	14.21	18.12	14.04
27	15:00:00	50.26	14.15	Shutdown	Shutdown	26.69	13.89	25.90	13.71	22.57	14.15	18.30	14.04
27	16:00:00	50.28	14.15	Shutdown	Shutdown	26.74	13.86	26.08	13.71	23.69	14.14	17.80	14.04
27	17:00:00	49.48	14.15	Shutdown	Shutdown	26.44	13.87	26.32	13.72	22.92	14.10	18.23	14.04
27	18:00:00	44.96	14.14	Shutdown	Shutdown	27.00	13.89	27.23	13.74	22.90	14.09	18.70	14.04
27	19:00:00	46.51	14.16	Shutdown	Shutdown	26.53	13.89	27.28	13.75	22.85	14.11	18.54	14.03
27	20:00:00	45.85	14.16	Shutdown	Shutdown	26.85	13.91	27.23	13.71	22.76	14.13	18.67	14.02
27	21:00:00	44.42	14.14	Shutdown	Shutdown	27.01	13.90	26.88	13.68	22.78	14.14	18.53	14.01
27	22:00:00	44.07	14.12	Shutdown	Shutdown	27.02	13.89	26.26	13.74	22.85	14.14	17.29	14.04
27	23:00:00	42.29	14.09	Shutdown	Shutdown	26.93	13.89	20.50	13.82	20.79	14.21	17.49	13.97
28	0:00:00	46.98	14.12	Shutdown	Shutdown	26.71	13.89	18.96	13.84	18.10	14.27	17.37	13.96
28	1:00:00	47.17	14.12	Shutdown	Shutdown	26.56	13.89	18.84	13.81	18.22	14.27	17.23	13.94
28	2:00:00	47.58	14.11	Shutdown	Shutdown	26.73	13.88	18.82	13.83	18.19	14.30	17.49	13.93
28	3:00:00	47.96	14.12	Shutdown	Shutdown	26.63	13.88	18.82	13.84	17.50	14.34	16.91	13.93
28	4:00:00	48.92	14.17	Shutdown	Shutdown	26.87	13.87	18.88	13.82	17.26	14.32	16.88	13.95
28	5:00:00	49.32	14.17	Shutdown	Shutdown	26.93	13.87	18.98	13.81	17.12	14.32	17.25	13.96
28	6:00:00	47.91	14.11	Shutdown	Shutdown	26.87	13.87	18.98	13.84	18.67	14.25	17.60	13.98
28	7:00:00	48.22	14.13	Shutdown	Shutdown	27.29	13.88	18.63	13.87	18.64	14.28	17.40	13.98
28	8:00:00	48.83	14.18	Shutdown	Shutdown	27.48	13.91	18.36	13.89	18.65	14.29	16.88	14.10
28	9:00:00	49.39	14.21	Shutdown	Shutdown	27.25	13.94	18.46	13.92	19.97	14.27	16.80	14.13
28	10:00:00	48.51	14.19	Shutdown	Shutdown	27.65	13.96	23.75	13.79	22.58	14.23	17.73	14.13
28	11:00:00	48.73	14.22	Shutdown	Shutdown	26.59	13.93	24.37	13.76	22.71	14.21	17.72	14.14
28	12:00:00	47.31	14.19	Shutdown	Shutdown	26.71	13.92	24.58	13.74	22.41	14.22	19.01	14.08
28	13:00:00	44.90	14.17	Shutdown	Shutdown	25.74	13.89	24.28	13.72	22.18	14.21	19.04	14.06
28	14:00:00	44.52	14.15	Shutdown	Shutdown	25.58	13.88	24.49	13.71	22.35	14.20	19.96	14.07
28	15:00:00	45.27	14.15	Shutdown	Shutdown	26.96	13.89	24.83	13.69	22.41	14.16	18.79	14.10
28	16:00:00	43.96	14.12	Shutdown	Shutdown	26.89	13.86	25.02	13.68	22.24	14.13	17.25	14.13
28	17:00:00	41.66	14.05	Shutdown	Shutdown	25.42	13.84	25.73	13.72	22.05	14.14	17.65	14.07
28	18:00:00	41.92	14.06	Shutdown	Shutdown	25.30	13.89	26.42	13.74	22.23	14.18	18.15	14.02
28	19:00:00	41.35	14.05	Shutdown	Shutdown	25.14	13.90	27.21	13.77	23.72	14.18	17.83	14.01
28	20:00:00	42.33	14.08	Shutdown	Shutdown	25.86	13.91	27.63	13.76	23.21	14.20	18.19	13.99

วันที่	เวลา	TOPSPP (G-85053) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O2 (%)	NOx (ppm)	O2 (%)	NOx (ppm)	O2 (%)	NOx (ppm)	O2 (%)	NOx (ppm)	O2 (%)
28	21:00:00	40.66	14.08	Shutdown	Shutdown	26.53	13.90	28.31	13.78	24.19	14.18	17.71	13.99
28	22:00:00	39.77	14.06	Shutdown	Shutdown	26.53	13.89	27.93	13.80	23.35	14.19	17.16	14.09
28	23:00:00	47.65	14.16	Shutdown	Shutdown	26.22	13.89	21.83	13.88	20.19	14.29	17.68	13.99
29	0:00:00	47.45	14.14			26.56	13.89	20.47	13.94	19.70	14.26	17.28	13.96
29	1:00:00	47.44	14.14			26.14	13.89	20.56	13.96	19.34	14.27	17.73	13.95
29	2:00:00	44.28	14.10			26.15	13.88	20.07	13.92	19.55	14.26	17.23	13.94
29	3:00:00	48.80	14.17			26.10	13.88	19.75	13.90	20.56	14.21	17.69	13.91
29	4:00:00	48.36	14.12			26.32	13.88	19.70	13.87	20.09	14.24	17.54	13.90
29	5:00:00	48.79	14.15			26.51	13.87	19.51	13.85	20.22	14.24	17.47	13.91
29	6:00:00	47.91	14.14			26.41	13.87	20.05	13.86	20.24	14.22	17.65	13.93
29	7:00:00	48.59	14.15			26.66	13.89	21.76	13.79	19.82	14.26	18.09	13.96
29	8:00:00	47.30	14.19			27.14	13.93	23.16	13.76	19.96	14.28	18.41	14.06
29	9:00:00	47.63	14.22			26.73	13.96	24.27	13.79	19.46	14.32	19.17	14.06
29	10:00:00	42.58	14.17			26.58	13.95	28.33	13.83	19.62	14.37	18.91	14.05
29	11:00:00	46.53	14.20			26.94	13.94	28.28	13.82	18.50	14.33	18.47	14.04
29	12:00:00	44.67	14.19			27.70	13.95	27.73	13.76	19.05	14.29	19.39	14.02
29	13:00:00	40.94	14.11			27.69	13.93	27.47	13.73	18.96	14.32	19.69	14.04
29	14:00:00	42.15	14.13			27.73	13.89	26.90	13.72	18.33	14.32	19.88	14.06
29	15:00:00	39.85	14.05			28.05	13.89	26.43	13.72	18.19	14.31	19.65	14.07
29	16:00:00	39.66	14.05			27.53	13.89	26.31	13.74	18.83	14.27	19.45	14.05
29	17:00:00	39.11	14.05			27.69	13.89	26.13	13.76	19.12	14.27	19.60	14.05
29	18:00:00	39.36	14.07			28.04	13.89	27.05	13.76	21.94	14.23	19.85	14.04
29	19:00:00	42.62	14.12			27.75	13.89	27.31	13.78	23.46	14.19	20.04	14.02
29	20:00:00	42.28	14.12			27.34	13.89	26.41	13.75	23.40	14.22	19.82	14.01
29	21:00:00	41.06	14.11			25.83	13.82	26.41	13.76	23.14	14.18	19.20	14.02
29	22:00:00	41.75	14.12			25.42	13.82	26.46	13.80	22.76	14.18	18.34	14.06
29	23:00:00	46.05	14.16			22.88	13.97	22.35	13.79	18.87	14.29	14.23	14.14
30	0:00:00	46.36	14.20			21.64	14.14	21.37	13.83	18.95	14.32	13.46	14.11
30	1:00:00	45.29	14.14			38.15	14.15	21.58	13.82	18.97	14.31	13.01	14.08
30	2:00:00	46.51	14.17			45.79	14.17	21.23	13.80	19.16	14.29	13.08	14.07
30	3:00:00	46.47	14.17			39.64	14.14	21.29	13.80	19.29	14.28	12.92	14.07
30	4:00:00	45.67	14.13			29.87	14.10	21.28	13.75	19.77	14.27	12.85	14.06
30	5:00:00	45.39	14.13			27.20	14.10	20.93	13.75	18.24	14.30	12.70	14.04
30	6:00:00	44.73	14.11			36.90	14.16	20.76	13.74	18.62	14.29	13.14	14.09
30	7:00:00	45.71	14.18			36.49	14.20	21.18	13.76	17.51	14.31	13.58	14.14
30	8:00:00	45.66	14.21			24.94	13.90	21.30	13.82	17.73	14.33	16.53	14.11
30	9:00:00	45.81	14.25			25.03	13.90	21.30	13.87	20.05	14.28	17.77	14.09
30	10:00:00	45.27	14.23			25.80	13.93	27.07	13.81	22.16	14.24	17.24	14.09
30	11:00:00	44.79	14.25			25.83	13.94	27.48	13.81	22.69	14.21	18.10	14.05
30	12:00:00	46.04	14.26			25.46	13.92	26.71	13.74	22.32	14.21	17.07	14.04
30	13:00:00	47.50	14.30			25.45	13.89	26.39	13.73	22.39	14.19	17.68	14.02
30	14:00:00	47.87	14.30			25.98	13.83	27.04	13.72	22.46	14.17	16.94	14.05

วันที่	เวลา	TOPSPP (G-85053) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
30	15:00:00	49.57	14.28			25.26	13.77	27.35	13.70	22.73	14.15	16.94	14.07
30	16:00:00	48.18	14.23			25.33	13.77	27.29	13.69	22.71	14.12	16.20	14.06
30	17:00:00	41.33	14.12			25.26	13.79	26.94	13.69	23.19	14.17	16.54	14.03
30	18:00:00	36.14	14.04			25.51	13.82	27.42	13.72	23.42	14.20	16.38	14.03
30	19:00:00	38.09	14.08			25.01	13.80	27.07	13.71	23.53	14.20	17.51	14.03
30	20:00:00	40.79	14.14			24.95	13.80	27.42	13.66	23.68	14.20	16.67	14.04
30	21:00:00	38.65	14.12			25.69	13.82	27.37	13.70	22.90	14.21	16.93	14.10
30	22:00:00	43.66	14.14			25.68	13.83	27.25	13.72	21.47	14.26	15.83	14.13
30	23:00:00	46.57	14.22			23.81	13.93	21.97	13.78	20.10	14.18	17.07	14.06
31	0:00:00	47.03	14.21			16.86	14.19			18.58	14.16		
31	1:00:00	45.67	14.17			16.58	14.15			18.40	14.19		
31	2:00:00	33.82	14.07			17.26	14.10			19.30	14.18		
31	3:00:00	34.83	14.10			20.02	14.14			19.60	14.15		
31	4:00:00	44.92	14.12			39.67	14.14			18.99	14.19		
31	5:00:00	44.32	14.11			37.18	14.14			18.92	14.17		
31	6:00:00	43.79	14.10			37.13	14.15			19.22	14.14		
31	7:00:00	44.94	14.16			36.08	14.16			19.03	14.17		
31	8:00:00	44.04	14.18			25.75	13.88			18.71	14.21		
31	9:00:00	43.09	14.20			24.61	13.84			20.34	14.18		
31	10:00:00	42.79	14.22			24.81	13.91			20.76	14.24		
31	11:00:00	43.28	14.23			24.50	13.95			20.80	14.25		
31	12:00:00	43.59	14.26			24.86	13.96			21.87	14.22		
31	13:00:00	30.03	14.16			24.59	13.93			20.55	14.22		
31	14:00:00	29.57	14.14			25.14	13.90			21.22	14.21		
31	15:00:00	29.66	14.12			26.14	13.89			21.95	14.20		
31	16:00:00	26.78	14.11			26.48	13.91			21.38	14.15		
31	17:00:00	26.11	14.11			26.06	13.95			22.41	14.17		
31	18:00:00	26.65	14.12			26.26	13.98			22.59	14.18		
31	19:00:00	27.11	14.13			26.54	13.96			22.32	14.15		
31	20:00:00	26.88	14.13			26.90	14.00			22.27	14.17		
31	21:00:00	26.48	14.11			26.58	13.97			22.77	14.20		
31	22:00:00	26.57	14.11			26.12	13.95			21.95	14.21		
31	23:00:00	40.21	14.17			23.80	13.96			20.38	14.18		

ผลการติดตามตรวจสอบคุณภาพอากาศที่ระบายออกจากปล่องแบบต่อเนื่อง ระหว่างเดือนมกราคม-มิถุนายน 2565

วันที่	เวลา	TOPSPP (G-85054) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
1	0:00:00	Shutdown	Shutdown	46.18	14.20	15.40	14.20	44.21	14.26	19.36	14.09	18.53	14.03
1	1:00:00	Shutdown	Shutdown	45.95	14.19	33.46	14.29	42.26	14.23	19.67	14.07	18.36	14.04
1	2:00:00	Shutdown	Shutdown	45.68	14.18	42.91	14.24	41.28	14.22	19.59	14.03	18.36	14.01
1	3:00:00	Shutdown	Shutdown	45.53	14.18	29.74	14.18	40.71	14.19	19.77	14.03	18.54	13.93
1	4:00:00	Shutdown	Shutdown	45.91	14.17	25.63	14.19	40.82	14.17	19.71	14.02	18.16	13.93
1	5:00:00	Shutdown	Shutdown	45.86	14.18	26.83	14.15	42.23	14.15	20.75	14.08	17.74	13.94
1	6:00:00	Shutdown	Shutdown	45.92	14.20	18.45	14.12	42.76	14.17	20.78	14.07	17.56	13.90
1	7:00:00	Shutdown	Shutdown	46.74	14.21	21.16	14.21	43.55	14.23	20.16	14.07	17.69	13.92
1	8:00:00	Shutdown	Shutdown	46.41	14.25	15.99	14.24	43.67	14.21	20.41	14.07	20.65	13.99
1	9:00:00	Shutdown	Shutdown	46.37	14.27	15.58	14.24	44.61	14.26	19.96	14.04	21.01	14.01
1	10:00:00	Shutdown	Shutdown	46.30	14.27	15.41	14.25	48.32	14.39	20.00	14.05	21.05	14.02
1	11:00:00	Shutdown	Shutdown	45.90	14.27	15.41	14.24	48.64	14.38	20.14	14.06	20.81	14.02
1	12:00:00	Shutdown	Shutdown	43.86	14.25	16.59	14.26	47.56	14.47	19.90	14.08	20.99	13.99
1	13:00:00	Shutdown	Shutdown	19.99	14.25	16.20	14.22	48.91	14.43	19.81	14.03	21.00	13.98
1	14:00:00	Shutdown	Shutdown	19.61	14.25	16.43	14.22	48.39	14.41	19.78	14.07	20.91	13.95
1	15:00:00	Shutdown	Shutdown	19.38	14.21	16.36	14.21	48.50	14.36	19.31	14.06	20.66	13.94
1	16:00:00	Shutdown	Shutdown	19.26	14.18	16.46	14.19	48.71	14.36	19.38	14.03	20.89	13.95
1	17:00:00	Shutdown	Shutdown	19.17	14.18	15.63	14.18	48.81	14.41	19.43	14.02	20.64	13.95
1	18:00:00	Shutdown	Shutdown	19.57	14.18	15.23	14.17	47.98	14.47	20.52	14.11	20.75	13.95
1	19:00:00	Shutdown	Shutdown	19.60	14.19	14.35	14.16	46.62	14.47	19.96	14.19	21.00	13.97
1	20:00:00	Shutdown	Shutdown	19.65	14.21	14.78	14.18	46.43	14.45	20.19	14.20	20.97	13.97
1	21:00:00	Shutdown	Shutdown	17.99	14.27	15.06	14.18	45.91	14.44	20.28	14.22	20.96	13.96
1	22:00:00	Shutdown	Shutdown	18.22	14.25	15.37	14.20	46.05	14.46	20.19	14.19	18.92	14.01
1	23:00:00	Shutdown	Shutdown	15.86	14.09	17.90	14.24	44.47	14.40	16.61	14.10	17.47	13.98
2	0:00:00	Shutdown	Shutdown	15.73	14.11	42.87	14.27	44.97	14.40	15.71	14.09	16.34	14.02
2	1:00:00	Shutdown	Shutdown	17.68	14.14	46.32	14.25	45.11	14.40	16.30	14.06	16.23	14.02
2	2:00:00	Shutdown	Shutdown	15.23	14.12	45.96	14.25	45.35	14.39	16.40	14.04	16.08	14.01
2	3:00:00	Shutdown	Shutdown	17.07	14.13	42.94	14.23	46.48	14.39	16.52	14.04	16.11	14.01
2	4:00:00	Shutdown	Shutdown	34.14	14.17	38.67	14.19	47.81	14.40	16.40	14.05	16.13	14.00
2	5:00:00	Shutdown	Shutdown	15.55	14.13	19.85	14.15	49.25	14.40	16.57	14.05	16.07	13.98
2	6:00:00	Shutdown	Shutdown	15.74	14.17	13.35	14.12	49.45	14.41	17.30	14.07	16.31	13.99
2	7:00:00	Shutdown	Shutdown	18.29	14.20	26.46	14.19	50.92	14.42	18.01	14.04	16.51	14.02
2	8:00:00	Shutdown	Shutdown	15.82	14.16	16.78	14.21	49.58	14.43	20.10	14.06	20.55	13.97
2	9:00:00	Shutdown	Shutdown	25.18	16.09	16.57	14.26	45.70	14.44	46.80	14.10	21.33	13.99
2	10:00:00	Shutdown	Shutdown	16.26	14.93	16.55	14.29	47.52	14.44	47.60	14.12	21.38	14.00
2	11:00:00	Shutdown	Shutdown	17.55	14.20	16.19	14.27	47.23	14.45	27.21	14.07	21.44	14.00
2	12:00:00	Shutdown	Shutdown	18.57	14.18	15.86	14.26	46.43	14.41	20.11	14.02	20.81	13.98
2	13:00:00	Shutdown	Shutdown	18.52	14.07	16.22	14.26	45.68	14.42	20.33	14.03	20.66	13.95
2	14:00:00	Shutdown	Shutdown	16.05	13.98	15.58	14.27	48.13	14.46	20.08	14.05	20.80	13.92
2	15:00:00	Shutdown	Shutdown	15.62	13.92	16.22	14.22	46.37	14.44	19.88	14.06	20.86	13.90
2	16:00:00	Shutdown	Shutdown	15.25	13.86	15.94	14.23	44.87	14.41	19.96	14.07	21.36	13.93
2	17:00:00	Shutdown	Shutdown	15.41	13.86	16.14	14.26	43.94	14.39	20.25	14.08	21.43	13.94

วันที่	เวลา	TOPSPP (G-85054) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
2	18:00:00	Shutdown	Shutdown	15.35	13.86	16.25	14.28	44.12	14.36	21.04	14.18	21.49	13.95
2	19:00:00	Shutdown	Shutdown	15.32	13.86	15.85	14.27	44.16	14.37	21.17	14.24	21.55	13.96
2	20:00:00	Shutdown	Shutdown	15.19	13.86	16.09	14.27	42.96	14.38	21.35	14.26	21.21	13.95
2	21:00:00	Shutdown	Shutdown	15.89	13.91	16.17	14.26	43.04	14.37	21.20	14.25	21.44	13.95
2	22:00:00	Shutdown	Shutdown	17.00	13.90	16.29	14.27	44.29	14.38	21.32	14.22	19.89	13.99
2	23:00:00	Shutdown	Shutdown	42.83	14.02	20.45	14.24	46.05	14.41	35.03	14.20	17.62	13.98
3	0:00:00	Shutdown	Shutdown	46.21	14.00	39.64	14.22	45.79	14.39	19.73	14.10	16.21	14.03
3	1:00:00	Shutdown	Shutdown	46.41	13.96	39.77	14.21	47.05	14.37	19.22	14.09	16.22	14.04
3	2:00:00	Shutdown	Shutdown	Maintenance	Maintenance	38.55	14.20	46.63	14.34	18.83	14.07	16.01	14.02
3	3:00:00	Shutdown	Shutdown	Maintenance	Maintenance	43.17	14.21	47.09	14.32	20.75	14.08	16.07	14.02
3	4:00:00	Shutdown	Shutdown	Maintenance	Maintenance	34.42	14.18	47.73	14.30	28.02	14.13	16.01	14.01
3	5:00:00	Shutdown	Shutdown	Maintenance	Maintenance	36.25	14.18	47.81	14.27	38.16	14.12	16.44	14.02
3	6:00:00	Shutdown	Shutdown	Maintenance	Maintenance	36.47	14.18	45.13	14.25	22.51	14.10	16.49	14.03
3	7:00:00	Shutdown	Shutdown	Maintenance	Maintenance	41.51	14.24	44.64	14.25	18.93	14.07	16.34	14.03
3	8:00:00	Shutdown	Shutdown	Maintenance	Maintenance	17.80	14.28	43.70	14.28	19.24	14.08	16.74	14.06
3	9:00:00	Shutdown	Shutdown	Maintenance	Maintenance	16.95	14.29	42.73	14.31	20.20	14.14	16.44	14.08
3	10:00:00	Shutdown	Shutdown	53.77	14.63	16.82	14.33	42.68	14.35	21.35	14.21	16.32	14.08
3	11:00:00	Shutdown	Shutdown	51.12	14.48	15.98	14.32	42.41	14.35	21.45	14.25	16.44	14.07
3	12:00:00	Shutdown	Shutdown	51.53	14.48	16.43	14.30	42.05	14.38	21.39	14.23	16.19	14.06
3	13:00:00	Shutdown	Shutdown	20.12	14.38	15.95	14.30	41.33	14.39	21.29	14.24	16.42	14.05
3	14:00:00	Shutdown	Shutdown	19.68	14.35	16.56	14.26	40.95	14.40	21.08	14.27	16.34	14.03
3	15:00:00	Shutdown	Shutdown	20.29	14.38	16.52	14.27	41.01	14.37	21.36	14.22	16.42	14.03
3	16:00:00	Shutdown	Shutdown	20.07	14.36	16.45	14.28	40.46	14.37	21.33	14.21	16.42	14.03
3	17:00:00	Shutdown	Shutdown	19.53	14.33	16.50	14.27	40.45	14.36	21.38	14.22	16.12	14.02
3	18:00:00	Shutdown	Shutdown	19.58	14.32	16.46	14.27	45.62	14.40	21.39	14.26	20.34	13.96
3	19:00:00	Shutdown	Shutdown	19.83	14.33	16.54	14.27	48.14	14.47	21.51	14.26	21.31	13.96
3	20:00:00	Shutdown	Shutdown	19.76	14.35	16.80	14.27	47.62	14.47	21.39	14.25	21.42	13.95
3	21:00:00	Shutdown	Shutdown	19.76	14.36	16.55	14.26	47.55	14.48	21.77	14.26	21.29	13.96
3	22:00:00	Shutdown	Shutdown	18.72	14.37	16.50	14.26	44.98	14.42	21.60	14.26	19.77	14.00
3	23:00:00	Shutdown	Shutdown	45.88	14.39	21.09	14.24	39.74	14.38	22.10	14.22	17.27	14.01
4	0:00:00	Shutdown	Shutdown	49.43	14.37	48.96	14.27	44.22	14.39	23.31	14.20	17.38	14.01
4	1:00:00	Shutdown	Shutdown	49.58	14.35	47.41	14.24	44.54	14.38	24.94	14.17	17.80	14.01
4	2:00:00	Shutdown	Shutdown	49.47	14.34	49.54	14.27	45.42	14.39	17.92	14.12	17.31	14.00
4	3:00:00	Shutdown	Shutdown	49.74	14.33	38.32	14.19	44.62	14.38	18.31	14.12	17.42	14.00
4	4:00:00	Shutdown	Shutdown	50.02	14.33	42.50	14.20	44.61	14.36	18.32	14.13	17.21	13.99
4	5:00:00	Shutdown	Shutdown	50.01	14.34	37.88	14.19	46.37	14.37	19.49	14.16	17.06	13.99
4	6:00:00	41.87	14.13	49.12	14.34	34.94	14.18	48.26	14.42	24.12	14.16	17.50	13.99
4	7:00:00	42.64	14.14	48.97	14.35	44.78	14.23	45.96	14.43	23.38	14.17	17.46	13.99
4	8:00:00	46.52	14.17	48.78	14.37	19.12	14.27	46.64	14.45	31.77	14.19	20.69	14.00
4	9:00:00	51.54	14.17	49.54	14.40	17.53	14.29	39.67	14.46	36.71	14.18	21.71	14.01
4	10:00:00	32.35	6.08	50.91	14.44	17.63	14.30	32.22	9.03	23.63	14.23	21.50	14.01
4	11:00:00	50.47	14.23	50.45	14.43	17.14	14.28	39.78	14.22	23.71	14.26	21.62	14.01
4	12:00:00	47.89	14.20	49.05	14.41	16.56	14.28	40.22	14.27	23.73	14.24	21.15	14.00
4	13:00:00	Maintenance	Maintenance	20.21	14.38	16.38	14.25	40.70	14.28	23.37	14.23	21.14	14.01
4	14:00:00	Maintenance	Maintenance	20.48	14.37	15.68	14.24	40.68	14.26	23.26	14.22	21.25	14.04

วันที่	เวลา	TOPSPP (G-85054) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
4	15:00:00	Maintenance	Maintenance	18.05	14.26	16.47	14.19	40.67	14.27	23.34	14.20	21.37	14.03
4	16:00:00	Maintenance	Maintenance	17.65	14.24	16.59	14.17	40.75	14.26	23.03	14.19	21.50	14.04
4	17:00:00	Maintenance	Maintenance	16.74	14.19	16.69	14.17	41.11	14.31	23.33	14.19	21.61	14.03
4	18:00:00	Maintenance	Maintenance	16.53	14.19	16.44	14.18	41.93	14.32	23.54	14.18	21.74	14.03
4	19:00:00	Maintenance	Maintenance	16.41	14.16	16.03	14.20	42.48	14.35	23.91	14.20	21.77	14.04
4	20:00:00	Maintenance	Maintenance	16.06	14.17	16.42	14.17	39.81	14.30	23.98	14.22	21.33	14.03
4	21:00:00	Maintenance	Maintenance	16.56	14.20	16.46	14.17	39.87	14.32	24.19	14.22	21.43	14.03
4	22:00:00	Maintenance	Maintenance	19.30	14.25	16.56	14.20	42.04	14.38	22.49	14.28	19.70	14.10
4	23:00:00	50.82	14.24	49.43	14.37	16.11	14.24	41.23	14.32	20.03	14.15	18.43	14.03
5	0:00:00	48.01	14.21	50.90	14.35	Shutdown	Shutdown	41.94	14.32	19.06	14.08	17.44	14.03
5	1:00:00	48.64	14.19	50.79	14.34	Shutdown	Shutdown	42.91	14.31	18.89	14.06	18.26	14.04
5	2:00:00	52.50	14.20	49.73	14.34	Shutdown	Shutdown	41.58	14.30	18.90	14.04	17.64	14.04
5	3:00:00	50.04	14.17	49.84	14.34	Shutdown	Shutdown	42.81	14.29	19.13	14.04	17.63	14.04
5	4:00:00	49.60	14.17	50.54	14.36	Shutdown	Shutdown	44.79	14.28	19.12	14.04	17.99	14.03
5	5:00:00	49.64	14.19	47.20	14.33	Shutdown	Shutdown	43.99	14.30	19.31	14.05	17.75	14.03
5	6:00:00	49.96	14.20	41.90	14.33	Shutdown	Shutdown	39.42	14.26	18.92	14.05	17.76	14.03
5	7:00:00	50.16	14.21	48.39	14.38	Shutdown	Shutdown	38.03	14.25	18.94	14.05	17.81	14.03
5	8:00:00	43.18	14.24	52.67	14.41	Shutdown	Shutdown	37.98	14.26	19.12	14.06	17.65	14.05
5	9:00:00	36.10	14.23	52.25	14.41	Shutdown	Shutdown	37.85	14.26	20.34	14.16	18.17	14.07
5	10:00:00	47.49	14.24	53.29	15.63	Shutdown	Shutdown	44.22	14.41	23.30	14.23	18.16	14.07
5	11:00:00	48.55	14.19	Maintenance	Maintenance	Shutdown	Shutdown	45.51	14.44	23.45	14.23	18.11	14.08
5	12:00:00	49.15	14.18	Maintenance	Maintenance	Shutdown	Shutdown	46.46	14.44	23.21	14.24	18.03	14.07
5	13:00:00	Maintenance	Maintenance	Maintenance	Maintenance	Shutdown	Shutdown	43.88	14.47	23.28	14.26	17.04	14.08
5	14:00:00	Maintenance	Maintenance	Maintenance	Maintenance	Shutdown	Shutdown	43.92	14.43	22.92	14.27	17.79	14.07
5	15:00:00	Maintenance	Maintenance	34.57	20.26	Shutdown	Shutdown	40.02	14.39	22.96	14.24	17.25	14.05
5	16:00:00	Maintenance	Maintenance	23.03	20.09	Shutdown	Shutdown	38.64	14.34	22.60	14.19	18.00	14.06
5	17:00:00	Maintenance	Maintenance	21.44	18.36	Shutdown	Shutdown	38.64	14.33	22.18	14.14	17.65	14.03
5	18:00:00	53.17	14.30	20.23	14.17	Shutdown	Shutdown	38.52	14.36	22.22	14.15	20.80	13.99
5	19:00:00	52.50	14.28	19.98	14.17	Shutdown	Shutdown	37.46	14.34	22.04	14.16	21.48	14.00
5	20:00:00	52.72	14.30	20.00	14.19	Shutdown	Shutdown	37.11	14.30	22.34	14.16	21.62	13.97
5	21:00:00	53.32	14.32	20.02	14.19	Shutdown	Shutdown	36.28	14.32	22.16	14.16	22.36	13.91
5	22:00:00	53.39	14.30	19.27	14.17	Shutdown	Shutdown	35.90	14.31	22.00	14.17	21.05	13.90
5	23:00:00	45.68	14.16	19.38	14.19	Shutdown	Shutdown	29.44	14.26	19.12	14.07	15.85	14.11
6	0:00:00	45.93	14.13	19.89	14.19	Shutdown	Shutdown	28.77	14.25	17.83	13.99	15.01	14.13
6	1:00:00	47.48	14.14	19.81	14.18	Shutdown	Shutdown	32.58	14.22	17.83	13.96	14.22	14.15
6	2:00:00	49.73	14.17	19.98	14.18	Shutdown	Shutdown	34.53	14.21	17.48	13.96	14.40	14.16
6	3:00:00	48.18	14.15	20.55	14.19	Shutdown	Shutdown	35.34	14.19	17.38	13.98	15.21	14.13
6	4:00:00	48.28	14.16	20.85	14.20	Shutdown	Shutdown	31.70	14.22	17.56	13.99	14.79	14.17
6	5:00:00	47.96	14.16	21.26	14.23	Shutdown	Shutdown	32.40	14.25	17.85	13.98	14.84	14.16
6	6:00:00	48.13	14.19	22.00	14.29	Shutdown	Shutdown	35.35	14.26	17.44	13.99	15.89	14.13
6	7:00:00	49.00	14.20	21.91	14.34	Shutdown	Shutdown	33.12	14.20	17.80	13.99	15.14	14.17
6	8:00:00	47.83	14.22	21.38	14.23	Shutdown	Shutdown	33.51	14.25	17.88	14.02	20.93	14.04
6	9:00:00	45.40	14.25	21.45	14.28	Shutdown	Shutdown	33.41	14.29	18.86	14.12	20.45	14.10
6	10:00:00	32.02	14.27	21.58	14.28	Shutdown	Shutdown	39.28	14.40	21.66	14.19	21.22	14.11
6	11:00:00	31.55	14.27	21.18	14.22	Shutdown	Shutdown	40.43	14.43	21.82	14.22	20.38	14.11

วันที่	เวลา	TOPSPP (G-85054) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
6	12:00:00	34.45	14.27	28.08	16.78	Shutdown	Shutdown	40.41	14.42	21.48	14.23	21.50	14.06
6	13:00:00	Maintenance	Maintenance	29.50	16.79	Shutdown	Shutdown	40.54	14.39	21.08	14.16	20.66	14.06
6	14:00:00	Maintenance	Maintenance	Maintenance	Maintenance	Shutdown	Shutdown	41.25	14.36	20.90	14.07	21.19	14.03
6	15:00:00	Maintenance	Maintenance	22.07	15.82	Shutdown	Shutdown	40.48	14.37	20.81	14.06	20.24	14.02
6	16:00:00	Maintenance	Maintenance	20.89	14.28	Shutdown	Shutdown	39.94	14.37	20.60	14.06	20.31	14.04
6	17:00:00	Maintenance	Maintenance	20.93	14.29	Shutdown	Shutdown	39.67	14.36	20.55	14.06	20.10	14.01
6	18:00:00	Maintenance	Maintenance	20.42	14.27	Shutdown	Shutdown	37.24	14.37	20.79	14.06	20.29	13.99
6	19:00:00	Maintenance	Maintenance	18.88	14.30	Shutdown	Shutdown	33.92	14.32	21.12	14.06	20.96	14.02
6	20:00:00	Maintenance	Maintenance	18.58	14.32	Shutdown	Shutdown	34.14	14.32	21.09	14.09	20.68	13.97
6	21:00:00	Maintenance	Maintenance	18.96	14.32	Shutdown	Shutdown	34.07	14.32	21.26	14.10	20.39	13.96
6	22:00:00	Maintenance	Maintenance	18.82	14.30	Shutdown	Shutdown	34.18	14.31	20.06	14.15	20.69	13.98
6	23:00:00	46.58	14.17	18.96	14.30	Shutdown	Shutdown	28.32	14.26	17.79	14.04	17.97	14.07
7	0:00:00	46.45	14.16	19.02	14.28	Shutdown	Shutdown	27.76	14.25	15.79	13.98	16.82	14.14
7	1:00:00	45.77	14.14	18.88	14.28	Shutdown	Shutdown	28.05	14.22	15.52	14.00	16.26	14.13
7	2:00:00	45.98	14.14	18.81	14.28	Shutdown	Shutdown	27.69	14.22	15.81	13.99	15.66	14.14
7	3:00:00	46.65	14.15	18.89	14.27	Shutdown	Shutdown	28.01	14.20	15.99	14.01	15.95	14.14
7	4:00:00	47.26	14.17	19.25	14.27	Shutdown	Shutdown	28.33	14.20	15.89	14.02	15.72	14.14
7	5:00:00	47.77	14.19	18.95	14.26	Shutdown	Shutdown	31.10	14.21	16.18	14.05	15.70	14.15
7	6:00:00	47.98	14.19	18.81	14.28	Shutdown	Shutdown	31.08	14.24	15.97	14.04	16.18	14.15
7	7:00:00	47.43	14.20	18.78	14.30	Shutdown	Shutdown	29.38	14.27	18.25	14.07	16.06	14.16
7	8:00:00	47.58	14.22	18.28	14.30	Shutdown	Shutdown	28.50	14.30	20.77	14.16	22.01	13.99
7	9:00:00	45.58	14.28	18.22	14.33	Shutdown	Shutdown	28.03	14.33	32.98	14.22	22.72	13.99
7	10:00:00	47.34	14.25	18.28	14.33	Shutdown	Shutdown	37.60	14.40	19.01	14.25	22.72	14.00
7	11:00:00	46.00	14.21	18.31	14.32	Shutdown	Shutdown	40.27	14.40	18.68	14.22	22.58	14.00
7	12:00:00	48.10	14.23	18.46	14.33	Shutdown	Shutdown	41.38	14.37	19.32	14.09	22.84	14.00
7	13:00:00	Maintenance	Maintenance	18.78	14.34	Shutdown	Shutdown	40.01	14.36	19.18	13.99	22.62	14.00
7	14:00:00	Maintenance	Maintenance	18.90	14.32	Shutdown	Shutdown	39.42	14.38	18.06	13.98	22.54	13.99
7	15:00:00	Maintenance	Maintenance	19.18	14.33	Shutdown	Shutdown	39.32	14.39	18.48	14.06	22.74	13.99
7	16:00:00	Maintenance	Maintenance	19.42	14.30	Shutdown	Shutdown	37.89	14.34	19.09	14.15	22.89	13.98
7	17:00:00	53.80	14.31	19.68	14.30	Shutdown	Shutdown	38.53	14.39	19.23	14.23	22.68	13.97
7	18:00:00	Maintenance	Maintenance	19.82	14.26	Shutdown	Shutdown	39.52	14.42	19.21	14.25	23.06	13.97
7	19:00:00	52.58	14.31	19.50	14.29	Shutdown	Shutdown	42.38	14.44	19.31	14.25	23.15	14.00
7	20:00:00	Maintenance	Maintenance	19.14	14.30	Shutdown	Shutdown	42.34	14.45	19.38	14.28	22.77	13.99
7	21:00:00	Maintenance	Maintenance	19.15	14.31	Shutdown	Shutdown	42.27	14.45	19.26	14.27	23.08	14.00
7	22:00:00	Maintenance	Maintenance	18.94	14.31	Shutdown	Shutdown	41.52	14.49	19.48	14.31	23.35	14.04
7	23:00:00	44.25	14.17	18.94	14.30	Shutdown	Shutdown	21.27	14.38	18.37	14.18	17.69	14.18
8	0:00:00	43.94	14.16	18.87	14.29	Shutdown	Shutdown	19.24	14.38	18.45	14.08	15.87	14.22
8	1:00:00	44.08	14.15	19.02	14.29	Shutdown	Shutdown	19.39	14.36	18.38	14.02	15.58	14.19
8	2:00:00	41.97	14.13	19.01	14.27	Shutdown	Shutdown	20.19	14.35	18.62	14.02	16.14	14.18
8	3:00:00	41.32	14.13	19.20	14.27	Shutdown	Shutdown	20.94	14.33	18.73	14.04	16.35	14.18
8	4:00:00	41.59	14.14	19.09	14.27	Shutdown	Shutdown	20.55	14.34	18.48	14.07	16.16	14.15
8	5:00:00	41.95	14.15	19.06	14.28	Shutdown	Shutdown	21.41	14.34	18.40	14.07	16.23	14.14
8	6:00:00	44.25	14.19	19.42	14.27	Shutdown	Shutdown	22.33	14.31	17.93	14.07	16.06	14.15
8	7:00:00	45.18	14.21	19.54	14.28	Shutdown	Shutdown	22.43	14.31	18.00	14.10	15.85	14.17
8	8:00:00	45.22	14.22	18.56	14.30	Shutdown	Shutdown	22.91	14.33	22.55	14.25	20.27	13.97

วันที่	เวลา	TOPSPP (G-85054) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
8	9:00:00	45.58	14.25	18.54	14.34	Shutdown	Shutdown	22.76	14.36	39.51	14.38	20.80	14.00
8	10:00:00	46.47	14.26	19.08	14.37	Shutdown	Shutdown	26.30	14.48	17.97	14.17	20.97	14.02
8	11:00:00	46.05	14.27	19.59	14.39	Shutdown	Shutdown	26.19	14.46	17.10	14.20	20.65	14.04
8	12:00:00	45.10	14.25	19.39	14.36	Shutdown	Shutdown	25.68	14.45	15.75	14.24	20.92	14.04
8	13:00:00	Maintenance	Maintenance	18.79	14.29	Shutdown	Shutdown	24.82	14.46	16.81	14.13	21.08	14.06
8	14:00:00	Maintenance	Maintenance	19.24	14.28	Shutdown	Shutdown	24.62	14.45	17.71	13.96	20.97	14.02
8	15:00:00	Maintenance	Maintenance	19.59	14.30	Shutdown	Shutdown	24.58	14.45	17.97	13.91	20.91	14.06
8	16:00:00	Maintenance	Maintenance	19.66	14.30	Shutdown	Shutdown	24.34	14.45	17.76	13.92	20.70	14.05
8	17:00:00	Maintenance	Maintenance	19.32	14.29	Shutdown	Shutdown	24.11	14.45	17.30	13.96	20.67	14.05
8	18:00:00	Maintenance	Maintenance	18.92	14.25	Shutdown	Shutdown	23.22	14.40	21.02	14.11	20.91	14.05
8	19:00:00	53.67	14.31	18.73	14.27	Shutdown	Shutdown	23.14	14.39	21.77	14.16	20.40	14.04
8	20:00:00	Maintenance	Maintenance	19.31	14.27	Shutdown	Shutdown	23.23	14.38	21.77	14.15	20.22	14.01
8	21:00:00	Maintenance	Maintenance	19.11	14.30	Shutdown	Shutdown	23.14	14.39	21.40	14.15	20.36	14.03
8	22:00:00	52.66	14.28	18.96	14.30	Shutdown	Shutdown	22.23	14.42	19.73	14.18	20.53	14.03
8	23:00:00	34.85	14.16	18.77	14.29	Shutdown	Shutdown	47.32	14.50	17.62	14.15	16.94	14.11
9	0:00:00	25.53	14.14	18.86	14.26	Shutdown	Shutdown	47.11	14.45	25.19	14.15	15.49	14.16
9	1:00:00	25.69	14.14	18.47	14.25	Shutdown	Shutdown	22.30	14.30	16.37	14.10	15.57	14.15
9	2:00:00	25.87	14.14	18.12	14.23	Shutdown	Shutdown	24.94	14.31	16.72	14.04	15.49	14.14
9	3:00:00	26.09	14.16	18.15	14.22	Shutdown	Shutdown	26.92	14.28	18.24	13.96	15.26	14.13
9	4:00:00	26.59	14.18	18.33	14.23	Shutdown	Shutdown	45.20	14.27	18.65	14.02	14.97	14.13
9	5:00:00	26.82	14.20	18.82	14.24	Shutdown	Shutdown	43.63	14.26	18.63	14.01	15.06	14.15
9	6:00:00	27.14	14.22	18.94	14.25	Shutdown	Shutdown	44.35	14.27	18.72	14.06	15.49	14.16
9	7:00:00	27.16	14.23	19.00	14.26	Shutdown	Shutdown	47.07	14.31	18.32	14.05	15.69	14.18
9	8:00:00	26.79	14.24	18.50	14.28	Shutdown	Shutdown	45.60	14.38	17.33	14.13	22.02	14.01
9	9:00:00	26.92	14.26	18.82	14.29	Shutdown	Shutdown	40.21	14.41	17.96	14.21	22.58	14.00
9	10:00:00	27.73	14.29	18.59	14.34	Shutdown	Shutdown	23.97	14.45	20.36	14.29	22.62	14.00
9	11:00:00	25.79	14.29	18.84	14.33	Shutdown	Shutdown	23.46	14.46	20.19	14.32	22.41	14.00
9	12:00:00	24.39	14.24	18.48	14.31	Shutdown	Shutdown	23.13	14.45	19.39	14.28	22.50	13.98
9	13:00:00	24.60	14.23	18.55	14.27	Shutdown	Shutdown	22.78	14.44	19.98	14.29	22.34	13.97
9	14:00:00	25.17	14.20	18.36	14.28	Shutdown	Shutdown	23.12	14.45	20.57	14.24	22.16	13.95
9	15:00:00	24.73	14.20	19.37	14.21	Shutdown	Shutdown	23.12	14.44	21.22	14.25	22.51	13.95
9	16:00:00	24.36	14.22	18.93	14.20	Shutdown	Shutdown	23.15	14.44	20.20	14.26	22.58	13.96
9	17:00:00	25.68	14.25	18.96	14.20	Shutdown	Shutdown	22.44	14.43	19.68	14.19	22.49	13.95
9	18:00:00	30.45	14.30	18.52	14.21	Shutdown	Shutdown	22.47	14.37	19.62	14.25	22.38	13.94
9	19:00:00	30.76	14.31	18.14	14.23	Shutdown	Shutdown	22.57	14.35	19.55	14.22	22.30	13.94
9	20:00:00	29.79	14.30	19.07	14.24	Shutdown	Shutdown	22.46	14.35	20.05	14.20	22.20	13.95
9	21:00:00	25.94	14.17	18.85	14.26	Shutdown	Shutdown	22.35	14.35	20.15	14.21	22.19	13.97
9	22:00:00	23.75	14.12	19.01	14.26	Shutdown	Shutdown	22.34	14.36	19.95	14.23	21.66	13.96
9	23:00:00	23.34	14.11	18.41	14.27	Shutdown	Shutdown	17.36	14.26	19.40	14.09	16.61	14.08
10	0:00:00	23.36	14.11	18.26	14.26	Shutdown	Shutdown	16.67	14.25	17.32	14.06	14.85	14.13
10	1:00:00	23.53	14.10	18.36	14.24	Shutdown	Shutdown	16.33	14.23	17.42	14.04	14.65	14.13
10	2:00:00	23.31	14.09	18.36	14.22	Shutdown	Shutdown	16.36	14.21	19.33	13.95	14.84	14.14
10	3:00:00	22.77	14.10	18.94	14.19	Shutdown	Shutdown	16.18	14.20	19.37	13.94	14.93	14.15
10	4:00:00	22.83	14.11	19.01	14.20	Shutdown	Shutdown	16.54	14.19	19.09	13.94	14.84	14.13
10	5:00:00	23.85	14.13	18.75	14.21	Shutdown	Shutdown	17.02	14.20	18.77	13.97	15.25	14.14

วันที่	เวลา	TOPSPP (G-85054) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
10	6:00:00	23.96	14.13	19.11	14.19	Shutdown	Shutdown	17.14	14.21	18.85	13.98	15.30	14.15
10	7:00:00	23.40	14.13	18.25	14.18	Shutdown	Shutdown	16.50	14.25	19.13	13.98	15.23	14.17
10	8:00:00	22.98	14.16	18.06	14.20	Shutdown	Shutdown	16.60	14.28	18.03	14.02	21.81	14.01
10	9:00:00	23.39	14.20	18.40	14.23	Shutdown	Shutdown	48.12	14.58	18.62	14.11	22.61	14.01
10	10:00:00	23.29	14.23	17.73	14.23	Shutdown	Shutdown	44.95	14.59	19.94	14.20	22.47	14.00
10	11:00:00	22.00	14.20	18.00	14.23	Shutdown	Shutdown	44.08	14.54	20.38	14.11	22.22	14.00
10	12:00:00	22.26	14.20	17.85	14.23	Shutdown	Shutdown	43.40	14.50	19.88	14.10	22.27	13.98
10	13:00:00	29.40	14.34	15.99	14.18	Shutdown	Shutdown	44.02	14.51	19.90	14.10	22.28	13.98
10	14:00:00	32.01	14.37	15.95	14.15	Shutdown	Shutdown	44.81	14.51	19.61	14.11	22.27	13.96
10	15:00:00	29.56	14.35	15.45	14.09	Shutdown	Shutdown	36.57	14.42	19.94	14.09	22.27	13.95
10	16:00:00	30.53	14.33	15.93	14.09	Shutdown	Shutdown	16.50	14.27	19.89	14.11	22.54	13.96
10	17:00:00	31.32	14.35	16.01	14.09	Shutdown	Shutdown	15.57	14.24	19.74	14.09	22.67	13.96
10	18:00:00	29.22	14.33	16.45	14.11	Shutdown	Shutdown	17.84	14.27	20.01	14.10	22.26	13.94
10	19:00:00	28.70	14.32	16.29	14.09	Shutdown	Shutdown	21.76	14.33	19.98	14.10	22.28	13.95
10	20:00:00	28.98	14.34	15.90	14.10	Shutdown	Shutdown	21.41	14.30	20.09	14.11	22.11	13.96
10	21:00:00	29.60	14.35	16.71	14.16	Shutdown	Shutdown	21.57	14.32	20.33	14.10	21.95	13.95
10	22:00:00	28.83	14.33	17.55	14.19	Shutdown	Shutdown	19.57	14.29	19.33	14.13	21.58	13.95
10	23:00:00	21.86	14.17	18.42	14.23	Shutdown	Shutdown	18.30	14.27	18.74	14.06	16.96	14.06
11	0:00:00	22.70	14.16	18.27	14.20	Shutdown	Shutdown	19.04	14.25	18.70	13.97	15.13	14.12
11	1:00:00	22.44	14.15	18.32	14.19	Shutdown	Shutdown	18.44	14.23	18.59	13.95	15.04	14.13
11	2:00:00	22.23	14.13	18.25	14.19	Shutdown	Shutdown	18.96	14.21	18.16	13.92	15.22	14.12
11	3:00:00	22.13	14.14	18.06	14.19	Shutdown	Shutdown	18.81	14.20	18.25	13.90	15.34	14.09
11	4:00:00	22.56	14.14	17.84	14.20	Shutdown	Shutdown	18.62	14.20	17.83	13.92	15.47	14.08
11	5:00:00	23.11	14.18	18.08	14.21	Shutdown	Shutdown	19.06	14.21	17.35	13.96	15.32	14.10
11	6:00:00	23.21	14.19	18.56	14.21	Shutdown	Shutdown	19.06	14.23	16.53	13.99	14.98	14.14
11	7:00:00	22.73	14.19	18.68	14.22	Shutdown	Shutdown	17.92	14.24	16.69	14.01	15.29	14.16
11	8:00:00	22.91	14.23	18.52	14.23	Shutdown	Shutdown	16.86	14.28	23.69	14.10	21.64	14.03
11	9:00:00	33.24	14.28	18.29	14.22	Shutdown	Shutdown	16.48	14.28	18.15	14.14	22.88	14.03
11	10:00:00	43.00	14.28	17.74	14.20	Shutdown	Shutdown	20.87	14.30	19.73	14.18	22.24	14.03
11	11:00:00	36.23	14.27	18.79	14.23	Shutdown	Shutdown	21.21	14.31	19.69	14.12	22.02	14.03
11	12:00:00	37.17	14.22	18.36	14.22	Shutdown	Shutdown	21.20	14.30	19.66	14.11	21.83	13.99
11	13:00:00	51.97	14.36	15.66	14.19	Shutdown	Shutdown	21.01	14.28	19.69	14.10	21.78	14.02
11	14:00:00	Maintenance	Maintenance	16.32	14.15	Shutdown	Shutdown	20.58	14.25	19.67	14.05	21.53	14.07
11	15:00:00	Maintenance	Maintenance	16.36	14.07	Shutdown	Shutdown	20.76	14.25	19.72	14.02	21.67	14.05
11	16:00:00	Maintenance	Maintenance	15.27	14.12	Shutdown	Shutdown	20.84	14.26	19.85	14.01	22.26	14.10
11	17:00:00	Maintenance	Maintenance	15.24	14.09	Shutdown	Shutdown	20.31	14.26	19.27	14.03	22.49	14.09
11	18:00:00	Maintenance	Maintenance	15.76	14.09	Shutdown	Shutdown	20.59	14.25	19.10	14.08	22.26	14.06
11	19:00:00	Maintenance	Maintenance	16.04	14.07	Shutdown	Shutdown	20.98	14.27	19.47	14.08	21.96	14.04
11	20:00:00	Maintenance	Maintenance	16.46	14.11	Shutdown	Shutdown	20.80	14.26	19.93	14.06	22.15	14.03
11	21:00:00	Maintenance	Maintenance	18.63	14.20	Shutdown	Shutdown	21.09	14.26	19.79	14.07	22.14	14.04
11	22:00:00	50.63	14.29	18.70	14.23	Shutdown	Shutdown	19.96	14.28	18.66	14.11	20.46	14.09
11	23:00:00	21.18	14.14	18.00	14.21	Shutdown	Shutdown	20.24	14.27	17.62	14.05	17.45	14.11
12	0:00:00	19.94	14.13	18.52	14.19	Shutdown	Shutdown	20.91	14.26	16.81	13.96	15.39	14.15
12	1:00:00	20.24	14.13	18.45	14.17	Shutdown	Shutdown	20.69	14.23	17.04	13.94	15.03	14.13
12	2:00:00	20.02	14.10	18.47	14.20	Shutdown	Shutdown	20.72	14.21	16.72	13.93	14.69	14.12

วันที่	เวลา	TOPSPP (G-85054) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
12	3:00:00	20.24	14.11	18.23	14.18	Shutdown	Shutdown	20.69	14.21	17.14	13.93	14.64	14.10
12	4:00:00	20.05	14.11	18.23	14.19	Shutdown	Shutdown	20.79	14.21	27.32	14.06	14.86	14.11
12	5:00:00	19.92	14.11	18.58	14.21	Shutdown	Shutdown	21.09	14.22	45.90	14.16	15.04	14.12
12	6:00:00	19.65	14.11	18.85	14.20	Shutdown	Shutdown	21.23	14.24	45.21	14.08	14.83	14.12
12	7:00:00	19.23	14.13	18.48	14.20	Shutdown	Shutdown	21.33	14.25	45.53	14.11	14.55	14.13
12	8:00:00	19.63	14.15	18.52	14.23	Shutdown	Shutdown	21.38	14.28	46.59	14.22	14.68	14.17
12	9:00:00	19.39	14.19	18.70	14.25	Shutdown	Shutdown	21.54	14.29	39.18	14.16	14.88	14.19
12	10:00:00	20.01	14.20	18.28	14.27	Shutdown	Shutdown	21.16	14.30	31.05	14.27	14.99	14.20
12	11:00:00	18.68	14.19	18.24	14.25	Shutdown	Shutdown	20.50	14.30	30.82	14.28	14.99	14.19
12	12:00:00	19.42	14.19	18.12	14.24	Shutdown	Shutdown	19.84	14.28	30.53	14.25	14.76	14.18
12	13:00:00	26.91	14.34	16.43	14.08	Shutdown	Shutdown	19.71	14.26	31.36	14.23	14.17	14.18
12	14:00:00	27.36	14.36	16.90	14.12	Shutdown	Shutdown	19.73	14.24	31.91	14.23	14.44	14.12
12	15:00:00	29.17	14.32	17.09	14.08	Shutdown	Shutdown	19.40	14.24	31.04	14.17	14.49	14.11
12	16:00:00	27.93	14.32	16.33	14.04	Shutdown	Shutdown	19.15	14.23	31.04	14.18	15.45	14.07
12	17:00:00	26.62	14.33	16.49	14.05	Shutdown	Shutdown	19.02	14.21	29.67	14.13	16.03	14.06
12	18:00:00	25.37	14.30	16.32	14.05	Shutdown	Shutdown	19.34	14.20	29.54	14.11	21.68	13.92
12	19:00:00	23.93	14.27	16.47	14.05	Shutdown	Shutdown	20.43	14.20	28.63	14.08	22.65	13.89
12	20:00:00	23.79	14.29	16.77	14.10	Shutdown	Shutdown	20.47	14.21	28.60	14.09	22.52	13.90
12	21:00:00	23.24	14.26	18.03	14.16	Shutdown	Shutdown	20.66	14.21	28.68	14.10	22.39	13.92
12	22:00:00	24.19	14.26	18.68	14.20	Shutdown	Shutdown	19.35	14.26	29.51	14.13	20.74	13.94
12	23:00:00	42.03	14.26	18.56	14.21	Shutdown	Shutdown	17.69	14.35	21.67	14.09	15.46	14.10
13	0:00:00	42.92	14.24	18.30	14.19	Shutdown	Shutdown	17.62	14.32	30.11	14.10	15.63	14.10
13	1:00:00	Maintenance	Maintenance	18.11	14.21	Shutdown	Shutdown	16.99	14.15	24.29	14.00	15.54	14.07
13	2:00:00	36.63	14.21	18.29	14.18	Shutdown	Shutdown	14.86	14.09	17.33	13.92	16.41	14.05
13	3:00:00	43.65	14.25	18.22	14.17	Shutdown	Shutdown	15.90	14.11	17.42	13.93	16.18	13.99
13	4:00:00	Maintenance	Maintenance	18.31	14.18	Shutdown	Shutdown	15.12	14.11	21.98	14.03	16.66	14.01
13	5:00:00	Maintenance	Maintenance	18.29	14.18	Shutdown	Shutdown	15.02	14.10	25.42	14.00	17.01	14.03
13	6:00:00	Maintenance	Maintenance	18.65	14.18	Shutdown	Shutdown	14.85	14.12	17.59	13.95	17.01	14.04
13	7:00:00	Maintenance	Maintenance	18.17	14.20	Shutdown	Shutdown	15.86	14.16	17.61	13.97	17.35	14.07
13	8:00:00	Maintenance	Maintenance	18.01	14.23	Shutdown	Shutdown	15.11	14.18	17.95	14.00	21.32	13.99
13	9:00:00	Maintenance	Maintenance	18.21	14.28	Shutdown	Shutdown	14.42	14.18	19.21	14.09	21.29	14.06
13	10:00:00	Maintenance	Maintenance	18.29	14.27	Shutdown	Shutdown	13.95	14.21	20.58	14.18	22.04	14.07
13	11:00:00	Maintenance	Maintenance	17.88	14.27	Shutdown	Shutdown	14.23	14.17	20.91	14.19	21.34	14.07
13	12:00:00	Maintenance	Maintenance	17.75	14.28	Shutdown	Shutdown	14.71	14.20	20.87	14.17	21.73	14.05
13	13:00:00	43.87	14.29	18.05	14.28	Shutdown	Shutdown	15.50	14.21	20.68	14.16	22.20	13.96
13	14:00:00	38.98	14.19	17.98	14.23	Shutdown	Shutdown	16.91	14.24	20.49	14.14	21.32	13.96
13	15:00:00	37.99	14.17	18.06	14.20	Shutdown	Shutdown	18.14	14.26	20.70	14.13	21.54	13.94
13	16:00:00	36.31	14.15	18.07	14.20	Shutdown	Shutdown	16.77	14.23	20.64	14.10	19.97	13.91
13	17:00:00	34.86	14.14	18.30	14.20	Shutdown	Shutdown	15.78	14.22	20.72	14.08	19.83	13.91
13	18:00:00	34.12	14.15	18.30	14.20	Shutdown	Shutdown	20.43	14.23	20.60	14.08	19.87	13.92
13	19:00:00	20.05	14.16	18.24	14.20	Shutdown	Shutdown	21.05	14.22	20.47	14.09	20.27	13.94
13	20:00:00	18.79	14.16	18.23	14.20	Shutdown	Shutdown	21.17	14.22	20.66	14.09	20.39	13.95
13	21:00:00	20.12	14.21	18.22	14.20	Shutdown	Shutdown	21.10	14.21	20.58	14.09	19.93	13.98
13	22:00:00	20.51	14.19	18.24	14.20	Shutdown	Shutdown	18.08	14.15	19.99	14.09	20.04	13.98
13	23:00:00	Maintenance	Maintenance	18.23	14.20	Shutdown	Shutdown	15.31	14.15	28.75	14.10	17.31	14.04

วันที่	เวลา	TOPSPP (G-85054) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
14	0:00:00	Maintenance	Maintenance	18.20	14.20	Shutdown	Shutdown	16.80	14.08	44.30	14.12	15.44	14.12
14	1:00:00	Maintenance	Maintenance	18.18	14.20	Shutdown	Shutdown	15.69	14.07	43.81	14.10	15.29	14.09
14	2:00:00	Maintenance	Maintenance	18.16	14.20	Shutdown	Shutdown	15.08	14.07	45.26	14.12	15.39	14.09
14	3:00:00	Maintenance	Maintenance	18.16	14.20	Shutdown	Shutdown	16.60	14.02	44.90	14.12	14.95	14.08
14	4:00:00	Maintenance	Maintenance	18.21	14.20	Shutdown	Shutdown	16.51	14.02	44.14	14.10	15.03	14.07
14	5:00:00	Maintenance	Maintenance	18.24	14.20	Shutdown	Shutdown	16.19	14.03	44.47	14.12	14.96	14.07
14	6:00:00	Maintenance	Maintenance	18.26	14.20	Shutdown	Shutdown	16.40	14.04	45.25	14.13	15.23	14.08
14	7:00:00	Maintenance	Maintenance	18.29	14.20	Shutdown	Shutdown	16.10	14.10	46.11	14.16	15.24	14.11
14	8:00:00	Maintenance	Maintenance	18.22	14.20	Shutdown	Shutdown	15.68	14.14	46.73	14.19	21.34	13.93
14	9:00:00	Maintenance	Maintenance	18.22	14.20	Shutdown	Shutdown	15.86	14.15	34.72	14.21	25.36	9.82
14	10:00:00	Maintenance	Maintenance	6.31	5.30	Shutdown	Shutdown	15.22	14.18	18.96	14.20	28.38	4.57
14	11:00:00	Maintenance	Maintenance	15.41	14.07	Shutdown	Shutdown	15.97	14.16	19.14	14.16	21.04	14.51
14	12:00:00	Maintenance	Maintenance	15.17	14.08	Shutdown	Shutdown	15.47	14.20	19.65	14.17	20.70	14.48
14	13:00:00	49.26	14.32	16.49	14.09	Shutdown	Shutdown	17.68	14.13	19.06	14.19	21.03	14.48
14	14:00:00	51.66	14.29	16.56	14.08	Shutdown	Shutdown	16.81	14.26	18.51	14.22	20.90	14.47
14	15:00:00	50.80	14.27	15.00	13.98	Shutdown	Shutdown	16.73	14.27	18.49	14.19	21.04	14.48
14	16:00:00	50.83	14.27	13.59	13.88	Shutdown	Shutdown	17.14	14.28	18.75	14.17	21.19	14.47
14	17:00:00	51.55	14.27	13.69	13.90	Shutdown	Shutdown	16.18	14.29	18.67	14.17	21.09	14.47
14	18:00:00	52.17	14.28	13.90	13.89	Shutdown	Shutdown	19.78	14.32	18.95	14.18	21.29	14.45
14	19:00:00	52.10	14.27	13.91	13.89	Shutdown	Shutdown	22.11	14.29	19.19	14.18	21.52	14.46
14	20:00:00	51.78	14.30	13.48	13.91	Shutdown	Shutdown	22.13	14.31	19.19	14.20	21.62	14.50
14	21:00:00	42.35	14.28	13.42	13.94	Shutdown	Shutdown	21.07	14.24	18.95	14.22	21.97	14.51
14	22:00:00	39.53	14.25	13.88	13.96	Shutdown	Shutdown	18.30	14.15	18.81	14.20	20.74	14.53
14	23:00:00	Maintenance	Maintenance	15.68	14.05	Shutdown	Shutdown	15.37	14.13	18.07	14.07	16.16	14.64
15	0:00:00	Maintenance	Maintenance	14.95	14.07	Shutdown	Shutdown	15.64	14.11	16.55	14.02	13.73	14.71
15	1:00:00	Maintenance	Maintenance	15.73	14.05	Shutdown	Shutdown	14.42	14.11	16.67	14.07	13.81	14.69
15	2:00:00	Maintenance	Maintenance	15.27	14.06	Shutdown	Shutdown	15.61	14.05	18.23	14.08	13.40	14.68
15	3:00:00	Maintenance	Maintenance	15.43	14.07	Shutdown	Shutdown	15.44	14.05	36.93	14.13	13.35	14.66
15	4:00:00	Maintenance	Maintenance	15.40	14.08	Shutdown	Shutdown	14.65	14.08	32.17	14.10	14.04	14.62
15	5:00:00	Maintenance	Maintenance	15.66	14.09	Shutdown	Shutdown	15.78	14.06	29.75	14.04	14.28	14.61
15	6:00:00	Maintenance	Maintenance	15.72	14.09	Shutdown	Shutdown	16.50	14.05	24.98	14.05	14.05	14.63
15	7:00:00	53.54	14.25	16.19	14.10	Shutdown	Shutdown	15.68	14.13	16.01	14.07	13.95	14.66
15	8:00:00	50.91	14.27	15.85	14.11	Shutdown	Shutdown	15.38	14.18	28.11	14.14	19.98	14.54
15	9:00:00	41.05	14.30	16.41	14.11	Shutdown	Shutdown	15.21	14.19	45.74	14.21	21.09	14.54
15	10:00:00	Maintenance	Maintenance	16.59	14.11	Shutdown	Shutdown	14.24	14.25	45.77	14.25	20.91	14.49
15	11:00:00	Maintenance	Maintenance	16.67	14.09	Shutdown	Shutdown	13.91	14.32	45.83	14.21	19.34	14.16
15	12:00:00	Maintenance	Maintenance	16.46	14.09	Shutdown	Shutdown	14.26	14.28	45.70	14.18	19.52	14.18
15	13:00:00	47.30	14.32	13.60	13.97	Shutdown	Shutdown	13.36	14.27	45.38	14.13	19.91	14.11
15	14:00:00	46.78	14.35	12.01	12.98	Shutdown	Shutdown	14.60	14.29	37.70	14.06	19.88	14.05
15	15:00:00	46.66	14.33	24.58	6.25	Shutdown	Shutdown	15.36	14.26	17.88	13.93	19.12	14.06
15	16:00:00	44.57	14.31	16.16	14.06	Shutdown	Shutdown	19.92	14.31	17.29	13.91	18.91	14.08
15	17:00:00	46.58	14.33	16.20	14.09	Shutdown	Shutdown	20.01	14.27	16.95	13.92	19.36	14.07
15	18:00:00	47.24	14.34	16.93	14.13	Shutdown	Shutdown	21.34	14.26	18.48	14.06	19.56	14.07
15	19:00:00	47.43	14.35	17.70	14.15	Shutdown	Shutdown	19.16	14.23	18.99	14.15	19.49	14.08
15	20:00:00	51.18	14.31	16.08	14.12	Shutdown	Shutdown	18.67	14.20	19.48	14.14	19.55	14.12

วันที่	เวลา	TOPSPP (G-85054) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
15	21:00:00	45.61	14.31	13.29	14.09	Shutdown	Shutdown	18.80	14.22	19.08	14.16	19.59	14.12
15	22:00:00	42.19	14.30	13.72	14.11	Shutdown	Shutdown	18.59	14.15	19.62	14.14	18.51	14.14
15	23:00:00	24.39	14.19	15.49	14.20	Shutdown	Shutdown	18.43	14.08	17.75	13.99	15.02	14.21
16	0:00:00	18.57	14.16	15.47	14.20	Shutdown	Shutdown	18.19	14.07	22.42	14.09	12.87	14.26
16	1:00:00	18.55	14.15	15.36	14.19	Shutdown	Shutdown	18.06	14.05	18.34	14.02	13.05	14.25
16	2:00:00	17.99	14.13	15.26	14.18	Shutdown	Shutdown	18.17	14.04	16.98	14.02	12.77	14.23
16	3:00:00	17.80	14.12	15.05	14.18	Shutdown	Shutdown	18.05	14.03	15.77	14.02	13.08	14.21
16	4:00:00	17.97	14.11	14.98	14.19	Shutdown	Shutdown	18.22	14.02	15.46	14.01	13.05	14.21
16	5:00:00	17.96	14.12	15.03	14.20	Shutdown	Shutdown	18.72	14.05	15.24	14.03	13.06	14.22
16	6:00:00	18.29	14.14	15.31	14.22	Shutdown	Shutdown	18.82	14.06	15.56	14.01	13.12	14.23
16	7:00:00	18.16	14.15	15.99	14.19	Shutdown	Shutdown	18.43	14.06	17.30	14.08	13.26	14.26
16	8:00:00	17.96	14.17	15.65	14.21	Shutdown	Shutdown	18.59	14.07	29.92	14.14	19.17	14.13
16	9:00:00	18.15	14.20	15.62	14.21	Shutdown	Shutdown	18.49	14.07	34.30	14.14	20.84	14.13
16	10:00:00	18.27	14.20	16.14	14.18	Shutdown	Shutdown	18.66	14.11	18.71	14.15	19.90	14.12
16	11:00:00	18.21	14.20	16.00	14.19	Shutdown	Shutdown	18.86	14.15	18.08	14.20	20.18	14.11
16	12:00:00	18.41	14.20	15.63	14.21	Shutdown	Shutdown	18.45	14.15	28.69	14.18	20.30	14.10
16	13:00:00	18.22	14.19	15.05	14.16	Shutdown	Shutdown	18.75	14.17	35.94	14.10	20.03	14.09
16	14:00:00	18.73	14.20	15.14	14.16	Shutdown	Shutdown	19.24	14.19	29.48	14.04	19.99	14.08
16	15:00:00	18.95	14.21	14.61	14.10	Shutdown	Shutdown	18.87	14.18	16.34	14.01	19.90	14.08
16	16:00:00	18.61	14.20	13.62	14.08	Shutdown	Shutdown	18.10	14.14	17.34	13.92	19.68	14.07
16	17:00:00	19.72	14.25	14.92	14.12	Shutdown	Shutdown	18.37	14.10	16.29	13.93	19.88	14.07
16	18:00:00	22.09	14.35	13.50	14.04	Shutdown	Shutdown	17.16	14.23	18.98	14.01	19.78	14.09
16	19:00:00	22.11	14.35	13.14	14.05	Shutdown	Shutdown	18.83	14.31	21.05	14.05	19.83	14.09
16	20:00:00	23.31	14.35	13.15	14.07	Shutdown	Shutdown	19.21	14.31	20.73	14.07	20.14	14.09
16	21:00:00	20.96	14.27	14.57	14.14	Shutdown	Shutdown	19.28	14.29	20.81	14.08	20.18	14.09
16	22:00:00	18.98	14.18	14.14	14.13	Shutdown	Shutdown	19.17	14.20	19.85	14.07	18.91	14.14
16	23:00:00	18.64	14.16	15.46	14.19	Shutdown	Shutdown	18.88	14.12	38.68	14.09	16.36	14.16
17	0:00:00	18.35	14.16	15.57	14.17	Shutdown	Shutdown	18.64	14.09	42.62	14.09	13.75	14.21
17	1:00:00	18.22	14.15	14.89	14.17	Shutdown	Shutdown	18.32	14.08	43.01	14.10	13.58	14.19
17	2:00:00	18.54	14.14	14.95	14.16	Shutdown	Shutdown	18.00	14.06	44.22	14.12	13.62	14.18
17	3:00:00	18.92	14.13	14.92	14.15	Shutdown	Shutdown	17.09	14.06	44.41	14.12	13.76	14.15
17	4:00:00	Maintenance	Maintenance	15.67	14.14	Shutdown	Shutdown	17.04	14.06	44.13	14.12	13.87	14.14
17	5:00:00	Maintenance	Maintenance	15.71	14.15	Shutdown	Shutdown	17.78	14.08	44.08	14.13	14.29	14.16
17	6:00:00	Maintenance	Maintenance	15.28	14.17	Shutdown	Shutdown	18.20	14.10	44.06	14.14	14.16	14.18
17	7:00:00	Maintenance	Maintenance	15.94	14.18	Shutdown	Shutdown	18.14	14.10	44.48	14.17	14.01	14.19
17	8:00:00	Maintenance	Maintenance	15.81	14.19	Shutdown	Shutdown	17.48	14.17	44.14	14.20	19.00	14.09
17	9:00:00	31.70	14.28	16.70	14.23	Shutdown	Shutdown	16.78	14.20	34.49	14.17	19.54	14.08
17	10:00:00	30.44	14.29	13.30	14.15	Shutdown	Shutdown	17.41	14.21	21.24	14.15	19.46	14.07
17	11:00:00	Maintenance	Maintenance	13.69	14.16	Shutdown	Shutdown	18.72	14.12	21.38	14.17	19.09	14.07
17	12:00:00	Maintenance	Maintenance	15.07	14.19	Shutdown	Shutdown	18.25	14.09	21.37	14.16	19.28	14.07
17	13:00:00	22.95	14.29	14.07	14.10	Shutdown	Shutdown	18.36	14.11	20.75	14.16	19.68	14.05
17	14:00:00	21.92	14.33	14.96	14.12	Shutdown	Shutdown	18.23	14.13	20.75	14.15	19.56	14.04
17	15:00:00	21.51	14.29	14.46	14.07	Shutdown	Shutdown	17.57	14.16	20.76	14.14	19.90	14.05
17	16:00:00	20.91	14.27	14.46	14.07	Shutdown	Shutdown	18.12	14.12	20.54	14.16	19.83	14.04
17	17:00:00	21.00	14.30	13.64	14.05	Shutdown	Shutdown	16.49	14.17	19.69	14.15	19.98	14.05

วันที่	เวลา	TOPSPP (G-85054) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
17	18:00:00	20.70	14.28	13.56	14.05	Shutdown	Shutdown	17.49	14.23	19.44	14.14	20.19	14.05
17	19:00:00	20.55	14.28	13.69	14.05	Shutdown	Shutdown	19.21	14.31	19.51	14.13	20.26	14.05
17	20:00:00	20.68	14.26	13.55	14.05	Shutdown	Shutdown	19.24	14.28	19.38	14.16	20.03	14.06
17	21:00:00	19.41	14.19	14.77	14.17	Shutdown	Shutdown	19.35	14.28	18.98	14.13	20.10	14.06
17	22:00:00	20.07	14.19	15.29	14.18	Shutdown	Shutdown	18.48	14.17	18.93	14.04	18.80	14.11
17	23:00:00	53.77	14.31	14.98	14.20	Shutdown	Shutdown	16.93	14.15	18.16	13.94	16.76	14.03
18	0:00:00	Maintenance	Maintenance	14.89	14.18	Shutdown	Shutdown	16.00	14.18	16.90	13.88	16.23	13.94
18	1:00:00	Maintenance	Maintenance	14.51	14.17	Shutdown	Shutdown	17.06	14.18	16.45	13.87	16.57	13.95
18	2:00:00	Maintenance	Maintenance	14.44	14.17	Shutdown	Shutdown	18.26	14.30	17.13	13.86	16.36	13.94
18	3:00:00	Maintenance	Maintenance	14.34	14.18	Shutdown	Shutdown	26.79	14.36	16.75	13.88	16.51	13.90
18	4:00:00	47.21	14.25	14.57	14.19	Shutdown	Shutdown	37.58	14.39	16.90	13.89	16.52	13.87
18	5:00:00	52.82	14.26	14.49	14.20	Shutdown	Shutdown	38.44	14.41	17.10	13.89	16.50	13.87
18	6:00:00	Maintenance	Maintenance	14.82	14.20	Shutdown	Shutdown	38.83	14.42	16.77	13.90	16.61	13.86
18	7:00:00	Maintenance	Maintenance	15.59	14.19	Shutdown	Shutdown	40.47	14.47	16.05	13.95	16.99	13.91
18	8:00:00	Maintenance	Maintenance	15.36	14.20	Shutdown	Shutdown	41.12	14.53	17.93	14.03	20.08	14.10
18	9:00:00	Maintenance	Maintenance	15.38	14.23	Shutdown	Shutdown	43.01	14.57	17.46	14.03	20.32	14.11
18	10:00:00	Maintenance	Maintenance	15.36	14.25	Shutdown	Shutdown	20.65	14.26	19.14	14.11	20.14	14.11
18	11:00:00	Maintenance	Maintenance	15.18	14.27	Shutdown	Shutdown	17.86	14.16	18.81	14.14	20.13	14.12
18	12:00:00	Maintenance	Maintenance	14.94	14.26	Shutdown	Shutdown	17.89	14.13	18.85	14.14	20.13	14.09
18	13:00:00	23.63	14.34	13.90	14.10	Shutdown	Shutdown	19.06	14.14	18.33	14.11	19.91	14.13
18	14:00:00	21.21	14.32	14.05	14.12	Shutdown	Shutdown	19.47	14.12	18.26	14.09	19.83	14.17
18	15:00:00	21.85	14.37	13.71	14.07	Shutdown	Shutdown	19.55	14.11	19.04	14.03	20.13	14.18
18	16:00:00	21.27	14.26	13.23	14.07	Shutdown	Shutdown	19.16	14.15	19.01	14.04	20.46	14.19
18	17:00:00	21.01	14.26	12.34	14.09	Shutdown	Shutdown	18.99	14.15	19.05	14.05	20.51	14.19
18	18:00:00	21.06	14.28	12.57	14.10	Shutdown	Shutdown	19.70	14.17	19.35	14.06	20.33	14.17
18	19:00:00	20.93	14.27	13.26	14.09	Shutdown	Shutdown	19.92	14.10	19.45	14.06	20.68	14.16
18	20:00:00	20.60	14.23	12.47	14.12	Shutdown	Shutdown	19.81	14.08	19.58	14.07	21.08	14.18
18	21:00:00	19.91	14.19	14.51	14.16	Shutdown	Shutdown	19.95	14.12	19.67	14.07	21.15	14.19
18	22:00:00	22.46	14.21	14.89	14.20	Shutdown	Shutdown	19.61	14.13	19.61	14.07	19.13	14.20
18	23:00:00	Maintenance	Maintenance	15.92	14.21	Shutdown	Shutdown	37.20	14.45	18.59	14.05	17.14	14.08
19	0:00:00	Maintenance	Maintenance	15.56	14.20	Shutdown	Shutdown	43.20	14.48	23.26	14.04	16.60	13.97
19	1:00:00	Maintenance	Maintenance	15.42	14.20	Shutdown	Shutdown	43.17	14.46	19.32	13.99	16.59	13.96
19	2:00:00	Maintenance	Maintenance	15.37	14.21	Shutdown	Shutdown	42.82	14.43	19.37	13.97	16.41	13.95
19	3:00:00	Maintenance	Maintenance	14.83	14.22	Shutdown	Shutdown	42.43	14.41	21.00	13.97	16.28	13.95
19	4:00:00	52.49	14.25	14.74	14.24	Shutdown	Shutdown	41.33	14.43	20.65	13.99	16.52	13.94
19	5:00:00	45.01	14.24	15.57	14.26	Shutdown	Shutdown	41.09	14.42	19.50	13.99	16.66	13.94
19	6:00:00	47.52	14.24	15.37	14.29	Shutdown	Shutdown	41.55	14.44	16.98	13.96	17.11	13.99
19	7:00:00	48.87	14.26	15.47	14.27	Shutdown	Shutdown	41.74	14.45	15.87	13.98	17.57	14.03
19	8:00:00	45.96	14.28	15.48	14.22	Shutdown	Shutdown	42.51	14.49	19.93	14.12	17.66	14.04
19	9:00:00	53.27	14.33	14.73	14.27	Shutdown	Shutdown	41.94	14.51	24.52	14.14	17.49	14.05
19	10:00:00	Maintenance	Maintenance	14.73	14.30	Shutdown	Shutdown	22.67	14.31	19.78	14.08	17.69	14.04
19	11:00:00	53.55	14.34	14.85	14.32	Shutdown	Shutdown	22.45	14.32	19.38	14.12	17.89	14.02
19	12:00:00	52.23	14.36	14.77	14.32	Shutdown	Shutdown	22.44	14.31	19.60	14.10	17.84	14.03
19	13:00:00	26.33	14.34	14.75	14.30	Shutdown	Shutdown	22.15	14.34	19.33	14.10	17.83	14.04
19	14:00:00	23.51	14.30	14.83	14.26	Shutdown	Shutdown	21.96	14.34	19.24	14.11	17.98	14.03

วันที่	เวลา	TOPSPP (G-85054) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
19	15:00:00	23.40	14.28	14.36	14.24	Shutdown	Shutdown	22.18	14.30	19.15	14.06	18.50	14.04
19	16:00:00	23.45	14.28	14.40	14.24	Shutdown	Shutdown	21.91	14.30	18.77	14.07	18.59	14.04
19	17:00:00	23.33	14.28	15.01	14.26	Shutdown	Shutdown	21.82	14.29	19.17	14.09	19.04	14.05
19	18:00:00	23.10	14.27	14.80	14.25	Shutdown	Shutdown	21.51	14.26	19.03	14.11	19.86	14.16
19	19:00:00	23.97	14.31	14.74	14.25	Shutdown	Shutdown	21.76	14.25	19.03	14.09	18.81	14.16
19	20:00:00	24.05	14.32	15.06	14.24	Shutdown	Shutdown	21.89	14.26	19.18	14.08	18.72	14.16
19	21:00:00	23.35	14.27	15.02	14.25	Shutdown	Shutdown	22.28	14.27	18.85	14.08	18.44	14.15
19	22:00:00	23.53	14.26	14.67	14.25	Shutdown	Shutdown	21.07	14.31	18.89	14.10	18.41	14.08
19	23:00:00	49.81	14.25	14.37	14.24	Shutdown	Shutdown	19.07	14.40	20.31	14.06	14.96	14.03
20	0:00:00	50.22	14.23	14.76	14.22	Shutdown	Shutdown	18.47	14.44	22.48	14.06	14.62	14.05
20	1:00:00	50.18	14.22	14.64	14.22	Shutdown	Shutdown	18.77	14.41	22.48	14.04	14.79	14.03
20	2:00:00	49.94	14.20	14.53	14.21	Shutdown	Shutdown	18.36	14.42	19.43	14.00	14.64	13.98
20	3:00:00	47.95	14.19	14.60	14.21	Shutdown	Shutdown	18.28	14.40	19.37	14.01	14.62	13.98
20	4:00:00	51.66	14.18	14.35	14.21	Shutdown	Shutdown	18.42	14.39	17.59	14.00	14.54	13.97
20	5:00:00	52.07	14.19	14.22	14.23	Shutdown	Shutdown	18.49	14.41	16.04	13.99	14.76	13.96
20	6:00:00	Maintenance	Maintenance	14.33	14.22	Shutdown	Shutdown	18.59	14.42	17.83	13.99	14.82	13.99
20	7:00:00	Maintenance	Maintenance	14.52	14.23	Shutdown	Shutdown	18.87	14.44	18.71	14.02	14.07	14.00
20	8:00:00	Maintenance	Maintenance	14.89	14.25	Shutdown	Shutdown	28.95	14.51	18.88	14.12	18.82	14.08
20	9:00:00	Maintenance	Maintenance	15.00	14.30	Shutdown	Shutdown	43.21	14.55	21.84	14.10	18.99	14.09
20	10:00:00	Maintenance	Maintenance	14.99	14.33	Shutdown	Shutdown	22.93	14.37	21.25	14.09	18.36	14.08
20	11:00:00	Maintenance	Maintenance	15.01	14.30	Shutdown	Shutdown	22.30	14.38	21.20	14.08	19.79	14.08
20	12:00:00	Maintenance	Maintenance	15.05	14.29	Shutdown	Shutdown	22.91	14.36	21.12	14.06	19.39	14.04
20	13:00:00	23.60	14.28	14.74	14.29	Shutdown	Shutdown	22.28	14.35	20.53	14.04	19.38	14.05
20	14:00:00	22.41	14.26	14.71	14.26	Shutdown	Shutdown	22.16	14.35	20.83	13.99	19.23	14.06
20	15:00:00	22.55	14.26	14.94	14.24	Shutdown	Shutdown	22.08	14.33	20.90	13.99	17.60	14.08
20	16:00:00	22.51	14.25	15.04	14.23	Shutdown	Shutdown	21.84	14.31	20.94	14.01	18.24	14.12
20	17:00:00	22.41	14.25	15.44	14.23	Shutdown	Shutdown	21.90	14.29	21.13	14.01	18.30	14.12
20	18:00:00	22.45	14.24	15.37	14.22	Shutdown	Shutdown	21.73	14.27	21.40	14.00	17.71	14.08
20	19:00:00	22.67	14.26	14.78	14.26	Shutdown	Shutdown	22.11	14.28	21.15	14.01	17.63	14.06
20	20:00:00	22.64	14.26	15.28	14.23	Shutdown	Shutdown	22.11	14.30	21.12	14.02	17.50	14.08
20	21:00:00	22.59	14.26	14.78	14.24	Shutdown	Shutdown	22.11	14.32	20.87	14.02	18.64	14.08
20	22:00:00	21.59	14.24	14.86	14.26	Shutdown	Shutdown	21.81	14.33	20.21	14.06	18.36	14.10
20	23:00:00	47.11	14.25	15.06	14.26	Shutdown	Shutdown	20.06	14.25	18.80	14.01	16.96	14.03
21	0:00:00	51.54	14.25	15.05	14.25	Shutdown	Shutdown	19.39	14.20	16.86	13.99	15.78	13.98
21	1:00:00	49.96	14.23	15.09	14.25	Shutdown	Shutdown	19.48	14.17	18.61	13.98	17.25	13.92
21	2:00:00	48.96	14.19	14.71	14.25	Shutdown	Shutdown	18.97	14.17	18.48	13.98	17.05	13.89
21	3:00:00	51.49	14.19	14.73	14.23	Shutdown	Shutdown	19.28	14.19	19.01	13.96	17.33	13.87
21	4:00:00	52.93	14.19	14.64	14.22	Shutdown	Shutdown	19.06	14.22	17.15	13.94	17.18	13.90
21	5:00:00	52.01	14.18	14.72	14.23	Shutdown	Shutdown	19.53	14.20	15.94	13.96	16.87	13.91
21	6:00:00	51.81	14.18	15.39	14.23	Shutdown	Shutdown	19.71	14.18	15.78	13.96	17.03	13.95
21	7:00:00	52.19	14.20	15.30	14.24	Shutdown	Shutdown	19.97	14.19	16.95	13.98	15.18	13.96
21	8:00:00	52.28	14.22	15.56	14.27	Shutdown	Shutdown	19.58	14.22	18.02	14.04	19.70	14.06
21	9:00:00	51.59	14.25	15.58	14.32	Shutdown	Shutdown	19.43	14.19	19.41	14.03	20.12	14.06
21	10:00:00	47.82	14.27	15.61	14.33	Shutdown	Shutdown	21.29	14.31	18.80	14.06	20.01	14.05
21	11:00:00	42.79	14.27	15.65	14.35	Shutdown	Shutdown	21.75	14.30	18.97	14.06	19.86	14.05

วันที่	เวลา	TOPSPP (G-85054) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
21	12:00:00	39.74	14.27	15.14	14.32	Shutdown	Shutdown	21.57	14.27	18.95	14.07	19.67	14.03
21	13:00:00	23.27	14.29	15.69	14.24	Shutdown	Shutdown	21.32	14.26	18.67	14.12	19.60	14.01
21	14:00:00	22.43	14.28	15.92	14.24	Shutdown	Shutdown	21.25	14.25	18.50	14.14	20.03	14.01
21	15:00:00	22.51	14.28	16.45	14.25	Shutdown	Shutdown	21.62	14.24	18.59	14.11	20.14	14.03
21	16:00:00	22.54	14.27	16.01	14.23	Shutdown	Shutdown	22.41	14.26	18.44	14.09	20.17	14.06
21	17:00:00	22.78	14.28	16.31	14.21	Shutdown	Shutdown	22.05	14.26	18.80	14.10	20.15	14.06
21	18:00:00	22.73	14.26	16.47	14.23	Shutdown	Shutdown	21.60	14.24	18.76	14.11	19.74	14.04
21	19:00:00	22.60	14.25	15.67	14.26	Shutdown	Shutdown	21.71	14.21	18.88	14.12	19.77	14.04
21	20:00:00	22.66	14.26	16.21	14.26	Shutdown	Shutdown	22.14	14.25	19.15	14.16	19.70	14.04
21	21:00:00	22.36	14.26	15.98	14.27	Shutdown	Shutdown	22.45	14.28	19.00	14.13	19.67	14.05
21	22:00:00	22.59	14.24	16.53	14.27	Shutdown	Shutdown	21.55	14.30	18.99	14.12	18.59	14.10
21	23:00:00	28.88	14.23	16.36	14.29	Shutdown	Shutdown	19.07	14.39	18.89	14.07	16.81	13.96
22	0:00:00	28.78	14.22	16.67	14.28	Shutdown	Shutdown	18.10	14.39	20.65	14.07	15.95	13.86
22	1:00:00	28.15	14.21	16.52	14.29	Shutdown	Shutdown	18.37	14.37	20.34	14.04	16.22	13.82
22	2:00:00	28.22	14.18	16.00	14.30	Shutdown	Shutdown	18.63	14.35	19.76	14.04	15.87	13.81
22	3:00:00	28.01	14.16	16.10	14.31	Shutdown	Shutdown	19.58	14.31	21.04	14.05	16.03	13.79
22	4:00:00	27.78	14.16	16.21	14.31	Shutdown	Shutdown	19.78	14.32	19.96	14.02	15.77	13.82
22	5:00:00	27.72	14.16	16.38	14.30	Shutdown	Shutdown	20.14	14.33	20.22	14.02	15.57	13.83
22	6:00:00	28.16	14.18	16.99	14.30	Shutdown	Shutdown	20.25	14.34	18.69	13.98	16.10	13.86
22	7:00:00	28.69	14.20	17.13	14.32	Shutdown	Shutdown	20.04	14.38	21.33	13.96	16.33	13.90
22	8:00:00	32.77	14.24	17.50	14.34	Shutdown	Shutdown	20.24	14.41	21.27	13.98	19.47	14.06
22	9:00:00	51.36	14.27	17.35	14.36	Shutdown	Shutdown	20.05	14.41	21.23	14.01	20.61	14.05
22	10:00:00	50.18	14.26	16.68	14.37	Shutdown	Shutdown	21.18	14.29	20.37	13.98	19.60	14.05
22	11:00:00	48.91	14.25	16.19	14.37	Shutdown	Shutdown	21.40	14.28	18.77	13.96	19.45	14.04
22	12:00:00	49.06	14.24	16.09	14.37	Shutdown	Shutdown	21.56	14.27	17.73	13.95	19.68	14.04
22	13:00:00	23.11	14.23	15.42	14.21	Shutdown	Shutdown	22.24	14.25	17.63	13.97	20.21	14.04
22	14:00:00	21.75	14.23	16.03	14.23	Shutdown	Shutdown	25.64	9.57	16.08	13.93	20.66	14.01
22	15:00:00	21.72	14.21	16.18	14.22	Shutdown	Shutdown	20.43	14.19	16.20	13.91	20.56	14.01
22	16:00:00	21.60	14.21	15.92	14.22	Shutdown	Shutdown	20.56	14.21	16.83	13.90	20.41	14.01
22	17:00:00	21.51	14.20	14.87	14.20	Shutdown	Shutdown	20.59	14.25	15.03	13.88	20.30	14.03
22	18:00:00	21.67	14.20	15.37	14.22	Shutdown	Shutdown	20.39	14.24	17.82	13.94	20.42	14.03
22	19:00:00	21.75	14.20	14.88	14.21	Shutdown	Shutdown	20.16	14.23	18.84	13.98	20.57	14.04
22	20:00:00	21.78	14.20	16.24	14.25	Shutdown	Shutdown	20.53	14.22	18.45	13.97	20.69	14.04
22	21:00:00	21.81	14.21	16.95	14.31	Shutdown	Shutdown	20.19	14.20	18.19	13.97	20.60	14.05
22	22:00:00	22.55	14.19	17.78	14.31	Shutdown	Shutdown	20.12	14.19	18.36	14.00	19.91	14.06
22	23:00:00	21.16	14.18	16.27	14.34	Shutdown	Shutdown	19.76	14.09	15.99	13.93	17.72	14.04
23	0:00:00	22.51	14.22	15.96	14.35	Shutdown	Shutdown	19.31	14.07	15.99	13.88	17.49	14.02
23	1:00:00	22.43	14.20	15.87	14.35	Shutdown	Shutdown	19.44	14.05	17.53	13.93	17.94	14.02
23	2:00:00	22.26	14.19	16.20	14.36	Shutdown	Shutdown	19.43	14.04	16.01	13.92	17.31	14.00
23	3:00:00	22.25	14.18	16.22	14.36	Shutdown	Shutdown	19.19	14.03	18.30	13.94	17.49	13.99
23	4:00:00	22.11	14.18	16.52	14.35	Shutdown	Shutdown	19.30	14.04	16.45	13.93	17.18	14.01
23	5:00:00	22.35	14.20	16.35	14.36	Shutdown	Shutdown	19.19	14.06	17.32	13.96	16.86	14.00
23	6:00:00	22.66	14.22	16.86	14.36	Shutdown	Shutdown	19.34	14.05	17.95	13.96	17.33	14.04
23	7:00:00	22.50	14.23	17.43	14.36	Shutdown	Shutdown	19.39	14.08	16.60	13.97	17.85	14.09
23	8:00:00	22.10	14.26	17.72	14.39	Shutdown	Shutdown	18.79	14.10	18.84	14.04	18.31	14.11

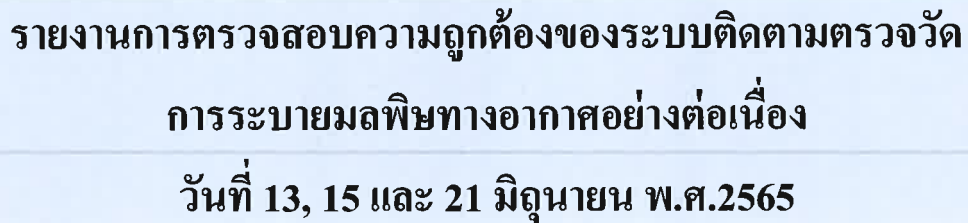
วันที่	เวลา	TOPSPP (G-85054) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
23	9:00:00	21.73	14.27	16.97	14.42	Shutdown	Shutdown	17.80	14.14	26.74	10.29	18.35	14.11
23	10:00:00	21.74	14.27	16.71	14.44	Shutdown	Shutdown	20.46	14.27	19.33	14.02	17.82	14.08
23	11:00:00	22.11	14.28	16.78	14.43	Shutdown	Shutdown	20.57	14.26	19.09	14.09	18.08	14.06
23	12:00:00	21.86	14.27	16.24	14.42	Shutdown	Shutdown	20.67	14.25	20.59	14.05	18.64	14.09
23	13:00:00	22.14	14.27	16.95	14.34	Shutdown	Shutdown	20.28	14.29	20.81	14.03	21.18	14.09
23	14:00:00	22.67	14.30	17.01	14.37	Shutdown	Shutdown	20.80	14.33	21.20	14.02	21.10	14.10
23	15:00:00	20.83	14.24	16.90	14.35	Shutdown	Shutdown	20.27	14.30	21.28	14.01	20.73	14.06
23	16:00:00	47.84	14.32	16.72	14.34	Shutdown	Shutdown	20.14	14.30	21.14	14.02	20.89	14.09
23	17:00:00	44.71	14.31	16.63	14.34	Shutdown	Shutdown	20.31	14.28	21.32	14.02	20.86	14.09
23	18:00:00	23.51	14.28	17.14	14.37	Shutdown	Shutdown	20.45	14.28	21.26	14.01	21.28	14.10
23	19:00:00	22.97	14.25	16.79	14.39	Shutdown	Shutdown	21.43	14.30	21.33	14.01	21.88	14.11
23	20:00:00	22.38	14.20	17.40	14.39	Shutdown	Shutdown	21.85	14.33	21.23	14.02	21.13	14.08
23	21:00:00	37.76	14.21	17.69	14.41	Shutdown	Shutdown	21.03	14.31	21.21	14.01	20.75	14.07
23	22:00:00	51.81	14.20	18.51	14.40	Shutdown	Shutdown	21.32	14.32	19.70	14.05	18.67	14.11
23	23:00:00	52.97	14.20	17.86	14.39	Shutdown	Shutdown	19.95	14.18	20.52	14.02	17.70	14.07
24	0:00:00	52.37	14.20	18.67	14.39	Shutdown	Shutdown	19.20	14.15	21.29	14.02	17.39	14.06
24	1:00:00	52.43	14.18	18.18	14.41	Shutdown	Shutdown	19.15	14.12	21.32	14.02	17.00	14.04
24	2:00:00	52.92	14.16	18.66	14.39	Shutdown	Shutdown	19.51	14.08	21.06	14.01	17.24	14.01
24	3:00:00	52.75	14.16	18.34	14.38	Shutdown	Shutdown	19.40	14.07	21.32	14.03	17.59	14.00
24	4:00:00	51.94	14.15	18.84	14.38	Shutdown	Shutdown	19.37	14.09	21.25	14.03	17.40	14.00
24	5:00:00	51.22	14.16	18.67	14.38	Shutdown	Shutdown	19.23	14.11	21.03	14.03	17.60	13.99
24	6:00:00	51.50	14.17	18.90	14.38	Shutdown	Shutdown	19.26	14.12	21.43	14.03	18.27	13.96
24	7:00:00	51.12	14.20	18.93	14.40	Shutdown	Shutdown	18.41	14.12	21.83	14.05	17.53	13.97
24	8:00:00	51.87	14.24	18.70	14.44	Shutdown	Shutdown	18.55	14.12	21.32	14.10	20.16	13.96
24	9:00:00	50.27	14.25	18.16	14.47	Shutdown	Shutdown	19.36	14.12	20.79	14.11	20.60	14.01
24	10:00:00	51.06	14.27	18.02	14.50	Shutdown	Shutdown	17.56	14.17	21.20	14.08	20.02	14.03
24	11:00:00	47.22	14.27	17.89	14.50	Shutdown	Shutdown	17.78	14.18	21.21	14.06	20.14	13.99
24	12:00:00	44.63	14.24	17.84	14.46	Shutdown	Shutdown	16.12	14.22	20.82	14.05	20.18	14.00
24	13:00:00	24.48	14.22	18.36	14.40	Shutdown	Shutdown	15.82	14.24	20.58	14.03	20.79	14.06
24	14:00:00	19.92	14.21	17.51	14.39	Shutdown	Shutdown	16.56	14.19	20.48	14.02	20.21	14.07
24	15:00:00	20.24	14.21	18.19	14.36	Shutdown	Shutdown	18.24	14.13	20.97	14.00	19.98	14.03
24	16:00:00	19.80	14.18	17.40	14.37	Shutdown	Shutdown	19.02	14.12	21.11	13.99	20.39	14.01
24	17:00:00	19.82	14.19	17.46	14.40	Shutdown	Shutdown	19.09	14.10	21.57	14.01	20.51	14.03
24	18:00:00	19.86	14.21	17.84	14.40	Shutdown	Shutdown	17.43	14.18	21.75	14.03	20.13	14.00
24	19:00:00	20.08	14.24	17.66	14.40	Shutdown	Shutdown	21.67	14.22	21.78	14.06	20.50	14.01
24	20:00:00	20.01	14.22	17.10	14.41	Shutdown	Shutdown	20.56	14.26	22.46	14.12	20.18	14.01
24	21:00:00	19.86	14.24	17.36	14.43	Shutdown	Shutdown	20.23	14.26	22.23	14.12	20.14	14.01
24	22:00:00	20.25	14.20	17.96	14.44	Shutdown	Shutdown	19.67	14.17	21.97	14.12	18.57	14.05
24	23:00:00	48.31	14.25	18.64	14.44	Shutdown	Shutdown	18.69	14.18	18.43	14.09	17.49	14.01
25	0:00:00	17.24	14.11	19.34	14.42	Shutdown	Shutdown	15.29	14.12	15.42	14.07	17.97	13.98
25	1:00:00	17.31	14.09	18.40	14.41	Shutdown	Shutdown	15.73	14.09	18.04	14.09	17.32	13.94
25	2:00:00	17.09	14.06	18.66	14.40	Shutdown	Shutdown	16.37	14.06	20.92	14.11	17.21	13.92
25	3:00:00	17.38	14.05	18.07	14.40	Shutdown	Shutdown	18.20	14.02	20.64	14.14	17.43	13.92
25	4:00:00	17.56	14.07	18.34	14.38	Shutdown	Shutdown	18.06	14.03	20.79	14.15	17.32	13.93
25	5:00:00	17.55	14.06	18.60	14.37	Shutdown	Shutdown	18.87	14.02	20.94	14.13	17.25	13.96

วันที่	เวลา	TOPSPP (G-85054) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
25	6:00:00	43.69	14.19	17.98	14.40	Shutdown	Shutdown	16.28	14.11	20.61	14.13	17.23	13.97
25	7:00:00	42.83	14.17	18.70	14.42	Shutdown	Shutdown	15.17	14.16	20.55	14.13	17.51	13.99
25	8:00:00	22.52	14.17	18.66	14.44	Shutdown	Shutdown	17.93	14.21	20.39	14.15	19.79	14.01
25	9:00:00	19.08	14.21	18.44	14.47	Shutdown	Shutdown	15.51	14.19	20.37	14.13	20.51	14.06
25	10:00:00	24.78	14.24	18.19	14.50	Shutdown	Shutdown	20.88	14.22	21.54	14.09	20.19	14.06
25	11:00:00	17.63	14.21	18.08	14.50	Shutdown	Shutdown	22.11	14.23	21.47	14.08	20.21	14.07
25	12:00:00	42.68	14.25	18.02	14.46	Shutdown	Shutdown	21.98	14.22	21.29	14.07	20.19	14.06
25	13:00:00	23.37	14.27	18.24	14.43	Shutdown	Shutdown	20.46	14.24	21.62	14.07	20.40	14.05
25	14:00:00	20.48	14.29	18.07	14.44	Shutdown	Shutdown	19.87	14.23	21.75	14.07	20.11	14.05
25	15:00:00	20.09	14.28	18.48	14.42	Shutdown	Shutdown	20.83	14.20	21.67	14.04	20.30	14.04
25	16:00:00	20.06	14.24	18.35	14.46	Shutdown	Shutdown	20.88	14.14	21.38	14.02	20.47	14.04
25	17:00:00	20.11	14.24	17.91	14.46	Shutdown	Shutdown	21.48	14.16	21.15	14.03	20.24	14.07
25	18:00:00	20.24	14.23	18.53	14.44	Shutdown	Shutdown	20.89	14.21	21.33	14.04	20.11	14.08
25	19:00:00	19.95	14.22	18.43	14.44	Shutdown	Shutdown	22.08	14.20	21.48	14.05	20.65	14.09
25	20:00:00	19.85	14.23	18.64	14.43	Shutdown	Shutdown	22.27	14.20	21.42	14.05	20.63	14.09
25	21:00:00	20.20	14.21	18.26	14.44	Shutdown	Shutdown	20.17	14.25	20.95	14.04	20.81	14.09
25	22:00:00	19.70	14.17	17.98	14.44	Shutdown	Shutdown	20.34	14.26	21.07	14.04	19.58	14.14
25	23:00:00	17.27	14.12	17.76	14.44	Shutdown	Shutdown	18.29	14.13	17.26	14.00	18.12	14.10
26	0:00:00	17.75	14.09	18.32	14.42	Shutdown	Shutdown	18.26	14.06	16.96	14.03	16.85	14.09
26	1:00:00	17.47	14.07	18.08	14.40	Shutdown	Shutdown	19.26	14.02	18.52	14.04	17.26	14.08
26	2:00:00	17.28	14.07	18.04	14.40	Shutdown	Shutdown	19.34	14.04	18.80	14.03	17.36	14.00
26	3:00:00	17.43	14.07	17.48	14.39	Shutdown	Shutdown	19.51	14.03	19.06	14.03	17.05	13.99
26	4:00:00	22.51	15.27	18.20	14.38	Shutdown	Shutdown	19.51	14.02	18.70	14.04	17.53	14.00
26	5:00:00	17.89	14.07	18.27	14.39	Shutdown	Shutdown	19.16	14.02	19.20	14.02	17.42	14.02
26	6:00:00	23.23	14.13	18.68	14.41	Shutdown	Shutdown	19.22	14.03	18.91	14.07	17.53	14.06
26	7:00:00	23.97	14.18	18.79	14.42	Shutdown	Shutdown	19.50	14.07	19.17	14.08	17.58	14.11
26	8:00:00	49.67	14.24	18.51	14.45	Shutdown	Shutdown	19.25	14.09	19.04	14.09	17.48	14.15
26	9:00:00	37.72	9.71	19.03	14.46	Shutdown	Shutdown	19.53	14.09	19.93	14.09	17.12	14.19
26	10:00:00	31.03	14.21	18.85	14.47	Shutdown	Shutdown	21.68	14.24	21.17	14.06	16.87	14.18
26	11:00:00	14.83	14.19	17.88	14.47	Shutdown	Shutdown	22.10	14.24	21.28	14.05	16.96	14.14
26	12:00:00	17.90	14.22	17.50	14.45	Shutdown	Shutdown	22.02	14.22	21.45	14.06	16.99	14.11
26	13:00:00	16.76	14.27	17.51	14.42	Shutdown	Shutdown	20.23	14.22	20.89	14.03	16.63	14.04
26	14:00:00	17.45	14.27	17.53	14.43	Shutdown	Shutdown	21.81	14.21	21.07	14.01	16.81	14.07
26	15:00:00	17.56	14.25	17.07	14.41	Shutdown	Shutdown	21.90	14.17	20.91	13.98	16.52	14.06
26	16:00:00	17.52	14.23	17.01	14.40	Shutdown	Shutdown	22.02	14.17	20.89	13.98	17.12	14.03
26	17:00:00	17.42	14.18	17.41	14.42	Shutdown	Shutdown	21.15	14.20	21.02	13.99	16.59	14.06
26	18:00:00	17.70	14.20	42.33	14.43	Shutdown	Shutdown	20.13	14.22	21.28	13.98	20.40	14.05
26	19:00:00	17.35	14.24	Maintenance	Maintenance	Shutdown	Shutdown	21.65	14.20	21.11	13.99	20.93	14.04
26	20:00:00	17.51	14.15	Maintenance	Maintenance	Shutdown	Shutdown	21.91	14.22	20.95	14.00	20.89	14.05
26	21:00:00	17.96	14.22	52.54	14.37	Shutdown	Shutdown	19.80	14.24	21.10	14.00	20.97	14.05
26	22:00:00	19.28	14.16	51.64	14.37	Shutdown	Shutdown	19.74	14.24	21.28	14.02	19.61	14.06
26	23:00:00	31.68	14.14	52.21	14.37	Shutdown	Shutdown	18.16	14.10	17.74	13.99	17.44	14.09
27	0:00:00	48.19	15.99	51.70	14.37	Shutdown	Shutdown	15.67	14.10	19.54	14.04	17.61	14.08
27	1:00:00	14.81	14.09	51.56	14.36	Shutdown	Shutdown	15.48	14.08	19.71	14.04	17.79	14.05
27	2:00:00	18.18	14.13	51.34	14.35	Shutdown	Shutdown	17.10	14.01	19.71	14.01	16.73	14.04

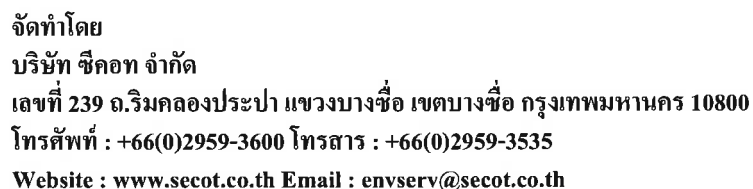
วันที่	เวลา	TOPSPP (G-85054) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
27	3:00:00	15.68	14.45	25.04	14.40	Shutdown	Shutdown	16.84	14.01	19.90	13.99	16.69	14.03
27	4:00:00	15.13	14.15	17.30	14.39	Shutdown	Shutdown	17.50	14.01	19.98	13.98	16.90	14.05
27	5:00:00	22.06	15.19	17.50	14.37	Shutdown	Shutdown	17.48	14.01	19.81	13.98	17.20	14.05
27	6:00:00	18.07	14.13	17.82	14.37	Shutdown	Shutdown	18.15	14.01	20.03	13.99	17.43	14.07
27	7:00:00	38.90	14.18	18.31	14.39	Shutdown	Shutdown	17.59	14.04	20.21	14.00	17.87	14.10
27	8:00:00	39.14	15.10	17.87	14.44	Shutdown	Shutdown	21.52	14.16	20.16	14.02	20.25	14.14
27	9:00:00	23.19	14.29	17.49	14.46	Shutdown	Shutdown	43.45	14.21	20.00	14.02	19.14	14.17
27	10:00:00	35.56	14.26	17.13	14.47	Shutdown	Shutdown	22.01	14.22	21.04	14.03	19.33	14.12
27	11:00:00	18.47	14.27	16.80	14.45	Shutdown	Shutdown	22.36	14.19	21.28	14.02	19.73	14.06
27	12:00:00	30.33	14.22	16.63	14.43	Shutdown	Shutdown	21.82	14.17	21.30	14.03	19.38	14.08
27	13:00:00	21.21	14.19	16.65	14.39	Shutdown	Shutdown	21.71	14.19	21.19	14.01	19.90	14.10
27	14:00:00	17.08	14.19	16.12	14.37	Shutdown	Shutdown	22.37	14.18	20.95	14.00	19.81	14.10
27	15:00:00	26.17	16.41	16.11	14.36	Shutdown	Shutdown	19.98	14.15	20.94	13.98	20.19	14.11
27	16:00:00	17.73	14.20	15.96	14.34	Shutdown	Shutdown	19.96	14.14	22.19	13.86	19.95	14.10
27	17:00:00	27.82	15.56	16.14	14.33	Shutdown	Shutdown	19.85	14.19	21.38	13.86	19.54	14.10
27	18:00:00	19.37	14.55	16.53	14.27	Shutdown	Shutdown	19.96	14.20	21.48	13.87	19.44	14.11
27	19:00:00	17.05	14.21	16.62	14.26	Shutdown	Shutdown	19.93	14.19	21.72	13.89	19.03	14.09
27	20:00:00	16.88	14.22	15.71	14.25	Shutdown	Shutdown	19.85	14.17	21.43	13.90	18.72	14.07
27	21:00:00	16.79	14.22	15.88	14.33	Shutdown	Shutdown	19.79	14.17	21.36	13.92	19.02	14.07
27	22:00:00	20.93	14.77	16.07	14.32	Shutdown	Shutdown	20.27	14.21	21.25	13.94	19.03	14.09
27	23:00:00	50.00	14.91	15.80	14.32	Shutdown	Shutdown	18.03	14.09	17.47	13.91	18.45	14.05
28	0:00:00	53.23	15.84	16.65	14.32	Shutdown	Shutdown	16.47	14.06	14.88	13.91	17.45	14.07
28	1:00:00	50.51	14.23	16.50	14.31	Shutdown	Shutdown	17.56	13.99	14.94	13.90	17.09	14.04
28	2:00:00	49.51	14.21	16.58	14.29	Shutdown	Shutdown	17.25	13.98	15.01	13.89	16.97	14.03
28	3:00:00	49.41	14.21	16.24	14.28	Shutdown	Shutdown	16.84	13.99	15.18	13.89	17.00	14.02
28	4:00:00	49.46	14.21	16.95	14.27	Shutdown	Shutdown	16.98	13.99	14.84	13.88	16.73	14.03
28	5:00:00	49.87	14.22	16.32	14.27	Shutdown	Shutdown	17.59	13.98	14.96	13.87	16.79	14.06
28	6:00:00	50.64	15.41	16.15	14.27	Shutdown	Shutdown	18.45	13.99	20.65	13.93	17.04	14.08
28	7:00:00	51.55	19.36	16.36	14.28	Shutdown	Shutdown	17.84	14.02	20.52	13.94	16.76	14.09
28	8:00:00	46.95	14.22	16.55	14.32	Shutdown	Shutdown	17.87	14.12	20.70	13.96	20.48	14.10
28	9:00:00	46.69	14.26	17.58	14.37	Shutdown	Shutdown	22.34	14.20	20.55	13.97	21.01	14.09
28	10:00:00	47.32	14.35	16.49	14.36	Shutdown	Shutdown	19.19	14.17	20.79	13.97	21.07	14.10
28	11:00:00	47.90	14.29	16.16	14.33	Shutdown	Shutdown	19.13	14.19	20.74	13.96	21.24	14.11
28	12:00:00	47.30	14.28	15.78	14.32	Shutdown	Shutdown	19.09	14.18	20.76	13.95	21.17	14.10
28	13:00:00	19.81	14.27	15.54	14.35	Shutdown	Shutdown	19.53	14.17	20.50	13.95	21.10	14.11
28	14:00:00	21.58	14.86	16.28	14.32	Shutdown	Shutdown	19.34	14.15	20.44	13.96	20.68	14.08
28	15:00:00	19.01	14.26	16.04	14.32	Shutdown	Shutdown	19.33	14.13	20.37	13.96	20.66	14.08
28	16:00:00	22.62	14.88	15.95	14.33	Shutdown	Shutdown	19.11	14.11	20.19	13.94	21.09	14.09
28	17:00:00	18.49	14.15	16.19	14.33	Shutdown	Shutdown	19.60	14.14	20.58	13.94	21.22	14.08
28	18:00:00	18.67	14.18	16.08	14.33	Shutdown	Shutdown	20.16	14.19	20.66	13.95	20.98	14.06
28	19:00:00	18.91	14.20	16.22	14.34	Shutdown	Shutdown	20.34	14.19	21.66	13.96	20.90	14.04
28	20:00:00	19.44	14.23	16.50	14.31	Shutdown	Shutdown	20.50	14.18	21.25	13.93	20.85	14.05
28	21:00:00	19.27	14.23	16.06	14.34	Shutdown	Shutdown	21.14	14.22	21.87	13.92	20.88	14.03
28	22:00:00	18.27	14.24	16.04	14.32	Shutdown	Shutdown	21.22	14.20	21.53	13.94	19.49	14.08
28	23:00:00	44.75	14.25	16.24	14.32	Shutdown	Shutdown	20.18	14.05	18.64	13.93	17.78	14.03

วันที่	เวลา	TOPSPP (G-85054) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)	NOx (ppm)	O ₂ (%)
29	0:00:00	49.46	14.25			Shutdown	Shutdown	20.19	14.07	15.16	13.92	16.82	14.03
29	1:00:00	49.30	14.23			Shutdown	Shutdown	20.55	14.15	15.40	13.92	16.43	14.02
29	2:00:00	49.02	14.21			Shutdown	Shutdown	20.21	14.11	15.72	13.92	16.28	14.01
29	3:00:00	49.78	14.21			Shutdown	Shutdown	20.34	14.09	15.30	13.91	16.19	14.00
29	4:00:00	50.15	14.20			Shutdown	Shutdown	20.36	14.08	15.16	13.91	16.41	13.99
29	5:00:00	49.84	14.21			Shutdown	Shutdown	20.91	14.08	14.71	13.90	16.44	13.99
29	6:00:00	50.29	14.23			Shutdown	Shutdown	21.23	14.10	15.15	13.91	16.08	14.01
29	7:00:00	50.58	14.24			Shutdown	Shutdown	20.85	14.05	15.11	13.92	15.81	14.04
29	8:00:00	49.66	14.27			Shutdown	Shutdown	20.30	14.02	15.21	13.94	18.99	14.05
29	9:00:00	49.34	14.28			Shutdown	Shutdown	20.81	14.04	15.90	13.98	18.76	14.06
29	10:00:00	49.43	14.29			Shutdown	Shutdown	22.70	14.23	21.05	14.03	19.12	14.08
29	11:00:00	49.18	14.29			Shutdown	Shutdown	23.39	14.25	20.64	14.03	18.51	14.09
29	12:00:00	48.20	14.27			Shutdown	Shutdown	23.53	14.23	20.92	14.02	20.25	14.05
29	13:00:00	19.64	14.22			Shutdown	Shutdown	23.13	14.20	21.15	14.02	20.74	14.04
29	14:00:00	19.28	14.22			Shutdown	Shutdown	22.79	14.18	20.65	14.02	20.82	14.04
29	15:00:00	19.02	14.19			Shutdown	Shutdown	22.68	14.16	20.14	14.01	20.25	14.04
29	16:00:00	19.49	14.21			Shutdown	Shutdown	22.94	14.14	19.97	14.00	18.85	14.03
29	17:00:00	19.93	14.23			Shutdown	Shutdown	22.93	14.14	19.71	14.01	18.83	14.03
29	18:00:00	19.64	14.22			Shutdown	Shutdown	22.82	14.16	19.94	14.00	19.64	14.03
29	19:00:00	18.07	14.20			Shutdown	Shutdown	23.09	14.16	20.92	13.98	19.69	14.04
29	20:00:00	17.79	14.21			Shutdown	Shutdown	22.64	14.14	20.79	13.99	18.83	14.05
29	21:00:00	18.00	14.21			Shutdown	Shutdown	22.53	14.15	20.34	13.97	18.25	14.02
29	22:00:00	18.62	14.20			Shutdown	Shutdown	21.65	14.21	18.71	13.97	18.37	14.03
29	23:00:00	43.40	14.21			Shutdown	Shutdown	20.44	14.06	15.36	13.94	18.63	13.94
30	0:00:00	44.89	14.20			Shutdown	Shutdown	20.16	14.07	15.42	13.95	17.54	13.87
30	1:00:00	44.86	14.17			Shutdown	Shutdown	19.97	14.08	15.36	13.95	17.18	13.87
30	2:00:00	45.22	14.15			Shutdown	Shutdown	19.71	14.04	15.39	13.94	17.20	13.85
30	3:00:00	44.90	14.15			Shutdown	Shutdown	19.99	14.02	15.45	13.93	17.24	13.87
30	4:00:00	45.12	14.15			Shutdown	Shutdown	19.66	14.04	15.04	13.93	16.11	13.86
30	5:00:00	45.24	14.16			Shutdown	Shutdown	19.92	14.06	15.05	13.92	15.30	13.83
30	6:00:00	45.76	14.18			Shutdown	Shutdown	19.85	14.05	15.20	13.92	15.23	13.85
30	7:00:00	45.68	14.19			Shutdown	Shutdown	19.44	14.01	17.38	13.95	14.83	13.94
30	8:00:00	45.30	14.22			Shutdown	Shutdown	19.62	14.06	18.93	14.04	19.68	14.03
30	9:00:00	45.36	14.23			Shutdown	Shutdown	20.12	14.11	18.70	14.03	20.01	14.03
30	10:00:00	45.20	14.27			Shutdown	Shutdown	21.52	14.21	18.63	14.06	20.33	14.03
30	11:00:00	43.41	14.26			Shutdown	Shutdown	22.40	14.23	18.50	14.00	19.90	14.02
30	12:00:00	43.02	14.28			Shutdown	Shutdown	22.62	14.19	18.35	14.00	20.06	14.00
30	13:00:00	43.08	14.28			Shutdown	Shutdown	22.13	14.24	18.97	14.01	19.54	13.99
30	14:00:00	40.84	14.27			Shutdown	Shutdown	21.48	14.28	18.61	13.99	19.99	14.02
30	15:00:00	46.64	14.29			Shutdown	Shutdown	20.52	14.25	18.24	13.94	20.21	14.00
30	16:00:00	50.77	14.28			Shutdown	Shutdown	20.37	14.22	18.35	13.94	20.18	13.99
30	17:00:00	34.91	14.22			Shutdown	Shutdown	20.80	14.22	18.52	13.95	19.92	13.98
30	18:00:00	19.94	14.21			Shutdown	Shutdown	21.42	14.24	18.45	13.96	20.07	13.98
30	19:00:00	20.04	14.23			Shutdown	Shutdown	21.01	14.28	18.74	13.94	20.04	13.98
30	20:00:00	18.46	14.25			Shutdown	Shutdown	21.41	14.28	18.77	13.94	20.09	13.98

วันที่	เวลา	TOPSPP (G-85054) 'S STACK											
		มกราคม		กุมภาพันธ์		มีนาคม		เมษายน		พฤษภาคม		มิถุนายน	
		NOx (ppm)	O ₂ (%)	NOx (ppm)	O2 (%)	NOx (ppm)	O2 (%)	NOx (ppm)	O2 (%)	NOx (ppm)	O2 (%)	NOx (ppm)	O2 (%)
30	21:00:00	30.22	14.22			Shutdown	Shutdown	21.28	14.28	18.20	13.95	20.40	14.00
30	22:00:00	50.00	14.25			Shutdown	Shutdown	20.76	14.27	18.36	14.00	19.42	14.04
30	23:00:00	49.86	14.25			Shutdown	Shutdown	19.08	14.13	18.49	13.96	15.52	14.16
31	0:00:00	49.97	14.24			46.54	14.25			18.51	13.97		
31	1:00:00	49.58	14.22			50.26	14.24			18.70	14.00		
31	2:00:00	49.56	14.21			51.04	14.22			18.58	14.01		
31	3:00:00	49.55	14.20			51.03	14.20			18.52	14.00		
31	4:00:00	48.73	14.20			49.96	14.18			18.30	13.98		
31	5:00:00	49.28	14.20			48.78	14.21			18.47	13.98		
31	6:00:00	49.28	14.21			49.53	14.21			19.12	13.99		
31	7:00:00	50.01	14.23			47.47	14.23			19.34	14.01		
31	8:00:00	49.95	14.27			49.05	14.33			19.05	14.04		
31	9:00:00	49.77	14.29			47.40	14.35			19.30	14.06		
31	10:00:00	49.26	14.30			46.87	14.35			20.44	14.00		
31	11:00:00	48.40	14.29			46.64	14.32			20.53	14.00		
31	12:00:00	47.78	14.28			46.82	14.33			20.70	14.00		
31	13:00:00	19.51	14.17			45.11	14.31			20.60	13.99		
31	14:00:00	17.88	14.16			45.63	14.31			20.41	13.97		
31	15:00:00	17.78	14.15			46.70	14.32			20.33	13.93		
31	16:00:00	17.46	14.22			48.57	14.32			20.49	13.93		
31	17:00:00	17.57	14.23			49.44	14.34			20.52	13.93		
31	18:00:00	17.61	14.22			49.30	14.37			20.67	13.93		
31	19:00:00	18.08	14.24			50.00	14.35			20.72	13.95		
31	20:00:00	18.14	14.24			50.28	14.39			20.63	13.95		
31	21:00:00	18.47	14.23			49.88	14.38			20.58	13.97		
31	22:00:00	18.46	14.20			47.67	14.37			18.70	14.01		
31	23:00:00	42.88	14.21			44.51	14.33			19.22	13.95		



ชื่อโครงการ	โรงไฟฟ้าขนาดเล็ก
ชื่อเจ้าของโครงการ	บริษัท ท็อป เอสพีพี จำกัด
สถานที่ติดต่อ	เลขที่ 42/1 หมู่ 1 ถนนสุขุมวิท กม.ที่ 124 ตำบลทุ่งสุขลา อำเภอศรีราชา จังหวัดชลบุรี 20230





รายงานการตรวจสอบความถูกต้องของระบบติดตามตรวจวัด
การระบายมลพิษทางอากาศอย่างต่อเนื่อง
วันที่ 13, 15 และ 21 มิถุนายน พ.ศ.2565

ชื่อโครงการ	โรงไฟฟ้าขนาดเล็ก
ชื่อเจ้าของโครงการ	บริษัท ท็อป เอสพีพี จำกัด
สถานที่ติดต่อ	เลขที่ 42/1 หมู่ 1 ถนนสุขุมวิท กม.ที่ 124 ตำบลทุ่งสุขลา อำเภอศรีราชา จังหวัดชลบุรี 20230



จัดทำโดย
บริษัท ซีคอต จำกัด
เลขที่ 239 ถ.วิมคลองประปา แขวงบางซื่อ เขตบางซื่อ กรุงเทพมหานคร 10800
โทรศัพท์ : +66(0)2959-3600 โทรสาร : +66(0)2959-3535
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รายงานการตรวจสอบความถูกต้องของระบบติดตามตรวจวัด

การระบายมลพิษทางอากาศอย่างต่อเนื่อง

โรงไฟฟ้าขนาดเล็ก

ชื่อโครงการ	โรงไฟฟ้าขนาดเล็ก
ที่ตั้งโรงงาน	เลขที่ 42/1 หมู่ที่ 1 ถนนสุขุมวิท กม.ที่ 124 ตำบลทุ่งสุขลา อำเภอศรีราชา จังหวัดชลบุรี 20230
ชื่อเจ้าของโครงการ	บริษัท ทีโอพี เอสพี จำกัด
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หนังสือรับรองการจัดทำรายงานการตรวจสอบความถูกต้องของระบบ

ติดตามตรวจวัดการระบายมลพิษทางอากาศอย่างต่อเนื่อง

โรงไฟฟ้าขนาดเล็ก

15 กรกฎาคม 2565

หนังสือฉบับนี้ขอรับรองว่า บริษัท ซีคอต จำกัด เป็นผู้จัดทำรายงานการตรวจสอบความถูกต้องของระบบติดตามตรวจวัดการระบายมลพิษทางอากาศอย่างต่อเนื่อง ในวันที่ 13, 15 และ 21 มิถุนายน พ.ศ.2565 ของโรงไฟฟ้าขนาดเล็ก ตั้งอยู่เลขที่ 42/1 หมู่ที่ 1 ถนนสุขุมวิท กม.ที่ 124 ตำบลทุ่งสุขลา อำเภอศรีราชา จังหวัดชลบุรี ให้แก่ บริษัท ท็อป เอสพีพี จำกัด

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(นายขรรชัช เกรียงไกรอุดม)

กรรมการผู้จัดการ

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ภาคผนวก ข	ใบ CERTIFICATE ที่เกี่ยวข้อง
ภาคผนวก ค	ข้อมูลจากระบบ CEMs ของโรงไฟฟ้า
ภาคผนวก ง	แบบบันทึกการทดสอบ RELATIVE ACCURACY AUDIT
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1. บทนำ

บริษัท ท็อป เอสพีพี จำกัด ตั้งอยู่ในบริเวณพื้นที่กลุ่มไทยออยล์ ซึ่งอยู่ทางทิศใต้ของบริษัท ไทยออยล์ จำกัด (มหาชน) ในเขตเทศบาลนครแหลมฉบัง ตำบลทุ่งสุขลา อำเภอสัตหีบ จังหวัดชลบุรี เป็นโรงไฟฟ้าที่ใช้ก๊าซธรรมชาติเป็นเชื้อเพลิง มีกำลังการผลิตไฟฟ้าสูงสุด (Gross) ประมาณ 246.4 เมกะวัตต์ ประกอบด้วย บล็อกที่ 1 มีกำลังการผลิตไฟฟ้าสูงสุด 128.3 เมกะวัตต์ บล็อกที่ 2 มีกำลังการผลิตไฟฟ้าสูงสุด 118.06 เมกะวัตต์ กระบวนการผลิตไฟฟ้าของบริษัท ท็อป เอสพีพี จำกัด ประกอบด้วย เครื่องกำเนิดไฟฟ้ากังหันก๊าซ (Gas Turbine Generators : GTGs) 5 เครื่อง โดยเครื่องกำเนิดไฟฟ้ากังหันก๊าซที่ติดตั้งใหม่ จำนวน 4 เครื่อง (G-5051, G-5052, G-5053 และ G-5054) เป็นแบบ Dry Low NO_x Combustion บล็อกที่ 1 ขนาดกำลังการผลิตไฟฟ้าเครื่องละประมาณ 38.5 เมกะวัตต์ บล็อกที่ 2 ขนาดกำลังการผลิตไฟฟ้าเครื่องละประมาณ 44.18 เมกะวัตต์ หน่วยผลิตไอน้ำ (Heat Recovery Steam Generators : HRSGs) 5 เครื่อง และเครื่องกำเนิดไฟฟ้ากังหันไอน้ำ (Steam Turbine Generators : STGs) 2 เครื่อง บล็อกที่ 1 ขนาดกำลังการผลิตไฟฟ้าประมาณ 12.8 เมกะวัตต์ (G-5056) บล็อกที่ 2 ขนาดกำลังการผลิตไฟฟ้าประมาณ 29.7 เมกะวัตต์ (G-5055)

ในปี พ.ศ. 2564 บริษัท ซีคอต จำกัด ได้รับมอบหมายให้ทำการทดสอบ RAA จำนวน 5 ปล่อง ได้แก่ ปล่อง G-85051, ปล่อง G-85052, ปล่อง G-85053, ปล่อง G-85054 และปล่อง G-5019 ซึ่งดำเนินการในระหว่างวันที่ 13, 15 และ 21 มิถุนายน พ.ศ.2565 ขั้นตอนวิธีการที่บริษัท ซีคอต จำกัด ใช้ในการทดสอบ RAA ของระบบ CEMS อ้างอิงแนวทางจากเอกสาร Code of Federal Regulations (CFR) 40 Part 60 (2019) Method 3A, Method 6C, Method 7E และ Method 10 ใน Appendix A Performance Specifications 2, 3 และ 4 ใน Appendix B และ Procedure 1 ของ Appendix F โดย Method 3A, Method 7E และ Method 10 เป็นวิธีการตรวจวัดก๊าซ O₂, NO_x, SO₂ และ CO โดยใช้เครื่องมืออัตโนมัติอย่างต่อเนื่องซึ่งใช้ก๊าซมาตรฐานชนิด EPA Protocol Type I ในการสอบเทียบเครื่องมือตรวจวัดก๊าซดังกล่าว

2. วัตถุประสงค์

เพื่อตรวจสอบความถูกต้องของการทำงานของระบบ CEMS สำหรับตรวจวัดความเข้มข้นของก๊าซ O₂, NO_x, SO₂ และ CO ที่ติดตั้งใช้งานต่อเนื่องว่าเป็นไปตามข้อกำหนดลักษณะเฉพาะของการทำงาน (Procedure 1 และ Performance Specification 2, 3 และ 4) ในด้าน Relative Accuracy Audit (RAA) ทั้งนี้ข้อกำหนดดังกล่าว ปรากฏอยู่ในเอกสาร 40 CFR 60 Appendix B และ Appendix F โดยเกณฑ์การยอมรับของการทดสอบ RAA ได้แสดงไว้ในตารางที่ 1

ตารางที่ 1 เกณฑ์ในการทดสอบ RAA

PS	ก๊าซ	Relative Accuracy Audit (RAA)
2	SO ₂ / NO _x	น้อยกว่าหรือเท่ากับ 15% ของค่าเฉลี่ยของวิธีอ้างอิง 3 ชุด หรือ น้อยกว่าหรือเท่ากับ 7.5% ของค่ามาตรฐานการระบายมลพิษ (แล้วแต่ค่าใดจะดีกว่ากัน)
4	CO	น้อยกว่าหรือเท่ากับ 15% ของค่าเฉลี่ยของวิธีอ้างอิง 3 ชุด หรือ น้อยกว่าหรือเท่ากับ 7.5% ของค่ามาตรฐานการระบายมลพิษ (แล้วแต่ค่าใดจะดีกว่ากัน)
3	O ₂	น้อยกว่าหรือเท่ากับ 15% ของค่าเฉลี่ยของวิธีอ้างอิง 3 ชุด

3. ขอบเขตการตรวจสอบ

บริษัท ซีคอต จำกัด ทำการทดสอบ Relative Accuracy ของระบบ CEMS ที่ตรวจวัดก๊าซ O₂, SO₂, NO_x และ CO ซึ่งติดตั้งที่ปล่อง G-85051, ปล่อง G-85052, ปล่อง G-85053, ปล่อง G-85054 และปล่อง G-5019 ของโรงไฟฟ้าขนาดเล็ก บริษัท ท็อป เอสพีที จำกัด

4. คำจำกัดความของการทดสอบ

4.1 การทดสอบ Relative Accuracy Audit (RAA Test)

การทดสอบ Relative Accuracy Audit จะทำโดยใช้ระบบของเครื่องมือตรวจวัดอีกชุดหนึ่ง ซึ่งใช้หลักการวิธีทดสอบที่เป็นวิธีอ้างอิง (Instrumental Reference Method) ที่มีความถูกต้องแม่นยำสูง นำไปตรวจวัดการระบายอากาศเสีย ณ ปล่องที่ติดตั้งระบบ CEMS โดยใช้ท่อเก็บตัวอย่าง และระบบเก็บตัวอย่าง/ระบบตรวจวัด/ระบบรวบรวมข้อมูลตรวจวัด แยกจากระบบ CEMS ที่ต้องการทดสอบ Relative Accuracy Audit เพื่อเปรียบเทียบค่าที่อ่านได้จากระบบ CEMS และข้อมูลที่ได้จากวิธีทดสอบที่เป็นวิธีอ้างอิง

ข้อกำหนดที่เกี่ยวข้องในการทดสอบ RAA

- ขณะทดสอบ RAA ทางโรงไฟฟ้าต้องรักษากำลังการผลิตให้คงที่ ที่ระดับไม่ต่ำกว่า 50% Load
- สำหรับการทดสอบ RAA ข้อมูลจากระบบ CEMS และข้อมูลจากวิธีอ้างอิงจะต้องเป็นข้อมูลในเวลาเดียวกัน โดยต้องคำนึงถึงช่วงเวลาตอบสนองของระบบ CEMS และช่วงเวลาตอบสนองของวิธีอ้างอิง โดยความยาวของสายเก็บตัวอย่างมักมีผลอย่างมากกับเวลาตอบสนองของเครื่องมือ
- การทดสอบใช้เวลาอย่างน้อยประมาณ 21 นาที/ชุด เก็บข้อมูลการทดสอบทั้งหมด จำนวน 3 ชุด
- ผลการทดสอบที่ถูกต้องจะต้องมีการปรับไปที่สภาวะเดียวกัน เช่น ค่าความดันมาตรฐาน (760 มม.ปรอท) อุณหภูมิมาตรฐาน (298 เคลวิน) เปอร์เซนต์ออกซิเจน สภาวะแห้ง/เปียก เป็นต้น ในกรณีที่การปรับแก้ค่าความชื้นเป็นสิ่งจำเป็น ควรมีการวัดความชื้นในเวลาเดียวกันกับการทดสอบ RAA ด้วย ในกรณีของ

โรงไฟฟ้าขนาดเล็ก บริษัท ท็อป เอสพีพี จำกัด นั้น NO_x , SO_2 และ CO จะเปรียบเทียบกับในหน่วย ppmvd ที่สภาวะแห้งและที่สภาวะ O_2 ที่แท้จริง (Actual O_2)

- เกณฑ์ในการทดสอบ RAA ของระบบ CEMS ที่ตรวจวัด NO_x , SO_2 และ CO จะอ้างอิงตามข้อกำหนดลักษณะเฉพาะของการทำงาน (Procedure 1 และ Performance Specification 2, 3, 4) ในด้าน Relative Accuracy Audit (RAA) ตามเอกสาร 40 CFR 60 Appendix B และ Appendix F โดยเกณฑ์การยอมรับของการทดสอบ RAA คือ น้อยกว่าหรือเท่ากับ 15% ของค่าเฉลี่ยของวิธีอ้างอิง หรือน้อยกว่าหรือเท่ากับ 7.5 % ของค่ามาตรฐานการระบายมลพิษ (แล้วแต่ค่าใดจะดีกว่า)
- เกณฑ์ในการทดสอบ RAA ของระบบ CEMS ที่ตรวจวัด O_2 คือน้อยกว่า หรือเท่ากับ 15 % O_2

5. ตำแหน่งที่ทำการทดสอบและจำนวนครั้งที่ทดสอบ

การทดสอบ RAA

ทดสอบ RAA โดยใช้วิธีทดสอบอ้างอิงให้ได้ข้อมูล 3 จุด ในกรณีของโรงไฟฟ้าขนาดเล็ก บริษัท ท็อป เอสพีพี จำกัด การทดสอบ RAA ทำที่ 3 จุดเก็บตัวอย่าง (Traverse) ที่ระยะ ร้อยละ 16.7, 50 และ 83.3 ของเส้นผ่านศูนย์กลางของปล่อง / ท่อ Port ที่ใช้ทำการทดสอบ Relative accuracy Audit คือ Port ที่อยู่ในแนวระดับใกล้เคียงกับ Port ที่ติดตั้งท่อเก็บตัวอย่าง (Probe) ของระบบ CEMS ของโรงไฟฟ้า

รายละเอียดของจำนวนจุดเก็บตัวอย่าง (Traverse) และเวลาที่ใช้ในการทดสอบ Relative Accuracy Audit แสดงในตารางที่ 2

ตารางที่ 2 สรุปจำนวนจุดเก็บตัวอย่าง (Traverse) และเวลาที่ใช้ในการทดสอบ RAA

มลพิษที่ตรวจวัด	จุดเก็บตัวอย่าง(Traverse Points)	เวลาในการทดสอบ	วิธีการอ้างอิงที่ใช้
O_2	3 จุด	21 นาที/1 ชุดของข้อมูล (7 นาที ต่อ 1 จุด)	PS-3 และ Method 3A
$\text{SO}_2 / \text{NO}_x$	3 จุด	21 นาที/1 ชุดของข้อมูล (7 นาที ต่อ 1 จุด)	PS-2 และ Method 6C, 7E
CO	3 จุด	21 นาที/1 ชุดของข้อมูล (7 นาที ต่อ 1 จุด)	PS-4 และ Method 10

6. วันที่ทำการทดสอบ

การทดสอบ Relative Accuracy

ปล่อง G-85051	:	วันที่ 13 มิถุนายน 2565
ปล่อง G-85052	:	วันที่ 13 มิถุนายน 2565
ปล่อง G-85053	:	วันที่ 15 มิถุนายน 2565
ปล่อง G-85054	:	วันที่ 15 มิถุนายน 2565
ปล่อง G-5019	:	วันที่ 21 มิถุนายน 2565

7. อุปกรณ์เครื่องมือที่ใช้ในการทดสอบ RAA

Relative Accuracy Audit ของระบบ CEMS ที่ตรวจวัด

1. ท่อเก็บตัวอย่าง (Sample Probe) เป็นท่อสแตนเลส พร้อมระบบให้ความร้อน ปลายเปิดและเป็นท่อตรงมีความยาวเพียงพอที่จะเลื่อนไปยังตำแหน่ง Traverse ต่างๆ ได้
2. แผ่นกรองฝุ่น (Particulate Filter) เป็นแผ่นกรองฝุ่นชนิด Glass Fiber
3. วาล์วสำหรับปรับเทียบ (Calibration Valve) เพื่อให้สามารถทำการปรับเทียบที่บริเวณปลายท่อเก็บตัวอย่างได้ โดยจะไปปิดกั้นการไหลของตัวอย่างอากาศ แต่ยอมให้ก๊าซมาตรฐานที่บรรจุอยู่ในถังส่งผ่านจากบริเวณด้านล่างภายในรถ Mobile ผ่านระบบท่อนำส่งตัวอย่างไปยังปลายท่อเก็บตัวอย่าง เมื่ออยู่ใน Mode ของการปรับเทียบ
4. ท่อนำส่งตัวอย่าง (Sample Heated Line) มีระบบให้ความร้อนเพื่อป้องกันการกลั่นตัวของไอน้ำ ภายในเป็นท่อ Teflon เพื่อนำพาตัวอย่างก๊าซ ไปยังระบบกำจัดความชื้น
5. ระบบกำจัดความชื้น (Moisture Removal System) เป็น Condenser หรือระบบหล่อเย็นที่ดึงเอาความชื้นออกจากกระแสก๊าซได้อย่างต่อเนื่อง โดยที่ระยะเวลาการสัมผัสระหว่างตัวอย่างก๊าซกับของเหลวที่กลั่นตัวออกมาจะต้องสั้นที่สุด
6. ระบบท่อนำส่งตัวอย่าง (Sample Transport Line) เป็นท่อ Teflon เพื่อนำส่งตัวอย่างก๊าซที่ถูกกำจัดความชื้นออกไปแล้วไปยังบีมคูอากาศ และ Sample Manifold
7. บีมคูอากาศ ไคอะแฟรมบีมที่ไม่รั่ว และไม่ทำปฏิกิริยากับตัวอย่างก๊าซที่ผ่านเข้ามา มีหน้าที่ดึงตัวอย่างก๊าซผ่านไประบบของ Instrumental Reference Method ด้วยอัตราไหลที่เพียงพอจะทำให้ได้ค่า Response Time ที่สั้นๆ
8. อุปกรณ์ควบคุมการไหลของตัวอย่างก๊าซ เป็น Rotameter เพื่อควบคุมอัตราไหลของตัวอย่างอากาศให้คงที่ $\pm 10\%$
9. Sample Gas Manifold เพื่อแบ่งตัวอย่างก๊าซไปยังเครื่องตรวจวัดแต่ละตัว และต้องมีช่องว่างเหลือเพื่อทำเป็น Bypass discharge vent ด้วย Manifold นี้ ถูกออกแบบให้สามารถทำการปรับแต่งเครื่องตรวจวัดก๊าซจากด้านล่างบริเวณ Inlet ของแต่ละเครื่อง (Local span) ได้ด้วย
10. เครื่องตรวจวัดก๊าซ
 - 10.1 เครื่องตรวจวัดก๊าซออกไซด์ของไนโตรเจน (NO_x) Teledyne รุ่น 200EM ใช้หลักการของ Chemiluminescent ในการตรวจวัด
 - 10.2 เครื่องตรวจวัดก๊าซออกซิเจน (O_2) AMI รุ่น 70 ใช้หลักการของ Zirconium oxide ในการตรวจวัด
 - 10.3 เครื่องตรวจวัดก๊าซคาร์บอนมอนอกไซด์ (CO) API รุ่น 300A ใช้หลักการของ Gas Filter Correlation ในการตรวจวัด
 - 10.4 เครื่องตรวจวัดก๊าซซัลเฟอร์ไดออกไซด์ (SO_2) API รุ่น 100AH ใช้หลักการของ Fluorescent ในการตรวจวัด

รายละเอียดของเครื่องมือตรวจวัดก๊าซ และระบบการตรวจวัดก๊าซของบริษัท ซีคอต จำกัด ที่ใช้ในการทดสอบ RAA แสดงไว้ในภาคผนวก ก

การสอบเทียบเครื่องมือที่ใช้ในการตรวจสอบความถูกต้องของระบบ CEMS

- Analyzer Calibration error ต้องน้อยกว่า $\pm 2\%$ ของค่า Span เมื่อตรวจสอบด้วยก๊าซมาตรฐาน
- System Bias ต้องน้อยกว่า $\pm 5\%$ ของค่า Span เมื่อตรวจสอบด้วยก๊าซมาตรฐาน 2 ช่วง คือ ช่วงต่ำ และช่วงกลาง หรือสูง
- Calibration Drift และ Zero Drift ต้องน้อยกว่า $\pm 3\%$ ของค่า Span ตลอดทั้งช่วงที่ทำการตรวจวัด
- การทดสอบการรั่วของ System
- ใช้ก๊าซมาตรฐานชนิด EPA Protocol Type I ในการตรวจสอบ

ใบ Certificate ที่เกี่ยวข้องแสดงไว้ในภาคผนวก ข

8. การประสานงานที่เกี่ยวข้องกับการทดสอบในภาคสนาม

ในระหว่างการทดสอบ RAA บริษัท ซีคोट จำกัด ได้ประสานงานกับเจ้าหน้าที่ผู้รับผิดชอบของ บริษัท ทีโอพี เอสซี จำกัด ในเรื่องที่เกี่ยวข้องกับการทดสอบ เช่น การเริ่มทดสอบ และ/หรือการสิ้นสุด ของการทดสอบ เป็นต้น นอกจากนี้ ยังได้รวบรวมข้อมูลการใช้เชื้อเพลิงของโรงงาน และ กำลังการผลิตขณะทดสอบ RAA จากบันทึกของโรงงานไว้ด้วย แสดงในภาคผนวก ค

9. ขั้นตอนวิธีการทดสอบ RAA สำหรับระบบ CEMS ที่ตรวจวัด O_2 , NO_x , SO_2 และ CO

ขั้นที่ 1 ตรวจสอบระบบตรวจวัดของบริษัท ซีคोट จำกัด ที่ใช้ในการตรวจสอบความถูกต้องของระบบ CEMS ของ บริษัท ทีโอพี เอสซี จำกัด โดยเปรียบเทียบ Analyzer ที่ตรวจวัด O_2 , NO_x , SO_2 และ CO ด้วยก๊าซมาตรฐาน EPA Protocol Type I ที่ 3 ระดับความเข้มข้น และปรับศูนย์ด้วย N_2 เช็ค Response Time และ System Calibration ที่ปลาย Probe

ขั้นที่ 2 ทดสอบ RAA ที่แต่ละระบบ CEMS

- เริ่มทำ RAA โดยใช้ Method 3A, Method 6C, Method 7E และ Method 10 สำหรับ O_2 , SO_2 , NO_x และ CO CEMS ตามลำดับ
- วาง Probe ที่ตำแหน่ง Traverse point แรก อ่านค่าเฉลี่ยทุก 1 นาที เป็นเวลา 7 นาที ก่อนจะเลื่อนไปที่ตำแหน่ง Traverse ที่ 2 และ 3 จุดละ 7 นาที 1 ชุดข้อมูลจะใช้เวลา 21 นาที เก็บข้อมูลรวม 3 ชุด
- จ่ายก๊าซมาตรฐาน 2 ระดับ คือที่ค่าความเข้มข้น 0 ppm และประมาณ 40 และ 80 ppm (NO_x , SO_2 และ CO) ไปที่ปลาย Probe อีกครั้ง เพื่อหา System Bias และ Drift ส่วน O_2 Analyzer ปรับเทียบด้วยอากาศแห้ง/สะอาดที่ 20.9 % O_2 และค่ากลางที่ 8.02 และ 15.00 % O_2 และปรับศูนย์ด้วย N_2 เช็ค Response Time และ System Calibration ที่ปลาย Probe
- ค่าที่อ่านจากระบบตรวจวัดของบริษัท ซีคोट จำกัด ถูกนำไปคำนวณเพื่อปรับ Bias จากการปรับเทียบระบบก่อน และหลัง (Pre-Post calibration) ในแต่ละ Test Run
- หาค่าเฉลี่ย ค่ารวมค่าเฉลี่ยของความแตกต่าง SD Confidence Coefficient และ CEMS RAA
- แบบบันทึกการทดสอบ RAA ของแต่ละปล่อง แสดงในภาคผนวก ง

ขั้นที่ 3 การคำนวณ

- ค่าเฉลี่ยความเข้มข้นของการระบายมลพิษ (Emission gas concentration, dry basis , C_{gas} , ppm)

$$C_{gas} = \frac{(C - C_o)}{C_m - C_o} \times C_{ma}$$

เมื่อ \bar{C} = Average gas concentration indicated by gas analyzer, dry basis, ppm

C_o = Average of initial and final system calibration bias check responses for the zero gas, ppm

C_m = Average of initial and final system calibration bias check responses for the upscale calibration gas, ppm

C_{ma} = Actual concentration of the upscale calibration gas, ppm

- RAA คำนวณโดยนำค่าความแตกต่างเฉลี่ยระหว่างข้อมูลจากข้อมูลจากระบบ CEMS กับวิธีอ้างอิง หาค่าเฉลี่ยโดยวิธีอ้างอิง หรือค่ามาตรฐานการระบายมลพิษ คูณ 100 ดังนี้

$$A = \frac{(C_m - C_a)}{C_a} \times 100$$

เมื่อ A = Accuracy of the CEMS

C_m = Average CEMS Response during audit in unit of applicable standard or appropriate concentration

C_a = Three-run average audit value in unit of applicable standard or appropriate concentration or applicable emission standard

10. ผลการทดสอบ RAA

ผลการทดสอบ Relative Accuracy Audit ของระบบ CEMS สำหรับตรวจวัดก๊าซ O_2 , NO_x , SO_2 และ CO ปล่อง G-85051, ปล่อง G-85052, ปล่อง G-85053, ปล่อง G-85054 และปล่อง G-5019 ของโรงไฟฟ้าขนาดเล็ก บริษัท ท็อป เอสพีพี จำกัด แสดงในตารางที่ 3 ถึงตารางที่ 7 โดยพบว่าค่า RAA ของระบบ CEMS ดังกล่าว มีค่าอยู่ในเกณฑ์ที่กำหนด

ตารางที่ 3 สรุปผลการตรวจสอบความถูกต้องของระบบ CEMS ปล่อง G-85051

ชื่อเจ้าของสถานประกอบการ	บริษัท ท็อป เอสพีพี จำกัด
ชื่อโรงงาน	โรงไฟฟ้าขนาดเล็ก
ชื่อแหล่งกำเนิด	ปล่อง G-85051
ชนิดของ CEMS	Direct Extractive
ตำแหน่งติดตั้ง CEMS	ปล่อง G-85051
ผลการประเมินค่า Accuracy (สำหรับแต่ละ CEMS หรือแต่ละพารามิเตอร์และ Diluent Analyzers)	
ก. Relative accuracy audit (RAA) สำหรับ ระบบตรวจวัดก๊าซ NO _x	
1. วันที่ตรวจสอบความถูกต้อง	13 มิถุนายน พ.ศ. 2565
2. Reference Methods (RM's) ที่ใช้ หรือ Instrumental Reference Method	Method 7E
3. ค่า RM หรือ Instrumental RM เฉลี่ย	18.39 ppmvd@ 7% O ₂
4. ค่าเฉลี่ยที่อ่านจาก CEMS	19.56 ppmvd@ 7% O ₂
5. Absolute value of mean difference (d)	-1.16 ppmvd@ 7% O ₂
6. เปอร์เซ็นต์ Relative Accuracy (RA)	-1.94
7. เกณฑ์ในการประเมินความถูกต้อง	น้อยกว่าหรือเท่ากับ 7.5% ของมาตรฐานการระบายมลพิษ
สรุปผลการประเมิน อยู่ในเกณฑ์ที่กำหนด	
ข. Relative accuracy audit (RAA) สำหรับ ระบบตรวจวัดก๊าซ CO	
1. วันที่ตรวจสอบความถูกต้อง	13 มิถุนายน พ.ศ. 2565
2. Reference Methods (RM's) ที่ใช้ หรือ Instrumental Reference Method	Method 10
3. ค่า RM หรือ Instrumental RM เฉลี่ย	10.58 ppmvd@ 7% O ₂
4. ค่าเฉลี่ยที่อ่านจาก CEMS	13.04 ppmvd@ 7% O ₂
5. Absolute value of mean difference (d)	-2.46 ppmvd@ 7% O ₂
6. เปอร์เซ็นต์ Relative Accuracy (RA)	-0.36
7. เกณฑ์ในการประเมินความถูกต้อง	น้อยกว่าหรือเท่ากับ 7.5% ค่ามาตรฐานการระบายมลพิษ
สรุปผลการประเมิน อยู่ในเกณฑ์ที่กำหนด	

ตารางที่ 3 สรุปผลการตรวจสอบความถูกต้องของระบบ CEMS ปล่อง G-85051 (ต่อ)

ค. Relative accuracy audit (RAA) สำหรับ ระบบตรวจวัดก๊าซ O_2	
1. วันที่ตรวจสอบความถูกต้อง	13 มิถุนายน พ.ศ. 2565
2. Reference Methods (RM's) ที่ใช้ หรือ Instrumental Reference Method	Method 3A
3. ค่า RM หรือ Instrumental RM เฉลี่ย	14.16 % O_2
4. ค่าเฉลี่ยที่อ่านจาก CEMS	14.20 % O_2
5. Absolute value of mean difference (d)	-0.04 % O_2
6. เปอร์เซนต์ Relative Accuracy (RA)	-0.28
7. เกณฑ์ในการประเมินความถูกต้อง	น้อยกว่าหรือเท่ากับ 15% ของค่าเฉลี่ยของวิธีอ้างอิง 3 ชุด
สรุปผลการประเมิน	อยู่ในเกณฑ์ที่กำหนด

ตารางที่ 4 สรุปผลการตรวจสอบความถูกต้องของระบบ CEMS ปล่อง G-85052

ชื่อเจ้าของสถานประกอบการ บริษัท ท็อป เอสพีพี จำกัด
ชื่อโรงงาน โรงไฟฟ้าขนาดเล็ก
ชื่อแหล่งกำเนิด ปล่อง G-85052
ชนิดของ CEMS Direct Extractive
ตำแหน่งติดตั้ง CEMS ปล่อง G-85052

ผลการประเมินค่า Accuracy (สำหรับแต่ละ CEMS หรือแต่ละพารามิเตอร์และ Diluent Analyzers)

ก. Relative accuracy audit (RAA) สำหรับ ระบบตรวจวัดก๊าซ NO_x

- วันที่ตรวจสอบความถูกต้อง 13 มิถุนายน พ.ศ. 2565
- Reference Methods (RM's) ที่ใช้ หรือ Instrumental Reference Method Method 7E
- ค่า RM หรือ Instrumental RM เฉลี่ย 18.49 ppmvd@ 7%O₂
- ค่าเฉลี่ยที่อ่านจาก CEMS 21.52 ppmvd@ 7% O₂
- Absolute value of mean difference (d) -3.03 ppmvd@ 7%O₂
- เปอร์เซ็นต์ Relative Accuracy (RA) -5.05
- เกณฑ์ในการประเมินความถูกต้อง น้อยกว่าหรือเท่ากับ 7.5% ของมาตรฐานการระบายมลพิษ
สรุปผลการประเมิน อยู่ในเกณฑ์ที่กำหนด

ข. Relative accuracy audit (RAA) สำหรับ ระบบตรวจวัดก๊าซ CO

- วันที่ตรวจสอบความถูกต้อง 13 มิถุนายน พ.ศ. 2565
- Reference Methods (RM's) ที่ใช้ หรือ Instrumental Reference Method Method 10
- ค่า RM หรือ Instrumental RM เฉลี่ย 4.88 ppmvd@ 7%O₂
- ค่าเฉลี่ยที่อ่านจาก CEMS 7.90 ppmvd@ 7%O₂
- Absolute value of mean difference (d) -3.02 ppmvd@ 7%O₂
- เปอร์เซ็นต์ Relative Accuracy (RA) -0.44
- เกณฑ์ในการประเมินความถูกต้อง น้อยกว่าหรือเท่ากับ 7.5% ค่ามาตรฐานการระบายมลพิษ
สรุปผลการประเมิน อยู่ในเกณฑ์ที่กำหนด

ตารางที่ 4 สรุปผลการตรวจสอบความถูกต้องของระบบ CEMS ปล่อง G-85052 (ต่อ)

ค. Relative accuracy audit (RAA) สำหรับ ระบบตรวจวัดก๊าซ O_2	
1. วันที่ตรวจสอบความถูกต้อง	13 มิถุนายน พ.ศ. 2565
2. Reference Methods (RM's) ที่ใช้ หรือ Instrumental Reference Method	Method 3A
3. ค่า RM หรือ Instrumental RM เฉลี่ย	13.90 % O_2
4. ค่าเฉลี่ยที่อ่านจาก CEMS	13.94 % O_2
5. Absolute value of mean difference (d)	-0.04 % O_2
6. เปอร์เซนต์ Relative Accuracy (RA)	-0.26
7. เกณฑ์ในการประเมินความถูกต้อง	น้อยกว่าหรือเท่ากับ 15% ของค่าเฉลี่ยของวิธีอ้างอิง 3 ชุด
สรุปผลการประเมิน	อยู่ในเกณฑ์ที่กำหนด

ตารางที่ 5 สรุปผลการตรวจสอบความถูกต้องของระบบ CEMS ปล่อง G-85053

ชื่อเจ้าของสถานประกอบการ	บริษัท ทีโอพี เอสซี จำกัด
ชื่อโรงงาน	โรงไฟฟ้าขนาดเล็ก
ชื่อแหล่งกำเนิด	ปล่อง G-85053
ชนิดของ CEMS	Direct Extractive
ตำแหน่งติดตั้ง CEMS	ปล่อง G-85053
ผลการประเมินค่า Accuracy (สำหรับแต่ละ CEMS หรือแต่ละพารามิเตอร์และ Diluent Analyzers)	
ก. Relative accuracy audit (RAA) สำหรับ ระบบตรวจวัดก๊าซ NO _x	
1. วันที่ตรวจสอบความถูกต้อง	15 มิถุนายน พ.ศ. 2565
2. Reference Methods (RM's) ที่ใช้ หรือ Instrumental Reference Method	Method 7E
3. ค่า RM หรือ Instrumental RM เฉลี่ย	19.34 ppmvd@ 7%O ₂
4. ค่าเฉลี่ยที่อ่านจาก CEMS	18.78 ppmvd@ 7% O ₂
5. Absolute value of mean difference (d)	0.56 ppmvd@ 7%O ₂
6. เปอร์เซ็นต์ Relative Accuracy (RA)	0.93
7. เกณฑ์ในการประเมินความถูกต้อง	น้อยกว่าหรือเท่ากับ 7.5% ของมาตรฐานการระบายมลพิษ
สรุปผลการประเมิน	อยู่ในเกณฑ์ที่กำหนด
ข. Relative accuracy audit (RAA) สำหรับ ระบบตรวจวัดก๊าซ CO	
1. วันที่ตรวจสอบความถูกต้อง	15 มิถุนายน พ.ศ. 2565
2. Reference Methods (RM's) ที่ใช้ หรือ Instrumental Reference Method	Method 10
3. ค่า RM หรือ Instrumental RM เฉลี่ย	0.19 ppmvd@ 7%O ₂
4. ค่าเฉลี่ยที่อ่านจาก CEMS	1.88 ppmvd@ 7%O ₂
5. Absolute value of mean difference (d)	-1.69 ppmvd@ 7%O ₂
6. เปอร์เซ็นต์ Relative Accuracy (RA)	-0.24
7. เกณฑ์ในการประเมินความถูกต้อง	น้อยกว่าหรือเท่ากับ 7.5% ค่ามาตรฐานการระบายมลพิษ
สรุปผลการประเมิน	อยู่ในเกณฑ์ที่กำหนด

ตารางที่ 5 สรุปผลการตรวจสอบความถูกต้องของระบบ CEMS ปล่อง G-85053 (ต่อ)

- ค. Relative accuracy audit (RAA) สำหรับ ระบบตรวจวัดก๊าซ O_2
- วันที่ตรวจสอบความถูกต้อง 15 มิถุนายน พ.ศ. 2565
 - Reference Methods (RM's) ที่ใช้ หรือ Instrumental Reference Method Method 3A
 - ค่า RM หรือ Instrumental RM เฉลี่ย 14.08 % O_2
 - ค่าเฉลี่ยที่อ่านจาก CEMS 14.06 % O_2
 - Absolute value of mean difference (d) 0.02 % O_2
 - เปอร์เซ็นต์ Relative Accuracy (RA) 0.17
 - เกณฑ์ในการประเมินความถูกต้อง น้อยกว่าหรือเท่ากับ 15% ของค่าเฉลี่ยของวิธีอ้างอิง 3 ชุด
สรุปผลการประเมิน อยู่ในเกณฑ์ที่กำหนด

ตารางที่ 6 สรุปผลการตรวจสอบความถูกต้องของระบบ CEMS ปล่อง G-85054

ชื่อเจ้าของสถานประกอบการ	บริษัท ท็อป เอสพีพี จำกัด
ชื่อโรงงาน	โรงไฟฟ้าขนาดเล็ก
ชื่อแหล่งกำเนิด	ปล่อง G-85054
ชนิดของ CEMS	Direct Extractive
ตำแหน่งติดตั้ง CEMS	ปล่อง G-85054
ผลการประเมินค่า Accuracy (สำหรับแต่ละ CEMS หรือแต่ละพารามิเตอร์และ Diluent Analyzers)	
ก. Relative accuracy audit (RAA) สำหรับ ระบบตรวจวัดก๊าซ NO _x	
1. วันที่ตรวจสอบความถูกต้อง	15 มิถุนายน พ.ศ. 2565
2. Reference Methods (RM's) ที่ใช้ หรือ Instrumental Reference Method	Method 7E
3. ค่า RM หรือ Instrumental RM เฉลี่ย	21.08 ppmvd@ 7%O ₂
4. ค่าเฉลี่ยที่อ่านจาก CEMS	19.82 ppmvd@ 7% O ₂
5. Absolute value of mean difference (d)	1.26 ppmvd@ 7%O ₂
6. เปอร์เซ็นต์ Relative Accuracy (RA)	2.10
7. เกณฑ์ในการประเมินความถูกต้อง	น้อยกว่าหรือเท่ากับ 7.5% ของมาตรฐานการระบายมลพิษ
สรุปผลการประเมิน	อยู่ในเกณฑ์ที่กำหนด
ข. Relative accuracy audit (RAA) สำหรับ ระบบตรวจวัดก๊าซ CO	
1. วันที่ตรวจสอบความถูกต้อง	15 มิถุนายน พ.ศ. 2565
2. Reference Methods (RM's) ที่ใช้ หรือ Instrumental Reference Method	Method 10
3. ค่า RM หรือ Instrumental RM เฉลี่ย	0.36 ppmvd@ 7%O ₂
4. ค่าเฉลี่ยที่อ่านจาก CEMS	1.65 ppmvd@ 7%O ₂
5. Absolute value of mean difference (d)	-1.29 ppmvd@ 7%O ₂
6. เปอร์เซ็นต์ Relative Accuracy (RA)	-0.19
7. เกณฑ์ในการประเมินความถูกต้อง	น้อยกว่าหรือเท่ากับ 7.5% ค่ามาตรฐานการระบายมลพิษ
สรุปผลการประเมิน	อยู่ในเกณฑ์ที่กำหนด

ตารางที่ 6 สรุปผลการตรวจสอบความถูกต้องของระบบ CEMS ปล่อง G-85054 (ต่อ)

- ค. Relative accuracy audit (RAA) สำหรับ ระบบตรวจวัดก๊าซ O_2
1. วันที่ตรวจสอบความถูกต้อง 15 มิถุนายน พ.ศ. 2565
 2. Reference Methods (RM's) ที่ใช้ หรือ Instrumental Reference Method Method 3A
 3. ค่า RM หรือ Instrumental RM เฉลี่ย 14.28 % O_2
 4. ค่าเฉลี่ยที่อ่านจาก CEMS 14.24 % O_2
 5. Absolute value of mean difference (d) 0.04 % O_2
 6. เปอร์เซนต์ Relative Accuracy (RA) 0.28
 7. เกณฑ์ในการประเมินความถูกต้อง น้อยกว่าหรือเท่ากับ 15% ของค่าเฉลี่ยของวิธีอ้างอิง 3 ชุด
สรุปผลการประเมิน อยู่ในเกณฑ์ที่กำหนด

ตารางที่ 7 สรุปผลการตรวจสอบความถูกต้องของระบบ CEMS ปล่อง G-5019

ชื่อเจ้าของสถานประกอบการ	บริษัท ท็อป เอสพีพี จำกัด
ชื่อโรงงาน	โรงไฟฟ้าขนาดเล็ก
ชื่อแหล่งกำเนิด	ปล่อง G-5019
ชนิดของ CEMS	Direct Extractive
ตำแหน่งติดตั้ง CEMS	ปล่อง G-5019
ผลการประเมินค่า Accuracy (สำหรับแต่ละ CEMS หรือแต่ละพารามิเตอร์และ Diluent Analyzers)	
ก. Relative accuracy test audit (RATA) สำหรับ ระบบตรวจวัดก๊าซ SO ₂	
1. วันที่ตรวจสอบความถูกต้อง	21 มิถุนายน พ.ศ. 2565
2. Reference Methods (RM's) ที่ใช้ หรือ Instrumental Reference Method	Method 6C
3. ค่า RM หรือ Instrumental RM เฉลี่ย	0.77 ppmvd@ 7%O ₂
6. ค่าเฉลี่ยที่อ่านจาก CEMS	1.66 ppmvd@ 7% O ₂
7. Absolute value of mean difference (d)	-0.90 ppmvd@ 7%O ₂
7. เปอร์เซนต์ Relative Accuracy (RA)	-4.48
8. เกณฑ์ในการประเมินความถูกต้อง	น้อยกว่าหรือเท่ากับ 7.5% ของค่ามาตรฐานการระบายมลพิษ
สรุปผลการประเมิน	อยู่ในเกณฑ์ที่กำหนด
ข. Relative accuracy test audit (RATA) สำหรับ ระบบตรวจวัดก๊าซ NO _x	
3. วันที่ตรวจสอบความถูกต้อง	21 มิถุนายน พ.ศ. 2565
4. Reference Methods (RM's) ที่ใช้ หรือ Instrumental Reference Method	Method 7E
3. ค่า RM หรือ Instrumental RM เฉลี่ย	106.34 ppmvd@ 7%O ₂
6. ค่าเฉลี่ยที่อ่านจาก CEMS	118.70 ppmvd@ 7%O ₂
7. Absolute value of mean difference (d)	-12.36 ppmvd@ 7%O ₂
7. เปอร์เซนต์ Relative Accuracy (RA)	-11.62
8. เกณฑ์ในการประเมินความถูกต้อง	น้อยกว่าหรือเท่ากับ 15% ของค่าเฉลี่ยของวิธีอ้างอิง 3 ชุด
สรุปผลการประเมิน	อยู่ในเกณฑ์ที่กำหนด

ตารางที่ 7 สรุปผลการตรวจสอบความถูกต้องของระบบ CEMS ปล่อง G-5019 (ต่อ)

- ค. Relative accuracy test audit (RATA) สำหรับ ระบบตรวจวัดก๊าซ O_2
1. วันที่ตรวจสอบความถูกต้อง 21 มิถุนายน พ.ศ. 2565
 2. Reference Methods (RM's) ที่ใช้ หรือ Instrumental Reference Method Method 3A
 3. ค่า RM หรือ Instrumental RM เฉลี่ย 14.31 % O_2
 8. ค่าเฉลี่ยที่อ่านจาก CEMS 14.76 % O_2
 9. Absolute value of mean difference (d) -0.45 % O_2
 7. เปอร์เซ็นต์ Relative Accuracy (RA) -3.17
 8. เกณฑ์ในการประเมินความถูกต้อง น้อยกว่าหรือเท่ากับ 15% ของค่าเฉลี่ยของวิธีอ้างอิง 3 ชุด
สรุปผลการประเมิน อยู่ในเกณฑ์ที่กำหนด

11. สรุปผลการทดสอบ

ผลการทดสอบข้างต้นในข้อ 10 แสดงว่า ระบบ CEMS ที่ตรวจวัด O_2 , NO_x , SO_2 และ CO ที่ติดตั้ง ณ ปล่อง G-85051, ปล่อง G-85052, ปล่อง G-85053, ปล่อง G-85054 และปล่อง G-5019 ของโรงไฟฟ้าขนาดเล็ก บริษัท ท็อป เอสพีพี จำกัด ผ่านเกณฑ์การประกันคุณภาพในการทดสอบตามข้อกำหนดของ 40 CFR 60 ในด้าน Relative Accuracy Audit (RAA)

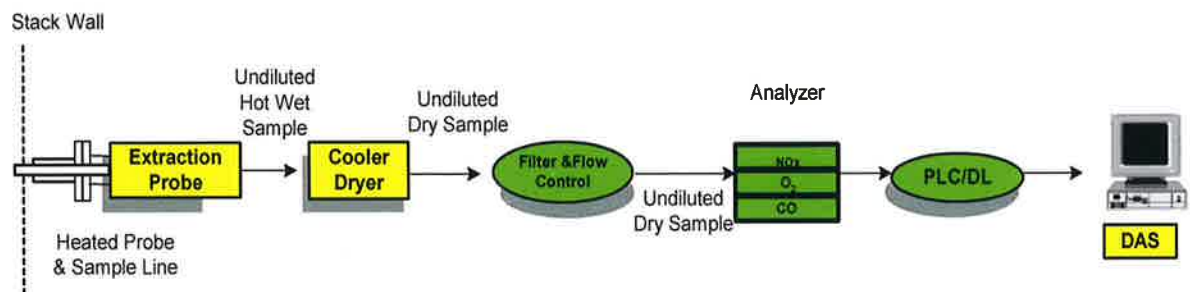
12. เอกสารอ้างอิง

- Procedure 1-Quality Assurance Requirements for Gas Continuous Emission Monitoring System Used for Compliance Determination, 40 CFR 60 App. F, 2019.
- PS 2-Specifications and Test Procedures for NO_x Continuous Emission Monitoring System in Stationary Sources, 40 CFR 60 App. B, 2019.
- PS 3-Specifications and Test Procedures for O₂ Continuous Emission Monitoring System in Stationary Sources, 40 CFR 60 App. B, 2019.
- PS 4-Specifications and Test Procedures for CO Continuous Emission Monitoring System in Stationary Sources, 40 CFR 60 App. B, 2019.
- Method 3A-Determination of oxygen and carbon dioxide concentrations in emission from stationary source (Instrument Analyzer Procedure), 40 CFR 60 App. A, 2019.
- Method 7E-Determination of oxides of nitrogen emission from stationary source (Instrument Analyzer Procedure), 40 CFR 60 App. A, 2019.
- Method 10-Determination of Carbon Monoxide Emission from Stationary Source, 40 CFR 60 App. A, 2019.

ภาคผนวก ก

รายละเอียดเครื่องมือตรวจวัดก๊าซ และระบบตรวจวัดก๊าซของบริษัท ซีคอน จำกัด

SECOT DIRECT EXTRACTIVE CEM SYSTEM

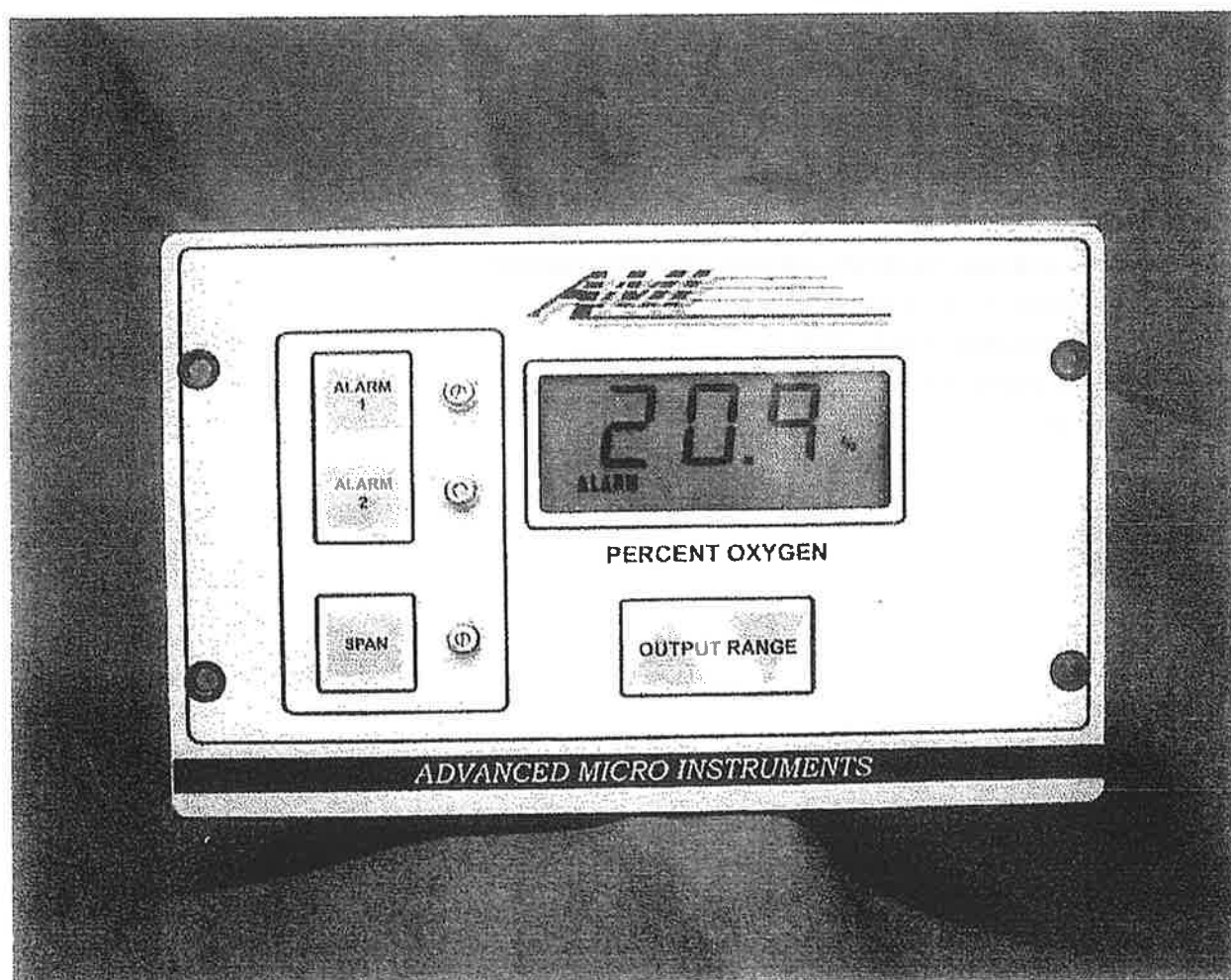


AMI

Oxygen Analyzer Manual

Model 70

AMI, Huntington Beach



Specifications and Disclaimer

Specifications:

Standard ranges: 0 – 1%, 0 – 5%, 0 – 10%, 0 – 25% and 0-100%.

Sensitivity: 0.5% of full scale.

Repeatability: +/- 1% of full scale at constant temperature.

Operating temperature: -5 to 55°C

Humidity: < 85%, non-condensing.

Operational conditions: Pollution degree 2, Installation category I I.

Drift: +/- 1% of full scale in 12 weeks at constant temperature.

Expected cell life: 5-10 years.

Response times: 90% of full scale < 15 seconds.

Outputs: 0 - 1 VDC, 4 - 20 mA isolated.

Alarm contacts: SPDT 3A @24VDC / 115VAC

Power requirements: 10-28VDC ~6W (typically 0.25A at 24VDC)

Box dimensions: 3.5 h. x 5.375 w. x 3.5 d.

Faceplate dimensions: 4.25 h. x 6.75 w.

Cut out dimensions: 4.75"h. x 5.5"w.

Weight: 2 lbs.

INSTRUCTION MANUAL

MODEL 200EH/EM NITROGEN OXIDES ANALYZER

© TELEDYNE ADVANCED POLLUTION INSTRUMENTATION


**9480 CARROLL PARK DRIVE
SAN DIEGO, CA 92121-5201
USA**

**Toll-free Phone: 800-324-5190
Phone: 858-657-9800
Fax: 858-657-9816
Email: api-sales@teledyne.com
Website: <http://www.teledyne-api.com/>**

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Teledyne Advanced Pollution Instrumentation**

**04521
Rev. B5
09 January 2007**

Printed: 03/08/07



1. M200EH/EM DOCUMENTATION

Thank you for purchasing the Model 200EH/EM Nitrogen Oxides Analyzer!

The documentation (part number 04521) for this instrument is available in several different formats:

- Printed format, or;
- Electronic format on a CD-ROM.

The electronic manual is in Adobe® Systems Inc. "Portable Document Format" (PDF). The Adobe® Acrobat Reader® software, which is necessary to view these files, can be downloaded for free from the internet at <http://www.adobe.com/>.

The electronic version of the manual has many advantages:

- Keyword and phrase search feature
- Figures, tables and internet addresses are linked so that clicking on the item will display the associated feature or open the website.
- A list of chapters and sections as well as thumbnails of each page are displayed to the left of the text.
- Entries in the table of contents are linked to the corresponding locations in the manual.
- Ability to print sections (or all) of the manual

Additional documentation for the Model 200EH/EM Nitrogen Oxides Analyzer is available from Teledyne Instruments' website at <http://www.teledyne-api.com/manuals/>

- APICOM software manual, part number 03945
- Multi-drop manual, part number 02179
- DAS manual, part number 02837.

1.1. USING THIS MANUAL

This manual has the following data structures:

1.0 Table of Contents:

Outlines the contents of the manual in the order the information is presented. This is a good overview of the topics covered in the manual. There is also a list of appendices, figures and tables. In the electronic version of the manual, clicking on any of these table entries automatically views that section.

2.0 Specifications and Warranty

A list of the analyzer's performance specifications, a description of the conditions and configuration under which EPA equivalency was approved and Teledyne Instruments' warranty statement.

3.0 Getting Started

Concise instructions for setting up, installing and running your analyzer for the first time.

4.0 FAQ & Glossary:

Answers to the most frequently asked questions about operating the analyzer and a glossary of acronyms and technical terms.

5.0 Optional Hardware & Software

A description of optional equipment to add functionality to your analyzer.

6.0 Operation Instructions

Step by step instructions for operating the analyzer.

7.0 Calibration Procedures

General information and step by step instructions for calibrating your analyzer.

8.0 EPA Protocol Calibration

Because there is no single, standard method for EPA equivalency in application where high concentrations of NO_x are measured, no specific EPA calibration/validation method is included in this manual.

9.0 Instrument Maintenance

Description of preventative maintenance procedures that should be regularly performed on your instrument to assure good operating condition. This includes information on using the iDAS to predict possible component failures before they happen.

10.0 Theory of Operation

An in-depth look at the various principals by which your analyzer operates as well as a description of how the various electronic, mechanical and pneumatic components of the instrument work and interact with each other. A close reading of this section is invaluable for understanding the instrument's operation.

11.0 Troubleshooting & Repair

This section includes pointers and instructions for diagnosing problems with the instrument, such as excessive noise or drift, as well as instructions on performing repairs of the instrument's major subsystems.

12.0 Electro-static Discharge Primer

This section describes how static electricity occurs; why it is a significant concern and; how to avoid it and avoid allowing ESD to affect the reliable and accurate operation of your analyzer.

Appendices

For easier access and better updating, some information has been separated out of the manual and placed in a series of appendices at the end of this manual. These include version-specific software menu trees, warning messages, definitions of iDAS & serial I/O variables as well as spare part listings, repair questionnaire, interconnect drawing, detailed pneumatic and electronic schematics.

NOTE

Throughout this manual, words printed in capital, bold letters, such as **SETUP** or **ENTR** represent messages as they appear on the analyzer's front panel display.

NOTE

The flowcharts in this manual contain typical representations of the analyzer's display during the various operations being described. These representations are not intended to be exact and may differ slightly from the actual display of your instrument.

USER NOTES:

2. SPECIFICATIONS, APPROVALS AND WARRANTY

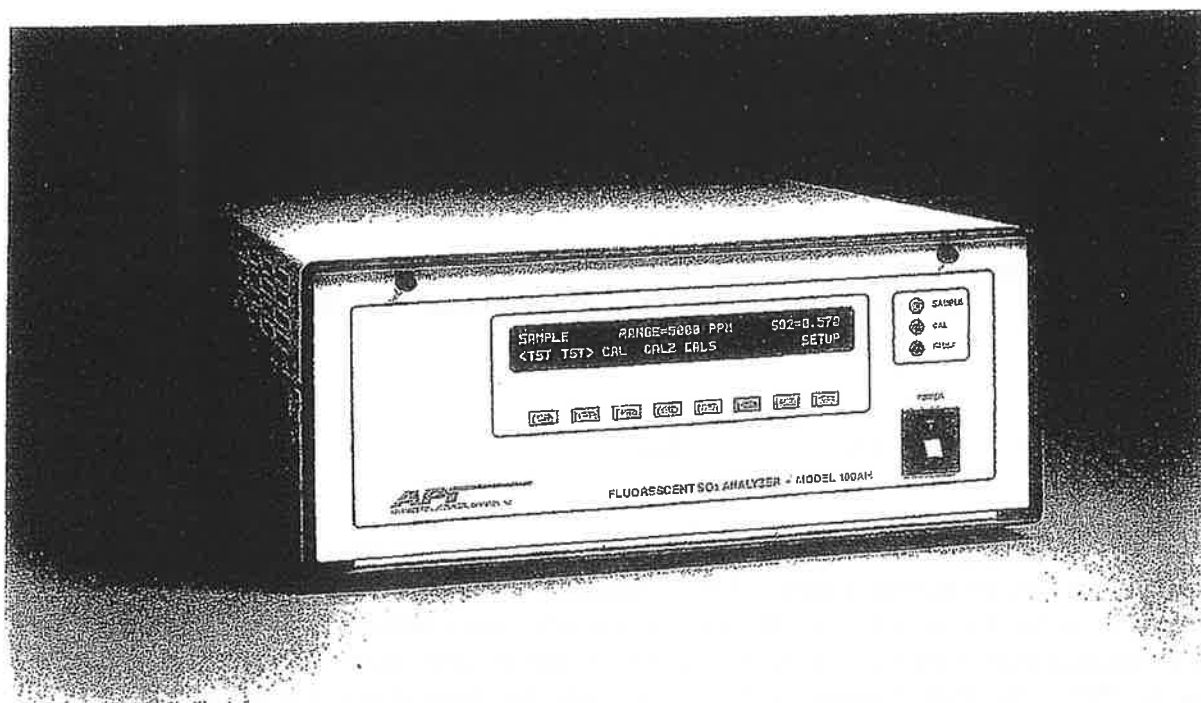
2.1. M200EH/EM OPERATING SPECIFICATIONS

Table 2-1: Model 200EH/EM Basic Unit Specifications

Min/Max Range (Physical Analog Output)	200EH: Min: 0-5 ppm; Max: 0-5000 ppm 200EM: Min: 0-1 ppm; Max: 0-200 ppm
Measurement Units	ppm, mg/m ³ (user selectable)
Zero Noise	<20 ppb (RMS)
Span Noise	<0.2% of reading above 20 ppm
Lower Detectable Limit	40 ppb (2x noise as per USEPA)
Zero Drift (24 hours)	<20 ppb (at constant temperature and voltage.)
Zero Drift (7 days)	<20 ppb (at constant temperature and voltage.)
Span Drift (7 Days)	<1% of reading (at constant temperature and voltage.)
Linearity	1% of full scale
Precision	0.5% of reading
Lag Time	20 s
Rise/Fall Time	95% in <60 s (~10 s in NO only or NO _x only modes)
Gas Flow Rates	200EH: -40 cm ³ /min sample gas through NO ₂ converter & sensor module -250 cm ³ /min \pm 10% through bypass manifold; -290 cm ³ /min total flow 200EM: -250 cm ³ /min sample gas through NO ₂ converter & sensor module O ₂ Sensor option adds 80 cm ³ /min to total flow through M200EH/EM when installed;
Temperature Range	5 - 40 °C operating range
Humidity Range	0-95% RH non-condensing
Dimensions H x W x D	18 cm x 43 cm x 61 cm (7" x 17" x 23.6")
Weight, Analyzer	18 kg (40 lbs) without options
Weight, Ext Pump Pack	7 kg (16 lbs)
AC Power Rating	100 V, 50/60 Hz (3.25A); 115 V, 60 Hz (3.0 A); 220 - 240 V, 50/60 Hz (2.5 A)
Power, Ext Pump	100 V, 50/60 Hz (3.25A); 115 V, 60 Hz (3.0 A); 220 - 240 V, 50/60 Hz (2.5 A)
Environmental	Installation category (over-voltage category) II; Pollution degree 2
Analog Outputs	4 user configurable outputs
Analog Output Ranges	All Outputs: 0.1 V, 1 V, 5 V or 10 V Three outputs convertible to 4-20 mA isolated current loop. All Ranges with 5% under/over-range
Analog Output Resolution	1 part in 4096 of selected full-scale voltage (12 bit)
Status Outputs	8 Status outputs from opto-isolators, 7 defined, 1 spare
Control Inputs	6 Control inputs, 4 defined, 2 spare
Alarm outputs	2 relay alarms outputs (Optional equipment) with user settable alarm limits - 1 Form C: SPDT; 3 Amp @ 125 VAC
Serial I/O	1x RS-232; 1x RS-485 or RS-232 (configurable) Communication speed: 300 - 115200 baud (user selectable)
Certifications	CE: EN61326 (1997 w/A1: 98) Class A, FCC Part 15 Subpart B Section 15.107 Class A, ICES-003 Class A (ANSI C63.4 1992) & AS/NZS 3548 (w/A1 & A2: 97) Class A.

INSTRUCTION MANUAL

SO₂ FLUORESCENT ANALYZER Model 100AH



© Advanced Pollution Instrumentation, Inc.
6565 Nancy Ridge Drive
San Diego, CA 92121-2251

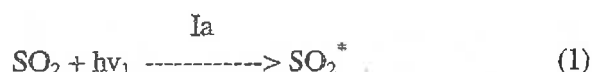
TOLL-FREE: 800-324-5190
TEL: 858-657-9800
FAX: 858-657-9816

4.0 The M100AH SO₂ Analyzer

4.1 Principle of Operation

The operation of the API Model 100AH Analyzer is based upon the well proven technology from the measurement of fluorescence of SO₂ due to absorption of UV energy. Sulfur Dioxide absorbs in the 190 nm - 230 nm region free of quenching by air and relatively free of other interference.

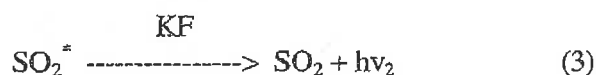
The UV lamp emits ultraviolet radiation which passes through a 214 nm filter (allowing 214 nm light through), exciting the SO₂ molecules and producing fluorescence which is measured by a PMT with a secondary UV filter. The equations describing the above reactions are as follows:



The ultraviolet light at any point in the system is given by:

$$I_a = I_0 [1 - \exp(-ax(\text{SO}_2))] \quad (2)$$

Where I_0 is the UV light intensity, a is the absorption coefficient of SO₂, x the path length, and (SO_2) the concentration of SO₂. The excited SO₂ decays back to the ground state emitting a characteristic fluorescence:



The block diagram in Figure 4.1 illustrates the general operation principle of the Model 100AH. Ultraviolet light is focused through a narrow 214 nm bandpass filter into the reaction chamber. Here it excites the SO₂ molecules, which give off their characteristic decay radiation. The sample is under vacuum to minimize quenching effect from CO₂ and O₂. A second filter allows only the decay radiation to fall on the PMT. The PMT transfers the light energy into the electrical signal in the sample stream being analyzed. The preamp board converts this signal into a voltage which is further conditioned by the signal processing electronics.

The UV light source is measured by a UV detector. Software calculates the ratio of the PMT output and the UV detector in order to compensate for variations in the UV light energy. Stray light is the background light produced with zero PPM SO₂. Once this background light is subtracted, the CPU will convert this electrical signal into the SO₂ concentration.

3.0 Specifications, Agency Approvals, Warranty

3.1 Specifications

Ranges	In 1 PPM increments from 10 PPM to 5000 PPM, dual ranges or autoranging
Noise at Zero	.05 PPM RMS
Noise at Span	<.5% of reading (above 50 PPM)
Lower Detectable Limit ¹	.1 PPM RMS
Zero Drift ²	< 1 PPM/24 hours
Zero Drift ²	<2 PPM/7 days
Span Drift ²	<.5% FS/7 days
Lag Time	5 sec
Rise Time	95% in < 30 sec
Fall Time	95% in < 30 sec
Sample Flow Rate	650cc/min. \pm 10%
Linearity	1% of full scale
Precision	.5% of reading
Temperature Range	5-40°C
Temp Coefficient	< 0.1% per °C
Humidity	0 - 95% RH, non-condensing
Voltage Coefficient	< 0.05% per V
Dimensions HxWxD	7"x17"x23.6" (18cm x 43cm x 61cm)
Weight, Analyzer	43 lbs (19.5kg)
Weight, Pump Pack	16 lbs (7 kg)
Power, Analyzer	110v~60Hz, 220v~50Hz, 240v~50Hz, 250 watts
Power, Analyzer ³	230v~50Hz, 2.5A
Power, Ext. Pump	110v~60Hz, 220v~50Hz, 240v~50Hz, 295 watts
Power, Ext. Pump ³	230v~50Hz, 2.5A
Environmental Conditions	Installation Category (Overvoltage Category) II Pollution Degree 2
Recorder Output ⁴	4 - 20 mA non-isolated standard, 0-100 mV, 0-1, 5, 10v ; resolution of 1 part in 1024 of selected voltage or current range. 4 - 20 mA isolated optional.
Status Option	12 Status Outputs from opto-isolator
Measurement Units	PPM, mg/m ³

1) Defined as twice the zero noise level.

2) At constant temperature and voltage.

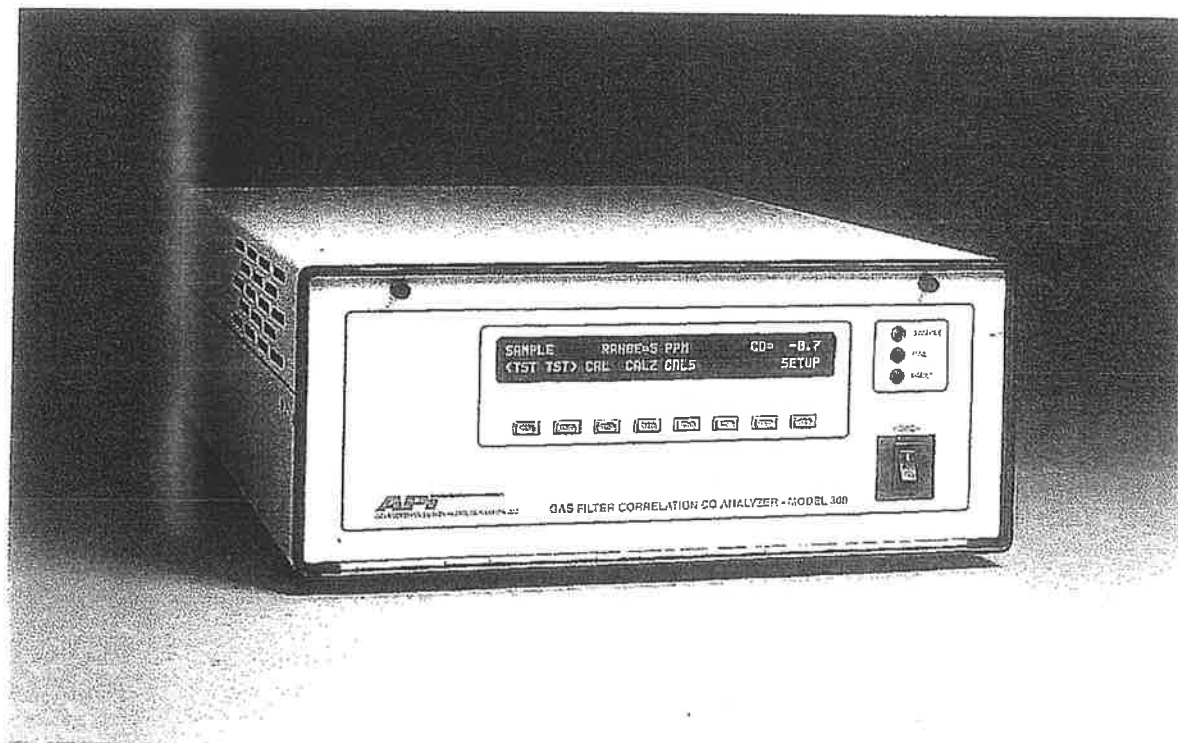
3) Electrical ratings for CE Mark compliance.

4) Bi-polar. (voltage or current selectable by the jumper on the motherboard)



INSTRUCTION MANUAL

Gas Filter Correlation CO ANALYZER Model 300



© Advanced Pollution Instrumentation, Inc.
6565 Nancy Ridge Drive
San Diego, CA 92121-2251

TOLL-FREE: 800-324-5190
TEL: 858-657-9800
FAX: 858-657-9816

1.3 Principle of operation

The detection and measurement of carbon monoxide in the Model 300 is based on the absorption of Infra Red (IR) radiation by CO molecules at wave lengths near 4.7 microns. In practice, the Model 300 uses a high energy heated element to generate broad-band IR light. This light is passed through a rotating Gas Filter Wheel which causes the beam to alternately pass through a gas cell filled with Nitrogen, (the Measure Cell) and a cell filled with CO/Nitrogen Mixture (the Reference Cell). This alternation occurs at a rate of 30 cycles/second and causes the beam to be modulated into Reference and Measure pulses. During a Reference pulse, the CO in the gas filter wheel effectively strips the beam of all IR energy at wave lengths where CO can absorb. This results in a beam which is unaffected by any CO in the Sample Cell. During the Measure pulse, the Nitrogen in the filter wheel does not effect the beam which can subsequently be alternated by any CO in the sample cell. The Gas Filter wheel also incorporates an optical chopping mark which superimposes a 360 Cycles/Second Light/Dark modulation on the IR Beam. This high frequency modulation is included to maximize detector signal-to-noise performance.

After the gas filter wheel the IR beam enters the multi-pass sample cell. This sample cell uses folding optics to generate a 16 meter absorption path length in order to achieve maximum sensitivity.

Upon exiting the sample cell, the beam passes through a band-pass interference filter to limit the light to wave length of interest.

Finally, the beam strikes the detector which is a thermoelectricly cooled solid-state photo-conductor.

This detector, along with its pre-amplifier and bias voltage supply convert the light signal into a modulated voltage signal.

The detector output is electronically demodulated to generate two DC voltages, CO MEAS and CO REF. These voltages are proportional to the light intensity striking the detector during the Measure Pulse and Reference Pulse, respectively.

1.4 Specifications

Ranges	User selectable to any full-scale range from 1 ppm to 1,000 ppm
Zero Noise	< 0.025 ppm (rms)
Span Noise	< 0.5% of reading (rms)
Lower Detectable Limit	< 0.050 ppm
Zero Drift (24 hours)	* <0.1 ppm
Zero Drift (7 days)	* <0.2 ppm
Span Drift (7 days)	* 1% of reading
Linearity	1% FS
Precision	0.5% of reading
Lag Time	10 sec
Rise/Fall Time (95%)	<60 sec
Sample Flow Rate	800cc/min. \pm 10%
Temperature Range	5-40°C
Humidity Range	0-95% RH, non-condensing
Temp Coefficient	< 0.05 % per °C
Voltage Coefficient	< 0.05 % per V
Dimensions HxWxD	7" x 17" x 25" (178mm x 432mm x 660mm)
Weight	50 lbs (22.7 kg)
Power	110V~/60Hz, 220V~/50Hz., 240V~/50Hz. 250 Watts
Power, CE	230V~/50Hz, 2.5 A
Environmental Conditions	Installation Category (Overvoltage Category) II Pollution Degree 2
Recorder Outputs	\pm 100 mV, \pm 1 V, \pm 5 V, \pm 10 V (Bi-Polar)
Status	12 status outputs from opto-isolators

* at constant temperature and voltage

ภาคผนวก ข

ใบ CERTIFICATE ที่เกี่ยวข้อง

ปล่อง G-85051

O2 Analyzer Calibration Data

Source identification : G-85051

Test personnel : Kittipong T.

Span(%) 15

Date : June 13,2022

Time : 09:20 - 10:10

Analyzer calibration data for sampling

O2 AMI Model - S/N 121121-10

	Cylinder value (%)	Analyzers calibration response (%)	Absolute difference (%)	Difference (percent of span)
Zero gas	0.00	0.00	0.00	0.00
Mid-level gas	15.00	15.00	0.00	0.00
High level gas	20.90	20.90	0.00	0.00

NOx Analyzer Calibration Data

Source identification : G-85051

Test personnel : Kittipong T.

Span(ppm) 78.5

Date : June 13,2022

Time : 09:20 - 10:10

Analyzer calibration data for sampling

NOx Teledyne Model 200EM S/N 433

	Cylinder value (ppm)	Analyzers calibration response (ppm)	Absolute difference (ppm)	Difference (percent of span)
Zero gas	0.00	0.00	0.00	0.00
Mid-level gas	39.30	39.71	0.41	0.52
High level gas	78.50	78.50	0.00	0.00

CO Analyzer Calibration Data

Source identification : G-85051

Test personnel : Kittipong T.

Span(ppm) 81.1

Date : June 13,2022

Time : 09:20 - 10:10

Analyzer calibration data for sampling

CO API Model 300A S/N 1070

	Cylinder value (ppm)	Analyzers calibration response (ppm)	Absolute difference (ppm)	Difference (percent of span)
Zero gas	0.00	0.00	0.00	0.00
Mid-level gas	40.40	40.40	0.00	0.00
High level gas	81.10	81.10	0.00	0.00

System Calibration Bias and Drift Data

Source identification G-85051

Date : June 13, 2022

Test personnel : Kittipong T.

Cylinder Conc : 15 %

Time : 10:10-10:30 , 11:45-12:00

Span : 15 %

	O2 Analyzer Calibration response	Initial values		Final values		Drift (percent of span)
		System Calibration response	System cal bias (percent of span)	System Calibration response	System cal bias (percent of span)	
Zero gas.....	0.00	0.00	0.00	0.00	0.00	0.00
Upscale gas.....	15.00	15.00	0.00	15.00	0.00	0.00

System Calibration Bias and Drift Data

Source identification G-85051

Date : June 13, 2022

Test personnel : Kittipong T.

Cylinder Conc : 39.3 ppm

Time : 10:10-10:30 , 11:45-12:00

Span : 78.5 ppm

	Nox Analyzer Calibration response	Initial values		Final values		Drift (percent of span)
		System Calibration response	System cal bias (percent of span)	System Calibration response	System cal bias (percent of span)	
Zero gas.....	0.00	0.01	0.01	0.01	0.01	0.00
Upscale gas.....	39.71	39.25	-0.59	39.13	-0.74	-0.15

System Calibration Bias and Drift Data

Source identification G-85051

Date : June 13, 2022

Test personnel : Kittipong T.

Cylinder Conc : 40.4 ppm

Time : 10:10-10:30 , 11:45-12:00

Span : 81.1 ppm

	CO Analyzer Calibration response	Initial values		Final values		Drift (percent of span)
		System Calibration response	System cal bias (percent of span)	System Calibration response	System cal bias (percent of span)	
Zero gas.....	0.00	0.10	0.12	0.10	0.12	0.00
Upscale gas.....	40.40	40.30	-0.12	40.10	-0.37	-0.25

ปล่อง G-85052

O2 Analyzer Calibration Data

Source identification : G-85052

Test personnel : Kittipong T.

Span(%) 15

Date : June 13,2022

Time : 09:20 - 10:10

Analyzer calibration data for sampling

O2 AMI Model - S/N 121121-10

	Cylinder value (%)	Analyzers calibration response (%)	Absolute difference (%)	Difference (percent of span)
Zero gas	0.00	0.00	0.00	0.00
Mid-level gas	15.00	15.00	0.00	0.00
High level gas	20.90	20.90	0.00	0.00

NOx Analyzer Calibration Data

Source identification : G-85052

Test personnel : Kittipong T.

Span(ppm) 78.5

Date : June 13,2022

Time : 09:20 - 10:10

Analyzer calibration data for sampling

NOx Teledyne Model 200EM S/N 433

	Cylinder value (ppm)	Analyzers calibration response (ppm)	Absolute difference (ppm)	Difference (percent of span)
Zero gas	0.00	0.00	0.00	0.00
Mid-level gas	39.30	39.71	0.41	0.52
High level gas	78.50	78.50	0.00	0.00

CO Analyzer Calibration Data

Source identification : G-85052

Test personnel : Kittipong T.

Span(ppm) 81.1

Date : June 13,2022

Time : 09:20 - 10:10

Analyzer calibration data for sampling

CO API Model 300A S/N 1070

	Cylinder value (ppm)	Analyzers calibration response (ppm)	Absolute difference (ppm)	Difference (percent of span)
Zero gas	0.00	0.00	0.00	0.00
Mid-level gas	40.40	40.40	0.00	0.00
High level gas	81.10	81.10	0.00	0.00

System Calibration Bias and Drift Data

Source identification G-85052

Date : June 13, 2022

Test personnel : Kittipong T.

Cylinder Conc : 15 %

Time : 11:45-12:00 , 14:35-14:50

Span : 15 %

	O2 Analyzer Calibration response	Initial values		Final values		Drift (percent of span)
		System Calibration response	System cal bias (percent of span)	System Calibration response	System cal bias (percent of span)	
Zero gas.....	0.00	0.00	0.00	0.01	0.07	0.07
Upscale gas.....	15.00	15.00	0.00	15.00	0.00	0.00

System Calibration Bias and Drift Data

Source identification G-85052

Date : June 13, 2022

Test personnel : Kittipong T.

Cylinder Conc : 39.3 ppm

Time : 11:45-12:00 , 14:35-14:50

Span : 78.5 ppm

	Nox Analyzer Calibration response	Initial values		Final values		Drift (percent of span)
		System Calibration response	System cal bias (percent of span)	System Calibration response	System cal bias (percent of span)	
Zero gas.....	0.00	0.01	0.01	0.01	0.01	0.00
Upscale gas.....	39.71	39.13	-0.74	39.22	-0.62	0.11

System Calibration Bias and Drift Data

Source identification G-85052

Date : June 13, 2022

Test personnel : Kittipong T.

Cylinder Conc : 40.4 ppm

Time : 11:45-12:00 , 14:35-14:50

Span : 81.1 ppm

	CO Analyzer Calibration response	Initial values		Final values		Drift (percent of span)
		System Calibration response	System cal bias (percent of span)	System Calibration response	System cal bias (percent of span)	
Zero gas.....	0.00	0.10	0.12	0.01	0.01	-0.11
Upscale gas.....	40.40	40.10	-0.37	40.20	-0.25	0.12

ปล่อง G-85053

O2 Analyzer Calibration Data

Source identification : G-85053

Test personnel : Kittipong T.

Span(%) 15

Date : June 15,2022

Time : 09:10 - 10:00

Analyzer calibration data for sampling

O2 AMI Model - S/N 121121-10

	Cylinder value (%)	Analyzers calibration response (%)	Absolute difference (%)	Difference (percent of span)
Zero gas	0.00	0.00	0.00	0.00
Mid-level gas	15.00	15.00	0.00	0.00
High level gas	20.90	20.90	0.00	0.00

NOx Analyzer Calibration Data

Source identification : G-85053

Test personnel : Kittipong T.

Span(ppm) 78.5

Date : June 15,2022

Time : 09:10 - 10:00

Analyzer calibration data for sampling

NOx Teledyne Model 200EM S/N 433

	Cylinder value (ppm)	Analyzers calibration response (ppm)	Absolute difference (ppm)	Difference (percent of span)
Zero gas	0.00	0.00	0.00	0.00
Mid-level gas	39.30	39.69	0.39	0.50
High level gas	78.50	78.50	0.00	0.00

CO Analyzer Calibration Data

Source identification : G-85053

Test personnel : Kittipong T.

Span(ppm) 81.1

Date : June 15,2022

Time : 09:10 - 10:00

Analyzer calibration data for sampling

CO API Model 300A S/N 1070

	Cylinder value (ppm)	Analyzers calibration response (ppm)	Absolute difference (ppm)	Difference (percent of span)
Zero gas	0.00	0.00	0.00	0.00
Mid-level gas	40.40	40.20	0.20	0.25
High level gas	81.10	81.10	0.00	0.00

System Calibration Bias and Drift Data

Source identification G-85053

Date : June 15, 2022

Test personnel : Kittipong T.

Cylinder Conc : 15 %

Time : 11:45-12:00 , 13:45-14:00

Span : 15 %

	O2 Analyzer Calibration response	Initial values		Final values		Drift (percent of span)
		System Calibration response	System cal bias (percent of span)	System Calibration response	System cal bias (percent of span)	
Zero gas.....	0.00	0.01	0.07	0.02	0.13	0.07
Upscale gas.....	15.00	15.00	0.00	15.00	0.00	0.00

System Calibration Bias and Drift Data

Source identification G-85053

Date : June 15, 2022

Test personnel : Kittipong T.

Cylinder Conc : 39.3 ppm

Time : 11:45-12:00 , 13:45-14:00

Span : 78.5 ppm

	Nox Analyzer Calibration response	Initial values		Final values		Drift (percent of span)
		System Calibration response	System cal bias (percent of span)	System Calibration response	System cal bias (percent of span)	
Zero gas.....	0.00	0.01	0.01	0.14	0.18	0.16
Upscale gas.....	39.69	39.59	-0.13	39.55	-0.18	-0.05

System Calibration Bias and Drift Data

Source identification G-85053

Date : June 15, 2022

Test personnel : Kittipong T.

Cylinder Conc : 40.4 ppm

Time : 11:45-12:00 , 13:45-14:00

Span : 81.1 ppm

	CO Analyzer Calibration response	Initial values		Final values		Drift (percent of span)
		System Calibration response	System cal bias (percent of span)	System Calibration response	System cal bias (percent of span)	
Zero gas.....	0.00	0.10	0.12	0.02	0.02	-0.10
Upscale gas.....	40.20	40.30	0.12	40.20	0.00	-0.12

ปล่อง G-85054

O2 Analyzer Calibration Data

Source identification : G-85054

Test personnel : Kittipong T.

Date : June 15,2022

Span(%) 15

Time : 09:10 - 10:00

Analyzer calibration data for sampling

O2 AMI Model - S/N 121121-10

	Cylinder value (%)	Analyzers calibration response (%)	Absolute difference (%)	Difference (percent of span)
Zero gas	0.00	0.00	0.00	0.00
Mid-level gas	15.00	15.00	0.00	0.00
High level gas	20.90	20.90	0.00	0.00

NOx Analyzer Calibration Data

Source identification : G-85054

Test personnel : Kittipong T.

Date : June 15,2022

Span(ppm) 78.5

Time : 09:10 - 10:00

Analyzer calibration data for sampling

NOx Teledyne Model 200EM S/N 433

	Cylinder value (ppm)	Analyzers calibration response (ppm)	Absolute difference (ppm)	Difference (percent of span)
Zero gas	0.00	0.00	0.00	0.00
Mid-level gas	39.30	39.69	0.39	0.50
High level gas	78.50	78.50	0.00	0.00

CO Analyzer Calibration Data

Source identification : G-85054

Test personnel : Kittipong T.

Date : June 15,2022

Span(ppm) 81.1

Time : 09:10 - 10:00

Analyzer calibration data for sampling

CO API Model 300A S/N 1070

	Cylinder value (ppm)	Analyzers calibration response (ppm)	Absolute difference (ppm)	Difference (percent of span)
Zero gas	0.00	0.00	0.00	0.00
Mid-level gas	40.40	40.20	0.20	0.25
High level gas	81.10	81.10	0.00	0.00

System Calibration Bias and Drift Data

Source identification G-85054

Date : June 15, 2022

Test personnel : Kittipong T.

Cylinder Conc : 15 %

Time : 10:00-10:20 , 11:45-12:00

Span : 15 %

	O2 Analyzer Calibration response	Initial values		Final values		Drift (percent of span)
		System Calibration response	System cal bias (percent of span)	System Calibration response	System cal bias (percent of span)	
Zero gas.....	0.00	0.01	0.07	0.01	0.07	0.00
Upscale gas.....	15.00	15.00	0.00	15.00	0.00	0.00

System Calibration Bias and Drift Data

Source identification G-85054

Date : June 15, 2022

Test personnel : Kittipong T.

Cylinder Conc : 39.3 ppm

Time : 10:00-10:20 , 11:45-12:00

Span : 78.5 ppm

	Nox Analyzer Calibration response	Initial values		Final values		Drift (percent of span)
		System Calibration response	System cal bias (percent of span)	System Calibration response	System cal bias (percent of span)	
Zero gas.....	0.00	0.01	0.01	0.01	0.01	0.00
Upscale gas.....	39.69	39.53	-0.20	39.59	-0.13	0.08

System Calibration Bias and Drift Data

Source identification G-85054

Date : June 15, 2022

Test personnel : Kittipong T.

Cylinder Conc : 40.4 ppm

Time : 10:00-10:20 , 11:45-12:00

Span : 81.1 ppm

	CO Analyzer Calibration response	Initial values		Final values		Drift (percent of span)
		System Calibration response	System cal bias (percent of span)	System Calibration response	System cal bias (percent of span)	
Zero gas.....	0.00	0.00	0.00	0.10	0.12	0.12
Upscale gas.....	40.20	40.10	-0.12	40.30	0.12	0.25

ปล่อง G-5019

O2 Analyzer Calibration Data

Source identification : G-5019

Test personnel : Kittipong T.

Span(%) 8.02

Date : June 21,2022

Time : 08:40 - 09:40

Analyzer calibration data for sampling

O2 AMI Model - S/N 121121-10

	Cylinder value (%)	Analyzers calibration response (%)	Absolute difference (%)	Difference (percent of span)
Zero gas	0.00	0.00	0.00	0.00
Mid-level gas	8.02	8.02	0.00	0.00
High level gas	20.90	20.80	0.10	1.25

NOx Analyzer Calibration Data

Source identification : G-5019

Test personnel : Kittipong T.

Span(ppm) 78.5

Date : June 21,2022

Time : 08:40 - 09:40

Analyzer calibration data for sampling

NOx Teledyne Model 200EM S/N 433

	Cylinder value (ppm)	Analyzers calibration response (ppm)	Absolute difference (ppm)	Difference (percent of span)
Zero gas	0.00	0.00	0.00	0.00
Mid-level gas	39.30	39.23	0.07	0.09
High level gas	78.50	78.50	0.00	0.00

SO2 Analyzer Calibration Data

Source identification : G-5019

Test personnel : Kittipong T.

Span(ppm) 81

Date : June 21,2022

Time : 08:40 - 09:40

Analyzer calibration data for sampling

SO2 API Model 100AH S/N 083

	Cylinder value (ppm)	Analyzers calibration response (ppm)	Absolute difference (ppm)	Difference (percent of span)
Zero gas	0.00	0.00	0.00	0.00
Mid-level gas	39.40	39.61	0.21	0.26
High level gas	81.00	81.00	0.00	0.00

System Calibration Bias and Drift Data

Source identification G-5019

Date : June 21, 2022

Test personnel : Kittipong T.

Cylinder Conc : 8.02 %

Time : 11:25-11:50 , 15:55-16:15

Span : 8.02 %

	O2 Analyzer Calibration response	Initial values		Final values		Drift (percent of span)
		System Calibration response	System cal bias (percent of span)	System Calibration response	System cal bias (percent of span)	
Zero gas.....	0.00	0.03	0.37	0.02	0.25	-0.12
Upscale gas.....	8.02	8.03	0.12	8.04	0.25	0.12

System Calibration Bias and Drift Data

Source identification G-5019

Date : June 21, 2022

Test personnel : Kittipong T.

Cylinder Conc : 39.3 ppm

Time : 11:25-11:50 , 15:55-16:15

Span : 78.5 ppm

	Nox Analyzer Calibration response	Initial values		Final values		Drift (percent of span)
		System Calibration response	System cal bias (percent of span)	System Calibration response	System cal bias (percent of span)	
Zero gas.....	0.00	0.02	0.03	0.02	0.02	-0.01
Upscale gas.....	39.23	39.30	0.09	39.20	-0.04	-0.13

System Calibration Bias and Drift Data

Source identification G-5019

Date : June 21, 2022

Test personnel : Kittipong T.

Cylinder Conc : 39.4 ppm

Time : 11:25-11:50 , 15:55-16:15

Span : 81 ppm

	SO2 Analyzer Calibration response	Initial values		Final values		Drift (percent of span)
		System Calibration response	System cal bias (percent of span)	System Calibration response	System cal bias (percent of span)	
Zero gas.....	0.00	0.04	0.05	0.01	0.01	-0.04
Upscale gas.....	39.61	40.06	0.56	39.40	-0.26	-0.81

THE LINDE GROUP

Linde

Certificate Of Analysis

Special Gases Mixture

Customer Details

Name:

SECOT CO.,LTD.

Address:

House number.239 Rimklongprapa Rd,Bangsue
Bang Su Bangkok 10800

Customer Tag No.:

Certificate Details

Number: 0304/19

Date of Issue:

4-Feb-2019

Expired date:

3-Feb-2023

Material Details

Production Order: 90152418

Material Code:

478100-J-62

Cylinder No.:

5484

Gas content: 6.52 M³ (nominal)

Filling pressure:

145 bar (g)

Valve:

CGA 590 BRASS

Cylinder Owner: LINDE

Cylinder Material:

STEEL

Cylinder Size:

47 L

Laboratory Report

Component	Nominal Concentration	Analysis Result ¹	Uncertainty ²	Method of Analysis ³
Oxygen	8.00%	8.02%	± 2% relative	(1) SG-O-01
Nitrogen	Balance			

Recommend usage condition

Minimum utilization: 5% of actual content or before expire date whichever comes first.

Storage condition: Keep in well ventilation and secure area.

Comments

Note:

1. All results expressed in this report are on mole/mole basis, unless otherwise specified.
2. The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%. The measurement of this material is traceable to the SI through the reference gas standard which is traceable to Swiss National Standard of Mass or other recognised national metrology institutes.
3. (1) Gas Chromatography, (2) Paramagnetic Oxygen Analyzer, (3) Electrochemical Oxygen Analyzer,
- (4) Electrochemical Moisture Analyzer, (5) Total Hydrocarbon Analyzer, (6) Other - Specified

Sukanya Parinyasoonorn

Signatory for and on behalf of Linde (Thailand) Co., Ltd.

Page 1 of 1

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บริษัท ลินด์ (ประเทศไทย) จำกัด (มหาชน)

โทรสาร (66) 2338-6100

ชั้น 15 อาคารทาวเวอร์ เอ 2/3 หมู่ 14 ถนนบางนา-ตราด กม. 6.5 แขวงบางนา

อ.บางพลี จ.สมุทรปราการ 10540 โทรศัพท์ (66) 2338-6100 โทรสาร (66) 2338-6333

โรงงานเวลโกรว์: 105 หมู่ 5 ต.บางพลีใหญ่ อ.บางพลี จ.สมุทรปราการ 24180

โทรศัพท์ (66) 38.570-479-93

โทรสาร (66) 38.570-323

Linde (Thailand) Public Company Limited

P.L.C. Registration no. 010753700785

15th Floor, Bangna Tower A, 2/3 Moo 14, Bangna Trad KM. 6.5 Road, Bangkaew

Bangplee, Samutprakarn 10540, Tel (66) 2338-6100 Fax (66) 2338-6333

Wellgrow Plant: 105 Moo 5, T.Bangsamak, A.Bangpakong, Chachoengsao 24180

Thailand, Tel (66) 38.570-479-93

Fax (66) 38.570-323

PB-002/F004

Iss:H/2, 01 March 2018

THE LINDE GROUP

Linde

Certificate Of Analysis
Special Gases Mixture

Customer Details

Name:

Secot Co., Ltd.

Address:

239 Rimklongprapa Rd., Bangsue, Bang Su,
Bangkok 10800

Customer Tag No.:

Certificate Details

Number:

0372/19

Date of Issue:

7-Feb-2019

Expired date:

6-Feb-2023

Material Details

Production Order:

90152419

Material Code:

429900-J-62

Cylinder No.:

16294

Gas content:

6.56 M³ (nominal)

Filling pressure:

145 bar (g)

Valve:

CGA 590 BRASS

Cylinder Owner:

LINDE

Cylinder Material:

STEEL

Cylinder Size:

47 L

Laboratory Report

Component	Normal Concentration	Analysis Result ¹	Uncertainty ²	Method of Analysis ³
Oxygen	15.0%	15.0%	± 2% relative	(2) I-PB-303
Nitrogen	Balance			

Recommend usage condition

Minimum utilization: 5% of actual content or before expire date whichever comes first.

Storage condition: Keep in well ventilation and secure area.

Comments

Note:

1. All results expressed in this report are on mole/mole basis, unless otherwise specified.
2. The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%. The measurement of this material is traceable to the SI through the reference gas standard which is traceable to Swiss National Standard of Mass or other recognised national metrology institutes.
3. (1) Gas Chromatography, (2) Paramagnetic Oxygen Analyzer, (3) Electrochemical Oxygen Analyzer,
- (4) Electrochemical Moisture Analyzer, (5) Total Hydrocarbon Analyzer, (6) Other - Specified

Page 1 of 1

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Sukanya Parinyasoontorn

Signatory for and on behalf of Linde (Thailand) Co., Ltd.

PB-002/F004

Iss: H/2, 01 March 2018

บริษัท ลินด์ (ประเทศไทย) จำกัด (มหาชน)

เบอร์โทรศัพท์: 010-6370000

ชั้น 15 อาคารทาวเวอร์ เอ 2/3 หมู่ 14 ถนนพหลโยธิน กม. 6.5 บางนา/วั

อ.บางพลี อ.สมุทรปราการ 10540 โทรศัพท์ (66) 2338-6100 โทรสาร (66) 2338-6333

โรงงานเวลโกรว์: 105 หมู่ 5 ต.บางพลี อ.บางพลี จ.สมุทรปราการ 24180

โทรศัพท์ (66) 38.570-479-93

โทรสาร (66) 38.570-323

Linde (Thailand) Public Company Limited

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Wellgrow Plant: 105 Moo 5, T.Bangsamak, A.Bangpakong, Chachoengsao 24180

Thailand, Tel (66) 38.570-479-93

Fax (66) 38.570-323

THE LINDE GROUP

Linde

Certificate Of Analysis

Special Gases Mixture

Customer Details

Name:
Secot Co., Ltd.

Address:
239, Rimklongprapa Rd., Bangsue, Bangkok
10800

Customer Tag No.:

Certificate Details

Number:	0333/22	Date of Issue:	8-Feb-2022	Expiry date:	8-Feb-2024
Material Details					
Production Order:	90169719	Material Code:	511600-SK-34	Cylinder No.:	D519462
Gas content:	5.20 M ³	Filling pressure:	137.0 bar	Valve:	CGA 660 SS
Cylinder Owner:	LINDE	Cylinder Material:	Spectra seal	Cylinder Size:	40 L

Laboratory Report

Analytical Result

Component	Normal Concentration	Analysis Result ¹	Uncertainty ²	Method of Analysis ³	Assay Date
Nitric Oxide	40.0 ppm	39.3 ppm	± 1% relative	(6) I-PB-352	1-Feb & 8-Feb-22
Other NOx impurity		Less than 1.9 ppm			
Carbon Monoxide	40.0 ppm	40.4 ppm	± 1% relative	(6) I-PB-352	1-Feb & 8-Feb-22
In Nitrogen					

Reference Standard used in Assay

Reference Standard	Cylinder number	Concentration	Expiry date:
Nitric Oxide	D022358	70.7 ± 0.2 ppm	5-Mar-2023
Carbon Monoxide	D022358	70.8 ± 0.2 ppm	5-Mar-2023
In Nitrogen			

Analytical Instruments used in Assay

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
FTIR Spectrometers Nicolet iS50	FTIR-NO	10-Jan-2022
FTIR Spectrometers Nicolet iS50	FTIR-CO	8-Jan-2022

Recommend usage condition

Minimum utilization: 5% of actual content or before expire date whichever comes first.
Storage condition: Keep in well ventilation and secure area.

Comments

When reordering, please quote the material number

Note:

- All results expressed in this report are on mole/mole basis, unless otherwise specified. The Assay of this Standard has been performed in accordance with the EPA Traceability Protocol EPA-600/R-12/531 for the Assay and Certification of Gaseous Calibration Standards using procedure G1
- The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%. The measurement of this material is traceable to the SI through the reference gas standard which is traceable to Swiss National Standard of Mass or other recognised national metrology institutes.
- (1) Gas Chromatography, (2) Paramagnetic Oxygen Analyzer, (3) Electrochemical Oxygen Analyzer, (4) Electrochemical Moisture Analyzer, (5) Total Hydrocarbon Analyzer, (6) Other - Specified

Sukanya Parinyasoontorn
Signatory for and on behalf of Linde (Thailand) Co., Ltd.

Page 1 of 1

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บริษัท ลินด์ (ประเทศไทย) จำกัด (มหาชน)

เลขที่ใบแจ้งหนี้: 0107537000285

ชั้น 15 อาคารทาวเวอร์ เอ 2/3 หมู่ 14 ถนนบางนา-ตราด กม. 6.5 แขวงบาง

อ.บางพลี จ.สมุทรปราการ 10540 โทรศัพท์ (66) 2338-6100 โทรสาร (66) 2338-6333

โรงงานเวลโกรว์: 105 หมู่ 5 ต.บางพลีใหญ่ อ.บางพลี จ.สมุทรปราการ 24180

โทรศัพท์ (66) 38.570-479-93

โทรสาร (66) 38.570-323

Linde (Thailand) Public Company Limited

Iss:K/2, 15 Oct 2021

PLC: Registration no. 107537000285

15th Floor, Bangna Tower A, 2/3 Moo 14, Bangna Trad KM. 6.5 Road, Bangkaew

Bangplee, Samutprakarn 10540, Tel (66) 2338-6100 Fax (66) 2338-6333

Wellgrow Plant: 105 Moo 5, T.Bangsamak, A.Bangpakong, Chachoengsao 24180

Thailand, Tel (66) 38.570-479-93

Fax (66) 38.570-323

THE LINDE GROUP

Linde

Certificate Of Analysis
Special Gases Mixture

Customer Details

Name: Secot Co., Ltd. Address: 239, Rimklongprapa Rd., Bangsue, Bangkok 10800 Customer Tag No.:

Certificate Details

Number:	0330/22	Date of Issue:	8-Feb-2022	Expiry date:	8-Feb-2024
Material Details					
Production Order:	90169720	Material Code:	436700-SK-34	Cylinder No.:	D636021
Gas content:	5.23 M ³	Filling pressure:	137.0 bar	Valve:	CGA 660 SS
Cylinder Owner:	LINDE	Cylinder Material:	Spectra seal	Cylinder Size:	40 L

Laboratory Report

Analytical Result

Component	Nominal Concentration	Analysis Result ¹	Uncertainty ²	Method of Analysis ³	Assay Date
Nitric Oxide	80.0 ppm	78.5 ppm	± 1% relative	(6) I-PB-352	1-Feb & 8-Feb-22
Other NOx impurity		Less than 3.9 ppm			
Carbon Monoxide	80.0 ppm	81.1 ppm	± 1% relative	(6) I-PB-352	1-Feb & 8-Feb-22
In Nitrogen					

Reference Standard used in Assay

Reference Standard	Cylinder number	Concentration	Expiry date:
Nitric Oxide	D022358	70.7 ± 0.2 ppm	5-Mar-2023
Carbon Monoxide	D022358	70.8 ± 0.2 ppm	5-Mar-2023
In Nitrogen			

Analytical Instruments used in Assay

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
FTIR Spectrometers Nicolet iS50	FTIR-NO	10-Jan-2022
FTIR Spectrometers Nicolet iS50	FTIR-CO	8-Jan-2022

Recommend usage condition

Minimum utilization: 5% of actual content or before expiry date whichever comes first.
Storage condition: Keep in well ventilation and secure area.

Comments

When reordering, please quote the material number

Note:

- All results expressed in this report are on mole/mole basis, unless otherwise specified. The Assay of this Standard has been performed in accordance with the EPA Traceability Protocol EPA-600/R-12/531 for the Assay and Certification of Gaseous Calibration Standards using procedure G1
- The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%. The measurement of this material is traceable to the SI through the reference gas standard which is traceable to Swiss National Standard of Mass or other recognised national metrology institutes.
- (1) Gas Chromatography, (2) Paramagnetic Oxygen Analyzer, (3) Electrochemical Oxygen Analyzer, (4) Electrochemical Moisture Analyzer, (5) Total Hydrocarbon Analyzer, (6) Other - Specified

Sukanya Parinyasoonporn
Signatory for and on behalf of Linde (Thailand) Co., Ltd.

Page 1 of 1

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บริษัท ลินด์ (ประเทศไทย) จำกัด (มหาชน)

เบอร์โทรศัพท์: 010737000785

ชั้น 15 อาคารทาวเวอร์ 2/3 หมู่ 14 ถนนบางนา-ตราด กม. 6.5 ตำบลทวี

อ.บางพลี อ.สมุทรปราการ 10540 โทรศัพท์ (66) 2338-6100 โทรสาร (66) 2338-6333

โรงงานเวลโกรว์: 105 หมู่ 5 ต.บางสนธิ์ อ.บางปะกง จ.ฉะเชิงเทรา 24180

โทรศัพท์ (66) 38.570-479-93 โทรสาร (66) 38.570-323

Linde (Thailand) Public Company Limited Iss:K/2, 15 Oct 2021

PLC. Registration no. 0107537000785

15th Floor, Bangna Tower A, 2/3 Moo 14, Bangna Trad KM. 6.5 Road, Bangnae

Bangplee, Samutprakarn 10540, Tel (66) 2338-6100 Fax (66) 2338-6333

Wellgrow Plant: 105 Moo 5, T.Bangsamak, A.Bangpakong, Chachoengsao 24180

Thailand, Tel (66) 38.570-479-93

Fax (66) 38.570-323

THE LINDE GROUP

Linde

Certificate Of Analysis

Special Gases Mixture

Customer Details

Name:
Secot Co., Ltd.

Address:
239 Rimklongprapa Rd., Bangsue,
Bang Su, Bangkok 10800

Customer Tag No.:

Certificate Details

Number:	0710/19	Date of Issue:	12-Mar-2019	Expired date:	12-Mar-2023
Material Details					
Production Order:	90152849	Material Code:	608400-SK-44	Cylinder No.:	D636003
Gas content:	5.520 M ³	Filling pressure:	145.0 Bar	Valve:	CGA 660 SS
Cylinder Owner:	LINDE	Cylinder Material:	Spectra seal	Cylinder Size:	40 L

Laboratory Report

Analytical Result

Component	Normal Concentration	Analysis Result ¹	Uncertainty ²	Method of Analysis ³	Assay Date
Sulphur Dioxide In Nitrogen	40.0 ppm	39.4 ppm	± 1% relative	(6) I-PB-352	28 11- Mar-19

Reference Standard
Sulphur Dioxide
In Nitrogen

Reference Standard used in Assay

Cylinder number	Concentration
256241SG	52.86±0.42 ppm

Expired date
1-May-2020

Instrument/Make/Model
FTIR Spectrometers Nicolet iS50

Analytical Instruments used in Assay

Analytical Principle
FTIR-SO2

Last Multipoint Calibration
23-Feb-2019

Recommend usage condition

Minimum utilization: 5% of actual content or before expire date whichever comes first.

Storage condition: Keep in well ventilation and secure area.

Comments

When reordering, please quote the material number

Note:

1. All results expressed in this report are on mole/mole basis, unless otherwise specified. The Assay of this Standard has been performed in accordance with the EPA Traceability Protocol EPA-600/R-12/531 for the Assay and Certification of Gaseous Calibration Standards using procedure G1
2. The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%. The measurement of this material is traceable to the SI through the reference gas standard which is traceable to Swiss National Standard of Mass or other recognised national metrology institutes.
3. (1) Gas Chromatography, (2) Paramagnetic Oxygen Analyzer, (3) Electrochemical Oxygen Analyzer, (4) Electrochemical Moisture Analyzer, (5) Total Hydrocarbon Analyzer, (6) Other - Specified

Sukanya Parinyasoonorn

Signatory for and on behalf of Linde (Thailand) Co., Ltd.

Page 1 of 1

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PB-002/F006

Iss: H/2, 01 March 2018

บริษัท ลินด์ (ประเทศไทย) จำกัด (มหาชน)

เลขที่หนังสือแจ้ง: 0107537000785

ชั้น 15 อาคารทาวเวอร์ เอ 2/3 หมู่ 14 ถนนบางนา-ตราด กม. 6.5 แขวงคลอง

อ.บางพลี จ.สมุทรปราการ 10540 โทรศัพท์ (66) 2338-6100 โทรสาร (66) 2338-6333

โรงงานเวลโกรว์: 105 หมู่ 5 ต.บางพลี อ.บางพลี จ.สมุทรปราการ 24180

โทรศัพท์ (66) 38.570-479-93

โทรสาร (66) 38.570-323

Linde (Thailand) Public Company Limited

PLC Registration no. 0107537000785

15th Floor, Bangna Tower A, 2/3 Moo 14, Bangna Trad KM. 6.5 Road, Bangkaew

Bangplee, Samutprakarn 10540, Tel (66) 2338-6100 Fax (66) 2338-6333

Wellgrow Plant: 105 Moo 5, T.Bangsamak, A.Bangpakong, Chachoengsao 24180

Thailand, Tel (66) 38.570-479-93

Fax (66) 38.570-323

THE LINDE GROUP

Linde

Certificate of Analysis
Special Gases Mixture

Customer Details

Name: Secot Co., Ltd. Address: 239, Rimklongprapa Rd., Bangsue, Bangkok 10800 Customer Tag No.:

Certificate Details

Number: 0273/22 Date of Issue: 4-Feb-2022 Expiry date: 4-Feb-2030
 Material Details
 Production Order: 90169723 Material Code: 445100-SK-44 Cylinder No.: D636047
 Gas content: 5.52 M³ Filling pressure: 145.0 bar Valve: CGA 660 SS
 Cylinder Owner: LINDE Cylinder Material: Spectra seal Cylinder Size: 40 L

Laboratory Report

Analytical Result

Component	Normal Concentration	Analysis Result ¹	Uncertainty ²	Method of Analysis ³	Assay Date
Sulphur Dioxide In Nitrogen	80.0 ppm	81.0 ppm	± 1% relative	(6) I-PB-352	28-Jan & 4-Feb-22

Reference Standard used in Assay
 Reference Standard Sulphur Dioxide In Nitrogen
 Cylinder number 256240 Concentration 52.73 ± 0.42 ppm Expiry date: 6-May-2023

Analytical Instruments used in Assay
 Instrument/Make/Model FTIR Spectrometers Nicolet iS50
 Analytical Principle FTIR-SO2
 Last Multipoint Calibration 10-Jan-2022

Recommend usage condition

Minimum utilization: 5% of actual content or before expire date whichever comes first.
 Storage condition: Keep in well ventilation and secure area.

Comments

When reordering, please quote the material number

Note:

1. All results expressed in this report are on mole/mole basis, unless otherwise specified. The Assay of this Standard has been performed in accordance with the EPA Traceability Protocol EPA-600/R-12/531 for the Assay and Certification of Gaseous Calibration Standards using procedure G1
2. The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor k=2, providing a level of confidence of approximately 95%. The measurement of this material is traceable to the SI through the reference gas standard which is traceable to Swiss National Standard of Mass or other recognised national metrology institutes.
3. (1) Gas Chromatography, (2) Paramagnetic Oxygen Analyzer, (3) Electrochemical Oxygen Analyzer, (4) Electrochemical Moisture Analyzer, (5) Total Hydrocarbon Analyzer, (6) Other - Specified

Page 1 of 1

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Sukanya Parinyasoontorn
 Signatory for and on behalf of Linde (Thailand) Co., Ltd.

บริษัท ลินด์ (ประเทศไทย) จำกัด (มหาชน)

โทรศัพท์ 0107537000785

ชั้น 15 อาคารทาวเวอร์ เอ 2/3 หมู่ 14 ถนนบางนา-ตราด กม. 6.5 ต.บางนาใต้

อ.บางพลี อ.สมุทรปราการ 10540 โทรศัพท์ (66) 2338-6100 โทรสาร (66) 2338-6333

โรงงานเวลโกรว์: 105 หมู่ 5 ต.บางพลี อ.บางนา-ตราด เขตเมืองหลวง 24180

โทรศัพท์ (66) 38.570-479-93

โทรสาร (66) 38.570-323

Linde (Thailand) Public Company Limited

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Bangplee, Samutprakarn 10540, Tel (66) 2338-6100 Fax (66) 2338-6333

Wellgrow Plant: 105 Moo 5, T.Bangsamak, A.Bangpakong, Chachoengsao 24180

Thailand, Tel (66) 38.570-479-93

Fax (66) 38.570-323

PB-002/F006

Iss:K/2, 15 Oct 2021

ภาคผนวก ก

ข้อมูลจากระบบ CEMS ของโรงไฟฟ้า

ปล่อง G-85051

G-85051

Date: 13/6/2022

Time	O2	NOx	CO
	%Vol	ppm	ppm
13/Jun/2022 10:40	13.43	10.91	3.56
13/Jun/2022 10:41	13.30	10.93	3.59
13/Jun/2022 10:42	13.43	10.95	3.63
13/Jun/2022 10:43	13.33	10.96	3.67
13/Jun/2022 10:44	13.41	10.97	3.70
13/Jun/2022 10:45	13.36	10.98	3.74
13/Jun/2022 10:46	13.41	10.93	3.77
13/Jun/2022 10:47	13.35	10.64	3.83
13/Jun/2022 10:48	13.39	10.53	3.98
13/Jun/2022 10:49	13.46	10.45	4.15
13/Jun/2022 10:50	13.79	10.40	4.31
13/Jun/2022 10:51	13.71	10.44	4.48
13/Jun/2022 10:52	13.75	10.50	4.64
13/Jun/2022 10:53	13.93	10.56	4.81
13/Jun/2022 10:54	14.14	10.48	4.97
13/Jun/2022 10:55	14.18	9.84	5.14
13/Jun/2022 10:56	14.27	9.69	5.30
13/Jun/2022 10:57	14.32	9.57	5.47
13/Jun/2022 10:58	14.24	9.29	5.63
13/Jun/2022 10:59	14.32	9.09	5.80
13/Jun/2022 11:00	14.25	9.28	5.96
Average	13.75	10.35	4.48
13/Jun/2022 11:01	14.32	9.24	6.12
13/Jun/2022 11:02	14.30	9.18	6.29
13/Jun/2022 11:03	14.29	9.12	6.45
13/Jun/2022 11:04	14.31	9.06	6.60
13/Jun/2022 11:05	14.25	8.99	6.65
13/Jun/2022 11:06	14.46	8.88	6.70
13/Jun/2022 11:07	14.42	8.64	6.75
13/Jun/2022 11:08	14.41	8.83	6.80
13/Jun/2022 11:09	14.41	8.90	6.84
13/Jun/2022 11:10	14.43	9.01	6.89
13/Jun/2022 11:11	14.46	8.82	6.94
13/Jun/2022 11:12	14.41	8.80	6.99
13/Jun/2022 11:13	14.47	8.82	7.03
13/Jun/2022 11:14	14.43	8.83	7.08
13/Jun/2022 11:15	14.46	8.85	7.13
13/Jun/2022 11:16	14.48	8.86	7.17
13/Jun/2022 11:17	14.44	8.88	7.22
13/Jun/2022 11:18	14.48	8.89	7.27
13/Jun/2022 11:19	14.41	8.91	7.32
13/Jun/2022 11:20	14.47	8.92	7.36
13/Jun/2022 11:21	14.44	8.97	7.41
Average	14.41	8.92	6.91
13/Jun/2022 11:22	14.46	9.13	7.46
13/Jun/2022 11:23	14.48	9.10	7.50
13/Jun/2022 11:24	14.44	9.05	7.55
13/Jun/2022 11:25	14.48	8.99	7.58
13/Jun/2022 11:26	14.39	8.94	7.55
13/Jun/2022 11:27	14.44	8.94	7.51
13/Jun/2022 11:28	14.38	8.93	7.46
13/Jun/2022 11:29	14.44	8.93	7.42
13/Jun/2022 11:30	14.42	8.90	7.38
13/Jun/2022 11:31	14.41	8.76	7.34
13/Jun/2022 11:32	14.43	8.89	7.29
13/Jun/2022 11:33	14.37	9.07	7.25
13/Jun/2022 11:34	14.44	9.18	7.21
13/Jun/2022 11:35	14.37	8.99	7.17
13/Jun/2022 11:36	14.44	8.83	7.12
13/Jun/2022 11:37	14.47	9.02	7.08
13/Jun/2022 11:38	14.48	9.22	7.04
13/Jun/2022 11:39	14.47	9.29	7.00
13/Jun/2022 11:40	14.39	9.34	6.95
13/Jun/2022 11:41	14.47	9.33	6.91
13/Jun/2022 11:42	14.45	9.11	6.87
Average	14.43	9.05	7.27

ปล่อง G-85052

G-84052

Date: 13/6/2022

Time	O2	NOx	CO
	%Vol	ppm	ppm
13/Jun/2022 13:30	13.90	11.49	3.22
13/Jun/2022 13:31	13.83	11.09	3.85
13/Jun/2022 13:32	13.95	10.86	4.48
13/Jun/2022 13:33	13.86	11.09	4.61
13/Jun/2022 13:34	13.90	11.44	2.95
13/Jun/2022 13:35	13.90	11.14	2.78
13/Jun/2022 13:36	13.89	10.93	2.81
13/Jun/2022 13:37	13.87	11.39	2.84
13/Jun/2022 13:38	13.80	11.37	2.87
13/Jun/2022 13:39	13.88	11.27	2.90
13/Jun/2022 13:40	13.92	11.12	2.92
13/Jun/2022 13:41	13.92	10.90	2.95
13/Jun/2022 13:42	13.83	11.23	2.98
13/Jun/2022 13:43	13.88	11.38	3.01
13/Jun/2022 13:44	13.91	11.51	3.04
13/Jun/2022 13:45	13.81	11.50	3.07
13/Jun/2022 13:46	13.88	11.10	3.10
13/Jun/2022 13:47	13.77	11.44	3.13
13/Jun/2022 13:48	13.84	11.22	3.16
13/Jun/2022 13:49	13.90	11.07	3.19
13/Jun/2022 13:50	13.79	11.33	3.22
Average	13.87	11.23	3.19
13/Jun/2022 13:51	13.93	10.75	3.24
13/Jun/2022 13:52	13.83	11.06	3.27
13/Jun/2022 13:53	13.90	10.97	3.30
13/Jun/2022 13:54	13.85	11.22	3.33
13/Jun/2022 13:55	13.84	11.08	3.36
13/Jun/2022 13:56	13.87	11.26	3.39
13/Jun/2022 13:57	13.79	11.36	3.42
13/Jun/2022 13:58	13.87	11.04	3.45
13/Jun/2022 13:59	13.82	11.48	3.48
13/Jun/2022 14:00	13.82	11.47	3.51
13/Jun/2022 14:01	13.82	11.40	3.54
13/Jun/2022 14:02	13.85	11.28	3.56
13/Jun/2022 14:03	13.91	11.05	3.59
13/Jun/2022 14:04	13.86	11.02	3.62
13/Jun/2022 14:05	13.94	11.02	3.65
13/Jun/2022 14:06	13.86	11.05	3.68
13/Jun/2022 14:07	13.70	11.14	3.71
13/Jun/2022 14:08	13.73	10.86	3.74
13/Jun/2022 14:09	13.63	11.21	3.77
13/Jun/2022 14:10	13.75	11.00	3.80
13/Jun/2022 14:11	13.69	10.99	3.83
Average	13.82	11.13	3.54
13/Jun/2022 14:12	13.84	10.67	3.86
13/Jun/2022 14:13	13.84	10.73	4.25
13/Jun/2022 14:14	13.96	10.09	5.70
13/Jun/2022 14:15	14.01	10.41	4.91
13/Jun/2022 14:16	14.01	10.32	4.15
13/Jun/2022 14:17	14.09	10.25	4.70
13/Jun/2022 14:18	14.03	10.38	5.41
13/Jun/2022 14:19	14.21	9.72	6.11
13/Jun/2022 14:20	14.23	9.68	6.21
13/Jun/2022 14:21	14.16	10.04	4.15
13/Jun/2022 14:22	14.27	9.76	4.00
13/Jun/2022 14:23	14.27	9.82	4.91
13/Jun/2022 14:24	14.38	9.18	7.84
13/Jun/2022 14:25	14.25	9.84	5.34
13/Jun/2022 14:26	14.23	9.74	5.10
13/Jun/2022 14:27	14.29	9.49	5.18
13/Jun/2022 14:28	14.19	9.88	5.27
13/Jun/2022 14:29	14.17	9.94	4.87
13/Jun/2022 14:30	14.05	10.27	3.66
13/Jun/2022 14:31	14.21	9.51	6.44
13/Jun/2022 14:32	14.10	10.11	4.82
Average	14.13	9.99	5.09

ปล่อง G-85053

G-84053

Date: 15/6/2022

Time	O2	NOx	CO
	%Vol	ppm	ppm
15/Jun/2022 12:40	14.10	8.97	0.93
15/Jun/2022 12:41	14.10	8.89	0.93
15/Jun/2022 12:42	14.10	9.03	0.93
15/Jun/2022 12:43	14.10	9.04	0.93
15/Jun/2022 12:44	14.09	8.94	0.93
15/Jun/2022 12:45	14.09	8.66	0.93
15/Jun/2022 12:46	14.09	8.77	0.93
15/Jun/2022 12:47	14.09	9.02	0.93
15/Jun/2022 12:48	14.09	9.04	0.93
15/Jun/2022 12:49	14.08	9.12	0.93
15/Jun/2022 12:50	14.08	9.27	0.93
15/Jun/2022 12:51	14.08	9.03	0.93
15/Jun/2022 12:52	14.08	8.82	0.93
15/Jun/2022 12:53	14.08	8.81	0.93
15/Jun/2022 12:54	14.08	8.81	0.93
15/Jun/2022 12:55	14.08	8.81	0.93
15/Jun/2022 12:56	14.08	8.81	0.93
15/Jun/2022 12:57	14.08	8.81	0.93
15/Jun/2022 12:58	14.08	8.81	0.93
15/Jun/2022 12:59	14.08	8.81	0.93
15/Jun/2022 13:00	14.08	8.81	0.93
Average	14.09	8.91	0.93
15/Jun/2022 13:01	14.08	8.78	0.93
15/Jun/2022 13:02	14.08	8.73	0.93
15/Jun/2022 13:03	14.08	9.04	0.93
15/Jun/2022 13:04	14.08	9.44	0.93
15/Jun/2022 13:05	14.07	9.32	0.93
15/Jun/2022 13:06	14.07	9.17	0.92
15/Jun/2022 13:07	14.07	9.12	0.92
15/Jun/2022 13:08	14.07	9.24	0.92
15/Jun/2022 13:09	14.07	9.13	0.92
15/Jun/2022 13:10	14.07	9.22	0.92
15/Jun/2022 13:11	14.07	9.69	0.92
15/Jun/2022 13:12	14.07	9.69	0.92
15/Jun/2022 13:13	14.07	9.67	0.92
15/Jun/2022 13:14	14.07	9.57	0.92
15/Jun/2022 13:15	14.07	9.36	0.92
15/Jun/2022 13:16	14.07	9.47	0.92
15/Jun/2022 13:17	14.07	9.70	0.92
15/Jun/2022 13:18	14.07	9.49	0.92
15/Jun/2022 13:19	14.07	9.50	0.92
15/Jun/2022 13:20	14.07	9.53	0.92
15/Jun/2022 13:21	14.07	9.56	0.92
Average	14.07	9.35	0.92
15/Jun/2022 13:22	14.05	9.70	0.92
15/Jun/2022 13:23	14.01	9.83	0.92
15/Jun/2022 13:24	14.01	9.54	0.92
15/Jun/2022 13:25	14.01	9.80	0.92
15/Jun/2022 13:26	14.01	9.57	0.92
15/Jun/2022 13:27	14.01	9.79	0.92
15/Jun/2022 13:28	14.01	9.62	0.92
15/Jun/2022 13:29	14.01	9.53	0.92
15/Jun/2022 13:30	14.01	9.30	0.92
15/Jun/2022 13:31	14.01	9.43	0.92
15/Jun/2022 13:32	14.01	9.31	0.92
15/Jun/2022 13:33	14.01	9.43	0.92
15/Jun/2022 13:34	14.01	9.56	0.92
15/Jun/2022 13:35	14.01	9.54	0.92
15/Jun/2022 13:36	14.01	9.20	0.92
15/Jun/2022 13:37	14.01	9.34	0.92
15/Jun/2022 13:38	14.01	9.65	0.92
15/Jun/2022 13:39	14.01	9.00	0.92
15/Jun/2022 13:40	14.01	9.21	0.92
15/Jun/2022 13:41	14.01	9.38	0.92
15/Jun/2022 13:42	14.01	9.29	0.92
Average	14.01	9.48	0.92

ปล่อง G-85054

G-85054

Date: 15/6/2022

Time	O2	NOx	CO
	%Vol	ppm	ppm
15/Jun/2022 10:40	14.54	9.73	0.79
15/Jun/2022 10:41	14.54	9.73	0.79
15/Jun/2022 10:42	14.54	9.73	0.79
15/Jun/2022 10:43	14.54	9.73	0.79
15/Jun/2022 10:44	14.54	9.73	0.79
15/Jun/2022 10:45	14.54	9.73	0.79
15/Jun/2022 10:46	14.54	9.73	0.79
15/Jun/2022 10:47	14.54	9.73	0.79
15/Jun/2022 10:48	14.54	9.73	0.79
15/Jun/2022 10:49	14.52	9.71	0.79
15/Jun/2022 10:50	14.47	9.64	0.79
15/Jun/2022 10:51	14.42	9.56	0.79
15/Jun/2022 10:52	14.37	9.49	0.79
15/Jun/2022 10:53	14.32	9.41	0.79
15/Jun/2022 10:54	14.26	9.34	0.79
15/Jun/2022 10:55	14.21	9.37	0.79
15/Jun/2022 10:56	14.17	9.59	0.79
15/Jun/2022 10:57	14.17	9.46	0.79
15/Jun/2022 10:58	14.17	9.48	0.79
15/Jun/2022 10:59	14.16	9.78	0.79
15/Jun/2022 11:00	14.16	9.51	0.79
Average	14.39	9.61	0.79
15/Jun/2022 11:01	14.16	9.27	0.79
15/Jun/2022 11:02	14.16	9.20	0.79
15/Jun/2022 11:03	14.16	9.15	0.79
15/Jun/2022 11:04	14.15	9.20	0.79
15/Jun/2022 11:05	14.14	9.52	0.79
15/Jun/2022 11:06	14.12	9.71	0.79
15/Jun/2022 11:07	14.15	9.48	0.79
15/Jun/2022 11:08	14.17	9.26	0.79
15/Jun/2022 11:09	14.17	9.26	0.79
15/Jun/2022 11:10	14.17	9.38	0.79
15/Jun/2022 11:11	14.17	9.20	0.79
15/Jun/2022 11:12	14.17	9.58	0.79
15/Jun/2022 11:13	14.17	9.94	0.79
15/Jun/2022 11:14	14.17	9.66	0.79
15/Jun/2022 11:15	14.17	9.79	0.79
15/Jun/2022 11:16	14.17	9.68	0.79
15/Jun/2022 11:17	14.17	9.45	0.79
15/Jun/2022 11:18	14.17	9.71	0.79
15/Jun/2022 11:19	14.17	9.72	0.79
15/Jun/2022 11:20	14.17	9.58	0.79
15/Jun/2022 11:21	14.17	9.23	0.79
Average	14.16	9.47	0.79
15/Jun/2022 11:22	14.17	9.28	0.79
15/Jun/2022 11:23	14.17	9.42	0.79
15/Jun/2022 11:24	14.17	9.61	0.79
15/Jun/2022 11:25	14.16	9.50	0.79
15/Jun/2022 11:26	14.16	9.41	0.79
15/Jun/2022 11:27	14.16	9.41	0.79
15/Jun/2022 11:28	14.16	9.41	0.79
15/Jun/2022 11:29	14.16	9.33	0.79
15/Jun/2022 11:30	14.16	9.22	0.79
15/Jun/2022 11:31	14.16	9.45	0.79
15/Jun/2022 11:32	14.16	9.49	0.79
15/Jun/2022 11:33	14.16	9.64	0.79
15/Jun/2022 11:34	14.16	9.40	0.79
15/Jun/2022 11:35	14.16	9.26	0.79
15/Jun/2022 11:36	14.16	9.47	0.79
15/Jun/2022 11:37	14.16	9.70	0.79
15/Jun/2022 11:38	14.16	9.80	0.79
15/Jun/2022 11:39	14.16	9.51	0.79
15/Jun/2022 11:40	14.16	9.24	0.79
15/Jun/2022 11:41	14.16	9.08	0.79
15/Jun/2022 11:42	14.16	9.04	0.79
Average	14.16	9.41	0.79

ปล่อง G-5019

G-5019

Date: 21/6/2022

Time	O2	NOx	SO2
	%Vol	ppm	ppm
21/Jun/2022 14:50	14.77	53.35	1.49
21/Jun/2022 14:51	14.76	52.93	1.85
21/Jun/2022 14:52	14.77	52.93	1.01
21/Jun/2022 14:53	14.77	53.34	0.00
21/Jun/2022 14:54	14.77	53.38	0.58
21/Jun/2022 14:55	14.77	53.21	1.12
21/Jun/2022 14:56	14.77	52.44	1.04
21/Jun/2022 14:57	14.77	51.70	0.04
21/Jun/2022 14:58	14.77	51.96	0.31
21/Jun/2022 14:59	14.77	51.83	0.73
21/Jun/2022 15:00	14.77	52.07	0.98
21/Jun/2022 15:01	14.77	52.77	1.50
21/Jun/2022 15:02	14.76	52.52	1.59
21/Jun/2022 15:03	14.77	52.40	1.25
21/Jun/2022 15:04	14.77	52.69	0.75
21/Jun/2022 15:05	14.77	53.05	0.49
21/Jun/2022 15:06	14.77	52.87	1.00
21/Jun/2022 15:07	14.77	51.83	1.35
21/Jun/2022 15:08	14.76	52.04	0.59
21/Jun/2022 15:09	14.76	53.30	0.57
21/Jun/2022 15:10	14.76	52.66	0.95
Average	14.77	52.63	0.91
21/Jun/2022 15:11	14.76	52.50	0.45
21/Jun/2022 15:12	14.76	52.25	0.73
21/Jun/2022 15:13	14.76	52.22	0.57
21/Jun/2022 15:14	14.77	53.22	1.11
21/Jun/2022 15:15	14.76	53.04	1.56
21/Jun/2022 15:16	14.76	52.73	0.74
21/Jun/2022 15:17	14.76	51.64	0.96
21/Jun/2022 15:18	14.76	51.70	0.97
21/Jun/2022 15:19	14.75	51.88	0.72
21/Jun/2022 15:20	14.76	52.00	0.31
21/Jun/2022 15:21	14.76	52.64	0.59
21/Jun/2022 15:22	14.76	52.07	0.99
21/Jun/2022 15:23	14.75	52.03	0.89
21/Jun/2022 15:24	14.76	52.27	0.72
21/Jun/2022 15:25	14.76	51.88	0.48
21/Jun/2022 15:26	14.76	51.61	0.37
21/Jun/2022 15:27	14.76	52.57	0.38
21/Jun/2022 15:28	14.77	53.19	0.40
21/Jun/2022 15:29	14.76	52.32	0.42
21/Jun/2022 15:30	14.76	51.59	0.67
21/Jun/2022 15:31	14.76	51.94	0.98
Average	14.76	52.25	0.71
21/Jun/2022 15:32	14.76	53.45	0.97
21/Jun/2022 15:33	14.76	53.21	0.99
21/Jun/2022 15:34	14.76	52.51	0.87
21/Jun/2022 15:35	14.76	52.27	0.17
21/Jun/2022 15:36	14.76	52.49	0.00
21/Jun/2022 15:37	14.76	52.56	0.00
21/Jun/2022 15:38	14.76	52.06	0.82
21/Jun/2022 15:39	14.75	52.15	1.94
21/Jun/2022 15:40	14.75	52.32	1.35
21/Jun/2022 15:41	14.76	52.73	1.08
21/Jun/2022 15:42	14.76	52.65	0.21
21/Jun/2022 15:43	14.76	52.44	0.00
21/Jun/2022 15:44	14.76	52.82	0.00
21/Jun/2022 15:45	14.75	53.13	0.00
21/Jun/2022 15:46	14.75	52.47	0.16
21/Jun/2022 15:47	14.75	51.88	0.63
21/Jun/2022 15:48	14.75	51.97	0.38
21/Jun/2022 15:49	14.75	51.73	0.73
21/Jun/2022 15:50	14.75	51.12	1.36
21/Jun/2022 15:51	14.76	51.30	0.55
21/Jun/2022 15:52	14.75	51.60	0.00
Average	14.76	52.33	0.58

ภาคผนวก ง

แบบบันทึกการทดสอบ RELATIVE ACCURACY AUDIT

ปล้อง G-85051

Relative Accuracy Determination for CEMS TOP SPP Co., Ltd. : G-85051

DATE June 13, 2022

Run No.	Time		O ₂			NOx			CO		
	Start	End	%			ppm@7% O ₂			ppm@7% O ₂		
			Instrumental RM	CEMS	Diff(d)	Instrumental RM	CEMS	Diff(d)	Instrumental RM	CEMS	Diff(d)
1	10:40 AM	11:00 AM	13.74	13.75	-0.01	19.59	20.12	-0.53	7.49	8.71	-1.22
2	11:01 AM	11:21 AM	14.33	14.41	-0.08	17.69	19.10	-1.42	12.19	14.80	-2.61
3	11:22 AM	11:42 AM	14.40	14.43	-0.03	17.90	19.44	-1.54	12.06	15.62	-3.56
Average			14.16	14.20	-0.04	18.39	19.56	-1.16	10.58	13.04	-2.46
Relative Accuracy			-0.28			-1.94			-0.36		
Performance Specification : RA			+/-15%**			+/-7.5%***			+/-7.5%***		

* Instrumental RM and CEMS data are on a constant basis, that is, dry and actual oxygen.

** 15 % of RM value

*** 7.5% of Emission Standard value 60 ppm@7%O₂ of NO_x, 690 ppm@7%O₂ of CO

Relative Accuracy Recording Form : TOP SPP Co., Ltd.

Location: **G85051**

Run Number: **1**

Date: **Jun 13 ,2022**

Start Time: **10:40 AM**

End Time: **11:00 AM**

Test Operator: **Kittipong T.**

Time	O2 Reading(%)		NOx Reading(ppm)		CO Reading(ppm)	
	Instrumental RM	CEMS	Instrumental RM	CEMS	Instrumental RM	CEMS
1st minute	13.50	13.43	10.17	10.91	3.37	3.56
2nd minute	13.60	13.30	10.14	10.93	3.54	3.59
3rd minute	13.46	13.43	10.13	10.95	3.63	3.63
4th minute	13.54	13.33	10.20	10.96	3.61	3.67
5th minute	13.46	13.41	10.67	10.97	3.63	3.70
6th minute	13.49	13.36	10.63	10.98	3.57	3.74
7th minute	13.46	13.41	10.66	10.93	3.57	3.77
8th minute	13.45	13.35	10.75	10.64	3.52	3.83
9th minute	13.46	13.39	10.77	10.53	3.51	3.98
10th minute	13.43	13.46	10.70	10.45	3.49	4.15
11th minute	13.50	13.79	10.74	10.40	3.50	4.31
12th minute	13.78	13.71	10.66	10.44	3.60	4.48
13th minute	13.75	13.75	10.49	10.50	3.75	4.64
14th minute	13.66	13.93	10.52	10.56	3.84	4.81
15th minute	13.92	14.14	10.47	10.48	4.00	4.97
16th minute	14.06	14.18	10.20	9.84	4.18	5.14
17th minute	14.13	14.27	8.86	9.69	4.40	5.30
18th minute	14.16	14.32	8.95	9.57	4.70	5.47
19th minute	14.28	14.24	8.51	9.29	4.96	5.63
20th minute	14.16	14.32	8.79	9.09	5.14	5.80
21st minute	14.25	14.25	8.71	9.28	5.24	5.96
Average	13.74	13.75	10.08	10.35	3.94	4.48

Signature 
 (Miss Katesarin Vorradetwittaya)
 Environmental Scientist

Relative Accuracy Recording Form : TOP SPP Co., Ltd.

Location: G85051

Run Number: 2

Date: Jun 13 ,2022

Start Time: 11:01 AM

End Time: 11:21 AM

Test Operator: Kittipong T.

Time	O2 Reading(%)		NOx Reading(ppm)		CO Reading(ppm)	
	Instrumental RM	CEMS	Instrumental RM	CEMS	Instrumental RM	CEMS
1st minute	14.18	14.32	8.65	9.24	5.36	6.12
2nd minute	14.22	14.30	8.72	9.18	5.32	6.29
3rd minute	14.23	14.29	8.68	9.12	5.43	6.45
4th minute	14.15	14.31	8.66	9.06	5.48	6.60
5th minute	14.25	14.25	8.68	8.99	5.51	6.65
6th minute	14.17	14.46	8.64	8.88	5.58	6.70
7th minute	14.37	14.42	8.59	8.64	5.61	6.75
8th minute	14.36	14.41	8.28	8.83	5.79	6.80
9th minute	14.36	14.41	8.39	8.90	5.86	6.84
10th minute	14.38	14.43	8.24	9.01	6.01	6.89
11th minute	14.34	14.46	7.95	8.82	5.96	6.94
12th minute	14.41	14.41	8.25	8.80	5.95	6.99
13th minute	14.35	14.47	8.18	8.82	5.97	7.03
14th minute	14.41	14.43	8.19	8.83	5.99	7.08
15th minute	14.38	14.46	8.15	8.85	6.09	7.13
16th minute	14.38	14.48	8.16	8.86	6.06	7.17
17th minute	14.41	14.44	8.22	8.88	6.14	7.22
18th minute	14.35	14.48	8.19	8.89	6.04	7.27
19th minute	14.43	14.41	7.92	8.91	6.00	7.32
20th minute	14.36	14.47	8.17	8.92	6.02	7.36
21st minute	14.41	14.44	8.20	8.97	5.95	7.41
Average	14.33	14.41	8.34	8.92	5.82	6.91

Signature

(Miss Katesarin Vorradetwittaya)

Environmental Scientist

Relative Accuracy Recording Form : TOP SPP Co., Ltd.

Location: **G85051**

Run Number: **3**

Date: **Jun 13, 2022**

Start Time: **11:22 AM**

End Time: **11:42 AM**

Test Operator: **Kittipong T.**

Time	O2 Reading(%)		NOx Reading(ppm)		CO Reading(ppm)	
	Instrumental RM	CEMS	Instrumental RM	CEMS	Instrumental RM	CEMS
1st minute	14.37	14.46	8.22	9.13	6.04	7.46
2nd minute	14.36	14.48	8.23	9.10	5.99	7.50
3rd minute	14.40	14.44	8.22	9.05	6.09	7.55
4th minute	14.32	14.48	8.17	8.99	6.10	7.58
5th minute	14.39	14.39	8.25	8.94	6.12	7.55
6th minute	14.30	14.44	8.26	8.94	6.10	7.51
7th minute	14.36	14.38	8.30	8.93	5.95	7.46
8th minute	14.32	14.44	8.03	8.93	5.90	7.42
9th minute	14.38	14.42	8.42	8.90	5.74	7.38
10th minute	14.43	14.41	8.48	8.76	5.66	7.34
11th minute	14.40	14.43	8.45	8.89	5.55	7.29
12th minute	14.47	14.37	8.44	9.07	5.51	7.25
13th minute	14.39	14.44	8.40	9.18	5.51	7.21
14th minute	14.48	14.37	8.42	8.99	5.51	7.17
15th minute	14.41	14.44	8.40	8.83	5.51	7.12
16th minute	14.45	14.47	8.43	9.02	5.46	7.08
17th minute	14.45	14.48	8.41	9.22	5.46	7.04
18th minute	14.41	14.47	8.45	9.29	5.40	7.00
19th minute	14.49	14.39	8.45	9.34	5.36	6.95
20th minute	14.40	14.47	8.43	9.33	5.26	6.91
21st minute	14.47	14.45	8.49	9.11	5.24	6.87
Average	14.40	14.43	8.35	9.04	5.69	7.27

Signature 
 (Miss Katesarin Vorradetwittaya)
 Environmental Scientist

ปล่อง G-85052

Relative Accuracy Determination for CEMS TOP SPP Co., Ltd. : G-85052

DATE

June 13, 2022

Run No.	Time		O ₂				NOx				CO			
	Start	End	%				ppm@7% O ₂				ppm@7% O ₂			
			Instrumental RM	CEMS	Diff(d)		Instrumental RM	CEMS	Diff(d)		Instrumental RM	CEMS	Diff(d)	
1	1:30 PM	1:50 PM	13.84	13.87	-0.03		18.68	22.20	-3.52		4.41	6.31	-1.90	
2	1:51 PM	2:11 PM	13.82	13.82	0.00		18.87	21.85	-2.98		3.83	6.95	-3.12	
3	2:12 PM	2:32 PM	14.05	14.13	-0.08		17.92	20.51	-2.59		6.41	10.45	-4.04	
Average			13.90	13.94	-0.04		18.49	21.52	-3.03		4.88	7.90	-3.02	
Relative Accuracy				-0.26				-5.05				-0.44		
Performance Specification : RA				+/-1.5%**				+/-7.5%***				+/-7.5%***		

* Instrumental RM and CEMS data are on a constant basis, that is, dry and actual oxygen.

** 15 % of RM value

*** 7.5% of Emission Standard value 60 ppm@7%O₂ of NO_x, 690 ppm@7%O₂ of CO

Relative Accuracy Recording Form : TOP SPP Co., Ltd.

Location: **G85052**

Run Number: **1**

Date: **Jun 13 ,2022**

Start Time: **1:30 PM**

End Time: **1:50 PM**

Test Operator: **Kittipong T.**

Time	O2 Reading(%)		NOx Reading(ppm)		CO Reading(ppm)	
	Instrumental RM	CEMS	Instrumental RM	CEMS	Instrumental RM	CEMS
1st minute	13.75	13.90	9.54	11.49	1.72	3.22
2nd minute	13.91	13.83	9.58	11.09	1.70	3.85
3rd minute	13.82	13.95	9.45	10.86	1.74	4.48
4th minute	13.87	13.86	9.41	11.09	1.78	4.61
5th minute	13.88	13.90	9.19	11.44	2.03	2.95
6th minute	13.82	13.90	9.17	11.14	2.35	2.78
7th minute	13.87	13.89	10.12	10.93	2.52	2.81
8th minute	13.82	13.87	9.41	11.39	2.53	2.84
9th minute	13.90	13.80	9.29	11.37	2.65	2.87
10th minute	13.81	13.88	9.21	11.27	2.60	2.90
11th minute	13.79	13.92	9.32	11.12	2.77	2.92
12th minute	13.87	13.92	9.41	10.90	2.85	2.95
13th minute	13.87	13.83	9.32	11.23	2.75	2.98
14th minute	13.88	13.88	9.23	11.38	2.84	3.01
15th minute	13.80	13.91	9.57	11.51	2.71	3.04
16th minute	13.86	13.81	9.60	11.50	2.48	3.07
17th minute	13.85	13.88	9.57	11.10	2.15	3.10
18th minute	13.78	13.77	9.56	11.44	1.79	3.13
19th minute	13.85	13.84	9.23	11.22	2.00	3.16
20th minute	13.71	13.90	9.68	11.07	2.15	3.19
21st minute	13.86	13.79	9.73	11.33	2.17	3.22
Average	13.84	13.87	9.46	11.23	2.30	3.19

Signature

(Miss Katesarin Vorradetwittaya)

Environmental Scientist

Relative Accuracy Recording Form : TOP SPP Co., Ltd.

Location: G85052

Run Number: 2

Date: Jun 13 ,2022

Start Time: 1:51 PM

End Time: 2:11 PM

Test Operator: Kittipong T.

Time	O2 Reading(%)		NOx Reading(ppm)		CO Reading(ppm)	
	Instrumental RM	CEMS	Instrumental RM	CEMS	Instrumental RM	CEMS
1st minute	13.83	13.93	9.60	10.75	2.16	3.24
2nd minute	13.82	13.83	9.55	11.06	1.88	3.27
3rd minute	13.89	13.90	8.83	10.97	2.00	3.30
4th minute	13.78	13.85	9.58	11.22	2.10	3.33
5th minute	13.90	13.84	9.24	11.08	2.21	3.36
6th minute	13.77	13.87	9.69	11.26	2.34	3.39
7th minute	13.85	13.79	9.77	11.36	2.06	3.42
8th minute	13.83	13.87	9.62	11.04	1.96	3.45
9th minute	13.80	13.82	9.58	11.48	1.68	3.48
10th minute	13.87	13.82	9.57	11.47	1.57	3.51
11th minute	13.80	13.82	9.60	11.40	1.57	3.54
12th minute	13.82	13.85	9.59	11.28	1.57	3.56
13th minute	13.82	13.91	9.55	11.05	1.61	3.59
14th minute	13.85	13.86	9.53	11.02	1.63	3.62
15th minute	13.90	13.94	11.36	11.02	1.70	3.65
16th minute	13.82	13.86	9.50	11.05	1.74	3.68
17th minute	13.96	13.70	9.21	11.14	1.89	3.71
18th minute	13.76	13.73	9.32	10.86	2.25	3.74
19th minute	13.73	13.63	9.39	11.21	2.51	3.77
20th minute	13.73	13.75	9.41	11.00	2.77	3.80
21st minute	13.68	13.69	9.80	10.99	2.63	3.83
Average	13.82	13.82	9.59	11.13	1.99	3.54

Signature

(Miss Katesarin Vorradetwittaya)

Environmental Scientist

Relative Accuracy Recording Form : TOP SPP Co., Ltd.

Location: **G85052**

Run Number: **3**

Date: **Jun 13 ,2022**

Start Time: **2:12 PM**

End Time: **2:32 PM**

Test Operator: **Kittipong T.**

Time	O2 Reading(%)		NOx Reading(ppm)		CO Reading(ppm)	
	Instrumental RM	CEMS	Instrumental RM	CEMS	Instrumental RM	CEMS
1st minute	13.79	13.84	9.65	10.67	2.27	3.86
2nd minute	13.71	13.84	9.59	10.73	1.98	4.25
3rd minute	13.87	13.96	9.14	10.09	2.03	5.70
4th minute	13.79	14.01	9.21	10.41	2.31	4.91
5th minute	13.97	14.01	8.99	10.32	2.73	4.15
6th minute	13.93	14.09	9.16	10.25	3.02	4.70
7th minute	14.04	14.03	8.89	10.38	3.03	5.41
8th minute	14.04	14.21	8.76	9.72	3.25	6.11
9th minute	13.98	14.23	8.85	9.68	3.18	6.21
10th minute	14.19	14.16	8.80	10.04	3.33	4.15
11th minute	14.13	14.27	8.61	9.76	3.45	4.00
12th minute	14.15	14.27	8.61	9.82	3.41	4.91
13th minute	14.19	14.38	8.62	9.18	3.54	7.84
14th minute	14.19	14.25	8.55	9.84	3.48	5.34
15th minute	14.27	14.23	8.02	9.74	3.62	5.10
16th minute	14.12	14.29	8.57	9.49	3.73	5.18
17th minute	14.19	14.19	8.64	9.88	3.68	5.27
18th minute	14.17	14.17	8.41	9.94	3.73	4.87
19th minute	14.16	14.05	8.55	10.27	3.52	3.66
20th minute	14.06	14.21	8.58	9.51	3.66	6.44
21st minute	14.05	14.10	9.01	10.11	3.58	4.82
Average	14.05	14.13	8.82	9.99	3.17	5.09

Signature


(Miss Katesarin Vorradetwittaya)

Environmental Scientist

ปล่อง G-85053

Relative Accuracy Determination for CEMS TOP SPP Co., Ltd. : G-85053

DATE June 15, 2022

Run No.	Time		O ₂			NOx			CO		
	Start	End	%			ppm@7% O ₂			ppm@7% O ₂		
			Instrumental RM	CEMS	Diff(d)	Instrumental RM	CEMS	Diff(d)	Instrumental RM	CEMS	Diff(d)
1	12:40 PM	1:00 PM	14.10	14.09	0.01	19.40	18.19	1.21	0.18	1.90	-1.71
2	1:01 PM	1:21 PM	14.08	14.07	0.01	19.30	19.03	0.27	0.10	1.87	-1.77
3	1:22 PM	1:42 PM	14.06	14.01	0.05	19.31	19.13	0.18	0.28	1.86	-1.57
Average			14.08	14.06	0.02	19.34	18.78	0.56	0.19	1.88	-1.69
Relative Accuracy				0.17			0.93			-0.24	
Performance Specification : RA				+/-1.5%**			+/-7.5%***			+/-7.5%***	

* Instrumental RM and CEMS data are on a consistent basis, that is, dry and actual oxygen.

** 15 % of RM value

*** 7.5% of Emission Standard value 60 ppm@7%O₂ of NO_x, 690 ppm@7%O₂ of CO

Relative Accuracy Recording Form : TOP SPP Co., Ltd.

Location: **G85053**

Run Number: **1**

Date: **Jun 15 ,2022**

Start Time: **12:40 PM**

End Time: **1:00 PM**

Test Operator: **Kittipong T.**

Time	O2 Reading(%)		NOx Reading(ppm)		CO Reading(ppm)	
	Instrumental RM	CEMS	Instrumental RM	CEMS	Instrumental RM	CEMS
1st minute	14.18	14.10	9.22	8.97	0.16	0.93
2nd minute	14.18	14.10	9.13	8.89	0.16	0.93
3rd minute	14.17	14.10	9.13	9.03	0.16	0.93
4th minute	14.17	14.10	9.19	9.04	0.16	0.93
5th minute	14.15	14.09	9.26	8.94	0.18	0.93
6th minute	14.14	14.09	9.37	8.66	0.22	0.93
7th minute	14.15	14.09	9.43	8.77	0.20	0.93
8th minute	14.13	14.09	9.42	9.02	0.16	0.93
9th minute	14.13	14.09	9.49	9.04	0.16	0.93
10th minute	14.13	14.08	9.54	9.12	0.17	0.93
11th minute	14.11	14.08	9.61	9.27	0.18	0.93
12th minute	14.10	14.08	9.80	9.03	0.14	0.93
13th minute	14.10	14.08	9.97	8.82	0.15	0.93
14th minute	14.04	14.08	10.04	8.81	0.15	0.93
15th minute	14.03	14.08	10.06	8.81	0.20	0.93
16th minute	14.03	14.08	10.02	8.81	0.21	0.93
17th minute	14.03	14.08	9.99	8.81	0.22	0.93
18th minute	14.01	14.08	9.82	8.81	0.20	0.93
19th minute	14.03	14.08	9.56	8.81	0.17	0.93
20th minute	14.02	14.08	9.57	8.81	0.17	0.93
21st minute	14.04	14.08	9.65	8.81	0.17	0.93
Average	14.10	14.09	9.58	8.91	0.18	0.93

Signature 
 (Miss Katesarin Vorradetwittaya)
 Environmental Scientist

Relative Accuracy Recording Form : TOP SPP Co., Ltd.

Location: G85053

Run Number: 2

Date: Jun 15 ,2022

Start Time: 1:01 PM

End Time: 1:21 PM

Test Operator: Kittipong T.

Time	O2 Reading(%)		NOx Reading(ppm)		CO Reading(ppm)	
	Instrumental RM	CEMS	Instrumental RM	CEMS	Instrumental RM	CEMS
1st minute	14.08	14.08	9.62	8.78	0.16	0.93
2nd minute	14.07	14.08	9.56	8.73	0.14	0.93
3rd minute	14.08	14.08	9.54	9.04	0.11	0.93
4th minute	14.09	14.08	9.56	9.44	0.11	0.93
5th minute	14.09	14.07	9.52	9.32	0.10	0.93
6th minute	14.08	14.07	9.54	9.17	0.10	0.92
7th minute	14.05	14.07	9.59	9.12	0.10	0.92
8th minute	14.06	14.07	9.66	9.24	0.11	0.92
9th minute	14.03	14.07	9.68	9.13	0.13	0.92
10th minute	14.02	14.07	9.64	9.22	0.14	0.92
11th minute	14.02	14.07	9.73	9.69	0.12	0.92
12th minute	14.03	14.07	9.67	9.69	0.06	0.92
13th minute	14.02	14.07	9.60	9.67	0.02	0.92
14th minute	14.02	14.07	9.57	9.57	0.03	0.92
15th minute	14.07	14.07	9.55	9.36	0.07	0.92
16th minute	14.12	14.07	9.50	9.47	0.06	0.92
17th minute	14.11	14.07	9.51	9.70	0.10	0.92
18th minute	14.13	14.07	9.59	9.49	0.15	0.92
19th minute	14.13	14.07	9.55	9.50	0.16	0.92
20th minute	14.14	14.07	9.60	9.53	0.16	0.92
21st minute	14.15	14.07	9.55	9.56	0.16	0.92
Average	14.08	14.07	9.59	9.35	0.11	0.92

Signature



(Miss Katesarin Vorradetwittaya)

Environmental Scientist

Relative Accuracy Recording Form : TOP SPP Co., Ltd.

Location: **G85053**

Run Number: **3**

Date: **Jun 15, 2022**

Start Time: **1:22 PM**

End Time: **1:42 PM**

Test Operator: **Kittipong T.**

Time	O2 Reading(%)		NOx Reading(ppm)		CO Reading(ppm)	
	Instrumental RM	CEMS	Instrumental RM	CEMS	Instrumental RM	CEMS
1st minute	14.13	14.05	9.53	9.70	0.16	0.92
2nd minute	14.12	14.01	9.58	9.83	0.16	0.92
3rd minute	14.13	14.01	9.53	9.54	0.16	0.92
4th minute	14.10	14.01	9.64	9.80	0.16	0.92
5th minute	14.10	14.01	9.45	9.57	0.16	0.92
6th minute	14.07	14.01	9.61	9.79	0.15	0.92
7th minute	14.07	14.01	9.64	9.62	0.14	0.92
8th minute	14.03	14.01	9.70	9.53	0.13	0.92
9th minute	14.03	14.01	9.74	9.30	0.13	0.92
10th minute	14.02	14.01	9.77	9.43	0.14	0.92
11th minute	14.01	14.01	9.78	9.31	0.18	0.92
12th minute	14.03	14.01	9.78	9.43	0.18	0.92
13th minute	14.03	14.01	9.68	9.56	0.19	0.92
14th minute	14.02	14.01	9.74	9.54	0.19	0.92
15th minute	14.03	14.01	9.29	9.20	0.19	0.92
16th minute	14.02	14.01	9.68	9.34	0.19	0.92
17th minute	14.04	14.01	9.72	9.65	0.19	0.92
18th minute	14.05	14.01	9.66	9.00	0.20	0.92
19th minute	14.04	14.01	9.65	9.21	0.21	0.92
20th minute	14.08	14.01	9.70	9.38	0.22	0.92
21st minute	14.09	14.01	9.70	9.29	0.22	0.92
Average	14.06	14.01	9.65	9.48	0.17	0.92

Signature

(Miss Katesarin Vorradetwittaya)

Environmental Scientist

ปล่อง G-85054

Relative Accuracy Determination for CEMS TOP SPP Co., Ltd. : G-85054

DATE June 15, 2022

Run No.	Time		O ₂			NOx			CO		
	Start	End	%			ppm@7% O ₂			ppm@7% O ₂		
			Instrumental RM	CEMS	Diff(d)	Instrumental RM	CEMS	Diff(d)	Instrumental RM	CEMS	Diff(d)
1	10:40 AM	11:00 AM	14.28	14.39	-0.11	20.85	20.52	0.33	0.48	1.69	-1.20
2	11:01 AM	11:21 AM	14.26	14.16	0.10	21.18	19.53	1.65	0.33	1.63	-1.29
3	11:22 AM	11:42 AM	14.29	14.16	0.13	21.20	19.41	1.79	0.25	1.63	-1.38
Average			14.28	14.24	0.04	21.08	19.82	1.26	0.36	1.65	-1.29
Relative Accuracy			0.28			2.10			-0.19		
Performance Specification : RA			+/-1.5%**			+/-7.5%***			+/-7.5%***		

* Instrumental RM and CEMS data are on a constant basis, that is, dry and actual oxygen.

** 1.5 % of RM value

*** 7.5% of Emission Standard value 60 ppm@7%O₂ of NO_x, 690 ppm@7%O₂ of CO

Relative Accuracy Recording Form : TOP SPP Co., Ltd.

Location: **G85054**

Run Number: **1**

Date: **Jun 15, 2022**

Start Time: **10:40 AM**

End Time: **11:00 AM**

Test Operator: **Kiltpong T.**

Time	O2 Reading(%)		NOx Reading(ppm)		CO Reading(ppm)	
	Instrumental RM	CEMS	Instrumental RM	CEMS	Instrumental RM	CEMS
1st minute	14.38	14.54	9.38	9.73	0.28	0.79
2nd minute	14.36	14.54	10.01	9.73	0.22	0.79
3rd minute	14.28	14.54	8.83	9.73	0.22	0.79
4th minute	14.33	14.54	9.51	9.73	0.22	0.79
5th minute	14.29	14.54	9.55	9.73	0.22	0.79
6th minute	14.31	14.54	9.72	9.73	0.22	0.79
7th minute	14.30	14.54	9.86	9.73	0.22	0.79
8th minute	14.32	14.54	9.95	9.73	0.22	0.79
9th minute	14.29	14.54	9.89	9.73	0.22	0.79
10th minute	14.29	14.52	9.95	9.71	0.22	0.79
11th minute	14.28	14.47	10.01	9.64	0.22	0.79
12th minute	14.27	14.42	10.04	9.56	0.22	0.79
13th minute	14.29	14.37	10.19	9.49	0.23	0.79
14th minute	14.26	14.32	10.17	9.41	0.24	0.79
15th minute	14.24	14.26	10.29	9.34	0.26	0.79
16th minute	14.22	14.21	10.47	9.37	0.26	0.79
17th minute	14.23	14.17	10.53	9.59	0.27	0.79
18th minute	14.23	14.17	10.52	9.46	0.27	0.79
19th minute	14.20	14.17	10.56	9.48	0.27	0.79
20th minute	14.21	14.16	10.34	9.78	0.24	0.79
21st minute	14.21	14.16	10.21	9.51	0.23	0.79
Average	14.28	14.39	10.00	9.61	0.24	0.79

Signature 
 (Miss Katesarin Vorradetwittaya)
 Environmental Scientist

Relative Accuracy Recording Form : TOP SPP Co., Ltd.

Location: **G85054**

Run Number: **2**

Date: **Jun 15 ,2022**

Start Time: **11:01 AM**

End Time: **11:21 AM**

Test Operator: **Kiitpong T.**

Time	O2 Reading(%)		NOx Reading(ppm)		CO Reading(ppm)	
	Instrumental RM	CEMS	Instrumental RM	CEMS	Instrumental RM	CEMS
1st minute	14.22	14.16	10.08	9.27	0.22	0.79
2nd minute	14.22	14.16	10.05	9.20	0.22	0.79
3rd minute	14.22	14.16	10.06	9.15	0.22	0.79
4th minute	14.23	14.15	10.03	9.20	0.22	0.79
5th minute	14.23	14.14	9.98	9.52	0.21	0.79
6th minute	14.23	14.12	9.99	9.71	0.16	0.79
7th minute	14.20	14.15	10.11	9.48	0.16	0.79
8th minute	14.24	14.17	10.23	9.26	0.16	0.79
9th minute	14.24	14.17	10.06	9.26	0.22	0.79
10th minute	14.24	14.17	9.90	9.38	0.22	0.79
11th minute	14.24	14.17	9.97	9.20	0.22	0.79
12th minute	14.28	14.17	9.95	9.58	0.21	0.79
13th minute	14.29	14.17	9.90	9.94	0.18	0.79
14th minute	14.29	14.17	10.48	9.66	0.22	0.79
15th minute	14.29	14.17	10.42	9.79	0.22	0.79
16th minute	14.29	14.17	10.41	9.68	0.21	0.79
17th minute	14.30	14.17	10.40	9.45	0.22	0.79
18th minute	14.29	14.17	10.39	9.71	0.22	0.79
19th minute	14.29	14.17	10.46	9.72	0.19	0.79
20th minute	14.29	14.17	10.54	9.58	0.25	0.79
21st minute	14.27	14.17	10.67	9.23	0.26	0.79
Average	14.26	14.16	10.19	9.47	0.21	0.79

Signature 
 (Miss Katesarin Vorradetwittaya)
 Environmental Scientist

Relative Accuracy Recording Form : TOP SPP Co., Ltd.

Location: **G85054**

Run Number: **3**

Date: **Jun 15 ,2022**

Start Time: **11:22 AM**

End Time: **11:42 AM**

Test Operator: **Kiitpong T.**

Time	O2 Reading(%)		NOx Reading(ppm)		CO Reading(ppm)	
	Instrumental RM	CEMS	Instrumental RM	CEMS	Instrumental RM	CEMS
1st minute	14.27	14.17	10.71	9.28	0.27	0.79
2nd minute	14.29	14.17	10.35	9.42	0.28	0.79
3rd minute	14.29	14.17	10.04	9.61	0.25	0.79
4th minute	14.29	14.16	10.14	9.50	0.23	0.79
5th minute	14.29	14.16	10.29	9.41	0.22	0.79
6th minute	14.29	14.16	10.20	9.41	0.22	0.79
7th minute	14.29	14.16	10.07	9.41	0.22	0.79
8th minute	14.29	14.16	10.00	9.33	0.22	0.79
9th minute	14.29	14.16	10.05	9.22	0.22	0.79
10th minute	14.29	14.16	10.02	9.45	0.18	0.79
11th minute	14.29	14.16	9.92	9.49	0.16	0.79
12th minute	14.29	14.16	10.00	9.64	0.16	0.79
13th minute	14.29	14.16	10.16	9.40	0.16	0.79
14th minute	14.29	14.16	10.18	9.26	0.16	0.79
15th minute	14.29	14.16	10.13	9.47	0.16	0.79
16th minute	14.29	14.16	10.04	9.70	0.16	0.79
17th minute	14.29	14.16	10.00	9.80	0.17	0.79
18th minute	14.28	14.16	10.87	9.51	0.21	0.79
19th minute	14.28	14.16	10.18	9.24	0.21	0.79
20th minute	14.29	14.16	10.08	9.08	0.21	0.79
21st minute	14.28	14.16	9.90	9.04	0.20	0.79
Average	14.29	14.16	10.16	9.41	0.20	0.79

Signature

(Miss Katesarin Vorradetwittaya)

Environmental Scientist

ปล่อง G-5019

Relative Accuracy Determination for CEMS TOP SPP Co., Ltd. : G-5019

DATE June 21, 2022

Run No.	Time		O ₂			NOx			SO ₂		
	Start	End	%			ppm@7% O ₂			ppm@7% O ₂		
			Instrumental RM	CEMS	Diff(d)	Instrumental RM	CEMS	Diff(d)	Instrumental RM	CEMS	Diff(d)
1	2:50 PM	3:10 PM	14.34	14.77	-0.43	106.77	119.34	-12.57	0.91	2.06	-1.15
2	3:11 PM	3:31 PM	14.31	14.76	-0.45	105.80	118.29	-12.49	0.30	1.61	-1.31
3	3:32 PM	3:52 PM	14.28	14.76	-0.48	106.45	118.47	-12.01	1.09	1.31	-0.22
Average			14.31	14.76	-0.45	106.34	118.70	-12.36	0.77	1.66	-0.90
Relative Accuracy			-3.17			-11.62			-4.48		
Performance Specification : RA			+/-15%**			+/-15%**			+/-7.5%***		

* Instrumental RM and CEMS data are on a constant basis, that is, dry and actual oxygen.

** 15 % of RM value

*** 7.5% of Emission Standard value 20 ppm@7%O₂ of SO₂

Relative Accuracy Recording Form : TOP SPP Co., Ltd.

Location: **G-5019**

Run Number: **1**

Date: **Jun 21 ,2022**

Start Time: **2:50 PM**

End Time: **3:10 PM**

Test Operator: **Kittipong T.**

Time	O2 Reading(%)		NOx Reading(ppm)		SO2 Reading(ppm)	
	Instrumental RM	CEMS	Instrumental RM	CEMS	Instrumental RM	CEMS
1st minute	14.30	14.77	50.18	53.35	0.88	1.49
2nd minute	14.30	14.76	50.45	52.93	0.87	1.85
3rd minute	14.32	14.77	50.76	52.93	0.85	1.01
4th minute	14.30	14.77	50.61	53.34	0.76	0.00
5th minute	14.30	14.77	50.43	53.38	0.69	0.58
6th minute	14.33	14.77	50.29	53.21	0.69	1.12
7th minute	14.36	14.77	50.43	52.44	0.65	1.04
8th minute	14.34	14.77	50.51	51.70	0.68	0.04
9th minute	14.36	14.77	47.53	51.96	0.57	0.31
10th minute	14.36	14.77	50.58	51.83	0.50	0.73
11th minute	14.35	14.77	50.28	52.07	0.47	0.98
12th minute	14.36	14.77	50.21	52.77	0.41	1.50
13th minute	14.37	14.76	50.38	52.52	0.35	1.59
14th minute	14.37	14.77	50.75	52.40	0.35	1.25
15th minute	14.35	14.77	50.55	52.69	0.26	0.75
16th minute	14.35	14.77	50.58	53.05	0.27	0.49
17th minute	14.37	14.77	50.54	52.87	0.23	1.00
18th minute	14.36	14.77	50.75	51.83	0.15	1.35
19th minute	14.35	14.76	50.79	52.04	0.17	0.59
20th minute	14.35	14.76	50.49	53.30	0.08	0.57
21st minute	14.36	14.76	50.51	52.66	0.06	0.95
Average	14.34	14.77	50.36	52.63	0.47	0.91

Signature 
 (Miss Katesarin Vorradetwittaya)
 Environmental Scientist

Relative Accuracy Recording Form : TOP SPP Co., Ltd.

Location: **G-5019**

Run Number: **2**

Date: **Jun 21 ,2022**

Start Time: **3:11 PM**

End Time: **3:31 PM**

Test Operator: **Kittipong T.**

Time	O2 Reading(%)		NOx Reading(ppm)		SO2 Reading(ppm)	
	Instrumental RM	CEMS	Instrumental RM	CEMS	Instrumental RM	CEMS
1st minute	14.32	14.76	50.39	52.50	0.04	0.45
2nd minute	14.33	14.76	50.33	52.25	0.00	0.73
3rd minute	14.35	14.76	50.16	52.22	0.00	0.57
4th minute	14.34	14.77	50.33	53.22	0.05	1.11
5th minute	14.32	14.76	47.38	53.04	0.11	1.56
6th minute	14.35	14.76	50.35	52.73	0.06	0.74
7th minute	14.35	14.76	50.61	51.64	0.09	0.96
8th minute	14.30	14.76	50.50	51.70	0.07	0.97
9th minute	14.32	14.75	50.34	51.88	0.10	0.72
10th minute	14.31	14.76	50.25	52.00	0.11	0.31
11th minute	14.30	14.76	47.36	52.64	0.15	0.59
12th minute	14.30	14.76	50.19	52.07	0.11	0.99
13th minute	14.33	14.75	50.41	52.03	0.19	0.89
14th minute	14.32	14.76	50.60	52.27	0.24	0.72
15th minute	14.30	14.76	50.48	51.88	0.25	0.48
16th minute	14.30	14.76	50.28	51.61	0.28	0.37
17th minute	14.30	14.76	50.28	52.57	0.24	0.38
18th minute	14.30	14.77	50.37	53.19	0.36	0.40
19th minute	14.30	14.76	50.21	52.32	0.32	0.42
20th minute	14.34	14.76	50.41	51.59	0.36	0.67
21st minute	14.32	14.76	50.59	51.94	0.40	0.98
Average	14.32	14.76	50.09	52.25	0.17	0.71

Signature

(Miss Katesarin Vorradetwittaya)

Environmental Scientist

Relative Accuracy Recording Form : TOP SPP Co., Ltd.

Location: **G-5019**

Run Number: **3**

Date: **Jun 21 ,2022**

Start Time: **3:32 PM**

End Time: **3:52 PM**

Test Operator: **Kittipong T.**

Time	O2 Reading(%)		NOx Reading(ppm)		SO2 Reading(ppm)	
	Instrumental RM	CEMS	Instrumental RM	CEMS	Instrumental RM	CEMS
1st minute	14.30	14.76	50.62	53.45	0.40	0.97
2nd minute	14.30	14.76	50.06	53.21	0.41	0.99
3rd minute	14.32	14.76	50.38	52.51	0.38	0.87
4th minute	14.31	14.76	50.48	52.27	0.34	0.17
5th minute	14.32	14.76	50.59	52.49	0.47	0.00
6th minute	14.31	14.76	50.75	52.56	0.41	0.00
7th minute	14.30	14.76	50.64	52.06	0.45	0.82
8th minute	14.31	14.75	50.70	52.15	0.50	1.94
9th minute	14.31	14.75	50.71	52.32	0.57	1.35
10th minute	14.30	14.76	50.64	52.73	0.55	1.08
11th minute	14.30	14.76	50.46	52.65	0.54	0.21
12th minute	14.30	14.76	47.57	52.44	0.53	0.00
13th minute	14.31	14.76	50.55	52.82	0.59	0.00
14th minute	14.30	14.75	50.59	53.13	0.58	0.00
15th minute	14.30	14.75	50.53	52.47	0.60	0.16
16th minute	14.30	14.75	50.38	51.88	0.63	0.63
17th minute	14.30	14.75	50.38	51.97	0.64	0.38
18th minute	14.30	14.75	54.96	51.73	0.63	0.73
19th minute	14.30	14.75	50.45	51.12	0.68	1.36
20th minute	14.30	14.76	50.43	51.30	0.67	0.55
21st minute	14.30	14.75	50.26	51.60	0.70	0.00
Average	14.30	14.76	50.58	52.33	0.54	0.58

Signature 
 (Miss Katesarin Vorradetwittaya)
 Environmental Scientist

ภาคผนวก จ

ภาพถ่ายขณะทำการทดสอบ RELATIVE ACCURACY AUDIT



G-85051 : วันที่ 13 มิถุนายน พ.ศ. 2565



G-85052 : วันที่ 13 มิถุนายน พ.ศ. 2565

ภาพถ่ายการทดสอบ Relative Accuracy Audit
ของระบบติดตามตรวจวัดการระบายมลพิษทางอากาศจากปล่องอย่างต่อเนื่อง





G-85053 : วันที่ 15 มิถุนายน พ.ศ. 2565



G-85054 : วันที่ 15 มิถุนายน พ.ศ. 2565

ภาพถ่ายการทดสอบ Relative Accuracy Audit
ของระบบติดตามตรวจวัดการระบายมลพิษทางอากาศจากปล่องอย่างต่อเนื่อง





G-5019 : วันที่ 21 มิถุนายน พ.ศ. 2565

ภาพถ่ายการทดสอบ Relative Accuracy Audit
ของระบบติดตามตรวจวัดการระบายมลพิษทางอากาศจากปล่องอย่างต่อเนื่อง



ANALYSIS REPORT

CUSTOMER NAME : TOP SPP COMPANY LIMITED
ADDRESS : 42/7 MOO 1 SUKHUMVIT ROAD KM.124 THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 08 1556 0557 e-mail : kitiya@thaioilgroup.com
SAMPLING SOURCE : มหาวิทยาลัยเกษตรศาสตร์ วิทยาเขตศรีราชา
SAMPLE TYPE : AMBIENT
SAMPLING DATE : *, **, ***
SAMPLING TIME : *, **, ***
SAMPLING BY : MR SIRAPAT JONGPHADUNGKIET
ANALYZED BY : MISS JETJARIN TUMSA-AT

RECEIVED DATE : MAY 13, 2022
ANALYTICAL DATE : MAY 13-20, 2022
REPORT NO. : 2022-U038020
WORK NO. : 2021-003226
ANALYSIS NO. : T22AJ079-0015 - T22AJ079-0017

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		
			มหาวิทยาลัยเกษตรศาสตร์ วิทยาเขตศรีราชา		
			* T22AJ079-0015	** T22AJ079-0016	*** T22AJ079-0017
TOTAL SUSPENDED PARTICULATE	mg/m ³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.045	0.022	0.025
PARTICULATE MATTER (≤ 10 µm)	mg/m ³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.035	0.011	0.015
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 I PART 50, APPENDIX B.
PM10 : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER I 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

CUSTOMER NAME : TOP SPP COMPANY LIMITED
ADDRESS : 42/7 MOO 1 SUKHUMVIT ROAD KM.124 THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 08 1556 0557 e-mail : kitiya@thaioilgroup.com
SAMPLING SOURCE : มหาวิทยาลัยเกษตรศาสตร์ วิทยาเขตศรีราชา
SAMPLE TYPE : AMBIENT
SAMPLING DATE : * , ** , *** , ****
SAMPLING TIME : * , ** , *** , ****
SAMPLING BY : MR SIRAPAT JONGPHADUNGKIET
ANALYZED BY : MISS JETJARIN TUMSA-AT

RECEIVED DATE : MAY 13, 2022
ANALYTICAL DATE : MAY 13-20, 2022
REPORT NO. : 2022-U038021
WORK NO. : 2021-003226
ANALYSIS NO. : T22AJ079-0018 - T22AJ079-0021

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT			
			มหาวิทยาลัยเกษตรศาสตร์ วิทยาเขตศรีราชา			
			* T22AJ079-0018	** T22AJ079-0019	*** T22AJ079-0020	**** T22AJ079-0021
TOTAL SUSPENDED PARTICULATE	mg/m ³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.037	0.025	0.038	0.043
PARTICULATE MATTER (≤ 10 µm)	mg/m ³	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 I PART 50, APPENDIX B.
PM10 : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER I PART 50, APPENDIX J.
* : SAMPLING FROM 10:30 HOUR ON MAY 9, 2022 TO 10:30 HOUR ON MAY 10, 2022.
** : SAMPLING FROM 10:30 HOUR ON MAY 10, 2022 TO 10:30 HOUR ON MAY 11, 2022.
*** : SAMPLING FROM 10:30 HOUR ON MAY 11, 2022 TO 10:30 HOUR ON MAY 12, 2022.
**** : SAMPLING FROM 10:30 HOUR ON MAY 12, 2022 TO 10:30 HOUR ON MAY 13, 2022.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

MAY 25, 2022



ANALYSIS REPORT

CUSTOMER NAME : TOP SPP COMPANY LIMITED
ADDRESS : 42/7 MOO 1 SUKHUMVIT ROAD KM.124 THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 08 1556 0557 e-mail : kitiya@thaioilgroup.com
MEASURING PLACE : มหาวิทยาลัยเกษตรศาสตร์ วิทยาเขตศรีราชา
MEASURING TYPE : AMBIENT (AIR) **RECEIVED DATE** : MAY 6-13, 2022
MEASURING DATE : MAY 6-13, 2022 **ANALYTICAL DATE** : MAY 6-13, 2022
MEASURING TIME : * **REPORT NO.** : 2022-U040854
MEASURING METHOD : CHEMILUMINESCENCE **WORK NO.** : 2021-003226
MEASURED BY : MR SIRAPAT JONGPHADUNGKIET **ANALYSIS NO.** : T22AJ079-0015 - T22AJ079-0021

TIME *	RESULT (ppm)		
	NITROGEN DIOXIDE		
	มหาวิทยาลัยเกษตรศาสตร์ วิทยาเขตศรีราชา		
	MAY 6-7, 2022 T22AJ079-0015	MAY 7-8, 2022 T22AJ079-0016	MAY 8-9, 2022 T22AJ079-0017
08:00-09:00 HOUR	0.0216	0.0277	0.0252
09:00-10:00 HOUR	0.0234	0.0250	0.0247
10:00-11:00 HOUR	0.0236	0.0224	0.0235
11:00-12:00 HOUR	0.0263	0.0198	0.0239
12:00-13:00 HOUR	0.0264	0.0196	0.0250
13:00-14:00 HOUR	0.0268	0.0209	0.0249
14:00-15:00 HOUR	0.0250	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	0.0268	0.0253	0.0241
18:00-19:00 HOUR	0.0263	0.0274	0.0240
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	0.0236	0.0252
23:00-00:00 HOUR	0.0249	0.0221	0.0232
00:00-01:00 HOUR	0.0218	0.0220	0.0216
01:00-02:00 HOUR	0.0211	0.0199	0.0209
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			
	มหาวิทยาลัยเกษตรศาสตร์ วิทยาเขตศรีราชา			
	MAY 9-10, 2022 T22AJ079-0018	MAY 10-11, 2022 T22AJ079-0019	MAY 11-12, 2022 T22AJ079-0020	MAY 12-13, 2022 T22AJ079-0021
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	0.0233	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	0.0288	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	0.0237	0.0223	0.0245	0.0231
19:00-20:00 HOUR	0.0248	0.0221	0.0247	0.0223
20:00-21:00 HOUR	0.0244	0.0226	0.0250	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	0.0226	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	0.0255	0.0195
03:00-04:00 HOUR	0.0271	0.0204	0.0262	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	0.0251	0.0206
07:00-08:00 HOUR	0.0230	0.0194	0.0231	0.0222

Sila Banjongjairuk

(MR SILA BANJONGJAIKUK)
LABORATORY SUPERVISOR

JUNE 3, 2022

ANALYSIS REPORT

CUSTOMER NAME : TOP SPP COMPANY LIMITED
ADDRESS : 42/7 MOO 1 SUKHUMVIT ROAD KM.124 THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 08 1556 0557 e-mail : kitiya@thaioilgroup.com
MEASURING PLACE : มหาวิทยาลัยเกษตรศาสตร์ วิทยาเขตศรีราชา
MEASURING TYPE : AMBIENT (AIR) **RECEIVED DATE** : MAY 6-13, 2022
MEASURING DATE : MAY 6-13, 2022 **ANALYTICAL DATE** : MAY 6-13, 2022
MEASURING TIME : * **REPORT NO.** : 2022-U040857
MEASURING METHOD : UV FLUORESCENCE **WORK NO.** : 2021-003226
MEASURED BY : MR SIRAPAT JONGPHADUNGKIET **ANALYSIS NO.** : T22AJ079-0015 - T22AJ079-0021

เวลา *	RESULT (ppm)		
	SULPHUR DIOXIDE		
	มหาวิทยาลัยเกษตรศาสตร์ วิทยาเขตศรีราชา		
	MAY 6-7, 2022 T22AJ079-0015	MAY 7-8, 2022 T22AJ079-0016	MAY 8-9, 2022 T22AJ079-0017
08:00-09:00 HOUR	0.0021	0.0023	0.0022
09:00-10:00 HOUR	0.0021	0.0026	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	0.0021	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



เวลา *	RESULT (ppm)			
	SULPHUR DIOXIDE			
	มหาวิทยาลัยเกษตรศาสตร์ วิทยาเขตศรีราชา			
	MAY 9-10, 2022 T22AJ079-0018	MAY 10-11, 2022 T22AJ079-0019	MAY 11-12, 2022 T22AJ079-0020	MAY 12-13, 2022 T22AJ079-0021
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	0.0031	0.0021	0.0027
11:00-12:00 HOUR	0.0023	0.0029	0.0020	0.0030
12:00-13:00 HOUR	0.0025	0.0028	0.0019	0.0033
13:00-14:00 HOUR	0.0024	0.0025	0.0019	0.0032
14:00-15:00 HOUR	0.0025	0.0022	0.0022	0.0028
15:00-16:00 HOUR	0.0026	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	0.0031	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	0.0028
07:00-08:00 HOUR	0.0028	0.0020	0.0031	0.0026
AVERAGE 24 HOUR	0.0028	0.0023	0.0024	0.0026

Sila Banjongjairuk

(MR SILA BANJONGJAIKUK)
LABORATORY SUPERVISOR

JUNE 3, 2022

ANALYSIS REPORT

CUSTOMER NAME : TOP SPP COMPANY LIMITED
ADDRESS : 42/7 MOO 1 SUKHUMVIT ROAD KM.124 THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 08 1556 0557 e-mail : kitiya@thaioilgroup.com
SAMPLING SOURCE : บ้านฉางอุดม
SAMPLE TYPE : AMBIENT
SAMPLING DATE : *, **, ***
SAMPLING TIME : *, **, ***
SAMPLING BY : MR SIRAPAT JONGPHADUNGKIET
ANALYZED BY : MISS JETJARIN TUMSA-AT

RECEIVED DATE : MAY 13, 2022
ANALYTICAL DATE : MAY 13-20, 2022
REPORT NO. : 2022-U038018
WORK NO. : 2021-003226
ANALYSIS NO. : T22AJ079-0008 - T22AJ079-0010

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		
			บ้านฉางอุดม		
			* T22AJ079-0008	** T22AJ079-0009	*** T22AJ079-0010
TOTAL SUSPENDED PARTICULATE	mg/m ³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.080	0.031	0.039
PARTICULATE MATTER (≤ 10 µm)	mg/m ³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.030	0.015	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 I PART 50, APPENDIX B.
PM10 : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER I PART 50, APPENDIX J.
* : 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.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

MAY 25, 2022



ANALYSIS REPORT

CUSTOMER NAME : TOP SPP COMPANY LIMITED
ADDRESS : 42/7 MOO 1 SUKHUMVIT ROAD KM.124 THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 08 1556 0557 e-mail : kitiya@thaioilgroup.com
SAMPLING SOURCE : บ้านอ่าวอุดม
SAMPLE TYPE : AMBIENT
SAMPLING DATE : * , ** , *** , ****
SAMPLING TIME : * , ** , *** , ****
SAMPLING BY : MR SIRAPAT JONGPHADUNGKIET
ANALYZED BY : MISS JETJARIN TUMSA-AT

RECEIVED DATE : MAY 13, 2022
ANALYTICAL DATE : MAY 13-20, 2022
REPORT NO. : 2022-U038019
WORK NO. : 2021-003226
ANALYSIS NO. : T22AJ079-0011 - T22AJ079-0014

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT			
			บ้านอ่าวอุดม			
			* T22AJ079-0011	** T22AJ079-0012	*** T22AJ079-0013	**** T22AJ079-0014
TOTAL SUSPENDED PARTICULATE	mg/m ³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.038	0.023	0.026	0.029
PARTICULATE MATTER (≤ 10 µm)	mg/m ³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.018	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 I PART 50, APPENDIX B.
PM10 : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER I PART 50, APPENDIX J.
* : 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 SUTTAMANUTWONG)
LABORATORY SUPERVISOR

MAY 25, 2022



ANALYSIS REPORT

CUSTOMER NAME : TOP SPP COMPANY LIMITED
ADDRESS : 42/7 MOO 1 SUKHUMVIT ROAD KM.124 THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 08 1556 0557 e-mail : kitiya@thaioilgroup.com
MEASURING PLACE : บ้านฉางอุดม
MEASURING TYPE : AMBIENT (AIR) **RECEIVED DATE** : MAY 6-13, 2022
MEASURING DATE : MAY 6-13, 2022 **ANALYTICAL DATE** : MAY 6-13, 2022
MEASURING TIME : * **REPORT NO.** : 2022-U040853
MEASURING METHOD : CHEMILUMINESCENCE **WORK NO.** : 2021-003226
MEASURED BY : MR SIRAPAT JONGPHADUNGKIET **ANALYSIS NO.** : T22AJ079-0008 - T22AJ079-0014

TIME *	RESULT (ppm)		
	NITROGEN DIOXIDE		
	บ้านฉางอุดม		
	MAY 6-7, 2022 T22AJ079-0008	MAY 7-8, 2022 T22AJ079-0009	MAY 8-9, 2022 T22AJ079-0010
08:00-09:00 HOUR	0.0159	0.0211	0.0210
09:00-10:00 HOUR	0.0153	0.0184	0.0214
10:00-11:00 HOUR	0.0160	0.0163	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	0.0105
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	0.0180	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	0.0208	0.0281
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			
	นํ้าวนํ้าจตุคณ			
	MAY 9-10, 2022 T22AJ079-0011	MAY 10-11, 2022 T22AJ079-0012	MAY 11-12, 2022 T22AJ079-0013	MAY 12-13, 2022 T22AJ079-0014
08:00-09:00 HOUR	0.0324	0.0139	0.0228	0.0221
09:00-10:00 HOUR	0.0294	0.0105	0.0227	0.0209
10:00-11:00 HOUR	0.0252	0.0071	0.0216	0.0199
11:00-12:00 HOUR	0.0202	0.0064	0.0206	0.0198
12:00-13:00 HOUR	0.0157	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	0.0286	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	0.0169	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	0.0239	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	0.0308	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

Sila Banjongjairuk

(MR SILA BANJONGJAIKUK)
LABORATORY SUPERVISOR

JUNE 3, 2022

ANALYSIS REPORT

CUSTOMER NAME : TOP SPP COMPANY LIMITED
ADDRESS : 42/7 MOO 1 SUKHUMVIT ROAD KM.124 THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 08 1556 0557 e-mail : kitiya@thaioilgroup.com
MEASURING PLACE : บ้านฉางอุตสาหกรรม
MEASURING TYPE : AMBIENT (AIR) **RECEIVED DATE** : MAY 6-13, 2022
MEASURING DATE : MAY 6-13, 2022 **ANALYTICAL DATE** : MAY 6-13, 2022
MEASURING TIME : * **REPORT NO.** : 2022-U040856
MEASURING METHOD : UV FLUORESCENCE **WORK NO.** : 2021-003226
MEASURED BY : MR SIRAPAT JONGPHADUNGKIET **ANALYSIS NO.** : T22AJ079-0008 - T22AJ079-0014

เวลา *	RESULT (ppm)		
	SULPHUR DIOXIDE		
	บ้านฉางอุตสาหกรรม		
	MAY 6-7, 2022 T22AJ079-0008	MAY 7-8, 2022 T22AJ079-0009	MAY 8-9, 2022 T22AJ079-0010
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	0.0026	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	0.0031	0.0020
01:00-02:00 HOUR	0.0039	0.0039	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	0.0032	0.0039	0.0032
07:00-08:00 HOUR	0.0026	0.0031	0.0032
AVERAGE 24 HOUR	0.0027	0.0029	0.0023



เวลา *	RESULT (ppm)			
	SULPHUR DIOXIDE			
	บ้านอ่าวอุดม			
	MAY 9-10, 2022 T22AJ079-0011	MAY 10-11, 2022 T22AJ079-0012	MAY 11-12, 2022 T22AJ079-0013	MAY 12-13, 2022 T22AJ079-0014
08:00-09:00 HOUR	0.0029	0.0021	0.0023	0.0024
09:00-10:00 HOUR	0.0028	0.0020	0.0023	0.0026
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	0.0028	0.0031
14:00-15:00 HOUR	0.0035	0.0030	0.0035	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	0.0050	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	0.0036	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

Sila Banjongjairuk

(MR SILA BANJONGJAIKUK)
LABORATORY SUPERVISOR

JUNE 3, 2022

ANALYSIS REPORT

CUSTOMER NAME : TOP SPP COMPANY LIMITED
ADDRESS : 42/7 MOO 1 SUKHUMVIT ROAD KM.124 THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 08 1556 0557 e-mail : kitiya@thaioilgroup.com
SAMPLING SOURCE : บ้านทุ่ง
SAMPLE TYPE : AMBIENT
SAMPLING DATE : *, **, ***
SAMPLING TIME : *, **, ***
SAMPLING BY : MR SIRAPAT JONGPHADUNGKIET
ANALYZED BY : MISS JETJARIN TUMSA-AT

RECEIVED DATE : MAY 13, 2022
ANALYTICAL DATE : MAY 13-20, 2022
REPORT NO. : 2022-U038016
WORK NO. : 2021-003226
ANALYSIS NO. : T22AJ079-0001 - T22AJ079-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		
			บ้านทุ่ง		
			* T22AJ079-0001	** T22AJ079-0002	*** T22AJ079-0003
TOTAL SUSPENDED PARTICULATE	mg/m ³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.125	0.081	0.140
PARTICULATE MATTER (≤ 10 µm)	mg/m ³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.061	0.039	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 I PART 50, APPENDIX B.
PM10 : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER I PART 50, APPENDIX J.
* : 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.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

MAY 25, 2022



ANALYSIS REPORT

CUSTOMER NAME : TOP SPP COMPANY LIMITED
ADDRESS : 42/7 MOO 1 SUKHUMVIT ROAD KM.124 THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 08 1556 0557 e-mail : kitiya@thaioilgroup.com
SAMPLING SOURCE : บ้านทุ่ง
SAMPLE TYPE : AMBIENT
SAMPLING DATE : * , ** , *** , ****
SAMPLING TIME : * , ** , *** , ****
SAMPLING BY : MR SIRAPAT JONGPHADUNGKIET
ANALYZED BY : MISS JETJARIN TUMSA-AT
RECEIVED DATE : MAY 13, 2022
ANALYTICAL DATE : MAY 13-20, 2022
REPORT NO. : 2022-U038017
WORK NO. : 2021-003226
ANALYSIS NO. : T22AJ079-0004 - T22AJ079-0007

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT			
			บ้านทุ่ง			
			* T22AJ079-0004	** T22AJ079-0005	*** T22AJ079-0006	**** T22AJ079-0007
TOTAL SUSPENDED PARTICULATE	mg/m ³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.060	0.078	0.071	0.073
PARTICULATE MATTER (≤ 10 µm)	mg/m ³	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 I PART 50, APPENDIX B.
PM10 : US EPA, CODE OF FEDERAL REGULATION SEARCH RESULTS, 40 CFR-CHAPTER I PART 50, APPENDIX J.
* : 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 SUTTAMANUTWONG)
LABORATORY SUPERVISOR

MAY 25, 2022



ANALYSIS REPORT

CUSTOMER NAME : TOP SPP COMPANY LIMITED
ADDRESS : 42/7 MOO 1 SUKHUMVIT ROAD KM.124 THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 08 1556 0557 e-mail : kitiya@thaioilgroup.com
MEASURING PLACE : บ้านทุ่ง
MEASURING TYPE : AMBIENT (AIR) **RECEIVED DATE** : MAY 6-13, 2022
MEASURING DATE : MAY 6-13, 2022 **ANALYTICAL DATE** : MAY 6-13, 2022
MEASURING TIME : * **REPORT NO.** : 2022-U040852
MEASURING METHOD : CHEMILUMINESCENCE **WORK NO.** : 2021-003226
MEASURED BY : MR SIRAPAT JONGPHADUNGKIET **ANALYSIS NO.** : T22AJ079-0001 - T22AJ079-0007

TIME *	RESULT (ppm)		
	NITROGEN DIOXIDE		
	บ้านทุ่ง		
	MAY 6-7, 2022 T22AJ079-0001	MAY 7-8, 2022 T22AJ079-0002	MAY 8-9, 2022 T22AJ079-0003
08:00-09:00 HOUR	0.0291	0.0287	0.0288
09:00-10:00 HOUR	0.0289	0.0290	0.0292
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	0.0289
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	0.0281	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	0.0259	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	0.0224
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	0.0296	0.0282	0.0303



TIME *	RESULT (ppm)			
	NITROGEN DIOXIDE			
	บันทึก			
	MAY 9-10, 2022 T22AJ079-0004	MAY 10-11, 2022 T22AJ079-0005	MAY 11-12, 2022 T22AJ079-0006	MAY 12-13, 2022 T22AJ079-0007
08:00-09:00 HOUR	0.0286	0.0283	0.0305	0.0301
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	0.0300	0.0291	0.0284	0.0280
15:00-16:00 HOUR	0.0290	0.0299	0.0291	0.0276
16:00-17:00 HOUR	0.0294	0.0294	0.0295	0.0284
17:00-18:00 HOUR	0.0270	0.0272	0.0285	0.0289
18:00-19:00 HOUR	0.0285	0.0286	0.0271	0.0297
19:00-20:00 HOUR	0.0283	0.0283	0.0259	0.0276
20:00-21:00 HOUR	0.0261	0.0261	0.0255	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

Sila Banjongjairuk

(MR SILA BANJONGJAIKUK)
LABORATORY SUPERVISOR

JUNE 3, 2022

ANALYSIS REPORT

CUSTOMER NAME : TOP SPP COMPANY LIMITED
ADDRESS : 42/7 MOO 1 SUKHUMVIT ROAD KM.124 THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 08 1556 0557 e-mail : kitiya@thaioilgroup.com
MEASURING PLACE : บ้านทุ่ง
MEASURING TYPE : AMBIENT (AIR) **RECEIVED DATE** : MAY 6-13, 2022
MEASURING DATE : MAY 6-13, 2022 **ANALYTICAL DATE** : MAY 6-13, 2022
MEASURING TIME : * **REPORT NO.** : 2022-U040855
MEASURING METHOD : UV FLUORESCENCE **WORK NO.** : 2021-003226
MEASURED BY : MR SIRAPAT JONGPHADUNGKIET **ANALYSIS NO.** : T22AJ079-0001 - T22AJ079-0007

เวลา *	RESULT (ppm)		
	SULPHUR DIOXIDE		
	บ้านทุ่ง		
	MAY 6-7, 2022 T22AJ079-0001	MAY 7-8, 2022 T22AJ079-0002	MAY 8-9, 2022 T22AJ079-0003
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	0.0049	0.0043	0.0043
14:00-15:00 HOUR	0.0041	0.0043	0.0044
15:00-16:00 HOUR	0.0044	0.0046	0.0048
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



เวลา *	RESULT (ppm)			
	SULPHUR DIOXIDE			
	บันทึก			
	MAY 9-10, 2022 T22AJ079-0004	MAY 10-11, 2022 T22AJ079-0005	MAY 11-12, 2022 T22AJ079-0006	MAY 12-13, 2022 T22AJ079-0007
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	0.0046	0.0049	0.0049
12:00-13:00 HOUR	0.0046	0.0043	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	0.0049	0.0041	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	0.0035	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	0.0039	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

Sila Banjongjairuk

(MR SILA BANJONGJAIKUK)
LABORATORY SUPERVISOR

JUNE 3, 2022

ANALYSIS REPORT

CUSTOMER NAME	: TOP SPP COMPANY LIMITED	RECEIVED DATE	: MAY 6-11, 2022
ADDRESS	: 42/7 MOO 1 SUKHUMVIT ROAD KM.124 THUNG SUKHLA SI RACHA CHON BURI 20230	ANALYTICAL DATE	: MAY 6-11, 2022
CONTACT INFORMATION	: TEL : 08 1556 0557 e-mail : kitiya@thaioilgroup.com	REPORT NO.	: 2022-U040858
MEASURING SOURCE	: บ้านทุ่ง	WORK NO.	: 2021-003226
MEASURING TYPE	: AMBIENT (NOISE)	ANALYSIS NO.	: T22AI973-0001 - T22AI973-0005
MEASURING DATE	: MAY 6-11, 2022		
MEASURING TIME	: *		
MEASURING METHOD	: INTEGRATED SOUND LEVEL METER		
MEASURED BY	: MR SIRAPAT JONGPHADUNGKIET		

TIME*	RESULT dB(A)		
	บ้านทุ่ง		
	MAY 6-7, 2022		
	T22AI973-0001		
	L _{Aeq} 1 hour	L _{Amax} 1 hour	L _{A90} 1 hour
07:00-08:00 HOUR	60.2	74.5	53.7
08:00-09:00 HOUR	60.1	76.4	55.2
09:00-10:00 HOUR	56.4	78.0	52.4
10:00-11:00 HOUR	53.3	70.6	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	76.8	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	79.5	54.1
20:00-21:00 HOUR	59.1	75.3	53.7
21:00-22:00 HOUR	59.6	74.5	52.6
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	73.7	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 _{Aeq} 24 hours	57.3		
L _{Adn}	61.4		



TIME*	RESULT dB(A)		
	บ้านทุ่ง		
	MAY 7-8, 2022		
	T22AI973-0002		
	L _{Aeq} 1 hour	L _{Amax} 1 hour	L _{A90} 1 hour
07:00-08:00 HOUR	53.2	76.2	50.6
08:00-09:00 HOUR	62.8	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	83.7	53.5
18:00-19:00 HOUR	55.8	81.7	52.4
19:00-20:00 HOUR	58.6	74.6	52.5
20:00-21:00 HOUR	52.8	67.1	51.7
21:00-22:00 HOUR	53.0	70.0	51.7
22:00-23:00 HOUR	53.2	72.4	51.9
23:00-00:00 HOUR	52.6	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	54.9	69.1	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
L _{Aeq} 24 hours		57.0	
L _{Adn}		61.6	

TIME*	RESULT dB(A)		
	รายงาน		
	MAY 8-9, 2022		
	T22AI973-0003		
	L _{Aeq} 1 hour	L _{Amax} 1 hour	L _{A90} 1 hour
07:00-08:00 HOUR	60.3	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	58.9	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	53.0
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	74.9	53.3
22:00-23:00 HOUR	56.7	75.7	53.0
23:00-00:00 HOUR	58.2	73.0	53.7
00:00-01:00 HOUR	56.9	68.8	53.4
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
L _{Aeq} 24 hours		57.7	
L _{Adn}		62.2	

TIME*	RESULT dB(A)		
	มาตรฐาน		
	MAY 9-10, 2022		
	T22AI973-0004		
	L _{Aeq} 1 hour	L _{Amax} 1 hour	L _{A90} 1 hour
07:00-08:00 HOUR	52.4	60.5	51.5
08:00-09:00 HOUR	54.1	78.1	51.9
09:00-10:00 HOUR	60.1	84.3	53.2
10:00-11:00 HOUR	60.0	69.9	52.6
11:00-12:00 HOUR	56.1	69.4	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	64.2	77.8	57.2
16:00-17:00 HOUR	59.5	79.5	55.0
17:00-18:00 HOUR	61.4	85.9	55.6
18:00-19:00 HOUR	60.4	72.9	54.5
19:00-20:00 HOUR	59.7	75.0	54.2
20:00-21:00 HOUR	58.3	81.0	54.5
21:00-22:00 HOUR	58.7	72.7	54.6
22:00-23:00 HOUR	55.2	69.8	53.8
23:00-00:00 HOUR	55.6	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	53.2	63.9	51.5
03:00-04:00 HOUR	52.6	64.9	51.5
04:00-05:00 HOUR	53.0	63.6	51.6
05:00-06:00 HOUR	52.8	65.9	51.2
06:00-07:00 HOUR	53.8	73.3	52.1
L _{Aeq} 24 hours		58.6	
L _{Adn}		61.9	

TIME*	RESULT dB(A)		
	นางพญ		
	MAY 10-11, 2022		
	T22AI973-0005		
	L _{Aeq} 1 hour	L _{Amax} 1 hour	L _{A90} 1 hour
07:00-08:00 HOUR	55.1	62.9	52.9
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	80.1	53.3
13:00-14:00 HOUR	61.3	81.1	55.0
14:00-15:00 HOUR	61.6	80.0	55.6
15:00-16:00 HOUR	58.0	81.9	53.8
16:00-17:00 HOUR	60.1	78.6	54.9
17:00-18:00 HOUR	62.4	79.3	55.4
18:00-19:00 HOUR	56.1	74.2	52.9
19:00-20:00 HOUR	56.2	75.5	53.0
20:00-21:00 HOUR	55.9	74.1	53.0
21:00-22:00 HOUR	55.1	71.0	52.3
22:00-23:00 HOUR	57.1	73.2	53.2
23:00-00:00 HOUR	54.3	72.8	52.1
00:00-01:00 HOUR	53.5	69.6	51.3
01:00-02:00 HOUR	53.9	70.0	51.3
02:00-03:00 HOUR	52.9	68.3	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	51.1
06:00-07:00 HOUR	52.1	61.0	51.3
L _{Aeq} 24 hours		57.5	
L _{Adn}		61.5	

Sila Banjongjairuk

(MR SILA BANJONGJAIKUK)
LABORATORY SUPERVISOR

JUNE 3, 2022

ANALYSIS REPORT

CUSTOMER NAME : TOP SPP COMPANY LIMITED
ADDRESS : 42/1 MOO 1 SUKHUMVIT ROAD KM.124 THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 08 1556 0557 e-mail : kitiya@thaioilgroup.com
MEASURING PLACE : TOP SPP COMPANY LIMITED
MEASURING TYPE : WORKPLACE (NOISE) **RECEIVED DATE** : MARCH 8, 2022
MEASURING DATE : MARCH 8, 2022 **ANALYTICAL DATE** : MARCH 8, 2022
MEASURING TIME : * **REPORT NO.** : 2022-U020733
MEASURING EQUIPMENT : INTEGRATED SOUND LEVEL METER **WORK NO.** : 2021-003226
MEASURED BY : MR WORAWUT JITMAIKASEM **ANALYSIS NO.** : T22AE825-0001 - T22AE825-0002

ANALYSIS NO.	MEASURING SITE	TIME* (HOUR)	RESULT (dB(A))	
			L _{Aeq} 8 hours	L _{Amax} 8 hours
T22AE825-0001	PUMP (P-84601A)	08:20-16:20	80.7	83.5
T22AE825-0002	COMPRESSOR (K-85056)	08:25-16:25	78.2	84.8

Nattawat

(MR NATTAWAT DANGSAWAT)
LABORATORY SUPERVISOR

MARCH 24, 2022



ANALYSIS REPORT

CUSTOMER NAME : TOP SPP COMPANY LIMITED
ADDRESS : 42/1 MOO 1 SUKHUMVIT ROAD KM.124 THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 08 1556 0557 e-mail : kitiya@thaioilgroup.com
MEASURING PLACE : TOP SPP COMPANY LIMITED
MEASURING TYPE : WORKPLACE (NOISE) **RECEIVED DATE** : MAY 10, 2022
MEASURING DATE : MAY 10, 2022 **ANALYTICAL DATE** : MAY 10, 2022
MEASURING TIME : * **REPORT NO.** : 2022-U037151
MEASURING EQUIPMENT : INTEGRATED SOUND LEVEL METER **WORK NO.** : 2021-003226
MEASURED BY : MISS SUMITTRA NAMPRADIDKUL **ANALYSIS NO.** : T22AJ125-0001 - T22AJ125-0002

ANALYSIS NO.	MEASURING SITE	TIME* (HOUR)	RESULT (dB(A))	
			L _{Aeq} 8 hours	L _{Amax} 8 hours
T22AJ125-0001	K-85056	08:05-16:05	79.9	80.9
T22AJ125-0002	P-84601B	08:07-16:07	82.4	86.7

Nattawat

(MR NATTAWAT DANGSAWAT)
LABORATORY SUPERVISOR

JUNE 6, 2022



ANALYSIS REPORT

CUSTOMER NAME : TOP SPP COMPANY LIMITED
ADDRESS : 42/1 MOO 1 SUKHUMVIT ROAD KM.124 THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 08 1556 0557 e-mail : kitiya@thaioilgroup.com
MEASURING PLACE : TOP SPP COMPANY LIMITED
MEASURING TYPE : WORKPLACE (HEAT STRESS) **RECEIVED DATE** : MARCH 8, 2022
MEASURING DATE : MARCH 8, 2022 **ANALYTICAL DATE** : MARCH 8, 2022
MEASURING TIME : * **REPORT NO.** : 2022-U020736
MEASURING EQUIPMENT : WET BULB GLOBE TEMPERATURE **WORK NO.** : 2021-003226
MEASURED BY : MR WORAWUT JITMAIKASEM **ANALYSIS NO.** : T22AE826-0001

ANALYSIS NO.	MEASURING SITE	DURATION TIME*	RESULT (DEGREE CELSIUS)				
			NWB	DB	GT	WBGT	WBGT AVG
T22AE826-0001	GAS TURBINE (G-85051) (คุณกิตติศักดิ์ [REDACTED])	10:00-11:30 HOUR	27.7	35.6	36.9	30.4	29.3
		11:30-12:00 HOUR	25.5	26.4	26.7	25.8	

Nattawat

(MR NATTAWAT DANGSAWAT)
LABORATORY SUPERVISOR

MARCH 24, 2022



ANALYSIS REPORT

CUSTOMER NAME : TOP SPP COMPANY LIMITED
ADDRESS : 42/1 MOO 1 SUKHUMVIT ROAD KM.124 THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 08 1556 0557 e-mail : kitiya@thaioilgroup.com
MEASURING PLACE : TOP SPP COMPANY LIMITED
MEASURING TYPE : WORKPLACE (HEAT STRESS) **RECEIVED DATE** : MARCH 8, 2022
MEASURING DATE : MARCH 8, 2022 **ANALYTICAL DATE** : MARCH 8, 2022
MEASURING TIME : * **REPORT NO.** : 2022-U020738
MEASURING EQUIPMENT : WET BULB GLOBE TEMPERATURE **WORK NO.** : 2021-003226
MEASURED BY : MR WORAWUT JITMAIKASEM **ANALYSIS NO.** : T22AE826-0002

ANALYSIS NO.	MEASURING SITE	DURATION TIME*	RESULT (DEGREE CELSIUS)				
			NWB	DB	GT	WBGT	WBGT AVG
T22AE826-0002	GENERATOR HOUSE G-5019 (คุณธีรวัฒน์ [REDACTED])	10:05-11:35 HOUR	26.8	36.5	37.6	30.0	29.0
		11:35-12:05 HOUR	25.6	26.7	27.6	26.2	

Nattawat

(MR NATTAWAT DANGSAWAT)
LABORATORY SUPERVISOR

MARCH 24, 2022



ANALYSIS REPORT

CUSTOMER NAME : TOP SPP COMPANY LIMITED
ADDRESS : 42/1 MOO 1 SUKHUMVIT ROAD KM.124 THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 08 1556 0557 e-mail : kitiya@thaioilgroup.com
MEASURING PLACE : TOP SPP COMPANY LIMITED
MEASURING TYPE : WORKPLACE (LIGHT INTENSITY) **RECEIVED DATE** : MARCH 8, 2022
MEASURING DATE : MARCH 8, 2022 **ANALYTICAL DATE** : MARCH 8, 2022
MEASURING TIME : * **REPORT NO.** : 2022-U020740
MEASURING EQUIPMENT : LUX METER **WORK NO.** : 2021-003226
MEASURED BY : MR WORAWUT JITMAIKASEM **ANALYSIS NO.** : T22AE824-0004

ANALYSIS NO.	MEASURING SITE	TIME *	RESULT (LUX)
			LIGHT INTENSITY
			SPOT MEASUREMENT
T22AE824-0004	แสงกลางวัน OC-SPP2	09:21 HOUR	228

Nattawat

(MR NATTAWAT DANGSAWAT)
LABORATORY SUPERVISOR

MARCH 24, 2022



ANALYSIS REPORT

CUSTOMER NAME : TOP SPP COMPANY LIMITED
ADDRESS : 42/1 MOO 1 SUKHUMVIT ROAD KM.124 THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 08 1556 0557 e-mail : kitiya@thaioilgroup.com
MEASURING PLACE : TOP SPP COMPANY LIMITED
MEASURING TYPE : WORKPLACE (LIGHT INTENSITY) **RECEIVED DATE** : MAY 11, 2022
MEASURING DATE : MAY 11, 2022 **ANALYTICAL DATE** : MAY 11, 2022
MEASURING TIME : * **REPORT NO.** : 2022-U038598
MEASURING EQUIPMENT : LUX METER **WORK NO.** : 2021-003226
MEASURED BY : MISS SUMITTRA NAMPRADIDKUL **ANALYSIS NO.** : T22AJ209-0004

ANALYSIS NO.	MEASURING SITE	TIME *	RESULT (LUX)
			LIGHT INTENSITY
			SPOT MEASUREMENT
T22AJ209-0004	แสงกลางวัน OC-SPP2	10:33 HOUR	249

Nattawat

(MR NATTAWAT DANGSAWAT)
LABORATORY SUPERVISOR

MAY 26, 2022



ANALYSIS REPORT

CUSTOMER NAME : TOP SPP COMPANY LIMITED
ADDRESS : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 08 1556 0557 e-mail : kitiya@thaioilgroup.com
SAMPLING SOURCE : TOP SPP (42/7 MOO 1, SUKHUMVIT ROAD KM.124, THUNGSUKHLA, SRIRACHA, CHONBURI 20230.)
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : JANUARY 12, 2022
SAMPLING TIME : 10:30 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : CUSTOMER
ANALYZED BY : MISS KALLAYA SOMPHONG

RECEIVED DATE : JANUARY 13, 2022
ANALYTICAL DATE : JANUARY 13-19, 2022
REPORT NO. : 2022-U004805
WORK NO. : 2021-003226
ANALYSIS NO. : T22AA603-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			บอพักน้ำ (RETENTION BASIN) T22AA603-0001	
pH ^c	-	ELECTROMETRIC METHOD AT SITE (SM:4500-H ⁺ B)	8.1 (32°C)	-
CHEMICAL OXYGEN DEMAND ^a	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: 5220 D)	ND	25.0
SUSPENDED SOLIDS ^a	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: 2540 D)	ND	5.0
SULPHIDE AS H ₂ S ^c	mg/L H ₂ S	IODOMETRIC METHOD (SM: 4500-S ²⁻ F)	ND	0.53
AMMONIA ^c	mg/L NH ₃	KJELDAHL (SM: 4500-NH ₃ B AND 4500-NH ₃ C) AND CALCULATION METHOD	ND	1.8
FAT, OIL AND GREASE ^a	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: 5520 B)	ND	3
SAMPLE CONDITION				
WATER'S COLOUR/TURBID			YELLOW/CLEAR	
SEDIMENT			GREEN	

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

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

ND : NON-DETECTABLE.

Benjawan V.

(MISS BENJAWAN VIRIYOTHAI)
LABORATORY SUPERVISOR

JANUARY 21, 2022



ANALYSIS REPORT

CUSTOMER NAME : TOP SPP COMPANY LIMITED
ADDRESS : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 08 1556 0557 e-mail : kitiya@thaioilgroup.com
SAMPLING SOURCE : TOP SPP (42/7 MOO 1, SUKHUMVIT ROAD KM.124, THUNGSUKHLA, SRIRACHA, CHONBURI 20230.)
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : FEBRUARY 9, 2022
SAMPLING TIME : 09:30 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : CUSTOMER
ANALYZED BY : MISS KALLAYA SOMPHONG

RECEIVED DATE : FEBRUARY 10, 2022
ANALYTICAL DATE : FEBRUARY 10-19, 2022
REPORT NO. : 2022-U011956
WORK NO. : 2021-003226
ANALYSIS NO. : T22AC382-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			บ่อพักน้ำ (RETENTION BASIN) T22AC382-0001	
pH ^c	-	ELECTROMETRIC METHOD AT SITE (SM:4500-H ⁺ B)	7.5 (31°C)	-
CHEMICAL OXYGEN DEMAND ^a	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: 5220 D)	ND	25.0
SUSPENDED SOLIDS ^a	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: 2540 D)	ND	5.0
SULPHIDE AS H ₂ S ^c	mg/L H ₂ S	IODOMETRIC METHOD (SM: 4500-S ²⁻ F)	ND	0.53
AMMONIA ^c	mg/L NH ₃	KJELDAHL (SM: 4500-NH ₃ B AND 4500-NH ₃ C) AND CALCULATION METHOD	ND	1.8
FAT, OIL AND GREASE ^a	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: 5520 B)	ND	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR GREEN	

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

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

ND : NON-DETECTABLE.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

FEBRUARY 21, 2022



ANALYSIS REPORT

CUSTOMER NAME : TOP SPP COMPANY LIMITED
ADDRESS : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 08 1556 0557 e-mail : kitiya@thaioilgroup.com
SAMPLING SOURCE : TOP SPP (42/7 MOO 1, SUKHUMVIT ROAD KM.124, THUNGSUKHLA, SRIRACHA, CHONBURI 20230.)
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : MARCH 9, 2022
SAMPLING TIME : 11:00 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : CUSTOMER
ANALYZED BY : MISS KALLAYA SOMPHONG

RECEIVED DATE : MARCH 10, 2022
ANALYTICAL DATE : MARCH 10-17, 2022
REPORT NO. : 2022-U020252
WORK NO. : 2021-003226
ANALYSIS NO. : T22AE499-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			บอพักน้ำ (RETENTION BASIN) T22AE499-0001	
pH ^c	-	ELECTROMETRIC METHOD AT SITE (SM:4500-H ⁺ B)	7.2 (30°C)	-
CHEMICAL OXYGEN DEMAND ^a	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: 5220 D)	ND	25.0
SUSPENDED SOLIDS ^a	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: 2540 D)	ND	5.0
SULPHIDE AS H ₂ S ^c	mg/L H ₂ S	IODOMETRIC METHOD (SM: 4500-S ²⁻ F)	ND	0.53
AMMONIA ^c	mg/L NH ₃	KJELDAHL (SM: 4500-NH ₃ B AND 4500-NH ₃ C) AND CALCULATION METHOD	ND	1.8
FAT, OIL AND GREASE ^a	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: 5520 B)	ND	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR YELLOW	

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

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

ND : NON-DETECTABLE.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

MARCH 23, 2022



ANALYSIS REPORT

CUSTOMER NAME : TOP SPP COMPANY LIMITED
ADDRESS : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 08 1556 0557 e-mail : kitiya@thaioilgroup.com
SAMPLING SOURCE : TOP SPP (42/7 MOO 1, SUKHUMVIT ROAD KM.124, THUNGSUKHLA, SRIRACHA, CHONBURI 20230.)
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : APRIL 4, 2022
SAMPLING TIME : 10:15 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : CUSTOMER
ANALYZED BY : MISS KALLAYA SOMPHONG

RECEIVED DATE : APRIL 4, 2022
ANALYTICAL DATE : APRIL 4-8, 2022
REPORT NO. : 2022-U027535
WORK NO. : 2021-003226
ANALYSIS NO. : T22AG428-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			บอพักน้ำ (RETENTION BASIN) T22AG428-0001	
pH ^c	-	ELECTROMETRIC METHOD AT SITE (SM:4500-H ⁺ B)	7.1 (30°C)	-
CHEMICAL OXYGEN DEMAND ^a	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: 5220 D)	ND	25.0
SUSPENDED SOLIDS ^a	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: 2540 D)	ND	5.0
SULPHIDE AS H ₂ S ^c	mg/L H ₂ S	IODOMETRIC METHOD (SM: 4500-S ²⁻ F)	ND	0.53
AMMONIA ^c	mg/L NH ₃	KJELDAHL (SM: 4500-NH ₃ B AND 4500-NH ₃ C) AND CALCULATION METHOD	ND	1.8
FAT, OIL AND GREASE ^a	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: 5520 B)	ND	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR GREEN	

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

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

ND : NON-DETECTABLE.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

APRIL 18, 2022



ANALYSIS REPORT

CUSTOMER NAME : TOP SPP COMPANY LIMITED
ADDRESS : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 08 1556 0557 e-mail : kitiya@thaioilgroup.com
SAMPLING SOURCE : TOP SPP (42/7 MOO 1, SUKHUMVIT ROAD KM.124, THUNGSUKHLA, SRIRACHA, CHONBURI 20230.)
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : MAY 9, 2022
SAMPLING TIME : 10:25 HOUR
SAMPLING METHOD ^c : GRAB
SAMPLING BY ^c : MR THANADET WANSANOR
ANALYZED BY : MISS KALLAYA SOMPHONG

RECEIVED DATE : MAY 10, 2022
ANALYTICAL DATE : MAY 10-19, 2022
REPORT NO. : 2022-U037155
WORK NO. : 2021-003226
ANALYSIS NO. : T22AI729-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			บอพักน้ำ (RETENTION BASIN) T22AI729-0001	
pH ^c	-	ELECTROMETRIC METHOD AT SITE (SM:4500-H ⁺ B)	6.9 (32°C)	-
CHEMICAL OXYGEN DEMAND ^a	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: 5220 D)	ND	25.0
SUSPENDED SOLIDS ^a	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: 2540 D)	ND	5.0
SULPHIDE AS H ₂ S ^c	mg/L H ₂ S	IODOMETRIC METHOD (SM: 4500-S ²⁻ F)	ND	0.53
AMMONIA ^c	mg/L NH ₃	KJELDAHL (SM: 4500-NH ₃ B AND 4500-NH ₃ C) AND CALCULATION METHOD	ND	1.8
FAT, OIL AND GREASE ^a	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: 5520 B)	ND	3
SAMPLE CONDITION				
WATER'S COLOUR/TURBID			YELLOW/CLEAR	
SEDIMENT			GREEN	

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

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

ND : NON-DETECTABLE.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

MAY 23, 2022



ANALYSIS REPORT

CUSTOMER NAME : TOP SPP COMPANY LIMITED
ADDRESS : 555/1 ENERGY COMPLEX BUILDING A, ELEVENTH FLOOR VIBHAVADI RANGSIT ROAD CHATUCHAK CHATUCHAK BANGKOK 10900
CONTACT INFORMATION : TEL : 08 1556 0557 e-mail : kitiya@thaioilgroup.com
SAMPLING SOURCE : TOP SPP (42/7 MOO 1, SUKHUMVIT ROAD KM.124, THUNGSUKHLA, SRIRACHA, CHONBURI 20230.)
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : JUNE 6, 2022
SAMPLING TIME : 11:20 HOUR
SAMPLING METHOD ^c : GRAB
SAMPLING BY ^c : MR NAPASIT SRIPIM
ANALYZED BY : MISS KALLAYA SOMPHONG

RECEIVED DATE : JUNE 6, 2022
ANALYTICAL DATE : JUNE 6-17, 2022
REPORT NO. : 2022-U046706
WORK NO. : 2021-003226
ANALYSIS NO. : T22AK778-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			บอพักน้ำ (RETENTION BASIN) T22AK778-0002	
pH ^c	-	ELECTROMETRIC METHOD AT SITE (SM:4500-H ⁺ B)	8.4 (32°C)	-
CHEMICAL OXYGEN DEMAND ^a	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: 5220 D)	ND	25.0
SUSPENDED SOLIDS ^a	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: 2540 D)	7.8	5.0
SULPHIDE AS H ₂ S ^c	mg/L H ₂ S	IODOMETRIC METHOD (SM: 4500-S ²⁻ F)	< 0.53	0.53
AMMONIA ^c	mg/L NH ₃	KJELDAHL (SM: 4500-NH ₃ B AND 4500-NH ₃ C) AND CALCULATION METHOD	ND	1.8
FAT, OIL AND GREASE ^a	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: 5520 B)	ND	3
SAMPLE CONDITION				
WATER'S COLOUR/TURBID			YELLOW/CLEAR	
SEDIMENT			YELLOW	

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

^b : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

^c : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

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

ND : NON-DETECTABLE.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

JULY 1, 2022



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

ตารางผลวิเคราะห์ปริมาณสารมลพิษในตัวอย่างน้ำทิ้งผ่านระบบบำบัดแล้ว

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 สนญ.09/0247

วันที่ 28 เมษายน 2565

เรื่อง รายงานผลการตรวจวัดคุณภาพน้ำทิ้งที่ผ่านระบบบำบัดและหน่วยกลั่นน้ำทะเล รวมถึงผลการติดตามตรวจสอบคุณภาพน้ำทะเล ประจำเดือนมกราคมถึงเดือนมีนาคม 2565

เรียน อธิบดีกรมเจ้าท่า

อ้างถึง 1. หนังสือรับรองตรวจสภาพท่าเทียบเรือ ขนาดเกินกว่า 500 ตันกรอสส์ ทำหมายเลข 1-8 ที่ผู้จดทะเบียนเรือ CBM, SBM-1 และ SBM-2 เลขที่ 102 ถึง 112/2564 ของบริษัท ไทยออยล์ จำกัด (มหาชน)
2. ใบอนุญาตให้ทิ้งหรือระบายน้ำลงสู่ทะเล เลขที่ คค 0310/สปว 411/2564

สิ่งที่ส่งมาด้วย รายงานผลการตรวจวัดคุณภาพน้ำทิ้งที่ผ่านระบบบำบัดและหน่วยกลั่นน้ำทะเล ประจำเดือนมกราคมถึงเดือนมีนาคม 2565 รวมถึงผลการติดตามตรวจสอบคุณภาพน้ำทะเลเดือนพฤศจิกายน 2564

ตามหนังสือรับรองตรวจสภาพท่าเทียบเรือท่าเทียบเรือที่อ้างถึง 1. กรมเจ้าท่าได้อนุญาตให้บริษัท ไทยออยล์ จำกัด (มหาชน) ใช้ท่าเทียบเรือขนาดเกินกว่า 500 ตันกรอสส์ ทำหมายเลข 1 - 8 และผู้จดทะเบียนเรือ CBM, SBM-1 และ SBM-2 โดยมีเงื่อนไขให้บริษัทฯ ต้องติดตามตรวจสอบคุณภาพน้ำทิ้งจากทุกจุดที่ปล่อยออกจากโครงการลงสู่แหล่งน้ำ โดยดัชนีคุณภาพที่ตรวจวัด ได้แก่ ความเป็นกรดต่าง ปริมาณความสกปรกหรือบีโอดี (BOD5) ปริมาณสารแขวนลอย และปริมาณน้ำมันและไขมัน โดยทำการตรวจวัด 4 เดือนต่อครั้งและต้องรายงานผลการวิเคราะห์ให้กรมเจ้าท่าทราบ และตามใบอนุญาตที่อ้างถึง 2. กรมเจ้าท่าได้อนุญาตให้บริษัทฯ เททิ้งหรือระบายน้ำทิ้งตามค่ามาตรฐานควบคุมการระบายน้ำที่กำหนดไว้ในประกาศกระทรวงทรัพยากรธรรมชาติและสิ่งแวดล้อมหรือประกาศกรมเจ้าท่าลงสู่ทะเล รวมถึงให้บริษัทฯ ต้องตรวจสอบคุณภาพน้ำทิ้งอย่างน้อย สัปดาห์ละ 1 ครั้ง และรายงานให้กรมเจ้าท่าทราบทุก 3 เดือน ตามความละเอียดแจ้งแล้วนั้น

ในการนี้ บริษัทฯ ขอเรียนว่าได้ปฏิบัติตามเงื่อนไขดังกล่าวอย่างครบถ้วน พร้อมทั้งได้จัดทำรายงานผลการตรวจวัดคุณภาพน้ำทิ้งที่ผ่านระบบบำบัดและหน่วยกลั่นน้ำทะเล ประจำเดือนมกราคมถึงเดือนมีนาคม 2565 รวมถึงผลการติดตามตรวจสอบคุณภาพน้ำทะเลเดือนพฤศจิกายน 2564 เสร็จเรียบร้อยแล้ว ทั้งนี้ บริษัทฯ จึงขอส่งรายงานฯ ดังกล่าว เพื่อรายงานผลการปฏิบัติตามเงื่อนไข โดยมีรายละเอียดปรากฏตามสิ่งที่ส่งมาด้วย

จึงเรียนมาเพื่อโปรดทราบ

ได้รับหนังสือต้นฉบับนี้ ส่งมอบสิ่งที่ส่งมาด้วย
ไว้เรียบร้อยแล้ว

ลงชื่อ..... จิตตนา (ตัวบรรจง)
ลงวันที่..... 28 เมษายน 65

แผนกรัฐกิจสัมพันธ์
โทร 0 2797 2999 ต่อ 43031

ขอแสดงความนับถือ

บริษัท ไทยออยล์ จำกัด (มหาชน)

(นายวิโรจน์ มีนะพันธ์)

ผู้รับมอบอำนาจ

ตารางผลวิเคราะห์ปริมาณสารมลพิษในตัวอย่างน้ำผ่านหน่วย API (ก่อนเข้าระบบบำบัด) ของบริษัท ไทยออยล์ จำกัด (มหาชน)
โดยห้องปฏิบัติการวิเคราะห์เอกชน บริษัท ไทยออยล์ จำกัด(มหาชน) เลขทะเบียน ๖-202 ประจำเดือนมกราคมถึงเดือนมีนาคม พ.ศ. 2565

ประจำเดือนมกราคม-มีนาคม 2565

วันที่	ปริมาณ ของเสีย (m3/day)	เวลาที่เก็บ ตัวอย่าง วิเคราะห์	จุดที่เก็บ ตัวอย่าง	วิธีการเก็บ ตัวอย่าง	ความเป็น กรดและด่าง	อุณหภูมิ °C	แอมโมเนีย mg/l	ของแข็ง ละลายน้ำ mg/l	ของแข็ง แขวนลอย mg/l	บีโอดี mg/l	ซีโอดี mg/l	ซัลไฟด์ mg/l	โซดาไนต์ mg/l	ไนโตรเจน และ ไขมัน mg/l	ฟอสฟอรัส mg/l	ตะกั่ว mg/l	สี ^{2/} ADMI	ทีเคเอ็น ^{3/} mg/l
5 ม.ค. 65	6,734	8:00	I	G	8.9	32.1	13.9	500	20.0	121	1,070	2	0.030	74	15	<0.05	57 (pH 7.7)	26.2
12 ม.ค. 65	6,814	8:00	I	G	9.1	32.1	-	480	36.0	89	470	2	0.040	41	18	<0.05	53 (pH 9.1)	30.4
19 ม.ค. 65	7,074	8:00	I	G	10.5	34.6	26.8	1,600	54.0	141	790	8	0.050	35	10	<0.05	85 (pH 10.6)	42.7
26 ม.ค. 65	6,857	8:00	I	G	9.4	34.4	-	1,550	51.0	231	1,150	8	0.050	65	12	<0.05	109 (pH 9.3)	35.7
2 ก.พ. 65	6,167	8:00	I	G	9.6	34.5	-	1,150	83.0	221	800	6	0.060	92	12	<0.05	68 (pH 9.4)	44.8
9 ก.พ. 65	5,357	8:00	I	G	9.7	33.1	26.6	1,250	70.0	260	950	6	0.050	216	11	<0.05	107 (pH 9.6)	41.9
16 ก.พ. 65	H																	
23 ก.พ. 65	5,813	8:00	I	G	11.0	35.3	30.6	1,150	36.0	142	1,000	17	0.050	45	14	<0.05	70 (pH 11.0)	46.7
2 มี.ค. 65	5,685	8:00	I	G	10.6	32.9	26.6	1,300	30.0	142	890	13	0.050	51	14	<0.05	68 (pH 10.1)	40.4
9 มี.ค. 65	6,525	8:00	I	G	9.8	33.5	-	1,050	26.0	142	640	3	0.050	69	12	<0.05	68 (pH 10.0)	46.3
16 มี.ค. 65	6,787	8:00	I	G	9.4	34.5	21.5	1,400	72.0	226	1,320	4	0.050	80	12	<0.05	73 (pH 9.3)	29.1
23 มี.ค. 65	7,098	8:00	I	G	9.3	32.7	-	220	28.0	164	620	10	0.050	80	12	<0.05	86 (pH 9.3)	23.7
30 มี.ค. 65	6,100	8:00	I	G	9.1	33.8	-	760	44	150	410	1	0.040	18	11	<0.05	57 (pH 9.0)	23.2

หมายเหตุ G หมายถึง วิธีเก็บตัวอย่างแบบ GRAB SAMPLE

C " วิธีเก็บตัวอย่างแบบ COMPOSITE SAMPLE

I " จุดที่เก็บตัวอย่างก่อนเข้าระบบ (INFLUENT)

E " จุดที่เก็บตัวอย่างผ่านระบบระบายออกนอกโรงงาน (EFFLUENT)

H " วันหยุดราชการ

1/ " แอมโมเนีย (Ammonia) ตรวจวิเคราะห์จากห้องปฏิบัติการวิเคราะห์เอกชนของบริษัท ยูโนเด็ค แอนนาไลติก แอนด์ เอ็นจิเนียริ่ง คอนซัลแตนท์ จำกัด เลขทะเบียน จ145

2/ " สี (Colour) ตรวจวิเคราะห์จากห้องปฏิบัติการวิเคราะห์เอกชนของบริษัท ยูโนเด็ค แอนนาไลติก แอนด์ เอ็นจิเนียริ่ง คอนซัลแตนท์ จำกัด เลขทะเบียน จ145

3/ " ทีเคเอ็น (Total Kjeldahl Nitrogen) ตรวจวิเคราะห์จากห้องปฏิบัติการวิเคราะห์เอกชนของบริษัท ยูโนเด็ค แอนนาไลติก แอนด์ เอ็นจิเนียริ่ง คอนซัลแตนท์ จำกัด เลขทะเบียน จ145

4/ " เป็นพารามิเตอร์ที่นอกเหนือการขึ้นทะเบียนสารพิษที่อนุญาตให้วิเคราะห์ในน้ำเสีย ห้องปฏิบัติการวิเคราะห์เอกชน เลขทะเบียน ๖202

ผู้เก็บตัวอย่าง: ลงชื่อ สุภาพร โพธิ์วรรณ
 (นางสาวสุภาพร โพธิ์วรรณ)

เจ้าหน้าที่ประจำห้องปฏิบัติการวิเคราะห์เอกชน เลขทะเบียน ๖202-๖-8753

ผู้วิเคราะห์: ลงชื่อ วิภากร วิรัตน์
 (นางวิภากร วิรัตน์)

เจ้าหน้าที่ประจำห้องปฏิบัติการวิเคราะห์เอกชน เลขทะเบียน ๖202-๖-4636

ผู้ตรวจสอบควบคุม: ลงชื่อ นิศิตา นันท
 (นางสาวนิศิตา นันท)

ผู้ควบคุมดูแลห้องปฏิบัติการวิเคราะห์เอกชน เลขทะเบียน ๖202-๖-4634

KH-1P

ผลการตรวจคุณภาพน้ำทิ้งจากหน่วยกลั่นน้ำทะเลเป็นน้ำจืดของบริษัท ไทยออยล์ จำกัด (มหาชน)
โดยห้องปฏิบัติการวิเคราะห์เอกชน บริษัท ไทยออยล์ จำกัด (มหาชน) เลขทะเบียน ว-202 ประจำเดือนมกราคมถึงเดือนมีนาคม พ.ศ. 2565

วันที่ คั้งในการ ตรวจวัดหน่วย	ความเป็นกรดเป็นด่าง	อุณหภูมิ °	ของแข็งละลายน้ำทั้งหมด		ของแข็งละลายน้ำทั้งหมด	คลอไรด์ ²⁾	ของแข็งแขวนลอยทั้งหมด	บีโอดี	น้ำมันและไขมัน
	(pH)	(Temperature)	(Outlet)	(Inlet)	(Δ DISSOLVED SOLID)	(CHLORIDE CONTENT as Cl)	(TOTAL SUSPENDED SOLIDS)	(BOD)	(OIL AND GREASE)
	-	°C	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l
4 ม.ก. 65	8.3	27	32450	31450	1,000	23004	18	4	<0.5
1 ก.พ. 65	8.3	31	36550	32100	4,450	23927	25	10	<0.5
1 มี.ค. 65	8.3	30	36400	31400	5,000	17849	22	8	0.8
มาตรฐาน ¹⁾	5.5-9.0	≤40	-	-	≤5000	-	≤50	≤20	≤5

1/ มาตรฐานตามประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดมาตรฐานควบคุมระบายน้ำทิ้งจากโรงงาน พ.ศ. 2560

ประกาศในราชกิจจานุเบกษา เล่มที่ 34 ตอนที่ 153 ง ลงวันที่ 7 มิถุนายน พ.ศ. 2560

2/ เป็นพารามิเตอร์ที่นอกเหนือการขึ้นทะเบียนสารพิษที่อนุญาตให้วิเคราะห์ในน้ำเสีย ห้องปฏิบัติการวิเคราะห์เอกชน เลขทะเบียน ว202

ผู้วิเคราะห์ : ลงชื่อ ธิดาชนก วิรัตน์ประภา

(นางสาววิชนก วิรัตน์ประภา)

เจ้าหน้าที่ประจำห้องปฏิบัติการวิเคราะห์เอกชน เลขทะเบียน ว-202-จ-4636

ผู้ตรวจสอบควบคุม : ลงชื่อ นริศรา ไชยเดช

(นางสาวนริศรา ไชยเดช)

ผู้ควบคุมดูแลห้องปฏิบัติการวิเคราะห์เอกชน เลขทะเบียน ว-202-ก-4634

ผู้เก็บตัวอย่าง : ลงชื่อ สุภาพร ไชยธรรม์

(นางสาวสุภาพร ไชยธรรม์)

เจ้าหน้าที่ประจำห้องปฏิบัติการวิเคราะห์เอกชน เลขทะเบียน ว-202-จ-8753

Kikay P.

ผลการติดตามตรวจสอบคุณภาพน้ำทะเลชายฝั่ง เดือนพฤศจิกายน 2564

คำนิยาม	หน่วย	ผลการติดตามตรวจสอบ															มาตรฐาน ^v
		12 พ.ย. 64	12 พ.ย. 64	12 พ.ย. 64	12 พ.ย. 64	12 พ.ย. 64	13 พ.ย. 64	13 พ.ย. 64	13 พ.ย. 64	13 พ.ย. 64	13 พ.ย. 64	13 พ.ย. 64	13 พ.ย. 64	13 พ.ย. 64	13 พ.ย. 64	13 พ.ย. 64	
		Jetty 7, 8 ทิศตะวันตกเฉียงใต้ 3 กิโลเมตร	Jetty 7, 8 ทิศใต้ 500 เมตร	Jetty 7, 8 ทิศตะวันออก 500 เมตร	Jetty 7, 8 ทิศตะวันออกเฉียง 500 เมตร	Jetty 7, 8 ทิศเหนือ 500 เมตร	หมู่เรือเฝ้าระวังทะเล (CBM)	ท่าเทียบเรือ (Jetty 3)	ปลาน้ำจืดน้ำทิ้ง (Refinery Outfall)	หมู่เรือเฝ้าระวังทะเล (SBM-1)	Jetty 1, 2 ทิศเหนือ 100 เมตร	Jetty 4 ทิศตะวันออกเฉียง 100 เมตร	Jetty 5, 6 ทิศใต้ 100 เมตร	CBM ทิศเหนือ 100 เมตร	CBM ทิศใต้ 100 เมตร	หมู่เรือเฝ้าระวังทะเล (SBM-2)	
ความเป็นกรด-ด่าง	-	7.9	8.2	8.2	8.3	8.3	8.3	8.2	8.2	8.2	8.3	8.3	8.3	8.3	8.3	8.1	7.0-8.5
อุณหภูมิ	°C	30	30	29	29	29	30	29	30	29	31	31	31	30	31	29	
ค่าออกซิเจนที่เปลี่ยนแปลง	°C	0	0	2	2	2	1	2	2	2	2	2	2	2	2	1	Δ 2
ความเค็ม	ppt	33.5	33.5	33.5	33.6	33.5	33.3	33.1	32.8	33.4	33.1	33.1	33.0	33.3	33.3	33.6	5/
ออกซิเจนละลาย	mg/L	4.2	4.0	4.2	4.0	4.2	4.3	4.1	4.0	4.2	4.1	4.3	4.2	4.3	4.1	4.4	4
บีโอดี	mg/L	-	-	-	-	-	0.7	1.3	2.0	0.6	1.6	1.3	1.4	0.8	0.8	-	2/
น้ำมันและไขมัน	mg/L	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	3/
แอมโมเนียรวม	mg/L	120	135	196	203	141	120	104	195	168	144	142	145	134	72	108	950
ซีดีพีดี	μg/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	10
ฟีนอล	mg/L	<0.005	0.006	<0.005	0.006	0.006	0.007	0.007	0.007	0.008	0.007	0.006	0.007	0.009	0.009	0.007	0.03
ตะกั่ว	μg/L	0.250	0.790	0.500	0.310	0.690	<0.100	0.250	<0.100	0.590	<0.100	<0.100	<0.100	0.170	0.240	0.680	8.5
สารแขวนลอย	mg/L	3.0	3.6	4.8	2.5	2.6	2.0	7.4	11.0	2.6	6.1	7.5	6.6	2.0	2.2	1.5	4/
ของแข็งละลาย	mg/L	36,060	35,580	35,560	33,880	35,330	34,900	37,653	30,800	31,800	36,240	30,740	35,480	36,160	30,460	30,020	-
ไฮยาไนต์	μg/L	-	-	-	-	-	<5	<5	<5	<5	<5	<5	<5	<5	<5	-	7
ปิโตรเลียม ไฮโดรคาร์บอน	μg/L	0.12	0.1	0.22	0.23	0.1	0.07	0.31	0.57	0.12	0.15	0.14	0.08	0.08	0.21	0.07	5
แบคทีเรียกลุ่ม พิคโคไคลโฟรัม	CFU/100mL	< 1	5	14	2	< 1	< 1	4	48	< 1	< 1	1	4	< 1	< 1	27	100
แบคทีเรียกลุ่ม โคลิฟอร์มทั้งหมด	MPN/100mL	< 1.8	4	23	< 1.8	< 1.8	1.8	< 1.8	490	< 1.8	< 1.8	4	6.8	4.5	< 1.8	< 1.8	1,000

หมายเหตุ:

- 1/ มาตรฐานตามประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ (พ.ศ. 2564) ออกตามความในพระราชบัญญัติสิ่งแวดล้อมแห่งชาติ พ.ศ. 2535 เรื่อง กำหนดมาตรฐานคุณภาพน้ำทะเลประเภทในราชกิจจานุเบกษา เล่มที่ 138 ตอนที่ 245 ง ลงวันที่ 6 ตุลาคม พ.ศ. 2564
- 2/ มาตรฐานฯ ไม่ได้กำหนด
- 3/ ไม่รบกวนหรือไขมันที่ตามองมองเห็นได้ลอยคลาปล่ายอยู่ปนผิวน้ำ
- 4/ มีค่าเปลี่ยนแปลงเพิ่มขึ้นไม่เกินผลรวมของค่าเฉลี่ย 1 วัน หรือ 1 เดือน หรือ 1 ปี บวกกับค่าเบี่ยงเบนมาตรฐานของค่าเฉลี่ยนั้นๆ
- 5/ มีค่าเปลี่ยนแปลงไม่เกินร้อยละ 10 ของค่าความเค็มค่าชุด
- 6/ ค่าปริมาณปิโตรเลียมไฮโดรคาร์บอน มีปริมาณ ≥ 0.02 และ < 0.05 $\mu\text{g/L}$

Δ 2 มีค่าเปลี่ยนแปลงเพิ่มขึ้นไม่เกินจากสภาพธรรมชาติ โดยอ้างอิงข้อมูลคุณภาพธรรมชาติจากข้อมูลที่มีการตรวจวัดเป็นพื้นฐานก่อนจะมีโครงการ โดยได้ระบุไว้ในบทที่ 3 สภาพแวดล้อมปัจจุบัน ของรายงานการวิเคราะห์ผลกระทบสิ่งแวดล้อม โครงการสูบน้ำมันดิบจาก

ถังแกวกลอย โครงการท่าเทียบเรือหมายเลข 7 และ 8
ฉบับมีกฎหมาย พ.ศ. 2560 ของบริษัท ไทยออยล์ จำกัด (มหาชน) ที่ได้รับเห็นชอบค่าชุดก่อนมีโครงการ บทที่ 3 สภาพแวดล้อมปัจจุบันโดยบทที่ 3 โครงการ ของรายงานการวิเคราะห์ผลกระทบสิ่งแวดล้อม โครงการสูบน้ำมันดิบจากทะเลสาบใหม่ (SBM-2) ฉบับพฤศจิกายน พ.ศ. 2564 ของบริษัท ไทยออยล์ จำกัด (มหาชน) ที่ได้รับเห็นชอบค่าชุดก่อนมีโครงการ และข้อมูลจากรายงานผลการติดตามตรวจสอบผลกระทบสิ่งแวดล้อมและการปฏิบัติตามมาตรการป้องกัน และลดผลกระทบสิ่งแวดล้อม โครงการท่าเทียบเรือหมายเลข 7 และ 8 ประจำปี พ.ศ. 2563 ที่มีการตรวจวัดข้อมูลคุณภาพน้ำทะเลเป็นครั้งแรก

หน่วย	Jetty 7, 8 ทิศตะวันตกเฉียงใต้ 3 กิโลเมตร	Jetty 7, 8 ทิศใต้ 500 เมตร	Jetty 7, 8 ทิศตะวันออก 500 เมตร	Jetty 7, 8 ทิศตะวันออกเฉียง 500 เมตร	Jetty 7, 8 ทิศเหนือ 500 เมตร	หมู่เรือเฝ้าระวังทะเล (CBM)	ท่าเทียบเรือ (Jetty 3)	ปลาน้ำจืดน้ำทิ้ง (Refinery Outfall)	หมู่เรือเฝ้าระวังทะเล (SBM-1)	Jetty 1, 2 ทิศเหนือ 100 เมตร	Jetty 4 ทิศตะวันออกเฉียง 100 เมตร	Jetty 5, 6 ทิศใต้ 100 เมตร	CBM ทิศเหนือ 100 เมตร	CBM ทิศใต้ 100 เมตร	หมู่เรือเฝ้าระวังทะเล (SBM-2)
°C	30	30	31	31	31	31	31	32	31	33	33	33	32	33	30

ค่าขีดจำกัดค่าชุดของการวัด (Detection Limit) ของน้ำมันและไขมัน เท่ากับ <3 mg/L, แบคทีเรียกลุ่มพิคโคไคลโฟรัมทั้งหมด <1.8 MPN/100mL, แบคทีเรียกลุ่มพิคโคไคลโฟรัม <1 CFU/100mL, ซีดีพีดี <10 $\mu\text{g/L}$, ฟีนอล <0.005 mg/L, และตะกั่ว <0.100 $\mu\text{g/L}$

ผู้ติดตามตรวจสอบ:

ผู้วิเคราะห์:

ผู้ตรวจสอบผู้ควบคุม:

บริษัทผู้สำรวจ:

นายอนุชาตน์ หายดี

นายฐานิกรณ พิศัยพร เลขที่ 2-145-9-8220

นางปิยะพัชร สุวรมนังวงศ์

บริษัท ฐานิกรณ พิศัยพร และนายณัฐ อดิษฐ์ เอ็นจิเนียริ่ง คอนซัลแตนท์ จำกัด

Handwritten signature

ตารางผลการวิเคราะห์ปริมาณสารมลพิษในตัวอย่างน้ำทิ้งผ่านระบบบำบัดแล้ว บริษัท ไทยออยล์ จำกัด(มหาชน)
โดยห้องปฏิบัติการวิเคราะห์เอกชน บริษัท ไทยออยล์ จำกัด(มหาชน) เลขทะเบียน ๖-202 ประจำเดือนมกราคมถึงเดือนมีนาคม พ.ศ. 2565

ประจำเดือน มกราคม-มีนาคม 2565

วันที่	ปริมาณ ของเสีย (m3/day)	เวลาที่เก็บ ตัวอย่าง วิเคราะห์	จุดที่เก็บ ตัวอย่าง	วิธีการเก็บ ตัวอย่าง	ความเป็น กรดและด่าง	อุณหภูมิ °C	แอมโมเนีย " "	ของแข็งละลาย น้ำทั้งหมด	ของแข็ง แขวนลอย	บีโอดี	ซีโอดี	ซัลไฟด์	ไฮโดรไนต์	น้ำมีนและ ไขมัน	ฟีนอล	ตะกั่ว	ซี " "	ทีเคเอ็น "
							mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ADMI	mg/l
5 ม.ค. 65	7,494	8:00	E	G	7.7	27.0	<1.5	860	12.0	5	26.8	0.3	<0.02	0.5	0.3	<0.05	21 (pH 7.7)	5.3
12 ม.ค. 65	7,695	8:00	E	G	7.5	27.4	-	880	13.0	9	28.0	0.2	<0.02	0.8	0.3	<0.05	23 (pH 7.6)	<LOQ
19 ม.ค. 65	7,384	8:00	E	G	7.4	29.3	<1.5	880	14.0	11	23.0	0.2	<0.02	0.5	0.4	<0.05	29 (pH 7.8)	6.3
26 ม.ค. 65	7,206	8:00	E	G	7.3	30.0	-	1,100	16.0	10	26.9	0.3	<0.02	<0.5	0.4	<0.05	31 (pH 7.4)	<LOQ
2 ก.พ. 65	6,242	8:00	E	G	7.8	30.5	-	970	13.0	9	22.3	0.2	<0.02	0.6	0.3	<0.05	33 (pH 7.7)	<LOQ
9 ก.พ. 65	5,266	8:00	E	G	7.4	30.1	<1.5	500	17.0	12	39.7	0.5	<0.02	0.9	0.4	<0.05	35 (pH 8.1)	<LOQ
16 ก.พ. 65																		
23 ก.พ. 65	5,817	8:00	E	G	7.7	29.6	<1.5	1,100	4.3	9	23.1	0.7	<0.02	1.2	0.6	<0.05	30 (pH 8.0)	<LOQ
2 มี.ค. 65	5,721	8:00	E	G	7.6	29.7	<1.5	400	6.0	10	40.8	0.7	<0.02	0.9	0.6	<0.05	32 (pH 8.0)	<LOQ
9 มี.ค. 65	6,541	8:00	E	G	8.0	29.0	-	980	14.0	9	30.5	0.5	<0.02	1.4	0.4	<0.05	30 (pH 8.2)	54.5
16 มี.ค. 65	6,767	8:00	E	G	7.5	29.8	<1.5	380	12.0	7	27.0	0.2	<0.02	0.5	0.4	<0.05	24 (pH 7.9)	<LOQ
23 มี.ค. 65	6,987	8:00	E	G	7.8	28.5	-	660	17.0	8	28.0	0.2	<0.02	<0.5	0.4	<0.05	28 (pH 7.6)	<LOQ
30 มี.ค. 65	7,060	8:00	E	G	7.5	29.4	-	660	16.0	8	29.7	0.7	<0.02	0.6	0.3	<0.05	28 (pH 7.2)	<LOQ
มาตรฐาน "					5.5-9.0	40	-	น้ำทะเล+5000	50	20	120	1.0	0.2	5.0	1.0	0.2	300	100

หมายเหตุ G หมายถึง วิธีเก็บตัวอย่างแบบ GRAB SAMPLE

C " วิธีเก็บตัวอย่างแบบ COMPOSITE SAMPLE

I " จุดที่เก็บตัวอย่างก่อนเข้าระบบ (INFLUENT)

E " จุดที่เก็บตัวอย่างผ่านระบบระบายออกนอกโรงงาน (EFFLUENT)

H " วันหยุดราชการ

1/ " แอมโมเนีย (Ammonia) ตรวจวิเคราะห์จากห้องปฏิบัติการวิเคราะห์เอกชนของบริษัท ยูไนเทค แอนาไลติกส์ แอนด์ เอ็นจิเนียริ่ง คอนซัลแตนท์ จำกัด เลขทะเบียน ๖ -145

2/ " ซี (Colony) ตรวจวิเคราะห์จากห้องปฏิบัติการวิเคราะห์เอกชนของบริษัท ยูไนเทค แอนาไลติกส์ แอนด์ เอ็นจิเนียริ่ง คอนซัลแตนท์ จำกัด เลขทะเบียน ๖ -145

3/ " ทีเคเอ็น (Total Kjeldahl Nitrogen) ตรวจวิเคราะห์จากห้องปฏิบัติการวิเคราะห์เอกชนของบริษัท ยูไนเทค แอนาไลติกส์ แอนด์ เอ็นจิเนียริ่ง คอนซัลแตนท์ จำกัด เลขทะเบียน ๖ -145

4/ " มาตรฐานตามประกาศกระทรวงอุตสาหกรรม เรื่อง กำหนดมาตรฐานควบคุมระบายน้ำทิ้งจากโรงงาน พ.ศ. 2560

ประกาศในราชกิจจานุเบกษา เล่มที่ 134 ตอนที่ 153 ง ลงวันที่ 7 มิถุนายน พ.ศ. 2560

5/ " เป็นพหุคูณเลขที่นอกเหนือการขึ้นทะเบียนสารพิษที่อนุญาตให้วิเคราะห์ในน้ำเสีย ห้องปฏิบัติการวิเคราะห์เอกชน เลขทะเบียน ๖-202

< LOQ " < Level of Quantitation (Total Kjeldahl Nitrogen \geq 1.5 and < 5.0 mg/L)

ผู้เก็บตัวอย่าง : ลงชื่อ สุภาพร ไชยธรรม์
 (นางสาวสุภาพร ไชยธรรม์)

เจ้าหน้าที่ประจำห้องปฏิบัติการวิเคราะห์เอกชน เลขทะเบียน ๖-202-๖-8753

ผู้วิเคราะห์ : ลงชื่อ วิรัชชนก วีระประภา
 (นางวิรัชชนก วีระประภา)

เจ้าหน้าที่ประจำห้องปฏิบัติการวิเคราะห์เอกชน เลขทะเบียน ๖-202-๖-4636

ผู้ตรวจสอบ/ควบคุม : ลงชื่อ นริศรา ท้าวทอง
 (นางสาวนริศรา ท้าวทอง)

ผู้ควบคุมดูแลห้องปฏิบัติการวิเคราะห์เอกชน เลขทะเบียน ๖-202-๖-4634

KLH-1P