

ภาคผนวก ก

เอกสารประกอบการปฏิบัติตาม
มาตรการติดตามตรวจสอบคุณภาพสิ่งแวดล้อม

ภาคผนวก ค.1

ผลการวิเคราะห์องค์ประกอบของผงคาร์บอนแบล็ก



59394

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Unless otherwise stated the results shown in this test report refer only to the sample(s) received and such sample(s) are retained for 30 days only.

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ภาคผนวก ก.2

การตรวจสอบสภาพพนักงาน

- วิธีการปฏิบัติ เรื่อง การตรวจสอบสภาพพนักงาน
และพนักงานผู้รับเหมา
 - ผลการตรวจสอบสภาพพนักงานใหม่
 - ผลการตรวจสอบสภาพทั่วไปของพนักงาน
- ประจำปี พ.ศ.2566

วิธีการปฏิบัติ เรื่อง การตรวจสอบสภาพพนักงาน และพนักงานผู้รับเหมา



A



ADM-FR-01	
REV. 01	01/12/98

เอกสารไม่ควบคุม

B



เอกสารไม่ควบคุม



ADM-FR-02	
REV. 01	01/12/98



เอกสารไม่ควบคุม



ADM-FR-03	
REV. 01	01/12/98

D



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C



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เอกสารไม่ควบคุม

เอกสารไม่ควบคุม

เอกสารไม่ควบคุม

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เอกสารไม่ควบคุม

เอกสารไม่ควบคุม

เอกสารไม่ควบคุม

เอกสารควบคุม

ผลการตรวจสอบภาพพนักงานใหม่

การตรวจสอบภาพทั่วไปของพนักงาน
ประจำปี พ.ศ.2566

ภาคผนวก ก.3

สถิติอุบัติเหตุ

ระหว่างเดือนกรกฎาคม ถึงธันวาคม พ.ศ.2566

รายงานสรุปการเกิดอุบัติเหตุภายในโรงงาน ปี2023
(พนักงาน TCP)

OHS-FR-46302	
Rev : 00	Date : 10/1/98

เดือน	จำนวนอุบัติเหตุ			ลักษณะการประสบอันตราย																	หมายเหตุ
	อุบัติเหตุ	เกือบเกิด	รวม	ตกจากที่สูง	หกล้มอื่นอัน	สิ่งของหล่นทับ	สิ่งของกระแทก/ชน	สิ่งของหนีบ/สิ่ง	สิ่งของัดบาด/ตำแทง	สิ่งของกระเด็นเข้าตา	รถเคลื่อนย้ายของหนัก	อุบัติเหตุจายานพาหนะ	วัตถุสิ่งของระเบิด	ไฟฟ้าช็อต	สัมผัสความร้อน	สัมผัสสิ่งมีพิษ/สารเคมี	อันตรายจากแสง	ไต่เทม	อันตรายจากรังสี	อื่นๆ (ระบุ)	
ม.ค.	0	0	0																		ไม่มีอุบัติเหตุเกิดขึ้น
ก.พ.	0	0	0																		ไม่มีอุบัติเหตุเกิดขึ้น
มี.ค.	0	0	0																		ไม่มีอุบัติเหตุเกิดขึ้น
เม.ย.	0	0	0																		ไม่มีอุบัติเหตุเกิดขึ้น
พ.ค.	1	0	1												1						น้ำมันกระเด็นถูกพนักงาน
มิ.ย.	0	0	0																		ไม่มีอุบัติเหตุเกิดขึ้น
ก.ค.	0	0	0																		ไม่มีอุบัติเหตุเกิดขึ้น
ส.ค.	0	0	0																		ไม่มีอุบัติเหตุเกิดขึ้น
ก.ย.	0	0	0																		ไม่มีอุบัติเหตุเกิดขึ้น
ต.ค.	0	0	0																		ไม่มีอุบัติเหตุเกิดขึ้น
พ.ย.	0	0	0																		ไม่มีอุบัติเหตุเกิดขึ้น
ธ.ค.	0	0	0																		ไม่มีอุบัติเหตุเกิดขึ้น
TOTAL	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	

หมายเหตุ 1. สถิติความปลอดภัยในการทำงานของพนักงาน TCP โดยไม่สูญเสียเวลาในการทำงาน ณ.วันที่ 31 ธันวาคม 2566 = 448,754 ชั่วโมงคน

AFR (Accident Frequency Rate)

=

จำนวนครั้งของการเกิดอุบัติเหตุ * 1,000,000

ชั่วโมงการทำงานทั้งสิ้นของพนักงาน

=

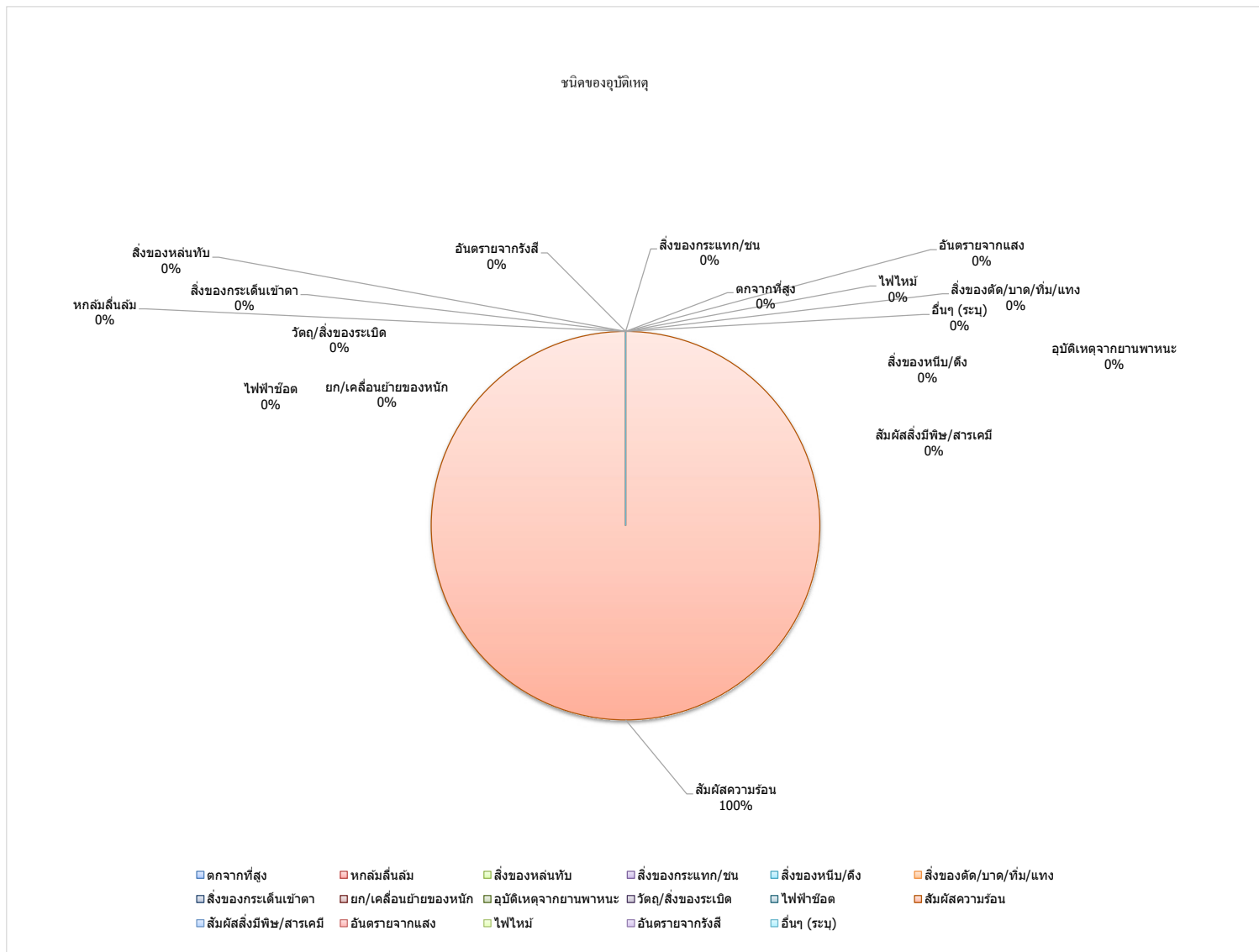
1*1,000,000

448,754

=

2.28

ครั้งต่อหนึ่งล้านชั่วโมงทำงาน



รายงานสรุปการเกิดอุบัติเหตุภายในโรงงาน ปี2023
(ผู้รับเหมา - ประจำ)

OHS-FR-46302
Rev : 00 | Date : 10/1/98

เดือน	จำนวนอุบัติเหตุ			ลักษณะการประสบอันตราย																		หมายเหตุ
	อุบัติเหตุ	เกือบเกิด	รวม	ตกจากที่สูง	หกล้มื่นล้ม	สิ่งของกดทับ	สิ่งของกระแทก/ชน	สิ่งของหนีบ/ดึง	สิ่งของตัดบาด/ตำ/แทง	สิ่งของกระเด็นเข้าตา	รถ/เครื่องจักรของหนัก	อุบัติเหตุจากยานพาหนะ	วัตถุสิ่งของระเบิด	ไฟฟ้าช็อต	สัมผัสความร้อน	สัมผัสสิ่งมีพิษ/สารเคมี	อันตรายจากแสง	ไอน้ำ	อันตรายจากรังสี	อื่นๆ (ระบุ)		
ม.ค.	0	0	0																		ไม่มีอุบัติเหตุเกิดขึ้น	
ก.พ.	0	0	0																		ไม่มีอุบัติเหตุเกิดขึ้น	
มี.ค.	0	0	0																		ไม่มีอุบัติเหตุเกิดขึ้น	
เม.ย.	0	0	0																		ไม่มีอุบัติเหตุเกิดขึ้น	
พ.ค.	0	0	0																		ไม่มีอุบัติเหตุเกิดขึ้น	
มิ.ย.	0	0	0																		ไม่มีอุบัติเหตุเกิดขึ้น	
ก.ค.	0	0	0																		ไม่มีอุบัติเหตุเกิดขึ้น	
ส.ค.	0	0	0																		ไม่มีอุบัติเหตุเกิดขึ้น	
ก.ย.	0	0	0																		ไม่มีอุบัติเหตุเกิดขึ้น	
ต.ล.	0	0	0																		ไม่มีอุบัติเหตุเกิดขึ้น	
พ.ย.	0	0	0																		ไม่มีอุบัติเหตุเกิดขึ้น	
ธ.ล.	0	0	0																		ไม่มีอุบัติเหตุเกิดขึ้น	
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		

หมายเหตุ 1. สถิติความปลอดภัยในการทำงานของผู้รับเหมา โดยไม่สูญเสียเวลาในการทำงาน ณ วันที่ 31 ธันวาคม 2566 = 2,741,083 ชั่วโมง

Accident Frequency Rate (AFR)

=

จำนวนครั้งของการเกิดอุบัติเหตุ * 1,000,000

ชั่วโมงการทำงานทั้งสิ้นของผู้รับเหมา(ประจำ)

=

0

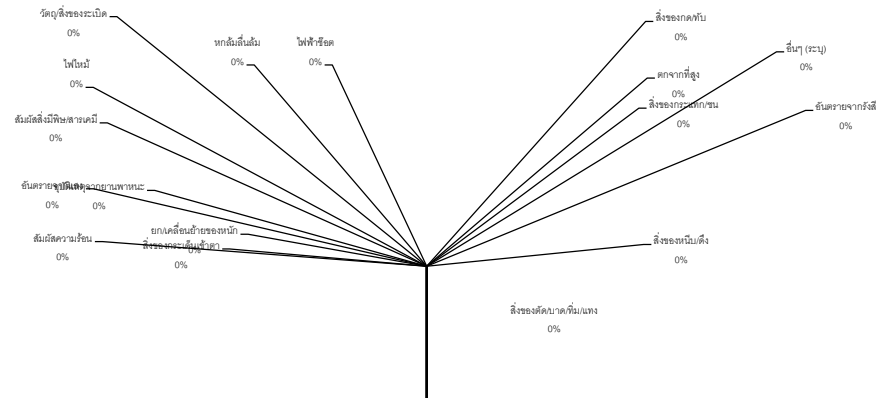
2,741,083

=

0

ครั้งต่อหนึ่งล้านชั่วโมงทำงาน

ชนิดของอุบัติเหตุ



ตกจากที่สูง	หกล้ม/ลื่นล้ม	สิ่งของกด/ทับ	สิ่งของกระแทก/ชน	สิ่งของหนีบ/ดิ่ง	สิ่งของตัด/บาด/ทิ่ม/แทง
สิ่งของกระเด็นเข้าตา	ยก/เคลื่อนย้ายของหนัก	อุบัติเหตุจากยานพาหนะ	วัตถุ/สิ่งของระเบิด	ไฟฟ้าช็อต	สัมผัสความร้อน
สัมผัสสิ่งมีพิษ/สารเคมี	อันตรายจากแสง	ไฟไหม้	อันตรายจากถังสี	อื่นๆ (ระบุ)	

ภาคผนวก ก.4

ผลการสำรวจความคิดเห็นของผู้นำชุมชน
ประชาชนในชุมชนใกล้เคียง และผู้แทนหน่วยงานราชการ

รายงานผลการปฏิบัติตามมาตรการป้องกันและแก้ไขผลกระทบสิ่งแวดล้อม
และมาตรการติดตามตรวจสอบคุณภาพสิ่งแวดล้อม
ด้านเศรษฐกิจ-สังคม และการมีส่วนร่วมของประชาชนโครงการผลิตผงคาร์บอนแบล็ก
บริษัท ไทยโตไกคาร์บอนโปรดักท์ จำกัด
ประจำปี 2566

ตำบลทุ่งสุขลา อำเภอศรีราชา จังหวัดชลบุรี



บริษัท ไทยโตไกคาร์บอนโปรดักท์ จำกัด
42/2 หมู่ที่ 1 ถนนสุขุมวิท
ตำบลทุ่งสุขลา อำเภอศรีราชา จังหวัดชลบุรี 20230



บริษัท ยูไนเต็ด แอนาไลซิสต์ แอนด์ เอ็นจิเนียริ่ง คอนซัลแตนท์ จำกัด
81 ซอยอุดมสุข 41 ถนนสุขุมวิท แขวงบางจาก เขตพระโขนง กรุงเทพฯ 10260
โทรศัพท์ 0-2763-2828, โทรสาร 0-2763-2800
www.uaconsultant.com E-mail: uae@uaconsultant.com

รายงานสรุปผลการติดตามตรวจสอบด้านเศรษฐกิจ-สังคม และ
การมีส่วนร่วมของประชาชนของบริษัท ไทยโตไกคาร์บอนโปรดักท์ จำกัด
ประจำปี 2566

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6.1 สรุปผลการสำรวจความคิดเห็น	23
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7. สรุปผลการศึกษาความคิดเห็นของประชาชนตั้งแต่ พ.ศ. 2556 ถึง พ.ศ. 2566	25
8. ภาคผนวก	

การติดตามตรวจสอบด้านเศรษฐกิจ-สังคม และการมีส่วนร่วมของประชาชน
โครงการผลิตผงคาร์บอนแบล็ก ของบริษัท ไทยไดโกลคาร์บอนโปรดักท์ จำกัด

การติดตามตรวจสอบด้านเศรษฐกิจ-สังคม และการมีส่วนร่วมของประชาชน
โครงการผลิตผงคาร์บอนแบล็ก ของบริษัท ไทยไดโกลคาร์บอนโปรดักท์ จำกัด

ภาคผนวก ง

หนังสือรับรองผลการตรวจวัดและวิเคราะห์คุณภาพสิ่งแวดล้อม

ใบรับรองผลการตรวจวิเคราะห์
คุณภาพอากาศในบรรยากาศ

ANALYSIS REPORT

CUSTOMER NAME : THAI TOKAI CARBON PRODUCT COMPANY LIMITED
ADDRESS : 42/2 MOO 1, SUKHUMVIT ROAD KM. 124.5, THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 0 3835 2487, 081-921-7550 e-mail : wipawee@tcp.co.th
SAMPLING SOURCE : บริเวณโครงการ TCP
SAMPLE TYPE : AMBIENT
SAMPLING DATE : *, **, ***
SAMPLING TIME : *, **, ***
SAMPLING BY : MR SIRAPAT JONGPHADUNGKIET
ANALYZED BY : MISS JETJARIN TUMSA-AT
RECEIVED DATE : NOVEMBER 14, 2023
ANALYTICAL DATE : NOVEMBER 14-20, 2023
REPORT NO. : 2023-U100347
WORK NO. : 2021-003466
ANALYSIS NO. : T23AW666-0008 - T23AW666-0010

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		
			บริเวณโครงการ TCP		
			* T23AW666-0008	** T23AW666-0009	*** T23AW666-0010
TOTAL SUSPENDED PARTICULATE	mg/m ³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.112	0.097	0.101
PARTICULATE MATTER (≤ 10 µm)	mg/m ³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.056	0.042	0.055
SAMPLE CONDITION			COMPLETE	COMPLETE	COMPLETE

REMARK
TSP, PM10 : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.
TSP : US EPA, CODE OF FEDERAL REGULATIONS, 40 CFR CHAPTER I-PART 50 APPENDIX B, REFERENCE METHOD FOR THE DETERMINATION OF SUSPENDED PARTICULATE MATTER IN THE ATMOSPHERE (HIGH-VOLUME METHOD) REVISED AS OF JULY 1, 2021.
PM10 : US EPA, CODE OF FEDERAL REGULATIONS, 40 CFR CHAPTER I-PART 50 APPENDIX J, REFERENCE METHOD FOR THE DETERMINATION OF PARTICULATE MATTER AS PM10 IN THE ATMOSPHERE (HIGH-VOLUME METHOD) REVISED AS OF JULY 1, 2021.
* : SAMPLING FROM 10:00 HOUR ON NOVEMBER 7, 2023 TO 10:00 HOUR ON NOVEMBER 8, 2023.
** : SAMPLING FROM 10:00 HOUR ON NOVEMBER 8, 2023 TO 10:00 HOUR ON NOVEMBER 9, 2023.
*** : SAMPLING FROM 10:00 HOUR ON NOVEMBER 9, 2023 TO 10:00 HOUR ON NOVEMBER 10, 2023.

Budsakorn ✓

(MISS BUDSAKORN LERDPANUMAS)
LABORATORY SUPERVISOR

NOVEMBER 23, 2023



ANALYSIS REPORT

CUSTOMER NAME : THAI TOKAI CARBON PRODUCT COMPANY LIMITED
ADDRESS : 42/2 MOO 1, SUKHUMVIT ROAD KM. 124.5, THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 0 3835 2487, 081-921-7550 e-mail : wipawee@tcp.co.th
SAMPLING SOURCE : บริเวณโครงการ TCP
SAMPLE TYPE : AMBIENT
SAMPLING DATE : *, **, ***, ****
SAMPLING TIME : *, **, ***, ****
SAMPLING BY : MR SIRAPAT JONGPHADUNGKIET
ANALYZED BY : MISS JETJARIN TUMSA-AT
RECEIVED DATE : NOVEMBER 14, 2023
ANALYTICAL DATE : NOVEMBER 14-20, 2023
REPORT NO. : 2023-U100348
WORK NO. : 2021-003466
ANALYSIS NO. : T23AW666-0011 - T23AW666-0014

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT			
			บริเวณโครงการ TCP			
			*	**	***	****
			T23AW666-0011	T23AW666-0012	T23AW666-0013	T23AW666-0014
TOTAL SUSPENDED PARTICULATE	mg/m ³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.057	0.044	0.075	0.075
PARTICULATE MATTER (≤ 10 µm)	mg/m ³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.025	0.026	0.049	0.052
SAMPLE CONDITION			COMPLETE	COMPLETE	COMPLETE	COMPLETE

REMARK
TSP, PM10 : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.
TSP : US EPA, CODE OF FEDERAL REGULATIONS, 40 CFR CHAPTER I-PART 50 APPENDIX B, REFERENCE METHOD FOR THE DETERMINATION OF SUSPENDED PARTICULATE MATTER IN THE ATMOSPHERE (HIGH-VOLUME METHOD) REVISED AS OF JULY 1, 2021.
PM10 : US EPA, CODE OF FEDERAL REGULATIONS, 40 CFR CHAPTER I-PART 50 APPENDIX J, REFERENCE METHOD FOR THE DETERMINATION OF PARTICULATE MATTER AS PM10 IN THE ATMOSPHERE (HIGH-VOLUME METHOD) REVISED AS OF JULY 1, 2021.
* : SAMPLING FROM 10:00 HOUR ON NOVEMBER 10, 2023 TO 10:00 HOUR ON NOVEMBER 11, 2023.
** : SAMPLING FROM 10:00 HOUR ON NOVEMBER 11, 2023 TO 10:00 HOUR ON NOVEMBER 12, 2023.
*** : SAMPLING FROM 10:00 HOUR ON NOVEMBER 12, 2023 TO 10:00 HOUR ON NOVEMBER 13, 2023.
**** : SAMPLING FROM 10:00 HOUR ON NOVEMBER 13, 2023 TO 10:00 HOUR ON NOVEMBER 14, 2023.

Budsakorn ✓

(MISS BUDSAKORN LERDPANUMAS)
LABORATORY SUPERVISOR

NOVEMBER 23, 2023



ANALYSIS REPORT

CUSTOMER NAME : THAI TOKAI CARBON PRODUCT COMPANY LIMITED
ADDRESS : 42/2 MOO 1, SUKHUMVIT ROAD KM. 124.5, THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 0 3835 2487, 081-921-7550 e-mail : wipawee@tcp.co.th
SAMPLING SOURCE : บ้านปากทางอ่าวอุดม
SAMPLE TYPE : AMBIENT
SAMPLING DATE : *, **, ***
SAMPLING TIME : *, **, ***
SAMPLING BY : MR SIRAPAT JONGPHADUNGKIET
ANALYZED BY : MISS JETJARI TUMSA-AT
RECEIVED DATE : NOVEMBER 14, 2023
ANALYTICAL DATE : NOVEMBER 14-20, 2023
REPORT NO. : 2023-U100345
WORK NO. : 2021-003466
ANALYSIS NO. : T23AW666-0001 - T23AW666-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		
			บ้านปากทางอ่าวอุดม		
			* T23AW666-0001	** T23AW666-0002	*** T23AW666-0003
TOTAL SUSPENDED PARTICULATE	mg/m ³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.086	0.104	0.138
PARTICULATE MATTER (≤ 10 µm)	mg/m ³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.041	0.042	0.055
SAMPLE CONDITION			COMPLETE	COMPLETE	COMPLETE

REMARK
TSP, PM10 : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.
TSP : US EPA, CODE OF FEDERAL REGULATIONS, 40 CFR CHAPTER I-PART 50 APPENDIX B, REFERENCE METHOD FOR THE DETERMINATION OF SUSPENDED PARTICULATE MATTER IN THE ATMOSPHERE (HIGH-VOLUME METHOD) REVISED AS OF JULY 1, 2021.
PM10 : US EPA, CODE OF FEDERAL REGULATIONS, 40 CFR CHAPTER I-PART 50 APPENDIX J, REFERENCE METHOD FOR THE DETERMINATION OF PARTICULATE MATTER AS PM10 IN THE ATMOSPHERE (HIGH-VOLUME METHOD) REVISED AS OF JULY 1, 2021.
* : SAMPLING FROM 09:30 HOUR ON NOVEMBER 7, 2023 TO 09:30 HOUR ON NOVEMBER 8, 2023.
** : SAMPLING FROM 09:30 HOUR ON NOVEMBER 8, 2023 TO 09:30 HOUR ON NOVEMBER 9, 2023.
*** : SAMPLING FROM 09:30 HOUR ON NOVEMBER 9, 2023 TO 09:30 HOUR ON NOVEMBER 10, 2023.

Budsakorn ✓

(MISS BUDSAKORN LERDPANUMAS)
LABORATORY SUPERVISOR

NOVEMBER 23, 2023



ANALYSIS REPORT

CUSTOMER NAME : THAI TOKAI CARBON PRODUCT COMPANY LIMITED
ADDRESS : 42/2 MOO 1, SUKHUMVIT ROAD KM. 124.5, THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 0 3835 2487, 081-921-7550 e-mail : wipawee@tcp.co.th
SAMPLING SOURCE : บ้านปากทางอ่าวอุดม
SAMPLE TYPE : AMBIENT
SAMPLING DATE : *, **, ***, ****
SAMPLING TIME : *, **, ***, ****
SAMPLING BY : MR SIRAPAT JONGPHADUNGKIET
ANALYZED BY : MISS JETJARI TUMSA-AT
RECEIVED DATE : NOVEMBER 14, 2023
ANALYTICAL DATE : NOVEMBER 14-20, 2023
REPORT NO. : 2023-U100346
WORK NO. : 2021-003466
ANALYSIS NO. : T23AW666-0004 - T23AW666-0007

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT			
			บ้านปากทางอ่าวอุดม			
			*	**	***	****
			T23AW666-0004	T23AW666-0005	T23AW666-0006	T23AW666-0007
TOTAL SUSPENDED PARTICULATE	mg/m ³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.066	0.092	0.100	0.088
PARTICULATE MATTER (≤ 10 μm)	mg/m ³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.034	0.078	0.035	0.041
SAMPLE CONDITION			COMPLETE	COMPLETE	COMPLETE	COMPLETE

REMARK
TSP, PM10 : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.
TSP : US EPA, CODE OF FEDERAL REGULATIONS, 40 CFR CHAPTER I-PART 50 APPENDIX B, REFERENCE METHOD FOR THE DETERMINATION OF SUSPENDED PARTICULATE MATTER IN THE ATMOSPHERE (HIGH-VOLUME METHOD) REVISED AS OF JULY 1, 2021.
PM10 : US EPA, CODE OF FEDERAL REGULATIONS, 40 CFR CHAPTER I-PART 50 APPENDIX J, REFERENCE METHOD FOR THE DETERMINATION OF PARTICULATE MATTER AS PM10 IN THE ATMOSPHERE (HIGH-VOLUME METHOD) REVISED AS OF JULY 1, 2021.
* : SAMPLING FROM 09:30 HOUR ON NOVEMBER 10, 2023 TO 09:30 HOUR ON NOVEMBER 11, 2023.
** : SAMPLING FROM 09:30 HOUR ON NOVEMBER 11, 2023 TO 09:30 HOUR ON NOVEMBER 12, 2023.
*** : SAMPLING FROM 09:30 HOUR ON NOVEMBER 12, 2023 TO 09:30 HOUR ON NOVEMBER 13, 2023.
**** : SAMPLING FROM 09:30 HOUR ON NOVEMBER 13, 2023 TO 09:30 HOUR ON NOVEMBER 14, 2023.

Budsakorn ✓

(MISS BUDSAKORN LERDPANUMAS)
LABORATORY SUPERVISOR

NOVEMBER 23, 2023



ANALYSIS REPORT

CUSTOMER NAME : THAI TOKAI CARBON PRODUCT COMPANY LIMITED
ADDRESS : 42/2 MOO 1, SUKHUMVIT ROAD KM. 124.5, THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 0 3835 2487, 081-921-7550 e-mail : wipawee@tcp.co.th
MEASURING PLACE : บริเวณโครงการ TCP
MEASURING TYPE : AMBIENT (AIR) **RECEIVED DATE** : NOVEMBER 7-14, 2023
MEASURING DATE : NOVEMBER 7-14, 2023 **ANALYTICAL DATE** : NOVEMBER 7-14, 2023
MEASURING TIME : * **REPORT NO.** : 2023-U100397
MEASURING METHOD : UV FLUORESCENCE **WORK NO.** : 2021-003466
MEASURED BY : MR SIRAPAT JONGPHADUNGKIET **ANALYSIS NO.** : T23AW666-0008 - T23AW666-0014

เวลา *	RESULT (ppm)		
	SULPHUR DIOXIDE		
	บริเวณโครงการ TCP		
	NOVEMBER 7-8, 2023 T23AW666-0008	NOVEMBER 8-9, 2023 T23AW666-0009	NOVEMBER 9-10, 2023 T23AW666-0010
08:00-09:00 HOUR	0.0031	0.0031	0.0028
09:00-10:00 HOUR	0.0030	0.0032	0.0029
10:00-11:00 HOUR	0.0033	0.0030	0.0030
11:00-12:00 HOUR	0.0030	0.0031	0.0031
12:00-13:00 HOUR	0.0032	0.0031	0.0032
13:00-14:00 HOUR	0.0030	0.0033	0.0033
14:00-15:00 HOUR	0.0031	0.0031	0.0033
15:00-16:00 HOUR	0.0032	0.0030	0.0032
16:00-17:00 HOUR	0.0033	0.0030	0.0032
17:00-18:00 HOUR	0.0031	0.0031	0.0033
18:00-19:00 HOUR	0.0032	0.0033	0.0030
19:00-20:00 HOUR	0.0030	0.0030	0.0029
20:00-21:00 HOUR	0.0029	0.0028	0.0028
21:00-22:00 HOUR	0.0029	0.0027	0.0028
22:00-23:00 HOUR	0.0027	0.0028	0.0029
23:00-00:00 HOUR	0.0028	0.0028	0.0027
00:00-01:00 HOUR	0.0028	0.0027	0.0028
01:00-02:00 HOUR	0.0029	0.0029	0.0028
02:00-03:00 HOUR	0.0029	0.0029	0.0028
03:00-04:00 HOUR	0.0029	0.0029	0.0028
04:00-05:00 HOUR	0.0029	0.0027	0.0027
05:00-06:00 HOUR	0.0029	0.0029	0.0029
06:00-07:00 HOUR	0.0027	0.0029	0.0027
07:00-08:00 HOUR	0.0029	0.0028	0.0028
AVERAGE 24 HOUR	0.0030	0.0030	0.0029



เวลา *	RESULT (ppm)			
	SULPHUR DIOXIDE			
	บริเวณโครงการ TCP			
	NOVEMBER 10-11, 2023 T23AW666-0011	NOVEMBER 11-12, 2023 T23AW666-0012	NOVEMBER 12-13, 2023 T23AW666-0013	NOVEMBER 13-14, 2023 T23AW666-0014
08:00-09:00 HOUR	0.0027	0.0028	0.0028	0.0027
09:00-10:00 HOUR	0.0029	0.0028	0.0029	0.0029
10:00-11:00 HOUR	0.0030	0.0029	0.0030	0.0030
11:00-12:00 HOUR	0.0031	0.0031	0.0031	0.0031
12:00-13:00 HOUR	0.0030	0.0030	0.0032	0.0033
13:00-14:00 HOUR	0.0031	0.0033	0.0030	0.0033
14:00-15:00 HOUR	0.0033	0.0032	0.0031	0.0032
15:00-16:00 HOUR	0.0030	0.0033	0.0030	0.0031
16:00-17:00 HOUR	0.0033	0.0032	0.0031	0.0032
17:00-18:00 HOUR	0.0030	0.0032	0.0030	0.0032
18:00-19:00 HOUR	0.0030	0.0031	0.0033	0.0030
19:00-20:00 HOUR	0.0029	0.0030	0.0032	0.0029
20:00-21:00 HOUR	0.0028	0.0029	0.0030	0.0027
21:00-22:00 HOUR	0.0028	0.0028	0.0028	0.0029
22:00-23:00 HOUR	0.0029	0.0028	0.0029	0.0027
23:00-00:00 HOUR	0.0028	0.0027	0.0027	0.0027
00:00-01:00 HOUR	0.0028	0.0028	0.0029	0.0027
01:00-02:00 HOUR	0.0027	0.0027	0.0028	0.0027
02:00-03:00 HOUR	0.0027	0.0028	0.0027	0.0028
03:00-04:00 HOUR	0.0028	0.0029	0.0028	0.0027
04:00-05:00 HOUR	0.0028	0.0027	0.0028	0.0028
05:00-06:00 HOUR	0.0028	0.0027	0.0027	0.0029
06:00-07:00 HOUR	0.0028	0.0027	0.0029	0.0028
07:00-08:00 HOUR	0.0027	0.0028	0.0028	0.0029
AVERAGE 24 HOUR	0.0029	0.0029	0.0029	0.0029

Sila Banjongjairuk

(MR SILA BANJONGJAIRUK)
LABORATORY SUPERVISOR

NOVEMBER 22, 2023

ANALYSIS REPORT

CUSTOMER NAME : THAI TOKAI CARBON PRODUCT COMPANY LIMITED
ADDRESS : 42/2 MOO 1, SUKHUMVIT ROAD KM. 124.5, THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 0 3835 2487, 081-921-7550 e-mail : wipawee@tcp.co.th
MEASURING PLACE : บ้านพักทางด่วน
MEASURING TYPE : AMBIENT (AIR) **RECEIVED DATE** : NOVEMBER 7-14, 2023
MEASURING DATE : NOVEMBER 7-14, 2023 **ANALYTICAL DATE** : NOVEMBER 7-14, 2023
MEASURING TIME : * **REPORT NO.** : 2023-U100395
MEASURING METHOD : UV FLUORESCENCE **WORK NO.** : 2021-003466
MEASURED BY : MR SIRAPAT JONGPHADUNGKIET **ANALYSIS NO.** : T23AW666-0001 - T23AW666-0007

เวลา *	RESULT (ppm)		
	SULPHUR DIOXIDE		
	บ้านพักทางด่วน		
	NOVEMBER 7-8, 2023 T23AW666-0001	NOVEMBER 8-9, 2023 T23AW666-0002	NOVEMBER 9-10, 2023 T23AW666-0003
08:00-09:00 HOUR	0.0027	0.0026	0.0027
09:00-10:00 HOUR	0.0027	0.0028	0.0028
10:00-11:00 HOUR	0.0026	0.0026	0.0028
11:00-12:00 HOUR	0.0028	0.0028	0.0026
12:00-13:00 HOUR	0.0029	0.0026	0.0026
13:00-14:00 HOUR	0.0028	0.0028	0.0027
14:00-15:00 HOUR	0.0027	0.0028	0.0027
15:00-16:00 HOUR	0.0024	0.0024	0.0026
16:00-17:00 HOUR	0.0025	0.0025	0.0027
17:00-18:00 HOUR	0.0025	0.0024	0.0027
18:00-19:00 HOUR	0.0025	0.0025	0.0024
19:00-20:00 HOUR	0.0028	0.0025	0.0025
20:00-21:00 HOUR	0.0027	0.0024	0.0028
21:00-22:00 HOUR	0.0025	0.0026	0.0024
22:00-23:00 HOUR	0.0026	0.0024	0.0027
23:00-00:00 HOUR	0.0027	0.0028	0.0025
00:00-01:00 HOUR	0.0026	0.0024	0.0024
01:00-02:00 HOUR	0.0028	0.0028	0.0025
02:00-03:00 HOUR	0.0027	0.0027	0.0027
03:00-04:00 HOUR	0.0027	0.0026	0.0026
04:00-05:00 HOUR	0.0025	0.0027	0.0028
05:00-06:00 HOUR	0.0025	0.0025	0.0027
06:00-07:00 HOUR	0.0028	0.0025	0.0025
07:00-08:00 HOUR	0.0027	0.0027	0.0026
AVERAGE 24 HOUR	0.0027	0.0026	0.0026



เวลา *	RESULT (ppm)			
	SULPHUR DIOXIDE			
	บ้านพักทางอำเภอดม			
	NOVEMBER 10-11, 2023 T23AW666-0004	NOVEMBER 11-12, 2023 T23AW666-0005	NOVEMBER 12-13, 2023 T23AW666-0006	NOVEMBER 13-14, 2023 T23AW666-0007
08:00-09:00 HOUR	0.0027	0.0028	0.0024	0.0026
09:00-10:00 HOUR	0.0025	0.0025	0.0028	0.0024
10:00-11:00 HOUR	0.0028	0.0027	0.0027	0.0027
11:00-12:00 HOUR	0.0029	0.0026	0.0025	0.0026
12:00-13:00 HOUR	0.0027	0.0027	0.0025	0.0027
13:00-14:00 HOUR	0.0028	0.0025	0.0026	0.0024
14:00-15:00 HOUR	0.0027	0.0028	0.0025	0.0028
15:00-16:00 HOUR	0.0027	0.0024	0.0024	0.0027
16:00-17:00 HOUR	0.0028	0.0025	0.0026	0.0028
17:00-18:00 HOUR	0.0029	0.0024	0.0027	0.0024
18:00-19:00 HOUR	0.0028	0.0025	0.0026	0.0024
19:00-20:00 HOUR	0.0027	0.0027	0.0025	0.0027
20:00-21:00 HOUR	0.0025	0.0026	0.0027	0.0025
21:00-22:00 HOUR	0.0026	0.0027	0.0028	0.0025
22:00-23:00 HOUR	0.0026	0.0027	0.0025	0.0026
23:00-00:00 HOUR	0.0027	0.0027	0.0028	0.0024
00:00-01:00 HOUR	0.0024	0.0027	0.0026	0.0026
01:00-02:00 HOUR	0.0027	0.0027	0.0025	0.0025
02:00-03:00 HOUR	0.0026	0.0027	0.0025	0.0027
03:00-04:00 HOUR	0.0026	0.0026	0.0027	0.0027
04:00-05:00 HOUR	0.0024	0.0024	0.0024	0.0025
05:00-06:00 HOUR	0.0026	0.0028	0.0025	0.0026
06:00-07:00 HOUR	0.0024	0.0027	0.0027	0.0027
07:00-08:00 HOUR	0.0026	0.0026	0.0026	0.0028
AVERAGE 24 HOUR	0.0027	0.0026	0.0026	0.0026

Sila Banjongjairuk

(MR SILA BANJONGJAIRUK)
LABORATORY SUPERVISOR

NOVEMBER 22, 2023

ANALYSIS REPORT

CUSTOMER NAME : THAI TOKAI CARBON PRODUCT COMPANY LIMITED
ADDRESS : 42/2 MOO 1, SUKHUMVIT ROAD KM. 124.5, THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 0 3835 2487, 081-921-7550 e-mail : wipawee@tcp.co.th
MEASURING PLACE : บริเวณโครงการ TCP
MEASURING TYPE : AMBIENT (AIR) **RECEIVED DATE** : NOVEMBER 7-14, 2023
MEASURING DATE : NOVEMBER 7-14, 2023 **ANALYTICAL DATE** : NOVEMBER 7-14, 2023
MEASURING TIME : * **REPORT NO.** : 2023-U100394
MEASURING METHOD : CHEMILUMINESCENCE **WORK NO.** : 2021-003466
MEASURED BY : MR SIRAPAT JONGPHADUNGKIET **ANALYSIS NO.** : T23AW666-0008 - T23AW666-0014

TIME *	RESULT (ppm)		
	NITROGEN DIOXIDE		
	บริเวณโครงการ TCP		
	NOVEMBER 7-8, 2023 T23AW666-0008	NOVEMBER 8-9, 2023 T23AW666-0009	NOVEMBER 9-10, 2023 T23AW666-0010
08:00-09:00 HOUR	0.0238	0.0232	0.0209
09:00-10:00 HOUR	0.0236	0.0234	0.0216
10:00-11:00 HOUR	0.0246	0.0237	0.0234
11:00-12:00 HOUR	0.0249	0.0257	0.0233
12:00-13:00 HOUR	0.0243	0.0259	0.0239
13:00-14:00 HOUR	0.0246	0.0248	0.0257
14:00-15:00 HOUR	0.0248	0.0256	0.0244
15:00-16:00 HOUR	0.0252	0.0254	0.0250
16:00-17:00 HOUR	0.0250	0.0244	0.0249
17:00-18:00 HOUR	0.0249	0.0244	0.0239
18:00-19:00 HOUR	0.0240	0.0238	0.0264
19:00-20:00 HOUR	0.0233	0.0231	0.0239
20:00-21:00 HOUR	0.0232	0.0226	0.0229
21:00-22:00 HOUR	0.0228	0.0219	0.0205
22:00-23:00 HOUR	0.0233	0.0214	0.0208
23:00-00:00 HOUR	0.0236	0.0209	0.0229
00:00-01:00 HOUR	0.0213	0.0218	0.0224
01:00-02:00 HOUR	0.0229	0.0217	0.0235
02:00-03:00 HOUR	0.0223	0.0221	0.0232
03:00-04:00 HOUR	0.0218	0.0220	0.0223
04:00-05:00 HOUR	0.0209	0.0230	0.0225
05:00-06:00 HOUR	0.0219	0.0222	0.0238
06:00-07:00 HOUR	0.0202	0.0234	0.0206
07:00-08:00 HOUR	0.0214	0.0207	0.0228



TIME *	RESULT (ppm)			
	NITROGEN DIOXIDE			
	บริเวณโครงการ TCP			
	NOVEMBER 10-11, 2023 T23AW666-0011	NOVEMBER 11-12, 2023 T23AW666-0012	NOVEMBER 12-13, 2023 T23AW666-0013	NOVEMBER 13-14, 2023 T23AW666-0014
08:00-09:00 HOUR	0.0226	0.0229	0.0242	0.0218
09:00-10:00 HOUR	0.0229	0.0246	0.0253	0.0231
10:00-11:00 HOUR	0.0233	0.0244	0.0261	0.0240
11:00-12:00 HOUR	0.0239	0.0241	0.0256	0.0249
12:00-13:00 HOUR	0.0244	0.0242	0.0251	0.0253
13:00-14:00 HOUR	0.0260	0.0237	0.0237	0.0242
14:00-15:00 HOUR	0.0243	0.0256	0.0231	0.0257
15:00-16:00 HOUR	0.0239	0.0251	0.0255	0.0244
16:00-17:00 HOUR	0.0257	0.0241	0.0236	0.0253
17:00-18:00 HOUR	0.0240	0.0228	0.0232	0.0247
18:00-19:00 HOUR	0.0233	0.0225	0.0229	0.0242
19:00-20:00 HOUR	0.0227	0.0215	0.0221	0.0242
20:00-21:00 HOUR	0.0227	0.0221	0.0228	0.0236
21:00-22:00 HOUR	0.0209	0.0212	0.0224	0.0231
22:00-23:00 HOUR	0.0234	0.0226	0.0221	0.0234
23:00-00:00 HOUR	0.0218	0.0204	0.0205	0.0199
00:00-01:00 HOUR	0.0222	0.0217	0.0211	0.0228
01:00-02:00 HOUR	0.0226	0.0224	0.0223	0.0237
02:00-03:00 HOUR	0.0221	0.0215	0.0228	0.0204
03:00-04:00 HOUR	0.0211	0.0226	0.0229	0.0231
04:00-05:00 HOUR	0.0225	0.0221	0.0214	0.0228
05:00-06:00 HOUR	0.0218	0.0214	0.0224	0.0211
06:00-07:00 HOUR	0.0217	0.0203	0.0200	0.0212
07:00-08:00 HOUR	0.0226	0.0229	0.0234	0.0221

Sila Banjongjairuk

(MR SILA BANJONGJAIRUK)
LABORATORY SUPERVISOR

NOVEMBER 22, 2023

ANALYSIS REPORT

CUSTOMER NAME : THAI TOKAI CARBON PRODUCT COMPANY LIMITED
ADDRESS : 42/2 MOO 1, SUKHUMVIT ROAD KM. 124.5, THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 0 3835 2487, 081-921-7550 e-mail : wipawee@tcp.co.th
MEASURING PLACE : บ้านพักทางหลวงอุดม
MEASURING TYPE : AMBIENT (AIR) **RECEIVED DATE** : NOVEMBER 7-14, 2023
MEASURING DATE : NOVEMBER 7-14, 2023 **ANALYTICAL DATE** : NOVEMBER 7-14, 2023
MEASURING TIME : * **REPORT NO.** : 2023-U100393
MEASURING METHOD : CHEMILUMINESCENCE **WORK NO.** : 2021-003466
MEASURED BY : MR SIRAPAT JONGPHADUNGKIET **ANALYSIS NO.** : T23AW666-0001 - T23AW666-0007

TIME *	RESULT (ppm)		
	NITROGEN DIOXIDE		
	บ้านพักทางหลวงอุดม		
	NOVEMBER 7-8, 2023 T23AW666-0001	NOVEMBER 8-9, 2023 T23AW666-0002	NOVEMBER 9-10, 2023 T23AW666-0003
08:00-09:00 HOUR	0.0161	0.0179	0.0170
09:00-10:00 HOUR	0.0171	0.0199	0.0185
10:00-11:00 HOUR	0.0190	0.0189	0.0190
11:00-12:00 HOUR	0.0185	0.0181	0.0186
12:00-13:00 HOUR	0.0175	0.0193	0.0183
13:00-14:00 HOUR	0.0192	0.0180	0.0200
14:00-15:00 HOUR	0.0200	0.0180	0.0170
15:00-16:00 HOUR	0.0177	0.0175	0.0193
16:00-17:00 HOUR	0.0181	0.0192	0.0198
17:00-18:00 HOUR	0.0191	0.0181	0.0185
18:00-19:00 HOUR	0.0173	0.0180	0.0173
19:00-20:00 HOUR	0.0170	0.0170	0.0180
20:00-21:00 HOUR	0.0153	0.0165	0.0180
21:00-22:00 HOUR	0.0147	0.0154	0.0169
22:00-23:00 HOUR	0.0149	0.0158	0.0156
23:00-00:00 HOUR	0.0152	0.0162	0.0172
00:00-01:00 HOUR	0.0158	0.0171	0.0163
01:00-02:00 HOUR	0.0163	0.0155	0.0162
02:00-03:00 HOUR	0.0154	0.0145	0.0175
03:00-04:00 HOUR	0.0146	0.0153	0.0175
04:00-05:00 HOUR	0.0165	0.0151	0.0157
05:00-06:00 HOUR	0.0151	0.0153	0.0164
06:00-07:00 HOUR	0.0156	0.0154	0.0168
07:00-08:00 HOUR	0.0165	0.0163	0.0181



TIME *	RESULT (ppm)			
	NITROGEN DIOXIDE			
	ยานพาหนะทางอากาศ			
	NOVEMBER 10-11, 2023 T23AW666-0004	NOVEMBER 11-12, 2023 T23AW666-0005	NOVEMBER 12-13, 2023 T23AW666-0006	NOVEMBER 13-14, 2023 T23AW666-0007
08:00-09:00 HOUR	0.0184	0.0188	0.0173	0.0159
09:00-10:00 HOUR	0.0176	0.0176	0.0191	0.0164
10:00-11:00 HOUR	0.0169	0.0182	0.0189	0.0155
11:00-12:00 HOUR	0.0190	0.0197	0.0200	0.0171
12:00-13:00 HOUR	0.0189	0.0177	0.0174	0.0175
13:00-14:00 HOUR	0.0180	0.0177	0.0195	0.0182
14:00-15:00 HOUR	0.0198	0.0184	0.0190	0.0174
15:00-16:00 HOUR	0.0196	0.0189	0.0176	0.0176
16:00-17:00 HOUR	0.0192	0.0177	0.0174	0.0193
17:00-18:00 HOUR	0.0170	0.0175	0.0191	0.0182
18:00-19:00 HOUR	0.0157	0.0162	0.0175	0.0177
19:00-20:00 HOUR	0.0162	0.0150	0.0185	0.0186
20:00-21:00 HOUR	0.0172	0.0164	0.0171	0.0202
21:00-22:00 HOUR	0.0160	0.0163	0.0163	0.0185
22:00-23:00 HOUR	0.0158	0.0157	0.0169	0.0170
23:00-00:00 HOUR	0.0165	0.0148	0.0160	0.0169
00:00-01:00 HOUR	0.0168	0.0155	0.0162	0.0151
01:00-02:00 HOUR	0.0164	0.0165	0.0170	0.0156
02:00-03:00 HOUR	0.0161	0.0166	0.0150	0.0147
03:00-04:00 HOUR	0.0161	0.0153	0.0159	0.0149
04:00-05:00 HOUR	0.0174	0.0164	0.0166	0.0156
05:00-06:00 HOUR	0.0149	0.0160	0.0163	0.0152
06:00-07:00 HOUR	0.0164	0.0164	0.0154	0.0142
07:00-08:00 HOUR	0.0179	0.0169	0.0148	0.0155

Sila Banjongjairuk

(MR SILA BANJONGJAIKUK)
LABORATORY SUPERVISOR

NOVEMBER 22, 2023

ANALYSIS REPORT

CUSTOMER NAME : THAI TOKAI CARBON PRODUCT COMPANY LIMITED
ADDRESS : 42/2 MOO 1, SUKHUMVIT ROAD KM. 124.5, THUNG SUKHLA SI RACHA CHON BURI 20230
CONTACT INFORMATION : TEL : 0 3835 2487, 081-921-7550 e-mail : wipawee@tcp.co.th
MEASURING PLACE : บริเวณโครงการ TCP
MEASURING TYPE : AMBIENT (AIR)
MEASURING DATE : NOVEMBER 7-14, 2023
MEASURING TIME : *
MEASURING METHOD : WIND SPEED & WIND DIRECTION EQUIPMENT
MEASURED BY : MR SIRAPAT JONGPHADUNGKIET

RECEIVED DATE : NOVEMBER 7-14, 2023
ANALYTICAL DATE : NOVEMBER 7-14, 2023
REPORT NO. : 2023-U100398
WORK NO. : 2021-003466
ANALYSIS NO. : T23AW666-0008 - T23AW666-0014

TIME *	RESULT (m/s)					
	บริเวณโครงการ TCP					
	NOVEMBER 7-8, 2023 T23AW666-0008		NOVEMBER 8-9, 2023 T23AW666-0009		NOVEMBER 9-10, 2023 T23AW666-0010	
	WIND SPEED	WIND DIRECTION	WIND SPEED	WIND DIRECTION	WIND SPEED	WIND DIRECTION
08:00-09:00 HOUR	2.7	N	0.5	SE	2.5	NE
09:00-10:00 HOUR	0.5	N	1.5	S	2.6	ENE
10:00-11:00 HOUR	1.4	ENE	1.9	S	2.4	NE
11:00-12:00 HOUR	3.0	NE	2.0	ESE	3.0	N
12:00-13:00 HOUR	2.1	NE	2.7	SSE	2.1	N
13:00-14:00 HOUR	3.1	NNE	1.4	SE	1.8	ENE
14:00-15:00 HOUR	1.5	NNE	2.2	S	3.2	ENE
15:00-16:00 HOUR	1.5	NE	0.8	SSE	1.4	NNE
16:00-17:00 HOUR	0.7	NNE	2.3	ESE	2.6	E
17:00-18:00 HOUR	3.5	NE	2.3	SSE	3.0	E
18:00-19:00 HOUR	1.1	NE	1.8	ESE	3.0	N
19:00-20:00 HOUR	2.6	E	2.1	ESE	0.6	ENE
20:00-21:00 HOUR	2.9	E	1.1	E	3.0	ENE
21:00-22:00 HOUR	2.3	NNE	0.7	ENE	1.8	ENE
22:00-23:00 HOUR	1.3	NNE	3.5	N	3.4	NE
23:00-00:00 HOUR	1.3	E	2.5	ENE	1.5	NE
00:00-01:00 HOUR	0.8	ENE	0.9	N	3.5	NNE
01:00-02:00 HOUR	2.8	E	3.3	E	0.8	ESE
02:00-03:00 HOUR	0.5	SE	1.0	ENE	1.7	SE
03:00-04:00 HOUR	3.0	SE	2.0	NE	1.5	SSE
04:00-05:00 HOUR	3.1	SE	0.5	NE	2.9	SSE
05:00-06:00 HOUR	2.6	SE	0.9	E	1.3	SE
06:00-07:00 HOUR	2.7	SSE	1.4	ENE	1.2	SE
07:00-08:00 HOUR	2.5	ESE	1.5	ENE	0.6	SSW



TIME *	RESULT (m/s)							
	บริเวณโครงการ TCP							
	NOVEMBER 10-11, 2023		NOVEMBER 11-12, 2023		NOVEMBER 12-13, 2023		NOVEMBER 13-14, 2023	
	T23AW666-0011		T23AW666-0012		T23AW666-0013		T23AW666-0014	
	WIND SPEED	WIND DIRECTION	WIND SPEED	WIND DIRECTION	WIND SPEED	WIND DIRECTION	WIND SPEED	WIND DIRECTION
08:00-09:00 HOUR	1.5	SSE	1.8	NW	1.6	NE	1.5	NE
09:00-10:00 HOUR	2.8	SSW	2.0	N	1.1	NNE	2.5	NNE
10:00-11:00 HOUR	3.2	ESE	3.0	N	0.5	NE	2.7	NE
11:00-12:00 HOUR	2.8	SE	0.8	NNE	3.3	N	2.3	NE
12:00-13:00 HOUR	1.6	SSE	1.0	ENE	2.0	N	1.6	NNE
13:00-14:00 HOUR	2.6	SSW	2.5	ENE	1.3	NNE	3.2	NNE
14:00-15:00 HOUR	2.1	W	0.5	E	0.9	NE	1.7	NNE
15:00-16:00 HOUR	1.7	WSW	3.5	N	3.1	E	2.9	E
16:00-17:00 HOUR	2.5	SW	2.3	NNE	2.6	E	1.9	ENE
17:00-18:00 HOUR	0.8	WSW	2.7	E	3.5	E	1.7	E
18:00-19:00 HOUR	3.5	W	2.5	NNE	3.0	E	3.0	NE
19:00-20:00 HOUR	0.5	SW	2.8	ENE	2.6	E	0.5	E
20:00-21:00 HOUR	1.3	WSW	1.1	NE	3.0	NE	3.4	ENE
21:00-22:00 HOUR	3.0	W	1.0	E	2.5	E	2.9	NE
22:00-23:00 HOUR	1.4	SW	2.5	NNE	3.3	NNE	0.5	E
23:00-00:00 HOUR	1.7	WNW	0.9	NNE	2.6	ENE	0.6	E
00:00-01:00 HOUR	2.0	WSW	0.9	N	0.8	ENE	1.3	NE
01:00-02:00 HOUR	0.6	SW	2.5	NE	1.3	ENE	2.9	NE
02:00-03:00 HOUR	2.1	W	2.0	NE	1.4	E	1.9	NNE
03:00-04:00 HOUR	2.2	W	0.8	NE	3.4	NNE	2.4	ENE
04:00-05:00 HOUR	0.7	W	1.6	NE	1.2	NE	3.1	NE
05:00-06:00 HOUR	0.6	SSW	1.0	E	1.6	N	1.5	E
06:00-07:00 HOUR	0.7	WNW	2.7	ENE	2.4	E	0.8	E
07:00-08:00 HOUR	1.7	NW	2.5	E	1.5	NE	1.3	E

Sila Banjongjairuk

(MR SILA BANJONGJAIKUK)
LABORATORY SUPERVISOR

NOVEMBER 22, 2023

ใบรับรองผลการตรวจวิเคราะห์
คุณภาพอากาศจากปล่องระบายอากาศ

**The Monitoring Result of Emission Concentration
Combine Stack
Thai Tokai Carbon Product Co., Ltd.
November 7, 2023**

Run Number	Oxygen content (%)		Oxide of Nitrogen (ppm)		
	RM Stack Gas Conc	Corrected Gas Conc	RM Stack Gas Conc	Corrected Gas Conc @Actual O2	Corrected Gas Conc @7% O2
1	11.69	11.75	76.74	76.84	116.73
2	11.74	11.73	75.79	75.90	115.05
3	11.72	11.65	75.29	75.42	113.33
Average	11.72	11.71	75.94	76.05	115.03

Run Number	Oxygen content (%)		Sulfur dioxide (ppm)		
	RM Stack Gas Conc	Corrected Gas Conc	RM Stack Gas Conc	Corrected Gas Conc @Actual O2	Corrected Gas Conc @7% O2
1	11.69	11.75	166.92	167.07	253.80
2	11.74	11.73	169.43	169.59	257.07
3	11.72	11.65	165.77	165.93	249.34
Average	11.72	11.71	167.37	167.53	253.39

Run Number	Oxygen content (%)		Carbonmonoxide (ppm)		
	RM Stack Gas Conc	Corrected Gas Conc	RM Stack Gas Conc	Corrected Gas Conc @Actual O2	Corrected Gas Conc @7% O2
1	11.69	11.75	29.33	29.35	44.59
2	11.74	11.73	26.34	26.36	39.96
3	11.72	11.65	25.68	25.69	38.60
Average	11.72	11.71	27.12	27.13	41.04

Thai Tokai Carbon Product Co., Ltd. EMISSION TEST RESULT

Date: November 7, 2023

Start time: 11:30 AM

O₂ instrument Model: AMI 70NO_x instrument Model: Teledyne 200 EHSO₂ instrument Model: API 100 AH

CO instrument Model: API 300 A

Fuel Type : Tail Gas

Run # : 1

Location : Combine Stack

Finish time : 11:50 AM

Serial No.: 161212-14

Serial No.: 435

Serial No.: 058

Serial No.: 1070

Test Operator : Song H.

Time, min	O ₂ (%)	NO _x (ppm)	SO ₂ (ppm)	CO (ppm)
11:30 AM	11.65	77.36	167.67	30.64
11:31 AM	11.63	77.37	166.66	30.18
11:32 AM	11.65	77.37	166.21	32.59
11:33 AM	11.63	77.44	165.71	30.36
11:34 AM	11.63	77.45	165.67	29.39
11:35 AM	11.60	77.45	166.23	29.94
11:36 AM	11.68	76.99	166.86	30.88
11:37 AM	11.71	76.43	166.10	27.08
11:38 AM	11.73	76.33	166.24	26.81
11:39 AM	11.73	76.11	166.09	29.27
11:40 AM	11.73	76.15	165.74	31.11
11:41 AM	11.67	76.53	165.81	30.91
11:42 AM	11.73	76.64	166.50	31.77
11:43 AM	11.63	76.67	166.71	30.40
11:44 AM	11.67	76.79	167.59	29.11
11:45 AM	11.76	76.31	168.35	27.74
11:46 AM	11.73	76.13	167.99	26.30
11:47 AM	11.73	76.45	167.92	27.27
11:48 AM	11.69	76.70	168.10	30.04
11:49 AM	11.73	76.62	168.42	27.84
11:50 AM	11.73	76.35	168.82	26.21
Average	11.69	76.74	166.92	29.33

Signature



(Miss Katesarin Vorradetwittaya)

Environmental Scientist

Thai Tokai Carbon Product Co., Ltd. EMISSION TEST RESULT

Date: <u>November 7, 2023</u> Start time: <u>11:51 AM</u> O₂ instrument Model: <u>AMI 70</u> NO_x instrument Model: <u>Teledyne 200 EH</u> SO₂ instrument Model: <u>API 100 AH</u> CO instrument Model: <u>API 300 A</u> Fuel Type : <u>Tail Gas</u>	Run # : 2 Location : <u>Combine Stack</u> Finish time : <u>12:11 PM</u> Serial No.: <u>161212-14</u> Serial No.: <u>435</u> Serial No.: <u>058</u> Serial No.: <u>1070</u> Test Operator : <u>Song H.</u>
---	--

Time, min	O ₂ (%)	NO _x (ppm)	SO ₂ (ppm)	CO (ppm)
11:51 AM	11.75	76.26	168.41	25.91
11:52 AM	11.66	76.36	168.02	27.91
11:53 AM	11.70	76.28	168.66	27.80
11:54 AM	11.76	75.68	168.83	27.20
11:55 AM	11.74	75.22	168.56	25.40
11:56 AM	11.87	75.07	168.64	24.87
11:57 AM	11.78	75.28	168.69	24.80
11:58 AM	11.73	75.73	169.39	26.03
11:59 AM	11.80	75.68	169.74	26.30
12:00 PM	11.75	75.60	169.71	26.53
12:01 PM	11.73	75.91	169.78	27.20
12:02 PM	11.78	75.77	169.68	26.90
12:03 PM	11.73	75.64	169.08	26.17
12:04 PM	11.73	75.63	168.91	25.53
12:05 PM	11.73	75.67	169.11	26.37
12:06 PM	11.78	75.87	169.46	25.90
12:07 PM	11.73	76.11	170.40	26.43
12:08 PM	11.73	76.19	171.08	26.77
12:09 PM	11.64	76.20	171.31	28.33
12:10 PM	11.73	75.93	170.96	26.04
12:11 PM	11.73	75.58	169.60	24.74
Average	11.74	75.79	169.43	26.34

Signature



(Miss Katesarin Vorradetwittaya)

Environmental Scientist

Thai Tokai Carbon Product Co., Ltd. EMISSION TEST RESULT

Date: November 7, 2023

Start time: 12:12 PM

O₂ instrument Model: AMI 70NO_x instrument Model: Teledyne 200 EHSO₂ instrument Model: API 100 AH

CO instrument Model: API 300 A

Fuel Type : Tail Gas

Run # : 3

Location : Combine Stack

Finish time : 12:32 PM

Serial No.: 161212-14

Serial No.: 435

Serial No.: 058

Serial No.: 1070

Test Operator : Song H.

Time, min	O ₂ (%)	NO _x (ppm)	SO ₂ (ppm)	CO (ppm)
12:12 PM	11.65	75.63	168.70	25.67
12:13 PM	11.78	75.25	168.77	25.33
12:14 PM	11.81	74.71	168.19	25.63
12:15 PM	11.77	74.70	166.87	25.37
12:16 PM	11.73	75.12	166.40	26.01
12:17 PM	11.73	75.62	167.30	26.74
12:18 PM	11.79	75.58	167.58	25.74
12:19 PM	11.72	75.50	167.38	25.28
12:20 PM	11.74	75.67	168.07	25.41
12:21 PM	11.73	75.39	168.13	25.05
12:22 PM	11.75	75.18	168.24	24.88
12:23 PM	11.66	75.52	168.08	25.91
12:24 PM	11.69	75.50	168.73	26.55
12:25 PM	11.81	74.99	168.37	24.71
12:26 PM	11.82	74.76	167.47	24.95
12:27 PM	11.64	75.13	167.11	26.38
12:28 PM	11.58	75.58	164.82	27.01
12:29 PM	11.69	75.37	162.04	26.28
12:30 PM	11.63	75.16	158.19	26.54
12:31 PM	11.73	75.35	156.22	25.34
12:32 PM	11.68	75.35	154.50	24.51
Average	11.72	75.29	165.77	25.68

Signature



(Miss Katesarin Vorradetwittaya)

Environmental Scientist



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STACK EMISSION ANALYSIS REPORT

CLIENT NAME	: Thai Tokai Carbon Product Co., Ltd.	REFERENCE NO.	: 223023sign(stk)-Nov/PM
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING DATE	: 07/11/2023
RECEIVED DATE	: 08/11/2023	ANALYTICAL DATE	: 08-09/11/2023
REPORT DATE	: 13/11/2023	SAMPLE CONDITION	: Normal
STACK LOCATION	: Combined Concrete Stack	OPERATOR	: Mr. Song Hangchwankun
SOURCE DESCRIPTION	: Combustion	FUEL TYPE	: Tail gas
STACK DESCRIPTION			

Height	: 100.0	m	Gas Velocity	: 16.7	m/s
Diameter	: 3.0	m	Flow Rate*	: 3,880	Ncu.m/min
Temperature	: 183.7	°C	Excess Oxygen	: 11.7	%

PARAMETER	UNITS	RESULTS*		STANDARDS ^{1/}	REFERENCE
		11.7%O ₂	7%O ₂	7%O ₂	METHODS
Particulate matter	mg/Ncu.m.	21.0	31.8	240	US. EPA Method 5

Phatchara Samanchan

(Miss Phatchara Samanchan)

Analyst

REG.NO. 3-239-ก-0021

Narisa Poowasanpetch

(Miss Narisa Poowasanpetch)

Technical Management Team

REG.NO. 3-239-ก-0010

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

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

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



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STACK EMISSION ANALYSIS REPORT

CLIENT NAME	: Thai Tokai Carbon Product Co., Ltd.	REFERENCE NO.	: 223023-stk-sign/Process Bag Filter-Nov/PM
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING DATE	: 09/11/2023
RECEIVED DATE	: 13/11/2023	ANALYTICAL DATE	: 13-14/11/2023
REPORT DATE	: 15/11/2023	SAMPLE CONDITION	: Normal
STACK LOCATION	: Process Bag Filter Stack fo Unit 7	OPERATOR	: Mr. Song Hanghchwankun
SOURCE DESCRIPTION	: Process	FUEL TYPE	: -
STACK DESCRIPTION			

Height	: 30.0	m	Gas Velocity	: 29.6	m/s
Diameter	: 0.65	m	Flow Rate*	: 427	Ncu.m/min
Temperature	: 87.2	°C	Excess Oxygen	: 20.5	%

PARAMETER	UNIT	RESULT	STANDARD ^{1/}	REFERENCE METHOD
Particulate matter	mg/Ncu.m.	4.4	400	US. EPA Method 5

Phatchara Samanchan

(Miss Phatchara Samanchan)

Analyst

REG.NO.จ-239-จ-0021

Narisa Poowasanpetch

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

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

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จากบ่อกักน้ำทิ้ง (Effluent Tank (M-910))



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: Thai Tokai Carbon Product Company Limited	REQUEST SERVICE No.	: 1122/66
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING METHOD	: Grab
SAMPLING DATE	: 06/07/2023	SAMPLING TIME	: 08:03
RECEIVED DATE	: 07/07/2023	ANALYTICAL DATE	: 07-15/07/2023
REPORT DATE	: 15/07/2023	SITE OPERATOR	: Mr. Baworn Deechaiya
SAMPLE CONDITION	: Normal	FILE CODE	: 223023_WW_July

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	STANDARD ^{1/}
				Effluent Tank : M-910	
Temperature	°C	2550 B	< 0.5	31.8	≤ 40
pH	-	4500-H ⁺ B	< 0.10	7.91	5.5-9.0
Total Dissolved Solids	mg/l	2540 C	< 50	426	≤ 3,000
Total Suspended Solids	mg/l	2540 D	< 5	< 5	≤ 50
TKN	mg/l	4500-N _{org} B	< 0.20	0.70	≤ 100
Sulfate	mg/l	4500-SO ₄ ²⁻ E	< 1.00	31.4	-
Sulfide	mg/l	4500-S ²⁻ F	< 0.20	ND	≤ 1
Fat Oil & Grease	mg/l	5520 B	< 0.50	ND	≤ 5
Phenols	mg/l	5530 B,C	< 0.001	ND	≤ 1
BOD ₅	mg/l	5210 B	< 1.0	1.0	≤ 20
COD	mg/l	5220 D	< 40.00	< 40.00	≤ 120

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



(Miss Khemchuda Insorn)

Analyst

REG. NO. ว-239-ค-5976



(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ว-239-ค-5863

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 4. - Not available.



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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: Thai Tokai Carbon Product Company Limited	REQUEST SERVICE No.	: 1274/66
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING METHOD	: Grab
SAMPLING DATE	: 03/08/2023	SAMPLING TIME	: 09:45
RECEIVED DATE	: 04/08/2023	ANALYTICAL DATE	: 04-10/08/2023
REPORT DATE	: 10/08/2023	SITE OPERATOR	: Mr.Thanawut Duansaeng
SAMPLE CONDITION	: Normal	FILE CODE	: 223023_WW_August

PARAMETER	UNIT	ANALYSIS	ND	STATION	STANDARD ^{1/}
		METHODS	(non-detectable)	Effluent Tank : M-910	
Temperature	°C	2550 B	< 0.5	30.9	≤ 40
pH	-	4500-H ⁺ B	< 0.10	7.70	5.5-9.0
Total Dissolved Solids	mg/l	2540 C	< 50	368	≤ 3,000
Total Suspended Solids	mg/l	2540 D	< 5	< 5	≤ 50
TKN	mg/l	4500-N _{org} B	< 0.20	0.79	≤ 100
Sulfate	mg/l	4500-SO ₄ ²⁻ E	< 1.00	17.4	-
Sulfide	mg/l	4500-S ²⁻ F	< 0.20	ND	≤ 1
Fat Oil & Grease	mg/l	5520 B	< 0.50	ND	≤ 5
Phenols	mg/l	5530 B,C	< 0.001	ND	≤ 1
BOD ₅	mg/l	5210 B	< 1.0	< 1.0	≤ 20
COD	mg/l	5220 D	< 40.00	< 40.00	≤ 120

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

(Miss Khemchuda Insorn)

Analyst

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(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ว-239-ก-0004

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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: Thai Tokai Carbon Product Company Limited	REQUEST SERVICE No.	: 1564/66
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING METHOD	: Grab
SAMPLING DATE	: 07/09/2023	SAMPLING TIME	: 08:17
RECEIVED DATE	: 08/09/2023	ANALYTICAL DATE	: 08-15/09/2023
REPORT DATE	: 15/09/2023	SITE OPERATOR	: Mr.Tanachot Changlor
SAMPLE CONDITION	: Normal	FILE CODE	: 223023_WW_September

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	STANDARD ^{1/}
				Effluent Tank : M-910	
Temperature	°C	2550 B	< 0.5	32.6	≤ 40
pH	-	4500-H ⁺ B	< 0.10	7.12	5.5-9.0
Total Dissolved Solids	mg/l	2540 C	< 50	596	≤ 3,000
Total Suspended Solids	mg/l	2540 D	< 5	14	≤ 50
TKN	mg/l	4500-N _{org} B	< 0.20	2.20	≤ 100
Sulfate	mg/l	4500-SO ₄ ²⁻ E	< 1.00	50.1	-
Sulfide	mg/l	4500-S ²⁻ F	< 0.20	ND	≤ 1
Fat Oil & Grease	mg/l	5520 B	< 0.50	ND	≤ 5
Phenols	mg/l	5530 B,C	< 0.001	ND	≤ 1
BOD ₅	mg/l	5210 B	< 1.0	< 1.0	≤ 20
COD	mg/l	5220 D	< 40.00	< 40.00	≤ 120

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



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Analyst

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(Mrs. Araya Tipparuk)

Technical Management Team

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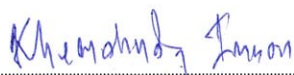
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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: Thai Tokai Carbon Product Company Limited	REQUEST SERVICE No.	: 1740/66
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING METHOD	: Grab
SAMPLING DATE	: 05/10/2023	SAMPLING TIME	: 8.15
RECEIVED DATE	: 06/10/2023	ANALYTICAL DATE	: 06-11/10/2023
REPORT DATE	: 12/10/2023	SITE OPERATOR	: Mr.Chanapon Oakkharaplon
SAMPLE CONDITION	: Normal	FILE CODE	: 223023_WW_October

PARAMETER	UNIT	ANALYSIS	ND	STATION	STANDARD ^{1/}
		METHODS	(non-detectable)	Effluent Tank : M-910	
Temperature	°C	2550 B	< 0.5	30.3	≤ 40
pH	-	4500-H ⁺ B	< 0.10	7.44	5.5-9.0
Total Dissolved Solids	mg/l	2540 C	< 50	553	≤ 3,000
Total Suspended Solids	mg/l	2540 D	< 5	6	≤ 50
TKN	mg/l	4500-N _{org} B	< 0.20	1.9	≤ 100
Sulfate	mg/l	4500-SO ₄ ²⁻ E	< 1.00	114	-
Sulfide	mg/l	4500-S ²⁻ F	< 0.20	ND	≤ 1
Fat Oil & Grease	mg/l	5520 B	< 0.50	ND	≤ 5
Phenols	mg/l	5530 B,C	< 0.001	ND	≤ 1
BOD ₅	mg/l	5210 B	< 1.0	< 1.0	≤ 20
COD	mg/l	5220 D	< 40.00	< 40.00	≤ 120

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



(Miss Khemchuda Insorn)

Analyst

REG. NO. ๖-239-ก-0005



(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ๖-239-ก-0004

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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: Thai Tokai Carbon Product Company Limited	REQUEST SERVICE No.	: 1893/66
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING METHOD	: Grab
SAMPLING DATE	: 02/11/2023	SAMPLING TIME	: 09:04
RECEIVED DATE	: 03/11/2023	ANALYTICAL DATE	: 03-08/11/2023
REPORT DATE	: 09/11/2023	SITE OPERATOR	: Miss Wiraya Patchimboon
SAMPLE CONDITION	: Normal	FILE CODE	: 223023_WW_November

PARAMETER	UNIT	ANALYSIS	ND	STATION	STANDARD ^{1/}
		METHODS	(non-detectable)	Effluent Tank : M-910	
Temperature	°C	2550 B	< 0.5	30.3	≤ 40
pH	-	4500-H ⁺ B	< 0.10	7.30	5.5-9.0
Total Dissolved Solids	mg/l	2540 C	< 50	364	≤ 3,000
Total Suspended Solids	mg/l	2540 D	< 5	< 5	≤ 50
TKN	mg/l	4500-N _{org} B	< 0.20	1.6	≤ 100
Sulfate	mg/l	4500-SO ₄ ²⁻ E	< 1.00	62.6	-
Sulfide	mg/l	4500-S ²⁻ F	< 0.20	ND	≤ 1
Fat Oil & Grease	mg/l	5520 B	< 0.50	ND	≤ 5
Phenols	mg/l	5530 B,C	< 0.001	ND	≤ 1
BOD ₅	mg/l	5210 B	< 1.0	< 1.0	≤ 20
COD	mg/l	5220 D	< 40.00	< 40.00	≤ 120

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

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Analyst

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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: Thai Tokai Carbon Product Company Limited	REQUEST SERVICE No.	: 2112/66
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING METHOD	: Grab
SAMPLING DATE	: 01/12/2023	SAMPLING TIME	: 08:35
RECEIVED DATE	: 02/12/2023	ANALYTICAL DATE	: 02-08/12/2023
REPORT DATE	: 08/12/2023	SITE OPERATOR	: Mr.Suphachai Sukmai
SAMPLE CONDITION	: Normal	FILE CODE	: 223023_WW_December

PARAMETER	UNIT	ANALYSIS METHODS	ND (non-detectable)	STATION	STANDARD ^{1/}
				Effluent Tank : M-910	
Temperature	°C	2550 B	< 0.5	29.8	≤ 40
pH	-	4500-H ⁺ B	< 0.10	7.35	5.5-9.0
Total Dissolved Solids	mg/l	2540 C	< 50	528	≤ 3,000
Total Suspended Solids	mg/l	2540 D	< 5	< 5	≤ 50
TKN	mg/l	4500-N _{org} B	< 0.20	3.4	≤ 100
Sulfate	mg/l	4500-SO ₄ ²⁻ E	< 1.00	50.1	-
Sulfide	mg/l	4500-S ²⁻ F	< 0.20	ND	≤ 1
Fat Oil & Grease	mg/l	5520 B	< 0.50	ND	≤ 5
Phenols	mg/l	5530 B,C	< 0.001	ND	≤ 1
BOD ₅	mg/l	5210 B	< 1.0	1.7	≤ 20
COD	mg/l	5220 D	< 40.00	52.38	≤ 120

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



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(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ๖-239-ก-0004

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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: Thai Tokai Carbon Product Company Limited	REQUEST SERVICE No.	: 1122/66
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING METHOD	: Grab
SAMPLING DATE	: 06/07/2023	SAMPLING TIME	: 08:19
RECEIVED DATE	: 07/07/2023	ANALYTICAL DATE	: 07-15/07/2023
REPORT DATE	: 15/07/2023	SITE OPERATOR	: Mr. Baworn Deechaiya
SAMPLE CONDITION	: Normal	FILE CODE	: 223023_WW_July

PARAMETER	UNIT	ANALYSIS	ND	STATION	STANDARD ^{1/}
		METHODS	(non-detectable)	FGD Filtered Sump(V-701B)	
Temperature	°C	2550 B	< 0.5	34.9	≤ 40
pH	-	4500-H ⁺ B	< 0.10	7.43	5.5-9.0
Total Dissolved Solids	mg/l	2540 C	< 50	2,846	≤ 3,000
Total Suspended Solids	mg/l	2540 D	< 5	18	≤ 50
COD	mg/l	5220 D	< 40.00	< 40.00	≤ 120

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



(Miss Khemchuda Insorn)

Analyst

REG. NO. ๖-239-ค-5976



(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ๖-239-ค-5863

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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: Thai Tokai Carbon Product Company Limited	REQUEST SERVICE No.	: 1274/66
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING METHOD	: Grab
SAMPLING DATE	: 03/08/2023	SAMPLING TIME	: 10:03
RECEIVED DATE	: 04/08/2023	ANALYTICAL DATE	: 04-10/08/2023
REPORT DATE	: 10/08/2023	SITE OPERATOR	: Mr.Thanawut Duansaeng
SAMPLE CONDITION	: Normal	FILE CODE	: 223023_WW_August

PARAMETER	UNIT	ANALYSIS	ND	STATION	STANDARD ^{1/}
		METHODS	(non-detectable)	FGD Filtered Sump(V-701B)	
Temperature	°C	2550 B	< 0.5	34.1	≤ 40
pH	-	4500-H ⁺ B	< 0.10	7.46	5.5-9.0
Total Dissolved Solids	mg/l	2540 C	< 50	2,434	≤ 3,000
Total Suspended Solids	mg/l	2540 D	< 5	18	≤ 50
COD	mg/l	5220 D	< 40.00	< 40.00	≤ 120

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

(Miss Khemchuda Insorn)

Analyst

REG. NO. ๖-239-ค-0005

(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ๖-239-ค-0004

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 3. ^{1/} Notification of the Ministry of Natural Resources and Environment, B.E.2559 (2016).
 4. - Not available.



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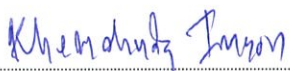
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TEL. (662) 959-3600 FAX (662) 959-3535 Website : secot.co.th E-mail : envserv@secot.co.th

WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: Thai Tokai Carbon Product Company Limited	REQUEST SERVICE No.	: 1564/66
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING METHOD	: Grab
SAMPLING DATE	: 07/09/2023	SAMPLING TIME	: 08:43
RECEIVED DATE	: 08/09/2023	ANALYTICAL DATE	: 08-15/09/2023
REPORT DATE	: 15/09/2023	SITE OPERATOR	: Mr.Tanachot Changlor
SAMPLE CONDITION	: Normal	FILE CODE	: 223023_WW_September

PARAMETER	UNIT	ANALYSIS	ND	STATION	STANDARD ^{1/}
		METHODS	(non-detectable)	FGD Filtered Sump(V-701B)	
Temperature	°C	2550 B	< 0.5	32.9	≤ 40
pH	-	4500-H ⁺ B	< 0.10	6.97	5.5-9.0
Total Dissolved Solids	mg/l	2540 C	< 50	2,536	≤ 3,000
Total Suspended Solids	mg/l	2540 D	< 5	20	≤ 50
COD	mg/l	5220 D	< 40.00	< 40.00	≤ 120

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



(Miss Khemchuda Insorn)

Analyst

REG. NO. ๖-239-ท-0005



(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ๖-239-ท-0004

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WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: Thai Tokai Carbon Product Company Limited	REQUEST SERVICE No.	: 1740/66
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING METHOD	: Grab
SAMPLING DATE	: 05/10/2023	SAMPLING TIME	: 10.35
RECEIVED DATE	: 06/10/2023	ANALYTICAL DATE	: 06-11/10/2023
REPORT DATE	: 12/10/2023	SITE OPERATOR	: Mr.Chanapon Oakkharaplon
SAMPLE CONDITION	: Normal	FILE CODE	: 223023_WW_October

PARAMETER	UNIT	ANALYSIS	ND	STATION	STANDARD ^{1/}
		METHODS	(non-detectable)	FGD Filtered Sump(V-701B)	
Temperature	°C	2550 B	< 0.5	34.0	≤ 40
pH	-	4500-H ⁺ B	< 0.10	7.26	5.5-9.0
Total Dissolved Solids	mg/l	2540 C	< 50	2,164	≤ 3,000
Total Suspended Solids	mg/l	2540 D	< 5	12	≤ 50
COD	mg/l	5220 D	< 40.00	< 40.00	≤ 120

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



(Miss Khemchuda Insorn)

Analyst

REG. NO. ๖-239-ก-0005



(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ๖-239-ก-0004

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

WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: Thai Tokai Carbon Product Company Limited	REQUEST SERVICE No.	: 1893/66
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING METHOD	: Grab
SAMPLING DATE	: 02/11/2023	SAMPLING TIME	: 09:29
RECEIVED DATE	: 03/11/2023	ANALYTICAL DATE	: 03-08/11/2023
REPORT DATE	: 09/11/2023	SITE OPERATOR	: Miss Wiraya Patchimboon
SAMPLE CONDITION	: Normal	FILE CODE	: 223023_WW_November

PARAMETER	UNIT	ANALYSIS	ND	STATION	STANDARD ^{1/}
		METHODS	(non-detectable)	FGD Filtered Sump(V-701B)	
Temperature	°C	2550 B	< 0.5	32.6	≤ 40
pH	-	4500-H ⁺ B	< 0.10	7.54	5.5-9.0
Total Dissolved Solids	mg/l	2540 C	< 50	1,876	≤ 3,000
Total Suspended Solids	mg/l	2540 D	< 5	7	≤ 50
COD	mg/l	5220 D	< 40.00	< 40.00	≤ 120

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

(Miss Khemchuda Insorn)

Analyst

REG. NO. ว-239-ค-0005

(Mrs. Araya Tippiaruk)

Technical Management Team

REG. NO. ว-239-ค-0004

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

WATER AND WASTEWATER ANALYSIS REPORT

CLIENT NAME	: Thai Tokai Carbon Product Company Limited	REQUEST SERVICE No.	: 2112/66
SAMPLING BY	: SECOT Co., Ltd.	SAMPLING METHOD	: Grab
SAMPLING DATE	: 01/12/2023	SAMPLING TIME	: 09:07
RECEIVED DATE	: 02/12/2023	ANALYTICAL DATE	: 02-08/12/2023
REPORT DATE	: 08/12/2023	SITE OPERATOR	: Mr.Suphachai Sukmai
SAMPLE CONDITION	: Normal	FILE CODE	: 223023_WW_December

PARAMETER	UNIT	ANALYSIS	ND (non-detectable)	STATION	STANDARD ^{1/}
		METHODS		FGD Filtered Sump(V-701B)	
Temperature	°C	2550 B	< 0.5	33.4	≤ 40
pH	-	4500-H ⁺ B	< 0.10	7.52	5.5-9.0
Total Dissolved Solids	mg/l	2540 C	< 50	2,482	≤ 3,000
Total Suspended Solids	mg/l	2540 D	< 5	8	≤ 50
COD	mg/l	5220 D	< 40.00	< 40.00	≤ 120

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

(Miss Khemchuda Insorn)

Analyst

REG. NO. ว-239-ก-0005

(Mrs. Araya Tipparuk)

Technical Management Team

REG. NO. ว-239-ก-0004

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 4. - Not available.

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คุณภาพอากาศในสถานประกอบการ



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

ANALYSIS/TEST REPORT

Customer	: EED/SECOT Co., Ltd.	Request Service No.	: 1285/66
For	: Thai Tokai Carbon Product Co., Ltd.	Sampling Date	: 03/08/2023
Address	: 42/2 Moo. 1 Sukhumvit Highway , km 124.5 , Tung-Sukla , Sriracha , Chonburi 20230 , Thailand	Received Date	: 04/08/2023
		Test Date	: 04/08/2023
Tel/Fax	: 0-3835-2487 ext. 5503 / 0-3835-2246-7	Report Date	: 15/08/2023

SAMPLE DESCRIPTION / SAMPLING INFORMATION

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

Sampling Location	Sampling Date/Time	Compound	Analytical Method	ND	RESULT	STANDARD
				ppm	ppm	ppm
บริเวณหน่วยของหอปฏิริยา (Reactor) หน้า หอ 1	03/08/2023 10:40-10:55	Carbon monoxide	NIOSH 6604/NDIR	< 0.04	4.81	50
บริเวณหน่วยของหอปฏิริยา (Reactor) หลัง หอ 1	03/08/2023 10:41-10:56	Carbon monoxide	NIOSH 6604/NDIR	< 0.04	4.67	50
บริเวณหน่วยของหอปฏิริยา (Reactor) หน้า หอ 2	03/08/2023 11:00-11:15	Carbon monoxide	NIOSH 6604/NDIR	< 0.04	7.02	50
บริเวณหน่วยของหอปฏิริยา (Reactor) หลัง หอ 2	03/08/2023 11:01-11:16	Carbon monoxide	NIOSH 6604/NDIR	< 0.04	5.57	50
บริเวณหน่วยของหอปฏิริยา (Reactor) ระหว่าง หอ1 และ หอ2	03/08/2023 11:20-11:35	Carbon monoxide	NIOSH 6604/NDIR	< 0.04	5.41	50

Analyst By :

Sudaporn S.

(Miss Sudaporn Soonthorn)

Approved By :

Narisa Poowasanpet

(Miss Narisa Poowasanpet)

Technical Management Team

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

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

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

ANALYSIS/TEST REPORT

Customer	: EED/SECOT Co., Ltd.	Request Service No.	: 191766
For	: Thai Tokai Carbon Product Co.,Ltd.	Sampling Date	: 02/11/2023
Address	: 42/2 Moo. 1 Sukhumvit Highway , km 124.5 , Tung-Sukla , Sriracha , Chonburi 20230 , Thailand	Received Date	: 04/11/2023
		Test Date	: 06/11/2023
Tel/Fax	: 0-3835-2487 ext. 5503 / 0-3835-2246-7	Report Date	: 09/11/2023

SAMPLE DESCRIPTION / SAMPLING INFORMATION

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

Sampling Location	Sampling Date/Time	Compound	Analytical Method	ND	RESULT	STANDARD
				ppm	ppm	ppm
บริเวณหน่วยของหอปฏิริยา (Reactor) หน้า หอ 1	02/11/2023 10:07-10:22	Carbon monoxide	NIOSH 6604/NDIR	< 0.04	3.28	50
บริเวณหน่วยของหอปฏิริยา (Reactor) หลัง หอ 1	02/11/2023 11:01-11:16	Carbon monoxide	NIOSH 6604/NDIR	< 0.04	3.38	50
บริเวณหน่วยของหอปฏิริยา (Reactor) หน้า หอ 2	02/11/2023 10:24-10:39	Carbon monoxide	NIOSH 6604/NDIR	< 0.04	3.31	50
บริเวณหน่วยของหอปฏิริยา (Reactor) หลัง หอ 2	02/11/2023 11:19-11:34	Carbon monoxide	NIOSH 6604/NDIR	< 0.04	3.51	50
บริเวณหน่วยของหอปฏิริยา (Reactor) ระหว่าง หอ1 และ หอ2	02/11/2023 10:42-10:57	Carbon monoxide	NIOSH 6604/NDIR	< 0.04	3.63	50

Analyst By :

Sudaporn S.

(Miss Sudaporn Soonthorn)

Approved By :

Narisa Poowasanpetch

(Miss Narisa Poowasanpetch)

Technical Management Team

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

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

ANALYSIS/TEST REPORT

Customer	: EED/SECOT Co., Ltd.	Request Service No.	: 1285/66
For	: Thai Tokai Carbon Product Co.,Ltd.	Sampling Date	: 03/08/2023
Address	: 42/2 Moo.1 Sukhumvit Highway , km 124.5 , Tung-Sukla , Sriracha , Chonburi 20230 , Thailand	Received Date	: 04/08/2023
		Test Date	: 11/08/2023
Tel/Fax	: 0-3835-2487 ext. 5503 / 0-3835-2246-7	Report Date	: 15/08/2023

SAMPLE DESCRIPTION / SAMPLING INFORMATION

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

Sampling Location	Sampling Date/Time	Compound	Analytical Method	ND	RESULT	STANDARD
				mg/m ³	mg/m ³	mg/m ³
บริเวณบรรจุภัณฑ์	03/08/2023 09:33-11:33	Total dust	NIOSH 0500 /Microbalance	< 0.25	1.32	15
Packing Paper	03/08/2023 09:40-11:40	Total dust	NIOSH 0500 /Microbalance	< 0.25	4.78	15
ห้องล้างถุง	03/08/2023 09:30-11:30	Total dust	NIOSH 0500 /Microbalance	< 0.25	1.07	15

Analyst By : Phatchara Samanchan
(Miss Phatchara Samanchan)

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

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

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ANALYSIS/TEST REPORT

Customer	: EED/SECOT Co., Ltd.	Request Service No.	: 191766
For	: Thai Tokai Carbon Product Co., Ltd.	Sampling Date	: 02/11/2023
Address	: 42/2 Moo.1 Sukhumvit Highway, km 124.5, Tung-Sukla, Sriracha, Chonburi 20230, Thailand	Received Date	: 04/11/2023
		Test Date	: 06/11/2023
Tel/Fax	: 0-3835-2487 ext. 5503 / 0-3835-2246-7	Report Date	: 09/11/2023

SAMPLE DESCRIPTION / SAMPLING INFORMATION

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

Sampling Location	Sampling Date/Time	Compound	Analytical Method	ND	RESULT	STANDARD
				mg/m ³	mg/m ³	mg/m ³
บริเวณบรรจุภัณฑ์	02/11/2023	Total dust	NIOSH 0500 /Microbalance	< 0.25	1.02	15
	09:34-11:34					
Packing Paper	02/11/2023	Total dust	NIOSH 0500 /Microbalance	< 0.25	3.23	15
	09:32-11:32					
ห้องล้างถุง	02/11/2023	Total dust	NIOSH 0500 /Microbalance	< 0.25	5.22	15
	09:36-11:36					

Analyst By : Phatchara Samanchan
(Miss Phatchara Samanchan)

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

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ระดับเสียงในสถานประกอบการ



Noise Monitoring Result : Working Noise MTR-TCP

Location : Turbine Generator

Monitor Period : Aug 03, 2023

SLM Model : Cirrus CR162B

Serial No : G302740

Site Operator : Mr. Thanawut Duansaeng

Calibrator Model : Cirrus CR:151

Serial No : 94296

Calibration Ref dB(A) : 94.0

Certified Date : Dec 20, 2022

SLM Reading / Adjust dB(A) : 93.5/0.2

Expire Date : Dec 19, 2023

Cal Sheet No.: CR-151-2023-105

Time	Equivalent Sound Pressure Level (dB(A))	
	Aug 03, 2023	
00:00 - 01:00		
01:00 - 02:00		
02:00 - 03:00		
03:00 - 04:00		
04:00 - 05:00		
05:00 - 06:00		
06:00 - 07:00		
07:00 - 08:00		
08:00 - 09:00		
09:00 - 10:00	87.4	
10:00 - 11:00	87.2	
11:00 - 12:00	87.3	
12:00 - 13:00	87.1	
13:00 - 14:00	87.2	
14:00 - 15:00	87.2	
15:00 - 16:00	87.2	
16:00 - 17:00	87.4	
17:00 - 18:00		
18:00 - 19:00		
19:00 - 20:00		
20:00 - 21:00		
21:00 - 22:00		
22:00 - 23:00		
23:00 - 24:00		
Leq(8)*	87.3	
Lmax **	93.5	
Standard-8Hr	90 dB(A)	
Standard-Max	140 dB(A)	

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

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

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Sununta Sirawuttinanon)
Technical Management Team



Noise Monitoring Result : Working Noise MTR-TCP

Location : Air Compressor K-701A

Monitor Period : Aug 03, 2023

SLM Model : SCARLET ST-21D

Serial No : 820727

Site Operator : Mr. Thanawut Duansaeng

Calibrator Model : Cirrus CR:515

Serial No : 94296

Calibration Ref dB(A) : 94.0

Certified Date : Sep 12, 2022

SLM Reading / Adjust dB(A) : 93.7/0.0


Expire Date : Sep 11, 2023


Cal Sheet No.: CR-515-2023-106

Time	Equivalent Sound Pressure Level (dB(A))	
	Aug 03, 2023	
00:00 - 01:00		
01:00 - 02:00		
02:00 - 03:00		
03:00 - 04:00		
04:00 - 05:00		
05:00 - 06:00		
06:00 - 07:00		
07:00 - 08:00		
08:00 - 09:00		
09:00 - 10:00	86.7	
10:00 - 11:00	86.7	
11:00 - 12:00	86.8	
12:00 - 13:00	86.6	
13:00 - 14:00	86.7	
14:00 - 15:00	86.7	
15:00 - 16:00	86.7	
16:00 - 17:00	86.0	
17:00 - 18:00		
18:00 - 19:00		
19:00 - 20:00		
20:00 - 21:00		
21:00 - 22:00		
22:00 - 23:00		
23:00 - 24:00		
Leq(8)*	86.6	
Lmax **	88.4	
Standard-8Hr	90 dB(A)	
Standard-Max	140 dB(A)	

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

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


 (Miss Katesarin Vorradetwittaya)
 Environmental Scientist


 (Miss Sununta Sirawuttinanon)
 Technical Management Team



Noise Monitoring Result : Working Noise MTR-TCP

Location : Air Compressor K-701E
SLM Model : SCARLET ST-21D
Site Operator : Mr. Thanawut Duansaeng

Monitor Period : Aug 03, 2023
Serial No : 820729


Calibrator Model : Cirrus CR:515
Calibration Ref dB(A) : 94.0
SLM Reading / Adjust dB(A) : 93.7/0.0
Cal Sheet No.: CR-515-2023-106


Serial No : 94296
Certified Date : Sep 12, 2022
Expire Date : Sep 11, 2023

Time	Equivalent Sound Pressure Level (dB(A))	
	Aug 03, 2023	
00:00 - 01:00		
01:00 - 02:00		
02:00 - 03:00		
03:00 - 04:00		
04:00 - 05:00		
05:00 - 06:00		
06:00 - 07:00		
07:00 - 08:00		
08:00 - 09:00		
09:00 - 10:00	61.7	
10:00 - 11:00	61.3	
11:00 - 12:00	61.6	
12:00 - 13:00	60.9	
13:00 - 14:00	61.3	
14:00 - 15:00	61.3	
15:00 - 16:00	61.4	
16:00 - 17:00	61.8	
17:00 - 18:00		
18:00 - 19:00		
19:00 - 20:00		
20:00 - 21:00		
21:00 - 22:00		
22:00 - 23:00		
23:00 - 24:00		
Leq(8)*	61.4	
Lmax **	93.1	
Standard-8Hr	90 dB(A)	
Standard-Max	140 dB(A)	

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

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


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Sununta Sirawuttinanon)
Technical Management Team



Noise Monitoring Result : Working Noise MTR-TCP

Location : Blower Compressor K-702B

Monitor Period : Aug 03, 2023

SLM Model : SCARLET ST-21D

Serial No : 820728

Site Operator : Mr. Thanawut Duansaeng

Calibrator Model : Cirrus CR:515

Serial No : 94296

Calibration Ref dB(A) : 94.0

Certified Date : Sep 12, 2022

SLM Reading / Adjust dB(A) : 93.7/0.0

Expire Date : Sep 11, 2023

Cal Sheet No.: CR-515-2023-106

Time	Equivalent Sound Pressure Level (dB(A))	
	Aug 03, 2023	
00:00 - 01:00		
01:00 - 02:00		
02:00 - 03:00		
03:00 - 04:00		
04:00 - 05:00		
05:00 - 06:00		
06:00 - 07:00		
07:00 - 08:00		
08:00 - 09:00		
09:00 - 10:00	88.0	
10:00 - 11:00	87.6	
11:00 - 12:00	87.8	
12:00 - 13:00	87.4	
13:00 - 14:00	87.2	
14:00 - 15:00	87.5	
15:00 - 16:00	87.7	
16:00 - 17:00	87.3	
17:00 - 18:00		
18:00 - 19:00		
19:00 - 20:00		
20:00 - 21:00		
21:00 - 22:00		
22:00 - 23:00		
23:00 - 24:00		
Leq(8)*	87.6	
Lmax **	99.4	
Standard-8Hr	90 dB(A)	
Standard-Max	140 dB(A)	

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

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

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Sununta Sirawuttinanon)
Technical Management Team



Noise Monitoring Result : Working Noise MTR-TCP

Location : Blower Compressor K-702D

Monitor Period : Aug 03, 2023

SLM Model : SCARLET ST-21D

Serial No : 820722

Site Operator : Mr. Thanawut Duansaeng

Calibrator Model : Cirrus CR:515

Serial No : 94296

Calibration Ref dB(A) : 94.0

Certified Date : Sep 12, 2022

SLM Reading / Adjust dB(A) : 93.7/0.0

Expire Date : Sep 11, 2023

Cal Sheet No.: CR-515-2023-106

Time	Equivalent Sound Pressure Level (dB(A))	
	Aug 03, 2023	
00:00 - 01:00		
01:00 - 02:00		
02:00 - 03:00		
03:00 - 04:00		
04:00 - 05:00		
05:00 - 06:00		
06:00 - 07:00		
07:00 - 08:00		
08:00 - 09:00		
09:00 - 10:00	87.5	
10:00 - 11:00	87.0	
11:00 - 12:00	87.4	
12:00 - 13:00	86.7	
13:00 - 14:00	86.7	
14:00 - 15:00	86.8	
15:00 - 16:00	86.8	
16:00 - 17:00	86.9	
17:00 - 18:00		
18:00 - 19:00		
19:00 - 20:00		
20:00 - 21:00		
21:00 - 22:00		
22:00 - 23:00		
23:00 - 24:00		
Leq(8)*	87.0	
Lmax **	113.5	
Standard-8Hr	90 dB(A)	
Standard-Max	140 dB(A)	

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

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

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Sununta Sirawuttinanon)
Technical Management Team



Noise Monitoring Result : Working Noise MTR-TCP

Location : Blower Compressor K-702G

Monitor Period : Aug 03, 2023

SLM Model : SCARLET ST-21D

Serial No : 820731

Site Operator : Mr. Thanawut Duansaeng

Calibrator Model : Cirrus CR:515

Serial No : 94296

Calibration Ref dB(A) : 94.0

Certified Date : Sep 12, 2022

SLM Reading / Adjust dB(A) : 93.7/0.0

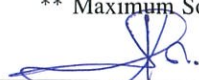
Expire Date : Sep 11, 2023


Cal Sheet No.: CR-515-2023-106

Time	Equivalent Sound Pressure Level (dB(A))	
	Aug 03, 2023	
00:00 - 01:00		
01:00 - 02:00		
02:00 - 03:00		
03:00 - 04:00		
04:00 - 05:00		
05:00 - 06:00		
06:00 - 07:00		
07:00 - 08:00		
08:00 - 09:00		
09:00 - 10:00	89.2	
10:00 - 11:00	89.1	
11:00 - 12:00	89.3	
12:00 - 13:00	89.0	
13:00 - 14:00	88.9	
14:00 - 15:00	89.0	
15:00 - 16:00	89.0	
16:00 - 17:00	89.0	
17:00 - 18:00		
18:00 - 19:00		
19:00 - 20:00		
20:00 - 21:00		
21:00 - 22:00		
22:00 - 23:00		
23:00 - 24:00		
Leq(8)*	89.1	
Lmax **	95.6	
Standard-8Hr	90 dB(A)	
Standard-Max	140 dB(A)	

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

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


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Sununta Sirawuttinanon)
Technical Management Team



Noise Monitoring Result : Working Noise MTR-TCP

Location : Blower Compressor K-702H

Monitor Period : Aug 03, 2023

SLM Model : SCARLET ST-21D

Serial No : 820725

Site Operator : Mr. Thanawut Duansaeng

Calibrator Model : Cirrus CR:515

Serial No : 94296

Calibration Ref dB(A) : 94.0

Certified Date : Sep 12, 2022

SLM Reading / Adjust dB(A) : 93.7/0.0


Expire Date : Sep 11, 2023


Cal Sheet No.: CR-515-2023-106

Time	Equivalent Sound Pressure Level (dB(A))	
	Aug 03, 2023	
00:00 - 01:00		
01:00 - 02:00		
02:00 - 03:00		
03:00 - 04:00		
04:00 - 05:00		
05:00 - 06:00		
06:00 - 07:00		
07:00 - 08:00		
08:00 - 09:00		
09:00 - 10:00	89.1	
10:00 - 11:00	89.0	
11:00 - 12:00	89.1	
12:00 - 13:00	88.9	
13:00 - 14:00	88.8	
14:00 - 15:00	88.9	
15:00 - 16:00	88.9	
16:00 - 17:00	88.9	
17:00 - 18:00		
18:00 - 19:00		
19:00 - 20:00		
20:00 - 21:00		
21:00 - 22:00		
22:00 - 23:00		
23:00 - 24:00		
Leq(8)*	89.0	
Lmax **	95.4	
Standard-8Hr	90 dB(A)	
Standard-Max	140 dB(A)	

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

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


 (Miss Katesarin Vorradetwittaya)
 Environmental Scientist


 (Miss Sununta Sirawuttinanon)
 Technical Management Team



Noise Monitoring Result : Working Noise MTR-TCP

Location : Control Room (CCR)
SLM Model : SCARLET ST-21D
Site Operator : Mr. Thanawut Duansaeng

Monitor Period : Aug 03, 2023
Serial No : 820723

Calibrator Model : Cirrus CR:515
Calibration Ref dB(A) : 94.0
SLM Reading / Adjust dB(A) : 93.7/0.0
Cal Sheet No.: CR-515-2023-106

Serial No : 94296
Certified Date : Sep 12, 2022
Expire Date : Sep 11, 2023

Time	Equivalent Sound Pressure Level (dB(A))	
	Aug 03, 2023	
00:00 - 01:00		
01:00 - 02:00		
02:00 - 03:00		
03:00 - 04:00		
04:00 - 05:00		
05:00 - 06:00		
06:00 - 07:00		
07:00 - 08:00		
08:00 - 09:00		
09:00 - 10:00	63.9	
10:00 - 11:00	64.9	
11:00 - 12:00	64.4	
12:00 - 13:00	62.5	
13:00 - 14:00	64.9	
14:00 - 15:00	64.4	
15:00 - 16:00	67.2	
16:00 - 17:00	68.7	
17:00 - 18:00		
18:00 - 19:00		
19:00 - 20:00		
20:00 - 21:00		
21:00 - 22:00		
22:00 - 23:00		
23:00 - 24:00		
Leq(8)*	65.5	
Lmax **	89.0	
Standard-8Hr	90 dB(A)	
Standard-Max	140 dB(A)	

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

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

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Sununta Sirawuttinanon)
Technical Management Team



Noise Monitoring Result : Working Noise MTR-TCP

Location : Control Room (ECR)

Monitor Period : Aug 03, 2023

SLM Model : Cirrus CR162B

Serial No : G302743

Site Operator : Mr. Thanawut Duansaeng

Calibrator Model : Cirrus CR:151

Serial No : 94296

Calibration Ref dB(A) : 94.0

Certified Date : Dec 20, 2022

SLM Reading / Adjust dB(A) : 93.7/0.0


Expire Date : Dec 19, 2023


Cal Sheet No.: CR-151-2023-105

Time	Equivalent Sound Pressure Level (dB(A))	
	Aug 03, 2023	
00:00 - 01:00		
01:00 - 02:00		
02:00 - 03:00		
03:00 - 04:00		
04:00 - 05:00		
05:00 - 06:00		
06:00 - 07:00		
07:00 - 08:00		
08:00 - 09:00		
09:00 - 10:00	69.0	
10:00 - 11:00	69.8	
11:00 - 12:00	69.5	
12:00 - 13:00	69.0	
13:00 - 14:00	69.4	
14:00 - 15:00	70.1	
15:00 - 16:00	70.6	
16:00 - 17:00	69.1	
17:00 - 18:00		
18:00 - 19:00		
19:00 - 20:00		
20:00 - 21:00		
21:00 - 22:00		
22:00 - 23:00		
23:00 - 24:00		
Leq(8)*	69.6	
Lmax**	92.4	
Standard-8Hr	90 dB(A)	
Standard-Max	140 dB(A)	

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

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


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Sununta Sirawuttinanon)
Technical Management Team



Noise Monitoring Result : Working Noise MTR-TCP

Location : Turbine Generator

Monitor Period : Nov 02, 2023

SLM Model : SCARLET ST-21D

Serial No : 820731

Site Operator : Mr. Watcharakan Pramakhate

Calibrator Model : Cirrus CR:515

Serial No : 94296

Calibration Ref dB(A) : 94.0

Certified Date : Sep 11, 2023

SLM Reading / Adjust dB(A) : 93.8/0.0

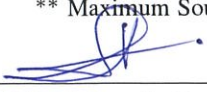
Expire Date : Sep 10, 2024


Cal Sheet No.: CR-515-2023-190

Time	Equivalent Sound Pressure Level (dB(A))	
	Nov 02, 2023	
00:00 - 01:00		
01:00 - 02:00		
02:00 - 03:00		
03:00 - 04:00		
04:00 - 05:00		
05:00 - 06:00		
06:00 - 07:00		
07:00 - 08:00	87.6	
08:00 - 09:00	87.6	
09:00 - 10:00	87.5	
10:00 - 11:00	87.1	
11:00 - 12:00	87.0	
12:00 - 13:00	87.1	
13:00 - 14:00	87.1	
14:00 - 15:00	87.0	
15:00 - 16:00		
16:00 - 17:00		
17:00 - 18:00		
18:00 - 19:00		
19:00 - 20:00		
20:00 - 21:00		
21:00 - 22:00		
22:00 - 23:00		
23:00 - 24:00		
Leq(8)*	87.3	
Lmax **	95.5	
Standard-8Hr	90 dB(A)	
Standard-Max	140 dB(A)	

Remark : * Average time between 07:00-15:00

** Maximum Sound Pressure Level between 07:00-15:00


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Sununta Sirawuttinanon)
Technical Management Team



Noise Monitoring Result : Working Noise MTR-TCP

Location : Air Compressor K-701A

Monitor Period : Nov 02, 2023

SLM Model : Cirrus CR162B

Serial No : G302333

Site Operator : Mr. Watcharakan Pramakhate

Calibrator Model : Cirrus CR:515

Serial No : 94296

Calibration Ref dB(A) : 94.0

Certified Date : Dec 20, 2022

SLM Reading / Adjust dB(A) : 93.7/0.0

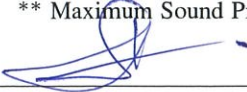
Expire Date : Dec 19, 2023


Cal Sheet No.: CR-515-2023-189

Time	Equivalent Sound Pressure Level (dB(A))	
	Nov 02, 2023	
00:00 - 01:00		
01:00 - 02:00		
02:00 - 03:00		
03:00 - 04:00		
04:00 - 05:00		
05:00 - 06:00		
06:00 - 07:00		
07:00 - 08:00		
08:00 - 09:00	85.8	
09:00 - 10:00	85.7	
10:00 - 11:00	85.4	
11:00 - 12:00	85.2	
12:00 - 13:00	85.0	
13:00 - 14:00	85.0	
14:00 - 15:00	84.9	
15:00 - 16:00	84.9	
16:00 - 17:00		
17:00 - 18:00		
18:00 - 19:00		
19:00 - 20:00		
20:00 - 21:00		
21:00 - 22:00		
22:00 - 23:00		
23:00 - 24:00		
Leq(8)*	85.3	
Lmax **	88.9	
Standard-8Hr	90 dB(A)	
Standard-Max	140 dB(A)	

Remark : * Average time between 08:00-16:00

** Maximum Sound Pressure Level between 08:00-16:00


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Sununta Sirawuttinanon)
Technical Management Team



Noise Monitoring Result : Working Noise MTR-TCP

Location : Air Compressor K-701C

Monitor Period : Nov 02, 2023

SLM Model : Cirrus CR162B

Serial No : G302742

Site Operator : Mr. Watcharakan Pramakhate

Calibrator Model : Cirrus CR:515

Serial No : 94296

Calibration Ref dB(A) : 94.0

Certified Date : Dec 20, 2022

SLM Reading / Adjust dB(A) : 93.7/0.0

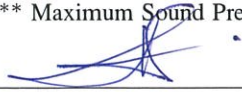
Expire Date : Dec 19, 2023


Cal Sheet No.: CR-515-2023-189

Time	Equivalent Sound Pressure Level (dB(A))	
	Nov 02, 2023	
00:00 - 01:00		
01:00 - 02:00		
02:00 - 03:00		
03:00 - 04:00		
04:00 - 05:00		
05:00 - 06:00		
06:00 - 07:00		
07:00 - 08:00		
08:00 - 09:00	85.0	
09:00 - 10:00	84.9	
10:00 - 11:00	84.9	
11:00 - 12:00	84.7	
12:00 - 13:00	84.4	
13:00 - 14:00	84.3	
14:00 - 15:00	84.3	
15:00 - 16:00	84.3	
16:00 - 17:00		
17:00 - 18:00		
18:00 - 19:00		
19:00 - 20:00		
20:00 - 21:00		
21:00 - 22:00		
22:00 - 23:00		
23:00 - 24:00		
Leq(8)*	84.6	
Lmax **	88.3	
Standard-8Hr	90 dB(A)	
Standard-Max	140 dB(A)	

Remark : * Average time between 08:00-16:00

** Maximum Sound Pressure Level between 08:00-16:00


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Sununta Sirawuttinanon)
Technical Management Team



Noise Monitoring Result : Working Noise MTR-TCP

Location : Blower Compressor K-702C

Monitor Period : Nov 02, 2023

SLM Model : Cirrus CR162B

Serial No : G302741

Site Operator : Mr. Watcharakan Pramakhate

Calibrator Model : Cirrus CR:515

Serial No : 94296

Calibration Ref dB(A) : 94.0

Certified Date : Dec 20, 2022

SLM Reading / Adjust dB(A) : 93.6/0.1


Expire Date : Dec 19, 2023


Cal Sheet No.: CR-515-2023-189

Time	Equivalent Sound Pressure Level (dB(A))	
	Nov 02, 2023	
00:00 - 01:00		
01:00 - 02:00		
02:00 - 03:00		
03:00 - 04:00		
04:00 - 05:00		
05:00 - 06:00		
06:00 - 07:00		
07:00 - 08:00		
08:00 - 09:00	86.3	
09:00 - 10:00	86.3	
10:00 - 11:00	86.3	
11:00 - 12:00	86.3	
12:00 - 13:00	86.2	
13:00 - 14:00	85.8	
14:00 - 15:00	85.9	
15:00 - 16:00	86.0	
16:00 - 17:00		
17:00 - 18:00		
18:00 - 19:00		
19:00 - 20:00		
20:00 - 21:00		
21:00 - 22:00		
22:00 - 23:00		
23:00 - 24:00		
Leq(8)*	86.1	
Lmax **	91.5	
Standard-8Hr	90 dB(A)	
Standard-Max	140 dB(A)	

Remark : * Average time between 08:00-16:00

** Maximum Sound Pressure Level between 08:00-16:00


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Sununta Sirawuttinanon)
Technical Management Team



Noise Monitoring Result : Working Noise MTR-TCP

Location : Blower Compressor K-702G
SLM Model : SCARLET ST-21D
Site Operator : Mr. Watcharakan Pramakhate

Monitor Period : Nov 02, 2023
Serial No : 820723

Calibrator Model : Cirrus CR:515
Calibration Ref dB(A) : 94.0
SLM Reading / Adjust dB(A) : 93.8/0.0
Cal Sheet No.: CR-515-2023-190

Serial No : 94296
Certified Date : Sep 11, 2023
Expire Date : Sep 10, 2024

Time	Equivalent Sound Pressure Level (dB(A))	
	Nov 02, 2023	
00:00 - 01:00		
01:00 - 02:00		
02:00 - 03:00		
03:00 - 04:00		
04:00 - 05:00		
05:00 - 06:00		
06:00 - 07:00		
07:00 - 08:00		
08:00 - 09:00	89.3	
09:00 - 10:00	88.8	
10:00 - 11:00	88.8	
11:00 - 12:00	88.7	
12:00 - 13:00	88.6	
13:00 - 14:00	88.5	
14:00 - 15:00	88.5	
15:00 - 16:00	88.5	
16:00 - 17:00		
17:00 - 18:00		
18:00 - 19:00		
19:00 - 20:00		
20:00 - 21:00		
21:00 - 22:00		
22:00 - 23:00		
23:00 - 24:00		
Leq(8)*	88.7	
Lmax **	95.4	
Standard-8Hr	90 dB(A)	
Standard-Max	140 dB(A)	

Remark : * Average time between 08:00-16:00

** Maximum Sound Pressure Level between 08:00-16:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Sununta Sirawuttinanon)
Technical Management Team



Noise Monitoring Result : Working Noise MTR-TCP

Location : Blower Compressor K-702H
SLM Model : Cirrus CR162B
Site Operator : Mr. Watcharakan Pramakhate

Monitor Period : Nov 02, 2023
Serial No : G302237

Calibrator Model : Cirrus CR:515
Calibration Ref dB(A) : 94.0
SLM Reading / Adjust dB(A) : 93.7/0.0
Cal Sheet No.: CR-515-2023-189

Serial No : 94296
Certified Date : Dec 20, 2022
Expire Date : Dec 19, 2023

Time	Equivalent Sound Pressure Level (dB(A))	
	Nov 02, 2023	
00:00 - 01:00		
01:00 - 02:00		
02:00 - 03:00		
03:00 - 04:00		
04:00 - 05:00		
05:00 - 06:00		
06:00 - 07:00		
07:00 - 08:00		
08:00 - 09:00	89.0	
09:00 - 10:00	88.6	
10:00 - 11:00	88.4	
11:00 - 12:00	88.3	
12:00 - 13:00	88.1	
13:00 - 14:00	87.9	
14:00 - 15:00	88.0	
15:00 - 16:00	88.0	
16:00 - 17:00		
17:00 - 18:00		
18:00 - 19:00		
19:00 - 20:00		
20:00 - 21:00		
21:00 - 22:00		
22:00 - 23:00		
23:00 - 24:00		
Leq(8)*	88.3	
Lmax **	95.4	
Standard-8Hr	90 dB(A)	
Standard-Max	140 dB(A)	

Remark : * Average time between 08:00-16:00

** Maximum Sound Pressure Level between 08:00-16:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Sununta Sirawuttinanon)
Technical Management Team



Noise Monitoring Result : Working Noise MTR-TCP

Location : Control Room (CCR)

Monitor Period : Nov 02, 2023

SLM Model : Cirrus CR162B

Serial No : G302738

Site Operator : Mr. Watcharakan Pramakhate

Calibrator Model : Cirrus CR:515

Serial No : 94296

Calibration Ref dB(A) : 94.0

Certified Date : Dec 20, 2022

SLM Reading / Adjust dB(A) : 93.8/-0.1


Expire Date : Dec 19, 2023


Cal Sheet No.: CR-515-2023-189

Time	Equivalent Sound Pressure Level (dB(A))	
	Nov 02, 2023	
00:00 - 01:00		
01:00 - 02:00		
02:00 - 03:00		
03:00 - 04:00		
04:00 - 05:00		
05:00 - 06:00		
06:00 - 07:00		
07:00 - 08:00		
08:00 - 09:00	63.0	
09:00 - 10:00	65.0	
10:00 - 11:00	64.7	
11:00 - 12:00	63.0	
12:00 - 13:00	61.1	
13:00 - 14:00	62.4	
14:00 - 15:00	62.5	
15:00 - 16:00	63.1	
16:00 - 17:00		
17:00 - 18:00		
18:00 - 19:00		
19:00 - 20:00		
20:00 - 21:00		
21:00 - 22:00		
22:00 - 23:00		
23:00 - 24:00		
Leq(8)*	63.3	
Lmax **	82.7	
Standard-8Hr	90 dB(A)	
Standard-Max	140 dB(A)	

Remark : * Average time between 08:00-16:00

** Maximum Sound Pressure Level between 08:00-16:00


(Miss Katesarin Vorradetwittaya)
Environmental Scientist


(Miss Sununta Sirawuttinanon)
Technical Management Team



Noise Monitoring Result : Working Noise MTR-TCP

Location : Control Room (ECR)
SLM Model : SCARLET ST-21D
Site Operator : Mr. Watcharakan Pramakhate

Monitor Period : Nov 02, 2023
Serial No : 820722

Calibrator Model : Cirrus CR:515
Calibration Ref dB(A) : 94.0
SLM Reading / Adjust dB(A) : 93.8/0.0
Cal Sheet No.: CR-515-2023-190

Serial No : 94296
Certified Date : Sep 11, 2023
Expire Date : Sep 10, 2024

Time	Equivalent Sound Pressure Level (dB(A))	
	Nov 02, 2023	
00:00 - 01:00		
01:00 - 02:00		
02:00 - 03:00		
03:00 - 04:00		
04:00 - 05:00		
05:00 - 06:00		
06:00 - 07:00		
07:00 - 08:00		
08:00 - 09:00	68.9	
09:00 - 10:00	68.5	
10:00 - 11:00	68.6	
11:00 - 12:00	68.3	
12:00 - 13:00	68.2	
13:00 - 14:00	68.7	
14:00 - 15:00	69.2	
15:00 - 16:00	68.9	
16:00 - 17:00		
17:00 - 18:00		
18:00 - 19:00		
19:00 - 20:00		
20:00 - 21:00		
21:00 - 22:00		
22:00 - 23:00		
23:00 - 24:00		
Leq(8)*	68.7	
Lmax **	94.0	
Standard-8Hr	90 dB(A)	
Standard-Max	140 dB(A)	

Remark : * Average time between 08:00-16:00

** Maximum Sound Pressure Level between 08:00-16:00

(Miss Katesarin Vorradetwittaya)
Environmental Scientist

(Miss Sununta Sirawuttinanon)
Technical Management Team