

ภาคผนวก ก

ผลการติดตามตรวจสอบ



ภาคผนวก ก-1

ผลการติดตามตรวจสอบคุณภาพอากาศในบรรยากาศ



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : บ้านสามแยก (A1)
SAMPLE TYPE : AMBIENT
SAMPLING DATE : *, **, ***
SAMPLING TIME : *, **, ***
SAMPLING BY : MR AUSADAWUT YONSIRI
ANALYZED BY : MISS JETJARIN TUMSA-AT
RECEIVED DATE : MAY 30, 2023
ANALYTICAL DATE : MAY 30-JUNE 2, 2023
REPORT NO. : 2023-U046626
WORK NO. : 2023-000327
ANALYSIS NO. : T23AJ987-0001 - T23AJ987-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		
			บ้านสามแยก (A1)		
			* T23AJ987-0001	** T23AJ987-0002	*** T23AJ987-0003
TOTAL SUSPENDED PARTICULATE	mg/m ³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.049	0.045	0.067
PARTICULATE MATTER (≤ 10 µm)	mg/m ³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.013	0.023	0.031
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 10:30 HOUR ON MAY 22, 2023 TO 10:30 HOUR ON MAY 23, 2023.
** : SAMPLING FROM 10:30 HOUR ON MAY 23, 2023 TO 10:30 HOUR ON MAY 24, 2023.
*** : SAMPLING FROM 10:30 HOUR ON MAY 24, 2023 TO 10:30 HOUR ON MAY 25, 2023.

Budsakorn ✓

(MISS BUDSAKORN LERDPANUMAS)
LABORATORY SUPERVISOR

JUNE 14, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : บ้านสามแยก (A1)
SAMPLE TYPE : AMBIENT
SAMPLING DATE : *, **, ***, ****
SAMPLING TIME : *, **, ***, ****
SAMPLING BY : MR AUSADAWUT YONSIRI
ANALYZED BY : MISS JETJARIN TUMSA-AT
RECEIVED DATE : MAY 30, 2023
ANALYTICAL DATE : MAY 30-JUNE 2, 2023
REPORT NO. : 2023-U046628
WORK NO. : 2023-000327
ANALYSIS NO. : T23AJ987-0004 - T23AJ987-0007

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT			
			บ้านสามแยก (A1)			
			*	**	***	****
			T23AJ987-0004	T23AJ987-0005	T23AJ987-0006	T23AJ987-0007
TOTAL SUSPENDED PARTICULATE	mg/m ³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.035	0.063	0.031	0.067
PARTICULATE MATTER (≤ 10 µm)	mg/m ³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.023	0.019	0.021	0.054
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 10:30 HOUR ON MAY 25, 2023 TO 10:30 HOUR ON MAY 26, 2023.
** : SAMPLING FROM 10:30 HOUR ON MAY 26, 2023 TO 10:30 HOUR ON MAY 27, 2023.
*** : SAMPLING FROM 10:30 HOUR ON MAY 27, 2023 TO 10:30 HOUR ON MAY 28, 2023.
**** : SAMPLING FROM 10:30 HOUR ON MAY 28, 2023 TO 10:30 HOUR ON MAY 29, 2023.

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JUNE 14, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : บ้านสวนหลวง (A2)
SAMPLE TYPE : AMBIENT
SAMPLING DATE : *, **, ***
SAMPLING TIME : *, **, ***
SAMPLING BY : MR AUSADAWUT YONSIRI
ANALYZED BY : MISS JETJARIN TUMSA-AT
RECEIVED DATE : MAY 30, 2023
ANALYTICAL DATE : MAY 30-JUNE 2, 2023
REPORT NO. : 2023-U046631
WORK NO. : 2023-000327
ANALYSIS NO. : T23AJ987-0008 - T23AJ987-0010

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		
			บ้านสวนหลวง (A2)		
			* T23AJ987-0008	** T23AJ987-0009	*** T23AJ987-0010
TOTAL SUSPENDED PARTICULATE	mg/m ³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.047	0.089	0.042
PARTICULATE MATTER ($\leq 10 \mu\text{m}$)	mg/m ³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.020	0.026	0.027
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.
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CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : บ้านสวนหลวง (A2)
SAMPLE TYPE : AMBIENT
SAMPLING DATE : *, **, ***, ****
SAMPLING TIME : *, **, ***, ****
SAMPLING BY : MR AUSADAWUT YONSIRI
ANALYZED BY : MISS JETJARIN TUMSA-AT

RECEIVED DATE : MAY 30, 2023
ANALYTICAL DATE : MAY 30-JUNE 2, 2023
REPORT NO. : 2023-U046633
WORK NO. : 2023-000327
ANALYSIS NO. : T23AJ987-0011 - T23AJ987-0014

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT			
			บ้านสวนหลวง (A2)			
			*	**	***	****
			T23AJ987-0011	T23AJ987-0012	T23AJ987-0013	T23AJ987-0014
TOTAL SUSPENDED PARTICULATE	mg/m ³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.071	0.072	0.072	0.054
PARTICULATE MATTER (≤ 10 µm)	mg/m ³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.018	0.028	0.027	0.036
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.
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JUNE 14, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : บ้านนิคมสร้างตนเอง (A3)
SAMPLE TYPE : AMBIENT
SAMPLING DATE : *, **, ***
SAMPLING TIME : *, **, ***
SAMPLING BY : MR AUSADAWUT YONSIRI
ANALYZED BY : MISS JETJARIN TUMSA-AT

RECEIVED DATE : MAY 30, 2023
ANALYTICAL DATE : MAY 30-JUNE 2, 2023
REPORT NO. : 2023-U046636
WORK NO. : 2023-000327
ANALYSIS NO. : T23AJ987-0015 - T23AJ987-0017

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		
			บ้านนิคมสร้างตนเอง (A3)		
			* T23AJ987-0015	** T23AJ987-0016	*** T23AJ987-0017
TOTAL SUSPENDED PARTICULATE	mg/m ³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.034	0.096	0.046
PARTICULATE MATTER (≤ 10 µm)	mg/m ³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.021	0.023	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 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.
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CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
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SAMPLING SOURCE : บ้านนิคมสร้างตนเอง (A3)
SAMPLE TYPE : AMBIENT
SAMPLING DATE : *, **, ***, ****
SAMPLING TIME : *, **, ***, ****
SAMPLING BY : MR AUSADAWUT YONSIRI
ANALYZED BY : MISS JETJARIN TUMSA-AT
RECEIVED DATE : MAY 30, 2023
ANALYTICAL DATE : MAY 30-JUNE 2, 2023
REPORT NO. : 2023-U046638
WORK NO. : 2023-000327
ANALYSIS NO. : T23AJ987-0018 - T23AJ987-0021

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT			
			บ้านนิคมสร้างตนเอง (A3)			
			*	**	***	****
			T23AJ987-0018	T23AJ987-0019	T23AJ987-0020	T23AJ987-0021
TOTAL SUSPENDED PARTICULATE	mg/m ³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.037	0.092	0.042	0.041
PARTICULATE MATTER (≤ 10 µm)	mg/m ³	GRAVIMETRIC (HIGH VOLUME METHOD)	0.025	0.044	0.029	0.027
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.
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**** : SAMPLING FROM 09:30 HOUR ON MAY 28, 2023 TO 09:30 HOUR ON MAY 29, 2023.

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JUNE 14, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : บ้านสามแยก (A1)
SAMPLE TYPE : AMBIENT **RECEIVED DATE** : MAY 30, 2023
SAMPLING DATE : *, **, *** **ANALYTICAL DATE** : MAY 30-JUNE 7, 2023
SAMPLING TIME : *, **, *** **REPORT NO.** : 2023-U046627
SAMPLING BY : MR AUSADAWUT YONSIRI **WORK NO.** : 2023-000327
ANALYZED BY : MISS SUWAN KONGTHONG **ANALYSIS NO.** : T23AJ987-0001 - T23AJ987-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		
			บ้านสามแยก (A1)		
			* T23AJ987-0001	** T23AJ987-0002	*** T23AJ987-0003
HYDROGEN CHLORIDE	mg/m ³	ION CHROMATOGRAPHIC METHOD	< 0.001	< 0.001	< 0.001
SAMPLE CONDITION			COMPLETE	COMPLETE	COMPLETE

REMARK

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.
 * : SAMPLING FROM 10:30 HOUR ON MAY 22, 2023 TO 10:30 HOUR ON MAY 23, 2023.
 ** : SAMPLING FROM 10:30 HOUR ON MAY 23, 2023 TO 10:30 HOUR ON MAY 24, 2023.
 *** : SAMPLING FROM 10:30 HOUR ON MAY 24, 2023 TO 10:30 HOUR ON MAY 25, 2023.

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LABORATORY SUPERVISOR

JUNE 14, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : บ้านสามแยก (A1)
SAMPLE TYPE : AMBIENT
SAMPLING DATE : *, **, ***, ****
SAMPLING TIME : *, **, ***, ****
SAMPLING BY : MR AUSADAWUT YONSIRI
ANALYZED BY : MISS SUWAN KONGTHONG

RECEIVED DATE : MAY 30, 2023
ANALYTICAL DATE : MAY 30-JUNE 7, 2023
REPORT NO. : 2023-U046630
WORK NO. : 2023-000327
ANALYSIS NO. : T23AJ987-0004 - T23AJ987-0007

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT			
			บ้านสามแยก (A1)			
			*	**	***	****
			T23AJ987-0004	T23AJ987-0005	T23AJ987-0006	T23AJ987-0007
HYDROGEN CHLORIDE	mg/m ³	ION CHROMATOGRAPHIC METHOD	< 0.001	< 0.001	< 0.001	< 0.001
SAMPLE CONDITION			COMPLETE	COMPLETE	COMPLETE	COMPLETE

REMARK

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.
 * : SAMPLING FROM 10:30 HOUR ON MAY 25, 2023 TO 10:30 HOUR ON MAY 26, 2023.
 ** : SAMPLING FROM 10:30 HOUR ON MAY 26, 2023 TO 10:30 HOUR ON MAY 27, 2023.
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JUNE 14, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : บ้านสวนหลวง (A2)
SAMPLE TYPE : AMBIENT
SAMPLING DATE : *, **, ***
SAMPLING TIME : *, **, ***
SAMPLING BY : MR AUSADAWUT YONSIRI
ANALYZED BY : MISS SUWAN KONGTHONG
RECEIVED DATE : MAY 30, 2023
ANALYTICAL DATE : MAY 30-JUNE 7, 2023
REPORT NO. : 2023-U046632
WORK NO. : 2023-000327
ANALYSIS NO. : T23AJ987-0008 - T23AJ987-0010

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		
			บ้านสวนหลวง (A2)		
			* T23AJ987-0008	** T23AJ987-0009	*** T23AJ987-0010
HYDROGEN CHLORIDE	mg/m ³	ION CHROMATOGRAPHIC METHOD	< 0.001	< 0.001	< 0.001
SAMPLE CONDITION			COMPLETE	COMPLETE	COMPLETE

REMARK

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.
* : SAMPLING FROM 10:00 HOUR ON MAY 22, 2023 TO 10:00 HOUR ON MAY 23, 2023.
** : SAMPLING FROM 10:00 HOUR ON MAY 23, 2023 TO 10:00 HOUR ON MAY 24, 2023.
*** : SAMPLING FROM 10:00 HOUR ON MAY 24, 2023 TO 10:00 HOUR ON MAY 25, 2023.

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JUNE 14, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : บ้านสวนหลวง (A2)
SAMPLE TYPE : AMBIENT
SAMPLING DATE : *, **, ***, ****
SAMPLING TIME : *, **, ***, ****
SAMPLING BY : MR AUSADAWUT YONSIRI
ANALYZED BY : MISS SUWAN KONGTHONG

RECEIVED DATE : MAY 30, 2023
ANALYTICAL DATE : MAY 30-JUNE 7, 2023
REPORT NO. : 2023-U046635
WORK NO. : 2023-000327
ANALYSIS NO. : T23AJ987-0011 - T23AJ987-0014

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT			
			บ้านสวนหลวง (A2)			
			*	**	***	****
			T23AJ987-0011	T23AJ987-0012	T23AJ987-0013	T23AJ987-0014
HYDROGEN CHLORIDE	mg/m ³	ION CHROMATOGRAPHIC METHOD	< 0.001	< 0.001	< 0.001	< 0.001
SAMPLE CONDITION			COMPLETE	COMPLETE	COMPLETE	COMPLETE

REMARK

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.
* : SAMPLING FROM 10:00 HOUR ON MAY 25, 2023 TO 10:00 HOUR ON MAY 26, 2023.
** : SAMPLING FROM 10:00 HOUR ON MAY 26, 2023 TO 10:00 HOUR ON MAY 27, 2023.
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**** : SAMPLING FROM 10:00 HOUR ON MAY 28, 2023 TO 10:00 HOUR ON MAY 29, 2023.

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LABORATORY SUPERVISOR

JUNE 14, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : บ้านนิคมสร้างตนเอง (A3)
SAMPLE TYPE : AMBIENT
SAMPLING DATE : *, **, ***
SAMPLING TIME : *, **, ***
SAMPLING BY : MR AUSADAWUT YONSIRI
ANALYZED BY : MISS SUWAN KONGTHONG
RECEIVED DATE : MAY 30, 2023
ANALYTICAL DATE : MAY 30-JUNE 7, 2023
REPORT NO. : 2023-U046637
WORK NO. : 2023-000327
ANALYSIS NO. : T23AJ987-0015 - T23AJ987-0017

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		
			บ้านนิคมสร้างตนเอง (A3)		
			* T23AJ987-0015	** T23AJ987-0016	*** T23AJ987-0017
HYDROGEN CHLORIDE	mg/m ³	ION CHROMATOGRAPHIC METHOD	< 0.001	< 0.001	< 0.001
SAMPLE CONDITION			COMPLETE	COMPLETE	COMPLETE

REMARK

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.
* : SAMPLING FROM 09:30 HOUR ON MAY 22, 2023 TO 09:30 HOUR ON MAY 23, 2023.
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JUNE 14, 2023



ANALYSIS REPORT

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ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : บ้านนิคมสร้างตนเอง (A3)
SAMPLE TYPE : AMBIENT
SAMPLING DATE : *, **, ***, ****
SAMPLING TIME : *, **, ***, ****
SAMPLING BY : MR AUSADAWUT YONSIRI
ANALYZED BY : MISS SUWAN KONGTHONG
RECEIVED DATE : MAY 30, 2023
ANALYTICAL DATE : MAY 30-JUNE 7, 2023
REPORT NO. : 2023-U046639
WORK NO. : 2023-000327
ANALYSIS NO. : T23AJ987-0018 - T23AJ987-0021

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT			
			บ้านนิคมสร้างตนเอง (A3)			
			*	**	***	****
			T23AJ987-0018	T23AJ987-0019	T23AJ987-0020	T23AJ987-0021
HYDROGEN CHLORIDE	mg/m ³	ION CHROMATOGRAPHIC METHOD	< 0.001	< 0.001	< 0.001	< 0.001
SAMPLE CONDITION			COMPLETE	COMPLETE	COMPLETE	COMPLETE

REMARK

RESULT : REFERENCE CONDITION IS 25 DEGREE CELSIUS AT 1 ATMOSPHERE.
* : SAMPLING FROM 09:30 HOUR ON MAY 25, 2023 TO 09:30 HOUR ON MAY 26, 2023.
** : SAMPLING FROM 09:30 HOUR ON MAY 26, 2023 TO 09:30 HOUR ON MAY 27, 2023.
*** : SAMPLING FROM 09:30 HOUR ON MAY 27, 2023 TO 09:30 HOUR ON MAY 28, 2023.
**** : SAMPLING FROM 09:30 HOUR ON MAY 28, 2023 TO 09:30 HOUR ON MAY 29, 2023.

Budsakorn ✓

(MISS BUDSAKORN LERDPANUMAS)
LABORATORY SUPERVISOR

JUNE 14, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
MEASURING PLACE : บ้านสวนเกษตร (A1)
MEASURING TYPE : AMBIENT (AIR) **RECEIVED DATE** : MAY 22-29, 2023
MEASURING DATE : MAY 22-29, 2023 **ANALYTICAL DATE** : MAY 22-29, 2023
MEASURING TIME : * **REPORT NO.** : 2023-U044565
MEASURING METHOD : CHEMILUMINESCENCE **WORK NO.** : 2023-000327
MEASURED BY : MR AUSADAWUT YONSIRI **ANALYSIS NO.** : T23AJ987-0001 - T23AJ987-0007

TIME *	RESULT (ppm)		
	NITROGEN DIOXIDE		
	บ้านสวนเกษตร (A1)		
	MAY 22 - 23, 2023 T23AJ987-0001	MAY 23 - 24, 2023 T23AJ987-0002	MAY 24 - 25, 2023 T23AJ987-0003
07:00-08:00 HOUR	0.0243	0.0251	0.0250
08:00-09:00 HOUR	0.0217	0.0216	0.0218
09:00-10:00 HOUR	0.0200	0.0188	0.0189
10:00-11:00 HOUR	0.0198	0.0177	0.0172
11:00-12:00 HOUR	0.0208	0.0175	0.0164
12:00-13:00 HOUR	0.0225	0.0187	0.0163
13:00-14:00 HOUR	0.0252	0.0212	0.0174
14:00-15:00 HOUR	0.0268	0.0245	0.0191
15:00-16:00 HOUR	0.0280	0.0268	0.0214
16:00-17:00 HOUR	0.0277	0.0277	0.0231
17:00-18:00 HOUR	0.0275	0.0273	0.0247
18:00-19:00 HOUR	0.0269	0.0268	0.0255
19:00-20:00 HOUR	0.0262	0.0259	0.0258
20:00-21:00 HOUR	0.0251	0.0248	0.0254
21:00-22:00 HOUR	0.0239	0.0235	0.0255
22:00-23:00 HOUR	0.0236	0.0223	0.0263
23:00-00:00 HOUR	0.0239	0.0214	0.0276
00:00-01:00 HOUR	0.0250	0.0209	0.0284
01:00-02:00 HOUR	0.0253	0.0209	0.0283
02:00-03:00 HOUR	0.0252	0.0219	0.0273
03:00-04:00 HOUR	0.0254	0.0238	0.0264
04:00-05:00 HOUR	0.0267	0.0268	0.0266
05:00-06:00 HOUR	0.0282	0.0284	0.0267
06:00-07:00 HOUR	0.0279	0.0280	0.0255



TIME *	RESULT (ppm)			
	NITROGEN DIOXIDE			
	บ้านสามแยก (A1)			
	MAY 25 - 26, 2023 T23AJ987-0004	MAY 26 - 27, 2023 T23AJ987-0005	MAY 27 - 28, 2023 T23AJ987-0006	MAY 28 - 29, 2023 T23AJ987-0007
07:00-08:00 HOUR	0.0220	0.0240	0.0242	0.0210
08:00-09:00 HOUR	0.0183	0.0204	0.0211	0.0170
09:00-10:00 HOUR	0.0162	0.0174	0.0182	0.0143
10:00-11:00 HOUR	0.0163	0.0157	0.0172	0.0145
11:00-12:00 HOUR	0.0182	0.0149	0.0173	0.0164
12:00-13:00 HOUR	0.0203	0.0150	0.0184	0.0190
13:00-14:00 HOUR	0.0233	0.0168	0.0203	0.0220
14:00-15:00 HOUR	0.0250	0.0190	0.0231	0.0247
15:00-16:00 HOUR	0.0259	0.0212	0.0260	0.0272
16:00-17:00 HOUR	0.0256	0.0222	0.0280	0.0286
17:00-18:00 HOUR	0.0256	0.0231	0.0289	0.0289
18:00-19:00 HOUR	0.0260	0.0228	0.0283	0.0285
19:00-20:00 HOUR	0.0264	0.0220	0.0267	0.0280
20:00-21:00 HOUR	0.0268	0.0198	0.0241	0.0277
21:00-22:00 HOUR	0.0270	0.0181	0.0222	0.0272
22:00-23:00 HOUR	0.0269	0.0170	0.0214	0.0264
23:00-00:00 HOUR	0.0263	0.0165	0.0218	0.0260
00:00-01:00 HOUR	0.0256	0.0159	0.0224	0.0260
01:00-02:00 HOUR	0.0254	0.0158	0.0231	0.0268
02:00-03:00 HOUR	0.0256	0.0171	0.0235	0.0276
03:00-04:00 HOUR	0.0264	0.0197	0.0241	0.0284
04:00-05:00 HOUR	0.0276	0.0234	0.0251	0.0288
05:00-06:00 HOUR	0.0284	0.0259	0.0257	0.0290
06:00-07:00 HOUR	0.0273	0.0265	0.0248	0.0291

(Signature)

(MR. SILA BANJONGJAIKUK)
LABORATORY SUPERVISOR

JUNE 7, 2023

ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
MEASURING PLACE : บ้านสวนหลวง (A2)
MEASURING TYPE : AMBIENT (AIR) **RECEIVED DATE** : MAY 22-29, 2023
MEASURING DATE : MAY 22-29, 2023 **ANALYTICAL DATE** : MAY 22-29, 2023
MEASURING TIME : * **REPORT NO.** : 2023-U044566
MEASURING METHOD : CHEMILUMINESCENCE **WORK NO.** : 2023-000327
MEASURED BY : MR AUSADAWUT YONSIRI **ANALYSIS NO.** : T23AJ987-0008 - T23AJ987-0014

TIME *	RESULT (ppm)		
	NITROGEN DIOXIDE		
	บ้านสวนหลวง (A2)		
	MAY 22 - 23, 2023 T23AJ987-0008	MAY 23 - 24, 2023 T23AJ987-0009	MAY 24 - 25, 2023 T23AJ987-0010
07:00-08:00 HOUR	0.0228	0.0254	0.0218
08:00-09:00 HOUR	0.0198	0.0226	0.0186
09:00-10:00 HOUR	0.0175	0.0203	0.0163
10:00-11:00 HOUR	0.0162	0.0192	0.0161
11:00-12:00 HOUR	0.0167	0.0198	0.0166
12:00-13:00 HOUR	0.0176	0.0215	0.0169
13:00-14:00 HOUR	0.0198	0.0242	0.0180
14:00-15:00 HOUR	0.0219	0.0267	0.0196
15:00-16:00 HOUR	0.0245	0.0283	0.0217
16:00-17:00 HOUR	0.0263	0.0283	0.0235
17:00-18:00 HOUR	0.0273	0.0278	0.0243
18:00-19:00 HOUR	0.0271	0.0274	0.0250
19:00-20:00 HOUR	0.0263	0.0274	0.0250
20:00-21:00 HOUR	0.0257	0.0269	0.0245
21:00-22:00 HOUR	0.0243	0.0259	0.0240
22:00-23:00 HOUR	0.0226	0.0240	0.0231
23:00-00:00 HOUR	0.0206	0.0220	0.0227
00:00-01:00 HOUR	0.0199	0.0194	0.0220
01:00-02:00 HOUR	0.0201	0.0175	0.0215
02:00-03:00 HOUR	0.0217	0.0175	0.0215
03:00-04:00 HOUR	0.0240	0.0196	0.0220
04:00-05:00 HOUR	0.0266	0.0238	0.0233
05:00-06:00 HOUR	0.0280	0.0258	0.0240
06:00-07:00 HOUR	0.0275	0.0257	0.0230



TIME *	RESULT (ppm)			
	NITROGEN DIOXIDE			
	บ้านสวนหลวง (A2)			
	MAY 25 - 26, 2023 T23AJ987-0011	MAY 26 - 27, 2023 T23AJ987-0012	MAY 27 - 28, 2023 T23AJ987-0013	MAY 28 - 29, 2023 T23AJ987-0014
07:00-08:00 HOUR	0.0202	0.0246	0.0229	0.0219
08:00-09:00 HOUR	0.0169	0.0219	0.0201	0.0185
09:00-10:00 HOUR	0.0151	0.0197	0.0175	0.0156
10:00-11:00 HOUR	0.0150	0.0188	0.0161	0.0156
11:00-12:00 HOUR	0.0164	0.0193	0.0159	0.0172
12:00-13:00 HOUR	0.0183	0.0198	0.0162	0.0200
13:00-14:00 HOUR	0.0206	0.0214	0.0180	0.0228
14:00-15:00 HOUR	0.0226	0.0228	0.0204	0.0254
15:00-16:00 HOUR	0.0242	0.0247	0.0233	0.0273
16:00-17:00 HOUR	0.0251	0.0254	0.0250	0.0284
17:00-18:00 HOUR	0.0255	0.0261	0.0258	0.0289
18:00-19:00 HOUR	0.0264	0.0264	0.0266	0.0284
19:00-20:00 HOUR	0.0279	0.0266	0.0269	0.0274
20:00-21:00 HOUR	0.0299	0.0263	0.0266	0.0256
21:00-22:00 HOUR	0.0313	0.0262	0.0248	0.0244
22:00-23:00 HOUR	0.0316	0.0263	0.0225	0.0235
23:00-00:00 HOUR	0.0313	0.0268	0.0205	0.0231
00:00-01:00 HOUR	0.0300	0.0272	0.0193	0.0228
01:00-02:00 HOUR	0.0288	0.0270	0.0187	0.0228
02:00-03:00 HOUR	0.0273	0.0262	0.0190	0.0233
03:00-04:00 HOUR	0.0268	0.0249	0.0203	0.0241
04:00-05:00 HOUR	0.0272	0.0250	0.0233	0.0250
05:00-06:00 HOUR	0.0274	0.0252	0.0251	0.0253
06:00-07:00 HOUR	0.0270	0.0253	0.0253	0.0257

Sila Banjongjairuk

(MR SILA BANJONGJAIKUK)
LABORATORY SUPERVISOR

JUNE 7, 2023

ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
MEASURING PLACE : บ้านนิคมสร้างตนเอง (A3)
MEASURING TYPE : AMBIENT (AIR) **RECEIVED DATE** : MAY 22-29, 2023
MEASURING DATE : MAY 22-29, 2023 **ANALYTICAL DATE** : MAY 22-29, 2023
MEASURING TIME : * **REPORT NO.** : 2023-U044567
MEASURING METHOD : CHEMILUMINESCENCE **WORK NO.** : 2023-000327
MEASURED BY : MR AUSADAWUT YONSIRI **ANALYSIS NO.** : T23AJ987-0015 - T23AJ987-0021

TIME *	RESULT (ppm)		
	NITROGEN DIOXIDE		
	บ้านนิคมสร้างตนเอง (A3)		
	MAY 22 - 23, 2023 T23AJ987-0015	MAY 23 - 24, 2023 T23AJ987-0016	MAY 24 - 25, 2023 T23AJ987-0017
07:00-08:00 HOUR	0.0235	0.0208	0.0244
08:00-09:00 HOUR	0.0211	0.0172	0.0205
09:00-10:00 HOUR	0.0188	0.0151	0.0177
10:00-11:00 HOUR	0.0175	0.0147	0.0165
11:00-12:00 HOUR	0.0165	0.0155	0.0173
12:00-13:00 HOUR	0.0168	0.0172	0.0183
13:00-14:00 HOUR	0.0186	0.0201	0.0205
14:00-15:00 HOUR	0.0213	0.0234	0.0227
15:00-16:00 HOUR	0.0240	0.0259	0.0253
16:00-17:00 HOUR	0.0252	0.0274	0.0270
17:00-18:00 HOUR	0.0249	0.0275	0.0278
18:00-19:00 HOUR	0.0235	0.0273	0.0272
19:00-20:00 HOUR	0.0215	0.0258	0.0253
20:00-21:00 HOUR	0.0196	0.0244	0.0228
21:00-22:00 HOUR	0.0182	0.0225	0.0208
22:00-23:00 HOUR	0.0175	0.0216	0.0196
23:00-00:00 HOUR	0.0174	0.0204	0.0191
00:00-01:00 HOUR	0.0176	0.0200	0.0184
01:00-02:00 HOUR	0.0181	0.0196	0.0179
02:00-03:00 HOUR	0.0192	0.0205	0.0188
03:00-04:00 HOUR	0.0213	0.0221	0.0209
04:00-05:00 HOUR	0.0243	0.0252	0.0240
05:00-06:00 HOUR	0.0256	0.0272	0.0253
06:00-07:00 HOUR	0.0247	0.0274	0.0245



TIME *	RESULT (ppm)			
	NITROGEN DIOXIDE			
	บ้านนิคมสร้างตนเอง (A3)			
	MAY 25 - 26, 2023 T23AJ987-0018	MAY 26 - 27, 2023 T23AJ987-0019	MAY 27 - 28, 2023 T23AJ987-0020	MAY 28 - 29, 2023 T23AJ987-0021
07:00-08:00 HOUR	0.0212	0.0264	0.0205	0.0231
08:00-09:00 HOUR	0.0181	0.0223	0.0176	0.0196
09:00-10:00 HOUR	0.0164	0.0192	0.0160	0.0173
10:00-11:00 HOUR	0.0169	0.0179	0.0163	0.0164
11:00-12:00 HOUR	0.0183	0.0178	0.0170	0.0172
12:00-13:00 HOUR	0.0197	0.0182	0.0183	0.0187
13:00-14:00 HOUR	0.0211	0.0194	0.0199	0.0207
14:00-15:00 HOUR	0.0223	0.0212	0.0221	0.0232
15:00-16:00 HOUR	0.0234	0.0238	0.0241	0.0252
16:00-17:00 HOUR	0.0239	0.0256	0.0258	0.0262
17:00-18:00 HOUR	0.0243	0.0266	0.0267	0.0263
18:00-19:00 HOUR	0.0246	0.0269	0.0273	0.0252
19:00-20:00 HOUR	0.0251	0.0267	0.0275	0.0233
20:00-21:00 HOUR	0.0245	0.0260	0.0276	0.0206
21:00-22:00 HOUR	0.0241	0.0245	0.0273	0.0183
22:00-23:00 HOUR	0.0233	0.0228	0.0264	0.0170
23:00-00:00 HOUR	0.0236	0.0209	0.0248	0.0165
00:00-01:00 HOUR	0.0231	0.0192	0.0237	0.0163
01:00-02:00 HOUR	0.0231	0.0177	0.0227	0.0159
02:00-03:00 HOUR	0.0230	0.0185	0.0227	0.0169
03:00-04:00 HOUR	0.0246	0.0210	0.0233	0.0189
04:00-05:00 HOUR	0.0268	0.0252	0.0248	0.0233
05:00-06:00 HOUR	0.0290	0.0263	0.0260	0.0253
06:00-07:00 HOUR	0.0289	0.0247	0.0254	0.0286

Sila Banjongjairuk

(MR SILA BANJONGJAIKUK)
LABORATORY SUPERVISOR

JUNE 7, 2023

ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
MEASURING PLACE : บ้านนิคมสร้างตนเอง (A3)
MEASURING TYPE : AMBIENT (AIR) **RECEIVED DATE** : MAY 22-29, 2023
MEASURING DATE : MAY 22-29, 2023 **ANALYTICAL DATE** : MAY 22-29, 2023
MEASURING TIME : * **REPORT NO.** : 2023-U044568
MEASURING METHOD : WIND SPEED & WIND DIRECTION EQUIPMENT **WORK NO.** : 2023-000327
MEASURED BY : MR AUSADAWUT YONSIRI **ANALYSIS NO.** : T23AJ987-0015 - T23AJ987-0021

TIME *	RESULT (m/s)					
	บ้านนิคมสร้างตนเอง (A3)					
	MAY 22 - 23, 2023 T23AJ987-0015		MAY 23 - 24, 2023 T23AJ987-0016		MAY 24 - 25, 2023 T23AJ987-0017	
	WIND SPEED	WIND DIRECTION	WIND SPEED	WIND DIRECTION	WIND SPEED	WIND DIRECTION
07:00-08:00 HOUR	0.9	WSW	1.9	SSW	1.7	SSE
08:00-09:00 HOUR	1.0	SW	1.6	SSW	1.3	SSE
09:00-10:00 HOUR	1.6	SW	1.1	SSW	1.0	S
10:00-11:00 HOUR	1.9	WNW	1.0	SW	1.0	SE
11:00-12:00 HOUR	1.9	NW	1.5	W	0.7	S
12:00-13:00 HOUR	2.0	WNW	2.0	SW	0.9	S
13:00-14:00 HOUR	1.9	WSW	2.3	W	0.9	SW
14:00-15:00 HOUR	1.5	S	2.4	SW	1.0	SW
15:00-16:00 HOUR	1.4	S	1.7	SW	1.6	SW
16:00-17:00 HOUR	1.3	S	1.6	SSW	2.0	S
17:00-18:00 HOUR	1.1	S	1.9	SSW	1.8	S
18:00-19:00 HOUR	1.1	S	1.6	SSW	1.8	S
19:00-20:00 HOUR	1.2	SW	1.4	S	1.3	SSE
20:00-21:00 HOUR	0.9	SW	2.0	SW	1.7	SW
21:00-22:00 HOUR	1.5	S	1.7	SSW	1.1	SW
22:00-23:00 HOUR	1.7	SSW	1.7	SSW	0.9	WSW
23:00-00:00 HOUR	1.9	SSE	1.9	WSW	0.9	WNW
00:00-01:00 HOUR	1.8	SSE	1.8	SW	0.9	W
01:00-02:00 HOUR	2.1	S	1.5	SW	0.9	WSW
02:00-03:00 HOUR	2.1	SSW	1.9	SW	0.9	W
03:00-04:00 HOUR	2.3	SW	2.4	SSW	1.1	SW
04:00-05:00 HOUR	2.1	SW	2.5	S	0.8	WNW
05:00-06:00 HOUR	2.2	SSW	2.3	S	0.7	SW
06:00-07:00 HOUR	1.5	SSW	1.9	SSE	1.1	SSW



TIME *	RESULT (m/s)							
	บ้านนิคมสร้างตนเอง (A3)							
	MAY 25 - 26, 2023		MAY 26 - 27, 2023		MAY 27 - 28, 2023		MAY 28 - 29, 2023	
	T23AJ987-0018		T23AJ987-0019		T23AJ987-0020		T23AJ987-0021	
	WIND SPEED	WIND DIRECTION	WIND SPEED	WIND DIRECTION	WIND SPEED	WIND DIRECTION	WIND SPEED	WIND DIRECTION
07:00-08:00 HOUR	0.8	WSW	2.4	SW	1.0	W	2.9	WSW
08:00-09:00 HOUR	1.2	SSE	1.8	SW	1.1	WSW	3.1	S
09:00-10:00 HOUR	1.4	SSE	2.1	SSW	1.7	SSW	2.4	S
10:00-11:00 HOUR	1.7	S	1.7	SW	1.7	SSW	2.9	S
11:00-12:00 HOUR	1.8	S	2.2	SW	1.8	SSW	2.2	S
12:00-13:00 HOUR	1.8	SSW	2.1	SSW	1.7	S	2.1	S
13:00-14:00 HOUR	2.2	S	1.9	SSW	1.9	SW	2.0	S
14:00-15:00 HOUR	2.0	SSW	1.8	S	2.1	SSE	1.9	SSW
15:00-16:00 HOUR	1.9	SSW	2.1	S	2.3	SSE	2.2	SW
16:00-17:00 HOUR	2.3	SSW	1.4	SE	2.3	W	1.8	SSW
17:00-18:00 HOUR	1.5	WSW	1.6	SSE	2.6	W	1.8	SSW
18:00-19:00 HOUR	1.4	SW	2.1	SSE	2.7	W	1.8	S
19:00-20:00 HOUR	0.8	WSW	2.1	SSW	2.6	NW	1.6	W
20:00-21:00 HOUR	0.7	WSW	1.7	SSW	2.2	WSW	1.9	WNW
21:00-22:00 HOUR	0.7	SSE	1.6	S	2.0	WNW	1.7	SW
22:00-23:00 HOUR	1.0	S	1.7	S	1.9	WSW	1.5	WSW
23:00-00:00 HOUR	0.8	SSW	1.6	SSE	2.3	W	2.0	SSE
00:00-01:00 HOUR	0.7	SSE	2.4	S	2.1	W	1.4	S
01:00-02:00 HOUR	0.8	S	1.7	S	1.6	WSW	2.1	SSW
02:00-03:00 HOUR	1.0	SSW	2.3	S	2.0	WSW	1.3	S
03:00-04:00 HOUR	1.3	SSW	1.5	S	1.6	W	2.2	SW
04:00-05:00 HOUR	1.4	SSE	1.1	SSW	2.2	SW	1.9	SW
05:00-06:00 HOUR	2.0	S	0.7	SW	1.5	WSW	1.3	SW
06:00-07:00 HOUR	2.3	SSW	0.9	W	2.3	S	2.4	WSW

Sila Banjongjairuk

(MR SILA BANJONGJAIKUK)
LABORATORY SUPERVISOR

JUNE 7, 2023

ภาคผนวก ก-2

ผลการติดตามตรวจสอบคุณภาพอากาศจากปล่องระบาย



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : THE SIAM INDUSTRIAL WIRE CO., LTD.
SAMPLE TYPE : STACK
SAMPLING DATE : MAY 26, 2023
SAMPLING TIME : 09:30-10:14 HOUR
SAMPLING BY : MR RATTANACHAI LOAMA ว-145-จ-0072
ANALYZED BY : MISS SUWAN KONGTHONG ว-145-ค-0025

RECEIVED DATE : MAY 29, 2023
ANALYTICAL DATE : MAY 29-JUNE 2, 2023
REPORT NO. : 2023-U045194
WORK NO. : 2023-000327
ANALYSIS NO. : T23AJ838-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			ปล่องหม้อไอน้ำ หมายเลข 2 (S1) T23AJ838-0001	
			ACTUAL OXYGEN	7% OXYGEN
TOTAL SUSPENDED PARTICULATE	mg/m ³	ISOKINETIC, GRAVIMETRIC METHOD (US EPA METHOD 5)	5.08	3.99
SAMPLE CONDITION			COMPLETE	

DESCRIPTION	UNIT	RESULT
		ปล่องหม้อไอน้ำ หมายเลข 2 (S1) T23AJ838-0001
AMBIENT PRESSURE	mmHg	758
AMBIENT TEMPERATURE	°C	31.88
STACK TEMPERATURE	°C	142.13
DIAMETER	m	0.4
GAS VELOCITY	m/s	4.68
FLOW RATE	Nm ³ /hr	1,365.53
OXYGEN	%	3.2
MOISTURE	%	9.85
CARBONDIOXIDE	%	10.03
VOLUME OF DRY GAS AT STP	m ³	0.965138

REMARK

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

Budsakorn ✓

(MISS BUDSAKORN LERDPANUMAS)

LABORATORY SUPERVISOR

ว-145-ค-0011

JUNE 9, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : THE SIAM INDUSTRIAL WIRE CO., LTD.
SAMPLE TYPE : STACK
SAMPLING DATE : MAY 26, 2023
SAMPLING TIME : 09:35-09:45 HOUR
SAMPLING BY : MR RATTANACHAI LOAMA ว-145-จ-0072
ANALYZED BY : MR RATTANACHAI LOAMA ว-145-จ-0072

RECEIVED DATE : MAY 26, 2023
ANALYTICAL DATE : MAY 26, 2023
REPORT NO. : 2023-U045195
WORK NO. : 2023-000327
ANALYSIS NO. : T23AJ838-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			ปล่องหม้อไอน้ำ หมายเลข 2 (S1) T23AJ838-0001	
			ACTUAL OXYGEN	7% OXYGEN
SULPHUR DIOXIDE	ppm	PORTABLE ANALYZER, ELECTROCHEMICAL METHOD AT SITE (US EPA METHOD 6C)	< 1	< 1
OXIDES OF NITROGEN AS NITROGEN DIOXIDE	ppm	PORTABLE ANALYZER, ELECTROCHEMICAL METHOD AT SITE (US EPA METHOD 7E)	42	33
CARBON MONOXIDE	ppm	PORTABLE ANALYZER, ELECTROCHEMICAL METHOD AT SITE (US EPA METHOD 10)	83	65
SAMPLE CONDITION			COMPLETE	

DESCRIPTION	UNIT	RESULT
		ปล่องหม้อไอน้ำ หมายเลข 2 (S1) T23AJ838-0001
AMBIENT PRESSURE	mmHg	758
AMBIENT TEMPERATURE	°C	31.88
STACK TEMPERATURE	°C	142.13
DIAMETER	m	0.4
GAS VELOCITY	m/s	4.68
FLOW RATE	Nm³/hr	1,365.53
OXYGEN	%	3.2
MOISTURE	%	9.85
CARBONDIOXIDE	%	10.03
VOLUME OF DRY GAS AT STP	m³	0.965138

REMARK

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

Nattawat.

(MR NATTAWAT DANGSAWAT)
LABORATORY SUPERVISOR

ว-145-ค-0021
JUNE 9, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : THE SIAM INDUSTRIAL WIRE CO., LTD.
SAMPLE TYPE : STACK
SAMPLING DATE : MAY 25, 2023
SAMPLING TIME : 11:10-11:52 HOUR
SAMPLING BY : MR RATTANACHAI LOAMA ๖-145-๖-0072
ANALYZED BY : MISS SUWAN KONGTHONG ๖-145-๓-0025

RECEIVED DATE : MAY 29, 2023
ANALYTICAL DATE : MAY 29-JUNE 2, 2023
REPORT NO. : 2023-U045196
WORK NO. : 2023-000327
ANALYSIS NO. : T23AJ838-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			ปล่อง WET SCRUBBER (S2) T23AJ838-0002
			ACTUAL OXYGEN
HYDROGEN CHLORIDE	mg/m ³	ABSORPTION, ION CHROMATOGRAPHIC METHOD (US EPA METHOD 26A)	0.138
SAMPLE CONDITION			COMPLETE

DESCRIPTION	UNIT	RESULT
		ปล่อง WET SCRUBBER (S2) T23AJ838-0002
AMBIENT PRESSURE	mmHg	758
AMBIENT TEMPERATURE	°C	35.17
STACK TEMPERATURE	°C	30
DIAMETER	m	0.8
GAS VELOCITY	m/s	8.38
FLOW RATE	Nm ³ /hr	14,386.38
OXYGEN	%	20.9
MOISTURE	%	2.26
CARBONDIOXIDE	%	0.1
VOLUME OF DRY GAS AT STP	m ³	0.952411

REMARK

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

Budsakorn ✓

(MISS BUDSAKORN LERDPANUMAS)
LABORATORY SUPERVISOR
๖-145-๓-0011
JUNE 16, 2023



ภาคผนวก ก-3

ผลการติดตามตรวจสอบระดับเสียงทั่วไป



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
MEASURING SOURCE : ริมรั้วโครงการด้านทิศตะวันตก
MEASURING TYPE : AMBIENT (NOISE) **RECEIVED DATE** : MAY 25-28, 2023
MEASURING DATE : MAY 25-28, 2023 **ANALYTICAL DATE** : MAY 25-28, 2023
MEASURING TIME : * **REPORT NO.** : 2023-U044569
MEASURING METHOD : INTEGRATED SOUND LEVEL METER **WORK NO.** : 2023-000327
MEASURED BY : MR AUSADAWUT YONSIRI **ANALYSIS NO.** : T23AJ988-0001 - T23AJ988-0003

TIME*	RESULT dB(A)		
	ริมรั้วโครงการด้านทิศตะวันตก		
	MAY 25 - 26, 2023		
	T23AJ988-0001		
	LAeq 1 hour	LAmx 1 hour	LA90 1 hour
07:00-08:00 HOUR	64.2	78.4	60.8
08:00-09:00 HOUR	62.4	77.5	59.0
09:00-10:00 HOUR	65.1	76.3	59.3
10:00-11:00 HOUR	61.4	75.5	58.4
11:00-12:00 HOUR	60.5	71.5	57.9
12:00-13:00 HOUR	61.1	73.5	58.8
13:00-14:00 HOUR	61.3	71.7	58.8
14:00-15:00 HOUR	61.7	72.9	59.8
15:00-16:00 HOUR	61.2	78.1	59.4
16:00-17:00 HOUR	61.5	74.9	59.2
17:00-18:00 HOUR	60.9	72.8	59.3
18:00-19:00 HOUR	61.4	74.0	59.7
19:00-20:00 HOUR	61.9	72.9	58.7
20:00-21:00 HOUR	59.3	70.0	57.9
21:00-22:00 HOUR	60.4	70.9	58.8
22:00-23:00 HOUR	59.4	69.9	58.2
23:00-00:00 HOUR	59.6	69.9	58.3
00:00-01:00 HOUR	59.3	70.7	58.4
01:00-02:00 HOUR	58.6	71.5	57.5
02:00-03:00 HOUR	58.7	71.1	58.1
03:00-04:00 HOUR	58.4	62.1	57.8
04:00-05:00 HOUR	59.0	64.5	58.3
05:00-06:00 HOUR	59.9	69.9	58.7
06:00-07:00 HOUR	62.0	75.9	59.3
LAeq 24 hours		61.1	



TIME*	RESULT dB(A)		
	ริมรั้วโครงการด้านทิศตะวันตก		
	MAY 26 - 27, 2023		
	T23AJ988-0002		
	L _{Aeq} 1 hour	L _{Amax} 1 hour	L _{A90} 1 hour
07:00-08:00 HOUR	63.8	79.2	60.3
08:00-09:00 HOUR	61.3	79.6	59.0
09:00-10:00 HOUR	62.1	73.1	59.9
10:00-11:00 HOUR	61.6	72.0	59.2
11:00-12:00 HOUR	60.1	72.0	58.1
12:00-13:00 HOUR	60.3	72.4	57.9
13:00-14:00 HOUR	61.5	72.7	59.4
14:00-15:00 HOUR	61.7	74.1	59.2
15:00-16:00 HOUR	61.6	79.2	59.2
16:00-17:00 HOUR	62.5	82.0	59.5
17:00-18:00 HOUR	61.3	74.0	59.5
18:00-19:00 HOUR	61.8	77.6	59.6
19:00-20:00 HOUR	62.1	76.5	59.6
20:00-21:00 HOUR	60.0	73.2	58.7
21:00-22:00 HOUR	59.9	70.6	58.3
22:00-23:00 HOUR	59.1	67.5	57.8
23:00-00:00 HOUR	60.3	72.7	58.6
00:00-01:00 HOUR	59.2	69.9	58.3
01:00-02:00 HOUR	59.2	70.5	58.3
02:00-03:00 HOUR	59.1	64.0	58.4
03:00-04:00 HOUR	67.2	93.0	60.4
04:00-05:00 HOUR	59.1	63.8	58.3
05:00-06:00 HOUR	59.7	71.4	58.4
06:00-07:00 HOUR	61.2	79.1	57.5
L _{Aeq} 24 hours		61.5	

TIME*	RESULT dB(A)		
	ริมรั้วโครงการด้านทิศตะวันตก		
	MAY 27 - 28, 2023		
	T23AJ988-0003		
	LAeq 1 hour	LAmx 1 hour	LA90 1 hour
07:00-08:00 HOUR	63.5	78.8	59.9
08:00-09:00 HOUR	60.5	71.3	58.2
09:00-10:00 HOUR	60.7	71.5	58.7
10:00-11:00 HOUR	61.9	86.0	58.8
11:00-12:00 HOUR	60.5	73.4	58.2
12:00-13:00 HOUR	59.9	70.5	58.1
13:00-14:00 HOUR	61.6	75.4	59.4
14:00-15:00 HOUR	60.8	75.4	58.8
15:00-16:00 HOUR	60.3	72.9	58.2
16:00-17:00 HOUR	60.8	74.9	58.8
17:00-18:00 HOUR	59.7	74.9	58.1
18:00-19:00 HOUR	61.2	76.5	58.4
19:00-20:00 HOUR	61.3	76.7	58.9
20:00-21:00 HOUR	59.5	69.2	58.5
21:00-22:00 HOUR	60.8	81.5	58.7
22:00-23:00 HOUR	59.6	67.8	58.4
23:00-00:00 HOUR	59.9	75.1	58.2
00:00-01:00 HOUR	58.9	64.7	57.8
01:00-02:00 HOUR	59.0	64.9	58.1
02:00-03:00 HOUR	58.1	68.5	56.8
03:00-04:00 HOUR	58.6	68.9	57.8
04:00-05:00 HOUR	58.5	64.9	57.5
05:00-06:00 HOUR	59.9	69.0	58.7
06:00-07:00 HOUR	59.8	72.2	58.3
LAeq 24 hours		60.4	

Sila Banjongjairuk

(MR SILA BANJONGJAIKUK)
LABORATORY SUPERVISOR

JUNE 28, 2023

ANALYSIS REPORT

CUSTOMER NAME	: THE SIAM INDUSTRIAL WIRE CO., LTD.	RECEIVED DATE	: MAY 25-28, 2023
ADDRESS	: 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120	ANALYTICAL DATE	: MAY 25-28, 2023
CONTACT INFORMATION	: TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th	REPORT NO.	: 2023-L044570
MEASURING SOURCE	: โรงรีดเคเบิลการเดินท่อ	WORK NO.	: 2023-000327
MEASURING TYPE	: AMBIENT (NOISE)	ANALYSIS NO.	: T23AJ988-0004 - T23AJ988-0006
MEASURING DATE	: MAY 24-27, 2023		
MEASURING TIME	: *		
MEASURING METHOD	: INTEGRATED SOUND LEVEL METER		
MEASURED BY	: MR AUSADAWUT YONSIRI		

TIME*	RESULT dB(A)		
	โรงรีดเคเบิลการเดินท่อ		
	MAY 25 - 26, 2023		
	T23AJ988-0004		
	L _{Aeq} 1 hour	L _{Amax} 1 hour	L _{A90} 1 hour
07:00-08:00 HOUR	56.4	75.2	53.1
08:00-09:00 HOUR	57.8	71.2	56.2
09:00-10:00 HOUR	58.0	72.9	56.4
10:00-11:00 HOUR	58.9	83.0	56.1
11:00-12:00 HOUR	59.3	74.1	57.3
12:00-13:00 HOUR	57.4	69.9	56.1
13:00-14:00 HOUR	57.4	72.5	55.8
14:00-15:00 HOUR	56.8	70.1	55.3
15:00-16:00 HOUR	61.6	79.2	57.9
16:00-17:00 HOUR	59.8	75.3	57.1
17:00-18:00 HOUR	62.4	80.9	59.1
18:00-19:00 HOUR	62.2	73.2	58.0
19:00-20:00 HOUR	59.2	68.3	56.8
20:00-21:00 HOUR	62.8	73.3	58.1
21:00-22:00 HOUR	60.7	78.7	56.4
22:00-23:00 HOUR	61.1	73.1	56.9
23:00-00:00 HOUR	58.3	74.9	55.5
00:00-01:00 HOUR	61.4	73.7	56.1
01:00-02:00 HOUR	59.5	73.1	56.6
02:00-03:00 HOUR	60.5	79.0	55.5
03:00-04:00 HOUR	63.0	79.0	56.3
04:00-05:00 HOUR	59.4	80.9	55.5
05:00-06:00 HOUR	59.9	76.7	56.3
06:00-07:00 HOUR	58.7	79.2	54.5
L_{Aeq} 24 hours	60.1		



TIME*	RESULT dB(A)		
	ริมรั้วโครงการด้านทิศเหนือ		
	MAY 26 - 27, 2023		
	T23AJ988-0005		
	L _{Aeq} 1 hour	L _{Amax} 1 hour	L _{A90} 1 hour
07:00-08:00 HOUR	56.7	77.1	54.0
08:00-09:00 HOUR	54.7	70.3	52.7
09:00-10:00 HOUR	55.1	62.6	53.3
10:00-11:00 HOUR	55.1	65.9	53.5
11:00-12:00 HOUR	56.9	77.1	53.9
12:00-13:00 HOUR	56.2	69.3	54.8
13:00-14:00 HOUR	56.1	71.7	53.9
14:00-15:00 HOUR	56.3	84.3	52.9
15:00-16:00 HOUR	60.0	73.9	55.0
16:00-17:00 HOUR	60.3	83.2	57.1
17:00-18:00 HOUR	61.1	78.0	56.8
18:00-19:00 HOUR	61.2	79.1	56.7
19:00-20:00 HOUR	62.4	79.6	58.2
20:00-21:00 HOUR	61.2	79.2	57.8
21:00-22:00 HOUR	58.8	79.5	56.1
22:00-23:00 HOUR	59.6	80.5	55.2
23:00-00:00 HOUR	62.3	80.8	57.6
00:00-01:00 HOUR	61.6	81.2	57.5
01:00-02:00 HOUR	64.7	89.1	58.1
02:00-03:00 HOUR	61.4	80.9	57.5
03:00-04:00 HOUR	60.1	81.2	57.5
04:00-05:00 HOUR	62.0	82.0	57.2
05:00-06:00 HOUR	60.7	81.3	57.0
06:00-07:00 HOUR	62.1	80.9	57.5
L _{Aeq} 24 hours		60.3	

TIME*	RESULT dB(A)		
	ริมรั้วโครงการด้านทิศเหนือ		
	MAY 27 - 28, 2023		
	T23AJ988-0006		
	L _{Aeq} 1 hour	L _{Amax} 1 hour	L _{A90} 1 hour
07:00-08:00 HOUR	56.9	74.0	54.2
08:00-09:00 HOUR	56.4	65.8	54.9
09:00-10:00 HOUR	56.0	67.5	54.4
10:00-11:00 HOUR	55.7	64.4	54.3
11:00-12:00 HOUR	55.6	64.9	54.3
12:00-13:00 HOUR	55.6	64.1	53.7
13:00-14:00 HOUR	56.0	70.3	53.7
14:00-15:00 HOUR	55.1	62.9	53.5
15:00-16:00 HOUR	55.7	63.8	53.7
16:00-17:00 HOUR	59.3	80.2	54.1
17:00-18:00 HOUR	61.4	80.4	56.5
18:00-19:00 HOUR	61.8	79.5	56.1
19:00-20:00 HOUR	61.3	78.5	57.1
20:00-21:00 HOUR	62.7	78.8	58.6
21:00-22:00 HOUR	63.2	78.4	58.5
22:00-23:00 HOUR	62.4	80.1	57.7
23:00-00:00 HOUR	62.1	80.7	57.6
00:00-01:00 HOUR	62.2	80.8	58.3
01:00-02:00 HOUR	63.6	80.4	58.2
02:00-03:00 HOUR	60.9	80.8	57.0
03:00-04:00 HOUR	64.2	80.6	59.0
04:00-05:00 HOUR	61.5	80.2	57.7
05:00-06:00 HOUR	58.8	66.9	57.5
06:00-07:00 HOUR	59.6	78.8	57.2
L _{Aeq} 24 hours		60.5	

Sila Banjongjairuk

(MR SILA BANJONGJAIKUK)
LABORATORY SUPERVISOR

JUNE 28, 2023

ภาคผนวก ก-4

ผลการติดตามตรวจสอบคุณภาพน้ำผิวดิน



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : คลองน้ำเย็นก่อนไหลผ่านจุดประภอมการฯ จุดที่ 1 (SW1)
SAMPLE TYPE : SURFACE WATER
SAMPLING DATE : MAY 11, 2023
SAMPLING TIME : 09:40 HOUR
SAMPLING METHOD ° : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY ° : MR KITIPONG SONCHAIYAPHUM
ANALYZED BY : MISS ARIYA THARAROM

RECEIVED DATE : MAY 12, 2023
ANALYTICAL DATE : MAY 12-22, 2023
REPORT NO. : 2023-U039891
WORK NO. : 2023 000327
ANALYSIS NO. : T23AI509-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			SW1 T23AI509-0001		
pH °	-	ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B)	7.6 (25°C)	5.0-9.0	-
ELECTRICAL CONDUCTIVITY °	µmhos/cm	ELECTRICAL CONDUCTIVITY METHOD (SM: 2510 B)	1403 (25°C)	-	0.1
DISSOLVED OXYGEN °	mg/L	AZIDE MODIFICATION METHOD AT SITE (SM: PART 4500-O ₂ C)	4.9	≥ 2.0	0.5
BIOCHEMICAL OXYGEN DEMAND °	mg/L	AZIDE MODIFICATION METHOD (SM: PART 5210 B AND PART 4500-O ₂ C)	16	≤ 4.0	1.0
TOTAL SUSPENDED SOLIDS °	mg/L	TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	9.1	-	5.0
TOTAL DISSOLVED SOLIDS °	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	726	-	25
AMMONIA-NITROGEN °	mg/L NH ₃ -N	DISTILLATION NESSLERIZATION METHOD	ND	≤ 0.5	0.5
NITRATE-NITROGEN °	mg/L NO ₃ -N	CADMIUM REDUCTION METHOD (SM: PART 4500-NO ₃ -E)	0.33	≤ 5.0	0.02
PHENOLS °	mg/L	DISTILLATION, 4-AMINOANTIPYRINE METHOD (SM: PART 5530 B AND PART 5530 C)	ND	≤ 0.005	0.005
FAT, OIL AND GREASE °	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	-	3
METALS					
HEXAVALENT CHROMIUM °	mg/L Cr ⁶⁺	EXTRACTION AND AIR-ACETYLENE FLAME METHOD (SM: PART 3111 C)	ND	≤ 0.05	0.001
COPPER °	mg/L Cu	IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B	< LOQ	≤ 0.1	0.002
IRON °	mg/L Fe	IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B	0.538	-	0.005
LEAD °	mg/L Pb	IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B	ND	≤ 0.05	0.003
TOTAL MERCURY °	mg/L Hg	IN-HOUSE METHOD: UAE.TP.HEM.002 (COLD VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD); SM: PART 3112 B	< LOQ	≤ 0.002	0.0001



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			SW1 T23AI509-0001		
NICKEL ^c	mg/L Ni	IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B	ND	≤ 0.1	0.005
ZINC ^c	mg/L Zn	IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B	0.198	≤ 1.0	0.003
MICROBIOLOGY					
COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221B)	17,000	-	1.8
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR BROWN		

^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

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

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

STANDARDS : SURFACE WATER QUALITY STANDARDS CLASS 4, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD, NO.8, B.E. 2537
ISSUED UNDER THE ENCHANCEMENT AND CONSERVATION OF NATIONAL ENVIRONMENTAL QUALITY ACT, B.E. 2535,
PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL. 111, PART 16, DATED FEBRUARY 24, B.E. 2537 (1994).

CLASS 4 : FAIRLY CLEAN FRESH SURFACE WATER RESOURCES USED FOR :
(1) CONSUMPTION, BUT REQUIRES SPECIAL WATER TREATMENT PROCESS BEFORE USING
(2) INDUSTRY

ND : NON-DETECTABLE.

< LOQ : < LIMIT OF QUANTITATION (COPPER ≥ 0.002 AND < 0.025 mg/L, TOTAL MERCURY ≥ 0.0001 AND < 0.0005 mg/L).

Bhuchonk p.

(MR BHUCHONK PANICHLERTUMPI)
LABORATORY SUPERVISOR

JUNE 29, 2023

ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : คลองน้ำเย็นก่อนไหลผ่านจุดประกอบการฯ จุดที่ 2 (SW2)
SAMPLE TYPE : SURFACE WATER
SAMPLING DATE : MAY 11, 2023
SAMPLING TIME : 10:00 HOUR
SAMPLING METHOD : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY : MR KITIPONG SONCHAIYAPHUM
ANALYZED BY : MISS ARIYA THARAROM

RECEIVED DATE : MAY 12, 2023
ANALYTICAL DATE : MAY 12-23, 2023
REPORT NO. : 2023-U039893
WORK NO. : 2023-000327
ANALYSIS NO. : T23AI509-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			คลองน้ำเย็นก่อนไหลผ่านจุดประกอบการฯ จุดที่ 2 (SW2) T23AI509-0002		
pH ^c	-	ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B)	7.4 (29°C)	5.0-9.0	-
ELECTRICAL CONDUCTIVITY ^c	µmhos/cm	ELECTRICAL CONDUCTIVITY METHOD (SM: 2510 B)	221 (25°C)	-	0.1
DISSOLVED OXYGEN ^c	mg/L	AZIDE MODIFICATION METHOD AT SITE (SM: PART 4500-O C)	5.0	≥ 2.0	0.5
BIOCHEMICAL OXYGEN DEMAND ^c	mg/L	AZIDE MODIFICATION METHOD (SM: PART 5210 B AND PART 4500-O C)	1.0	≤ 4.0	1.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	6.0	-	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	148	-	25
AMMONIA-NITROGEN ^c	mg/L NH ₃ -N	DISTILLATION NESSLERIZATION METHOD	ND	≤ 0.5	0.5
NITRATE-NITROGEN ^c	mg/L NO ₃ -N	CADMIUM REDUCTION METHOD (SM: PART 4500-NO ₃ E)	0.16	≤ 5.0	0.02
PHENOLS ^c	mg/L	DISTILLATION, 4-AMINOANTIPYRINE METHOD (SM: PART 5530 B AND PART 5530 C)	ND	≤ 0.005	0.005
FAT, OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	-	3
METALS					
HEXAVALENT CHROMIUM ^c	mg/L Cr ⁶⁺	EXTRACTION AND AIR-ACETYLENE FLAME METHOD (SM: PART 3111 C)	ND	≤ 0.05	0.001
COPPER ^c	mg/L Cu	IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B	< LOQ	≤ 0.1	0.002
IRON ^c	mg/L Fe	IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B	1.04	-	0.005
LEAD ^c	mg/L Pb	IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B	ND	≤ 0.05	0.003
TOTAL MERCURY ^c	mg/L Hg	IN-HOUSE METHOD: UAE.TP.HEM.002 (COLD VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD); SM: PART 3112 B	ND	≤ 0.002	0.0001



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			คลอโรน้าเป็นก้อนไหลผ่านจุดประกอบการ 1 จุดที่ 2 (SW2) T23A1509-0002		
NICKEL ^c	mg/L Ni	IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B	ND	≤ 0.1	0.005
ZINC ^c	mg/L Zn	IN-HOUSE METHOD: UAE.TP.SW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B	< LOQ	≤ 1.0	0.003
MICROBIOLOGY					
COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B)	840	-	1.8
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR BROWN		

^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

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

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

STANDARDS : SURFACE WATER QUALITY STANDARDS CLASS 4, NOTIFICATION OF THE NATIONAL ENVIRONMENT BOARD, NO.8, B.E. 2537 ISSUED UNDER THE ENCHANCEMENT AND CONSERVATION OF NATIONAL ENVIRONMENTAL QUALITY ACT, B.E. 2535, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL. 111, PART 16, DATED FEBRUARY 24, B.E. 2537 (1994).

CLASS 4 : FAIRLY CLEAN FRESH SURFACE WATER RESOURCES USED FOR :
(1) CONSUMPTION, BUT REQUIRES SPECIAL WATER TREATMENT PROCESS BEFORE USING
(2) INDUSTRY

ND : NON-DETECTABLE.

< LOQ : < LIMIT OF QUANTITATION (COPPER ≥ 0.002 AND < 0.025 mg/L, ZINC ≥ 0.003 AND < 0.025 mg/L).

Bhuchonk p.

(MR BHUCHONK PANICHLERTUMPI)
LABORATORY SUPERVISOR

JUNE 29, 2023

ภาคผนวก ก-5

ผลการติดตามตรวจสอบคุณภาพน้ำทิ้ง



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11, NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : ปล่อยน้ำ POND 1 (บริเวณปล่อยน้ำทิ้ง EFFLUENT)
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : JANUARY 24, 2023
SAMPLING TIME : 13:35 HOUR
SAMPLING METHOD ^c : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY ^c : MR CHAI BUASOD
ANALYZED BY : MISS AMONRAT PUTTALEE

RECEIVED DATE : JANUARY 24, 2023
ANALYTICAL DATE : JANUARY 24-31, 2023
REPORT NO. : 2023-U007792
WORK NO. : 2023-000328
ANALYSIS NO. : T23AB260-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ปล่อยน้ำ POND 1 (บริเวณปล่อยน้ำทิ้ง EFFLUENT) T23AB260-0001		
pH ^c	-	ELECTROMETRIC METHOD AT SITE (SM:4500-H ⁺ B)	6.4 (32°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	MEMBRANE ELECTRODE METHOD (SM: 4500-O G AND 5210 B)	ND	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ^a	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: 5220 D)	ND	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: 2540 D)	ND	≤ 50	5.0
TEMPERATURE ^c	°C	THERMOMETER AT SITE (SM: 2550 B)	32	≤ 40	-
TOTAL DISSOLVED SOLIDS ^b	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: 2540 C)	983	≤ 3,000	25
FAT, OIL AND GREASE ^a	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: 5520 B)	ND	≤ 5	3
PHENOLS ^c	mg/L	DISTILLATION, 4-AMINOANTIPYRINE METHOD (SM: 5530 B AND 5530 D)	ND	≤ 1	0.1
PHOSPHATE ^c	mg/L PO ₄ ³⁻	ASCORBIC ACID METHOD (SM: 4500-P E)	0.40	-	0.03
SULPHATE ^c	mg/L SO ₄ ²⁻	TURBIDIMETRIC METHOD (SM: 4500-SO ₄ ²⁻ E)	16.3	-	0.3
METALS					
TRIVALENT CHROMIUM ^c	mg/L Cr ³⁺	NITRIC ACID DIGESTION, DIRECT AIR ACETYLENE FLAME, COLOURIMETRIC (SM: 3030 E, 3111 B AND 3500-Cr B) AND CALCULATION METHOD	0.010	≤ 0.75	0.007
HEXAVALENT CHROMIUM ^c	mg/L Cr ⁶⁺	COLOURIMETRIC METHOD (SM: 3500-Cr B)	ND	≤ 0.25	0.006
ZINC ^c	mg/L Zn	IN-HOUSE METHOD: UAE.TP.IW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: 3030 E AND 3111 B	0.269	≤ 5.0	0.003
MANGANESE ^c	mg/L Mn	IN-HOUSE METHOD: UAE.TP.IW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: 3030 E AND 3111 B	0.171	≤ 5.0	0.004
IRON ^c	mg/L Fe	IN-HOUSE METHOD: UAE.TP.IW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: 3030 E AND 3111 B	0.122	-	0.005



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ปลายท่อ POND 1 (บริเวณปลายท่อ น้ำทิ้ง EFFLUENT) T23AB260-0001		
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: 9221 E)	2.0	-	1.8
SAMPLE CONDITION					
WATER'S COLOUR/TURBID			COLOURLESS/CLEAR		
SEDIMENT			BROWN		

^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

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

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

REGULATORY STANDARD : INDUSTRIAL EFFLUENT STANDARDS, NOTIFICATION OF THE MINISTRY OF INDUSTRY, B.E. 2560,
PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 134, PART 153 D, DATED JUNE 7, 2017.

ND : NON-DETECTABLE.

Bhuchonk

(MR BHUCHONK PANICHLERTUMPI)
LABORATORY SUPERVISOR

FEBRUARY 6, 2023

ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11, NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : ปลายท่อ POND 1 (บริเวณปลายท่อน้ำทิ้ง EFFLUENT)
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : FEBRUARY 10, 2023
SAMPLING TIME : 13:30 HOUR
SAMPLING METHOD ° : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY ° : MR SETTHAWUT EMKLINBUA
ANALYZED BY : MISS ARIYA THARAROM

RECEIVED DATE : FEBRUARY 11, 2023
ANALYTICAL DATE : FEBRUARY 11-20, 2023
REPORT NO. : 2023-U012652
WORK NO. : 2023-000328
ANALYSIS NO. : T23AC393-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ปลายท่อ POND 1 (บริเวณปลายท่อน้ำทิ้ง EFFLUENT) T23AC393-0001		
pH °	-	ELECTROMETRIC METHOD AT SITE (SM:4500-H ⁺ B)	6.6 (32°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND °	mg/L	MEMBRANE ELECTRODE METHOD (SM: 4500-O G AND 5210 B)	ND	≤ 20	2.0
CHEMICAL OXYGEN DEMAND °	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: 5220 D)	ND	≤ 120	25.0
TOTAL SUSPENDED SOLIDS °	mg/L	TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: 2540 D)	ND	≤ 50	5.0
TEMPERATURE °	°C	THERMOMETER AT SITE (SM: 2550 B)	32	≤ 40	-
TOTAL DISSOLVED SOLIDS °	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: 2540 C)	778	≤ 3,000	25
FAT, OIL AND GREASE °	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: 5520 B)	ND	≤ 5	3
PHENOLS °	mg/L	DISTILLATION, 4-AMINOANTIPYRINE METHOD (SM: 5530 B AND 5530 D)	ND	≤ 1	0.1
PHOSPHATE °	mg/L PO ₄ ³⁻	ASCORBIC ACID METHOD (SM: 4500-P E)	0.31	-	0.03
SULPHATE °	mg/L SO ₄ ²⁻	TURBIDIMETRIC METHOD (SM: 4500-SO ₄ ²⁻ E)	17.9	-	0.3
METALS					
TRIVALENT CHROMIUM °	mg/L Cr ³⁺	NITRIC ACID DIGESTION, DIRECT AIR ACETYLENE FLAME, COLOURIMETRIC (SM: 3030 E, 3111 B AND 3500-Cr B) AND CALCULATION METHOD	ND	≤ 0.75	0.007
HEXAVALENT CHROMIUM °	mg/L Cr ⁶⁺	COLOURIMETRIC METHOD (SM: 3500-Cr B)	ND	≤ 0.25	0.006
ZINC °	mg/L Zn	IN-HOUSE METHOD: UAE.TP.IW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: 3030 E AND 3111 B	0.397	≤ 5.0	0.003
MANGANESE °	mg/L Mn	IN-HOUSE METHOD: UAE.TP.IW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: 3030 E AND 3111 B	0.098	≤ 5.0	0.004



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ปล่อยทิ้ง POND 1 (บริเวณปล่อยทิ้ง น้ำทิ้ง EFFLUENT) T23AC393-0001		
IRON ^c	mg/L Fe	IN-HOUSE METHOD: UAE TP IW 01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: 3030 E AND 3111 B	0.212	-	0.005
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: 9221 E)	49	-	18
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

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23RD EDITION, 2017.

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

REGULATORY STANDARD : INDUSTRIAL EFFLUENT STANDARDS, NOTIFICATION OF THE MINISTRY OF INDUSTRY, B.E. 2560,
PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 134, PART 153 D, DATED JUNE 7, 2017.

ND : NON-DETECTABLE

Benjawan V.

(MISS BENJAWAN VIRIYOTHAI)
LABORATORY SUPERVISOR

FEBRUARY 23, 2023

ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : ปลายท่อ POND 1 (บริเวณปลายท่อน้ำทิ้ง EFFLUENT)
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : MARCH 3, 2023
SAMPLING TIME : 13:30 HOUR
SAMPLING METHOD ° : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY ° : MR RATTANACHAI LOAMA
ANALYZED BY : MISS ARIYA THARAROM

RECEIVED DATE : MARCH 4, 2023
ANALYTICAL DATE : MARCH 4-14, 2023
REPORT NO. : 2023-U018604
WORK NO. : 2023-000328
ANALYSIS NO. : T23AD846-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ปลายท่อ POND 1 (บริเวณปลายท่อน้ำทิ้ง EFFLUENT) T23AD846-0001		
pH °	-	ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B)	6.6 (32°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND °	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	ND	≤ 20	2.0
CHEMICAL OXYGEN DEMAND °	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: PART 5220 D)	ND	≤ 120	25.0
TOTAL SUSPENDED SOLIDS °	mg/L	TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	ND	≤ 50	5.0
TEMPERATURE °	°C	THERMOMETER AT SITE (SM: PART 2550 B)	32	≤ 40	-
TOTAL DISSOLVED SOLIDS ^b	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	1,034	≤ 3,000	25
FAT, OIL AND GREASE °	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 5	3
PHENOLS °	mg/L	DISTILLATION, 4-AMINOANTIPYRINE METHOD (SM: PART 5530 B AND PART 5530 D)	ND	≤ 1	0.1
PHOSPHATE °	mg/L PO ₄ ³⁻	ASCORBIC ACID METHOD (SM: PART 4500-P E)	0.24	-	0.03
SULPHATE °	mg/L SO ₄ ²⁻	TURBIDIMETRIC METHOD (SM: PART 4500 -SO ₄ ²⁻ E)	19.3	-	0.3
METALS					
TRIVALENT CHROMIUM °	mg/L Cr ³⁺	NITRIC ACID DIGESTION, DIRECT AIR ACETYLENE FLAME, COLOURIMETRIC (SM: PART 3030 E, PART 3111 B AND PART 3500-Cr B) AND CALCULATION METHOD	ND	≤ 0.75	0.007
HEXAVALENT CHROMIUM °	mg/L Cr ⁶⁺	COLOURIMETRIC METHOD (SM: PART 3500-Cr B)	ND	≤ 0.25	0.006
ZINC ^a °	mg/L Zn	IN-HOUSE METHOD: UAE.TP.IW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B	2.38	≤ 5.0	0.003
MANGANESE °	mg/L Mn	IN-HOUSE METHOD: UAE.TP.IW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B	0.583	≤ 5.0	0.004



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ปลารวม POND 1 (บริเวณปลารวม) น้ำทิ้ง EFFLUENT T23AD846-0001		
IRON ^c	mg/L Fe	IN-HOUSE METHOD: UAE.TP.IW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B	0.549	-	0.005
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	< 1.8	-	1.8
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

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

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

REGULATORY STANDARD : INDUSTRIAL EFFLUENT STANDARDS, NOTIFICATION OF THE MINISTRY OF INDUSTRY, B.E. 2560,
PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 134, PART 153 D, DATED JUNE 7, 2017.

ND : NON-DETECTABLE.

[^] : SAMPLING AT 11:30 HOUR ON MARCH 22, 2023, ANALYSIS NO. T23AF177-0001 (ANALYTICAL DATE : MARCH 23 - APRIL 3, 2023)

Bhuchonk p.

(MR BHUCHONK PANICHLERTUMPI)
LABORATORY SUPERVISOR

APRIL 18, 2023

ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : ปลายท่อ POND 1 (บริเวณปลายท่อน้ำทิ้ง EFFLUENT)
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : APRIL 7, 2023
SAMPLING TIME : 14:30 HOUR
SAMPLING METHOD : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY : MR RATTANACHAI LOAMA
ANALYZED BY : MISS ARIYA THARAROM

RECEIVED DATE : APRIL 8, 2023
ANALYTICAL DATE : APRIL 8-21, 2023
REPORT NO. : 2023-U029545
WORK NO. : 2023-000328
ANALYSIS NO. : T23AG409-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ปลายท่อ POND 1 (บริเวณปลายท่อน้ำทิ้ง EFFLUENT) T23AG409-0001		
pH °	-	ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H* B)	7.7 (30°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	2.8	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ^c	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: PART 5220 D)	ND	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^c	mg/L	TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	ND	≤ 50	5.0
TEMPERATURE ^c	°C	THERMOMETER AT SITE (SM: PART 2550 B)	30	≤ 40	-
TOTAL DISSOLVED SOLIDS ^b	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	953	≤ 3,000	25
FAT, OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 5	3
PHENOLS ^c	mg/L	DISTILLATION, 4-AMINOANTIPYRINE METHOD (SM: PART 5530 B AND PART 5530 D)	ND	≤ 1	0.1
PHOSPHATE ^c	mg/L PO ₄ ³⁻	ASCORBIC ACID METHOD (SM: PART 4500-P E)	0.46	-	0.03
SULPHATE ^c	mg/L SO ₄ ²⁻	TURBIDIMETRIC METHOD (SM: PART 4500 -SO ₄ ²⁻ E)	21.5	-	0.3
METALS					
TRIVALENT CHROMIUM ^c	mg/L Cr ³⁺	NITRIC ACID DIGESTION, DIRECT AIR ACETYLENE FLAME, COLOURIMETRIC (SM: PART 3030 E, PART 3111 B AND PART 3500-Cr B) AND CALCULATION METHOD	ND	≤ 0.75	0.007
HEXAVALENT CHROMIUM ^c	mg/L Cr ⁶⁺	COLOURIMETRIC METHOD (SM: PART 3500-Cr B)	ND	≤ 0.25	0.006
ZINC ^c	mg/L Zn	IN-HOUSE METHOD: UAE.TP.IW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B	0.306	≤ 5.0	0.003
MANGANESE ^c	mg/L Mn	IN-HOUSE METHOD: UAE.TP.IW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B	0.073	≤ 5.0	0.004



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ปลายท่อ POND 1 (บริเวณปลายท่อ น้ำทิ้ง EFFLUENT) T23AG409-0001		
IRON ^c	mg/L Fe	IN-HOUSE METHOD: UAE.TP.IW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B	0.449	-	0.005
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	33	-	1.8
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

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

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

REGULATORY STANDARD : INDUSTRIAL EFFLUENT STANDARDS, NOTIFICATION OF THE MINISTRY OF INDUSTRY, B.E. 2560,
PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 134, PART 153 D, DATED JUNE 7, 2017.

ND : NON-DETECTABLE.

Benjawan V.

(MISS BENJAWAN VIRIYOTHAI)
LABORATORY SUPERVISOR

APRIL 25, 2023

ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : ปลายท่อ POND 1 (บริเวณปลายท่อน้ำทิ้ง EFFLUENT)
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : MAY 11, 2023
SAMPLING TIME : 13:30 HOUR
SAMPLING METHOD : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY : MR KITIPONG SONCHAIYAPHUM
ANALYZED BY : MISS ARIYA THARAROM

RECEIVED DATE : MAY 12, 2023
ANALYTICAL DATE : MAY 12-23, 2023
REPORT NO. : 2023-U039454
WORK NO. : 2023-000328
ANALYSIS NO. : T23AI507-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ปลายท่อ POND 1 (บริเวณปลายท่อน้ำทิ้ง EFFLUENT) T23AI507-0001		
pH ^c	-	ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B)	7.3 (34°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND ^c	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	ND	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ^c	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: PART 5220 D)	ND	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	8.4	≤ 50	5.0
TEMPERATURE ^c	°C	THERMOMETER AT SITE (SM: PART 2550 B)	34	≤ 40	-
TOTAL DISSOLVED SOLIDS ^b	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	598	≤ 3,000	25
FAT, OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 5	3
PHENOLS ^c	mg/L	DISTILLATION, 4-AMINOANTIPYRINE METHOD (SM: PART 5530 B AND PART 5530 D)	ND	≤ 1	0.1
PHOSPHATE ^c	mg/L PO ₄ ³⁻	ASCORBIC ACID METHOD (SM: PART 4500-P E)	2.30	-	0.03
SULPHATE ^c	mg/L SO ₄ ²⁻	TURBIDIMETRIC METHOD (SM: PART 4500-SO ₄ ²⁻ E)	215	-	0.3
METALS					
TRIVALENT CHROMIUM ^c	mg/L Cr ³⁺	NITRIC ACID DIGESTION, DIRECT AIR ACETYLENE FLAME, COLOURIMETRIC (SM: PART 3030 E, PART 3111 B AND PART 3500-Cr B) AND CALCULATION METHOD	ND	≤ 0.75	0.007
HEXAVALENT CHROMIUM ^c	mg/L Cr ⁶⁺	COLOURIMETRIC METHOD (SM: PART 3500-Cr B)	ND	≤ 0.25	0.006
ZINC ^c	mg/L Zn	IN-HOUSE METHOD: UAE.TP.IW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B	186	≤ 5.0	0.003
MANGANESE ^c	mg/L Mn	IN-HOUSE METHOD: UAE.TP.IW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B	0.191	≤ 5.0	0.004



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ปลายท่อ POND 1 (บริเวณปลายท่อ น้ำทิ้ง EFFLUENT) T23A1507-0001		
IRON ^c	mg/L Fe	IN-HOUSE METHOD: UAE.TP.IW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B	1.25	-	0.005
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA ^{a c}	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	49	-	1.8
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR BROWN		

^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

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

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

REGULATORY STANDARD : INDUSTRIAL EFFLUENT STANDARDS, NOTIFICATION OF THE MINISTRY OF INDUSTRY, B.E. 2560,
PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 134, PART 153 D, DATED JUNE 7, 2017.

ND : NON-DETECTABLE.

^a : SAMPLING AT 14:15 HOUR ON MAY 29, 2023, ANALYSIS NO. T23AJ962-0001 (ANALYTICAL DATE : MAY 30 - JUNE 3, 2023)

Benjawan V.

(MISS BENJAWAN VIRIYOTHAI)
LABORATORY SUPERVISOR

JUNE 16, 2023

ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : ปลายท่อ POND 1 (บริเวณปลายท่อน้ำทิ้ง EFFLUENT)
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : JUNE 12, 2023
SAMPLING TIME : 13:30 HOUR
SAMPLING METHOD ° : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY ° : MR SETTHAWUT EMKLINBUA
ANALYZED BY : MISS AKSARIN BUNKONG

RECEIVED DATE : JUNE 13, 2023
ANALYTICAL DATE : JUNE 13-23, 2023
REPORT NO. : 2023-U051278
WORK NO. : 2023-000328
ANALYSIS NO. : T23AL033-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ปลายท่อ POND 1 (บริเวณปลายท่อน้ำทิ้ง EFFLUENT) T23AL033-0001		
pH °	-	ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H* B)	6.9 (34°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND °	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	3.4	≤ 20	2.0
CHEMICAL OXYGEN DEMAND °	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: PART 5220 D)	ND	≤ 120	25.0
TOTAL SUSPENDED SOLIDS °	mg/L	TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	ND	≤ 50	5.0
TEMPERATURE °	°C	THERMOMETER AT SITE (SM: PART 2550 B)	34	≤ 40	-
TOTAL DISSOLVED SOLIDS °	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	1,108	≤ 3,000	25
FAT, OIL AND GREASE °	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 5	3
PHENOLS °	mg/L	DISTILLATION, 4-AMINOANTIPYRINE METHOD (SM: PART 5530 B AND PART 5530 D)	ND	≤ 1	0.1
PHOSPHATE °	mg/L PO ₄ ³⁻	ASCORBIC ACID METHOD (SM: PART 4500-P E)	0.24	-	0.03
SULPHATE °	mg/L SO ₄ ²⁻	TURBIDIMETRIC METHOD (SM: PART 4500 -SO ₄ ²⁻ E)	23.6	-	0.3
METALS					
TRIVALENT CHROMIUM °	mg/L Cr ³⁺	NITRIC ACID DIGESTION, DIRECT AIR ACETYLENE FLAME, COLOURIMETRIC (SM: PART 3030 E, PART 3111 B AND PART 3500-Cr B) AND CALCULATION METHOD	ND	≤ 0.75	0.007
HEXAVALENT CHROMIUM °	mg/L Cr ⁶⁺	COLOURIMETRIC METHOD (SM: PART 3500-Cr B)	ND	≤ 0.25	0.006
ZINC °	mg/L Zn	IN-HOUSE METHOD: UAE.TP.IW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B	0.141	≤ 5.0	0.003
MANGANESE °	mg/L Mn	IN-HOUSE METHOD: UAE.TP.IW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B	0.078	≤ 5.0	0.004



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ปลายท่อ POND 1 (บริเวณปลายท่อ น้ำทิ้ง EFFLUENT) T23AL033-0001		
IRON ^c	mg/L Fe	IN-HOUSE METHOD: UAE.TP.IW.01 (NITRIC ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD); SM: PART 3030 E AND PART 3111 B	0.129	-	0.005
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	2.0	-	1.8
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

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23rd EDITION, 2017.

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

REGULATORY STANDARD : INDUSTRIAL EFFLUENT STANDARDS, NOTIFICATION OF THE MINISTRY OF INDUSTRY, B.E. 2560,
PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 134, PART 153 D, DATED JUNE 7, 2017

ND : NON-DETECTABLE.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

JUNE 26, 2023

ANALYSIS REPORT

CUSTOMER NAME	: THE SIAM INDUSTRIAL WIRE CO., LTD.	RECEIVED DATE	: JANUARY 24, 2023
ADDRESS	: 160 MOO 11, NONG LALOK BAN KHAI RAYONG 21120	ANALYTICAL DATE	: JANUARY 24-27, 2023
CONTACT INFORMATION	: TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th	REPORT NO.	: 2023-U007793
SAMPLING SOURCE	: EFFLUENT POND	WORK NO.	: 2023-000328
SAMPLE TYPE	: EFFLUENT	ANALYSIS NO.	: T23AB260-0002
SAMPLING DATE	: JANUARY 24, 2023		
SAMPLING TIME	: 13:35 HOUR		
SAMPLING METHOD ^c	: GRAB		
SAMPLING BY ^c	: MR CHAI BUASOD		
ANALYZED BY	: MISS ARIYA THARAROM		

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			EFFLUENT POND T23AB260-0002		
TOTAL DISSOLVED SOLIDS ^b	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: 2540 C)	983	≤ 3,000	25
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR BROWN		

^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.

REGULATORY STANDARD : INDUSTRIAL EFFLUENT STANDARDS, NOTIFICATION OF THE MINISTRY OF INDUSTRY, B.E. 2560,
PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 134, PART 153 D, DATED JUNE 7, 2017.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

FEBRUARY 6, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11, NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : EFFLUENT POND
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : FEBRUARY 10, 2023
SAMPLING TIME : 13:50 HOUR
SAMPLING METHOD ° : GRAB
SAMPLING BY ° : MR SETTHAWUT EMKLINBUA
ANALYZED BY : MISS ARTIYA THARAROM

RECEIVED DATE : FEBRUARY 11, 2023
ANALYTICAL DATE : FEBRUARY 11-16, 2023
REPORT NO. : 2023-U012655
WORK NO. : 2023-000328
ANALYSIS NO. : T23AC393-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			EFFLUENT POND T23AC393-0004		
TOTAL DISSOLVED SOLIDS °	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: 2540 C)	778	≤ 3,000	25
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR YELLOW		

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

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

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

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

REGULATORY STANDARD : INDUSTRIAL EFFLUENT STANDARDS, NOTIFICATION OF THE MINISTRY OF INDUSTRY, B.E. 2560.

PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 134, PART 153 D, DATED JUNE 7, 2017.

Benjawan V.

(MISS BENJAWAN VIRIYOTHAI)
LABORATORY SUPERVISOR

FEBRUARY 23, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11, NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : EFFLUENT POND
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : MARCH 3, 2023
SAMPLING TIME : 13:30 HOUR
SAMPLING METHOD ^c : GRAB
SAMPLING BY ^c : MR RATTANACHAI LOAMA
ANALYZED BY : MISS ARIYA THARAROM

RECEIVED DATE : MARCH 4, 2023
ANALYTICAL DATE : MARCH 4-13, 2023
REPORT NO. : 2023-U018605
WORK NO. : 2023-000328
ANALYSIS NO. : T23AD846-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			EFFLUENT POND T23AD846-0002		
TOTAL DISSOLVED SOLIDS ^b	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	1,034	≤ 3,000	25
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.

REGULATORY STANDARD : INDUSTRIAL EFFLUENT STANDARDS, NOTIFICATION OF THE MINISTRY OF INDUSTRY, B.E. 2560,
PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 134, PART 153 D, DATED JUNE 7, 2017.

Benjawan V.

(MISS BENJAWAN VIRIYOTHAI)
LABORATORY SUPERVISOR

MARCH 17, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : EFFLUENT POND
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : APRIL 7, 2023
SAMPLING TIME : 14:30 HOUR
SAMPLING METHOD ^c : GRAB
SAMPLING BY ^c : MR RATTANACHAI LOAMA
ANALYZED BY : MISS ARIYA THARAROM

RECEIVED DATE : APRIL 8, 2023
ANALYTICAL DATE : APRIL 8-20, 2023
REPORT NO. : 2023-U029546
WORK NO. : 2023-000328
ANALYSIS NO. : T23AG409-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			EFFLUENT POND T23AG409-0002		
TOTAL DISSOLVED SOLIDS ^b	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM. PART 2540 C)	953	≤ 3,000	25
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.

REGULATORY STANDARD : INDUSTRIAL EFFLUENT STANDARDS, NOTIFICATION OF THE MINISTRY OF INDUSTRY, B.E. 2560,
PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 134, PART 153 D, DATED JUNE 7, 2017.

Benjawan V.

(MISS BENJAWAN VIRIYOTHAI)
LABORATORY SUPERVISOR

APRIL 25, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : EFFLUENT POND
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : MAY 11, 2023
SAMPLING TIME : 13:30 HOUR
SAMPLING METHOD ^c : GRAB
SAMPLING BY ^c : MR KITIPONG SONCHAIYAPHUM
ANALYZED BY : MISS ARIYA THARAROM

RECEIVED DATE : MAY 12, 2023
ANALYTICAL DATE : MAY 12-22, 2023
REPORT NO. : 2023-U039456
WORK NO. : 2023-000328
ANALYSIS NO. : T23AI507-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			EFFLUENT POND T23AI507-0003		
TOTAL DISSOLVED SOLIDS ^b	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	598	≤ 3,000	25
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR BROWN		

^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.

REGULATORY STANDARD : INDUSTRIAL EFFLUENT STANDARDS, NOTIFICATION OF THE MINISTRY OF INDUSTRY, B.E. 2560,
PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 134, PART 153 D, DATED JUNE 7, 2017.

Benjawan V.

(MISS BENJAWAN VIRIYOTHAI)
LABORATORY SUPERVISOR

MAY 24, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : EFFLUENT POND
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : JUNE 12, 2023
SAMPLING TIME : 13:30 HOUR
SAMPLING METHOD^c : GRAB
SAMPLING BY^c : MR RATTANACHAI LOAMA
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM
RECEIVED DATE : JUNE 13, 2023
ANALYTICAL DATE : JUNE 13-20, 2023
REPORT NO. : 2023-U051280
WORK NO. : 2023-000328
ANALYSIS NO. : T23AL033-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			EFFLUENT POND T23AL033-0002		
TOTAL DISSOLVED SOLIDS ^b	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM PART 2540 C)	1,108	≤ 3,000	25
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR		

^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.

REGULATORY STANDARD : INDUSTRIAL EFFLUENT STANDARDS, NOTIFICATION OF THE MINISTRY OF INDUSTRY, B.E. 2560,
PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 134, PART 153 D, DATED JUNE 7, 2017.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

JUNE 26, 2023



ภาคผนวก ก-6

ผลการติดตามตรวจสอบคุณภาพดิน



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : -
SAMPLE TYPE : SOIL
SAMPLING DATE : MAY 11, 2023
SAMPLING TIME : 11:00 HOUR
SAMPLING METHOD : UNDISTURBED
SAMPLING BY : MR KITIPONG SONCHAIYAPHUM
ANALYZED BY : MISS CHOMTHANAN APHIPATPAPHA

RECEIVED DATE : MAY 12, 2023
ANALYTICAL DATE : MAY 12-30, 2023
REPORT NO. : 2023-U042339
WORK NO. : 2023-000327
ANALYSIS NO. : T23AI508-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บริเวณพื้นที่สีเขียว ลึกไม่เกิน 5 ซม. (ข้างปอ POND3) T23AI508-0001		
METALS					
CHROMIUM HEXAVALENT (Cr ⁶⁺)	mg/kg	ALKALINE DIGESTION AND COLOURIMETRIC METHOD (US EPA 1996: 3060A AND 1992: 7196A)	ND	≤ 640	0.600
IRON (Fe)	mg/kg	ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD (US EPA 1996: 3050B AND 2007: 7000B)	11,778	-	0.500
TRIVALENT CHROMIUM (Cr ³⁺)	mg/kg	ACID DIGESTION, DIRECT AIR ACETYLENE FLAME, COLOURIMETRIC (US EPA 1996: 3050B, 2007: 7000B AND 1992: 7196A) AND CALCULATION METHOD	9.46	≤ 1,000	0.500
MANGANESE (Mn)	mg/kg	ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD (US EPA 1996: 3050B AND 2007: 7000B)	60.8	≤ 32,000	0.250
ZINC (Zn)	mg/kg	ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD (US EPA 1996: 3050B AND 2007: 7000B)	55.3	≤ 1,000	0.350
SAMPLE CONDITION			BROWN SOIL		

REGULATORY STANDARD : NOTIFICATION OF MINISTRY OF INDUSTRY IN PRESCRIBING THE CRITERIA ON CONTAMINATION IN SOIL AND GROUNDWATER, THE EXAMINATION OF SOIL AND GROUNDWATER QUALITY, INFORMATION INCLUDING MAKING THE REPORT OF THE RESULT OF SOIL AND GROUNDWATER QUALITY EXAMINATION, AND THE REPORT WHICH SHALL BE PROPOSED THE MEASUREMENT TO CONTROL AND REDUCE THE CONTAMINATION IN SOIL AND GROUNDWATER B.E. 2559 (2016), PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL.133, SPECIAL PART 275D DATED NOVEMBER 29, B.E.2559 (2016).

SAMPLE (S) ANALYSED ON AS RECEIVED BASIS. RESULT (S) REPORTED ON A DRY WEIGHT BASIS.
ND : NON-DETECTABLE.



(MR BHUCHONK PANICHLERTUMPI)
LABORATORY SUPERVISOR

MAY 31, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : -
SAMPLE TYPE : SOIL
SAMPLING DATE : MAY 11, 2023
SAMPLING TIME : 11:05 HOUR
SAMPLING METHOD : UNDISTURBED
SAMPLING BY : MR KITIPONG SONCHAIYAPHUM
ANALYZED BY : MISS CHOMTHANAN APHIPATPAPHA
RECEIVED DATE : MAY 12, 2023
ANALYTICAL DATE : MAY 12-30, 2023
REPORT NO. : 2023-U042340
WORK NO. : 2023-000327
ANALYSIS NO. : T23AI508-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บริเวณพื้นที่สีเขียว ลึกไม่เกิน 5 ซม. (ข้างสวน 1 ไร่) T23AI508-0002		
METALS					
CHROMIUM HEXAVALENT (Cr ⁶⁺)	mg/kg	ALKALINE DIGESTION AND COLOURIMETRIC METHOD (US EPA 1996: 3060A AND 1992: 7196A)	ND	≤ 640	0.600
IRON (Fe)	mg/kg	ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD (US EPA 1996: 3050B AND 2007: 7000B)	9,576	-	0.500
TRIVALENT CHROMIUM (Cr ³⁺)	mg/kg	ACID DIGESTION, DIRECT AIR ACETYLENE FLAME, COLOURIMETRIC (US EPA 1996: 3050B, 2007: 7000B AND 1992: 7196A) AND CALCULATION METHOD	12.3	≤ 1,000	0.500
MANGANESE (Mn)	mg/kg	ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD (US EPA 1996: 3050B AND 2007: 7000B)	96.4	≤ 32,000	0.250
ZINC (Zn)	mg/kg	ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD (US EPA 1996: 3050B AND 2007: 7000B)	30.3	≤ 1,000	0.350
SAMPLE CONDITION			BROWN SOIL		

REGULATORY STANDARD : NOTIFICATION OF MINISTRY OF INDUSTRY IN PRESCRIBING THE CRITERIA ON CONTAMINATION IN SOIL AND GROUNDWATER, THE EXAMINATION OF SOIL AND GROUNDWATER QUALITY, INFORMATION INCLUDING MAKING THE REPORT OF THE RESULT OF SOIL AND GROUNDWATER QUALITY EXAMINATION, AND THE REPORT WHICH SHALL BE PROPOSED THE MEASUREMENT TO CONTROL AND REDUCE THE CONTAMINATION IN SOIL AND GROUNDWATER B.E. 2559 (2016), PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL.133, SPECIAL PART 275D DATED NOVEMBER 29, B.E.2559 (2016).

SAMPLE (S) ANALYSED ON AS RECEIVED BASIS. RESULT (S) REPORTED ON A DRY WEIGHT BASIS.
ND : NON-DETECTABLE.



(MR BHUCHONK PANICHLERTUMPI)
LABORATORY SUPERVISOR

MAY 31, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : -
SAMPLE TYPE : SOIL
SAMPLING DATE : MAY 11, 2023
SAMPLING TIME : 11:10 HOUR
SAMPLING METHOD : UNDISTURBED
SAMPLING BY : MR KITIPONG SONCHAIYAPHUM
ANALYZED BY : MISS CHOMTHANAN APHIPATPAPHA
RECEIVED DATE : MAY 12, 2023
ANALYTICAL DATE : MAY 12-30, 2023
REPORT NO. : 2023-U042341
WORK NO. : 2023-000327
ANALYSIS NO. : T23AI508-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บริเวณพื้นที่สีเขียว ลึกไม่เกิน 5 ซม. (ข้างศาลา) T23AI508-0003		
METALS					
CHROMIUM HEXAVALENT (Cr ⁶⁺)	mg/kg	ALKALINE DIGESTION AND COLOURIMETRIC METHOD (US EPA 1996: 3060A AND 1992: 7196A)	ND	≤ 640	0.600
IRON (Fe)	mg/kg	ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD (US EPA 1996: 3050B AND 2007: 7000B)	20,722	-	0.500
TRIVALENT CHROMIUM (Cr ³⁺)	mg/kg	ACID DIGESTION, DIRECT AIR ACETYLENE FLAME, COLOURIMETRIC (US EPA 1996: 3050B, 2007: 7000B AND 1992: 7196A) AND CALCULATION METHOD	24.3	≤ 1,000	0.500
MANGANESE (Mn)	mg/kg	ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD (US EPA 1996: 3050B AND 2007: 7000B)	532	≤ 32,000	0.250
ZINC (Zn)	mg/kg	ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD (US EPA 1996: 3050B AND 2007: 7000B)	27.2	≤ 1,000	0.350
SAMPLE CONDITION			BROWN SOIL		

REGULATORY STANDARD : NOTIFICATION OF MINISTRY OF INDUSTRY IN PRESCRIBING THE CRITERIA ON CONTAMINATION IN SOIL AND GROUNDWATER, THE EXAMINATION OF SOIL AND GROUNDWATER QUALITY, INFORMATION INCLUDING MAKING THE REPORT OF THE RESULT OF SOIL AND GROUNDWATER QUALITY EXAMINATION, AND THE REPORT WHICH SHALL BE PROPOSED THE MEASUREMENT TO CONTROL AND REDUCE THE CONTAMINATION IN SOIL AND GROUNDWATER B.E. 2559 (2016), PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL.133, SPECIAL PART 275D DATED NOVEMBER 29, B.E.2559 (2016).

SAMPLE (S) ANALYSED ON AS RECEIVED BASIS. RESULT (S) REPORTED ON A DRY WEIGHT BASIS.

ND : NON-DETECTABLE.



(MR BHUCHONK PANICHLERTUMPI)
LABORATORY SUPERVISOR

MAY 31, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : -
SAMPLE TYPE : SOIL
SAMPLING DATE : MAY 11, 2023
SAMPLING TIME : 10:40 HOUR
SAMPLING METHOD : UNDISTURBED
SAMPLING BY : MR KITIPONG SONCHAIYAPHUM
ANALYZED BY : MISS CHOMTHANAN APHIPATPAPHA
RECEIVED DATE : MAY 12, 2023
ANALYTICAL DATE : MAY 12-30, 2023
REPORT NO. : 2023-U042342
WORK NO. : 2023-000327
ANALYSIS NO. : T23AI508-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บริเวณพื้นที่สีเขียว ลึกไม่เกิน 5 ซม. (ช่วง LAMP ค่า) T23AI508-0004		
METALS					
CHROMIUM HEXAVALENT (Cr ⁶⁺)	mg/kg	ALKALINE DIGESTION AND COLOURIMETRIC METHOD (US EPA 1996: 3060A AND 1992: 7196A)	ND	≤ 640	0.600
IRON (Fe)	mg/kg	ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD (US EPA 1996: 3050B AND 2007: 7000B)	4,505	-	0.500
TRIVALENT CHROMIUM (Cr ³⁺)	mg/kg	ACID DIGESTION, DIRECT AIR ACETYLENE FLAME, COLOURIMETRIC (US EPA 1996: 3050B, 2007: 7000B AND 1992: 7196A) AND CALCULATION METHOD	3.55	≤ 1,000	0.500
MANGANESE (Mn)	mg/kg	ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD (US EPA 1996: 3050B AND 2007: 7000B)	20.4	≤ 32,000	0.250
ZINC (Zn)	mg/kg	ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD (US EPA 1996: 3050B AND 2007: 7000B)	7.35	≤ 1,000	0.350
SAMPLE CONDITION			BROWN SOIL		

REGULATORY STANDARD : NOTIFICATION OF MINISTRY OF INDUSTRY IN PRESCRIBING THE CRITERIA ON CONTAMINATION IN SOIL AND GROUNDWATER, THE EXAMINATION OF SOIL AND GROUNDWATER QUALITY, INFORMATION INCLUDING MAKING THE REPORT OF THE RESULT OF SOIL AND GROUNDWATER QUALITY EXAMINATION, AND THE REPORT WHICH SHALL BE PROPOSED THE MEASUREMENT TO CONTROL AND REDUCE THE CONTAMINATION IN SOIL AND GROUNDWATER B.E. 2559 (2016), PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL.133, SPECIAL PART 275D DATED NOVEMBER 29, B.E.2559 (2016).

SAMPLE (S) ANALYSED ON AS RECEIVED BASIS. RESULT (S) REPORTED ON A DRY WEIGHT BASIS.

ND : NON-DETECTABLE.



(MR BHUCHONK PANICHLERTUMPI)
LABORATORY SUPERVISOR

MAY 31, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : -
SAMPLE TYPE : SOIL
SAMPLING DATE : MAY 11, 2023
SAMPLING TIME : 10:45 HOUR
SAMPLING METHOD : UNDISTURBED
SAMPLING BY : MR KITIPONG SONCHAIYAPHUM
ANALYZED BY : MISS CHOMTHANAN APHIPATPAPA

RECEIVED DATE : MAY 12, 2023
ANALYTICAL DATE : MAY 12-30, 2023
REPORT NO. : 2023-U042343
WORK NO. : 2023-000327
ANALYSIS NO. : T23AI508-0005

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บริเวณพื้นที่สีเขียว ลึกไม่เกิน 5 ซม. (ข้างสระน้ำหน้า ออฟฟิศ) T23AI508-0005		
METALS					
CHROMIUM HEXAVALENT (Cr ⁶⁺)	mg/kg	ALKALINE DIGESTION AND COLOURIMETRIC METHOD (US EPA 1996: 3060A AND 1992: 7196A)	ND	≤ 640	0.600
IRON (Fe)	mg/kg	ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD (US EPA 1996: 3050B AND 2007: 7000B)	13,896	-	0.500
TRIVALENT CHROMIUM (Cr ³⁺)	mg/kg	ACID DIGESTION, DIRECT AIR ACETYLENE FLAME, COLOURIMETRIC (US EPA 1996: 3050B, 2007: 7000B AND 1992: 7196A) AND CALCULATION METHOD	11.5	≤ 1,000	0.500
MANGANESE (Mn)	mg/kg	ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD (US EPA 1996: 3050B AND 2007: 7000B)	37.5	≤ 32,000	0.250
ZINC (Zn)	mg/kg	ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD (US EPA 1996: 3050B AND 2007: 7000B)	15.2	≤ 1,000	0.350
SAMPLE CONDITION			BROWN SOIL		

REGULATORY STANDARD : NOTIFICATION OF MINISTRY OF INDUSTRY IN PRESCRIBING THE CRITERIA ON CONTAMINATION IN SOIL AND GROUNDWATER, THE EXAMINATION OF SOIL AND GROUNDWATER QUALITY, INFORMATION INCLUDING MAKING THE REPORT OF THE RESULT OF SOIL AND GROUNDWATER QUALITY EXAMINATION, AND THE REPORT WHICH SHALL BE PROPOSED THE MEASUREMENT TO CONTROL AND REDUCE THE CONTAMINATION IN SOIL AND GROUNDWATER B.E. 2559 (2016), PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL.133, SPECIAL PART 275D DATED NOVEMBER 29, B.E.2559 (2016).

SAMPLE(S) ANALYSED ON AS RECEIVED BASIS. RESULT(S) REPORTED ON A DRY WEIGHT BASIS.
ND : NON-DETECTABLE.



(MR BHUCHONK PANICHLERTUMPI)
LABORATORY SUPERVISOR

MAY 31, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : -
SAMPLE TYPE : SOIL
SAMPLING DATE : MAY 11, 2023
SAMPLING TIME : 10:50 HOUR
SAMPLING METHOD : UNDISTURBED
SAMPLING BY : MR KITIPONG SONCHAIYAPHUM
ANALYZED BY : MISS CHOMTHANAN APHIPATPAPHA

RECEIVED DATE : MAY 12, 2023
ANALYTICAL DATE : MAY 12-30, 2023
REPORT NO. : 2023-U042345
WORK NO. : 2023-000327
ANALYSIS NO. : T23AI508-0006

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บริเวณพื้นที่สีเขียว ลึกไม่เกิน 5 ซม. (ข้างอาคารซ่อม บำรุง) T23AI508-0006		
METALS					
CHROMIUM HEXAVALENT (Cr ⁶⁺)	mg/kg	ALKALINE DIGESTION AND COLOURIMETRIC METHOD (US EPA 1996: 3050A AND 1992: 7196A)	ND	≤ 640	0.600
IRON (Fe)	mg/kg	ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD (US EPA 1996: 3050B AND 2007: 7000B)	7.698	-	0.500
TRIVALENT CHROMIUM (Cr ³⁺)	mg/kg	ACID DIGESTION, DIRECT AIR ACETYLENE FLAME, COLOURIMETRIC (US EPA 1996: 3050B, 2007: 7000B AND 1992: 7196A) AND CALCULATION METHOD	10.5	≤ 1,000	0.500
MANGANESE (Mn)	mg/kg	ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD (US EPA 1996: 3050B AND 2007: 7000B)	23.0	≤ 32,000	0.250
ZINC (Zn)	mg/kg	ACID DIGESTION AND DIRECT AIR ACETYLENE FLAME METHOD (US EPA 1996: 3050B AND 2007: 7000B)	68.7	≤ 1,000	0.350
SAMPLE CONDITION			BROWN SOIL		

REGULATORY STANDARD NOTIFICATION OF MINISTRY OF INDUSTRY IN PRESCRIBING THE CRITERIA ON CONTAMINATION IN SOIL AND GROUNDWATER, THE EXAMINATION OF SOIL AND GROUNDWATER QUALITY, INFORMATION INCLUDING MAKING THE REPORT OF THE RESULT OF SOIL AND GROUNDWATER QUALITY EXAMINATION, AND THE REPORT WHICH SHALL BE PROPOSED THE MEASUREMENT TO CONTROL AND REDUCE THE CONTAMINATION IN SOIL AND GROUNDWATER B.E. 2559 (2016), PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL.133, SPECIAL PART 275D DATED NOVEMBER 29, B.E.2559 (2016).

SAMPLE(S) ANALYSED ON AS RECEIVED BASIS. RESULT(S) REPORTED ON A DRY WEIGHT BASIS.

ND : NON-DETECTABLE.



(MR BHUCHONK PANICHLERTUMPI)
LABORATORY SUPERVISOR

MAY 31, 2023



ภาคผนวก ก-7


ผลการติดตามตรวจสอบความร้อนในสถานประกอบการ



ใบรายงานผลการวิเคราะห์

ชื่อลูกค้า : บริษัท สยามลวดเหล็กอุตสาหกรรม จำกัด
ที่อยู่ : 160 หมู่ 11 ตำบลหนองละลอก อำเภอบ้านค่าย จังหวัดระยอง 21120
ข้อมูลผู้ติดต่อ : โทรศัพท์ : 0 3889 2333 EXT. 413 อีเมล : taweesak_a@siw.co.th
สถานที่ตรวจวัด : บริษัท สยามลวดเหล็กอุตสาหกรรม จำกัด
ชนิดตัวอย่าง : ความร้อนภายในสถานประกอบการ
วันที่รับตัวอย่าง : 20 กุมภาพันธ์ 2566
วันที่ตรวจวัด : 20 กุมภาพันธ์ 2566
เวลาที่ตรวจวัด : *
วิธีตรวจวัด : WET BULB GLOBE TEMPERATURE
ผู้ตรวจวัด : นางสาวจินตหรา จินดาแจ้ง
วันที่วิเคราะห์ : 20 กุมภาพันธ์ 2566
วันที่วิเคราะห์ : 20 กุมภาพันธ์ 2566
เลขที่ใบรายงานผล : 2023-U013563
เลขที่งาน : 2023-000327
หมายเลขปฏิบัติการ : T23AD107-0001 - T23AD107-0002

หมายเลขปฏิบัติการ	จุดตรวจวัด	เวลา *	ผลการวิเคราะห์ (องศาเซลเซียส)				
			NWB	DB	GT	WBGT	WBGT AVG
T23AD107-0001	พื้นที่คาบอบไล่ความชื้น (H1) (คุณสมบัติ วิเศษศรี)	13:00-13:40 น.	24.8	32.9	33.3	27.4	25.0
		13:40-15:00 น.	23.3	24.7	25.1	23.8	
T23AD107-0002	พื้นที่หม้อไอน้ำ (H2) (คุณเศกรินทร์ แผนสุวรรณ)	13:03-13:43 น.	25.4	36.4	38.5	29.4	25.8
		13:43-15:03 น.	23.5	25.1	25.5	24.1	



(นายณัฐวัฒน์ แดงสวัสดิ์)
ผู้ควบคุมห้องปฏิบัติการ

24 กุมภาพันธ์ 2566



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
MEASURING PLACE : THE SIAM INDUSTRIAL WIRE CO., LTD.
MEASURING TYPE : WORKPLACE (HEAT STRESS) **RECEIVED DATE** : MAY 25, 2023
MEASURING DATE : MAY 25, 2023 **ANALYTICAL DATE** : MAY 25, 2023
MEASURING TIME : * **REPORT NO.** : 2023-U044758
MEASURING EQUIPMENT : WET BULB GLOBE TEMPERATURE **WORK NO.** : 2023-000327
MEASURED BY : MISS PATJIRA KADEEPISAN **ANALYSIS NO.** : T23AJ861-0001 - T23AJ861-0002

ANALYSIS NO.	MEASURING SITE	DURATION TIME*	RESULT (DEGREE CELSIUS)				
			NWB	DB	GT	WBGT	WBGT AVG
T23AJ861-0001	พื้นที่เดาโลบความชื้น (H1) (อุตสาหกรรมโรงโม่หิน)	10:00-10:40 HOUR	27.7	33.9	34.1	29.6	24.5
		10:40-12:00 HOUR	19.8	27.2	27.3	22.0	
T23AJ861-0002	พื้นที่หม้อไอน้ำ (H2) (อุตสาหกรรมโรงไฟฟ้า)	10:05-10:45 HOUR	28.7	36.2	38.0	31.5	25.3
		10:45-12:05 HOUR	20.2	26.8	27.0	22.3	

Nattawat

(MR NATTAWAT DANGSAWAT)
LABORATORY SUPERVISOR

JUNE 13, 2023



ภาคผนวก ก-8

ผลการติดตามตรวจสอบคุณภาพอากาศในสถานประกอบการ



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11, NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : PC STRAND (KM 1, 2)
SAMPLE TYPE : WORKPLACE
SAMPLING DATE : FEBRUARY 20, 2023
SAMPLING TIME : 09:15-17:15 HOUR
SAMPLING BY : MISS SUPAWADEE INYASI
ANALYZED BY : MISS JETJARIN TUMSA-AT
RECEIVED DATE : FEBRUARY 22, 2023
ANALYTICAL DATE : FEBRUARY 22-24, 2023
REPORT NO. : 2023-U014851
WORK NO. : 2023-000327
ANALYSIS NO. : T23AD105-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			PC STRAND (KM 1, 2) T23AD105-0001
TOTAL DUST ^b	mg/m ³	GRAVIMETRIC METHOD (NIOSH METHOD 0500)	0.068
RESPIRABLE DUST ^a	mg/m ³	GRAVIMETRIC METHOD (NIOSH METHOD 0600)	0.021
SAMPLE CONDITION			COMPLETE

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

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

REMARK

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

Budsakorn ✓

(MISS BUDSAKORN LERDPANUMAS)
LABORATORY SUPERVISOR

MARCH 3, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11, NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : PC WIRE (DRG 6, 2)
SAMPLE TYPE : WORKPLACE
RECEIVED DATE : FEBRUARY 22, 2023
SAMPLING DATE : FEBRUARY 20, 2023
ANALYTICAL DATE : FEBRUARY 22-24, 2023
SAMPLING TIME : 09:10-17:10 HOUR
REPORT NO. : 2023-U014852
SAMPLING BY : MISS SUPAWADEE INYASI
WORK NO. : 2023-000327
ANALYZED BY : MISS JETJARIN TUMSA-AT
ANALYSIS NO. : T23AD105-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			PC WIRE (DRG 6, 2) T23AD105-0002
TOTAL DUST ^b	mg/m ³	GRAVIMETRIC METHOD (NIOSH METHOD 0500)	0.123
RESPIRABLE DUST ^a	mg/m ³	GRAVIMETRIC METHOD (NIOSH METHOD 0600)	0.041
SAMPLE CONDITION			COMPLETE

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

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

REMARK

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

Budsakorn ✓

(MISS BUDSAKORN LERDPANUMAS)
LABORATORY SUPERVISOR

MARCH 3, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11, NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : PE
SAMPLE TYPE : WORKPLACE
SAMPLING DATE : FEBRUARY 20, 2023
SAMPLING TIME : 09:17-17:17 HOUR
SAMPLING BY : MISS SUPAWADEE INYASI
ANALYZED BY : MISS JETJARIN TUMSA-AT
RECEIVED DATE : FEBRUARY 22, 2023
ANALYTICAL DATE : FEBRUARY 22-24, 2023
REPORT NO. : 2023-U014853
WORK NO. : 2023-000327
ANALYSIS NO. : T23AD105-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			PE T23AD105-0003
TOTAL DUST ^b	mg/m ³	GRAVIMETRIC METHOD (NIOSH METHOD 0500)	0.129
RESPIRABLE DUST ^a	mg/m ³	GRAVIMETRIC METHOD (NIOSH METHOD 0600)	0.039
SAMPLE CONDITION			COMPLETE

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

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

REMARK

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

Budsakorn ✓

(MISS BUDSAKORN LERDPANUMAS)
LABORATORY SUPERVISOR

MARCH 3, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11, NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : WIRE MESH (DRG 3)
SAMPLE TYPE : WORKPLACE
RECEIVED DATE : FEBRUARY 22, 2023
SAMPLING DATE : FEBRUARY 21, 2023
ANALYTICAL DATE : FEBRUARY 22-24, 2023
SAMPLING TIME : 09:20-17:20 HOUR
REPORT NO. : 2023-U014854
SAMPLING BY : MISS SUPAWADEE INYASI
WORK NO. : 2023-000327
ANALYZED BY : MISS JETJARIN TUMSA-AT
ANALYSIS NO. : T23AD105-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			WIRE MESH (DRG 3) T23AD105-0004
TOTAL DUST	mg/m ³	GRAVIMETRIC METHOD (NIOSH METHOD 0500)	0.326
RESPIRABLE DUST	mg/m ³	GRAVIMETRIC METHOD (NIOSH METHOD 0600)	0.136
SAMPLE CONDITION			COMPLETE

REMARK

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

Budsakorn ✓

(MISS BUDSAKORN LERDPANUMAS)
LABORATORY SUPERVISOR

MARCH 3, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11, NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : COLD DRAWN
SAMPLE TYPE : WORKPLACE
RECEIVED DATE : FEBRUARY 22, 2023
SAMPLING DATE : FEBRUARY 21, 2023
ANALYTICAL DATE : FEBRUARY 22-24, 2023
SAMPLING TIME : 09:18-17:18 HOUR
REPORT NO. : 2023-U014856
SAMPLING BY : MISS SUPAWADEE INYASI
WORK NO. : 2023-000327
ANALYZED BY : MISS JETJARIN TUMSA-AT
ANALYSIS NO. : T23AD105-0005

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			COLD DRAWN T23AD105-0005
TOTAL DUST ^b	mg/m ³	GRAVIMETRIC METHOD (NIOSH METHOD 0500)	0.093
RESPIRABLE DUST ^a	mg/m ³	GRAVIMETRIC METHOD (NIOSH METHOD 0600)	0.072
SAMPLE CONDITION			COMPLETE

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

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

REMARK

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

Budsakorn ✓

(MISS BUDSAKORN LERDPANUMAS)
LABORATORY SUPERVISOR

MARCH 3, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11, NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : PICKLING PLANT
SAMPLE TYPE : WORKPLACE
RECEIVED DATE : FEBRUARY 22, 2023
SAMPLING DATE : FEBRUARY 21, 2023
ANALYTICAL DATE : FEBRUARY 22-24, 2023
SAMPLING TIME : 09:15-12:15 HOUR
REPORT NO. : 2023-U014857
SAMPLING BY : MISS SUPAWADEE INYASI
WORK NO. : 2023-000327
ANALYZED BY : MISS SUWAN KONGTHONG
ANALYSIS NO. : T23AD105-0006

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			PICKLING PLANT T23AD105-0006
HYDROGEN CHLORIDE	ppm	ION CHROMATOGRAPHIC METHOD (NIOSH METHOD 7903)	0.320
SAMPLE CONDITION			COMPLETE

REMARK

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

Budsakorn ✓

(MISS BUDSAKORN LERDPANUMAS)
LABORATORY SUPERVISOR

MARCH 3, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : PC STRAND (KM 1,2)
SAMPLE TYPE : WORKPLACE
SAMPLING DATE : MAY 24, 2023
SAMPLING TIME : 09:00-17:00 HOUR
SAMPLING BY : MISS PATJIRA KADEEPISAN
ANALYZED BY : MISS JETJARIN TUMSA-AT

RECEIVED DATE : MAY 29, 2023
ANALYTICAL DATE : MAY 29-JUNE 6, 2023
REPORT NO. : 2023-U046578
WORK NO. : 2023-000327
ANALYSIS NO. : T23A3860-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			PC STRAND (KM 1,2) T23A3860-0001
TOTAL DUST ^b	mg/m ³	GRAVIMETRIC METHOD (NIOSH METHOD 0500)	0.163
RESPIRABLE DUST ^a	mg/m ³	GRAVIMETRIC METHOD (NIOSH METHOD 0600)	0.048
SAMPLE CONDITION			COMPLETE

^a : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARD INSTITUTE (TISI)
^b : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

REMARK

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

Budsakorn ✓

(MISS BUDSAKORN LERDPANUMAS)
LABORATORY SUPERVISOR

JULY 3, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : PC WIRE (DRG 6,2)
SAMPLE TYPE : WORKPLACE
SAMPLING DATE : MAY 24, 2023
SAMPLING TIME : 09:05-17:05 HOUR
SAMPLING BY : MISS PATJIRA KADEEPISAN
ANALYZED BY : MISS JETJARIN TUMSA-AT

RECEIVED DATE : MAY 29, 2023
ANALYTICAL DATE : MAY 29-JUNE 6, 2023
REPORT NO. : 2023-U046584
WORK NO. : 2023-000327
ANALYSIS NO. : T23AJ860-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			PC WIRE (DRG 6,2) T23AJ860-0002
TOTAL DUST	mg/m ³	GRAVIMETRIC METHOD (NIOSH METHOD 0500)	0.889
RESPIRABLE DUST	mg/m ³	GRAVIMETRIC METHOD (NIOSH METHOD 0600)	0.091
SAMPLE CONDITION			COMPLETE

REMARK

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

Budsakorn ✓

(MISS BUDSAKORN LERDPANUMAS)
LABORATORY SUPERVISOR

JULY 3, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : PE
SAMPLE TYPE : WORKPLACE
SAMPLING DATE : MAY 24, 2023
SAMPLING TIME : 09:10-17:10 HOUR
SAMPLING BY : MISS PATJIRA KADEEPISAN
ANALYZED BY : MISS JETJARIN TUMSA-AT

RECEIVED DATE : MAY 29, 2023
ANALYTICAL DATE : MAY 29-JUNE 6, 2023
REPORT NO. : 2023-U046585
WORK NO. : 2023-000327
ANALYSIS NO. : T23AJ860-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			PE T23AJ860-0003
TOTAL DUST ^b	mg/m ³	GRAVIMETRIC METHOD (NIOSH METHOD 0500)	0.105
RESPIRABLE DUST ^a	mg/m ³	GRAVIMETRIC METHOD (NIOSH METHOD 0600)	0.039
SAMPLE CONDITION			COMPLETE

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

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

REMARK

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

Budsakorn ✓

(MISS BUDSAKORN LERDPANUMAS)
LABORATORY SUPERVISOR

JULY 3, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : WIRE MESH (DRG 3)
SAMPLE TYPE : WORKPLACE
SAMPLING DATE : MAY 25-26, 2023
SAMPLING TIME : 17:45-01:45 HOUR
SAMPLING BY : MISS PATJIRA KADEEPISAN
ANALYZED BY : MISS JETJARIN TUMSA-AT
RECEIVED DATE : MAY 29, 2023
ANALYTICAL DATE : MAY 29-JUNE 6, 2023
REPORT NO. : 2023-U046586
WORK NO. : 2023-000327
ANALYSIS NO. : T23AJ860-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			WIRE MESH (DRG 3) T23AJ860-0004
TOTAL DUST ^b	mg/m ³	GRAVIMETRIC METHOD (NIOSH METHOD 0500)	0.145
RESPIRABLE DUST ^a	mg/m ³	GRAVIMETRIC METHOD (NIOSH METHOD 0600)	0.040
SAMPLE CONDITION			COMPLETE

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

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

REMARK

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

Budsakorn ✓

(MISS BUDSAKORN LERDPANUMAS)
LABORATORY SUPERVISOR

JUNE 16, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : COLD DRAWN
SAMPLE TYPE : WORKPLACE
SAMPLING DATE : MAY 25-26, 2023
SAMPLING TIME : 17:40-01:40 HOUR
SAMPLING BY : MISS PATJIRA KADEEPISAN
ANALYZED BY : MISS JETJARIN TUMSA-AT
RECEIVED DATE : MAY 29, 2023
ANALYTICAL DATE : MAY 29-JUNE 6, 2023
REPORT NO. : 2023-U046587
WORK NO. : 2023-000327
ANALYSIS NO. : T23AJ860-0005

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			COLD DRAWN T23AJ860-0005
TOTAL DUST	mg/m ³	GRAVIMETRIC METHOD (NIOSH METHOD 0500)	0.239
RESPIRABLE DUST	mg/m ³	GRAVIMETRIC METHOD (NIOSH METHOD 0600)	0.044
SAMPLE CONDITION			COMPLETE

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

Budsakorn ✓

(MISS BUDSAKORN LERDPANUMAS)
LABORATORY SUPERVISOR

JUNE 16, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
SAMPLING SOURCE : PICKLING PLANT
SAMPLE TYPE : WORKPLACE
SAMPLING DATE : MAY 25, 2023
SAMPLING TIME : 09:25-12:25 HOUR
SAMPLING BY : MISS PATJIRA KADEEPISAN
ANALYZED BY : MISS SUWAN KONGTHONG

RECEIVED DATE : MAY 29, 2023
ANALYTICAL DATE : MAY 29-JUNE 2, 2023
REPORT NO. : 2023-U046592
WORK NO. : 2023-000327
ANALYSIS NO. : T23AJ860-0010

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT
			PICKLING PLANT T23AJ860-0010
HYDROGEN CHLORIDE	ppm	ION CHROMATOGRAPHIC METHOD (NIOSH METHOD 7903)	0.214
SAMPLE CONDITION			COMPLETE

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

Budsakorn ✓

(MISS BUDSAKORN LERDPANUMAS)
 LABORATORY SUPERVISOR

JUNE 16, 2023



ภาคผนวก ก-9

ผลการติดตามตรวจสอบระดับเสียงในสถานประกอบการ

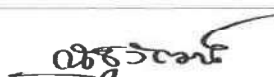


ใบรายงานผลการวิเคราะห์

ชื่อลูกค้า : บริษัท สยามลวดเหล็กอุตสาหกรรม จำกัด
ที่อยู่ : 160 หมู่ 11 ตำบลหนองละลอก อำเภอบ้านค่าย จังหวัดระยอง 21120
ข้อมูลผู้ติดต่อ : โทรศัพท์ : 0 3889 2333 EXT. 413 อีเมล : taweesak_a@siw.co.th
สถานที่ตรวจวัด : บริษัท สยามลวดเหล็กอุตสาหกรรม จำกัด
ชนิดตัวอย่าง : ระดับเสียงภายในสถานประกอบการ
วันที่ตรวจวัด : 20 กุมภาพันธ์ 2566
เวลาที่ตรวจวัด : *
วิธีตรวจวัด : มาตรฐานระดับเสียง
ผู้ตรวจวัด : นางสาวจินตหรา จินดาแจ้ง

วันที่รับตัวอย่าง : 20 กุมภาพันธ์ 2566
วันที่วิเคราะห์ : 20 กุมภาพันธ์ 2566
เลขที่ใบรายงานผล : 2023-U013561
เลขที่งาน : 2023-000327
หมายเลขปฏิบัติการ : T23AD106-0001 - T23AD106-0003

หมายเลขปฏิบัติการ	จุดตรวจวัด	เวลา*	ผลการวิเคราะห์ (เดซิเบลเอ)	
			ระดับเสียงเฉลี่ย 8 ชั่วโมง	ระดับเสียงสูงสุด 8 ชั่วโมง
T23AD106-0001	PC STRAND (KM 4,5)	09:13-17:13 น.	77.4	96.0
T23AD106-0002	PC WIRE (DRG 6,2)	09:11-17:11 น.	84.5	99.2
T23AD106-0003	PE	09:18-17:18 น.	75.7	95.2



(นายณัฐวัฒน์ แดงสวัสดิ์)
ผู้ควบคุมห้องปฏิบัติการ

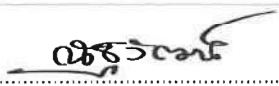
24 กุมภาพันธ์ 2566



ใบรายงานผลการวิเคราะห์

ชื่อลูกค้า : บริษัท สยามลวดเหล็กอุตสาหกรรม จำกัด
 ที่อยู่ : 160 หมู่ 11 ตำบลหนองละลอก อำเภอบ้านค่าย จังหวัดระยอง 21120
 ข้อมูลผู้ติดต่อ : โทรศัพท์ : 0 3889 2333 EXT. 413 อีเมล : taweesak_a@siw.co.th
 สถานที่ตรวจวัด : บริษัท สยามลวดเหล็กอุตสาหกรรม จำกัด
 ชนิดตัวอย่าง : ระดับเสียงภายในสถานประกอบการ
 วันที่ตรวจวัด : 21 กุมภาพันธ์ 2566
 เวลาที่ตรวจวัด : *
 วิธีตรวจวัด : มาตรฐานระดับเสียง
 ผู้ตรวจวัด : นางสาวจินตหรา จินดาแจ้ง
 วันที่รับตัวอย่าง : 21 กุมภาพันธ์ 2566
 วันที่วิเคราะห์ : 21 กุมภาพันธ์ 2566
 เลขที่ใบรายงานผล : 2023-U013562
 เลขที่งาน : 2023-000327
 หมายเลขปฏิบัติการ : T23AD106-0004 - T23AD106-0005

หมายเลขปฏิบัติการ	จุดตรวจวัด	เวลา*	ผลการวิเคราะห์ (เดซิเบลเอ)	
			ระดับเสียงเฉลี่ย 8 ชั่วโมง	ระดับเสียงสูงสุด 8 ชั่วโมง
T23AD106-0004	WIRE MESH (ควบคุมเครื่อง MESH 2)	09:22-17:22 น.	87.8	99.0
T23AD106-0005	COLD DRAWN (จุดโต๊ะเขียนรายงาน)	09:19-17:19 น.	81.5	98.5



(นายถวัลย์ แดงสวัสดิ์)
 ผู้ควบคุมห้องปฏิบัติการ

24 กุมภาพันธ์ 2566



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
MEASURING PLACE : THE SIAM INDUSTRIAL WIRE CO., LTD.
MEASURING TYPE : WORKPKACE (NOISE) **RECEIVED DATE** : MAY 24, 2023
MEASURING DATE : MAY 24, 2023 **ANALYTICAL DATE** : MAY 24, 2023
MEASURING TIME : * **REPORT NO.** : 2023-U044750
MEASURING EQUIPMENT : INTEGRATED SOUND LEVEL METER **WORK NO.** : 2023-000327
MEASURED BY : MISS PATJIRA KADEEPISAN **ANALYSIS NO.** : T23AJ839-0001 - T23AJ839-0003

ANALYSIS NO.	MEASURING SITE	TIME* (HOUR)	RESULT (dB(A))	
			L _{Aeq} 8 hours	L _{Amax} 8 hours
T23AJ839-0001	PC STRAND (KM 4,5)	09:11-17:11	91.1	97.1
T23AJ839-0002	PC WIRE (DRG 6,2)	09:06-17:06	90.8	101
T23AJ839-0003	PE	09:14-17:14	84.9	104

Nattawat

(MR NATTAWAT DANGSAWAT)
LABORATORY SUPERVISOR

JUNE 13, 2023



ANALYSIS REPORT

CUSTOMER NAME : THE SIAM INDUSTRIAL WIRE CO., LTD.
ADDRESS : 160 MOO 11 NONG LALOK BAN KHAI RAYONG 21120
CONTACT INFORMATION : TEL : 0 3889 2333 EXT. 413 e-mail : taweesak_a@siw.co.th
MEASURING PLACE : THE SIAM INDUSTRIAL WIRE CO., LTD.
MEASURING TYPE : WORKPKACE (NOISE) **RECEIVED DATE** : MAY 25-26, 2023
MEASURING DATE : MAY 25-26, 2023 **ANALYTICAL DATE** : MAY 25-26, 2023
MEASURING TIME : * **REPORT NO.** : 2023-U044751
MEASURING EQUIPMENT : INTEGRATED SOUND LEVEL METER **WORK NO.** : 2023-000327
MEASURED BY : MISS PATJIRA KADEEPISAN **ANALYSIS NO.** : T23AJ839-0004 - T23AJ839-0005

ANALYSIS NO.	MEASURING SITE	TIME* (HOUR)	RESULT (dB(A))	
			L _{eq} 8 hours	L _{Amax} 8 hours
T23AJ839-0004	WIRE MESH (ควบคุมเครื่อง MESH 2)	17:30-01:30	88.6	107
T23AJ839-0005	COLD DRAWN (จัดโต๊ะเขียนรายงาน)	17:35-01:35	80.7	98.5

Nattawat.

(MR NATTAWAT DANGSAWAT)
LABORATORY SUPERVISOR

JUNE 13, 2023

