



## TEST REPORT

**Analysis No.** : R23-2046 **Report Date** : 10/07/23  
**Received Date** : 04/07/23 **Analysis Date** : 03-10/07/23  
**Customer** : Technical Division of Thai Environmental Technic Limited  
 For นิคมอุตสาหกรรมสมุทรสาคร **Job No.** : S660391/July  
**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000 **Sampling Date \*** : 03/07/23  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070 **Sampling By \*** : TET  
**Type of Sample** : Wastewater  
**Sample Conditions** : 2307-WW0018 = black turbid/high black sediment/covered with oil slick/smell, Flow Rate = 12,145 m<sup>3</sup>/Day

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2307-WW0018		
				บ่อปรับเสรมอ (Equalization Basin)		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	31.4	45	03/07/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.48	5.5-9.0	03/07/23
3	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	146.9	200	04/07/23
4	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	1,366	3,000	06/07/23
5	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	195	500	05-10/07/23
6	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	501	750	05/07/23
7	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	9.0	10	06/07/23
8	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	32.41	100	05/07/23
9	Cyanide as HCN *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	0.002	0.2	06/06/23
10	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	0.067	1.0	06/06/23
11	Sulfide as H <sub>2</sub> S *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	5.75	1.0	06/06/23
12	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	0.20	1.0	06/06/23
13	Free Chlorine *	mg/L	DPD Ferrous Titrimetric Method (SM 4500-Cl <sub>2</sub> F)	< 0.01	1.0	04/07/23
14	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B) ; Calculation	< 0.02	0.75	05/07/23
15	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.25	04/05/23
16	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.005	05/07/23
17	As *	mg/L	Digestion, Continuous Hydride generation/AAS Method (SM 3114 C)	0.0010	0.25	06/07/23

continue

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Thai Environmental Technic Limited  
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Page 2 of 6

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**Analysis No.** : R23-2046 **Report Date** : 10/07/23  
**Received Date** : 04/07/23 **Analysis Date** : 03-10/07/23  
**Customer** : Technical Division of Thai Environmental Technic Limited **Job No.** : S660391/July  
For นิคมอุตสาหกรรมสมุทรสาคร **Sampling Date \*** : 03/07/23  
**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000 **Sampling By \*** : TET  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070 **Type of Sample** : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2307-WW0018		
				บ่อปรับเสรมอ (Equalization Basin)		
18	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	05/07/23
19	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.47	2.0	05/07/23
20	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.17	5.0	05/07/23
21	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.03	1.0	05/07/23
22	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	0.2	05/07/23
23	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.90	5.0	05/07/23

**Remarks** \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"  
: บ่อปรับเสรมอ (Equalization Basin) = 47P 0633290 UTM 1499540  
**Method** (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017  
(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ธงชัย พรธนะสวัสดิ์, วิบูลย์ลักษณ์ วิสุมพิทักษ์  
**Standard** : Notification of the Industrial Estate Authority of Thailand No. 76 (2017) (B.E. 2560)

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
10/07/23



Approved by

Mrs. Porntip Pethshee  
Laboratory Manager  
10/07/23

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Report Date : 10/07/23

Received Date : 04/07/23

Analysis Date : 03-10/07/23

Customer : Technical Division of Thai Environmental Technic Limited

Job No. : S660391/July

For นิคมอุตสาหกรรมสมุทรสาคร

Sampling Date \* : 03/07/23

Address : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000

Sampling By \* : TET

Contact : Tel. (034) 490 066-8

Fax. (034) 490 070

Type of Sample : Wastewater

Sample Conditions : 2307-WW0019 = yellow turbid/high black sediment/covered with oil slick, Flow Rate = 12,145 m<sup>3</sup>/Day

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2307-WW0019 น้ำทิ้งหลังผ่านการบำบัด บริเวณที่ 2 <sup>nd</sup> Clarifier		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	29.8	40	03/07/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.75	5.5-9.0	03/07/23
3	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	6.8	50	04/07/23
4	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	1,410	3,000	06/07/23
5	BOD*	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	3	20	05-10/07/23
6	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	32	120	05/07/23
7	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	0.8	5.0	06/07/23
8	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	3.13	100	05/07/23
9	Cyanide as HCN *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	< 0.001	0.2	06/06/23
10	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	1.0	06/06/23
11	Sulfide as H <sub>2</sub> S *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	< 0.01	1.0	06/06/23
12	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	< 0.01	1.0	06/06/23
13	Free Chlorine *	mg/L	DPD Ferrous Titrimetric Method (SM 4500-Cl <sub>2</sub> F)	< 0.01	1.0	04/07/23
14	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B) ; Calculation	< 0.02	0.75	05/07/23
15	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.25	04/05/23
16	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.005	05/07/23
17	As *	mg/L	Digestion, Continuous Hydride generation/AAS Method (SM 3114 C)	< 0.0005	0.25	06/07/23

continue

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Page 4 of 6

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Analysis No. : R23-2046

Report Date : 10/07/23

Received Date : 04/07/23

Analysis Date : 03-10/07/23

Customer : Technical Division of Thai Environmental Technic Limited

Job No. : S660391/July

For นิคมอุตสาหกรรมสมุทรสาคร

Sampling Date \* : 03/07/23

Address : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000

Sampling By \* : TET

Contact : Tel. (034) 490 066-8

Fax. (034) 490 070

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2307-WW0019		
				น้ำทิ้งหลังผ่านการบำบัดบริเวณที่ 2 <sup>nd</sup> Clarifier		
18	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	05/07/23
19	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.05	2.0	05/07/23
20	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.04	5.0	05/07/23
21	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	1.0	05/07/23
22	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	0.2	05/07/23
23	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.12	5.0	05/07/23

Remarks \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"

: น้ำทิ้งหลังผ่านการบำบัดบริเวณที่ 2<sup>nd</sup> Clarifier = 47P 0633293 UTM 1499589

Method (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ธงชัย พรหมสวัสดิ์, วิบูลย์ลักษณ์ วิสุทธิศักดิ์

Standard : Notification of the Ministry of the Natural Resources and Environment (2016) (B.E. 2559)

Reviewed by

Ms. Wareerut Prachumdaeng

Chief of Laboratory

10, 07, 23



Approved by

Mrs. Pomtip Pethshee

Laboratory Manager

10, 07, 23

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Analysis Date : 03-10/07/23

Customer : Technical Division of Thai Environmental Technic Limited

Job No. : S660391/July

For นิคมอุตสาหกรรมสมุทรสาคร

Sampling Date \* : 03/07/23

Address : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000

Sampling By \* : TET

Contact : Tel. (034) 490 066-8

Fax. (034) 490 070

Type of Sample : Wastewater

Sample Conditions : 2307-WW0020 = yellow turbid/slight black sediment, Flow Rate = 12,145 m<sup>3</sup>/Day

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2307-WW0020		
				บ่อกักน้ำทิ้งภายหลังการบำบัด (Holding Pond)		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	30.9	40	03/07/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.71	5.5-9.0	03/07/23
3	Color (Original pH) *	ADMI	} ADMI Weighted-Ordinate Spectrophotometric Method (SM 2120 F)	37	300	05/07/23
	Color (pH 7) *	ADMI		28	300	05/07/23
4	TSS *	mg/L	Dried at 103-105 °C (SM 2540 D)	3.3	50	04/07/23
5	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	1,268	3,000	06/07/23
6	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	2	20	05-10/07/23
7	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	20	120	05/07/23
8	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	0.7	5.0	06/07/23
9	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	4.28	100	05/07/23
10	Cyanide as HCN *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	< 0.001	0.2	06/06/23
11	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	1.0	06/06/23
12	Sulfide as H <sub>2</sub> S *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	< 0.01	1.0	06/06/23
13	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	< 0.01	1.0	06/06/23
14	Free Chlorine *	mg/L	DPD Ferrous Titrimetric Method (SM 4500-Cl <sub>2</sub> F)	< 0.01	1.0	04/07/23
15	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B) ; Calculation	< 0.02	0.75	05/07/23
16	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	0.07	0.25	04/05/23
17	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.005	05/07/23

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Page 6 of 6

## TEST REPORT


**Analysis No.** : R23-2046 **Report Date** : 10/07/23  
**Received Date** : 04/07/23 **Analysis Date** : 03-10/07/23  
**Customer** : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมสมุทรสาคร **Job No.** : S660391/July  
**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000 **Sampling Date \*** : 03/07/23  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070 **Sampling By \*** : TET  
**Type of Sample** : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2307-WW0020		
				บ่อพักน้ำทิ้งภายหลังการบำบัด (Holding Pond)		
18	As *	mg/L	Digestion, Continuous Hydride generation/AAS Method (SM 3114 C)	0.0006	0.25	06/07/23
19	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	05/07/23
20	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.05	2.0	05/07/23
21	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.11	5.0	05/07/23
22	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	1.0	05/07/23
23	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	0.2	05/07/23
24	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.10	5.0	05/07/23

**Remarks** \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"  
: บ่อพักน้ำทิ้งภายหลังการบำบัด (Holding Pond) = 47P 0633418 UTM 1499532  
**Method** (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017  
(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ธงชัย พรหมสวัสดิ์, วิบูลย์ลักษณ์ วิสุทธิสักดิ์  
**Standard** : Notification of Ministry of Natural Resources and Environment (2016) (B.E. 2559)

Reviewed by   
Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
10/07/23



Approved by   
Mrs. Pornpip Pethshee  
Laboratory Manager  
10/07/23

..... END OF REPORT .....

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## TEST REPORT

**Analysis No.** : R23-2566 **Report Date** : 29/08/23  
**Received Date** : 16/08/23 **Analysis Date** : 15-25/08/23  
**Customer** : Technical Division of Thai Environmental Technic Limited **Job No.** : S660391/Aug  
For นิคมอุตสาหกรรมสมุทรสาคร **Sampling Date \*** : 15/08/23  
**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000 **Sampling By \*** : TET  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070 **Type of Sample** : Wastewater  
**Sample Conditions** : 2308-WW0437 = black turbid/high black sediment/covered with oil slick/smell, Flow Rate = 10,635 m<sup>3</sup>/Day

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2308-WW0437		
				ข้อปรับปรุง (Equalization Basin)		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	33.7	45	15/08/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.51	5.5-9.0	15/08/23
3	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	64.4	200	18/08/23
4	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	1,878	3,000	18/08/23
5	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	235	500	16-21/08/23
6	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	661	750	17/08/23
7	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	12.7	10	18/08/23
8	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	25.43	100	21/08/23
9	Cyanide as HCN *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	0.002	0.2	17/08/23
10	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	0.073	1.0	18/08/23
11	Sulfide as H <sub>2</sub> S *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	7.84	1.0	17/08/23
12	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	0.36	1.0	18/08/23
13	Free Chlorine *	mg/L	DPD Ferrous Titrimetric Method (SM 4500-Cl <sub>2</sub> F)	< 0.01	1.0	17/08/23
14	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B) ; Calculation	< 0.02	0.75	22/08/23
15	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.25	16/08/23
16	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	0.0012	0.005	23/08/23
17	As *	mg/L	Digestion, Continuous Hydride generation/AAS Method (SM 3114 C)	0.0015	0.25	25/08/23

continue

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Page 2 of 6

## TEST REPORT

**Analysis No.** : R23-2566 **Report Date** : 29/08/23  
**Received Date** : 16/08/23 **Analysis Date** : 15-25/08/23  
**Customer** : Technical Division of Thai Environmental Technic Limited **Job No.** : S660391/Aug  
For นิคมอุตสาหกรรมสมุทรสาคร **Sampling Date \*** : 15/08/23  
**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000 **Sampling By \*** : TET  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070 **Type of Sample** : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2308-WW0437		
				บ่อปรับเสรมอ (Equalization Basin)		
18	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	22/08/23
19	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.49	2.0	22/08/23
20	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.09	5.0	22/08/23
21	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	1.0	22/08/23
22	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	0.2	22/08/23
23	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.32	5.0	22/08/23

**Remarks** \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"  
: บ่อปรับเสรมอ (Equalization Basin) = 47P 0633290 UTM 1499540  
**Method** (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017  
(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ธงชัย พรธนะสวัสดิ์, วิทยาลัยเกษตร วิศุทธศาสตร์  
**Standard** : Notification of the Industrial Estate Authority of Thailand No. 76 (2017) (B.E. 2560)

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
29.08.23



Approved by

Mrs. Pomtip Pethshee  
Laboratory Manager  
29.08.23

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## TEST REPORT

Analysis No. : R23-2566

Report Date : 29/08/23

Received Date : 16/08/23

Analysis Date : 15-25/08/23

Customer : Technical Division of Thai Environmental Technic Limited

Job No. : S660391/Aug

For นิคมอุตสาหกรรมสมุทรสาคร

Sampling Date \* : 15/08/23

Address : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000

Sampling By \* : TET

Contact : Tel. (034) 490 066-8

Fax. (034) 490 070

Type of Sample : Wastewater

Sample Conditions : 2308-WW0438 = yellow turbid/slight black sediment, Flow Rate = 10,635 m<sup>3</sup>/Day

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2308-WW0438 น้ำทิ้งหลังผ่านการบำบัด บริเวณที่ 2 <sup>nd</sup> Clarifier		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	28.9	40	15/08/23
2	pH *	-	Electrometric Method (SM 4500 B)	8.63	5.5-9.0	15/08/23
3	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	12.2	50	18/08/23
4	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	1,628	3,000	18/08/23
5	BOD*	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	5	20	16-21/08/23
6	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	52	120	17/08/23
7	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	1.2	5.0	18/08/23
8	TKN *	mg/L	Macro-Kjeldahl/ Titrimetric Method (SM 4500-N <sub>org</sub> B & 4500-NH <sub>3</sub> C)	1.90	100	21/08/23
9	Cyanide as HCN *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	0.001	0.2	17/08/23
10	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	1.0	18/08/23
11	Sulfide as H <sub>2</sub> S *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	< 0.01	1.0	17/08/23
12	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	< 0.01	1.0	18/08/23
13	Free Chlorine *	mg/L	DPD Ferrous Titrimetric Method (SM 4500-Cl <sub>2</sub> F)	< 0.01	1.0	17/08/23
14	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B) ; Calculation	< 0.02	0.75	22/08/23
15	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.25	16/08/23
16	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	0.0009	0.005	23/08/23
17	As *	mg/L	Digestion, Continuous Hydride generation/AAS Method (SM 3114 C)	0.0019	0.25	25/08/23

continue

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Thai Environmental Technic Limited  
บริษัท เทคนิคสิ่งแวดล้อมไทย จำกัด



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Page 4 of 6

## TEST REPORT

Analysis No. : R23-2566

Report Date : 29/08/23

Received Date : 16/08/23

Analysis Date : 15-25/08/23

Customer : Technical Division of Thai Environmental Technic Limited

Job No. : S660391/Aug

For นิคมอุตสาหกรรมสมุทรสาคร

Sampling Date \* : 15/08/23

Address : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000

Sampling By \* : TET

Contact : Tel. (034) 490 066-8

Fax. (034) 490 070

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2308-WW0438		
				น้ำทิ้งหลังผ่านการบำบัด บริเวณที่ 2 <sup>nd</sup> Clarifier		
18	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	22/08/23
19	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.23	2.0	22/08/23
20	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.02	5.0	22/08/23
21	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.03	1.0	22/08/23
22	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	0.2	22/08/23
23	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.37	5.0	22/08/23

Remarks \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"

: น้ำทิ้งหลังผ่านการบำบัดบริเวณที่ 2<sup>nd</sup> Clarifier = 47P 0633293 UTM 1499589

Method (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ธงชัย พรหมสวัสดิ์, วิบูลย์ลักษณ์ วิศุทธิ์ศักดิ์

Standard : Notification of the Ministry of the Natural Resources and Environment (2016) (B.E. 2559)

Reviewed by

Ms. Wareerut Prachumdaeng

Chief of Laboratory

29/08/23



Approved by

Mrs. Pomtip Pethshee

Laboratory Manager

29/08/23

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## TEST REPORT

Analysis No. : R23-2566

Report Date : 29/08/23

Received Date : 16/08/23

Analysis Date : 15-25/08/23

Customer : Technical Division of Thai Environmental Technic Limited

Job No. : S660391/Aug

For นิคมอุตสาหกรรมสมุทรสาคร

Sampling Date \* : 15/08/23

Address : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000

Sampling By \* : TET

Contact : Tel. (034) 490 066-8

Fax. (034) 490 070

Type of Sample : Wastewater

Sample Conditions : 2308-WW0439 = yellow turbid/high black sediment, Flow Rate = 10,635 m<sup>3</sup>/Day

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2308-WW0439		
				บ่อกักน้ำทิ้งภายหลังการบำบัด (Holding Pond)		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	31.7	40	15/08/23
2	pH *	-	Electrometric Method (SM 4500 B)	8.77	5.5-9.0	15/08/23
3	Color (Original pH) *	ADMI	} ADMI Weighted-Ordinate	44	300	22/08/23
	Color (pH 7) *	ADMI		33	300	22/08/23
4	TSS *	mg/L	Dried at 103-105 °C (SM 2540 D)	8.6	50	18/08/23
5	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	1,702	3,000	18/08/23
6	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	4	20	16-21/08/23
7	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	50	120	17/08/23
8	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	0.8	5.0	18/08/23
9	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	4.81	100	21/08/23
10	Cyanide as HCN *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	< 0.001	0.2	17/08/23
11	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	1.0	18/08/23
12	Sulfide as H <sub>2</sub> S *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	< 0.01	1.0	17/08/23
13	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	< 0.01	1.0	18/08/23
14	Free Chlorine *	mg/L	DPD Ferrous Titrimetric Method (SM 4500-Cl <sub>2</sub> F)	0.02	1.0	17/08/23
15	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B) ; Calculation	< 0.02	0.75	22/08/23
16	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.25	16/08/23
17	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.005	23/08/23

continue

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Page 6 of 6

## TEST REPORT

**Analysis No.** : R23-2566 **Report Date** : 29/08/23  
**Received Date** : 16/08/23 **Analysis Date** : 15-25/08/23  
**Customer** : Technical Division of Thai Environmental Technic Limited **Job No.** : S660391/Aug  
For นิคมอุตสาหกรรมสมุทรสาคร **Sampling Date \*** : 15/08/23  
**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000 **Sampling By \*** : TET  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070 **Type of Sample** : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2308-WW0439		
				บ่อพักน้ำทิ้งภายหลังการบำบัด (Holding Pond)		
18	As *	mg/L	Digestion, Continuous Hydride generation/AAS Method (SM 3114 C)	0.0015	0.25	25/08/23
19	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	22/08/23
20	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.05	2.0	22/08/23
21	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.07	5.0	22/08/23
22	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	1.0	22/08/23
23	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	0.2	22/08/23
24	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.08	5.0	22/08/23

**Remarks** \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"

: บ่อพักน้ำทิ้งภายหลังการบำบัด (Holding Pond) = 47P 0633418 UTM 1499532

**Method** (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ธงชัย พรหมสวัสดิ์, วิบูลย์ลักษณ์ วิสุทธิสักดิ์

**Standard** : Notification of Ministry of Natural Resources and Environment (2016) (B.E. 2559)

Reviewed by

Ms. Wareerut Prachumdaeng

Chief of Laboratory

29/08/23



Approved by

Mrs. Pomtip Pethshee

Laboratory Manager

29/08/23

..... END OF REPORT .....

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## TEST REPORT

**Analysis No.** : R23-2781 **Report Date** : 14/09/23  
**Received Date** : 05/09/23 **Analysis Date** : 04-12/09/23  
**Customer** : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมสมุทรสาคร **Job No.** : S660391/Sep  
**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000 **Sampling Date \*** : 04/09/23  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070 **Sampling By \*** : TET  
**Type of Sample** : Wastewater  
**Sample Conditions** : 2309-WW0105 = black turbid/high black sediment/smell, Flow Rate = 10,950 m<sup>3</sup>/Day

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2309-WW0105		
				บ่อปรับเสรมอ (Equalization Basin)		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	31.1	45	04/09/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.26	5.5-9.0	04/09/23
3	TSS *	mg/L	Dried at 103-105 °C (SM 2540 D)	2,415.0	200	07/09/23
4	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	576	3,000	06/09/23
5	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	890	500	06-11/09/23
6	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	3,084	750	08/09/23
7	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	10.2	10	07/09/23
8	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	149.79	100	07/09/23
9	Cyanide as HCN *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	0.002	0.2	07/09/23
10	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	1.0	08/09/23
11	Sulfide as H <sub>2</sub> S *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	9.42	1.0	05/09/23
12	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	< 0.01	1.0	08/09/23
13	Free Chlorine *	mg/L	DPD Ferrous Titrimetric Method (SM 4500-Cl <sub>2</sub> F)	< 0.01	1.0	05/09/23
14	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B) ; Calculation	2.12	0.75	08/09/23
15	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.25	05/09/23
16	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.005	08/09/23
17	As *	mg/L	Digestion, Continuous Hydride generation/AAS Method (SM 3114 C)	0.0007	0.25	12/09/23

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Page 2 of 10

## TEST REPORT

**Analysis No.** : R23-2781 **Report Date** : 14/09/23  
**Received Date** : 05/09/23 **Analysis Date** : 04-12/09/23  
**Customer** : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมสมุทรสาคร **Job No.** : S660391/Sep  
**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000 **Sampling Date \*** : 04/09/23  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070 **Sampling By \*** : TET  
**Type of Sample** : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2309-WW0105		
				บ่อปรับเสถียร (Equalization Basin)		
18	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	08/09/23
19	Cu *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	59.13	2.0	08/09/23
20	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	1.68	5.0	08/09/23
21	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	1.90	1.0	08/09/23
22	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.87	0.2	08/09/23
23	Zn *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	43.80	5.0	08/09/23

**Remarks** \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"  
: บ่อปรับเสถียร (Equalization Basin) = 47P 0633290 UTM 1499540  
**Method** (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017  
(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ชงชัย พรหมสวัสดิ์, วิบูลย์ลักษณ์ วิสุทธศักดิ์  
**Standard** : Notification of the Industrial Estate Authority of Thailand No. 76 (2017) (B.E. 2560)

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
14/09/23



Approved by

Mrs. Pornpip Pethshee  
Laboratory Manager  
14/09/23

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## TEST REPORT

**Analysis No.** : R23-2781 **Report Date** : 14/09/23  
**Received Date** : 05/09/23 **Analysis Date** : 04-12/09/23  
**Customer** : Technical Division of Thai Environmental Technic Limited  
 For นิคมอุตสาหกรรมสมุทรสาคร **Job No.** : S660391/Sep  
**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000 **Sampling Date \*** : 04/09/23  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070 **Sampling By \*** : TET  
**Type of Sample** : Wastewater  
**Sample Conditions** : 2309-WW0106 = yellow turbid/high black sediment, Flow Rate = 10,950 m<sup>3</sup>/Day

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2309-WW0106		
				น้ำทิ้งหลังผ่านการบำบัดบริเวณที่ 2 <sup>nd</sup> Clarifier		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	29.8	40	04/09/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.69	5.5-9.0	04/09/23
3	TSS *	mg/L	Dried at 103-105 °C (SM 2540 D)	4.7	50	07/09/23
4	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	1,646	3,000	06/09/23
5	BOD*	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	4	20	06-11/09/23
6	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	35	120	06/09/23
7	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	0.6	5.0	07/09/23
8	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	2.79	100	07/09/23
9	Cyanide as HCN *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	< 0.001	0.2	07/09/23
10	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	1.0	08/09/23
11	Sulfide as H <sub>2</sub> S *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	< 0.01	1.0	05/09/23
12	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	< 0.01	1.0	08/09/23
13	Free Chlorine *	mg/L	DPD Ferrous Titrimetric Method (SM 4500-Cl <sub>2</sub> F)	< 0.01	1.0	05/09/23
14	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B) ; Calculation	< 0.02	0.75	08/09/23
15	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.25	05/09/23
16	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	0.0011	0.005	08/09/23
17	As *	mg/L	Digestion, Continuous Hydride generation/AAS Method (SM 3114 C)	0.0023	0.25	12/09/23

continue

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## TEST REPORT

**Analysis No.** : R23-2781  
**Received Date** : 05/09/23  
**Customer** : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมสมุทรสาคร  
**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070

**Report Date** : 14/09/23  
**Analysis Date** : 04-12/09/23  
**Job No.** : S660391/Sep  
**Sampling Date \*** : 04/09/23  
**Sampling By \*** : TET  
**Type of Sample** : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2309-WW0106		
				น้ำทิ้งหลังผ่านการบำบัด บริเวณที่ 2 <sup>nd</sup> Clarifier		
18	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	08/09/23
19	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.13	2.0	08/09/23
20	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.06	5.0	08/09/23
21	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.03	1.0	08/09/23
22	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	0.2	08/09/23
23	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.28	5.0	08/09/23

**Remarks** \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"  
: น้ำทิ้งหลังผ่านการบำบัดบริเวณที่ 2<sup>nd</sup> Clarifier = 47P 0633293 UTM 1499589

**Method** (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017  
(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ชงชัย พรหมสวัสดิ์, วิบูลย์ลักษณ์ วิสุทธศักดิ์

**Standard** : Notification of the Ministry of the Natural Resources and Environment (2016) (B.E. 2559)

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
14/09/23



Approved by

Mrs. Pomtip Pethshee  
Laboratory Manager  
14/09/23

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## TEST REPORT

Analysis No. : R23-2781

Report Date : 14/09/23

Received Date : 05/09/23

Analysis Date : 04-12/09/23

Customer : Technical Division of Thai Environmental Technic Limited

Job No. : S660391/Sep

For นิคมอุตสาหกรรมสมุทรสาคร

Sampling Date \* : 04/09/23

Address : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000

Sampling By \* : TET

Contact : Tel. (034) 490 066-8

Fax. (034) 490 070

Type of Sample : Wastewater

Sample Conditions : 2309-WW0107 = yellow turbid/slight black sediment, Flow Rate = 10,950 m<sup>3</sup>/Day

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2309-WW0107		
				บ่อกักน้ำทิ้งภายหลังการบำบัด (Holding Pond)		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	32.4	40	04/09/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.83	5.5-9.0	04/09/23
3	Color (Original pH) *	ADMI	} ADM I Weighted-Ordinate Spectrophotometric Method (SM 2120 F)	36	300	11/09/23
	Color (pH 7) *	ADMI		28	300	11/09/23
4	TSS *	mg/L	Dried at 103-105 °C (SM 2540 D)	7.3	50	07/09/23
5	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	1,538	3,000	06/09/23
6	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	3	20	06-11/09/23
7	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	31	120	06/09/23
8	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	0.8	5.0	07/09/23
9	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	3.91	100	07/09/23
10	Cyanide as HCN *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	0.001	0.2	07/09/23
11	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	1.0	08/09/23
12	Sulfide as H <sub>2</sub> S *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	< 0.01	1.0	05/09/23
13	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	< 0.01	1.0	08/09/23
14	Free Chlorine *	mg/L	DPD Ferrous Titrimetric Method (SM 4500-Cl <sub>2</sub> F)	0.02	1.0	05/09/23
15	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B) ; Calculation	< 0.02	0.75	08/09/23
16	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.25	05/09/23
17	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.005	08/09/23

continue

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Page 6 of 10

## TEST REPORT

**Analysis No.** : R23-2781 **Report Date** : 14/09/23  
**Received Date** : 05/09/23 **Analysis Date** : 04-08/09/23  
**Customer** : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมสมุทรสาคร **Job No.** : S660391/Sep  
**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000 **Sampling Date \*** : 04/09/23  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070 **Sampling By \*** : TET  
**Type of Sample** : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2309-WW0107		
				บ่อกักน้ำทิ้งภายหลังการบำบัด (Holding Pond)		
18	As *	mg/L	Digestion, Continuous Hydride generation/AAS Method (SM 3114 C)	0.0027	0.25	12/09/23
19	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	08/09/23
20	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.08	2.0	08/09/23
21	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.13	5.0	08/09/23
22	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.04	1.0	08/09/23
23	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	0.2	08/09/23
24	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.10	5.0	08/09/23

**Remarks** \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"  
: บ่อกักน้ำทิ้งภายหลังการบำบัด (Holding Pond) = 47P 0633418 UTM 1499532  
**Method** (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017  
(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ธงชัย พรหมสวัสดิ์, วิบูลย์ลักษณ์ วิสุทธิศักดิ์  
**Standard** : Notification of Ministry of Natural Resources and Environment (2016) (B.E. 2559)

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
14/09/23



Approved by

Mrs. Porntip Pethshee  
Laboratory Manager  
14/09/23

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## TEST REPORT

**Analysis No.** : R23-3105 **Report Date** : 09/10/23  
**Received Date** : 03/10/23 **Analysis Date** : 02-09/10/23  
**Customer** : Technical Division of Thai Environmental Technic Limited **Job No.** : S660391/Oct  
For นิคมอุตสาหกรรมสมุทรสาคร **Sampling Date \*** : 02/10/23  
**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000 **Sampling By \*** : TET  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070 **Type of Sample** : Wastewater  
**Sample Conditions** : 2310-WW0046 = black turbid/high black sediment/smell, Flow Rate = 11,166 m<sup>3</sup>/Day

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2310-WW0046		
				บ่อปรับเสรมอ (Equalization Basin)		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	29.9	45	02/10/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.27	5.5-9.0	02/10/23
3	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	353.0	200	04/10/23
4	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	593	3,000	03/10/23
5	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	173	500	04-09/10/23
6	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	390	750	04/10/23
7	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	11.3	10	05/10/23
8	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	26.79	100	04/10/23
9	Cyanide as HCN *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	0.002	0.2	06/10/23
10	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	0.165	1.0	05/10/23
11	Sulfide as H <sub>2</sub> S *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	3.25	1.0	03/10/23
12	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	0.04	1.0	05/10/23
13	Free Chlorine *	mg/L	DPD Ferrous Titrimetric Method (SM 4500-Cl <sub>2</sub> F)	< 0.01	1.0	03/10/23
14	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B) ; Calculation	0.23	0.75	04/10/23
15	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.25	03/10/23
16	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.005	05/10/23
17	As *	mg/L	Digestion, Continuous Hydride generation/AAS Method (SM 3114 C)	0.0013	0.25	06/10/23

continue

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Thai Environmental Technic Limited  
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Page 2 of 6

## TEST REPORT

**Analysis No.** : R23-3105 **Report Date** : 09/10/23  
**Received Date** : 03/10/23 **Analysis Date** : 02-09/10/23  
**Customer** : Technical Division of Thai Environmental Technic Limited **Job No.** : S660391/Oct  
For นิคมอุตสาหกรรมสมุทรสาคร **Sampling Date \*** : 02/10/23  
**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000 **Sampling By \*** : TET  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070 **Type of Sample** : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2310-WW0046		
				บ่อปรับเสรมอ (Equalization Basin)		
18	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	04/10/23
19	Cu *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	3.28	2.0	04/10/23
20	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.40	5.0	04/10/23
21	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.28	1.0	04/10/23
22	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	0.2	04/10/23
23	Zn *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	2.94	5.0	04/10/23

**Remarks** \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"  
: บ่อปรับเสรมอ (Equalization Basin) = 47P 0633290 UTM 1499540  
**Method** (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017  
(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ชงชัย พรหมสวัสดิ์, วิทยาลัยเทคโนโลยี วิทยาศาสตร์  
**Standard** : Notification of the Industrial Estate Authority of Thailand No. 76 (2017) (B.E. 2560)

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
09/10/23



Approved by

Mrs. Pomtip Pethshee  
Laboratory Manager  
09/10/23

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## TEST REPORT

**Analysis No.** : R23-3105 **Report Date** : 09/10/23  
**Received Date** : 03/10/23 **Analysis Date** : 02-09/10/23  
**Customer** : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมสมุทรสาคร **Job No.** : S660391/Oct  
**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000 **Sampling Date \*** : 02/10/23  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070 **Sampling By \*** : TET  
**Type of Sample** : Wastewater  
**Sample Conditions** : 2310-WW0047 = yellow turbid/high black sediment, Flow Rate = 11,166 m<sup>3</sup>/Day

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2310-WW0047		
				น้ำทิ้งหลังผ่านการบำบัด บริเวณที่ 2 <sup>nd</sup> Clarifier		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	30.0	40	02/10/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.66	5.5-9.0	02/10/23
3	TSS *	mg/L	Dried at 103-105 °C (SM 2540 D)	6.0	50	04/10/23
4	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	1,395	3,000	03/10/23
5	BOD*	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	4	20	04-09/10/23
6	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	39	120	04/10/23
7	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	0.6	5.0	05/10/23
8	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	7.23	100	04/10/23
9	Cyanide as HCN *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	< 0.001	0.2	06/10/23
10	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	1.0	05/10/23
11	Sulfide as H <sub>2</sub> S *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	< 0.01	1.0	03/10/23
12	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	< 0.01	1.0	05/10/23
13	Free Chlorine *	mg/L	DPD Ferrous Titrimetric Method (SM 4500-Cl <sub>2</sub> F)	< 0.01	1.0	03/10/23
14	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B) ; Calculation	< 0.02	0.75	04/10/23
15	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.25	03/10/23
16	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.005	05/10/23
17	As *	mg/L	Digestion, Continuous Hydride generation/AAS Method (SM 3114 C)	0.0016	0.25	06/10/23

continue

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Page 4 of 6

## TEST REPORT

**Analysis No.** : R23-3105  
**Received Date** : 03/10/23  
**Customer** : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมสมุทรสาคร  
**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070

**Report Date** : 09/10/23  
**Analysis Date** : 02-09/10/23  
**Job No.** : S660391/Oct  
**Sampling Date \*** : 02/10/23  
**Sampling By \*** : TET  
**Type of Sample** : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2310-WW0047		
				น้ำทิ้งหลังผ่านการบำบัด บริเวณที่ 2 <sup>nd</sup> Clarifier		
18	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	04/10/23
19	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.10	2.0	04/10/23
20	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.14	5.0	04/10/23
21	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.02	1.0	04/10/23
22	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	0.2	04/10/23
23	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.13	5.0	04/10/23

**Remarks** \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"

: น้ำทิ้งหลังผ่านการบำบัดบริเวณที่ 2<sup>nd</sup> Clarifier = 47P 0633293 UTM 1499589

**Method** (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ชงชัย พรหมสวัสดิ์, วิบูลย์ลักษณ์ วิสุทธศักดิ์

**Standard** : Notification of the Ministry of the Natural Resources and Environment (2016) (B.E. 2559)

Reviewed by

Ms. Wareerut Prachumdaeng

Chief of Laboratory

09/10/23



Approved by

Mrs. Pornpip Pethshee

Laboratory Manager

09/10/23

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## TEST REPORT

**Analysis No.** : R23-3105 **Report Date** : 09/10/23  
**Received Date** : 03/10/23 **Analysis Date** : 02-09/10/23  
**Customer** : Technical Division of Thai Environmental Technic Limited **Job No.** : S660391/Oct  
For นิคมอุตสาหกรรมสมุทรสาคร **Sampling Date \*** : 02/10/23  
**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000 **Sampling By \*** : TET  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070 **Type of Sample** : Wastewater  
**Sample Conditions** : 2310-WW0048 = yellow turbid/high black sediment, Flow Rate = 11,166 m<sup>3</sup>/Day

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2310-WW0048		
				บ่อกักน้ำทิ้งภายหลังการบำบัด (Holding Pond)		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	30.3	40	02/10/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.54	5.5-9.0	02/10/23
3	Color (Original pH) *	ADMI	} ADMI Weighted-Ordinate	62	300	03/10/23
	Color (pH 7) *	ADMI		47	300	03/10/23
4	TSS *	mg/L	Dried at 103-105 °C (SM 2540 D)	8.1	50	04/10/23
5	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	1,149	3,000	03/10/23
6	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	5	20	04-09/10/23
7	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	47	120	04/10/23
8	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	0.4	5.0	05/10/23
9	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	7.23	100	04/10/23
10	Cyanide as HCN *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	< 0.001	0.2	06/10/23
11	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	1.0	05/10/23
12	Sulfide as H <sub>2</sub> S *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	< 0.01	1.0	03/10/23
13	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	< 0.01	1.0	05/10/23
14	Free Chlorine *	mg/L	DPD Ferrous Titrimetric Method (SM 4500-Cl <sub>2</sub> F)	< 0.01	1.0	03/10/23
15	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B) ; Calculation	0.02	0.75	04/10/23
16	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.25	03/10/23
17	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.005	05/10/23

continue

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## TEST REPORT

**Analysis No.** : R23-3105 **Report Date** : 09/10/23  
**Received Date** : 03/10/23 **Analysis Date** : 02-09/10/23  
**Customer** : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมสมุทรสาคร **Job No.** : S660391/Oct  
**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000 **Sampling Date \*** : 02/10/23  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070 **Sampling By \*** : TET  
**Type of Sample** : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2310-WW0048		
				บ่อกักน้ำทิ้งภายหลังการบำบัด (Holding Pond)		
18	As *	mg/L	Digestion, Continuous Hydride generation/AAS Method (SM 3114 C)	0.0043	0.25	06/10/23
19	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	04/10/23
20	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.05	2.0	04/10/23
21	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.65	5.0	04/10/23
22	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	1.0	04/10/23
23	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	0.2	04/10/23
24	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.15	5.0	04/10/23

**Remarks** \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"  
: บ่อกักน้ำทิ้งภายหลังการบำบัด (Holding Pond) = 47P 0633418 UTM 1499532  
**Method** (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017  
(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ธงชัย พรหมสวัสดิ์, วิบูลย์ลักษณ์ วิสุทธิศักดิ์  
**Standard** : Notification of Ministry of Natural Resources and Environment (2016) (B.E. 2559)

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
09/10/23



Approved by

Mrs. Pornpip Pethshee  
Laboratory Manager  
09/10/23

..... END OF REPORT .....

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## TEST REPORT

**Analysis No.** : R23-3543 **Report Date** : 24/11/23  
**Received Date** : 07/11/23 **Analysis Date** : 06-13/11/23  
**Customer** : Technical Division of Thai Environmental Technic Limited **Job No.** : S660391/Nov  
For นิคมอุตสาหกรรมสมุทรสาคร  
**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอมะขาม จังหวัดสมุทรสาคร 74000 **Sampling Date \*** : 06/11/23  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070 **Sampling By \*** : TET  
**Type of Sample** : Wastewater  
**Sample Conditions** : 2311-WW0174 = black turbid/high black sediment/covered with oil slick/smell, Flow Rate = 10,182 m<sup>3</sup>/Day

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2311-WW0174		
				บ่อปรับเสรม (Equalization Basin)		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	28.9	45	06/11/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.63	5.5-9.0	06/11/23
3	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	36.2	200	09/11/23
4	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	710	3,000	09/11/23
5	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	51	500	08-13/11/23
6	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	172	750	10/11/23
7	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	5.8	10	08/11/23
8	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	17.22	100	08/11/23
9	Cyanide as HCN *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	0.002	0.2	08/11/23
10	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	0.070	1.0	10/11/23
11	Sulfide as H <sub>2</sub> S *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	0.67	1.0	07/11/23
12	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	< 0.01	1.0	10/11/23
13	Free Chlorine *	mg/L	DPD Ferrous Titrimetric Method (SM 4500-Cl <sub>2</sub> F)	< 0.01	1.0	07/11/23
14	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B) ; Calculation	0.03	0.75	13/11/23
15	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.25	07/11/23
16	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.005	13/11/23
17	As *	mg/L	Digestion, Continuous Hydride generation/AAS Method (SM 3114 C)	0.0034	0.25	08/11/23

continue

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Thai Environmental Technic Limited  
บริษัท เทคนิคสิ่งแวดล้อมไทย จำกัด



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E-mail : admin@tet1995.com  
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Page 2 of 11

## TEST REPORT

**Analysis No.** : R23-3543 **Report Date** : 24/11/23  
**Received Date** : 07/11/23 **Analysis Date** : 06-13/11/23  
**Customer** : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมสมุทรสาคร  
**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอมือง จังหวัดสมุทรสาคร 74000 **Job No.** : S660391/Nov  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070 **Sampling Date \*** : 06/11/23  
**Sampling By \*** : TET **Type of Sample** : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2311-WW0174		
				บ่อปรับเสรมอ (Equalization Basin)		
18	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	13/11/23
19	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.37	2.0	13/11/23
20	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.25	5.0	13/11/23
21	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.14	1.0	13/11/23
22	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	0.2	13/11/23
23	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.48	5.0	13/11/23

**Remarks** \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"  
: บ่อปรับเสรมอ (Equalization Basin) = 47P 0633290 UTM 1499540  
**Method** (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017  
(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 รงชัย พรณสวัสดิ์, วิบูลย์ลักษณ์ วิสุทธิสักดิ์  
**Standard** : Notification of the Industrial Estate Authority of Thailand No. 76 (2017) (B.E. 2560)

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
24/11/23



Approved by

Mrs. Pornpip Pethshee  
Laboratory Manager  
24/11/23

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## TEST REPORT

**Analysis No.** : R23-3543 **Report Date** : 24/11/23  
**Received Date** : 07/11/23 **Analysis Date** : 06-13/11/23  
**Customer** : Technical Division of Thai Environmental Technic Limited **Job No.** : S660391/Nov  
For นิคมอุตสาหกรรมสมุทรสาคร **Sampling Date \*** : 06/11/23  
**Address** : 39/5 หมู่ 2 ตำบลบางกระบือ อำเภอเมือง จังหวัดสมุทรสาคร 74000 **Sampling By \*** : TET  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070 **Type of Sample** : Wastewater  
**Sample Conditions** : 2311-WW0175 = yellow turbid/slight black sediment/covered with oil slick/smell, Flow Rate = 10,182 m<sup>3</sup>/Day

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2311-WW0175 น้ำทิ้งหลังผ่านการบำบัด บริเวณที่ 2 <sup>nd</sup> Clarifier		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	28.9	40	06/11/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.93	5.5-9.0	06/11/23
3	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	11.2	50	09/11/23
4	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	1,508	3,000	09/11/23
5	BOD*	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	6	20	08-13/11/23
6	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	65	120	10/11/23
7	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	0.9	5.0	08/11/23
8	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	10.19	100	09/11/23
9	Cyanide as HCN *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	< 0.001	0.2	08/11/23
10	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	1.0	10/11/23
11	Sulfide as H <sub>2</sub> S *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	< 0.01	1.0	07/11/23
12	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	< 0.01	1.0	10/11/23
13	Free Chlorine *	mg/L	DPD Ferrous Titrimetric Method (SM 4500-Cl <sub>2</sub> F)	< 0.01	1.0	07/11/23
14	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B) ; Calculation	< 0.02	0.75	13/11/23
15	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.25	07/11/23
16	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.005	13/11/23
17	As *	mg/L	Digestion, Continuous Hydride generation/AAS Method (SM 3114 C)	0.0029	0.25	08/11/23

continue

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Thai Environmental Technic Limited  
บริษัท เทคนิคสิ่งแวดล้อมไทย จำกัด



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Page 4 of 11

## TEST REPORT

Analysis No. : R23-3543

Report Date : 24/11/23

Received Date : 07/11/23

Analysis Date : 06-13/11/23

Customer : Technical Division of Thai Environmental Technic Limited

Job No. : S660391/Nov

For นิคมอุตสาหกรรมสมุทรสาคร

Sampling Date \* : 06/11/23

Address : 39/5 หมู่ 2 ตำบลบางกระบือ อำเภอเมือง จังหวัดสมุทรสาคร 74000

Sampling By \* : TET

Contact : Tel. (034) 490 066-8

Fax. (034) 490 070

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2311-WW0175		
				น้ำทิ้งหลังผ่านการบำบัด บริเวณที่ 2 <sup>nd</sup> Clarifier		
18	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	13/11/23
19	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.13	2.0	13/11/23
20	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.17	5.0	13/11/23
21	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.03	1.0	13/11/23
22	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	0.2	13/11/23
23	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.09	5.0	13/11/23

Remarks \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"

: น้ำทิ้งหลังผ่านการบำบัดบริเวณที่ 2<sup>nd</sup> Clarifier = 47P 0633293 UTM 1499589

Method (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ธงชัย พรหมสวัสดิ์, วิบูลย์ลักษณ์ วิสุทธีศักดิ์

Standard : Notification of the Ministry of the Natural Resources and Environment (2016) (B.E. 2559)

Reviewed by

Ms. Wareerut Prachumdaeng

Chief of Laboratory

24/11/23



Approved by

Mrs. Porntip Pethshee

Laboratory Manager

24/11/23

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## TEST REPORT

**Analysis No.** : R23-3543 **Report Date** : 24/11/23  
**Received Date** : 07/11/23 **Analysis Date** : 06-13/11/23  
**Customer** : Technical Division of Thai Environmental Technic Limited **Job No.** : S660391/Nov  
For นิคมอุตสาหกรรมสมุทรสาคร **Sampling Date \*** : 06/11/23  
**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000 **Sampling By \*** : TET  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070 **Type of Sample** : Wastewater  
**Sample Conditions** : 2311-WW0176 = yellow turbid/slight black sediment/covered with oil slick/smell, Flow Rate = 10,182 m<sup>3</sup>/Day

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2311-WW0176		
				บ่อพักน้ำทิ้งภายหลังการบำบัด (Holding Pond)		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	30.0	40	06/11/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.74	5.5-9.0	06/11/23
3	Color (Original pH) *	ADMI	} ADMI Weighted-Ordinate Spectrophotometric Method (SM 2120 F)	60	300	07/11/23
	Color (pH 7) *	ADMI		39	300	07/11/23
4	TSS *	mg/L	Dried at 103-105 °C (SM 2540 D)	8.3	50	09/11/23
5	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	1,094	3,000	09/11/23
6	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	5	20	08-13/11/23
7	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	59	120	10/11/23
8	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	0.8	5.0	08/11/23
9	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	5.93	100	09/11/23
10	Cyanide as HCN *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	< 0.001	0.2	08/11/23
11	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	1.0	10/11/23
12	Sulfide as H <sub>2</sub> S *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	< 0.01	1.0	07/11/23
13	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	< 0.01	1.0	10/11/23
14	Free Chlorine *	mg/L	DPD Ferrous Titrimetric Method (SM 4500-Cl <sub>2</sub> F)	< 0.01	1.0	07/11/23
15	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B) ; Calculation	< 0.02	0.75	13/11/23
16	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.25	07/11/23
17	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	0.0005	0.005	13/11/23

continue

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Thai Environmental Technic Limited  
บริษัท เทคนิคสิ่งแวดล้อมไทย จำกัด



ORIGINAL  
ต้นฉบับ

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1/6 ซอยรามคำแหง 145 แขวงสะพานสูง เขตสะพานสูง กรุงเทพมหานคร 10240

E-mail : admin@tet1995.com  
Tel : 0-2373-7799 (Auto) Fax : 0-2373-7979

Page 6 of 11

## TEST REPORT

**Analysis No.** : R23-3543 **Report Date** : 24/11/23  
**Received Date** : 07/11/23 **Analysis Date** : 06-13/11/23  
**Customer** : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมสมุทรสาคร **Job No.** : S660391/Nov  
**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000 **Sampling Date \*** : 06/11/23  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070 **Sampling By \*** : TET  
**Type of Sample** : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2311-WW0176		
				บ่อกักน้ำทิ้งภายหลังการบำบัด (Holding Pond)		
18	As *	mg/L	Digestion, Continuous Hydride generation/AAS Method (SM 3114 C)	0.0015	0.25	08/11/23
19	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	13/11/23
20	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.08	2.0	13/11/23
21	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.55	5.0	13/11/23
22	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.03	1.0	13/11/23
23	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	0.2	13/11/23
24	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.28	5.0	13/11/23

**Remarks** \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"  
: บ่อกักน้ำทิ้งภายหลังการบำบัด (Holding Pond) = 47P 0633418 UTM 1499532  
**Method** (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017  
(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ธงชัย พรหมสวัสดิ์, วิบูลย์ลักษณ์ วิสุทธิสักดิ์  
**Standard** : Notification of Ministry of Natural Resources and Environment (2016) (B.E. 2559)

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
24.11.23



Approved by

Mrs. Porntip Pethshee  
Laboratory Manager  
24.11.23

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# ANALYTICAL REPORT

AR-23-D7-007181-01. 965-2023-00007357. Page No : 1/1



Report date : 21-Nov-2023

## Client:

Thai Environmental Technic Ltd.

1/6, Soi Ramkhamhaeng 145, Saphan Sung, Saphan Sung, Bangkok, 10240, THAILAND

Eurofins Sample Code : 965-2023-00007357

Sample name : 2311-WF0177

Arrival temperature (°C) : 20.9

Sample quantity : 1 bottle (40 g)

Sample Condition : Sample is contained in a plastic bottle.

Date of Sample Received : 15-Nov-2023

Start of analysis : 15-Nov-2023

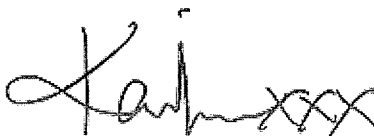
End of analysis: 21-Nov-2023

## ANALYTICAL RESULT

CHEMISTRY ANALYSIS		RESULT	UNIT	LOD	LOQ
D70H0	Cadmium (Cd)				
Method: Standard Methods for the Examination of Water and Wastewater APHA,AWWA,WEF 24th Edition 2023,Part 3125B by ICP-MS					
◆	Cadmium (Cd)	Not Detected ✓	mg/l	0.0005	0.001

The above test result(s), if relevant, has/have been validated by:

## SIGNATURE



Kanjana Wongcharoen  
Chemical Laboratory Manager Food Testing Thailand

## EXPLANATORY NOTE

The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

This analytical report shall not be reproduced except in full, without written approval of the laboratory.

The result(s) relate(s) only to the sample(s) as received.


This document can only be reproduced in full; it only concerns the submitted sample.

Results have been obtained and reported in accordance with our general sales conditions available on request.

When declaring compliance or non-compliance, the uncertainty associated with the result has been added or subtracted in order to obtain a result that can be compared to regulatory limits or specifications. The uncertainty has not been taken into account for standards that already include measurement uncertainty.

The tests are identified by a five-digit code, their description is available on request.

Eurofins General Terms and Conditions apply.

<input type="checkbox"/>	Test is externally subcontracted.	Est	Estimated count.
#	Test is subcontracted within Eurofins group.	LOD	Limit of Detection.
★	Parameter is accredited with a non ISO/IEC 17025 accredited.	LOQ	Limit of Quantification.
◆	Parameter is not accredited.	<LOQ	Not detected at or below the LOQ.
	Designated method by Department of Livestock Development for livestock product testing.	N/A	Not applicable.

- END OF REPORT -





# ANALYTICAL REPORT

AR-23-D7-007182-01. 965-2023-00007358. Page No : 1/1



Report date : 21-Nov-2023

**Client:**

Thai Environmental Technic Ltd.

1/6, Soi Ramkhamhaeng 145, Saphan Sung, Saphan Sung, Bangkok, 10240, THAILAND

Eurofins Sample Code : 965-2023-00007358

Sample name : 2311-WF0178

Arrival temperature (°C) : 20.9

Sample quantity : 1 bottle (40 g)

Sample Condition : Sample is contained in a plastic bottle.

Date of Sample Received : 15-Nov-2023

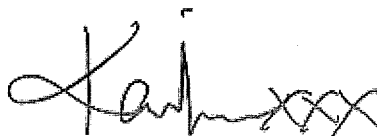
Start of analysis : 15-Nov-2023

End of analysis: 21-Nov-2023

## ANALYTICAL RESULT

CHEMISTRY ANALYSIS		RESULT	UNIT	LOD	LOQ
D70H0	Cadmium (Cd)				
Method: Standard Methods for the Examination of Water and Wastewater APHA,AWWA,WEF 24th Edition 2023,Part 3125B by ICP-MS					
◆	Cadmium (Cd)	Not Detected	mg/l	0.0005	0.001

The above test result(s), if relevant, has/have been validated by:

**SIGNATURE**


Kanjana Wongcharoen

Chemical Laboratory Manager Food Testing Thailand

**EXPLANATORY NOTE**

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When declaring compliance or non-compliance, the uncertainty associated with the result has been added or subtracted in order to obtain a result that can be compared to regulatory limits or specifications. The uncertainty has not been taken into account for standards that already include measurement uncertainty.

The tests are identified by a five-digit code, their description is available on request.

Eurofins General Terms and Conditions apply.

<input type="checkbox"/>	Test is externally subcontracted.	Est	Estimated count.
#	Test is subcontracted within Eurofins group.	LOD	Limit of Detection.
★	Parameter is accredited with a non ISO/IEC 17025 accredited.	LOQ	Limit of Quantification.
◆	Parameter is not accredited.	<LOQ	Not detected at or below the LOQ.
(DL)	Designated method by Department of Livestock Development for livestock product testing.	N/A	Not applicable.

- END OF REPORT -



# ANALYTICAL REPORT

AR-23-D7-007183-01. 965-2023-00007359. Page No : 1/1



Report date : 21-Nov-2023

Client:  
 Thai Environmental Technic Ltd.  
 1/6, Soi Ramkhamhaeng 145, Saphan Sung, Saphan Sung, Bangkok, 10240, THAILAND

Eurofins Sample Code : 965-2023-00007359  
 Sample name : 2311-WF0179  
 Arrival temperature (°C) : 20.9  
 Sample quantity : 1 bottle (40 g)  
 Sample Condition : Sample is contained in a plastic bottle.  
 Date of Sample Received : 15-Nov-2023  
 Start of analysis : 15-Nov-2023  
 End of analysis: 21-Nov-2023

## ANALYTICAL RESULT

CHEMISTRY ANALYSIS	RESULT	UNIT	LOD	LOQ
D70H0 Cadmium (Cd)				
Method: Standard Methods for the Examination of Water and Wastewater APHA,AWWA,WEF 24th Edition 2023,Part 3125B by ICP-MS				
◆ Cadmium (Cd)	Not Detected	mg/l	0.0005	0.001

The above test result(s), if relevant, has/have been validated by:

SIGNATURE



Kanjana Wongcharoen  
 Chemical Laboratory Manager Food Testing Thailand

### EXPLANATORY NOTE

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 This document can only be reproduced in full; it only concerns the submitted sample.  
 Results have been obtained and reported in accordance with our general sales conditions available on request.  
 When declaring compliance or non-compliance, the uncertainty associated with the result has been added or subtracted in order to obtain a result that can be compared to regulatory limits or specifications. The uncertainty has not been taken into account for standards that already include measurement uncertainty.  
 The tests are identified by a five-digit code, their description is available on request.  
 Eurofins General Terms and Conditions apply.

<input type="checkbox"/>	Test is externally subcontracted.	Est	Estimated count.
#	Test is subcontracted within Eurofins group.	LOD	Limit of Detection.
★	Parameter is accredited with a non ISO/IEC 17025 accredited.	LOQ	Limit of Quantification.
◆	Parameter is not accredited.	<LOQ	Not detected at or below the LOQ.
(DLI)	Designated method by Department of Livestock Development for livestock product testing.	N/A	Not applicable.

- END OF REPORT -





## TEST REPORT

**Analysis No.** : R23-3903 **Report Date** : 14/12/23  
**Received Date** : 06/12/23 **Analysis Date** : 04-11/12/23  
**Customer** : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมสมุทรสาคร **Job No.** : S660391/Dec  
**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000 **Sampling Date \*** : 04/12/23  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070 **Sampling By \*** : TET  
**Type of Sample** : Wastewater  
**Sample Conditions** : 2312-WW0114 = black turbid/high black sediment/covered with oil slick/smell, Flow Rate = 10,750 m<sup>3</sup>/Day

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2312-WW0114		
				บ่อปรับเสรม (Equalization Basin)		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	31.2	45	04/12/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.16	5.5-9.0	04/12/23
3	TSS	mg/L	Dried at 103-105 °C (SM 2540 D)	164.1	200	08/12/23
4	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	1,604	3,000	08/12/23
5	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	68	500	06-11/12/23
6	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	450	750	07/12/23
7	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	3.8	10	08/12/23
8	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	31.89	100	08/12/23
9	Cyanide as HCN *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	0.002	0.2	11/12/23
10	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	1.0	08/12/23
11	Sulfide as H <sub>2</sub> S *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	17.45	1.0	08/12/23
12	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	< 0.01	1.0	08/12/23
13	Free Chlorine *	mg/L	DPD Ferrous Titrimetric Method (SM 4500-Cl <sub>2</sub> F)	< 0.01	1.0	07/12/23
14	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B) ; Calculation	0.18	0.75	11/12/23
15	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.25	06/12/23
16	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.005	07/12/23
17	As *	mg/L	Digestion, Continuous Hydride generation/AAS Method (SM 3114 C)	0.0009	0.25	08/12/23

continue

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Thai Environmental Technic Limited  
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E-mail : admin@tet1995.com  
Tel : 0-2373-7799 (Auto) Fax : 0-2373-7979

Page 2 of 6

## TEST REPORT

**Analysis No.** : R23-3903 **Report Date** : 14/12/23  
**Received Date** : 06/12/23 **Analysis Date** : 04-11/12/23  
**Customer** : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมสมุทรสาคร **Job No.** : S660391/Dec  
**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000 **Sampling Date \*** : 04/12/23  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070 **Sampling By \*** : TET  
**Type of Sample** : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2312-WW0114		
				บ่อปรับเสถียร (Equalization Basin)		
18	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	11/12/23
19	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	4.52	2.0	11/12/23
20	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.52	5.0	11/12/23
21	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.27	1.0	11/12/23
22	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	0.2	11/12/23
23	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	2.01	5.0	11/12/23

**Remarks** \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"  
: บ่อปรับเสถียร (Equalization Basin) = 47P 0633290 UTM 1499540  
**Method** (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017  
(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ธงชัย พรหมสวัสดิ์, วิบูลย์ลักษณ์ วิสุทธีศักดิ์  
**Standard** : Notification of the Industrial Estate Authority of Thailand No. 76 (2017) (B.E. 2560)

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
12.12.23



Approved by

Mrs. Pornpip Pethshee  
Laboratory Manager  
14.12.23

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## TEST REPORT

Analysis No. : R23-3903

Received Date : 06/12/23

Customer : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมสมุทรสาคร

Address : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000

Contact : Tel. (034) 490 066-8

Fax. (034) 490 070

Report Date : 14/12/23

Analysis Date : 04-11/12/23

Job No. : S660391/Dec

Sampling Date \* : 04/12/23

Sampling By \* : TET

Type of Sample : Wastewater

Sample Conditions : 2312-WW0115 = yellow turbid/slight black sediment, Flow Rate = 10,750 m<sup>3</sup>/Day

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2312-WW0115		
				น้ำทิ้งหลังผ่านการบำบัด บริเวณที่ 2 <sup>nd</sup> Clarifier		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	29.2	40	04/12/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.80	5.5-9.0	04/12/23
3	TSS *	mg/L	Dried at 103-105 °C (SM 2540 D)	6.5	50	08/12/23
4	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	1,480	3,000	08/12/23
5	BOD*	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	3	20	06-11/12/23
6	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	38	120	07/12/23
7	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	0.8	5.0	08/12/23
8	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	11.70	100	08/12/23
9	Cyanide as HCN *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	< 0.001	0.2	11/12/23
10	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	1.0	08/12/23
11	Sulfide as H <sub>2</sub> S *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	< 0.01	1.0	08/12/23
12	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	< 0.01	1.0	08/12/23
13	Free Chlorine *	mg/L	DPD Ferrous Titrimetric Method (SM 4500-Cl <sub>2</sub> F)	< 0.01	1.0	07/12/23
14	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B) ; Calculation	< 0.02	0.75	11/12/23
15	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.25	06/12/23
16	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.005	07/12/23
17	As *	mg/L	Digestion, Continuous Hydride generation/AAS Method (SM 3114 C)	< 0.0005	0.25	08/12/23

continue

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## TEST REPORT

**Analysis No.** : R23-3903 **Report Date** : 14/12/23  
**Received Date** : 06/12/23 **Analysis Date** : 04-11/12/23  
**Customer** : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมสมุทรสาคร **Job No.** : S660391/Dec  
**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000 **Sampling Date \*** : 04/12/23  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070 **Sampling By \*** : TET  
**Type of Sample** : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2312-WW0115		
				น้ำทิ้งหลังผ่านการบำบัด บริเวณที่ 2 <sup>nd</sup> Clarifier		
18	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	11/12/23
19	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.11	2.0	11/12/23
20	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.14	5.0	11/12/23
21	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.03	1.0	11/12/23
22	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	0.2	11/12/23
23	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.05	5.0	11/12/23

**Remarks** \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"  
: น้ำทิ้งหลังผ่านการบำบัดบริเวณที่ 2<sup>nd</sup> Clarifier = 47P 0633293 UTM 1499589  
**Method** (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017  
(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ธงชัย พรหมสวัสดิ์, วิทยาลัยเกษตรและเทคโนโลยีสุพรรณบุรี  
**Standard** : Notification of the Ministry of the Natural Resources and Environment (2016) (B.E. 2559)

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory

14/12/23



Approved by

Mrs. Pomtip Pethshee  
Laboratory Manager

14/12/23

- REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY
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## TEST REPORT

**Analysis No.** : R23-3903 **Report Date** : 14/12/23  
**Received Date** : 06/12/23 **Analysis Date** : 04-11/12/23  
**Customer** : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมสมุทรสาคร **Job No.** : S660391/Dec  
**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000 **Sampling Date \*** : 04/12/23  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070 **Sampling By \*** : TET  
**Type of Sample** : Wastewater  
**Sample Conditions** : 2312-WW0116 = yellow turbid/slight black sediment, Flow Rate = 10,750 m<sup>3</sup>/Day

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2312-WW0116		
				บ่อกักน้ำทิ้งภายหลังการบำบัด (Holding Pond)		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	29.8	40	04/12/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.75	5.5-9.0	04/12/23
3	Color (Original pH) *	ADMI	} ADMI Weighted-Ordinate Spectrophotometric Method (SM 2120 F)	60	300	06/12/23
	Color (pH 7) *	ADMI		46	300	06/12/23
4	TSS *	mg/L	Dried at 103-105 °C (SM 2540 D)	8.0	50	08/12/23
5	TDS *	mg/L	Dried at 180 °C (SM 2540 C)	1,346	3,000	08/12/23
6	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	4	20	06-11/12/23
7	COD *	mg/L	Closed Reflux Titrimetric Method (SM 5220 C)	49	120	07/12/23
8	Oil & Grease *	mg/L	Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)	0.6	5.0	08/12/23
9	TKN *	mg/L	Macro-Kjeldahl/Titrimetric Method (SM 4500-N <sub>org</sub> B&4500-NH <sub>3</sub> C)	8.78	100	08/12/23
10	Cyanide as HCN *	mg/L	Distillation, Colorimetric Method (SM 4500-CN <sup>-</sup> B/E)	< 0.001	0.2	11/12/23
11	Phenols *	mg/L	Distillation, Direct Photometric Method (SM 5530 D)	< 0.001	1.0	08/12/23
12	Sulfide as H <sub>2</sub> S *	mg/L	ZnS Precipitation, Methylene Blue Colorimetric Method (SM 4500-S <sup>2-</sup> D)	< 0.01	1.0	08/12/23
13	Formaldehyde *	mg/L	Distillation, Colorimetric Method <sup>(B)</sup>	< 0.01	1.0	08/12/23
14	Free Chlorine *	mg/L	DPD Ferrous Titrimetric Method (SM 4500-Cl <sub>2</sub> F)	0.02	1.0	07/12/23
15	Cr <sup>+3</sup> *	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B) ; Filtration, Colorimetric Method (SM 3500-Cr B) ; Calculation	< 0.02	0.75	11/12/23
16	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.25	06/12/23
17	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.005	07/12/23

continue

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Thai Environmental Technic Limited  
บริษัท เทคนิคสิ่งแวดล้อมไทย จำกัด



ORIGINAL  
ต้นฉบับ

1/6 Soi Ramkhamhaeng 145, Khwaeng / Khet Saphansung, Bangkok 10240

E-mail : admin@tet1995.com

1/6 ซอยรามคำแหง 145 แขวงสะพานสูง เขตสะพานสูง กรุงเทพมหานคร 10240

Tel : 0-2373-7799 (Auto) Fax : 0-2373-7979

Page 6 of 6

## TEST REPORT

Analysis No. : R23-3903

Report Date : 14/12/23

Received Date : 06/12/23

Analysis Date : 04-11/12/23

Customer : Technical Division of Thai Environmental Technic Limited

Job No. : S660391/Dec

For นิคมอุตสาหกรรมสมุทรสาคร

Sampling Date \* : 04/12/23

Address : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000

Sampling By \* : TET

Contact : Tel. (034) 490 066-8

Fax. (034) 490 070

Type of Sample : Wastewater

Item	Parameter	Unit	Method <sup>(A)</sup>	Result	Standard	Analysis Date
				2312-WW0116		
				บ่อกักน้ำทิ้งภายหลังการบำบัด (Holding Pond)		
18	As *	mg/L	Digestion, Continuous Hydride generation/AAS Method (SM 3114 C)	< 0.0005	0.25	08/12/23
19	Cd	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.02	0.03	11/12/23
20	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.05	2.0	11/12/23
21	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.29	5.0	11/12/23
22	Ni	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.04	1.0	11/12/23
23	Pb	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	0.2	11/12/23
24	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.05	5.0	11/12/23

Remarks \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"

: บ่อกักน้ำทิ้งภายหลังการบำบัด (Holding Pond) = 47P 0633418 UTM 1499532

Method (A) SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

(B) คู่มือวิเคราะห์น้ำเสีย พิมพ์ครั้งที่ 3 ธงชัย พรหมสวัสดิ์, วิบูลย์ลักษณ์ วิสุทธิศักดิ์

Standard : Notification of Ministry of Natural Resources and Environment (2016) (B.E. 2559)

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory

14/12/23



Approved by

Mrs. Porntip Pethshee  
Laboratory Manager

14/12/23

..... END OF REPORT .....

● REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY

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## TEST REPORT

**Analysis No.** : R23-3543

**Received Date** : 07/11/23

**Customer** : Technical Division of Thai Environmental Technic Limited

For นิคมอุตสาหกรรมสมุทรสาคร

**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000

**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070

**Report Date** : 24/11/23

**Analysis Date** : 06-10/11/23

**Job No.** : S660391/Nov

**Sampling Date** : 06/11/23

**Sampling By** : TET

**Type of Sample** : Water

**Sample Conditions** : 2311-W0180 = yellow turbid/slight black sediment/covered with oil slick

2311-W0181 = yellow turbid/slight black sediment/covered with oil slick

2311-W0182 = yellow turbid/slight black sediment/covered with oil slick/smell

2311-W0183 = yellow turbid/slight black sediment/covered with oil slick/smell

2311-W0184 = yellow turbid/slight black sediment/covered with oil slick

Item	Sample No.	Sampling Point	Result			
			pH	SS (mg/L)	COD (mg/L)	Oil & Grease (mg/L)
		บ่อน้ำฝนโครงการป้องกัน				
1	2311-W0180	บ่อน้ำฝน 1	7.49	3.6	70	0.8
2	2311-W0181	บ่อน้ำฝน 2	7.62	4.2	58	0.8
3	2311-W0182	บ่อน้ำฝน 3	7.50	5.2	39	0.9
4	2311-W0183	บ่อน้ำฝน 4	7.76	4.9	42	1.0
5	2311-W0184	บ่อน้ำฝน 5	7.59	3.3	41	0.8
Standard			5.5-9.0	50	120	5.0

**Remarks** : บ่อน้ำฝน 1 = 47P 0633773 UTM 1498748  
 บ่อน้ำฝน 2 = 47P 0633451 UTM 1497869  
 บ่อน้ำฝน 3 = 47P 0631477 UTM 1497486  
 บ่อน้ำฝน 4 = 47P 0632431 UTM 1498911  
 บ่อน้ำฝน 5 = 47P 0632606 UTM 1498823

**Analysis Date** : pH Item 1-5)06/11/23  
 SS Item 1-5)09/11/23  
 COD Item 1-5)10/11/23  
 Oil & Grease Item 1-5)08/11/23

**Method** : pH - Electrometric Method (SM 4500 B)  
 SS - Volumetric, Dried at 103-105 °C (SM 2540 F)  
 COD - Closed Reflux Titrimetric Method (SM 5220 C)  
 Oil & Grease - Liquid-Liquid, Partition Gravimetric Method (SM 5520 B)

: SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

**Standard** : Notification of Ministry of Natural Resources and Environment (2016) (B.E. 2559)

Reviewed by

Ms. Wareerut Prachumdaeng

Chief of Laboratory

24/11/23

Approved by

Mrs. Pornpip Pethshee

Laboratory Manager

24/11/23

END OF REPORT

- REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY
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## TEST REPORT

**Analysis No.** : R23-2781  
**Received Date** : 05/09/23  
**Customer** : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมสมุทรสาคร  
**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070  
**Report Date** : 14/09/23  
**Analysis Date** : 04-12/09/23  
**Job No.** : S660391/Sep  
**Sampling Date \*** : 04/09/23  
**Sampling By \*** : TET  
**Type of Sample** : Surface Water  
**Sample Conditions** : 2309-WF0108 = yellow turbid/high yellow sediment

Item	Parameter	Unit	Method	Result	Standard <sup>(1)</sup>	Analysis Date
				2309-WF0108		
				แม่น้ำท่าจีน เหนือจุดระบายน้ำทั้งประมาณ 100 เมตร		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	31.5	35.2 <sup>(2)</sup>	04/09/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.19	5.0-9.0	04/09/23
3	DO *	mg/L	Membrane Electrode (SM 4500 G)	4.93	≥ 2.0	04/09/23
4	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	3	4.0	06-11/09/23
5	Total Hardness *	mg/L as CaCO <sub>3</sub>	EDTA Titrimetric (SM 2340 C)	178.4	-	05/09/23
6	NO <sub>3</sub> -N *	mg/L	Cadmium Reduction (SM 4500-NO <sub>3</sub> E)	0.04	5.0	05/09/23
7	NH <sub>3</sub> -N *	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	< 0.10	0.5	08/09/23
8	Phenols *	mg/L	Distillation/Direct Photometric Method (SM 5530 D)	< 0.001	0.005	08/09/23
9	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.05	05/09/23
10	Pb *	mg/L	Digestion, Electrothermal AAS Method (SM 3030E and 3113B)	< 0.001	0.05	07/09/23
11	Cd *	mg/L		< 0.001	0.05 <sup>(3)</sup>	07/09/23
12	Ni *	mg/L	Digestion, Pre-concentration, ICP-OES Method (SM 3030F and 3120B)	< 0.010	0.1	11/09/23
13	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.002	08/09/23
14	As *	mg/L	Digestion, Continuous Hydride generation/AAS Method (SM 3114 C)	0.0010	0.01	12/09/23
15	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.05	0.1	08/09/23
16	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.09	1.0	08/09/23
17	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	1.0	08/09/23
18	Fecal Coliform Bacteria *	MPN/100 mL	Multiple-Tube Fermentation Technique (SM 9221 C&E)	1.7 x 10 <sup>4</sup>	-	05-08/09/23
19	Total Coliform Bacteria *	MPN/100 mL	Multiple-Tube Fermentation Technique (SM 9221 B&C)	2.2 x 10 <sup>4</sup>	-	05-08/09/23

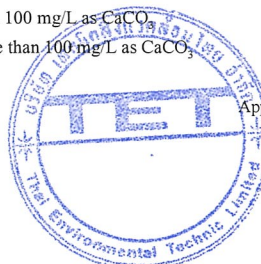
**Remarks** \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"  
: แม่น้ำท่าจีน เหนือจุดระบายน้ำทั้งประมาณ 100 เมตร = 47P 0634264 UTM 1500023  
**Method** : SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017  
**Standard** (1) Notification of the National Environment Board No. 8 (1994) (B.E. 2537), class 4  
(2) อุณหภูมิ (Temperature) ไม่สูงกว่าอุณหภูมิตามธรรมชาติเกิน 3 องศาเซลเซียส  
(อ้างอิงอุณหภูมิสภาพธรรมชาติ จุดเหนือน้ำขึ้นไป 500 เมตร แม่น้ำท่าจีน เหนือจุดระบายน้ำทั้งประมาณ 100 เมตร ตรวจวัดเมื่อวันที่ 4 กันยายน 2566 มีค่าเท่ากับ 32.2 °C ดังนั้นมาตรฐานอุณหภูมิคุณภาพน้ำผิวดิน คือ 32.2 °C + 3 °C = 35.2 °C)  
(3) Standard Cd = 0.05 mg/L ; When Total Hardness more than 100 mg/L as CaCO<sub>3</sub>  
Standard Cd = 0.005 mg/L ; When Total Hardness not more than 100 mg/L as CaCO<sub>3</sub>

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
14/ 9/ 23

Approved by

Mrs. Pornpip Pethshee  
Laboratory Manager  
14/ 9/ 23





## TEST REPORT

Analysis No. : R23-2781

Report Date : 14/09/23

Received Date : 05/09/23

Analysis Date : 04-12/09/23

Customer : Technical Division of Thai Environmental Technic Limited

Job No. : S660391/Sep

For นิคมอุตสาหกรรมสมุทรสาคร

Sampling Date \* : 04/09/23

Address : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000

Sampling By \* : TET

Contact : Tel. (034) 490 066-8

Fax. (034) 490 070

Type of Sample : Surface Water

Sample Conditions : 2309-WF0109 = yellow turbid/high yellow sediment

Item	Parameter	Unit	Method	Result	Standard <sup>(1)</sup>	Analysis Date
				2309-WF0109		
				แม่น้ำท่าจีน จุกระบายน้ำทิ้งของนิคมฯ		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	31.7	35.2 <sup>(2)</sup>	04/09/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.11	5.0-9.0	04/09/23
3	DO *	mg/L	Membrane Electrode (SM 4500 G)	4.23	≥ 2.0	04/09/23
4	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	3	4.0	06-11/09/23
5	Total Hardness *	mg/L as CaCO <sub>3</sub>	EDTA Titrimetric (SM 2340 C)	177.5	-	05/09/23
6	NO <sub>3</sub> -N *	mg/L	Cadmium Reduction (SM 4500-NO <sub>3</sub> E)	0.06	5.0	05/09/23
7	NH <sub>3</sub> -N *	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	< 0.10	0.5	08/09/23
8	Phenols *	mg/L	Distillation/Direct Photometric Method (SM 5530 D)	< 0.001	0.005	08/09/23
9	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.05	05/09/23
10	Pb *	mg/L	Digestion, Electrothermal AAS Method (SM 3030E and 3113B)	< 0.001	0.05	07/09/23
11	Cd *	mg/L		< 0.001	0.05 <sup>(3)</sup>	07/09/23
12	Ni *	mg/L	Digestion, Pre-concentration, ICP-OES Method (SM 3030F and 3120B)	< 0.010	0.1	11/09/23
13	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.002	08/09/23
14	As *	mg/L	Digestion, Continuous Hydride generation/AAS Method (SM 3114 C)	0.0007	0.01	12/09/23
15	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.05	0.1	08/09/23
16	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.12	1.0	08/09/23
17	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	1.0	08/09/23
18	Fecal Coliform Bacteria *	MPN/100 mL	Multiple-Tube Fermentation Technique (SM 9221 C&E)	1.3 x 10 <sup>4</sup>	-	05-08/09/23
19	Total Coliform Bacteria *	MPN/100 mL	Multiple-Tube Fermentation Technique (SM 9221 B&C)	3.5 x 10 <sup>4</sup>	-	05-08/09/23

Remarks : \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"

: แม่น้ำท่าจีน จุกระบายน้ำทิ้งของนิคมฯ = 47P 0634319 UTM 1499866

Method : SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

Standard (1) Notification of the National Environment Board No. 8 (1994) (B.E. 2537), class 4

(2) อุณหภูมิ (Temperature) ไม่สูงกว่าอุณหภูมิตามธรรมชาติเกิน 3 องศาเซลเซียส (อ้างอิงอุณหภูมิสภาพธรรมชาติ จุดเหนือน้ำขึ้นไป 500 เมตร แม่น้ำท่าจีน เหนือจุกระบายน้ำทิ้งประมาณ 100 เมตร ตรวจวัดเมื่อวันที่ 4 กันยายน 2566 มีค่าเท่ากับ 32.2 °C ดังนั้นมาตรฐานอุณหภูมิคุณภาพน้ำผิวดิน คือ 32.2 °C + 3 °C = 35.2 °C)

(3) Standard Cd = 0.05 mg/L ; When Total Hardness more than 100 mg/L as CaCO<sub>3</sub>  
Standard Cd = 0.005 mg/L ; When Total Hardness not more than 100 mg/L as CaCO<sub>3</sub>

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
14/09/23

Approved by

Mrs. Pornpip Pethshee  
Laboratory Manager  
14/09/23







## TEST REPORT

**Analysis No.** : R23-2781  
**Received Date** : 05/09/23  
**Customer** : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมสมุทรสาคร  
**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070  
**Sample Conditions** : 2309-WF0110 = yellow turbid/high yellow sediment

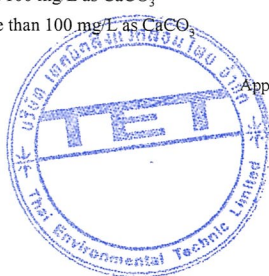
**Report Date** : 14/09/23  
**Analysis Date** : 04-12/09/23  
**Job No.** : S660391/Sep  
**Sampling Date \*** : 04/09/23  
**Sampling By \*** : TET  
**Type of Sample** : Surface Water

Item	Parameter	Unit	Method	Result	Standard <sup>(1)</sup>	Analysis Date
				2309-WF0110		
				แม่น้ำท่าจีน ท้ายจุดระบายน้ำทั้งประมาณ 100 เมตร		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	32.1	35.2 <sup>(2)</sup>	04/09/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.04	5.0-9.0	04/09/23
3	DO *	mg/L	Membrane Electrode (SM 4500 G)	4.76	≥ 2.0	04/09/23
4	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	4	4.0	06-11/09/23
5	Total Hardness *	mg/L as CaCO <sub>3</sub>	EDTA Titrimetric (SM 2340 C)	174.5	-	05/09/23
6	NO <sub>3</sub> -N *	mg/L	Cadmium Reduction (SM 4500-NO <sub>3</sub> E)	0.07	5.0	05/09/23
7	NH <sub>3</sub> -N *	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	< 0.10	0.5	08/09/23
8	Phenols *	mg/L	Distillation/Direct Photometric Method (SM 5530 D)	< 0.001	0.005	08/09/23
9	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.05	05/09/23
10	Pb *	mg/L	Digestion, Electrothermal AAS Method (SM 3030E and 3113B)	< 0.001	0.05	07/09/23
11	Cd *	mg/L		< 0.001	0.05 <sup>(3)</sup>	07/09/23
12	Ni *	mg/L	Digestion, Pre-concentration, ICP-OES Method (SM 3030F and 3120B)	< 0.010	0.1	11/09/23
13	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.002	08/09/23
14	As *	mg/L	Digestion, Continuous Hydride generation/AAS Method (SM 3114 C)	< 0.0005	0.01	12/09/23
15	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.05	0.1	08/09/23
16	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.14	1.0	08/09/23
17	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	1.0	08/09/23
18	Fecal Coliform Bacteria *	MPN/100 mL	Multiple-Tube Fermentation Technique (SM 9221 C&E)	7.9 x 10 <sup>3</sup>	-	05-08/09/23
19	Total Coliform Bacteria *	MPN/100 mL	Multiple-Tube Fermentation Technique (SM 9221 B&C)	1.7 x 10 <sup>4</sup>	-	05-08/09/23

- Remarks** \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"
- : แม่น้ำท่าจีน ท้ายจุดระบายน้ำทั้งประมาณ 100 เมตร = 47P 0634449 UTM 1499689
- Method** : SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017
- Standard** (1) Notification of the National Environment Board No. 8 (1994) (B.E. 2537), class 4
- (2) อุณหภูมิ (Temperature) ไม่สูงกว่าอุณหภูมิตามธรรมชาติเกิน 3 องศาเซลเซียส  
(อ้างอิงอุณหภูมิสภาพธรรมชาติ จุดเหนือน้ำขึ้นไป 500 เมตร แม่น้ำท่าจีน เหนือจุดระบายน้ำทั้งประมาณ 100 เมตร ตรวจวัดเมื่อวันที่ 4 กันยายน 2566 มีค่าเท่ากับ 32.2 °C ดังนั้นมาตรฐานอุณหภูมิคุณภาพน้ำผิวดิน คือ 32.2 °C + 3 °C = 35.2 °C)
- (3) Standard Cd = 0.05 mg/L ; When Total Hardness more than 100 mg/L as CaCO<sub>3</sub>  
Standard Cd = 0.005 mg/L ; When Total Hardness not more than 100 mg/L as CaCO<sub>3</sub>

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
14. 09. 23



Approved by

Mrs. Porntip Pethshee  
Laboratory Manager  
14. 09. 23

- REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY
- DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL





## TEST REPORT

**Analysis No.** : R23-2781  
**Received Date** : 05/09/23  
**Customer** : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมสมุทรสาคร  
**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070  
**Report Date** : 14/09/23  
**Analysis Date** : 04/09/23  
**Job No.** : S660391/Sep  
**Sampling Date** : 04/09/23  
**Sampling By** : TET  
**Type of Sample** : Surface Water

Item	Sampling Point	Result	Analysis Date
		Temperature (°C)	
1	จุดเหื่อน้ำขึ้นไป 500 เมตร แม่น้ำท่าจีน เหนือจุดระบายน้ำทั้งประมาณ 100 เมตร	32.2	04/09/23

**Remarks** : จุดเหื่อน้ำขึ้นไป 500 เมตร แม่น้ำท่าจีน เหนือจุดระบายน้ำทั้งประมาณ 100 เมตร = 47P 0634217 UTM 1500360  
**Method** : Temperature - Laboratory and Field, Methods (SM 2550B)  
: SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

Reviewed by

Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
14/09/23



Approved by

Mrs. Pomtip Pethshee  
Laboratory Manager  
14/09/23

..... END OF REPORT .....

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## TEST REPORT

**Analysis No.** : R23-3543 **Report Date** : 24/11/23  
**Received Date** : 07/11/23 **Analysis Date** : 06-21/11/23  
**Customer** : Technical Division of Thai Environmental Technic Limited  
 For นิคมอุตสาหกรรมสมุทรสาคร **Job No.** : S660391/Nov  
**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอมือง จังหวัดสมุทรสาคร 74000 **Sampling Date \*** : 06/11/23  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070 **Sampling By \*** : TET  
**Type of Sample** : Surface Water  
**Sample Conditions** : 2311-WF0177 = yellow turbid/slight black sediment/covered with oil slick

Item	Parameter	Unit	Method	Result	Standard <sup>(1)</sup>	Analysis Date
				2311-WF0177 แม่น้ำท่าจีน เหนือจุด ระบายน้ำทั้งประมาณ 100 เมตร		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	31.2	34.3 <sup>(2)</sup>	06/11/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.34	5.0-9.0	06/11/23
3	DO *	mg/L	Membrane Electrode (SM 4500 G)	4.43	≥ 2.0	06/11/23
4	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	3	4.0	08-13/11/23
5	Total Hardness *	mg/L as CaCO <sub>3</sub>	EDTA Titrimetric (SM 2340 C)	190.4	-	08/11/23
6	NO <sub>3</sub> -N *	mg/L	Cadmium Reduction (SM 4500-NO <sub>3</sub> E)	0.10	5.0	10/11/23
7	NH <sub>3</sub> -N *	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	0.46	0.5	09/11/23
8	Phenols *	mg/L	Distillation/Direct Photometric Method (SM 5530 D)	< 0.001	0.005	09/11/23
9	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.05	07/11/23
10	Pb *	mg/L	Digestion, Pre-concentration, ICP-OES Method (SM 3030F and 3120B)	< 0.01	0.05	14/11/23
11	Cd ***	mg/L	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24 <sup>th</sup> Edition 2023, Part 3125B by ICP-MS	< 0.001	0.05 <sup>(3)</sup>	15-21/11/23
12	Ni *	mg/L	Digestion, Pre-concentration, ICP-OES Method (SM 3030F and 3120B)	< 0.005	0.1	14/11/23
13	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	0.0005	0.002	13/11/23
14	As *	mg/L	Digestion, Continuous Hydride generation/AAS Method (SM 3114 C)	< 0.0005	0.01	08/11/23
15	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.05	0.1	13/11/23
16	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.21	1.0	13/11/23
17	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	1.0	13/11/23
18	Fecal Coliform Bacteria *	MPN/100 mL	Multiple-Tube Fermentation Technique (SM 9221 C&E)	2.4 x 10 <sup>4</sup>	-	07-13/11/23
19	Total Coliform Bacteria *	MPN/100 mL	Multiple-Tube Fermentation Technique (SM 9221 B&C)	3.5 x 10 <sup>4</sup>	-	07-13/11/23

**Remarks** \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"

\*\*\* Subcontractor "Not TISI Accredited"

: แม่น้ำท่าจีน เหนือจุดระบายน้ำทั้งประมาณ 100 เมตร = 47P 0634264 UTM 1500023

**Method** : SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

**Standard** (1) Notification of the National Environment Board No. 8 (1994) (B.E. 2537), class 4

(2) อุณหภูมิ (Temperature) ไม่สูงกว่าอุณหภูมิตามธรรมชาติเกิน 3 องศาเซลเซียส

(อ้างอิงอุณหภูมิสภาพธรรมชาติ จุดเหนือน้ำขึ้นไป 500 เมตร แม่น้ำท่าจีน เหนือจุดระบายน้ำทั้งประมาณ 100 เมตร ตรวจวัดเมื่อวันที่ 6 พฤศจิกายน 2566 มีค่าเท่ากับ 31.3 °C ดังนั้นมาตรฐานอุณหภูมิคุณภาพน้ำผิวน้ำ คือ 31.3 °C + 3 °C = 34.3 °C)

(3) Standard Cd = 0.05 mg/L ; When Total Hardness more than 100 mg/L as CaCO<sub>3</sub>

Standard Cd = 0.005 mg/L ; When Total Hardness not more than 100 mg/L as CaCO<sub>3</sub>

Reviewed by

Ms. Wareerut Prachumdaeng

Chief of Laboratory

Approved by

Mrs. Porntip Pethshee

Laboratory Manager

● REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY

● DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL





## TEST REPORT

**Analysis No.** : R23-3543 **Report Date** : 24/11/23  
**Received Date** : 07/11/23 **Analysis Date** : 06-21/11/23  
**Customer** : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมสมุทรสาคร **Job No.** : S660391/Nov  
**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000 **Sampling Date \*** : 06/11/23  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070 **Sampling By \*** : TET  
**Type of Sample** : Surface Water  
**Sample Conditions** : 2311-WF0178 = yellow turbid/slight black sediment/covered with oil slick

Item	Parameter	Unit	Method	Result	Standard <sup>(1)</sup>	Analysis Date
				2311-WF0178		
				แม่น้ำท่าจีน จุติระบายน้ำทิ้งของนิคมฯ		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	31.0	34.3 <sup>(2)</sup>	06/11/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.48	5.0-9.0	06/11/23
3	DO *	mg/L	Membrane Electrode (SM 4500 G)	4.78	≥ 2.0	06/11/23
4	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	2	4.0	08-13/11/23
5	Total Hardness *	mg/L as CaCO <sub>3</sub>	EDTA Titrimetric (SM 2340 C)	165.4	-	08/11/23
6	NO <sub>3</sub> -N *	mg/L	Cadmium Reduction (SM 4500-NO <sub>3</sub> E)	0.11	5.0	10/11/23
7	NH <sub>3</sub> -N *	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	0.34	0.5	09/11/23
8	Phenols *	mg/L	Distillation/Direct Photometric Method (SM 5530 D)	< 0.001	0.005	09/11/23
9	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.05	07/11/23
10	Pb *	mg/L	Digestion, Pre-concentration, ICP-OES Method (SM 3030F and 3120B)	< 0.01	0.05	14/11/23
11	Cd ***	mg/L	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24 <sup>th</sup> Edition 2023, Part 3125B by ICP-MS	< 0.001	0.05 <sup>(3)</sup>	15-21/11/23
12	Ni *	mg/L	Digestion, Pre-concentration, ICP-OES Method (SM 3030F and 3120B)	< 0.005	0.1	14/11/23
13	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.002	13/11/23
14	As *	mg/L	Digestion, Continuous Hydride generation/AAS Method (SM 3114 C)	0.0021	0.01	08/11/23
15	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.05	0.1	13/11/23
16	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.17	1.0	13/11/23
17	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	1.0	13/11/23
18	Fecal Coliform Bacteria *	MPN/100 mL	Multiple-Tube Fermentation Technique (SM 9221 C&E)	1.3 x 10 <sup>4</sup>	-	07-13/11/23
19	Total Coliform Bacteria *	MPN/100 mL	Multiple-Tube Fermentation Technique (SM 9221 B&C)	2.4 x 10 <sup>4</sup>	-	07-13/11/23

**Remarks** \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"

\*\*\* Subcontractor "Not TISI Accredited"

: แม่น้ำท่าจีน จุติระบายน้ำทิ้งของนิคมฯ = 47P 0634319 UTM 1499866

**Method** : SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

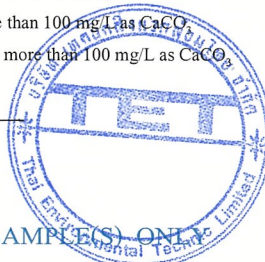
**Standard** (1) Notification of the National Environment Board No. 8 (1994) (B.E. 2537), class 4

(2) อุณหภูมิ (Temperature) ไม่สูงกว่าอุณหภูมิตามธรรมชาติเกิน 3 องศาเซลเซียส (อ้างอิงอุณหภูมิสภาพธรรมชาติ จุดเหนือน้ำขึ้นไป 500 เมตร แม่น้ำท่าจีน เหนือจุดระบายน้ำทิ้งประมาณ 100 เมตร ตรวจวัดเมื่อวันที่ 6 พฤศจิกายน 2566 มีค่าเท่ากับ 31.3 °C ดังนั้นมาตรฐานอุณหภูมิคุณภาพน้ำผิวดิน คือ 31.3 °C + 3 °C = 34.3 °C)

(3) Standard Cd = 0.05 mg/L ; When Total Hardness more than 100 mg/L as CaCO<sub>3</sub>  
Standard Cd = 0.005 mg/L ; When Total Hardness not more than 100 mg/L as CaCO<sub>3</sub>

Reviewed by   
Ms. Wareerut Prachumdaeng  
Chief of Laboratory  
..... 24/11/23

Approved by   
Mrs. Pomtip Pethshee  
Laboratory Manager  
..... 24/11/23







## TEST REPORT

**Analysis No.** : R23-3543 **Report Date** : 24/11/23  
**Received Date** : 07/11/23 **Analysis Date** : 06-21/11/23  
**Customer** : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมสมุทรสาคร **Job No.** : S660391/Nov  
**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000 **Sampling Date \*** : 06/11/23  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070 **Sampling By \*** : TET  
**Type of Sample** : Surface Water  
**Sample Conditions** : 2311-WF0179 = yellow turbid/slight black sediment/covered with oil slick

Item	Parameter	Unit	Method	Result	Standard <sup>(1)</sup>	Analysis Date
				2311-WF0179		
				แม่น้ำท่าจีน ท้ายจุดระบายน้ำทิ้งประมาณ 100 เมตร		
1	Temperature *	°C	Laboratory and Field, Methods (SM 2550B)	31.10	34.3 <sup>(2)</sup>	06/11/23
2	pH *	-	Electrometric Method (SM 4500 B)	7.49	5.0-9.0	06/11/23
3	DO *	mg/L	Membrane Electrode (SM 4500 G)	4.69	≥ 2.0	06/11/23
4	BOD *	mg/L	5-Days BOD Test, Azide Modification Method (SM 5210 B)	4	4.0	08-13/11/23
5	Total Hardness *	mg/L as CaCO <sub>3</sub>	EDTA Titrimetric (SM 2340 C)	173.4	-	08/11/23
6	NO <sub>3</sub> -N *	mg/L	Cadmium Reduction (SM 4500-NO <sub>3</sub> E)	0.10	5.0	10/11/23
7	NH <sub>3</sub> -N *	mg/L	Distillation/Titrimetric Method (SM 4500-NH <sub>3</sub> C)	0.23	0.5	09/11/23
8	Phenols *	mg/L	Distillation/Direct Photometric Method (SM 5530 D)	< 0.001	0.005	09/11/23
9	Cr <sup>+6</sup> *	mg/L	Filtration, Colorimetric Method (SM 3500-Cr B)	< 0.02	0.05	07/11/23
10	Pb *	mg/L	Digestion, Pre-concentration, ICP-OES Method (SM 3030F and 3120B)	< 0.01	0.05	14/11/23
11	Cd ***	mg/L	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 24 <sup>th</sup> Edition 2023, Part 3125B by ICP-MS	< 0.001	0.05 <sup>(3)</sup>	15-21/11/23
12	Ni *	mg/L	Digestion, Pre-concentration, ICP-OES Method (SM 3030F and 3120B)	< 0.005	0.1	14/11/23
13	Hg *	mg/L	Cold-Vapor AAS Method (SM 3112 B)	< 0.0005	0.002	13/11/23
14	As *	mg/L	Digestion, Continuous Hydride generation/AAS Method (SM 3114 C)	0.0011	0.01	08/11/23
15	Cu	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.05	0.1	13/11/23
16	Mn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	0.15	1.0	13/11/23
17	Zn	mg/L	Digestion, ICP-OES Method (SM 3030F and 3120B)	< 0.04	1.0	13/11/23
18	Fecal Coliform Bacteria *	MPN/100 mL	Multiple-Tube Fermentation Technique (SM 9221 C&E)	3.5 x 10 <sup>4</sup>	-	07-13/11/23
19	Total Coliform Bacteria *	MPN/100 mL	Multiple-Tube Fermentation Technique (SM 9221 B&C)	5.4 x 10 <sup>4</sup>	-	07-13/11/23

**Remarks** \* "Test marked "Not TISI Accredited" in this Report are not included in the TISI Accreditation Schedule for our Laboratory"

\*\*\* Subcontractor "Not TISI Accredited"

: แม่น้ำท่าจีน ท้ายจุดระบายน้ำทิ้งประมาณ 100 เมตร = 47P 0634449 UTM 1499689

**Method** : SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

**Standard** (1) Notification of the National Environment Board No. 8 (1994) (B.E. 2537), class 4

(2) อุณหภูมิ (Temperature) ไม่สูงกว่าอุณหภูมิตามธรรมชาติเกิน 3 องศาเซลเซียส

(อ้างอิงอุณหภูมิสภาพธรรมชาติ จุดเหนือน้ำขึ้นไป 500 เมตร แม่น้ำท่าจีน เหนือจุดระบายน้ำทิ้งประมาณ 100 เมตร ตรวจวัดเมื่อวันที่ 6 พฤศจิกายน 2566 มีค่าเท่ากับ 31.3 °C

ดังนั้นมาตรฐานอุณหภูมิคุณภาพน้ำผิวดิน คือ 31.3 °C + 3 °C = 34.3 °C)

(3) Standard Cd = 0.05 mg/L ; When Total Hardness more than 100 mg/L as CaCO<sub>3</sub>

Standard Cd = 0.005 mg/L ; When Total Hardness not more than 100 mg/L as CaCO<sub>3</sub>

Reviewed by

Ms. Wareerut Prachumdaeng

Chief of Laboratory

.....

Approved by

Mrs. Porntip Pethshee

Laboratory Manager

.....

- REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY
- DO NOT COPY PARTIAL OF THIS ANALYSIS REPORT WITHOUT OFFICIAL APPROVAL



## TEST REPORT

**Analysis No.** : R23-3543  
**Received Date** : 07/11/23  
**Customer** : Technical Division of Thai Environmental Technic Limited  
For นิคมอุตสาหกรรมสมุทรสาคร  
**Address** : 39/5 หมู่ 2 ตำบลบางกระเจ้า อำเภอเมือง จังหวัดสมุทรสาคร 74000  
**Contact** : Tel. (034) 490 066-8 Fax. (034) 490 070  
**Report Date** : 24/11/23  
**Analysis Date** : 06/11/23  
**Job No.** : S660391/Nov  
**Sampling Date** : 06/11/23  
**Sampling By** : TET  
**Type of Sample** : Surface Water

Item	Sampling Point	Result	Analysis Date
		Temperature (°C)	
1	จุดเหื่อน้ำขึ้นไป 500 เมตร แม่น้ำท่าจีน เหนือจุดระบายน้ำทิ้งประมาณ 100 เมตร	31.3	06/11/23

**Remarks** : จุดเหื่อน้ำขึ้นไป 500 เมตร แม่น้ำท่าจีน เหนือจุดระบายน้ำทิ้งประมาณ 100 เมตร = 47P 0634217 UTM 1500360

**Method** : Temperature - Laboratory and Field, Methods (SM 2550B)

: SM = Standard Method for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23<sup>rd</sup> Edition, 2017

Reviewed by

Ms. Wareerut Prachumdaeng

Chief of Laboratory

24.11.23



Approved by

Mrs. Pornpip Pethshee

Laboratory Manager

24.11.23

- REPORTED RESULTS REFER TO SUBMITTED SAMPLE(S) ONLY
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