



TESTING
No.0042

Lot ID: 2421210
Date Received : Mar 13, 2024
Date Reported : Mar 18, 2024
Report Number : 2419273-1

Lot ID: 2421233
Date Received : Mar 13, 2024
Date Reported : Mar 16, 2024
Report Number : 2816767.3

Date Reported: Mar 15, 2024
Report Number: 3816163-1

Sample Number	2421233-1									Page 2 of 2
Sample Date	Mar 13, 2024 2:30 PM									
Sample Description	Wastewater									
Contract ID	L_WHA CEL007-2506	Plot 2/21				Site	TOOLS INTERNATIONAL (THAILAND) CO.,LTD.			
Date Analysis Commenced	Mar 13, 2024									
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pre-ventilation - preservation standards. (APHIA / USEPA)									
Physical Property	Yellow, a lot of odor, some solid and turbid									
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location			
Water Testing										
BOD (5 days at 20 Degree C)	mg/L	-	2.0	58.3	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, test 550C - O-G	Bayong			
Oil & Grease	mg/L	-	5	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Bayong			
pH (on site) *		-		7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF,	Bayong			

Guideline: Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 = Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Factories Polluting Waterways Act No.9 Section 8 - 2535 - 2544

Remark:

- * LOD: Limit of Detection
- * "LQ": Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting);
- * Analyte(s) marked * are not included in scope of Accreditation ISO/IEC 17025.
- * The laboratory has been accepted as an accredited laboratory according with the ISO/IEC 17025.

Technical Management		Approved by	
	Namron Banchongkik Supervisor โทรศัพท์มือถือ 0-323-4-0445		Dej Changchou Senior Manager โทรศัพท์มือถือ 0-323-4-0440

Results appear in the January/June submitted, unless the sampling was conducted in A.S. No part of this result may be reproduced. A sign form without endorsement from the Ministry of Agriculture and Forestry is not valid.

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TESTING
No. 0042

Lot ID: 2421219
Date Received : Mar 12, 2024
Date Reported : Mar 18, 2024
Report Number : 2919319-1

Lot ID: 2421197
Date Received : Mar 13, 2024
Date Reported : Mar 18, 2024
Report Number : Z919732-1

Date Reported : Mar 18, 2024
Report Number : 7919732-1

Sample Number	2421167-1						
Sampled Date	Mar 13, 2024 2:50 PM						
Sample Description	Wastewater						
Contract ID	i_VWA	Plot	2.55 F	Site	Tumfite Technology Thailand Co.,Ltd		
Date Analysis Commenced	Mar 13, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pre-treatment / preservation standards. (APHA / USEPA)						
Physical Property	Yellow, some odour, solid and no turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	~2.0	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF 23rd ed., 2017, part 5210 B, part 5200 - 0.0	Extern
Oil & Grease	mg/L	-	5	+3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF 23rd ed., 2017, part 5200 B	Internal
pH (on site) x		-		8.4	3.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF 23rd ed., 2017, part 4500 - 0.00	Extern

Guideline: Notification of the Industrial Estate Authority of Thailand No.79, B.E. 2560; Criteria of wastewater characteristic from factory discharge to several wastewater Treatment Plant

Remark:

- LOD = level of Detection
- "L" = Lower than LOD (level of Qualification) / LQ (level of Screening)
- Analyte(s) method(s) applied includes a screen of Accreditation ISO/IEC 17025.
- The document has been developed as an internal laboratory compliance with the ISO/IEC 17025.

Technical Management N. B. Singh Approved by D. Chandel
Narain Bhan Singh Supervisor Dir. Chandel Senior Manager

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TESTING
No. 0042

Lot ID: 2421197
Date Received : Mar 13, 2024
Date Reported : Mar 18, 2024
Report Number : Z919732-1

Date Reported : Mar 18, 2024
Report Number : 7919732-1

Sample Number	2421167-1						
Sampled Date	Mar 13, 2024 2:50 PM						
Sample Description	Wastewater						
Contract ID	i_VWA	Plot	2.55 F	Site	Tumfite Technology Thailand Co.,Ltd		
Date Analysis Commenced	Mar 13, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pre-treatment / preservation standards. (APHA / USEPA)						
Physical Property	Yellow, some odour, solid and no turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	~2.0	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF 23rd ed., 2017, part 5210 B, part 5500 - G G	Extern
Oil & Grease	mg/L	-	5	+3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF 23rd ed., 2017, part 5520 B	Internal
pH (on site) x		-		8.4	3.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF 23rd ed., 2017, part 4500 - H	Extern

Guideline: Notification of the Industrial Estate Authority of Thailand No.79, B.E. 2560; Criteria of wastewater characteristic from factory discharge to several wastewater Treatment Plant

Remark:

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- "L" = Lower than LOD (level of Qualification) / LQ (level of Screening)
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Narain Bhan Singh Supervisor Dir. Chandel Senior Manager

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2421202

Date Received : Mar 13, 2024
Date Reported : Mar 18, 2024
Report Number : 2919260-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Sample Number	2421202-1						
Sampled Date	Mar 13, 2024 3:20 PM						
Sample Description	Wastewater						
Contract ID	L_WHA	Plot	2-55D	Site Ultimate Spring (Thailand) Co., Ltd.			
	CIE1_006_2563						
Date Analysis Commenced	Mar 13, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APIA / USEPA) Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	242	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Kayong
Oil & Grease	mg/L	-	3	3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 B	Kayong
pH (on site) *	-	-	-	7.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant.

Sampling By : Tanont Wongkarnchai โทร 09-9485

Remark :
- LOD : Limit of Detection
- "u" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analytical method : value not included in scope of Accreditation ISO/IEC 17025
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banjongkha

Approved by

D. Chumchot

Narumon Banjongkha
Supervisor
โทร 09-9485

Dij Chumchot
Senior Manager
โทร 09-9485

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2421174

Date Received : Mar 12, 2024
Date Reported : Mar 18, 2024
Report Number : 2919166-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Sample Number	2421174-1						
Sampled Date	Mar 12, 2024 10:36 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_023_2550	Plot	P-9	SRe Ivan Leuwun Pipe and Tube (Thailand) Ltd.			
Date Analysis Commenced	Mar 12, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APIA / USEPA) Yellow, some odour, solid and turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	—	2.0	48.8	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Kayong
Oil & Grease	mg/L	—	1	9	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 B	Kayong
pH (on site) *		—	—	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant.

Sampling By : Paratit Sattayakun โทร 09-9476

Remark :
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Technical Management

N. Banjongkha

Approved by

D. Chumchot

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Dij Chumchot
Senior Manager
โทร 09-9485

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2421223

Date Received : Mar 11, 2024
Date Reported : Mar 17, 2024
Report Number : 2919327-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Sample Number	2421223-1						
Sampled Date	Mar 11, 2024 11:13 AM						
Sample Description	Wastewater						
Contract ID	L_WHA	Plot	B-10C	Site V-SACHET Co., Ltd.			
CIE_006_2555	Mar 11, 2024						
Date Analysis Commenced	Mar 11, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APIA / USEPA) Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	—	2.0	18.2	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Kayong
Oil & Grease	mg/L	—	3	43	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 B	Kayong
pH (on-site) *				6.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant.

Sampling By : Pithaya Thongkarn โทร 09-9448

Remark :
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- "u" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management

N. Banjongkha

Approved by

D. Chumchot

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Dij Chumchot
Senior Manager
โทร 09-9448

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2434499

Date Received : Apr 10, 2024
Date Reported : Apr 10, 2024
Report Number : 2946040-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Sample Number	2434499-1									
Sampled Date	Apr 10, 2024 10:01 AM									
Sample Description	Wastewater									
Contract ID	L_WHA	Plot	P-55G	SRe AGRI SVAP INDUSTRY (THAILAND) Co., Ltd.						
	CIE_007_2564									
Date Analysis Commenced	Apr 10, 2024									
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.									
Physical Property	(APIA / USEPA) Yellow, some odour, no solid and turbid									
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location			
Water Testing										
BOD (5 days at 20 Degree C)	mg/L	-	2.0	11.5	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Kayong			
Oil & Grease	mg/L	-	1	<1	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 B	Kayong			
pH (on site) =				7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong			

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant.

Sampling By : Pithaya Thongkarn โทร 09-9448

Remark :
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Technical Management

N. Banjongkha

Approved by

D. Chumchot

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โทร 09-9448

Dij Chumchot
Senior Manager
โทร 09-9448

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Boin, Amphur Siracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2434500
Date Received : Apr 10, 2024
Date Reported : Apr 17, 2024
Report Number : 2948042-1

Page 1 of 1

Sample Number	2434500-1						
Sampled Date	Apr 10, 2024 10:06 AM						
Sample Description	Wastewater						
Contract ID	L_WHA CIE1_008_2564	Plot	2-55H	SRe	AGRI SYRUP INDUSTRY (THAILAND) Co., Ltd.		
Date Analysis Commenced	Apr 10, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA) Yellow, some odour, solid and no turbid						
Physical Property							
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		7.0	85.2	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rapen
Oil & Grease	mg/L			<8	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rapen
pH (on site) *				8.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rapen

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thongtaeng โทร 09-9445-9445

Remark :
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- "L" : Lower than LOQ (Limit of Quantitation) / LOQ (Limit of Reporting)
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Technical Management

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Approved by

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Boin, Amphur Siracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2434507
Date Received : Apr 09, 2024
Date Reported : Apr 15, 2024
Report Number : 2948067-1

Page 1 of 1

Sample Number	2434507-1						
Sampled Date	Apr 09, 2024 10:40 AM						
Sample Description	Wastewater						
Contract ID	L_WHA CIE1_004_2565	Plot	2-59B	SRe	AIR INTERNATIONAL THERMAL SYSTEMS (THAILAND) LIMITED		
Date Analysis Commenced	Apr 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA) Yellow, a lot of odour, some solid and turbid						
Physical Property							
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	123	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rapen
Oil & Grease	mg/L			8	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rapen
pH (on site) *				8.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rapen

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thongtaeng โทร 09-9445-9445

Remark :
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- "L" : Lower than LOQ (Limit of Quantitation) / LOQ (Limit of Reporting)
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Technical Management

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D. Chongchuen

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โทร 09-9445-9445

Dej Chongchuen
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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Boin, Amphur Siracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2434509
Date Received : Apr 09, 2024
Date Reported : Apr 15, 2024
Report Number : 2948070-1

Page 1 of 1

Sample Number	2434509-1						
Sampled Date	Apr 09, 2024 10:45 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_007_2560	Plot	2-56D	SRe	AIR INTERNATIONAL THERMAL SYSTEMS (THAILAND) LIMITED		
Date Analysis Commenced	Apr 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA) Yellow, a lot of odour, some solid and turbid						
Physical Property							
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		3.0	87.5	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rapen
Oil & Grease	mg/L			8	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rapen
pH (on site) *				7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rapen

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thongtaeng โทร 09-9445-9445

Remark :
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- "L" : Lower than LOQ (Limit of Quantitation) / LOQ (Limit of Reporting)
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N. Banomyit

Approved by

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5-000001_AE_02-01 (1.0/2023)



Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Boin, Amphur Siracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2434476
Date Received : Apr 10, 2024
Date Reported : Apr 17, 2024
Report Number : 2947949-1

Page 1 of 1

Sample Number	2434476-1						
Sampled Date	Apr 10, 2024 9:51 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_008_2558	Plot	2-55E	SRe	Analay City		
Date Analysis Commenced	Apr 10, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA) Yellow, a lot of odour, some solid and turbid						
Physical Property							
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	78.1	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rapen
Oil & Grease	mg/L			<2	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rapen
pH (on site) *				8.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rapen

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thongtaeng โทร 09-9445-9445

Remark :
- LOD : Limit of Detection
- "L" : Lower than LOQ (Limit of Quantitation) / LOQ (Limit of Reporting)
- Analytical method * value not included in scope of Accreditation ISO/IEC 17025
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025

Technical Management

N. Banomyit

Approved by

D. Chongchuen

Narumon Banomyit
Supervisor
โทร 09-9445-9445

Dej Chongchuen
Senior Manager
โทร 09-9445-9445

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5-000001_AE_02-01 (1.0/2023)



Analysis / Test Report



TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

Lot ID: 2434438
Date Received : Apr 05, 2024
Date Reported : Apr 11, 2024
Report Number : 2947817-1

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Page 1 of 1

Sample Number	2434438-1						
Sample Date	Apr 05, 2024 11:32 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_003_2557	Plot	B-108	Site	AmLac (Thailand) Co., Ltd.		
Date Analysis Commenced	Apr 05, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, some odour, solid and no turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	30.2	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Oil & Grease	mg/L	-	2	4	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *				7.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant.

Sampling By : Pithaya Thongsaeng wudhawan ๖-323-๙948

Remark :
- LOD : Limit of Detection
- "u" : Lower than LOQ (Limit of Quantitation) / LOQ (Limit of Reporting)
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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management :
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Approved by :
Dej Changchom
Senior Manager
wudhawan ๖-323-๙942

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Analysis / Test Report



TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

Lot ID: 2434456
Date Received : Apr 05, 2024
Date Reported : Apr 11, 2024
Report Number : 2947824-1

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Page 1 of 1

Sample Number	2434456-1						
Sample Date	Apr 05, 2024 10:45 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_008_2558	Plot	A-08C	Site	Asahi Diamond (Thailand) Co., Ltd.		
Date Analysis Commenced	Apr 05, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, solid and some turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	—	2.0	104	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Oil & Grease	mg/L	—	1	8	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *				7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant.

Sampling By : Pithaya Thongsaeng wudhawan ๖-323-๙948

Remark :
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Technical Management :
Narumon Banchongkit
Supervisor
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Approved by :
Dej Changchom
Senior Manager
wudhawan ๖-323-๙942

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Analysis / Test Report



TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

Lot ID: 2434498
Date Received : Apr 08, 2024
Date Reported : Apr 14, 2024
Report Number : 2948038-1

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Page 1 of 1

Sample Number	2434498-1						
Sample Date	Apr 08, 2024 3:10 PM						
Sample Description	Wastewater						
Contract ID	L_WHA_CIE_005_2564	Plot	C-01	Site	ATEN COMPUTER PRODUCT CO.,LTD.		
Date Analysis Commenced	Apr 08, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	6.0	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Oil & Grease	mg/L	-	2	<1	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3520 B	Rayong
pH (on site) *				7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant.

Sampling By : Paramee Sattayakorn wudhawan ๖-323-๙946

Remark :
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Technical Management :
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Analysis / Test Report



TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

Lot ID: 2434462
Date Received : Apr 05, 2024
Date Reported : Apr 11, 2024
Report Number : 2947896-1

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Page 1 of 1

Sample Number	2434462-1						
Sample Date	Apr 05, 2024 2:10 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_001_2350	Plot	F-31	Site	Aul Hong Co., Ltd.		
Date Analysis Commenced	Apr 05, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	21.0	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 & part 4500 - O G	Rayong
Oil & Grease	mg/L	-	2	<1	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *				7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant.

Sampling By : Pithaya Thongsaeng wudhawan ๖-323-๙948

Remark :
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Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING
No.0042
Lot ID: 2434562

Date Received : Apr 08, 2024
Date Reported : Apr 14, 2024
Report Number : 2547986-1

Page 1 of 2

Sample Number : 2434562-1
Sample Date : Apr 08, 2024 9:50 AM
Sample Description : Wastewater
Contract ID : L_CIE_002_2559 Plot A Site B: Green Power (WHA) 1 Limited
Location : Office
Date Analysis Commenced : Apr 08, 2024
Condition of Sample : Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)
Physical Property : Yellow, a lot of odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	52.7	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Kayong
COD	mg/L	1.5	25	178	≤120	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Kayong
Color (at Original pH)	ADMU	-	1	189	≤600	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Kayong
Color (at pH 7.0)	ADMU	-	1	183	≤600	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Kayong
Oil & Grease	mg/L	-	1	<1	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong
Temperature *	Degree C	-	-	30.8	≤45	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2500 B	Kayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	3	528	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Kayong

Technical Management

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
331/9-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING
No.0042
Lot ID: 2434562

Date Received : Apr 08, 2024
Date Reported : Apr 14, 2024
Report Number : 2547986-1

Page 2 of 2

Sample Number : 2434562-1
Sample Date : Apr 08, 2024 9:50 AM
Sample Description : Wastewater
Contract ID : L_CIE_002_2559 Plot A Site B: Green Power (WHA) 1 Limited
Location : Office
Date Analysis Commenced : Apr 08, 2024
Condition of Sample : Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)
Physical Property : Yellow, a lot of odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	36.2	≤100	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-NH ₄ (C), part 4500-NH ₃ (D)	Kayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	28	≤200	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 / Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Paramet Sattayakun

Remark :
LOD : Limit of Detection
"L" : Lower than LOQ (Limit of Quantitation) / LOQ (Limit of Reporting)
Analyte(s) marked * : value not included in scope of Accreditation (ISO/IEC 17025)
The laboratory has been assessed an accredited laboratory complying with the ISO/IEC 17025.

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
331/9-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Lot ID: 2434562

Date Received : Apr 08, 2024
Date Reported : Apr 14, 2024
Report Number : 2547986-2

Page 1 of 2

Sample Number : 2434562-1
Sample Date : Apr 08, 2024 9:50 AM
Sample Description : Wastewater
Contract ID : L_CIE_002_2559 Plot A Site B: Green Power (WHA) 1 Limited
Location : Office
Date Analysis Commenced : Apr 08, 2024
Condition of Sample : Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)
Physical Property : Yellow, a lot of odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Flow rate	m ³ /s	-	-	0.000	No Standard	Flow meter	Kayong
Odour	-	-	-	Objectionable	Min. Objectionable	TDS, 257-2599	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 / Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Paramet Sattayakun

Remark :
LOD : Limit of Detection
"L" : Lower than LOQ (Limit of Quantitation) / LOQ (Limit of Reporting)

Technical Management

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
331/9-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING
No.0042
Lot ID: 2434563

Date Received : Apr 08, 2024
Date Reported : Apr 14, 2024
Report Number : 2547987-1

Page 1 of 2

Sample Number : 2434563-1
Sample Date : Apr 08, 2024 9:45 AM
Sample Description : Wastewater
Contract ID : L_CIE_002_2559 Plot A Site B: Green Power (WHA) 1 Limited
Location : Process
Date Analysis Commenced : Apr 08, 2024
Condition of Sample : Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)
Physical Property : Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Kayong
COD	mg/L	1.5	25	31	≤750	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Kayong
Color (at Original pH)	ADMU	-	1	<1	≤600	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Kayong
Color (at pH 7.0)	ADMU	-	1	<1	≤600	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Kayong
Oil & Grease	mg/L	-	1	<1	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong
Ammonia Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl ₂ (F)	Kayong
Temperature *	Degree C	-	-	31.4	≤45	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2500 B	Kayong

Technical Management

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Narumon Banngnit

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Analysis / Test Report



TESTING

No.0042

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

Lot ID: 2434563
Date Received : Apr 08, 2024
Date Reported : Apr 14, 2024
Report Number : 2947987-1

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Page 2 of 2

Sample Number	2434563-1						
Sampled Date	Apr 08, 2024 9:45 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_003_2559	Plot A				Site	B. Grimen Power (WHA) 1 Limited.
Location	Process						
Date Analysis Commenced	Apr 08, 2024						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, some odour, solid and turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	2180	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Raying
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.3	≤100	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Horg (C), part 4500 (D)	Raying
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	6	≤200	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Raying

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Paramet Sattayakun ๖323-๙9465

Remark :
- LOD : Limit of Detection
- "L" : Lower than LOQ (Limit of Quantitation) / LOB (Limit of Reporting)
- Analytical method : value not included in scope of Accreditation (ISO/IEC 17025)
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banchook

Approved by

D. Chongkarn

Dej Chongkarn
Senior Manager
๖323-๙9445

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1371222-BNA

5 (Thailand), 13 (UK), 13 (USA)



Analysis / Test Report

Lot ID: 2434563

Date Received : Apr 08, 2024
Date Reported : Apr 14, 2024
Report Number : 2947987-2

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Page 1 of 2

Sample Number	2434563-1						
Sampled Date	Apr 08, 2024 9:45 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_003_2559	Plot A				Site	B. Grimen Power (WHA) 1 Limited.
Location	Process						
Date Analysis Commenced	Apr 08, 2024						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, some odour, solid and turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Flow rate	m ³ /h	-	-	0.017	No Standard	Flow meter	Raying
Odour	-	-	-	Obnoxious	Non Objectionable	TSS, 257-259	Raying

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Paramet Sattayakun

Remark :
- LOD : Limit of Detection
- "L" : Lower than LOQ (Limit of Quantitation) / LOB (Limit of Reporting)

Approved by

N. Banchook

Narumon Banchook
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Analysis / Test Report



TESTING

No.0042

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

Lot ID: 2434431
Date Received : Apr 05, 2024
Date Reported : Apr 11, 2024
Report Number : 2947869-1

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Page 2 of 2

Sample Number	2434431-1						
Sampled Date	Apr 05, 2024 9:45 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_002_2550	Plot B.T.G				Site	B.T.G. Co., Ltd.
Location	Process						
Date Analysis Commenced	Apr 05, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, solid and turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	102	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Raying
Oil & Grease	mg/L	-	5	6	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Raying
pH (at 25°C)	-	-	-	8.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Raying

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Pittaya Thongtong ๖323-๙9445

Remark :
- LOD : Limit of Detection
- "L" : Lower than LOQ (Limit of Quantitation) / LOB (Limit of Reporting)
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Technical Management

N. Banchook

Approved by

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Senior Manager
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Analysis / Test Report

Lot ID: 2434557

Date Received : Apr 09, 2024
Date Reported : Apr 15, 2024
Report Number : 2947994-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Page 2 of 2

Sample Number	2434557-1						
Sampled Date	Apr 09, 2024 2:55 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_002_2555	Plot Z-68				Site	BWH (THAILAND) Co., Ltd.
Location	Process						
Date Analysis Commenced	Apr 09, 2024						
Condition of Sample	Contained in one amber glass bottle and two plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Colorless, odorless, no solid and turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Raying
COD	mg/L	-	15	25	≤750	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Raying
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Raying
pH (at 25°C)	-	-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Raying
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Raying

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Pittaya Thongtong ๖323-๙9445

Remark :
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Technical Management

N. Banchook

Approved by

D. Chongkarn

Narumon Banchook
Supervisor
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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Boini, Amphur Srinacha, Chonburi
Thailand 20230

P/O :
Project Name : Factory Monthly
Project Location : WHA CIE 1



TESTING

No.0042
Lot ID: 2434487
Date Received : Apr 09, 2024
Date Reported : Apr 15, 2024
Report Number : 2948020-1

Sample Number : 2434487-1
Sample Date : Apr 09, 2024 9:27 AM
Sample Description : Wastewater
Contract ID : L_WHA_CIE_001_2563 Plot : B-0C Site : Boncate (Thailand) Co., Ltd.
Date Analysis Commenced : Apr 09, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property : Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing BOD (5 days at 20 Degree C)	mg/L	-	2.0	0.5	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Kayong
Oil & Grease	mg/L	-	1	<1	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pattaya Thongtong Win (Dusavee) >323-n-9446

Remark :
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- "C" : Lower than LOQ (Limit of Quantitation) / LOQ (Limit of Reporting)
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Technical Management:

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Natamon Banchoang
Supervisor
Win (Dusavee) >323-n-9446

Approved by:

D. Chongchit

Dej Chongchit
Senior Manager
Win (Dusavee) >323-n-9442

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3 (Name), 41, 22, 41 (2024)



Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Boini, Amphur Srinacha, Chonburi
Thailand 20230

P/O :
Project Name : Factory Monthly
Project Location : WHA CIE 1



TESTING

No.0042
Lot ID: 2434549
Date Received : Apr 09, 2024
Date Reported : Apr 15, 2024
Report Number : 2947962-1

Sample Number : 2434549-1
Sample Date : Apr 09, 2024 10:17 AM
Sample Description : Wastewater
Contract ID : L_CIE_001_2550 Plot : B-5 Site : Boncate (Thailand) Ltd.
Date Analysis Commenced : Apr 09, 2024
Condition of Sample : Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property : Yellow, some odour, solid and a lot of turbid

Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing BOD (5 days at 20 Degree C)	mg/L	-	2.0	73.2	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Kayong
Oil & Grease	mg/L	-	1	<1	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	32	≤200	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pattaya Thongtong Win (Dusavee) >323-n-9446

Remark :
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Technical Management:

N. Banchoang

Natamon Banchoang
Supervisor
Win (Dusavee) >323-n-9446

Approved by:

D. Chongchit

Dej Chongchit
Senior Manager
Win (Dusavee) >323-n-9442

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3 (Name), 41, 22, 41 (2024)



Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
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Thailand 20230

P/O :
Project Name : Factory Monthly
Project Location : WHA CIE 1



TESTING

No.0042
Lot ID: 2434442
Date Received : Apr 09, 2024
Date Reported : Apr 15, 2024
Report Number : 2947924-1

Sample Number : 2434442-1
Sample Date : Apr 09, 2024 10:01 AM
Sample Description : Wastewater
Contract ID : L_CIE_001_2557 Plot : B-0H Site : Castool Tooling Systems
Date Analysis Commenced : Apr 09, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property : Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing BOD (5 days at 20 Degree C)	mg/L	-	2.0	17.4	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Kayong
Oil & Grease	mg/L	-	1	<1	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pattaya Thongtong Win (Dusavee) >323-n-9446

Remark :
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Technical Management:

N. Banchoang

Natamon Banchoang
Supervisor
Win (Dusavee) >323-n-9446

Approved by:

D. Chongchit

Dej Chongchit
Senior Manager
Win (Dusavee) >323-n-9442

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3 (Name), 41, 22, 41 (2024)



Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Boini, Amphur Srinacha, Chonburi
Thailand 20230

P/O :
Project Name : Factory Monthly
Project Location : WHA CIE 1



TESTING

No.0042
Lot ID: 2434502
Date Received : Apr 09, 2024
Date Reported : Apr 15, 2024
Report Number : 2948000-1

Sample Number : 2434502-1
Sample Date : Apr 09, 2024 1:48 PM
Sample Description : Wastewater
Contract ID : L_WHA_CIE_010_2564 Plot : 2-14-2-14 Site : Colerane (Thailand) Co., Ltd.
Date Analysis Commenced : Apr 09, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)
Physical Property : Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing BOD (5 days at 20 Degree C)	mg/L	-	2.0	11.4	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Kayong
Oil & Grease	mg/L	-	1	<1	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pattaya Thongtong Win (Dusavee) >323-n-9446

Remark :
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Technical Management:

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Supervisor
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Approved by:

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Senior Manager
Win (Dusavee) >323-n-9442

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3 (Name), 41, 22, 41 (2024)



Analysis / Test Report

TESTING
No.0042Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Boin, Amphur Sriracha, Chonburi
Thailand 20230Lot ID: 2434486
Date Received : Apr 05, 2024
Date Reported : Apr 15, 2024
Report Number : 2948014-1P/O :
Project Name : Factory / Monthly
Project Location : WHA CIE 1

Page 1 of 1

Sample Number	2434486-1						
Sampled Date	Apr 05, 2024 2:40 PM						
Sample Description	Wastewater						
Contract ID	L_WHA	Plot	D.13/1.D.13/3(A)	Site	Chobun Cinen Energy Co., Ltd.		
Date Analysis Commenced	APHA_001_2563 Apr 05, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, a lot of odour, some solid and no turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	—	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease	mg/L	—	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *	—	—	—	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thonglaeng นิสิตนิสิต ๖323-๖9448Remark :
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Technical Management:

N. Banthit

Approved by

D. Chongthorn

Narumon Banthongkit
Supervisor
นิสิตนิสิต ๖323-๖9448Dej Chongthorn
Senior Manager
นิสิตนิสิต ๖323-๖9442

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Analysis / Test Report

TESTING
No.0042Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Boin, Amphur Sriracha, Chonburi
Thailand 20230Lot ID: 2434473
Date Received : Apr 05, 2024
Date Reported : Apr 15, 2024
Report Number : 2947940-1P/O :
Project Name : Factory / Monthly
Project Location : WHA CIE 1

Page 1 of 1

Sample Number	2434473-1						
Sampled Date	Apr 05, 2024 2:39 PM						
Sample Description	Wastewater						
Contract ID	L_CTE_028_2550	Plot	Z-46	Site	Carl Tech Steel (Thailand) Co.,Ltd.		
Date Analysis Commenced	Apr 05, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)						
Physical Property	Yellow, some odour, a lot of solid and some turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	—	2.0	10.6	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease	mg/L	—	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *	—	—	—	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thonglaeng นิสิตนิสิต ๖323-๖9448Remark :
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Technical Management:

N. Banthit

Approved by

D. Chongthorn

Narumon Banthongkit
Supervisor
นิสิตนิสิต ๖323-๖9448Dej Chongthorn
Senior Manager
นิสิตนิสิต ๖323-๖9442

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5 (Page 1 of 1) 01-08-2024



Analysis / Test Report

TESTING
No.0042Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Boin, Amphur Sriracha, Chonburi
Thailand 20230Lot ID: 2434448
Date Received : Apr 08, 2024
Date Reported : Apr 14, 2024
Report Number : 2947932-1P/O :
Project Name : Factory / Monthly
Project Location : WHA CIE 1

Page 1 of 1

Sample Number	2434448-1						
Sampled Date	Apr 08, 2024 10:25 AM						
Sample Description	Wastewater						
Contract ID	L_CTE_004_2550	Plot	E-5	Site	Dafuku (Thailand) Ltd.		
Date Analysis Commenced	Apr 08, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, a lot of odour, some solid and a lot of turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	—	2.0	50.1	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease	mg/L	—	3	8	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *	—	—	—	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Palanet Sattayavan นิสิตนิสิต ๖323-๖9476Remark :
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- "x" : Lower than LOQ (Limit of Quantitation) / LOQ (Limit of Reporting)
- Analytical marked * value not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management:

N. Banthit

Approved by

D. Chongthorn

Narumon Banthongkit
Supervisor
นิสิตนิสิต ๖323-๖9448Dej Chongthorn
Senior Manager
นิสิตนิสิต ๖323-๖9442

Result data in the sample(s) as submitted, unless the sampling was conducted by ALS. No part of the report may be reproduced in any form without written consent from the laboratory.

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5 (Page 1 of 1) 01-08-2024



Analysis / Test Report

TESTING
No.0042Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Boin, Amphur Sriracha, Chonburi
Thailand 20230Lot ID: 2434481
Date Received : Apr 09, 2024
Date Reported : Apr 15, 2024
Report Number : 2947962-1P/O :
Project Name : Factory / Monthly
Project Location : WHA CIE 1

Page 1 of 1

Sample Number	2434481-1						
Sampled Date	Apr 09, 2024 3:06 PM						
Sample Description	Wastewater						
Contract ID	L_WHA	Plot	E.67	Site	DT Wiring Systems (Thailand) Co., Ltd.		
Date Analysis Commenced	Apr 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	34.5	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *	-	-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thonglaeng นิสิตนิสิต ๖323-๖9448Remark :
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- "x" : Lower than LOQ (Limit of Quantitation) / LOQ (Limit of Reporting)
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Technical Management:

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Approved by

D. Chongthorn

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Analysis / Test Report



TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1

Lot ID: 2434483
Date Received : Apr 09, 2024
Date Reported : Apr 15, 2024
Report Number : 2947865-1

Page 1 of 1

Sample Number	2434483-1						
Sample Date	Apr 09, 2024 3:22 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_006_2502	Plot	2-52	Site	DTD Greenwater Automotive Systems (Thailand) Co., Ltd.		
Date Analysis Commenced	Apr 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment : preservation standards. (APHA / USEPA)						
Physical Property	Yellow, some odour, a lot of solid and some turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	46.5	<500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease	mg/L	-	3	43	<10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5509 - H (8)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thongkietwong ๖323-๖9448
Remark :
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Client : WHA Utilities and Power Public Company Limited
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Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1

Lot ID: 2434432
Date Received : Apr 05, 2024
Date Reported : Apr 11, 2024
Report Number : 2947830-1

Page 1 of 1

Sample Number	2434432-1						
Sample Date	Apr 05, 2024 10:05 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_005_2500	Plot	A-1	Site	Dusakorn (Siam) Co., Ltd.		
Date Analysis Commenced	Apr 05, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment : preservation standards. (APHA / USEPA)						
Physical Property	Yellow, some odour, a lot of solid and some turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	24.8	<500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease	mg/L	-	3	7	<10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5509 - H (8)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thongkietwong ๖323-๖9448
Remark :
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Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1

Lot ID: 2434474
Date Received : Apr 09, 2024
Date Reported : Apr 15, 2024
Report Number : 2947943-1

Page 1 of 1

Sample Number	2434474-1						
Sample Date	Apr 09, 2024 2:43 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_007_2500	Plot	2-49	Site	EBRO Valves (Thailand) Co., Ltd.		
Date Analysis Commenced	Apr 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment : preservation standards. (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some cold and turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	104	<500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease	mg/L	-	3	10	<10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5509 - H (8)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thongkietwong ๖323-๖9448
Remark :
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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1

Lot ID: 2434496
Date Received : Apr 05, 2024
Date Reported : Apr 11, 2024
Report Number : 2948035-1

Page 1 of 1

Sample Number	2434496-1						
Sample Date	Apr 05, 2024 3:50 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_002_2504	Plot	D6-A	Site	ENR Limited		
Date Analysis Commenced	Apr 05, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment : preservation standards. (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, solid and turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	36.1	<500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease	mg/L	-	3	4	<10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5509 - H (8)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thongkietwong ๖323-๖9448
Remark :
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Analysis / Test Report



TESTING
No.0042

Lot ID: 2434515

Date Received : Apr 05, 2024
Date Reported : Apr 11, 2024
Report Number : 2948099-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location: WHA CIE 1

Sample Number	2434515-1						
Sampled Date	Apr 05, 2024 10:50 AM						
Sample Description	Wastewater						
Contract ID	L_WHA CIE1_002_2566 Apr 05, 2024	Plot	A-085	Site	FABINET COMPANY LIMITED		
Date Analysis Commenced	Apr 05, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA - USEPA)						
Physical Property	Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOQ)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	30.6	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4300 - O G	Rayong
Oil & Grease	mg/L	-	3	10	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *				7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (8)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant.
Sampling By : Pithaya Thongtaeng wudhawan@v-323-n-9446

Remarks :
- LOD : Limit of Detection
- "L" : Lower than LOQ (Limit of Quantitation) / LOD (Limit of Reporting)
- Analytical method : Where not included in scope of Accreditation ISO/IEC 17025
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Technical Management : N. Banchoh
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Approved by : D. Chongthorn
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Analysis / Test Report



TESTING
No.0042

Lot ID: 2434516

Date Received : Apr 09, 2024
Date Reported : Apr 15, 2024
Report Number : 2948099-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location: WHA CIE 1

Sample Number	2434516-1						
Sampled Date	Apr 09, 2024 10:50 AM						
Sample Description	Wastewater						
Contract ID	L_WHA CIE1_002_2566 Apr 09, 2024	Plot	Z-58E	Site	FES & KAYSAR ELECTRONICS Co., Ltd.		
Date Analysis Commenced	Apr 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / 1556A) Colorless, some odour, no solid and turbid						
Analyte	Unit	LOD	LOQ (LOQ)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4300 - O G	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *	-	-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (8)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant.
Sampling By : Pithaya Thongtaeng wudhawan@v-323-n-9446

Remarks :
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- "L" : Lower than LOQ (Limit of Quantitation) / LOD (Limit of Reporting)
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Technical Management : N. Banchoh
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Approved by : D. Chongthorn
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Analysis / Test Report



TESTING
No.0042

Lot ID: 2434480

Date Received : Apr 09, 2024
Date Reported : Apr 15, 2024
Report Number : 2947961-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location: WHA CIE 1

Sample Number	2434480-1						
Sampled Date	Apr 09, 2024 11:07 AM						
Sample Description	Wastewater						
Contract ID	L_WHA CIE1_002_2562 Apr 09, 2024	PME	Z-59F	Site	FES International (Thailand) Co., Ltd.		
Date Analysis Commenced	Apr 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, solid and some turbid						
Analyte	Unit	LOD	LOQ (LOQ)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	107	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4300 - O G	Rayong
Oil & Grease	mg/L	-	3	10	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *				8.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (8)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant.
Sampling By : Pithaya Thongtaeng wudhawan@v-323-n-9446

Remarks :
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TESTING
No.0042

Lot ID: 2434505

Date Received : Apr 09, 2024
Date Reported : Apr 15, 2024
Report Number : 2948099-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location: WHA CIE 1

Sample Number	2434505-1						
Sampled Date	Apr 09, 2024 11:00 AM						
Sample Description	Wastewater						
Contract ID	L_WHA CIE1_002_2565 Apr 09, 2024	Plot	Z-59G	Site	FES International Co., Ltd.		
Date Analysis Commenced	Apr 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, solid and some turbid						
Analyte	Unit	LOD	LOQ (LOQ)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	113	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4300 - O G	Rayong
Oil & Grease	mg/L	-	3	3	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (8)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant.
Sampling By : Pithaya Thongtaeng wudhawan@v-323-n-9446

Remarks :
- LOD : Limit of Detection
- "L" : Lower than LOQ (Limit of Quantitation) / LOD (Limit of Reporting)
- Analytical method : Where not included in scope of Accreditation ISO/IEC 17025
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

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Approved by : D. Chongthorn
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Senior Manager
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(Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory. ALS Laboratory Group (Thailand) Public Co., Ltd. is not responsible for the results of the test.)

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Analysis / Test Report



TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

Lot ID: 2434513
Date Received : Apr 08, 2024
Date Reported : Apr 14, 2024
Report Number : 2948052-1

P/O :
Project Name : Factory 1 Monthly
Project Location: WHA CIE 1

Page 1 of 1

Sample Number 2434513-1
Sampled Date Apr 08, 2024 11:00 AM
Sample Description Wastewater
Contract ID L_CIE_011_2957 Plot D-1 Site FRASERS PROPERTY THAILAND INDUSTRIAL FREEHOLD & LEASEHOLD REIT
Date Analysis Commenced Apr 08, 2024
Condition of Sample Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
Physical Property (APHA / USEPA)
Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	19.0	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Oil & Grease	mg/L	-	3	<1	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *	-	-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Paramit Sattayakorn wiboonwatt 323-n-9476

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management :
Narumon Banchoangkit
Supervisor
wiboonwatt 323-n-9445

Approved by :
Dej Changphon
Senior Manager
wiboonwatt 323-n-9442

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Client : WHA Utilities and Power Public Company Limited
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Thailand 20230

Lot ID: 2434450
Date Received : Apr 08, 2024
Date Reported : Apr 14, 2024
Report Number : 2947839-1

P/O :
Project Name : Factory 1 Monthly
Project Location: WHA CIE 1

Page 1 of 1

Sample Number 2434450-1
Sampled Date Apr 08, 2024 10:55 AM
Sample Description Wastewater
Contract ID L_CIE_016_2357 Plot D-2 Site FRASERS PROPERTY THAILAND INDUSTRIAL FREEHOLD & LEASEHOLD REIT
Date Analysis Commenced Apr 08, 2024
Condition of Sample Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
Physical Property (APHA / USEPA)
Yellow, a lot of odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	22.3	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Oil & Grease	mg/L	-	3	<1	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *	-	-	-	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Paramit Sattayakorn wiboonwatt 323-n-9476

Remark :
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Technical Management :
Narumon Banchoangkit
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Approved by :
Dej Changphon
Senior Manager
wiboonwatt 323-n-9442

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Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

Lot ID: 2434453
Date Received : Apr 08, 2024
Date Reported : Apr 14, 2024
Report Number : 2947838-1

P/O :
Project Name : Factory 1 Monthly
Project Location: WHA CIE 1

Page 1 of 1

Sample Number 2434453-1
Sampled Date Apr 08, 2024 2:40 PM
Sample Description Wastewater
Contract ID L_CIE_004_2358 Plot D-6 Site FRASERS PROPERTY THAILAND INDUSTRIAL FREEHOLD & LEASEHOLD REIT
Date Analysis Commenced Apr 08, 2024
Condition of Sample Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
Physical Property (APHA / USEPA)
Yellow, a lot of odour, some solid and a lot of turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	49.5	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Oil & Grease	mg/L	-	3	4	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *	-	-	-	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Paramit Sattayakorn wiboonwatt 323-n-9476

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Technical Management :
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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
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Thailand 20230

Lot ID: 2434467
Date Received : Apr 09, 2024
Date Reported : Apr 15, 2024
Report Number : 2947914-1

P/O :
Project Name : Factory 1 Monthly
Project Location: WHA CIE 1

Page 1 of 1

Sample Number 2434467-1
Sampled Date Apr 09, 2024 2:04 PM
Sample Description Wastewater
Contract ID L_CIE_007_2356 Plot Z-13 Site FRASERS PROPERTY THAILAND INDUSTRIAL FREEHOLD & LEASEHOLD REIT
Date Analysis Commenced Apr 09, 2024
Condition of Sample Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
Physical Property (APHA / USEPA)
Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	36.3	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Oil & Grease	mg/L	-	3	5	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *	-	-	-	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Pethaya Thongpang wiboonwatt 323-n-9448

Remark :
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Technical Management :
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Senior Manager
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Thailand 20330

P/O :
Project Name : Factory / Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2434468
Date Received : Apr 06, 2024
Date Reported : Apr 15, 2024
Report Number : 2947939-1

Page 1 of 1

Sample Number	2434468-1							Page 1 of 1
Sample Date	Apr 09, 2024 2:00 PM							
Sample Description	Wastewater							
Contract ID	L_CIE_009_2556		Plot	2-14	Site	FRASERS PROPERTY THAILAND INDUSTRIAL FREEHOLD & LEASEHOLD REIT		
Date Analysis Commenced	Apr 09, 2024							
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (AFHA / USEPA)							
Physical Property	Yellow, a lot of odour, some solid and turbid							
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location	
Water Testing								
BOD (5 days at 20 Degree C)	mg/L	-	2.0	79.4	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Kayong	
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong	
pH (on site) *				8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong	

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristics from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thongtaeng วิษณุวานิชย์ ๖-323-๙-๙445
Remark :
LOD : Limit of Detection
"u" : Lower than LOD (Limit of Quantitation) / LOQ (Limit of Reporting)
Analytical method : where not included in scope of Accreditation (ISO/IEC 17025)
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Technical Management : N. Banjongk
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Approved by : D. Changchun
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Thailand 20330

P/O :
Project Name : Factory / Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2434469
Date Received : Apr 09, 2024
Date Reported : Apr 15, 2024
Report Number : 2947939-1

Page 1 of 1

Sample Number	2434469-1							Page 10 of 10
Sample Date	Apr 09, 2024 1:55 PM							
Sample Description	Wastewater							
Contract ID	L_CIE_009_2556	Plot	2-16-17	Site	FRASERS PROPERTY THAILAND INDUSTRIAL FREEHOLD & LEASEHOLD REIT			
Date Analysis Commenced	Apr 09, 2024							
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (AFHA / USEPA)							
Physical Property	Yellow, a lot of odour, some solid and turbid							
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location	
Water Testing								
BOD (5 days at 20 Degree C)	mg/L	-	2.0	18.4	<500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Kayong	
Oil & Grease	mg/L	-	3	<3	<10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong	
pH (on site) *		-	-	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong	

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristics from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thongtaeng วิษณุวานิชย์ ๖-323-๙-๙445
Remark :
LOD : Limit of Detection
"u" : Lower than LOD (Limit of Quantitation) / LOQ (Limit of Reporting)
Analytical method : where not included in scope of Accreditation (ISO/IEC 17025)
The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025

Technical Management : N. Banjongk
Narumon Banjongk
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Approved by : D. Changchun
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Thailand 20330

P/O :
Project Name : Factory / Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2434449
Date Received : Apr 06, 2024
Date Reported : Apr 14, 2024
Report Number : 2947834-1

Page 1 of 1

Sample Number	2434449-1						
Sampled Date	Apr 06, 2024 2:05 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_009_2556		Plot	H-1	Site	Glow IP Co., Ltd.	
Location	Office						
Date Analysis Commenced	Apr 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (AFHA / USEPA)						
Physical Property	Yellow, a lot of odour, solid and turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	—	2.0	75.3	≤300	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Kayong
Oil & Grease	mg/L	—	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *				8.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristics from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thongtaeng วิษณุวานิชย์ ๖-323-๙-๙445
Remark :
LOD : Limit of Detection
"u" : Lower than LOD (Limit of Quantitation) / LOQ (Limit of Reporting)
Analytical method : where not included in scope of Accreditation (ISO/IEC 17025)
The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025

Technical Management : N. Banjongk
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Approved by : D. Changchun
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Senior Manager
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Thailand 20330

P/O :
Project Name : Factory / Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2434490
Date Received : Apr 05, 2024
Date Reported : Apr 11, 2024
Report Number : 2948024-1

Page 1 of 1

Sample Number	2434490-1						
Sample Date	Apr 05, 2024 9:30 AM						
Sample Description	Wastewater						
Contract ID	L_WHA CE1_010_2563	Plot	BC	Site	Hardware King Co., Ltd.		
Date Analysis Commenced	Apr 05, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards (AFHA / USEPA)						
Physical Property	Yellow, some odour, solid and no turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	<500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Kayong
Oil & Grease	mg/L	-	3	<3	<10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *				7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristics from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thongtaeng วิษณุวานิชย์ ๖-323-๙-๙445
Remark :
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"u" : Lower than LOD (Limit of Quantitation) / LOQ (Limit of Reporting)
Analytical method : where not included in scope of Accreditation (ISO/IEC 17025)
The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025

Technical Management : N. Banjongk
Narumon Banjongk
Supervisor
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Approved by : D. Changchun
Dej Changchun
Senior Manager
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Analysis / Test Report



TESTING
No.0042

Lot ID: 2434561

Date Received : Apr 09, 2024
Date Reported : Apr 13, 2024
Report Number : 2947983-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location: WHA CIE 1

Page 1 of 1

Sample Number	2434561-1						
Sampled Date	Apr 09, 2024 9:41 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_011_2550	Plot	B-1	Site	Honey Well Electronic Materials (Thailand) Co., Ltd.		
Date Analysis Commenced	Apr 09, 2024						
Condition of Sample	Contained in one amber glass bottle and two plastic bottles. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, some odour, solid and no turbid						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	11.7	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Kayong
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *		-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1284	≤7000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Paraset Sattayakorn widoowasath 323-9-9476, Thanosun Namakumna widoowasath 3204-9-0101

Remark :
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Technical Management

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Narumon Banchoangkit
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Approved by

D. Chongchom

Dej Chongchom
Senior Manager
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Analysis / Test Report



TESTING
No.0009

Lot ID: 2434561

Date Received : Apr 09, 2024
Date Reported : Apr 17, 2024
Report Number : 2947983-2

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location: WHA CIE 1

Page 1 of 1

Sample Number	2434561-1						
Sampled Date	Apr 09, 2024 9:41 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_011_2550	Plot	B-1	Site	Honey Well Electronic Materials (Thailand) Co., Ltd.		
Date Analysis Commenced	Apr 10, 2024						
Condition of Sample	Contained in one amber glass bottle and two plastic bottles. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, some odour, solid and no turbid						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Nickel	mg/L	0.0003	0.0005	0.02	≤1.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Paraset Sattayakorn widoowasath 323-9-9476, Thanosun Namakumna widoowasath 3204-9-0101

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Chanatt L.

Chanattagorn Ertchom
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widoowasath 3204-9-0008

Approved by

K. Anek

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2434493

Date Received : Apr 09, 2024
Date Reported : Apr 13, 2024
Report Number : 2948029-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location: WHA CIE 1

Page 1 of 1

Sample Number	2434493-1						
Sampled Date	Apr 09, 2024 3:49 PM						
Sample Description	Wastewater						
Contract ID	L_WHA_CIE_016_2563	Plot	Z-63	Site	Irisanka (Thailand) Co., Ltd.		
Date Analysis Commenced	Apr 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, some odour, solid and turbid						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	66.8	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Kayong
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pitiyay Thongpang widoowasath 3223-9-9448

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Technical Management

N. Banchoangkit

Narumon Banchoangkit
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Approved by

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Dej Chongchom
Senior Manager
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Analysis / Test Report



TESTING
No.0042

Lot ID: 2434436

Date Received : Apr 09, 2024
Date Reported : Apr 11, 2024
Report Number : 2947815-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location: WHA CIE 1

Page 1 of 1

Sample Number	2434436-1						
Sampled Date	Apr 09, 2024 10:40 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_012_2550	Plot	A-7	Site	In-Season Foods Ltd.		
Date Analysis Commenced	Apr 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, some odour, solid and turbid						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	46.8	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Kayong
Oil & Grease	mg/L	-	3	6	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *				7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pitiyay Thongpang widoowasath 3223-9-9448

Remark :
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Technical Management

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Approved by

D. Chongchom

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Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2434556
Date Received : Apr 05, 2024
Date Reported : Apr 11, 2024
Report Number : 2947972-1

Page 1 of 1

Sample Number	2434556-1						
Sample Date	Apr 05, 2024 3:18 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_002_2508	Plot	M-2	Site	Imee Ecocycle Co., Ltd.		
Date Analysis Commenced	Apr 05, 2024						
Condition of Sample	Contained in one amber glass bottle and two plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Black, a lot of odour, solid and turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	97.5	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 5200 - G	Bayang
COO	mg/L	1.5	25	281	≤750	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Bayang
Oil & Grease	mg/L	1	3	10	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Bayang
pH (on site) *	-	-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Bayang
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	8	46	≤100	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Bayang

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Pithaya Thongtaeng w:0264988-1-323-9-9448

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Technical Management

N. Banjongkitt

Narumon Banjongkitt
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Approved by

D. Chongchon

Dej Chongchon
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Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2434472
Date Received : Apr 05, 2024
Date Reported : Apr 15, 2024
Report Number : 2947936-1

Page 1 of 1

Sample Number	2434472-1						Page 1 of 2
Sample Date	Apr 05, 2024 11:27 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_002_2561	Plot	2-40	Site	ISHWAR PROFILES (THAILAND) Co., Ltd.		
Date Analysis Commenced	Apr 05, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, some odour, a lot of solid and some turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	30.6	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 5200 - G	Kayong
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	8.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Pithaya Thongtaeng w:0264988-1-323-9-9448

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Technical Management

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Approved by

D. Chongchon

Dej Chongchon
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P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2434459
Date Received : Apr 05, 2024
Date Reported : Apr 11, 2024
Report Number : 2947988-1

Page 1 of 1

Sample Number	2434459-1						Page 1 of 1
Sample Date	Apr 05, 2024 3:55 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_012_2560 Plot B-6E Site Jungthamkiet Lift Truck Co., Ltd.						
Date Analysis Commenced	Apr 05, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	32.3	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - G	Rayong
Oil & Grease	mg/L	-	3	5	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *	-	-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Pithaya Thongtaeng w:0264988-1-323-9-9448

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Technical Management

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Narumon Banjongkitt
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Approved by

D. Chongchon

Dej Chongchon
Senior Manager
w:0264988-1-323-9-9442

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P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2434551
Date Received : Apr 09, 2024
Date Reported : Apr 15, 2024
Report Number : 2947925-1

Page 1 of 1

Sample Number	2434551-1							Page 1 of 1
Sample Date	Apr 09, 2024 2:12 PM							
Sample Description	Wastewater							
Contract ID	L_CIE_002_2561	Plot	2-18	Site	KIMSONG ARTWOOD Co., Ltd.			
Date Analysis Commenced	Apr 09, 2024							
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)							
Physical Property	Yellow, a lot of odour, some solid and a lot of turbid							
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location	
Water Testing								
BOD (5 days at 20 Degree C)	mg/L	-	2.0	97.3	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 1600 - G	Kayong	
Formaldehyde	mg/L	0.03	0.1	>0.1	<1	Wastewater analysis manual Environmental Engineering Association of Thailand, 4th ed., 2004	Kayong	
Oil & Grease	mg/L	-	3	4	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong	
pH (on site) *	-	-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong	

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Pithaya Thongtaeng w:0264988-1-323-9-9448

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Technical Management

N. Banjongkitt

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Approved by

D. Chongchon

Dej Chongchon
Senior Manager
w:0264988-1-323-9-9442

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TESTING
No.0042

Lot ID: 2434475

Date Received : Apr 09, 2024
Date Reported : Apr 15, 2024
Report Number : 2947947-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location: WHA CIE 1

Page 1 of 1

Sample Number 2434475-1
Sample Date Apr 09, 2024 10:33 AM
Sample Description Wastewater
Contract ID L_CIE_016_2557 Plot 2-50A Site Kinacru Logistics (Thailand) Co., Ltd.
Date Analysis Commenced Apr 09, 2024
Condition of Sample Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
Physical Property (APHA / USEPA)
Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	1.0	69.0	<500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease	mg/L	-	1	5	<10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Pattaya Thongsaeng วิจัยและวิจัย >323-4-6448

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Technical Management : N. Banchohkit
Narumon Banchohkit
Supervisor
วิไลวัฒนา >323-4-9445

Approved by : D. Chongchuan
Dej Chongchuan
Senior Manager
วิไลวัฒนา >323-4-9442

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TESTING
No.0042

Lot ID: 2434439

Date Received : Apr 09, 2024
Date Reported : Apr 11, 2024
Report Number : 2947818-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location: WHA CIE 1

Page 2 of 2

Sample Number 2434439-1
Sample Date Apr 09, 2024 11:18 AM
Sample Description Wastewater
Contract ID L_CIE_001_2556 Plot 8-11C Site Kinyama (Thailand) Co., Ltd.
Date Analysis Commenced Apr 09, 2024
Condition of Sample Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
Physical Property (APHA / USEPA)
Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	58.0	<500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease	mg/L	-	3	5	<10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Pattaya Thongsaeng วิจัยและวิจัย >323-4-6448

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Technical Management : N. Banchohkit
Narumon Banchohkit
Supervisor
วิไลวัฒนา >323-4-9445

Approved by : D. Chongchuan
Dej Chongchuan
Senior Manager
วิไลวัฒนา >323-4-9442

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TESTING
No.0042

Lot ID: 2434559

Date Received : Apr 09, 2024
Date Reported : Apr 14, 2024
Report Number : 2947970-1

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331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location: WHA CIE 1

Page 1 of 1

Sample Number 2434559-1
Sample Date Apr 08, 2024 11:30 AM
Sample Description Wastewater
Contract ID L_CIE_020_2550 Plot 2-3 Site Kyoden (Thailand) Co., Ltd.
Location Factory 1
Date Analysis Commenced Apr 09, 2024
Condition of Sample Contained in one amber glass bottle and two plastic bottles. Sample containers comply to pretreatment - preservation standards.
Physical Property (APHA / USEPA)
Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	14.4	<500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease	mg/L	-	1	<3	<10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	576	<3000	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Paramet Sattayakun วิจัยและวิจัย >323-4-9476, Thanassorn Namkuma วิจัยและวิจัย >204-4-0101

Remarks :
- LOD : Limit of Detection
- "x" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * where not included in scope of Accreditation ISO/IEC 17025
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management : N. Banchohkit
Narumon Banchohkit
Supervisor
วิไลวัฒนา >323-4-9445

Approved by : D. Chongchuan
Dej Chongchuan
Senior Manager
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Analysis / Test Report



TESTING
No.0009

Lot ID: 2434559

Date Received : Apr 08, 2024
Date Reported : Apr 17, 2024
Report Number : 2947970-2

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location: WHA CIE 1

Page 1 of 1

Sample Number 2434559-1
Sample Date Apr 08, 2024 11:30 AM
Sample Description Wastewater
Contract ID L_CIE_020_2550 Plot 2-3 Site Kyoden (Thailand) Co., Ltd.
Location Factory 1
Date Analysis Commenced Apr 09, 2024
Condition of Sample Contained in one amber glass bottle and two plastic bottles. Sample containers comply to pretreatment - preservation standards.
Physical Property (APHA / USEPA)
Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Copper	mg/L	0.0003	0.0005	0.03	<1.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3020 F	Bangkok
Nickel	mg/L	0.0003	0.0005	0.002	<1.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3020 F	Bangkok

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Paramet Sattayakun วิจัยและวิจัย >323-4-9476, Thanassorn Namkuma วิจัยและวิจัย >204-4-0101

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Technical Management : Chanatt S.
Chanattagarn Sitchum
Section Head
วิไลวัฒนา >204-4-0008

Approved by : Kanokorn Anek
Kanokorn Anek
Senior Manager
วิไลวัฒนา >204-4-0004

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Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2434560
Date Received : Apr 08, 2024
Date Reported : Apr 14, 2024
Report Number : 2847081-1

Page 1 of 1

Sample Number	2434560-1						
Sampled Date	Apr 08, 2024 11:40 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_001_2550	Plot	2-6	Site	Kyoden (Thailand) Co., Ltd.		
Location	Factory 2						
Date Analysis Commenced	Apr 08, 2024						
Condition of Sample	Contained in one amber glass bottle and two plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, some odour, solid and turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	8.8	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Kyogen
Oil & Grease	mg/L		3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kyogen
pH (on site)				4.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kyogen
Total Dissolved Solids Dried at 180 degree C	mg/L		5	449	≤2000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Kyogen

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Paramet Sattayakorn wu@uol.com 9-323-9-9476, Thanassak Hanomkha wu@uol.com 9-204-9-0101

Remark :

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Technical Management

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Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING
No.0009

Lot ID: 2434560
Date Received : Apr 08, 2024
Date Reported : Apr 17, 2024
Report Number : 2847081-3

Page 1 of 1

Sample Number	2434560-1						
Sampled Date	Apr 08, 2024 11:40 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_001_2550	Plot	2-6	Site	Kyoden (Thailand) Co., Ltd.		
Location	Factory 2						
Date Analysis Commenced	Apr 09, 2024						
Condition of Sample	Contained in one amber glass bottle and two plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, some odour, solid and turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Copper	mg/L	0.0003	0.0005	0.17	≤2.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3120 B, 3030 F	Kyogen
Nickel	mg/L	0.0003	0.0005	0.002	≤1.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Kyogen

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Paramet Sattayakorn wu@uol.com 9-323-9-9476, Thanassak Hanomkha wu@uol.com 9-204-9-0101

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P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2434458
Date Received : Apr 09, 2024
Date Reported : Apr 13, 2024
Report Number : 2947886-1

Page 1 of 1

Sample Number	2434458-1						
Sampled Date	Apr 09, 2024 9:24 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_013_2557	Plot	B-48	Site	Kyowa SS (Thailand) Co., Ltd.		
Location							
Date Analysis Commenced	Apr 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and a lot of turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	45.4	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Kyogen
Oil & Grease	mg/L		3	8	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kyogen
pH (on site)				7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kyogen

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Pethaya Thongsaeng wu@uol.com 9-323-9-9476

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P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2434437
Date Received : Apr 08, 2024
Date Reported : Apr 14, 2024
Report Number : 3347816-1

Page 1 of 1

Sample Number	2434437-1						
Sampled Date	Apr 08, 2024 3:30 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_001_2554	Plot	A-5/1	Site	Larn Chabang Tank Services Co., Ltd.		
Location							
Date Analysis Commenced	Apr 08, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	40.3	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Kyogen
Oil & Grease	mg/L		3	8	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kyogen
pH (on site)				7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kyogen

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Paramet Sattayakorn wu@uol.com 9-323-9-9476

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P/O :
Project Name : Factory / Monthly
Project Location : WHA CIE 1



TESTING

Lot ID: 2434514
Date Received : Apr 05, 2024
Date Reported : Apr 11, 2024
Report Number : 2948064-1

Page 1 of 1

Sample Number : 2434514-1
Sampled Date : Apr 05, 2024 1:50 PM
Sample Description : Wastewater
Contract ID : L_WHA_CIE1_001_2566
Date Analysis Commenced : Apr 05, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
(APHA / USEPA)
Physical Property : Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	—	2.0	42.8	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 5500 - O-G	Kayong
Oil & Grease	mg/L	—	3	8	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	—	—	—	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thongtongkiet wirodwan@r 323-n-9445

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Thailand 20230

P/O :
Project Name : Factory / Monthly
Project Location : WHA CIE 1



TESTING

Lot ID: 2434478
Date Received : Apr 05, 2024
Date Reported : Apr 11, 2024
Report Number : 2947955-1

Page 1 of 1

Sample Number : 2434478-1
Sampled Date : Apr 05, 2024 11:18 AM
Sample Description : Wastewater
Contract ID : L_CIE_001_2560
Date Analysis Commenced : Apr 05, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
(APHA / USEPA)
Physical Property : Yellow, a lot of odour, some solid and a lot of turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	—	2.0	112	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 5500 - O-G	Kayong
Oil & Grease	mg/L	—	3	7	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	—	—	—	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thongtongkiet wirodwan@r 323-n-9445

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Thailand 20230

P/O :
Project Name : Factory / Monthly
Project Location : WHA CIE 1



TESTING

Lot ID: 2434451
Date Received : Apr 06, 2024
Date Reported : Apr 14, 2024
Report Number : 2947836-1

Page 1 of 1

Sample Number : 2434451-1
Sampled Date : Apr 06, 2024 3:50 PM
Sample Description : Wastewater
Contract ID : L_CIE_012_2557
Date Analysis Commenced : Apr 06, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
(APHA / USEPA)
Physical Property : Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	—	2.0	23.1	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 5500 - O-G	Kayong
Oil & Grease	mg/L	—	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	—	—	—	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Parameet Sattayakul wirodwan@r 323-n-9446

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P/O :
Project Name : Factory / Monthly
Project Location : WHA CIE 1



TESTING

Lot ID: 2434518
Date Received : Apr 09, 2024
Date Reported : Apr 14, 2024
Report Number : 2948102-1

Page 1 of 1

Sample Number : 2434518-1
Sampled Date : Apr 09, 2024 3:40 PM
Sample Description : Wastewater
Contract ID : L_WHA_CIE1_005_2566
Date Analysis Commenced : Apr 09, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
(APHA / USEPA)
Physical Property : Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	—	2.0	34.8	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 5500 - O-G	Kayong
Oil & Grease	mg/L	—	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	—	—	—	7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Parameet Sattayakul wirodwan@r 323-n-9446

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Analysis / Test Report



TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

Lot ID: 2434485
Date Received : Apr 05, 2024
Date Reported : Apr 11, 2024
Report Number : 2948010-1

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Page 1 of 1

Sample Number : 2434485-1
Sample Date : Apr 05, 2024 10:22 AM
Sample Description : Wastewater
Contract ID : L_CIE_002_2553 Plot : A-6 Site : IDEC Die-casting (THAIWAT) Co.,Ltd.
Date Analysis Commenced : Apr 05, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
(APHA / USEPA)
Physical Property : Yellow, a lot of odour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	81.6	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease	mg/L	-	3	8	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thongtongwattanasakul 3-323-n-9448

Remarks :
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- "C" : Lower than LOQ (Limit of Quantitation) / LOB (Limit of Reporting)
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Client : WHA Utilities and Power Public Company Limited
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Thailand 20230

Lot ID: 2434460
Date Received : Apr 05, 2024
Date Reported : Apr 11, 2024
Report Number : 2948015-1

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Page 1 of 1

Sample Number : 2434460-1
Sample Date : Apr 05, 2024 9:55 AM
Sample Description : Wastewater
Contract ID : L_CIE_006_2560 Plot : K-1 Site : JKKK PC Aluminium Co.,Ltd.
Date Analysis Commenced : Apr 05, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
(APHA / USEPA)
Physical Property : Yellow, a lot of odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	35.0	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease	mg/L	-	3	8	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thongtongwattanasakul 3-323-n-9448

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Client : WHA Utilities and Power Public Company Limited
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Thailand 20230

Lot ID: 2434454
Date Received : Apr 08, 2024
Date Reported : Apr 14, 2024
Report Number : 2947819-1

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Page 1 of 1

Sample Number : 2434454-1
Sample Date : Apr 08, 2024 3:15 PM
Sample Description : Wastewater
Contract ID : L_CIE_005_2558 Plot : A-6/7 Site : Huai Chavet Engineering Co.,Ltd.
Date Analysis Commenced : Apr 08, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
(APHA / USEPA)
Physical Property : Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	71.2	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease	mg/L	-	3	8	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Paramet Sattayakun 3-323-n-9476

Remarks :
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Thailand 20230

Lot ID: 2434488
Date Received : Apr 09, 2024
Date Reported : Apr 15, 2024
Report Number : 2948021-1

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Page 1 of 1

Sample Number : 2434488-1
Sample Date : Apr 09, 2024 10:55 AM
Sample Description : Wastewater
Contract ID : L_WHA_CIE1_004_2563 Plot : 2-59H 2-59H Site : Ruedon (Thailand) Co.,Ltd.
Date Analysis Commenced : Apr 09, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
(APHA / USEPA)
Physical Property : Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	65.1	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease	mg/L	-	3	10	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thongtongwattanasakul 3-323-n-9448

Remarks :
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Thailand 20230
P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Lot ID: 2434477
Date Received : Apr 09, 2024
Date Reported : Apr 15, 2024
Report Number : 2947932-1

Page 1 of 1

Sample Number	2434477-1						
Sampled Date	Apr 09, 2024 10:53 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_001_2561	Plot	2-59 I	Site	Redflow (Thailand) Limited		
Date Analysis Commenced	Apr 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, a lot of odor, some solid and a lot of turbid						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	211	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Kayong
Oil & Grease	mg/L	-	5	8	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thongtaeng วิไลลักษณ์ 3-323-9-9448

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Approved by

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Thailand 20230
P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Lot ID: 2434447
Date Received : Apr 05, 2024
Date Reported : Apr 11, 2024
Report Number : 2947831-1

Page 1 of 1

Sample Number	2434447-1						
Sampled Date	Apr 05, 2024 3:00 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_014_2560	Plot	D-12/2A	Site	S.O. TANK CLEANING TERMINAL Co., Ltd.		
Date Analysis Commenced	Apr 05, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	54.2	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Kayong
Oil & Grease	mg/L	-	5	8	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thongtaeng วิไลลักษณ์ 3-323-9-9448

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Thailand 20230
P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Lot ID: 2434471
Date Received : Apr 09, 2024
Date Reported : Apr 15, 2024
Report Number : 2947933-1

Page 1 of 1

Sample Number	2434471-1						
Sampled Date	Apr 09, 2024 2:32 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_010_2556	Plot	2-32	Site	Sai Industry (Thailand) Co., Ltd.		
Date Analysis Commenced	Apr 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, a lot of odour, solids and turbid						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	158	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Kayong
Oil & Grease	mg/L		5	8	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *				8.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thongtaeng วิไลลักษณ์ 3-323-9-9448

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Thailand 20230
P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Lot ID: 2434470
Date Received : Apr 09, 2024
Date Reported : Apr 15, 2024
Report Number : 2947928-1

Page 1 of 1

Sample Number	2434470-1							Page 1 of 1
Sampled Date	Apr 09, 2024 2:27 PM							
Sample Description	Wastewater							
Contract ID	L_CIE_032_2550	Plot	2-33	Site	Sakura Industry (Thailand) Co., Ltd.			
Date Analysis Commenced	Apr 09, 2024							
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.							
	(APHA / USEPA)							
Physical Property	Yellow, a lot of odor, some solid and turbid							
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location	
Water Testing								
BOD (5 days at 20 Degree C)	mg/L	-	2.0	158	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Kayong	
Oil & Grease	mg/L	-	5	8	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong	
pH (on site) *	-	-	-	8.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong	

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thongtaeng วิไลลักษณ์ 3-323-9-9448

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Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2434552
Date Received : Apr 08, 2024
Date Reported : Apr 14, 2024
Report Number : 2947967-1

Page 1 of 1

Sample Number	2434552-1						
Sampled Date	Apr 08, 2024 10:15 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_001_2555	Plot	C-5.6	Site	SANG CHAREON EASTERN GALVANIZE CO.,LTD		
Date Analysis Commenced	Apr 08, 2024						
Condition of Sample	Contained in one amber glass bottle and two plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, solid and some turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
ROD (5 days at 20 Degree C)	mg/L	-	2.0	8.0	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
COO	mg/L	1.5	25	34	≤750	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *				8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L		5	271	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Paramee Sattayakun วิไลวรรณ 323-95476 , Thanassorn Namakunnas วิไลวรรณ 323-95476

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING
No.0009

Lot ID: 2434552
Date Received : Apr 08, 2024
Date Reported : Apr 17, 2024
Report Number : 2947967-2

Page 1 of 1

Sample Number	2434552-1						
Sampled Date	Apr 08, 2024 10:15 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_001_2555	Plot	C-5.6	Site	SANG CHAREON EASTERN GALVANIZE CO.,LTD		
Date Analysis Commenced	Apr 09, 2024						
Condition of Sample	Contained in one amber glass bottle and two plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, solid and some turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Nickel	mg/L	0.0003	0.0005	0.003	≤1.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.005	0.09	≤5.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Paramee Sattayakun วิไลวรรณ 323-95476 , Thanassorn Namakunnas วิไลวรรณ 323-95476

Remarks:
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOB (Limit of Reporting)
- Analytical method : value not included in scope of Accreditation ISO/IEC 17025
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025

Technical Management :
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Supervisor
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Approved by :
Kantakorn Anek
Senior Manager
วิไลวรรณ 323-95442

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Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING
No.0009

Lot ID: 2434552
Date Received : Apr 08, 2024
Date Reported : Apr 17, 2024
Report Number : 2947967-3

Page 1 of 1

Sample Number	2434552-1						
Sampled Date	Apr 08, 2024 10:15 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_001_2555	Plot	C-5.6	Site	SANG CHAREON EASTERN GALVANIZE CO.,LTD		
Date Analysis Commenced	Apr 09, 2024						
Condition of Sample	Contained in one amber glass bottle and two plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, solid and some turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.21	≤10.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Paramee Sattayakun วิไลวรรณ 323-95476 , Thanassorn Namakunnas วิไลวรรณ 323-95476

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Technical Management :
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331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2434466
Date Received : Apr 05, 2024
Date Reported : Apr 11, 2024
Report Number : 2947930-1

Page 1 of 1

Sample Number	2434466-1						
Sampled Date	Apr 05, 2024 1:45 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_018_2557	Plot	F-13	Site	SET (Thailand) Co.,LTD.		
Date Analysis Commenced	Apr 05, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
ROD (5 days at 20 Degree C)	mg/L	-	2.0	42.4	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease	mg/L	-	3	7	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *				7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Paramee Sattayakun วิไลวรรณ 323-95476

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Thailand 20230
P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1



TESTING
No.0042
Lot ID: 2434465
Date Received : Apr 05, 2024
Date Reported : Apr 11, 2024
Report Number : 2947960-1

Page 1 of 1

Sample Number	2434465-1						
Sample Date	Apr 05, 2024 2:25 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_017_2557	Plot	F-30	Site	Srinet Kots (Thailand) Corporation Limited.		
Date Analysis Commenced	Apr 05, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards: (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	23.6	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O ₅	Kayong
Oil & Grease	mg/L	-	1	4	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Pitthaya Thengsarn widoosara@>323-w-9446

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Thailand 20230
P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1



TESTING
No.0042
Lot ID: 2434441
Date Received : Apr 05, 2024
Date Reported : Apr 11, 2024
Report Number : 2947923-1

Page 1 of 1

Sample Number	2434441-1						
Sample Date	Apr 05, 2024 9:52 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_017_2556	Plot	B-3	Site	Srinwa Kogyo (Thailand) Co., Ltd.		
Date Analysis Commenced	Apr 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards: (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, solid and turbid						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	52.8	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O ₅	Kayong
Oil & Grease	mg/L	-	1	<1	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Pitthaya Thengsarn widoosara@>323-w-9446

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Thailand 20230
P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1



TESTING
No.0042
Lot ID: 2434445
Date Received : Apr 05, 2024
Date Reported : Apr 11, 2024
Report Number : 2947827-1

Page 1 of 1

Sample Number	2434445-1						
Sample Date	Apr 05, 2024 2:35 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_018_2550	Plot	D-13/2	Site	Slum Steel P&S Services Ltd.		
Date Analysis Commenced	Apr 05, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards: (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	14.5	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O ₅	Kayong
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site)	-	-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Pitthaya Thengsarn widoosara@>323-w-9446

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Thailand 20230
P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1



TESTING
No.0042
Lot ID: 2434440
Date Received : Apr 05, 2024
Date Reported : Apr 11, 2024
Report Number : 2947822-1

Page 1 of 1

Sample Number	2434440-1							Page 1 of 2
Sample Date	Apr 05, 2024 11:05 AM							
Sample Description	Wastewater							
Contract ID	L_CIE_004_2557	Plot	B-11A	Site	SPF (Thailand) Co., Ltd.			
Date Analysis Commenced	Apr 05, 2024							
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards: (APHA / USEPA)							
Physical Property	Yellow, some odour, no solid and turbid							
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location	
Water Testing								
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O ₅	Kayong	
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong	
pH (on site) *	-	-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong	

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Pitthaya Thengsarn widoosara@>323-w-9446

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

Lot ID: 2434444
Date Received : Apr 08, 2024
Date Reported : Apr 14, 2024
Report Number : 2947826-1

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Page 1 of 1

Sample Number	2434444-1						
Sample Date	Apr 08, 2024 10:45 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_019_2550	Plot	D-4	Site	Tanet Plus (Thailand) Co., Ltd.		
Date Analysis Commenced	Apr 08, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	Yellow, a lot of odour, some solid and a lot of turbid						
Analyte	Unit	LOD	LOQ (LO)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	66.0	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 5500 - O-G	Kayong
Oil & Grease	mg/L	-	3	1	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Paramet Sattayakum วิเศษคุณากร 323-9-9446

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Approved by :
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Analysis / Test Report



TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

Lot ID: 2434452
Date Received : Apr 05, 2024
Date Reported : Apr 11, 2024
Report Number : 2947837-1

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Page 1 of 1

Sample Number	2434452-1						
Sample Date	Apr 05, 2024 3:20 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_003_2558	Plot	M-3	Site	Tayli Kemri's Auto Parts (Thailand) Co., Ltd.		
Date Analysis Commenced	Apr 05, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LO)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	65.5	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 5500 - O-G	Kayong
Oil & Grease	mg/L	-	1	4	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Pithaya Thongsaeng วิเศษคุณากร 323-9-9448

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Analysis / Test Report



TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

Lot ID: 2434550
Date Received : Apr 05, 2024
Date Reported : Apr 11, 2024
Report Number : 2948006-1

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Page 1 of 1

Sample Number	2434550-1						
Sample Date	Apr 05, 2024 1:55 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_013_2560	Plot	F-13A	Site	Thai daem Precision Co., Ltd.		
Date Analysis Commenced	Apr 05, 2024						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards.						
Physical Property	Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LO)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	146	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 5500 - O-G	Kayong
COD	mg/L	-	1.5	25	≤750	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Kayong
Oil & Grease	mg/L	-	3	10	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	448	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Kayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	66	≤200	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Pithaya Thongsaeng วิเศษคุณากร 323-9-9448

Remark :

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Technical Management :
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Nanorn Banthongk
Supervisor
วิเศษคุณากร 323-9-9446

Approved by :
D. Chongchon
Dej Chongchon
Senior Manager
วิเศษคุณากร 323-9-9442

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Analysis / Test Report



TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

Lot ID: 2434446
Date Received : Apr 05, 2024
Date Reported : Apr 11, 2024
Report Number : 2947828-1

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Page 1 of 1

Sample Number	2434446-1						
Sample Date	Apr 05, 2024 2:50 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_007_2559	Plot	D-32/1A	Site	THAI ESCORP LTD.		
Date Analysis Commenced	Apr 05, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LO)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	31.6	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 5500 - O-G	Kayong
Oil & Grease	mg/L	-	1	6	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Pithaya Thongsaeng วิเศษคุณากร 323-9-9448

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Technical Management :
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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

Lot ID: 2434553
Date Received : Apr 08, 2024
Date Reported : Apr 14, 2024
Report Number : 2947970-1

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1

Page 1 of 1

Sample Number	2434553-1						
Sample Date	Apr 08, 2024 1:45 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_001_2550	Plot	D-9	Site	Thai Huawin Battery Co., Ltd.		
Date Analysis Commenced	Apr 08, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, some odour, solid and no turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Kayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5200 D	Kayong
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (8)	Kayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	-	210	≤3600	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Kayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Paramet Sattayakun wutthasawat 323-9-9476, Thanassuan Namnamsana wutthasawat 204-0-0101

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Technical Management

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Analysis / Test Report

TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

Lot ID: 2434553
Date Received : Apr 08, 2024
Date Reported : Apr 17, 2024
Report Number : 2947970-2

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1

Page 1 of 1

Sample Number	2434553-1						Page 1 of 2
Sample Date	Apr 08, 2024 1:45 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_001_2550	Plot	D-9	Site:	Thai Huawin Battery Co., Ltd.		
Date Analysis Commenced	Apr 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards						
Physical Property	(APHA / USEPA) Yellow, some odour, solid and no turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Lead	mg/L	0.0003	0.0005	0.003	≤0.2	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3120 B, 3130 F	Bangkok

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Paramet Sattayakun wutthasawat 323-9-9476, Thanassuan Namnamsana wutthasawat 204-0-0101

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Technical Management

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Analysis / Test Report

TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

Lot ID: 2434463
Date Received : Apr 05, 2024
Date Reported : Apr 11, 2024
Report Number : 2947900-1

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1

Page 1 of 1

Sample Number	2434463-1						
Sampled Date	Apr 05, 2024 2:05 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_001_2552	Plot	F-12	Site	Thai Tinted Products Co., Ltd.		
Date Analysis Commenced	Apr 05, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, a lot of odour, solid and turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	106	≤300	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Kayong
Oil & Grease	mg/L		3	<3	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *				8.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (8)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Pittaya Thongkarn wutthasawat 323-9-9448

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Thailand 20230

Lot ID: 2434512
Date Received : Apr 08, 2024
Date Reported : Apr 14, 2024
Report Number : 2948079-1

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1

Page 1 of 1

Sample Number	2434512-1							Page 1 of 1
Sample Date	Apr 08, 2024 10:40 AM							
Sample Description	Wastewater							
Contract ID	L_CIE_001_2560	Plot	E-6	Site	Thai Ring Union Car Public Co., Ltd.			
Date Analysis Commenced	Apr 08, 2024							
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.							
Physical Property	(APHA / USEPA) Yellow, a lot of odour, some solid and turbid							
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location	
Water Testing								
BOD (5 days at 20 Degree C)	mg/L	-	2.0	34.8	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Kunming	
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kunming	
pH (on site) *	-	-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (8)	Kunming	

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Paramet Sattayakun wutthasawat 323-9-9476

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Technical Management

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

Lot ID: 2434497
Date Received : Apr 10, 2024
Date Reported : Apr 17, 2024
Report Number : 2946039-1

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Page 1 of 1

Sample Number : 2434497-1
Sampled Date : Apr 10, 2024 10:18 AM
Sample Description : Wastewater
Contract ID : L_WHA CIE1_2023_2564
Date Analysis Commenced : Apr 10, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pre-treatment - preservation standards.
(APHA / USEPA)
Physical Property : Yellow, a lot of odour, some solid and a lot of turbid

Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	85.3	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Raying
Oil & Grease	mg/L	-	3	5	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5220 B	Raying
pH (on site) *	-	-	-	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Raying

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 / Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pittaya Thonglaeng มินโดวซ่า ๖323-๙9448

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Technical Management

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
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Thailand 20230

Lot ID: 2434520
Date Received : Apr 09, 2024
Date Reported : Apr 15, 2024
Report Number : 2946109-1

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Page 1 of 1

Sample Number : 2434520-1
Sampled Date : Apr 09, 2024 2:17 PM
Sample Description : Wastewater
Contract ID : L_WHA CIE1_2023_2565
Date Analysis Commenced : Apr 09, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pre-treatment - preservation standards.
(APHA / USEPA)
Physical Property : Yellow, a lot of odour, some solid and a lot of turbid

Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	84.4	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Raying
Oil & Grease	mg/L	-	3	4	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5220 B	Raying
pH (on site) *	-	-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Raying

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 / Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pittaya Thonglaeng มินโดวซ่า ๖323-๙9448

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Client : WHA Utilities and Power Public Company Limited
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Thailand 20230

Lot ID: 2434506
Date Received : Apr 09, 2024
Date Reported : Apr 15, 2024
Report Number : 2948065-1

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Page 1 of 1

Sample Number : 2434506-1
Sampled Date : Apr 09, 2024 3:31 PM
Sample Description : Wastewater
Contract ID : L_WHA CIE1_2023_2565
Date Analysis Commenced : Apr 09, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pre-treatment - preservation standards.
(APHA / USEPA)
Physical Property : Yellow, a lot of odour, some solid and a lot of turbid

Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	41.4	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Raying
Oil & Grease	mg/L	-	3	8	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5220 B	Raying
pH (on site) *	-	-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Raying

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 / Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pittaya Thonglaeng มินโดวซ่า ๖323-๙9448

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Technical Management

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Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

Lot ID: 2434489
Date Received : Apr 10, 2024
Date Reported : Apr 17, 2024
Report Number : 2948022-1

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Page 1 of 1

Sample Number : 2434489-1
Sampled Date : Apr 10, 2024 9:43 AM
Sample Description : Wastewater
Contract ID : L_WHA CIE1_2023_2563
Date Analysis Commenced : Apr 10, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pre-treatment - preservation standards.
(APHA / USEPA)
Physical Property : Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	187	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Raying
Oil & Grease	mg/L	-	3	8	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5220 B	Raying
pH (on site) *	-	-	-	6.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Raying

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 / Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pittaya Thonglaeng มินโดวซ่า ๖323-๙9448

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

Technical Management

N. Banjongkit

Narumon Banjongkit
Supervisor
มินโดวซ่า ๖323-๙9448

Approved by

D. Chongchon

Daj Chongchon
Senior Manager
มินโดวซ่า ๖323-๙9442

Please note: If this report is to be used for legal purposes, please refer to the original report and the original sample.

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TESTING
No. 0042

Page 1 of 1

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	166	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4550 - O & B	Kaynar
Oil & Grease	mg/L	-	1	<1	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Kaynar
pH (on site) *				0.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (A)	Kaynar

LOQ Limit of Detection
 "n" Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
 Analyte(s) marked * where not included in scope of Accreditation ISO/IEC 17025.
 The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

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TESTING
No.0042

Page 2 of 1

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	77.9	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O ₂	Kayong
Oil & Grease	mg/L	-	1	5	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5020 B	Kayong
pH (on site) *				7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (8)	Kayong

- LOD: Limit of Detection
- "a": Lower than: LOQ (Limit of Quantitation) / LDR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

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TESTING
N: 2012

Page 1 of 1

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	41.0	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 5500 -O-G	Bayang
Oil & Grease	mg/L		1	<3	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 1550 B	Bayang
pH (on site) ²⁴		-	-	7.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 9100	Bayang

Remarks:

- LOD Limit of Detection
- * < LOD Lower than LOD (Limit of Quantification) / LOR (Limit of Reporting)

Analysis marked * are not included in scope of Accreditation ISO/IEC 17025.

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

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TESTING
No. 0042

Page 2 of 1

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	—	2.0	71.6	≥500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210-B, part 4500-O-C	Kayap
Oil & Grease	mg/L	—	3	7	910	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520-B	Kayap
pH (on site) *				7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500-H (B)	Kayap

- LOD = Limit of Detection
- "LQ" = Lower than LOD (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * are not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bovin, Amphur Siracha, Chonburi
Thailand 20330
P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

TESTING
No.0042
Lot ID: 2445964
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2974072-1

Page 1 of 2

Sample Number	2445964-1						
Sample Date	May 09, 2024 10:35 AM						
Sample Description	Wastewater						
Contract ID	L_WHA_CIE1_006_2550	Plot	B11-5	Site	ASMECH TECHNOLOGY (THAILAND) COMPANY LIMITED		
Date Analysis Commenced	May 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards: (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	43.3	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Oil & Grease	mg/L	-	8	9	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (at 20°C) *	-	-	-	7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pitthaya Thongtaeng winidawar@y-323-y-9442

Remark :
- LOD : Limit of Detection
- "LOQ" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bovin, Amphur Siracha, Chonburi
Thailand 20330
P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

TESTING
No.0042
Lot ID: 2445942
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2974072-1

Page 1 of 2

Sample Number	2445942-1						
Sample Date	May 09, 2024 11:50 AM						
Sample Description	Wastewater						
Contract ID	L_WHA_CIE1_005_2554	Plot	C-91	Site	ATEN COMPUTER PRODUCT Co.,Ltd.		
Date Analysis Commenced	May 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards: (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	12.0	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Oil & Grease	mg/L	-	8	4.3	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (at 20°C) *	-	-	-	7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pitthaya Thongtaeng winidawar@y-323-y-9442

Remark :
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- "LOQ" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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Analysis / Test Report

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Thailand 20330
P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

TESTING
No.0042
Lot ID: 2445905
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2973933-1

Page 1 of 2

Sample Number	2445905-1						
Sample Date	May 09, 2024 1:35 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_001_2550	Plot	F-11	Site	Aui Hong Co., Ltd.		
Date Analysis Commenced	May 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards: (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	16.3	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Oil & Grease	mg/L	-	8	10	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (at 20°C) *	-	-	-	8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pitthaya Thongtaeng winidawar@y-323-y-9442

Remark :
- LOD : Limit of Detection
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- Analytical method : value not included in scope of Accreditation ISO/IEC 17025
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Analysis / Test Report

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Thailand 20330
P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

TESTING
No.0042
Lot ID: 2445979
Date Received : May 10, 2024
Date Reported : May 16, 2024
Report Number : 2974169-1

Page 1 of 2

Sample Number	2445979-1						
Sample Date	May 10, 2024 8:54 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_002_2559	Plot	A	Site	B. Green Power (WHA) Limited.		
Date Analysis Commenced	May 10, 2024						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards: (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	8.4	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
CO2	mg/L	3.3	2.0	3.3	≤750	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Color (at Original pH)	ADMF	-	5	36	≤600	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMF	-	5	11	≤800	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease	mg/L	-	8	4.3	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (in situ) *	-	-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Temperature *	Degree C	-	-	30.0	≤45	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	357	≤3000	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

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Analysis / Test Report

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Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2445979
Date Received : May 10, 2024
Date Reported : May 16, 2024
Report Number : 2974109-1

Page 2 of 2

Sample Number 2445979-1
Sampled Date May 10, 2024 8:54 AM
Sample Description Wastewater
Contract ID L_CIE_002_2559 Plot A Site B. Grimm Power (WHA) 1 Limited.
Location Office
Date Analysis Commenced May 10, 2024
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / US EPA)
Physical Property Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	22.2	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part 4500 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	24	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Suravit Narapong วิสุตนิรันดร์ 323-9-0011

Remark :
- LOD : Limit of Detection
- "L" : Lower than LOQ (Limit of Quantitation) / (OR) (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation (ISO/IEC 17025)
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

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Approved by

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Result apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Lot ID: 2445979

Date Received : May 10, 2024
Date Reported : May 16, 2024
Report Number : 2974109-2

Page 1 of 1

Sample Number 2445979-1
Sampled Date May 10, 2024 8:54 AM
Sample Description Wastewater
Contract ID L_CIE_002_2559 Plot A Site B. Grimm Power (WHA) 1 Limited.
Location Office
Date Analysis Commenced May 10, 2024
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / US EPA)
Physical Property Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Flow rate	m ³ /h	-	-	0.000	No Standard	Flow meter	Rayong
Odour		-	-	Odourless	Nim Objectable	TIS, 257-2549	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Suravit Narapong วิสุตนิรันดร์ 323-9-0011

Remark :
- LOD : Limit of Detection
- "L" : Lower than LOQ (Limit of Quantitation) / (OR) (Limit of Reporting)

Technical Management

N. Banchoh

Narumon Banchoh
Supervisor

Result apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.

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0101021000



Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2445982
Date Received : May 10, 2024
Date Reported : May 16, 2024
Report Number : 2974111-1

Page 1 of 2

Sample Number 2445982-1
Sampled Date May 10, 2024 8:51 AM
Sample Description Wastewater
Contract ID L_CIE_003_2559 Plot A Site B. Grimm Power (WHA) 1 Limited.
Location Process
Date Analysis Commenced May 10, 2024
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / US EPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	2.6	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
COD	mg/L	-	3.5	25	≤750	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5220 B	Rayong
Color (at Original pH)	ADMU	-	5	10	≤600	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMU	-	5	10	≤600	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Oil & Grease	mg/L	-	3	4.3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (at 25°C)		-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Residual Free Chlorine *	mg/L	-	0.1	<0.1	≤1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-CI (F)	Rayong
Temperature *	Degree C	-	-	30.2	≤45	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong

Technical Management

N. Banchoh

Narumon Banchoh
Supervisor
วิสุตนิรันดร์ 323-9-9445

Approved by

D. Chingchon

Dej Chingchon
Senior Manager
วิสุตนิรันดร์ 323-9-9442

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Lot ID: 2445982

Date Received : May 10, 2024
Date Reported : May 16, 2024
Report Number : 2974111-1

Page 2 of 2

Sample Number 2445982-1
Sampled Date May 10, 2024 8:51 AM
Sample Description Wastewater
Contract ID L_CIE_003_2559 Plot A Site B. Grimm Power (WHA) 1 Limited.
Location Process
Date Analysis Commenced May 10, 2024
Condition of Sample Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / US EPA)
Physical Property Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1352	≤3000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Kjeldahl Nitrogen as N	mg/L	-	1.0	1.3	≤100	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Norg (C), part 4500 (D)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	6	≤200	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Suravit Narapong วิสุตนิรันดร์ 323-9-0011

Remark :
- LOD : Limit of Detection
- "L" : Lower than LOQ (Limit of Quantitation) / (OR) (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation (ISO/IEC 17025)
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. Banchoh

Narumon Banchoh
Supervisor
วิสุตนิรันดร์ 323-9-9445

Approved by

D. Chingchon

Dej Chingchon
Senior Manager
วิสุตนิรันดร์ 323-9-9442

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Boin, Amphur Sriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1

Lot ID: 2445982
Date Received : May 10, 2024
Date Reported : May 16, 2024
Report Number : 2974111-2

Sample Number : 2445982-1
Sampled Date : May 10, 2024 8:55 AM
Sample Description : Wastewater
Contract ID : L_CIE_002_2559 Plot : A Site : B. Grimm Power (WHA) 1 Limited.
Location : Precise
Date Analysis Commenced : May 10, 2024
Condition of Sample : Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards.
Physical Property : (APHA / USEPA)
Yellow, some odour, solid and turbid

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Suranang Manangpang

Remark :
- LOD : Limit of Detection
- LOQ : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
Analytical method is not included in scope of Accreditation ISO/IEC 17025.
The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved By

N. B. Manangpang
Suranang Manangpang
Supervisor

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Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1

TESTING
No.0042

Lot ID: 2445874
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2973006-1

Sample Number : 2445874-1
Sampled Date : May 09, 2024 8:45 AM
Sample Description : Wastewater
Contract ID : L_CIE_002_2550 Plot : B.I.G. Site : B.I.G. Co., Ltd.
Date Analysis Commenced : May 09, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
Physical Property : (APHA / USEPA)
Yellow, a lot of odour, solid and some turbid

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thengsarn 3323-9446

Remark :
- LOD : Limit of Detection
- LOQ : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
Analytical method is not included in scope of Accreditation ISO/IEC 17025.
The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. B. Manangpang
Suranang Manangpang
Supervisor

Approved By

D. Chongchorn
Dej Chongchorn
Senior Manager

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Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1

TESTING
No.0042
Lot ID: 2445931
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2973990-1

Sample Number : 2445931-1
Sampled Date : May 09, 2024 9:35 AM
Sample Description : Wastewater
Contract ID : L_WHA_CIE1_002_2569 Plot : B-4C Site : Bimale (Thailand) Co., Ltd.
Location : Precise
Date Analysis Commenced : May 09, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
Physical Property : (APHA / USEPA)
Yellow, some odour, solid and turbid

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thengsarn 3323-9446

Remark :
- LOD : Limit of Detection
- LOQ : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
Analytical method is not included in scope of Accreditation ISO/IEC 17025.
The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. B. Manangpang
Suranang Manangpang
Supervisor

Approved By

D. Chongchorn
Dej Chongchorn
Senior Manager

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Analysis / Test Report

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Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1

TESTING
No.0042

Lot ID: 2445983
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2974112-1

Sample Number : 2445983-1
Sampled Date : May 09, 2024 9:35 AM
Sample Description : Wastewater
Contract ID : L_CIE_002_2550 Plot : B-5 Site : Bimale (Thailand) Co., Ltd.
Date Analysis Commenced : May 09, 2024
Condition of Sample : Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards.
Physical Property : (APHA / USEPA)
Yellow, some odour, solid and turbid

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Suranang Manangpang 3323-9446

Remark :
- LOD : Limit of Detection
- LOQ : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
Analytical method is not included in scope of Accreditation ISO/IEC 17025.
The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

N. B. Manangpang
Suranang Manangpang
Supervisor

Approved By

D. Chongchorn
Dej Chongchorn
Senior Manager

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TESTING

Lot ID: 2445891
Date Received : May 10, 2024
Date Reported : May 16, 2024
Report Number : 2973870-1

Source: *Author's calculations*.

Sample Number	2445924-1			
Sampled Date	May 10, 2024 10:02 AM			
Sample Description	Wastewater			
Contract ID	L_WYWA	Plot	Z.67	Site DT Wiring Systems (Thailand) Co.,Ltd

Date Analysis Commenced	May 10, 2024
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.

Physical Property	(APHA / USEPA) Yellow, some odour, solid and turbid
-------------------	--

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	—	2.0	23.3	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Oil & Grease	mg/L	—	8	8	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 g	Rayong
pH (on site)	°	—	—	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF,	Rayong

Guideline: Notification of the Industrial Estate Authority of Thailand No.74, B.E. 2560 ; Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant.

Sampling By : Surend Narayana m:098441 73234-0011

Remark :

- LOQ : Limit of Detection
- <L : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analysis(s) Initiated @ : 24/04/2018
- The laboratory has been accredited by scope of Accreditation ISO/IEC 17025

D. Simon

Dej Changchun
Senior Manager

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TESTING

Lot ID: 2445926
Date Received: May 09, 2024
Date Reported: May 16, 2024
Report Number: 2973983-1

2000

Sample Number	2441875-1		
Sampled Date	May 09, 2024 9:25 AM		
Sample Description	Wastewater		
Contract ID	I_CIE_003_2550	Plot	A-1
		Site	Dioxholke (Starr) Co., Ltd

Date Analysis Commenced May 09, 2024

Condition of Sample Contained in one amber glass bottle and one plastic bottle. Sample containers comply to DIN EN ISO 15700 - 15700 standard

Physical Property	(AQUA / USEPA) Yellow; a lot of odor, solid and some
--------------------------	---

Analyte	Unit	LOD	LOQ (LOF)	Recovery	Guideline / Specification	Method	Testing Location
Water Testing BOO (5 days at 20 Degree C)	mg/L	—	2.0	40.1	500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 2nd ed., 2017, part 9210-B, part 9200 - O-G	Bayport
Oil & Grease	mg/L	3	—	—	10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 2nd ed., 2017, part 9200-B	Bayport
pH (on site) *				1.8	12.3-9.8	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF,	Bayport

Guideline: Notification of the Industrial Estate Authority of Thailand No 76, B.E. 2560; Criteria of wastewater characteristic from factory discharge to ventral wastewater Treatment Plant.

Remark :

- LOD² : Limit of Detection
- "d" : Lower than LOD (Limit of Quantitation) / s.d. (Limit of Reporting)
- Analyte(s) named * were not included in scope of Accreditation ISO/IEC 17025.

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

D. Kumanov

Dr. Changchun
Senior Manager

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
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Thailand 20230

P/O :
Project Name : Factory Monthly
Project Location : WHA CIE 1



TESTING

Lot ID: 2445923
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2973975-1

Page 1 of 1

Sample Number	2445923-1						
Sample Date	May 09, 2024 2:54 PM						
Sample Description	Wastewater						
Contract ID	L_WHA	Plot	2-59F	Site	FES International (Thailand) Co., Ltd.		
Date Analysis Commenced	CIE1_002_2562						
Condition of Sample	May 09, 2024						
Physical Property	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA) Yellow, a lot of odour, some solid and turbid.						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	16.1	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4300 - O-G	Raying
Oil & Grease	mg/L				≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Raying
pH (on site) *				8.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Raying

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Suravit Hanongkarn วสุวัต ๗323-๙-๐011
Remark :
- LOD : Limit of Detection
- "u" : Lower than LOQ (Limit of Quantitation) / LOB (Limit of Reporting)
- Analytical method : Where not included in scope of Accreditation ISO/IEC 17025
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025

Technical Management

N. Banjongkitt

Approved by

D. Hanongkarn

Narumon Banjongkitt

Dej Changchon

Supervisor

Senior Manager

วสุวัต ๗323-๙-๐011

วสุวัต ๗323-๙-๐042

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Analysis / Test Report

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Thailand 20230

P/O :
Project Name : Factory Monthly
Project Location : WHA CIE 1



TESTING

Lot ID: 2445949
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2974034-1

Page 1 of 1

Sample Number	2445949-1						
Sample Date	May 09, 2024 2:59 PM						
Sample Description	Wastewater						
Contract ID	L_WHA	Plot	2-59G	Site	FES International Co., Ltd.		
Date Analysis Commenced	CIE1_002_2565						
Condition of Sample	May 09, 2024						
Physical Property	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA) Yellow, a lot of odour, solid and some turbid.						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	72.9	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4300 - O-G	Raying
Oil & Grease	mg/L				≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Raying
pH (on site) *				7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Raying

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Suravit Hanongkarn วสุวัต ๗323-๙-๐011
Remark :
- LOD : Limit of Detection
- "u" : Lower than LOQ (Limit of Quantitation) / LOB (Limit of Reporting)
- Analytical method : Where not included in scope of Accreditation ISO/IEC 17025
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025

Technical Management

N. Banjongkitt

Approved by

D. Hanongkarn

Narumon Banjongkitt

Dej Changchon

Supervisor

Senior Manager

วสุวัต ๗323-๙-๐043

วสุวัต ๗323-๙-๐042

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
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Thailand 20230

P/O :
Project Name : Factory Monthly
Project Location : WHA CIE 1



TESTING

Lot ID: 2445947
Date Received : May 10, 2024
Date Reported : May 16, 2024
Report Number : 2974032-1

Page 1 of 1

Sample Number	2445947-1						
Sample Date	May 10, 2024 10:09 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_010_2558	Plot	2-46	Site	Finco Global Industry Co., Ltd.		
Date Analysis Commenced	May 10, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA) Yellow, some odour, a lot of solid and some turbid.						
Physical Property							
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	11.2	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4300 - O-G	Raying
Oil & Grease	mg/L				≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Raying
pH (on site) *				8.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Raying

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Suravit Hanongkarn วสุวัต ๗323-๙-๐011
Remark :
- LOD : Limit of Detection
- "u" : Lower than LOQ (Limit of Quantitation) / LOB (Limit of Reporting)
- Analytical method : Where not included in scope of Accreditation ISO/IEC 17025
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025

Technical Management

N. Banjongkitt

Approved by

D. Hanongkarn

Narumon Banjongkitt

Dej Changchon

Supervisor

Senior Manager

วสุวัต ๗323-๙-๐044

วสุวัต ๗323-๙-๐042

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory Monthly
Project Location : WHA CIE 1



TESTING

Lot ID: 2445900
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2973927-1

Page 1 of 1

Sample Number	2445900-1						
Sample Date	May 09, 2024 9:58 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_011_2558	Plot	B-6	Site	FRASERS PROPERTY (THAILAND) PUBLIC COMPANY LIMITED		
Date Analysis Commenced	May 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA) Yellow, a lot of odour, solid and some turbid.						
Physical Property							
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	49.5	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4300 - O-G	Raying
Oil & Grease	mg/L				≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Raying
pH (on site) *				8.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Raying

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Suravit Hanongkarn วสุวัต ๗323-๙-๐011
Remark :
- LOD : Limit of Detection
- "u" : Lower than LOQ (Limit of Quantitation) / LOB (Limit of Reporting)
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Technical Management

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Analysis / Test Report



TESTING

No.0042

Lot ID: 2445967

Date Received : May 10, 2024

Date Reported : May 16, 2024

Report Number : 2974076-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory / Monthly
Project Location: WHA CIE 1

Page 1 of 1

Sample Number	2445967-1						
Sample Date	May 10, 2024 2:12 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_013_2558	Plot	D-7	Site	FRASERS PROPERTY (THAILAND) PUBLIC COMPANY LIMITED		
Date Analysis Commenced	May 10, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOI)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	79.4	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease	mg/L	-	3	5	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *	-	-	-	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Suravit Narapong นวดิฐนาพร 323-9-0011

Remarks :

- LOD : Limit of Detection
- "u" : Lower than LOQ (Limit of Quantitation) / LOD (Limit of Reporting)
- Analytical method * : Not included in scope of Accreditation ISO/IEC 17025
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025

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TESTING

No.0042

Lot ID: 2445938

Date Received : May 10, 2024

Date Reported : May 16, 2024

Report Number : 2974001-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory / Monthly
Project Location: WHA CIE 1

Page 1 of 1

Sample Number	2445938-1						
Sample Date	May 10, 2024 2:16 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_014_2558	Plot	D-8	Site	FRASERS PROPERTY (THAILAND) PUBLIC COMPANY LIMITED		
Date Analysis Commenced	May 10, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOI)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	39.9	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease	mg/L	-	3	1	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *	-	-	-	8.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Suravit Narapong นวดิฐนาพร 323-9-0011

Remarks :

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- Analytical method * : Not included in scope of Accreditation ISO/IEC 17025
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Analysis / Test Report



TESTING

No.0042

Lot ID: 2445957

Date Received : May 09, 2024

Date Reported : May 16, 2024

Report Number : 2974061-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory / Monthly
Project Location: WHA CIE 1

Page 1 of 1

Sample Number	2445957-1						
Sample Date	May 09, 2024 3:30 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_011_2557	Plot	D-1	Site	FRASERS PROPERTY THAILAND INDUSTRIAL FREEHOLD & LEASEHOLD REIT		
Date Analysis Commenced	May 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOI)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	17.6	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease	mg/L	-	3	<1	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *	-	-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Pithaya Thongsaeng นวดิฐนาพร 323-9-9446

Remarks :

- LOD : Limit of Detection
- "u" : Lower than LOQ (Limit of Quantitation) / LOD (Limit of Reporting)
- Analytical method * : Not included in scope of Accreditation ISO/IEC 17025
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TESTING

No.0042

Lot ID: 2445893

Date Received : May 09, 2024

Date Reported : May 16, 2024

Report Number : 2973901-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory / Monthly
Project Location: WHA CIE 1

Page 1 of 1

Sample Number	2445893-1						
Sample Date	May 09, 2024 3:25 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_010_2557	Plot	D-2	Site	FRASERS PROPERTY THAILAND INDUSTRIAL FREEHOLD & LEASEHOLD REIT		
Date Analysis Commenced	May 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOI)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	16.6	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease	mg/L	-	3	<1	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *	-	-	-	7.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Pithaya Thongsaeng นวดิฐนาพร 323-9-9446

Remarks :

- LOD : Limit of Detection
- "u" : Lower than LOQ (Limit of Quantitation) / LOD (Limit of Reporting)
- Analytical method * : Not included in scope of Accreditation ISO/IEC 17025
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025

Technical Management
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Analysis / Test Report



TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230
P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Lot ID: 2445896
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2973922-1

Page 1 of 1

Sample Number	2445896-1						
Sampled Date	May 09, 2024 @ 15:00						
Sample Description	Wastewater						
Contract ID	L_CIE_004_2556	Plot	D-6	Site	FRASERS PROPERTY THAILAND INDUSTRIAL FREEHOLD & LEASEHOLD REIT		
Date Analysis Commenced	May 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards: (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOQ	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOO (5 days at 20 Degree C)	mg/L		2.0	<0.1	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 & part 4500 - O-G	Rayong
Oil & Grease	mg/L		3	<3	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 & Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
pH (on site) *				8.0	5.5-9.0		Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithay Thongkanying W:090948 7-323-9-9448

Remark :
- LOQ : Limit of Detection
- "C" : Lower than LOQ (Limit of Quantitation) / LOB (Limit of Reporting)
- Analytical Method : Value not included in scope of Accreditation (ISO/IEC 17025)
The laboratory has been accepted as an accredited laboratory complying with the (ISO/IEC 17025)

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Analysis / Test Report



TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230
P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Lot ID: 2445910
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2973946-1

Page 1 of 1

Sample Number	2445910-1						
Sampled Date	May 09, 2024 11:20 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_007_2556	Plot	Z-13	Site	FRASERS PROPERTY THAILAND INDUSTRIAL FREEHOLD & LEASEHOLD REIT		
Date Analysis Commenced	May 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards: (APHA / USEPA)						
Physical Property	Yellow, some odour, solid and turbid						
Analyte	Unit	LOQ	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOO (5 days at 20 Degree C)	mg/L		2.0	17.2	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 & part 4500 - O-G	Rayong
Oil & Grease	mg/L		3	<3	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 & Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
pH (on site) *				7.7	5.5-9.0		Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Surawit Narong W:090948 7-323-9-0011

Remark :
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Technical Management : N. Banomyit
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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230
P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Lot ID: 2445911
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2973948-1

Page 1 of 1

Sample Number	2445911-1						
Sampled Date	May 09, 2024 11:15 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_008_2556	Plot	Z-14	Site	FRASERS PROPERTY THAILAND INDUSTRIAL FREEHOLD & LEASEHOLD REIT		
Date Analysis Commenced	May 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards: (APHA / USEPA)						
Physical Property	Yellow, some odour, solid and turbid						
Analyte	Unit	LOQ	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOO (5 days at 20 Degree C)	mg/L		2.0	10.7	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 & part 4500 - O-G	Rayong
Oil & Grease	mg/L		3	<3	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 & Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
pH (on site) *				7.2	5.5-9.0		Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Surawit Narong W:090948 7-323-9-0011

Remark :
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Analysis / Test Report



TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230
P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Lot ID: 2445912
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2973951-1

Page 1 of 1

Sample Number	2445912-1						
Sampled Date	May 09, 2024 10:58 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_009_2556	Plot	Z-16-17	Site	FRASERS PROPERTY THAILAND INDUSTRIAL FREEHOLD & LEASEHOLD REIT		
Date Analysis Commenced	May 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards: (APHA / USEPA)						
Physical Property	Yellow, some odour, solid and no turbid						
Analyte	Unit	LOQ	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOO (5 days at 20 Degree C)	mg/L		2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 & part 4500 - O-G	Rayong
Oil & Grease	mg/L		3	<3	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 & Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
pH (on site) *				8.8	5.5-9.0		Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Surawit Narong W:090948 7-323-9-0011

Remark :
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TESTING

Lot ID: 2445935

Date Received : May 09, 2024

Date Reported : May 16, 2024

Report Number : 2973968-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Boin, Amphur Sriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Sample Number : 2445935-1
Sampled Date : May 09, 2024 10:09 AM
Sample Description : Wastewater
Contract ID : L_WHA_CIE1_001_2563
Date Analysis Commenced : May 09, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
Physical Property : Yellow, a lot of colour, solid and some turbid

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	18.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Suravit Narapong wu00uaw8 7-323-n-9442

Remarks :
- LOD : Limit of Detection
- "L" : Lower than LOQ (Limit of Quantitation) / LOB (Limit of Reporting)
- Analyte(s) marked * : Value not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management : N. Banthongkit
Supervisor
WU00uaw8 7-323-n-9442
Approved by : Dej Changchorn
Senior Manager
WU00uaw8 7-323-n-9442

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Analysis / Test Report



TESTING

Lot ID: 2445892

Date Received : May 10, 2024

Date Reported : May 16, 2024

Report Number : 2973883-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Boin, Amphur Sriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Sample Number : 2445892-1
Sampled Date : May 10, 2024 2:00 PM
Sample Description : Wastewater
Contract ID : L_CIE_009_2550
Date Analysis Commenced : May 10, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
Physical Property : Yellow, a lot of colour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	16.2	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Oil & Grease	mg/L	-	3	3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Suravit Narapong wu00uaw8 7-323-n-9442

Remarks :
- LOD : Limit of Detection
- "L" : Lower than LOQ (Limit of Quantitation) / LOB (Limit of Reporting)
- Analyte(s) marked * : Value not included in scope of Accreditation ISO/IEC 17025.
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Technical Management : N. Banthongkit
Supervisor
WU00uaw8 7-323-n-9442
Approved by : Dej Changchorn
Senior Manager
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Analysis / Test Report



TESTING

Lot ID: 2445934

Date Received : May 09, 2024

Date Reported : May 16, 2024

Report Number : 2973961-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Boin, Amphur Sriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Sample Number : 2445934-1
Sampled Date : May 09, 2024 8:40 AM
Sample Description : Wastewater
Contract ID : L_WHA_CIE1_010_2563
Date Analysis Commenced : May 09, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
Physical Property : Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thongsang wu00uaw8 7-323-n-9448

Remarks :
- LOD : Limit of Detection
- "L" : Lower than LOQ (Limit of Quantitation) / LOB (Limit of Reporting)
- Analyte(s) marked * : Value not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management : N. Banthongkit
Supervisor
WU00uaw8 7-323-n-9442
Approved by : Dej Changchorn
Senior Manager
WU00uaw8 7-323-n-9442

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Analysis / Test Report



TESTING

Lot ID: 2445939

Date Received : May 09, 2024

Date Reported : May 16, 2024

Report Number : 2974003-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Boin, Amphur Sriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Sample Number : 2445939-1
Sampled Date : May 09, 2024 11:05 AM
Sample Description : Wastewater
Contract ID : L_WHA_CIE1_001_2564
Date Analysis Commenced : May 09, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
Physical Property : Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	5.1	≤500	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thongsang wu00uaw8 7-323-n-9448

Remarks :
- LOD : Limit of Detection
- "L" : Lower than LOQ (Limit of Quantitation) / LOB (Limit of Reporting)
- Analyte(s) marked * : Value not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management : N. Banthongkit
Supervisor
WU00uaw8 7-323-n-9442
Approved by : Dej Changchorn
Senior Manager
WU00uaw8 7-323-n-9442

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2445974

Date Received : May 09, 2024

Date Reported : May 16, 2024

Report Number : 2974101-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location: WHA CIE 1

Page 1 of 1

Sample Number	2445974-1										
Sampled Date	May 09, 2024 2:35 PM										
Sample Description	Wastewater										
Contract ID	L_CIE_002_2558		Plot	M-2	Site	Insee Ecycle Co., Ltd.					
Date Analysis Commenced	May 09, 2024										
Condition of Sample	Contained in one amber glass bottle and two plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)										
Physical Property	Yellow, a lot of odour, some solid and turbid										
Analyte	Unit	LOD	LOQ (LOQ)	Result	Guideline / Specification	Method	Testing Location				
Water Testing											
BOD (5 days at 20 Degree C)	mg/L	-	2.0	23.4	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Raying				
COD	mg/L	1.5	25	132	≤750	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Raying				
Oil & Grease	mg/L	-	3	5	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Raying				
pH (on site) *	-	-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Raying				
Total Suspended Solids Dried at 102-103 degree C	mg/L	-	5	18	≤200	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Raying				

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Pithaya Thongtaeng วิธิตายาณ ๖323-๙9445

Remarks :
- LOD : Limit of Detection
- "L" : Lower than LOQ (Limit of Quantitation) / LOD (Limit of Reporting)
- Analyte(s) marked * refers not included in scope of Accreditation (ISO/IEC 17025)
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
N. Banphit
Narumon Banphongkit
Supervisor
วิธิตายาณ ๖323-๙9445

Approved by
D. Chongchun
Dej Chongchun
Senior Manager
วิธิตายาณ ๖323-๙9442

Please refer to the sample(s) enclosed, unless the sampling was conducted by ALS. No part of this report may be reproduced or any form without written consent from the laboratory.

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2445915

Date Received : May 09, 2024

Date Reported : May 16, 2024

Report Number : 2973957-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location: WHA CIE 1

Page 1 of 1

Sample Number	2445915-1						
Sampled Date	May 09, 2024 11:30 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_003_2561	Plot	T-40	Site	ISHWAR PROFILES (THAILAND) Co.,Ltd.		
Date Analysis Commenced	May 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, some odour, a lot of solid and no turbid						
Analyte	Unit	LOD	LOQ (LOQ)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	67.8	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Oil & Grease	mg/L	-	3	10	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *	-	-	-	7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Surawit Narongpong วิธิตายาณ ๖323-๙9031

Remarks :
- LOD : Limit of Detection
- "L" : Lower than LOQ (Limit of Quantitation) / LOD (Limit of Reporting)
- Analyte(s) marked * refers not included in scope of Accreditation (ISO/IEC 17025)
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
N. Banphit
Narumon Banphongkit
Supervisor
วิธิตายาณ ๖323-๙9445

Approved by
D. Chongchun
Dej Chongchun
Senior Manager
วิธิตายาณ ๖323-๙9442

Please refer to the sample(s) enclosed, unless the sampling was conducted by ALS. No part of this report may be reproduced or any form without written consent from the laboratory.

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2445902

Date Received : May 09, 2024

Date Reported : May 16, 2024

Report Number : 2973929-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location: WHA CIE 1

Page 1 of 1

Sample Number	2445902-1						
Sampled Date	May 09, 2024 11:25 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_012_2560		Plot	B-4E	Site	Junghehrich LR Truck Co.,Ltd.	
Date Analysis Commenced	May 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
(APHA / USEPA)	Yellow, a lot of odour, solid and some turbid						
Physical Property							
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	69.8	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Raying
Oil & Grease	mg/L	-	3	8	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Raying
pH (on site) *				7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Raying

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Pithaya Thongtaeng วิธิตายาณ ๖323-๙9445

Remarks :
- LOD : Limit of Detection
- "L" : Lower than LOQ (Limit of Quantitation) / LOD (Limit of Reporting)
- Analyte(s) marked * refers not included in scope of Accreditation (ISO/IEC 17025)
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
N. Banphit
Narumon Banphongkit
Supervisor
วิธิตายาณ ๖323-๙9445

Approved by
D. Chongchun
Dej Chongchun
Senior Manager
วิธิตายาณ ๖323-๙9442

Please refer to the sample(s) enclosed, unless the sampling was conducted by ALS. No part of this report may be reproduced or any form without written consent from the laboratory.

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RIGHT SOLUTIONS (P) (C) 2024

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2445985

Date Received : May 09, 2024

Date Reported : May 16, 2024

Report Number : 2974116-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location: WHA CIE 1

Page 1 of 1

Sample Number	2445985-1						
Sampled Date	May 09, 2024 10:17 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_002_2560		Plot	Z-18		Site	KINSING ARTWOOD Co.,Ltd.
Date Analysis Commenced	May 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, some odour, solid and no turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.8	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Raying
Formaldehyde	mg/L	0.03	0.1	Not Detected	≤1	Wastewater analysis manual, Environmental Engineering Association of Thailand, 9th ed., 2004	Raying
Oil & Grease	mg/L	-	3	<1	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Raying
pH (on site) *	-	-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Raying

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Surawit Narongpong วิธิตายาณ ๖323-๙9031

Remarks :
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- "L" : Lower than LOQ (Limit of Quantitation) / LOD (Limit of Reporting)
- Analyte(s) marked * refers not included in scope of Accreditation (ISO/IEC 17025)
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management
N. Banphit
Narumon Banphongkit
Supervisor
วิธิตายาณ ๖323-๙9445

Approved by
D. Chongchun
Dej Chongchun
Senior Manager
วิธิตายาณ ๖323-๙9442

Please refer to the sample(s) enclosed, unless the sampling was conducted by ALS. No part of this report may be reproduced or any form without written consent from the laboratory.

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING

Lot ID: 2445977
Date Received : May 10, 2024
Date Reported : May 16, 2024
Report Number : 2974105-1

Page 1 of 1

Sample Number	2445977-1						
Sampled Date	May 10, 2024 11:15 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_021_2550	Plot	Z-6	Site Kyosin (Thailand) Co., Ltd.			
Location	Factory 2						
Date Analysis Commenced	May 10, 2024						
Condition of Sample	Contained in one amber glass bottle and two plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, solid and some turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	—	2.0	21.4	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 5200 - D-G	Rayong
Oil & Grease	mg/L	—	1	1	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *	—	—	—	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (R)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	—	3	448	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant.

Sampling By : Sorawit Narapong มิสสุวรรณฯ 323-4-0011, Karabundit Kikavavatt มิสสุวรรณฯ 324-4-0001

Remarks :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOD (Limit of Reporting)
- Analyte(s) marked * were not included in scope of Accreditation ISO/IEC 17025.

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

Technical Management

N. Banthong

Approved by

D. Chongtham

Narumon Banthongkiet
Supervisor
มิดสุวรรณฯ 323-4-9445

Dej Chongtham
Senior Manager
มิดสุวรรณฯ 323-4-9442

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING

Lot ID: 2445977
Date Received : May 10, 2024
Date Reported : May 16, 2024
Report Number : 2974105-2

Page 1 of 1

Sample Number	2445977-1						
Sampled Date	May 10, 2024 11:15 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_021_2550	Plot	Z-6	Site	Kyoten (Thailand) Co.,Ltd.		
Location	Factory 2						
Date Analysis Commenced	May 11, 2024						
Condition of Sample	Contained in one amber glass bottle and two plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, solid and some turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Copper	mg/L	0.0003	0.0005	0.20	≤2.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Nickel	mg/L	0.0003	0.0005	0.004	≤1.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline: Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant.

Sampling By: สุรศักดิ์ วัฒนศิริกุล +323-0-0011, Kanabundit Kikayavornritsilak (สุรศักดิ์ +323-0-0001)

Remark :
LOD = Limit of Detection

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant.

Sampling By : Sorawit Narapong มิสสุวรรณฯ 323-4-0011, Karabundit Kikavavatt มิสสุวรรณฯ 324-4-0001

Remarks :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOD (Limit of Reporting)
- Analyte(s) marked * were not included in scope of Accreditation ISO/IEC 17025.

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

Technical Management

S. N. Banthong

Approved by

K. A. Banthong

Sarathorn Banthongkiet
Manager
มิดสุวรรณฯ 324-4-0007

Kirakorn Anek
Senior Manager
มิดสุวรรณฯ 324-4-0004

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.

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3-Phonon, AL, BL, CL, DL, EL



Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING

Lot ID: 2445880
Date Received : May 10, 2024
Date Reported : May 16, 2024
Report Number : 2973820-1

Page 1 of 1

Sample Number	2445880-1						
Sampled Date	May 10, 2024 2:38 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_001_2554	Plot	A-5/1	Site	Laem Chabang Tank Services Co., Ltd.		
Date Analysis Commenced	May 10, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, a lot of odour, solid and some turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	23.7	≤ 500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 5200 - D-G	Rayong
Oil & Grease	mg/L	-	1	6	≤ 10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *	-	-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (R)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant.

Sampling By : Sorawit Narapong มิสสุวรรณฯ 323-4-0001

Remarks :

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Technical Management

N. Banthong

Approved by

D. Chongtham

Narumon Banthongkiet
Supervisor
มิดสุวรรณฯ 323-4-9445

Dej Chongtham
Senior Manager
มิดสุวรรณฯ 323-4-9442

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
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Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING

Lot ID: 2445922
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2973972-1

Page 1 of 1

Sample Number	2445922-1						
Sampled Date	May 09, 2024 10:25 AM						
Sample Description	Wastewater						
Contract ID	L_WHA CIE1_001_2560	Plot	B-12D	Site	HARB Global Co., Ltd.		
Date Analysis Commenced	May 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	3.0	46.5	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - D-G	Rayong
Oil & Grease	mg/L	-	1	6	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *	-	-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (R)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant.

Sampling By : Pathaya Thongtaeng มิสสุวรรณฯ 323-4-9448

Remarks :

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Technical Management

N. Banthong

Approved by

D. Chongtham

Narumon Banthongkiet
Supervisor
มิดสุวรรณฯ 323-4-9445

Dej Chongtham
Senior Manager
มิดสุวรรณฯ 323-4-9442

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Analysis / Test Report

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Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2445958
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2974662-1

Page 1 of 1

Sample Number : 2445958-1
Sample Date : May 09, 2024 1:40 PM
Sample Description : Wastewater
Contract ID : L_CIE_001_2560 Plot : P-14 Site : MAX METAL INTERNATIONAL COMPANY LIMITED
Date Analysis Commenced : May 09, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
(APHA / USEPA)
Physical Property : Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	31.9	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Raying
Oil & Grease	mg/L			4	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Raying
pH (at 25°C) *				7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (8)	Raying

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pichaya Thenglaeng วิไลสุธรรม ๖323-๖446

Remark :
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Technical Management

N. Banjongkai

Narumon Banjongkai
Supervisor
วิไลสุธรรม ๖323-๖446

Approved by

D. Chongchit

Dej Chongchit
Senior Manager
วิไลสุธรรม ๖323-๖446

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Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2445921
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2973968-1

Page 1 of 1

Sample Number : 2445921-1
Sample Date : May 09, 2024 11:50 AM
Sample Description : Wastewater
Contract ID : L_CIE_001_2560 Plot : Z57 Site : Hantana Ingredients (Thailand) Co., Ltd.
Date Analysis Commenced : May 09, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
(APHA / USEPA)
Physical Property : Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	27.5	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Raying
Oil & Grease	mg/L			<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Raying
pH (at 25°C) *				7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (8)	Raying

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Suravit Narangong วิไลสุธรรม ๖323-๖4011

Remark :
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Technical Management

N. Banjongkai

Narumon Banjongkai
Supervisor
วิไลสุธรรม ๖323-๖446

Approved by

D. Chongchit

Dej Chongchit
Senior Manager
วิไลสุธรรม ๖323-๖446

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Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2445894
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2973903-1

Page 1 of 1

Sample Number : 2445894-1
Sample Date : May 09, 2024 11:35 AM
Sample Description : Wastewater
Contract ID : L_CIE_012_2557 Plot : C-23,4 Site : NIKUNGI Special Steel (Thailand) Co., Ltd.
Date Analysis Commenced : May 09, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
(APHA / USEPA)
Physical Property : Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	15.1	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Raying
Oil & Grease	mg/L			<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Raying
pH (at 25°C) *				7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (8)	Raying

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pichaya Thenglaeng วิไลสุธรรม ๖323-๖446

Remark :
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Technical Management

N. Banjongkai

Narumon Banjongkai
Supervisor
วิไลสุธรรม ๖323-๖446

Approved by

D. Chongchit

Dej Chongchit
Senior Manager
วิไลสุธรรม ๖323-๖446

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Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2445963
Date Received : May 10, 2024
Date Reported : May 16, 2024
Report Number : 2974067-1

Page 1 of 1

Sample Number : 2445963-1
Sample Date : May 10, 2024 2:00 PM
Sample Description : Wastewater
Contract ID : L_CIE_005_2566 Plot : K2 Site : HANYONG TERMINAL PUBLIC COMPANY LIMITED
Date Analysis Commenced : May 10, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
(APHA / USEPA)
Physical Property : Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	41.8	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Raying
Oil & Grease	mg/L			<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Raying
pH (at 25°C) *				7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (8)	Raying

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Suravit Narangong วิไลสุธรรม ๖323-๖4011

Remark :
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Technical Management

N. Banjongkai

Narumon Banjongkai
Supervisor
วิไลสุธรรม ๖323-๖446

Approved by

D. Chongchit

Dej Chongchit
Senior Manager
วิไลสุธรรม ๖323-๖446

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2445898

Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2973924-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siriracha, Chonburi
Thailand 20230
P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Sample Number	2445898-1						
Sampled Date	May 09, 2024 10:15 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_002_2560	Plot	A-8A	Site	NDEC Hestec (Thailand) Co., Ltd.		
Date Analysis Commenced	May 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards: (APIA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	46.2	≤500	Standard Methods for the Examination of Water and Wastewater: APIA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease	mg/L	-	3	8	≤10	Standard Methods for the Examination of Water and Wastewater: APIA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *	-	-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APIA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thongtongwongwong ๖323-๙9448

Remarks :
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- Analytical method * refers not included in scope of Accreditation (ISO/IEC 17025)
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Technical Management

N. Banjongkit

Approved by

D. Chongchong

Narumon Banjongkit
Supervisor
๖๓๒๓๖๖๖ ๖323-๙9448

Dej Chongchong
Senior Manager
๖๓๒๓๖๖๖ ๖323-๙9442

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2445948

Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2974033-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siriracha, Chonburi
Thailand 20230
P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Sample Number	2445948-1						
Sampled Date	May 09, 2024 10:45 AM						
Sample Description	Wastewater						
Contract ID	L_WHA CIE1_001_2565	Plot	B-11D	Site	Nechyu Asia (Thailand) Co.,Ltd.		
Date Analysis Commenced	May 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APIA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	41.8	≤300	Standard Methods for the Examination of Water and Wastewater: APIA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease	mg/L	-	3	8	≤10	Standard Methods for the Examination of Water and Wastewater: APIA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *	-	-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APIA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thongtongwongwong ๖323-๙9448

Remarks :
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Technical Management

N. Banjongkit

Approved by

D. Chongchong

Narumon Banjongkit
Supervisor
๖๓๒๓๖๖๖ ๖323-๙9448

Dej Chongchong
Senior Manager
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Analysis / Test Report



TESTING
No.0042

Lot ID: 2445973

Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2974093-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siriracha, Chonburi
Thailand 20230
P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Sample Number	2445973-1								
Sampled Date	May 09, 2024 9:55 AM								
Sample Description	Wastewater								
Contract ID	L_CIE_016_2550	Plot	A-4	Site	NIDEC Die-casting (Thailand) Co., Ltd.				
Location	Factory 1								
Date Analysis Commenced	May 09, 2024								
Condition of Sample	Contained in one amber glass bottle and two plastic bottles. Sample containers comply to pretreatment - preservation standards. (APIA / USEPA)								
Physical Property	Yellow, a lot of odour, some solid and turbid								
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location		
Water Testing									
BOD (5 days at 20 Degree C)	mg/L	-	2.0	15.3	≤500	Standard Methods for the Examination of Water and Wastewater: APIA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong		
COD	mg/L	-	1.5	25	≤750	Standard Methods for the Examination of Water and Wastewater: APIA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong		
Oil & Grease	mg/L	-	3	4	≤10	Standard Methods for the Examination of Water and Wastewater: APIA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong		
pH (on site) *	-	-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APIA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong		
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	4	≤200	Standard Methods for the Examination of Water and Wastewater: APIA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong		

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thongtongwongwong ๖323-๙9448

Remarks :
- LOD : Limit of Detection
- "L" : Lower than LOQ (Limit of Quantitation) / LOQ (Limit of Reporting)
- Analytical method * refers not included in scope of Accreditation (ISO/IEC 17025)
- The laboratory has been accepted as an accredited laboratory complying with the (ISO/IEC 17025)

Technical Management

N. Banjongkit

Approved by

D. Chongchong

Narumon Banjongkit
Supervisor
๖๓๒๓๖๖๖ ๖323-๙9448

Dej Chongchong
Senior Manager
๖๓๒๓๖๖๖ ๖323-๙9442

Results valid to the extent that the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2445978

Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2974118-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siriracha, Chonburi
Thailand 20230
P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Sample Number	2445978-1						
Sampled Date	May 09, 2024 9:50 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_027_2550	Plot	A-5	Site	NDEC Die-casting (Thailand) Co., Ltd.		
Date Analysis Commenced	May 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards (APIHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	5.8	≤500	Standard Methods for the Examination of Water and Wastewater: APIHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease	mg/L	-	3	3.8	≤10	Standard Methods for the Examination of Water and Wastewater: APIHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *	-	-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APIHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Guideline: Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 - Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant.							
Sampling By: Pithaya Thongpang xtc@donwatt.com 0323-919448							
Remark:							
- LOD : Limit of Detection							
- "L" : Lower than LOD (Limit of Quantitation) / LOQ (Limit of Reporting)							
- Analyte(s) marked * above not included in scope of Accreditation (ISO/IEC 17025)							
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025							

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thongtongwongwong ๖323-๙9448

Remarks :
- LOD : Limit of Detection
- "L" : Lower than LOQ (Limit of Quantitation) / LOQ (Limit of Reporting)
- Analytical method * refers not included in scope of Accreditation (ISO/IEC 17025)
- The laboratory has been accepted as an accredited laboratory complying with the (ISO/IEC 17025)

Technical Management

N. Banjongkit

Approved by

D. Chongchong

Narumon Banjongkit
Supervisor
๖๓๒๓๖๖๖ ๖323-๙9448

Dej Chongchong
Senior Manager
๖๓๒๓๖๖๖ ๖323-๙9442

Results valid to the extent that the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Boin, Amphur Sriracha, Chonburi
Thailand 20230
P/O :
Project Name : Factory I Monthly
Project Location: WHA CIE 1



TESTING

No.0042
Lot ID: 2445928
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2973988-1

Page 1 of 1

Sample Number	2445928-1						
Sampled Date	May 09, 2024 9:45 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_002_2553	Plot	A-6	Site	NIDEC Die-casting (Thailand) Co.,Ltd.		
Date Analysis Commenced	May 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA) Yellow, a lot of odour, some solid and turbid						
Physical Property							
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	36.4	<500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 5200 - D G	Kayong
Oil & Grease	mg/L	-	1	4	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *				7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thongtaeng วิศกรสิ่งแวดล้อม 9-323-9-9446

Remark :
- LOD : Limit of Detection
- "x" : Lower than LOD (Limit of Quantitation) / LOQ (Limit of Reporting)
- Analytical method * refers not included in scope of Accreditation (ISO/IEC 17025)
- The laboratory has been accepted as an accredited laboratory complying with the (ISO/IEC 17025)

Technical Management: N. Banomyit
Narumon Banchoogkitt
Supervisor
วิศกรสิ่งแวดล้อม 9-323-9-9446
Approved By: D. Khumsoi
Dej Chongchon
Senior Manager
วิศกรสิ่งแวดล้อม 9-323-9-9446

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Boin, Amphur Sriracha, Chonburi
Thailand 20230
P/O :
Project Name : Factory I Monthly
Project Location: WHA CIE 1



TESTING

No.0042
Lot ID: 2445903
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2973931-1

Page 1 of 1

Sample Number	2445903-1						
Sampled Date	May 09, 2024 9:05 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_006_2500	Plot	K-1	Site	Nikkol PC Aluminium Co., Ltd.		
Date Analysis Commenced	May 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA) Yellow, a lot of odour, some solid and turbid						
Physical Property							
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	40.1	<500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - D G	Kayong
Oil & Grease	mg/L	-	1	11	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *				7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thongtaeng วิศกรสิ่งแวดล้อม 9-323-9-9446

Remark :
- LOD : Limit of Detection
- "x" : Lower than LOD (Limit of Quantitation) / LOQ (Limit of Reporting)
- Analytical method * refers not included in scope of Accreditation (ISO/IEC 17025)
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Technical Management: N. Banomyit
Narumon Banchoogkitt
Supervisor
วิศกรสิ่งแวดล้อม 9-323-9-9446
Approved By: D. Khumsoi
Dej Chongchon
Senior Manager
วิศกรสิ่งแวดล้อม 9-323-9-9446

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Thailand 20230
P/O :
Project Name : Factory I Monthly
Project Location: WHA CIE 1



TESTING

No.0042
Lot ID: 2445897
Date Received : May 10, 2024
Date Reported : May 16, 2024
Report Number : 2973923-1

Page 1 of 1

Sample Number	2445897-1						
Sampled Date	May 10, 2024 2:30 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_005_2558	Plot	A-3/2	Site	Isal Chaves Engineering Co., Ltd.		
Date Analysis Commenced	May 10, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA) Yellow, a lot of odour, still and some turbid						
Physical Property							
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	19.8	<500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - D G	Kayong
Oil & Grease	mg/L	-	1	3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *				8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Surarat Narsapang วิศกรสิ่งแวดล้อม 9-323-9-9451

Remark :
- LOD : Limit of Detection
- "x" : Lower than LOD (Limit of Quantitation) / LOQ (Limit of Reporting)
- Analytical method * refers not included in scope of Accreditation (ISO/IEC 17025)
- The laboratory has been accepted as an accredited laboratory complying with the (ISO/IEC 17025)

Technical Management: N. Banomyit
Narumon Banchoogkitt
Supervisor
วิศกรสิ่งแวดล้อม 9-323-9-9446
Approved By: D. Khumsoi
Dej Chongchon
Senior Manager
วิศกรสิ่งแวดล้อม 9-323-9-9446

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Thailand 20230
P/O :
Project Name : Factory I Monthly
Project Location: WHA CIE 1



TESTING

No.0042
Lot ID: 2445996
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2982312-1

Page 1 of 1

Sample Number	2445996-1						
Sampled Date	May 09, 2024 10:20 AM						
Sample Description	Wastewater						
Contract ID	L_WHA_CIE1_002_2567	Plot	B.12A	Site	PRISH TELECOM ASIA (LIMITED)		
Date Analysis Commenced	May 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA) Yellow, a lot of odour, solid and some turbid						
Physical Property							
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	113	<500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - D G	Kayong
Oil & Grease	mg/L	-	1	7	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *				8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thongtaeng วิศกรสิ่งแวดล้อม 9-323-9-9446

Remark :
- LOD : Limit of Detection
- "x" : Lower than LOD (Limit of Quantitation) / LOQ (Limit of Reporting)
- Analytical method * refers not included in scope of Accreditation (ISO/IEC 17025)
- The laboratory has been accepted as an accredited laboratory complying with the (ISO/IEC 17025)

Technical Management: N. Banomyit
Narumon Banchoogkitt
Supervisor
วิศกรสิ่งแวดล้อม 9-323-9-9446
Approved By: D. Khumsoi
Dej Chongchon
Senior Manager
วิศกรสิ่งแวดล้อม 9-323-9-9446

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TESTING
No. 0042

Lot ID: 2445932
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number: 2973993-1

Page 8 of 8

Sample Number	24K1920-1		
Sampled Date	May 09, 2024 2:47 PM		
Sample Description	Wastewater		
Contract ID	I_CIE_001_2561	Plot	2-59 I Site
Date Analysis Commenced	May 09, 2024		Reflexion (Thailand) Limited
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.		

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing BOD (5 days at 20 Degree C)	mg/L	—	2.0	59.3	±500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B: part 5100 - 0-0	Rayong
Oil & Grease	mg/L	—	5	5	±10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *				7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline: Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 / Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant.
Sampling By: Sirasit Nacapong vcs00000000-323-4-0011

Remarks:

- LOD = Limit of Detection
- *LOQ = Limit of Quantitation / LOR (Limit of Reporting)
- Analyte(s) missed / failure was included in scope of Accreditation ISO/IEC 17025.

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

Approved by _____

D. J. J. J.

Dej Changch
Senior Manag
โทร: 09-00000000

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A. Houghton, M. Gurney (Eds.)



TESTING
No. 0042

Lot ID: 2445890
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2973560-1

100

Sample Number	2405014-1		
Sample Date	May 09, 2024 10:35 AM		
Sample Description	Wastewater		
Contract ID	LCIE_010_2556	Plot	2-32
Date Analysis Commenced	May 09, 2024		
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.		

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BSOD (5 days at 20 Degree C)	mg/L	—	7.0	84.7	≤300	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 8100 - D & E	Ramsey
Oil & Grease	mg/L	—	8	<8	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Ramsey
pH (on site) *		—	—	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Ramsey

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 ; Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Surarit Narapong mscGruuwaA 7323-4-0011

Remarks:

- LOD : Limit of Detection
- "L" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * : alarm not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the FSQ/SCC 37035

Approved by _____

D. L. Lums

DeJ. Chang
Senior Manager
Manufacturing

Results apply to the currency) as confirmed, unless the targeting was conducted by AIS. As part of this report may be requested in any form without express consent from the relevant AIS Licensure Group (Thailand) strongly recommends that this report is not released without its full.

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TESTING

Lot ID: 2449997
Date Received : May 10, 2024
Date Reported : May 16, 2024
Report Number : 2982311-1

P/O :
Project Name : Factory Monthly
Project Location: WHA CTE 1

Sample Number	244913-1			Page 2 of 2
Sample Date	May 09, 2024 10:25 AM			
Sample Description	Wastewater			
Contract ID	LC_002_2590	Plot	2-33	Site Sakura Industry (Thailand) Co., Ltd.
Date Analysis Commenced	May 09, 2024			
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment / preservation standards.			
Physical Property	LAPHA / USEPA Yellow, a lot of odour, solid and some turbid			

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	114	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 1550 - D/C	Rayong
Oil & Grease	mg/L	-	8	5	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5200 B	Rayong
pH (on site)	-	-	-	8.8	5.5-8.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (8)	Rayong

Guideline: Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2550 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By: Suravit Narapong นวสรวัด ๖-๒๒๖-๖-๐๐11

- LOD = Limit of Detection
 - "L" = Lower than LOD (Limit of Quantitation) / LOQ (Limit of Reporting).
 Analyte(s) marked * is/are not included in scope of Accreditation (ISO/IEC 17025).
 - The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025

D. K. K. K.

Dej Changchun

Senior Manager
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STRENGTH TRAINING



TESTING

Lot ID: 2445969
Date Received : May 10, 2024
Date Reported : May 16, 2024
Report Number : 2974085-1

Project Name : Factory | Monthly
Project Location: WHA CTF 1

Sample Number	2445069-1			Page 2 of 2
Sample Date	May 10, 2024 9:27 AM			
Sample Description	Wastewater			
Contract ID	L_CIE_001_2555	Plot	C-5.6	Site :SANG CHAREON EASTERN GALVANIZE CO., LTD
Date Analysis Commenced	May 11, 2024			
Condition of Sample	Contained in one amber glass bottle and two plastic bottles. Sample containers comply to pretest/initial - preservation standards (APHA, USEPA)			
Physical Property	Yellow, a lot of odour, solid and some turbid			

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Nickel	mg/L	0.0003	0.0005	0.002	11.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 H, 3030 F	Bangkok
Zinc	mg/L	0.003	0.003	0.06	15.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 H, 3030 F	Bangkok

Guideline: Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2556 / Criteria of wastewater characteristic from factory discharge to control wastewater Treatment Plant.

Sampling by: Surendra Narasingh Choudhary 7-123-4-0011, Keshavnagar, Kalyanpur, Bili Gauraha B 2014-4-0001

- Analytical method • software has been in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Land

Kanokkam Ayei

Senior Manager
November 2006 - Present

*Results apply to the unimodal (no extended, clockwise sampling) case considered by A.C.S. No part of this report may be reproduced in any form without written consent from the publisher.

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TESTING

Lot ID: 2445969
Date Received : May 10, 2024
Date Reported : May 16, 2024
Report Number : 2974085-1

Project Name : Factory 1 Monthly
Project Location: WHA CTF 1

Sample Number	2445069-1			Page 2 of 2
Sample Date	May 10, 2024 9:27 AM			
Sample Description	Wastewater			
Contract ID	L_CIE_001_2555	Plot	C-5.6	Site :SANG CHAREON EASTERN GALVANIZE CO., LTD
Date Analysis Commenced	May 11, 2024			
Condition of Sample	Contained in one amber glass bottle and two plastic bottles. Sample containers comply to pretest/initial - preservation standards (APHA, USEPA)			
Physical Property	Yellow, a lot of odour, solid and some turbid			

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Nickel	mg/L	0.0003	0.0005	0.002	11.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Zinc	mg/L	0.003	0.003	0.06	15.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline: Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2556 / Criteria of wastewater characteristic from factory discharge to control wastewater Treatment Plant.

Sampling by: Surendra Narasingh Chinnaiyasaheb 7-323-4-0011, Keshavnagar, Kalyanpur, Bili Gausia B 2014-4-0001

- Analytical method • software has been in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Land

Kanakkum Ayal

Senior Manager
အထူးစီမံကိန်းဦးစီးဌာန

*Results apply to the unimodal (no extended, clockwise sampling) case considered by A.C.S. No part of this report may be reproduced in any form without written consent from the publisher.

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Analysis / Test Report



TESTING
No.0009

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Boin, Amphur Sriracha, Chonburi
Thailand 20230
P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Lot ID: 2445969
Date Received : May 10, 2024
Date Reported : May 16, 2024
Report Number : 2974065-3

Page 1 of 1

Sample Number	2445969-1						
Sampled Date	May 10, 2024 9:27 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_001_2555						
	Plot	C-5/6		Site	SAKAI CHAREON EASTERN GALVANIZE CO.,LTD		
Date Analysis Commenced	May 11, 2024						
Condition of Sample	Contained in one amber glass bottle and two plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, solid and some turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.20	≤10.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Suravit Narapong , Kardsinok Khosavanit

Remark :
LOD : Limit of Detection
"x" : Lower than LOQ (Limit of Quantitation) / LOQ (Limit of Reporting)
Analyte(s) marked * refers not included in scope of Accreditation ISO/IEC 17025.
This laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by *Sauwath N.*
Santree Nontanjan
Manager

Remark: (in the sample) is submitted, unless the sampling was conducted by ALS. The part of the report may be reproduced in any form without written consent from the laboratory.

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Analysis / Test Report



TESTING
No.0042

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Thailand 20230
P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Lot ID: 2445909
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 297939-1

Page 1 of 1

Sample Number	2445909-1						
Sampled Date	May 09, 2024 1:30 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_018_2557	Plot	P-15	Site	SET (Thailand) Co.,Ltd.		
Date Analysis Commenced	May 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	38.8	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *	-	-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thongtong winDusarakh 323-9-9445

Remark :
LOD : Limit of Detection
"x" : Lower than LOQ (Limit of Quantitation) / LOQ (Limit of Reporting)
Analyte(s) marked * refers not included in scope of Accreditation ISO/IEC 17025.
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Technical Management *N.Bangnit*
Narumon Banchoangkit
Supervisor
winDusarakh 323-9-9445

Approved by *D.Changnon*
Dej Changnon
Senior Manager
winDusarakh 323-9-9442

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Thailand 20230
P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Lot ID: 2445908
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 297937-1

Page 1 of 1

Sample Number	2445908-1						
Sampled Date	May 09, 2024 2:10 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_017_2557 Plot F-10 Site Shinsei Koki (Thailand) Corporation Limited.						
Date Analysis Commenced	May 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	8.6	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *	-	-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pithaya Thongtong winDusarakh 323-9-9445

Remark :
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This laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Approved by *D.Changnon*
Dej Changnon
Senior Manager
winDusarakh 323-9-9442

Technical Management *N.Bangnit*
Narumon Banchoangkit
Supervisor
winDusarakh 323-9-9445

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Thailand 20230
P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Lot ID: 2445884
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 297936-1

Page 1 of 1

Sample Number	2445884-1						
Sampled Date	May 09, 2024 9:09 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_017_2550						
	Plot	B-3		Site	Shinsei Kogyo (Thailand) Co., Ltd.		
Date Analysis Commenced	May 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, some odour, a lot of solid and some turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	17.6	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *	-	-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Suravit Narapong winDusarakh 323-9-9445

Remark :
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Technical Management *N.Bangnit*
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Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1



TESTING
No.0042
Lot ID: 2445888
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2973850-1

Page 1 of 1

Sample Number : 2445888-1
Sample Date : May 09, 2024 2:20 PM
Sample Description : Wastewater
Contract ID : L_CIE_018_2550 Plot : D-13/2 Site : Siam Steel Mill Services Ltd.
Date Analysis Commenced : May 09, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
(APHA / USEPA)
Physical Property : Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	10.7	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O ₂	Rapax
Oil & Grease	mg/L		3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rapax
PH (on site) *				7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rapax

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Pithaya Thongtaeng รหัสประจำตัว 3-323-4-9445

Remarks :
LOD : Limit of Detection
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Technical Management : N. Banthongkit
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Approved by : D. Chongchit
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P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1



TESTING
No.0042
Lot ID: 2445883
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2973833-1

Page 1 of 1

Sample Number : 2445883-1
Sample Date : May 09, 2024 10:30 AM
Sample Description : Wastewater
Contract ID : L_CIE_004_2537 Plot : B-11A Site : SPF (Thailand) Co., Ltd.
Date Analysis Commenced : May 09, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
(APHA / USEPA)
Physical Property : Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	21.5	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O ₂	Rapax
Oil & Grease	mg/L		3	4	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rapax
PH (on site) *				7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rapax

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Pithaya Thongtaeng รหัสประจำตัว 3-323-4-9445

Remarks :
LOD : Limit of Detection
"u" : Lower than LOQ (Limit of Quantitation) / LOQ (Limit of Reporting)
Analytical method * refers not included in scope of Accreditation ISO/IEC 17025.
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Technical Management : N. Banthongkit
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Approved by : D. Chongchit
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Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1



TESTING
No.0042
Lot ID: 2445887
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2973843-1

Page 1 of 1

Sample Number : 2445887-1
Sample Date : May 09, 2024 3:20 PM
Sample Description : Wastewater
Contract ID : L_CIE_018_2550 Plot : D-4 Site : Taisan Pias (Thailand) Co., Ltd.
Date Analysis Commenced : May 09, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
(APHA / USEPA)
Physical Property : Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	21.8	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O ₂	Rapax
Oil & Grease	mg/L		3	4	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rapax
PH (on site) *				8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rapax

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Pithaya Thongtaeng รหัสประจำตัว 3-323-4-9445

Remarks :
LOD : Limit of Detection
"u" : Lower than LOQ (Limit of Quantitation) / LOQ (Limit of Reporting)
Analytical method * refers not included in scope of Accreditation ISO/IEC 17025.
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Technical Management : N. Banthongkit
Supervisor
รหัสประจำตัว 3-323-4-9445
Approved by : D. Chongchit
Senior Manager
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Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1



TESTING
No.0042
Lot ID: 2445895
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2973910-1

Page 1 of 1

Sample Number : 2445895-1
Sample Date : May 09, 2024 3:05 PM
Sample Description : Wastewater
Contract ID : L_CIE_003_2558 Plot : H-2 Site : Tayth Kenmoo Auto Parts (Thailand) Co., Ltd.
Date Analysis Commenced : May 09, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
(APHA / USEPA)
Physical Property : Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	94.3	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O ₂	Rapax
Oil & Grease	mg/L		3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rapax
PH (on site) *				7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rapax

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Pithaya Thongtaeng รหัสประจำตัว 3-323-4-9445

Remarks :
LOD : Limit of Detection
"u" : Lower than LOQ (Limit of Quantitation) / LOQ (Limit of Reporting)
Analytical method * refers not included in scope of Accreditation ISO/IEC 17025.
The laboratory has been accredited as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management : N. Banthongkit
Supervisor
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Approved by : D. Chongchit
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Thailand 20230

P/O :
Project Name : Factory / Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2445906
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2973934-1

Page 1 of 1

Sample Number	2445906-1						
Sample Date	May 09, 2024 11:50 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_001_2552	Plot	F-12	Site	Thai Instant Products Co., Ltd.		
Date Analysis Commenced	May 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Black, a lot of odour, solid and turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	—	2.0	339	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O ₂	Kayong
Oil & Grease	mg/L	—	9	6	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *		—	—	6.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Pithaya Thengseng นิสิตกุล นว 323-9-946

Remarks :
- LOD : Limit of Detection
- "—" : Lower than LOQ (Limit of Quantitation) / LOQ (Limit of Reporting)
- Analytical method : Value not included in scope of Accreditation (ISO/IEC 17025)
- The laboratory has been accepted as an accredited laboratory complying with the (ISO/IEC 17025)

Technical Management

N. Banomyit

Nannan Banomyit

Supervisor

นิสิตกุล นว 323-9-946

Approved by

D. Chongchon

Dej Chongchon

Senior Manager

นิสิตกุล นว 323-9-946

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P/O :
Project Name : Factory / Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2445956
Date Received : May 10, 2024
Date Reported : May 16, 2024
Report Number : 2974053-1

Page 1 of 1

Sample Number	2445956-1						
Sample Date	May 10, 2024 11:42 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_001_2560	Plot	E-6	Site	Thai Rung Linen Co Public Co., Ltd.		
Date Analysis Commenced	May 10, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	—	2.0	88.2	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O ₂	Kayong
Oil & Grease	mg/L	—	9	4	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *		—	—	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Surant Narong นิสิตกุล นว 323-9-9001

Remarks :
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- "—" : Lower than LOQ (Limit of Quantitation) / LOQ (Limit of Reporting)
- Analytical method : Value not included in scope of Accreditation (ISO/IEC 17025)
- The laboratory has been accepted as an accredited laboratory complying with the (ISO/IEC 17025)

Technical Management

N. Banomyit

Nannan Banomyit

Supervisor

นิสิตกุล นว 323-9-946

Approved by

D. Chongchon

Dej Chongchon

Senior Manager

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Thailand 20230

P/O :
Project Name : Factory / Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2445941
Date Received : May 10, 2024
Date Reported : May 16, 2024
Report Number : 2974003-1

Page 1 of 1

Sample Number	2445941-1						
Sample Date	May 10, 2024 10:43 AM						
Sample Description	Wastewater						
Contract ID	L_WHA_CIE1_003_2164	Plot	F-62	Site	Thai Wip Co., Ltd.		
Date Analysis Commenced	May 10, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	—	2.0	33.6	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O ₂	Kayong
Oil & Grease	mg/L	—	9	10	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *		—	—	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Surant Narong นิสิตกุล นว 323-9-001

Remarks :
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Thailand 20230

P/O :
Project Name : Factory / Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2445965
Date Received : May 10, 2024
Date Reported : May 16, 2024
Report Number : 2974073-1

Page 1 of 1

Sample Number	2445965-1						
Sample Date	May 09, 2024 10:44 AM						
Sample Description	Wastewater						
Contract ID	L_WHA_CIE1_007_2566	Plot	F-231	Site	TOOLS INTERNATIONAL (THAILAND) Co., Ltd.		
Date Analysis Commenced	May 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	—	2.0	21.8	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O ₂	Kayong
Oil & Grease	mg/L	—	9	1	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *		—	—	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant

Sampling By : Surant Narong นิสิตกุล นว 323-9-001

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P/O :
Project Name : Factory / Monthly
Project Location: WHA CIE 1



TESTING

No.0042
Lot ID: 2445925
Date Received : May 10, 2024
Date Reported : May 16, 2024
Report Number : 2973980-1

Page 1 of 1

Sample Number	2445925-1						
Sampled Date	May 10, 2024 10:25 AM						
Sample Description	Wastewater						
Contract ID	L_WHA CIE1_003_2565	Plot	Z-61	Site	Top Link Industrial (Thailand) Co., Ltd.		
Date Analysis Commenced	May 10, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, solid and some turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	67.2	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 5200 - D G	Kayong
Oil & Grease	mg/L	-	3	4	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	8.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Surawit Narapong วิสุธรรม 9-323-9-0011
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N. Banjongkit

Approved by

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P/O :
Project Name : Factory / Monthly
Project Location: WHA CIE 1



TESTING

No.0042
Lot ID: 2445950
Date Received : May 10, 2024
Date Reported : May 16, 2024
Report Number : 2974037-1

Page 1 of 1

Sample Number	2445950-1						
Sampled Date	May 10, 2024 10:18 AM						
Sample Description	Wastewater						
Contract ID	L_WHA CIE1_003_2565	Plot	Z-64	Site	Top Link Industrial (Thailand) Co., Ltd.		
Date Analysis Commenced	May 10, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)						
Physical Property	Yellow, some odour, solid and turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	11.2	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - D G	Kayong
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Surawit Narapong วิสุธรรม 9-323-9-0011
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P/O :
Project Name : Factory / Monthly
Project Location: WHA CIE 1



TESTING

No.0042
Lot ID: 2445936
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2973999-1

Page 1 of 1

Sample Number	2445936-1						
Sampled Date	May 09, 2024 11:00 AM						
Sample Description	Wastewater						
Contract ID	L_WHA CIE1_002_2563	Plot	B-9	Site	Toymia Seiko (Thailand) Co., Ltd.		
Date Analysis Commenced	May 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, solid and some turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	118	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - D G	Kayong
Oil & Grease	mg/L	-	3	16	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	6.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Pethaya Thongplang วิสุธรรม 9-323-9-9446
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N. Banjongkit

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D. Chongchom

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Thailand 20230
P/O :
Project Name : Factory / Monthly
Project Location: WHA CIE 1



TESTING

No.0042
Lot ID: 2445927
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2973986-1

Page 1 of 1

Sample Number	2445927-1						
Sampled Date	May 09, 2024 1:38 PM						
Sample Description	Wastewater						
Contract ID	L_WHA CIE1_002_2563	Plot	Z-55 F	Site	Tumfite Technology Thailand Co., Ltd.		
Date Analysis Commenced	May 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)						
Physical Property	Yellow, some odour, solid and turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	4.2	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - D G	Kayong
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	7.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater Treatment Plant
Sampling By : Surawit Narapong วิสุธรรม 9-323-9-0011
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Approved by

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Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING

Lot ID: 2445933
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2573995-1

Sample Number	2445933-1						Page 1 of 1
Sampled Date	May 09, 2024 2:12 PM						
Sample Description	Wastewater						
Contract ID	L_WHA CIE1_006_2563	Plot	2-350	Site	Ultimate Spungs (Thailand) Co., Ltd.		
Date Analysis Commenced	May 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	124	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Kayong
Oil & Grease	mg/L	-	1	10	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *				7.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater treatment plant
Sampling By : Suranai Manopong วสุธรรมารักษ์ 323-9-9443

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Supervisor
วิไลวรรณ 323-9-9443

Approved by : D. Chongchit
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Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING

Lot ID: 2445904
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2573932-1

Sample Number	2445904-1						Page 1 of 1
Sample Date	May 09, 2024 2:05 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_003_2550	Plot	F-9	Site	Van Laxum Pipe and Tube (Thailand) Ltd.		
Date Analysis Commenced	May 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	55.5	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease	mg/L		1	8	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *				7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater treatment plant
Sampling By : Pichaya Thongtong วสุธรรมารักษ์ 323-9-9443

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วิไลวรรณ 323-9-9443

Approved by : D. Chongchit
Dej Chongchit
Senior Manager
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P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING

Lot ID: 2445954
Date Received : May 09, 2024
Date Reported : May 16, 2024
Report Number : 2574047-1

Sample Number	2445954-1						Page 1 of 1
Sample Date	May 09, 2024 10:55 AM						
Sample Description	Wastewater						
Contract ID	L_WHA CIE1_006_2565	Plot	2-350	Site	V-SACHEE Co., Ltd.		
Date Analysis Commenced	May 09, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	51.8	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Baying
Oil & Grease	mg/L		1	7	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Karung
pH (on site) *				7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Baying

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater treatment plant
Sampling By : Pichaya Thongtong วสุธรรมารักษ์ 323-9-9443

Remark :
- LOD : Limit of Detection
- "u" : Lower than LOQ (Limit of Quantitation) / LOQ (Limit of Reporting)
- Analytical marked * where not included in scope of Accreditation (ISO/IEC 17025)
The laboratory has been accepted as an accredited laboratory complying with the (ISO/IEC 17025)

Technical Management : N. Bannapit
Narumon Banchoongkit
Supervisor
วิไลวรรณ 323-9-9443

Approved by : D. Chongchit
Dej Chongchit
Senior Manager
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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Boini, Amphur Siriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING

Lot ID: 2458213
Date Received : Jun 13, 2024
Date Reported : Jun 18, 2024
Report Number : 3500709-1

Sample Number	2458213-1						Page 1 of 1
Sample Date	Jun 13, 2024 11:36 AM						
Sample Description	Wastewater						
Contract ID	L_WHA CIE1_007_2564	Plot	2-350	Site	AGRI SYRUP INDUSTRY (THAILAND) Co., Ltd.		
Date Analysis Commenced	Jun 13, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	—	2.0	14.8	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Karoon
Oil & Grease	mg/L	—	1	8	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Karoon
pH (on site) *				8.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Karoon

Guideline : Notification of the Industrial Estate Authority of Thailand No.76/2567 : General Standards for Wastewater drainage into central wastewater treatment system in Industrial Estates
Sampling By : Suphanat Sakul วสุธรรมารักษ์ 323-9-9443

Remark :
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- "u" : Lower than LOQ (Limit of Quantitation) / LOQ (Limit of Reporting)
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Technical Management : Photchana S.
Photchana Senda
Scientist (A)
วิไลวรรณ 323-9-9443

Approved by : D. Chongchit
Dej Chongchit
Senior Manager
วิไลวรรณ 323-9-9443

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Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2458143
Date Received : Jun 10, 2024
Date Reported : Jun 17, 2024
Report Number : 3000486-1

Page 1 of 1

Sample Number : 2458143-1
Sample Date : Jun 10, 2024 3:43 PM
Sample Description : Wastewater
Contract ID : L_CIE_003_2557 Plot : B-10B Site : Asahi (Thailand) Co., Ltd.
Date Analysis Commenced : Jun 10, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
(APHA / USEPA)
Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	21.8	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 5200 - G-G	Rayong
Oil & Grease	mg/L		8	8	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (at 25°C) *				7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Tanasit Wongpachai รหัสประจำตัว 3223-99460

Remark :
- LOD : Limit of Detection
- "LT" : Lesser than LOQ (Limit of Quantitation) / LOB (Limit of Reporting)
- Analytical method * refers not included in scope of Accreditation ISO/IEC 17025.
The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management : **Photchanna S.**
Photchanna Seeda
Scientist (4)
รหัสประจำตัว 3223-99460

Approved by : **D. Chongchon**
Dej Chongchon
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Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2458164
Date Received : Jun 10, 2024
Date Reported : Jun 17, 2024
Report Number : 3000550-1

Page 1 of 1

Sample Number : 2458164-1
Sample Date : Jun 10, 2024 3:10 PM
Sample Description : Wastewater
Contract ID : L_CIE_009_2558 Plot : A-08C Site : Asahi Diamond (Thailand) Co., Ltd.
Date Analysis Commenced : Jun 10, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
(APHA / USEPA)
Yellow, a lot of odour, some solid and turbid

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	117	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 5200 - G-G	Rayong
Oil & Grease	mg/L		8	10	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (at 25°C) *				7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Tanasit Wongpachai รหัสประจำตัว 3223-99460

Remark :
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- "LT" : Lesser than LOQ (Limit of Quantitation) / LOB (Limit of Reporting)
- Analytical method * refers not included in scope of Accreditation ISO/IEC 17025.
The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management : **Photchanna S.**
Photchanna Seeda
Scientist (4)
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Approved by : **D. Chongchon**
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Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2458233
Date Received : Jun 10, 2024
Date Reported : Jun 17, 2024
Report Number : 3000770-1

Page 1 of 1

Sample Number : 2458233-1
Sample Date : Jun 10, 2024 3:39 PM
Sample Description : Wastewater
Contract ID : L_WHA_CIE1_005_2564 Plot : B11-B Site : ASKED TECHNOLOGY (THAILAND) COMPANY LIMITED
Date Analysis Commenced : Jun 10, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
(APHA / USEPA)
Yellow, a lot of odour, some acid and turbid

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	40.7	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 5200 - G-G	Rayong
Oil & Grease	mg/L		8	8	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (at 25°C) *				7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Tanasit Wongpachai รหัสประจำตัว 3223-99460

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

Technical Management : **Photchanna S.**
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Approved by : **D. Chongchon**
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Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2458212
Date Received : Jun 10, 2024
Date Reported : Jun 18, 2024
Report Number : 3000706-1

Page 1 of 1

Sample Number : 2458212-1
Sample Date : Jun 12, 2024 3:52 PM
Sample Description : Wastewater
Contract ID : L_WHA_CIE1_005_2564 Plot : C-01 Site : ATEN COMPUTER PRODUCT Co., Ltd.
Date Analysis Commenced : Jun 12, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
(APHA / USEPA)
Yellow, a lot of odour, some acid and some turbid

Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	102	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 5200 - G-G	Rayong
Oil & Grease	mg/L		8	4	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (at 25°C) *				7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphanat Sakul รหัสประจำตัว 3223-99021

Remark :
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Technical Management : **Chontichak**
Chontichak Subongkach
Scientist (2)
รหัสประจำตัว 3223-99469

Approved by : **D. Chongchon**
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TESTING
No.0042

Lot ID: 2458176

Date Received : Jun 11, 2024
Date Reported : Jun 17, 2024
Report Number : 3000558-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location: WHA CIE 1

Page 1 of 1

Sample Number	2458176-1						
Sample Date	Jun 11, 2024 2:42 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_001_2550	Plot	F-11	Site	Aul Hing Co.,Ltd.		
Date Analysis Commenced	Jun 11, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	Yellow, some odour, solid and turbid						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	18.0	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 O-G	Rayong
DR & Grease	mg/L			<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5320 B	Rayong
pH (on site) *				7.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 H (8)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphant Sakulak วิสุฒานนท์ 323-4-9442

Remark :
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Technical Management

Chontichak

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Approved by

Dej Changchon

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TESTING
No.0042

Lot ID: 2458254

Date Received : Jun 12, 2024
Date Reported : Jun 18, 2024
Report Number : 3000647-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location: WHA CIE 1

Page 1 of 1

Sample Number	2458254-1						
Sample Date	Jun 12, 2024 10:18 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_002_2559	Plot	A	Site	B. Grimm Power (WHA) I Limited.		
Location	Office						
Date Analysis Commenced	Jun 12, 2024						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	21.3	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 O-G	Rayong
COD	mg/L	1.5	25	68	≤750	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5200 D	Rayong
Color (at Original pH)	ADMI		5	59	≤600	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
Color (at pH 7.0)	ADMI		5	96	≤600	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong
DR & Grease	mg/L		3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5320 B	Rayong
pH (on site) *				7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 H (8)	Rayong
Temperature *	Degree C			30.8	≤45	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong
Total Dissolved Solids Dried at 180 Degree C	mg/L		5	388	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong

Technical Management

Chontichak

Chonticha Subongkroch
Scientist (3)
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Dej Changchon

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TESTING
No.0042

Lot ID: 2458254

Date Received : Jun 12, 2024
Date Reported : Jun 18, 2024
Report Number : 3000647-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location: WHA CIE 1

Page 2 of 2

Sample Number	2458254-1						
Sample Date	Jun 12, 2024 10:18 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_002_2559	Plot	A	Site	B. Grimm Power (WHA) I Limited.		
Location	Office						
Date Analysis Commenced	Jun 12, 2024						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Kjeldahl Nitrogen as N	mg/L		1.0	34.3	≤100	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Horg (C), part 4500 (D)	Rayong
Total Suspended Solids Dried at 103-105 Degree C	mg/L		5	17	≤200	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphant Sakulak วิสุฒานนท์ 323-4-9442

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

Technical Management

Chontichak

Chonticha Subongkroch
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วิสุฒานนท์ 323-4-9442

Approved by

Dej Changchon

Dej Changchon
Senior Manager
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TESTING
No.0042

Lot ID: 2458254

Date Received : Jun 12, 2024
Date Reported : Jun 18, 2024
Report Number : 3000647-1

Client : WHA Utilities and Power Public Company Limited
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Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location: WHA CIE 1

Page 1 of 1

Sample Number	2458254-1						
Sample Date	Jun 12, 2024 10:18 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_002_2559	Plot	A	Site	B. Grimm Power (WHA) I Limited.		
Location	Office						
Date Analysis Commenced	Jun 12, 2024						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Flow rate	m3/s			0.000	No Standard	Flow meter	Rayong
Odour				Odourless	No Standard	TB, 257-2549	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphant Sakulak

Remark :
- LOD : Limit of Detection
- "N" : Lower than LOQ (Limit of Quantitation) / LOQ (Limit of Reporting)

Technical Management

Chontichak

Chonticha Subongkroch
Scientist (3)
วิสุฒานนท์ 323-4-9442

Approved by

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Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2458257
Date Received : Jun 12, 2024
Date Reported : Jun 18, 2024
Report Number : 3000649-1

Page 1 of 2

Sample Number	2458257-1							Page 1 of 2
Sample Date	Jun 12, 2024 10:15 AM							
Sample Description	Wastewater							
Contract ID	L_CIE_003_2559	Plot A		Site	B. Green Power (WHA) 1 Limited.			
Location	Boreas							
Date Analysis Commenced	Jun 12, 2024							
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment- preservation standards (APHA / USEPA).							
Physical Property	Yellow, some odour, solid and no turbid							
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location	
Water Testing								
BOD (5 days at 20 Degree C)	mg/L	—	2.0	3.7	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong	
COD	mg/L	1.5	25	46	≤750	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong	
Color (at Original pH)	ADPH	—	1	10	≤600	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong	
Color (at pH 7.0)	ADPH	—	1	10	≤600	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2120 F	Rayong	
Oil & Grease	mg/L	—	1	1.1	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong	
pH (on site) *	—	—	—	7.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (8)	Rayong	
Residual Free Chlorine **	mg/L	—	0.1	10.1	≥1	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Cl (F)	Rayong	
Temperature *	Degree C	—	—	32.2	≤45	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2550 B	Rayong	

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Dej Chongchon

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2458257
Date Received : Jun 12, 2024
Date Reported : Jun 18, 2024
Report Number : 3000649-1

Page 2 of 2

Sample Number	2458257-1						Page 2 of 2
Sample Date	Jun 12, 2024 10:15 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_003_2559	Plot A		Site	B. Green Power (WHA) 1 Limited.		
Location	Pricas						
Date Analysis Commenced	Jun 12, 2024						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, some odour, solid and no turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Dissolved Solids Dried at 180 degrees C	mg/L	—	5	1760	≤3000	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Bayang
Total Kjeldahl Nitrogen as N	mg/L	—	1.0	3.3	≤100	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500-Hung (C), part 4500 (C)	Bayang
Total Suspended Solids Dried at 103-105 degree C	mg/L	—	5	15	≤200	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Bayang

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphant Sakulchai vudhavanat v-323-n-9442

Remark :
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- "L" : Lower than LOQ (Limit of Quantitation) / LOQ (Limit of Reporting)
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Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Lot ID: 2458257
Date Received : Jun 12, 2024
Date Reported : Jun 18, 2024
Report Number : 3000649-2

Page 1 of 2

Sample Number	2458257-1						Page 1 of 1
Sample Date	Jun 12, 2024 10:15 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_003_2559	Plot	A	Site	B. Green Power (WHA) 1 Limited.		
Location	Promiss						
Date Analysis Commenced	Jun 12, 2024						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA).						
Physical Property	Yellow, some odour, solid and no turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Flow rate	m3/s			0.017	No Standard	Flow meter	Kayong
Odour				Odorous	No Standard	TSS 257-2149	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphant Sakulchai

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Approved by

Chontichak

Chonticha Subongkhit
Scientist (3)

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Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2458250
Date Received : Jun 12, 2024
Date Reported : Jun 18, 2024
Report Number : 3000616-1

Page 1 of 2

Sample Number	2458250-1						Page 1 of 1
Sample Date	Jun 12, 2024 2:35 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_002_2555	Plot	2-48	Site	BPH (THAILAND) Co., Ltd.		
Date Analysis Commenced	Jun 12, 2024						
Condition of Sample	Contained in one amber glass bottle and two plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA).						
Physical Property	Yellow, a lot of odour, some solid and no turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	—	2.0	<2.0	≤360	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 O-5	Bayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Bayong
Oil & Grease	mg/L	—	1	3	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Bayong
pH (on site) *	—	—	—	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (8)	Bayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	—	5	<5	≤200	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Bayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphant Sakulchai vudhavanat v-323-n-9442

Remark :
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Chontichak

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Dej Chongchon

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P/O :
Project Name : Factory Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2458201
Date Received : Jun 11, 2024
Date Reported : Jun 18, 2024
Report Number : 3000637-1

Page 1 of 1

Sample Number	2458201-1						
Sample Date	Jun 11, 2024 10:04 AM						
Sample Description	Wastewater						
Contract ID	L_WHA CIE1_002_2563	Plot	B-0C	Site	Boncafé (Thailand) Co., Ltd.		
Date Analysis Commenced	Jun 11, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, some odour, solid and no turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	—	2.0	2.7	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease	mg/L	—	1	1	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *				7.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphanat Sakulchai (0909898) → 323-0021

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Approved by

D. Chongchit

Chonticha Subongthoch

Dej Chongchit

Scientist (3)

Senior Manager

มือถือ 0909898 → 323-0049

มือถือ 0909898 → 323-0042

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Thailand 20230

P/O :
Project Name : Factory Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2458242
Date Received : Jun 11, 2024
Date Reported : Jun 18, 2024
Report Number : 3000650-1

Page 1 of 1

Sample Number	2458242-1						
Sample Date	Jun 11, 2024 10:47 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_003_2550	Plot	B-5	Site	Boncafé (Thailand) Ltd.		
Date Analysis Commenced	Jun 11, 2024						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards (APHA / USEPA) Yellow, some odour, solid and turbid						
Physical Property							
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	—	2.0	84.3	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease	mg/L	—	1	1	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *				7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	—	5	25	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5340 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphanat Sakulchai (0909898) → 323-0021

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Approved by

D. Chongchit

Chonticha Subongthoch

Dej Chongchit

Scientist (3)

Senior Manager

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Thailand 20230

P/O :
Project Name : Factory Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2458147
Date Received : Jun 11, 2024
Date Reported : Jun 18, 2024
Report Number : 3000499-1

Page 1 of 1

Sample Number	2458147-1						
Sample Date	Jun 11, 2024 10:38 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_009_2557	Plot	B-04	Site	Casitol Toning system		
Date Analysis Commenced	Jun 11, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, some odour, solid and no turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	—	2.0	15.0	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease	mg/L	—	1	1	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *				7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphanat Sakulchai (0909898) → 323-0021

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Approved by

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Chonticha Subongthoch

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Scientist (3)

Senior Manager

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P/O :
Project Name : Factory Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2458200
Date Received : Jun 11, 2024
Date Reported : Jun 17, 2024
Report Number : 3000436-1

Page 1 of 1

Sample Number	2458200-1						
Sample Date	Jun 11, 2024 3:51 PM						
Sample Description	Wastewater						
Contract ID	L_WHA CIE1_001_2563	Plot	D.13/L.D.13/3(A)	Site	Chasitol Chai Energy Co., Ltd.		
Date Analysis Commenced	Jun 11, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, some odour, solid and a lot of turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	—	2.0	212	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease	mg/L	—	1	1	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *				7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

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Sampling By : Suphanat Sakulchai (0909898) → 323-0021

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Chonticha Subongthoch

Dej Chongchit

Scientist (3)

Senior Manager

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Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING

No.0042
Lot ID: 2458187
Date Received : Jun 13, 2024
Date Reported : Jun 18, 2024
Report Number : 3000583-1

Page 1 of 1

Sample Number	2458187-1						
Sampled Date	Jun 12, 2024 2:27 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_004_2550	Plot	2-48	Site	Call Tech Steel (Thailand) Co., Ltd.		
Date Analysis Commenced	Jun 12, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Colorless, some odour, no solid and turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	7.3	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O ₂	Kayong
Oil & Grease	mg/L	-	8	<1	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphanat Sakulwattanasakul >323-n-9442

Remark :

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Photchana S.

Photchana Smita
Scientist (4)
m0000000 >323-n-9444

Approved By

D. Chongchom

Dej Chongchom
Senior Manager
m0000000 >323-n-9442

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Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING

No.0042
Lot ID: 2458153
Date Received : Jun 12, 2024
Date Reported : Jun 18, 2024
Report Number : 3000552-1

Page 1 of 1

Sample Number	2458153-1						
Sampled Date	Jun 12, 2024 11:49 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_004_2550	Plot	E-5	Site	Gulfuku (Thailand) Ltd.		
Date Analysis Commenced	Jun 12, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, a lot of odour, solid and turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	185	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O ₂	Kayong
Oil & Grease	mg/L	-	8	9	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphanat Sakulwattanasakul >323-n-9442

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOQ (Limit of Reporting)
- Analysis marked "A" value not included in scope of Accreditation ISO/IEC 17025
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025

Technical Management

Chontichak

Chontichak Subongkarn
Scientist (3)
m0000000 >323-n-9449

Approved By

D. Chongchom

Dej Chongchom
Senior Manager
m0000000 >323-n-9442

Results data in the attached is submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
331/9-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING

No.0042
Lot ID: 2458195
Date Received : Jun 12, 2024
Date Reported : Jun 18, 2024
Report Number : 3000598-1

Page 1 of 1

Sample Number	2458195-1						
Sampled Date	Jun 12, 2024 2:43 PM						
Sample Description	Wastewater						
Contract ID	L_WHA_CIE1_004_2562	Plot	2-67	Site	UT Wiring Systems (Thailand) Co., Ltd.		
Date Analysis Commenced	Jun 12, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, some odour, solid and turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	31.6	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O ₂	Kayong
Oil & Grease	mg/L	-	8	8	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphanat Sakulwattanasakul >323-n-9442

Remark :

- LOD : Limit of Detection
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Technical Management

Chontichak

Chontichak Subongkarn
Scientist (3)
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Approved By

D. Chongchom

Dej Chongchom
Senior Manager
m0000000 >323-n-9442

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
331/9-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING

No.0042
Lot ID: 2458197
Date Received : Jun 12, 2024
Date Reported : Jun 18, 2024
Report Number : 3000604-1

Page 1 of 1

Sample Number	2458197-1						
Sampled Date	Jun 12, 2024 3:02 PM						
Sample Description	Wastewater						
Contract ID	L_WHA_CIE1_004_2562	Plot	2-52	Site	GTS Draxwiser Automotive Systems (Thailand) Co., Ltd.		
Date Analysis Commenced	Jun 12, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, a lot of odour, some solid and a lot of turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	78.4	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O ₂	Kayong
Oil & Grease	mg/L	-	8	11	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphanat Sakulwattanasakul >323-n-9442

Remark :

- LOD : Limit of Detection
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- Analysis marked "A" value not included in scope of Accreditation ISO/IEC 17025
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Technical Management

Chontichak

Chontichak Subongkarn
Scientist (3)
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Approved By

D. Chongchom

Dej Chongchom
Senior Manager
m0000000 >323-n-9442

Results data in the attached is submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2458136

Date Received : Jun 10, 2024
Date Reported : Jun 17, 2024
Report Number : 3000464-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1

Sample Number	2458136-1						
Sampled Date	Jun 10, 2024 2:05 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_005_2550		Plot	A-1	SRA	Dushinex (Siam) Co., Ltd.	
Date Analysis Commenced	Jun 10, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, some odour, a lot of solid and some turbid						
Analyte	Unit	LOD	LOQ (LOQ)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	36.2	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Kayong
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	8.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Tanasit Wongpaichai วิธิตานาสิต ๖323-๖9446

Remark :
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- "L" : Lower than LOQ (Limit of Quantitation) / LOQ (Limit of Reporting)
- Analytical method * value not included in scope of Accreditation ISO/IEC 17025.
The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management:

Photchann S.

Photchann Sontia
Scientist (4)
วิธิตานาสิต ๖323-๖9446

Approved by

D. Chongchom

Dej Chongchom
Senior Manager
วิธิตานาสิต ๖323-๖9442

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2458188

Date Received : Jun 13, 2024
Date Reported : Jun 18, 2024
Report Number : 3000585-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1

Sample Number	2458188-1						
Sampled Date	Jun 13, 2024 2:24 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_007_2550	Plot	Z-49	Site	EBRO Valves (Thailand) Co., Ltd.		
Date Analysis Commenced	Jun 13, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, solid and turbid						
Analyte	Unit	LOD	LOQ (LOQ)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	217	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Kayong
Oil & Grease	mg/L	-	3	7	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphanat Sakul วิธิตานาสิต ๖323-๖9021

Remark :
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- "L" : Lower than LOQ (Limit of Quantitation) / LOQ (Limit of Reporting)
- Analytical method * value not included in scope of Accreditation ISO/IEC 17025.
The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management:

Photchann S.

Photchann Sontia
Scientist (4)
วิธิตานาสิต ๖323-๖9446

Approved by

D. Chongchom

Dej Chongchom
Senior Manager
วิธิตานาสิต ๖323-๖9442

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2458210

Date Received : Jun 10, 2024
Date Reported : Jun 17, 2024
Report Number : 3000683-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1

Sample Number	2458210-1						
Sampled Date	Jun 10, 2024 3:52 PM						
Sample Description	Wastewater						
Contract ID	L_WHA CIE1_002_2564	Plot	BG-A	Site	ENRX Limited		
Date Analysis Commenced	Jun 10, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOQ)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	30.0	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Kayong
Oil & Grease	mg/L	-	3	7	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Tanasit Wongpaichai วิธิตานาสิต ๖323-๖9446

Remark :
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Technical Management:

Photchann S.

Photchann Sontia
Scientist (4)
วิธิตานาสิต ๖323-๖9446

Approved by

D. Chongchom

Dej Chongchom
Senior Manager
วิธิตานาสิต ๖323-๖9442

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2458230

Date Received : Jun 11, 2024
Date Reported : Jun 18, 2024
Report Number : 3000794-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1

Sample Number	2458230-1						
Sampled Date	Jul 11, 2024 11:26 AM						
Sample Description	Wastewater						
Contract ID	L_WHA CIE1_003_2566	Plot	Z-50E	Site	YES & KAYSANG ELECTRONICS CO. LD.		
Date Analysis Commenced	Jun 11, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)						
Physical Property	Colorless, some odour, no solid and turbid						
Analyte	Unit	LOD	LOQ (LOQ)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/l	-	2.0	5.6	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O/G	Kayong
Oil & Grease	mg/l	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphanat Sakul วิธิตานาสิต ๖323-๖9021

Remark :
- LOD : Limit of Detection
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- Analytical method * value not included in scope of Accreditation ISO/IEC 17025.
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Technical Management:

Chontichok

Chontichok Suteekachok
Scientist (3)
วิธิตานาสิต ๖323-๖9448

Approved by

D. Chongchom

Dej Chongchom
Senior Manager
วิธิตานาสิต ๖323-๖9442

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TESTING

Lot ID: 2458194
Date Received : Jun 11, 2024
Date Reported : Jun 17, 2024
Report Number : 3000597-1

Page 2 of 2

Sample Number	2456219-1						
Sampled Date	Jun 11, 2024 11:39 AM						
Sample Description	Wastewater						
Contract ID	L_WWA	Plot	2-550	Site	PES International Co., Ltd.		
Date Analysis Commenced	CIEL_002_2545 Jun 11, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pre/treatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOD (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.6	67.2	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Keying
Oil & Grease	mg/L	-	3	7	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Keying
pH (on site) *		-		7.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF,	Keying

Guideline: Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Remark:

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- The laboratory will have provided its own Accredited detection capability with the ISO/IEC 17025.

D. Amos

Del. Changchun

Senior Manager

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NOTE: $\sigma^2 = 0.0001$.

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TESTING

Lot ID: 2458217
Date Received : Jun 12, 2024
Date Reported : Jun 18, 2024
Report Number : 3090718-E

Page 1 of 1

Page 1 of 1							
Sample Number	2450166-1						
Sample Date	Jun 11, 2024 10:55 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_211_7558	Plot	B-6	Site	FRASERS PROPERTY (THAILAND) PUBLIC COMPANY LIMITED		
Location	old industrial substation, Surasani						
Date Analysis Commenced	Jun 11, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pre-treatment preservation standards (APHA / USEPA)						
Physical Property	Yellow, some odour, solid and turbid						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
DOO (5 Days at 20 Degree.C)	mg/L		7.0	71.6	<500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Kaynar
OR & Grease	mg/L		1	4.3	<10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Kaynar
pH (at 25°C)		-	-	8.0	6.5-8.5	Standard Methods for the Examination of Water and	Kaynar

Wastewater, APHA, AWWA & WEF
23rd ed., 2017, part 4500 - H (B)

Guideline: Notification of the Industrial Estate Authority of Thailand No.029/2562 : General Standards for Wastewater drainage into central wastewater

Sampling By : Suphanat Sakulwattanasakul +222+0021

D. K. Malone

Total Questions:

Senior Manager

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Journal of Management Education 35(10)

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1. *Journal of the American Medical Association*, 1997; 277: 1033-1036.



TESTING

Lot ID: 2458236
Date Received : Jun 11, 2024
Date Reported : Jun 18, 2024
Report Number : 3000774-1

Guideline: Notification of the Industrial Estate Authority of Thailand No.029/2562 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.
Sampling By: Suphanat Sakulchai ๐๖๖๐๖๖๖๖ ๐-๓๓๓-๐๐๒๑

Remarks:

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D. Emerson.

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S. Vassou et al. / J. Bus. Ethics (2015) 125:139–158

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TESTING

Lot ID: 2458227
Date Received : Jun 12, 2021
Date Reported : Jun 18, 2021
Report Number : 300761-1

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.
Sampling by : Surinrat Sankulchai, 9-323-s-0021

Remarks:

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- Analysis/Method : Is/are not included in scope of Accreditation (ISO/IEC 17025)
- The Laboratory has been assessed as an accredited laboratory complying with the ISO/IEC 17025

D. Kinnou

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Analysis / Test Report



TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Lot ID: 2458158
Date Received : Jun 11, 2024
Date Reported : Jun 17, 2024
Report Number : 3000549-1

Page 1 of 2

Sample Number	2458158-1						
Sampled Date	Jun 11, 2024 4:05 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_004_2556	Plot	D-6	Site	FRASERS PROPERTY THAILAND INDUSTRIAL FREEHOLD & LEASEHOLD REIT		
Date Analysis Commenced	Jun 11, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, a bit of odour, some solid and a lot of turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	45.9	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 5200 - O-G	Kayong
Oil & Grease	mg/L	-	1	5	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	7.5	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 / General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphant Sakulchai วสุธรรมวณิช 323-9-0021

Remark :
LOD : Limit of Detection
"L" : Lesser than LOQ (Limit of Quantitation) / LOB (Limit of Reporting)
Analytical method : Not included in scope of Accreditation (ISO/IEC 17025)
The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Photchanas S.

Approved by

D. Chongchit

Photchanas Soala
Scientist (4)
วสุธรรมวณิช 323-9-9446

Dej Chongchit
Senior Manager
วสุธรรมวณิช 323-9-9442

Results made in the laboratory as indicated, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.

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Analysis / Test Report



TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Lot ID: 2458181
Date Received : Jun 13, 2024
Date Reported : Jun 18, 2024
Report Number : 3000569-1

Page 1 of 2

Sample Number	2458181-1							Page: 1 of 2
Sampled Date	Jun 13, 2024 10:41 AM							
Sample Description	Wastewater							
Contract ID	L_CIE_004_2556	Plot	Z-13	Site	FRASERS PROPERTY THAILAND INDUSTRIAL FREEHOLD & LEASEHOLD REIT			
Date Analysis Commenced	Jun 13, 2024							
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards: (APHA / USEPA)							
Physical Property	Yellow, a bit of odour, some solid and turbid							
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location	
Water Testing								
BOD (5 days at 20 Degree C)	mg/L	-	2.0	15.4	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 5200 - O-G	Kayong	
Oil & Grease	mg/L	-	1	8	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong	
pH (on site) *	-	-	-	7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong	

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 / General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphant Sakulchai วสุธรรมวณิช 323-9-0021

Remark :
LOD : Limit of Detection
"L" : Lesser than LOQ (Limit of Quantitation) / LOB (Limit of Reporting)
Analytical method : Not included in scope of Accreditation (ISO/IEC 17025)
The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Photchanas S.

Approved by

D. Chongchit

Photchanas Soala
Scientist (4)
วสุธรรมวณิช 323-9-9446

Dej Chongchit
Senior Manager
วสุธรรมวณิช 323-9-9442

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Analysis / Test Report



TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Lot ID: 2458182
Date Received : Jun 13, 2024
Date Reported : Jun 18, 2024
Report Number : 3000572-1

Page 1 of 2

Sample Number	2458182-1						
Sampled Date	Jun 13, 2024 10:38 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_004_2556	Plot	Z-14	Site	FRASERS PROPERTY THAILAND INDUSTRIAL FREEHOLD & LEASEHOLD REIT		
Date Analysis Commenced	Jun 13, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Colorless, some odour, no solid and turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	13.9	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 5200 - O-G	Kayong
Oil & Grease	mg/L	-	1	<1	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 / General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphant Sakulchai วสุธรรมวณิช 323-9-0021

Remark :
LOD : Limit of Detection
"L" : Lesser than LOQ (Limit of Quantitation) / LOB (Limit of Reporting)
Analytical method : Not included in scope of Accreditation (ISO/IEC 17025)
The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Photchanas S.

Approved by

D. Chongchit

Photchanas Soala
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Dej Chongchit
Senior Manager
วสุธรรมวณิช 323-9-9442

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Analysis / Test Report



TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1

Lot ID: 2458183
Date Received : Jun 13, 2024
Date Reported : Jun 18, 2024
Report Number : 3000573-1

Page 1 of 2

Sample Number							2458183-1	Page 1 of 1
Sampled Date							Jun 13, 2024 10:33 AM	
Sample Description							Wastewater	
Contract ID		L_CIE_004_2556	Plot	Z-14-17	Site	FRASERS PROPERTY THAILAND INDUSTRIAL FREEHOLD & LEASEHOLD REIT		
Date Analysis Commenced								
Jun 13, 2024								
Condition of Sample								
Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards: (APHA / USEPA)								
Physical Property							Colorless, some odour, solid and no turbid	
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location	
Water Testing								
BOD (5 days at 20 Degree C)	mg/L	-	2.0	6.2	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 5200 - G-G	Kayong	
Oil & Grease	mg/L	-	1	1	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong	
pH (on site) *	-	-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong	

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 / General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphant Sakulchai วสุธรรมวณิช 323-9-0021

Remark :
LOD : Limit of Detection
"L" : Lesser than LOQ (Limit of Quantitation) / LOB (Limit of Reporting)
Analytical method : Not included in scope of Accreditation (ISO/IEC 17025)
The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Photchanas S.

Approved by

D. Chongchit

Photchanas Soala
Scientist (4)
วสุธรรมวณิช 323-9-9446

Dej Chongchit
Senior Manager
วสุธรรมวณิช 323-9-9442

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2458205

Date Received : Jun 11, 2024

Date Reported : Jun 18, 2024

Report Number : 300065-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1

Sample Number	2458205-1						
Sampled Date	Jun 11, 2024 11:02 AM						
Sample Description	Wastewater						
Contract ID	L_WHA CIE1_010_2550	Plot	B-7	Site	Glory Winner (Thailand) Co.,Ltd.		
Date Analysis Commenced	Jun 11, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, some odour, solid and turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	56.9	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease	mg/L	-	3	3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphanat Sakulchai วสุธรรมวาท ๖323-๖-0021

Remarks :
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Technical Management

Chontichak

Approved by

Dej Changchon

Chonticha Subongkarn
Scientist (3)
โทรศัพท์ ๖323-๖-9440

Dej Changchon
Senior Manager
โทรศัพท์ ๖323-๖-9442

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5 Report, 45, 46, 47 (2024)



Analysis / Test Report



TESTING
No.0042

Lot ID: 2458154

Date Received : Jun 12, 2024

Date Reported : Jun 18, 2024

Report Number : 3000325-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1

Sample Number	2458154-1						
Sampled Date	Jun 12, 2024 11:31 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_009_2550	Plot	M-1	Site	Glow IPP Co.,Ltd.		
Location	Office						
Date Analysis Commenced	Jun 12, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment – preservation standards. (APHA / USEPA)						
Physical Property	Yellow, some odour, solid and a lot of turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	40.7	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease	mg/L	-	3	3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.9	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphanat Sakulchai วสุธรรมวาท ๖323-๖-0021

Remarks :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOB (Limit of Reporting)
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Technical Management

Chontichak

Approved by

Dej Changchon

Chonticha Subongkarn
Scientist (3)
โทรศัพท์ ๖323-๖-9440

Dej Changchon
Senior Manager
โทรศัพท์ ๖323-๖-9442

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5 Report, 45, 46, 47 (2024)



Analysis / Test Report



TESTING
No.0042

Lot ID: 2458246

Date Received : Jun 12, 2024

Date Reported : Jun 18, 2024

Report Number : 3000760-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1

Sample Number	2458246-1						
Sampled Date	Jun 12, 2024 11:06 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_010_2550		Plot	H-1		Site	Glow IPP Co.,Ltd.
Location	Blow Down						
Date Analysis Commenced	Jun 12, 2024						
Condition of Sample	Contained in one amber glass bottle and three plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, some odour, solid and turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	15.4	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
COD	mg/L	1.5	25	32	≤750	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 D	Rayong
Oil & Grease	mg/L	-	3	6	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	1950	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2550 C	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphanat Sakulchai วสุธรรมวาท ๖323-๖-0021

Remarks :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOB (Limit of Reporting)
- Analytical method * value not included in scope of Accreditation (ISO/IEC 17025)
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025

Technical Management

Chontichak

Approved by

Dej Changchon

Chonticha Subongkarn
Scientist (3)
โทรศัพท์ ๖323-๖-9440

Dej Changchon
Senior Manager
โทรศัพท์ ๖323-๖-9442

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5 Report, 45, 46, 47 (2024)



Analysis / Test Report



TESTING
No.0042

Lot ID: 2458204

Date Received : Jun 11, 2024

Date Reported : Jun 16, 2024

Report Number : 3000664-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1

Sample Number	2458204-1						
Sampled Date	Jun 11, 2024 8:36 AM						
Sample Description	Wastewater						
Contract ID	L_WHA_CIE1_010_2560	Plot	BC	Site	Hardware King Co.,Ltd.		
Date Analysis Commenced	Jun 11, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Colorless, a lot of odour, some solid and no turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *		-	-	5.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (E)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphanat Sakulchai วสุธรรมวาท ๖323-๖-0021

Remarks :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOB (Limit of Reporting)
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Technical Management

Chontichak

Approved by

Dej Changchon

Chonticha Subongkarn
Scientist (3)
โทรศัพท์ ๖323-๖-9440

Dej Changchon
Senior Manager
โทรศัพท์ ๖323-๖-9442

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5 Report, 45, 46, 47 (2024)



Analysis / Test Report

Client : VHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Srisacha, Chonburi
Thailand 20230
P/O :
Project Name : Factory I Monthly
Project Location : VHA CIE 1



TESTING
No.0042
Lot ID: 2458253
Date Received : Jun 12, 2024
Date Reported : Jun 18, 2024
Report Number : 3000637-1

Sample Number	2458253-1						
Sample Date	Jun 12, 2024 9:47 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_011_2530	Plot	B-1	Site	Honey Well Electronic Materials (Thailand) Co., Ltd.		
Date Analysis Commenced	Jun 12, 2024						
Condition of Sample	Contained in one amber glass bottle and two plastic bottles. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, a lot of odour, some solid and no turbid						
Analyte	Unit	LOD	LOQ (LO)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	11.1	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Bayong
Oil & Grease	mg/L			8	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 B	Bayong
pH (on site) ^				7.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Bayong
Total Dissolved Solids Dried at 180 degree C	mg/L		5	1540	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Bayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphanat Sakulchai (ผู้ดูแลระบบ) 323-9-0021, Pattaraporn Sawangjit (ผู้ดูแลระบบ) 204-9-0002

Remark :
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Technical Management

Chontichak

Chontichak Subongkroh
Scientist (1)

ผู้ดูแลระบบ 323-9-0448

Approved by

Dr. Chongchai

Dr. Chongchai
Senior Manager

ผู้ดูแลระบบ 323-9-9442

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Analysis / Test Report

Client : VHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Srisacha, Chonburi
Thailand 20230
P/O :
Project Name : Factory I Monthly
Project Location : VHA CIE 1



TESTING
No.0009
Lot ID: 2458253
Date Received : Jun 12, 2024
Date Reported : Jun 18, 2024
Report Number : 3000637-2

Sample Number	2458253-1						Page 1 of 1
Sample Date	Jun 12, 2024 9:47 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_011_2530	Plot	B-1	SRe	Honey Well Electronic Materials (Thailand) Co.,Ltd.		
Date Analysis Commenced	Jun 12, 2024						
Condition of Sample	Contained in one amber glass bottle and two plastic bottles. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, a lot of odour, some solid and no turbid						
Analyte	Unit	LOD	LOQ (LO)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Nickel	mg/L	0.0003	0.0005	0.12	≤1.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3130 D	Shuangku

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphanat Sakulchai (ผู้ดูแลระบบ) 323-9-0021, Pattaraporn Sawangjit (ผู้ดูแลระบบ) 204-9-0002

Remark :
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- "L" : Lower than LOD (Limit of Quantitation) / LOQ (Limit of Reporting)
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Technical Management

Sauwath N.

Sauwath Nonsamran
Manager

ผู้ดูแลระบบ 204-9-0002

Approved by

Kanok Anit

Kanok Anit
Senior Manager

ผู้ดูแลระบบ 204-9-0004

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Analysis / Test Report

Client : VHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Srisacha, Chonburi
Thailand 20230
P/O :
Project Name : Factory I Monthly
Project Location : VHA CIE 1



TESTING
No.0042
Lot ID: 2458141
Date Received : Jun 10, 2024
Date Reported : Jun 17, 2024
Report Number : 3000479-1

Sample Number	2458141-1						
Sample Date	Jun 10, 2024 3:00 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_012_2530		Plot	A-7	SRe	In-Selton Foods Ltd.	
Date Analysis Commenced	Jun 10, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solids and no turbid						
Analyte	Unit	LOD	LOQ (LO)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	111	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Bayview
Oil & Grease	mg/L	-	3	8	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 B	Bayview
pH (at 25°C)	-	-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Bayview

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Tanont Wongwattana (ผู้ดูแลระบบ) 323-9-9440

Remark :
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Technical Management

Phatchana S.

Phatchana Somsa
Scientist (1)

ผู้ดูแลระบบ 323-9-9448

Approved by

Dr. Chongchai

Dr. Chongchai
Senior Manager

ผู้ดูแลระบบ 323-9-9442

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Thailand 20230
P/O :
Project Name : Factory I Monthly
Project Location : VHA CIE 1



TESTING
No.0042
Lot ID: 2458249
Date Received : Jun 12, 2024
Date Reported : Jun 18, 2024
Report Number : 3000641-1

Sample Number	2458249-1						Page 1 of 1
Sample Date	Jun 12, 2024 11:35 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_002_2538	Plot	M-2	Site	Insee Ecosystem Co., Ltd.		
Date Analysis Commenced	Jun 12, 2024						
Condition of Sample	Contained in one amber glass bottle and two plastic bottles. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, a lot of odour, some solid and a lot of turbid						
Analyte	Unit	LOD	LOQ (LO)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	43.8	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Rayong
COD	mg/L	1.5	20	14.9	≤750	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease	mg/L			8	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 B	Rayong
pH (at 25°C)				7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L			85	≤200	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphanat Sakulchai (ผู้ดูแลระบบ) 323-9-0021

Remark :
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Technical Management

Chontichak

Chontichak Subongkroh
Scientist (1)

ผู้ดูแลระบบ 323-9-9448

Approved by

Dr. Chongchai

Dr. Chongchai
Senior Manager

ผู้ดูแลระบบ 323-9-9442

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TESTING
No.0042

Client : WHA Utilities and Power Public Company Limited
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Thailand 20230

Lot ID: 2458186
Date Received : Jun 13, 2024
Date Reported : Jun 18, 2024
Report Number : 3000580-1

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1

Page 1 of 1

Sample Number	2458186-1						
Sample Date	Jun 13, 2024 10:27 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_001_2561	Plot	Z-40	Site	ISHWAR PROFILES (THAILAND) CO.,LTD.		
Date Analysis Commenced	Jun 13, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, some odour, a lot of solid and some turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	21.3	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 5200 - O-G	Kayong
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *		-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphannat Sakulki วิสุฒานนท์ 323-9-9446

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Technical Management
Photchanan S.
Photchanan Senda
Scientist (4)
วิสุฒานนท์ 323-9-9446

Approved by
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Client : WHA Utilities and Power Public Company Limited
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Thailand 20230

Lot ID: 2458171
Date Received : Jun 10, 2024
Date Reported : Jun 17, 2024
Report Number : 3000554-1

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1

Page 1 of 1

Sample Number	2458171-1						
Sample Date	Jun 10, 2024 3:57 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_002_2560	Plot	B-6E	Site	Jonghannich Lift Truck Co.,Ltd		
Date Analysis Commenced	Jun 10, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	34.0	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Kayong
Oil & Grease	mg/L	-	3	8	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *		-	-	7.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Tanasit Wongsachai วิสุฒานนท์ 323-9-9440

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Technical Management
Photchanan S.
Photchanan Senda
Scientist (4)
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Approved by
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Lot ID: 2458241
Date Received : Jun 13, 2024
Date Reported : Jun 18, 2024
Report Number : 3000574-1

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1

Page 1 of 1

Sample Number	2458241-1						
Sample Date	Jun 13, 2024 10:57 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_002_2561	Plot	Z-18	Site	KIRISSONG ARTWOOD CO.,LTD.		
Date Analysis Commenced	Jun 13, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	88.2	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Kayong
Formaldehyde	mg/L	0.03	0.1	<0.1	≤1	Wastewater analysis manual Environmental Engineering Association of Thailand, 4th ed., 2004	Kayong
Oil & Grease	mg/L	-	3	5	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *		-	-	7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphannat Sakulki วิสุฒานนท์ 323-9-9446

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Technical Management
Photchanan S.
Photchanan Senda
Scientist (4)
วิสุฒานนท์ 323-9-9446

Approved by
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Senior Manager
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Client : WHA Utilities and Power Public Company Limited
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Thailand 20230

Lot ID: 2458189
Date Received : Jun 11, 2024
Date Reported : Jun 17, 2024
Report Number : 3000587-1

P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1

Page 1 of 1

Sample Number	2458189-1						
Sample Date	Jun 11, 2024 11:12 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_018_2552	Plot	Z-59A	Site	KIRISSONG ARTWOOD CO.,LTD.		
Date Analysis Commenced	Jun 11, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, some odour, solid and turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	31.3	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Kayong
Oil & Grease	mg/L	-	3	8	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *		-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphannat Sakulki วิสุฒานนท์ 323-9-9446

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Technical Management
Chontichak
Chontichak Subongchok
Scientist (3)
วิสุฒานนท์ 323-9-9440

Approved by
Dej Changchon
Senior Manager
วิสุฒานนท์ 323-9-9442

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Thailand 20330
P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2458144
Date Received : Jun 10, 2024
Date Reported : Jun 17, 2024
Report Number : 3900499-1

Sample Number	2458144-1							Page 1 of 1
Sampled Date	Jun 10, 2024 3:40 PM							
Sample Description	Wastewater							
Contract ID	L_CIE_001_2556	Plot	B-31C	Site	Kiryama (Thailand) Co., Ltd.			
Date Analysis Commenced	Jun 10, 2024							
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.							
Physical Property	(APHA / USEPA) Yellow, a lot of odour, some solid and turbid							
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location	
Water Testing								
BOD (5 days at 20 Degree C)	mg/L	-	2.0	57.3	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Kyong	
Oil & Grease	mg/L	-	3	0	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kyong	
pH (on site) *				7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kyong	

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Tanat Wongsachai รหัสประจำตัว : 323-9-9460

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Technical Management : Photchanas S.
Scientist (4)
รหัสประจำตัว : 323-9-9460

Approved by : Dej Changchon
Senior Manager
รหัสประจำตัว : 323-9-9442

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Thailand 20330
P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2458251
Date Received : Jun 12, 2024
Date Reported : Jun 18, 2024
Report Number : 3900510-1

Sample Number	2458251-1							Page 1 of 1
Sampled Date	Jun 12, 2024 1:40 PM							
Sample Description	Wastewater							
Contract ID	L_CIE_030_2550	Plot	B-3	Site	Kyoten (Thailand) Co., Ltd.			
Location	Factory 1							
Date Analysis Commenced	Jun 12, 2024							
Condition of Sample	Contained in one amber glass bottle and two plastic bottles. Sample containers comply to pretreatment - preservation standards.							
Physical Property	(APHA / USEPA) Yellow, some odour, no solids and turbid							
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location	
Water Testing								
BOD (5 days at 20 Degree C)	mg/L	-	2.0	15.9	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Kyong	
Oil & Grease	mg/L	-	3	<3	≤15	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kyong	
pH (on site) *		-	-	7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kyong	
Total Dissolved Solids Dried at 180 degree C	mg/L	-	5	616	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Kyong	

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphann Sakul รหัสประจำตัว : 323-9-9621, Pattapong Sawangpatum รหัสประจำตัว : 323-9-9602

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Technical Management : Chontichak
Chonticha Subongkha
Scientist (3)
รหัสประจำตัว : 323-9-9446

Approved by : Dej Changchon
Senior Manager
รหัสประจำตัว : 323-9-9442

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Thailand 20330
P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING
No.0009

Lot ID: 2458251
Date Received : Jun 12, 2024
Date Reported : Jun 18, 2024
Report Number : 3900619-2

Sample Number	2458251-1						Page 1 of 1
Sampled Date	Jun 12, 2024 1:40 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_030_2550	Plot	B-3	Site	Kyoden (Thailand) Co., Ltd.		
Location	Factory 1						
Date Analysis Commenced	Jun 13, 2024						
Condition of Sample	Contained in one amber glass bottle and two plastic bottles. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, some odour, no solid and turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Copper	mg/L	0.0003	0.0003	0.16	≤2.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok
Nickel	mg/L	0.0003	0.0003	0.004	≤0.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 3125 B, 3030 F	Bangkok

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphann Sakul รหัสประจำตัว : 323-9-9621, Pattapong Sawangpatum รหัสประจำตัว : 323-9-9602

Remark :
- LOD : Limit of Detection
- "x" : Lower than LOQ (Limit of Quantitation) / LOQ (Limit of Reporting)
- Analytical method : value not included in scope of Accreditation (ISO/IEC 17025)
- The laboratory has been accepted as an accredited laboratory complying with the (ISO/IEC 17025)

Technical Management : Sawittra N.
Scientist (4)
รหัสประจำตัว : 323-9-9460

Approved by : Dej Changchon
Senior Manager
รหัสประจำตัว : 323-9-9442

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Boini, Amphur Siriracha, Chonburi
Thailand 20330
P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING
No.0042

Lot ID: 2458252
Date Received : Jun 12, 2024
Date Reported : Jun 18, 2024
Report Number : 3900634-1

Sample Number	2458252-1							Page 1 of 1
Sampled Date	Jun 12, 2024 2:18 PM							
Sample Description	Wastewater							
Contract ID	L_CIE_021_2550	Plot	B-6	Site	Kyoden (Thailand) Co., Ltd.			
Location	Factory 2							
Date Analysis Commenced	Jun 12, 2024							
Condition of Sample	Contained in one amber glass bottle and two plastic bottles. Sample containers comply to pretreatment - preservation standards.							
Physical Property	(APHA / USEPA) Yellow, a lot of odour, some solid and turbid							
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location	
Water Testing								
BOD (5 days at 20 Degree C)	mg/L		2.0	19.8	≤300	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Kyong	
Oil & Grease	mg/L		3	0.3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kyong	
pH (on site) *				8.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kyong	
Total Dissolved Solids Dried at 180 degree C	mg/L		5	404	≤3000	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Kyong	

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater treatment plant

Sampling By : Suphann Sakul รหัสประจำตัว : 323-9-9621, Pattapong Sawangpatum รหัสประจำตัว : 323-9-9602

Remark :
- LOD : Limit of Detection
- "x" : Lower than LOQ (Limit of Quantitation) / LOQ (Limit of Reporting)
- Analytical method : value not included in scope of Accreditation (ISO/IEC 17025)
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Technical Management : Chontichak
Chonticha Subongkha
Scientist (3)
รหัสประจำตัว : 323-9-9446

Approved by : Dej Changchon
Senior Manager
รหัสประจำตัว : 323-9-9442

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Analysis / Test Report



TESTING
No.0009

Lot ID: 2458252

Date Received : Jun 12, 2024
Date Reported : Jun 18, 2024
Report Number : 3000534-2

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location: WHA CIE 1

Page 1 of 1

Sample Number	2458252-1					
Sampled Date	Jun 12, 2024 2:18 PM					
Sample Description	Wastewater					
Contract ID	L_CIE_001_2550	Plot	Z-6	Site	Kyosue (Thailand) Co., Ltd.	
Location	Factory 2					
Date Analysis Commenced	Jun 13, 2024					
Condition of Sample	Contained in one amber glass bottle and two plastic bottles. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)					
Physical Property	Yellow, a lot of odour, some solid and turbid					
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method
Metals Testing						
Copper	mg/L	0.0003	0.0005	0.32	≤2.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 1125 B, 1030 F
Nickel	mg/L	0.0903	0.0905	0.001	≤1.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 1125 B, 1030 F

Guideline : Notification of the Industrial Estate Authority of Thailand No.76, B.E. 2560 : Criteria of wastewater characteristic from factory discharge to central wastewater treatment plant

Sampling By : Suphanat Sakul (วิสุตสวรรค์) 323-9-0021, Patarapet Sawangjarn (พัชรเทพ) 323-9-0002

Remark :
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Technical Management : Savitree N.
Savitree Nongkham
Manager
วิสุตสวรรค์ 323-9-0007

Approved by : Kanok Anuk
Kanok Anuk
Senior Manager
วิสุตสวรรค์ 323-9-0004

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2458168

Date Received : Jun 11, 2024
Date Reported : Jun 17, 2024
Report Number : 3000553-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location: WHA CIE 1

Page 1 of 1

Sample Number	2458168-1						
Sampled Date	Jun 11, 2024 10:09 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_001_2557	Plot	S-6B		Site	Kyosue SS (Thailand) Co., Ltd.	
Date Analysis Commenced	Jun 11, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, a lot of odour, solid and turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	50.2	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Royang
Oil & Grease	mg/L	-	2	4.3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Royang
pH (on site) *	-	-	-	7.1	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Royang

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphanat Sakul (วิสุตสวรรค์) 323-9-0021

Remark :
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Technical Management : Chontichak
Chontichak Subongkroh
Scientist (3)
วิสุตสวรรค์ 323-9-0449

Approved by : Dhumsa
Dej Chongchoti
Senior Manager
วิสุตสวรรค์ 323-9-0442

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2458142

Date Received : Jun 13, 2024
Date Reported : Jun 18, 2024
Report Number : 3000483-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location: WHA CIE 1

Page 1 of 1

Sample Number	2458142-1						
Sampled Date	Jun 13, 2024 2:52 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_001_2554	Plot	A-5/1	Site	Lam Chabang Tank Services Co., Ltd.		
Date Analysis Commenced	Jun 13, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and no turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	—	2.0	69.9	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Kayong
Oil & Grease	mg/L	X	7	7	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	—	—	—	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphanat Sakul (วิสุตสวรรค์) 323-9-0021

Remark :
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Technical Management : Photchan S.
Photchan Senda
Scientist (4)
วิสุตสวรรค์ 323-9-9446

Approved by : Dhumsa
Dej Chongchoti
Senior Manager
วิสุตสวรรค์ 323-9-9442

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2458228

Date Received : Jun 11, 2024
Date Reported : Jun 18, 2024
Report Number : 3000763-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location: WHA CIE 1

Page 1 of 1

Sample Number	2458228-1						
Sampled Date	Jun 11, 2024 2:19 PM						
Sample Description	Wastewater						
Contract ID	L_WHA_CIE_001_2566	Plot	F-14		Site	HAAS METAL INTERNATIONAL COMPANY LIMITED	
Date Analysis Commenced	Jun 11, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/l	-	2.0	44.2	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Kayong
Oil & Grease	mg/l	-	2	4.8	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphanat Sakul (วิสุตสวรรค์) 323-9-0021

Remark :
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Technical Management : Chontichak
Chontichak Subongkroh
Scientist (3)
วิสุตสวรรค์ 323-9-0449

Approved by : Dhumsa
Dej Chongchoti
Senior Manager
วิสุตสวรรค์ 323-9-0442

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Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING

Lot ID: 2458156
Date Received : Jun 12, 2024
Date Reported : Jun 18, 2024
Report Number : 3000934-1

Page 1 of 1

Sample Number	2458156-1						
Sampled Date	Jun 12, 2024 2:44 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_002_2557	Plot	C-2,3,4	Site	Nakajawa Special Steel (Thailand) Co., Ltd.		
Date Analysis Commenced	Jun 12, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and a lot of turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	—	2.0	32.0	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Raying
Oil & Grease	mg/L	—	1	5	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Raying
pH (on site) *				7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Raying

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphansa Sakulchai วิเศษวานิชย์ 323-9-9442

Remark :
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Technical Management
Chontichok
Chonticha Subongkroh
Scientist (3)
วิเศษวานิชย์ 323-9-9442

Approved By
Dej Changchon
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Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING

Lot ID: 2458232
Date Received : Jun 13, 2024
Date Reported : Jun 18, 2024
Report Number : 3000769-1

Page 1 of 1

Sample Number	2458232-1						
Sampled Date	Jun 13, 2024 3:18 PM						
Sample Description	Wastewater						
Contract ID	L_WHA_CIE_003_2566	Plot	J2	Site	HANYONG TERMINAL PUBLIC COMPANY LIMITED		
Date Analysis Commenced	Jun 13, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	—	2.0	108	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Raying
Oil & Grease	mg/L	—	1	<1	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Raying
pH (on site) *				7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Raying

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphansa Sakulchai วิเศษวานิชย์ 323-9-9442

Remark :
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- "u" : Lower than LOQ (Limit of Quantification) / LOB (Limit of Reporting)
- Analytical method * refers not included in scope of Accreditation ISO/IEC 17025
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Technical Management
Photchanas
Photchanas Soella
Scientist (4)
วิเศษวานิชย์ 323-9-9442

Approved By
Dej Changchon
Dej Changchon
Senior Manager
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Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING

Lot ID: 2458162
Date Received : Jun 10, 2024
Date Reported : Jun 17, 2024
Report Number : 3000548-1

Page 1 of 1

Sample Number	2458162-1						
Sampled Date	Jun 10, 2024 3:00 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_002_2560	Plot	A-1A	Site	NBC Machine (Thailand) Co., Ltd.		
Date Analysis Commenced	Jun 10, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, some odour, a lot of solid and some turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	—	2.0	27.2	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Raying
Oil & Grease	mg/L	—	1	<1	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Raying
pH (on site) *				7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Raying

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Tanasit Wongsechais วิเศษวานิชย์ 323-9-9442

Remark :
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Technical Management
Photchanas
Photchanas Soella
Scientist (4)
วิเศษวานิชย์ 323-9-9442

Approved By
Dej Changchon
Dej Changchon
Senior Manager
วิเศษวานิชย์ 323-9-9442

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Analysis / Test Report

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331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly
Project Location : WHA CIE 1



TESTING

Lot ID: 2458218
Date Received : Jun 11, 2024
Date Reported : Jun 18, 2024
Report Number : 3000718-1

Page 1 of 1

Sample Number	2458218-1						
Sampled Date	Jun 11, 2024 9:46 AM						
Sample Description	Wastewater						
Contract ID	L_WHA_CIE_001_2565	Plot	B-11D	Site	Nkhye Asia (Thailand) Co., Ltd.		
Date Analysis Commenced	Jun 11, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards. (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and a lot of turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	—	2.0	69.4	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Raying
Oil & Grease	mg/L	—	1	6	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Raying
pH (on site) *				7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Raying

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphansa Sakulchai วิเศษวานิชย์ 323-9-9442

Remark :
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Technical Management
Chontichok
Chonticha Subongkroh
Scientist (3)
วิเศษวานิชย์ 323-9-9442

Approved By
Dej Changchon
Dej Changchon
Senior Manager
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Analysis / Test Report

TESTING

No.0042

Lot ID: 2458248

Date Received : Jun 10, 2024

Date Reported : Jun 17, 2024

Report Number : 3000470-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly

Project Location : WHA CIE 1

Sample Number : 2458248-1
Sampled Date : Jun 10, 2024 2:45 PM
Sample Description : Wastewater
Contract ID : L_CIE_016_2550 Plot : A-4 Site : NIDEC Die-casting (Thailand) Co.,Ltd.
Location : Factory 1
Date Analysis Commenced : Jun 10, 2024
Condition of Sample : Contained in one amber glass bottle and two plastic bottles. Sample containers comply to pretreatment - preservation standards.
(APHA / USEPA)
Physical Property : Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	40.7	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Kayong
COD	mg/L	1.5	25	168	≤750	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Kayong
Oil & Grease	mg/L	-	3	10	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 520 B	Kayong
pH (at 25°C) *	-	-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	-	5	32	≤200	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Tanasit Wongsachai วิเศษชัยชาญ 323-9-9446

Remarks :
- LOD : Limit of Detection
- "x" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analytical method * where not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accredited as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

Photchanna S.

Photchanna Seeta
Scientist (4)
วิเศษชัยชาญ 323-9-9446

Approved by

Dej Changchon

Dej Changchon
Senior Manager
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Remarks apply to the sample(s) as submitted, unless the sampling was conducted by ALS. To part of this report may be reproduced in any form without written consent from ALS.

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Analysis / Test Report

TESTING

No.0042

Lot ID: 2458140

Date Received : Jun 10, 2024

Date Reported : Jun 17, 2024

Report Number : 3000472-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly

Project Location : WHA CIE 1

Sample Number : 2458140-1
Sampled Date : Jun 10, 2024 2:30 PM
Sample Description : Wastewater
Contract ID : L_CIE_027_2550 Plot : A-5 Site : NIDEC Die-casting (Thailand) Co.,Ltd.
Location : Factory 1
Date Analysis Commenced : Jun 10, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
(APHA / USEPA)
Physical Property : Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	14.0	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Kayong
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Kayong
pH (on site) *	-	-	-	8.0	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Tanasit Wongsachai วิเศษชัยชาญ 323-9-9446

Remarks :
- LOD : Limit of Detection
- "x" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analytical method * where not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accredited as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

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Analysis / Test Report

TESTING

No.0042

Lot ID: 2458199

Date Received : Jun 10, 2024

Date Reported : Jun 17, 2024

Report Number : 3000553-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly

Project Location : WHA CIE 1

Sample Number : 2458199-1
Sampled Date : Jun 10, 2024 2:30 PM
Sample Description : Wastewater
Contract ID : L_CIE_006_2553 Plot : A-6 Site : NIDEC Die-casting (Thailand) Co.,Ltd.
Location : Factory 1
Date Analysis Commenced : Jun 10, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
(APHA / USEPA)
Physical Property : Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	15.7	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Kayong
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Kayong
pH (on site) *	-	-	-	7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Tanasit Wongsachai วิเศษชัยชาญ 323-9-9446

Remarks :
- LOD : Limit of Detection
- "x" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analytical method * where not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accredited as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

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Scientist (4)
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Approved by

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Analysis / Test Report

TESTING

No.0042

Lot ID: 2458173

Date Received : Jun 10, 2024

Date Reported : Jun 17, 2024

Report Number : 3000555-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

P/O :
Project Name : Factory 1 Monthly

Project Location : WHA CIE 1

Sample Number : 2458173-1
Sampled Date : Jun 10, 2024 1:50 PM
Sample Description : Wastewater
Contract ID : L_CIE_006_2550 Plot : K-1 Site : NIDEC Die-casting (Thailand) Co.,Ltd.
Location : Factory 1
Date Analysis Commenced : Jun 10, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
(APHA / USEPA)
Physical Property : Yellow, some odour, solid and turbid

Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	11.7	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O-G	Kayong
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B	Kayong
pH (on site) *	-	-	-	7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Tanasit Wongsachai วิเศษชัยชาญ 323-9-9446

Remarks :
- LOD : Limit of Detection
- "x" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analytical method * where not included in scope of Accreditation ISO/IEC 17025.
- The laboratory has been accredited as an accredited laboratory complying with the ISO/IEC 17025.

Technical Management

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Scientist (4)
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Approved by

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Client : WHA Utilities and Power Public Company Limited
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Thailand 20230
P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1



TESTING

No.0042
Lot ID: 2458160
Date Received : Jun 11, 2024
Date Reported : Jun 18, 2024
Report Number : 3000547-1

Page 1 of 1

Sample Number : 2458160-1
Sample Date : Jun 12, 2024 2:43 PM
Sample Description : Wastewater
Contract ID : L_CIE_005_2536 Plot : A-5/2 SRe : Hual Chavee Engineering Co.,Ltd.
Date Analysis Commenced : Jun 13, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
Physical Property : (APHA / USEPA)
Yellow, some odour, solid and no turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		3.0	77.6	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Oil & Grease	mg/L		1	<1	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *				7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater discharge into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphanat Sakulchai vichitsavangkarn >323-w-9401

Remark :

- LOD : Limit of Detection
- *m : Lower than LOQ (Limit of Quantification) / LOR (Limit of Reporting)
- Analysis method : values not included in scope of Accreditation ISO/IEC 17025
- The laboratory has been accredited as an accredited laboratory complying with the ISO/IEC 17025

Technical Management

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Scientist (4)
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Approved by

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Dr. Chongchorn
Senior Manager
vichitsavangkarn >323-w-9442

Result valid to the nearest 1% as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Boin, Amphur Sriracha, Chonburi
Thailand 20230
P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1



TESTING

No.0042
Lot ID: 2458202
Date Received : Jun 11, 2024
Date Reported : Jun 18, 2024
Report Number : 3000660-1

Page 1 of 1

Sample Number : 2458202-1
Sample Date : Jun 11, 2024 11:47 AM
Sample Description : Wastewater
Contract ID : L_WHA_CIE1_004_2563 Plot : Z-SH 2-59H SRe : Redflow (Thailand) Co.,Ltd.
Date Analysis Commenced : Jun 11, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
Physical Property : (APHA / USEPA)
Black, some odour, a lot of solid and turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	84.5	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Oil & Grease	mg/L		1	<10	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *				7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater discharge into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphanat Sakulchai vichitsavangkarn >323-w-9001

Remark :

- LOD : Limit of Detection
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- Analysis method : values not included in scope of Accreditation ISO/IEC 17025
- The laboratory has been accredited as an accredited laboratory complying with the ISO/IEC 17025

Technical Management

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Chonticha Subongchok
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Approved by

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Boin, Amphur Sriracha, Chonburi
Thailand 20230
P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1



TESTING

No.0042
Lot ID: 2458191
Date Received : Jun 11, 2024
Date Reported : Jun 17, 2024
Report Number : 3000591-1

Page 1 of 1

Sample Number : 2458191-1
Sample Date : Jun 11, 2024 11:53 AM
Sample Description : Wastewater
Contract ID : L_CIE_001_2551 Plot : Z-59 I SRe : Redflow (Thailand) Limited.
Date Analysis Commenced : Jun 12, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
Physical Property : (APHA / USEPA)
Yellow, a lot of odour, some solid and a lot of turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	<170	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Oil & Grease	mg/L		1	<1	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *				7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater discharge into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphanat Sakulchai vichitsavangkarn >323-w-9001

Remark :

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- Analysis method : values not included in scope of Accreditation ISO/IEC 17025
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Technical Management

Chontichak

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Analysis / Test Report

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Boin, Amphur Sriracha, Chonburi
Thailand 20230
P/O :
Project Name : Factory I Monthly
Project Location : WHA CIE 1



TESTING

No.0042
Lot ID: 2458152
Date Received : Jun 11, 2024
Date Reported : Jun 17, 2024
Report Number : 3000520-1

Page 1 of 1

Sample Number : 2458152-1
Sample Date : Jun 11, 2024 3:32 PM
Sample Description : Wastewater
Contract ID : L_CIE_014_2560 Plot : D-12/2A SRe : S.O. TANK CLEANING TERMINAL Co.,Ltd.
Date Analysis Commenced : Jun 11, 2024
Condition of Sample : Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.
Physical Property : (APHA / USEPA)
Yellow, a lot of odour, some solid and a lot of turbid

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	85.1	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Rayong
Oil & Grease	mg/L		1	<1	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *				7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater discharge into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphanat Sakulchai vichitsavangkarn >323-w-9001

Remark :

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- *m : Lower than LOQ (Limit of Quantification) / LOR (Limit of Reporting)
- Analysis method : values not included in scope of Accreditation ISO/IEC 17025
- The laboratory has been accredited as an accredited laboratory complying with the ISO/IEC 17025

Technical Management

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Scientist (4)
vichitsavangkarn >323-w-9440

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Result valid to the nearest 1% as submitted, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2458185

Date Received : Jun 13, 2024

Date Reported : Jun 18, 2024

Report Number : 3000578-1

Client : WHA Utilities and Power Public Company Limited
331/9-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

P/O :

Project Name : Factory / Monthly

Project Location: WHA CIE 1

Sample Number	2450185-1						
Sampled Date	Jun 13, 2024 11:22 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_010_2556	Plot	2/32	Site	Sai Industry (Thailand) Co., Ltd.		
Date Analysis Commenced	Jun 13, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards: (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and a lot of turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	104	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Kayong
Oil & Grease	mg/L	-	3	8	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	7.8	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (8)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphanat Sakul wirodwan@v-323-n-9442

Remark :

- LOD : Limit of Detection
- LOQ : Lower than LOQ (Limit of Quantitation) / LOB (Limit of Reporting)
- Analyte(s) marked * value not included in scope of Accreditation ISO/IEC 17025
- The laboratory has been accredited as an accredited laboratory complying with the ISO/IEC 17025

Technical Management

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Approved by

Dej Chongchon

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Results given in the certificate are preliminary, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.



Analysis / Test Report



TESTING
No.0042

Lot ID: 2458239

Date Received : Jun 13, 2024

Date Reported : Jun 18, 2024

Report Number : 3000793-1

Client : WHA Utilities and Power Public Company Limited
331/9-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

P/O :

Project Name : Factory / Monthly

Project Location: WHA CIE 1

Sample Number	2458239-1						
Sampled Date	Jun 13, 2024 2:20 PM						
Sample Description	Wastewater						
Contract ID	L_WHA_CIE1_003_2567	Plot	2/25, 2/26	SRe	SAIL INDUSTRY (THAILAND) COMPANY LIMITED		
Date Analysis Commenced	Jun 13, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards: (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and no turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	12.5	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O D	Rayong
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on-site) *	-	-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (8)	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphanat Sakul wirodwan@v-323-n-9442

Remark :

- LOD : Limit of Detection
- LOQ : Lower than LOQ (Limit of Quantitation) / LOB (Limit of Reporting)
- Analyte(s) marked * value not included in scope of Accreditation ISO/IEC 17025
- The laboratory has been accredited as an accredited laboratory complying with the ISO/IEC 17025

Technical Management

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Approved by

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Results given in the certificate are preliminary, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.



Analysis / Test Report



TESTING
No.0042

Lot ID: 2458184

Date Received : Jun 13, 2024

Date Reported : Jun 18, 2024

Report Number : 3000575-1

Client : WHA Utilities and Power Public Company Limited
331/9-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

P/O :

Project Name : Factory / Monthly

Project Location: WHA CIE 1

Sample Number	2458184-1						
Sampled Date	Jun 13, 2024 11:04 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_032_2550	Plot	2-33	Site	Sakura Industry (Thailand) Co., Ltd.		
Date Analysis Commenced	Jun 13, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards: (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and a lot of turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	127	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Kayong
Oil & Grease	mg/L	-	3	8	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong
pH (on site) *	-	-	-	7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (8)	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphanat Sakul wirodwan@v-323-n-9442

Remark :

- LOD : Limit of Detection
- LOQ : Lower than LOQ (Limit of Quantitation) / LOB (Limit of Reporting)
- Analyte(s) marked * value not included in scope of Accreditation ISO/IEC 17025
- The laboratory has been accredited as an accredited laboratory complying with the ISO/IEC 17025

Technical Management

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Analysis / Test Report



TESTING
No.0042

Lot ID: 2458245

Date Received : Jun 12, 2024

Date Reported : Jun 18, 2024

Report Number : 3000608-1

Client : WHA Utilities and Power Public Company Limited
331/9-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Siracha, Chonburi
Thailand 20230

P/O :

Project Name : Factory / Monthly

Project Location: WHA CIE 1

Sample Number	2458245-1						
Sampled Date	Jun 12, 2024 10:32 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_WHL_2555 Plot: E-5/4 Site: SANG CHAMROE EASTERN GALVANIZE CO., LTD						
Date Analysis Commenced	Jun 12, 2024						
Condition of Sample	Contained in one amber glass bottle and two plastic bottles. Sample containers comply to pretreatment - preservation standards: (APHA / USEPA)						
Physical Property	Yellow, some odour, a lot of solid and turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	15.5	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Kayong
COD	mg/L	1.5	35	50	≤750	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Kayong
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Kayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphanat Sakul wirodwan@v-323-n-9442, Pattakapol Samvongjadam wirodwan@v-204-n-0002

Remark :

- LOD : Limit of Detection
- LOQ : Lower than LOQ (Limit of Quantitation) / LOB (Limit of Reporting)
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- The laboratory has been accredited as an accredited laboratory complying with the ISO/IEC 17025

Technical Management

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Results given in the certificate are preliminary, unless the sampling was conducted by ALS. No part of this report may be reproduced in any form without written consent from the laboratory.



TESTING
No.0009

Lot ID: 2458245
Date Received : Jun 12, 2024
Date Reported : Jun 18, 2024
Report Number : 3000606-2

Page 1 of 1

[illegible]

Guideline: Notification of the Industrial Estate Authority of Thailand No.629/2567 / General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Remark:

- LOD: Limit of Detection
- "L": Lower than LOD (Limit of Quantitation) / LQR (Limit of Reporting)
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- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025

Kasolkorn Anuk
Senior Manager
095-4421 3-204-6 (H004)

Savitree Mitsamla
Manager

Results apply to the sample(s) as submitted, unless the sampling was prohibited by ALE. No part of this report may be reproduced in any form without written consent from the laboratory. ALE Laboratory Group (Portland) expressly recommends that this report is not reproduced except in full.

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TESTING
No. 0042

Lot ID: 2458180
Date Received : Jun 11, 2024
Date Reported : Jun 17, 2024
Report Number : 3000567-1

Page 1 of 1

Sample Number							2458379-1	Page 1 of 2			
Sample Date							Jun 11, 2024 2:46 PM				
Sample Description							Wastewater				
Contract ID							LC_EE_047_2557	Plot	P-10	Site	Srinoo Koki (Thailand) Components (Level)
Date Analysis Commenced							Jun 11, 2024				
Condition of Sample							Contained in one similar glass bottle and one plastic bottle. Sample containers comply to pretreatment + preservation standards (APHA / USCPA)				
Physical Property							Yellow, a bit of colour, some solid and turbid				
Analyte	Unit	LOD	LOQ (LOD)	Result	Guideline / Specification	Method	Testing Location				
Water Testing											
BOD (5 days at 20 Degrees C)	mg/L	—	2.6	41.8	≤500	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, sect 4500 - O G	Kayson				
OR B: Gressed	mg/L	—	—	4.6	≤10	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 5220 B	Kayson				
pH (average) *		—	—	7.4	5.5-8.6	Standard Methods for the Examination of Water and Wastewater, APHA, AWWA & WEF, 23rd ed., 2017, part 9100	Kayson				

Guideline: Notification of the Industrial Estate Authority of Thailand No.028/2567 : General Standards for Wastewater discharge into central wastewater treatment systems in Industrial Estates.

Remark:

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- "n" = Lower than 100 (Limit of Quantitation) / (LOQ) (Limit of Reporting)
- Analyte(s) marked "n" are not included in assay of Accreditation ID/IFCC (7025)
- The laboratory has been assessed as an accredited laboratory in accordance with ISO 15189:2013

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Analysis / Test Report



TESTING

No.0042

Lot ID: 2458146

Date Received : Jun 11, 2024

Date Reported : Jun 18, 2024

Report Number : 3000494-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Boini, Amphur Siracha, Chonburi
Thailand 20230
P/O :
Project Name : Factory I Monthly
Project Location: WHA CIE 1

Sample Number	2458146-1						
Sampled Date	Jun 11, 2024 10:30 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_017_2530	Plot	B-3	Site	Sinhwa Koyu (Thailand) Co., Ltd.		
Date Analysis Commenced	Jun 11, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	28.6	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Raying
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Raying
pH (on site) *				7.7	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Raying

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphanat Sakul wudhawanat 323-n-94021

Remarks :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantification) / LOB (Limit of Reporting)
- Analytical method * refers not included in scope of Accreditation ISO/IEC 17025
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025

Technical Management

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Results apply to the sample(s) as submitted, unless the sampling was performed by ALS. No part of this report may be reproduced or any form without written consent from the laboratory.

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6/18/2024, 14:28:49 (3:00PM)



Analysis / Test Report



TESTING

No.0042

Lot ID: 2458150

Date Received : Jun 11, 2024

Date Reported : Jun 17, 2024

Report Number : 3000518-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Boini, Amphur Siracha, Chonburi
Thailand 20230
P/O :
Project Name : Factory I Monthly
Project Location: WHA CIE 1

Sample Number	2458150-1						
Sampled Date	Jun 11, 2024 3:01 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_018_2530	Plot	D-13/2	Site	Siam Steel Mill Services Ltd.		
Date Analysis Commenced	Jun 11, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards: (APHA / USEPA)						
Physical Property	Yellow, a lot of odour, some solid and turbid.						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	12.2	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Raying
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Raying
pH (on site) *		-	-	7.5	5.3-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Raying

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphanat Sakul wudhawanat 323-n-94021

Remarks :
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- "<" : Lower than LOQ (Limit of Quantification) / LOB (Limit of Reporting)
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Technical Management

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Analysis / Test Report



TESTING

No.0042

Lot ID: 2458145

Date Received : Jun 10, 2024

Date Reported : Jun 17, 2024

Report Number : 3000492-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Boini, Amphur Siracha, Chonburi
Thailand 20230
P/O :
Project Name : Factory I Monthly
Project Location: WHA CIE 1

Sample Number	2458145-1						
Sampled Date	Jun 10, 2024 3:35 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_094_2532	Plot	B-11A	Site	SFH (Thailand) Co., Ltd.		
Date Analysis Commenced	Jun 10, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, a lot of odour, some solid and turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	-	2.0	16.4	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Raying
Oil & Grease	mg/L	-	3	<3	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Raying
pH (on site) *				7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Raying

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Tanat Wongsuwan wudhawanat 323-n-9400

Remarks :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantification) / LOB (Limit of Reporting)
- Analytical method * refers not included in scope of Accreditation ISO/IEC 17025
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Technical Management

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Analysis / Test Report



TESTING

No.0042

Lot ID: 2458149

Date Received : Jun 12, 2024

Date Reported : Jun 18, 2024

Report Number : 3000505-1

Client : WHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Boini, Amphur Siracha, Chonburi
Thailand 20230
P/O :
Project Name : Factory I Monthly
Project Location: WHA CIE 1

Sample Number	2458149-1						
Sampled Date	Jun 12, 2024 10:40 AM						
Sample Description	Wastewater						
Contract ID	L_CIE_019_2530	Plot	D-4	Site	Taben Pua (Thailand) Co., Ltd.		
Date Analysis Commenced	Jun 12, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Yellow, a lot of odour, solids and some turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L		2.0	28.3	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O G	Raying
Oil & Grease	mg/L		3	4	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Raying
pH (on site) *				7.6	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Raying

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphanat Sakul wudhawanat 323-n-94021

Remarks :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantification) / LOB (Limit of Reporting)
- Analytical method * refers not included in scope of Accreditation ISO/IEC 17025
- The laboratory has been accepted as an accredited laboratory complying with the ISO/IEC 17025

Technical Management

Chontichak

Approved by

D. Chongthorn

Chontichak Subongkhot
Scientist (3)
wudhawanat 323-n-9446

Dej Chongthorn
Senior Manager
wudhawanat 323-n-9442

Results apply to the sample(s) as submitted, unless the sampling was performed by ALS. No part of this report may be reproduced or any form without written consent from the laboratory.

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332-0210492

6/18/2024, 14:28:49 (3:00PM)



Analysis / Test Report



TESTING

Client : VHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230
P/O :
Project Name : Factory 1 Monthly
Project Location : VHA CIE 1

Lot ID: 2458157
Date Received : Jun 11, 2024
Date Reported : Jun 17, 2024
Report Number : 3000538-1

Page 2 of 3

Sample Number	2458157-1							Site
Sampled Date	Jun 11, 2024 3:43 PM							
Sample Description	Wastewater							
Contract ID	L_CIE_003_2558	Plot	M-3	Tayh Kenrosi Auto Parts (Thailand) Co., Ltd.				
Date Analysis Commenced	Jun 11, 2024							
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards (APHA / USEPA)							
Physical Property	Yellow, some odour, solid and no turbid							
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location	
Water Testing								
BOD (5 days at 20 Degree C)	mg/L	—	2.0	83.3	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O ₂	Rayong	
Oil & Grease	mg/L	—	3	10	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong	
pH (on site) *				7.2	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong	

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphant Sakulwongchai >323-4-0021

Remark :
- LOD : Limit of Detection
- "—" : Lesser than LOQ (Limit of Quantitation) / LOB (Limit of Reporting)
- Analytical method * refers not included in scope of Accreditation (ISO/IEC 17025)
- The laboratory has been accepted as an accredited laboratory complying with the (ISO/IEC 17025)

Technical Management

Photchanas

Photchanas Suda
Scientist (4)
วิศกรรมศาสตร์ 323-4-9446

Approved By

D. Chumpon

D. Chumpon
Senior Manager
วิศกรรมศาสตร์ 323-4-9442

Results apply to the sample(s) as submitted, unless the sampling was supervised by ALS. No part of this report may be reproduced or any form without written consent from the laboratory.

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Analysis / Test Report



TESTING

Client : VHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230
P/O :
Project Name : Factory 1 Monthly
Project Location : VHA CIE 1

Lot ID: 2458151
Date Received : Jun 11, 2024
Date Reported : Jun 17, 2024
Report Number : 3000538-1

Page 1 of 3

Sample Number	2458151-1							THAI ESCORP LTD.
Sampled Date	Jun 11, 2024 3:21 PM							
Sample Description	Wastewater							
Contract ID	L_CIE_007_2558	Plot	D-12/1A	Site	THAI ESCORP LTD.			
Date Analysis Commenced	Jun 11, 2024							
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.							
Physical Property	(APHA / USEPA) Yellow, a lot of odour, some solid and a lot of turbid							
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location	
Water Testing								
BOD (5 days at 20 Degree C)	mg/L		2.0	35.4	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF 23rd ed., 2017, part 5210 B, part 5000 - O ₂	Rayong	
Oil & Grease	mg/L		3	4	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong	
pH (on site) *				7.4	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong	

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphant Sakulwongchai >323-4-0021

Remark :
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- "—" : Lesser than LOQ (Limit of Quantitation) / LOB (Limit of Reporting)
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Technical Management

Photchanas

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Scientist (4)
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Approved By

D. Chumpon

D. Chumpon
Senior Manager
วิศกรรมศาสตร์ 323-4-9442

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Analysis / Test Report



TESTING

Client : VHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230
P/O :
Project Name : Factory 1 Monthly
Project Location : VHA CIE 1

Lot ID: 2458247
Date Received : Jun 11, 2024
Date Reported : Jun 18, 2024
Report Number : 3000613-1

Page 2 of 3

Sample Number	2458247-1						
Sampled Date	Jun 12, 2024 1:41 PM						
Sample Description	Wastewater						
Contract ID	L_CIE_001_2559	Plot	D-9	Site	The Huawei Battery Co., Ltd.		
Date Analysis Commenced	Jun 12, 2024						
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment - preservation standards.						
Physical Property	(APHA / USEPA) Colorless, some odour, no solid and turbid						
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
BOD (5 days at 20 Degree C)	mg/L	—	2.0	<2.0	≤500	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5210 B, part 4500 - O ₂	Rayong
COD	mg/L	1.5	25	<25	≤750	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5220 D	Rayong
Oil & Grease	mg/L	—	3	8	≤10	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 5520 B	Rayong
pH (on site) *				7.3	5.5-9.0	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 4500 - H (B)	Rayong
Total Dissolved Solids Dried at 180 degree C	mg/L	—	5	188	≤3000	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 C	Rayong
Total Suspended Solids Dried at 103-105 degree C	mg/L	—	5	<5	≤2000	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 2540 D	Rayong

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphant Sakulwongchai >323-4-0021, Patsaraporn Sawangjittum >304-4-0002

Remark :
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- "—" : Lesser than LOQ (Limit of Quantitation) / LOB (Limit of Reporting)
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- The laboratory has been accepted as an accredited laboratory complying with the (ISO/IEC 17025)

Technical Management

Chontichak

Chontichak Sudojwong
Scientist (3)
วิศกรรมศาสตร์ 323-4-8449

Approved By

D. Chumpon

D. Chumpon
Senior Manager
วิศกรรมศาสตร์ 323-4-9442

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Analysis / Test Report



TESTING

Client : VHA Utilities and Power Public Company Limited
331/8-9 Moo 6, High Way No.331 Road, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230
P/O :
Project Name : Factory 1 Monthly
Project Location : VHA CIE 1

Lot ID: 2458247
Date Received : Jun 12, 2024
Date Reported : Jun 18, 2024
Report Number : 3000613-2

Page 3 of 3

Sample Number	2458247-1							Page 1 of 1
Sampled Date	Jun 12, 2024 1:41 PM							
Sample Description	Wastewater							
Contract ID	L_CIE_001_2559	Plot	D-9	Site	Tian Huawei Battery Co., Ltd.			
Date Analysis Commenced	Jun 12, 2024							
Condition of Sample	Contained in one amber glass bottle and one plastic bottle. Sample containers comply to pretreatment / preservation standards (APHA / USEPA)							
Physical Property	Colorless, some odour, no solid and turbid							
Analyte	Unit	LOD	LOQ (LOB)	Result	Guideline / Specification	Method	Testing Location	
Metals Testing								
Lead	mg/L	0.0003	0.0005	0.002	≤0.2	Standard Methods for the Examination of Water and Wastewater: APHA, AWWA & WEF, 23rd ed., 2017, part 3123 B, 3500 B	Shanghai	

Guideline : Notification of the Industrial Estate Authority of Thailand No.029/2567 : General Standards for Wastewater drainage into central wastewater treatment systems in Industrial Estates.

Sampling By : Suphant Sakulwongchai >323-4-0021, Patsaraporn Sawangjittum >304-4-0002

Remark :
- LOD : Limit of Detection
- "—" : Lesser than LOQ (Limit of Quantitation) / LOB (Limit of Reporting)
- Analytical method * refers not included in scope of Accreditation (ISO/IEC 17025)
- The laboratory has been accepted as an accredited laboratory complying with the (ISO/IEC 17025)

Technical Management

Sawitree N.

Sawitree Nongnong
Manager
วิศกรรมศาสตร์ 323-4-0007

Approved By

Kanokorn A.

Kanokorn Anek
Senior Manager
วิศกรรมศาสตร์ 323-4-0004

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ภาคผนวก ค-5

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Analysis / Test Report



TESTING
No.0042

Client : WHA Industrial Development Public Company Limited
331/8-9 Moo 2, High Way 331 Road., KM 91-92, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

Lot ID: 2411639
Date Received : Feb 06, 2024
Date Reported : Feb 09, 2024
Report Number: 2907102-1

P/O :
Project Name : Monitoring
Project Location : WHA CIE 1

Page 1 of 1

Sample Number : 2411639-1
Parameter : Noise (Leq 24hrs)
Location : บริเวณริมรั้วถนน 0726905E 1443663N
Measurement Date : Feb 03 - Feb 04, 2024
Measurement by : Satcha Phetsawaeng
Sound Level meter : Serial No. 920831

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	64.1	80.6	60.0
12:00 PM - 01:00 PM	62.6	77.5	57.8
01:00 PM - 02:00 PM	62.8	85.6	57.7
02:00 PM - 03:00 PM	62.7	79.9	58.7
03:00 PM - 04:00 PM	62.2	74.5	58.3
04:00 PM - 05:00 PM	63.5	83.0	59.0
05:00 PM - 06:00 PM	64.2	76.8	59.7
06:00 PM - 07:00 PM	63.4	76.1	59.6
07:00 PM - 08:00 PM	63.7	79.9	59.0
08:00 PM - 09:00 PM	63.1	82.5	58.2
09:00 PM - 10:00 PM	61.2	76.9	55.3
10:00 PM - 11:00 PM	60.2	85.5	52.1
11:00 PM - 12:00 AM	59.5	79.9	50.1
12:00 AM - 01:00 AM	57.6	77.3	47.8
01:00 AM - 02:00 AM	56.1	71.3	46.1
02:00 AM - 03:00 AM	56.8	76.4	46.3
03:00 AM - 04:00 AM	55.9	77.3	44.2
04:00 AM - 05:00 AM	58.1	77.2	49.5
05:00 AM - 06:00 AM	62.2	85.4	52.9
06:00 AM - 07:00 AM	64.5	91.0	57.2
07:00 AM - 08:00 AM	64.7	82.7	59.8
08:00 AM - 09:00 AM	65.8	82.5	60.7
09:00 AM - 10:00 AM	64.0	82.6	59.2
10:00 AM - 11:00 AM	62.5	78.5	58.0

Leq Average 24 hrs. (dB(A)) : 62.5
Lmax (dB(A)) : 91.0
L90 (dB(A)) : 57.8
Ldn (dB(A)) : 67.1
Standard (dB(A)) : 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ
โรงงาน พ.ศ. 2548

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

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report



TESTING
No.0042

Client : WHA Industrial Development Public Company Limited
331/8-9 Moo 2, High Way 331 Road., KM 91-92, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

Lot ID: 2411639
Date Received : Feb 06, 2024
Date Reported : Feb 09, 2024
Report Number: 2907103-1

P/O :
Project Name : Monitoring
Project Location : WHA CIE 1

Page 1 of 1

Sample Number : 2411639-2
Parameter : Noise (Leq 24hrs)
Location : บริเวณริมรั้วถนน 0726905E 1443663N
Measurement Date : Feb 04 - Feb 05, 2024
Measurement by : Satcha Phetsawaeng
Sound Level meter : Serial No. 920831

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	62.0	74.9	57.6
12:00 PM - 01:00 PM	61.7	77.8	56.8
01:00 PM - 02:00 PM	62.0	78.7	56.8
02:00 PM - 03:00 PM	61.9	77.9	57.1
03:00 PM - 04:00 PM	63.0	86.4	57.4
04:00 PM - 05:00 PM	62.8	79.2	58.4
05:00 PM - 06:00 PM	62.9	78.3	58.6
06:00 PM - 07:00 PM	62.9	79.3	58.9
07:00 PM - 08:00 PM	63.7	81.0	58.5
08:00 PM - 09:00 PM	63.3	83.8	57.4
09:00 PM - 10:00 PM	61.5	84.0	54.4
10:00 PM - 11:00 PM	59.7	80.0	51.2
11:00 PM - 12:00 AM	58.7	78.9	50.0
12:00 AM - 01:00 AM	56.1	73.1	45.5
01:00 AM - 02:00 AM	54.9	74.3	43.4
02:00 AM - 03:00 AM	55.1	76.5	43.0
03:00 AM - 04:00 AM	56.0	73.2	45.1
04:00 AM - 05:00 AM	57.7	71.2	48.4
05:00 AM - 06:00 AM	61.2	79.4	55.0
06:00 AM - 07:00 AM	65.3	78.3	61.7
07:00 AM - 08:00 AM	67.4	84.8	63.8
08:00 AM - 09:00 AM	64.9	79.7	61.4
09:00 AM - 10:00 AM	64.3	81.2	60.3
10:00 AM - 11:00 AM	64.3	79.0	60.0

Leq Average 24 hrs. (dB(A)) : 62.5
Lmax (dB(A)) : 86.4
L90 (dB(A)) : 57.1
Ldn (dB(A)) : 66.9
Standard (dB(A)) : 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ
โรงงาน พ.ศ. 2548

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

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report



TESTING
No.0042

Client : WHA Industrial Development Public Company Limited

331/8-9 Moo 2, High Way 331 Road., KM 91-92, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

P/O :

Project Name : Monitoring

Project Location : WHA CIE 1

Lot ID: 2411639

Date Received : Feb 06, 2024

Date Reported : Feb 09, 2024

Report Number: 2907104-1

Page 1 of 1

Sample Number 2411639-3
Parameter Noise (Leq 24hrs)
Location บริเวณริมรั้วถนน 0726905E 1443663N
Measurement Date Feb 05 - Feb 06, 2024
Measurement by Satcha Phetsawaeng
Sound Level meter Serial No. 920831

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
11:00 AM - 12:00 PM	64.2	83.3	59.5
12:00 PM - 01:00 PM	61.4	76.0	57.5
01:00 PM - 02:00 PM	63.7	81.0	58.5
02:00 PM - 03:00 PM	62.1	84.0	57.6
03:00 PM - 04:00 PM	63.0	82.3	58.4
04:00 PM - 05:00 PM	62.9	77.5	59.1
05:00 PM - 06:00 PM	64.3	84.3	60.0
06:00 PM - 07:00 PM	63.7	84.6	59.9
07:00 PM - 08:00 PM	64.1	87.2	59.8
08:00 PM - 09:00 PM	63.2	81.9	58.8
09:00 PM - 10:00 PM	61.6	79.3	55.2
10:00 PM - 11:00 PM	59.2	80.1	50.9
11:00 PM - 12:00 AM	57.1	75.9	49.0
12:00 AM - 01:00 AM	56.9	74.6	47.2
01:00 AM - 02:00 AM	55.4	73.4	44.5
02:00 AM - 03:00 AM	55.6	78.1	44.4
03:00 AM - 04:00 AM	55.6	71.6	44.6
04:00 AM - 05:00 AM	58.3	77.0	48.6
05:00 AM - 06:00 AM	62.0	87.0	54.6
06:00 AM - 07:00 AM	64.8	79.4	60.7
07:00 AM - 08:00 AM	66.8	82.0	63.2
08:00 AM - 09:00 AM	65.0	86.9	60.9
09:00 AM - 10:00 AM	64.4	82.0	60.2
10:00 AM - 11:00 AM	64.9	79.7	61.4

Leq Average 24 hrs. (dB(A)) 62.7
Lmax (dB(A)) 87.2
L90 (dB(A)) 58.4
Ldn (dB(A)) 66.9
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ
โรงงาน พ.ศ. 2548

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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354-121/ EMAIL

S:\Reports_Air Noise.rpt (12:40PM)



Analysis / Test Report



TESTING
No.0042

Client : WHA Industrial Development Public Company Limited

331/8-9 Moo 2, High Way 331 Road., KM 91-92, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

P/O :

Project Name : Monitoring

Project Location : WHA CIE 1

Lot ID: 2411639

Date Received : Feb 06, 2024

Date Reported : Feb 09, 2024

Report Number: 2907105-1

Page 1 of 1

Sample Number 2411639-4
Parameter Noise (Leq 24hrs)
Location บริเวณชุมชนบ้านยางเอน 0724553E 1448947N
Measurement Date Feb 03 - Feb 04, 2024
Measurement by Satcha Phetsawaeng
Sound Level meter Serial No. 920832

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	62.4	87.4	45.0
01:00 PM - 02:00 PM	61.0	89.8	44.0
02:00 PM - 03:00 PM	53.2	74.0	45.5
03:00 PM - 04:00 PM	58.1	81.2	45.9
04:00 PM - 05:00 PM	53.9	77.7	46.3
05:00 PM - 06:00 PM	52.3	69.9	46.5
06:00 PM - 07:00 PM	51.6	75.9	44.1
07:00 PM - 08:00 PM	49.5	66.7	43.1
08:00 PM - 09:00 PM	49.5	69.2	44.5
09:00 PM - 10:00 PM	49.2	67.7	44.6
10:00 PM - 11:00 PM	49.9	68.9	44.8
11:00 PM - 12:00 AM	48.8	74.7	42.7
12:00 AM - 01:00 AM	47.6	71.1	41.8
01:00 AM - 02:00 AM	47.3	63.4	41.2
02:00 AM - 03:00 AM	44.0	73.2	40.3
03:00 AM - 04:00 AM	45.0	69.9	39.7
04:00 AM - 05:00 AM	44.0	61.0	39.2
05:00 AM - 06:00 AM	47.3	67.1	41.9
06:00 AM - 07:00 AM	48.1	68.9	41.1
07:00 AM - 08:00 AM	54.9	77.9	49.5
08:00 AM - 09:00 AM	55.5	87.2	48.0
09:00 AM - 10:00 AM	60.6	92.5	48.0
10:00 AM - 11:00 AM	58.7	78.9	50.0
11:00 AM - 12:00 PM	55.6	79.7	46.0

Leq Average 24 hrs. (dB(A)) 55.3
Lmax (dB(A)) 92.5
L90 (dB(A)) 44.5
Ldn (dB(A)) 57.1
Standard (dB(A)) 70 115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ
โรงงาน พ.ศ. 2548

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

Technical Management

Thanita K.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report



TESTING
No.0042

Client : WHA Industrial Development Public Company Limited
331/8-9 Moo 2, High Way 331 Road., KM 91-92, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

Lot ID: 2411639

Date Received : Feb 06, 2024

Date Reported : Feb 09, 2024

Report Number: 2907106-1

P/O :

Project Name : Monitoring

Project Location : WHA CIE 1

Page 1 of 1

Sample Number 2411639-5
Parameter Noise (Leq 24hrs)
Location บริเวณชุมชนบ้านยางแถม 0724553E 1448947N
Measurement Date Feb 04 - Feb 05, 2024
Measurement by Satcha Phetsawaeng
Sound Level meter Serial No. 920832

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	52.9	71.1	46.7
01:00 PM - 02:00 PM	53.2	70.7	46.6
02:00 PM - 03:00 PM	54.6	73.0	46.9
03:00 PM - 04:00 PM	52.9	77.8	45.9
04:00 PM - 05:00 PM	53.2	79.7	46.1
05:00 PM - 06:00 PM	54.6	82.0	44.8
06:00 PM - 07:00 PM	51.9	73.1	43.7
07:00 PM - 08:00 PM	50.6	70.5	43.9
08:00 PM - 09:00 PM	50.3	70.4	44.6
09:00 PM - 10:00 PM	48.9	66.4	43.0
10:00 PM - 11:00 PM	47.8	65.3	42.4
11:00 PM - 12:00 AM	47.9	73.1	42.6
12:00 AM - 01:00 AM	43.8	57.3	40.2
01:00 AM - 02:00 AM	45.0	68.8	38.5
02:00 AM - 03:00 AM	45.6	71.7	40.7
03:00 AM - 04:00 AM	43.2	58.7	37.9
04:00 AM - 05:00 AM	56.4	77.2	40.0
05:00 AM - 06:00 AM	47.0	65.2	42.4
06:00 AM - 07:00 AM	54.0	79.1	46.2
07:00 AM - 08:00 AM	55.5	78.1	50.0
08:00 AM - 09:00 AM	57.5	85.2	49.3
09:00 AM - 10:00 AM	55.6	78.3	46.7
10:00 AM - 11:00 AM	56.0	79.8	45.2
11:00 AM - 12:00 PM	56.7	79.9	44.0

Leq Average 24 hrs. (dB(A))

53.2

Lmax (dB(A))

85.2

L90 (dB(A))

44.0

Ldn (dB(A))

57.6

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ
โรงงาน พ.ศ. 2548

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

Technical Management

Thanitak.

Thanita Kulsuriwong
Scientist (4)

Approved by

Supot S.

Supot Salamteh
Section Head

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Analysis / Test Report



TESTING
No.0042

Client : WHA Industrial Development Public Company Limited
331/8-9 Moo 2, High Way 331 Road., KM 91-92, Tambol Bowin, Amphur Sriracha, Chonburi
Thailand 20230

Lot ID: 2411639

Date Received : Feb 06, 2024

Date Reported : Feb 09, 2024

Report Number: 2907107-1

P/O :

Project Name : Monitoring

Project Location : WHA CIE 1

Page 1 of 1

Sample Number 2411639-6
Parameter Noise (Leq 24hrs)
Location บริเวณชุมชนบ้านยางแถม 0724553E 1448947N
Measurement Date Feb 05 - Feb 06, 2024
Measurement by Satcha Phetsawaeng
Sound Level meter Serial No. 920832

Time	Leq (dB(A))	Lmax (dB(A))	L90 (dB(A))
12:00 PM - 01:00 PM	52.5	76.7	43.6
01:00 PM - 02:00 PM	55.6	78.1	43.7
02:00 PM - 03:00 PM	50.5	75.0	44.7
03:00 PM - 04:00 PM	53.3	76.8	45.6
04:00 PM - 05:00 PM	53.4	79.9	46.4
05:00 PM - 06:00 PM	52.1	72.0	46.2
06:00 PM - 07:00 PM	51.9	69.8	46.5
07:00 PM - 08:00 PM	51.2	69.7	45.3
08:00 PM - 09:00 PM	51.2	68.2	46.6
09:00 PM - 10:00 PM	51.3	75.5	47.3
10:00 PM - 11:00 PM	49.3	70.0	46.1
11:00 PM - 12:00 AM	55.4	84.7	43.8
12:00 AM - 01:00 AM	45.3	69.2	40.1
01:00 AM - 02:00 AM	44.1	68.6	37.6
02:00 AM - 03:00 AM	42.5	58.6	39.1
03:00 AM - 04:00 AM	42.7	63.8	36.7
04:00 AM - 05:00 AM	56.0	80.3	36.0
05:00 AM - 06:00 AM	45.7	72.0	39.4
06:00 AM - 07:00 AM	50.8	74.8	44.5
07:00 AM - 08:00 AM	54.7	76.9	48.7
08:00 AM - 09:00 AM	58.7	84.5	48.9
09:00 AM - 10:00 AM	53.7	72.7	45.4
10:00 AM - 11:00 AM	53.5	78.7	44.7
11:00 AM - 12:00 PM	56.0	73.2	45.1

Leq Average 24 hrs. (dB(A))

53.0

Lmax (dB(A))

84.7

L90 (dB(A))

44.7

Ldn (dB(A))

57.8

Standard (dB(A))

70

115

Reference Method : ISO1996-1 and 1996-2

Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการ
โรงงาน พ.ศ. 2548

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

Technical Management

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Supot Salamteh
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