

ANALYSIS REPORT

CUSTOMER NAME : SIAM CHEMICALS PUBLIC COMPANY
ADDRESS : 196 MOO 1 SUK SAWAT ROAD PAK KHLONG BANG PLA KOT PHRA SAMUT CHEDI SAMUT PRAKAN 10290
CONTACT INFORMATION : TEL : 06 2374 2691 e-mail : safetyofficer@siamchemicals.co.th
SAMPLING SOURCE : SIAM CHEMICALS PUBLIC COMPANY
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : JULY 12, 2024
SAMPLING TIME : 09:10 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR WEERAYUT MOKKAEW ว-145-ค-0027
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM ว-145-จ-0114

RECEIVED DATE : JULY 12, 2024
ANALYTICAL DATE : JULY 12-18, 2024
ISSUE DATE : JULY 24, 2024
REPORT NO. : 2024-U067182
WORK NO. : 2023-010570
ANALYSIS NO. : T24AP845-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บอกรักเก็บตัวอย่าง ด้านหน้าโครงการ (ผ่านการบำบัด) T24AP845-0001		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H* B AND 1060 B	7.3 (32°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	5-DAY BOD TEST, MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	7.0	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ^a	mg/L	CLOSED REFLUX, TITRIMETRIC METHOD (SM: PART 5220 C)	35.3	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED FROM 103 TO 105 °C (SM: PART 2540 D)	15.0	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	2,032	≤ 3,000	25
OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 5	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR BROWN		

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

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

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

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

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

ND : NOT DETECTED.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR
ว-145-ค-0004



ANALYSIS REPORT

CUSTOMER NAME : SIAM CHEMICALS PUBLIC COMPANY
ADDRESS : 196 MOO 1 SUK SAWAT ROAD PAK KHLONG BANG PLA KOT PHRA SAMUT CHEDI SAMUT PRAKAN 10290
CONTACT INFORMATION : TEL : 06 2374 2691 e-mail : safetyofficer@siamchemicals.co.th
SAMPLING SOURCE : SIAM CHEMICALS PUBLIC COMPANY
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : JULY 12, 2024
SAMPLING TIME : 09:20 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR WEERAYUT MOKKAEW ว-145-ค-0027
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM ว-145-จ-0114
RECEIVED DATE : JULY 12, 2024
ANALYTICAL DATE : JULY 12-18, 2024
ISSUE DATE : JULY 24, 2024
REPORT NO. : 2024-U067183
WORK NO. : 2023-010570
ANALYSIS NO. : T24AP845-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			มอกกเก็บน้ำหลังโรง ผลิตกรดกำมะถันเก่า T24AP845-0002		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.3 (32°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	5-DAY BOD TEST, MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	5.6	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ^a	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: PART 5220 D)	39.7	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED FROM 103 TO 105 °C (SM: PART 2540 D)	15.4	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	2,119	≤ 3,000	25
OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 5	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

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

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SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

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

ND : NOT DETECTED.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR
ว-145-ค-0004



ANALYSIS REPORT

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CONTACT INFORMATION : TEL : 06 2374 2691 e-mail : safetyofficer@siamchemicals.co.th
SAMPLING SOURCE : SIAM CHEMICALS PUBLIC COMPANY
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : JULY 12, 2024
SAMPLING TIME : 09:30 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR WEERAYUT MOKKAEW ว-145-ค-0027
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM ว-145-จ-0114
RECEIVED DATE : JULY 12, 2024
ANALYTICAL DATE : JULY 12-18, 2024
ISSUE DATE : JULY 24, 2024
REPORT NO. : 2024-U067184
WORK NO. : 2023-010570
ANALYSIS NO. : T24AP845-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บันทึกเก็บน้ำด้านหน้า ท่าเทียบเรือ T24AP845-0003		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.3 (32°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	5-DAY BOD TEST, MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	7.0	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ^a	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: PART 5220 D)	41.7	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED FROM 103 TO 105 °C (SM: PART 2540 D)	16.4	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	2,007	≤ 3,000	25
OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 5	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

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

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

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

ND : NOT DETECTED.

Piyapat S.

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LABORATORY SUPERVISOR
ว-145-ค-0004



ANALYSIS REPORT

CUSTOMER NAME : SIAM CHEMICALS PUBLIC COMPANY
ADDRESS : 196 MOO 1 SUK SAWAT ROAD PAK KHLONG BANG PLA KOT PHRA SAMUT CHEDI SAMUT PRAKAN 10290
CONTACT INFORMATION : TEL : 06 2374 2691 e-mail : safetyofficer@siamchemicals.co.th
SAMPLING SOURCE : SIAM CHEMICALS PUBLIC COMPANY
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : AUGUST 16, 2024
SAMPLING TIME : 13:20 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR WEERAYUT MOKKAEW ว-145-ค-0027
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM ว-145-จ-0114
RECEIVED DATE : AUGUST 16, 2024
ANALYTICAL DATE : AUGUST 16-23, 2024
ISSUE DATE : AUGUST 27, 2024
REPORT NO. : 2024-U078125
WORK NO. : 2023-010570
ANALYSIS NO. : T24AS597-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ปอกักเก็บตัวอย่าง ด้านหน้าโครงการ (ผ่านการบำบัด) T24AS597-0001		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.3 (31°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	5-DAY BOD TEST, MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	< 2.0	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ^a	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: PART 5220 D)	25.7	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED FROM 103 TO 105 °C (SM: PART 2540 D)	5.5	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	978	≤ 3,000	25
OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 5	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR BROWN		

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

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

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

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

ND : NOT DETECTED.

Piyapat S.

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LABORATORY SUPERVISOR
ว-145-ค-0004



ANALYSIS REPORT

CUSTOMER NAME : SIAM CHEMICALS PUBLIC COMPANY
ADDRESS : 196 MOO 1 SUK SAWAT ROAD PAK KHLONG BANG PLA KOT PHRA SAMUT CHEDI SAMUT PRAKAN 10290
CONTACT INFORMATION : TEL : 06 2374 2691 e-mail : safetyofficer@siamchemicals.co.th
SAMPLING SOURCE : SIAM CHEMICALS PUBLIC COMPANY
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : AUGUST 16, 2024
SAMPLING TIME : 13:00 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR WEERAYUT MOKKAEW ว-145-ค-0027
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM ว-145-จ-0114
RECEIVED DATE : AUGUST 16, 2024
ANALYTICAL DATE : AUGUST 16-23, 2024
ISSUE DATE : AUGUST 27, 2024
REPORT NO. : 2024-U078126
WORK NO. : 2023-010570
ANALYSIS NO. : T24AS597-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ปอกักเก็บน้ำหลังโรง ผลิตกรดกำมะถันเก่า T24AS597-0002		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	6.8 (31°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	5-DAY BOD TEST, MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	< 2.0	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ^a	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: PART 5220 D)	27.2	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED FROM 103 TO 105 °C (SM: PART 2540 D)	13.0	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	1,927	≤ 3,000	25
OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 5	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR BROWN		

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ND : NOT DETECTED.

Piyapat S.

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LABORATORY SUPERVISOR
ว-145-ค-0004



ANALYSIS REPORT

CUSTOMER NAME : SIAM CHEMICALS PUBLIC COMPANY
ADDRESS : 196 MOO 1 SUK SAWAT ROAD PAK KHLONG BANG PLA KOT PHRA SAMUT CHEDI SAMUT PRAKAN 10290
CONTACT INFORMATION : TEL : 06 2374 2691 e-mail : safetyofficer@siamchemicals.co.th
SAMPLING SOURCE : SIAM CHEMICALS PUBLIC COMPANY
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : AUGUST 16, 2024
SAMPLING TIME : 13:10 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR WEERAYUT MOKKAEW ว-145-ค-0027
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM ว-145-จ-0114
RECEIVED DATE : AUGUST 16, 2024
ANALYTICAL DATE : AUGUST 16-23, 2024
ISSUE DATE : AUGUST 27, 2024
REPORT NO. : 2024-U078127
WORK NO. : 2023-010570
ANALYSIS NO. : T24AS597-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บอกกักเก็บน้ำด้านหน้า ท่าเทียบเรือ T24AS597-0003		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.2 (32°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	5-DAY BOD TEST, MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	< 2.0	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ^a	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: PART 5220 D)	27.2	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^c	mg/L	DRIED FROM 103 TO 105 °C (SM: PART 2540 D)	ND	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	913	≤ 3,000	25
OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 5	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR BROWN		

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

ND : NOT DETECTED.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR
ว-145-ค-0004



ANALYSIS REPORT

CUSTOMER NAME : SIAM CHEMICALS PUBLIC COMPANY
ADDRESS : 196 MOO 1 SUK SAWAT ROAD PAK KHLONG BANG PLA KOT PHRA SAMUT CHEDI SAMUT PRAKAN 10290
CONTACT INFORMATION : TEL : 06 2374 2691 e-mail : safetyofficer@siamchemicals.co.th
SAMPLING SOURCE : SIAM CHEMICALS PUBLIC COMPANY
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : SEPTEMBER 13, 2024
SAMPLING TIME : 11:10 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR WEERAYUT MOKKAEW ว-145-ค-0027
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM ว-145-จ-0114
RECEIVED DATE : SEPTEMBER 13, 2024
ANALYTICAL DATE : SEPTEMBER 13-21, 2024
ISSUE DATE : SEPTEMBER 25, 2024
REPORT NO. : 2024-U088981
WORK NO. : 2023-010570
ANALYSIS NO. : T24AV226-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ปกติเก็บตัวอย่าง ด้านหน้าโครงการ (ผ่านการบำบัด) T24AV226-0001		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.3 (32.0°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	5-DAY BOD TEST, MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	4.1	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ^a	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: PART 5220 D)	29.9	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED FROM 103 TO 105 °C (SM: PART 2540 D)	8.4	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	958	≤ 3,000	25
OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 5	3
METALS					
ARSENIC ^c	mg/L As	DIGESTION, HYDRIDE GENERATION/ATOMIC ABSORPTION SPECTROMETRIC METHOD (SM: PART 3114 C)	0.0052	≤ 0.25	0.0003
HEXAVALENT CHROMIUM ^c	mg/L Cr ⁶⁺	FILTRATION, COLOURIMETRIC METHOD (SM: 3500-Cr B)	ND	≤ 0.25	0.006
CADMIUM ^c	mg/L Cd	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	ND	≤ 0.03	0.005
LEAD ^c	mg/L Pb	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	ND	≤ 0.2	0.020
MANGANESE ^c	mg/L Mn	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	0.432	≤ 5.0	0.005
NICKEL ^c	mg/L Ni	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	ND	≤ 1.0	0.005
ZINC ^c	mg/L Zn	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	ND	≤ 5.0	0.003



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บ่งชี้ให้เห็นตัวอย่าง ด้านหน้าโครงการ (ผ่านการบำบัด) T24AV226-0001		
MERCURY ^c	mg/L Hg	DIGESTION, COLD-VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD (SM: PART 3112 B)	ND	≤ 0.005	0.0005
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

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ND : NOT DETECTED.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR
จ-145-ค-0004

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SAMPLE TYPE : EFFLUENT
SAMPLING DATE : SEPTEMBER 13, 2024
SAMPLING TIME : 11:00 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR WEERAYUT MOKKAEW ว-145-ค-0027
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM ว-145-จ-0114

RECEIVED DATE : SEPTEMBER 13, 2024
ANALYTICAL DATE : SEPTEMBER 13-19, 2024
ISSUE DATE : SEPTEMBER 25, 2024
REPORT NO. : 2024-U088982
WORK NO. : 2023-010570
ANALYSIS NO. : T24AV226-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บอกรักเก็บน้ำหลังโรง ผลิตกรดกำมะถันเก่า T24AV226-0002		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.0 (31.5°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	5-DAY BOD TEST, MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	2.3	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ^c	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: PART 5220 D)	ND	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED FROM 103 TO 105 °C (SM: PART 2540 D)	11.8	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	2,127	≤ 3,000	25
OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 5	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

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

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

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

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

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

ND : NOT DETECTED.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR
ว-145-ค-0004



ANALYSIS REPORT

CUSTOMER NAME : SIAM CHEMICALS PUBLIC COMPANY
ADDRESS : 196 MOO 1 SUK SAWAT ROAD PAK KHLONG BANG PLA KOT PHRA SAMUT CHEDI SAMUT PRAKAN 10290
CONTACT INFORMATION : TEL : 06 2374 2691 e-mail : safetyofficer@siamchemicals.co.th
SAMPLING SOURCE : SIAM CHEMICALS PUBLIC COMPANY
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : SEPTEMBER 13, 2024
SAMPLING TIME : 11:20 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR WEERAYUT MOKKAEW ๖-145-๓-0027
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM ๖-145-๖-0114
RECEIVED DATE : SEPTEMBER 13, 2024
ANALYTICAL DATE : SEPTEMBER 13-19, 2024
ISSUE DATE : SEPTEMBER 25, 2024
REPORT NO. : 2024-U088983
WORK NO. : 2023-010570
ANALYSIS NO. : T24AV226-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บอกเก็บน้ำด้านหน้า ท่าเทียบเรือ T24AV226-0003		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.3 (32.3°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	5-DAY BOD TEST, MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	4.0	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ^a	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: PART 5220 D)	29.4	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED FROM 103 TO 105 °C (SM: PART 2540 D)	8.0	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	944	≤ 3,000	25
OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 5	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

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

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

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

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

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

ND : NOT DETECTED.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR
๖-145-๓-0004



ANALYSIS REPORT

CUSTOMER NAME : SIAM CHEMICALS PUBLIC COMPANY
ADDRESS : 196 MOO 1 SUK SAWAT ROAD PAK KHLONG BANG PLA KOT PHRA SAMUT CHEDI SAMUT PRAKAN 10290
CONTACT INFORMATION : TEL : 06 2374 2691 e-mail : safetyofficer@siamchemicals.co.th
SAMPLING SOURCE : SIAM CHEMICALS PUBLIC COMPANY
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : OCTOBER 8, 2024
SAMPLING TIME : 13:20 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR WEERAYUT MOKKAEW ว-145-ค-0027
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM ว-145-จ-0114
RECEIVED DATE : OCTOBER 8, 2024
ANALYTICAL DATE : OCTOBER 8-16, 2024
ISSUE DATE : OCTOBER 18, 2024
REPORT NO. : 2024-U097773
WORK NO. : 2023-010570
ANALYSIS NO. : T24AX634-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บอกเก็บตัวอย่าง ด้านหน้าโครงการ (ผ่านการปาด) T24AX634-0001		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.4 (32.2°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	5-DAY BOD TEST, MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	< 2.0	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ^c	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: PART 5220 D)	ND	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED FROM 103 TO 105 °C (SM: PART 2540 D)	23.8	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	810	≤ 3,000	25
OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 5	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

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

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

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

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

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

ND : NOT DETECTED.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR
ว-145-ค-0004



ANALYSIS REPORT

CUSTOMER NAME : SIAM CHEMICALS PUBLIC COMPANY
ADDRESS : 196 MOO 1 SUK SAWAT ROAD PAK KHLONG BANG PLA KOT PHRA SAMUT CHEDI SAMUT PRAKAN 10290
CONTACT INFORMATION : TEL : 06 2374 2691 e-mail : safetyofficer@siamchemicals.co.th
SAMPLING SOURCE : SIAM CHEMICALS PUBLIC COMPANY
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : OCTOBER 8, 2024
SAMPLING TIME : 13:00 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR WEERAYUT MOKKAEW ว-145-ค-0027
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM ว-145-จ-0114

RECEIVED DATE : OCTOBER 8, 2024
ANALYTICAL DATE : OCTOBER 8-16, 2024
ISSUE DATE : OCTOBER 18, 2024
REPORT NO. : 2024-U097774
WORK NO. : 2023-010570
ANALYSIS NO. : T24AX634-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บอกรับเก็บน้ำหลังโรง ผลิตกรดกำมะถันเก่า T24AX634-0002		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.0 (32.0°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	5-DAY BOD TEST, MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	3.0	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ^c	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: PART 5220 D)	ND	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED FROM 103 TO 105 °C (SM: PART 2540 D)	63.5	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	441	≤ 3,000	25
OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 5	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

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

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

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

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

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

ND : NOT DETECTED.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR
ว-145-ค-0004



ANALYSIS REPORT

CUSTOMER NAME : SIAM CHEMICALS PUBLIC COMPANY
ADDRESS : 196 MOO 1 SUK SAWAT ROAD PAK KHLONG BANG PLA KOT PHRA SAMUT CHEDI SAMUT PRAKAN 10290
CONTACT INFORMATION : TEL : 06 2374 2691 e-mail : safetyofficer@siamchemicals.co.th
SAMPLING SOURCE : SIAM CHEMICALS PUBLIC COMPANY
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : OCTOBER 8, 2024
SAMPLING TIME : 13:10 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR WEERAYUT MOKKAEW ๖-145-๓-0027
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM ๖-145-๓-0114

RECEIVED DATE : OCTOBER 8, 2024
ANALYTICAL DATE : OCTOBER 8-16, 2024
ISSUE DATE : OCTOBER 18, 2024
REPORT NO. : 2024-U097775
WORK NO. : 2023-010570
ANALYSIS NO. : T24AX634-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ปกติเก็บน้ำด้านหน้า ท่าเทียบเรือ T24AX634-0003		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.4 (32.3°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	5-DAY BOD TEST, MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	< 2.0	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ^c	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: PART 5220 D)	ND	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED FROM 103 TO 105 °C (SM: PART 2540 D)	20.1	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	625	≤ 3,000	25
OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 5	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

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

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

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

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

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

ND : NOT DETECTED.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR
๖-145-๓-0004



ANALYSIS REPORT

CUSTOMER NAME : SIAM CHEMICALS PUBLIC COMPANY
ADDRESS : 196 MOO 1 SUK SAWAT ROAD PAK KHLONG BANG PLA KOT PHRA SAMUT CHEDI SAMUT PRAKAN 10290
CONTACT INFORMATION : TEL : 06 2374 2691 e-mail : safetyofficer@siamchemicals.co.th
SAMPLING SOURCE : SIAM CHEMICALS PUBLIC COMPANY
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : NOVEMBER 11, 2024
SAMPLING TIME : 10:40 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR WEERAYUT MOKKAEW ๖-145-๑-0027
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM ๖-145-๖-0114

RECEIVED DATE : NOVEMBER 11, 2024
ANALYTICAL DATE : NOVEMBER 11-19, 2024
ISSUE DATE : NOVEMBER 22, 2024
REPORT NO. : 2024-U109284
WORK NO. : 2023-010570
ANALYSIS NO. : T24BA427-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	LIMIT OF QUANTITATION (LOQ)
			บอกรักเก็บตัวอย่างด้านหน้าโครงการ (ผ่านการบำบัด) T24BA427-0001		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H* B AND 1060 B	7.5 (30.1°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	5-DAY BOD TEST, MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	2.8	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ^c	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: PART 5220 D)	< 25.0	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED FROM 103 TO 105 °C (SM: PART 2540 D)	5.4	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	563	≤ 3,000	25
OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	< 3	≤ 5	3
SAMPLE CONDITION					
WATER'S COLOUR/TURBID			YELLOW/TURBID		
SEDIMENT			BROWN		

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

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

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

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

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

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR
๖-145-๑-0004



ANALYSIS REPORT

CUSTOMER NAME : SIAM CHEMICALS PUBLIC COMPANY
ADDRESS : 196 MOO 1 SUK SAWAT ROAD PAK KHLONG BANG PLA KOT PHRA SAMUT CHEDI SAMUT PRAKAN 10290
CONTACT INFORMATION : TEL : 06 2374 2691 e-mail : safetyofficer@siamchemicals.co.th
SAMPLING SOURCE : SIAM CHEMICALS PUBLIC COMPANY
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : NOVEMBER 11, 2024
SAMPLING TIME : 10:25 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR WEERAYUT MOKKAEW ว-145-ค-0027
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM ว-145-จ-0114

RECEIVED DATE : NOVEMBER 11, 2024
ANALYTICAL DATE : NOVEMBER 11-19, 2024
ISSUE DATE : NOVEMBER 22, 2024
REPORT NO. : 2024-U109285
WORK NO. : 2023-010570
ANALYSIS NO. : T24BA427-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	LIMIT OF QUANTITATION (LOQ)
			บอกรักเก็บน้ำหลังโรง ผลิตกรดกำมะถันเก่า T24BA427-0002		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H* B AND 1060 B	7.5 (30.4°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	5-DAY BOD TEST, MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	< 2.0	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ^c	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: PART 5220 D)	< 25.0	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED FROM 103 TO 105 °C (SM: PART 2540 D)	25.5	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	838	≤ 3,000	25
OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	< 3	≤ 5	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

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

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

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

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

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

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR
ว-145-ค-0004



ANALYSIS REPORT

CUSTOMER NAME : SIAM CHEMICALS PUBLIC COMPANY
ADDRESS : 196 MOO 1 SUK SAWAT ROAD PAK KHLONG BANG PLA KOT PHRA SAMUT CHEDI SAMUT PRAKAN 10290
CONTACT INFORMATION : TEL : 06 2374 2691 e-mail : safetyofficer@siamchemicals.co.th
SAMPLING SOURCE : SIAM CHEMICALS PUBLIC COMPANY
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : NOVEMBER 11, 2024
SAMPLING TIME : 10:30 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR WEERAYUT MOKKAEW จ-145-ค-0027
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM จ-145-จ-0114

RECEIVED DATE : NOVEMBER 11, 2024
ANALYTICAL DATE : NOVEMBER 11-19, 2024
ISSUE DATE : NOVEMBER 22, 2024
REPORT NO. : 2024-U109286
WORK NO. : 2023-010570
ANALYSIS NO. : T24BA427-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	LIMIT OF QUANTITATION (LOQ)
			บอกกเก็บน้ำ ด้านหน้าท่าเทียบเรือ T24BA427-0003		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.5 (30.2°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	5-DAY BOD TEST, MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	3.0	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ^c	mg/L	CLOSED REFLUX, COLOURIMETRIC METHOD (SM: PART 5220 D)	< 25.0	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED FROM 103 TO 105 °C (SM: PART 2540 D)	5.8	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	496	≤ 3,000	25
OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	< 3	≤ 5	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

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

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

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

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

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

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR
จ-145-ค-0004



ANALYSIS REPORT

CUSTOMER NAME : SIAM CHEMICALS PUBLIC COMPANY
ADDRESS : 196 MOO 1 SUK SAWAT ROAD PAK KHLONG BANG PLA KOT PHRA SAMUT CHEDI SAMUT PRAKAN 10290
CONTACT INFORMATION : TEL : 06 2374 2691 e-mail : safetyofficer@siamchemicals.co.th
SAMPLING SOURCE : SIAM CHEMICALS PUBLIC COMPANY
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : DECEMBER 9, 2024
SAMPLING TIME : 13:00 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR WEERAYUT MOKKAEW ว-145-ค-0027
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM ว-145-จ-0114
RECEIVED DATE : DECEMBER 9, 2024
ANALYTICAL DATE : DECEMBER 9-19, 2024
ISSUE DATE : DECEMBER 24, 2024
REPORT NO. : 2024-U120126
WORK NO. : 2023-010570
ANALYSIS NO. : T24BC949-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	LIMIT OF QUANTITATION (LOQ)
			บอกเก็บตัวอย่างด้านหน้าโครงการ (ผ่านการบำบัด) T24BC949-0001		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.7 (29.4°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	5-DAY BOD TEST, MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	7.8	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ^c	mg/L	CLOSED REFLUX, TITRIMETRIC METHOD (SM: PART 5220 C)	44.4	≤ 120	40.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED FROM 103 TO 105 °C (SM: PART 2540 D)	23.3	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	4,914	≤ 3,000	25
OIL AND GREASE ^a	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	< 3	≤ 5	3
METALS					
ARSENIC ^c	mg/L As	DIGESTION, HYDRIDE GENERATION/ATOMIC ABSORPTION SPECTROMETRIC METHOD (SM: PART 3114 C)	0.0025	≤ 0.25	-
HEXAVALENT CHROMIUM ^c	mg/L Cr ⁶⁺	FILTRATION, COLOURIMETRIC METHOD (SM: 3500-Cr B)	ND	≤ 0.25	-
CADMIUM ^c	mg/L Cd	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	ND	≤ 0.03	0.020
LEAD ^c	mg/L Pb	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	ND	≤ 0.2	0.200
MANGANESE ^c	mg/L Mn	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	0.299	≤ 5.0	0.050
NICKEL ^c	mg/L Ni	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	ND	≤ 1.0	0.100
ZINC ^c	mg/L Zn	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	ND	≤ 5.0	0.050



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	LIMIT OF QUANTITATION (LOQ)
			ปลอกเก็บตัวอย่างด้านหน้าโครงการ (ผ่านการบำบัด) T24BC949-0001		
MERCURY ^c	mg/L Hg	DIGESTION, COLD-VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD (SM: PART 3112 B)	ND	≤ 0.005	-
SAMPLE CONDITION					
WATER'S COLOUR/TURBID			YELLOW/TURBID		
SEDIMENT			BROWN		

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

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

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

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

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

ND : NOT DETECTED.

Bhuchonk Panichlertumpi

(MR BHUCHONK PANICHLERTUMPI)
LABORATORY SUPERVISOR
จ-145-ค-0020

ANALYSIS REPORT

CUSTOMER NAME : SIAM CHEMICALS PUBLIC COMPANY
ADDRESS : 196 MOO 1 SUK SAWAT ROAD PAK KHLONG BANG PLA KOT PHRA SAMUT CHEDI SAMUT PRAKAN 10290
CONTACT INFORMATION : TEL : 06 2374 2691 e-mail : safetyofficer@siamchemicals.co.th
SAMPLING SOURCE : SIAM CHEMICALS PUBLIC COMPANY
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : DECEMBER 9, 2024
SAMPLING TIME : 12:50 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR WEERAYUT MOKKAEW ว-145-ค-0027
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM ว-145-จ-0114
RECEIVED DATE : DECEMBER 9, 2024
ANALYTICAL DATE : DECEMBER 9-19, 2024
ISSUE DATE : DECEMBER 24, 2024
REPORT NO. : 2024-U120127
WORK NO. : 2023-010570
ANALYSIS NO. : T24BC949-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	LIMIT OF QUANTITATION (LOQ)
			ปอกักเก็บน้ำหลังโรง ผลิตกรดกำมะถันเก่า T24BC949-0002		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.3 (29.8°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	5-DAY BOD TEST, MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	< 2.0	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ^c	mg/L	CLOSED REFLUX, TITRIMETRIC METHOD (SM: PART 5220 C)	52.3	≤ 120	40.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED FROM 103 TO 105 °C (SM: PART 2540 D)	22.0	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^c	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	8,727	≤ 3,000	25
OIL AND GREASE ^a	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	< 3	≤ 5	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

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

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

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

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

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

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR
ว-145-ค-0004



ANALYSIS REPORT

CUSTOMER NAME : SIAM CHEMICALS PUBLIC COMPANY
ADDRESS : 196 MOO 1 SUK SAWAT ROAD PAK KHLONG BANG PLA KOT PHRA SAMUT CHEDI SAMUT PRAKAN 10290
CONTACT INFORMATION : TEL : 06 2374 2691 e-mail : safetyofficer@siamchemicals.co.th
SAMPLING SOURCE : SIAM CHEMICALS PUBLIC COMPANY
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : DECEMBER 9, 2024
SAMPLING TIME : 12:45 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR WEERAYUT MOKKAEW ว-145-ค-0027
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM ว-145-จ-0114
RECEIVED DATE : DECEMBER 9, 2024
ANALYTICAL DATE : DECEMBER 9-19, 2024
ISSUE DATE : DECEMBER 24, 2024
REPORT NO. : 2024-U120128
WORK NO. : 2023-010570
ANALYSIS NO. : T24BC949-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	LIMIT OF QUANTITATION (LOQ)
			บอกรักเก็บน้ำ ด้านหน้าท่าเทียบเรือ T24BC949-0003		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.7 (29.7°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	5-DAY BOD TEST, MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	2.0	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ^c	mg/L	CLOSED REFLUX, TITRIMETRIC METHOD (SM: PART 5220 C)	53.9	≤ 120	40.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED FROM 103 TO 105 °C (SM: PART 2540 D)	24.0	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	5,062	≤ 3,000	25
OIL AND GREASE ^a	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	< 3	≤ 5	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

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

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

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

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

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

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR
ว-145-ค-0004

