

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 : JANUARY 17, 2024
SAMPLING TIME : 09:30 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR WEERAYUT MOKKAEW ว-145-ค-0027
ANALYZED BY : MISS AKSARIN BUNKONG ว-145-จ-0014

RECEIVED DATE : JANUARY 17, 2024
ANALYTICAL DATE : JANUARY 17-23, 2024
REPORT NO. : 2024-U006752
WORK NO. : 2023-010570
ANALYSIS NO. : T24AA963-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บอกเก็บตัวอย่าง ด้านหน้าโครงการ (ผ่านการปำบด) T24AA963-0001		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.4 (28°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND* ^a	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	5.2	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ^c	mg/L	CLOSED REFLUX, TITRIMETRIC METHOD (SM: PART 5220 C)	68.1	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	TOTAL SUSPENDED SOLIDS DRIED AT 103- 105 °C (SM: PART 2540 D)	25.4	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	14,080	≤ 3,000	25
FAT, 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, 23rd EDITION, 2017.

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

* : ADDITION OF NITRIFICATION INHIBITION (TCMP) FOLLOW TO THE SM: 5210B,5(e).

ND : NON-DETECTABLE.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)

LABORATORY SUPERVISOR

ว-145-ค-0004

JANUARY 29, 2024



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 : JANUARY 17, 2024
SAMPLING TIME : 09:40 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR WEERAYUT MOKKAEW ว-145-ค-0027
ANALYZED BY : MISS AKSARIN BUNKONG ว-145-จ-0014

RECEIVED DATE : JANUARY 17, 2024
ANALYTICAL DATE : JANUARY 17-23, 2024
REPORT NO. : 2024-U006753
WORK NO. : 2023-010570
ANALYSIS NO. : T24AA963-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บอกเก็บน้ำหลังโรง ผลิตกรดกำมะถันเก่า T24AA963-0002		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.2 (29°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND* ^a	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	2.4	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ^c	mg/L	CLOSED REFLUX, TITRIMETRIC METHOD (SM: PART 5220 C)	63.4	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	TOTAL SUSPENDED SOLIDS DRIED AT 103- 105 °C (SM: PART 2540 D)	40.1	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^c	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	16,333	≤ 3,000	25
FAT, 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, 23rd EDITION, 2017.

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

* : ADDITION OF NITRIFICATION INHIBITION (TCMP) FOLLOW TO THE SM: 5210B.5(e).

ND : NON-DETECTABLE.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR
ว-145-ค-0004
JANUARY 29, 2024



ANALYSIS REPORT

CUSTOMER NAME : SIAM CHEMICALS PUBLIC COMPANY
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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 : JANUARY 17, 2024
SAMPLING TIME : 09:50 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR WEERAYUT MOKKAEW ว-145-ค-0027
ANALYZED BY : MISS AKSARIN BUNKONG ว-145-จ-0014

RECEIVED DATE : JANUARY 17, 2024
ANALYTICAL DATE : JANUARY 17-23, 2024
REPORT NO. : 2024-U006754
WORK NO. : 2023-010570
ANALYSIS NO. : T24AA963-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บอกเกินมาตรฐาน หาเทียบเรือ T24AA963-0003		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.3 (28°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND* ^a	mg/L	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)	66.5	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	TOTAL SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	16.7	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^c	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	15,250	≤ 3,000	25
FAT, 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, 23rd EDITION, 2017.

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

* : ADDITION OF NITRIFICATION INHIBITION (TCMP) FOLLOW TO THE SM: 5210B,5(e).

ND : NON-DETECTABLE.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR
ว-145-ค-0004
JANUARY 29, 2024



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 : FEBRUARY 14, 2024
SAMPLING TIME : 09:30 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR WEERAYUT MOKKAEW ๖-145-๓-0027
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM ๖-145-๓-0114
RECEIVED DATE : FEBRUARY 14, 2024
ANALYTICAL DATE : FEBRUARY 14-21, 2024
ISSUE DATE : FEBRUARY 22, 2024
REPORT NO. : 2024-U015498
WORK NO. : 2023-010570
ANALYSIS NO. : T24AC942-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บอกเก็บตัวอย่าง ด้านหน้าโครงการ (ผ่านการบำบัด) T24AC942-0001		
pH ^a	-	ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B)	6.4 (28°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND* ^c	mg/L	5-DAY BOD TEST, MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	3.8	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ^c	mg/L	CLOSED REFLUX, TITRIMETRIC METHOD (SM: PART 5220 C)	96.6	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED AT 103-105 °C (SM: PART 2540 D)	12.5	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^c	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	14,380	≤ 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, 23rd EDITION, 2017.

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

* : ADDITION OF NITRIFICATION INHIBITION (TCMP) FOLLOW TO THE SM: 5210B.5(e).

ND : NON-DETECTABLE.



(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR
๖-145-๓-0004
FEBRUARY 23, 2024



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 : FEBRUARY 14, 2024
SAMPLING TIME : 09:40 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR WEERAYUT MOKKAEW ว-145-ค-0027
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM ว-145-จ-0114
RECEIVED DATE : FEBRUARY 14, 2024
ANALYTICAL DATE : FEBRUARY 14-21, 2024
ISSUE DATE : FEBRUARY 22, 2024
REPORT NO. : 2024-U015499
WORK NO. : 2023-010570
ANALYSIS NO. : T24AC942-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บอกเก็บน้ำหลังโรง ผลิตกรดกำมะถันเก่า T24AC942-0002		
pH ^a	-	ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B)	6.6 (29°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND* ^c	mg/L	5-DAY BOD TEST, MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	ND	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ^c	mg/L	CLOSED REFLUX, TITRIMETRIC METHOD (SM: PART 5220 C)	68.1	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED AT 103-105 °C (SM: PART 2540 D)	97.3	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^c	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	16,200	≤ 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, 23rd EDITION, 2017.

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

* : ADDITION OF NITRIFICATION INHIBITION (TCMP) FOLLOW TO THE SM: 5210B.5(e).

ND : NON-DETECTABLE.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR
ว-145-ค-0004
FEBRUARY 23, 2024



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 : FEBRUARY 14, 2024
SAMPLING TIME : 09:50 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR WEERAYUT MOKKAEW ว-145-ค-0027
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM ว-145-จ-0114
RECEIVED DATE : FEBRUARY 14, 2024
ANALYTICAL DATE : FEBRUARY 14-21, 2024
ISSUE DATE : FEBRUARY 22, 2024
REPORT NO. : 2024-U015500
WORK NO. : 2023-010570
ANALYSIS NO. : T24AC942-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บอกกักเก็บน้ำด้านหน้า ท่าเทียบเรือ T24AC942-0003		
pH ^a	-	ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B)	6.8 (29°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND* ^c	mg/L	5-DAY BOD TEST, MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	ND	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ^c	mg/L	CLOSED REFLUX, TITRIMETRIC METHOD (SM: PART 5220 C)	95.0	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED AT 103-105 °C (SM: PART 2540 D)	51.7	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^c	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	18,410	≤ 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, 23rd EDITION, 2017.

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

* : ADDITION OF NITRIFICATION INHIBITION (TCMP) FOLLOW TO THE SM: 5210B,5(e).

ND : NON-DETECTABLE.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR
ว-145-ค-0004
FEBRUARY 23, 2024



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 : MARCH 11, 2024
SAMPLING TIME : 09:20 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR CHOKCHAI PHUMSAWAI ๖-145-๖-0136
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM ๖-145-๖-0114
RECEIVED DATE : MARCH 11, 2024
ANALYTICAL DATE : MARCH 11-19, 2024
ISSUE DATE : MARCH 22, 2024
REPORT NO. : 2024-U023958
WORK NO. : 2023-010570
ANALYSIS NO. : T24AF074-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บอกเก็บตัวอย่าง ด้านหน้าโครงการ (ผ่านการบำบัด) T24AF074-0001		
pH ^a	-	ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ 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)	7.1	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ^c	mg/L	CLOSED REFLUX, TITRIMETRIC METHOD (SM: PART 5220 C)	68.8	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED AT 103-105 °C (SM: PART 2540 D)	26.6	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^c	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	14,520	≤ 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)	0.0021	≤ 0.25	0.0003
CADMIUM ^c	mg/L Cd	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	ND	≤ 0.03	0.002
HEXAVALENT CHROMIUM ^c	mg/L Cr ⁶⁺	FILTRATION, COLOURIMETRIC METHOD (SM: 3500-Cr B)	ND	≤ 0.25	0.006
LEAD ^c	mg/L Pb	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	ND	≤ 0.2	0.015
MANGANESE ^c	mg/L Mn	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	0.245	≤ 5.0	0.004
MERCURY ^c	mg/L Hg	DIGESTION, COLD-VAPOUR ATOMIC ABSORPTION SPECTROMETRIC METHOD (SM: PART 3112 B)	ND	≤ 0.005	0.0005
NICKEL ^c	mg/L Ni	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	ND	≤ 1.0	0.005



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บอ กักเก็บตัวอย่าง ด้านหน้าโครงการ (ผ่านการป าบัด) T24AF074-0001		
ZINC ^c	mg/L Zn	DIGESTION, DIRECT AIR-ACETYLENE FLAME METHOD (SM: PART 3030 E AND PART 3111 B)	ND	≤ 5.0	0.003
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			GREEN/TURBID GREEN		

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

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

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

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

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

ND : NON-DETECTABLE.

Bhuchonk p.

(MR BHUCHONK PANICHLERTUMPI)

LABORATORY SUPERVISOR

จ-145-ค-0020

MARCH 25, 2024

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 : MARCH 11, 2024
SAMPLING TIME : 09:30 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR CHOKCHAI PHUMSAWAI ๖-145-๖-0136
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM ๖-145-๖-0114
RECEIVED DATE : MARCH 11, 2024
ANALYTICAL DATE : MARCH 11-19, 2024
ISSUE DATE : MARCH 22, 2024
REPORT NO. : 2024-U023959
WORK NO. : 2023-010570
ANALYSIS NO. : T24AF074-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บอกเก็บน้ำหลังโรง ผลิตกรดกำมะถันเก่า T24AF074-0002		
pH ^a	-	ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B)	6.8 (30°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)	2.6	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ^c	mg/L	CLOSED REFLUX, TITRIMETRIC METHOD (SM: PART 5220 C)	73.6	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED AT 103-105 °C (SM: PART 2540 D)	42.7	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^c	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	14,140	≤ 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, 23rd EDITION, 2017.

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

ND : NON-DETECTABLE.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR
๖-145-๖-0004
MARCH 25, 2024



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 : MARCH 11, 2024
SAMPLING TIME : 09:35 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR CHOKCHAI PHUMSAWAI ๖-145-๖-0136
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM ๖-145-๖-0114
RECEIVED DATE : MARCH 11, 2024
ANALYTICAL DATE : MARCH 11-19, 2024
ISSUE DATE : MARCH 22, 2024
REPORT NO. : 2024-U023960
WORK NO. : 2023-010570
ANALYSIS NO. : T24AF074-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บอกกเกินน้ำด้านหน้า ทำเทียบเรือ T24AF074-0003		
pH ^a	-	ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B)	7.1 (30°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)	60.8	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED AT 103-105 °C (SM: PART 2540 D)	34.6	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^c	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	19,460	≤ 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, 23rd EDITION, 2017.

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

ND : NON-DETECTABLE.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR
๖-145-๖-0004
MARCH 25, 2024



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 : APRIL 8, 2024
SAMPLING TIME : 10:20 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR WEERAYUT MOKKAEW ว-145-ค-0027
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM ว-145-จ-0114

RECEIVED DATE : APRIL 8, 2024
ANALYTICAL DATE : APRIL 8-19, 2024
ISSUE DATE : APRIL 22, 2024
REPORT NO. : 2024-U032913
WORK NO. : 2023-010570
ANALYSIS NO. : T24AH451-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บอกเก็บตัวอย่าง ด้านหน้าโครงการ (ผ่านการบำบัด) T24AH451-0001		
pH ^a	-	ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B)	7.3 (32°C)	5.5-9.0	-
COLOUR (ORIGINAL pH) ^b	ADMI	ADMI WEIGHTED-ORDINATE SPECTROPHOTOMETRIC METHOD (SM: PART 2120 F)	24	≤ 300	10
COLOUR (pH 7.0) ^b	ADMI	ADMI WEIGHTED-ORDINATE SPECTROPHOTOMETRIC METHOD (SM: PART 2120 F)	19	≤ 300	10
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	5-DAY BOD TEST, MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	6.4	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ^c	mg/L	CLOSED REFLUX, TITRIMETRIC METHOD (SM: PART 5220 C)	81.6	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED AT 103-105 °C (SM: PART 2540 D)	15.1	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^c	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	12,635	≤ 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, 23rd EDITION, 2017.

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

ND : NON-DETECTABLE.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR
ว-145-ค-0004
APRIL 23, 2024



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 : APRIL 8, 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 : APRIL 8, 2024
ANALYTICAL DATE : APRIL 8-19, 2024
ISSUE DATE : APRIL 22, 2024
REPORT NO. : 2024-U032914
WORK NO. : 2023-010570
ANALYSIS NO. : T24AH451-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ปกติเก็บน้ำหลังโรง ผลิตกรดกำมะถันเก่า T24AH451-0002		
pH ^a	-	ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B)	6.5 (32°C)	5.5-9.0	-
COLOUR (ORIGINAL pH) ^b	ADMI	ADMI WEIGHTED-ORDINATE SPECTROPHOTOMETRIC METHOD (SM: PART 2120 F)	11	≤ 300	10
COLOUR (pH 7.0) ^b	ADMI	ADMI WEIGHTED-ORDINATE SPECTROPHOTOMETRIC METHOD (SM: PART 2120 F)	11	≤ 300	10
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)	67.2	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED AT 103-105 °C (SM: PART 2540 D)	9.8	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^c	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	12,920	≤ 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, 23rd EDITION, 2017.

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

ND : NON-DETECTABLE.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR
ว-145-ค-0004
APRIL 23, 2024



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 : APRIL 8, 2024
SAMPLING TIME : 10:35 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR WEERAYUT MOKKAEW ว-145-ค-0027
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM ว-145-จ-0114

RECEIVED DATE : APRIL 8, 2024
ANALYTICAL DATE : APRIL 8-19, 2024
ISSUE DATE : APRIL 22, 2024
REPORT NO. : 2024-U032915
WORK NO. : 2023-010570
ANALYSIS NO. : T24AH451-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			ปกติกับเก็บน้ำด้านหน้า ท่าเทียบเรือ T24AH451-0003		
pH ^a	-	ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B)	7.3 (32°C)	5.5-9.0	-
COLOUR (ORIGINAL pH) ^b	ADMI	ADMI WEIGHTED-ORDINATE SPECTROPHOTOMETRIC METHOD (SM: PART 2120 F)	30	≤ 300	10
COLOUR (pH 7.0) ^b	ADMI	ADMI WEIGHTED-ORDINATE SPECTROPHOTOMETRIC METHOD (SM: PART 2120 F)	34	≤ 300	10
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	5-DAY BOD TEST, MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	32.4	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ^c	mg/L	CLOSED REFLUX, TITRIMETRIC METHOD (SM: PART 5220 C)	88.0	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED AT 103-105 °C (SM: PART 2540 D)	30.9	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^c	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	14,880	≤ 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, 23rd EDITION, 2017.

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

ND : NON-DETECTABLE.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)

LABORATORY SUPERVISOR

ว-145-ค-0004

APRIL 23, 2024



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 : MAY 9, 2024
SAMPLING TIME : 13:15 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR PEERAPAT BANYATSIN จ-145-จ-0032
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM จ-145-จ-0114
RECEIVED DATE : MAY 9, 2024
ANALYTICAL DATE : MAY 9-17, 2024
ISSUE DATE : MAY 20, 2024
REPORT NO. : 2024-U042573
WORK NO. : 2023-010570
ANALYSIS NO. : T24AJ703-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บอกเก็บตัวอย่าง ด้านหน้าโครงการ (ผ่านการปาด) T24AJ703-0001		
pH	-	ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B)	7.1 (32°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND	mg/L	5-DAY BOD TEST, MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	9.7	≤ 20	2.0
CHEMICAL OXYGEN DEMAND	mg/L	CLOSED REFLUX, TITRIMETRIC METHOD (SM: PART 5220 C)	94.4	≤ 120	25.0
TOTAL SUSPENDED SOLIDS	mg/L	DRIED AT 103-105 °C (SM: PART 2540 D)	12.7	≤ 50	5.0
TOTAL DISSOLVED SOLIDS	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	11,740	≤ 3,000	25
OIL AND GREASE	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 5	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

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

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

ND : NON-DETECTABLE.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR
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	RECEIVED DATE	: MAY 9, 2024
SAMPLING DATE	: MAY 9, 2024	ANALYTICAL DATE	: MAY 9-17, 2024
SAMPLING TIME	: 13:30 HOUR	ISSUE DATE	: MAY 20, 2024
SAMPLING METHOD	: GRAB	REPORT NO.	: 2024-U042574
SAMPLING BY	: MR PEERAPAT BANYATSIN ๖-145-๖-0032	WORK NO.	: 2023-010570
ANALYZED BY	: MISS NAPAPORN KHUNNOCKHUM ๖-145-๖-0114	ANALYSIS NO.	: T24AJ703-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			นํ้ากักเก็บนํ้าหลังโรง ผลิตกรดกำมะถันเก่า T24AJ703-0002		
pH	-	ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H* B)	7.0 (34°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND	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	mg/L	CLOSED REFLUX, TITRIMETRIC METHOD (SM: PART 5220 C)	68.8	≤ 120	25.0
TOTAL SUSPENDED SOLIDS	mg/L	DRIED AT 103-105 °C (SM: PART 2540 D)	19.4	≤ 50	5.0
TOTAL DISSOLVED SOLIDS	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	13,440	≤ 3,000	25
OIL AND GREASE	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 5	3
SAMPLE CONDITION					
WATER'S COLOUR/TURBID			YELLOW/TURBID		
SEDIMENT			BROWN		

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

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

ND : NON-DETECTABLE.

Pingapal S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR
3-145-a-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 : MAY 9, 2024
SAMPLING TIME : 13:45 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR PEERAPAT BANYATSIN จ-145-จ-0032
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM จ-145-จ-0114
RECEIVED DATE : MAY 9, 2024
ANALYTICAL DATE : MAY 9-17, 2024
ISSUE DATE : MAY 20, 2024
REPORT NO. : 2024-U042575
WORK NO. : 2023-010570
ANALYSIS NO. : T24AJ703-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บอกเก็บน้ำด้านหน้า ท่าเทียบเรือ T24AJ703-0003		
pH	-	ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B)	7.3 (33°C)	5.5-9.0	-
BIOCHEMICAL OXYGEN DEMAND	mg/L	5-DAY BOD TEST, MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	33.6	≤ 20	2.0
CHEMICAL OXYGEN DEMAND	mg/L	CLOSED REFLUX, TITRIMETRIC METHOD (SM: PART 5220 C)	89.6	≤ 120	25.0
TOTAL SUSPENDED SOLIDS	mg/L	DRIED AT 103-105 °C (SM: PART 2540 D)	19.1	≤ 50	5.0
TOTAL DISSOLVED SOLIDS	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	12,520	≤ 3,000	25
OIL AND GREASE	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 5	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN		

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

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

ND : NON-DETECTABLE.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR
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 : JUNE 12, 2024
SAMPLING TIME : 13:10 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR WEERAYUT MOKKAEW จ-145-ค-0027
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM จ-145-จ-0114

RECEIVED DATE : JUNE 12, 2024
ANALYTICAL DATE : JUNE 12-21, 2024
ISSUE DATE : JUNE 24, 2024
REPORT NO. : 2024-U056545
WORK NO. : 2023-010570
ANALYSIS NO. : T24AM895-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บอกเก็บน้ำด้านหน้า ท่าเทียบเรือ T24AM895-0003		
pH ^a	-	ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B)	7.6 (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)	44.4	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ^a	mg/L	CLOSED REFLUX, TITRIMETRIC METHOD (SM: PART 5220 C)	96.6	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED FROM 103 TO 105 °C (SM: PART 2540 D)	20.4	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	5,512	≤ 3,000	25
OIL AND GREASE ^a	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	4	≤ 5	3
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			GREY/TURBID GREY		

^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 : JUNE 12, 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 : JUNE 12, 2024
ANALYTICAL DATE : JUNE 12-22, 2024
ISSUE DATE : JUNE 24, 2024
REPORT NO. : 2024-U056543
WORK NO. : 2023-010570
ANALYSIS NO. : T24AM895-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บอกรักเก็บตัวอย่าง ด้านหน้าโครงการ (ผ่านการบำบัด) T24AM895-0001		
pH ^a	-	ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B)	8.0 (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)	12.1	≤ 20	2.0
CHEMICAL OXYGEN DEMAND ^a	mg/L	CLOSED REFLUX, TITRIMETRIC METHOD (SM: PART 5220 C)	38.0	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED FROM 103 TO 105 °C (SM: PART 2540 D)	23.9	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	4,852	≤ 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)	0.0020	≤ 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)	0.354	≤ 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)	< LOQ	≤ 5.0	0.003



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			บอกเก็บตัวอย่าง ด้านหน้าโครงการ (ผ่านการบำบัด) T24AM895-0001		
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			GREEN/TURBID GREEN		

^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,
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ND : NOT DETECTED.

< LOQ : < LIMIT OF QUANTITATION (ZINC ≥ 0.003 AND < 0.050 mg/L).



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

ANALYSIS REPORT

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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 : JUNE 12, 2024
SAMPLING TIME : 13:00 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR WEERAYUT MOKKAEW ๖-145-๓-0027
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM ๖-145-๓-0114
RECEIVED DATE : JUNE 12, 2024
ANALYTICAL DATE : JUNE 12-21, 2024
ISSUE DATE : JUNE 24, 2024
REPORT NO. : 2024-U056544
WORK NO. : 2023-010570
ANALYSIS NO. : T24AM895-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			มอกกเก็บน้ำหลังโรง ผลิตกรดกำมะถันเก่า T24AM895-0002		
pH ^a	-	ELECTROMETRIC METHOD AT SITE (SM: PART 4500-H ⁺ B)	7.1 (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, TITRIMETRIC METHOD (SM: PART 5220 C)	41.2	≤ 120	25.0
TOTAL SUSPENDED SOLIDS ^a	mg/L	DRIED FROM 103 TO 105 °C (SM: PART 2540 D)	5.2	≤ 50	5.0
TOTAL DISSOLVED SOLIDS ^c	mg/L	DRIED AT 180 °C (SM: PART 2540 C)	7,320	≤ 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)

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ND : NOT DETECTED.

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