



SINGHA
COMPLEX

ภาคผนวก ค

ใบรายงานผลการวิเคราะห์คุณภาพสิ่งแวดล้อม

- ค-1 รายงานผลการติดตามตรวจสอบคุณภาพน้ำทิ้ง เดือนมกราคม พ.ศ. 2567
- ค-2 รายงานผลการติดตามตรวจสอบคุณภาพน้ำทิ้ง เดือนกุมภาพันธ์ พ.ศ. 2567
- ค-3 รายงานผลการติดตามตรวจสอบคุณภาพน้ำทิ้ง เดือนมีนาคม พ.ศ. 2567
- ค-4 รายงานผลการติดตามตรวจสอบคุณภาพน้ำทิ้ง เดือนเมษายน พ.ศ. 2567
- ค-5 รายงานผลการติดตามตรวจสอบคุณภาพน้ำทิ้ง เดือนพฤษภาคม พ.ศ. 2567
- ค-6 รายงานผลการติดตามตรวจสอบคุณภาพน้ำทิ้ง เดือนมิถุนายน พ.ศ. 2567
- ค-7 รายงานผลการติดตามตรวจสอบคุณภาพน้ำหล่อเย็น



SINGHA
COMPLEX

ภาคผนวก ค-1

รายงานผลการติดตามตรวจสอบคุณภาพน้ำทิ้ง
เดือนมกราคม พ.ศ. 2567

ANALYSIS REPORT

CUSTOMER NAME : SINGHA PROPERTY DEVELOPMENT CO., LTD.
ADDRESS : 1788 SINGHA COMPLEX, 14TH FLOOR NEW PHETCHABURI RD. BANG KAPI HUAI KHWANG BANGKOK 10310
CONTACT INFORMATION : TEL : 08 1560 5406 e-mail : pruchaya.p@singhaestate.co.th
SAMPLING SOURCE : SINGHA COMPLEX BUILDING
SAMPLE TYPE : WASTEWATER
SAMPLING DATE : JANUARY 24, 2024
SAMPLING TIME : 12:00 HOUR
SAMPLING METHOD : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY : MR SUKSAN BOONLEANG
ANALYZED BY : MISS AKSARIN BUNKONG

RECEIVED DATE : JANUARY 24, 2024
ANALYTICAL DATE : JANUARY 24-31, 2024
ISSUE DATE : JULY 11, 2024
REPORT NO. : 2024-U063192
WORK NO. : 2023-005635
ANALYSIS NO. : T24AB511-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			น้ำเสียก่อนการบำบัด T24AB511-0001	
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500 -H ⁺ B AND 1060 B	8.5 (28°C)	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	383	2.0
SUSPENDED SOLIDS ^a	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	656	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM: PART 2540 C	533	25
SETTLABLE SOLIDS ^c	mL/L	IMHOFF CONE (SM: PART 2540 F)	20.0	0.1
SULPHIDE ^b	mg/L	IODOMETRIC METHOD (SM: PART 4500-S ²⁻ F)	0.53	0.50
TOTAL KJELDAHL NITROGEN ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: PART 4500-Norg C	135	1.5
FAT, OIL AND GREASE ^a	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	35	3



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			น้ำเสียก่อนการบำบัด T24AB511-0001	
MICROBIOLOGY				
COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B AND C)	>160,000	1.8
FAECAL COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B, C AND E)	>160,000	1.8
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

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

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

^A : CUSTOMER INFORMATION

THE REASON FOR ISSUING THE NEW ANALYSIS REPORT IS TO NOT SHOW REGULATORY STANDARD.

SUBSTITUTED REPORT FOR REPORT NO. 2024-U008823, DATED FEBRUARY 2, 2024.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

ANALYSIS REPORT

CUSTOMER NAME : SINGHA PROPERTY DEVELOPMENT CO., LTD.
ADDRESS : 1788 SINGHA COMPLEX, 15TH FLOOR NEW PHETCHABURI RD. BANG KAPI HUAI KHWANG BANGKOK 10310
CONTACT INFORMATION : TEL : 08 1560 5406 e-mail : pruchaya.p@singhaestate.co.th
SAMPLING SOURCE : SINGHA COMPLEX BUILDING
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : JANUARY 24, 2024
SAMPLING TIME : 11:40 HOUR
SAMPLING METHOD : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY : MR SUKSAN BOONLEANG
ANALYZED BY : MISS AKSARIN BUNKONG

RECEIVED DATE : JANUARY 24, 2024
ANALYTICAL DATE : JANUARY 24-31, 2024
REPORT NO. : 2024-U008825
WORK NO. : 2023-005635
ANALYSIS NO. : T24AB511-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			น้ำทิ้งหลังการบำบัด T24AB511-0003		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	6.5 (29°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND** ^a	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	9.7	≤ 20	2.0
SUSPENDED SOLIDS ^a	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	72.4	≤ 30	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM: PART 2540 C	603	500*	25
SETTLEABLE SOLIDS ^c	mL/L	IMHOFF CONE (SM: PART 2540 F)	< 0.1	≤ 0.5	0.1
SULPHIDE ^b	mg/L	IODOMETRIC METHOD (SM: PART 4500-S ²⁻ F)	< 0.50	≤ 1.0	0.50
TOTAL KJELDAHL NITROGEN ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: PART 4500-Norg C	24.7	≤ 35	1.5
FAT, OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			น้ำทิ้งหลังการบำบัด T24AB511-0003		
MICROBIOLOGY					
COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221B)	35,000	-	1.8
FAECAL COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221E)	24,000	-	1.8
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

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

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

REGULATORY STANDARD : RANGE OR MAXIMUM PERMITTED VALUE FOR BUILDING EFFLUENT STANDARDS CLASS A, NOTIFICATION OF THE
MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122,
PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

500* : PERMITTED EXCESS VALUE TO TOTAL DISSOLVED SOLIDS OF ACTUAL TAP WATER USED.

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

ND : NON-DETECTABLE.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

FEBRUARY 2, 2024

ANALYSIS REPORT

CUSTOMER NAME : SINGHA PROPERTY DEVELOPMENT CO., LTD.
ADDRESS : 1788 SINGHA COMPLEX, 15TH FLOOR NEW PHETCHABURI RD. BANG KAPI HUAI KHWANG BANGKOK 10310
CONTACT INFORMATION : TEL : 08 1560 5406 e-mail : pruchaya.p@singhaestate.co.th
SAMPLING SOURCE : SINGHA COMPLEX BUILDING
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : JANUARY 24, 2024
SAMPLING TIME : 11:50 HOUR
SAMPLING METHOD : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY : MR SUKSAN BOONLEANG
ANALYZED BY : MISS AKSARIN BUNKONG

RECEIVED DATE : JANUARY 24, 2024
ANALYTICAL DATE : JANUARY 24-31, 2024
REPORT NO. : 2024-U008824
WORK NO. : 2023-005635
ANALYSIS NO. : T24AB511-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			น้ำทิ้งก่อนระบายออกสู่ภายนอกโครงการ T24AB511-0002		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	6.4 (29°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND** ^a	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	11.3	≤ 20	2.0
SUSPENDED SOLIDS ^a	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	76.3	≤ 30	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM: PART 2540 C	598	500*	25
SETTLABLE SOLIDS ^c	mL/L	IMHOFF CONE (SM: PART 2540 F)	< 0.1	≤ 0.5	0.1
SULPHIDE ^b	mg/L	IODOMETRIC METHOD (SM: PART 4500-S ²⁻ F)	< 0.50	≤ 1.0	0.50
TOTAL KJELDAHL NITROGEN ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: PART 4500-Norg C	25.3	≤ 35	1.5
FAT, OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			น้ำทิ้งก่อนระบายออกสู่ภายนอกโครงการ T24AB511-0002		
MICROBIOLOGY					
COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B)	35,000	-	1.8
FAECAL COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	35,000	-	1.8
SAMPLE CONDITION			YELLOW/TURBID BROWN		
WATER'S COLOUR/TURBID SEDIMENT					

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

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

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

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

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

REGULATORY STANDARD : RANGE OR MAXIMUM PERMITTED VALUE FOR BUILDING EFFLUENT STANDARDS CLASS A, NOTIFICATION OF THE MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122, PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

500* : PERMITTED EXCESS VALUE TO TOTAL DISSOLVED SOLIDS OF ACTUAL TAP WATER USED.

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

ND : NON-DETECTABLE.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

FEBRUARY 2, 2024

ANALYSIS REPORT

CUSTOMER NAME : SINGHA PROPERTY DEVELOPMENT CO., LTD.
ADDRESS : 1788 SINGHA COMPLEX, 15TH FLOOR NEW PHETCHABURI RD. BANG KAPI HUAI KHWANG BANGKOK 10310
CONTACT INFORMATION : TEL : 08 1560 5406 e-mail : pruchaya.p@singhaestate.co.th
SAMPLING SOURCE : SINGHA COMPLEX BUILDING
SAMPLE TYPE : WATER SUPPLY
SAMPLING DATE : JANUARY 24, 2024
SAMPLING TIME : 11:30 HOUR
SAMPLING METHOD ^c : GRAB
SAMPLING BY ^c : MR SUKSAN BOONLEANG
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM

RECEIVED DATE : JANUARY 24, 2024
ANALYTICAL DATE : JANUARY 24-26, 2024
REPORT NO. : 2024-U008826
WORK NO. : 2023-005635
ANALYSIS NO. : T24AB511-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			WATER SUPPLY T24AB511-0004	
TOTAL DISSOLVED SOLIDS ^b	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	296	25
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR -	

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

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

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

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

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

FEBRUARY 2, 2024





SINGHA
COMPLEX

ภาคผนวก ค-2

รายงานผลการติดตามตรวจสอบคุณภาพน้ำทิ้ง
เดือนกุมภาพันธ์ พ.ศ. 2567

ANALYSIS REPORT

CUSTOMER NAME : SINGHA PROPERTY DEVELOPMENT CO., LTD.
ADDRESS : 1788 SINGHA COMPLEX, 14TH FLOOR NEW PHETCHABURI RD. BANG KAPI HUAI KHWANG BANGKOK 10310
CONTACT INFORMATION : TEL : 08 1560 5406 e-mail : pruchaya.p@singhaestate.co.th
SAMPLING SOURCE : SINGHA COMPLEX BUILDING
SAMPLE TYPE : WASTEWATER
SAMPLING DATE : FEBRUARY 21, 2024
SAMPLING TIME : 13:50 HOUR
SAMPLING METHOD : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY : MR TEERAPONG SRIKAMHANG
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM

RECEIVED DATE : FEBRUARY 21, 2024
ANALYTICAL DATE : FEBRUARY 21-29, 2024
ISSUE DATE : FEBRUARY 29, 2024
REPORT NO. : 2024-U017189
WORK NO. : 2023-005635
ANALYSIS NO. : T24AD597-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			น้ำเสียก่อนการบำบัด T24AD597-0001	
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500 -H ⁺ B AND 1060 B	8.4 (30°C)	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	224	2.0
SUSPENDED SOLIDS ^a	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	312	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM: PART 2540 C	470	25
SETTLEABLE SOLIDS ^c	mL/L	IMHOFF CONE (SM: PART 2540 F)	26.0	0.1
SULPHIDE ^b	mg/L	IODOMETRIC METHOD (SM: PART 4500-S ²⁻ F)	< 0.50	0.50
TOTAL KJELDAHL NITROGEN ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: PART 4500-Norg C	113	1.5
FAT, OIL AND GREASE ^a ^a	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	11	3



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			น้ำเสียก่อนการบำบัด T24AD597-0001	
MICROBIOLOGY				
COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221B)	>160,000	1.8
FAECAL COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221E)	>160,000	1.8
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

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

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

^A : CUSTOMER INFORMATION

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

MARCH 6, 2024

ANALYSIS REPORT

CUSTOMER NAME : SINGHA PROPERTY DEVELOPMENT CO., LTD.
ADDRESS : 1788 SINGHA COMPLEX, 14TH FLOOR NEW PHETCHABURI RD. BANG KAPI HUAI KHWANG BANGKOK 10310
CONTACT INFORMATION : TEL : 08 1560 5406 e-mail : pruchaya.p@singhaestate.co.th
SAMPLING SOURCE : SINGHA COMPLEX BUILDING
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : FEBRUARY 21, 2024
SAMPLING TIME : 13:30 HOUR
SAMPLING METHOD : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY : MR TEERAPONG SRIKAMHANG
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM

RECEIVED DATE : FEBRUARY 21, 2024
ANALYTICAL DATE : FEBRUARY 21-29, 2024
ISSUE DATE : FEBRUARY 29, 2024
REPORT NO. : 2024-U017191
WORK NO. : 2023-005635
ANALYSIS NO. : T24AD597-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			น้ำทิ้งหลังการบำบัด T24AD597-0003		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	5.9 (31°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND** ^c	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	9.8	≤ 20	2.0
SUSPENDED SOLIDS ^a	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	92.2	≤ 30	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM: PART 2540 C	592	500*	25
SETTLEABLE SOLIDS ^c	mL/L	IMHOFF CONE (SM: PART 2540 F)	0.2	≤ 0.5	0.1
SULPHIDE ^b	mg/L	IODOMETRIC METHOD (SM: PART 4500-S ²⁻ F)	< 0.50	≤ 1.0	0.50
TOTAL KJELDAHL NITROGEN ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: PART 4500-Norg C	20.4	≤ 35	1.5
FAT, OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			น้ำทิ้งหลังการบำบัด T24AD597-0003		
MICROBIOLOGY					
COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221B)	160,000	-	1.8
FAECAL COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221E)	54,000	-	1.8
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

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

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

REGULATORY STANDARD : RANGE OR MAXIMUM PERMITTED VALUE FOR BUILDING EFFLUENT STANDARDS CLASS A, NOTIFICATION OF THE MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122, PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

500* : PERMITTED EXCESS VALUE TO TOTAL DISSOLVED SOLIDS OF ACTUAL TAP WATER USED.

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

ND : NON-DETECTABLE.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

MARCH 1, 2024

ANALYSIS REPORT

CUSTOMER NAME : SINGHA PROPERTY DEVELOPMENT CO., LTD.
ADDRESS : 1788 SINGHA COMPLEX, 14TH FLOOR NEW PHETCHABURI RD. BANG KAPI HUAI KHWANG BANGKOK 10310
CONTACT INFORMATION : TEL : 08 1560 5406 e-mail : pruchaya.p@singhaestate.co.th
SAMPLING SOURCE : SINGHA COMPLEX BUILDING
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : FEBRUARY 21, 2024
SAMPLING TIME : 13:20 HOUR
SAMPLING METHOD : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY : MR TEERAPONG SRIKAMHANG
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM

RECEIVED DATE : FEBRUARY 21, 2024
ANALYTICAL DATE : FEBRUARY 21-29, 2024
ISSUE DATE : FEBRUARY 29, 2024
REPORT NO. : 2024-U017190
WORK NO. : 2023-005635
ANALYSIS NO. : T24AD597-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			นำหึ่งก่อนระบายออกสู่ภายนอกโครงการ T24AD597-0002		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	6.8 (32°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND** ^c	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	10.7	≤ 20	2.0
SUSPENDED SOLIDS ^a	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	79.6	≤ 30	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM: PART 2540 C	452	500*	25
SETTLEABLE SOLIDS ^c	mL/L	IMHOFF CONE (SM: PART 2540 F)	0.2	≤ 0.5	0.1
SULPHIDE ^b	mg/L	IODOMETRIC METHOD (SM: PART 4500-S ²⁻ F)	< 0.50	≤ 1.0	0.50
TOTAL KJELDAHL NITROGEN ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: PART 4500-Norg C	213	≤ 35	1.5
FAT, OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			น้ำทิ้งก่อนระบายออกสู่ภายนอกโครงการ T24AD597-0002		
MICROBIOLOGY					
COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B)	160,000	-	1.8
FAECAL COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	92,000	-	1.8
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

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

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

REGULATORY STANDARD : RANGE OR MAXIMUM PERMITTED VALUE FOR BUILDING EFFLUENT STANDARDS CLASS A, NOTIFICATION OF THE
MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122,
PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

500* : PERMITTED EXCESS VALUE TO TOTAL DISSOLVED SOLIDS OF ACTUAL TAP WATER USED.

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

ND : NON-DETECTABLE.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

MARCH 1, 2024

ANALYSIS REPORT

CUSTOMER NAME : SINGHA PROPERTY DEVELOPMENT CO., LTD.
ADDRESS : 1788 SINGHA COMPLEX, 14TH FLOOR NEW PHETCHABURI RD. BANG KAPI HUAI KHWANG BANGKOK 10310
CONTACT INFORMATION : TEL : 08 1560 5406 e-mail : pruchaya.p@singhaestate.co.th
SAMPLING SOURCE : SINGHA COMPLEX BUILDING
SAMPLE TYPE : WATER SUPPLY
SAMPLING DATE : FEBRUARY 21, 2024
SAMPLING TIME : 13:00 HOUR
SAMPLING METHOD ^c : GRAB
SAMPLING BY ^c : MR TEERAPONG SRIKAMHANG
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM

RECEIVED DATE : FEBRUARY 21, 2024
ANALYTICAL DATE : FEBRUARY 21-28, 2024
ISSUE DATE : FEBRUARY 29, 2024
REPORT NO. : 2024-U017193
WORK NO. : 2023-005635
ANALYSIS NO. : T24AD597-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	
			WATER SUPPLY T24AD597-0004	DETECTION LIMIT
TOTAL DISSOLVED SOLIDS ^b	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	251	25
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR -	

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

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

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

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

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

MARCH 1, 2024



ภาคผนวก ค-3

รายงานผลการติดตามตรวจสอบคุณภาพน้ำทิ้ง
เดือนมีนาคม พ.ศ. 2567

ANALYSIS REPORT

CUSTOMER NAME : SINGHA PROPERTY DEVELOPMENT CO., LTD.
ADDRESS : 1788 SINGHA COMPLEX, 14TH FLOOR NEW PHETCHABURI RD. BANG KAPI HUAI KHWANG BANGKOK 10310
CONTACT INFORMATION : TEL : 08 1560 5406 e-mail : pruchaya.p@singhaestate.co.th
SAMPLING SOURCE : SINGHA COMPLEX BUILDING
SAMPLE TYPE : WASTEWATER
SAMPLING DATE : MARCH 25, 2024
SAMPLING TIME : 11:35 HOUR
SAMPLING METHOD : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY : MR TEERAPONG SRIKAMHANG
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM

RECEIVED DATE : MARCH 25, 2024
ANALYTICAL DATE : MARCH 25 - APRIL 1, 2024
ISSUE DATE : APRIL 2, 2024
REPORT NO. : 2024-U027706
WORK NO. : 2023-005635
ANALYSIS NO. : T24AG278-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			น้ำเสียก่อนการบำบัด T24AG278-0001	
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500 -H ⁺ B AND 1060 B	8.3 (31°C)	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	286	2.0
SUSPENDED SOLIDS ^a	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	1,061	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM: PART 2540 C	415	25
SETTLEABLE SOLIDS ^c	mL/L	IMHOFF CONE (SM: PART 2540 F)	10.0	0.1
SULPHIDE ^b	mg/L	IODOMETRIC METHOD (SM: PART 4500-S ²⁻ F)	< 0.50	0.50
TOTAL KJELDAHL NITROGEN ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: PART 4500-Norg C	89.0	1.5
FAT, OIL AND GREASE ^a	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	26	3



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			น้ำเสียมก่อนการบำบัด T24AG278-0001	
MICROBIOLOGY				
COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221B)	>160,000	1.8
FAECAL COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	1.8
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

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

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

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

APRIL 3, 2024

ANALYSIS REPORT

CUSTOMER NAME : SINGHA PROPERTY DEVELOPMENT CO., LTD.
ADDRESS : 1788 SINGHA COMPLEX, 14TH FLOOR NEW PHETCHABURI RD. BANG KAPI HUAI KHWANG BANGKOK 10310
CONTACT INFORMATION : TEL : 08 1560 5406 e-mail : pruchaya.p@singhaestate.co.th
SAMPLING SOURCE : SINGHA COMPLEX BUILDING
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : MARCH 25, 2024
SAMPLING TIME : 11:00 HOUR
SAMPLING METHOD : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY : MR TEERAPONG SRIKAMHANG
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM

RECEIVED DATE : MARCH 25, 2024
ANALYTICAL DATE : MARCH 25 - APRIL 1, 2024
ISSUE DATE : APRIL 2, 2024
REPORT NO. : 2024-U027711
WORK NO. : 2023-005635
ANALYSIS NO. : T24AG278-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			น้ำทิ้งหลังการบำบัด T24AG278-0003		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	6.8 (31°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND** ^c	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	24.8	≤ 20	2.0
SUSPENDED SOLIDS ^a	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	156	≤ 30	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM: PART 2540 C	486	500*	25
SETTLABLE SOLIDS ^c	mL/L	IMHOFF CONE (SM: PART 2540 F)	1.5	≤ 0.5	0.1
SULPHIDE ^b	mg/L	IODOMETRIC METHOD (SM: PART 4500-S ²⁻ F)	< 0.50	≤ 1.0	0.50
TOTAL KJELDAHL NITROGEN ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: PART 4500-Norg C	44.5	≤ 35	1.5
FAT, OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			น้ำทิ้งหลังการบำบัด T24AG278-0003		
MICROBIOLOGY					
COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B)	>1,600,000	-	1.8
FAECAL COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	54,000	-	1.8
SAMPLE CONDITION					
WATER'S COLOUR/TURBID			BROWN/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

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

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

REGULATORY STANDARD : RANGE OR MAXIMUM PERMITTED VALUE FOR BUILDING EFFLUENT STANDARDS CLASS A, NOTIFICATION OF THE MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122, PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

500* : PERMITTED EXCESS VALUE TO TOTAL DISSOLVED SOLIDS OF ACTUAL TAP WATER USED.

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

ND : NON-DETECTABLE.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

APRIL 3, 2024

ANALYSIS REPORT

CUSTOMER NAME : SINGHA PROPERTY DEVELOPMENT CO., LTD.
ADDRESS : 1788 SINGHA COMPLEX, 14TH FLOOR NEW PHETCHABURI RD. BANG KAPI HUAI KHWANG BANGKOK 10310
CONTACT INFORMATION : TEL : 08 1560 5406 e-mail : pruchaya.p@singhaestate.co.th
SAMPLING SOURCE : SINGHA COMPLEX BUILDING
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : MARCH 25, 2024
SAMPLING TIME : 11:20 HOUR
SAMPLING METHOD : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY : MR TEERAPONG SRIKAMHANG
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM

RECEIVED DATE : MARCH 25, 2024
ANALYTICAL DATE : MARCH 25 - APRIL 1, 2024
ISSUE DATE : APRIL 2, 2024
REPORT NO. : 2024-U027710
WORK NO. : 2023-005635
ANALYSIS NO. : T24AG278-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			น้ำทิ้งก่อนระบายออกสู่ภายนอกโครงการ T24AG278-0002		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	6.9 (31°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	68.2	≤ 20	2.0
SUSPENDED SOLIDS ^a	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	173	≤ 30	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM: PART 2540 C	488	500*	25
SETTLEABLE SOLIDS ^c	mL/L	IMHOFF CONE (SM: PART 2540 F)	3.5	≤ 0.5	0.1
SULPHIDE ^b	mg/L	IODOMETRIC METHOD (SM: PART 4500-S ²⁻ F)	< 0.50	≤ 1.0	0.50
TOTAL KJELDAHL NITROGEN ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: PART 4500-Norg C	45.1	≤ 35	1.5
FAT, OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			น้ำทิ้งก่อนระบายออกสู่ภายนอกโครงการ T24AG278-0002		
MICROBIOLOGY					
COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221B)	>160,000	-	1.8
FAECAL COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221E)	160,000	-	1.8
SAMPLE CONDITION					
WATER'S COLOUR/TURBID			BROWN/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

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

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

REGULATORY STANDARD : RANGE OR MAXIMUM PERMITTED VALUE FOR BUILDING EFFLUENT STANDARDS CLASS A, NOTIFICATION OF THE
MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122,
PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

500* : PERMITTED EXCESS VALUE TO TOTAL DISSOLVED SOLIDS OF ACTUAL TAP WATER USED.

ND : NON-DETECTABLE.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

APRIL 3, 2024

ANALYSIS REPORT

CUSTOMER NAME : SINGHA PROPERTY DEVELOPMENT CO., LTD.
ADDRESS : 1788 SINGHA COMPLEX, 14TH FLOOR NEW PHETCHABURI RD. BANG KAPI HUAI KHWANG BANGKOK 10310
CONTACT INFORMATION : TEL : 08 1560 5406 e-mail : pruchaya.p@singhaestate.co.th
SAMPLING SOURCE : SINGHA COMPLEX BUILDING
SAMPLE TYPE : WATER SUPPLY
SAMPLING DATE : MARCH 25, 2024
SAMPLING TIME : 10:55 HOUR
SAMPLING METHOD ^c : GRAB
SAMPLING BY ^c : MR TEERAPONG SRIKAMHANG
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM

RECEIVED DATE : MARCH 25, 2024
ANALYTICAL DATE : MARCH 25-29, 2024
ISSUE DATE : APRIL 2, 2024
REPORT NO. : 2024-U027713
WORK NO. : 2023-005635
ANALYSIS NO. : T24AG278-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			WATER SUPPLY T24AG278-0004	
TOTAL DISSOLVED SOLIDS ^b	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	213	25
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR -	

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

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

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

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

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

APRIL 3, 2024





SINGHA
COMPLEX

ภาคผนวก ค-4

รายงานผลการติดตามตรวจสอบคุณภาพน้ำทิ้ง
เดือนเมษายน พ.ศ. 2567

ANALYSIS REPORT

CUSTOMER NAME : SINGHA PROPERTY DEVELOPMENT CO., LTD.
ADDRESS : 1788 SINGHA COMPLEX, 14TH FLOOR NEW PHETCHABURI RD. BANG KAPI HUAI KHWANG BANGKOK 10310
CONTACT INFORMATION : TEL : 08 1560 5406 e-mail : pruchaya.p@singhaestate.co.th
SAMPLING SOURCE : SINGHA COMPLEX BUILDING
SAMPLE TYPE : WASTEWATER
SAMPLING DATE : APRIL 30, 2024
SAMPLING TIME : 13:00 HOUR
SAMPLING METHOD : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY : MR TEERAPONG SRIKAMHANG
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM

RECEIVED DATE : APRIL 30, 2024
ANALYTICAL DATE : APRIL 30 - MAY 8, 2024
ISSUE DATE : MAY 9, 2024
REPORT NO. : 2024-U038792
WORK NO. : 2023-005635
ANALYSIS NO. : T24AJ063-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			น้ำเสียก่อนการบำบัด T24AJ063-0001	
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500 -H ⁺ B AND 1060 B	8.3 (31°C)	-
BIOCHEMICAL OXYGEN DEMAND	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	206	2.0
SUSPENDED SOLIDS	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	230	5.0
TOTAL DISSOLVED SOLIDS	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM: PART 2540 C	604	25
SETTLEABLE SOLIDS	mL/L	IMHOFF CONE (SM: PART 2540 F)	14.0	0.1
SULPHIDE	mg/L	IODOMETRIC METHOD (SM: PART 4500-S ²⁻ F)	0.65	0.50
TOTAL KJELDAHL NITROGEN	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: PART 4500-Norg C	102	1.5
FAT, OIL AND GREASE	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	10	3
MICROBIOLOGY				
COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B)	>160,000	1.8
FAECAL COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	1.8
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			YELLOW/TURBID BROWN	

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

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR



ANALYSIS REPORT

CUSTOMER NAME : SINGHA PROPERTY DEVELOPMENT CO., LTD.
ADDRESS : 1788 SINGHA COMPLEX, 14TH FLOOR NEW PHETCHABURI RD. BANG KAPI HUAI KHWANG BANGKOK 10310
CONTACT INFORMATION : TEL : 08 1560 5406 e-mail : pruchaya.p@singhaestate.co.th
SAMPLING SOURCE : SINGHA COMPLEX BUILDING
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : APRIL 30, 2024
SAMPLING TIME : 12:40 HOUR
SAMPLING METHOD : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY : MR TEERAPONG SRIKAMHANG
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM

RECEIVED DATE : APRIL 30, 2024
ANALYTICAL DATE : APRIL 30 - MAY 8, 2024
ISSUE DATE : MAY 9, 2024
REPORT NO. : 2024-U038794
WORK NO. : 2023-005635
ANALYSIS NO. : T24AJ063-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			น้ำทิ้งหลังการบำบัด T24AJ063-0003		
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.3 (32°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	37.0	≤ 20	2.0
SUSPENDED SOLIDS	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	21.8	≤ 30	5.0
TOTAL DISSOLVED SOLIDS	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM: PART 2540 C	334	500*	25
SETTLEABLE SOLIDS	mL/L	IMHOFF CONE (SM: PART 2540 F)	< 0.1	≤ 0.5	0.1
SULPHIDE	mg/L	IODOMETRIC METHOD (SM: PART 4500-S ²⁻ F)	< 0.50	≤ 1.0	0.50
TOTAL KJELDAHL NITROGEN	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: PART 4500-Norg C	15.7	≤ 35	1.5
FAT, OIL AND GREASE	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			น้ำทิ้งหลังการบำบัด T24AJ063-0003		
MICROBIOLOGY					
COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221B)	92,000	-	1.8
FAECAL COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221E)	92,000	-	1.8
SAMPLE CONDITION					
WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR BROWN		

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

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

REGULATORY STANDARD : RANGE OR MAXIMUM PERMITTED VALUE FOR BUILDING EFFLUENT STANDARDS CLASS A, NOTIFICATION OF THE
MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122,
PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

500* : PERMITTED EXCESS VALUE TO TOTAL DISSOLVED SOLIDS OF ACTUAL TAP WATER USED.

ND : NON-DETECTABLE.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

ANALYSIS REPORT

CUSTOMER NAME : SINGHA PROPERTY DEVELOPMENT CO., LTD.
ADDRESS : 1788 SINGHA COMPLEX, 14TH FLOOR NEW PHETCHABURI RD. BANG KAPI HUAI KHWANG BANGKOK 10310
CONTACT INFORMATION : TEL : 08 1560 5406 e-mail : pruchaya.p@singhaestate.co.th
SAMPLING SOURCE : SINGHA COMPLEX BUILDING
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : APRIL 30, 2024
SAMPLING TIME : 12:30 HOUR
SAMPLING METHOD : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY : MR TEERAPONG SRIKAMHANG
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM

RECEIVED DATE : APRIL 30, 2024
ANALYTICAL DATE : APRIL 30 - MAY 8, 2024
ISSUE DATE : MAY 9, 2024
REPORT NO. : 2024-U038793
WORK NO. : 2023-005635
ANALYSIS NO. : T24AJ063-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			น้ำทิ้งก่อนระบายออก สู่ภายนอกโครงการ T24AJ063-0002		
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.1 (33°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	53.7	≤ 20	2.0
SUSPENDED SOLIDS	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	39.5	≤ 30	5.0
TOTAL DISSOLVED SOLIDS	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM: PART 2540 C	320	500*	25
SETTLEABLE SOLIDS	ml/L	IMHOFF CONE (SM: PART 2540 F)	0.2	≤ 0.5	0.1
SULPHIDE	mg/L	IODOMETRIC METHOD (SM: PART 4500-S ²⁻ F)	< 0.50	≤ 1.0	0.50
TOTAL KJELDAHL NITROGEN	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: PART 4500-Norg C	17.1	≤ 35	1.5
FAT, OIL AND GREASE	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			น้ำทิ้งก่อนระบายออกสู่ภายนอกโครงการ T24AJ063-0002		
MICROBIOLOGY					
COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B)	54,000	-	1.8
FAECAL COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	35,000	-	1.8
SAMPLE CONDITION					
WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR BROWN		

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

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

REGULATORY STANDARD : RANGE OR MAXIMUM PERMITTED VALUE FOR BUILDING EFFLUENT STANDARDS CLASS A, NOTIFICATION OF THE
MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122,
PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

500* : PERMITTED EXCESS VALUE TO TOTAL DISSOLVED SOLIDS OF ACTUAL TAP WATER USED.

ND : NON-DETECTABLE.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

ANALYSIS REPORT

CUSTOMER NAME : SINGHA PROPERTY DEVELOPMENT CO., LTD.
ADDRESS : 1788 SINGHA COMPLEX, 14TH FLOOR NEW PHETCHABURI RD. BANG KAPI HUAI KHWANG BANGKOK 10310
CONTACT INFORMATION : TEL : 08 1560 5406 e-mail : pruchaya.p@singhaestate.co.th
SAMPLING SOURCE : SINGHA COMPLEX BUILDING
SAMPLE TYPE : WATER SUPPLY
SAMPLING DATE : APRIL 30, 2024
SAMPLING TIME : 12:25 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR TEERAPONG SRIKAMHANG
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM

RECEIVED DATE : APRIL 30, 2024
ANALYTICAL DATE : APRIL 30 - MAY 8, 2024
ISSUE DATE : MAY 9, 2024
REPORT NO. : 2024-U038795
WORK NO. : 2023-005635
ANALYSIS NO. : T24AJ063-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			WATER SUPPLY T24AJ063-0004	
TOTAL DISSOLVED SOLIDS	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	271	25
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR -	

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

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR





SINGHA
COMPLEX

ภาคผนวก ค-5

รายงานผลการติดตามตรวจสอบคุณภาพน้ำทิ้ง
เดือนพฤษภาคม พ.ศ. 2567

ANALYSIS REPORT

CUSTOMER NAME : SINGHA PROPERTY DEVELOPMENT CO., LTD.
ADDRESS : 1788 SINGHA COMPLEX, 14TH FLOOR NEW PHETCHABURI RD. BANG KAPI HUAI KHWANG BANGKOK 10310
CONTACT INFORMATION : TEL : 08 1560 5406 e-mail : pruchaya.p@singhaestate.co.th
SAMPLING SOURCE : SINGHA COMPLEX BUILDING
SAMPLE TYPE : WASTEWATER
SAMPLING DATE : MAY 23, 2024
SAMPLING TIME : 14:40 HOUR
SAMPLING METHOD : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY : MR TEERAPONG SRIKAMHANG
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM

RECEIVED DATE : MAY 23, 2024
ANALYTICAL DATE : MAY 23-30, 2024
ISSUE DATE : MAY 30, 2024
REPORT NO. : 2024-U047213
WORK NO. : 2023-005635
ANALYSIS NO. : T24AK963-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			น้ำเสียก่อนการบำบัด T24AK963-0001	
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500 -H ⁺ B AND 1060 B	8.4 (30°C)	-
BIOCHEMICAL OXYGEN DEMAND	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	294	2.0
SUSPENDED SOLIDS	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	158	5.0
TOTAL DISSOLVED SOLIDS	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM: PART 2540 C	524	25
SETTLEABLE SOLIDS	mL/L	IMHOFF CONE (SM: PART 2540 F)	5.5	0.1
SULPHIDE	mg/L	IODOMETRIC METHOD (SM: PART 4500-S ²⁻ F)	< 0.50	0.50
TOTAL KJELDAHL NITROGEN	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: PART 4500-Norg C	93.5	1.5
FAT, OIL AND GREASE	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	20	3
MICROBIOLOGY				
COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B)	>160,000	1.8
FAECAL COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 E)	>160,000	1.8
SAMPLE CONDITION				
WATER'S COLOUR/TURBID			YELLOW/TURBID	
SEDIMENT			BROWN	

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

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

Piyapol S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR



ANALYSIS REPORT

CUSTOMER NAME : SINGHA PROPERTY DEVELOPMENT CO., LTD.
ADDRESS : 1788 SINGHA COMPLEX, 14TH FLOOR NEW PHETCHABURI RD. BANG KAPI HUAI KHWANG BANGKOK 10310
CONTACT INFORMATION : TEL : 08 1560 5406 e-mail : pruchaya.p@singhaestate.co.th
SAMPLING SOURCE : SINGHA COMPLEX BUILDING
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : MAY 23, 2024
SAMPLING TIME : 15:10 HOUR
SAMPLING METHOD : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY : MR TEERAPONG SRIKAMHANG
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM

RECEIVED DATE : MAY 23, 2024
ANALYTICAL DATE : MAY 23-29, 2024
ISSUE DATE : MAY 30, 2024
REPORT NO. : 2024-U047219
WORK NO. : 2023-005635
ANALYSIS NO. : T24AK963-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			น้ำทิ้งหลังการบำบัด T24AK963-0003		
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.7 (32°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	5.5	≤ 20	2.0
SUSPENDED SOLIDS	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	ND	≤ 30	5.0
TOTAL DISSOLVED SOLIDS	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM: PART 2540 C	312	500*	25
SETTLEABLE SOLIDS	mL/L	IMHOFF CONE (SM: PART 2540 F)	< 0.1	≤ 0.5	0.1
SULPHIDE	mg/L	IODOMETRIC METHOD (SM: PART 4500-S ²⁻ F)	< 0.50	≤ 1.0	0.50
TOTAL KJELDAHL NITROGEN	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: PART 4500-Norg C	9.0	≤ 35	15
FAT, OIL AND GREASE	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			น้ำทิ้งหลังการบำบัด T24AK963-0003		
MICROBIOLOGY					
COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221B)	54,000	-	1.8
FAECAL COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221E)	54,000	-	1.8
SAMPLE CONDITION					
WATER'S COLOUR/TURBID			YELLOW/CLEAR		
SEDIMENT			BROWN		

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

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

REGULATORY STANDARD : RANGE OR MAXIMUM PERMITTED VALUE FOR BUILDING EFFLUENT STANDARDS CLASS A, NOTIFICATION OF THE MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122, PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

500* : PERMITTED EXCESS VALUE TO TOTAL DISSOLVED SOLIDS OF ACTUAL TAP WATER USED.

ND : NON-DETECTABLE.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

ANALYSIS REPORT

CUSTOMER NAME : SINGHA PROPERTY DEVELOPMENT CO., LTD.
ADDRESS : 1788 SINGHA COMPLEX, 14TH FLOOR NEW PHETCHABURI RD. BANG KAPI HUAI KHWANG BANGKOK 10310
CONTACT INFORMATION : TEL : 08 1560 5406 e-mail : pruchaya.p@singhaestate.co.th
SAMPLING SOURCE : SINGHA COMPLEX BUILDING
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : MAY 23, 2024
SAMPLING TIME : 14:30 HOUR
SAMPLING METHOD : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY : MR TEERAPONG SRIKAMHANG
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM

RECEIVED DATE : MAY 23, 2024
ANALYTICAL DATE : MAY 23-29, 2024
ISSUE DATE : MAY 30, 2024
REPORT NO. : 2024-U047214
WORK NO. : 2023-005635
ANALYSIS NO. : T24AK963-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			น้ำทิ้งก่อนระบายออก สู่ภายนอกโครงการ T24AK963-0002		
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.8 (32°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	5.2	≤ 20	2.0
SUSPENDED SOLIDS	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	ND	≤ 30	5.0
TOTAL DISSOLVED SOLIDS	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM: PART 2540 C	308	500*	25
SETTLEABLE SOLIDS	mL/L	IMHOFF CONE (SM: PART 2540 F)	< 0.1	≤ 0.5	0.1
SULPHIDE	mg/L	IODOMETRIC METHOD (SM: PART 4500-S ₂ -F)	< 0.50	≤ 1.0	0.50
TOTAL KJELDAHL NITROGEN	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: PART 4500-Norg C	10.3	≤ 35	1.5
FAT, OIL AND GREASE	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			น้ำทิ้งก่อนระบายออกสู่ภายนอกโครงการ T24AK963-0002		
MICROBIOLOGY					
COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221B)	21,000	-	1.8
FAECAL COLIFORM BACTERIA	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221E)	17,000	-	1.8
SAMPLE CONDITION					
WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR BROWN		

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

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

REGULATORY STANDARD : RANGE OR MAXIMUM PERMITTED VALUE FOR BUILDING EFFLUENT STANDARDS CLASS A, NOTIFICATION OF THE
MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122,
PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

500* : PERMITTED EXCESS VALUE TO TOTAL DISSOLVED SOLIDS OF ACTUAL TAP WATER USED.

ND : NON-DETECTABLE.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

ANALYSIS REPORT

CUSTOMER NAME : SINGHA PROPERTY DEVELOPMENT CO., LTD.
ADDRESS : 1788 SINGHA COMPLEX, 14TH FLOOR NEW PHETCHABURI RD. BANG KAPI HUAI KHWANG BANGKOK 10310
CONTACT INFORMATION : TEL : 08 1560 5406 e-mail : pruchaya.p@singhaestate.co.th
SAMPLING SOURCE : SINGHA COMPLEX BUILDING
SAMPLE TYPE : WATER SUPPLY **RECEIVED DATE** : MAY 23, 2024
SAMPLING DATE : MAY 23, 2024 **ANALYTICAL DATE** : MAY 23-28, 2024
SAMPLING TIME : 15:15 HOUR **ISSUE DATE** : MAY 30, 2024
SAMPLING METHOD : GRAB **REPORT NO.** : 2024-U047221
SAMPLING BY : MR TEERAPONG SRIKAMHANG **WORK NO.** : 2023-005635
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM **ANALYSIS NO.** : T24AK963-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			WATER SUPPLY T24AK963-0004	
TOTAL DISSOLVED SOLIDS	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	280	25
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR -	

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



(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR





SINGHA
COMPLEX

ภาคผนวก ค-6

รายงานผลการติดตามตรวจสอบคุณภาพน้ำทิ้ง
เดือนมิถุนายน พ.ศ. 2567

ANALYSIS REPORT

CUSTOMER NAME	: SINGHA PROPERTY DEVELOPMENT CO., LTD.	RECEIVED DATE	: JUNE 26, 2024
ADDRESS	: 1788 SINGHA COMPLEX, 14TH FLOOR NEW PHETCHABURI RD. BANG KAPI HUAI KHWANG BANGKOK 10310	ANALYTICAL DATE	: JUNE 26 - JULY 3, 2024
CONTACT INFORMATION	: TEL : 08 1560 5406 e-mail : pruchaya.p@singhaestate.co.th	ISSUE DATE	: JULY 8, 2024
SAMPLING SOURCE	: SINGHA COMPLEX BUILDING	REPORT NO.	: 2024-U060863
SAMPLE TYPE	: WASTEWATER	WORK NO.	: 2023-005635
SAMPLING DATE	: JUNE 26, 2024	ANALYSIS NO.	: T24AO262-0001
SAMPLING TIME	: 12:40 HOUR		
SAMPLING METHOD	: GRAB, GRAB AND STERILE TECHNIQUE		
SAMPLING BY	: MR TEERAPONG SRIKAMHANG		
ANALYZED BY	: MISS AKSARIN BUNKONG		

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			น้ำเสียก่อนการบำบัด T24AO262-0001	
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500 -H ⁺ B AND 1060 B	8.1 (33°C)	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	209	2.0
SUSPENDED SOLIDS ^a	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	224	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM: PART 2540 C	536	25
SETTLEABLE SOLIDS ^c	mL/L	IMHOFF CONE (SM: PART 2540 F)	20.0	0.1
SULPHIDE ^b	mg/L	IODOMETRIC METHOD (SM: PART 4500-S ²⁻ F)	0.60	0.50
TOTAL KJELDAHL NITROGEN ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: PART 4500-Norg C	149	1.5
FAT, OIL AND GREASE ^a	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	10	3



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			น้ำเสียก่อนการบำบัด T24AO262-0001	
MICROBIOLOGY				
COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B AND C)	>160,000	1.8
FAECAL COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221 B, C AND E)	>160,000	1.8
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

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

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

^A : CUSTOMER INFORMATION

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

ANALYSIS REPORT

CUSTOMER NAME : SINGHA PROPERTY DEVELOPMENT CO., LTD.
ADDRESS : 1788 SINGHA COMPLEX, 14TH FLOOR NEW PHETCHABURI RD. BANG KAPI HUAI KHWANG BANGKOK 10310
CONTACT INFORMATION : TEL : 08 1560 5406 e-mail : pruchaya.p@singhaestate.co.th
SAMPLING SOURCE : SINGHA COMPLEX BUILDING
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : JUNE 26, 2024
SAMPLING TIME : 12:20 HOUR
SAMPLING METHOD : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY : MR TEERAPONG SRIKAMHANG
ANALYZED BY : MISS AKSARIN BUNKONG

RECEIVED DATE : JUNE 26, 2024
ANALYTICAL DATE : JUNE 26 - JULY 3, 2024
ISSUE DATE : JULY 8, 2024
REPORT NO. : 2024-U060867
WORK NO. : 2023-005635
ANALYSIS NO. : T24AO262-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			น้ำทิ้งหลังการบำบัด T24AO262-0003		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.2 (32°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	71.7	≤ 20	2.0
SUSPENDED SOLIDS ^a	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	98.2	≤ 30	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM: PART 2540 C	445	500*	25
SETTLABLE SOLIDS ^c	mL/L	IMHOFF CONE (SM: PART 2540 F)	46.0	≤ 0.5	0.1
SULPHIDE ^b	mg/L	IODOMETRIC METHOD (SM: PART 4500-S ²⁻ F)	< 0.50	≤ 1.0	0.50
TOTAL KJELDAHL NITROGEN ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: PART 4500-Norg C	69.7	≤ 35	1.5
FAT, OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			น้ำทิ้งหลังการบำบัด T24AO262-0003		
MICROBIOLOGY					
COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221B AND C)	>160,000	-	1.8
FAECAL COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221B, C AND E)	>160,000	-	1.8
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

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

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

REGULATORY STANDARD : RANGE OR MAXIMUM PERMITTED VALUE FOR BUILDING EFFLUENT STANDARDS CLASS A, NOTIFICATION OF THE
MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122,
PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

500* : PERMITTED EXCESS VALUE TO TOTAL DISSOLVED SOLIDS OF ACTUAL TAP WATER USED.

ND : NOT DETECTED.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

ANALYSIS REPORT

CUSTOMER NAME : SINGHA PROPERTY DEVELOPMENT CO., LTD.
ADDRESS : 1788 SINGHA COMPLEX, 14TH FLOOR NEW PHETCHABURI RD. BANG KAPI HUAI KHWANG BANGKOK 10310
CONTACT INFORMATION : TEL : 08 1560 5406 e-mail : pruchaya.p@singhaestate.co.th
SAMPLING SOURCE : SINGHA COMPLEX BUILDING
SAMPLE TYPE : EFFLUENT
SAMPLING DATE : JUNE 26, 2024
SAMPLING TIME : 12:30 HOUR
SAMPLING METHOD : GRAB, GRAB AND STERILE TECHNIQUE
SAMPLING BY : MR TEERAPONG SRIKAMHANG
ANALYZED BY : MISS AKSARIN BUNKONG

RECEIVED DATE : JUNE 26, 2024
ANALYTICAL DATE : JUNE 26 - JULY 3, 2024
ISSUE DATE : JULY 8, 2024
REPORT NO. : 2024-U060864
WORK NO. : 2023-005635
ANALYSIS NO. : T24AO262-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			น้ำทิ้งก่อนระบายออก สู่ภายนอกโครงการ T24AO262-0002		
pH ^a	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500-H ⁺ B AND 1060 B	7.5 (32°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND ^a	mg/L	MEMBRANE ELECTRODE METHOD (SM: PART 5210 B AND PART 4500-O G)	24.8	≤ 20	2.0
SUSPENDED SOLIDS ^a	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: PART 2540 D)	53.8	≤ 30	5.0
TOTAL DISSOLVED SOLIDS ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM: PART 2540 C	359	500*	25
SETTLABLE SOLIDS ^c	mL/L	IMHOFF CONE (SM: PART 2540 F)	14.0	≤ 0.5	0.1
SULPHIDE ^b	mg/L	IODOMETRIC METHOD (SM: PART 4500-S ²⁻ F)	< 0.50	≤ 1.0	0.50
TOTAL KJELDAHL NITROGEN ^b	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: PART 4500-Norg C	30.1	≤ 35	1.5
FAT, OIL AND GREASE ^c	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: PART 5520 B)	ND	≤ 20	3



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			น้ำทิ้งก่อนระบายออกสู่ภายนอกโครงการ T24A0262-0002		
MICROBIOLOGY					
COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221B AND C)	92,000	-	1.8
FAECAL COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: PART 9221B, C AND E)	54,000	-	1.8
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

IN-HOUSE : BASED ON STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24th EDITION, 2023.

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

REGULATORY STANDARD : RANGE OR MAXIMUM PERMITTED VALUE FOR BUILDING EFFLUENT STANDARDS CLASS A, NOTIFICATION OF THE
MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL. 122,
PART 125 D, DATED DECEMBER 29, 2005 AND VOL 139 SPECIAL PART 171 D, DATED JULY 21, 2022.

500* : PERMITTED EXCESS VALUE TO TOTAL DISSOLVED SOLIDS OF ACTUAL TAP WATER USED.

ND : NOT DETECTED.

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR

ANALYSIS REPORT

CUSTOMER NAME : SINGHA PROPERTY DEVELOPMENT CO., LTD.
ADDRESS : 1788 SINGHA COMPLEX, 14TH FLOOR NEW PHETCHABURI RD. BANG KAPI HUAI KHWANG BANGKOK 10310
CONTACT INFORMATION : TEL : 08 1560 5406 e-mail : pruchaya.p@singhaestate.co.th
SAMPLING SOURCE : SINGHA COMPLEX BUILDING
SAMPLE TYPE : WATER SUPPLY
SAMPLING DATE : JUNE 26, 2024
SAMPLING TIME : 12:15 HOUR
SAMPLING METHOD ^c : GRAB
SAMPLING BY ^c : MR TEERAPONG SRIKAMHANG
ANALYZED BY : MISS NAPAPORN KHUNNOKKHUM

RECEIVED DATE : JUNE 26, 2024
ANALYTICAL DATE : JUNE 26 - JULY 2, 2024
ISSUE DATE : JULY 4, 2024
REPORT NO. : 2024-U060870
WORK NO. : 2023-005635
ANALYSIS NO. : T24AO262-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			WATER SUPPLY T24AO262-0004	
TOTAL DISSOLVED SOLIDS ^b	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: PART 2540 C)	263	25
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR -	

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

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

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

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

Piyapat S.

(MRS PIYAPAT SUTTAMANUTWONG)
LABORATORY SUPERVISOR





SINGHA
COMPLEX

ภาคผนวก ค-7

รายงานผลการติดตามตรวจสอบคุณภาพน้ำหล่อเย็น

ANALYSIS REPORT

CUSTOMER NAME : SINGHA ESTATE PUBLIC COMPANY LIMITED
ADDRESS : 725 METROPOLIS SUKHUMVIT ROAD KHLONG TAN NUEA WATTHANA BANGKOK 10110
CONTACT INFORMATION : TEL : 08 1560 5406 e-mail : pruchaya.p@singhaestate.co.th
SAMPLING SOURCE : SINGHA COMPLEX BUILDING
SAMPLE TYPE : COOLING WATER
SAMPLING DATE : JUNE 26, 2024
SAMPLING TIME : 12:50 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR TEERAPONG SRIKAMHANG
ANALYZED BY : MISS JITSAMON NGAMKANA

RECEIVED DATE : JUNE 26, 2024
ANALYTICAL DATE : JUNE 26 - JULY 3, 2024
ISSUE DATE : JULY 16, 2024
REPORT NO. : 2024-U064576
WORK NO. : 2024-003632
ANALYSIS NO. : T24AO263-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			จุดที่นำไหลเข้ามาเดิม ในระบบ T24AO263-0001	
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500 -H* B AND 1060 B	7.5 (30°C)	-
MICROBIOLOGY				
TOTAL BACTERIA	CFU/mL	STANDARD PLATE COUNT (SM: PART 9215 B)	1.3x10 ²	1
SAMPLE CONDITION WATER'S COLOUR/TURBID SEDIMENT			COLOURLESS/CLEAR -	

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



(MISS CHAWEEVAN BOONLA)
LABORATORY SUPERVISOR



ANALYSIS REPORT

CUSTOMER NAME : SINGHA ESTATE PUBLIC COMPANY LIMITED
ADDRESS : 725 METROPOLIS SUKHUMVIT ROAD KHLONG TAN NUEA WATTHANA BANGKOK 10110
CONTACT INFORMATION : TEL : 08 1560 5406 e-mail : pruchaya.p@singhaestate.co.th
SAMPLING SOURCE : SINGHA COMPLEX BUILDING
SAMPLE TYPE : COOLING WATER
SAMPLING DATE : JUNE 26, 2024
SAMPLING TIME : 12:50 HOUR
SAMPLING METHOD * : GRAB
SAMPLING BY * : MR TEERAPONG SRIKAMHANG
ANALYZED BY : MISS ITSARIYAPORN BUATIB
RECEIVED DATE : JUNE 26, 2024
ANALYTICAL DATE : JUNE 26 - JULY 9, 2024
ISSUE DATE : JULY 16, 2024
REPORT NO. : 2024-U064981
WORK NO. : 2024-003632
ANALYSIS NO. : T24AO263-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			จุดที่น้ำไหลเข้ามาเดิม ในระบบ T24AO263-0001	
MICROBIOLOGY				
Legionella spp.	CFU/L	ISO 11731:2017-05 (E)	NOT DETECTED	100
SAMPLE CONDITION				
WATER'S COLOUR/TURBID			COLOURLESS/CLEAR	
SEDIMENT			-	

THE LABORATORY HAS BEEN ACCEPTED AS AN ACCREDITED LABORATORY COMPLYING WITH THE ISO/IEC 17025.

* : TEST METHOD ARE NOT COVERED COMPLYING WITH THE ISO/IEC 17025, VERIFIED BY OWN LABORATORY QUALITY SYSTEM.



(MISS CHAWEEWAN BOONLA)
LABORATORY SUPERVISOR



ANALYSIS REPORT

CUSTOMER NAME : SINGHA PROPERTY DEVELOPMENT CO., LTD.
ADDRESS : 1788 SINGHA COMPLEX, 14TH FLOOR NEW PHETCHABURI RD. BANG KAPI HUAI KHWANG BANGKOK 10310
CONTACT INFORMATION : TEL : 08 1560 5406 e-mail : pruchaya.p@singhaestate.co.th
SAMPLING SOURCE : SINGHA COMPLEX BUILDING
SAMPLE TYPE : COOLING WATER
SAMPLING DATE : JANUARY 29, 2024
SAMPLING TIME : 13:20 HOUR
SAMPLING METHOD : GRAB AND STERILE TECHNIQUE
SAMPLING BY : MR SUKSAN BOONLEANG
ANALYZED BY : MR PITTAPAN LAEKODD

RECEIVED DATE : JANUARY 29, 2024
ANALYTICAL DATE : JANUARY 29 - FEBRUARY 15, 2024
ISSUE DATE : JULY 24, 2024
REPORT NO. : 2024-U067662
WORK NO. : 2024-000386
ANALYSIS NO. : T24AB758-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			อ้างอิงรับน้ำ T24AB758-0001	
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500 -H ⁺ B AND 1060 B	8.5 (27°C)	-
MICROBIOLOGY				
TOTAL BACTERIA	CFU/mL	STANDARD PLATE COUNT (SM: PART 9215 B)	3.9x10 ²	1
SAMPLE CONDITION				
WATER'S COLOUR/TURBID			YELLOW/CLEAR	
SEDIMENT			-	

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

THE REASON FOR ISSUING THE NEW REPORT IS TO THE CORRECT THE SAMPLE NAME.

SUBSTITUTED REPORT FOR REPORT NO. 2024-U013442, ISSUE DATE FEBRUARY 16, 2024.



(MISS CHAWEEVAN BOONLA)
LABORATORY SUPERVISOR



ANALYSIS REPORT

CUSTOMER NAME : SINGHA PROPERTY DEVELOPMENT CO., LTD.
ADDRESS : 1788 SINGHA COMPLEX, 14TH FLOOR NEW PHETCHABURI RD. BANG KAPI HUAI KHWANG BANGKOK 10310
CONTACT INFORMATION : TEL : 08 1560 5406 e-mail : pruchaya.p@singhaestate.co.th
SAMPLING SOURCE : SINGHA COMPLEX BUILDING
SAMPLE TYPE : COOLING WATER
SAMPLING DATE : JANUARY 29, 2024
SAMPLING TIME : 13:20 HOUR
SAMPLING METHOD * : STERILE TECHNIQUE
SAMPLING BY * : MR SUKSAN BOONLEANG
ANALYZED BY : MR PITTAPAN LAEKOOD

RECEIVED DATE : JANUARY 29, 2024
ANALYTICAL DATE : JANUARY 29 - FEBRUARY 15, 2024
ISSUE DATE : JULY 24, 2024
REPORT NO. : 2024-U067663
WORK NO. : 2024-000386
ANALYSIS NO. : T24AB758-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			อ้างอิงรับน้ำ T24AB758-0001	
MICROBIOLOGY				
Legionella spp.	CFU/L	ISO 11731:2017-05 (E)	NOT DETECTED	100
SAMPLE CONDITION				
WATER'S COLOUR/TURBID			YELLOW/CLEAR	
SEDIMENT			-	

THE LABORATORY HAS BEEN ACCEPTED AS AN ACCREDITED LABORATORY COMPLYING WITH THE ISO/IEC 17025.

* : TEST METHOD ARE NOT COVERED COMPLYING WITH THE ISO/IEC 17025, VERIFIED BY OWN LABORATORY QUALITY SYSTEM.

THE REASON FOR ISSUING THE NEW REPORT IS TO THE CORRECT THE SAMPLE NAME.

SUBSTITUTED REPORT FOR REPORT NO. 2024-U013445, ISSUE DATE FEBRUARY 16, 2024.



(MISS CHAWEEWAN BOONLA)
LABORATORY SUPERVISOR



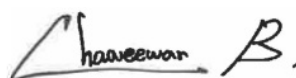
ANALYSIS REPORT

CUSTOMER NAME : SINGHA ESTATE PUBLIC COMPANY LIMITED
ADDRESS : 725 METROPOLIS SUKHUMVIT ROAD KHLONG TAN NUEA WATTHANA BANGKOK 10110
CONTACT INFORMATION : TEL : 08 1560 5406 e-mail : pruchaya.p@singhaestate.co.th
SAMPLING SOURCE : SINGHA COMPLEX BUILDING
SAMPLE TYPE : COOLING WATER
SAMPLING DATE : JUNE 26, 2024
SAMPLING TIME : 13:00 HOUR
SAMPLING METHOD : GRAB
SAMPLING BY : MR TEERAPONG SRIKAMHANG
ANALYZED BY : MISS JITSAMON NGAMKANA

RECEIVED DATE : JUNE 26, 2024
ANALYTICAL DATE : JUNE 26 - JULY 3, 2024
ISSUE DATE : JULY 16, 2024
REPORT NO. : 2024-U064577
WORK NO. : 2024-003632
ANALYSIS NO. : T24AO263-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			หอน้ำทิ้งจากหอผึ่งเย็น T24AO263-0002	
pH	-	ELECTROMETRIC METHOD (AT SITE) SM: PART 4500 -H ⁺ B AND 1060 B	8.1 (30°C)	-
MICROBIOLOGY				
TOTAL BACTERIA	CFU/mL	STANDARD PLATE COUNT (SM: PART 9215 B)	96	1
SAMPLE CONDITION				
WATER'S COLOUR/TURBID			COLOURLESS/CLEAR	
SEDIMENT			BLACK	

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



(MISS CHAWEEWAN BOONLA)
LABORATORY SUPERVISOR



ANALYSIS REPORT

CUSTOMER NAME : SINGHA ESTATE PUBLIC COMPANY LIMITED
ADDRESS : 725 METROPOLIS SUKHUMVIT ROAD KHLONG TAN NUEA WATTHANA BANGKOK 10110
CONTACT INFORMATION : TEL : 08 1560 5406 e-mail : pruchaya.p@singhaestate.co.th
SAMPLING SOURCE : SINGHA COMPLEX BUILDING
SAMPLE TYPE : COOLING WATER
SAMPLING DATE : JUNE 26, 2024
SAMPLING TIME : 13:00 HOUR
SAMPLING METHOD * : GRAB
SAMPLING BY * : MR TEERAPONG SRIKAMHANG
ANALYZED BY : MISS ITSARIYAPORN BUATIB
RECEIVED DATE : JUNE 26, 2024
ANALYTICAL DATE : JUNE 26 - JULY 9, 2024
ISSUE DATE : JULY 16, 2024
REPORT NO. : 2024-U064982
WORK NO. : 2024-003632
ANALYSIS NO. : T24AO263-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	DETECTION LIMIT
			หอน้ำทิ้งจากหอผึ่งเย็น T24A0263-0002	
MICROBIOLOGY				
Legionella spp.	CFU/L	ISO 11731:2017-05 (E)	NOT DETECTED	100
SAMPLE CONDITION				
WATER'S COLOUR/TURBID			COLOURLESS/CLEAR	
SEDIMENT			BLACK	

THE LABORATORY HAS BEEN ACCEPTED AS AN ACCREDITED LABORATORY COMPLYING WITH THE ISO/IEC 17025.

* : TEST METHOD ARE NOT COVERED COMPLYING WITH THE ISO/IEC 17025, VERIFIED BY OWN LABORATORY QUALITY SYSTEM.



(MISS CHAWEEWAN BOONLA)
LABORATORY SUPERVISOR

