

# ผลวิเคราะห์คุณภาพน้ำทิ้ง HHA1 ของโครงการ CAPE NIDHRA HOTEL



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NSC-TISI-TIS 17025  
TESTING 0287



TESTING  
No. 0063

## ANALYSIS REPORT

**CUSTOMER NAME** : KASEMKIJ COMPANY LIMITED (CAPE NIDHRA HOTEL)  
**ADDRESS** : 97/2 PETCHKASEM ROAD HUA HIN HUA HIN PRACHUAP KHIRI KHAN 77110  
**CONTACT INFORMATION** : TEL : 0 2233 8989-98 e-mail : kj-qc@kasemkij.com  
**SAMPLING SOURCE** : WASTEWATER TREATMENT PLANT OF CAPE NIDHRA HOTEL  
**SAMPLE TYPE** : EFFLUENT  
**RECEIVED DATE** : JANUARY 28, 2022  
**SAMPLING DATE** : JANUARY 27, 2022  
**ANALYTICAL DATE** : JANUARY 28 - FEBRUARY 6, 2022  
**SAMPLING TIME** : -  
**REPORT NO.** : 2022-U009171  
**SAMPLING METHOD** : -  
**WORK NO.** : 2022-000359  
**SAMPLING BY** : CUSTOMER  
**ANALYSIS NO.** : T22AB532-0001  
**ANALYZED BY** : MISS PORNPIMOL WAENTHONG

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			EFFLUENT (HHA 1) T22AB532-0001		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (SM: 4500-H <sup>+</sup> B)	6.4 (25°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>c</sup>	mg/L	AZIDE MODIFICATION METHOD (SM: 4500-O <sub>2</sub> C AND 5210 B)	5.1	≤ 30	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: 2540 D)	8.6	≤ 40	5.0
TOTAL DISSOLVED SOLIDS <sup>b</sup>	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM 2540 C	424	500*	25
SETTLABLE SOLIDS <sup>c</sup>	mL/L	IMHOFF CONE (SM: 2540 F)	< 0.1	≤ 0.5	0.1
SULPHIDE <sup>c</sup>	mg/L	IODOMETRIC METHOD (SM: 4500-S <sup>2-</sup> F)	ND	≤ 1.0	0.50
TOTAL KJELDAHL NITROGEN <sup>b</sup>	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: 4500-Norg C	5.1	≤ 35	1.5
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: 5520 B)	ND	≤ 20	3
RESIDUAL CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	DPD FERROUS TITRIMETRIC METHOD (SM: 4500-Cl F)	ND	-	0.1

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PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			EFFLUENT (HHA 1) T22AB532-0001		
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: 9221 E)	< 1.8	-	1.8
SAMPLE CONDITION					
WATER'S COLOUR/TURBID			YELLOW/CLEAR		
SEDIMENT			BROWN		

<sup>a</sup> : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

<sup>b</sup> : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

<sup>c</sup> : 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, 23<sup>rd</sup> EDITION, 2017.

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

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

500\* : PERMITTED EXCESS VALUE TO TOTAL DISSOLVED SOLIDS OF ACTUAL TAP WATER USED  
(TOTAL DISSOLVED SOLIDS STANDARD VALUE OF TAP WATER QUALITY IS 1,000 mg/L).

ND : NON-DETECTABLE.

*Piyapat S.*

(MRS PIYAPAT SUTTAMANUTWONG)  
LABORATORY SUPERVISOR

FEBRUARY 9, 2022

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2022-U009171

## ANALYSIS REPORT

**CUSTOMER NAME** : KASEMKIJ COMPANY LIMITED (CAPE NIDHRA HOTEL)  
**ADDRESS** : 97/2 PETCHKASEM ROAD HUA HIN HUA HIN PRACHUAP KHIRI KHAN 77110  
**CONTACT INFORMATION** : TEL : 0 2233 8989-98 e-mail : kj-qc@kasemkij.com  
**SAMPLING SOURCE** : WASTEWATER TREATMENT PLANT OF CAPE NIDHRA HOTEL  
**SAMPLE TYPE** : EFFLUENT  
**SAMPLING DATE** : APRIL 21, 2022  
**SAMPLING TIME** : -  
**SAMPLING METHOD** : -  
**SAMPLING BY** : CUSTOMER  
**ANALYZED BY** : MISS PORNPIMOL WAENTHONG  
**RECEIVED DATE** : APRIL 22, 2022  
**ANALYTICAL DATE** : APRIL 22-29, 2022  
**REPORT NO.** : 2022-U041600  
**WORK NO.** : 2022-002708  
**ANALYSIS NO.** : T22AH550-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			EFFLUENT (HHA 1) T22AH550-0001		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (SM: 4500-H <sup>+</sup> B)	6.6 (25°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>c</sup>	mg/L	AZIDE MODIFICATION METHOD (SM: 4500-O C AND 5210 B)	11.0	≤ 30	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: 2540 D)	15.4	≤ 40	5.0
TOTAL DISSOLVED SOLIDS <sup>b</sup>	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM 2540 C	528	500*	25
SETTLEABLE SOLIDS <sup>c</sup>	mL/L	IMHOFF CONE (SM: 2540 F)	< 0.1	≤ 0.5	0.1
RESIDUAL CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	DPD FERROUS TITRIMETRIC METHOD (SM: 4500-Cl F)	ND	-	0.1
SULPHIDE <sup>c</sup>	mg/L	IODOMETRIC METHOD (SM: 4500-S <sup>2-</sup> F)	ND	≤ 1.0	0.50
TOTAL KJELDAHL NITROGEN <sup>b</sup>	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: 4500-Norg C	8.0	≤ 35	1.5
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: 5520 B)	ND	≤ 20	3



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			EFFLUENT (HHA 1) T22AH550-0001		
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA ^ b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: 9221 E)	< 1.8	-	1.8
SAMPLE CONDITION					
WATER'S COLOUR/TURBID			YELLOW/CLEAR		
SEDIMENT			BROWN		

<sup>a</sup> : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

<sup>b</sup> : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

<sup>c</sup> : 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, 23<sup>rd</sup> EDITION, 2017.

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

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

500\* : PERMITTED EXCESS VALUE TO TOTAL DISSOLVED SOLIDS OF ACTUAL TAP WATER USED  
(TOTAL DISSOLVED SOLIDS STANDARD VALUE OF TAP WATER QUALITY IS 1,000 mg/L).

ND : NON-DETECTABLE.

<sup>a</sup> : SAMPLING ON MAY 25, 2022, ANALYSIS NO. T22AJ943-0001 (ANALYTICAL DATE : MAY 25-30, 2022).

THE REASON FOR ISSUING THE NEW REPORT IS SUBSTITUTE RESULT.

SUBSTITUTED REPORT FOR REPORT NO. 2022-U032218, DATED MAY 6, 2022.

*Piyapat S.*

(MRS PIYAPAT SUTTAMANUTWONG)  
LABORATORY SUPERVISOR

JUNE 9, 2022



# ผลวิเคราะห์คุณภาพน้ำทิ้ง HHA2 ของโครงการ CAPE NIDHRA HOTEL



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NSC-TISI-TIS 17025  
TESTING 0207



TESTING  
No. 0063

## ANALYSIS REPORT

**CUSTOMER NAME** : KASEMKIJ COMPANY LIMITED (CAPE NIDHRA HOTEL)  
**ADDRESS** : 97/2 PETCHKASEM ROAD HUA HIN HUA HIN PRACHUAP KHIRI KHAN 77110  
**CONTACT INFORMATION** : TEL : 0 2233 8989-98 e-mail : kj-qc@kasemkij.com  
**SAMPLING SOURCE** : WASTEWATER TREATMENT PLANT OF CAPE NIDHRA HOTEL  
**SAMPLE TYPE** : EFFLUENT  
**SAMPLING DATE** : JANUARY 27, 2022  
**SAMPLING TIME** : -  
**SAMPLING METHOD** : -  
**SAMPLING BY** : CUSTOMER  
**ANALYZED BY** : MISS PORNPIMOL WAENTHONG  
**RECEIVED DATE** : JANUARY 28, 2022  
**ANALYTICAL DATE** : JANUARY 28 - FEBRUARY 6, 2022  
**REPORT NO.** : 2022-U009172  
**WORK NO.** : 2022-000359  
**ANALYSIS NO.** : T22AB532-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			EFFLUENT (HHA 2) T22AB532-0002		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (SM: 4500-H <sup>+</sup> B)	5.6 (25°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>c</sup>	mg/L	AZIDE MODIFICATION METHOD (SM: 4500-O C AND 5210 B)	2.0	≤ 30	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: 2540 D)	ND	≤ 40	5.0
TOTAL DISSOLVED SOLIDS <sup>b</sup>	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM 2540 C	384	500*	25
SETTLABLE SOLIDS <sup>c</sup>	mL/L	IMHOFF CONE (SM: 2540 F)	< 0.1	≤ 0.5	0.1
SULPHIDE <sup>c</sup>	mg/L	IODOMETRIC METHOD (SM: 4500-S <sup>2-</sup> F)	ND	≤ 1.0	0.50
TOTAL KJELDAHL NITROGEN <sup>b</sup>	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: 4500-Norg C	< LOQ	≤ 35	1.5
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: 5520 B)	ND	≤ 20	3
RESIDUAL CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	DPD FERROUS TITRIMETRIC METHOD (SM: 4500-Cl F)	ND	-	0.1

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PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			EFFLUENT (HHA 2) T22AB532-0002		
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: 9221 E)	< 1.8	-	1.8
SAMPLE CONDITION					
WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR BROWN		

<sup>a</sup> : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

<sup>b</sup> : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

<sup>c</sup> : 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, 23<sup>rd</sup> EDITION, 2017.

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

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MINISTRY OF RESOURCES AND ENVIRONMENT, PUBLISHED IN THE ROYAL GOVERNMENT GAZETTE, VOL 122,  
PART 125 D, DATED DECEMBER 29, 2005.

500\* : PERMITTED EXCESS VALUE TO TOTAL DISSOLVED SOLIDS OF ACTUAL TAP WATER USED  
(TOTAL DISSOLVED SOLIDS STANDARD VALUE OF TAP WATER QUALITY IS 1,000 mg/L).

ND : NON-DETECTABLE.

< LOQ : < LEVEL OF QUANTITATION (TOTAL KJELDAHL NITROGEN  $\geq 1.5$  AND < 5.0 mg/L).

*Piyapat S.*

(MRS PIYAPAT SUTTAMANUTWONG)  
LABORATORY SUPERVISOR

FEBRUARY 9, 2022

## ANALYSIS REPORT

**CUSTOMER NAME** : KASEMKIJ COMPANY LIMITED (CAPE NIDHRA HOTEL)  
**ADDRESS** : 97/2 PETCHKASEM ROAD HUA HIN HUA HIN PRACHUAP KHIRI KHAN 77110  
**CONTACT INFORMATION** : TEL : 0 2233 8989-98 e-mail : kj-qc@kasemkij.com  
**SAMPLING SOURCE** : WASTEWATER TREATMENT PLANT OF CAPE NIDHRA HOTEL  
**SAMPLE TYPE** : EFFLUENT  
**SAMPLING DATE** : APRIL 21, 2022  
**SAMPLING TIME** : -  
**SAMPLING METHOD** : -  
**SAMPLING BY** : CUSTOMER  
**ANALYZED BY** : MISS PORNPIMOL WAENTHONG  
**RECEIVED DATE** : APRIL 22, 2022  
**ANALYTICAL DATE** : APRIL 22-29, 2022  
**REPORT NO.** : 2022-U032229  
**WORK NO.** : 2022-002708  
**ANALYSIS NO.** : T22AH550-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			EFFLUENT (HHA 2) T22AH550-0002		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (SM: 4500-H <sup>+</sup> B)	5.1 (25°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>c</sup>	mg/L	AZIDE MODIFICATION METHOD (SM: 4500-O C AND 5210 B)	2.9	≤ 30	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: 2540 D)	18.2	≤ 40	5.0
TOTAL DISSOLVED SOLIDS <sup>b</sup>	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM 2540 C	460	500*	25
SETTLABLE SOLIDS <sup>c</sup>	mL/L	IMHOFF CONE (SM: 2540 F)	< 0.1	≤ 0.5	0.1
RESIDUAL CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	DPD FERROUS TITRIMETRIC METHOD (SM: 4500-Cl F)	ND	-	0.1
SULPHIDE <sup>c</sup>	mg/L	IODOMETRIC METHOD (SM: 4500-S <sup>2-</sup> F)	ND	≤ 1.0	0.50
TOTAL KJELDAHL NITROGEN <sup>b</sup>	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: 4500-Norg C	8.7	≤ 35	1.5
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: 5520 B)	ND	≤ 20	3



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			EFFLUENT (HHA 2) T22AH550-0002		
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: 9221 E)	790	-	1.8
SAMPLE CONDITION					
WATER'S COLOUR/TURBID SEDIMENT			YELLOW/CLEAR BROWN		

<sup>a</sup> : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

<sup>b</sup> : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

<sup>c</sup> : 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, 23<sup>rd</sup> EDITION, 2017.

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

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

500\* : PERMITTED EXCESS VALUE TO TOTAL DISSOLVED SOLIDS OF ACTUAL TAP WATER USED  
(TOTAL DISSOLVED SOLIDS STANDARD VALUE OF TAP WATER QUALITY IS 1,000 mg/L).

ND : NON-DETECTABLE.

*Piyapat S.*

(MRS PIYAPAT SUTTAMANUTWONG)  
LABORATORY SUPERVISOR

MAY 6, 2022

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2022-U032229



# ผลวิเคราะห์คุณภาพน้ำทิ้ง HHA3 ของโครงการ CAPE NIDHRA HOTEL



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NSC - TISI - TIS 17025  
TESTING 0207

TESTING  
No. 0063

## ANALYSIS REPORT

<b>CUSTOMER NAME</b>	: KASEMKIJ COMPANY LIMITED (CAPE NIDHRA HOTEL)		
<b>ADDRESS</b>	: 97/2 PETCHKASEM ROAD HUA HIN HUA HIN PRACHUAP KHIRI KHAN 77110		
<b>CONTACT INFORMATION</b>	: TEL : 0 2233 8989-98 e-mail : kj-qc@kasemkij.com		
<b>SAMPLING SOURCE</b>	: WASTEWATER TREATMENT PLANT OF CAPE NIDHRA HOTEL		
<b>SAMPLE TYPE</b>	: EFFLUENT	<b>RECEIVED DATE</b>	: JANUARY 28, 2022
<b>SAMPLING DATE</b>	: JANUARY 27, 2022	<b>ANALYTICAL DATE</b>	: JANUARY 28 - FEBRUARY 6, 2022
<b>SAMPLING TIME</b>	: -	<b>REPORT NO.</b>	: 2022-U014581
<b>SAMPLING METHOD</b>	: -	<b>WORK NO.</b>	: 2022-000359
<b>SAMPLING BY</b>	: CUSTOMER	<b>ANALYSIS NO.</b>	: T22AB532-0003
<b>ANALYZED BY</b>	: MISS PORNPIMOL WAENTHONG		

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			EFFLUENT (HHA 3) T22AB532-0003		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (SM: 4500-H <sup>+</sup> B)	7.1 (25°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a c</sup>	mg/L	AZIDE MODIFICATION METHOD (SM: 4500-O C AND 5210 B)	ND	≤ 30	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: 2540 D)	25.0	≤ 40	5.0
TOTAL DISSOLVED SOLIDS <sup>b</sup>	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM 2540 C	390	500*	25
SETTLABLE SOLIDS <sup>c</sup>	mL/L	IMHOFF CONE (SM: 2540 F)	< 0.1	≤ 0.5	0.1
SULPHIDE <sup>c</sup>	mg/L	IODOMETRIC METHOD (SM: 4500-S <sup>2-</sup> F)	ND	≤ 1.0	0.50
TOTAL KJELDAHL NITROGEN <sup>b</sup>	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: 4500-Norg C	29.4	≤ 35	1.5
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: 5520 B)	ND	≤ 20	3
RESIDUAL CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	DPD FERROUS TITRIMETRIC METHOD (SM: 4500-Cl F)	ND	-	0.1

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PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			EFFLUENT (HHA 3) T22AB532-0003		
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: 9221E)	< 1.8	-	1.8
SAMPLE CONDITION					
WATER'S COLOUR/TURBID			YELLOW/TURBID		
SEDIMENT			YELLOW		

<sup>a</sup> : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

<sup>b</sup> : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

<sup>c</sup> : 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, 23<sup>RD</sup> EDITION, 2017.

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>RD</sup> EDITION, 2017.

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

500\* : PERMITTED EXCESS VALUE TO TOTAL DISSOLVED SOLIDS OF ACTUAL TAP WATER USED  
(TOTAL DISSOLVED SOLIDS STANDARD VALUE OF TAP WATER QUALITY IS 1,000 mg/L).

ND : NON-DETECTABLE.

<sup>A</sup> : SAMPLING ON FEBRUARY 17, 2022, ANALYSIS NO. T22AC842-0001 (ANALYTICAL DATE : FEBRUARY 17-23, 2022)

SUBSTITUTED REPORT FOR REPORT NO.2022-U009173, DATED FEBRUARY 9, 2022.

*Piyapat S.*

(MRS PIYAPAT SUTTAMANUTWONG)  
LABORATORY SUPERVISOR

MARCH 2, 2022

## ANALYSIS REPORT

**CUSTOMER NAME** : KASEMKIJ COMPANY LIMITED (CAPE NIDHRA HOTEL)  
**ADDRESS** : 97/2 PETCHKASEM ROAD HUA HIN HUA HIN PRACHUAP KHIRI KHAN 77110  
**CONTACT INFORMATION** : TEL : 0 2233 8989-98 e-mail : kj-qc@kasemkij.com  
**SAMPLING SOURCE** : WASTEWATER TREATMENT PLANT OF CAPE NIDHRA HOTEL  
**SAMPLE TYPE** : EFFLUENT  
**SAMPLING DATE** : APRIL 21, 2022  
**SAMPLING TIME** : -  
**SAMPLING METHOD** : -  
**SAMPLING BY** : CUSTOMER  
**ANALYZED BY** : MISS PORNPIMOL WAENTHONG

**RECEIVED DATE** : APRIL 22, 2022  
**ANALYTICAL DATE** : APRIL 22-29, 2022  
**REPORT NO.** : 2022-U041603  
**WORK NO.** : 2022-002708  
**ANALYSIS NO.** : T22AH550-0003

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			EFFLUENT (HHA 3) T22AH550-0003		
pH <sup>a</sup>	-	ELECTROMETRIC METHOD (SM: 4500-H <sup>+</sup> B)	6.9 (25°C)	5-9	-
BIOCHEMICAL OXYGEN DEMAND <sup>a c</sup>	mg/L	AZIDE MODIFICATION METHOD (SM: 4500-O C AND 5210 B)	ND	≤ 30	2.0
SUSPENDED SOLIDS <sup>a</sup>	mg/L	SUSPENDED SOLIDS DRIED AT 103-105 °C (SM: 2540 D)	34.7	≤ 40	5.0
TOTAL DISSOLVED SOLIDS <sup>b</sup>	mg/L	IN-HOUSE METHOD: UAE.TP.WAO.007 (TOTAL DISSOLVED SOLIDS DRIED AT 103-105 °C); SM 2540 C	422	500*	25
SETTLABLE SOLIDS <sup>c</sup>	mL/L	IMHOFF CONE (SM: 2540 F)	< 0.1	≤ 0.5	0.1
RESIDUAL CHLORINE <sup>c</sup>	mg/L Cl <sub>2</sub>	DPD FERROUS TITRIMETRIC METHOD (SM: 4500-Cl F)	ND	-	0.1
SULPHIDE <sup>c</sup>	mg/L	IODOMETRIC METHOD (SM: 4500-S <sup>2-</sup> F)	ND	≤ 1.0	0.50
TOTAL KJELDAHL NITROGEN <sup>b</sup>	mg/L	IN-HOUSE METHOD: UAE.TP.WAS.001 (KJELDAHL METHOD); SM: 4500-Norg C	28.2	≤ 35	15
FAT, OIL AND GREASE <sup>a</sup>	mg/L	LIQUID-LIQUID, PARTITION-GRAVIMETRIC METHOD (SM: 5520 B)	ND	≤ 20	3



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			EFFLUENT (HHA 3) T22AH550-0003		
MICROBIOLOGY					
FAECAL COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: 9221E)	1,700	-	18
SAMPLE CONDITION					
WATER'S COLOUR/TURBID			YELLOW/TURBID		
SEDIMENT			BROWN		

<sup>a</sup> : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

<sup>b</sup> : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

<sup>c</sup> : 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, 23<sup>rd</sup> EDITION, 2017.

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

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

500\* : PERMITTED EXCESS VALUE TO TOTAL DISSOLVED SOLIDS OF ACTUAL TAP WATER USED  
(TOTAL DISSOLVED SOLIDS STANDARD VALUE OF TAP WATER QUALITY IS 1,000 mg/L).

ND : NON-DETECTABLE.

<sup>A</sup> : SAMPLING ON MAY 25, 2022, ANALYSIS NO. T22AJ943-0002 (ANALYTICAL DATE : MAY 25-30, 2022).

THE REASON FOR ISSUING THE NEW REPORT IS SUBSTITUTE RESULT.

SUBSTITUTED REPORT FOR REPORT NO. 2022-U032232, DATED MAY 6, 2022.

*Piyapat S.*

(MRS PIYAPAT SUTTAMANUTWONG)  
LABORATORY SUPERVISOR

JUNE 9, 2022



# ผลวิเคราะห์คุณภาพน้ำประปา ของโครงการ CAPE NIDHRA HOTEL



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TESTING  
No.0063

## ANALYSIS REPORT

**CUSTOMER NAME** : KASEMKIJ COMPANY LIMITED (CAPE NIDHRA HOTEL)  
**ADDRESS** : 97/2 PETCHKASEM ROAD HUA HIN HUA HIN PRACHUAP KHIRI KHAN 77110  
**CONTACT INFORMATION** : TEL : 0 2233 8989-98 e-mail : kj-qc@kasemkij.com  
**SAMPLING SOURCE** : CAPE NIDHRA HOTEL  
**SAMPLE TYPE** : WATER SUPPLY  
**SAMPLING DATE** : JANUARY 27, 2022  
**SAMPLING TIME** : -  
**SAMPLING METHOD** : -  
**SAMPLING BY** : CUSTOMER  
**ANALYZED BY** : MISS PORNPIMOL WAENTHONG

**RECEIVED DATE** : JANUARY 28, 2022  
**ANALYTICAL DATE** : JANUARY 28 - FEBRUARY 1, 2022  
**REPORT NO.** : 2022-U009174  
**WORK NO.** : 2022-000359  
**ANALYSIS NO.** : T22AB532-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			WATER SUPPLY T22AB532-0004		
TOTAL DISSOLVED SOLIDS <sup>b</sup>	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: 2540 C)	159	≤ 600	25
<b>SAMPLE CONDITION</b>					
WATER'S COLOUR/TURBID			COLOURLESS/CLEAR		
SEDIMENT					

<sup>a</sup> : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

<sup>b</sup> : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

<sup>c</sup> : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

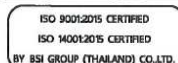
SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 23<sup>rd</sup> EDITION, 2017.

REGULATORY STANDARD : WATER SUPPLY STANDARDS, NOTIFICATION OF THE PROVINCIAL WATERWORKS AUTHORITY FOLLOW AS WORLD HEALTH ORGANIZATION (WHO) GUIDELINE VALUE, B.E. 2554 (2011).

*Piyapat S.*

(MRS PIYAPAT SUTTAMANUTWONG)  
LABORATORY SUPERVISOR

FEBRUARY 9, 2022



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## ANALYSIS REPORT

**CUSTOMER NAME** : KASEMKIJ COMPANY LIMITED (CAPE NIDHRA HOTEL)  
**ADDRESS** : 97/2 PETCHKASEM ROAD HUA HIN HUA HIN PRACHUAP KHIRI KHAN 77110  
**CONTACT INFORMATION** : TEL : 0 2233 8989-98 e-mail : kj-qc@kasemkij.com  
**SAMPLING SOURCE** : CAPE NIDHRA HOTEL  
**SAMPLE TYPE** : WATER SUPPLY  
**SAMPLING DATE** : APRIL 21, 2022  
**SAMPLING TIME** : -  
**SAMPLING METHOD** : -  
**SAMPLING BY** : CUSTOMER  
**ANALYZED BY** : MISS PORNPIMOL WAENTHONG  
**RECEIVED DATE** : APRIL 22, 2022  
**ANALYTICAL DATE** : APRIL 22-28, 2022  
**REPORT NO.** : 2022-U032234  
**WORK NO.** : 2022-002708  
**ANALYSIS NO.** : T22AH550-0004

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			WATER SUPPLY T22AH550-0004		
TOTAL DISSOLVED SOLIDS <sup>b</sup>	mg/L	TOTAL DISSOLVED SOLIDS DRIED AT 180 °C (SM: 2540 C)	166	≤ 600	25
<b>SAMPLE CONDITION</b>					
WATER'S COLOUR/TURBID			COLOURLESS/CLEAR		
SEDIMENT			YELLOW		

<sup>a</sup> : ISO/IEC 17025 ACCREDITED BY THAI INDUSTRIAL STANDARDS INSTITUTE (TISI)

<sup>b</sup> : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF SCIENCE SERVICE (DSS)

<sup>c</sup> : VERIFIED BY OWN LABORATORY QUALITY SYSTEM, BUT STILL NOT ACCREDITED

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

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*Piyapat S.*

(MRS PIYAPAT SUTTAMANUTWONG)  
LABORATORY SUPERVISOR

MAY 6, 2022

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