

ผลวิเคราะห์คุณภาพน้ำสระว่ายน้ำ โครงการ โรงแรม แคนทารี บ้านฉาง



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Ref. No. W687/01/22

Report No. 2201/450

B-Quo-2738/2021

Swimming Pool Water Quality Analysis Report

Project : Kantary Banchang
Client Name : Kasemkij Co., Ltd.
Sampling by : Kasemkij Co., Ltd.

Sampling Date : 19 January 2022
Date Received : 20 January 2022
Date of Analysis : 20-26 January 2022
Date Reported : 28 January 2022

Parameter	Analytical Method	Swimming Pool	Standard
Total Coliform Bacteria (MPN/100 mL)	Multiple-Tube Fermentation Technique (9221 B.)	<1.1	Less than 10
Fecal Coliform Bacteria (MPN/100 mL)	Multiple-Tube Fermentation Technique (9221 E.)	None	None

Remark:

Sample Characteristics: Clear

Detection Limit: Fecal Coliform Bacteria <1.1 MPN/100 mL

Standard = Regulation to swimming pool business operations or other similar activities, Recommendation of Public Health Committee No.1, B.E. 2550

Method = Based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017.

Reported results refer to submitted samples only.

Do not copy partial of this analysis report without official approval.

(Salaleewan Moolwongsri)

Scientist

28 / 01 / 22

(Jarinee Nunthavisut)

Laboratory Manager

28 / 01 / 22



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Ref. No. W113/02/22

Report No. 2202/115

B-Quo-0106/2022

Swimming Pool Water Quality Analysis Report

Project : Kantary Banchang

Sampling Date : 2 February 2022

Client Name : Kasemkij Co., Ltd.

Date Received : 3 February 2022

Sampling by : Kasemkij Co., Ltd.

Date of Analysis : 3-10 February 2022

Date Reported : 14 February 2022

Parameter	Analytical Method	Swimming Pool	Standard
Total Coliform Bacteria (MPN/100 mL)	Multiple-Tube Fermentation Technique (9221 B.)	<1.1	Less than 10
Fecal Coliform Bacteria (MPN/100 mL)	Multiple-Tube Fermentation Technique (9221 E.)	None	None

Remark:

Sample Characteristics: Clear

Detection Limit: Fecal Coliform Bacteria <1.1 MPN/100 mL

Standard = Regulation to swimming pool business operations or other similar activities, Recommendation of Public Health Committee No.1, B.E. 2550

Method = Based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017.

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(Salaleewan Moolwongsri)

Scientist

14 / 02 / 22

(Jarinee Nunthavisut)

Laboratory Manager

14 / 02 / 22



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Ref. No. W097/03/22

Report No. 2203/249

B-Quo-0372/2022

Swimming Pool Water Quality Analysis Report

Project : Kantary Banchang
Client Name : Kasemkij Co., Ltd.
Sampling by : Kasemkij Co., Ltd.

Sampling Date : 2 March 2022
Date Received : 3 March 2022
Date of Analysis : 3-10 March 2022
Date Reported : 14 March 2022

Parameter	Analytical Method	Swimming Pool	Standard
Total Coliform Bacteria (MPN/100 mL)	Multiple-Tube Fermentation Technique (9221 B.)	<1.1	Less than 10
Fecal Coliform Bacteria (MPN/100 mL)	Multiple-Tube Fermentation Technique (9221 E.)	None	None

Remark:

Sample Characteristics: Clear

Detection Limit: Fecal Coliform Bacteria <1.1 MPN/100 mL

Standard = Regulation to swimming pool business operations or other similar activities, Recommendation of Public Health Committee No.1, B.E. 2550

Method = Based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017.

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(Salaleewan Moolwongsri)

Scientist

14 / 03 / 22

(Jarinee Nunthavisut)

Laboratory Manager

14 / 3 / 22



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Ref. No. W372/04/22

Report No. 2204/279

B-Quo-0630/2022

Swimming Pool Water Quality Analysis Report

Project : Kantary Banchang
Client Name : Kasemkij Co., Ltd.
Sampling by : Kasemkij Co., Ltd.

Sampling Date : 7 April 2022
Date Received : 8 April 2022
Date of Analysis : 8-20 April 2022
Date Reported : 22 April 2022

Parameter	Analytical Method	Swimming Pool	Standard
Total Coliform Bacteria (MPN/100 mL)	Multiple-Tube Fermentation Technique (9221 B.)	<1.1	Less than 10
Fecal Coliform Bacteria (MPN/100 mL)	Multiple-Tube Fermentation Technique (9221 E.)	None	None

Remark:

Sample Characteristics: Clear

Detection Limit: Fecal Coliform Bacteria <1.1 MPN/100 mL

Standard = Regulation to swimming pool business operations or other similar activities, Recommendation of Public Health Committee No.1, B.E. 2550

Method = Based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017.

Reported results refer to submitted samples only.

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(Salaleewan Moolwongsri)

Laboratory Operator

22 / 04 / 22

(Jarinee Nunthavisut)

Laboratory Manager

22 / 4 / 22

ANALYSIS REPORT

CUSTOMER NAME : KASEMKIJ COMPANY LIMITED (KANTARY BANCHANG HOTEL)
ADDRESS : 91, 91/1 MOO 3 PHLA BANCHANG RAYONG 21130
CONTACT INFORMATION : TEL : 0 2233 8989-98 e-mail : kj-qc@kasemkij.com
SAMPLING SOURCE : -
SAMPLE TYPE : WATER SAMPLE FROM SWIMMING POOL
SAMPLING DATE : MAY 4, 2022
SAMPLING TIME : -
SAMPLING METHOD : -
SAMPLING BY : CUSTOMER
ANALYZED BY : MISS ITSARIYAPORN BUATIB

RECEIVED DATE : MAY 6, 2022
ANALYTICAL DATE : MAY 6-20, 2022
REPORT NO. : 2022-U041988
WORK NO. : 2022-003090
ANALYSIS NO. : T22AI451-0001

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			SWIMMING POOL T22AI451-0001		
pH ^a	-	ELECTROMETRIC METHOD AT SITE (SM:4500-H ⁺ B)	7.6 (25°C)	7.2-7.6*	-
TOTAL CHLORINE ^c	mg/L Cl ₂	DPD FERROUS TITRIMETRIC METHOD (SM: 4500-Cl F)	0.2	-	0.1
AMMONIA ^c	mg/L NH ₃	PHENATE METHOD (SM: 4500-NH ₃ F)	1.13	-	0.05
TOTAL HARDNESS ^c	mg/L as CaCO ₃	EDTA TITRIMETRIC METHOD (SM: 2340 C)	321	-	4.0
NITRATE ^c	mg/L NO ₃ ⁻	CADMIUM REDUCTION METHOD (SM: 4500-NO ₃ E)	1.15	-	0.09
CHLORIDE ^c	mg/L Cl ⁻	ARGENTOMETRIC METHOD (SM: 4500-Cl ⁻ B)	281	-	2.0
TOTAL ALKALINITY ^{a,c}	mg/L as CaCO ₃	TITRATION METHOD (SM : 2320 B)	57.8	-	-
FREE CHLORINE ^{a,c}	mg/L Cl ₂	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	1.1	1.0-3.0*	0.1
CYANURIC ACID ^c	mg/L	TURBIDIMETRIC METHOD	35	30-150*	1
MICROBIOLOGY					
COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: 9221 B)	< 1.1	< 10	1.1
FAECAL COLIFORM BACTERIA ^b	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: 9221 E)	< 1.1	NONE**	1.1
<i>E. coli</i> ^b	/100 mL	FLUOROGENIC SUBSTRATE TEST (SM: 9221 D AND F)	ABSENCE	ABSENCE	-



PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT	REGULATORY STANDARD	DETECTION LIMIT
			SWIMMING POOL T22AI451-0001		
<i>Pseudomonas aeruginosa</i> ^c	/100 mL	MEMBRANE FILTER TECHNIQUE (ISO 16266)	NOT DETECTED	1/	-
<i>Staphylococcus aureus</i> ^c	/100 mL	MEMBRANE FILTER TECHNIQUE (SM: 9213 B)	NOT DETECTED	1/	-
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.

REGULATORY STANDARD : BANGKOK METROPOLITAN REGULATIONS FOR THE BUSINESS DISTRICTIONAL TO HEALTH, B.E. 2530 (1987).

* : NATIONAL SPA AND POOL INSTITUTE (NSPI).

** : RECOMMENDATIONS OF PUBLIC HEALTH COMMITTEE NO. 1/2550; CONTROL OF SWIMMING POOLS BUSINESSES OR OTHER SIMILAR BUSINESSES.

1/ : DISEASE-CAUSING BACTERIA IS NOT DETECTED.

ND : NON-DETECTABLE.

^A : RECEIVED ON MAY 27, 2022, ANALYSIS NO. T22AK156-0001 (ANALYTICAL DATE : MAY 27-31, 2022).

THE REASON FOR ISSUING THE NEW REPORT IS SUBSTITUTE RESULT.

SUBSTITUTED REPORT FOR REPORT NO. 2022-U037459, DATED MAY 24, 2022.

Benjawan V.

(MISS BENJAWAN VIRIYOTHAI)
LABORATORY SUPERVISOR

JUNE 8, 2022

ISO 9001:2015 CERTIFIED
ISO 14001:2015 CERTIFIED
BY BSI GROUP (THAILAND) CO., LTD.

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• REPORTED ANALYSIS REFERS TO SUBMITTED SAMPLE ONLY.

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2022-U041988



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Ref. No. W038/06/22

Report No. 2206/206

B-Quo-1173/2022

Swimming Pool Water Quality Analysis Report

Project : Kantary Banchang
Client Name : Kasemkij Co., Ltd.
Sampling by : Kasemkij Co., Ltd.

Sampling Date : 1 June 2022
Date Received : 2 June 2022
Date of Analysis : 2-10 June 2022
Date Reported : 13 June 2022

Parameter	Analytical Method	Swimming Pool	Standard
Total Coliform Bacteria (MPN/100 mL)	Multiple-Tube Fermentation Technique (9221 B.)	<1.1	Less than 10
Fecal Coliform Bacteria (MPN/100 mL)	Multiple-Tube Fermentation Technique (9221 E.)	None	None

Remark:

Sample Characteristics: Clear

Detection Limit: Fecal Coliform Bacteria <1.1 MPN/100 mL

Standard = Regulation to swimming pool business operations or other similar activities, Recommendation of Public Health Committee No.1, B.E. 2550

Method = Based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 23rd Edition, 2017.

Reported results refer to submitted samples only.

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(Sukanda Phaytaisong)

Laboratory Operator
13 / 06 / 22



(Thanutporn Numtrakulpattana)

Laboratory Supervisor
13 / 06 / 22