



Analysis / Test Report

TESTING
No.0166

Client : Bangkok Phuket Hospital Co., Ltd.
2/1, Hongyok Utis Road, Taladyai, Muang, Phuket Thailand 83000

P/O :

Project Name : Water Testing : BPK

Project Location :

Lot ID: 2567719

Date Received : Aug 06, 2025

Date Reported : Aug 22, 2025

Report Number : 3389081-1

Page 1 of 1

Sample Number	2567719-9
Sampled Date	Aug 05, 2025 12:30 PM
Sample Description	น้ำอ่างล้างตา - จุดล้างตัวฉุกเฉิน
Location	จุดล้างตาล้างตัว - จุดล้างตัวฉุกเฉิน
Date Analysis Commenced	Aug 06, 2025
Condition of Sample	Contained in three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Microbiological Testing							
<i>Escherichia coli</i>	MPN/100mL	-	-	<1.1	<1.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 9221 B, F	Songkhla
^[A] <i>Legionella spp.</i>	CFU/L	-	-	<1	No Standard	ISO 11731 (2017)	Bangkok
Total Coliform	MPN/100mL	-	-	<1.1	<1.1	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 9221 B	Songkhla

Guideline : เกณฑ์คุณภาพน้ำประปาดื่มได้ ประกาศ กรมอนามัย พ.ศ. 2563

Note : Microbiological Testing Result <1 mean Bacteria not found in agar plate.

Sampling By : Yuttapong Rattana , Sakkarin Panpheng

Remark :

- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- [A] Analysis conducted by ALS Laboratory Group (Thailand) Co.,Ltd. Bangkok Branch, DMSc Accreditation No. 1031/47.
- Sampling is not included in scope of accreditation ISO/IEC 17025

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Approved by

Chompoonuch F.

Chompoonuch Funtha
Supervisor

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2/1, Hongyok Utis Road, Taladyai, Muang, Phuket Thailand 83000

P/O :

Project Name : Water Testing : BPK

Project Location :

Lot ID: 2567719

Date Received : Aug 06, 2025

Date Reported : Aug 23, 2025

Report Number : 3389095-1

Page 1 of 2

Sample Number	2567719-23
Sampled Date	Aug 05, 2025 10:40 AM
Sample Description	น้ำดื่มขวดเขียวในระบบ Cooling tower
Location	น้ำดื่มขวดเขียวในระบบ Cooling tower
Date Analysis Commenced	Aug 06, 2025
Condition of Sample	Contained in five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	Not Detected	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Songkhla
Microbiological Testing							
<i>Legionella spp. *</i>	CFU/L	-	-	Not Detected**	Not Detected (1)	ISO 11731 (2017)	Bangkok
Water Testing							
Calcium Hardness as CaCO ₃ *	mg/L	-	1	<1	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3500-Ca (B)	Songkhla
Chloride as Cl	mg/L	0.06	0.2	28.2	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4110 B	Bangkok
Conductivity *	micromhos/cm	-	0.5	252	≤3000	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2510 B	Songkhla
pH at 25 degree C		-	-	7.4	7-9	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Songkhla
Phosphate as P *	mg/L	0.15	0.5	Not Detected	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4110 B	Bangkok
Silica as SiO ₂ *	mg/L	0.007	0.02	20.0	≤120	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-SiO ₂ (D)	Bangkok
Total Alkalinity as CaCO ₃ *	mg/L	-	1	24	≤1000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B	Songkhla

Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. The report shall not be reproduced except in full without the written approval of the laboratory.

Approved by

Ananta B.

Ananta Boonphet
Scientist (2)

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P/O :

Project Name : Water Testing : BPK

Project Location :

Lot ID: 2567719

Date Received : Aug 06, 2025

Date Reported : Aug 23, 2025

Report Number : 3389095-1

Page 2 of 2

Sample Number	2567719-23						
Sampled Date	Aug 05, 2025 10:40 AM						
Sample Description	น้ำดื่มขดเขยในระบบ Cooling tower						
Location	น้ำดื่มขดเขยในระบบ Cooling tower						
Date Analysis Commenced	Aug 06, 2025						
Condition of Sample	Contained in five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	168	≤2000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Songkhla
Total Hardness as CaCO ₃	mg/L	-	1	<1	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2340 C	Songkhla

Guideline : หนังสือการปรุงแต่งคุณภาพน้ำ มาตรฐานน้ำใน Cooling Tower ดร.มันสิน ตันกุลเวศน์
(1) ประกาศกรมอนามัย พ.ศ. 2544 เรื่องข้อปฏิบัติการควบคุมเชื้อลิจิโอเนลลา ในหอฝิ่งเย็นของอาคารในประเทศไทย

Note : ** Not Detected mean Bacteria not found in agar plate.

Sampling By : Yuttapong Rattana , Sakkarin Panpheng

Remark :

- LOD : Limit of Detection
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Project Name : Water Testing : BPK

Project Location :

Lot ID: 2567719

Date Received : Aug 06, 2025

Date Reported : Aug 23, 2025

Report Number : 3389096-1

Page 1 of 2

Sample Number	2567719-24
Sampled Date	Aug 05, 2025 10:30 AM
Sample Description	น้ำในถาด Cooling tower
Location	Cooling tower
Date Analysis Commenced	Aug 06, 2025
Condition of Sample	Contained in five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Metals Testing							
Iron	mg/L	0.003	0.005	0.04	≤1.0	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F	Songkhla
Microbiological Testing							
<i>Legionella spp.</i> *	CFU/L	-	-	Not Detected**	Not Detected (1)	ISO 11731 (2017)	Bangkok
Water Testing							
Calcium Hardness as CaCO ₃ *	mg/L	-	1	12	No Standard	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3500-Ca (B)	Songkhla
Chloride as Cl	mg/L	0.06	0.2	191	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4110 B	Bangkok
Conductivity *	micromhos/cm	-	0.5	1421	≤3000	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2510 B	Songkhla
pH at 25 degree C		-	-	8.6	7-9	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - H (B)	Songkhla
Phosphate as P *	mg/L	0.15	0.5	Not Detected	≤20	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4110 B	Bangkok
Silica as SiO ₂ *	mg/L	0.007	0.02	98.3	≤120	Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-SiO ₂ (D)	Bangkok
Total Alkalinity as CaCO ₃ *	mg/L	-	1	138	≤1000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B	Songkhla

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Sample Number	2567719-24						
Sampled Date	Aug 05, 2025 10:30 AM						
Sample Description	น้ำในถาด Cooling tower						
Location	Cooling tower						
Date Analysis Commenced	Aug 06, 2025						
Condition of Sample	Contained in five plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA)						

Analyte	Unit	LOD	LOQ (LOR)	Result	Guideline / Specification	Method	Testing Location
Water Testing							
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	951	≤2000	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C	Songkhla
Total Hardness as CaCO ₃	mg/L	-	1	16	≤300	Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2340 C	Songkhla

Guideline : หนังสือการปรุงแต่งคุณภาพน้ำ มาตรฐานน้ำใน Cooling Tower ดร.มันสิน ตัณฑุลเวศน์
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Note : ** Not Detected mean Bacteria not found in agar plate.

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