



Accreditation No. 1031/47

## Analysis / Test Report

**Client** : Bangkok Phuket Hospital Co., Ltd.  
2/1, Hongyok Utis Road, Taladyai, Muang, Phuket Thailand 83000  
**P/O** : 005-4304217105  
**Project Name** : Water Testing : BPK  
**Project Location** :

**Lot ID: 2173238**

Date Received : Jul 07, 2021

Date Reported : Jul 23, 2021

Report Number : 2022101-1

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**Sample Number** 2173238-1  
**Sampled Date** Jul 06, 2021 11:07 AM  
**Sample Description** น้ำในถาด Cooling Tower  
**Location** Cooling Tower  
**Date Analysis Commenced** Jul 07, 2021  
**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
<b>Metals Testing</b>							
Iron	mg/L	0.0005	0.001	0.04	≤1.0	Based on APHA (2017), 3125	Bangkok
<b>Microbiological Testing</b>							
<i>Legionella spp.</i> *	CFU/L	-	-	Not Detected**	Not Detected (1)	ISO 11731 (2017)	Bangkok
<b>Water Testing</b>							
Calcium Hardness as CaCO <sub>3</sub> *	mg/L	-	1	256	No Standard	Based on APHA (2017), 3500-Ca (B)	Bangkok
Chloride as Cl	mg/L	0.06	0.2	187	≤300	APHA (2017), 4110 B	Bangkok
Conductivity at 25 degree C *	micromhos/cm	-	0.5	1395	≤3000	Based on APHA (2017), 2510 B	Bangkok
pH at 25 degree C		-	-	8.1	7-9	APHA (2017), 4500-H(B)	Bangkok
Phosphate as P *	mg/L	0.15	0.5	Not Detected	≤20	APHA (2017), 4110 B	Bangkok
Silica as SiO <sub>2</sub> *	mg/L	0.02	0.05	138	≤120	Based on APHA (2017), 4500-SiO <sub>2</sub> (D)	Bangkok
Total Alkalinity as CaCO <sub>3</sub> *	mg/L	-	1	133	≤1000	Based on APHA (2017), 2320 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	960	≤2000	Based on APHA (2017), 2540 C	Bangkok
Total Hardness as CaCO <sub>3</sub>	mg/L	-	1	336	≤300	APHA (2017), 2340 C	Bangkok

**Guideline** : หนังสือการปรุงแต่งคุณภาพน้ำ มาตรฐานน้ำใน Cooling Tower ดร.มันสิน ตัณฑเวทน์  
(1) ประกาศกรมอนามัย พ.ศ. 2544 เรื่องข้อปฏิบัติการควบคุมเชื้อลิจิโอเนลลา ในหอผึ่งเย็นของอาคารในประเทศไทย

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

**Sampled By** : Yuttapong Rattana

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.

Approved by

Tuanjai Thangklang  
Assistant Manager

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