



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: 2184435

Date Received : Aug 05, 2021

Date Reported : Aug 23, 2021

Report Number : 2046287-1

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Sample Number 2184435-1
Sampled Date Aug 04, 2021 10:18 AM
Sample Description น้ำดื่มชดเชยในระบบ Cooling Tower
Location Cooling Tower
Date Analysis Commenced Aug 05, 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
Metals Testing							
Iron	mg/L	0.0005	0.001	0.003	≤1.0	Based on APHA (2017), 3125	Bangkok
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	39	No Standard	Based on APHA (2017), 3500-Ca (B)	Bangkok
Chloride as Cl	mg/L	0.06	0.2	27.0	≤300	APHA (2017), 4110 B	Bangkok
Conductivity at 25 degree C *	micromhos/cm	-	0.5	194	≤3000	Based on APHA (2017), 2510 B	Bangkok
pH at 25 degree C		-	-	7.4	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 ₂ *	mg/L	0.02	0.05	21.7	≤120	Based on APHA (2017), 4500-SiO ₂ (D)	Bangkok
Total Alkalinity as CaCO ₃ *	mg/L	-	1	27	≤1000	Based on APHA (2017), 2320 B	Bangkok
Total Dissolved solids Dried at 180 degree C	mg/L	-	5	161	≤2000	Based on APHA (2017), 2540 C	Bangkok
Total Hardness as CaCO ₃	mg/L	-	1	49	≤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

Siriluk P.

Siriluk Puengpang
Supervisor

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