



## ANALYSIS REPORT

**CUSTOMER NAME** : CARLTON HOTEL BANGKOK SUKHUMVIT  
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**SAMPLING SOURCE** : COOLING TOWER  
**SAMPLE TYPE** : COOLING WATER  
**SAMPLING DATE** : JUNE 29, 2022  
**SAMPLING TIME** : 1/  
**SAMPLING METHOD<sup>b</sup>** : GRAB GRAB AND STERILE TECHNIQUE  
**SAMPLING BY<sup>b</sup>** :   
**ANALYZED BY** :   
**RECEIVED DATE** : JUNE 30, 2022  
**ANALYTICAL DATE** : JUNE 30 - JULY 11, 2022  
**REPORT NO.** : 2022-U054936  
**WORK NO.** : 2022-000982  
**ANALYSIS NO.** : T22AM831-0001 - T22AM831-0002

PARAMETER	UNIT	METHOD OF ANALYSIS	RESULT		REGULATORY STANDARD	DETECTION LIMIT
			1 15:20 HOUR 1/ T22AM831-0001	2 15:15 HOUR 1/ T22AM831-0002		
pH <sup>b</sup>	-	ELECTROMETRIC METHOD AT SITE (SM:4500-H <sup>+</sup> B)	8.3 (30°C)	8.3 (30°C)	7.2-8.3	-
RESIDUAL CHLORINE <sup>b</sup>	mg/L Cl <sub>2</sub>	MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)	0.1	0.1	-	0.1
<b>MICROBIOLOGY</b>						
COLIFORM BACTERIA <sup>b</sup>	MPN/100 mL	MULTIPLE-TUBE FERMENTATION TECHNIQUE (SM: 9221 B)	4.5	6.8	-	1.8
<i>Legionella</i> spp. <sup>a</sup>	CFU/L	ISO 11731:2017-05 (E)	NOT DETECTED	NOT DETECTED	NOT DETECTED	-
<b>SAMPLE CONDITION</b>						
WATER'S COLOUR/TURBID			COLOURLESS/CLEAR	COLOURLESS/CLEAR		
SEDIMENT			WHITE	WHITE		

<sup>a</sup> : ISO/IEC 17025 ACCREDITED BY DEPARTMENT OF MEDICAL SCIENCE (DMSC)

<sup>b</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.

RESULT 1 : น้ำเข้ามาเติมในอ่างรองรับ

RESULT 2 : ท่อน้ำทิ้งจากหอผึ่งเย็น

REGULATORY STANDARD : ANNOUNCEMENT OF THE DEPARTMENT OF HEALTH (THAILAND), PRACTICE FOR THE CONTROL OF LEGIONELLA BACTERIA IN COOLING TOWERS, JANUARY 2001.

