

ภาคผนวก ค  
ใบรายงานผลการตรวจวัดคุณภาพสิ่งแวดล้อม

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## ANALYSIS REPORT

**CUSTOMER NAME** : LH MALL & HOTEL COMPANY LIMITED  
**ADDRESS** : 356 RAMA III ROAD BANG KHLO BANG KHO LAEM BANGKOK 10120  
**CONTACT INFORMATION** : TEL : 0 2343 8899 e-mail : wiwat.r@terminal21.co.th  
**SAMPLING SOURCE** : TERMINAL 21 RAMA 3  
**SAMPLE TYPE** : COOLING WATER  
**SAMPLING DATE** : JULY 23, 2025  
**SAMPLING TIME** : 15:15 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** : MR SUKSAN BOONLEANG  
**ANALYZED BY** : MISS ITSARIYAPORN BUATIB

**RECEIVED DATE** : JULY 24, 2025  
**ANALYTICAL DATE** : JULY 24-28, 2025  
**ISSUE DATE** : AUGUST 13, 2025  
**REPORT NO.** : 2025-U072414  
**WORK NO.** : 2024-008591  
**ANALYSIS NO.** : T25AQ216-0001

| PARAMETER               | UNIT                 | METHOD OF ANALYSIS   | RESULT   | DETECTION LIMIT |
|-------------------------|----------------------|--|--|-----------------|
|                         |                      |  | จุดที่นำไหลเข้ามา<br>เดิมในระบบ<br>T25AQ216-0001 |                 |
| pH                      | -                    | ELECTROMETRIC METHOD (AT SITE) SM: PART 4500<br>-H <sup>+</sup> B AND 1060 B | 7.6 (30.6°C)                                     | -               |
| FREE CHLORINE           | mg/L Cl <sub>2</sub> | MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)                                  | ND   | 0.1             |
| <b>MICROBIOLOGY</b>     |                      |  |  |                 |
| TOTAL BACTERIA          | CFU/mL               | STANDARD PLATE COUNT (SM: PART 9215 B)                                       | 1.1x10 <sup>3</sup>                              | 1               |
| <b>SAMPLE CONDITION</b> |                      |  |  |                 |
| WATER'S COLOUR/TURBID   |                      |  | YELLOW/CLEAR                                     |                 |
| SEDIMENT                |                      |  | WHITE  |                 |

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24<sup>th</sup> EDITION, 2023.

ND : NOT DETECTED.

(MISS CHAWEEWAN BOONLA)  
LABORATORY SUPERVISOR



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**SAMPLING DATE** : JULY 23, 2025  
**SAMPLING TIME** : 15:15 HOUR  
**SAMPLING METHOD \*** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY \*** : MR SUKSAN BOONLEANG  
**ANALYZED BY** : MR NUTTACHOK LAKHAMMOON

**RECEIVED DATE** : JULY 24, 2025  
**ANALYTICAL DATE** : JULY 24 - AUGUST 1, 2025  
**ISSUE DATE** : AUGUST 13, 2025  
**REPORT NO.** : 2025-U072416  
**WORK NO.** : 2024-008591  
**ANALYSIS NO.** : T25AQ216-0001

| PARAMETER             | UNIT  | METHOD OF ANALYSIS    | RESULT  | REGULATORY STANDARD | DETECTION LIMIT |
|-----------------------|-------|-----------------------|---|---------------------|-----------------|
|                       |       |                       | จุดที่น้ำไหลเข้ามาเดิมในระบบ<br>T25AQ216-0001 |                     |                 |
| MICROBIOLOGY          |       |                       |   |                     |                 |
| Legionella spp.       | CFU/L | ISO 11731:2017-05 (E) | NOT DETECTED                                  | NOT DETECTED        | 100             |
| SAMPLE CONDITION      |       |                       |   |                     |                 |
| WATER'S COLOUR/TURBID |       |                       | YELLOW/CLEAR                                  |                     |                 |
| SEDIMENT              |       |                       | WHITE   |                     |                 |

THE LABORATORY HAS BEEN ACCEPTED AS AN ACCREDITED LABORATORY COMPLYING WITH THE ISO/IEC 17025.

\* : TEST METHOD ARE NOT COVERED COMPLYING WITH THE ISO/IEC 17025, VERIFIED BY OWN LABORATORY QUALITY SYSTEM.

REGULATORY STANDARD : ANNOUNCEMENT OF THE DEPARTMENT OF HEALTH (THAILAND), PRACTICE FOR THE CONTROL OF LEGIONELLA BACTERIA IN COOLING TOWERS, JANUARY 8, 2001.



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**SAMPLING SOURCE** : TERMINAL 21 RAMA 3  
**SAMPLE TYPE** : COOLING WATER  
**SAMPLING DATE** : JULY 23, 2025  
**SAMPLING TIME** : 15:10 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** : MR SUKSAN BOONLEANG  
**ANALYZED BY** : MISS ITSARIYAPORN BUATIB

**RECEIVED DATE** : JULY 24, 2025  
**ANALYTICAL DATE** : JULY 24-28, 2025  
**ISSUE DATE** : AUGUST 13, 2025  
**REPORT NO.** : 2025-U072418  
**WORK NO.** : 2024-008591  
**ANALYSIS NO.** : T25AQ216-0002

| PARAMETER               | UNIT                 | METHOD OF ANALYSIS  | RESULT                              | DETECTION LIMIT |
|-------------------------|----------------------|---|-------------------------------------|-----------------|
|                         |                      |   | น้ำในอ่างรองรับน้ำ<br>T25AQ216-0002 |                 |
| pH                      | -                    | ELECTROMETRIC METHOD (AT SITE) SM: PART 4500 -H <sup>+</sup> B AND 1060 B | 8.8 (30.3°C)                        | -               |
| FREE CHLORINE           | mg/L Cl <sub>2</sub> | MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)                               | 2.0                                 | 0.1             |
| <b>MICROBIOLOGY</b>     |                      |   |                                     |                 |
| TOTAL BACTERIA          | CFU/mL               | STANDARD PLATE COUNT (SM: PART 9215 B)                                    | 5                                   | 1               |
| <b>SAMPLE CONDITION</b> |                      |   |                                     |                 |
| WATER'S COLOUR/TURBID   |                      |   | COLOURLESS/CLEAR                    |                 |
| SEDIMENT                |                      |   | WHITE                               |                 |

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24<sup>th</sup> EDITION, 2023.



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**SAMPLING METHOD \*** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY \*** : MR SUKSAN BOONLEANG  
**ANALYZED BY** : MR NUTTACHOK LAKHAMMOON

**RECEIVED DATE** : JULY 24, 2025  
**ANALYTICAL DATE** : JULY 24 - AUGUST 6, 2025  
**ISSUE DATE** : AUGUST 13, 2025  
**REPORT NO.** : 2025-U072419  
**WORK NO.** : 2024-008591  
**ANALYSIS NO.** : T25AQ216-0002

| PARAMETER             | UNIT  | METHOD OF ANALYSIS    | RESULT                              | REGULATORY STANDARD | DETECTION LIMIT |
|-----------------------|-------|-----------------------|-------------------------------------|---------------------|-----------------|
|                       |       |                       | น้ำในอ่างรองรับน้ำ<br>T25AQ216-0002 |                     |                 |
| MICROBIOLOGY          |       |                       |                                     |                     |                 |
| Legionella spp.       | CFU/L | ISO 11731:2017-05 (E) | NOT DETECTED                        | NOT DETECTED        | 100             |
| SAMPLE CONDITION      |       |                       |                                     |                     |                 |
| WATER'S COLOUR/TURBID |       |                       | COLOURLESS/CLEAR                    |                     |                 |
| SEDIMENT              |       |                       | WHITE                               |                     |                 |

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REGULATORY STANDARD : ANNOUNCEMENT OF THE DEPARTMENT OF HEALTH (THAILAND), PRACTICE FOR THE CONTROL OF LEGIONELLA BACTERIA IN COOLING TOWERS, JANUARY 8, 2001.

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**SAMPLING TIME** : 15:20 HOUR  
**SAMPLING METHOD** : GRAB, GRAB AND STERILE TECHNIQUE  
**SAMPLING BY** : MR SUKSAN BOONLEANG  
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**ISSUE DATE** : AUGUST 13, 2025  
**REPORT NO.** : 2025-U072420  
**WORK NO.** : 2024-008591  
**ANALYSIS NO.** : T25AQ216-0003

| PARAMETER                         | UNIT                 | METHOD OF ANALYSIS  | RESULT                                 | DETECTION LIMIT |
|-----------------------------------|----------------------|---|--|-----------------|
|                                   |                      |   | หน้าห้องจากห้องฝงเป็น<br>T25AQ216-0003 |                 |
| pH                                | -                    | ELECTROMETRIC METHOD (AT SITE) SM: PART 4500 -H <sup>+</sup> B AND 1060 B | 8.8 (30.2°C)                           | -               |
| FREE CHLORINE                     | mg/L Cl <sub>2</sub> | MODIFIED DPD COLOURIMETRIC METHOD (AT SITE)                               | 2.0                                    | 0.1             |
| MICROBIOLOGY                      |                      |   |  |                 |
| TOTAL BACTERIA                    | CFU/mL               | STANDARD PLATE COUNT (SM: PART 9215 B)                                    | 1                                      | 1               |
| SAMPLE CONDITION                  |                      |   | YELLOW/CLEAR<br>WHITE                  |                 |
| WATER'S COLOUR/TURBID<br>SEDIMENT |                      |   |  |                 |

SM : STANDARD METHODS FOR THE EXAMINATION OF WATER AND WASTEWATER, APHA, AWWA, WEF, 24<sup>th</sup> EDITION, 2023.

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**ANALYTICAL DATE** : JULY 24 - AUGUST 6, 2025  
**ISSUE DATE** : AUGUST 13, 2025  
**REPORT NO.** : 2025-U072421  
**WORK NO.** : 2024-008591  
**ANALYSIS NO.** : T25AQ216-0003

| PARAMETER             | UNIT  | METHOD OF ANALYSIS    | RESULT                                  | REGULATORY STANDARD | DETECTION LIMIT |
|-----------------------|-------|-----------------------|---|---------------------|-----------------|
|                       |       |                       | ห่อผ้าหึ่งจากหอส่งเย็น<br>T25AQ216-0003 |                     |                 |
| MICROBIOLOGY          |       |                       |   |                     |                 |
| Legionella spp.       | CFU/L | ISO 11731:2017-05 (E) | NOT DETECTED                            | NOT DETECTED        | 100             |
| SAMPLE CONDITION      |       |                       |   |                     |                 |
| WATER'S COLOUR/TURBID |       |                       | YELLOW/CLEAR                            |                     |                 |
| SEDIMENT              |       |                       | WHITE                                   |                     |                 |

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