# เอกสารแนบ 10

## หนังสือรับรองผลการตรวจวัดคุณภาพสิ่งแวดล้อม

MM-N12

# Analysis / Test Report

TESTING
No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512262**
Date Received : Feb 18, 2025
Date Reported : Feb 25, 2025
Report Number : 3229449-1



| | |
|---|---|
| **Sample Number** | 2512262-2 |
| **Sampled Date** | Feb 11, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Dong Long (GPS 47Q 0678206, 1802191) |
| **Date Analysis Commenced** | Feb 20, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 754 mmHg |
| **Atmospheric Temperature** | 33.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 11/02/25 - 12/02/25 | mg/m3 | - | 0.005 | 0.056 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 11/02/25 - 12/02/25 | mg/m3 | - | 0.005 | 0.073 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Vanich Phanpipit

Remark :
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- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.
- Sampling is not included in scope of accreditation ISO/IEC 17025

**Approved by** [redacted]
Scientist (3)

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# Analysis / Test Report

TESTING
No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512262**
Date Received : Feb 18, 2025
Date Reported : Feb 25, 2025
Report Number : 3229449-1



| | |
|---|---|
| **Sample Number** | 2512262-1 |
| **Sampled Date** | Feb 10, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Dong Long (GPS 47Q 0678206, 1802191) |
| **Date Analysis Commenced** | Feb 20, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 754 mmHg |
| **Atmospheric Temperature** | 33.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 10/02/25 - 11/02/25 | mg/m3 | - | 0.005 | 0.059 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 10/02/25 - 11/02/25 | mg/m3 | - | 0.005 | 0.079 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

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**Approved by** [redacted]
Scientist (3)

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MM-N12

# Analysis / Test Report

TESTING
No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512262**
Date Received : Feb 18, 2025
Date Reported : Feb 25, 2025
Report Number : 3229449-1



| | |
|---|---|
| **Sample Number** | 2512262-4 |
| **Sampled Date** | Feb 10, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Nong Ra Man (GPS 47Q 0674693, 1802561) |
| **Date Analysis Commenced** | Feb 20, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 754 mmHg |
| **Atmospheric Temperature** | 33.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 10/02/25 - 11/02/25 | mg/m3 | - | 0.005 | 0.068 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 10/02/25 - 11/02/25 | mg/m3 | - | 0.005 | 0.140 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

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99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512262**
Date Received : Feb 18, 2025
Date Reported : Feb 25, 2025
Report Number : 3229449-1



| | |
|---|---|
| **Sample Number** | 2512262-3 |
| **Sampled Date** | Feb 12, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Dong Long (GPS 47Q 0678206, 1802191) |
| **Date Analysis Commenced** | Feb 20, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 754 mmHg |
| **Atmospheric Temperature** | 33.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 12/02/25 - 13/02/25 | mg/m3 | - | 0.005 | 0.057 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 12/02/25 - 13/02/25 | mg/m3 | - | 0.005 | 0.080 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

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**Sampled By :** Vanich Phanpipit

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# Analysis / Test Report

TESTING
No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512262**
Date Received : Feb 18, 2025
Date Reported : Feb 25, 2025
Report Number : 3229449-1



| | |
|---|---|
| **Sample Number** | 2512262-6 |
| **Sampled Date** | Feb 12, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Nong Ra Man (GPS 47Q 0674693, 1802561) |
| **Date Analysis Commenced** | Feb 20, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 754 mmHg |
| **Atmospheric Temperature** | 33.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 12/02/25 - 13/02/25 | mg/m3 | - | 0.005 | 0.054 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 12/02/25 - 13/02/25 | mg/m3 | - | 0.005 | 0.095 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

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# Analysis / Test Report

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99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512262**
Date Received : Feb 18, 2025
Date Reported : Feb 25, 2025
Report Number : 3229449-1



| | |
|---|---|
| **Sample Number** | 2512262-5 |
| **Sampled Date** | Feb 11, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Nong Ra Man (GPS 47Q 0674693, 1802561) |
| **Date Analysis Commenced** | Feb 20, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 754 mmHg |
| **Atmospheric Temperature** | 33.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 11/02/25 - 12/02/25 | mg/m3 | - | 0.005 | 0.062 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 11/02/25 - 12/02/25 | mg/m3 | - | 0.005 | 0.163 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

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MM-N12

# Analysis / Test Report

TESTING
No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512262**
Date Received : Feb 18, 2025
Date Reported : Feb 25, 2025
Report Number : 3229449-1



| | |
|---|---|
| **Sample Number** | 2512262-23 |
| **Sampled Date** | Feb 15, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Klong Sai Yang Rong (GPS 47Q 0676116, 1798785) |
| **Date Analysis Commenced** | Feb 20, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 754 mmHg |
| **Atmospheric Temperature** | 33.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 15/02/25 - 16/02/25 | mg/m3 | - | 0.005 | 0.067 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 15/02/25 - 16/02/25 | mg/m3 | - | 0.005 | 0.086 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

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**Sampled By :** Vanich Phanpipit

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TESTING
No.0009

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**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512262**
Date Received : Feb 18, 2025
Date Reported : Feb 25, 2025
Report Number : 3229449-1



| | |
|---|---|
| **Sample Number** | 2512262-22 |
| **Sampled Date** | Feb 14, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Klong Sai Yang Rong (GPS 47Q 0676116, 1798785) |
| **Date Analysis Commenced** | Feb 20, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 754 mmHg |
| **Atmospheric Temperature** | 33.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 14/02/25 - 15/02/25 | mg/m3 | - | 0.005 | 0.059 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 14/02/25 - 15/02/25 | mg/m3 | - | 0.005 | 0.071 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

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TESTING
No.0009

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**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512262**
Date Received : Feb 18, 2025
Date Reported : Feb 25, 2025
Report Number : 3229449-1



| | |
|---|---|
| **Sample Number** | 2512262-10 |
| **Sampled Date** | Feb 10, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Khao Mor (GPS 47Q 0675723, 1804284) |
| **Date Analysis Commenced** | Feb 20, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 754 mmHg |
| **Atmospheric Temperature** | 33.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 10/02/25 - 11/02/25 | mg/m3 | - | 0.005 | 0.064 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 10/02/25 - 11/02/25 | mg/m3 | - | 0.005 | 0.130 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

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NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Vanich Phanpipit

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**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512262**
Date Received : Feb 18, 2025
Date Reported : Feb 25, 2025
Report Number : 3229449-1



| | |
|---|---|
| **Sample Number** | 2512262-24 |
| **Sampled Date** | Feb 16, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Klong Sai Yang Rong (GPS 47Q 0676116, 1798785) |
| **Date Analysis Commenced** | Feb 20, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 754 mmHg |
| **Atmospheric Temperature** | 33.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 16/02/25 - 17/02/25 | mg/m3 | - | 0.005 | 0.065 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 16/02/25 - 17/02/25 | mg/m3 | - | 0.005 | 0.087 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

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**Sampled By :** Vanich Phanpipit

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MM-N12

# Analysis / Test Report

TESTING
No.0009

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**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512262**
Date Received : Feb 18, 2025
Date Reported : Feb 25, 2025
Report Number : 3229449-1



| | |
|---|---|
| **Sample Number** | 2512262-12 |
| **Sampled Date** | Feb 12, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Khao Mor (GPS 47Q 0675723, 1804284) |
| **Date Analysis Commenced** | Feb 20, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 754 mmHg |
| **Atmospheric Temperature** | 33.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 12/02/25 - 13/02/25 | mg/m3 | - | 0.005 | 0.054 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 12/02/25 - 13/02/25 | mg/m3 | - | 0.005 | 0.110 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Vanich Phanpipit

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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- Sampling is not included in scope of accreditation ISO/IEC 17025

**Approved by** [redacted]
Scientist (3)

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# Analysis / Test Report

TESTING
No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512262**
Date Received : Feb 18, 2025
Date Reported : Feb 25, 2025
Report Number : 3229449-1



| | |
|---|---|
| **Sample Number** | 2512262-11 |
| **Sampled Date** | Feb 11, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Khao Mor (GPS 47Q 0675723, 1804284) |
| **Date Analysis Commenced** | Feb 20, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 754 mmHg |
| **Atmospheric Temperature** | 33.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 11/02/25 - 12/02/25 | mg/m3 | - | 0.005 | 0.065 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 11/02/25 - 12/02/25 | mg/m3 | - | 0.005 | 0.127 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Vanich Phanpipit

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**Approved by** [redacted]
Scientist (3)

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# Analysis / Test Report

TESTING
No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512262**
Date Received : Feb 18, 2025
Date Reported : Feb 25, 2025
Report Number : 3229449-1



| | |
|---|---|
| **Sample Number** | 2512262-26 |
| **Sampled Date** | Feb 11, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Long Du (GPS 47Q 0671962, 1799044) |
| **Date Analysis Commenced** | Feb 20, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 754 mmHg |
| **Atmospheric Temperature** | 33.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 11/02/25 - 12/02/25 | mg/m3 | - | 0.005 | 0.058 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 11/02/25 - 12/02/25 | mg/m3 | - | 0.005 | 0.084 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

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**Sampled By :** Vanich Phanpipit

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**Approved by** [redacted]
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# Analysis / Test Report

TESTING
No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512262**
Date Received : Feb 18, 2025
Date Reported : Feb 25, 2025
Report Number : 3229449-1



| | |
|---|---|
| **Sample Number** | 2512262-25 |
| **Sampled Date** | Feb 10, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Long Du (GPS 47Q 0671962, 1799044) |
| **Date Analysis Commenced** | Feb 20, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 754 mmHg |
| **Atmospheric Temperature** | 33.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 10/02/25 - 11/02/25 | mg/m3 | - | 0.005 | 0.061 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 10/02/25 - 11/02/25 | mg/m3 | - | 0.005 | 0.086 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

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# Analysis / Test Report

TESTING
No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512262**
Date Received : Feb 18, 2025
Date Reported : Feb 25, 2025
Report Number : 3229449-1



| | |
|---|---|
| **Sample Number** | 2512262-7 |
| **Sampled Date** | Feb 10, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Nong Sang (GPS 47Q 0678405, 1805760) |
| **Date Analysis Commenced** | Feb 20, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 754 mmHg |
| **Atmospheric Temperature** | 33.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 10/02/25 - 11/02/25 | mg/m3 | - | 0.005 | 0.050 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 10/02/25 - 11/02/25 | mg/m3 | - | 0.005 | 0.089 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

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NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Vanich Phanpipit

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# Analysis / Test Report

TESTING
No.0009

**Client** : Akara Resources Public Co., Ltd.
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**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512262**
Date Received : Feb 18, 2025
Date Reported : Feb 25, 2025
Report Number : 3229449-1



| | |
|---|---|
| **Sample Number** | 2512262-27 |
| **Sampled Date** | Feb 12, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Long Du (GPS 47Q 0671962, 1799044) |
| **Date Analysis Commenced** | Feb 20, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 754 mmHg |
| **Atmospheric Temperature** | 33.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 12/02/25 - 13/02/25 | mg/m3 | - | 0.005 | 0.052 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 12/02/25 - 13/02/25 | mg/m3 | - | 0.005 | 0.081 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

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Scientist (3)

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# Analysis / Test Report

TESTING
No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512262**
Date Received : Feb 18, 2025
Date Reported : Feb 25, 2025
Report Number : 3229449-1



| | |
|---|---|
| **Sample Number** | 2512262-9 |
| **Sampled Date** | Feb 12, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Nong Sang (GPS 47Q 0678405, 1805760) |
| **Date Analysis Commenced** | Feb 20, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 754 mmHg |
| **Atmospheric Temperature** | 33.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 12/02/25 - 13/02/25 | mg/m3 | - | 0.005 | 0.057 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 12/02/25 - 13/02/25 | mg/m3 | - | 0.005 | 0.136 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

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**Sampled By :** Vanich Phanpipit

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**Approved by** [redacted]
Scientist (3)

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# Analysis / Test Report

TESTING
No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512262**
Date Received : Feb 18, 2025
Date Reported : Feb 25, 2025
Report Number : 3229449-1



| | |
|---|---|
| **Sample Number** | 2512262-8 |
| **Sampled Date** | Feb 11, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Nong Sang (GPS 47Q 0678405, 1805760) |
| **Date Analysis Commenced** | Feb 20, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 754 mmHg |
| **Atmospheric Temperature** | 33.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 11/02/25 - 12/02/25 | mg/m3 | - | 0.005 | 0.061 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 11/02/25 - 12/02/25 | mg/m3 | - | 0.005 | 0.121 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

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**Sampled By :** Vanich Phanpipit

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**Approved by** [redacted]
Scientist (3)

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# Analysis / Test Report

TESTING
No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512262**
Date Received : Feb 18, 2025
Date Reported : Feb 25, 2025
Report Number : 3229449-1



| | |
|---|---|
| **Sample Number** | 2512262-14 |
| **Sampled Date** | Feb 15, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Khao Kham (GPS 47Q 0675845, 1806452) |
| **Date Analysis Commenced** | Feb 20, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 754 mmHg |
| **Atmospheric Temperature** | 33.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 15/02/25 - 16/02/25 | mg/m3 | - | 0.005 | 0.066 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 15/02/25 - 16/02/25 | mg/m3 | - | 0.005 | 0.110 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Vanich Phanpipit

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**Approved by** [redacted]
Scientist (3)

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Analysis / Test Report
TESTING
No.0009
Client : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
P/O :
Project Name : Air Test
Project Location :
Lot ID: 2512262
Date Received : Feb 18, 2025
Date Reported : Feb 25, 2025
Report Number : 3229449-1



| | |
|---|---|
| **Sample Number** | 2512262-13 |
| **Sampled Date** | Feb 14, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Khao Kham (GPS 47Q 0675845, 1806452) |
| **Date Analysis Commenced** | Feb 20, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 754 mmHg |
| **Atmospheric Temperature** | 33.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 14/02/25 - 15/02/25 | mg/m3 | - | 0.005 | 0.068 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 14/02/25 - 15/02/25 | mg/m3 | - | 0.005 | 0.105 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

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**Sampled By :** Vanich Phanpipit

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Scientist (3)

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# Analysis / Test Report

TESTING
No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512262**
Date Received : Feb 18, 2025
Date Reported : Feb 25, 2025
Report Number : 3229449-1



| | |
|---|---|
| **Sample Number** | 2512262-16 |
| **Sampled Date** | Feb 14, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Tung Thong (GPS 47Q 0674666, 1805755) |
| **Date Analysis Commenced** | Feb 20, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 754 mmHg |
| **Atmospheric Temperature** | 33.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 14/02/25 - 15/02/25 | mg/m3 | - | 0.005 | 0.052 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 14/02/25 - 15/02/25 | mg/m3 | - | 0.005 | 0.102 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Vanich Phanpipit

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**Approved by** [redacted]
Scientist (3)

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# Analysis / Test Report

TESTING
No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512262**
Date Received : Feb 18, 2025
Date Reported : Feb 25, 2025
Report Number : 3229449-1



| | |
|---|---|
| **Sample Number** | 2512262-15 |
| **Sampled Date** | Feb 16, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Khao Kham (GPS 47Q 0675845, 1806452) |
| **Date Analysis Commenced** | Feb 20, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 754 mmHg |
| **Atmospheric Temperature** | 33.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 16/02/25 - 17/02/25 | mg/m3 | - | 0.005 | 0.061 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 16/02/25 - 17/02/25 | mg/m3 | - | 0.005 | 0.112 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Vanich Phanpipit

Remark :
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- Sampling is not included in scope of accreditation ISO/IEC 17025

**Approved by** [redacted]
Scientist (3)

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MM-N12

# Analysis / Test Report

TESTING
No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512262**
Date Received : Feb 18, 2025
Date Reported : Feb 25, 2025
Report Number : 3229449-1



| | |
|---|---|
| **Sample Number** | 2512262-18 |
| **Sampled Date** | Feb 16, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Tung Thong (GPS 47Q 0674666, 1805755) |
| **Date Analysis Commenced** | Feb 20, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 754 mmHg |
| **Atmospheric Temperature** | 33.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 16/02/25 - 17/02/25 | mg/m3 | - | 0.005 | 0.063 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 16/02/25 - 17/02/25 | mg/m3 | - | 0.005 | 0.108 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Vanich Phanpipit

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- Sampling is not included in scope of accreditation ISO/IEC 17025

**Approved by** [redacted]
Scientist (3)

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# Analysis / Test Report

TESTING
No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512262**
Date Received : Feb 18, 2025
Date Reported : Feb 25, 2025
Report Number : 3229449-1



| | |
|---|---|
| **Sample Number** | 2512262-17 |
| **Sampled Date** | Feb 15, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Tung Thong (GPS 47Q 0674666, 1805755) |
| **Date Analysis Commenced** | Feb 20, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 754 mmHg |
| **Atmospheric Temperature** | 33.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 15/02/25 - 16/02/25 | mg/m3 | - | 0.005 | 0.056 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 15/02/25 - 16/02/25 | mg/m3 | - | 0.005 | 0.114 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Vanich Phanpipit

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**Approved by** [redacted]
Scientist (3)

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# Analysis / Test Report

TESTING
No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512262**
Date Received : Feb 18, 2025
Date Reported : Feb 25, 2025
Report Number : 3229449-1



| | |
|---|---|
| **Sample Number** | 2512262-20 |
| **Sampled Date** | Feb 15, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Mai Klong Ta Lud (GPS 47Q 0676587, 1807162) |
| **Date Analysis Commenced** | Feb 20, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 754 mmHg |
| **Atmospheric Temperature** | 33.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 15/02/25 - 16/02/25 | mg/m3 | - | 0.005 | 0.072 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 15/02/25 - 16/02/25 | mg/m3 | - | 0.005 | 0.102 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

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NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Vanich Phanpipit

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**Approved by** [redacted]
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# Analysis / Test Report

TESTING
No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512262**
Date Received : Feb 18, 2025
Date Reported : Feb 25, 2025
Report Number : 3229449-1



| | |
|---|---|
| **Sample Number** | 2512262-19 |
| **Sampled Date** | Feb 14, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Mai Klong Ta Lud (GPS 47Q 0676587, 1807162) |
| **Date Analysis Commenced** | Feb 20, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 754 mmHg |
| **Atmospheric Temperature** | 33.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 14/02/25 - 15/02/25 | mg/m3 | - | 0.005 | 0.071 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 14/02/25 - 15/02/25 | mg/m3 | - | 0.005 | 0.113 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

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NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Vanich Phanpipit

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**Approved by** [redacted]
Scientist (3)

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# Analysis / Test Report

TESTING
No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512262**
Date Received : Feb 18, 2025
Date Reported : Feb 25, 2025
Report Number : 3229449-1



| | |
|---|---|
| **Sample Number** | 2512262-21 |
| **Sampled Date** | Feb 16, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Mai Klong Ta Lud (GPS 47Q 0676587, 1807162) |
| **Date Analysis Commenced** | Feb 20, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 754 mmHg |
| **Atmospheric Temperature** | 33.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 16/02/25 - 17/02/25 | mg/m3 | - | 0.005 | 0.055 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 16/02/25 - 17/02/25 | mg/m3 | - | 0.005 | 0.073 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Vanich Phanpipit

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**Approved by** [redacted]
Scientist (3)

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# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546106**
Date Received : May 30, 2025
Date Reported : Jun 06, 2025
Report Number : 3307399-1



| | |
|---|---|
| **Sample Number** | 2546106-2 |
| **Sampled Date** | May 21, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Dong Long (GPS 47Q 0678206, 1802191) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 30.1 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Hydrogen cyanide * | 21/05/25 - 22/05/25 | mg/m3 | - | 0.10 | <0.10 | No Standard | Based on NIOSH, P&CAM 116 | - | Bangkok |
| Total Suspended Particulate | 21/05/25 - 22/05/25 | mg/m3 | - | 0.005 | 0.018 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

Remark :
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**Approved by** [redacted]
Scientist (4)

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4.10/15

# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546106**
Date Received : May 30, 2025
Date Reported : Jun 06, 2025
Report Number : 3307399-1



| | |
|---|---|
| **Sample Number** | 2546106-1 |
| **Sampled Date** | May 20, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Dong Long (GPS 47Q 0678206, 1802191) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 34.1 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Hydrogen cyanide * | 20/05/25 - 21/05/25 | mg/m3 | - | 0.10 | <0.10 | No Standard | Based on NIOSH, P&CAM 116 | - | Bangkok |
| Total Suspended Particulate | 20/05/25 - 21/05/25 | mg/m3 | - | 0.005 | 0.035 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

Remark :
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**Approved by** [redacted]
Scientist (4)

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# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546115**
Date Received : May 30, 2025
Date Reported : Jun 07, 2025
Report Number : 3307408-1



| | |
|---|---|
| **Sample Number** | 2546115-1 |
| **Sampled Date** | May 20, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Dong Long (GPS 47Q 0678206, 1802191) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one filter paper placed in plastic cassette |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 34.1 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 20/05/25 - 21/05/25 | mg/m3 | - | 0.005 | 0.018 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

Remark :
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**Approved by** [redacted]
Scientist (4)

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8.10/16

# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546106**
Date Received : May 30, 2025
Date Reported : Jun 06, 2025
Report Number : 3307399-1



| | |
|---|---|
| **Sample Number** | 2546106-3 |
| **Sampled Date** | May 22, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Dong Long (GPS 47Q 0678206, 1802191) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 32.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Hydrogen cyanide * | 22/05/25 - 23/05/25 | mg/m3 | - | 0.10 | <0.10 | No Standard | Based on NIOSH, P&CAM 116 | - | Bangkok |
| Total Suspended Particulate | 22/05/25 - 23/05/25 | mg/m3 | - | 0.005 | 0.019 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

Remark :
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**Approved by** [redacted]
Scientist (4)

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# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546115**
Date Received : May 30, 2025
Date Reported : Jun 07, 2025
Report Number : 3307408-1



| | |
|---|---|
| **Sample Number** | 2546115-3 |
| **Sampled Date** | May 22, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Dong Long (GPS 47Q 0678206, 1802191) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one filter paper placed in plastic cassette |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 32.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 22/05/25 - 23/05/25 | mg/m3 | - | 0.005 | 0.013 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

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**Approved by** [redacted]
Scientist (4)

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.



8.10/17

# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546115**
Date Received : May 30, 2025
Date Reported : Jun 07, 2025
Report Number : 3307408-1



| | |
|---|---|
| **Sample Number** | 2546115-2 |
| **Sampled Date** | May 21, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Dong Long (GPS 47Q 0678206, 1802191) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one filter paper placed in plastic cassette |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 30.1 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 21/05/25 - 22/05/25 | mg/m3 | - | 0.005 | 0.012 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

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** [redacted]
Scientist (4)

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.

MM-N12

# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546106**
Date Received : May 30, 2025
Date Reported : Jun 06, 2025
Report Number : 3307399-1



| | |
|---|---|
| **Sample Number** | 2546106-9 |
| **Sampled Date** | May 21, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Nong Ra Man (GPS 47Q 0674693, 1802561) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 30.1 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Hydrogen cyanide * | 21/05/25 - 22/05/25 | mg/m3 | - | 0.10 | <0.10 | No Standard | Based on NIOSH, P&CAM 116 | - | Bangkok |
| Total Suspended Particulate | 21/05/25 - 22/05/25 | mg/m3 | - | 0.005 | 0.030 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

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** [redacted]
Scientist (4)

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.



4.10/18

# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546106**
Date Received : May 30, 2025
Date Reported : Jun 06, 2025
Report Number : 3307399-1



| | |
|---|---|
| **Sample Number** | 2546106-8 |
| **Sampled Date** | May 20, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Nong Ra Man (GPS 47Q 0674693, 1802561) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 34.3 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Hydrogen cyanide * | 20/05/25 - 21/05/25 | mg/m3 | - | 0.10 | <0.10 | No Standard | Based on NIOSH, P&CAM 116 | - | Bangkok |
| Total Suspended Particulate | 20/05/25 - 21/05/25 | mg/m3 | - | 0.005 | 0.056 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

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** [redacted]
Scientist (4)

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.

MM-N12

# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546115**
Date Received : May 30, 2025
Date Reported : Jun 07, 2025
Report Number : 3307408-1



| | |
|---|---|
| **Sample Number** | 2546115-4 |
| **Sampled Date** | May 20, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Nong Ra Man (GPS 47Q 0674693, 1802561) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one filter paper placed in plastic cassette |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 34.3 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 20/05/25 - 21/05/25 | mg/m3 | - | 0.005 | 0.022 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

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** [redacted]
Scientist (4)

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.



4.10/19

# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546106**
Date Received : May 30, 2025
Date Reported : Jun 06, 2025
Report Number : 3307399-1



| | |
|---|---|
| **Sample Number** | 2546106-10 |
| **Sampled Date** | May 22, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Nong Ra Man (GPS 47Q 0674693, 1802561) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 33.7 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Hydrogen cyanide * | 22/05/25 - 23/05/25 | mg/m3 | - | 0.10 | <0.10 | No Standard | Based on NIOSH, P&CAM 116 | - | Bangkok |
| Total Suspended Particulate | 22/05/25 - 23/05/25 | mg/m3 | - | 0.005 | 0.051 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

Remark :
- LOD : Limit of Detection
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**Approved by** [redacted]
Scientist (4)

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MM-N12

# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546115**
Date Received : May 30, 2025
Date Reported : Jun 07, 2025
Report Number : 3307408-1



| | |
|---|---|
| **Sample Number** | 2546115-6 |
| **Sampled Date** | May 22, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Nong Ra Man (GPS 47Q 0674693, 1802561) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one filter paper placed in plastic cassette |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 33.7 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 22/05/25 - 23/05/25 | mg/m3 | - | 0.005 | 0.021 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

Remark :
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- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

**Approved by** [redacted]
Scientist (4)

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8.10/20

# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546115**
Date Received : May 30, 2025
Date Reported : Jun 07, 2025
Report Number : 3307408-1



| | |
|---|---|
| **Sample Number** | 2546115-5 |
| **Sampled Date** | May 21, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Nong Ra Man (GPS 47Q 0674693, 1802561) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one filter paper placed in plastic cassette |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 30.1 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 21/05/25 - 22/05/25 | mg/m3 | - | 0.005 | 0.014 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

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** [redacted]
Scientist (4)

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MM-N12

# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546106**
Date Received : May 30, 2025
Date Reported : Jun 06, 2025
Report Number : 3307399-1



| | |
|---|---|
| **Sample Number** | 2546106-23 |
| **Sampled Date** | May 21, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Klong Sai Yang Rong (GPS 47Q 0676116, 1798785) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 30.1 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Hydrogen cyanide * | 21/05/25 - 22/05/25 | mg/m3 | - | 0.10 | <0.10 | No Standard | Based on NIOSH, P&CAM 116 | - | Bangkok |
| Total Suspended Particulate | 21/05/25 - 22/05/25 | mg/m3 | - | 0.005 | 0.016 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

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.

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**Approved by** [redacted]
Scientist (4)



8.10/21

# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546106**
Date Received : May 30, 2025
Date Reported : Jun 06, 2025
Report Number : 3307399-1



| | |
|---|---|
| **Sample Number** | 2546106-22 |
| **Sampled Date** | May 20, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Klong Sai Yang Rong (GPS 47Q 0676116, 1798785) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 32.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Hydrogen cyanide * | 20/05/25 - 21/05/25 | mg/m3 | - | 0.10 | <0.10 | No Standard | Based on NIOSH, P&CAM 116 | - | Bangkok |
| Total Suspended Particulate | 20/05/25 - 21/05/25 | mg/m3 | - | 0.005 | 0.025 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

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.

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** [redacted]
Scientist (4)

MM-N12

# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546115**
Date Received : May 30, 2025
Date Reported : Jun 07, 2025
Report Number : 3307408-1



| | |
|---|---|
| **Sample Number** | 2546115-10 |
| **Sampled Date** | May 20, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Klong Sai Yang Rong (GPS 47Q 0676116, 1798785) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one filter paper placed in plastic cassette |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 32.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 20/05/25 - 21/05/25 | mg/m3 | - | 0.005 | 0.020 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

Remark :
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- Analyte(s) marked * is/are not included in scope of Accreditation ISO/IEC 17025.

**Approved by** [redacted]
Scientist (4)

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8.10/22

# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546106**
Date Received : May 30, 2025
Date Reported : Jun 06, 2025
Report Number : 3307399-1



| | |
|---|---|
| **Sample Number** | 2546106-24 |
| **Sampled Date** | May 22, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Klong Sai Yang Rong (GPS 47Q 0676116, 1798785) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 32.1 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Hydrogen cyanide * | 22/05/25 - 23/05/25 | mg/m3 | - | 0.10 | <0.10 | No Standard | Based on NIOSH, P&CAM 116 | - | Bangkok |
| Total Suspended Particulate | 22/05/25 - 23/05/25 | mg/m3 | - | 0.005 | 0.025 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

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** [redacted]
Scientist (4)

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.

MM-N12

# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546115**
Date Received : May 30, 2025
Date Reported : Jun 07, 2025
Report Number : 3307408-1



| | |
|---|---|
| **Sample Number** | 2546115-12 |
| **Sampled Date** | May 22, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Klong Sai Yang Rong (GPS 47Q 0676116, 1798785) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one filter paper placed in plastic cassette |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 32.1 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 22/05/25 - 23/05/25 | mg/m3 | - | 0.005 | 0.019 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

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** [redacted]
Scientist (4)

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.



4.10/23

# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546115**
Date Received : May 30, 2025
Date Reported : Jun 07, 2025
Report Number : 3307408-1



| | |
|---|---|
| **Sample Number** | 2546115-11 |
| **Sampled Date** | May 21, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Klong Sai Yang Rong (GPS 47Q 0676116, 1798785) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one filter paper placed in plastic cassette |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 30.1 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 21/05/25 - 22/05/25 | mg/m3 | - | 0.005 | 0.013 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

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** [redacted]
Scientist (4)

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.

MM-N12

# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546106**
Date Received : May 30, 2025
Date Reported : Jun 06, 2025
Report Number : 3307399-1



| | |
|---|---|
| **Sample Number** | 2546106-16 |
| **Sampled Date** | May 21, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Khao Mor (GPS 47Q 0675723, 1804284) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 30.1 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Hydrogen cyanide * | 21/05/25 - 22/05/25 | mg/m3 | - | 0.10 | <0.10 | No Standard | Based on NIOSH, P&CAM 116 | - | Bangkok |
| Total Suspended Particulate | 21/05/25 - 22/05/25 | mg/m3 | - | 0.005 | 0.025 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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**Approved by** [redacted]
Scientist (4)



8.10/24

# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546106**
Date Received : May 30, 2025
Date Reported : Jun 06, 2025
Report Number : 3307399-1



| | |
|---|---|
| **Sample Number** | 2546106-15 |
| **Sampled Date** | May 20, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Khao Mor (GPS 47Q 0675723, 1804284) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 35.1 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Hydrogen cyanide * | 20/05/25 - 21/05/25 | mg/m3 | - | 0.10 | <0.10 | No Standard | Based on NIOSH, P&CAM 116 | - | Bangkok |
| Total Suspended Particulate | 20/05/25 - 21/05/25 | mg/m3 | - | 0.005 | 0.070 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

Remark :
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**Approved by** [redacted]
Scientist (4)

MM-N12

# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546115**
Date Received : May 30, 2025
Date Reported : Jun 07, 2025
Report Number : 3307408-1



| | |
|---|---|
| **Sample Number** | 2546115-7 |
| **Sampled Date** | May 20, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Khao Mor (GPS 47Q 0675723, 1804284) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one filter paper placed in plastic cassette |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 35.1 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 20/05/25 - 21/05/25 | mg/m3 | - | 0.005 | 0.030 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

Remark :
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**Approved by** [redacted]
Scientist (4)

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8.10/25

# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546106**
Date Received : May 30, 2025
Date Reported : Jun 06, 2025
Report Number : 3307399-1



| | |
|---|---|
| **Sample Number** | 2546106-17 |
| **Sampled Date** | May 22, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Khao Mor (GPS 47Q 0675723, 1804284) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 34.1 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Hydrogen cyanide * | 22/05/25 - 23/05/25 | mg/m3 | - | 0.10 | <0.10 | No Standard | Based on NIOSH, P&CAM 116 | - | Bangkok |
| Total Suspended Particulate | 22/05/25 - 23/05/25 | mg/m3 | - | 0.005 | 0.053 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

Remark :
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**Approved by** [redacted]
Scientist (4)

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MM-N12

# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546115**
Date Received : May 30, 2025
Date Reported : Jun 07, 2025
Report Number : 3307408-1



| | |
|---|---|
| **Sample Number** | 2546115-9 |
| **Sampled Date** | May 22, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Khao Mor (GPS 47Q 0675723, 1804284) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one filter paper placed in plastic cassette |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 34.1 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 22/05/25 - 23/05/25 | mg/m3 | - | 0.005 | 0.019 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

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**Approved by** [redacted]
Scientist (4)

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8.10/26

# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546115**
Date Received : May 30, 2025
Date Reported : Jun 07, 2025
Report Number : 3307408-1



| | |
|---|---|
| **Sample Number** | 2546115-8 |
| **Sampled Date** | May 21, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Khao Mor (GPS 47Q 0675723, 1804284) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one filter paper placed in plastic cassette |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 30.1 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 21/05/25 - 22/05/25 | mg/m3 | - | 0.005 | 0.014 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

Remark :
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**Approved by** [redacted]
Scientist (4)

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# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546106**
Date Received : May 30, 2025
Date Reported : Jun 06, 2025
Report Number : 3307399-1



| | |
|---|---|
| **Sample Number** | 2546106-30 |
| **Sampled Date** | May 21, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Long Du (GPS 47Q 0671962, 1799044) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 30.1 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Hydrogen cyanide * | 21/05/25 - 22/05/25 | mg/m3 | - | 0.10 | <0.10 | No Standard | Based on NIOSH, P&CAM 116 | - | Bangkok |
| Total Suspended Particulate | 21/05/25 - 22/05/25 | mg/m3 | - | 0.005 | 0.017 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

Remark :
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**Approved by** [redacted]
Scientist (4)



8.10/27

# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546106**
Date Received : May 30, 2025
Date Reported : Jun 06, 2025
Report Number : 3307399-1



| | |
|---|---|
| **Sample Number** | 2546106-29 |
| **Sampled Date** | May 20, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Long Du (GPS 47Q 0671962, 1799044) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 33.7 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Hydrogen cyanide * | 20/05/25 - 21/05/25 | mg/m3 | - | 0.10 | <0.10 | No Standard | Based on NIOSH, P&CAM 116 | - | Bangkok |
| Total Suspended Particulate | 20/05/25 - 21/05/25 | mg/m3 | - | 0.005 | 0.029 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

Remark :
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**Approved by** [redacted]
Scientist (4)



Wondershare PDFelement

MM-N12

# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546115**
Date Received : May 30, 2025
Date Reported : Jun 07, 2025
Report Number : 3307408-1



| | |
|---|---|
| **Sample Number** | 2546115-13 |
| **Sampled Date** | May 20, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Long Du (GPS 47Q 0671962, 1799044) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one filter paper placed in plastic cassette |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 33.7 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 20/05/25 - 21/05/25 | mg/m3 | - | 0.005 | 0.019 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

Remark :
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**Approved by** [redacted]
Scientist (4)

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Life Sciences www.alsglobal.com
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# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546106**
Date Received : May 30, 2025
Date Reported : Jun 06, 2025
Report Number : 3307399-1



| | |
|---|---|
| **Sample Number** | 2546106-31 |
| **Sampled Date** | May 22, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Long Du (GPS 47Q 0671962, 1799044) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 32.7 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Hydrogen cyanide * | 22/05/25 - 23/05/25 | mg/m3 | - | 0.10 | <0.10 | No Standard | Based on NIOSH, P&CAM 116 | - | Bangkok |
| Total Suspended Particulate | 22/05/25 - 23/05/25 | mg/m3 | - | 0.005 | 0.034 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

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**Approved by** [redacted]
Scientist (4)

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MM-N12

# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546115**
Date Received : May 30, 2025
Date Reported : Jun 07, 2025
Report Number : 3307408-1



| | |
|---|---|
| **Sample Number** | 2546115-15 |
| **Sampled Date** | May 22, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Long Du (GPS 47Q 0671962, 1799044) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one filter paper placed in plastic cassette |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 32.7 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 22/05/25 - 23/05/25 | mg/m3 | - | 0.005 | 0.016 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

Remark :
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**Approved by** [redacted]
Scientist (4)

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# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546115**
Date Received : May 30, 2025
Date Reported : Jun 07, 2025
Report Number : 3307408-1



| | |
|---|---|
| **Sample Number** | 2546115-14 |
| **Sampled Date** | May 21, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Long Du (GPS 47Q 0671962, 1799044) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one filter paper placed in plastic cassette |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 30.1 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 21/05/25 - 22/05/25 | mg/m3 | - | 0.005 | 0.012 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

Remark :
- LOD : Limit of Detection
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**Approved by** [redacted]
Scientist (4)

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MM-N12

# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546114**
Date Received : May 30, 2025
Date Reported : Jun 07, 2025
Report Number : 3307405-1



| | |
|---|---|
| **Sample Number** | 2546114-2 |
| **Sampled Date** | May 25, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Nong Sang (GPS 47Q 0678405, 1805760) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 32.1 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 25/05/25 - 26/05/25 | mg/m3 | - | 0.005 | 0.009 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 25/05/25 - 26/05/25 | mg/m3 | - | 0.005 | 0.024 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)
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**Approved by** [redacted]
Scientist (4)

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4.10/30

# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546114**
Date Received : May 30, 2025
Date Reported : Jun 07, 2025
Report Number : 3307405-1



| | |
|---|---|
| **Sample Number** | 2546114-1 |
| **Sampled Date** | May 24, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Nong Sang (GPS 47Q 0678405, 1805760) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 31.7 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 24/05/25 - 25/05/25 | mg/m3 | - | 0.005 | 0.014 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 24/05/25 - 25/05/25 | mg/m3 | - | 0.005 | 0.024 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

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**Approved by** [redacted]
Scientist (4)

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# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546114**
Date Received : May 30, 2025
Date Reported : Jun 07, 2025
Report Number : 3307405-1



| | |
|---|---|
| **Sample Number** | 2546114-4 |
| **Sampled Date** | May 24, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Khao Kham (GPS 47Q 0675845, 1806452) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 31.1 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 24/05/25 - 25/05/25 | mg/m3 | - | 0.005 | 0.030 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 24/05/25 - 25/05/25 | mg/m3 | - | 0.005 | 0.049 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

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Scientist (4)





# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546114**
Date Received : May 30, 2025
Date Reported : Jun 07, 2025
Report Number : 3307405-1



| | |
|---|---|
| **Sample Number** | 2546114-3 |
| **Sampled Date** | May 26, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Nong Sang (GPS 47Q 0678405, 1805760) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 31.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 26/05/25 - 27/05/25 | mg/m3 | - | 0.005 | 0.008 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 26/05/25 - 27/05/25 | mg/m3 | - | 0.005 | 0.018 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

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Scientist (4)

MM-N12

# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546114**
Date Received : May 30, 2025
Date Reported : Jun 07, 2025
Report Number : 3307405-1



| | |
|---|---|
| **Sample Number** | 2546114-6 |
| **Sampled Date** | May 26, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Khao Kham (GPS 47Q 0675845, 1806452) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 30.1 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 26/05/25 - 27/05/25 | mg/m3 | - | 0.005 | 0.012 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 26/05/25 - 27/05/25 | mg/m3 | - | 0.005 | 0.021 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

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NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

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# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546114**
Date Received : May 30, 2025
Date Reported : Jun 07, 2025
Report Number : 3307405-1



| | |
|---|---|
| **Sample Number** | 2546114-5 |
| **Sampled Date** | May 25, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Khao Kham (GPS 47Q 0675845, 1806452) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 30.2 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 25/05/25 - 26/05/25 | mg/m3 | - | 0.005 | 0.010 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 25/05/25 - 26/05/25 | mg/m3 | - | 0.005 | 0.016 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

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**Approved by** [redacted]
Scientist (4)

MM-N12

# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546114**
Date Received : May 30, 2025
Date Reported : Jun 07, 2025
Report Number : 3307405-1



| | |
|---|---|
| **Sample Number** | 2546114-8 |
| **Sampled Date** | May 25, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Tung Thong (GPS 47Q 0674666, 1805755) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 30.5 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 25/05/25 - 26/05/25 | mg/m3 | - | 0.005 | 0.012 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 25/05/25 - 26/05/25 | mg/m3 | - | 0.005 | 0.015 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

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NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

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**Approved by** [redacted]
Scientist (4)

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# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546114**
Date Received : May 30, 2025
Date Reported : Jun 07, 2025
Report Number : 3307405-1



| | |
|---|---|
| **Sample Number** | 2546114-7 |
| **Sampled Date** | May 24, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Tung Thong (GPS 47Q 0674666, 1805755) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 31.4 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 24/05/25 - 25/05/25 | mg/m3 | - | 0.005 | 0.015 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 24/05/25 - 25/05/25 | mg/m3 | - | 0.005 | 0.017 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

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NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

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**Approved by** [redacted]
Scientist (4)

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# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546114**
Date Received : May 30, 2025
Date Reported : Jun 07, 2025
Report Number : 3307405-1



| | |
|---|---|
| **Sample Number** | 2546114-10 |
| **Sampled Date** | May 24, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Mai Klong Ta Lud (GPS 47Q 0676587, 1807162) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 31.6 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 24/05/25 - 25/05/25 | mg/m3 | - | 0.005 | 0.015 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 24/05/25 - 25/05/25 | mg/m3 | - | 0.005 | 0.018 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

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NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

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**Approved by** [redacted]
Scientist (4)





# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546114**
Date Received : May 30, 2025
Date Reported : Jun 07, 2025
Report Number : 3307405-1



| | |
|---|---|
| **Sample Number** | 2546114-9 |
| **Sampled Date** | May 26, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Tung Thong (GPS 47Q 0674666, 1805755) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 30.7 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 26/05/25 - 27/05/25 | mg/m3 | - | 0.005 | 0.011 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 26/05/25 - 27/05/25 | mg/m3 | - | 0.005 | 0.016 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
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**Approved by** [redacted]
Scientist (4)

MM-N12

# Analysis / Test Report

TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546114**
Date Received : May 30, 2025
Date Reported : Jun 07, 2025
Report Number : 3307405-1



| | |
|---|---|
| **Sample Number** | 2546114-12 |
| **Sampled Date** | May 26, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Mai Klong Ta Lud (GPS 47Q 0676587, 1807162) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 30.9 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 26/05/25 - 27/05/25 | mg/m3 | - | 0.005 | 0.008 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 26/05/25 - 27/05/25 | mg/m3 | - | 0.005 | 0.011 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
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Scientist (4)





# Analysis / Test Report

TESTING No.0009

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99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546114**
Date Received : May 30, 2025
Date Reported : Jun 07, 2025
Report Number : 3307405-1



| | |
|---|---|
| **Sample Number** | 2546114-11 |
| **Sampled Date** | May 25, 2025 |
| **Sample Description** | Air Quality |
| **Location** | Ban Mai Klong Ta Lud (GPS 47Q 0676587, 1807162) |
| **Date Analysis Commenced** | May 31, 2025 |
| **Condition of Sample** | Drawn into one glass filter paper (8x10 inch) placed in plastic bag and one quartz filter paper (8x10 inch) placed in plastic bag |
| **Barometric Pressure** | 749 mmHg |
| **Atmospheric Temperature** | 31.5 °C |

| Analyte | Sampled Date/time | Unit | LOD | LOQ (LOR) | Result | Guideline Limit | Method | Guideline | Testing Location |
|---|---|---|---|---|---|---|---|---|---|
| **Air Testing** | | | | | | | | | |
| Particulate matter as PM 10 | 25/05/25 - 26/05/25 | mg/m3 | - | 0.005 | 0.009 | 0.12 | In - house method : STM 04-052 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix J, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |
| Total Suspended Particulate | 25/05/25 - 26/05/25 | mg/m3 | - | 0.005 | 0.013 | 0.33 | In - house method : STM 04-051 based on U.S. Environmental Protection Agency 40 CFR, method 50, Appendix B, revised as of July 1, 2008 (Include sampling) | NEB No.24 | Bangkok |

**Guideline :**
NEB No.24 : Notification of the National Environmental Board. No.24, 2004 (B.E.2547) dated September 22, 2004
**Sampled By :** Wasan Treenakul

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.

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** [redacted]
Scientist (4)

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# Analysis / Test Report

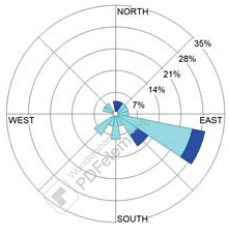
**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230

**P/O** : 1001947
**Project Name** : Air Test
**Project Location** :

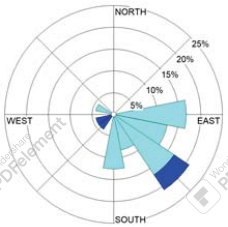
**Lot ID: 2546104**
Date Received :May 30, 2025
Date Reported :Jun 02, 2025
Report Number :3307334-1



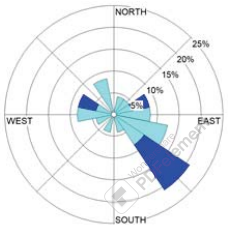
## Wind Rose



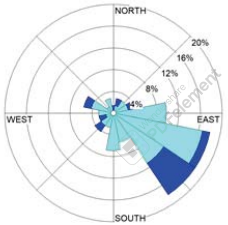

**Date : May 21-22, 2025**




**Date : May 22-23, 2025**




**Date : May 23-24, 2025**




**Date : May 21-24, 2025**

| WS (m/s) | % |
|---|---|
| ≥ 10.0 | 0.00 |
| 8.0-10.0 | 0.00 |
| 5.5-8.0 | 0.00 |
| 3.3-5.5 | 0.00 |
| 1.7-3.3 | 16.67 |
| 0.3-1.7 | 75.00 |
| Calms | 8.33 |

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Approved by [redacted]
Assistant General Manager

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Analysis / Test Report

Client : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230

P/O : 1001947
Project Name : Air Test
Project Location :

Lot ID: 2546104
Date Received :May 30, 2025
Date Reported :Jun 02, 2025
Report Number :3307334-1



**Sample Number** 2546104-1 to 3
**Parameter** Wind Speed / Wind Direction
**Location** บริเวณภายในโครงการ (GPS 47Q 0675834, 1801718)
**Sampling Date** May 21 - May 24, 2025
**Sampling by** Wasan Treenakul

| Time | May 21 - May 22, 2025 | | | May 22 - May 23, 2025 | | | May 23 - May 24, 2025 | | | - | | | - | | | - | | | - | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | WS (m/s) | WD (deg) | | WS (m/s) | WD (deg) | | WS (m/s) | WD (deg) | | - | - | | - | - | | - | - | | - | - | |
| 08:00 AM - 09:00 AM | 1.5 | 292.0 | WNW | 0.6 | 101.0 | E | 0.4 | 327.0 | NNW | - | - | - | - | - | - | - | - | - | - | - | - |
| 09:00 AM - 10:00 AM | 1.3 | 213.0 | SSW | 1.0 | 190.0 | S | 1.3 | 256.0 | WSW | - | - | - | - | - | - | - | - | - | - | - | - |
| 10:00 AM - 11:00 AM | 1.9 | 28.0 | NNE | 2.5 | 215.0 | SW | 0.9 | 192.0 | SSW | - | - | - | - | - | - | - | - | - | - | - | - |
| 11:00 AM - 12:00 PM | 1.7 | 8.0 | N | 1.7 | 248.0 | WSW | 2.1 | 295.0 | WNW | - | - | - | - | - | - | - | - | - | - | - | - |
| 12:00 PM - 01:00 PM | 0.8 | 141.0 | SE | 0.7 | 183.0 | S | 0.6 | 279.0 | W | - | - | - | - | - | - | - | - | - | - | - | - |
| 01:00 PM - 02:00 PM | 0.6 | 117.0 | ESE | 0.2 | - | - | 2.1 | 145.0 | SE | - | - | - | - | - | - | - | - | - | - | - | - |
| 02:00 PM - 03:00 PM | 2.5 | 137.0 | SE | 0.4 | 160.0 | SSE | 1.1 | 298.0 | WNW | - | - | - | - | - | - | - | - | - | - | - | - |
| 03:00 PM - 04:00 PM | 1.4 | 112.0 | ESE | 0.5 | 155.0 | SSE | 0.8 | 82.0 | E | - | - | - | - | - | - | - | - | - | - | - | - |
| 04:00 PM - 05:00 PM | 1.4 | 117.0 | ESE | 0.5 | 140.0 | SE | 0.8 | 157.0 | SSE | - | - | - | - | - | - | - | - | - | - | - | - |
| 05:00 PM - 06:00 PM | 1.5 | 121.0 | ESE | 0.6 | 130.0 | SE | 1.3 | 132.0 | SE | - | - | - | - | - | - | - | - | - | - | - | - |
| 06:00 PM - 07:00 PM | 2.4 | 112.0 | ESE | 0.8 | 127.0 | SE | 1.0 | 119.0 | ESE | - | - | - | - | - | - | - | - | - | - | - | - |
| 07:00 PM - 08:00 PM | 0.5 | 235.0 | SW | 0.5 | 116.0 | ESE | 1.2 | 107.0 | ESE | - | - | - | - | - | - | - | - | - | - | - | - |
| 08:00 PM - 09:00 PM | 0.4 | 183.0 | S | 0.9 | 122.0 | ESE | 3.1 | 131.0 | SE | - | - | - | - | - | - | - | - | - | - | - | - |
| 09:00 PM - 10:00 PM | 1.6 | 154.0 | SSE | 0.0 | - | - | 1.1 | 104.0 | ESE | - | - | - | - | - | - | - | - | - | - | - | - |
| 10:00 PM - 11:00 PM | 0.8 | 218.0 | SW | 0.1 | - | - | 2.6 | 132.0 | SE | - | - | - | - | - | - | - | - | - | - | - | - |
| 11:00 PM - 12:00 AM | 0.4 | 174.0 | S | 1.1 | 86.0 | E | 2.4 | 76.0 | ENE | - | - | - | - | - | - | - | - | - | - | - | - |
| 12:00 AM - 01:00 AM | 0.7 | 113.0 | ESE | 0.6 | 79.0 | E | 1.6 | 67.0 | ENE | - | - | - | - | - | - | - | - | - | - | - | - |
| 01:00 AM - 02:00 AM | 1.2 | 110.0 | ESE | 0.6 | 110.0 | ESE | 0.8 | 22.0 | NNE | - | - | - | - | - | - | - | - | - | - | - | - |
| 02:00 AM - 03:00 AM | 0.5 | 73.0 | ENE | 0.8 | 292.0 | WNW | 1.2 | 260.0 | W | - | - | - | - | - | - | - | - | - | - | - | - |
| 03:00 AM - 04:00 AM | 0.3 | 91.0 | E | 0.5 | 87.0 | E | 0.3 | 42.0 | NE | - | - | - | - | - | - | - | - | - | - | - | - |
| 04:00 AM - 05:00 AM | 0.2 | | - | 0.0 | - | - | 0.6 | 346.0 | NNW | - | - | - | - | - | - | - | - | - | - | - | - |
| 05:00 AM - 06:00 AM | 1.0 | 56.0 | NE | 1.9 | 130.0 | SE | 0.2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 06:00 AM - 07:00 AM | 0.7 | 313.0 | NW | 1.4 | 142.0 | SE | 0.8 | 99.0 | E | - | - | - | - | - | - | - | - | - | - | - | - |
| 07:00 AM - 08:00 AM | 1.4 | 142.0 | SE | 1.1 | 190.0 | S | 0.8 | 127.0 | SE | - | - | - | - | - | - | - | - | - | - | - | - |

Reference Method : Cup Anemometer & Anodized Aluminium Vane Method

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Assistant General Manager

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MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512274**
Date Received : Feb 18, 2025
Date Reported : Feb 20, 2025
Report g umber: 32391-0N1



**Sample Number** 251224-N2
**Parameter** Air Quality
**Location** Ban Donf Lonf (GPS -4Q 0648205, 1802158)
**Measurement Date** Feb 11 NFeb 12, 2025
**Measurement by** Vanich Phanpipit
**Sound Level meter** Serial g o. 542609

| Time | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|---|---|---|
| 02:00 PM N03:00 PM | -6.1 | 80.- | 32.9 |
| 03:00 PM N0-:00 PM | --.2 | 66.2 | 36.4 |
| 0-:00 PM N05:00 PM | -9.0 | 45.1 | 38.3 |
| 05:00 PM N06:00 PM | 51.2 | 46.3 | 39.0 |
| 06:00 PM N04:00 PM | -9.3 | 43.4 | 34.8 |
| 04:00 PM N08:00 PM | -8.1 | 42.8 | -3.4 |
| 08:00 PM N09:00 PM | -5.3 | 42.2 | -1.6 |
| 09:00 PM N10:00 PM | --.- | 4-.0 | -2.- |
| 10:00 PM N11:00 PM | -4.4 | 42.5 | -2.6 |
| 11:00 PM N12:00 AM | -4.- | 45.5 | -3.2 |
| 12:00 AM N01:00 AM | -9.0 | 41.6 | --.3 |
| 01:00 AM N02:00 AM | -5.9 | 59.3 | --.1 |
| 02:00 AM N03:00 AM | -5.3 | 62.2 | -3.4 |
| 03:00 AM N0-:00 AM | -1.- | 41.- | 35.1 |
| 0-:00 AM N05:00 AM | -4.1 | 41.6 | 36.6 |
| 05:00 AM N06:00 AM | 52.2 | 4-.5 | 39.9 |
| 06:00 AM N04:00 AM | 55.- | 82.1 | -1.2 |
| 04:00 AM N08:00 AM | -9.4 | 40.1 | -3.4 |
| 08:00 AM N09:00 AM | 51.0 | 46.1 | -1.6 |
| 09:00 AM N10:00 AM | 51.1 | 46.- | 38.1 |
| 10:00 AM N11:00 AM | -6.- | 45.8 | 38.2 |
| 11:00 AM N12:00 PM | -8.4 | 44.1 | 38.1 |
| 12:00 PM N01:00 PM | --.3 | 41.5 | 36.1 |
| 01:00 PM N02:00 PM | --.5 | 69.4 | 34.5 |
| Leq Averaf e 2- hrs. (dB(A)) | -8.9 | | |
| Lmax (dB(A)) | | 82.1 | |
| L90 (dB(A)) | | | 39.0 |
| Ldn (dB(A)) | 56.0 | | |
| Standard (dB(A)) | 40 | 115 | |

Re7erence Method : ISO1996N1 and 1996N2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 25-0) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 25-8

**Technical Management** [redacted]
Scientist (3)

**Approved by** [redacted]
Section Head



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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512274**
Date Received : Feb 18, 2025
Date Reported : Feb 20, 2025
Report Number: 3239139-1



**Sample Number** 2512274-1
**Parameter** Air Quality
**Location** Ban Dong Long (GPS 47Q 0678205, 1802158)
**Measurement Date** Feb 10 - Feb 11, 2025
**Measurement by** Vanich Phanpipit
**Sound Level meter** Serial No. 572609

| Time | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|---|---|---|
| 02:00 PM - 03:00 PM | 48.3 | 71.6 | 37.1 |
| 03:00 PM - 04:00 PM | 56.1 | 83.4 | 36.6 |
| 04:00 PM - 05:00 PM | 48.8 | 73.3 | 39.3 |
| 05:00 PM - 06:00 PM | 56.2 | 80.8 | 39.0 |
| 06:00 PM - 07:00 PM | 51.6 | 73.6 | 37.2 |
| 07:00 PM - 08:00 PM | 45.0 | 71.7 | 34.4 |
| 08:00 PM - 09:00 PM | 45.2 | 73.0 | 36.5 |
| 09:00 PM - 10:00 PM | 52.3 | 83.2 | 35.5 |
| 10:00 PM - 11:00 PM | 53.8 | 82.3 | 36.6 |
| 11:00 PM - 12:00 AM | 47.7 | 71.6 | 36.9 |
| 12:00 AM - 01:00 AM | 48.9 | 73.2 | 39.8 |
| 01:00 AM - 02:00 AM | 48.5 | 72.2 | 40.4 |
| 02:00 AM - 03:00 AM | 47.1 | 71.6 | 45.1 |
| 03:00 AM - 04:00 AM | 45.3 | 80.3 | 33.8 |
| 04:00 AM - 05:00 AM | 44.8 | 70.0 | 34.7 |
| 05:00 AM - 06:00 AM | 47.6 | 73.6 | 38.8 |
| 06:00 AM - 07:00 AM | 51.5 | 73.6 | 39.1 |
| 07:00 AM - 08:00 AM | 48.7 | 74.8 | 38.6 |
| 08:00 AM - 09:00 AM | 50.0 | 74.4 | 40.0 |
| 09:00 AM - 10:00 AM | 48.1 | 72.4 | 44.1 |
| 10:00 AM - 11:00 AM | 44.9 | 71.7 | 43.4 |
| 11:00 AM - 12:00 PM | 48.7 | 74.3 | 44.0 |
| 12:00 PM - 01:00 PM | 47.5 | 75.2 | 44.0 |
| 01:00 PM - 02:00 PM | 48.6 | 70.2 | 47.0 |
| Leq Average 24 hrs. (dB(A)) | 50.3 | | |
| Lmax (dB(A)) | | 83.4 | |
| L90 (dB(A)) | | | 38.8 |
| Ldn (dB(A)) | 55.9 | | |
| Standard (dB(A)) | 70 | 115 | |

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

**Technical Management** [redacted]
Scientist (3)

**Approved by** [redacted]
Section Head

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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512274**
Date Received : Feb 18, 2025
Date Reported : Feb 20, 2025
Report g umber: 32391-2N



**Sample Number** 251224-N
**Parameter** Air Quality
**Location** Ban g onf Ra Man (GPS - 4Q 064-68-, 1802590)
**Measurement Date** Feb 10 NFeb 11, 2025
**Measurement by** Vanich Phanpipit
**Sound Level meter** Serial g o. 542-54

| Time | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|---|---|---|
| 02:00 PM N03:00 PM | -8.0 | 68.5 | 34.4 |
| 03:00 PM N0-:00 PM | -8.4 | 64.9 | 34.8 |
| 0-:00 PM N05:00 PM | -9.- | 68.3 | 38.0 |
| 05:00 PM N06:00 PM | 55.9 | 8-.3 | -0.2 |
| 06:00 PM N04:00 PM | 53.0 | 83.5 | 38.8 |
| 04:00 PM N08:00 PM | -4.0 | 48.9 | 39.9 |
| 08:00 PM N09:00 PM | --.- | 65.0 | 38.- |
| 09:00 PM N10:00 PM | --.3 | 58.6 | 39.0 |
| 10:00 PM N11:00 PM | -5.0 | 6-.0 | 39.1 |
| 11:00 PM N12:00 AM | -1.6 | 60.2 | 34.4 |
| 12:00 AM N01:00 AM | -5.1 | 40.3 | 39.3 |
| 01:00 AM N02:00 AM | --.2 | 58.8 | -1.2 |
| 02:00 AM N03:00 AM | -5.3 | 58.4 | -1.5 |
| 03:00 AM N0-:00 AM | 65.- | 9-.0 | 38.0 |
| 0-:00 AM N05:00 AM | 50.6 | 43.9 | -1.- |
| 05:00 AM N06:00 AM | -9.3 | 62.- | -0.6 |
| 06:00 AM N04:00 AM | 50.8 | 68.- | -2.9 |
| 04:00 AM N08:00 AM | 55.3 | 41.1 | -6.5 |
| 08:00 AM N09:00 AM | 53.2 | 46.1 | -2.4 |
| 09:00 AM N10:00 AM | 51.- | 66.2 | -1.5 |
| 10:00 AM N11:00 AM | -8.4 | 66.6 | 39.1 |
| 11:00 AM N12:00 PM | -9.0 | 68.2 | 38.4 |
| 12:00 PM N01:00 PM | -4.8 | 64.5 | 38.2 |
| 01:00 PM N02:00 PM | -4.6 | 49.5 | -0.0 |
| Leq Averaf e 2- hrs. (dB(A)) | 53.8 | | |
| Lmax (dB(A)) | | 9-.0 | |
| L90 (dB(A)) | | | 39.1 |
| Ldn (dB(A)) | 62.3 | | |
| Standard (dB(A)) | 40 | 115 | |

Re7erence Method : ISO1996N and 1996N2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 25-0) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 25-8

**Technical Management** [redacted]
Scientist (3)

**Approved by** [redacted]
Section Head



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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512274**
Date Received : Feb 18, 2025
Date Reported : Feb 20, 2025
Report g umber: 32391-1N

Paf e 1 o71

**Sample Number** 251224-N8
**Parameter** Air Quality
**Location** Ban Donf Lonf (GPS - 4Q 0648205, 1802158)
**Measurement Date** Feb 12 NFeb 13, 2025
**Measurement by** Vanich Phanpipit
**Sound Level meter** Serial g o. 542609

| Time | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|---|---|---|
| 02:00 PM N03:00 PM | -3.3 | 66.2 | 34.5 |
| 03:00 PM N0-:00 PM | -8.5 | 49.3 | 38.3 |
| 0-:00 PM N05:00 PM | -6.- | 40.4 | 39.1 |
| 05:00 PM N06:00 PM | -9.2 | 43.3 | 38.6 |
| 06:00 PM N04:00 PM | 52.9 | 80.8 | 36.9 |
| 04:00 PM N08:00 PM | --.2 | 43.1 | -0.0 |
| 08:00 PM N09:00 PM | 53.9 | 60.6 | -2.- |
| 09:00 PM N10:00 PM | -3.6 | 42.- | -1.3 |
| 10:00 PM N11:00 PM | -4.6 | 42.9 | -2.6 |
| 11:00 PM N12:00 AM | -3.- | 64.2 | -1.8 |
| 12:00 AM N01:00 AM | -2.0 | 51.8 | 39.- |
| 01:00 AM N02:00 AM | -4.2 | 42.5 | 34.9 |
| 02:00 AM N03:00 AM | -2.1 | 65.3 | 36.3 |
| 03:00 AM N0-:00 AM | -8.6 | 43.5 | 3-.8 |
| 0-:00 AM N05:00 AM | -1.8 | 60.9 | 36.0 |
| 05:00 AM N06:00 AM | 51.9 | 4-.1 | 38.4 |
| 06:00 AM N04:00 AM | 56.1 | 83.5 | -1.3 |
| 04:00 AM N08:00 AM | 54.0 | 8-.0 | --.2 |
| 08:00 AM N09:00 AM | 53.4 | 46.- | 39.4 |
| 09:00 AM N10:00 AM | 51.8 | 82.0 | 34.8 |
| 10:00 AM N11:00 AM | -8.6 | 45.1 | 38.- |
| 11:00 AM N12:00 PM | 53.4 | 46.- | 39.4 |
| 12:00 PM N01:00 PM | 51.8 | 82.0 | 34.8 |
| 01:00 PM N02:00 PM | -8.6 | 45.1 | 38.- |
| Leq Averaf e 2- hrs. (dB(A)) | 50.5 | | |
| Lmax (dB(A)) | | 8-.0 | |
| L90 (dB(A)) | | | 38.6 |
| Ldn (dB(A)) | 56.2 | | |
| Standard (dB(A)) | 40 | 115 | |

Re7erence Method : ISO1996N and 1996N2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 25-0) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 25-8

**Technical Management** [redacted]
Scientist (3)

**Approved by** [redacted]
Section Head

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S:\Reports_Air Noise.rpt ( 1:08PM)

MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512274**
Date Received : Feb 18, 2025
Date Reported : Feb 20, 2025
Report g umber: 32391--N1



**Sample Number** 251224-N5
**Parameter** Air Quality
**Location** Ban g onf Ra Man (GPS - 4Q 064-68-, 1802590)
**Measurement Date** Feb 12 NFeb 13, 2025
**Measurement by** Vanich Phanpipit
**Sound Level meter** Serial g o. 542-54

| Time | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|---|---|---|
| 02:00 PM N03:00 PM | -6.2 | 40.2 | 38.- |
| 03:00 PM N0-:00 PM | -8.0 | 66.9 | 38.- |
| 0-:00 PM N05:00 PM | -8.6 | 69.0 | 38.1 |
| 05:00 PM N06:00 PM | -9.- | 68.- | -0.- |
| 06:00 PM N04:00 PM | -8.9 | 64.8 | -0.8 |
| 04:00 PM N08:00 PM | -9.8 | 80.1 | 38.2 |
| 08:00 PM N09:00 PM | -4.6 | 49.5 | -0.0 |
| 09:00 PM N10:00 PM | -5.2 | 40.2 | 39.8 |
| 10:00 PM N11:00 PM | -5.6 | 6-.6 | -0.6 |
| 11:00 PM N12:00 AM | --.2 | 4-.1 | 39.4 |
| 12:00 AM N01:00 AM | -3.0 | 66.0 | 34.8 |
| 01:00 AM N02:00 AM | -5.9 | 42.4 | 38.0 |
| 02:00 AM N03:00 AM | -5.3 | 41.1 | 34.8 |
| 03:00 AM N0-:00 AM | -1.4 | 59.5 | 34.4 |
| 0-:00 AM N05:00 AM | -2.3 | 59.4 | 38.0 |
| 05:00 AM N06:00 AM | -8.6 | 84.- | -0.2 |
| 06:00 AM N04:00 AM | -4.4 | 6-.- | -0.2 |
| 04:00 AM N08:00 AM | 51.0 | 6-.9 | -2.1 |
| 08:00 AM N09:00 AM | 54.- | 9-.6 | -8.2 |
| 09:00 AM N10:00 AM | 51.8 | 40.1 | -2.2 |
| 10:00 AM N11:00 AM | -9.8 | 6-.2 | -0.6 |
| 11:00 AM N12:00 PM | -4.- | 6-.1 | 39.1 |
| 12:00 PM N01:00 PM | -5.1 | 6-.4 | 34.1 |
| 01:00 PM N02:00 PM | -5.1 | 66.5 | 36.1 |
| Leq Averaf e 2- hrs. (dB(A)) | -9.0 | | |
| Lmax (dB(A)) | | 9-.6 | |
| L90 (dB(A)) | | | 39.1 |
| Ldn (dB(A)) | 53.0 | | |
| Standard (dB(A)) | 40 | 115 | |

Re7erence Method : ISO1996N1 and 1996N2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 25-0) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 25-8

**Technical Management** [redacted]
Scientist (3)

**Approved by** [redacted]
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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512274**
Date Received : Feb 18, 2025
Date Reported : Feb 20, 2025
Report g umber: 32391-3N1



**Sample Number** 251224-N5
**Parameter** Air Quality
**Location** Ban g onf Ra Man (GPS - 4Q 064-68-, 1802590)
**Measurement Date** Feb 11 NFeb 12, 2025
**Measurement by** Vanich Phanpipit
**Sound Level meter** Serial g o. 542-54

| Time | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|---|---|---|
| 02:00 PM N03:00 PM | -4.8 | 68.0 | 34.5 |
| 03:00 PM N0-:00 PM | -8.2 | 69.9 | 34.- |
| 0-:00 PM N05:00 PM | -6.4 | 66.- | 38.0 |
| 05:00 PM N06:00 PM | -9.5 | 66.1 | 39.4 |
| 06:00 PM N04:00 PM | -8.9 | 64.8 | -0.2 |
| 04:00 PM N08:00 PM | 50.2 | 66.2 | -1.0 |
| 08:00 PM N09:00 PM | 50.4 | 42.2 | -1.4 |
| 09:00 PM N10:00 PM | -8.1 | 41.4 | -0.2 |
| 10:00 PM N11:00 PM | -4.- | 66.8 | -1.4 |
| 11:00 PM N12:00 AM | -4.1 | 40.3 | -2.2 |
| 12:00 AM N01:00 AM | -8.1 | 66.- | -1.6 |
| 01:00 AM N02:00 AM | -6.6 | 65.0 | -0.9 |
| 02:00 AM N03:00 AM | --.3 | 68.1 | 39.2 |
| 03:00 AM N0-:00 AM | -1.8 | 54.4 | 39.- |
| 0-:00 AM N05:00 AM | --.0 | 6-.5 | 39.4 |
| 05:00 AM N06:00 AM | --.0 | 62.9 | 38.9 |
| 06:00 AM N04:00 AM | -8.4 | 64.2 | 38.4 |
| 04:00 AM N08:00 AM | -4.8 | 68.8 | -2.8 |
| 08:00 AM N09:00 AM | 50.5 | 65.0 | --.- |
| 09:00 AM N10:00 AM | 5-.2 | 46.0 | -4.3 |
| 10:00 AM N11:00 AM | 5-.4 | 68.4 | -4.6 |
| 11:00 AM N12:00 PM | 50.9 | 66.9 | -2.4 |
| 12:00 PM N01:00 PM | -8.8 | 40.8 | -0.8 |
| 01:00 PM N02:00 PM | -6.9 | 61.- | 39.4 |
| Leq Averaf e 2- hrs. (dB(A)) | -9.2 | | |
| Lmax (dB(A)) | | 46.0 | |
| L90 (dB(A)) | | | -0.2 |
| Ldn (dB(A)) | 53.5 | | |
| Standard (dB(A)) | 40 | 115 | |

Re7erence Method : ISO1996N1 and 1996N2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 25-0) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 25-8

**Technical Management** [redacted]
Scientist (3)

**Approved by** [redacted]
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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512274**
Date Received : Feb 18, 2025
Date Reported : Feb 20, 2025
Report Number: 3239161-1



**Sample Number** 2512274-23
**Parameter** Air Quality
**Location** Ban Klong Sai Yang Rong (GPS 47Q 0676121, 1798820)
**Measurement Date** Feb 15 - Feb 16, 2025
**Measurement by** Vanich Phanpipit
**Sound Level meter** Serial No. 658241

| Time | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|---|---|---|
| 10:00 AM - 11:00 AM | 47.9 | 66.4 | 37.1 |
| 11:00 AM - 12:00 PM | 42.0 | 70.8 | 36.0 |
| 12:00 PM - 01:00 PM | 47.1 | 66.4 | 36.7 |
| 01:00 PM - 02:00 PM | 48.0 | 69.4 | 36.9 |
| 02:00 PM - 03:00 PM | 47.2 | 67.6 | 37.8 |
| 03:00 PM - 04:00 PM | 48.4 | 67.8 | 39.5 |
| 04:00 PM - 05:00 PM | 43.5 | 61.7 | 36.3 |
| 05:00 PM - 06:00 PM | 47.8 | 62.3 | 39.7 |
| 06:00 PM - 07:00 PM | 50.7 | 62.6 | 48.3 |
| 07:00 PM - 08:00 PM | 49.9 | 63.3 | 46.9 |
| 08:00 PM - 09:00 PM | 47.7 | 67.8 | 44.9 |
| 09:00 PM - 10:00 PM | 46.7 | 62.9 | 44.0 |
| 10:00 PM - 11:00 PM | 44.8 | 52.9 | 41.8 |
| 11:00 PM - 12:00 AM | 43.9 | 62.7 | 39.3 |
| 12:00 AM - 01:00 AM | 40.8 | 55.2 | 38.1 |
| 01:00 AM - 02:00 AM | 41.3 | 64.2 | 37.7 |
| 02:00 AM - 03:00 AM | 50.5 | 76.7 | 39.2 |
| 03:00 AM - 04:00 AM | 46.8 | 66.4 | 40.9 |
| 04:00 AM - 05:00 AM | 45.4 | 59.5 | 39.3 |
| 05:00 AM - 06:00 AM | 47.3 | 73.1 | 40.5 |
| 06:00 AM - 07:00 AM | 46.7 | 66.4 | 40.7 |
| 07:00 AM - 08:00 AM | 46.2 | 66.1 | 39.6 |
| 08:00 AM - 09:00 AM | 43.3 | 74.2 | 36.0 |
| 09:00 AM - 10:00 AM | 43.9 | 65.3 | 35.5 |
| Leq Average 24 hrs. (dB(A)) | 46.9 | | |
| Lmax (dB(A)) | | 76.7 | |
| L90 (dB(A)) | | | 39.3 |
| Ldn (dB(A)) | 52.8 | | |
| Standard (dB(A)) | 70 | 115 | |

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

**Technical Management** [redacted]
Scientist (3)

**Approved by** [redacted]
Section Head



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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512274**
Date Received : Feb 18, 2025
Date Reported : Feb 20, 2025
Report Number: 3239160-1



**Sample Number** 2512274-22
**Parameter** Air Quality
**Location** Ban Klong Sai Yang Rong (GPS 47Q 0676121, 1798820)
**Measurement Date** Feb 14 - Feb 15, 2025
**Measurement by** Vanich Phanpipit
**Sound Level meter** Serial No. 658241

| Time | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|---|---|---|
| 10:00 AM - 11:00 AM | 49.9 | 77.6 | 37.1 |
| 11:00 AM - 12:00 PM | 42.4 | 64.8 | 36.9 |
| 12:00 PM - 01:00 PM | 48.4 | 64.5 | 38.1 |
| 01:00 PM - 02:00 PM | 46.5 | 65.6 | 37.3 |
| 02:00 PM - 03:00 PM | 51.2 | 79.6 | 36.5 |
| 03:00 PM - 04:00 PM | 48.5 | 68.7 | 37.9 |
| 04:00 PM - 05:00 PM | 44.6 | 70.1 | 35.4 |
| 05:00 PM - 06:00 PM | 50.0 | 67.1 | 37.8 |
| 06:00 PM - 07:00 PM | 55.9 | 76.0 | 52.1 |
| 07:00 PM - 08:00 PM | 54.2 | 64.2 | 51.8 |
| 08:00 PM - 09:00 PM | 51.9 | 55.5 | 47.9 |
| 09:00 PM - 10:00 PM | 51.4 | 64.0 | 48.8 |
| 10:00 PM - 11:00 PM | 50.3 | 56.2 | 45.5 |
| 11:00 PM - 12:00 AM | 46.9 | 61.1 | 39.1 |
| 12:00 AM - 01:00 AM | 42.5 | 69.5 | 37.1 |
| 01:00 AM - 02:00 AM | 41.9 | 59.6 | 36.3 |
| 02:00 AM - 03:00 AM | 39.6 | 65.2 | 33.7 |
| 03:00 AM - 04:00 AM | 45.4 | 70.0 | 35.3 |
| 04:00 AM - 05:00 AM | 44.5 | 61.9 | 36.6 |
| 05:00 AM - 06:00 AM | 47.6 | 73.7 | 38.7 |
| 06:00 AM - 07:00 AM | 45.6 | 69.8 | 38.0 |
| 07:00 AM - 08:00 AM | 48.4 | 66.9 | 37.1 |
| 08:00 AM - 09:00 AM | 49.8 | 65.6 | 38.2 |
| 09:00 AM - 10:00 AM | 49.9 | 71.4 | 39.2 |
| Leq Average 24 hrs. (dB(A)) | 49.5 | | |
| Lmax (dB(A)) | | 79.6 | |
| L90 (dB(A)) | | | 37.8 |
| Ldn (dB(A)) | 53.5 | | |
| Standard (dB(A)) | 70 | 115 | |

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

**Technical Management** [redacted]
Scientist (3)

**Approved by** [redacted]
Section Head

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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512274**
Date Received : Feb 18, 2025
Date Reported : Feb 20, 2025
Report g umber: 32391-8N1



| | |
|---|---|
| **Sample Number** | 251224-N10 |
| **Parameter** | Air Quality |
| **Location** | Ban Khao Mor (GPS -4Q 0645403, 180-304) |
| **Measurement Date** | Feb 10 NFeb 11, 2025 |
| **Measurement by** | Vanich Phanpipit |
| **Sound Level meter** | Serial g o. 858514 |

| Time | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|---|---|---|
| 02:00 PM N03:00 PM | --.2 | 43.1 | -0.0 |
| 03:00 PM N0-:00 PM | -3.9 | 60.6 | -2.- |
| 0-:00 PM N05:00 PM | -3.6 | 42.- | -1.3 |
| 05:00 PM N06:00 PM | -5.3 | 80.3 | 33.8 |
| 06:00 PM N04:00 PM | --.8 | 40.0 | 3-.4 |
| 04:00 PM N08:00 PM | -4.6 | 43.6 | 38.8 |
| 08:00 PM N09:00 PM | -3.5 | 69.2 | 36.9 |
| 09:00 PM N10:00 PM | --.8 | 40.0 | 34.8 |
| 10:00 PM N11:00 PM | --.4 | 61.5 | -2.3 |
| 11:00 PM N12:00 AM | -3.0 | 53.4 | -1.3 |
| 12:00 AM N01:00 AM | -4.6 | 43.2 | 38.1 |
| 01:00 AM N02:00 AM | -3.9 | 61.8 | 36.- |
| 02:00 AM N03:00 AM | -5.3 | 42.2 | -1.6 |
| 03:00 AM N0-:00 AM | --.- | 4-.0 | -2.- |
| 0-:00 AM N05:00 AM | -4.4 | 42.5 | -2.6 |
| 05:00 AM N06:00 AM | --.6 | 66.3 | 38.1 |
| 06:00 AM N04:00 AM | -3.8 | 69.9 | 38.- |
| 04:00 AM N08:00 AM | --.6 | 62.3 | 38.1 |
| 08:00 AM N09:00 AM | --.4 | 41.2 | -2.6 |
| 09:00 AM N10:00 AM | -4.- | 40.9 | -2.6 |
| 10:00 AM N11:00 AM | -3.8 | 52.9 | -2.6 |
| 11:00 AM N12:00 PM | -3.- | 65.1 | -1.8 |
| 12:00 PM N01:00 PM | --.6 | 66.9 | 38.1 |
| 01:00 PM N02:00 PM | -9.4 | 80.6 | 39.0 |
| Leq Averafe 2- hrs. (dB(A)) | -5.- | | |
| Lmax (dB(A)) | | 80.6 | |
| L90 (dB(A)) | | | 39.0 |
| Ldn (dB(A)) | 51.4 | | |
| Standard (dB(A)) | 40 | 115 | |

Re7erence Method : ISO1996N1 and 1996N2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 25-0) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 25-8

**Technical Management** [redacted]
Scientist (3)

**Approved by** [redacted]
Section Head



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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512274**
Date Received : Feb 18, 2025
Date Reported : Feb 20, 2025
Report Number: 3239162-1



| | |
|---|---|
| **Sample Number** | 2512274-24 |
| **Parameter** | Air Quality |
| **Location** | Ban Klong Sai Yang Rong (GPS 47Q 0676121, 1798820) |
| **Measurement Date** | Feb 16 - Feb 17, 2025 |
| **Measurement by** | Vanich Phanpipit |
| **Sound Level meter** | Serial No. 658241 |

| Time | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|---|---|---|
| 10:00 AM - 11:00 AM | 43.4 | 71.0 | 35.7 |
| 11:00 AM - 12:00 PM | 43.6 | 60.8 | 36.1 |
| 12:00 PM - 01:00 PM | 44.6 | 68.3 | 36.4 |
| 01:00 PM - 02:00 PM | 43.3 | 64.5 | 36.4 |
| 02:00 PM - 03:00 PM | 45.2 | 64.4 | 38.4 |
| 03:00 PM - 04:00 PM | 46.0 | 69.7 | 38.0 |
| 04:00 PM - 05:00 PM | 42.1 | 64.7 | 36.2 |
| 05:00 PM - 06:00 PM | 47.8 | 62.2 | 41.1 |
| 06:00 PM - 07:00 PM | 55.0 | 62.0 | 52.4 |
| 07:00 PM - 08:00 PM | 54.2 | 64.2 | 51.8 |
| 08:00 PM - 09:00 PM | 51.9 | 55.5 | 47.9 |
| 09:00 PM - 10:00 PM | 51.4 | 64.0 | 48.8 |
| 10:00 PM - 11:00 PM | 50.3 | 56.2 | 45.5 |
| 11:00 PM - 12:00 AM | 46.4 | 65.5 | 40.7 |
| 12:00 AM - 01:00 AM | 45.1 | 70.8 | 39.6 |
| 01:00 AM - 02:00 AM | 44.7 | 55.2 | 39.8 |
| 02:00 AM - 03:00 AM | 46.8 | 70.5 | 39.3 |
| 03:00 AM - 04:00 AM | 48.2 | 68.8 | 40.0 |
| 04:00 AM - 05:00 AM | 49.0 | 68.2 | 43.7 |
| 05:00 AM - 06:00 AM | 46.2 | 69.0 | 39.0 |
| 06:00 AM - 07:00 AM | 46.3 | 65.7 | 39.0 |
| 07:00 AM - 08:00 AM | 51.4 | 69.5 | 40.3 |
| 08:00 AM - 09:00 AM | 47.7 | 70.6 | 37.6 |
| 09:00 AM - 10:00 AM | 47.2 | 64.4 | 38.5 |
| Leq Average 24 hrs. (dB(A)) | 48.9 | | |
| Lmax (dB(A)) | | 71.0 | |
| L90 (dB(A)) | | | 39.3 |
| Ldn (dB(A)) | 54.2 | | |
| Standard (dB(A)) | 70 | 115 | |

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

**Technical Management** [redacted]
Scientist (3)

**Approved by** [redacted]
Section Head

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MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512274**
Date Received : Feb 18, 2025
Date Reported : Feb 20, 2025
Report Number: 3239150-1



**Sample Number** 2512274-12
**Parameter** Air Quality
**Location** Ban Khao Mor (GPS 47Q 0675703, 1804307)
**Measurement Date** Feb 12 - Feb 13, 2025
**Measurement by** Vanich Phanpipit
**Sound Level meter** Serial No. 858517

| Time | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|---|---|---|
| 02:00 PM - 03:00 PM | 45.0 | 68.7 | 38.6 |
| 03:00 PM - 04:00 PM | 45.8 | 72.1 | 38.3 |
| 04:00 PM - 05:00 PM | 44.6 | 66.9 | 38.1 |
| 05:00 PM - 06:00 PM | 49.7 | 80.6 | 39.0 |
| 06:00 PM - 07:00 PM | 45.8 | 71.8 | 38.4 |
| 07:00 PM - 08:00 PM | 47.9 | 74.8 | 38.7 |
| 08:00 PM - 09:00 PM | 49.7 | 67.3 | 43.7 |
| 09:00 PM - 10:00 PM | 44.7 | 71.2 | 42.6 |
| 10:00 PM - 11:00 PM | 47.4 | 70.9 | 42.6 |
| 11:00 PM - 12:00 AM | 43.8 | 52.9 | 42.6 |
| 12:00 AM - 01:00 AM | 43.4 | 65.1 | 41.8 |
| 01:00 AM - 02:00 AM | 45.2 | 68.6 | 43.0 |
| 02:00 AM - 03:00 AM | 45.4 | 60.7 | 43.5 |
| 03:00 AM - 04:00 AM | 43.9 | 62.8 | 41.7 |
| 04:00 AM - 05:00 AM | 45.6 | 58.5 | 44.4 |
| 05:00 AM - 06:00 AM | 45.4 | 59.8 | 44.3 |
| 06:00 AM - 07:00 AM | 45.5 | 71.9 | 43.8 |
| 07:00 AM - 08:00 AM | 43.5 | 69.2 | 36.9 |
| 08:00 AM - 09:00 AM | 44.8 | 70.0 | 37.8 |
| 09:00 AM - 10:00 AM | 45.6 | 58.5 | 44.4 |
| 10:00 AM - 11:00 AM | 45.4 | 59.8 | 44.3 |
| 11:00 AM - 12:00 PM | 45.5 | 71.9 | 43.8 |
| 12:00 PM - 01:00 PM | 45.3 | 80.3 | 33.8 |
| 01:00 PM - 02:00 PM | 44.8 | 70.0 | 34.7 |
| Leq Average 24 hrs. (dB(A)) | 45.9 | | |
| Lmax (dB(A)) | | 80.6 | |
| L90 (dB(A)) | | | 41.8 |
| Ldn (dB(A)) | 51.8 | | |
| Standard (dB(A)) | 70 | 115 | |

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

**Technical Management** [redacted]
Scientist (3)

**Approved by** [redacted]
Section Head

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น.10/42

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512274**
Date Received : Feb 18, 2025
Date Reported : Feb 20, 2025
Report g umber: 32391-9N1



**Sample Number** 251224-N11
**Parameter** Air Quality
**Location** Ban Khao Mor (GPS - 4Q 0645403, 180-304)
**Measurement Date** Feb 11 NFeb 12, 2025
**Measurement by** Vanich Phanpipit
**Sound Level meter** Serial go. 858514

| Time | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|---|---|---|
| 02:00 PM N03:00 PM | 55.9 | 91.1 | 38.2 |
| 03:00 PM N0-:00 PM | -5.3 | 40.4 | 34.8 |
| 0-:00 PM N05:00 PM | -4.1 | 64.4 | 39.0 |
| 05:00 PM N06:00 PM | 5-.5 | 44.0 | -0.1 |
| 06:00 PM N04:00 PM | 50.6 | 4-.2 | 38.2 |
| 04:00 PM N08:00 PM | 63.3 | 100.9 | -2.- |
| 08:00 PM N09:00 PM | -5.- | 62.1 | -3.0 |
| 09:00 PM N10:00 PM | -5.0 | 65.3 | -3.2 |
| 10:00 PM N11:00 PM | --.8 | 59.2 | -2.3 |
| 11:00 PM N12:00 AM | -6.3 | 43.6 | -1.8 |
| 12:00 AM N01:00 AM | -6.1 | 6-.9 | -2.0 |
| 01:00 AM N02:00 AM | -5.3 | 65.6 | -2.8 |
| 02:00 AM N03:00 AM | -3.9 | 66.4 | -1.4 |
| 03:00 AM N0-:00 AM | -3.1 | 63.- | 39.3 |
| 0-:00 AM N05:00 AM | -3.8 | 61.2 | -1.1 |
| 05:00 AM N06:00 AM | -5.3 | 69.3 | -0.1 |
| 06:00 AM N04:00 AM | 50.9 | 49.6 | 39.6 |
| 04:00 AM N08:00 AM | 52.6 | 45.4 | --.3 |
| 08:00 AM N09:00 AM | -9.9 | 42.2 | -2.3 |
| 09:00 AM N10:00 AM | -8.- | 43.- | 39.8 |
| 10:00 AM N11:00 AM | --.6 | 66.3 | 38.1 |
| 11:00 AM N12:00 PM | -3.8 | 69.9 | 38.- |
| 12:00 PM N01:00 PM | --.6 | 62.3 | 38.1 |
| 01:00 PM N02:00 PM | -5.2 | 62.3 | 39.9 |
| Leq Averaf e 2- hrs. (dB(A)) | 52.1 | | |
| Lmax (dB(A)) | | 100.9 | |
| L90 (dB(A)) | | | -0.1 |
| Ldn (dB(A)) | 5-.8 | | |
| Standard (dB(A)) | 40 | 115 | |

Re7erence Method : ISO1996N1 and 1996N2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 25-0) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 25-8

**Technical Management** [redacted]
Scientist (3)

**Approved by** [redacted]
Section Head

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MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512274**
Date Received : Feb 18, 2025
Date Reported : Feb 20, 2025
Report g umber: 323916-N1



**Sample Number** 251224-N26
**Parameter** Air Quality
**Location** Ban Lonf Du (GPS - 4Q 0642008, 1499066)
**Measurement Date** Feb 11 NFeb 12, 2025
**Measurement by** Vanich Phanpipit
**Sound Level meter** Serial g o. 6582-1

| Time | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|---|---|---|
| 03:00 PM N0-:00 PM | 68.2 | 44.2 | 53.9 |
| 0-:00 PM N05:00 PM | 58.0 | 69.- | 53.1 |
| 05:00 PM N06:00 PM | 58.0 | 40.8 | 53.3 |
| 06:00 PM N04:00 PM | 59.4 | 42.- | 53.- |
| 04:00 PM N08:00 PM | 56.5 | 42.6 | 50.6 |
| 08:00 PM N09:00 PM | 52.0 | 62.3 | 50.3 |
| 09:00 PM N10:00 PM | 51.1 | 4-.2 | -8.0 |
| 10:00 PM N11:00 PM | 51.6 | 61.- | -8.- |
| 11:00 PM N12:00 AM | 51.4 | 68.9 | -8.6 |
| 12:00 AM N01:00 AM | 50.5 | 64.3 | -5.4 |
| 01:00 AM N02:00 AM | --.2 | 63.5 | -1.0 |
| 02:00 AM N03:00 AM | -8.- | 61.2 | -2.4 |
| 03:00 AM N0-:00 AM | -9.6 | 60.8 | -5.3 |
| 0-:00 AM N05:00 AM | 59.3 | 40.5 | -5.4 |
| 05:00 AM N06:00 AM | 62.- | 85.8 | 56.2 |
| 06:00 AM N04:00 AM | 59.0 | 48.2 | -5.4 |
| 04:00 AM N08:00 AM | 50.5 | 68.0 | -2.6 |
| 08:00 AM N09:00 AM | 52.0 | 42.0 | -2.0 |
| 09:00 AM N10:00 AM | -8.8 | 4-.5 | -2.2 |
| 10:00 AM N11:00 AM | 51.8 | 49.8 | -2.0 |
| 11:00 AM N12:00 PM | 55.6 | 68.4 | 50.4 |
| 12:00 PM N01:00 PM | 56.8 | 82.0 | -6.4 |
| 01:00 PM N02:00 PM | 56.4 | 40.8 | -3.5 |
| 02:00 PM N03:00 PM | -9.3 | 40.5 | -3.8 |
| Leq Averafe 2- hrs. (dB(A)) | 58.1 | | |
| Lmax (dB(A)) | | 85.8 | |
| L90 (dB(A)) | | | -5.4 |
| Ldn (dB(A)) | 63.3 | | |
| Standard (dB(A)) | 40 | 115 | |

Re7erence Method : ISO1996N1 and 1996N2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 25-0) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 25-8

**Technical Management** [redacted]
Scientist (3)

**Approved by** [redacted]
Section Head

น.10/43

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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512274**
Date Received : Feb 18, 2025
Date Reported : Feb 20, 2025
Report Number: 3239163-1



**Sample Number** 2512274-25
**Parameter** Air Quality
**Location** Ban Long Du (GPS 47Q 0672008, 1799066)
**Measurement Date** Feb 10 - Feb 11, 2025
**Measurement by** Vanich Phanpipit
**Sound Level meter** Serial No. 658241

| Time | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|---|---|---|
| 03:00 PM - 04:00 PM | 48.7 | 75.9 | 42.5 |
| 04:00 PM - 05:00 PM | 52.6 | 75.1 | 44.0 |
| 05:00 PM - 06:00 PM | 58.2 | 83.1 | 45.1 |
| 06:00 PM - 07:00 PM | 60.1 | 73.4 | 53.8 |
| 07:00 PM - 08:00 PM | 53.2 | 69.0 | 50.0 |
| 08:00 PM - 09:00 PM | 53.5 | 62.9 | 49.7 |
| 09:00 PM - 10:00 PM | 53.7 | 69.4 | 49.7 |
| 10:00 PM - 11:00 PM | 53.0 | 71.5 | 49.7 |
| 11:00 PM - 12:00 AM | 51.7 | 74.5 | 47.4 |
| 12:00 AM - 01:00 AM | 48.9 | 72.5 | 43.3 |
| 01:00 AM - 02:00 AM | 44.4 | 60.3 | 40.6 |
| 02:00 AM - 03:00 AM | 51.1 | 74.0 | 42.0 |
| 03:00 AM - 04:00 AM | 51.3 | 72.2 | 43.8 |
| 04:00 AM - 05:00 AM | 57.0 | 75.6 | 44.3 |
| 05:00 AM - 06:00 AM | 61.7 | 82.5 | 48.1 |
| 06:00 AM - 07:00 AM | 56.7 | 76.0 | 43.3 |
| 07:00 AM - 08:00 AM | 50.1 | 70.6 | 42.0 |
| 08:00 AM - 09:00 AM | 49.1 | 72.7 | 41.7 |
| 09:00 AM - 10:00 AM | 48.4 | 71.5 | 41.2 |
| 10:00 AM - 11:00 AM | 46.5 | 68.2 | 41.5 |
| 11:00 AM - 12:00 PM | 46.6 | 68.7 | 40.5 |
| 12:00 PM - 01:00 PM | 45.5 | 67.5 | 41.0 |
| 01:00 PM - 02:00 PM | 45.6 | 68.1 | 41.1 |
| 02:00 PM - 03:00 PM | 64.4 | 75.6 | 40.9 |
| Leq Average 24 hrs. (dB(A)) | 55.7 | | |
| Lmax (dB(A)) | | 83.1 | |
| L90 (dB(A)) | | | 43.3 |
| Ldn (dB(A)) | 61.9 | | |
| Standard (dB(A)) | 70 | 115 | |

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

**Technical Management** [redacted]
Scientist (3)

**Approved by** [redacted]
Section Head

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MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512274**
Date Received : Feb 18, 2025
Date Reported : Feb 20, 2025
Report g umber: 32391-5N1



**Sample Number** 251224-N4
**Parameter** Air Quality
**Location** Ban gonf (anf GSP( -4Q 0648384, 1805433)
**Measurement Date** Feb 10 NFeb 11, 2025
**Measurement by** Vanich Phanpipit
**Sound Level meter** (erial go. 58-983

| Time | Leq GdBGA)) | Lmax GdBGA)) | L90 GdBGA)) |
|---|---|---|---|
| 03:00 PM N0-:00 PM | 52.6 | 49.1 | 38.1 |
| 0-:00 PM N05:00 PM | 51.1 | 43.2 | --.0 |
| 05:00 PM N06:00 PM | 53.3 | 43.2 | -5.0 |
| 06:00 PM N04:00 PM | 53.6 | 80.4 | -9.9 |
| 04:00 PM N08:00 PM | 5-.2 | 46.0 | 51.- |
| 08:00 PM N09:00 PM | 50.6 | 64.5 | -5.5 |
| 09:00 PM N10:00 PM | -8.3 | 42.6 | --.8 |
| 10:00 PM N11:00 PM | -9.3 | 43.6 | --.5 |
| 11:00 PM N12:00 AM | -4.0 | 66.- | --.2 |
| 12:00 AM N01:00 AM | -6.2 | 59.9 | --.0 |
| 01:00 AM N02:00 AM | -6.3 | 59.- | -3.4 |
| 02:00 AM N03:00 AM | -6.3 | 56.6 | -3.4 |
| 03:00 AM N0-:00 AM | -4.8 | 43.2 | --.1 |
| 0-:00 AM N05:00 AM | -9.1 | 45.1 | --.3 |
| 05:00 AM N06:00 AM | 5-.4 | 80.1 | -5.2 |
| 06:00 AM N04:00 AM | 60.1 | 82.5 | -8.2 |
| 04:00 AM N08:00 AM | 63.2 | 85.4 | -5.9 |
| 08:00 AM N09:00 AM | 56.5 | 82.2 | --.2 |
| 09:00 AM N10:00 AM | 50.5 | 43.2 | -3.8 |
| 10:00 AM N11:00 AM | 50.1 | 46.6 | -3.5 |
| 11:00 AM N12:00 PM | 52.- | 44.5 | --.3 |
| 12:00 PM N01:00 PM | 60.6 | 8-.3 | -2.9 |
| 01:00 PM N02:00 PM | 50.1 | 41.9 | -2.8 |
| 02:00 PM N03:00 PM | 52.6 | 49.4 | 38.4 |
| Leq Averafe 2- hrs. GdBGA)) | 5-.8 | | |
| Lmax GdBGA)) | | 85.4 | |
| L90 GdBGA)) | | | --.2 |
| Ldn GdBGA)) | 59.8 | | |
| (tandard GdBGA)) | 40 | 115 | |

Re7erence Method : I(O1996N1 and 1996N2
(tandard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 G พ.ศ. 25-0) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 25-8

**Technical Management** [redacted]
(cientist G)

**Approved by** [redacted]
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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512274**
Date Received : Feb 18, 2025
Date Reported : Feb 20, 2025
Report Number: 3239165-1



**Sample Number** 2512274-27
**Parameter** Air Quality
**Location** Ban Long Du (GPS 47Q 0672008, 1799066)
**Measurement Date** Feb 12 - Feb 13, 2025
**Measurement by** Vanich Phanpipit
**Sound Level meter** Serial No. 658241

| Time | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|---|---|---|
| 03:00 PM - 04:00 PM | 47.3 | 70.7 | 42.3 |
| 04:00 PM - 05:00 PM | 55.3 | 80.0 | 43.3 |
| 05:00 PM - 06:00 PM | 55.5 | 72.3 | 45.9 |
| 06:00 PM - 07:00 PM | 57.2 | 75.6 | 50.6 |
| 07:00 PM - 08:00 PM | 53.9 | 62.2 | 50.3 |
| 08:00 PM - 09:00 PM | 50.4 | 67.5 | 46.5 |
| 09:00 PM - 10:00 PM | 49.7 | 71.8 | 44.0 |
| 10:00 PM - 11:00 PM | 51.3 | 80.8 | 47.3 |
| 11:00 PM - 12:00 AM | 52.7 | 74.7 | 47.4 |
| 12:00 AM - 01:00 AM | 50.2 | 71.7 | 46.4 |
| 01:00 AM - 02:00 AM | 45.3 | 69.1 | 40.0 |
| 02:00 AM - 03:00 AM | 44.4 | 64.8 | 40.1 |
| 03:00 AM - 04:00 AM | 45.9 | 61.2 | 41.9 |
| 04:00 AM - 05:00 AM | 63.2 | 73.2 | 53.2 |
| 05:00 AM - 06:00 AM | 64.1 | 79.7 | 50.5 |
| 06:00 AM - 07:00 AM | 60.8 | 73.6 | 45.4 |
| 07:00 AM - 08:00 AM | 52.4 | 75.6 | 41.7 |
| 08:00 AM - 09:00 AM | 48.4 | 70.9 | 41.2 |
| 09:00 AM - 10:00 AM | 47.6 | 78.3 | 41.9 |
| 10:00 AM - 11:00 AM | 46.4 | 67.3 | 41.8 |
| 11:00 AM - 12:00 PM | 47.0 | 69.5 | 40.8 |
| 12:00 PM - 01:00 PM | 46.6 | 68.6 | 40.3 |
| 01:00 PM - 02:00 PM | 46.0 | 67.8 | 38.0 |
| 02:00 PM - 03:00 PM | 45.1 | 61.7 | 39.5 |
| Leq Average 24 hrs. (dB(A)) | 55.6 | | |
| Lmax (dB(A)) | | 80.8 | |
| L90 (dB(A)) | | | 42.3 |
| Ldn (dB(A)) | 64.4 | | |
| Standard (dB(A)) | 70 | 115 | |

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

**Technical Management** [redacted]
Scientist (3)

**Approved by** [redacted]
Section Head

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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512274**
Date Received : Feb 18, 2025
Date Reported : Feb 20, 2025
Report f umber: 32391-Ng1



**Sample Number** 25122N-g9
**Parameter** Air Quality
**Location** Ban f on7 (an7 GSP( -NQ 06N838N, 1805N33)
**Measurement Date** Feb 12 gFeb 13, 2025
**Measurement by** Vanich Phanpipit
**Sound Level meter** (erial f o. 58-983

| Time | Leq GdBGA)) | Lmax GdBGA)) | L90 GdBGA)) |
|---|---|---|---|
| 03:00 PM g0-:00 PM | 51.3 | N8.0 | 38.6 |
| 0-:00 PM g05:00 PM | 56.- | 80.2 | 39.0 |
| 05:00 PM g06:00 PM | 50.5 | N1.9 | --.1 |
| 06:00 PM g0N:00 PM | 53.6 | N5.5 | -3.0 |
| 0N:00 PM g08:00 PM | 53.1 | N9.N | -3.2 |
| 08:00 PM g09:00 PM | 51.6 | N-.2 | --.1 |
| 09:00 PM g10:00 PM | 53.1 | NN.6 | -5.- |
| 10:00 PM g11:00 PM | 52.3 | N5.5 | -N.9 |
| 11:00 PM g12:00 AM | 51.N | 6N.3 | -8.1 |
| 12:00 AM g01:00 AM | -9.3 | N0.1 | -6.6 |
| 01:00 AM g02:00 AM | -8.1 | N1.N | -6.3 |
| 02:00 AM g03:00 AM | -9.0 | N9.6 | -5.2 |
| 03:00 AM g0-:00 AM | -6.2 | 66.6 | --.1 |
| 0-:00 AM g05:00 AM | -5.8 | 62.3 | --.0 |
| 05:00 AM g06:00 AM | -6.3 | 68.6 | --.3 |
| 06:00 AM g0N:00 AM | -5.N | N1.- | -3.- |
| 0N:00 AM g08:00 AM | -N.2 | N1.5 | -3.N |
| 08:00 AM g09:00 AM | 51.9 | N9.5 | -5.- |
| 09:00 AM g10:00 AM | 55.N | N9.9 | -9.3 |
| 10:00 AM g11:00 AM | 59.N | 85.- | -N.9 |
| 11:00 AM g12:00 PM | 59.5 | 8N.1 | -N.0 |
| 12:00 PM g01:00 PM | 61.- | 8-.9 | -5.5 |
| 01:00 PM g02:00 PM | 5-.- | N8.2 | -3.3 |
| 02:00 PM g03:00 PM | 50.0 | N-.1 | -2.3 |
| Leq Avera7e 2- hrs. GdBGA)) | 5-.2 | | |
| Lmax GdBGA)) | | 8N.1 | |
| L90 GdBGA)) | | | --.1 |
| Ldn GdBGA)) | 5N.2 | | |
| (tandard GdBGA)) | N0 | 115 | |

Re4erence Method : I(O1996g1 and 1996g2
(tandard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 G พ.ศ. 25-0) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 25-8

**Technical Management** [redacted]
(cientist G3)

**Approved by** [redacted]
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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512274**
Date Received : Feb 18, 2025
Date Reported : Feb 20, 2025
Report g umber: 32391-6N



**Sample Number** 251224-N8
**Parameter** Air Quality
**Location** Ban g onf (anf GSP( -4Q 0648384, 1805433)
**Measurement Date** Feb 11 NFeb 12, 2025
**Measurement by** Vanich Phanpipit
**Sound Level meter** (erial g o. 58-983

| Time | Leq GdBGA)) | Lmax GdBGA)) | L90 GdBGA)) |
|---|---|---|---|
| 03:00 PM N0-:00 PM | 5-.5 | 49.2 | -1.9 |
| 0-:00 PM N05:00 PM | 51.0 | 44.4 | -1.0 |
| 05:00 PM N06:00 PM | 52.4 | 80.9 | -1.6 |
| 06:00 PM N04:00 PM | 52.6 | 45.6 | -3.8 |
| 04:00 PM N08:00 PM | 51.8 | 81.9 | -2.6 |
| 08:00 PM N09:00 PM | 53.6 | 81.8 | -2.6 |
| 09:00 PM N10:00 PM | 5-.9 | 81.- | --.4 |
| 10:00 PM N11:00 PM | 52.4 | 43.2 | -9.9 |
| 11:00 PM N12:00 AM | 52.- | 80.1 | -6.9 |
| 12:00 AM N01:00 AM | -8.- | 41.2 | --.3 |
| 01:00 AM N02:00 AM | -9.8 | 45.5 | -2.6 |
| 02:00 AM N03:00 AM | -6.0 | 66.3 | -1.6 |
| 03:00 AM N0-:00 AM | -6.1 | 40.0 | -1.5 |
| 0-:00 AM N05:00 AM | 51.0 | 80.8 | -1.6 |
| 05:00 AM N06:00 AM | -2.9 | 6-.6 | -1.1 |
| 06:00 AM N04:00 AM | -3.6 | 63.0 | -0.8 |
| 04:00 AM N08:00 AM | -3.5 | 59.0 | -1.- |
| 08:00 AM N09:00 AM | -8.5 | 4-.1 | -2.- |
| 09:00 AM N10:00 AM | 55.- | 43.1 | -4.8 |
| 10:00 AM N11:00 AM | 56.2 | 8-.8 | -5.6 |
| 11:00 AM N12:00 PM | 52.9 | 44.4 | --.1 |
| 12:00 PM N01:00 PM | 53.1 | 48.6 | --.4 |
| 01:00 PM N02:00 PM | 55.5 | 80.6 | -0.5 |
| 02:00 PM N03:00 PM | 59.2 | 8-.6 | 39.0 |
| Leq Averaf e 2- hrs. GdBGA)) | 52.9 | | |
| Lmax GdBGA)) | | 8-.8 | |
| L90 GdBGA)) | | | -2.- |
| Ldn GdBGA)) | 56.9 | | |
| (tandard GdBGA)) | 40 | 115 | |

Re7erence Method : I(O1996N1 and 1996N2
(tandard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 G พ.ศ. 25-0) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 25-8

**Technical Management** [redacted]
(cientist G3)

**Approved by** [redacted]
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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512274**
Date Received : Feb 18, 2025
Date Reported : Feb 20, 2025
Report Number: 3239152-1



**Sample Number** 2512274-14
**Parameter** Air Quality
**Location** Ban Khao Kham (GPS 47Q 0675850, 1806485)
**Measurement Date** Feb 15 - Feb 16, 2025
**Measurement by** Vanich Phanpipit
**Sound Level meter** Serial No. 858517

| Time | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|---|---|---|
| 09:00 AM - 10:00 AM | 45.4 | 63.8 | 36.9 |
| 10:00 AM - 11:00 AM | 45.4 | 71.8 | 34.8 |
| 11:00 AM - 12:00 PM | 42.3 | 72.4 | 35.0 |
| 12:00 PM - 01:00 PM | 41.8 | 67.6 | 35.2 |
| 01:00 PM - 02:00 PM | 43.1 | 65.9 | 35.9 |
| 02:00 PM - 03:00 PM | 43.5 | 67.7 | 35.6 |
| 03:00 PM - 04:00 PM | 41.9 | 65.7 | 35.6 |
| 04:00 PM - 05:00 PM | 41.5 | 64.6 | 35.7 |
| 05:00 PM - 06:00 PM | 48.1 | 69.5 | 35.7 |
| 06:00 PM - 07:00 PM | 51.5 | 84.5 | 41.4 |
| 07:00 PM - 08:00 PM | 51.6 | 60.9 | 44.6 |
| 08:00 PM - 09:00 PM | 54.6 | 68.3 | 53.0 |
| 09:00 PM - 10:00 PM | 55.8 | 64.5 | 51.6 |
| 10:00 PM - 11:00 PM | 56.8 | 64.0 | 48.4 |
| 11:00 PM - 12:00 AM | 55.0 | 75.2 | 47.1 |
| 12:00 AM - 01:00 AM | 52.0 | 67.0 | 46.3 |
| 01:00 AM - 02:00 AM | 52.5 | 64.1 | 44.2 |
| 02:00 AM - 03:00 AM | 53.6 | 66.7 | 46.9 |
| 03:00 AM - 04:00 AM | 54.8 | 72.0 | 47.0 |
| 04:00 AM - 05:00 AM | 50.8 | 61.2 | 46.5 |
| 05:00 AM - 06:00 AM | 47.6 | 64.5 | 44.3 |
| 06:00 AM - 07:00 AM | 50.6 | 73.3 | 44.1 |
| 07:00 AM - 08:00 AM | 48.5 | 72.6 | 43.2 |
| 08:00 AM - 09:00 AM | 55.0 | 82.6 | 42.6 |
| Leq Average 24 hrs. (dB(A)) | 51.7 | | |
| Lmax (dB(A)) | | 84.5 | |
| L90 (dB(A)) | | | 43.2 |
| Ldn (dB(A)) | 59.4 | | |
| Standard (dB(A)) | 70 | 115 | |

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

**Technical Management** [redacted]
Scientist (3)

**Approved by** [redacted]
Section Head



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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512274**
Date Received : Feb 18, 2025
Date Reported : Feb 20, 2025
Report Number: 3239151-1



**Sample Number** 2512274-13
**Parameter** Air Quality
**Location** Ban Khao Kham (GPS 47Q 0675850, 1806485)
**Measurement Date** Feb 14 - Feb 15, 2025
**Measurement by** Vanich Phanpipit
**Sound Level meter** Serial No. 858517

| Time | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|---|---|---|
| 09:00 AM - 10:00 AM | 44.8 | 68.3 | 36.9 |
| 10:00 AM - 11:00 AM | 44.0 | 69.6 | 36.9 |
| 11:00 AM - 12:00 PM | 43.5 | 64.3 | 37.2 |
| 12:00 PM - 01:00 PM | 42.6 | 60.6 | 33.0 |
| 01:00 PM - 02:00 PM | 42.0 | 64.7 | 31.2 |
| 02:00 PM - 03:00 PM | 46.9 | 70.0 | 32.5 |
| 03:00 PM - 04:00 PM | 48.7 | 78.5 | 34.4 |
| 04:00 PM - 05:00 PM | 42.9 | 62.6 | 38.6 |
| 05:00 PM - 06:00 PM | 51.4 | 70.2 | 37.8 |
| 06:00 PM - 07:00 PM | 62.1 | 91.6 | 37.1 |
| 07:00 PM - 08:00 PM | 50.8 | 63.4 | 46.4 |
| 08:00 PM - 09:00 PM | 52.9 | 69.9 | 51.6 |
| 09:00 PM - 10:00 PM | 55.9 | 78.6 | 50.5 |
| 10:00 PM - 11:00 PM | 49.6 | 68.0 | 48.0 |
| 11:00 PM - 12:00 AM | 47.1 | 72.6 | 43.6 |
| 12:00 AM - 01:00 AM | 46.4 | 60.2 | 45.3 |
| 01:00 AM - 02:00 AM | 45.9 | 60.8 | 43.4 |
| 02:00 AM - 03:00 AM | 46.9 | 54.1 | 44.9 |
| 03:00 AM - 04:00 AM | 47.6 | 61.8 | 43.3 |
| 04:00 AM - 05:00 AM | 47.3 | 61.6 | 44.4 |
| 05:00 AM - 06:00 AM | 46.1 | 59.9 | 43.4 |
| 06:00 AM - 07:00 AM | 49.8 | 69.2 | 41.8 |
| 07:00 AM - 08:00 AM | 44.9 | 65.4 | 39.4 |
| 08:00 AM - 09:00 AM | 45.4 | 66.5 | 39.1 |
| Leq Average 24 hrs. (dB(A)) | 51.4 | | |
| Lmax (dB(A)) | | 91.6 | |
| L90 (dB(A)) | | | 39.4 |
| Ldn (dB(A)) | 55.2 | | |
| Standard (dB(A)) | 70 | 115 | |

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

**Technical Management** [redacted]
Scientist (3)

**Approved by** [redacted]
Section Head

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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512274**
Date Received : Feb 18, 2025
Date Reported : Feb 20, 2025
Report g umber: 323915-N1



**Sample Number** 251224-N16
**Parameter** Air Quality
**Location** Ban Tunf Thonf (GPS -4Q 064-684, 1805468)
**Measurement Date** Feb 1- NFeb 15, 2025
**Measurement by** Vanich Phanpipit
**Sound Level meter** Serial g o. 542-54

| Time | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|---|---|---|
| 09:00 AM N10:00 AM | 5- .2 | 49.6 | 34.3 |
| 10:00 AM N11:00 AM | -9.1 | 48.1 | 36.- |
| 11:00 AM N12:00 PM | 51.6 | 81.5 | 3-.5 |
| 12:00 PM N01:00 PM | 5- .3 | 81.8 | 36.6 |
| 01:00 PM N02:00 PM | -8.8 | 81.2 | 35.6 |
| 02:00 PM N03:00 PM | 52.0 | 49.6 | 35.5 |
| 03:00 PM N0- :00 PM | 50.3 | 48.8 | 35.3 |
| 0- :00 PM N05:00 PM | 53.4 | 81.8 | 34.1 |
| 05:00 PM N06:00 PM | -6.9 | 44.2 | 3- .9 |
| 06:00 PM N04:00 PM | -8.1 | 46.- | 34.4 |
| 04:00 PM N08:00 PM | -4.6 | 41.8 | -6.0 |
| 08:00 PM N09:00 PM | -4.0 | 69.4 | - - .1 |
| 09:00 PM N10:00 PM | - - .3 | 40.2 | -1.4 |
| 10:00 PM N11:00 PM | -1.8 | 60.1 | 39.9 |
| 11:00 PM N12:00 AM | 39.1 | 59.4 | 34.9 |
| 12:00 AM N01:00 AM | - - .8 | 40.2 | 34.9 |
| 01:00 AM N02:00 AM | -1.3 | 51.4 | -0.4 |
| 02:00 AM N03:00 AM | -3.3 | 52.8 | -2.2 |
| 03:00 AM N0- :00 AM | -5.0 | 40.2 | -2.6 |
| 0- :00 AM N05:00 AM | -5.5 | 68.6 | -1.4 |
| 05:00 AM N06:00 AM | 53.0 | 45.2 | -0.0 |
| 06:00 AM N04:00 AM | -9.3 | 48.3 | -0.9 |
| 04:00 AM N08:00 AM | 55.0 | 81.1 | -1.0 |
| 08:00 AM N09:00 AM | 5- .4 | 80.3 | 39.- |
| Leq Averaf e 2- hrs. (dB(A)) | 50.- | | |
| Lmax (dB(A)) | | 81.8 | |
| L90 (dB(A)) | | | 34.9 |
| Ldn (dB(A)) | 5- .- | | |
| Standard (dB(A)) | 40 | 115 | |

Re7erence Method : ISO1996N1 and 1996N2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 25-0) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 25-8

**Technical Management** [redacted]
Scientist (3)

**Approved by** [redacted]
Section Head



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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512274**
Date Received : Feb 18, 2025
Date Reported : Feb 20, 2025
Report Number: 3239153-1



**Sample Number** 2512274-15
**Parameter** Air Quality
**Location** Ban Khao Kham (GPS 47Q 0675850, 1806485)
**Measurement Date** Feb 16 - Feb 17, 2025
**Measurement by** Vanich Phanpipit
**Sound Level meter** Serial No. 858517

| Time | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|---|---|---|
| 09:00 AM - 10:00 AM | 48.0 | 77.6 | 38.3 |
| 10:00 AM - 11:00 AM | 41.5 | 63.9 | 36.0 |
| 11:00 AM - 12:00 PM | 42.9 | 65.0 | 35.1 |
| 12:00 PM - 01:00 PM | 45.4 | 73.4 | 35.7 |
| 01:00 PM - 02:00 PM | 43.4 | 63.3 | 35.8 |
| 02:00 PM - 03:00 PM | 45.1 | 70.9 | 36.0 |
| 03:00 PM - 04:00 PM | 43.1 | 62.2 | 36.4 |
| 04:00 PM - 05:00 PM | 46.0 | 72.6 | 38.3 |
| 05:00 PM - 06:00 PM | 49.9 | 75.2 | 39.7 |
| 06:00 PM - 07:00 PM | 51.8 | 75.7 | 45.5 |
| 07:00 PM - 08:00 PM | 53.5 | 64.1 | 49.9 |
| 08:00 PM - 09:00 PM | 57.8 | 66.4 | 52.4 |
| 09:00 PM - 10:00 PM | 62.4 | 68.1 | 55.1 |
| 10:00 PM - 11:00 PM | 62.9 | 68.9 | 59.7 |
| 11:00 PM - 12:00 AM | 60.9 | 67.3 | 57.0 |
| 12:00 AM - 01:00 AM | 58.5 | 66.1 | 47.4 |
| 01:00 AM - 02:00 AM | 54.3 | 63.2 | 47.3 |
| 02:00 AM - 03:00 AM | 51.2 | 61.7 | 47.6 |
| 03:00 AM - 04:00 AM | 51.2 | 56.7 | 48.2 |
| 04:00 AM - 05:00 AM | 50.8 | 78.3 | 46.7 |
| 05:00 AM - 06:00 AM | 48.6 | 63.5 | 46.1 |
| 06:00 AM - 07:00 AM | 53.1 | 86.0 | 45.5 |
| 07:00 AM - 08:00 AM | 49.6 | 70.6 | 44.3 |
| 08:00 AM - 09:00 AM | 47.8 | 66.6 | 40.8 |
| Leq Average 24 hrs. (dB(A)) | 55.2 | | |
| Lmax (dB(A)) | | 86.0 | |
| L90 (dB(A)) | | | 45.5 |
| Ldn (dB(A)) | 63.3 | | |
| Standard (dB(A)) | 70 | 115 | |

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

**Technical Management** [redacted]
Scientist (3)

**Approved by** [redacted]
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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512274**
Date Received : Feb 18, 2025
Date Reported : Feb 20, 2025
Report Number: 3239156-1



**Sample Number** 2512274-18
**Parameter** Air Quality
**Location** Ban Tung Thong (GPS 47Q 0674687, 1805768)
**Measurement Date** Feb 16 - Feb 17, 2025
**Measurement by** Vanich Phanpipit
**Sound Level meter** Serial No. 572457

| Time | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|---|---|---|
| 09:00 AM - 10:00 AM | 53.7 | 82.8 | 35.5 |
| 10:00 AM - 11:00 AM | 45.0 | 78.9 | 36.0 |
| 11:00 AM - 12:00 PM | 49.8 | 81.1 | 34.9 |
| 12:00 PM - 01:00 PM | 50.8 | 78.7 | 36.1 |
| 01:00 PM - 02:00 PM | 55.8 | 81.5 | 36.9 |
| 02:00 PM - 03:00 PM | 47.7 | 76.1 | 35.7 |
| 03:00 PM - 04:00 PM | 48.0 | 79.5 | 36.3 |
| 04:00 PM - 05:00 PM | 52.8 | 81.1 | 37.5 |
| 05:00 PM - 06:00 PM | 54.1 | 83.0 | 37.9 |
| 06:00 PM - 07:00 PM | 48.3 | 76.0 | 40.3 |
| 07:00 PM - 08:00 PM | 48.8 | 69.6 | 45.6 |
| 08:00 PM - 09:00 PM | 46.7 | 67.0 | 44.6 |
| 09:00 PM - 10:00 PM | 46.8 | 70.7 | 44.0 |
| 10:00 PM - 11:00 PM | 42.8 | 59.9 | 41.2 |
| 11:00 PM - 12:00 AM | 41.9 | 66.7 | 40.6 |
| 12:00 AM - 01:00 AM | 43.7 | 64.1 | 40.2 |
| 01:00 AM - 02:00 AM | 42.7 | 59.4 | 41.1 |
| 02:00 AM - 03:00 AM | 43.6 | 65.7 | 41.2 |
| 03:00 AM - 04:00 AM | 43.5 | 52.9 | 42.0 |
| 04:00 AM - 05:00 AM | 46.2 | 69.3 | 40.9 |
| 05:00 AM - 06:00 AM | 50.1 | 69.3 | 41.0 |
| 06:00 AM - 07:00 AM | 58.4 | 82.2 | 41.1 |
| 07:00 AM - 08:00 AM | 53.7 | 81.0 | 40.5 |
| 08:00 AM - 09:00 AM | 53.9 | 78.7 | 38.4 |
| Leq Average 24 hrs. (dB(A)) | 51.1 | | |
| Lmax (dB(A)) | | 83.0 | |
| L90 (dB(A)) | | | 40.3 |
| Ldn (dB(A)) | 56.9 | | |
| Standard (dB(A)) | 70 | 115 | |

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

**Technical Management** [redacted]
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**Approved by** [redacted]
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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512274**
Date Received : Feb 18, 2025
Date Reported : Feb 20, 2025
Report Number: 3239155-1



**Sample Number** 2512274-17
**Parameter** Air Quality
**Location** Ban Tung Thong (GPS 47Q 0674687, 1805768)
**Measurement Date** Feb 15 - Feb 16, 2025
**Measurement by** Vanich Phanpipit
**Sound Level meter** Serial No. 572457

| Time | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|---|---|---|
| 09:00 AM - 10:00 AM | 55.0 | 83.2 | 38.4 |
| 10:00 AM - 11:00 AM | 50.7 | 80.9 | 35.0 |
| 11:00 AM - 12:00 PM | 51.2 | 82.9 | 34.7 |
| 12:00 PM - 01:00 PM | 51.4 | 80.6 | 35.0 |
| 01:00 PM - 02:00 PM | 50.1 | 80.2 | 33.9 |
| 02:00 PM - 03:00 PM | 48.6 | 81.9 | 33.4 |
| 03:00 PM - 04:00 PM | 49.0 | 82.4 | 34.4 |
| 04:00 PM - 05:00 PM | 54.2 | 82.0 | 35.4 |
| 05:00 PM - 06:00 PM | 54.1 | 83.9 | 36.5 |
| 06:00 PM - 07:00 PM | 47.6 | 78.5 | 35.5 |
| 07:00 PM - 08:00 PM | 47.5 | 67.3 | 44.9 |
| 08:00 PM - 09:00 PM | 47.2 | 68.3 | 45.5 |
| 09:00 PM - 10:00 PM | 44.3 | 60.6 | 42.6 |
| 10:00 PM - 11:00 PM | 43.0 | 63.9 | 40.7 |
| 11:00 PM - 12:00 AM | 44.4 | 70.4 | 39.5 |
| 12:00 AM - 01:00 AM | 40.0 | 54.7 | 39.2 |
| 01:00 AM - 02:00 AM | 40.7 | 59.6 | 38.6 |
| 02:00 AM - 03:00 AM | 45.9 | 70.9 | 40.2 |
| 03:00 AM - 04:00 AM | 45.4 | 72.1 | 41.0 |
| 04:00 AM - 05:00 AM | 45.9 | 69.7 | 40.6 |
| 05:00 AM - 06:00 AM | 50.0 | 71.3 | 39.3 |
| 06:00 AM - 07:00 AM | 53.0 | 77.0 | 39.7 |
| 07:00 AM - 08:00 AM | 53.6 | 77.7 | 41.1 |
| 08:00 AM - 09:00 AM | 52.7 | 80.3 | 39.5 |
| Leq Average 24 hrs. (dB(A)) | 50.3 | | |
| Lmax (dB(A)) | | 83.9 | |
| L90 (dB(A)) | | | 39.2 |
| Ldn (dB(A)) | 54.6 | | |
| Standard (dB(A)) | 70 | 115 | |

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
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**Technical Management** [redacted]
Scientist (3)

**Approved by** [redacted]
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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512274**
Date Received : Feb 18, 2025
Date Reported : Feb 20, 2025
Report Number: 3239158-1



**Sample Number** 2512274-20
**Parameter** Air Quality
**Location** Ban Mai Klong Ta Lud (GPS 47Q 0676588, 1807193)
**Measurement Date** Feb 15 - Feb 16, 2025
**Measurement by** Vanich Phanpipit
**Sound Level meter** Serial No. 584983

| Time | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|---|---|---|
| 10:00 AM - 11:00 AM | 49.5 | 66.8 | 40.6 |
| 11:00 AM - 12:00 PM | 50.4 | 70.9 | 40.8 |
| 12:00 PM - 01:00 PM | 47.7 | 70.6 | 41.1 |
| 01:00 PM - 02:00 PM | 46.9 | 68.2 | 40.6 |
| 02:00 PM - 03:00 PM | 50.3 | 70.8 | 40.8 |
| 03:00 PM - 04:00 PM | 53.3 | 81.7 | 40.7 |
| 04:00 PM - 05:00 PM | 49.9 | 67.7 | 41.6 |
| 05:00 PM - 06:00 PM | 50.8 | 74.6 | 42.3 |
| 06:00 PM - 07:00 PM | 48.0 | 69.2 | 42.2 |
| 07:00 PM - 08:00 PM | 50.1 | 71.5 | 42.8 |
| 08:00 PM - 09:00 PM | 52.2 | 71.1 | 39.3 |
| 09:00 PM - 10:00 PM | 48.4 | 72.3 | 39.2 |
| 10:00 PM - 11:00 PM | 48.1 | 72.1 | 39.3 |
| 11:00 PM - 12:00 AM | 46.3 | 72.5 | 39.5 |
| 12:00 AM - 01:00 AM | 46.5 | 76.3 | 39.9 |
| 01:00 AM - 02:00 AM | 49.1 | 71.9 | 40.8 |
| 02:00 AM - 03:00 AM | 59.3 | 94.5 | 40.7 |
| 03:00 AM - 04:00 AM | 48.4 | 71.1 | 41.0 |
| 04:00 AM - 05:00 AM | 48.4 | 65.9 | 44.2 |
| 05:00 AM - 06:00 AM | 48.6 | 64.4 | 47.4 |
| 06:00 AM - 07:00 AM | 48.9 | 64.2 | 47.7 |
| 07:00 AM - 08:00 AM | 47.0 | 62.1 | 45.5 |
| 08:00 AM - 09:00 AM | 44.7 | 55.1 | 43.1 |
| 09:00 AM - 10:00 AM | 42.3 | 56.9 | 40.6 |
| Leq Average 24 hrs. (dB(A)) | 50.5 | | |
| Lmax (dB(A)) | | 94.5 | |
| L90 (dB(A)) | | | 40.8 |
| Ldn (dB(A)) | 58.0 | | |
| Standard (dB(A)) | 70 | 115 | |

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
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**Technical Management** [redacted]
Scientist (3)

**Approved by** [redacted]
Section Head



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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512274**
Date Received : Feb 18, 2025
Date Reported : Feb 20, 2025
Report g umber: 323915- N



**Sample Number** 25122- 4N 9
**Parameter** Air Quality
**Location** Ban Mai Klonf Ta Lud (GPS 4-Q 06- 6588, 180- 193)
**Measurement Date** Feb 14 NFeb 15, 2025
**Measurement by** Vanich Phanpipit
**Sound Level meter** Serial g o. 584983

| Time | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|---|---|---|
| 10:00 AM N11:00 AM | 50.4 | - 4.9 | 36.3 |
| 11:00 AM N12:00 PM | 46.8 | 68.- | 40.3 |
| 12:00 PM N01:00 PM | 46.8 | 69.8 | 39.5 |
| 01:00 PM N02:00 PM | 48.5 | 68.5 | 39.6 |
| 02:00 PM N03:00 PM | 49.5 | 69.1 | 40.1 |
| 03:00 PM N04:00 PM | 49.9 | 68.4 | 40.0 |
| 04:00 PM N05:00 PM | 49.6 | 69.4 | 40.8 |
| 05:00 PM N06:00 PM | 50.- | - 4.9 | 41.6 |
| 06:00 PM N0- :00 PM | 52.9 | 84.6 | 41.6 |
| 0- :00 PM N08:00 PM | 48.6 | 64.8 | 44.9 |
| 08:00 PM N09:00 PM | 48.2 | 61.3 | 4- .0 |
| 09:00 PM N10:00 PM | 46.0 | 61.3 | 44.- |
| 10:00 PM N11:00 PM | 46.0 | - 0.4 | 44.2 |
| 11:00 PM N12:00 AM | 45.9 | 66.5 | 44.8 |
| 12:00 AM N01:00 AM | 46.3 | - 0.3 | 42.8 |
| 01:00 AM N02:00 AM | 44.9 | 6- .9 | 42.8 |
| 02:00 AM N03:00 AM | 43.5 | 59.4 | 41.3 |
| 03:00 AM N04:00 AM | 45.0 | 66.4 | 43.1 |
| 04:00 AM N05:00 AM | 46.8 | 6- .- | 43.9 |
| 05:00 AM N06:00 AM | 50.5 | - - .4 | 43.5 |
| 06:00 AM N0- :00 AM | 52.2 | - 3.5 | 42.9 |
| 0- :00 AM N08:00 AM | 51.0 | - 5.0 | 41.8 |
| 08:00 AM N09:00 AM | 49.3 | - 0.0 | 42.3 |
| 09:00 AM N10:00 AM | 52.2 | - 3.6 | 42.2 |
| Leq Averaf e 24 hrs. (dB(A)) | 49.1 | | |
| Lmax (dB(A)) | | 84.6 | |
| L90 (dB(A)) | | | 42.2 |
| Ldn (dB(A)) | 54.5 | | |
| Standard (dB(A)) | - 0 | 115 | |

Re7erence Method : ISO1996N1 and 1996N2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

**Technical Management** [redacted]
Scientist (3)

**Approved by** [redacted]
Section Head

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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2512274**
Date Received : Feb 18, 2025
Date Reported : Feb 20, 2025
Report Number: 3239159-1



**Sample Number** 2512274-21
**Parameter** Air Quality
**Location** Ban Mai Klong Ta Lud (GPS 47Q 0676588, 1807193)
**Measurement Date** Feb 16 - Feb 17, 2025
**Measurement by** Vanich Phanpipit
**Sound Level meter** Serial No. 584983

| Time | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|---|---|---|
| 10:00 AM - 11:00 AM | 52.2 | 71.1 | 39.3 |
| 11:00 AM - 12:00 PM | 48.4 | 72.3 | 39.2 |
| 12:00 PM - 01:00 PM | 48.1 | 72.1 | 39.3 |
| 01:00 PM - 02:00 PM | 46.3 | 72.5 | 39.5 |
| 02:00 PM - 03:00 PM | 46.5 | 76.3 | 39.9 |
| 03:00 PM - 04:00 PM | 49.1 | 71.9 | 40.8 |
| 04:00 PM - 05:00 PM | 59.3 | 94.5 | 40.7 |
| 05:00 PM - 06:00 PM | 48.4 | 71.1 | 41.0 |
| 06:00 PM - 07:00 PM | 48.4 | 65.9 | 44.2 |
| 07:00 PM - 08:00 PM | 48.6 | 64.4 | 47.4 |
| 08:00 PM - 09:00 PM | 48.9 | 64.2 | 47.7 |
| 09:00 PM - 10:00 PM | 47.0 | 62.1 | 45.5 |
| 10:00 PM - 11:00 PM | 44.7 | 55.1 | 43.1 |
| 11:00 PM - 12:00 AM | 42.3 | 56.9 | 40.6 |
| 12:00 AM - 01:00 AM | 42.1 | 73.3 | 39.2 |
| 01:00 AM - 02:00 AM | 41.7 | 69.0 | 39.0 |
| 02:00 AM - 03:00 AM | 43.3 | 62.3 | 39.2 |
| 03:00 AM - 04:00 AM | 44.3 | 65.5 | 42.1 |
| 04:00 AM - 05:00 AM | 47.6 | 65.7 | 41.3 |
| 05:00 AM - 06:00 AM | 52.6 | 78.0 | 39.4 |
| 06:00 AM - 07:00 AM | 58.3 | 84.5 | 41.3 |
| 07:00 AM - 08:00 AM | 52.8 | 74.8 | 40.3 |
| 08:00 AM - 09:00 AM | 49.5 | 69.2 | 37.4 |
| 09:00 AM - 10:00 AM | 50.1 | 71.5 | 42.8 |
| Leq Average 24 hrs. (dB(A)) | 51.1 | | |
| Lmax (dB(A)) | | 94.5 | |
| L90 (dB(A)) | | | 40.6 |
| Ldn (dB(A)) | 57.2 | | |
| Standard (dB(A)) | 70 | 115 | |

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
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**Technical Management** [redacted]
Scientist (3)

**Approved by** [redacted]
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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546116**
Date Received : May 30, 2025
Date Reported : Jun 02, 2025
Report Number: 3321986-1



**Sample Number** 2546116-6
**Parameter** Air Quality
**Location** Ban Dong Long (GPS 47Q 0678205, 1802158)
**Measurement Date** May 25 - May 26, 2025
**Measurement by** Wasan Treenakul
**Sound Level meter** Serial No. 858527

| Time | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|---|---|---|
| 01:00 PM - 02:00 PM | 51.3 | 72.6 | 43.6 |
| 02:00 PM - 03:00 PM | 49.6 | 69.2 | 43.5 |
| 03:00 PM - 04:00 PM | 51.0 | 82.3 | 41.5 |
| 04:00 PM - 05:00 PM | 47.6 | 71.9 | 39.3 |
| 05:00 PM - 06:00 PM | 50.9 | 73.1 | 39.7 |
| 06:00 PM - 07:00 PM | 55.4 | 85.9 | 42.8 |
| 07:00 PM - 08:00 PM | 46.2 | 72.7 | 38.9 |
| 08:00 PM - 09:00 PM | 43.9 | 70.7 | 41.6 |
| 09:00 PM - 10:00 PM | 42.5 | 57.5 | 40.9 |
| 10:00 PM - 11:00 PM | 42.2 | 64.1 | 41.0 |
| 11:00 PM - 12:00 AM | 42.7 | 62.6 | 40.5 |
| 12:00 AM - 01:00 AM | 41.5 | 56.0 | 40.4 |
| 01:00 AM - 02:00 AM | 40.1 | 55.5 | 38.6 |
| 02:00 AM - 03:00 AM | 41.2 | 59.6 | 38.6 |
| 03:00 AM - 04:00 AM | 43.2 | 68.6 | 40.4 |
| 04:00 AM - 05:00 AM | 42.7 | 58.3 | 40.5 |
| 05:00 AM - 06:00 AM | 54.3 | 77.1 | 42.9 |
| 06:00 AM - 07:00 AM | 50.2 | 69.6 | 42.3 |
| 07:00 AM - 08:00 AM | 51.2 | 70.8 | 44.0 |
| 08:00 AM - 09:00 AM | 50.7 | 85.4 | 42.6 |
| 09:00 AM - 10:00 AM | 52.5 | 78.8 | 44.2 |
| 10:00 AM - 11:00 AM | 50.8 | 74.8 | 43.2 |
| 11:00 AM - 12:00 PM | 49.6 | 70.2 | 43.0 |
| 12:00 PM - 01:00 PM | 53.1 | 76.8 | 43.3 |
| Leq Average 24 hrs. (dB(A)) | 49.8 | | |
| Lmax (dB(A)) | | 85.9 | |
| L90 (dB(A)) | | | 41.5 |
| Ldn (dB(A)) | 54.4 | | |
| Standard (dB(A)) | 70 | 115 | |

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
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**Technical Management** [redacted]
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**Approved by** [redacted]
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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546116**
Date Received : May 30, 2025
Date Reported : Jun 02, 2025
Report Number: 3321985-1



**Sample Number** 2546116-5
**Parameter** Air Quality
**Location** Ban Dong Long (GPS 47Q 0678205, 1802158)
**Measurement Date** May 24 - May 25, 2025
**Measurement by** Wasan Treenakul
**Sound Level meter** Serial No. 858527

| Time | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|---|---|---|
| 01:00 PM - 02:00 PM | 49.0 | 69.5 | 39.7 |
| 02:00 PM - 03:00 PM | 57.9 | 95.7 | 39.2 |
| 03:00 PM - 04:00 PM | 49.1 | 74.0 | 39.7 |
| 04:00 PM - 05:00 PM | 50.2 | 75.3 | 38.0 |
| 05:00 PM - 06:00 PM | 49.9 | 78.3 | 37.6 |
| 06:00 PM - 07:00 PM | 46.4 | 66.8 | 40.2 |
| 07:00 PM - 08:00 PM | 46.6 | 67.7 | 43.6 |
| 08:00 PM - 09:00 PM | 44.0 | 64.0 | 42.7 |
| 09:00 PM - 10:00 PM | 43.0 | 53.6 | 42.0 |
| 10:00 PM - 11:00 PM | 44.9 | 71.3 | 41.3 |
| 11:00 PM - 12:00 AM | 43.5 | 60.8 | 42.0 |
| 12:00 AM - 01:00 AM | 42.0 | 49.4 | 41.0 |
| 01:00 AM - 02:00 AM | 41.2 | 54.5 | 39.8 |
| 02:00 AM - 03:00 AM | 47.2 | 77.9 | 39.1 |
| 03:00 AM - 04:00 AM | 45.0 | 71.7 | 42.0 |
| 04:00 AM - 05:00 AM | 52.5 | 76.6 | 42.7 |
| 05:00 AM - 06:00 AM | 52.2 | 73.9 | 42.9 |
| 06:00 AM - 07:00 AM | 51.6 | 77.2 | 41.6 |
| 07:00 AM - 08:00 AM | 51.5 | 73.9 | 39.6 |
| 08:00 AM - 09:00 AM | 49.9 | 70.8 | 42.1 |
| 09:00 AM - 10:00 AM | 51.2 | 69.6 | 47.8 |
| 10:00 AM - 11:00 AM | 50.8 | 75.4 | 40.4 |
| 11:00 AM - 12:00 PM | 51.0 | 73.3 | 41.1 |
| 12:00 PM - 01:00 PM | 50.1 | 71.2 | 42.1 |
| Leq Average 24 hrs. (dB(A)) | 50.2 | | |
| Lmax (dB(A)) | | 95.7 | |
| L90 (dB(A)) | | | 41.1 |
| Ldn (dB(A)) | 55.4 | | |
| Standard (dB(A)) | 70 | 115 | |

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

**Technical Management** [redacted]
Scientist (4)

**Approved by** [redacted]
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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546116**
Date Received : May 30, 2025
Date Reported : Jun 02, 2025
Report - umber: 332200681



**Sample Number** 2546116826
**Parameter** Air f uality
**Location** Qan - onN Ra Man E( PG47f 06746S4, 1S02590)
**Measurement Date** May 24 8May 25, 2025
**Measurement by** Wasan Treenakul
**Sound Level meter** Gerial - o. S73053

| Time | Leq BdQBA)) | Lmax BdQBA)) | L90 BdQBA)) |
|---|---|---|---|
| 02:00 PM 803:00 PM | 55.9 | 69.1 | 45.3 |
| 03:00 PM 804:00 PM | 53.2 | 6S.7 | 47.0 |
| 04:00 PM 805:00 PM | 51.4 | 66.0 | 46.6 |
| 05:00 PM 806:00 PM | 52.2 | 72.3 | 45.7 |
| 06:00 PM 807:00 PM | 57.7 | S0.2 | 45.1 |
| 07:00 PM 80S:00 PM | 47.S | 65.S | 44.0 |
| 0S:00 PM 809:00 PM | 45.4 | 79.5 | 43.7 |
| 09:00 PM 810:00 PM | 45.S | 66.1 | 42.9 |
| 10:00 PM 811:00 PM | 45.0 | 63.5 | 42.0 |
| 11:00 PM 812:00 AM | 44.2 | 74.1 | 41.0 |
| 12:00 AM 801:00 AM | 50.4 | 74.1 | 42.5 |
| 01:00 AM 802:00 AM | 44.S | 73.S | 42.2 |
| 02:00 AM 803:00 AM | 43.5 | 61.2 | 40.S |
| 03:00 AM 804:00 AM | 47.1 | 62.S | 42.3 |
| 04:00 AM 805:00 AM | 46.4 | 62.S | 42.3 |
| 05:00 AM 806:00 AM | 57.4 | 67.7 | 42.7 |
| 06:00 AM 807:00 AM | 52.0 | 76.3 | 44.6 |
| 07:00 AM 80S:00 AM | 55.0 | 69.6 | 45.1 |
| 0S:00 AM 809:00 AM | 59.S | 7S.7 | 51.9 |
| 09:00 AM 810:00 AM | 57.5 | 71.1 | 52.9 |
| 10:00 AM 811:00 AM | 55.1 | 66.7 | 51.9 |
| 11:00 AM 812:00 PM | 54.1 | 71.7 | 4S.0 |
| 12:00 PM 801:00 PM | 52.5 | 73.1 | 44.9 |
| 01:00 PM 802:00 PM | 52.2 | 76.4 | 45.S |
| Leq AveraNe 24 hrs. BdQBA)) | 53.6 | | |
| Lmax BdQBA)) | | S0.2 | |
| L90 BdQBA)) | | | 44.6 |
| Ldn BdQBA)) | 57.9 | | |
| Gtandard BdQBA)) | 70 | 115 | |

Regerence Method : IGO199681 and 199682
Gtandard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 Bพ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 254S

**Technical Management** [redacted]
Gcientist B4)

**Approved by** [redacted]
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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546116**
Date Received : May 30, 2025
Date Reported : Jun 02, 2025
Report Number: 3321987-1



**Sample Number** 2546116-7
**Parameter** Air Quality
**Location** Ban Dong Long (GPS 47Q 0678205, 1802158)
**Measurement Date** May 26 - May 27, 2025
**Measurement by** Wasan Treenakul
**Sound Level meter** Serial No. 858527

| Time | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|---|---|---|
| 01:00 PM - 02:00 PM | 58.9 | 93.0 | 42.4 |
| 02:00 PM - 03:00 PM | 64.1 | 90.7 | 43.3 |
| 03:00 PM - 04:00 PM | 52.4 | 75.0 | 42.8 |
| 04:00 PM - 05:00 PM | 53.5 | 77.4 | 43.6 |
| 05:00 PM - 06:00 PM | 52.0 | 74.2 | 41.1 |
| 06:00 PM - 07:00 PM | 50.4 | 76.3 | 41.0 |
| 07:00 PM - 08:00 PM | 45.3 | 73.8 | 39.9 |
| 08:00 PM - 09:00 PM | 45.8 | 74.6 | 42.5 |
| 09:00 PM - 10:00 PM | 49.2 | 75.1 | 41.9 |
| 10:00 PM - 11:00 PM | 45.6 | 63.4 | 42.9 |
| 11:00 PM - 12:00 AM | 44.8 | 69.6 | 42.3 |
| 12:00 AM - 01:00 AM | 44.4 | 64.3 | 41.2 |
| 01:00 AM - 02:00 AM | 42.8 | 57.9 | 40.4 |
| 02:00 AM - 03:00 AM | 42.9 | 61.5 | 40.1 |
| 03:00 AM - 04:00 AM | 53.1 | 76.8 | 39.7 |
| 04:00 AM - 05:00 AM | 42.7 | 73.0 | 39.9 |
| 05:00 AM - 06:00 AM | 52.7 | 77.5 | 41.0 |
| 06:00 AM - 07:00 AM | 51.9 | 77.2 | 44.0 |
| 07:00 AM - 08:00 AM | 56.8 | 75.9 | 45.6 |
| 08:00 AM - 09:00 AM | 57.3 | 76.3 | 45.6 |
| 09:00 AM - 10:00 AM | 54.7 | 72.7 | 46.2 |
| 10:00 AM - 11:00 AM | 60.3 | 90.4 | 45.0 |
| 11:00 AM - 12:00 PM | 51.6 | 69.4 | 43.0 |
| 12:00 PM - 01:00 PM | 50.1 | 68.0 | 41.9 |
| Leq Average 24 hrs. (dB(A)) | 54.9 | | |
| Lmax (dB(A)) | | 93.0 | |
| L90 (dB(A)) | | | 42.3 |
| Ldn (dB(A)) | 57.6 | | |
| Standard (dB(A)) | 70 | 115 | |

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

**Technical Management** [redacted]
Scientist (4)

**Approved by** [redacted]
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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546116**
Date Received : May 30, 2025
Date Reported : Jun 02, 2025
Report Number: 3322008-1



**Sample Number** 2546116-28
**Parameter** Air Quality
**Location** Ban Nong Ra Man (GPS 47Q 0674684, 1802590)
**Measurement Date** May 26 - May 27, 2025
**Measurement by** Wasan Treenakul
**Sound Level meter** Serial No. 873053

| Time | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|---|---|---|
| 02:00 PM - 03:00 PM | 56.6 | 81.1 | 43.8 |
| 03:00 PM - 04:00 PM | 62.6 | 76.8 | 47.6 |
| 04:00 PM - 05:00 PM | 53.6 | 71.2 | 46.8 |
| 05:00 PM - 06:00 PM | 55.3 | 71.6 | 49.8 |
| 06:00 PM - 07:00 PM | 53.9 | 73.7 | 48.4 |
| 07:00 PM - 08:00 PM | 51.8 | 66.6 | 45.5 |
| 08:00 PM - 09:00 PM | 49.0 | 63.6 | 44.7 |
| 09:00 PM - 10:00 PM | 47.3 | 60.8 | 45.2 |
| 10:00 PM - 11:00 PM | 51.4 | 73.3 | 44.8 |
| 11:00 PM - 12:00 AM | 49.7 | 59.5 | 44.5 |
| 12:00 AM - 01:00 AM | 44.4 | 61.0 | 42.2 |
| 01:00 AM - 02:00 AM | 46.0 | 59.9 | 43.7 |
| 02:00 AM - 03:00 AM | 45.7 | 60.7 | 44.3 |
| 03:00 AM - 04:00 AM | 46.2 | 59.8 | 44.4 |
| 04:00 AM - 05:00 AM | 49.4 | 66.0 | 45.8 |
| 05:00 AM - 06:00 AM | 49.1 | 65.4 | 46.1 |
| 06:00 AM - 07:00 AM | 56.4 | 70.4 | 46.9 |
| 07:00 AM - 08:00 AM | 53.5 | 67.0 | 47.1 |
| 08:00 AM - 09:00 AM | 57.3 | 71.8 | 53.8 |
| 09:00 AM - 10:00 AM | 54.7 | 70.4 | 50.6 |
| 10:00 AM - 11:00 AM | 56.0 | 70.9 | 49.0 |
| 11:00 AM - 12:00 PM | 56.1 | 74.8 | 49.0 |
| 12:00 PM - 01:00 PM | 50.5 | 73.5 | 44.5 |
| 01:00 PM - 02:00 PM | 44.2 | 74.1 | 41.0 |
| Leq Average 24 hrs. (dB(A)) | 54.2 | | |
| Lmax (dB(A)) | | 81.1 | |
| L90 (dB(A)) | | | 45.5 |
| Ldn (dB(A)) | 58.0 | | |
| Standard (dB(A)) | 70 | 115 | |

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

**Technical Management** [redacted]
Scientist (4)

**Approved by** [redacted]
Section Head



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Analysis / Test Report

Client : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
P/O : 1001947
Project Name : Air Test
Project Location :

Lot ID: 2546116
Date Received : May 30, 2025
Date Reported : Jun 02, 2025
Report - umber: 332200781

PaNe 1 og1

Sample Number 25461168 27
Parameter Air f uality
Location Qan - onN Ra Man B( PG 47f 06746S4, 1S02590)
Measurement Date May 25 8May 26, 2025
Measurement by Wasan Treenakul
Sound Level meter Gerial - o. S73053

| Time | Leq BdQBA)) | Lmax BdQBA)) | L90 BdQBA)) |
|---|---|---|---|
| 02:00 PM 803:00 PM | 56.3 | 6S.6 | 47.6 |
| 03:00 PM 804:00 PM | 55.9 | 71.S | 47.4 |
| 04:00 PM 805:00 PM | 53.6 | 74.7 | 49.0 |
| 05:00 PM 806:00 PM | 51.S | 73.2 | 46.5 |
| 06:00 PM 807:00 PM | 53.5 | S1.3 | 47.2 |
| 07:00 PM 80S:00 PM | 53.4 | 71.6 | 46.9 |
| 0S:00 PM 809:00 PM | 4S.5 | 67.7 | 45.0 |
| 09:00 PM 810:00 PM | 46.1 | 6S.1 | 41.9 |
| 10:00 PM 811:00 PM | 44.3 | 73.S | 41.3 |
| 11:00 PM 812:00 AM | 46.0 | 62.4 | 42.2 |
| 12:00 AM 801:00 AM | 44.5 | 64.5 | 41.5 |
| 01:00 AM 802:00 AM | 45.S | 64.S | 43.6 |
| 02:00 AM 803:00 AM | 45.0 | 5S.9 | 43.0 |
| 03:00 AM 804:00 AM | 44.5 | 61.0 | 41.7 |
| 04:00 AM 805:00 AM | 4S.9 | 63.9 | 43.1 |
| 05:00 AM 806:00 AM | 4S.7 | 75.2 | 44.4 |
| 06:00 AM 807:00 AM | 57.9 | 69.2 | 46.9 |
| 07:00 AM 80S:00 AM | 54.0 | 75.7 | 46.0 |
| 0S:00 AM 809:00 AM | 57.3 | 6S.6 | 49.5 |
| 09:00 AM 810:00 AM | 56.6 | 69.4 | 50.9 |
| 10:00 AM 811:00 AM | 53.5 | 70.4 | 46.7 |
| 11:00 AM 812:00 PM | 54.S | 70.9 | 46.3 |
| 12:00 PM 801:00 PM | 56.5 | 66.9 | 50.7 |
| 01:00 PM 802:00 PM | 55.7 | 69.7 | 47.0 |
| Leq AveraNe 24 hrs. BdQBA)) | 53.4 | | |
| Lmax BdQBA)) | | S1.3 | |
| L90 BdQBA)) | | | 46.3 |
| Ldn BdQBA)) | 57.6 | | |
| Gtandard BdQBA)) | 70 | 115 | |

Regerence Method : IGO199681 and 199682
Gtandard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 Bพ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 254S

Technical Management [redacted]
Gcientist B4)

Approved by [redacted]
Gection Head

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2244823/ EMAIL S:\Reports_Air Noise.rpt (11:01AM)

MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546116**
Date Received : May 30, 2025
Date Reported : Jun 02, 2025
Report Number: 3322014-1



**Sample Number** 2546116-34
**Parameter** Air Quality
**Location** Ban Klong Sai Yang Rong (GPS 47Q 0676121, 1798820)
**Measurement Date** May 25 - May 26, 2025
**Measurement by** Wasan Treenakul
**Sound Level meter** Serial No. 710638

| Time | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|---|---|---|
| 05:00 PM - 06:00 PM | 48.2 | 60.7 | 43.4 |
| 06:00 PM - 07:00 PM | 47.6 | 63.7 | 42.6 |
| 07:00 PM - 08:00 PM | 49.1 | 62.6 | 44.4 |
| 08:00 PM - 09:00 PM | 47.0 | 61.0 | 43.2 |
| 09:00 PM - 10:00 PM | 47.5 | 61.4 | 43.2 |
| 10:00 PM - 11:00 PM | 45.5 | 53.7 | 42.7 |
| 11:00 PM - 12:00 AM | 49.6 | 64.2 | 44.5 |
| 12:00 AM - 01:00 AM | 50.2 | 72.1 | 44.3 |
| 01:00 AM - 02:00 AM | 48.7 | 61.0 | 45.0 |
| 02:00 AM - 03:00 AM | 50.2 | 69.1 | 45.3 |
| 03:00 AM - 04:00 AM | 46.6 | 55.4 | 45.0 |
| 04:00 AM - 05:00 AM | 47.4 | 57.0 | 44.9 |
| 05:00 AM - 06:00 AM | 51.5 | 68.1 | 45.2 |
| 06:00 AM - 07:00 AM | 48.4 | 71.7 | 45.4 |
| 07:00 AM - 08:00 AM | 53.6 | 61.8 | 47.8 |
| 08:00 AM - 09:00 AM | 57.1 | 63.5 | 53.8 |
| 09:00 AM - 10:00 AM | 61.4 | 65.8 | 59.3 |
| 10:00 AM - 11:00 AM | 49.8 | 57.3 | 46.2 |
| 11:00 AM - 12:00 PM | 52.5 | 67.7 | 45.5 |
| 12:00 PM - 01:00 PM | 50.8 | 68.1 | 45.4 |
| 01:00 PM - 02:00 PM | 50.5 | 61.9 | 45.5 |
| 02:00 PM - 03:00 PM | 49.4 | 59.0 | 45.2 |
| 03:00 PM - 04:00 PM | 54.1 | 73.4 | 46.3 |
| 04:00 PM - 05:00 PM | 54.1 | 75.5 | 45.7 |
| Leq Average 24 hrs. (dB(A)) | 52.5 | | |
| Lmax (dB(A)) | | 75.5 | |
| L90 (dB(A)) | | | 45.2 |
| Ldn (dB(A)) | 56.5 | | |
| Standard (dB(A)) | 70 | 115 | |

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

**Technical Management** [redacted]
Scientist (4)

**Approved by** [redacted]
Section Head



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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546116**
Date Received : May 30, 2025
Date Reported : Jun 02, 2025
Report Number: 3322013-1



**Sample Number** 2546116-33
**Parameter** Air Quality
**Location** Ban Klong Sai Yang Rong (GPS 47Q 0676121, 1798820)
**Measurement Date** May 24 - May 25, 2025
**Measurement by** Wasan Treenakul
**Sound Level meter** Serial No. 710638

| Time | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|---|---|---|
| 05:00 PM - 06:00 PM | 47.6 | 63.2 | 43.1 |
| 06:00 PM - 07:00 PM | 51.8 | 69.2 | 44.2 |
| 07:00 PM - 08:00 PM | 51.1 | 67.5 | 43.7 |
| 08:00 PM - 09:00 PM | 45.3 | 59.3 | 43.0 |
| 09:00 PM - 10:00 PM | 47.1 | 55.2 | 44.9 |
| 10:00 PM - 11:00 PM | 48.7 | 59.7 | 46.6 |
| 11:00 PM - 12:00 AM | 49.9 | 60.5 | 47.6 |
| 12:00 AM - 01:00 AM | 48.2 | 60.7 | 45.5 |
| 01:00 AM - 02:00 AM | 45.9 | 55.3 | 44.4 |
| 02:00 AM - 03:00 AM | 45.9 | 63.2 | 43.9 |
| 03:00 AM - 04:00 AM | 46.0 | 60.2 | 43.9 |
| 04:00 AM - 05:00 AM | 46.4 | 55.2 | 43.4 |
| 05:00 AM - 06:00 AM | 46.0 | 53.7 | 43.6 |
| 06:00 AM - 07:00 AM | 45.4 | 53.5 | 42.3 |
| 07:00 AM - 08:00 AM | 48.1 | 55.9 | 45.6 |
| 08:00 AM - 09:00 AM | 48.1 | 58.0 | 44.3 |
| 09:00 AM - 10:00 AM | 49.2 | 74.6 | 43.4 |
| 10:00 AM - 11:00 AM | 48.5 | 66.2 | 42.7 |
| 11:00 AM - 12:00 PM | 52.8 | 69.3 | 43.7 |
| 12:00 PM - 01:00 PM | 58.4 | 80.4 | 47.0 |
| 01:00 PM - 02:00 PM | 69.4 | 81.0 | 47.5 |
| 02:00 PM - 03:00 PM | 46.9 | 61.2 | 45.0 |
| 03:00 PM - 04:00 PM | 49.0 | 65.4 | 44.6 |
| 04:00 PM - 05:00 PM | 49.4 | 62.3 | 44.0 |
| Leq Average 24 hrs. (dB(A)) | 56.6 | | |
| Lmax (dB(A)) | | 81.0 | |
| L90 (dB(A)) | | | 44.0 |
| Ldn (dB(A)) | 58.0 | | |
| Standard (dB(A)) | 70 | 115 | |

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

**Technical Management** [redacted]
Scientist (4)

**Approved by** [redacted]
Section Head

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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546116**
Date Received : May 30, 2025
Date Reported : Jun 02, 2025
Report - umber: 332199281



**Sample Number** 25461168 12
**Parameter** Air f uality
**Location** Qan Khao Mor B( PG 47f 0675703, 1S04307)
**Measurement Date** May 24 8 May 25, 2025
**Measurement by** Wasan Treenakul
**Sound Level meter** Gerial - o. 65S242

| Time | Leq BdQBA)) | Lmax BdQBA)) | L90 BdQBA)) |
|---|---|---|---|
| 03:00 PM 804:00 PM | 60.0 | 74.9 | 43.7 |
| 04:00 PM 805:00 PM | 4S.2 | 67.0 | 41.0 |
| 05:00 PM 806:00 PM | 4S.S | 72.7 | 40.4 |
| 06:00 PM 807:00 PM | 56.9 | 71.7 | 43.5 |
| 07:00 PM 80S:00 PM | 54.9 | 70.1 | 4S.9 |
| 0S:00 PM 809:00 PM | 52.9 | 65.9 | 4S.3 |
| 09:00 PM 810:00 PM | 49.2 | 61.7 | 47.1 |
| 10:00 PM 811:00 PM | 49.5 | 66.3 | 44.S |
| 11:00 PM 812:00 AM | 53.2 | 64.9 | 45.S |
| 12:00 AM 801:00 AM | 51.2 | 63.5 | 46.2 |
| 01:00 AM 802:00 AM | 5S.2 | 64.S | 46.2 |
| 02:00 AM 803:00 AM | 57.4 | 64.S | 46.7 |
| 03:00 AM 804:00 AM | 52.6 | 59.7 | 43.1 |
| 04:00 AM 805:00 AM | 51.0 | 64.6 | 43.3 |
| 05:00 AM 806:00 AM | 60.0 | 69.7 | 50.5 |
| 06:00 AM 807:00 AM | 55.5 | 76.1 | 4S.1 |
| 07:00 AM 80S:00 AM | 61.7 | 71.5 | 60.4 |
| 0S:00 AM 809:00 AM | 57.1 | 63.0 | 45.9 |
| 09:00 AM 810:00 AM | 57.4 | 64.9 | 4S.4 |
| 10:00 AM 811:00 AM | 50.0 | 67.5 | 42.2 |
| 11:00 AM 812:00 PM | 51.9 | 62.6 | 42.7 |
| 12:00 PM 801:00 PM | 49.6 | 61.7 | 40.6 |
| 01:00 PM 802:00 PM | 54.7 | 65.2 | 47.9 |
| 02:00 PM 803:00 PM | 56.9 | 72.0 | 50.6 |
| Leq AveraNe 24 hrs. BdQBA)) | 55.S | | |
| Lmax BdQBA)) | | 76.1 | |
| L90 BdQBA)) | | | 45.9 |
| Ldn BdQBA)) | 62.1 | | |
| Gtandard BdQBA)) | 70 | 115 | |

Regerence Method : IGO199681 and 199682
Gtandard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 Bพ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 254S

**Technical Management** [redacted]
Gcientist B4)

**Approved by** [redacted]
Gection Head

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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546116**
Date Received : May 30, 2025
Date Reported : Jun 02, 2025
Report Number: 3322015-1



**Sample Number** 2546116-35
**Parameter** Air Quality
**Location** Ban Klong Sai Yang Rong (GPS 47Q 0676121, 1798820)
**Measurement Date** May 26 - May 27, 2025
**Measurement by** Wasan Treenakul
**Sound Level meter** Serial No. 710638

| Time | Leq (dB(A)) | Lmax (dB(A)) | L90 (dB(A)) |
|---|---|---|---|
| 05:00 PM - 06:00 PM | 52.2 | 73.4 | 44.1 |
| 06:00 PM - 07:00 PM | 52.4 | 77.3 | 42.0 |
| 07:00 PM - 08:00 PM | 54.1 | 75.2 | 45.9 |
| 08:00 PM - 09:00 PM | 49.4 | 77.8 | 36.4 |
| 09:00 PM - 10:00 PM | 49.2 | 78.5 | 37.1 |
| 10:00 PM - 11:00 PM | 48.1 | 73.1 | 37.2 |
| 11:00 PM - 12:00 AM | 45.0 | 67.1 | 35.7 |
| 12:00 AM - 01:00 AM | 43.5 | 66.6 | 36.9 |
| 01:00 AM - 02:00 AM | 49.3 | 71.6 | 39.5 |
| 02:00 AM - 03:00 AM | 54.3 | 80.2 | 44.9 |
| 03:00 AM - 04:00 AM | 53.8 | 76.9 | 46.1 |
| 04:00 AM - 05:00 AM | 52.0 | 78.7 | 43.5 |
| 05:00 AM - 06:00 AM | 46.8 | 65.5 | 44.3 |
| 06:00 AM - 07:00 AM | 43.5 | 65.3 | 39.6 |
| 07:00 AM - 08:00 AM | 46.0 | 72.7 | 39.8 |
| 08:00 AM - 09:00 AM | 46.3 | 65.2 | 38.8 |
| 09:00 AM - 10:00 AM | 54.7 | 73.3 | 43.4 |
| 10:00 AM - 11:00 AM | 52.9 | 72.1 | 47.2 |
| 11:00 AM - 12:00 PM | 54.6 | 83.5 | 47.1 |
| 12:00 PM - 01:00 PM | 50.7 | 73.4 | 44.4 |
| 01:00 PM - 02:00 PM | 52.0 | 70.5 | 44.8 |
| 02:00 PM - 03:00 PM | 52.9 | 74.6 | 43.9 |
| 03:00 PM - 04:00 PM | 52.2 | 74.7 | 43.6 |
| 04:00 PM - 05:00 PM | 52.7 | 74.0 | 45.4 |
| Leq Average 24 hrs. (dB(A)) | 51.5 | | |
| Lmax (dB(A)) | | 83.5 | |
| L90 (dB(A)) | | | 43.5 |
| Ldn (dB(A)) | 56.9 | | |
| Standard (dB(A)) | 70 | 115 | |

Reference Method : ISO1996-1 and 1996-2
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 (พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

**Technical Management** [redacted]
Scientist (4)

**Approved by** [redacted]
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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546116**
Date Received : May 30, 2025
Date Reported : Jun 02, 2025
Report - umber: 33219948l



**Sample Number** 25461168l4
**Parameter** Air f uality
**Location** Qan Khao Mor E( PG 47f 0675703, 1S04307)
**Measurement Date** May 26 8 May 27, 2025
**Measurement by** Wasan Treenakul
**Sound Level meter** Gerial - o. 65S242

| Time | Leq B(QBA)) | Lmax B(QBA)) | L90 B(QBA)) |
|---|---|---|---|
| 03:00 PM 8 04:00 PM | 59.3 | 75.6 | 44.4 |
| 04:00 PM 8 05:00 PM | 49.6 | 63.6 | 45.2 |
| 05:00 PM 8 06:00 PM | 51.9 | S1.9 | 43.9 |
| 06:00 PM 8 07:00 PM | 4S.9 | 61.0 | 42.6 |
| 07:00 PM 8 0S:00 PM | 50.3 | 64.3 | 45.3 |
| 0S:00 PM 8 09:00 PM | 54.4 | 63.5 | 46.9 |
| 09:00 PM 8 10:00 PM | 50.3 | 61.6 | 45.7 |
| 10:00 PM 8 11:00 PM | 54.2 | 64.0 | 45.6 |
| 11:00 PM 8 12:00 AM | 59.7 | 66.0 | 47.6 |
| 12:00 AM 8 01:00 AM | 55.6 | 6S.2 | 46.S |
| 01:00 AM 8 02:00 AM | 49.1 | 61.S | 45.2 |
| 02:00 AM 8 03:00 AM | 52.7 | 63.S | 45.0 |
| 03:00 AM 8 04:00 AM | 46.9 | 61.S | 43.S |
| 04:00 AM 8 05:00 AM | 49.5 | 56.1 | 47.3 |
| 05:00 AM 8 06:00 AM | 54.S | 74.0 | 46.3 |
| 06:00 AM 8 07:00 AM | 57.6 | 71.S | 49.0 |
| 07:00 AM 8 0S:00 AM | 53.7 | 6S.S | 4S.6 |
| 0S:00 AM 8 09:00 AM | 59.9 | 67.6 | 53.1 |
| 09:00 AM 8 10:00 AM | 54.1 | 75.9 | 50.0 |
| 10:00 AM 8 11:00 AM | 55.4 | 65.2 | 47.4 |
| 11:00 AM 8 12:00 PM | 53.6 | 67.0 | 46.3 |
| 12:00 PM 8 01:00 PM | 54.3 | 63.2 | 46.5 |
| 01:00 PM 8 02:00 PM | 53.7 | 67.4 | 47.S |
| 02:00 PM 8 03:00 PM | 54.S | 73.3 | 46.6 |
| Leq AveraNe 24 hrs. B(QBA)) | 54.9 | | |
| Lmax B(QBA)) | | S1.9 | |
| L90 B(QBA)) | | | 46.3 |
| Ldn B(QBA)) | 61.4 | | |
| Gtandard B(QBA)) | 70 | 115 | |

Regerence Method : IGO199681 and 199682
Gtandard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 B.พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 254S

**Technical Management** [redacted]
Gcientist B4)

**Approved by** [redacted]
Gection Head



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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546116**
Date Received : May 30, 2025
Date Reported : Jun 02, 2025
Report - umber: 33219938l



**Sample Number** 25461168l3
**Parameter** Air f uality
**Location** Qan Khao Mor E( PG 47f 0675703, 1S04307)
**Measurement Date** May 25 8 May 26, 2025
**Measurement by** Wasan Treenakul
**Sound Level meter** Gerial - o. 65S242

| Time | Leq B(QBA)) | Lmax B(QBA)) | L90 B(QBA)) |
|---|---|---|---|
| 03:00 PM 8 04:00 PM | 54.4 | 72.0 | 4S.3 |
| 04:00 PM 8 05:00 PM | 53.7 | 67.4 | 47.S |
| 05:00 PM 8 06:00 PM | 51.4 | 65.2 | 43.7 |
| 06:00 PM 8 07:00 PM | 53.7 | 73.2 | 45.S |
| 07:00 PM 8 0S:00 PM | 51.5 | 67.9 | 46.0 |
| 0S:00 PM 8 09:00 PM | 57.0 | 75.6 | 45.1 |
| 09:00 PM 8 10:00 PM | 56.6 | 69.5 | 43.9 |
| 10:00 PM 8 11:00 PM | 63.1 | 69.S | 44.2 |
| 11:00 PM 8 12:00 AM | 64.S | 69.9 | 45.5 |
| 12:00 AM 8 01:00 AM | 60.5 | 69.4 | 43.9 |
| 01:00 AM 8 02:00 AM | 45.S | 64.2 | 43.9 |
| 02:00 AM 8 03:00 AM | 45.0 | 71.7 | 42.7 |
| 03:00 AM 8 04:00 AM | 42.6 | 53.7 | 40.9 |
| 04:00 AM 8 05:00 AM | 44.7 | 55.2 | 42.5 |
| 05:00 AM 8 06:00 AM | 53.0 | 66.5 | 42.S |
| 06:00 AM 8 07:00 AM | 61.4 | 74.0 | 44.9 |
| 07:00 AM 8 0S:00 AM | 55.3 | 74.0 | 45.2 |
| 0S:00 AM 8 09:00 AM | 61.4 | 67.9 | 55.5 |
| 09:00 AM 8 10:00 AM | 52.0 | 71.0 | 47.9 |
| 10:00 AM 8 11:00 AM | 5S.S | 75.5 | 4S.1 |
| 11:00 AM 8 12:00 PM | 57.5 | S1.2 | 47.1 |
| 12:00 PM 8 01:00 PM | 54.3 | 63.2 | 46.5 |
| 01:00 PM 8 02:00 PM | 52.6 | 67.4 | 44.1 |
| 02:00 PM 8 03:00 PM | 60.6 | 76.2 | 43.3 |
| Leq AveraNe 24 hrs. B(QBA)) | 57.9 | | |
| Lmax B(QBA)) | | S1.2 | |
| L90 B(QBA)) | | | 44.9 |
| Ldn B(QBA)) | 65.5 | | |
| Gtandard B(QBA)) | 70 | 115 | |

Regerence Method : IGO199681 and 199682
Gtandard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 B.พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 254S

**Technical Management** [redacted]
Gcientist B4)

**Approved by** [redacted]
Gection Head

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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546116**
Date Received : May 30, 2025
Date Reported : Jun 02, 2025
Report - umber: 332200081



**Sample Number** 2546116820
**Parameter** Air f uality
**Location** Qan LonN Du B( PG 47f 067200S, 1799066)
**Measurement Date** May 25 8 May 26, 2025
**Measurement by** Wasan Treenakul
**Sound Level meter** Gerial - o. 572457

| Time | Leq B(QBA)) | Lmax B(QBA)) | L90 B(QBA)) |
|---|---|---|---|
| 04:00 PM 8 05:00 PM | 6S.7 | 77.2 | 64.4 |
| 05:00 PM 8 06:00 PM | 53.9 | S6.5 | 41.5 |
| 06:00 PM 8 07:00 PM | 51.9 | 6S.7 | 44.7 |
| 07:00 PM 8 0S:00 PM | 46.6 | 65.9 | 42.3 |
| 0S:00 PM 8 09:00 PM | 45.S | 63.S | 42.4 |
| 09:00 PM 8 10:00 PM | 46.0 | 63.6 | 41.7 |
| 10:00 PM 8 11:00 PM | 44.1 | 62.1 | 41.9 |
| 11:00 PM 8 12:00 AM | 44.6 | 5S.2 | 42.2 |
| 12:00 AM 8 01:00 AM | 45.0 | 70.1 | 43.2 |
| 01:00 AM 8 02:00 AM | 43.6 | 55.9 | 40.S |
| 02:00 AM 8 03:00 AM | 43.5 | 77.S | 3S.S |
| 03:00 AM 8 04:00 AM | 42.6 | 64.S | 3S.2 |
| 04:00 AM 8 05:00 AM | 49.S | 72.0 | 37.9 |
| 05:00 AM 8 06:00 AM | 6S.5 | 77.5 | 62.1 |
| 06:00 AM 8 07:00 AM | 6S.0 | 7S.3 | 61.0 |
| 07:00 AM 8 0S:00 AM | 64.6 | 74.S | 54.2 |
| 0S:00 AM 8 09:00 AM | 53.3 | 69.4 | 44.4 |
| 09:00 AM 8 10:00 AM | 56.7 | 64.S | 44.5 |
| 10:00 AM 8 11:00 AM | 53.6 | 67.2 | 42.2 |
| 11:00 AM 8 12:00 PM | 56.4 | 64.3 | 41.1 |
| 12:00 PM 8 01:00 PM | 56.5 | 65.7 | 49.7 |
| 01:00 PM 8 02:00 PM | 50.2 | 62.6 | 43.3 |
| 02:00 PM 8 03:00 PM | 52.S | 71.7 | 41.6 |
| 03:00 PM 8 04:00 PM | 49.9 | 65.7 | 40.0 |
| Leq AveraNe 24 hrs. B(QBA)) | 60.5 | | |
| Lmax B(QBA)) | | S6.5 | |
| L90 B(QBA)) | | | 42.2 |
| Ldn B(QBA)) | 67.9 | | |
| Gtandard B(QBA)) | 70 | 115 | |

Regerence Method : IGO 199681 and 199682
Gtandard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 B.พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 254S

**Technical Management** [redacted]
Gcientist B4)

**Approved by** [redacted]
Gection Head



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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546116**
Date Received : May 30, 2025
Date Reported : Jun 02, 2025
Report - umber: 332199981



**Sample Number** 2546116819
**Parameter** Air f uality
**Location** Qan LonN Du B( PG 47f 067200S, 1799066)
**Measurement Date** May 24 8 May 25, 2025
**Measurement by** Wasan Treenakul
**Sound Level meter** Gerial - o. 572457

| Time | Leq B(QBA)) | Lmax B(QBA)) | L90 B(QBA)) |
|---|---|---|---|
| 04:00 PM 8 05:00 PM | 49.5 | 77.6 | 42.0 |
| 05:00 PM 8 06:00 PM | 49.3 | 73.2 | 42.6 |
| 06:00 PM 8 07:00 PM | 56.9 | 74.3 | 43.S |
| 07:00 PM 8 0S:00 PM | 47.6 | 71.7 | 46.0 |
| 0S:00 PM 8 09:00 PM | 4S.2 | 5S.1 | 44.0 |
| 09:00 PM 8 10:00 PM | 46.4 | 61.4 | 44.3 |
| 10:00 PM 8 11:00 PM | 46.0 | 6S.5 | 44.1 |
| 11:00 PM 8 12:00 AM | 46.4 | 64.6 | 43.3 |
| 12:00 AM 8 01:00 AM | 49.2 | 67.6 | 42.7 |
| 01:00 AM 8 02:00 AM | 43.9 | 64.0 | 42.1 |
| 02:00 AM 8 03:00 AM | 42.6 | 60.4 | 40.S |
| 03:00 AM 8 04:00 AM | 43.6 | 65.3 | 39.7 |
| 04:00 AM 8 05:00 AM | 41.5 | 54.1 | 40.1 |
| 05:00 AM 8 06:00 AM | 62.3 | S4.7 | 41.9 |
| 06:00 AM 8 07:00 AM | 50.4 | 76.3 | 42.4 |
| 07:00 AM 8 0S:00 AM | 52.7 | S3.S | 42.5 |
| 0S:00 AM 8 09:00 AM | 62.1 | 74.1 | 51.9 |
| 09:00 AM 8 10:00 AM | 63.1 | 72.4 | 5S.3 |
| 10:00 AM 8 11:00 AM | 53.2 | 74.2 | 43.6 |
| 11:00 AM 8 12:00 PM | 52.2 | 72.1 | 42.0 |
| 12:00 PM 8 01:00 PM | 49.9 | 69.1 | 42.4 |
| 01:00 PM 8 02:00 PM | 51.3 | 64.S | 44.3 |
| 02:00 PM 8 03:00 PM | 55.2 | 67.1 | 43.2 |
| 03:00 PM 8 04:00 PM | 62.S | 74.0 | 42.4 |
| Leq AveraNe 24 hrs. B(QBA)) | 56.0 | | |
| Lmax B(QBA)) | | S4.7 | |
| L90 B(QBA)) | | | 42.6 |
| Ldn B(QBA)) | 60.7 | | |
| Gtandard B(QBA)) | 70 | 115 | |

Regerence Method : IGO 199681 and 199682
Gtandard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 B.พ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 254S

**Technical Management** [redacted]
Gcientist B4)

**Approved by** [redacted]
Gection Head

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MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546117**
Date Received : May 30, 2025
Date Reported : Jun 02, 2025
Report - umber: 33219098L



**Sample Number** 25461178L
**Parameter** - oise fLeQ 24 hrs.B
**Location** ( an - onN GanN fSPG47) 067W3W7, 1W05733B
**Measurement Date** May 24 8 May 25, 2025
**Measurement by** q asan Treenakul
**Sound Level meter** Gerial - o. W5W513

| Time | LeQ fd( fAEB | Lmax fd( fAEB | L90 fd( fAEB |
|---|---|---|---|
| 12:00 PM 801:00 PM | 54.5 | WL.7 | 44.5 |
| 01:00 PM 802:00 PM | 54.2 | 74.W | 44.1 |
| 02:00 PM 803:00 PM | 56.0 | W8.0 | 41.W |
| 03:00 PM 804:00 PM | 54.9 | 75.6 | 42.6 |
| 04:00 PM 805:00 PM | 52.0 | WL.2 | 41.1 |
| 05:00 PM 806:00 PM | 65.W | 79.9 | 44.5 |
| 06:00 PM 807:00 PM | 53.5 | W6.W | 43.3 |
| 07:00 PM 80W00 PM | 50.7 | 75.4 | 43.2 |
| 0W00 PM 809:00 PM | 53.W | W0.5 | 44.1 |
| 09:00 PM 810:00 PM | 52.5 | W0.9 | 4W2 |
| 10:00 PM 811:00 PM | 4W7 | 64.5 | 47.7 |
| 11:00 PM 812:00 AM | 4W0 | 61.W | 46.9 |
| 12:00 AM 801:00 AM | 53.6 | 65.2 | 49.0 |
| 01:00 AM 802:00 AM | 55.7 | 77.4 | 54.3 |
| 02:00 AM 803:00 AM | 52.W | 67.5 | 50.W |
| 03:00 AM 804:00 AM | 4W1 | 52.2 | 46.1 |
| 04:00 AM 805:00 AM | 49.1 | 56.7 | 47.0 |
| 05:00 AM 806:00 AM | 50.9 | 63.0 | 4W3 |
| 06:00 AM 807:00 AM | 52.4 | 66.0 | 4WW |
| 07:00 AM 80W00 AM | 5W6 | W0.5 | 4W9 |
| 0W00 AM 809:00 AM | 57.5 | W0.7 | 45.0 |
| 09:00 AM 810:00 AM | 56.0 | WL.3 | 44.2 |
| 10:00 AM 811:00 AM | 59.4 | W6.W | 44.6 |
| 11:00 AM 812:00 PM | 5W9 | W6.3 | 50.2 |
| LeQ AveraNe 24 hrs. fd( fAEB | 56.5 | | |
| Lmax fd( fAEB | | W6.W | |
| L90 fd( fAEB | | | 45.0 |
| Ldn fd( fAEB | 59.W | | |
| Gtandard fd( fAEB | 70 | 115 | |

Regerence Method : IGO199681 and 199682
Gtandard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 fพ.ศ. 2540B เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 254W

**Technical Management** [redacted]
Gcientist f4B

**Approved by** [redacted]
Gection Head



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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546116**
Date Received : May 30, 2025
Date Reported : Jun 02, 2025
Report - umber: 33220018L



**Sample Number** 25461168L
**Parameter** Air f uality
**Location** Qan LonN Du B( PG47f 067200S, 1799066)
**Measurement Date** May 26 8 May 27, 2025
**Measurement by** Wasan Treenakul
**Sound Level meter** Gerial - o. 572457

| Time | Leq BdQBA)) | Lmax BdQBA)) | L90 BdQBA)) |
|---|---|---|---|
| 04:00 PM 805:00 PM | 49.1 | 74.S | 43.7 |
| 05:00 PM 806:00 PM | 4S.9 | 70.3 | 44.6 |
| 06:00 PM 807:00 PM | 49.2 | 69.6 | 44.0 |
| 07:00 PM 80S:00 PM | 47.1 | 76.9 | 42.0 |
| 0S:00 PM 809:00 PM | 44.S | 62.6 | 42.2 |
| 09:00 PM 810:00 PM | 45.7 | 63.0 | 42.7 |
| 10:00 PM 811:00 PM | 44.6 | 67.9 | 41.7 |
| 11:00 PM 812:00 AM | 44.0 | 65.4 | 41.0 |
| 12:00 AM 801:00 AM | 43.4 | 54.7 | 41.2 |
| 01:00 AM 802:00 AM | 43.5 | 52.3 | 40.6 |
| 02:00 AM 803:00 AM | 43.0 | 56.6 | 39.S |
| 03:00 AM 804:00 AM | 46.6 | 70.0 | 3S.S |
| 04:00 AM 805:00 AM | 46.0 | 55.9 | 39.9 |
| 05:00 AM 806:00 AM | 56.9 | 76.4 | 42.S |
| 06:00 AM 807:00 AM | 50.7 | 73.1 | 42.3 |
| 07:00 AM 80S:00 AM | 47.3 | 64.1 | 42.4 |
| 0S:00 AM 809:00 AM | 53.5 | 69.0 | 46.1 |
| 09:00 AM 810:00 AM | 57.3 | 71.9 | 46.7 |
| 10:00 AM 811:00 AM | 57.2 | 66.0 | 49.0 |
| 11:00 AM 812:00 PM | 52.0 | 67.S | 42.S |
| 12:00 PM 801:00 PM | 60.5 | 64.9 | 56.7 |
| 01:00 PM 802:00 PM | 63.1 | 72.4 | 5S.3 |
| 02:00 PM 803:00 PM | 59.S | S4.S | 46.0 |
| 03:00 PM 804:00 PM | 60.S | 72.4 | 43.9 |
| Leq AveraNe 24 hrs. BdQBA)) | 55.2 | | |
| Lmax BdQBA)) | | S4.S | |
| L90 BdQBA)) | | | 42.7 |
| Ldn BdQBA)) | 5S.0 | | |
| Gtandard BdQBA)) | 70 | 115 | |

Regerence Method : IGO199681 and 199682
Gtandard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 Bพ.ศ. 2540) เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 254S

**Technical Management** [redacted]
Gcientist B4)

**Approved by** [redacted]
Gection Head

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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546117**
Date Received : May 30, 2025
Date Reported : Jun 02, 2025
Report - umber: 332191181



**Sample Number** 254611783
**Parameter** - oise fLeQ 24 hrs.B
**Location** ( an - onN GanN fSPG 47) 067W3W7, 1W05733B
**Measurement Date** May 26 8 May 27, 2025
**Measurement by** q asan Treenakul
**Sound Level meter** Gerial - o. W5W513

| Time | LeQ fd( fABB | Lmax fd( fABB | L90 fd( fABB |
|---|---|---|---|
| 12:00 PM 8 01:00 PM | 59.W | 76.W | 56.6 |
| 01:00 PM 8 02:00 PM | 55.4 | 76.5 | 44.9 |
| 02:00 PM 8 03:00 PM | 60.0 | W6.6 | 44.9 |
| 03:00 PM 8 04:00 PM | 54.3 | 76.3 | 43.7 |
| 04:00 PM 8 05:00 PM | 62.W | W3.1 | 45.5 |
| 05:00 PM 8 06:00 PM | 56.3 | W3.3 | 44.5 |
| 06:00 PM 8 07:00 PM | 56.7 | W2.2 | 44.7 |
| 07:00 PM 8 0W00 PM | 51.W | 77.2 | 45.1 |
| 0W00 PM 8 09:00 PM | 51.9 | W0.3 | 44.W |
| 09:00 PM 8 10:00 PM | 4W7 | 75.5 | 44.7 |
| 10:00 PM 8 11:00 PM | 46.1 | 69.2 | 44.0 |
| 11:00 PM 8 12:00 AM | 44.6 | 59.1 | 43.4 |
| 12:00 AM 8 01:00 AM | 4W1 | 64.W | 43.7 |
| 01:00 AM 8 02:00 AM | 49.7 | 60.W | 47.6 |
| 02:00 AM 8 03:00 AM | 52.7 | 93.4 | 45.2 |
| 03:00 AM 8 04:00 AM | 44.W | 63.3 | 43.1 |
| 04:00 AM 8 05:00 AM | 43.9 | 56.7 | 42.7 |
| 05:00 AM 8 06:00 AM | 45.9 | 65.5 | 42.6 |
| 06:00 AM 8 07:00 AM | 49.5 | 76.6 | 43.9 |
| 07:00 AM 8 0W00 AM | 5W5 | W0.5 | 4W4 |
| 0W00 AM 8 09:00 AM | 59.0 | W2.6 | 45.9 |
| 09:00 AM 8 10:00 AM | 56.4 | 7WW | 46.2 |
| 10:00 AM 8 11:00 AM | 57.6 | W6.3 | 45.W |
| 11:00 AM 8 12:00 PM | 57.2 | 75.3 | 52.1 |
| LeQ AveraNe 24 hrs. fd( fABB | 55.9 | | |
| Lmax fd( fABB | | 93.4 | |
| L90 fd( fABB | | | 44.W |
| Ldn fd( fABB | 57.9 | | |
| Gtandard fd( fABB | 70 | 115 | |

Regerence Method : IGO199681 and 199682
Gtandard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 fw.ศ. 2540B เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 254W

**Technical Management** [redacted]
Gcientist f4B

**Approved by** [redacted]
Gection Head



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Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546117**
Date Received : May 30, 2025
Date Reported : Jun 02, 2025
Report - umber: 332191081



**Sample Number** 254611782
**Parameter** - oise fLeQ 24 hrs.B
**Location** ( an - onN GanN fSPG 47) 067W3W7, 1W05733B
**Measurement Date** May 25 8 May 26, 2025
**Measurement by** q asan Treenakul
**Sound Level meter** Gerial - o. W5W513

| Time | LeQ fd( fABB | Lmax fd( fABB | L90 fd( fABB |
|---|---|---|---|
| 12:00 PM 8 01:00 PM | 55.9 | 7W6 | 40.1 |
| 01:00 PM 8 02:00 PM | 55.5 | W1.2 | 40.3 |
| 02:00 PM 8 03:00 PM | 55.0 | W4.3 | 41.5 |
| 03:00 PM 8 04:00 PM | 60.1 | 93.5 | 42.7 |
| 04:00 PM 8 05:00 PM | 54.7 | W0.3 | 45.7 |
| 05:00 PM 8 06:00 PM | 51.W | 77.7 | 43.5 |
| 06:00 PM 8 07:00 PM | 54.W | 79.1 | 42.W |
| 07:00 PM 8 0W00 PM | 54.1 | 7W4 | 42.W |
| 0W00 PM 8 09:00 PM | 51.5 | 7WW | 44.0 |
| 09:00 PM 8 10:00 PM | 49.7 | 73.6 | 45.6 |
| 10:00 PM 8 11:00 PM | 4W2 | 74.6 | 44.4 |
| 11:00 PM 8 12:00 AM | 45.5 | 6W0 | 43.6 |
| 12:00 AM 8 01:00 AM | 47.6 | 57.3 | 44.6 |
| 01:00 AM 8 02:00 AM | 50.2 | 6W0 | 47.6 |
| 02:00 AM 8 03:00 AM | 46.6 | 62.3 | 42.W |
| 03:00 AM 8 04:00 AM | 43.3 | 65.2 | 41.6 |
| 04:00 AM 8 05:00 AM | 43.9 | 64.5 | 42.3 |
| 05:00 AM 8 06:00 AM | 45.5 | 63.W | 42.9 |
| 06:00 AM 8 07:00 AM | 4W5 | 65.W | 42.W |
| 07:00 AM 8 0W00 AM | 60.0 | W0W2 | 47.9 |
| 0W00 AM 8 09:00 AM | 52.3 | 72.5 | 45.5 |
| 09:00 AM 8 10:00 AM | 56.9 | 79.3 | 44.4 |
| 10:00 AM 8 11:00 AM | 5W5 | W6.3 | 44.3 |
| 11:00 AM 8 12:00 PM | 59.7 | 7W6 | 49.W |
| LeQ AveraNe 24 hrs. fd( fABB | 54.7 | | |
| Lmax fd( fABB | | 93.5 | |
| L90 fd( fABB | | | 43.5 |
| Ldn fd( fABB | 56.7 | | |
| Gtandard fd( fABB | 70 | 115 | |

Regerence Method : IGO199681 and 199682
Gtandard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 fw.ศ. 2540B เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 254W

**Technical Management** [redacted]
Gcientist f4B

**Approved by** [redacted]
Gection Head

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2244823/ EMAIL S:\Reports_Air.Noise.rpt (10:18AM)

MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546117**
Date Received : May 30, 2025
Date Reported : Jun 02, 2025
Report - umber: 332191381



**Sample Number** 254611785
**Parameter** - oise fLeQ 24 hrs.B
**Location** ( an Khao Kham fGPS 47) 0675V60, 1V064V6B
**Measurement Date** May 25 8 May 26, 2025
**Measurement by** q asan Treenakul
**Sound Level meter** Serial - o. V6V616

| Time | LeQ fd( fABB | Lmax fd( fABB | L90 fd( fABB |
|---|---|---|---|
| 09:00 AM 8 10:00 AM | 65.0 | 74.3 | 47.6 |
| 10:00 AM 8 11:00 AM | 56.1 | 6W5 | 46.4 |
| 11:00 AM 8 12:00 PM | 62.2 | 77.7 | 49.0 |
| 12:00 PM 8 01:00 PM | 54.3 | 71.6 | 46.3 |
| 01:00 PM 8 02:00 PM | 66.3 | 79.3 | 46.W |
| 02:00 PM 8 03:00 PM | 54.3 | 66.6 | 4W0 |
| 03:00 PM 8 04:00 PM | 53.0 | 69.5 | 44.4 |
| 04:00 PM 8 05:00 PM | 52.9 | 6W5 | 46.7 |
| 05:00 PM 8 06:00 PM | 54.W | 6W3 | 46.1 |
| 06:00 PM 8 07:00 PM | 57.5 | 73.9 | 53.2 |
| 07:00 PM 8 0W00 PM | 56.3 | 79.4 | 53.9 |
| 0W00 PM 8 09:00 PM | 54.1 | 75.7 | 52.4 |
| 09:00 PM 8 10:00 PM | 56.1 | 77.9 | 52.4 |
| 10:00 PM 8 11:00 PM | 55.0 | 61.5 | 50.3 |
| 11:00 PM 8 12:00 AM | 49.9 | 57.9 | 4W6 |
| 12:00 AM 8 01:00 AM | 49.4 | 57.6 | 47.9 |
| 01:00 AM 8 02:00 AM | 50.7 | 56.0 | 49.3 |
| 02:00 AM 8 03:00 AM | 52.5 | 64.6 | 50.7 |
| 03:00 AM 8 04:00 AM | 53.0 | 66.4 | 49.W |
| 04:00 AM 8 05:00 AM | 62.2 | 75.0 | 56.3 |
| 05:00 AM 8 06:00 AM | 61.1 | 70.7 | 56.9 |
| 06:00 AM 8 07:00 AM | 63.0 | 71.4 | 57.6 |
| 07:00 AM 8 0W00 AM | 55.9 | 73.9 | 49.9 |
| 0W00 AM 8 09:00 AM | 56.2 | W4.2 | 47.2 |
| LeQ AveraNe 24 hrs. fd( fABB | 59.0 | | |
| Lmax fd( fABB | | W4.2 | |
| L90 fd( fABB | | | 49.0 |
| Ldn fd( fABB | 64.W | | |
| Standard fd( fABB | 70 | 115 | |

Regerence Method : ISO199681 and 199682
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 fw.ศ. 2540Bเรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 254W

**Technical Management** [redacted]
Scientist f4B

**Approved by** [redacted]
Section Head



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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546117**
Date Received : May 30, 2025
Date Reported : Jun 02, 2025
Report - umber: 332191281



**Sample Number** 254611784
**Parameter** - oise fLeQ 24 hrs.B
**Location** ( an Khao Kham fGPS 47) 0675V60, 1V064V6B
**Measurement Date** May 24 8 May 25, 2025
**Measurement by** q asan Treenakul
**Sound Level meter** Serial - o. V6V616

| Time | LeQ fd( fABB | Lmax fd( fABB | L90 fd( fABB |
|---|---|---|---|
| 09:00 AM 8 10:00 AM | 61.2 | 97.3 | 52.W |
| 10:00 AM 8 11:00 AM | 64.W | 75.9 | 51.W |
| 11:00 AM 8 12:00 PM | 66.7 | 75.1 | 49.5 |
| 12:00 PM 8 01:00 PM | 55.3 | 77.0 | 46.6 |
| 01:00 PM 8 02:00 PM | 60.1 | 72.9 | 49.3 |
| 02:00 PM 8 03:00 PM | 64.6 | WV5 | 44.6 |
| 03:00 PM 8 04:00 PM | 4W3 | 70.3 | 42.5 |
| 04:00 PM 8 05:00 PM | 4W7 | 70.W | 43.3 |
| 05:00 PM 8 06:00 PM | 56.5 | 72.1 | 50.2 |
| 06:00 PM 8 07:00 PM | 63.W | 7W4 | 59.2 |
| 07:00 PM 8 0W00 PM | 63.2 | 7W6 | 5W0 |
| 0W00 PM 8 09:00 PM | 59.W | 6W7 | 56.7 |
| 09:00 PM 8 10:00 PM | 64.W | 74.6 | 60.9 |
| 10:00 PM 8 11:00 PM | 66.0 | 79.6 | 63.2 |
| 11:00 PM 8 12:00 AM | 63.6 | 67.W | 61.2 |
| 12:00 AM 8 01:00 AM | 60.9 | 66.3 | 57.0 |
| 01:00 AM 8 02:00 AM | 60.W | 6W0 | 56.7 |
| 02:00 AM 8 03:00 AM | 56.W | 72.4 | 54.7 |
| 03:00 AM 8 04:00 AM | 56.1 | 73.W | 50.3 |
| 04:00 AM 8 05:00 AM | 61.0 | 72.2 | 51.9 |
| 05:00 AM 8 06:00 AM | 65.7 | 93.7 | 54.3 |
| 06:00 AM 8 07:00 AM | 65.0 | W2.2 | 59.W |
| 07:00 AM 8 0W00 AM | 5W7 | 75.6 | 49.7 |
| 0W00 AM 8 09:00 AM | 64.W | 77.5 | 53.2 |
| LeQ AveraNe 24 hrs. fd( fABB | 62.6 | | |
| Lmax fd( fABB | | 97.3 | |
| L90 fd( fABB | | | 52.W |
| Ldn fd( fABB | 69.3 | | |
| Standard fd( fABB | 70 | 115 | |

Regerence Method : ISO199681 and 199682
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 fw.ศ. 2540Bเรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 254W

**Technical Management** [redacted]
Scientist f4B

**Approved by** [redacted]
Section Head

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MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546117**
Date Received : May 30, 2025
Date Reported : Jun 02, 2025
Report - umber: 33219158l



**Sample Number** 254611787
**Parameter** - oise fLeQ 24 hrs.B
**Location** ( an TunN ThonN fGPS 47) 06746W7, 1W0576WB
**Measurement Date** May 24 8 May 25, 2025
**Measurement by** q asan Treenakul
**Sound Level meter** Serial - o. 572565

| Time | LeQ fd( fAEB | Lmax fd( fAEB | L90 fd( fAEB |
|---|---|---|---|
| 10:00 AM 8 11:00 AM | 67.5 | 79.5 | 50.9 |
| 11:00 AM 8 12:00 PM | 6W1 | 77.W | 49.W |
| 12:00 PM 8 01:00 PM | 66.W | 79.6 | 53.2 |
| 01:00 PM 8 02:00 PM | 56.7 | W4.2 | 4W9 |
| 02:00 PM 8 03:00 PM | 65.6 | W6.0 | 47.2 |
| 03:00 PM 8 04:00 PM | 5W7 | 77.2 | 46.7 |
| 04:00 PM 8 05:00 PM | 56.9 | W2.2 | 44.3 |
| 05:00 PM 8 06:00 PM | 54.6 | 7W3 | 45.W |
| 06:00 PM 8 07:00 PM | 54.0 | 70.4 | 53.0 |
| 07:00 PM 8 0W00 PM | 52.9 | 6W9 | 51.0 |
| 0W00 PM 8 09:00 PM | 53.3 | 64.7 | 52.4 |
| 09:00 PM 8 10:00 PM | 52.2 | 56.2 | 51.5 |
| 10:00 PM 8 11:00 PM | 52.7 | 67.4 | 51.7 |
| 11:00 PM 8 12:00 AM | 51.7 | 57.9 | 51.0 |
| 12:00 AM 8 01:00 AM | 50.7 | 61.2 | 49.2 |
| 01:00 AM 8 02:00 AM | 50.W | 70.2 | 4W7 |
| 02:00 AM 8 03:00 AM | 53.0 | 64.4 | 51.W |
| 03:00 AM 8 04:00 AM | 56.3 | 65.W | 53.W |
| 04:00 AM 8 05:00 AM | 55.4 | 77.5 | 46.1 |
| 05:00 AM 8 06:00 AM | 66.7 | 93.0 | 49.6 |
| 06:00 AM 8 07:00 AM | 56.9 | 71.5 | 49.0 |
| 07:00 AM 8 0W00 AM | 67.5 | 7W9 | 47.7 |
| 0W00 AM 8 09:00 AM | 57.7 | 72.7 | 4W2 |
| 09:00 AM 8 10:00 AM | 56.W | 72.9 | 47.9 |
| LeQ AveraNe 24 hrs. fd( fAEB | 61.W | | |
| Lmax fd( fAEB | | 93.0 | |
| L90 fd( fAEB | | | 49.2 |
| Ldn fd( fAEB | 66.1 | | |
| Standard fd( fAEB | 70 | 115 | |

Regerence Method : ISO199681 and 199682
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 fw.ศ. 2540Bเรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 254W

**Technical Management** [redacted]
Scientist f4B

**Approved by** [redacted]
Section Head



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Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546117**
Date Received : May 30, 2025
Date Reported : Jun 02, 2025
Report - umber: 33219148l



**Sample Number** 254611786
**Parameter** - oise fLeQ 24 hrs.B
**Location** ( an Khao Kham fGPS 47) 0675W60, 1W064W6B
**Measurement Date** May 26 8 May 27, 2025
**Measurement by** q asan Treenakul
**Sound Level meter** Serial - o. W5W616

| Time | LeQ fd( fAEB | Lmax fd( fAEB | L90 fd( fAEB |
|---|---|---|---|
| 09:00 AM 8 10:00 AM | 55.7 | 71.6 | 46.7 |
| 10:00 AM 8 11:00 AM | 56.3 | 69.0 | 47.9 |
| 11:00 AM 8 12:00 PM | 55.0 | 65.4 | 46.5 |
| 12:00 PM 8 01:00 PM | 56.2 | W4.3 | 43.5 |
| 01:00 PM 8 02:00 PM | 60.7 | W6.3 | 44.5 |
| 02:00 PM 8 03:00 PM | 4W2 | 71.0 | 43.5 |
| 03:00 PM 8 04:00 PM | 4W7 | 75.1 | 41.4 |
| 04:00 PM 8 05:00 PM | 4W7 | 74.0 | 42.1 |
| 05:00 PM 8 06:00 PM | 52.6 | 69.0 | 44.1 |
| 06:00 PM 8 07:00 PM | 60.5 | W8.5 | 51.7 |
| 07:00 PM 8 0W00 PM | 62.0 | W4.9 | 53.9 |
| 0W00 PM 8 09:00 PM | 61.6 | 66.7 | 54.4 |
| 09:00 PM 8 10:00 PM | 55.2 | 74.W | 50.6 |
| 10:00 PM 8 11:00 PM | 51.6 | 71.9 | 49.W |
| 11:00 PM 8 12:00 AM | 49.7 | 65.6 | 4W3 |
| 12:00 AM 8 01:00 AM | 49.0 | 57.5 | 47.4 |
| 01:00 AM 8 02:00 AM | 52.5 | 59.3 | 49.0 |
| 02:00 AM 8 03:00 AM | 52.1 | 61.6 | 4WW |
| 03:00 AM 8 04:00 AM | 4W6 | 6W1 | 45.9 |
| 04:00 AM 8 05:00 AM | 56.W | 74.3 | 51.6 |
| 05:00 AM 8 06:00 AM | 5W3 | 7W3 | 51.0 |
| 06:00 AM 8 07:00 AM | 60.W | 79.7 | 57.3 |
| 07:00 AM 8 0W00 AM | 56.0 | 70.9 | 51.5 |
| 0W00 AM 8 09:00 AM | 51.9 | 64.2 | 47.4 |
| LeQ AveraNe 24 hrs. fd( fAEB | 56.7 | | |
| Lmax fd( fAEB | | W6.3 | |
| L90 fd( fAEB | | | 47.9 |
| Ldn fd( fAEB | 62.1 | | |
| Standard fd( fAEB | 70 | 115 | |

Regerence Method : ISO199681 and 199682
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 fw.ศ. 2540Bเรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 254W

**Technical Management** [redacted]
Scientist f4B

**Approved by** [redacted]
Section Head

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2244823/ EMAIL S:\Reports_Air.Noise.rpt (10:20AM)

MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546117**
Date Received : May 30, 2025
Date Reported : Jun 02, 2025
Report - umber: 33219178l



**Sample Number** 25461178 9
**Parameter** - oise fLeQ 24 hrs.B
**Location** ( an TunN ThonN fGPS 47) 06746W7, 1W0576WB
**Measurement Date** May 26 8 May 27, 2025
**Measurement by** q asan Treenakul
**Sound Level meter** Serial - o. 572565

| Time | LeQ fd( fAEB | Lmax fd( fAEB | L90 fd( fAEB |
|---|---|---|---|
| 10:00 AM 8 11:00 AM | 50.7 | 64.2 | 49.7 |
| 11:00 AM 8 12:00 PM | 50.0 | 56.4 | 4W6 |
| 12:00 PM 8 01:00 PM | 52.4 | 5W5 | 51.6 |
| 01:00 PM 8 02:00 PM | 52.7 | 65.5 | 51.7 |
| 02:00 PM 8 03:00 PM | 5W5 | 71.3 | 50.1 |
| 03:00 PM 8 04:00 PM | 50.0 | 63.7 | 4W6 |
| 04:00 PM 8 05:00 PM | 49.0 | 63.7 | 47.6 |
| 05:00 PM 8 06:00 PM | 4W6 | 71.6 | 47.2 |
| 06:00 PM 8 07:00 PM | 50.1 | 69.2 | 47.5 |
| 07:00 PM 8 0W00 PM | 4W5 | 61.5 | 47.1 |
| 0W00 PM 8 09:00 PM | 49.9 | 64.3 | 4W3 |
| 09:00 PM 8 10:00 PM | 57.1 | 73.2 | 50.4 |
| 10:00 PM 8 11:00 PM | 51.0 | 63.0 | 49.6 |
| 11:00 PM 8 12:00 AM | 50.W | 57.2 | 49.4 |
| 12:00 AM 8 01:00 AM | 52.0 | 60.2 | 49.3 |
| 01:00 AM 8 02:00 AM | 60.3 | 64.0 | 59.3 |
| 02:00 AM 8 03:00 AM | 60.5 | 64.2 | 60.0 |
| 03:00 AM 8 04:00 AM | 60.5 | 62.0 | 60.2 |
| 04:00 AM 8 05:00 AM | 60.7 | 62.4 | 60.3 |
| 05:00 AM 8 06:00 AM | 61.W | 6W9 | 60.9 |
| 06:00 AM 8 07:00 AM | 62.9 | 67.6 | 59.4 |
| 07:00 AM 8 0W00 AM | 52.9 | 65.3 | 51.0 |
| 0W00 AM 8 09:00 AM | 51.0 | 75.9 | 49.W |
| 09:00 AM 8 10:00 AM | 50.3 | 62.7 | 4W5 |
| LeQ AveraNe 24 hrs. fd( fAEB | 56.7 | | |
| Lmax fd( fAEB | | 75.9 | |
| L90 fd( fAEB | | | 49.7 |
| Ldn fd( fAEB | 65.6 | | |
| Standard fd( fAEB | 70 | 115 | |

Regerence Method : ISO199681 and 199682
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 fพ.ศ. 2540Bเรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 254W

**Technical Management** [redacted]
Scientist f4B

**Approved by** [redacted]
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น.10/62

Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546117**
Date Received : May 30, 2025
Date Reported : Jun 02, 2025
Report - umber: 33219168l



**Sample Number** 25461178f
**Parameter** - oise QLeB 24 hrs.(
**Location** Gan TunN ThonN QSP) 47W06746f7, 1f0576f (
**Measurement Date** May 25 8 May 26, 2025
**Measurement by** q asan Treenakul
**Sound Level meter** ) erial - o. 572565

| Time | LeB QlGQA(( | Lmax QlGQA(( | L90 QlGQA(( |
|---|---|---|---|
| 10:00 AM 8 11:00 AM | 5f.2 | 7f.0 | 46.f |
| 11:00 AM 8 12:00 PM | 56.2 | 76.2 | 43.3 |
| 12:00 PM 8 01:00 PM | 52.5 | 76.4 | 46.5 |
| 01:00 PM 8 02:00 PM | 50.7 | 72.6 | 49.2 |
| 02:00 PM 8 03:00 PM | 50.9 | 63.5 | 50.0 |
| 03:00 PM 8 04:00 PM | 49.9 | 60.5 | 49.0 |
| 04:00 PM 8 05:00 PM | 49.4 | 60.6 | 4f.3 |
| 05:00 PM 8 06:00 PM | 4f.0 | 59.f | 46.6 |
| 06:00 PM 8 07:00 PM | 47.1 | 56.3 | 46.4 |
| 07:00 PM 8 0f:00 PM | 47.1 | 52.f | 46.2 |
| 0f:00 PM 8 09:00 PM | 46.4 | 59.0 | 45.4 |
| 09:00 PM 8 10:00 PM | 4f.7 | 62.5 | 47.6 |
| 10:00 PM 8 11:00 PM | 55.2 | 67.0 | 47.9 |
| 11:00 PM 8 12:00 AM | 64.4 | 74.1 | 52.5 |
| 12:00 AM 8 01:00 AM | 64.1 | 75.0 | 47.2 |
| 01:00 AM 8 02:00 AM | 66.0 | 77.0 | 50.9 |
| 02:00 AM 8 03:00 AM | 62.2 | f4.3 | 47.f |
| 03:00 AM 8 04:00 AM | 66.4 | 75.6 | 52.f |
| 04:00 AM 8 05:00 AM | 56.9 | 73.f | 45.4 |
| 05:00 AM 8 06:00 AM | 57.0 | 71.2 | 43.2 |
| 06:00 AM 8 07:00 AM | 54.2 | 7f.2 | 43.f |
| 07:00 AM 8 0f:00 AM | 51.9 | 73.7 | 45.7 |
| 0f:00 AM 8 09:00 AM | 52.7 | 7f.9 | 49.7 |
| 09:00 AM 8 10:00 AM | 50.7 | 65.2 | 49.f |
| LeB AveraNe 24 hrs. QlGQA(( | 59.1 | | |
| Lmax QlGQA(( | | f4.3 | |
| L90 QlGQA(( | | | 47.2 |
| Ldn QlGQA(( | 6f.5 | | |
| ) tandard QlGQA(( | 70 | 115 | |

Regerence Method : I) O199681 and 199682
) tandard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 Qพ.ศ. 2540( เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 254f

**Technical Management** [redacted]
) cientist Q!(

**Approved by** [redacted]
) ection Head

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2244823/ EMAIL S:\Reports_Air.Noise.rpt (10:22AM)

MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546117**
Date Received : May 30, 2025
Date Reported : Jun 02, 2025
Report - umber: 33219198l



| | |
|---|---|
| **Sample Number** | 25461178l1 |
| **Parameter** | - oise fLeQ 24 hrs.B |
| **Location** | ( an Mai KlonN Ta Lud fGPS 47) 06765WW, 1W07193B |
| **Measurement Date** | May 25 8 May 26, 2025 |
| **Measurement by** | q asan Treenakul |
| **Sound Level meter** | Serial - o. 572566 |

| Time | LeQ fd( fAEB | Lmax fd( fAEB | L90 fd( fAEB |
|---|---|---|---|
| 11:00 AM 8 12:00 PM | 52.W | 61.9 | 51.7 |
| 12:00 PM 8 01:00 PM | 55.4 | 7W5 | 52.1 |
| 01:00 PM 8 02:00 PM | 55.1 | W2.W | 51.4 |
| 02:00 PM 8 03:00 PM | 52.0 | 72.W | 49.9 |
| 03:00 PM 8 04:00 PM | 52.0 | 71.4 | 4W9 |
| 04:00 PM 8 05:00 PM | 56.3 | 63.5 | 49.3 |
| 05:00 PM 8 06:00 PM | 61.W | 65.7 | 60.0 |
| 06:00 PM 8 07:00 PM | 63.2 | 66.3 | 61.7 |
| 07:00 PM 8 0W:00 PM | 62.2 | 66.0 | 59.9 |
| 0W:00 PM 8 09:00 PM | 5W1 | 76.1 | 53.3 |
| 09:00 PM 8 10:00 PM | 52.9 | 6W2 | 4W2 |
| 10:00 PM 8 11:00 PM | 54.2 | 6W7 | 47.9 |
| 11:00 PM 8 12:00 AM | 56.2 | 79.9 | 4WW |
| 12:00 AM 8 01:00 AM | 51.6 | 73.1 | 47.1 |
| 01:00 AM 8 02:00 AM | 54.7 | W0.W | 46.6 |
| 02:00 AM 8 03:00 AM | 59.7 | 73.3 | 44.4 |
| 03:00 AM 8 04:00 AM | 4W2 | 67.7 | 44.3 |
| 04:00 AM 8 05:00 AM | 57.6 | 65.6 | 44.W |
| 05:00 AM 8 06:00 AM | 45.4 | 70.7 | 41.9 |
| 06:00 AM 8 07:00 AM | 4W0 | 71.5 | 42.1 |
| 07:00 AM 8 0W:00 AM | 4W0 | 72.1 | 42.2 |
| 0W:00 AM 8 09:00 AM | 50.6 | W0.2 | 44.2 |
| 09:00 AM 8 10:00 AM | 51.2 | W2.4 | 46.3 |
| 10:00 AM 8 11:00 AM | 52.1 | W3.7 | 47.1 |
| LeQ AveraNe 24 hrs. fd( fAEB | 56.6 | | |
| Lmax fd( fAEB | | W3.7 | |
| L90 fd( fAEB | | | 47.9 |
| Ldn fd( fAEB | 61.W | | |
| Standard fd( fAEB | 70 | 115 | |

Regerence Method : ISO199681 and 199682
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 fพ.ศ. 2540B เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 254W

**Technical Management** [redacted]
Scientist f4B

**Approved by** [redacted]
Section Head

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น.10/63

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546117**
Date Received : May 30, 2025
Date Reported : Jun 02, 2025
Report Number: 3321918-1



| | |
|---|---|
| **Sample Number** | 2546117-10 |
| **Parameter** | Noise QLeB 24 hrs.( |
| **Location** | Gan Mai Klong Ta Lud QSP) 47W 0676588, 1807193( |
| **Measurement Date** | May 24 - May 25, 2025 |
| **Measurement by** | q asan Treenakul |
| **Sound Level meter** | ) erial No. 572566 |

| Time | LeB QIGQA(( | Lmax QIGQA(( | L90 QIGQA(( |
|---|---|---|---|
| 11:00 AM - 12:00 PM | 63.4 | 75.0 | 46.1 |
| 12:00 PM - 01:00 PM | 57.8 | 73.1 | 45.0 |
| 01:00 PM - 02:00 PM | 52.5 | 75.0 | 43.8 |
| 02:00 PM - 03:00 PM | 53.4 | 75.0 | 44.2 |
| 03:00 PM - 04:00 PM | 63.2 | 78.5 | 48.5 |
| 04:00 PM - 05:00 PM | 55.6 | 70.7 | 45.0 |
| 05:00 PM - 06:00 PM | 57.2 | 74.1 | 45.1 |
| 06:00 PM - 07:00 PM | 54.8 | 72.9 | 48.7 |
| 07:00 PM - 08:00 PM | 58.1 | 85.5 | 51.3 |
| 08:00 PM - 09:00 PM | 63.1 | 76.4 | 46.5 |
| 09:00 PM - 10:00 PM | 49.8 | 73.2 | 43.9 |
| 10:00 PM - 11:00 PM | 49.6 | 74.1 | 42.6 |
| 11:00 PM - 12:00 AM | 57.2 | 81.6 | 43.8 |
| 12:00 AM - 01:00 AM | 54.4 | 79.3 | 45.1 |
| 01:00 AM - 02:00 AM | 54.7 | 75.4 | 43.7 |
| 02:00 AM - 03:00 AM | 53.8 | 74.0 | 47.5 |
| 03:00 AM - 04:00 AM | 53.2 | 68.7 | 51.5 |
| 04:00 AM - 05:00 AM | 53.8 | 66.7 | 52.5 |
| 05:00 AM - 06:00 AM | 54.7 | 64.4 | 53.4 |
| 06:00 AM - 07:00 AM | 55.1 | 63.1 | 53.7 |
| 07:00 AM - 08:00 AM | 54.9 | 63.5 | 53.6 |
| 08:00 AM - 09:00 AM | 55.3 | 69.8 | 54.0 |
| 09:00 AM - 10:00 AM | 55.2 | 66.0 | 54.1 |
| 10:00 AM - 11:00 AM | 54.2 | 69.6 | 52.2 |
| LeB Average 24 hrs. QIGQA(( | 57.3 | | |
| Lmax QIGQA(( | | 85.5 | |
| L90 QIGQA(( | | | 46.5 |
| Ldn QIGQA(( | 61.7 | | |
| ) tandard QIGQA(( | 70 | 115 | |

Reference Method : I) O1996-1 and 1996-2
) tandard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 Qพ.ศ. 2540( เรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 2548

**Technical Management** [redacted]
) cientist QI(

**Approved by** [redacted]
) ection Head

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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID: 2546117**
Date Received : May 30, 2025
Date Reported : Jun 02, 2025
Report - umber: 332192081



**Sample Number** 254611178l2
**Parameter** - oise fLeQ 24 hrs.B
**Location** ( an Mai KlonN Ta Lud fGPS 47) 06765WW 1W07193B
**Measurement Date** May 26 8May 27, 2025
**Measurement by** q asan Treenakul
**Sound Level meter** Serial - o. 572566

| Time | LeQfd( fAEB | Lmax fd( fAEB | L90 fd( fAEB |
|---|---|---|---|
| 11:00 AM 812:00 PM | 50.3 | 61.2 | 47.4 |
| 12:00 PM 801:00 PM | 51.6 | 73.3 | 4W1 |
| 01:00 PM 802:00 PM | 52.W | 69.9 | 49.3 |
| 02:00 PM 803:00 PM | 43.3 | 56.2 | 40.0 |
| 03:00 PM 804:00 PM | 47.2 | 77.6 | 41.2 |
| 04:00 PM 805:00 PM | 47.2 | 6W7 | 40.9 |
| 05:00 PM 806:00 PM | 50.2 | 70.3 | 41.7 |
| 06:00 PM 807:00 PM | 51.5 | 71.7 | 44.0 |
| 07:00 PM 80W00 PM | 55.1 | 75.9 | 45.0 |
| 0W00 PM 809:00 PM | 4W6 | 63.9 | 40.4 |
| 09:00 PM 810:00 PM | 43.2 | 66.0 | 39.0 |
| 10:00 PM 811:00 PM | 45.3 | 60.5 | 39.9 |
| 11:00 PM 812:00 AM | 42.6 | 59.5 | 3WW |
| 12:00 AM 801:00 AM | 44.5 | 73.1 | 37.3 |
| 01:00 AM 802:00 AM | 43.1 | 62.9 | 36.5 |
| 02:00 AM 803:00 AM | 49.0 | W6.5 | 37.0 |
| 03:00 AM 804:00 AM | 41.3 | 61.1 | 36.4 |
| 04:00 AM 805:00 AM | 46.3 | 6W6 | 37.2 |
| 05:00 AM 806:00 AM | 45.W | 67.3 | 35.1 |
| 06:00 AM 807:00 AM | 56.4 | 66.0 | 36.1 |
| 07:00 AM 80W00 AM | 57.9 | 64.5 | 43.0 |
| 0W00 AM 809:00 AM | 50.W | 7W3 | 39.5 |
| 09:00 AM 810:00 AM | 47.2 | 56.1 | 44.9 |
| 10:00 AM 811:00 AM | 47.2 | 55.2 | 45.3 |
| LeQAveraNe 24 hrs. fd( fAEB | 50.6 | | |
| Lmax fd( fAEB | | W6.5 | |
| L90 fd( fAEB | | | 40.0 |
| Ldn fd( fAEB | 55.W | | |
| Standard fd( fAEB | 70 | 115 | |

Regerence Method : ISO199681 and 199682
Standard : 1. ประกาศคณะกรรมการสิ่งแวดล้อมแห่งชาติ ฉบับที่ 15 fพ.ศ. 2540Bเรื่องกำหนดมาตรฐานระดับเสียงโดยทั่วไป
2. ประกาศกระทรวงอุตสาหกรรม เรื่องกำหนดค่าระดับเสียงการรบกวน และระดับเสียงที่เกิดจากการประกอบกิจการโรงงาน พ.ศ. 254W

**Technical Management** [redacted]
Scientist f4B

**Approved by** [redacted]
Section Head

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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O** :
**Project Name** : Air Test
**Project Location** :

**Lot ID : 2512260**
Date Received :Feb 18, 2025
Date Reported :Feb 27, 2025
Report Number :3229428-1



| | |
|---|---|
| **Sample Number** | 2512260-4 |
| **Sample Description** | Vibration |
| **Location** | Ban Nong Ra Man (GPS 47Q 0674684, 1802590) |
| **Sampled Date** | Feb 15 - Feb 16, 2025 |
| **Sampled by** | Vanich Phanpipit |

**Equipment Data**

| Description | Data Logger | Geophone | Microphone |
|---|---|---|---|
| Brand | Vibrock | Vibrock | Vibrock |
| Model | V901 | V901 | V901 |
| S/N | 1852 | 1852 | 1852 |
| Sensitivity | - | 0.254 mm/s | 0.1 dB |

| Date | Time | Transverse | | | Vertical | | | Longitudinal | | | Air Blast Pressure (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | PPV (mm/s) | Frequency (Hz) | PD (mm) | PPV (mm/s) | Frequency (Hz) | PD (mm) | PPV (mm/s) | Frequency (Hz) | PD (mm) | |
| Feb 16, 2025 | 12:15 PM | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Max** | | **0.000** | **0.00** | **0.000** | **0.000** | **0.00** | **0.000** | **0.000** | **0.00** | **0.000** | **0.0** |
| **Standard** | | - | - | - | - | - | - | - | - | - | - |

**Remark** : - PPV = Peak Particle Velocity - PD = Peak Displacement - ND = Not Detect
Standard (s) : Notification of the Ministry of Natural Resources and Environmental, dated November 7, B.E. 2548 (2005).

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Assistant General Manager

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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O** :
**Project Name** : Air Test
**Project Location** :

**Lot ID : 2512260**
Date Received :Feb 18, 2025
Date Reported :Feb 27, 2025
Report Number :3229428-1



| | |
|---|---|
| **Sample Number** | 2512260-2 |
| **Sample Description** | Vibration |
| **Location** | Ban Khao Mor (GPS 47Q 0675703, 1804307) |
| **Sampled Date** | Feb 15 - Feb 16, 2025 |
| **Sampled by** | Vanich Phanpipit |

**Equipment Data**

| Description | Data Logger | Geophone | Microphone |
|---|---|---|---|
| Brand | Vibrock | Vibrock | Vibrock |
| Model | V901 | V901 | V901 |
| S/N | 1618 | 1618 | 1618 |
| Sensitivity | - | 0.254 mm/s | 0.1 dB |

| Date | Time | Transverse | | | Vertical | | | Longitudinal | | | Air Blast Pressure (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | PPV (mm/s) | Frequency (Hz) | PD (mm) | PPV (mm/s) | Frequency (Hz) | PD (mm) | PPV (mm/s) | Frequency (Hz) | PD (mm) | |
| Feb 16, 2025 | 12:15 PM | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Max** | | **0.000** | **0.00** | **0.000** | **0.000** | **0.00** | **0.000** | **0.000** | **0.00** | **0.000** | **0.0** |
| **Standard** | | - | - | - | - | - | - | - | - | - | - |

**Remark** : - PPV = Peak Particle Velocity - PD = Peak Displacement - ND = Not Detect
Standard (s) : Notification of the Ministry of Natural Resources and Environmental, dated November 7, B.E. 2548 (2005).

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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O** :
**Project Name** : Air Test
**Project Location** :

**Lot ID : 2512260**
Date Received :Feb 18, 2025
Date Reported :Feb 27, 2025
Report Number :3229428-1



| | |
|---|---|
| **Sample Number** | 2512260-6 |
| **Sample Description** | Vibration |
| **Location** | Ban Tung Thong (GPS 47Q 0674687, 1805768) |
| **Sampled Date** | Feb 13 - Feb 14, 2025 |
| **Sampled by** | Vanich Phanpipit |

| Equipment Data | | | |
|---|---|---|---|
| Description | Data Logger | Geophone | Microphone |
| Brand | Vibrock | Vibrock | Vibrock |
| Model | V901 | V901 | V901 |
| S/N | 1618 | 1618 | 1618 |
| Sensitivity | - | 0.254 mm/s | 0.1 dB |

| Date | Time | Transverse | | | Vertical | | | Longitudinal | | | Air Blast Pressure (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | PPV (mm/s) | Frequency (Hz) | PD (mm) | PPV (mm/s) | Frequency (Hz) | PD (mm) | PPV (mm/s) | Frequency (Hz) | PD (mm) | |
| Feb 14, 2025 | 12:15 PM | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Max** | | **0.000** | **0.00** | **0.000** | **0.000** | **0.00** | **0.000** | **0.000** | **0.00** | **0.000** | **0.0** |
| **Standard** | | - | - | - | - | - | - | - | - | - | - |

**Remark** : - PPV = Peak Particle Velocity - PD = Peak Displacement - ND = Not Detect
Standard (s) : Notification of the Ministry of Natural Resources and Environmental, dated November 7, B.E. 2548 (2005).

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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O** :
**Project Name** : Air Test
**Project Location** :

**Lot ID : 2512260**
Date Received :Feb 18, 2025
Date Reported :Feb 27, 2025
Report Number :3229428-1



| | |
|---|---|
| **Sample Number** | 2512260-1 |
| **Sample Description** | Vibration |
| **Location** | Ban Dong Long (GPS 47Q 0678205, 1802158) |
| **Sampled Date** | Feb 13 - Feb 14, 2025 |
| **Sampled by** | Vanich Phanpipit |

| Equipment Data | | | |
|---|---|---|---|
| Description | Data Logger | Geophone | Microphone |
| Brand | Vibrock | Vibrock | Vibrock |
| Model | V901 | V901 | V901 |
| S/N | 1617 | 1617 | 1617 |
| Sensitivity | - | 0.254 mm/s | 0.1 dB |

| Date | Time | Transverse | | | Vertical | | | Longitudinal | | | Air Blast Pressure (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | PPV (mm/s) | Frequency (Hz) | PD (mm) | PPV (mm/s) | Frequency (Hz) | PD (mm) | PPV (mm/s) | Frequency (Hz) | PD (mm) | |
| Feb 14, 2025 | 12:15 PM | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Max** | | **0.000** | **0.00** | **0.000** | **0.000** | **0.00** | **0.000** | **0.000** | **0.00** | **0.000** | **0.0** |
| **Standard** | | - | - | - | - | - | - | - | - | - | - |

**Remark** : - PPV = Peak Particle Velocity - PD = Peak Displacement - ND = Not Detect
Standard (s) : Notification of the Ministry of Natural Resources and Environmental, dated November 7, B.E. 2548 (2005).

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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O** :
**Project Name** : Air Test
**Project Location** :

**Lot ID : 2512260**
Date Received :Feb 18, 2025
Date Reported :Feb 27, 2025
Report Number :3229428-1



| | |
|---|---|
| **Sample Number** | 2512260-5 |
| **Sample Description** | Vibration |
| **Location** | Ban Nong Sang (GPS 47Q 0678387, 1805733) |
| **Sampled Date** | Feb 15 - Feb 16, 2025 |
| **Sampled by** | Vanich Phanpipit |

| Equipment Data | | | |
|---|---|---|---|
| Description | Data Logger | Geophone | Microphone |
| Brand | Vibrock | Vibrock | Vibrock |
| Model | V901 | V901 | V901 |
| S/N | 1822 | 1822 | 1822 |
| Sensitivity | - | 0.254 mm/s | 0.1 dB |

| Date | Time | Transverse | | | Vertical | | | Longitudinal | | | Air Blast Pressure (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | PPV (mm/s) | Frequency (Hz) | PD (mm) | PPV (mm/s) | Frequency (Hz) | PD (mm) | PPV (mm/s) | Frequency (Hz) | PD (mm) | |
| Feb 16, 2025 | 12:15 PM | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Max** | | **0.000** | **0.00** | **0.000** | **0.000** | **0.00** | **0.000** | **0.000** | **0.00** | **0.000** | **0.0** |
| **Standard** | | - | - | - | - | - | - | - | - | - | - |

**Remark** : - PPV = Peak Particle Velocity - PD = Peak Displacement - ND = Not Detect
Standard (s) : Notification of the Ministry of Natural Resources and Environmental, dated November 7, B.E. 2548 (2005).

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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O** :
**Project Name** : Air Test
**Project Location** :

**Lot ID : 2512260**
Date Received :Feb 18, 2025
Date Reported :Feb 27, 2025
Report Number :3229428-1



| | |
|---|---|
| **Sample Number** | 2512260-7 |
| **Sample Description** | Vibration |
| **Location** | Ban Mai Klong Ta Lud (GPS 47Q 0676588, 1807193) |
| **Sampled Date** | Feb 13 - Feb 14, 2025 |
| **Sampled by** | Vanich Phanpipit |

| Equipment Data | | | |
|---|---|---|---|
| Description | Data Logger | Geophone | Microphone |
| Brand | Vibrock | Vibrock | Vibrock |
| Model | V901 | V901 | V901 |
| S/N | 1822 | 1822 | 1822 |
| Sensitivity | - | 0.254 mm/s | 0.1 dB |

| Date | Time | Transverse | | | Vertical | | | Longitudinal | | | Air Blast Pressure (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | PPV (mm/s) | Frequency (Hz) | PD (mm) | PPV (mm/s) | Frequency (Hz) | PD (mm) | PPV (mm/s) | Frequency (Hz) | PD (mm) | |
| Feb 14, 2025 | 12:15 PM | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Max** | | **0.000** | **0.00** | **0.000** | **0.000** | **0.00** | **0.000** | **0.000** | **0.00** | **0.000** | **0.0** |
| **Standard** | | - | - | - | - | - | - | - | - | - | - |

**Remark** : - PPV = Peak Particle Velocity - PD = Peak Displacement - ND = Not Detect
Standard (s) : Notification of the Ministry of Natural Resources and Environmental, dated November 7, B.E. 2548 (2005).

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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O** : 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID : 2546105**
Date Received :May 30, 2025
Date Reported :Jun 30, 2025
Report Number :3307347-1 Rev. No.1



| | |
|---|---|
| **Sample Number** | 2546105-1 |
| **Sample Description** | Vibration |
| **Location** | Ban Dong Long (GPS 47Q 0678205, 1802158) |
| **Sampled Date** | May 21 - May 22, 2025 |
| **Sampled by** | Wasan Treenakul |

**Equipment Data**

| Description | Data Logger | Geophone | Microphone |
|---|---|---|---|
| Brand | Vibrock | Vibrock | Vibrock |
| Model | V901 | V901 | V901 |
| S/N | 1617 | 1617 | 1617 |
| Sensitivity | - | 0.254 mm/s | 0.1 dB |

| Date | Time | Transverse | | | Vertical | | | Longitudinal | | | Air Blast Pressure (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | PPV (mm/s) | Frequency (Hz) | PD (mm) | PPV (mm/s) | Frequency (Hz) | PD (mm) | PPV (mm/s) | Frequency (Hz) | PD (mm) | |
| May 21, 2025 | 12:15 PM | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Max** | | **0.000** | **0.00** | **0.000** | **0.000** | **0.00** | **0.000** | **0.000** | **0.00** | **0.000** | **0.0** |
| **Standard** | | - | - | - | - | - | - | - | - | - | - |

**Remark** : - PPV = Peak Particle Velocity - PD = Peak Displacement - ND = Not Detect
Standard (s) : Notification of the Ministry of Natural Resources and Environmental, dated November 7, B.E. 2548 (2005).

**Note :** This Analysis test report is reissued to supersede report No.3307347-1, Date Reported : Jun 06, 2025 due to revise analytical information.

The above results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any form without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O** :
**Project Name** : Air Test
**Project Location** :

**Lot ID : 2512260**
Date Received :Feb 18, 2025
Date Reported :Feb 27, 2025
Report Number :3229428-1



| | |
|---|---|
| **Sample Number** | 2512260-3 |
| **Sample Description** | Vibration |
| **Location** | Ban Khao Kham (GPS 47Q 0675850, 1806485) |
| **Sampled Date** | Feb 13 - Feb 14, 2025 |
| **Sampled by** | Vanich Phanpipit |

**Equipment Data**

| Description | Data Logger | Geophone | Microphone |
|---|---|---|---|
| Brand | Vibrock | Vibrock | Vibrock |
| Model | V901 | V901 | V901 |
| S/N | 1852 | 1852 | 1852 |
| Sensitivity | - | 0.254 mm/s | 0.1 dB |

| Date | Time | Transverse | | | Vertical | | | Longitudinal | | | Air Blast Pressure (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | PPV (mm/s) | Frequency (Hz) | PD (mm) | PPV (mm/s) | Frequency (Hz) | PD (mm) | PPV (mm/s) | Frequency (Hz) | PD (mm) | |
| Feb 14, 2025 | 12:15 PM | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Max** | | **0.000** | **0.00** | **0.000** | **0.000** | **0.00** | **0.000** | **0.000** | **0.00** | **0.000** | **0.0** |
| **Standard** | | - | - | - | - | - | - | - | - | - | - |

**Remark** : - PPV = Peak Particle Velocity - PD = Peak Displacement - ND = Not Detect
Standard (s) : Notification of the Ministry of Natural Resources and Environmental, dated November 7, B.E. 2548 (2005).

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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O** : 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID : 2546105**
Date Received :May 30, 2025
Date Reported :Jun 30, 2025
Report Number :3307347-1 Rev. No.1



| | |
|---|---|
| **Sample Number** | 2546105-3 |
| **Sample Description** | Vibration |
| **Location** | Ban Khao Kham (GPS 47Q 0675850, 1806485) |
| **Sampled Date** | May 24 - May 25, 2025 |
| **Sampled by** | Wasan Treenakul |

| Equipment Data | | | |
|---|---|---|---|
| Description | Data Logger | Geophone | Microphone |
| Brand | Vibrock | Vibrock | Vibrock |
| Model | V901 | V901 | V901 |
| S/N | 1852 | 1852 | 1852 |
| Sensitivity | - | 0.254 mm/s | 0.1 dB |

| Date | Time | Transverse | | | Vertical | | | Longitudinal | | | Air Blast Pressure (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | PPV (mm/s) | Frequency (Hz) | PD (mm) | PPV (mm/s) | Frequency (Hz) | PD (mm) | PPV (mm/s) | Frequency (Hz) | PD (mm) | |
| May 24, 2025 | 12:15 PM | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Max** | | **0.000** | **0.00** | **0.000** | **0.000** | **0.00** | **0.000** | **0.000** | **0.00** | **0.000** | **0.0** |
| **Standard** | | - | - | - | - | - | - | - | - | - | - |

**Remark** : - PPV = Peak Particle Velocity - PD = Peak Displacement - ND = Not Detect
Standard (s) : Notification of the Ministry of Natural Resources and Environmental, dated November 7, B.E. 2548 (2005).

**Note :** This Analysis test report is reissued to supersede report No.3307347-1, Date Reported : Jun 06, 2025 due to revise analytical information.

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Approved by [redacted]
Assistant General Manager

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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O** : 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID : 2546105**
Date Received :May 30, 2025
Date Reported :Jun 30, 2025
Report Number :3307347-1 Rev. No.1



| | |
|---|---|
| **Sample Number** | 2546105-2 |
| **Sample Description** | Vibration |
| **Location** | Ban Khao Mor (GPS 47Q 0675703, 1804307) |
| **Sampled Date** | May 21 - May 22, 2025 |
| **Sampled by** | Wasan Treenakul |

| Equipment Data | | | |
|---|---|---|---|
| Description | Data Logger | Geophone | Microphone |
| Brand | Vibrock | Vibrock | Vibrock |
| Model | V901 | V901 | V901 |
| S/N | 1618 | 1618 | 1618 |
| Sensitivity | - | 0.254 mm/s | 0.1 dB |

| Date | Time | Transverse | | | Vertical | | | Longitudinal | | | Air Blast Pressure (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | PPV (mm/s) | Frequency (Hz) | PD (mm) | PPV (mm/s) | Frequency (Hz) | PD (mm) | PPV (mm/s) | Frequency (Hz) | PD (mm) | |
| May 21, 2025 | 12:15 PM | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Max** | | **0.000** | **0.00** | **0.000** | **0.000** | **0.00** | **0.000** | **0.000** | **0.00** | **0.000** | **0.0** |
| **Standard** | | - | - | - | - | - | - | - | - | - | - |

**Remark** : - PPV = Peak Particle Velocity - PD = Peak Displacement - ND = Not Detect
Standard (s) : Notification of the Ministry of Natural Resources and Environmental, dated November 7, B.E. 2548 (2005).

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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O** : 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID : 2546105**
Date Received :May 30, 2025
Date Reported :Jun 30, 2025
Report Number :3307347-1 Rev. No.1



**Sample Number** 2546105-5
**Sample Description** Vibration
**Location** Ban Nong Sang (GPS 47Q 0678387, 1805733)
**Sampled Date** May 24 - May 25, 2025
**Sampled by** Wasan Treenakul

| Equipment Data | | | |
|---|---|---|---|
| Description | Data Logger | Geophone | Microphone |
| Brand | Vibrock | Vibrock | Vibrock |
| Model | V901 | V901 | V901 |
| S/N | 1618 | 1618 | 1618 |
| Sensitivity | - | 0.254 mm/s | 0.1 dB |

| Date | Time | Transverse | | | Vertical | | | Longitudinal | | | Air Blast Pressure (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | PPV (mm/s) | Frequency (Hz) | PD (mm) | PPV (mm/s) | Frequency (Hz) | PD (mm) | PPV (mm/s) | Frequency (Hz) | PD (mm) | |
| May 24, 2025 | 12:15 PM | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Max** | | **0.000** | **0.00** | **0.000** | **0.000** | **0.00** | **0.000** | **0.000** | **0.00** | **0.000** | **0.0** |
| **Standard** | | - | - | - | - | - | - | - | - | - | - |

**Remark** : - PPV = Peak Particle Velocity - PD = Peak Displacement - ND = Not Detect
Standard (s) : Notification of the Ministry of Natural Resources and Environmental, dated November 7, B.E. 2548 (2005).

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Assistant General Manager

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Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O** : 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID : 2546105**
Date Received :May 30, 2025
Date Reported :Jun 30, 2025
Report Number :3307347-1 Rev. No.1



**Sample Number** 2546105-4
**Sample Description** Vibration
**Location** Ban Nong Ra Man (GPS 47Q 0674684, 1802590)
**Sampled Date** May 21 - May 22, 2025
**Sampled by** Wasan Treenakul

| Equipment Data | | | |
|---|---|---|---|
| Description | Data Logger | Geophone | Microphone |
| Brand | Vibrock | Vibrock | Vibrock |
| Model | V901 | V901 | V901 |
| S/N | 1822 | 1822 | 1822 |
| Sensitivity | - | 0.254 mm/s | 0.1 dB |

| Date | Time | Transverse | | | Vertical | | | Longitudinal | | | Air Blast Pressure (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | PPV (mm/s) | Frequency (Hz) | PD (mm) | PPV (mm/s) | Frequency (Hz) | PD (mm) | PPV (mm/s) | Frequency (Hz) | PD (mm) | |
| May 21, 2025 | 12:15 PM | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Max** | | **0.000** | **0.00** | **0.000** | **0.000** | **0.00** | **0.000** | **0.000** | **0.00** | **0.000** | **0.0** |
| **Standard** | | - | - | - | - | - | - | - | - | - | - |

**Remark** : - PPV = Peak Particle Velocity - PD = Peak Displacement - ND = Not Detect
Standard (s) : Notification of the Ministry of Natural Resources and Environmental, dated November 7, B.E. 2548 (2005).

**Note :** This Analysis test report is reissued to supersede report No.3307347-1, Date Reported : Jun 06, 2025 due to revise analytical information.

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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O** : 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID : 2546105**
Date Received :May 30, 2025
Date Reported :Jun 30, 2025
Report Number :3307347-1 Rev. No.1



| | |
|---|---|
| **Sample Number** | 2546105-7 |
| **Sample Description** | Vibration |
| **Location** | Ban Mai Klong Ta Lud (GPS 47Q 0676588, 1807193) |
| **Sampled Date** | May 24 - May 25, 2025 |
| **Sampled by** | Wasan Treenakul |

| Equipment Data | | | |
|---|---|---|---|
| Description | Data Logger | Geophone | Microphone |
| Brand | Vibrock | Vibrock | Vibrock |
| Model | V901 | V901 | V901 |
| S/N | 1822 | 1822 | 1822 |
| Sensitivity | - | 0.254 mm/s | 0.1 dB |

| Date | Time | Transverse | | | Vertical | | | Longitudinal | | | Air Blast Pressure (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | PPV (mm/s) | Frequency (Hz) | PD (mm) | PPV (mm/s) | Frequency (Hz) | PD (mm) | PPV (mm/s) | Frequency (Hz) | PD (mm) | |
| May 24, 2025 | 12:15 PM | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Max** | | **0.000** | **0.00** | **0.000** | **0.000** | **0.00** | **0.000** | **0.000** | **0.00** | **0.000** | **0.0** |
| **Standard** | | - | - | - | - | - | - | - | - | - | - |

**Remark** : - PPV = Peak Particle Velocity - PD = Peak Displacement - ND = Not Detect
Standard (s) : Notification of the Ministry of Natural Resources and Environmental, dated November 7, B.E. 2548 (2005).

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Approved by [redacted]
Assistant General Manager

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Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O** : 1001947
**Project Name** : Air Test
**Project Location** :

**Lot ID : 2546105**
Date Received :May 30, 2025
Date Reported :Jun 30, 2025
Report Number :3307347-1 Rev. No.1



| | |
|---|---|
| **Sample Number** | 2546105-6 |
| **Sample Description** | Vibration |
| **Location** | Ban Tung Thong (GPS 47Q 0674687, 1805768) |
| **Sampled Date** | May 24 - May 25, 2025 |
| **Sampled by** | Wasan Treenakul |

| Equipment Data | | | |
|---|---|---|---|
| Description | Data Logger | Geophone | Microphone |
| Brand | Vibrock | Vibrock | Vibrock |
| Model | V901 | V901 | V901 |
| S/N | 1617 | 1617 | 1617 |
| Sensitivity | - | 0.254 mm/s | 0.1 dB |

| Date | Time | Transverse | | | Vertical | | | Longitudinal | | | Air Blast Pressure (dB) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | PPV (mm/s) | Frequency (Hz) | PD (mm) | PPV (mm/s) | Frequency (Hz) | PD (mm) | PPV (mm/s) | Frequency (Hz) | PD (mm) | |
| May 24, 2025 | 12:15 PM | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Max** | | **0.000** | **0.00** | **0.000** | **0.000** | **0.00** | **0.000** | **0.000** | **0.00** | **0.000** | **0.0** |
| **Standard** | | - | - | - | - | - | - | - | - | - | - |

**Remark** : - PPV = Peak Particle Velocity - PD = Peak Displacement - ND = Not Detect
Standard (s) : Notification of the Ministry of Natural Resources and Environmental, dated November 7, B.E. 2548 (2005).

**Note :** This Analysis test report is reissued to supersede report No.3307347-1, Date Reported : Jun 06, 2025 due to revise analytical information.

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Assistant General Manager

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# CERTIFICATE OF ANALYSIS

| | | | |
|---|---|---|---|
| **Client** | **Akara Resources Public Co., Ltd.** | **ALS Lot No.** | **2510816** |
| Contact | Yaowanud Chandung | Date Samples Received | Feb 06, 2025 01:00 PM |
| Address | 99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230 | Issue Date | Feb 25, 2025 02:51 PM |
| Email | yaowanud@akararesources.com | Quote number | Q2448061(R1) |
| | | Project | CHATREE |
| Telephone | 0-5661-4500 | No. of samples received | 24 |
| Facsimile | 0-5661-4190 | No. of samples analysed | 24 |

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

***General Comments***

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or client request.

When sampling time information is not provided by client, sampling dates are shown without a time component. In this instances, the time component has been assumed by the laboratory for processing purposes.

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ALS Lot No. : 2510816
Client : Akara Resources Public Co., Ltd.
Project : CHATREE

## *Analytical Results*

| | | *Client sample ID* | SW6802 ST1 | SW6802 ST2 | SW6802 ST9 | SW6802 ST10 | SW6802 ST11 | SW6802 ST13 | SW6802 ST14 |
|---|---|---|---|---|---|---|---|---|---|
| | | Client sampling date / time | 4-Feb-25 | 4-Feb-25 | 5-Feb-25 | 4-Feb-25 | 4-Feb-25 | 3-Feb-25 | 3-Feb-25 |
| Compound | LOR | Unit | **2510816-1** | **2510816-2** | **2510816-3** | **2510816-4** | **2510816-5** | **2510816-6** | **2510816-7** |
| **EA015: Total Dissolved Solids** | | | | | | | | | |
| Total Dissolved solids | 5 | mg/L | 148 | 226 | 3688 | 1840 | 380 | 576 | 150 |
| **EA025: Suspended Solids** | | | | | | | | | |
| Total Suspended Solids | 5 | mg/L | 10 | 15 | <5 | <5 | 8 | 99 | 21 |
| **EA065: Total Hardness** | | | | | | | | | |
| Total Hardness | 1 | mg/L | 98 | 149 | 2934 | 1465 | 292 | 312 | 111 |
| **ED037P: Alkalinity** | | | | | | | | | |
| Bicarbonate Alkalinity | 1 | mg/L | 126 | 55 | 126 | 76 | 126 | 23 | 126 |
| Carbonate Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Hydroxide Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Phenolphthalein Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Total Alkalinity | 1 | mg/L | 126 | 55 | 126 | 76 | 126 | 23 | 126 |
| **ED041G: Sulfate** | | | | | | | | | |
| Sulfate | 1.0 | mg/L | <1.0 | 125 | 2678 | 1275 | 233 | 429 | 35.9 |
| **ED045G: Chloride Discrete analyzer** | | | | | | | | | |
| Chloride | 1.0 | mg/L | 11.2 | 13.7 | 2.4 | 2.9 | 2.1 | 13.6 | 11.3 |
| **ED093F: Dissolved Major Cations (GW & SW Dissolved)** | | | | | | | | | |
| Calcium | 0.10 | mg/L | 26.5 | 36.1 | 570 | 319 | 41.6 | 72.2 | 30.1 |
| Magnesium | 0.10 | mg/L | 7.65 | 14.2 | 366 | 155 | 45.8 | 32.0 | 8.82 |
| Potassium | 0.10 | mg/L | 4.95 | 2.50 | 10.8 | 10.4 | 6.12 | 5.54 | 4.40 |
| Sodium | 0.10 | mg/L | 17.1 | 8.88 | 27.0 | 14.8 | 8.32 | 35.1 | 15.1 |
| **EG020T: Total Metals by ICP-MS** | | | | | | | | | |
| Arsenic | 0.001 | mg/L | 0.002 | 0.001 | 0.001 | <0.001 | 0.001 | 0.002 | 0.002 |
| Cobalt | 0.001 | mg/L | <0.001 | <0.001 | 0.001 | 0.003 | <0.001 | 0.004 | <0.001 |
| Copper | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.004 | 0.002 |
| Iron | 0.05 | mg/L | 0.68 | 2.03 | 0.05 | 0.10 | 0.11 | 2.81 | 0.82 |
| Lead | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.001 | <0.001 |
| Manganese | 0.001 | mg/L | 0.54 | 0.87 | 1.25 | 1.78 | 0.16 | 4.74 | 0.61 |
| **EG035T: Total Recoverable Mercury by CVAFS** | | | | | | | | | |
| Mercury | 0.0001 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EK025G-1: Cyanide WAD Discrete analyzer** | | | | | | | | | |
| Weak Acid Dissociable Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |

LOR = Limit of reporting

Approved by [redacted]
Senior Manager

ALS Lot No. : 2510816
Client : Akara Resources Public Co., Ltd.
Project : CHATREE

## Analytical Results

| | | Client sample ID | SW6802 ST1 | SW6802 ST2 | SW6802 ST9 | SW6802 ST10 | SW6802 ST11 | SW6802 ST13 | SW6802 ST14 |
|---|---|---|---|---|---|---|---|---|---|
| | | Client sampling date / time | 4-Feb-25 | 4-Feb-25 | 5-Feb-25 | 4-Feb-25 | 4-Feb-25 | 3-Feb-25 | 3-Feb-25 |
| Compound | LOR | Unit | 2510816-1 | 2510816-2 | 2510816-3 | 2510816-4 | 2510816-5 | 2510816-6 | 2510816-7 |
| **EN055: Ionic Balance** | | | | | | | | | |
| Ionic Balance | 0 | % | 0.44 | 5.68 | 2.79 | 3.92 | 3.93 | 9.20 | 0.12 |
| Total Anions | 0.01 | mEq/L | 2.38 | 3.84 | 56.73 | 27.33 | 6.88 | 9.50 | 3.12 |
| Total Cations | 0.01 | mEq/L | 2.82 | 3.42 | 59.98 | 29.56 | 6.36 | 7.90 | 3.00 |
| **EP005: Total Organic Carbon** | | | | | | | | | |
| Total Organic Carbon | 0.1 | mg/L | 7.89 | 7.04 | 1.00 | 2.38 | 6.11 | 9.05 | 6.23 |
| **Turbidity** | | | | | | | | | |
| Turbidity | 0.1 | NTU | 3.9 | 20 | 0.60 | 2.1 | 8.6 | 110 | 30 |

LOR = Limit of reporting

Approved by [redacted]
Senior Manager



ALS Lot No. : 2510816
Client : Akara Resources Public Co., Ltd.
Project : CHATREE

## Analytical Results

| | | Client sample ID | SW6802 ST15 | SW6802 ST16 | SW6802 ST17 | SW6802 ST18 | SW6802 ST20 | SW6802 ST21 | SW6802 ST23 |
|---|---|---|---|---|---|---|---|---|---|
| | | Client sampling date / time | 5-Feb-25 | 3-Feb-25 | 5-Feb-25 | 5-Feb-25 | 4-Feb-25 | 4-Feb-25 | 3-Feb-25 |
| Compound | LOR | Unit | 2510816-8 | 2510816-9 | 2510816-10 | 2510816-11 | 2510816-12 | 2510816-13 | 2510816-14 |
| **EA015: Total Dissolved Solids** | | | | | | | | | |
| Total Dissolved solids | 5 | mg/L | 2316 | 182 | 804 | 776 | 2216 | 1780 | 1588 |
| **EA025: Suspended Solids** | | | | | | | | | |
| Total Suspended Solids | 5 | mg/L | <5 | 9 | 5 | 8 | 5 | <5 | <5 |
| **EA065: Total Hardness** | | | | | | | | | |
| Total Hardness | 1 | mg/L | 1852 | 124 | 511 | 503 | 1669 | 1373 | 1142 |
| **ED037P: Alkalinity** | | | | | | | | | |
| Bicarbonate Alkalinity | 1 | mg/L | 8 | 131 | 96 | 111 | 60 | 66 | 71 |
| Carbonate Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Hydroxide Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Phenolphthalein Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Total Alkalinity | 1 | mg/L | 8 | 131 | 96 | 111 | 60 | 66 | 71 |
| **ED041G: Sulfate** | | | | | | | | | |
| Sulfate | 1.0 | mg/L | 1796 | 64.3 | 516 | 546 | 1579 | 1241 | 1125 |
| **ED045G: Chloride Discrete analyzer** | | | | | | | | | |
| Chloride | 1.0 | mg/L | 1.7 | 14.8 | 11.3 | 10.5 | 2.3 | 2.8 | 11.9 |
| **ED093F: Dissolved Major Cations (GW & SW Dissolved)** | | | | | | | | | |
| Calcium | 0.10 | mg/L | 280 | 33.8 | 98.1 | 87.9 | 418 | 299 | 248 |
| Magnesium | 0.10 | mg/L | 280 | 9.62 | 64.7 | 68.9 | 149 | 143 | 123 |
| Potassium | 0.10 | mg/L | 9.95 | 3.29 | 5.18 | 9.22 | 9.86 | 10.6 | 8.39 |
| Sodium | 0.10 | mg/L | 32.5 | 22.9 | 33.5 | 18.3 | 21.4 | 22.3 | 36.3 |
| **EG020T: Total Metals by ICP-MS** | | | | | | | | | |
| Arsenic | 0.001 | mg/L | <0.001 | 0.002 | <0.001 | 0.002 | 0.001 | <0.001 | <0.001 |
| Cobalt | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.006 | <0.001 |
| Copper | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.002 | <0.001 |
| Iron | 0.05 | mg/L | <0.05 | 0.31 | 0.17 | <0.05 | 0.06 | <0.05 | 0.07 |
| Lead | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Manganese | 0.001 | mg/L | 0.17 | 0.72 | 0.26 | 0.27 | 0.29 | 1.53 | 1.03 |
| **EG035T: Total Recoverable Mercury by CVAFS** | | | | | | | | | |
| Mercury | 0.0001 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EK025G-1: Cyanide WAD Discrete analyzer** | | | | | | | | | |
| Weak Acid Dissociable Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |

LOR = Limit of reporting

Approved by [redacted]
Senior Manager

ALS Lot No. : 2510816
Client : Akara Resources Public Co., Ltd.
Project : CHATREE

## Analytical Results

| | | Client sample ID | SW6802 ST15 | SW6802 ST16 | SW6802 ST17 | SW6802 ST18 | SW6802 ST20 | SW6802 ST21 | SW6802 ST23 |
|---|---|---|---|---|---|---|---|---|---|
| | | Client sampling date / time | 5-Feb-25 | 3-Feb-25 | 5-Feb-25 | 5-Feb-25 | 4-Feb-25 | 4-Feb-25 | 3-Feb-25 |
| Compound | LOR | Unit | 2510816-8 | 2510816-9 | 2510816-10 | 2510816-11 | 2510816-12 | 2510816-13 | 2510816-14 |
| **EN055: Ionic Balance** | | | | | | | | | |
| Ionic Balance | 0 | % | 2.52 | 4.28 | 2.46 | 8.82 | 1.60 | 2.62 | 0.36 |
| Total Anions | 0.01 | mEq/L | 36.79 | 3.88 | 12.40 | 13.24 | 33.25 | 26.45 | 24.44 |
| Total Cations | 0.01 | mEq/L | 38.69 | 3.56 | 11.81 | 11.09 | 34.34 | 27.87 | 24.26 |
| **EP005: Total Organic Carbon** | | | | | | | | | |
| Total Organic Carbon | 0.1 | mg/L | 2.13 | 7.06 | 4.34 | 8.65 | 2.70 | 2.38 | 3.48 |
| **Turbidity** | | | | | | | | | |
| Turbidity | 0.1 | NTU | 0.55 | 4.6 | 3.0 | 7.9 | 2.3 | 1.4 | 2.4 |

LOR = Limit of reporting

Approved by [redacted]
Senior Manager



ALS Lot No. : 2510816
Client : Akara Resources Public Co., Ltd.
Project : CHATREE

## Analytical Results

| | | Client sample ID | SW6802 ST27 | SW6802 ST28 | SW6802 ST30 | SW6802 ST31 | SW6802 ST33 | SW6802 ST36 | SW6802 ST37 |
|---|---|---|---|---|---|---|---|---|---|
| | | Client sampling date / time | 4-Feb-25 | 4-Feb-25 | 5-Feb-25 | 3-Feb-25 | 3-Feb-25 | 5-Feb-25 | 5-Feb-25 |
| Compound | LOR | Unit | 2510816-15 | 2510816-16 | 2510816-17 | 2510816-18 | 2510816-19 | 2510816-20 | 2510816-21 |
| **EA015: Total Dissolved Solids** | | | | | | | | | |
| Total Dissolved solids | 5 | mg/L | 1812 | 1884 | 2932 | 2256 | 1616 | 2352 | 744 |
| **EA025: Suspended Solids** | | | | | | | | | |
| Total Suspended Solids | 5 | mg/L | <5 | 16 | <5 | <5 | <5 | <5 | <5 |
| **EA065: Total Hardness** | | | | | | | | | |
| Total Hardness | 1 | mg/L | 1357 | 1337 | 2585 | 1653 | 1218 | 1673 | 531 |
| **ED037P: Alkalinity** | | | | | | | | | |
| Bicarbonate Alkalinity | 1 | mg/L | 121 | 71 | 23 | 55 | 3 | 8 | 18 |
| Carbonate Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Hydroxide Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Phenolphthalein Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Total Alkalinity | 1 | mg/L | 121 | 71 | 23 | 55 | 3 | 8 | 18 |
| **ED041G: Sulfate** | | | | | | | | | |
| Sulfate | 1.0 | mg/L | 1226 | 1274 | 2440 | 1617 | 1580 | 1057 | 591 |
| **ED045G: Chloride Discrete analyzer** | | | | | | | | | |
| Chloride | 1.0 | mg/L | 1.9 | 10.4 | 2.5 | 2.4 | 2.1 | 12.0 | 1.5 |
| **ED093F: Dissolved Major Cations (GW & SW Dissolved)** | | | | | | | | | |
| Calcium | 0.10 | mg/L | 299 | 314 | 463 | 391 | 280 | 274 | 137 |
| Magnesium | 0.10 | mg/L | 143 | 135 | 346 | 166 | 128 | 239 | 45.7 |
| Potassium | 0.10 | mg/L | 6.47 | 8.73 | 11.6 | 9.80 | 10.5 | 3.16 | 2.73 |
| Sodium | 0.10 | mg/L | 14.6 | 23.9 | 15.6 | 27.4 | 11.6 | 34.9 | 14.9 |
| **EG020T: Total Metals by ICP-MS** | | | | | | | | | |
| Arsenic | 0.001 | mg/L | <0.001 | 0.003 | <0.001 | <0.001 | <0.001 | <0.001 | 0.001 |
| Cobalt | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | 0.001 | <0.001 | <0.001 |
| Copper | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Iron | 0.05 | mg/L | 0.07 | 0.21 | 0.10 | 0.05 | 0.14 | <0.05 | 0.09 |
| Lead | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Manganese | 0.001 | mg/L | 0.06 | 0.33 | 0.03 | 0.15 | 0.36 | 0.10 | 0.12 |
| **EG035T: Total Recoverable Mercury by CVAFS** | | | | | | | | | |
| Mercury | 0.0001 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EK025G-1: Cyanide WAD Discrete analyzer** | | | | | | | | | |
| Weak Acid Dissociable Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |

LOR = Limit of reporting

Approved by [redacted]
Senior Manager

ALS Lot No. : 2510816
Client : Akara Resources Public Co., Ltd.
Project : CHATREE

## Analytical Results

| | | Client sample ID | SW6802 ST27 | SW6802 ST28 | SW6802 ST30 | SW6802 ST31 | SW6802 ST33 | SW6802 ST36 | SW6802 ST37 |
|---|---|---|---|---|---|---|---|---|---|
| | | Client sampling date / time | 4-Feb-25 | 4-Feb-25 | 5-Feb-25 | 3-Feb-25 | 3-Feb-25 | 5-Feb-25 | 5-Feb-25 |
| Compound | LOR | Unit | 2510816-15 | 2510816-16 | 2510816-17 | 2510816-18 | 2510816-19 | 2510816-20 | 2510816-21 |
| **EN055: Ionic Balance** | | | | | | | | | |
| Ionic Balance | 0 | % | 0.78 | 1.16 | 2.29 | 0.96 | 12.28 | 22.76 | 4.52 |
| Total Anions | 0.01 | mEq/L | 27.04 | 27.42 | 50.19 | 33.95 | 32.32 | 22.01 | 12.37 |
| Total Cations | 0.01 | mEq/L | 27.47 | 28.06 | 52.54 | 34.60 | 25.25 | 34.98 | 11.30 |
| **EP005: Total Organic Carbon** | | | | | | | | | |
| Total Organic Carbon | 0.1 | mg/L | 2.52 | 7.22 | 1.82 | 3.52 | 2.10 | 3.21 | 2.19 |
| **Turbidity** | | | | | | | | | |
| Turbidity | 0.1 | NTU | 0.90 | 18 | 0.75 | 1.4 | 0.85 | 0.50 | 0.95 |

LOR = Limit of reporting

Approved by [redacted]
Senior Manager



ALS Lot No. : 2510816
Client : Akara Resources Public Co., Ltd.
Project : CHATREE

## Analytical Results

| | | Client sample ID | SW6802 ST39 | SW6802 ST40 | SW6802 ST41 | ---- | ---- | ---- | ---- |
|---|---|---|---|---|---|---|---|---|---|
| | | Client sampling date / time | 4-Feb-25 | 3-Feb-25 | 5-Feb-25 | ---- | ---- | ---- | ---- |
| Compound | LOR | Unit | 2510816-22 | 2510816-23 | 2510816-24 | ---- | ---- | ---- | ---- |
| **EA015: Total Dissolved Solids** | | | | | | | | | |
| Total Dissolved solids | 5 | mg/L | 636 | 752 | 1596 | ---- | ---- | ---- | ---- |
| **EA025: Suspended Solids** | | | | | | | | | |
| Total Suspended Solids | 5 | mg/L | 9 | <5 | <5 | ---- | ---- | ---- | ---- |
| **EA065: Total Hardness** | | | | | | | | | |
| Total Hardness | 1 | mg/L | 491 | 559 | 1130 | ---- | ---- | ---- | ---- |
| **ED037P: Alkalinity** | | | | | | | | | |
| Bicarbonate Alkalinity | 1 | mg/L | 81 | 15 | 81 | ---- | ---- | ---- | ---- |
| Carbonate Alkalinity | 1 | mg/L | <1 | <1 | <1 | ---- | ---- | ---- | ---- |
| Hydroxide Alkalinity | 1 | mg/L | <1 | <1 | <1 | ---- | ---- | ---- | ---- |
| Phenolphthalein Alkalinity | 1 | mg/L | <1 | <1 | <1 | ---- | ---- | ---- | ---- |
| Total Alkalinity | 1 | mg/L | 81 | 15 | 81 | ---- | ---- | ---- | ---- |
| **ED041G: Sulfate** | | | | | | | | | |
| Sulfate | 1.0 | mg/L | 502 | 600 | 1059 | ---- | ---- | ---- | ---- |
| **ED045G: Chloride Discrete analyzer** | | | | | | | | | |
| Chloride | 1.0 | mg/L | 6.0 | 1.9 | 2.5 | ---- | ---- | ---- | ---- |
| **ED093F: Dissolved Major Cations (GW & SW Dissolved)** | | | | | | | | | |
| Calcium | 0.10 | mg/L | 124 | 132 | 214 | ---- | ---- | ---- | ---- |
| Magnesium | 0.10 | mg/L | 43.8 | 55.6 | 141 | ---- | ---- | ---- | ---- |
| Potassium | 0.10 | mg/L | 10.6 | 7.25 | 4.98 | ---- | ---- | ---- | ---- |
| Sodium | 0.10 | mg/L | 8.71 | 6.61 | 18.5 | ---- | ---- | ---- | ---- |
| **EG020T: Total Metals by ICP-MS** | | | | | | | | | |
| Arsenic | 0.001 | mg/L | 0.003 | 0.001 | 0.001 | ---- | ---- | ---- | ---- |
| Cobalt | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | ---- | ---- | ---- | ---- |
| Copper | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | ---- | ---- | ---- | ---- |
| Iron | 0.05 | mg/L | 0.09 | <0.05 | 0.15 | ---- | ---- | ---- | ---- |
| Lead | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | ---- | ---- | ---- | ---- |
| Manganese | 0.001 | mg/L | 0.06 | 0.04 | 0.75 | | ---- | ---- | ---- |
| **EG035T: Total Recoverable Mercury by CVAFS** | | | | | | | | | |
| Mercury | 0.0001 | mg/L | <0.0001 | <0.0001 | <0.0001 | ---- | ---- | ---- | ---- |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | ---- | ---- | ---- | ---- |
| **EK025G-1: Cyanide WAD Discrete analyzer** | | | | | | | | | |
| Weak Acid Dissociable Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | ---- | ---- | ---- | ---- |

LOR = Limit of reporting

Approved by [redacted]
Senior Manager

ALS Lot No. : 2510816
Client : Akara Resources Public Co., Ltd.
Project : CHATREE

## *Analytical Results*

| | | *Client sample ID* | **SW6802 ST39** | **SW6802 ST40** | **SW6802 ST41** | **----** | **----** | **----** | **----** |
|---|---|---|---|---|---|---|---|---|---|
| | | Client sampling date / time | 4-Feb-25 | 3-Feb-25 | 5-Feb-25 | ---- | ---- | ---- | ---- |
| Compound | LOR | Unit | **2510816-22** | **2510816-23** | **2510816-24** | **----** | **----** | **----** | **----** |
| **EN055: Ionic Balance** | | | | | | | | | |
| Ionic Balance | 0 | % | 5.73 | 3.79 | 0.52 | ---- | ---- | ---- | ---- |
| Total Anions | 0.01 | mEq/L | 11.73 | 12.54 | 22.99 | ---- | ---- | ---- | ---- |
| Total Cations | 0.01 | mEq/L | 10.45 | 11.63 | 23.23 | ---- | ---- | ---- | ---- |
| **EP005: Total Organic Carbon** | | | | | | | | | |
| Total Organic Carbon | 0.1 | mg/L | 8.30 | 2.98 | 4.98 | ---- | ---- | ---- | ---- |
| **Turbidity** | | | | | | | | | |
| Turbidity | 0.1 | NTU | 4.6 | 1.1 | 2.2 | ---- | ---- | ---- | ---- |

LOR = Limit of reporting

Approved by [redacted]
Senior Manager

MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-1 |
| **Sampled Date** | May 14, 2025 10:30 AM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST9 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Carbonate Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Chloride | mg/L | - | 1.0 | 5.6 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4110 B | Bangkok |
| Cyanide as CN | mg/L | - | 0.002 | <0.002 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - CN (C, E) | Bangkok |
| Hydroxide Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Ionic Balance | % | - | - | 2.94 | | Bangkok |
| Phenolphthalein Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Sulfate | mg/L | - | 1.0 | 3175 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-SO4 (E) | Bangkok |
| Total Alkalinity as CaCO3 | mg/L | - | 1 | 132 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Total Anions | mEq/L | - | 0.01 | 67.06 | | Bangkok |
| Total Cations | mEq/L | - | 0.01 | 63.23 | | Bangkok |
| Total Dissolved solids Dried at 180 degree C | mg/L | - | 5 | 4240 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C | Bangkok |
| Total Hardness as CaCO3 | mg/L | - | 1 | 3094 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2340 C | Bangkok |

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** [redacted]
Manager



Analysis / Test Report

Client : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
P/O : 1001931
Project Name : Water Project
Project Location : CHATREE

Lot ID: 2537072
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-1 |
| **Sampled Date** | May 14, 2025 10:30 AM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST9 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Metals Testing** | | | | | | |
| Arsenic | mg/L | - | 0.001 | 0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Calcium Dissolved | mg/L | - | 0.10 | 590 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Cobalt | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Copper | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Iron | mg/L | - | 0.05 | <0.05 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Lead | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Magnesium Dissolved | mg/L | - | 0.10 | 393 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Manganese | mg/L | - | 0.001 | 0.44 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Mercury | mg/L | - | 0.0001 | <0.0001 | In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E | Bangkok |
| Potassium Dissolved | mg/L | - | 0.10 | 10.9 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Sodium Dissolved | mg/L | - | 0.10 | 27.5 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| **Water Testing** | | | | | | |
| Bicarbonate Alkalinity as CaCO3 | mg/L | - | 1 | 132 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |

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** Sawitree N.
Sawitree Noisangiam
Manager

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MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-2 |
| **Sampled Date** | May 13, 2025 2:08 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST10 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Metals Testing** | | | | | | |
| Arsenic | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Calcium Dissolved | mg/L | - | 0.10 | 335 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Cobalt | mg/L | - | 0.001 | 0.008 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Copper | mg/L | - | 0.001 | 0.002 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Iron | mg/L | - | 0.05 | 0.73 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Lead | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Magnesium Dissolved | mg/L | - | 0.10 | 149 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Manganese | mg/L | - | 0.001 | 2.18 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Mercury | mg/L | - | 0.0001 | <0.0001 | In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E | Bangkok |
| Potassium Dissolved | mg/L | - | 0.10 | 11.1 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Sodium Dissolved | mg/L | - | 0.10 | 17.6 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| **Water Testing** | | | | | | |
| Bicarbonate Alkalinity as CaCO3 | mg/L | - | 1 | 66 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |

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** [redacted]
Manager



# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-1 |
| **Sampled Date** | May 14, 2025 10:30 AM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST9 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Total Organic Carbon | mg/L | - | 0.1 | 0.95 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B | Bangkok |
| Total Suspended Solids Dried at 103-105 degree C | mg/L | - | 5 | <5 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D | Bangkok |
| Turbidity | NTU | - | 0.1 | 0.95 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2130 B | Bangkok |
| Weak Acid Dissociable Cyanide | mg/L | - | 0.002 | <0.002 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-CN (I) | Bangkok |

**Sampling By :** Theeraphol Sangthong

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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** [redacted]
Manager

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MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-2 |
| **Sampled Date** | May 13, 2025 2:08 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST10 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Total Organic Carbon | mg/L | - | 0.1 | 2.07 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B | Bangkok |
| Total Suspended Solids Dried at 103-105 degree C | mg/L | - | 5 | 11 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D | Bangkok |
| Turbidity | NTU | - | 0.1 | 14 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2130 B | Bangkok |
| Weak Acid Dissociable Cyanide | mg/L | - | 0.002 | <0.002 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-CN (I) | Bangkok |

**Sampling By :** Theeraphol Sangthong

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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** [redacted]
Manager



Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-2 |
| **Sampled Date** | May 13, 2025 2:08 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST10 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Carbonate Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Chloride | mg/L | - | 1.0 | 2.7 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4110 B | Bangkok |
| Cyanide as CN | mg/L | - | 0.002 | <0.002 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - CN (C, E) | Bangkok |
| Hydroxide Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Ionic Balance | % | - | - | 5.03 | | Bangkok |
| Phenolphthalein Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Sulfate | mg/L | - | 1.0 | 1573 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-SO4 (E) | Bangkok |
| Total Alkalinity as CaCO3 | mg/L | - | 1 | 66 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Total Anions | mEq/L | - | 0.01 | 33.23 | | Bangkok |
| Total Cations | mEq/L | - | 0.01 | 30.05 | | Bangkok |
| Total Dissolved solids Dried at 180 degree C | mg/L | - | 5 | 1824 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C | Bangkok |
| Total Hardness as CaCO3 | mg/L | - | 1 | 1481 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2340 C | Bangkok |

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**Approved by** [redacted]
Manager

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MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-3 |
| **Sampled Date** | May 13, 2025 2:53 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST11 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Carbonate Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Chloride | mg/L | - | 1.0 | 2.4 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4110 B | Bangkok |
| Cyanide as CN | mg/L | - | 0.002 | <0.002 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - CN (C, E) | Bangkok |
| Hydroxide Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Ionic Balance | % | - | - | 0.62 | | Bangkok |
| Phenolphthalein Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Sulfate | mg/L | - | 1.0 | 546 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-SO4 (E) | Bangkok |
| Total Alkalinity as CaCO3 | mg/L | - | 1 | 91 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Total Anions | mEq/L | - | 0.01 | 12.70 | | Bangkok |
| Total Cations | mEq/L | - | 0.01 | 12.86 | | Bangkok |
| Total Dissolved solids Dried at 180 degree C | mg/L | - | 5 | 796 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C | Bangkok |
| Total Hardness as CaCO3 | mg/L | - | 1 | 609 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2340 C | Bangkok |

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**Approved by** [redacted]
Manager



Analysis / Test Report

Client : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
P/O : 1001931
Project Name : Water Project
Project Location : CHATREE

Lot ID: 2537072
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-3 |
| **Sampled Date** | May 13, 2025 2:53 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST11 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Metals Testing** | | | | | | |
| Arsenic | mg/L | - | 0.001 | 0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Calcium Dissolved | mg/L | - | 0.10 | 103 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Cobalt | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Copper | mg/L | - | 0.001 | 0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Iron | mg/L | - | 0.05 | 0.16 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Lead | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Magnesium Dissolved | mg/L | - | 0.10 | 85.1 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Manganese | mg/L | - | 0.001 | 0.12 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Mercury | mg/L | - | 0.0001 | <0.0001 | In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E | Bangkok |
| Potassium Dissolved | mg/L | - | 0.10 | 7.78 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Sodium Dissolved | mg/L | - | 0.10 | 11.6 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| **Water Testing** | | | | | | |
| Bicarbonate Alkalinity as CaCO3 | mg/L | - | 1 | 91 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |

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**Approved by** [redacted]
Manager

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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-4 |
| **Sampled Date** | May 12, 2025 10:14 AM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST14 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Metals Testing** | | | | | | |
| Arsenic | mg/L | - | 0.001 | 0.02 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Calcium Dissolved | mg/L | - | 0.10 | 9.98 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Cobalt | mg/L | - | 0.001 | 0.002 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Copper | mg/L | - | 0.001 | 0.009 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Iron | mg/L | - | 0.05 | 4.26 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Lead | mg/L | - | 0.001 | 0.002 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Magnesium Dissolved | mg/L | - | 0.10 | 2.77 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Manganese | mg/L | - | 0.001 | 0.19 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Mercury | mg/L | - | 0.0001 | <0.0001 | In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E | Bangkok |
| Potassium Dissolved | mg/L | - | 0.10 | 3.52 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Sodium Dissolved | mg/L | - | 0.10 | 18.1 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| **Water Testing** | | | | | | |
| Bicarbonate Alkalinity as CaCO3 | mg/L | - | 1 | 66 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |

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**Approved by** [redacted]
Manager



# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-3 |
| **Sampled Date** | May 13, 2025 2:53 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST11 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Total Organic Carbon | mg/L | - | 0.1 | 5.52 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B | Bangkok |
| Total Suspended Solids Dried at 103-105 degree C | mg/L | - | 5 | 11 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D | Bangkok |
| Turbidity | NTU | - | 0.1 | 9.2 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2130 B | Bangkok |
| Weak Acid Dissociable Cyanide | mg/L | - | 0.002 | <0.002 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-CN (I) | Bangkok |

**Sampling By :** Theeraphol Sangthong

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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**Approved by** [redacted]
Manager

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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-4 |
| **Sampled Date** | May 12, 2025 10:14 AM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST14 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Total Organic Carbon | mg/L | - | 0.1 | 19.2 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B | Bangkok |
| Total Suspended Solids Dried at 103-105 degree C | mg/L | - | 5 | 153 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D | Bangkok |
| Turbidity | NTU | - | 0.1 | 270 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2130 B | Bangkok |
| Weak Acid Dissociable Cyanide | mg/L | - | 0.002 | <0.002 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-CN (I) | Bangkok |

**Sampling By :** Theeraphol Sangthong

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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**Approved by** [redacted]
Manager



# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-4 |
| **Sampled Date** | May 12, 2025 10:14 AM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST14 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Carbonate Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Chloride | mg/L | - | 1.0 | 10.8 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4110 B | Bangkok |
| Cyanide as CN | mg/L | - | 0.002 | <0.002 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - CN (C, E) | Bangkok |
| Hydroxide Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Ionic Balance | % | - | - | 0.04 | | Bangkok |
| Phenolphthalein Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Sulfate | mg/L | - | 1.0 | 8.6 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-SO4 (E) | Bangkok |
| Total Alkalinity as CaCO3 | mg/L | - | 1 | 66 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Total Anions | mEq/L | - | 0.01 | 1.56 | | Bangkok |
| Total Cations | mEq/L | - | 0.01 | 1.60 | | Bangkok |
| Total Dissolved solids Dried at 180 degree C | mg/L | - | 5 | 135 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C | Bangkok |
| Total Hardness as CaCO3 | mg/L | - | 1 | 36 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2340 C | Bangkok |

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**Approved by** [redacted]
Manager

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-5 |
| **Sampled Date** | May 12, 2025 2:36 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST16 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Carbonate Alkalinity as CaCO3 | mg/L | - | 1 | 10.00 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Chloride | mg/L | - | 1.0 | 11.9 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4110 B | Bangkok |
| Cyanide as CN | mg/L | - | 0.002 | <0.002 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - CN (C, E) | Bangkok |
| Hydroxide Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Ionic Balance | % | - | - | 3.42 | | Bangkok |
| Phenolphthalein Alkalinity as CaCO3 | mg/L | - | 1 | 5 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Sulfate | mg/L | - | 1.0 | 30.3 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-SO4 (E) | Bangkok |
| Total Alkalinity as CaCO3 | mg/L | - | 1 | 152 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Total Anions | mEq/L | - | 0.01 | 3.28 | | Bangkok |
| Total Cations | mEq/L | - | 0.01 | 3.51 | | Bangkok |
| Total Dissolved solids Dried at 180 degree C | mg/L | - | 5 | 214 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C | Bangkok |
| Total Hardness as CaCO3 | mg/L | - | 1 | 115 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2340 C | Bangkok |

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** [redacted]
Manager





# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-5 |
| **Sampled Date** | May 12, 2025 2:36 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST16 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Metals Testing** | | | | | | |
| Arsenic | mg/L | - | 0.001 | 0.002 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Calcium Dissolved | mg/L | - | 0.10 | 29.1 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Cobalt | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Copper | mg/L | - | 0.001 | 0.002 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Iron | mg/L | - | 0.05 | 0.71 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Lead | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Magnesium Dissolved | mg/L | - | 0.10 | 10.2 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Manganese | mg/L | - | 0.001 | 0.50 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Mercury | mg/L | - | 0.0001 | <0.0001 | In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E | Bangkok |
| Potassium Dissolved | mg/L | - | 0.10 | 4.50 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Sodium Dissolved | mg/L | - | 0.10 | 25.3 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| **Water Testing** | | | | | | |
| Bicarbonate Alkalinity as CaCO3 | mg/L | - | 1 | 142 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |

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** [redacted]
Manager

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MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-6 |
| **Sampled Date** | May 14, 2025 9:11 AM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST17 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Metals Testing** | | | | | | |
| Arsenic | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Calcium Dissolved | mg/L | - | 0.10 | 354 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Cobalt | mg/L | - | 0.001 | 0.002 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Copper | mg/L | - | 0.001 | 0.01 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Iron | mg/L | - | 0.05 | 0.43 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Lead | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Magnesium Dissolved | mg/L | - | 0.10 | 242 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Manganese | mg/L | - | 0.001 | 0.57 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Mercury | mg/L | - | 0.0001 | <0.0001 | In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E | Bangkok |
| Potassium Dissolved | mg/L | - | 0.10 | 7.43 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Sodium Dissolved | mg/L | - | 0.10 | 41.2 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| **Water Testing** | | | | | | |
| Bicarbonate Alkalinity as CaCO3 | mg/L | - | 1 | 51 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |

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** [redacted]
Manager



# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-5 |
| **Sampled Date** | May 12, 2025 2:36 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST16 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Total Organic Carbon | mg/L | - | 0.1 | 8.23 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B | Bangkok |
| Total Suspended Solids Dried at 103-105 degree C | mg/L | - | 5 | 20 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D | Bangkok |
| Turbidity | NTU | - | 0.1 | 11 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2130 B | Bangkok |
| Weak Acid Dissociable Cyanide | mg/L | - | 0.002 | <0.002 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-CN (I) | Bangkok |

**Sampling By :** Theeraphol Sangthong

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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** [redacted]
Manager

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MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-6 |
| **Sampled Date** | May 14, 2025 9:11 AM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST17 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Total Organic Carbon | mg/L | - | 0.1 | 3.80 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B | Bangkok |
| Total Suspended Solids Dried at 103-105 degree C | mg/L | - | 5 | <5 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D | Bangkok |
| Turbidity | NTU | - | 0.1 | 2.6 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2130 B | Bangkok |
| Weak Acid Dissociable Cyanide | mg/L | - | 0.002 | <0.002 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-CN (I) | Bangkok |

**Sampling By :** Theeraphol Sangthong

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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** [redacted]
Manager



# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-6 |
| **Sampled Date** | May 14, 2025 9:11 AM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST17 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Carbonate Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Chloride | mg/L | - | 1.0 | 6.1 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4110 B | Bangkok |
| Cyanide as CN | mg/L | - | 0.002 | <0.002 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - CN (C, E) | Bangkok |
| Hydroxide Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Ionic Balance | % | - | - | 3.04 | | Bangkok |
| Phenolphthalein Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Sulfate | mg/L | - | 1.0 | 1774 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-SO4 (E) | Bangkok |
| Total Alkalinity as CaCO3 | mg/L | - | 1 | 51 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Total Anions | mEq/L | - | 0.01 | 37.17 | | Bangkok |
| Total Cations | mEq/L | - | 0.01 | 39.50 | | Bangkok |
| Total Dissolved solids Dried at 180 degree C | mg/L | - | 5 | 2272 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C | Bangkok |
| Total Hardness as CaCO3 | mg/L | - | 1 | 1876 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2340 C | Bangkok |

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** [redacted]
Manager

MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-7 |
| **Sampled Date** | May 14, 2025 9:40 AM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST18 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Carbonate Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Chloride | mg/L | - | 1.0 | 5.8 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4110 B | Bangkok |
| Cyanide as CN | mg/L | - | 0.002 | <0.002 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - CN (C, E) | Bangkok |
| Hydroxide Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Ionic Balance | % | - | - | 0.10 | | Bangkok |
| Phenolphthalein Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Sulfate | mg/L | - | 1.0 | 521 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-SO4 (E) | Bangkok |
| Total Alkalinity as CaCO3 | mg/L | - | 1 | 101 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Total Anions | mEq/L | - | 0.01 | 12.45 | | Bangkok |
| Total Cations | mEq/L | - | 0.01 | 12.47 | | Bangkok |
| Total Dissolved solids Dried at 180 degree C | mg/L | - | 5 | 892 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C | Bangkok |
| Total Hardness as CaCO3 | mg/L | - | 1 | 565 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2340 C | Bangkok |

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** [redacted]
Manager



# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-7 |
| **Sampled Date** | May 14, 2025 9:40 AM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST18 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Metals Testing** | | | | | | |
| Arsenic | mg/L | - | 0.001 | 0.002 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Calcium Dissolved | mg/L | - | 0.10 | 89.9 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Cobalt | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Copper | mg/L | - | 0.001 | 0.002 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Iron | mg/L | - | 0.05 | <0.05 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Lead | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Magnesium Dissolved | mg/L | - | 0.10 | 82.8 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Manganese | mg/L | - | 0.001 | 0.31 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Mercury | mg/L | - | 0.0001 | <0.0001 | In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E | Bangkok |
| Potassium Dissolved | mg/L | - | 0.10 | 10.2 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Sodium Dissolved | mg/L | - | 0.10 | 21.1 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| **Water Testing** | | | | | | |
| Bicarbonate Alkalinity as CaCO3 | mg/L | - | 1 | 101 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |

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** [redacted]
Manager

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MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-8 |
| **Sampled Date** | May 13, 2025 2:11 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST20 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Metals Testing** | | | | | | |
| Arsenic | mg/L | - | 0.001 | 0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Calcium Dissolved | mg/L | - | 0.10 | 482 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Cobalt | mg/L | - | 0.001 | 0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Copper | mg/L | - | 0.001 | 0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Iron | mg/L | - | 0.05 | 0.13 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Lead | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Magnesium Dissolved | mg/L | - | 0.10 | 135 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Manganese | mg/L | - | 0.001 | 0.18 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Mercury | mg/L | - | 0.0001 | <0.0001 | In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E | Bangkok |
| Potassium Dissolved | mg/L | - | 0.10 | 11.1 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Sodium Dissolved | mg/L | - | 0.10 | 19.2 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| **Water Testing** | | | | | | |
| Bicarbonate Alkalinity as CaCO3 | mg/L | - | 1 | 51 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |

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** [redacted]
Manager



# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-7 |
| **Sampled Date** | May 14, 2025 9:40 AM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST18 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Total Organic Carbon | mg/L | - | 0.1 | 9.00 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B | Bangkok |
| Total Suspended Solids Dried at 103-105 degree C | mg/L | - | 5 | 7 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D | Bangkok |
| Turbidity | NTU | - | 0.1 | 8.5 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2130 B | Bangkok |
| Weak Acid Dissociable Cyanide | mg/L | - | 0.002 | <0.002 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-CN (I) | Bangkok |

**Sampling By :** Theeraphol Sangthong

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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** [redacted]
Manager

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
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MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-8 |
| **Sampled Date** | May 13, 2025 2:11 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST20 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Total Organic Carbon | mg/L | - | 0.1 | 2.00 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B | Bangkok |
| Total Suspended Solids Dried at 103-105 degree C | mg/L | - | 5 | 13 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D | Bangkok |
| Turbidity | NTU | - | 0.1 | 11 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2130 B | Bangkok |
| Weak Acid Dissociable Cyanide | mg/L | - | 0.002 | <0.002 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-CN (I) | Bangkok |

**Sampling By :** Theeraphol Sangthong

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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** [redacted]
Manager



# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-8 |
| **Sampled Date** | May 13, 2025 2:11 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST20 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Carbonate Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Chloride | mg/L | - | 1.0 | 2.9 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4110 B | Bangkok |
| Cyanide as CN | mg/L | - | 0.002 | <0.002 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - CN (C, E) | Bangkok |
| Hydroxide Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Ionic Balance | % | - | - | 0.69 | | Bangkok |
| Phenolphthalein Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Sulfate | mg/L | - | 1.0 | 1760 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-SO4 (E) | Bangkok |
| Total Alkalinity as CaCO3 | mg/L | - | 1 | 51 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Total Anions | mEq/L | - | 0.01 | 36.80 | | Bangkok |
| Total Cations | mEq/L | - | 0.01 | 36.29 | | Bangkok |
| Total Dissolved solids Dried at 180 degree C | mg/L | - | 5 | 2232 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C | Bangkok |
| Total Hardness as CaCO3 | mg/L | - | 1 | 1788 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2340 C | Bangkok |

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** [redacted]
Manager

MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-9 |
| **Sampled Date** | May 13, 2025 3:01 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST21 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Carbonate Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Chloride | mg/L | - | 1.0 | 3.4 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4110 B | Bangkok |
| Cyanide as CN | mg/L | - | 0.002 | <0.002 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - CN (C, E) | Bangkok |
| Hydroxide Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Ionic Balance | % | - | - | 0.80 | | Bangkok |
| Phenolphthalein Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Sulfate | mg/L | - | 1.0 | 2521 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-SO4 (E) | Bangkok |
| Total Alkalinity as CaCO3 | mg/L | - | 1 | 106 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Total Anions | mEq/L | - | 0.01 | 52.37 | | Bangkok |
| Total Cations | mEq/L | - | 0.01 | 53.22 | | Bangkok |
| Total Dissolved solids Dried at 180 degree C | mg/L | - | 5 | 2988 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C | Bangkok |
| Total Hardness as CaCO3 | mg/L | - | 1 | 2595 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2340 C | Bangkok |

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**Approved by** [redacted]
Manager



# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-9 |
| **Sampled Date** | May 13, 2025 3:01 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST21 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Metals Testing** | | | | | | |
| Arsenic | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Calcium Dissolved | mg/L | - | 0.10 | 512 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Cobalt | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Copper | mg/L | - | 0.001 | 0.01 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Iron | mg/L | - | 0.05 | 0.11 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Lead | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Magnesium Dissolved | mg/L | - | 0.10 | 319 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Manganese | mg/L | - | 0.001 | 0.21 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Mercury | mg/L | - | 0.0001 | <0.0001 | In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E | Bangkok |
| Potassium Dissolved | mg/L | - | 0.10 | 10.6 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Sodium Dissolved | mg/L | - | 0.10 | 26.3 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| **Water Testing** | | | | | | |
| Bicarbonate Alkalinity as CaCO3 | mg/L | - | 1 | 106 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |

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**Approved by** [redacted]
Manager

MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-10 |
| **Sampled Date** | May 12, 2025 10:36 AM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST23 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Metals Testing** | | | | | | |
| Arsenic | mg/L | - | 0.001 | 0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Calcium Dissolved | mg/L | - | 0.10 | 280 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Cobalt | mg/L | - | 0.001 | 0.007 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Copper | mg/L | - | 0.001 | 0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Iron | mg/L | - | 0.05 | 0.65 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Lead | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Magnesium Dissolved | mg/L | - | 0.10 | 129 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Manganese | mg/L | - | 0.001 | 12.6 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Mercury | mg/L | - | 0.0001 | <0.0001 | In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E | Bangkok |
| Potassium Dissolved | mg/L | - | 0.10 | 6.07 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Sodium Dissolved | mg/L | - | 0.10 | 62.6 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| **Water Testing** | | | | | | |
| Bicarbonate Alkalinity as CaCO3 | mg/L | - | 1 | 18 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |

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** [redacted]
Manager



Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-9 |
| **Sampled Date** | May 13, 2025 3:01 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST21 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Total Organic Carbon | mg/L | - | 0.1 | 1.73 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B | Bangkok |
| Total Suspended Solids Dried at 103-105 degree C | mg/L | - | 5 | <5 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D | Bangkok |
| Turbidity | NTU | - | 0.1 | 1.5 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2130 B | Bangkok |
| Weak Acid Dissociable Cyanide | mg/L | - | 0.002 | <0.002 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-CN (I) | Bangkok |

**Note :** This Analysis test report is reissued to supersede report No.3287111-1, Date Reported : May 28, 2025 due to revise analytical information.

**Sampling By :** Theeraphol Sangthong

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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** [redacted]
Manager

MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-10 |
| **Sampled Date** | May 12, 2025 10:36 AM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST23 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Total Organic Carbon | mg/L | - | 0.1 | 6.99 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B | Bangkok |
| Total Suspended Solids Dried at 103-105 degree C | mg/L | - | 5 | 16 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D | Bangkok |
| Turbidity | NTU | - | 0.1 | 14 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2130 B | Bangkok |
| Weak Acid Dissociable Cyanide | mg/L | - | 0.002 | <0.002 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-CN (I) | Bangkok |

**Sampling By :** Theeraphol Sangthong

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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** [redacted]
Manager



Analysis / Test Report

Client : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
P/O : 1001931
Project Name : Water Project
Project Location : CHATREE

Lot ID: 2537072
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-10 |
| **Sampled Date** | May 12, 2025 10:36 AM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST23 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Carbonate Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Chloride | mg/L | - | 1.0 | 7.9 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4110 B | Bangkok |
| Cyanide as CN | mg/L | - | 0.002 | <0.002 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - CN (C, E) | Bangkok |
| Hydroxide Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Ionic Balance | % | - | - | 4.85 | | Bangkok |
| Phenolphthalein Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Sulfate | mg/L | - | 1.0 | 1200 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-SO4 (E) | Bangkok |
| Total Alkalinity as CaCO3 | mg/L | - | 1 | 18 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Total Anions | mEq/L | - | 0.01 | 24.97 | | Bangkok |
| Total Cations | mEq/L | - | 0.01 | 27.52 | | Bangkok |
| Total Dissolved solids Dried at 180 degree C | mg/L | - | 5 | 1788 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C | Bangkok |
| Total Hardness as CaCO3 | mg/L | - | 1 | 1257 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2340 C | Bangkok |

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** [redacted]
Manager

MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-11 |
| **Sampled Date** | May 13, 2025 1:41 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST27 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Carbonate Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Chloride | mg/L | - | 1.0 | 2.3 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4110 B | Bangkok |
| Cyanide as CN | mg/L | - | 0.002 | <0.002 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - CN (C, E) | Bangkok |
| Hydroxide Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Ionic Balance | % | - | - | 1.29 | | Bangkok |
| Phenolphthalein Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Sulfate | mg/L | - | 1.0 | 1565 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-SO4 (E) | Bangkok |
| Total Alkalinity as CaCO3 | mg/L | - | 1 | 91 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Total Anions | mEq/L | - | 0.01 | 33.47 | | Bangkok |
| Total Cations | mEq/L | - | 0.01 | 34.35 | | Bangkok |
| Total Dissolved solids Dried at 180 degree C | mg/L | - | 5 | 1972 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C | Bangkok |
| Total Hardness as CaCO3 | mg/L | - | 1 | 1705 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2340 C | Bangkok |

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**Approved by** [redacted]
Manager



Analysis / Test Report

Client : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
P/O : 1001931
Project Name : Water Project
Project Location : CHATREE

Lot ID: 2537072
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-11 |
| **Sampled Date** | May 13, 2025 1:41 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST27 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Metals Testing** | | | | | | |
| Arsenic | mg/L | - | 0.001 | 0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Calcium Dissolved | mg/L | - | 0.10 | 423 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Cobalt | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Copper | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Iron | mg/L | - | 0.05 | <0.05 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Lead | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Magnesium Dissolved | mg/L | - | 0.10 | 149 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Manganese | mg/L | - | 0.001 | 0.12 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Mercury | mg/L | - | 0.0001 | <0.0001 | In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E | Bangkok |
| Potassium Dissolved | mg/L | - | 0.10 | 9.31 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Sodium Dissolved | mg/L | - | 0.10 | 17.5 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| **Water Testing** | | | | | | |
| Bicarbonate Alkalinity as CaCO3 | mg/L | - | 1 | 91 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |

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** [redacted]
Manager

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MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-12 |
| **Sampled Date** | May 13, 2025 9:47 AM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST28 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Metals Testing** | | | | | | |
| Arsenic | mg/L | - | 0.001 | 0.007 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Calcium Dissolved | mg/L | - | 0.10 | 312 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Cobalt | mg/L | - | 0.001 | 0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Copper | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Iron | mg/L | - | 0.05 | 0.16 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Lead | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Magnesium Dissolved | mg/L | - | 0.10 | 116 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Manganese | mg/L | - | 0.001 | 0.31 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Mercury | mg/L | - | 0.0001 | <0.0001 | In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E | Bangkok |
| Potassium Dissolved | mg/L | - | 0.10 | 9.96 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Sodium Dissolved | mg/L | - | 0.10 | 21.1 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| **Water Testing** | | | | | | |
| Bicarbonate Alkalinity as CaCO3 | mg/L | - | 1 | 46 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |

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** [redacted]
Manager



Analysis / Test Report

Client : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
P/O : 1001931
Project Name : Water Project
Project Location : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-11 |
| **Sampled Date** | May 13, 2025 1:41 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST27 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Total Organic Carbon | mg/L | - | 0.1 | 2.79 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B | Bangkok |
| Total Suspended Solids Dried at 103-105 degree C | mg/L | - | 5 | <5 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D | Bangkok |
| Turbidity | NTU | - | 0.1 | 1.3 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2130 B | Bangkok |
| Weak Acid Dissociable Cyanide | mg/L | - | 0.002 | <0.002 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-CN (I) | Bangkok |

**Sampling By :** Theeraphol Sangthong

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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**Approved by** [redacted]
Manager

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MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-12 |
| **Sampled Date** | May 13, 2025 9:47 AM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST28 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Total Organic Carbon | mg/L | - | 0.1 | 15.0 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B | Bangkok |
| Total Suspended Solids Dried at 103-105 degree C | mg/L | - | 5 | 23 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D | Bangkok |
| Turbidity | NTU | - | 0.1 | 24 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2130 B | Bangkok |
| Weak Acid Dissociable Cyanide | mg/L | - | 0.002 | <0.002 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-CN (I) | Bangkok |

**Sampling By :** Theeraphol Sangthong

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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** [redacted]
Manager



Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-12 |
| **Sampled Date** | May 13, 2025 9:47 AM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST28 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Carbonate Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Chloride | mg/L | - | 1.0 | 5.8 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4110 B | Bangkok |
| Cyanide as CN | mg/L | - | 0.002 | <0.002 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - CN (C, E) | Bangkok |
| Hydroxide Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Ionic Balance | % | - | - | 2.39 | | Bangkok |
| Phenolphthalein Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Sulfate | mg/L | - | 1.0 | 1182 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-SO4 (E) | Bangkok |
| Total Alkalinity as CaCO3 | mg/L | - | 1 | 46 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Total Anions | mEq/L | - | 0.01 | 25.02 | | Bangkok |
| Total Cations | mEq/L | - | 0.01 | 26.24 | | Bangkok |
| Total Dissolved solids Dried at 180 degree C | mg/L | - | 5 | 1792 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C | Bangkok |
| Total Hardness as CaCO3 | mg/L | - | 1 | 1269 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2340 C | Bangkok |

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**Approved by** [redacted]
Manager

MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-13 |
| **Sampled Date** | May 13, 2025 2:22 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST30 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Carbonate Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Chloride | mg/L | - | 1.0 | 3.8 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4110 B | Bangkok |
| Cyanide as CN | mg/L | - | 0.002 | <0.002 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - CN (C, E) | Bangkok |
| Hydroxide Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Ionic Balance | % | - | - | 4.63 | | Bangkok |
| Phenolphthalein Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Sulfate | mg/L | - | 1.0 | 2547 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-SO4 (E) | Bangkok |
| Total Alkalinity as CaCO3 | mg/L | - | 1 | 40 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Total Anions | mEq/L | - | 0.01 | 52.70 | | Bangkok |
| Total Cations | mEq/L | - | 0.01 | 57.82 | | Bangkok |
| Total Dissolved solids Dried at 180 degree C | mg/L | - | 5 | 3784 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C | Bangkok |
| Total Hardness as CaCO3 | mg/L | - | 1 | 2844 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2340 C | Bangkok |

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** [redacted]
Manager



Analysis / Test Report

Client : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
P/O : 1001931
Project Name : Water Project
Project Location : CHATREE

Lot ID: 2537072
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-13 |
| **Sampled Date** | May 13, 2025 2:22 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST30 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Metals Testing** | | | | | | |
| Arsenic | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Calcium Dissolved | mg/L | - | 0.10 | 514 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Cobalt | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Copper | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Iron | mg/L | - | 0.05 | 0.05 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Lead | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Magnesium Dissolved | mg/L | - | 0.10 | 378 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Manganese | mg/L | - | 0.001 | 0.01 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Mercury | mg/L | - | 0.0001 | <0.0001 | In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E | Bangkok |
| Potassium Dissolved | mg/L | - | 0.10 | 11.8 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Sodium Dissolved | mg/L | - | 0.10 | 17.1 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| **Water Testing** | | | | | | |
| Bicarbonate Alkalinity as CaCO3 | mg/L | - | 1 | 40 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |

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** [redacted]
Manager

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MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-14 |
| **Sampled Date** | May 12, 2025 1:57 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST31 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Metals Testing** | | | | | | |
| Arsenic | mg/L | - | 0.001 | 0.003 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Calcium Dissolved | mg/L | - | 0.10 | 450 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Cobalt | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Copper | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Iron | mg/L | - | 0.05 | 0.07 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Lead | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Magnesium Dissolved | mg/L | - | 0.10 | 185 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Manganese | mg/L | - | 0.001 | 0.27 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Mercury | mg/L | - | 0.0001 | <0.0001 | In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E | Bangkok |
| Potassium Dissolved | mg/L | - | 0.10 | 10.3 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Sodium Dissolved | mg/L | - | 0.10 | 30.3 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| **Water Testing** | | | | | | |
| Bicarbonate Alkalinity as CaCO3 | mg/L | - | 1 | 66 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |

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** [redacted]
Manager



# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-13 |
| **Sampled Date** | May 13, 2025 2:22 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST30 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Total Organic Carbon | mg/L | - | 0.1 | 1.65 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B | Bangkok |
| Total Suspended Solids Dried at 103-105 degree C | mg/L | - | 5 | <5 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D | Bangkok |
| Turbidity | NTU | - | 0.1 | 0.55 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2130 B | Bangkok |
| Weak Acid Dissociable Cyanide | mg/L | - | 0.002 | <0.002 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-CN (I) | Bangkok |

**Sampling By :** Theeraphol Sangthong

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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** [redacted]
Manager

MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-14 |
| **Sampled Date** | May 12, 2025 1:57 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST31 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Total Organic Carbon | mg/L | - | 0.1 | 4.39 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B | Bangkok |
| Total Suspended Solids Dried at 103-105 degree C | mg/L | - | 5 | 6 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D | Bangkok |
| Turbidity | NTU | - | 0.1 | 4.1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2130 B | Bangkok |
| Weak Acid Dissociable Cyanide | mg/L | - | 0.002 | <0.002 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-CN (I) | Bangkok |

**Sampling By :** Theeraphol Sangthong

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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** [redacted]
Manager



# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
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Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-14 |
| **Sampled Date** | May 12, 2025 1:57 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST31 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Carbonate Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Chloride | mg/L | - | 1.0 | 3.1 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4110 B | Bangkok |
| Cyanide as CN | mg/L | - | 0.002 | <0.002 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - CN (C, E) | Bangkok |
| Hydroxide Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Ionic Balance | % | - | - | 4.85 | | Bangkok |
| Phenolphthalein Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Sulfate | mg/L | - | 1.0 | 1691 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-SO4 (E) | Bangkok |
| Total Alkalinity as CaCO3 | mg/L | - | 1 | 66 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Total Anions | mEq/L | - | 0.01 | 35.65 | | Bangkok |
| Total Cations | mEq/L | - | 0.01 | 39.28 | | Bangkok |
| Total Dissolved solids Dried at 180 degree C | mg/L | - | 5 | 2348 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C | Bangkok |
| Total Hardness as CaCO3 | mg/L | - | 1 | 1892 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2340 C | Bangkok |

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**Approved by** [redacted]
Manager

MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-15 |
| **Sampled Date** | May 12, 2025 2:06 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST33 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Carbonate Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Chloride | mg/L | - | 1.0 | 2.7 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4110 B | Bangkok |
| Cyanide as CN | mg/L | - | 0.002 | <0.002 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - CN (C, E) | Bangkok |
| Hydroxide Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Ionic Balance | % | - | - | 2.35 | | Bangkok |
| Phenolphthalein Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Sulfate | mg/L | - | 1.0 | 1200 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-SO4 (E) | Bangkok |
| Total Alkalinity as CaCO3 | mg/L | - | 1 | 3 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Total Anions | mEq/L | - | 0.01 | 24.59 | | Bangkok |
| Total Cations | mEq/L | - | 0.01 | 25.77 | | Bangkok |
| Total Dissolved solids Dried at 180 degree C | mg/L | - | 5 | 1480 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C | Bangkok |
| Total Hardness as CaCO3 | mg/L | - | 1 | 1249 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2340 C | Bangkok |

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**Approved by** [redacted]
Manager



Analysis / Test Report

Client : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
P/O : 1001931
Project Name : Water Project
Project Location : CHATREE

Lot ID: 2537072
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-15 |
| **Sampled Date** | May 12, 2025 2:06 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST33 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Metals Testing** | | | | | | |
| Arsenic | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Calcium Dissolved | mg/L | - | 0.10 | 288 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Cobalt | mg/L | - | 0.001 | 0.003 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Copper | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Iron | mg/L | - | 0.05 | 0.07 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Lead | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Magnesium Dissolved | mg/L | - | 0.10 | 129 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Manganese | mg/L | - | 0.001 | 0.99 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Mercury | mg/L | - | 0.0001 | <0.0001 | In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E | Bangkok |
| Potassium Dissolved | mg/L | - | 0.10 | 10.2 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Sodium Dissolved | mg/L | - | 0.10 | 12.1 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| **Water Testing** | | | | | | |
| Bicarbonate Alkalinity as CaCO3 | mg/L | - | 1 | 3 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |

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**Approved by** [redacted]
Manager

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MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-16 |
| **Sampled Date** | May 14, 2025 10:08 AM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST36 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Metals Testing** | | | | | | |
| Arsenic | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Calcium Dissolved | mg/L | - | 0.10 | 312 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Cobalt | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Copper | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Iron | mg/L | - | 0.05 | <0.05 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Lead | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Magnesium Dissolved | mg/L | - | 0.10 | 269 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Manganese | mg/L | - | 0.001 | 0.13 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Mercury | mg/L | - | 0.0001 | <0.0001 | In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E | Bangkok |
| Potassium Dissolved | mg/L | - | 0.10 | 3.31 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Sodium Dissolved | mg/L | - | 0.10 | 38.6 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| **Water Testing** | | | | | | |
| Bicarbonate Alkalinity as CaCO3 | mg/L | - | 1 | 18 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |

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**Approved by** [redacted]
Manager



# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-15 |
| **Sampled Date** | May 12, 2025 2:06 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST33 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Total Organic Carbon | mg/L | - | 0.1 | 2.21 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B | Bangkok |
| Total Suspended Solids Dried at 103-105 degree C | mg/L | - | 5 | <5 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D | Bangkok |
| Turbidity | NTU | - | 0.1 | 1.6 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2130 B | Bangkok |
| Weak Acid Dissociable Cyanide | mg/L | - | 0.002 | <0.002 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-CN (I) | Bangkok |

**Sampling By :** Theeraphol Sangthong

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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**Approved by** [redacted]
Manager

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MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
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**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-16 |
| **Sampled Date** | May 14, 2025 10:08 AM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST36 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Total Organic Carbon | mg/L | - | 0.1 | 3.55 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B | Bangkok |
| Total Suspended Solids Dried at 103-105 degree C | mg/L | - | 5 | <5 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D | Bangkok |
| Turbidity | NTU | - | 0.1 | 0.90 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2130 B | Bangkok |
| Weak Acid Dissociable Cyanide | mg/L | - | 0.002 | <0.002 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-CN (I) | Bangkok |

**Sampling By :** Theeraphol Sangthong

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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.

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Manager



Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
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Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-16 |
| **Sampled Date** | May 14, 2025 10:08 AM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST36 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Carbonate Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Chloride | mg/L | - | 1.0 | 8.5 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4110 B | Bangkok |
| Cyanide as CN | mg/L | - | 0.002 | <0.002 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - CN (C, E) | Bangkok |
| Hydroxide Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Ionic Balance | % | - | - | 5.09 | | Bangkok |
| Phenolphthalein Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Sulfate | mg/L | - | 1.0 | 1722 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-SO4 (E) | Bangkok |
| Total Alkalinity as CaCO3 | mg/L | - | 1 | 18 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Total Anions | mEq/L | - | 0.01 | 35.65 | | Bangkok |
| Total Cations | mEq/L | - | 0.01 | 39.48 | | Bangkok |
| Total Dissolved solids Dried at 180 degree C | mg/L | - | 5 | 2308 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C | Bangkok |
| Total Hardness as CaCO3 | mg/L | - | 1 | 1888 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2340 C | Bangkok |

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**Approved by** [redacted]
Manager

MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-17 |
| **Sampled Date** | May 14, 2025 10:20 AM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST37 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Carbonate Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Chloride | mg/L | - | 1.0 | 1.1 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4110 B | Bangkok |
| Cyanide as CN | mg/L | - | 0.002 | <0.002 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - CN (C, E) | Bangkok |
| Hydroxide Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Ionic Balance | % | - | - | 1.80 | | Bangkok |
| Phenolphthalein Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Sulfate | mg/L | - | 1.0 | 559 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-SO4 (E) | Bangkok |
| Total Alkalinity as CaCO3 | mg/L | - | 1 | 30 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Total Anions | mEq/L | - | 0.01 | 11.92 | | Bangkok |
| Total Cations | mEq/L | - | 0.01 | 11.50 | | Bangkok |
| Total Dissolved solids Dried at 180 degree C | mg/L | - | 5 | 868 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C | Bangkok |
| Total Hardness as CaCO3 | mg/L | - | 1 | 581 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2340 C | Bangkok |

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**Approved by** [redacted]
Manager



# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-17 |
| **Sampled Date** | May 14, 2025 10:20 AM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST37 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Metals Testing** | | | | | | |
| Arsenic | mg/L | - | 0.001 | 0.002 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Calcium Dissolved | mg/L | - | 0.10 | 137 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Cobalt | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Copper | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Iron | mg/L | - | 0.05 | 0.11 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Lead | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Magnesium Dissolved | mg/L | - | 0.10 | 47.7 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Manganese | mg/L | - | 0.001 | 0.13 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Mercury | mg/L | - | 0.0001 | <0.0001 | In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E | Bangkok |
| Potassium Dissolved | mg/L | - | 0.10 | 2.10 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Sodium Dissolved | mg/L | - | 0.10 | 15.5 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| **Water Testing** | | | | | | |
| Bicarbonate Alkalinity as CaCO3 | mg/L | - | 1 | 30 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |

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** [redacted]
Manager

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MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-18 |
| **Sampled Date** | May 13, 2025 1:59 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST39 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Metals Testing** | | | | | | |
| Arsenic | mg/L | - | 0.001 | 0.004 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Calcium Dissolved | mg/L | - | 0.10 | 119 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Cobalt | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Copper | mg/L | - | 0.001 | 0.002 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Iron | mg/L | - | 0.05 | 0.12 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Lead | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Magnesium Dissolved | mg/L | - | 0.10 | 46.7 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Manganese | mg/L | - | 0.001 | 0.07 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Mercury | mg/L | - | 0.0001 | <0.0001 | In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E | Bangkok |
| Potassium Dissolved | mg/L | - | 0.10 | 10.2 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Sodium Dissolved | mg/L | - | 0.10 | 9.49 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| **Water Testing** | | | | | | |
| Bicarbonate Alkalinity as CaCO3 | mg/L | - | 1 | 76 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |

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** [redacted]
Manager



# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-17 |
| **Sampled Date** | May 14, 2025 10:20 AM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST37 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Total Organic Carbon | mg/L | - | 0.1 | 2.02 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B | Bangkok |
| Total Suspended Solids Dried at 103-105 degree C | mg/L | - | 5 | <5 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D | Bangkok |
| Turbidity | NTU | - | 0.1 | 1.2 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2130 B | Bangkok |
| Weak Acid Dissociable Cyanide | mg/L | - | 0.002 | <0.002 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-CN (I) | Bangkok |

**Sampling By :** Theeraphol Sangthong

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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** [redacted]
Manager

MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-18 |
| **Sampled Date** | May 13, 2025 1:59 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST39 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Total Organic Carbon | mg/L | - | 0.1 | 7.66 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B | Bangkok |
| Total Suspended Solids Dried at 103-105 degree C | mg/L | - | 5 | 9 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D | Bangkok |
| Turbidity | NTU | - | 0.1 | 5.7 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2130 B | Bangkok |
| Weak Acid Dissociable Cyanide | mg/L | - | 0.002 | <0.002 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-CN (I) | Bangkok |

**Sampling By :** Theeraphol Sangthong

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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** [redacted]
Manager



# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-18 |
| **Sampled Date** | May 13, 2025 1:59 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST39 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Carbonate Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Chloride | mg/L | - | 1.0 | 6.3 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4110 B | Bangkok |
| Cyanide as CN | mg/L | - | 0.002 | <0.002 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - CN (C, E) | Bangkok |
| Hydroxide Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Ionic Balance | % | - | - | 0.82 | | Bangkok |
| Phenolphthalein Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Sulfate | mg/L | - | 1.0 | 452 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-SO4 (E) | Bangkok |
| Total Alkalinity as CaCO3 | mg/L | - | 1 | 76 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Total Anions | mEq/L | - | 0.01 | 10.64 | | Bangkok |
| Total Cations | mEq/L | - | 0.01 | 10.47 | | Bangkok |
| Total Dissolved solids Dried at 180 degree C | mg/L | - | 5 | 712 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C | Bangkok |
| Total Hardness as CaCO3 | mg/L | - | 1 | 539 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2340 C | Bangkok |

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**Approved by** [redacted]
Manager

MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-19 |
| **Sampled Date** | May 12, 2025 2:14 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST40 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Carbonate Alkalinity as CaCO3 | mg/L | - | 1 | 10.00 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Chloride | mg/L | - | 1.0 | 1.8 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4110 B | Bangkok |
| Cyanide as CN | mg/L | - | 0.002 | <0.002 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - CN (C, E) | Bangkok |
| Hydroxide Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Ionic Balance | % | - | - | 4.56 | | Bangkok |
| Phenolphthalein Alkalinity as CaCO3 | mg/L | - | 1 | 5 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Sulfate | mg/L | - | 1.0 | 655 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-SO4 (E) | Bangkok |
| Total Alkalinity as CaCO3 | mg/L | - | 1 | 23 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Total Anions | mEq/L | - | 0.01 | 13.61 | | Bangkok |
| Total Cations | mEq/L | - | 0.01 | 12.42 | | Bangkok |
| Total Dissolved solids Dried at 180 degree C | mg/L | - | 5 | 868 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C | Bangkok |
| Total Hardness as CaCO3 | mg/L | - | 1 | 661 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2340 C | Bangkok |

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**Approved by** [redacted]
Manager



# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-19 |
| **Sampled Date** | May 12, 2025 2:14 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST40 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Metals Testing** | | | | | | |
| Arsenic | mg/L | - | 0.001 | 0.003 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Calcium Dissolved | mg/L | - | 0.10 | 138 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Cobalt | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Copper | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Iron | mg/L | - | 0.05 | <0.05 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Lead | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Magnesium Dissolved | mg/L | - | 0.10 | 60.8 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Manganese | mg/L | - | 0.001 | 0.02 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Mercury | mg/L | - | 0.0001 | <0.0001 | In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E | Bangkok |
| Potassium Dissolved | mg/L | - | 0.10 | 7.50 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Sodium Dissolved | mg/L | - | 0.10 | 7.65 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| **Water Testing** | | | | | | |
| Bicarbonate Alkalinity as CaCO3 | mg/L | - | 1 | 13 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |

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** [redacted]
Manager

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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-20 |
| **Sampled Date** | May 13, 2025 2:36 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST41 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Metals Testing** | | | | | | |
| Arsenic | mg/L | - | 0.001 | 0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Calcium Dissolved | mg/L | - | 0.10 | 289 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Cobalt | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Copper | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Iron | mg/L | - | 0.05 | <0.05 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Lead | mg/L | - | 0.001 | <0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Magnesium Dissolved | mg/L | - | 0.10 | 180 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Manganese | mg/L | - | 0.001 | 0.44 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Mercury | mg/L | - | 0.0001 | <0.0001 | In-house method : STM 05-007 based on United States Environmental Protection Agency, 2002, EPA Method 1631, Revision E | Bangkok |
| Potassium Dissolved | mg/L | - | 0.10 | 4.66 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| Sodium Dissolved | mg/L | - | 0.10 | 24.2 | Based on US EPA, Method 200.7, Revision 4.4 | Bangkok |
| **Water Testing** | | | | | | |
| Bicarbonate Alkalinity as CaCO3 | mg/L | - | 1 | 56 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |

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** [redacted]
Manager



# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-19 |
| **Sampled Date** | May 12, 2025 2:14 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST40 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Total Organic Carbon | mg/L | - | 0.1 | 2.60 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B | Bangkok |
| Total Suspended Solids Dried at 103-105 degree C | mg/L | - | 5 | <5 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D | Bangkok |
| Turbidity | NTU | - | 0.1 | 0.90 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2130 B | Bangkok |
| Weak Acid Dissociable Cyanide | mg/L | - | 0.002 | <0.002 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-CN (I) | Bangkok |

**Sampling By :** Theeraphol Sangthong

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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** [redacted]
Manager

MM-N12

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-20 |
| **Sampled Date** | May 13, 2025 2:36 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST41 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Total Organic Carbon | mg/L | - | 0.1 | 5.04 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B | Bangkok |
| Total Suspended Solids Dried at 103-105 degree C | mg/L | - | 5 | 6 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D | Bangkok |
| Turbidity | NTU | - | 0.1 | 3.8 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2130 B | Bangkok |
| Weak Acid Dissociable Cyanide | mg/L | - | 0.002 | <0.002 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-CN (I) | Bangkok |

**Sampling By :** Theeraphol Sangthong

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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** [redacted]
Manager



# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :** 1001931
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2537072**
Date Received : May 15, 2025
Date Reported : Jul 02, 2025
Report Number : 3287111-1



| | |
|---|---|
| **Sample Number** | 2537072-20 |
| **Sampled Date** | May 13, 2025 2:36 PM |
| **Sample Description** | Surface Water |
| **Location** | SW6805 ST41 |
| **Date Analysis Commenced** | May 16, 2025 |
| **Condition of Sample** | Contained in two vials and three plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Carbonate Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Chloride | mg/L | - | 1.0 | 3.0 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4110 B | Bangkok |
| Cyanide as CN | mg/L | - | 0.002 | <0.002 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - CN (C, E) | Bangkok |
| Hydroxide Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Ionic Balance | % | - | - | 1.15 | | Bangkok |
| Phenolphthalein Alkalinity as CaCO3 | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Sulfate | mg/L | - | 1.0 | 1407 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-SO4 (E) | Bangkok |
| Total Alkalinity as CaCO3 | mg/L | - | 1 | 56 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Total Anions | mEq/L | - | 0.01 | 29.69 | | Bangkok |
| Total Cations | mEq/L | - | 0.01 | 30.38 | | Bangkok |
| Total Dissolved solids Dried at 180 degree C | mg/L | - | 5 | 1864 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C | Bangkok |
| Total Hardness as CaCO3 | mg/L | - | 1 | 1481 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2340 C | Bangkok |

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** [redacted]
Manager

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# CERTIFICATE OF ANALYSIS

| | | | |
|---|---|---|---|
| **Client** | **Akara Resources Public Co., Ltd.** | **ALS Lot No.** | **2510820** |
| Contact | Yaowanud Chandung | Date Samples Received | Feb 05, 2025 01:00 PM |
| Address | 99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230 | Issue Date | Feb 14, 2025 09:15 PM |
| Email | yaowanud@akararesources.com | Quote number | Q2448061(R1) |
| | | Project | CHATREE |
| Telephone | 0-5661-4500 | No. of samples received | 25 |
| Facsimile | 0-5661-4190 | No. of samples analysed | 25 |

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

***General Comments***

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or client request.

When sampling time information is not provided by client, sampling dates are shown without a time component. In this instances, the time component has been assumed by the laboratory for processing purposes.

The results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any from without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

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ALS Lot No. : 2510820
Client : Akara Resources Public Co., Ltd.
Project : CHATREE

## Analytical Results

| | | | GW6802ST4 | GW6802ST5 | GW6802ST7 | GW6802ST8 | GW6802ST9 | GW6802ST10 | GW6802ST11 |
|---|---|---|---|---|---|---|---|---|---|
| | | *Client sample ID* | | | | | | | |
| | | Client sampling date / time | 4-Feb-25 | 4-Feb-25 | 3-Feb-25 | 3-Feb-25 | 3-Feb-25 | 3-Feb-25 | 3-Feb-25 |
| **Compound** | LOR | Unit | **2510820-1** | **2510820-2** | **2510820-3** | **2510820-4** | **2510820-5** | **2510820-6** | **2510820-7** |
| **EA015: Total Dissolved Solids** | | | | | | | | | |
| Total Dissolved solids | 5 | mg/L | 338 | 378 | 388 | 212 | 190 | 362 | 224 |
| **EA065: Total Hardness** | | | | | | | | | |
| Total Hardness | 1 | mg/L | 243 | 311 | 257 | 136 | 123 | 195 | 105 |
| **ED037P: Alkalinity** | | | | | | | | | |
| Bicarbonate Alkalinity | 1 | mg/L | 247 | 297 | 318 | 121 | 116 | 242 | 121 |
| Carbonate Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Hydroxide Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Phenolphthalein Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Total Alkalinity | 1 | mg/L | 247 | 297 | 318 | 121 | 116 | 242 | 121 |
| **ED041G: Sulfate** | | | | | | | | | |
| Sulfate | 1.0 | mg/L | 60.3 | <1.0 | 47.8 | 55.2 | 35.2 | 75.6 | 21.0 |
| **ED045G: Chloride Discrete analyzer** | | | | | | | | | |
| Chloride | 1.0 | mg/L | 15.1 | 1.5 | 21.6 | 21.9 | 6.3 | 15.7 | 2.3 |
| **ED093F: Dissolved Major Cations (GW & SW Dissolved)** | | | | | | | | | |
| Calcium | 0.10 | mg/L | 70.8 | 109 | 66.3 | 45.7 | 31.5 | 53.3 | 28.6 |
| Magnesium | 0.10 | mg/L | 16.2 | 9.16 | 22.3 | 5.39 | 10.8 | 15.0 | 8.07 |
| Potassium | 0.10 | mg/L | 0.53 | 0.72 | 0.52 | 6.07 | 0.39 | 0.58 | 1.55 |
| Sodium | 0.10 | mg/L | 35.5 | 16.6 | 69.8 | 16.6 | 16.9 | 62.2 | 15.4 |
| **EG020F: Dissolved Metals by ICP-MS (GW-Dissolved)** | | | | | | | | | |
| Arsenic | 0.001 | mg/L | 0.005 | 0.001 | 0.004 | 0.002 | <0.001 | <0.001 | 0.001 |
| Cobalt | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Copper | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Iron | 0.05 | mg/L | 0.08 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.16 |
| Lead | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Manganese | 0.001 | mg/L | 0.002 | 0.07 | 0.09 | 0.32 | 0.05 | 0.19 | 0.16 |
| **EG035F: Dissolved Mercury by CVAFS (GW-Dissolved)** | | | | | | | | | |
| Mercury | 0.0001 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Weak Acid Dissociable Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EN055: Ionic Balance** | | | | | | | | | |
| Ionic Balance | ---- | % | 5.93 | 17.13 | 9.36 | 1.69 | 6.78 | 5.30 | 0.33 |
| Total Anions | 0.01 | mEq/L | 5.70 | 4.92 | 6.79 | 3.73 | 2.80 | 5.95 | 2.47 |
| Total Cations | 0.01 | mEq/L | 6.42 | 6.95 | 8.19 | 3.60 | 3.20 | 6.62 | 2.80 |
| **Turbidity** | | | | | | | | | |
| Turbidity | 0.1 | NTU | 6.7 | 0.35 | 0.80 | 13 | 2.2 | 4.0 | 27 |

Approved by [redacted]
Senior Manager

MM-N12 ปี 10/107

ALS Lot No. : 2510820
Client : Akara Resources Public Co., Ltd.
Project : CHATREE

## Analytical Results

| | | Client sample ID | GW6802ST12 | GW6802ST13 | GW6802ST15 | GW6802ST17 | GW6802ST18 | GW6802ST20 | GW6802ST21 |
|---|---|---|---|---|---|---|---|---|---|
| | | Client sampling date / time | 4-Feb-25 | 4-Feb-25 | 4-Feb-25 | 3-Feb-25 | 3-Feb-25 | 4-Feb-25 | 4-Feb-25 |
| **Compound** | LOR | Unit | **2510820-8** | **2510820-9** | **2510820-10** | **2510820-11** | **2510820-12** | **2510820-13** | **2510820-14** |
| **EA015: Total Dissolved Solids** | | | | | | | | | |
| Total Dissolved solids | 5 | mg/L | 238 | 240 | 274 | 852 | 424 | 308 | 274 |
| **EA065: Total Hardness** | | | | | | | | | |
| Total Hardness | 1 | mg/L | 142 | 167 | 185 | 595 | 235 | 221 | 217 |
| **ED037P: Alkalinity** | | | | | | | | | |
| Bicarbonate Alkalinity | 1 | mg/L | 161 | 171 | 106 | 393 | 212 | 197 | 212 |
| Carbonate Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Hydroxide Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Phenolphthalein Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Total Alkalinity | 1 | mg/L | 161 | 171 | 106 | 393 | 212 | 197 | 212 |
| **ED041G: Sulfate** | | | | | | | | | |
| Sulfate | 1.0 | mg/L | 3.1 | 5.2 | 111 | 286 | 113 | <1.0 | 48.4 |
| **ED045G: Chloride Discrete analyzer** | | | | | | | | | |
| Chloride | 1.0 | mg/L | 1.7 | 6.1 | 18.2 | 106 | 40.4 | 32.2 | 6.2 |
| **ED093F: Dissolved Major Cations (GW & SW Dissolved)** | | | | | | | | | |
| Calcium | 0.10 | mg/L | 47.5 | 49.7 | 58.7 | 152 | 69.4 | 59.2 | 62.9 |
| Magnesium | 0.10 | mg/L | 5.80 | 10.5 | 9.22 | 52.3 | 14.9 | 17.7 | 14.5 |
| Potassium | 0.10 | mg/L | 1.25 | 0.71 | 7.73 | 3.14 | 1.32 | 1.10 | 0.30 |
| Sodium | 0.10 | mg/L | 14.9 | 15.3 | 10.2 | 108 | 70.0 | 13.9 | 22.2 |
| **EG020F: Dissolved Metals by ICP-MS (GW-Dissolved)** | | | | | | | | | |
| Arsenic | 0.001 | mg/L | 0.01 | <0.001 | 0.001 | 0.001 | <0.001 | <0.001 | 0.002 |
| Cobalt | 0.001 | mg/L | <0.001 | <0.001 | 0.003 | <0.001 | <0.001 | <0.001 | <0.001 |
| Copper | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Iron | 0.05 | mg/L | 0.18 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Lead | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Manganese | 0.001 | mg/L | 3.40 | 0.27 | 1.30 | 0.02 | <0.001 | 0.15 | 0.02 |
| **EG035F: Dissolved Mercury by CVAFS (GW-Dissolved)** | | | | | | | | | |
| Mercury | 0.0001 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Weak Acid Dissociable Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EN055: Ionic Balance** | | | | | | | | | |
| Ionic Balance | ---- | % | 12.29 | 13.18 | 2.13 | 4.45 | 5.81 | 9.96 | 6.78 |
| Total Anions | 0.01 | mEq/L | 2.75 | 3.09 | 4.52 | 15.25 | 6.92 | 4.13 | 4.63 |
| Total Cations | 0.01 | mEq/L | 3.53 | 4.03 | 4.33 | 16.67 | 7.77 | 5.04 | 5.31 |
| **Turbidity** | | | | | | | | | |
| Turbidity | 0.1 | NTU | 19 | 3.1 | 45 | 0.50 | 0.30 | 13 | 0.90 |

Approved by [redacted]
Senior Manager



ALS Lot No. : 2510820
Client : Akara Resources Public Co., Ltd.
Project : CHATREE

## Analytical Results

| | | Client sample ID | RG68026672 | RG6802690 | RG6802691 | RG6802692 | RG6802693 | RG68024017 | RG68024018 |
|---|---|---|---|---|---|---|---|---|---|
| | | Client sampling date / time | 4-Feb-25 | 4-Feb-25 | 4-Feb-25 | 4-Feb-25 | 4-Feb-25 | 3-Feb-25 | 3-Feb-25 |
| **Compound** | LOR | Unit | **2510820-15** | **2510820-16** | **2510820-17** | **2510820-18** | **2510820-19** | **2510820-20** | **2510820-21** |
| **EA015: Total Dissolved Solids** | | | | | | | | | |
| Total Dissolved solids | 5 | mg/L | 244 | 376 | 294 | 224 | 292 | 476 | 332 |
| **EA065: Total Hardness** | | | | | | | | | |
| Total Hardness | 1 | mg/L | 121 | 293 | 246 | 130 | 248 | 307 | 248 |
| **ED037P: Alkalinity** | | | | | | | | | |
| Bicarbonate Alkalinity | 1 | mg/L | 121 | 302 | 272 | 161 | 202 | 212 | 237 |
| Carbonate Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Hydroxide Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Phenolphthalein Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Total Alkalinity | 1 | mg/L | 121 | 302 | 272 | 161 | 202 | 212 | 237 |
| **ED041G: Sulfate** | | | | | | | | | |
| Sulfate | 1.0 | mg/L | 54.1 | <1.0 | 11.3 | <1.0 | 72.7 | 184 | 63.1 |
| **ED045G: Chloride Discrete analyzer** | | | | | | | | | |
| Chloride | 1.0 | mg/L | 1.5 | <1.0 | 4.7 | <1.0 | 1.6 | 45.2 | 6.7 |
| **ED093F: Dissolved Major Cations (GW & SW Dissolved)** | | | | | | | | | |
| Calcium | 0.10 | mg/L | 29.5 | 90.6 | 60.5 | 32.9 | 73.1 | 88.3 | 79.8 |
| Magnesium | 0.10 | mg/L | 11.5 | 16.3 | 23.0 | 11.5 | 15.8 | 21.0 | 11.9 |
| Potassium | 0.10 | mg/L | 4.39 | 0.58 | 8.83 | 0.31 | 0.39 | 1.44 | 3.57 |
| Sodium | 0.10 | mg/L | 20.3 | 23.2 | 27.9 | 21.3 | 11.4 | 59.3 | 26.2 |
| **EG020F: Dissolved Metals by ICP-MS (GW-Dissolved)** | | | | | | | | | |
| Arsenic | 0.001 | mg/L | 0.001 | 0.003 | 0.002 | 0.002 | <0.001 | <0.001 | 0.002 |
| Cobalt | 0.001 | mg/L | <0.001 | <0.001 | 0.005 | <0.001 | 0.002 | <0.001 | <0.001 |
| Copper | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Iron | 0.05 | mg/L | 0.06 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Lead | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Manganese | 0.001 | mg/L | 0.19 | 0.22 | 1.35 | 0.17 | 1.07 | 0.92 | 0.35 |
| **EG035F: Dissolved Mercury by CVAFS (GW-Dissolved)** | | | | | | | | | |
| Mercury | 0.0001 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Weak Acid Dissociable Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EN055: Ionic Balance** | | | | | | | | | |
| Ionic Balance | ---- | % | 4.26 | 16.07 | 13.68 | 13.82 | 6.10 | 1.43 | 7.23 |
| Total Anions | 0.01 | mEq/L | 3.13 | 4.98 | 4.82 | 2.67 | 4.83 | 8.50 | 5.36 |
| Total Cations | 0.01 | mEq/L | 3.41 | 6.89 | 6.35 | 3.52 | 5.46 | 8.75 | 6.19 |
| **Turbidity** | | | | | | | | | |
| Turbidity | 0.1 | NTU | 37 | 1.3 | 90 | 17 | 34 | 26 | 16 |

Approved by [redacted]
Senior Manager

ALS Lot No. : 2510820
Client : Akara Resources Public Co., Ltd.
Project : CHATREE

## Analytical Results

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | *Client sample ID* | RG68024020 | RG68024021 | RG68024024 | RG68024025 | ---- | ---- | ---- |
| | | Client sampling date / time | 3-Feb-25 | 3-Feb-25 | 3-Feb-25 | 3-Feb-25 | ---- | ---- | ---- |
| **Compound** | LOR | Unit | **2510820-22** | **2510820-23** | **2510820-24** | **2510820-25** | **----** | **----** | **----** |
| **EA015: Total Dissolved Solids** | | | | | | | | | |
| Total Dissolved solids | 5 | mg/L | 356 | 212 | 145 | 160 | ---- | ---- | ---- |
| **EA065: Total Hardness** | | | | | | | | | |
| Total Hardness | 1 | mg/L | 181 | 144 | 71 | 124 | ---- | ---- | ---- |
| **ED037P: Alkalinity** | | | | | | | | | |
| Bicarbonate Alkalinity | 1 | mg/L | 212 | 186 | 76 | 121 | ---- | ---- | ---- |
| Carbonate Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | ---- | ---- | ---- |
| Hydroxide Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | ---- | ---- | ---- |
| Phenolphthalein Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | ---- | ---- | ---- |
| Total Alkalinity | 1 | mg/L | 212 | 186 | 76 | 121 | ---- | ---- | ---- |
| **ED041G: Sulfate** | | | | | | | | | |
| Sulfate | 1.0 | mg/L | 105 | <1.0 | 29.0 | 23.7 | ---- | ---- | ---- |
| **ED045G: Chloride Discrete analyzer** | | | | | | | | | |
| Chloride | 1.0 | mg/L | 25.2 | 5.8 | 7.6 | 5.1 | ---- | ---- | ---- |
| **ED093F: Dissolved Major Cations (GW & SW Dissolved)** | | | | | | | | | |
| Calcium | 0.10 | mg/L | 45.6 | 46.1 | 19.8 | 39.8 | ---- | ---- | ---- |
| Magnesium | 0.10 | mg/L | 16.4 | 7.09 | 5.30 | 5.91 | ---- | ---- | ---- |
| Potassium | 0.10 | mg/L | 0.65 | 6.46 | 1.38 | 4.34 | ---- | ---- | ---- |
| Sodium | 0.10 | mg/L | 69.1 | 22.0 | 13.8 | 14.2 | ---- | ---- | ---- |
| **EG020F: Dissolved Metals by ICP-MS (GW-Dissolved)** | | | | | | | | | |
| Arsenic | 0.001 | mg/L | <0.001 | 0.002 | 0.001 | 0.001 | ---- | ---- | ---- |
| Cobalt | 0.001 | mg/L | <0.001 | <0.001 | 0.001 | <0.001 | ---- | ---- | ---- |
| Copper | 0.001 | mg/L | 0.006 | <0.001 | <0.001 | <0.001 | ---- | ---- | ---- |
| Iron | 0.05 | mg/L | <0.05 | 0.27 | <0.05 | <0.05 | ---- | ---- | ---- |
| Lead | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | ---- | ---- | ---- |
| Manganese | 0.001 | mg/L | 0.002 | 0.71 | 0.86 | 0.28 | ---- | ---- | ---- |
| **EG035F: Dissolved Mercury by CVAFS (GW-Dissolved)** | | | | | | | | | |
| Mercury | 0.0001 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.0001 | ---- | ---- | ---- |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | ---- | ---- | ---- |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Weak Acid Dissociable Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | ---- | ---- | ---- |
| **EN055: Ionic Balance** | | | | | | | | | |
| Ionic Balance | ---- | % | 2.51 | 10.89 | 0.01 | 10.13 | ---- | ---- | ---- |
| Total Anions | 0.01 | mEq/L | 6.32 | 3.22 | 2.04 | 2.61 | ---- | ---- | ---- |
| Total Cations | 0.01 | mEq/L | 6.65 | 4.01 | 2.06 | 3.20 | ---- | ---- | ---- |
| **Turbidity** | | | | | | | | | |
| Turbidity | 0.1 | NTU | 210 | 4.9 | 4.3 | 4.1 | ---- | ---- | ---- |

Approved by [redacted]

Senior Manager

# CERTIFICATE OF ANALYSIS

| | | | |
|---|---|---|---|
| **Client** | **Akara Resources Public Co., Ltd.** | **ALS Lot No.** | **2510838** |
| Contact | Yaowanud Chandung | Date Samples Received | Feb 05, 2025 01:00 PM |
| Address | 99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230 | Issue Date | Feb 14, 2025 09:57 PM |
| Email | yaowanud@akararesources.com | Quote number | Q2352889 |
| | | Project | CHATREE |
| Telephone | 0-5661-4500 | No. of samples received | 17 |
| Facsimile | 0-5661-4190 | No. of samples analysed | 17 |

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

***General Comments***

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or client request.

When sampling time information is not provided by client, sampling dates are shown without a time component. In this instances, the time component has been assumed by the laboratory for processing purposes.

The results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any from without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

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ALS Lot No. : 2510838
Client : Akara Resources Public Co., Ltd.
Project : CHATREE

## Analytical Results

| | | | MS6802678 | MS6802679 | MS68025993 | MS68025994 | MS68025997 | MS68026081 | MS68026082 |
|---|---|---|---|---|---|---|---|---|---|
| *Client sample ID* | | | | | | | | | |
| Client sampling date / time | | | 4-Feb-25 | 4-Feb-25 | 4-Feb-25 | 4-Feb-25 | 4-Feb-25 | 4-Feb-25 | 4-Feb-25 |
| **Compound** | LOR | Unit | **2510838-1** | **2510838-2** | **2510838-3** | **2510838-4** | **2510838-5** | **2510838-7** | **2510838-8** |
| **EA015: Total Dissolved Solids** | | | | | | | | | |
| Total Dissolved solids | 5 | mg/L | 250 | 286 | 2852 | 1852 | 166 | 1516 | 2784 |
| **EA065: Total Hardness** | | | | | | | | | |
| Total Hardness | 1 | mg/L | 136 | 121 | 2216 | 1457 | 55 | 998 | 1748 |
| **ED037P: Alkalinity** | | | | | | | | | |
| Bicarbonate Alkalinity | 1 | mg/L | 111 | 101 | 227 | 343 | 66 | 151 | 202 |
| Carbonate Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Hydroxide Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Phenolphthalein Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Total Alkalinity | 1 | mg/L | 111 | 101 | 227 | 343 | 66 | 151 | 202 |
| **ED041G: Sulfate** | | | | | | | | | |
| Sulfate | 1.0 | mg/L | 74.9 | 102 | 2361 | 1329 | 39.6 | 1094 | 2199 |
| **ED045G: Chloride Discrete analyzer** | | | | | | | | | |
| Chloride | 1.0 | mg/L | 1.1 | 1.4 | 3.2 | 3.0 | 1.3 | 3.2 | 2.5 |
| **ED093F: Dissolved Major Cations (GW & SW Dissolved)** | | | | | | | | | |
| Calcium | 0.10 | mg/L | 28.6 | 28.1 | 591 | 435 | 15.3 | 250 | 316 |
| Magnesium | 0.10 | mg/L | 16.0 | 12.2 | 179 | 83.5 | 4.09 | 79.2 | 233 |
| Potassium | 0.10 | mg/L | 0.45 | 1.04 | 2.14 | 5.11 | 1.08 | 1.81 | 5.58 |
| Sodium | 0.10 | mg/L | 15.6 | 22.8 | 72.9 | 43.3 | 13.3 | 94.6 | 199 |
| **EG020F: Dissolved Metals by ICP-MS (GW-Dissolved)** | | | | | | | | | |
| Arsenic | 0.001 | mg/L | 0.001 | 0.001 | 0.004 | 0.003 | <0.001 | <0.001 | 0.002 |
| Cobalt | 0.001 | mg/L | <0.001 | 0.01 | <0.001 | <0.001 | <0.001 | <0.001 | 0.001 |
| Copper | 0.001 | mg/L | <0.001 | <0.001 | 0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Iron | 0.05 | mg/L | <0.05 | 2.91 | <0.05 | <0.05 | <0.05 | <0.05 | 0.08 |
| Lead | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Manganese | 0.001 | mg/L | 0.17 | 0.71 | 0.17 | 1.19 | 0.13 | 0.47 | 4.50 |
| **EG035F: Dissolved Mercury by CVAFS (GW-Dissolved)** | | | | | | | | | |
| Mercury | 0.0001 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Weak Acid Dissociable Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EN055: Ionic Balance** | | | | | | | | | |
| Ionic Balance | ---- | % | 0.83 | 4.75 | 4.56 | 3.49 | 0.21 | 3.59 | 4.90 |
| Total Anions | 0.01 | mEq/L | 3.38 | 3.77 | 51.95 | 32.80 | 1.92 | 24.87 | 48.21 |
| Total Cations | 0.01 | mEq/L | 3.43 | 3.43 | 47.42 | 30.59 | 1.71 | 23.15 | 43.71 |
| **Turbidity** | | | | | | | | | |
| Turbidity | 0.1 | NTU | 80 | 70 | 1400 | 55 | 3.0 | 2.2 | 45 |

Approved by [redacted]
Senior Manager

ALS Lot No. : 2510838
Client : Akara Resources Public Co., Ltd.
Project : CHATREE

## Analytical Results

| Compound | LOR | Unit | MS68026083 | MS68026084 | MS68026647 | MS68026648 | MS68026651 | MS68026652 | MS68026653 |
|---|---|---|---|---|---|---|---|---|---|
| *Client sample ID* | | | | | | | | | |
| Client sampling date / time | | | 4-Feb-25 | 4-Feb-25 | 3-Feb-25 | 3-Feb-25 | 3-Feb-25 | 3-Feb-25 | 3-Feb-25 |
| | | | 2510838-9 | 2510838-10 | 2510838-11 | 2510838-12 | 2510838-13 | 2510838-14 | 2510838-15 |
| **EA015: Total Dissolved Solids** | | | | | | | | | |
| Total Dissolved solids | 5 | mg/L | 354 | 356 | 414 | 270 | 436 | 464 | 988 |
| **EA065: Total Hardness** | | | | | | | | | |
| Total Hardness | 1 | mg/L | 268 | 291 | 280 | 158 | 337 | 425 | 774 |
| **ED037P: Alkalinity** | | | | | | | | | |
| Bicarbonate Alkalinity | 1 | mg/L | 292 | 328 | 146 | 136 | 207 | 222 | 116 |
| Carbonate Alkalinity | 1 | mg/L | <1 | <1 | 20.00 | <1 | <1 | <1 | <1 |
| Hydroxide Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Phenolphthalein Alkalinity | 1 | mg/L | <1 | <1 | 10 | <1 | <1 | <1 | <1 |
| Total Alkalinity | 1 | mg/L | 292 | 328 | 166 | 136 | 207 | 222 | 116 |
| **ED041G: Sulfate** | | | | | | | | | |
| Sulfate | 1.0 | mg/L | 25.4 | 15.2 | 169 | 73.2 | 166 | 122 | 776 |
| **ED045G: Chloride Discrete analyzer** | | | | | | | | | |
| Chloride | 1.0 | mg/L | 1.5 | 1.6 | 2.7 | 2.7 | 3.4 | 4.3 | 3.8 |
| **ED093F: Dissolved Major Cations (GW & SW Dissolved)** | | | | | | | | | |
| Calcium | 0.10 | mg/L | 79.3 | 72.9 | 87.1 | 47.5 | 96.1 | 124 | 147 |
| Magnesium | 0.10 | mg/L | 17.5 | 27.8 | 15.6 | 9.78 | 24.4 | 29.0 | 98.5 |
| Potassium | 0.10 | mg/L | 0.50 | 0.22 | 3.27 | 2.18 | 4.40 | 3.11 | 13.0 |
| Sodium | 0.10 | mg/L | 25.6 | 29.2 | 11.2 | 14.8 | 11.1 | 13.0 | 12.8 |
| **EG020F: Dissolved Metals by ICP-MS (GW-Dissolved)** | | | | | | | | | |
| Arsenic | 0.001 | mg/L | 0.002 | <0.001 | <0.001 | <0.001 | 0.002 | 0.002 | <0.001 |
| Cobalt | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.002 |
| Copper | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Iron | 0.05 | mg/L | <0.05 | <0.05 | 0.30 | <0.05 | <0.05 | <0.05 | <0.05 |
| Lead | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Manganese | 0.001 | mg/L | 0.13 | 0.19 | 0.23 | 0.12 | 0.62 | 0.19 | 4.12 |
| **EG035F: Dissolved Mercury by CVAFS (GW-Dissolved)** | | | | | | | | | |
| Mercury | 0.0001 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EK026G: Cyanide Discrete analyzer** | | | | | | | | | |
| Weak Acid Dissociable Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EN055: Ionic Balance** | | | | | | | | | |
| Ionic Balance | ---- | % | 9.91 | 11.43 | 2.34 | 0.99 | 3.65 | 19.31 | 4.39 |
| Total Anions | 0.01 | mEq/L | 5.35 | 5.72 | 5.92 | 3.80 | 6.88 | 6.25 | 17.84 |
| Total Cations | 0.01 | mEq/L | 6.53 | 7.20 | 6.20 | 3.88 | 7.40 | 9.24 | 16.34 |
| **Turbidity** | | | | | | | | | |
| Turbidity | 0.1 | NTU | 2.8 | 3.0 | 16 | 37 | 28 | 17 | 220 |

Approved by [redacted]
Senior Manager



ALS Lot No. : 2510838
Client : Akara Resources Public Co., Ltd.
Project : CHATREE

## Analytical Results

| Compound | LOR | Unit | MS68026654 | MS68026665 | MS68026666 | ---- | ---- | ---- | ---- |
|---|---|---|---|---|---|---|---|---|---|
| *Client sample ID* | | | | | | | | | |
| Client sampling date / time | | | 3-Feb-25 | 3-Feb-25 | 3-Feb-25 | ---- | ---- | ---- | ---- |
| | | | 2510838-16 | 2510838-17 | 2510838-18 | ---- | ---- | ---- | ---- |
| **EA015: Total Dissolved Solids** | | | | | | | | | |
| Total Dissolved solids | 5 | mg/L | 228 | 188 | 262 | ---- | ---- | ---- | ---- |
| **EA065: Total Hardness** | | | | | | | | | |
| Total Hardness | 1 | mg/L | 90 | 59 | 128 | ---- | ---- | ---- | ---- |
| **ED037P: Alkalinity** | | | | | | | | | |
| Bicarbonate Alkalinity | 1 | mg/L | 96 | 96 | 126 | ---- | ---- | ---- | ---- |
| Carbonate Alkalinity | 1 | mg/L | <1 | 10.00 | <1 | ---- | ---- | ---- | ---- |
| Hydroxide Alkalinity | 1 | mg/L | <1 | <1 | <1 | ---- | ---- | ---- | ---- |
| Phenolphthalein Alkalinity | 1 | mg/L | <1 | 5 | <1 | ---- | ---- | ---- | ---- |
| Total Alkalinity | 1 | mg/L | 96 | 106 | 126 | ---- | ---- | ---- | ---- |
| **ED041G: Sulfate** | | | | | | | | | |
| Sulfate | 1.0 | mg/L | 88.8 | 29.7 | 34.8 | ---- | ---- | ---- | ---- |
| **ED045G: Chloride Discrete analyzer** | | | | | | | | | |
| Chloride | 1.0 | mg/L | 5.8 | 2.5 | 2.0 | ---- | ---- | ---- | ---- |
| **ED093F: Dissolved Major Cations (GW & SW Dissolved)** | | | | | | | | | |
| Calcium | 0.10 | mg/L | 9.74 | 18.1 | 40.3 | ---- | ---- | ---- | ---- |
| Magnesium | 0.10 | mg/L | 16.3 | 3.60 | 6.85 | ---- | ---- | ---- | ---- |
| Potassium | 0.10 | mg/L | 4.35 | 1.45 | 1.99 | ---- | ---- | ---- | ---- |
| Sodium | 0.10 | mg/L | 32.6 | 24.1 | 13.7 | ---- | ---- | ---- | ---- |
| **EG020F: Dissolved Metals by ICP-MS (GW-Dissolved)** | | | | | | | | | |
| Arsenic | 0.001 | mg/L | <0.001 | 0.001 | 0.002 | ---- | ---- | ---- | ---- |
| Cobalt | 0.001 | mg/L | 0.004 | <0.001 | <0.001 | ---- | ---- | ---- | ---- |
| Copper | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | ---- | ---- | ---- | ---- |
| Iron | 0.05 | mg/L | <0.05 | <0.05 | <0.05 | ---- | ---- | ---- | ---- |
| Lead | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | ---- | ---- | ---- | ---- |
| Manganese | 0.001 | mg/L | 0.69 | 0.11 | 0.29 | ---- | ---- | ---- | ---- |
| **EG035F: Dissolved Mercury by CVAFS (GW-Dissolved)** | | | | | | | | | |
| Mercury | 0.0001 | mg/L | <0.0001 | <0.0001 | <0.0001 | ---- | ---- | ---- | ---- |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | ---- | ---- | ---- | ---- |
| **EK026G: Cyanide Discrete analyzer** | | | | | | | | | |
| Weak Acid Dissociable Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | ---- | ---- | ---- | ---- |
| **EN055: Ionic Balance** | | | | | | | | | |
| Ionic Balance | ---- | % | 2.71 | 0.04 | 6.44 | ---- | ---- | ---- | ---- |
| Total Anions | 0.01 | mEq/L | 3.54 | 2.25 | 2.83 | ---- | ---- | ---- | ---- |
| Total Cations | 0.01 | mEq/L | 3.36 | 2.28 | 3.22 | ---- | ---- | ---- | ---- |
| **Turbidity** | | | | | | | | | |
| Turbidity | 0.1 | NTU | 45 | 4.8 | 9.7 | ---- | ---- | ---- | ---- |

Approved by [redacted]
Senior Manager

# CERTIFICATE OF ANALYSIS

| | | | |
|---|---|---|---|
| **Client** | **Akara Resources Public Co., Ltd.** | **ALS Lot No.** | **2510831** |
| Contact | Yaowanud Chandung | Date Samples Received | Feb 06, 2025 01:00 PM |
| Address | 99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230 | Issue Date | Feb 19, 2025 04:16 PM |
| Email | yaowanud@akararesources.com | Quote number | Q2448061(R1) |
| | | Project | CHATREE |
| Telephone | 0-5661-4500 | No. of samples received | 29 |
| Facsimile | 0-5661-4190 | No. of samples analysed | 29 |

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

***General Comments***

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or client request.

When sampling time information is not provided by client, sampling dates are shown without a time component. In this instances, the time component has been assumed by the laboratory for processing purposes.

The results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any from without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

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ALS Lot No. : 2510831
Client : Akara Resources Public Co., Ltd.
Project : CHATREE

## Analytical Results

| | | | MS68025991 | MS68025992 | TSF6802663 | TSF6802699 | TSF68021991 | TSF68021992 | TSF68025350 |
|---|---|---|---|---|---|---|---|---|---|
| *Client sample ID* | | | | | | | | | |
| Client sampling date / time | | | 5-Feb-25 | 5-Feb-25 | 5-Feb-25 | 5-Feb-25 | 5-Feb-25 | 5-Feb-25 | 5-Feb-25 |
| **Compound** | LOR | Unit | **2510831-1** | **2510831-2** | **2510831-3** | **2510831-4** | **2510831-5** | **2510831-6** | **2510831-7** |
| **EA015: Total Dissolved Solids** | | | | | | | | | |
| Total Dissolved solids | 5 | mg/L | 154 | 360 | 1036 | 1400 | 732 | 792 | 1044 |
| **EA065: Total Hardness** | | | | | | | | | |
| Total Hardness | 1 | mg/L | 58 | 218 | 818 | 1030 | 521 | 472 | 565 |
| **ED037P: Alkalinity** | | | | | | | | | |
| Bicarbonate Alkalinity | 1 | mg/L | 96 | 217 | 307 | 307 | 368 | 474 | 318 |
| Carbonate Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Hydroxide Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Phenolphthalein Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Total Alkalinity | 1 | mg/L | 96 | 217 | 307 | 307 | 368 | 474 | 318 |
| **ED041G: Sulfate** | | | | | | | | | |
| Sulfate | 1.0 | mg/L | 21.3 | 85.0 | 561 | 828 | 185 | 194 | 500 |
| **ED045G: Chloride Discrete analyzer** | | | | | | | | | |
| Chloride | 1.0 | mg/L | 6.1 | 1.8 | 30.7 | 18.6 | 6.3 | 6.1 | 11.6 |
| **ED093F: Dissolved Major Cations (GW & SW Dissolved)** | | | | | | | | | |
| Calcium | 0.10 | mg/L | 33.9 | 97.9 | 264 | 232 | 164 | 129 | 167 |
| Magnesium | 0.10 | mg/L | 2.27 | 6.39 | 36.9 | 107 | 43.7 | 52.4 | 52.5 |
| Potassium | 0.10 | mg/L | 0.44 | 0.51 | 2.18 | 0.59 | 0.53 | 0.19 | 2.45 |
| Sodium | 0.10 | mg/L | 11.1 | 12.0 | 28.5 | 53.5 | 32.5 | 79.1 | 66.8 |
| **EG020F: Dissolved Metals by ICP-MS (GW-Dissolved)** | | | | | | | | | |
| Arsenic | 0.001 | mg/L | <0.001 | 0.001 | 0.001 | <0.001 | 0.003 | 0.003 | 0.001 |
| Cobalt | 0.001 | mg/L | <0.001 | 0.002 | <0.001 | 0.002 | <0.001 | <0.001 | <0.001 |
| Copper | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Iron | 0.05 | mg/L | <0.05 | 0.15 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Lead | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Manganese | 0.001 | mg/L | 0.31 | 1.01 | 2.47 | 0.86 | 0.84 | 0.16 | 0.68 |
| **EG035F: Dissolved Mercury by CVAFS (GW-Dissolved)** | | | | | | | | | |
| Mercury | 0.0001 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Weak Acid Dissociable Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EN055: Ionic Balance** | | | | | | | | | |
| Ionic Balance | ---- | % | 0.20 | 5.44 | 0.52 | 0.63 | 13.89 | 8.95 | 0.38 |
| Total Anions | 0.01 | mEq/L | 2.18 | 5.34 | 17.35 | 22.46 | 9.99 | 11.89 | 15.73 |
| Total Cations | 0.01 | mEq/L | 2.37 | 5.95 | 17.53 | 22.74 | 13.21 | 14.23 | 15.61 |
| **Turbidity** | | | | | | | | | |
| Turbidity | 0.1 | NTU | 45 | 40 | 22 | 4.0 | 15 | 1.5 | 1.0 |

Approved by [redacted]
Senior Manager

MM-N12 ปี 10/112

ALS Lot No. : 2510831
Client : Akara Resources Public Co., Ltd.
Project : CHATREE

## Analytical Results

| | | Client sample ID | TSF68025351 | TSF68025249 | TSF68026534 | TSF68025332 | TSF68025336 | TSF68026691 | TSF68025338 |
|---|---|---|---|---|---|---|---|---|---|
| | | Client sampling date / time | 5-Feb-25 | 5-Feb-25 | 5-Feb-25 | 5-Feb-25 | 5-Feb-25 | 5-Feb-25 | 5-Feb-25 |
| **Compound** | LOR | Unit | **2510831-8** | **2510831-9** | **2510831-10** | **2510831-11** | **2510831-12** | **2510831-13** | **2510831-14** |
| **EA015: Total Dissolved Solids** | | | | | | | | | |
| Total Dissolved solids | 5 | mg/L | 1068 | 440 | 408 | 468 | 416 | 452 | 436 |
| **EA065: Total Hardness** | | | | | | | | | |
| Total Hardness | 1 | mg/L | 760 | 266 | 244 | 209 | 203 | 233 | 209 |
| **ED037P: Alkalinity** | | | | | | | | | |
| Bicarbonate Alkalinity | 1 | mg/L | 237 | 277 | 252 | 76 | 237 | 222 | 186 |
| Carbonate Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Hydroxide Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Phenolphthalein Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Total Alkalinity | 1 | mg/L | 237 | 277 | 252 | 76 | 237 | 222 | 186 |
| **ED041G: Sulfate** | | | | | | | | | |
| Sulfate | 1.0 | mg/L | 784 | 60.5 | 40.8 | 308 | 87.9 | 135 | 143 |
| **ED045G: Chloride Discrete analyzer** | | | | | | | | | |
| Chloride | 1.0 | mg/L | 4.4 | 10.2 | 5.5 | 11.0 | 2.2 | 4.2 | 4.1 |
| **ED093F: Dissolved Major Cations (GW & SW Dissolved)** | | | | | | | | | |
| Calcium | 0.10 | mg/L | 167 | 117 | 108 | 72.5 | 88.2 | 98.3 | 89.5 |
| Magnesium | 0.10 | mg/L | 99.5 | 6.29 | 6.14 | 23.2 | 12.3 | 13.3 | 12.9 |
| Potassium | 0.10 | mg/L | 2.46 | 0.82 | 0.79 | 0.58 | 0.82 | 1.36 | 1.32 |
| Sodium | 0.10 | mg/L | 45.9 | 12.4 | 11.7 | 26.8 | 19.0 | 21.2 | 20.4 |
| **EG020F: Dissolved Metals by ICP-MS (GW-Dissolved)** | | | | | | | | | |
| Arsenic | 0.001 | mg/L | <0.001 | 0.003 | 0.003 | 0.001 | 0.007 | 0.006 | 0.03 |
| Cobalt | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | 0.006 | <0.001 | <0.001 | <0.001 |
| Copper | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Iron | 0.05 | mg/L | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.07 | <0.05 |
| Lead | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Manganese | 0.001 | mg/L | 0.11 | 0.64 | 0.34 | 0.68 | 0.04 | 1.38 | 1.47 |
| **EG035F: Dissolved Mercury by CVAFS (GW-Dissolved)** | | | | | | | | | |
| Mercury | 0.0001 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Weak Acid Dissociable Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EN055: Ionic Balance** | | | | | | | | | |
| Ionic Balance | ---- | % | 3.66 | 6.53 | 11.48 | 7.71 | 4.43 | 3.32 | 2.89 |
| Total Anions | 0.01 | mEq/L | 20.00 | 6.07 | 5.12 | 7.83 | 5.73 | 6.51 | 6.09 |
| Total Cations | 0.01 | mEq/L | 18.59 | 6.91 | 6.44 | 6.71 | 6.27 | 6.96 | 6.45 |
| **Turbidity** | | | | | | | | | |
| Turbidity | 0.1 | NTU | 7.0 | 4.5 | 12 | 70 | 1.1 | 45 | 120 |

Approved by [redacted]
Senior Manager



ALS Lot No. : 2510831
Client : Akara Resources Public Co., Ltd.
Project : CHATREE

## Analytical Results

| | | Client sample ID | TSF68025339 | TSF68026467 | TSF68026468 | TSF68026472 | TSF68026473 | TSF68026655 | TSF68026656 |
|---|---|---|---|---|---|---|---|---|---|
| | | Client sampling date / time | 5-Feb-25 | 5-Feb-25 | 5-Feb-25 | 5-Feb-25 | 5-Feb-25 | 5-Feb-25 | 5-Feb-25 |
| **Compound** | LOR | Unit | **2510831-15** | **2510831-16** | **2510831-17** | **2510831-18** | **2510831-19** | **2510831-20** | **2510831-21** |
| **EA015: Total Dissolved Solids** | | | | | | | | | |
| Total Dissolved solids | 5 | mg/L | 248 | 736 | 2200 | 290 | 1100 | 190 | 64 |
| **EA065: Total Hardness** | | | | | | | | | |
| Total Hardness | 1 | mg/L | 130 | 559 | 1134 | 231 | 709 | 109 | 29 |
| **ED037P: Alkalinity** | | | | | | | | | |
| Bicarbonate Alkalinity | 1 | mg/L | 106 | 307 | 81 | 227 | 23 | 116 | 20 |
| Carbonate Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Hydroxide Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Phenolphthalein Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Total Alkalinity | 1 | mg/L | 106 | 307 | 81 | 227 | 23 | 116 | 20 |
| **ED041G: Sulfate** | | | | | | | | | |
| Sulfate | 1.0 | mg/L | 107 | 347 | 1562 | 35.9 | 834 | 11.1 | 20.6 |
| **ED045G: Chloride Discrete analyzer** | | | | | | | | | |
| Chloride | 1.0 | mg/L | 3.0 | 5.6 | 38.6 | 1.4 | 12.4 | 1.6 | 1.9 |
| **ED093F: Dissolved Major Cations (GW & SW Dissolved)** | | | | | | | | | |
| Calcium | 0.10 | mg/L | 40.2 | 186 | 289 | 77.1 | 168 | 33.4 | 7.69 |
| Magnesium | 0.10 | mg/L | 7.25 | 22.5 | 88.0 | 9.36 | 70.4 | 6.19 | 2.36 |
| Potassium | 0.10 | mg/L | 3.09 | 1.72 | 15.7 | 0.75 | 1.07 | 1.53 | 0.34 |
| Sodium | 0.10 | mg/L | 28.8 | 25.2 | 285 | 16.1 | 32.8 | 8.75 | 8.14 |
| **EG020F: Dissolved Metals by ICP-MS (GW-Dissolved)** | | | | | | | | | |
| Arsenic | 0.001 | mg/L | 0.001 | 0.002 | <0.001 | 0.002 | <0.001 | 0.004 | <0.001 |
| Cobalt | 0.001 | mg/L | <0.001 | <0.001 | 0.06 | <0.001 | <0.001 | 0.002 | <0.001 |
| Copper | 0.001 | mg/L | 0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Iron | 0.05 | mg/L | <0.05 | <0.05 | <0.05 | <0.05 | 0.95 | 0.28 | <0.05 |
| Lead | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Manganese | 0.001 | mg/L | 0.21 | 1.11 | 12.2 | 0.38 | 0.25 | 0.55 | 0.04 |
| **EG035F: Dissolved Mercury by CVAFS (GW-Dissolved)** | | | | | | | | | |
| Mercury | 0.0001 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Weak Acid Dissociable Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EN055: Ionic Balance** | | | | | | | | | |
| Ionic Balance | ---- | % | 0.87 | 0.02 | 0.29 | 8.63 | 6.30 | 0.42 | 0.14 |
| Total Anions | 0.01 | mEq/L | 4.00 | 12.28 | 34.26 | 4.49 | 17.72 | 2.17 | 0.80 |
| Total Cations | 0.01 | mEq/L | 3.93 | 12.28 | 34.46 | 5.34 | 15.62 | 2.59 | 0.94 |
| **Turbidity** | | | | | | | | | |
| Turbidity | 0.1 | NTU | 40 | 8.2 | 1.3 | 26 | 23 | 45 | 1.5 |

Approved by [redacted]
Senior Manager

ALS Lot No. : 2510831
Client : Akara Resources Public Co., Ltd.
Project : CHATREE

## Analytical Results

| | | Client sample ID | TSF68026657 | TSF68026658 | TSF68026659 | TSF68026660 | TSF68026661 | TSF68026662 | TSF68026663 |
|---|---|---|---|---|---|---|---|---|---|
| | | Client sampling date / time | 5-Feb-25 | 5-Feb-25 | 5-Feb-25 | 5-Feb-25 | 5-Feb-25 | 5-Feb-25 | 5-Feb-25 |
| **Compound** | LOR | Unit | **2510831-22** | **2510831-23** | **2510831-24** | **2510831-25** | **2510831-26** | **2510831-27** | **2510831-28** |
| **EA015: Total Dissolved Solids** | | | | | | | | | |
| Total Dissolved solids | 5 | mg/L | 338 | 864 | 376 | 168 | 280 | 94 | 252 |
| **EA065: Total Hardness** | | | | | | | | | |
| Total Hardness | 1 | mg/L | 230 | 478 | 288 | 250 | 211 | 22 | 125 |
| **ED037P: Alkalinity** | | | | | | | | | |
| Bicarbonate Alkalinity | 1 | mg/L | 232 | 23 | 282 | 222 | 232 | 76 | 151 |
| Carbonate Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Hydroxide Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Phenolphthalein Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Total Alkalinity | 1 | mg/L | 232 | 23 | 282 | 222 | 232 | 76 | 151 |
| **ED041G: Sulfate** | | | | | | | | | |
| Sulfate | 1.0 | mg/L | 18.3 | 646 | 99.4 | 73.9 | 3.7 | <1.0 | <1.0 |
| **ED045G: Chloride Discrete analyzer** | | | | | | | | | |
| Chloride | 1.0 | mg/L | 1.1 | <1.0 | 1.9 | 1.5 | 1.1 | 1.4 | <1.0 |
| **ED093F: Dissolved Major Cations (GW & SW Dissolved)** | | | | | | | | | |
| Calcium | 0.10 | mg/L | 80.2 | 129 | 95.2 | 87.5 | 72.9 | 6.78 | 39.7 |
| Magnesium | 0.10 | mg/L | 7.14 | 37.9 | 12.3 | 7.79 | 7.10 | 1.19 | 6.35 |
| Potassium | 0.10 | mg/L | 2.10 | 6.20 | 0.84 | 0.86 | 0.61 | 0.37 | 1.69 |
| Sodium | 0.10 | mg/L | 13.7 | 38.7 | 31.1 | 16.6 | 21.7 | 23.2 | 17.3 |
| **EG020F: Dissolved Metals by ICP-MS (GW-Dissolved)** | | | | | | | | | |
| Arsenic | 0.001 | mg/L | 0.001 | <0.001 | 0.005 | 0.003 | 0.008 | <0.001 | <0.001 |
| Cobalt | 0.001 | mg/L | <0.001 | 0.02 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Copper | 0.001 | mg/L | <0.001 | 0.005 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Iron | 0.05 | mg/L | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Lead | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Manganese | 0.001 | mg/L | 0.22 | 2.80 | 0.08 | 0.16 | 0.07 | 0.07 | 0.11 |
| **EG035F: Dissolved Mercury by CVAFS (GW-Dissolved)** | | | | | | | | | |
| Mercury | 0.0001 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Weak Acid Dissociable Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EN055: Ionic Balance** | | | | | | | | | |
| Ionic Balance | ---- | % | 10.97 | 8.70 | 3.11 | 5.17 | 14.03 | 0.18 | 13.78 |
| Total Anions | 0.01 | mEq/L | 4.20 | 13.56 | 6.70 | 5.18 | 3.91 | 1.28 | 2.50 |
| Total Cations | 0.01 | mEq/L | 5.24 | 11.39 | 7.13 | 5.75 | 5.18 | 1.46 | 3.30 |
| **Turbidity** | | | | | | | | | |
| Turbidity | 0.1 | NTU | 11 | 1.0 | 2.6 | 5.0 | 1.0 | 2.5 | 11 |

Approved by [redacted]
Senior Manager



ALS Lot No. : 2510831
Client : Akara Resources Public Co., Ltd.
Project : CHATREE

## Analytical Results

| | | Client sample ID | TSF68026664 | ---- | ---- | ---- | ---- | ---- | ---- |
|---|---|---|---|---|---|---|---|---|---|
| | | Client sampling date / time | 5-Feb-25 | ---- | ---- | ---- | ---- | ---- | ---- |
| **Compound** | LOR | Unit | **2510831-29** | **----** | **----** | **----** | **----** | **----** | **----** |
| **EA015: Total Dissolved Solids** | | | | | | | | | |
| Total Dissolved solids | 5 | mg/L | 238 | ---- | ---- | ---- | ---- | ---- | ---- |
| **EA065: Total Hardness** | | | | | | | | | |
| Total Hardness | 1 | mg/L | 127 | ---- | ---- | ---- | ---- | ---- | ---- |
| **ED037P: Alkalinity** | | | | | | | | | |
| Bicarbonate Alkalinity | 1 | mg/L | 156 | ---- | ---- | ---- | ---- | ---- | ---- |
| Carbonate Alkalinity | 1 | mg/L | <1 | ---- | ---- | ---- | ---- | ---- | ---- |
| Hydroxide Alkalinity | 1 | mg/L | <1 | ---- | ---- | ---- | ---- | ---- | ---- |
| Phenolphthalein Alkalinity | 1 | mg/L | <1 | ---- | ---- | ---- | ---- | ---- | ---- |
| Total Alkalinity | 1 | mg/L | 156 | ---- | ---- | ---- | ---- | ---- | ---- |
| **ED041G: Sulfate** | | | | | | | | | |
| Sulfate | 1.0 | mg/L | 1.9 | ---- | ---- | ---- | ---- | ---- | ---- |
| **ED045G: Chloride Discrete analyzer** | | | | | | | | | |
| Chloride | 1.0 | mg/L | 1.1 | ---- | ---- | ---- | ---- | ---- | ---- |
| **ED093F: Dissolved Major Cations (GW & SW Dissolved)** | | | | | | | | | |
| Calcium | 0.10 | mg/L | 38.0 | ---- | ---- | ---- | ---- | ---- | ---- |
| Magnesium | 0.10 | mg/L | 7.83 | ---- | ---- | ---- | ---- | ---- | ---- |
| Potassium | 0.10 | mg/L | 1.90 | ---- | ---- | ---- | ---- | ---- | ---- |
| Sodium | 0.10 | mg/L | 14.2 | ---- | ---- | ---- | ---- | ---- | ---- |
| **EG020F: Dissolved Metals by ICP-MS (GW-Dissolved)** | | | | | | | | | |
| Arsenic | 0.001 | mg/L | <0.001 | ---- | ---- | ---- | ---- | ---- | ---- |
| Cobalt | 0.001 | mg/L | 0.002 | ---- | ---- | ---- | ---- | ---- | ---- |
| Copper | 0.001 | mg/L | <0.001 | ---- | ---- | ---- | ---- | ---- | ---- |
| Iron | 0.05 | mg/L | <0.05 | ---- | ---- | ---- | ---- | ---- | ---- |
| Lead | 0.001 | mg/L | <0.001 | ---- | ---- | ---- | ---- | ---- | ---- |
| Manganese | 0.001 | mg/L | 0.39 | ---- | ---- | ---- | ---- | ---- | ---- |
| **EG035F: Dissolved Mercury by CVAFS (GW-Dissolved)** | | | | | | | | | |
| Mercury | 0.0001 | mg/L | <0.0001 | ---- | ---- | ---- | ---- | ---- | ---- |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Cyanide | 0.002 | mg/L | <0.002 | ---- | ---- | ---- | ---- | ---- | ---- |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Weak Acid Dissociable Cyanide | 0.002 | mg/L | <0.002 | ---- | ---- | ---- | ---- | ---- | ---- |
| **EN055: Ionic Balance** | | | | | | | | | |
| Ionic Balance | ---- | % | 9.84 | ---- | ---- | ---- | ---- | ---- | ---- |
| Total Anions | 0.01 | mEq/L | 2.63 | ---- | ---- | ---- | ---- | ---- | ---- |
| Total Cations | 0.01 | mEq/L | 3.20 | ---- | ---- | ---- | ---- | ---- | ---- |
| **Turbidity** | | | | | | | | | |
| Turbidity | 0.1 | NTU | 28 | ---- | ---- | ---- | ---- | ---- | ---- |

Approved by [redacted]
Senior Manager

# CERTIFICATE OF ANALYSIS

| | | | |
|---|---|---|---|
| **Client** | **Akara Resources Public Co., Ltd.** | **ALS Lot No.** | **2537086** |
| Contact | Yaowanud Chandung | Date Samples Received | May 15, 2025 09:00 AM |
| Address | 99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230 | Issue Date | May 22, 2025 09:57 PM |
| Email | yaowanud@akararesources.com | Quote number | Q2448061(R2) |
| | | Project | CHATREE |
| Telephone | 0-5661-4500 | No. of samples received | 21 |
| Facsimile | 0-5661-4190 | No. of samples analysed | 21 |

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

***General Comments***

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or client request.

When sampling time information is not provided by client, sampling dates are shown without a time component. In this instances, the time component has been assumed by the laboratory for processing purposes.

The results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any from without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

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ALS Lot No. : 2537086
Client : Akara Resources Public Co., Ltd.
Project : CHATREE

## *Analytical Results*

| *Client sample ID* | | | GW6805ST4 | GW6805ST5 | GW6805ST7 | GW6805ST9 | GW6805ST10 | GW6805ST11 | GW6805ST12 |
|---|---|---|---|---|---|---|---|---|---|
| Client sampling date / time | | | 13-May-25 | 13-May-25 | 12-May-25 | 12-May-25 | 12-May-25 | 12-May-25 | 13-May-25 |
| **Compound** | LOR | Unit | **2537086-1** | **2537086-2** | **2537086-3** | **2537086-4** | **2537086-5** | **2537086-6** | **2537086-7** |
| **EA015: Total Dissolved Solids** | | | | | | | | | |
| Total Dissolved solids | 5 | mg/L | 340 | 398 | 416 | 242 | 336 | 224 | 232 |
| **EA065: Total Hardness** | | | | | | | | | |
| Total Hardness | 1 | mg/L | 248 | 308 | 267 | 154 | 202 | 103 | 114 |
| **ED037P: Alkalinity** | | | | | | | | | |
| Bicarbonate Alkalinity | 1 | mg/L | 278 | 344 | 359 | 142 | 278 | 116 | 142 |
| Carbonate Alkalinity | 1 | mg/L | 10.00 | <1 | <1 | <1 | <1 | <1 | <1 |
| Hydroxide Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Phenolphthalein Alkalinity | 1 | mg/L | 5 | <1 | <1 | <1 | <1 | <1 | <1 |
| Total Alkalinity | 1 | mg/L | 288 | 344 | 359 | 142 | 278 | 116 | 142 |
| **ED041G: Sulfate** | | | | | | | | | |
| Sulfate | 1.0 | mg/L | 37.0 | 3.5 | 31.2 | 35.5 | 40.3 | 15.8 | 4.8 |
| **ED045G: Chloride Discrete analyzer** | | | | | | | | | |
| Chloride | 1.0 | mg/L | 12.2 | 2.2 | 18.6 | 8.5 | 11.7 | 1.7 | 1.3 |
| **ED093F: Dissolved Major Cations (GW & SW Dissolved)** | | | | | | | | | |
| Calcium | 0.10 | mg/L | 73.0 | 110 | 70.0 | 40.3 | 56.5 | 28.3 | 38.2 |
| Magnesium | 0.10 | mg/L | 16.6 | 9.09 | 23.0 | 13.0 | 15.1 | 7.90 | 4.62 |
| Potassium | 0.10 | mg/L | 0.69 | 0.73 | 2.58 | 0.39 | 0.55 | 1.46 | 0.99 |
| Sodium | 0.10 | mg/L | 39.0 | 15.6 | 70.7 | 19.1 | 54.3 | 14.7 | 14.0 |
| **EG020F: Dissolved Metals by ICP-MS (GW-Dissolved)** | | | | | | | | | |
| Arsenic | 0.001 | mg/L | 0.004 | <0.001 | 0.003 | <0.001 | <0.001 | 0.001 | 0.02 |
| Cobalt | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.001 | <0.001 |
| Copper | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Iron | 0.05 | mg/L | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.23 | <0.05 |
| Lead | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Manganese | 0.001 | mg/L | 0.08 | 0.15 | 0.10 | 0.15 | 0.19 | 0.16 | 1.06 |
| **EG035F: Dissolved Mercury by CVAFS (GW-Dissolved)** | | | | | | | | | |
| Mercury | 0.0001 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Weak Acid Dissociable Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EN055: Ionic Balance** | | | | | | | | | |
| Ionic Balance | ---- | % | 8.59 | 9.15 | 9.53 | 8.79 | 5.98 | 0.46 | 0.47 |
| Total Anions | 0.01 | mEq/L | 5.66 | 5.77 | 7.05 | 3.29 | 5.71 | 2.28 | 2.46 |
| Total Cations | 0.01 | mEq/L | 6.72 | 6.93 | 8.53 | 3.92 | 6.44 | 2.74 | 2.92 |
| **Turbidity** | | | | | | | | | |
| Turbidity | 0.1 | NTU | 0.85 | 0.50 | 0.80 | 0.65 | 4.4 | 36 | 11 |

Approved by [redacted]
Senior Manager

ALS Lot No. : 2537086
Client : Akara Resources Public Co., Ltd.
Project : CHATREE

## Analytical Results

| | | Client sample ID | GW6805ST13 | GW6805ST15 | GW6805ST22 | GW6805ST18 | GW6805ST20 | GW6805ST21 | RG68056672 |
|---|---|---|---|---|---|---|---|---|---|
| | | Client sampling date / time | 13-May-25 | 12-May-25 | 12-May-25 | 12-May-25 | 13-May-25 | 13-May-25 | 13-May-25 |
| **Compound** | LOR | Unit | **2537086-8** | **2537086-9** | **2537086-10** | **2537086-11** | **2537086-12** | **2537086-13** | **2537086-14** |
| **EA015: Total Dissolved Solids** | | | | | | | | | |
| Total Dissolved solids | 5 | mg/L | 274 | 308 | 340 | 472 | 316 | 284 | 256 |
| **EA065: Total Hardness** | | | | | | | | | |
| Total Hardness | 1 | mg/L | 171 | 197 | 230 | 254 | 245 | 222 | 125 |
| **ED037P: Alkalinity** | | | | | | | | | |
| Bicarbonate Alkalinity | 1 | mg/L | 197 | 132 | 288 | 243 | 228 | 228 | 126 |
| Carbonate Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Hydroxide Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Phenolphthalein Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Total Alkalinity | 1 | mg/L | 197 | 132 | 288 | 243 | 228 | 228 | 126 |
| **ED041G: Sulfate** | | | | | | | | | |
| Sulfate | 1.0 | mg/L | 3.9 | 72.4 | 15.8 | 111 | 1.3 | 28.1 | 32.4 |
| **ED045G: Chloride Discrete analyzer** | | | | | | | | | |
| Chloride | 1.0 | mg/L | 6.4 | 13.3 | 4.9 | 43.0 | 33.8 | 6.5 | <1.0 |
| **ED093F: Dissolved Major Cations (GW & SW Dissolved)** | | | | | | | | | |
| Calcium | 0.10 | mg/L | 51.3 | 64.6 | 70.3 | 75.6 | 67.1 | 65.3 | 30.2 |
| Magnesium | 0.10 | mg/L | 10.7 | 9.47 | 13.4 | 16.4 | 19.2 | 14.6 | 12.0 |
| Potassium | 0.10 | mg/L | 0.59 | 7.36 | 1.09 | 1.45 | 1.07 | 0.38 | 3.41 |
| Sodium | 0.10 | mg/L | 15.3 | 9.11 | 32.8 | 75.4 | 14.0 | 22.5 | 14.5 |
| **EG020F: Dissolved Metals by ICP-MS (GW-Dissolved)** | | | | | | | | | |
| Arsenic | 0.001 | mg/L | <0.001 | 0.001 | 0.003 | <0.001 | <0.001 | 0.002 | 0.002 |
| Cobalt | 0.001 | mg/L | <0.001 | 0.003 | <0.001 | <0.001 | <0.001 | <0.001 | 0.001 |
| Copper | 0.001 | mg/L | <0.001 | <0.001 | 0.003 | <0.001 | <0.001 | <0.001 | <0.001 |
| Iron | 0.05 | mg/L | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.08 |
| Lead | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Manganese | 0.001 | mg/L | 0.27 | 1.19 | 0.44 | 0.002 | 0.20 | 0.008 | 0.28 |
| **EG035F: Dissolved Mercury by CVAFS (GW-Dissolved)** | | | | | | | | | |
| Mercury | 0.0001 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Weak Acid Dissociable Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EN055: Ionic Balance** | | | | | | | | | |
| Ionic Balance | ---- | % | 8.24 | 6.75 | 7.82 | 6.15 | 8.32 | 9.67 | 7.51 |
| Total Anions | 0.01 | mEq/L | 3.49 | 4.01 | 5.19 | 7.46 | 4.71 | 4.49 | 2.76 |
| Total Cations | 0.01 | mEq/L | 4.12 | 4.59 | 6.07 | 8.44 | 5.57 | 5.45 | 3.21 |
| **Turbidity** | | | | | | | | | |
| Turbidity | 0.1 | NTU | 3.4 | 31 | 1.3 | 0.30 | 1.5 | 0.95 | 25 |

Approved by [redacted]
Senior Manager



ALS Lot No. : 2537086
Client : Akara Resources Public Co., Ltd.
Project : CHATREE

## Analytical Results

| | | Client sample ID | RG6805690 | RG6805691 | RG6805692 | RG68054017 | RG68054018 | RG68054021 | RG68054024 |
|---|---|---|---|---|---|---|---|---|---|
| | | Client sampling date / time | 13-May-25 | 13-May-25 | 13-May-25 | 12-May-25 | 12-May-25 | 12-May-25 | 12-May-25 |
| **Compound** | LOR | Unit | **2537086-15** | **2537086-16** | **2537086-17** | **2537086-18** | **2537086-19** | **2537086-21** | **2537086-22** |
| **EA015: Total Dissolved Solids** | | | | | | | | | |
| Total Dissolved solids | 5 | mg/L | 390 | 372 | 228 | 496 | 364 | 218 | 165 |
| **EA065: Total Hardness** | | | | | | | | | |
| Total Hardness | 1 | mg/L | 311 | 294 | 136 | 336 | 253 | 120 | 79 |
| **ED037P: Alkalinity** | | | | | | | | | |
| Bicarbonate Alkalinity | 1 | mg/L | 349 | 369 | 177 | 314 | 253 | 81 | 81 |
| Carbonate Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Hydroxide Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Phenolphthalein Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Total Alkalinity | 1 | mg/L | 349 | 369 | 177 | 314 | 253 | 81 | 81 |
| **ED041G: Sulfate** | | | | | | | | | |
| Sulfate | 1.0 | mg/L | <1.0 | 7.5 | 2.3 | 128 | 33.3 | 37.0 | 26.8 |
| **ED045G: Chloride Discrete analyzer** | | | | | | | | | |
| Chloride | 1.0 | mg/L | <1.0 | 4.3 | <1.0 | 37.3 | 5.7 | 4.6 | 8.8 |
| **ED093F: Dissolved Major Cations (GW & SW Dissolved)** | | | | | | | | | |
| Calcium | 0.10 | mg/L | 94.8 | 74.0 | 34.1 | 103 | 81.7 | 40.3 | 21.9 |
| Magnesium | 0.10 | mg/L | 17.7 | 26.7 | 12.3 | 19.7 | 12.4 | 5.04 | 5.87 |
| Potassium | 0.10 | mg/L | 0.82 | 11.4 | 0.41 | 1.35 | 3.49 | 5.50 | 1.31 |
| Sodium | 0.10 | mg/L | 23.3 | 33.6 | 20.9 | 55.4 | 26.4 | 11.2 | 14.8 |
| **EG020F: Dissolved Metals by ICP-MS (GW-Dissolved)** | | | | | | | | | |
| Arsenic | 0.001 | mg/L | 0.002 | 0.002 | 0.002 | <0.001 | 0.002 | <0.001 | <0.001 |
| Cobalt | 0.001 | mg/L | <0.001 | 0.007 | <0.001 | <0.001 | <0.001 | <0.001 | 0.001 |
| Copper | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.006 | <0.001 |
| Iron | 0.05 | mg/L | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | 0.22 | <0.05 |
| Lead | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Manganese | 0.001 | mg/L | 0.27 | 1.81 | 0.24 | 0.79 | 0.37 | 0.006 | 0.86 |
| **EG035F: Dissolved Mercury by CVAFS (GW-Dissolved)** | | | | | | | | | |
| Mercury | 0.0001 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Weak Acid Dissociable Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EN055: Ionic Balance** | | | | | | | | | |
| Ionic Balance | ---- | % | 11.26 | 9.44 | 10.12 | 2.18 | 11.90 | 15.90 | 0.13 |
| Total Anions | 0.01 | mEq/L | 5.76 | 6.33 | 2.96 | 8.81 | 4.99 | 2.21 | 2.12 |
| Total Cations | 0.01 | mEq/L | 7.22 | 7.65 | 3.63 | 9.20 | 6.33 | 3.05 | 2.25 |
| **Turbidity** | | | | | | | | | |
| Turbidity | 0.1 | NTU | 2.9 | 140 | 8.5 | 2.9 | 3.5 | 95 | 8.3 |

Approved by [redacted]
Senior Manager

# CERTIFICATE OF ANALYSIS

| | | | |
|---|---|---|---|
| **Client** | **Akara Resources Public Co., Ltd.** | **ALS Lot No.** | **2537097** |
| Contact | Yaowanud Chandung | Date Samples Received | May 15, 2025 09:00 AM |
| Address | 99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230 | Issue Date | May 22, 2025 09:58 PM |
| Email | yaowanud@akararesources.com | Quote number | Q2448061(R2) |
| | | Project | CHATREE |
| Telephone | 0-5661-4500 | No. of samples received | 15 |
| Facsimile | 0-5661-4190 | No. of samples analysed | 15 |

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

***General Comments***

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or client request.

When sampling time information is not provided by client, sampling dates are shown without a time component. In this instances, the time component has been assumed by the laboratory for processing purposes.

The results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any from without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

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ALS Lot No. : 2537097
Client : Akara Resources Public Co., Ltd.
Project : CHATREE

## Analytical Results

| | | *Client sample ID* | MS6805678 | MS6805679 | MS68055994 | MS68055997 | MS68056081 | MS68056082 | MS68056083 |
|---|---|---|---|---|---|---|---|---|---|
| | | Client sampling date / time | 13-May-25 | 13-May-25 | 13-May-25 | 13-May-25 | 13-May-25 | 13-May-25 | 13-May-25 |
| **Compound** | LOR | Unit | **2537097-1** | **2537097-2** | **2537097-3** | **2537097-4** | **2537097-5** | **2537097-6** | **2537097-7** |
| **EA015: Total Dissolved Solids** | | | | | | | | | |
| Total Dissolved solids | 5 | mg/L | 276 | 332 | 1892 | 147 | 540 | 1828 | 388 |
| **EA065: Total Hardness** | | | | | | | | | |
| Total Hardness | 1 | mg/L | 127 | 158 | 1542 | 52 | 378 | 1243 | 255 |
| **ED037P: Alkalinity** | | | | | | | | | |
| Bicarbonate Alkalinity | 1 | mg/L | 121 | 111 | 385 | 71 | 20 | 162 | 309 |
| Carbonate Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Hydroxide Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Phenolphthalein Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Total Alkalinity | 1 | mg/L | 121 | 111 | 385 | 71 | 20 | 162 | 309 |
| **ED041G: Sulfate** | | | | | | | | | |
| Sulfate | 1.0 | mg/L | 53.9 | 98.5 | 1299 | 8.5 | 401 | 1210 | 6.5 |
| **ED045G: Chloride Discrete analyzer** | | | | | | | | | |
| Chloride | 1.0 | mg/L | 1.1 | 1.1 | 3.2 | 1.7 | 3.3 | 2.5 | <1.0 |
| **ED093F: Dissolved Major Cations (GW & SW Dissolved)** | | | | | | | | | |
| Calcium | 0.10 | mg/L | 24.5 | 38.4 | 467 | 15.0 | 80.6 | 280 | 82.0 |
| Magnesium | 0.10 | mg/L | 16.0 | 15.1 | 86.0 | 3.61 | 43.6 | 142 | 13.0 |
| Potassium | 0.10 | mg/L | 0.30 | 0.63 | 4.68 | 1.07 | 2.06 | 3.52 | 0.36 |
| Sodium | 0.10 | mg/L | 16.0 | 15.7 | 48.2 | 19.4 | 22.6 | 119 | 27.1 |
| **EG020F: Dissolved Metals by ICP-MS (GW-Dissolved)** | | | | | | | | | |
| Arsenic | 0.001 | mg/L | 0.001 | 0.002 | 0.003 | <0.001 | <0.001 | 0.002 | 0.003 |
| Cobalt | 0.001 | mg/L | <0.001 | 0.009 | <0.001 | <0.001 | <0.001 | 0.003 | <0.001 |
| Copper | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Iron | 0.05 | mg/L | <0.05 | 5.28 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Lead | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Manganese | 0.001 | mg/L | 0.15 | 0.69 | 1.39 | 0.16 | 0.02 | 0.68 | 0.37 |
| **EG035F: Dissolved Mercury by CVAFS (GW-Dissolved)** | | | | | | | | | |
| Mercury | 0.0001 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Weak Acid Dissociable Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EN055: Ionic Balance** | | | | | | | | | |
| Ionic Balance | ---- | % | 1.84 | 0.14 | 0.48 | 0.54 | 0.26 | 6.12 | 9.88 |
| Total Anions | 0.01 | mEq/L | 3.12 | 3.86 | 32.89 | 1.38 | 8.61 | 27.39 | 5.21 |
| Total Cations | 0.01 | mEq/L | 3.24 | 3.85 | 32.58 | 1.92 | 8.65 | 30.96 | 6.35 |
| **Turbidity** | | | | | | | | | |
| Turbidity | 0.1 | NTU | 45 | 45 | 6.1 | 9.4 | 4.8 | 2.2 | 2.0 |

Approved by [redacted]
Senior Manager

ALS Lot No. : 2537097
Client : Akara Resources Public Co., Ltd.
Project : CHATREE

## Analytical Results

| | | Client sample ID | MS68056084 | MS68056647 | MS68056648 | MS68056651 | MS68056652 | MS68056653 | MS68056665 |
|---|---|---|---|---|---|---|---|---|---|
| | | Client sampling date / time | 13-May-25 | 12-May-25 | 12-May-25 | 12-May-25 | 12-May-25 | 12-May-25 | 12-May-25 |
| **Compound** | LOR | Unit | **2537097-8** | **2537097-9** | **2537097-10** | **2537097-11** | **2537097-12** | **2537097-13** | **2537097-14** |
| **EA015: Total Dissolved Solids** | | | | | | | | | |
| Total Dissolved solids | 5 | mg/L | 386 | 368 | 270 | 552 | 408 | 928 | 172 |
| **EA065: Total Hardness** | | | | | | | | | |
| Total Hardness | 1 | mg/L | 284 | 241 | 155 | 405 | 349 | 861 | 66 |
| **ED037P: Alkalinity** | | | | | | | | | |
| Bicarbonate Alkalinity | 1 | mg/L | 344 | 177 | 121 | 238 | 299 | 106 | 76 |
| Carbonate Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Hydroxide Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Phenolphthalein Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Total Alkalinity | 1 | mg/L | 344 | 177 | 121 | 238 | 299 | 106 | 76 |
| **ED041G: Sulfate** | | | | | | | | | |
| Sulfate | 1.0 | mg/L | 5.1 | 110 | 51.0 | 213 | 54.3 | 795 | 20.2 |
| **ED045G: Chloride Discrete analyzer** | | | | | | | | | |
| Chloride | 1.0 | mg/L | <1.0 | 2.5 | 1.5 | 2.4 | 3.3 | 3.9 | 2.2 |
| **ED093F: Dissolved Major Cations (GW & SW Dissolved)** | | | | | | | | | |
| Calcium | 0.10 | mg/L | 71.6 | 75.4 | 46.5 | 117 | 112 | 167 | 20.1 |
| Magnesium | 0.10 | mg/L | 26.0 | 13.6 | 9.69 | 27.8 | 17.8 | 110 | 3.75 |
| Potassium | 0.10 | mg/L | 0.20 | 2.88 | 1.85 | 4.58 | 3.27 | 13.4 | 1.46 |
| Sodium | 0.10 | mg/L | 32.3 | 12.2 | 12.1 | 12.9 | 10.2 | 8.18 | 17.8 |
| **EG020F: Dissolved Metals by ICP-MS (GW-Dissolved)** | | | | | | | | | |
| Arsenic | 0.001 | mg/L | 0.001 | <0.001 | <0.001 | 0.002 | 0.003 | <0.001 | 0.002 |
| Cobalt | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | 0.001 |
| Copper | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | 0.001 | <0.001 | <0.001 |
| Iron | 0.05 | mg/L | <0.05 | <0.05 | 0.06 | <0.05 | <0.05 | 0.07 | <0.05 |
| Lead | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Manganese | 0.001 | mg/L | 0.23 | 0.68 | 0.47 | 1.13 | 0.63 | 4.45 | 0.29 |
| **EG035F: Dissolved Mercury by CVAFS (GW-Dissolved)** | | | | | | | | | |
| Mercury | 0.0001 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Weak Acid Dissociable Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EN055: Ionic Balance** | | | | | | | | | |
| Ionic Balance | ---- | % | 10.52 | 2.54 | 9.14 | 2.89 | 10.81 | 0.08 | 0.41 |
| Total Anions | 0.01 | mEq/L | 5.77 | 5.21 | 3.07 | 8.31 | 6.09 | 18.07 | 1.72 |
| Total Cations | 0.01 | mEq/L | 7.12 | 5.49 | 3.69 | 8.81 | 7.57 | 18.09 | 2.12 |
| **Turbidity** | | | | | | | | | |
| Turbidity | 0.1 | NTU | 7.0 | 16 | 16 | 31 | 28 | 140 | 13 |

Approved by [redacted]
Senior Manager



ALS Lot No. : 2537097
Client : Akara Resources Public Co., Ltd.
Project : CHATREE

## Analytical Results

| | | Client sample ID | MS68056666 | ---- | ---- | ---- | ---- | ---- | ---- |
|---|---|---|---|---|---|---|---|---|---|
| | | Client sampling date / time | 12-May-25 | ---- | ---- | ---- | ---- | ---- | ---- |
| **Compound** | LOR | Unit | **2537097-15** | ---- | ---- | ---- | ---- | ---- | ---- |
| **EA015: Total Dissolved Solids** | | | | | | | | | |
| Total Dissolved solids | 5 | mg/L | 252 | ---- | ---- | ---- | ---- | ---- | ---- |
| **EA065: Total Hardness** | | | | | | | | | |
| Total Hardness | 1 | mg/L | 153 | ---- | ---- | ---- | ---- | ---- | ---- |
| **ED037P: Alkalinity** | | | | | | | | | |
| Bicarbonate Alkalinity | 1 | mg/L | 157 | ---- | ---- | ---- | ---- | ---- | ---- |
| Carbonate Alkalinity | 1 | mg/L | <1 | ---- | ---- | ---- | ---- | ---- | ---- |
| Hydroxide Alkalinity | 1 | mg/L | <1 | ---- | ---- | ---- | ---- | ---- | ---- |
| Phenolphthalein Alkalinity | 1 | mg/L | <1 | ---- | ---- | ---- | ---- | ---- | ---- |
| Total Alkalinity | 1 | mg/L | 157 | ---- | ---- | ---- | ---- | ---- | ---- |
| **ED041G: Sulfate** | | | | | | | | | |
| Sulfate | 1.0 | mg/L | 18.6 | ---- | ---- | ---- | ---- | ---- | ---- |
| **ED045G: Chloride Discrete analyzer** | | | | | | | | | |
| Chloride | 1.0 | mg/L | 1.5 | ---- | ---- | ---- | ---- | ---- | ---- |
| **ED093F: Dissolved Major Cations (GW & SW Dissolved)** | | | | | | | | | |
| Calcium | 0.10 | mg/L | 49.2 | ---- | ---- | ---- | ---- | ---- | ---- |
| Magnesium | 0.10 | mg/L | 7.57 | ---- | ---- | ---- | ---- | ---- | ---- |
| Potassium | 0.10 | mg/L | 2.01 | ---- | ---- | ---- | ---- | ---- | ---- |
| Sodium | 0.10 | mg/L | 13.9 | ---- | ---- | ---- | ---- | ---- | ---- |
| **EG020F: Dissolved Metals by ICP-MS (GW-Dissolved)** | | | | | | | | | |
| Arsenic | 0.001 | mg/L | 0.003 | ---- | ---- | ---- | ---- | ---- | ---- |
| Cobalt | 0.001 | mg/L | <0.001 | ---- | ---- | ---- | ---- | ---- | ---- |
| Copper | 0.001 | mg/L | <0.001 | ---- | ---- | ---- | ---- | ---- | ---- |
| Iron | 0.05 | mg/L | <0.05 | ---- | ---- | ---- | ---- | ---- | ---- |
| Lead | 0.001 | mg/L | <0.001 | ---- | ---- | ---- | ---- | ---- | ---- |
| Manganese | 0.001 | mg/L | 0.47 | ---- | ---- | ---- | ---- | ---- | ---- |
| **EG035F: Dissolved Mercury by CVAFS (GW-Dissolved)** | | | | | | | | | |
| Mercury | 0.0001 | mg/L | <0.0001 | ---- | ---- | ---- | ---- | ---- | ---- |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Cyanide | 0.002 | mg/L | <0.002 | ---- | ---- | ---- | ---- | ---- | ---- |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Weak Acid Dissociable Cyanide | 0.002 | mg/L | <0.002 | ---- | ---- | ---- | ---- | ---- | ---- |
| **EN055: Ionic Balance** | | | | | | | | | |
| Ionic Balance | ---- | % | 11.04 | ---- | ---- | ---- | ---- | ---- | ---- |
| Total Anions | 0.01 | mEq/L | 2.99 | ---- | ---- | ---- | ---- | ---- | ---- |
| Total Cations | 0.01 | mEq/L | 3.74 | ---- | ---- | ---- | ---- | ---- | ---- |
| **Turbidity** | | | | | | | | | |
| Turbidity | 0.1 | NTU | 3.6 | ---- | ---- | ---- | ---- | ---- | ---- |

Approved by [redacted]
Senior Manager

# CERTIFICATE OF ANALYSIS

| | | | |
|---|---|---|---|
| **Client** | **Akara Resources Public Co., Ltd.** | **ALS Lot No.** | **2537103** |
| Contact | Yaowanud Chandung | Date Samples Received | May 16, 2025 12:00 PM |
| Address | 99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230 | Issue Date | May 30, 2025 08:46 AM |
| Email | yaowanud@akararesources.com | Quote number | Q2448061(R2) |
| | | Project | CHATREE |
| Telephone | 0-5661-4500 | No. of samples received | 29 |
| Facsimile | 0-5661-4190 | No. of samples analysed | 29 |

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

***General Comments***

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or client request.

When sampling time information is not provided by client, sampling dates are shown without a time component. In this instances, the time component has been assumed by the laboratory for processing purposes.

The results are valid only for the analyzed/tested sample(s) as indicated in this report. No part of this report or certificate may be reproduced in any from without written consent from the Laboratory. ALS Laboratory Group (Thailand) strongly recommends that this report is not reproduced except in full.

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ALS Lot No. : 2537103
Client : Akara Resources Public Co., Ltd.
Project : CHATREE

## *Analytical Results*

| | | *Client sample ID* | MS68055991 | MS68055992 | TSF6805663 | TSF6805699 | TSF68051991 | TSF68051992 | TSF68055350 |
|---|---|---|---|---|---|---|---|---|---|
| | | Client sampling date / time | 14-May-25 | 14-May-25 | 14-May-25 | 14-May-25 | 14-May-25 | 14-May-25 | 14-May-25 |
| **Compound** | LOR | Unit | **2537103-1** | **2537103-2** | **2537103-3** | **2537103-4** | **2537103-5** | **2537103-6** | **2537103-7** |
| **EA015: Total Dissolved Solids** | | | | | | | | | |
| Total Dissolved solids | 5 | mg/L | 143 | 262 | 1004 | 1308 | 968 | 752 | 1452 |
| **EA065: Total Hardness** | | | | | | | | | |
| Total Hardness | 1 | mg/L | 100 | 196 | 741 | 1040 | 669 | 508 | 1143 |
| **ED037P: Alkalinity** | | | | | | | | | |
| Bicarbonate Alkalinity | 1 | mg/L | 106 | 207 | 288 | 314 | 380 | 445 | 228 |
| Carbonate Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | 10.00 |
| Hydroxide Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Phenolphthalein Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | 5 |
| Total Alkalinity | 1 | mg/L | 106 | 207 | 288 | 314 | 380 | 445 | 238 |
| **ED041G: Sulfate** | | | | | | | | | |
| Sulfate | 1.0 | mg/L | 26.7 | 6.5 | 497 | 803 | 325 | 132 | 1066 |
| **ED045G: Chloride Discrete analyzer** | | | | | | | | | |
| Chloride | 1.0 | mg/L | 4.2 | 1.2 | 25.4 | 20.1 | 8.4 | 4.9 | 8.2 |
| **ED093F: Dissolved Major Cations (GW & SW Dissolved)** | | | | | | | | | |
| Calcium | 0.10 | mg/L | 33.8 | 70.3 | 235 | 225 | 193 | 124 | 261 |
| Magnesium | 0.10 | mg/L | 3.85 | 4.99 | 39.7 | 122 | 51.2 | 48.2 | 124 |
| Potassium | 0.10 | mg/L | 0.43 | 0.36 | 2.09 | 0.96 | 0.97 | 0.55 | 3.96 |
| Sodium | 0.10 | mg/L | 16.1 | 8.92 | 31.3 | 54.7 | 43.9 | 65.2 | 61.2 |
| **EG020F: Dissolved Metals by ICP-MS (GW-Dissolved)** | | | | | | | | | |
| Arsenic | 0.001 | mg/L | 0.001 | 0.002 | <0.001 | <0.001 | 0.003 | 0.003 | 0.001 |
| Cobalt | 0.001 | mg/L | <0.001 | 0.003 | <0.001 | <0.001 | <0.001 | <0.001 | 0.002 |
| Copper | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Iron | 0.05 | mg/L | <0.05 | 0.06 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Lead | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Manganese | 0.001 | mg/L | 0.16 | 0.76 | 1.77 | 0.29 | 1.30 | 0.17 | 1.92 |
| **EG035F: Dissolved Mercury by CVAFS (GW-Dissolved)** | | | | | | | | | |
| Mercury | 0.0001 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Weak Acid Dissociable Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EN055: Ionic Balance** | | | | | | | | | |
| Ionic Balance | ---- | % | 0.31 | 9.48 | 2.54 | 3.56 | 9.43 | 12.46 | 0.58 |
| Total Anions | 0.01 | mEq/L | 2.40 | 3.57 | 15.59 | 22.08 | 13.07 | 10.12 | 25.69 |
| Total Cations | 0.01 | mEq/L | 2.72 | 4.31 | 16.40 | 23.71 | 15.80 | 13.00 | 25.99 |
| **Turbidity** | | | | | | | | | |
| Turbidity | 0.1 | NTU | 18 | 20 | 2.0 | 13 | 1.2 | 2.4 | 1.9 |

Approved by [redacted]

Senior Manager

MM-N12 ปี 10/119

ALS Lot No. : 2537103
Client : Akara Resources Public Co., Ltd.
Project : CHATREE

## Analytical Results

| | | Client sample ID | TSF68055351 | TSF68055249 | TSF68056534 | TSF68055332 | TSF68055336 | TSF68056691 | TSF68055338 |
|---|---|---|---|---|---|---|---|---|---|
| | | Client sampling date / time | 14-May-25 | 14-May-25 | 14-May-25 | 14-May-25 | 14-May-25 | 14-May-25 | 14-May-25 |
| **Compound** | LOR | Unit | **2537103-8** | **2537103-9** | **2537103-10** | **2537103-11** | **2537103-12** | **2537103-13** | **2537103-14** |
| **EA015: Total Dissolved Solids** | | | | | | | | | |
| Total Dissolved solids | 5 | mg/L | 2395 | 458 | 415 | 460 | 392 | 448 | 442 |
| **EA065: Total Hardness** | | | | | | | | | |
| Total Hardness | 1 | mg/L | 2052 | 314 | 307 | 254 | 247 | 312 | 281 |
| **ED037P: Alkalinity** | | | | | | | | | |
| Bicarbonate Alkalinity | 1 | mg/L | 48 | 293 | 278 | 66 | 248 | 273 | 202 |
| Carbonate Alkalinity | 1 | mg/L | <1 | 10.00 | <1 | <1 | 20.00 | <1 | <1 |
| Hydroxide Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Phenolphthalein Alkalinity | 1 | mg/L | <1 | 5 | <1 | <1 | 10 | <1 | <1 |
| Total Alkalinity | 1 | mg/L | 48 | 304 | 278 | 66 | 268 | 273 | 202 |
| **ED041G: Sulfate** | | | | | | | | | |
| Sulfate | 1.0 | mg/L | 2121 | 34.9 | 30.1 | 271 | 33.9 | 96.7 | 124 |
| **ED045G: Chloride Discrete analyzer** | | | | | | | | | |
| Chloride | 1.0 | mg/L | 4.9 | 7.3 | 4.5 | 8.9 | 1.7 | 3.7 | 4.1 |
| **ED093F: Dissolved Major Cations (GW & SW Dissolved)** | | | | | | | | | |
| Calcium | 0.10 | mg/L | 380 | 115 | 112 | 63.9 | 80.3 | 102 | 90.0 |
| Magnesium | 0.10 | mg/L | 273 | 6.34 | 6.44 | 22.9 | 11.4 | 13.9 | 13.7 |
| Potassium | 0.10 | mg/L | 6.11 | 0.74 | 0.71 | 0.59 | 0.65 | 1.36 | 1.30 |
| Sodium | 0.10 | mg/L | 41.8 | 12.2 | 12.3 | 27.8 | 18.2 | 23.3 | 20.8 |
| **EG020F: Dissolved Metals by ICP-MS (GW-Dissolved)** | | | | | | | | | |
| Arsenic | 0.001 | mg/L | <0.001 | 0.003 | 0.003 | <0.001 | 0.007 | 0.07 | 0.01 |
| Cobalt | 0.001 | mg/L | 0.005 | <0.001 | <0.001 | 0.004 | <0.001 | <0.001 | <0.001 |
| Copper | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Iron | 0.05 | mg/L | 3.11 | <0.05 | <0.05 | 0.36 | <0.05 | <0.05 | <0.05 |
| Lead | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Manganese | 0.001 | mg/L | 0.81 | 0.66 | 0.25 | 0.50 | 0.02 | 1.25 | 1.20 |
| **EG035F: Dissolved Mercury by CVAFS (GW-Dissolved)** | | | | | | | | | |
| Mercury | 0.0001 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Weak Acid Dissociable Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EN055: Ionic Balance** | | | | | | | | | |
| Ionic Balance | ---- | % | 0.88 | 8.80 | 11.58 | 4.26 | 8.99 | 5.28 | 4.71 |
| Total Anions | 0.01 | mEq/L | 44.18 | 5.73 | 5.30 | 6.86 | 4.80 | 6.55 | 5.97 |
| Total Cations | 0.01 | mEq/L | 43.41 | 6.83 | 6.69 | 6.29 | 5.75 | 7.28 | 6.56 |
| **Turbidity** | | | | | | | | | |
| Turbidity | 0.1 | NTU | 95 | 5.4 | 14 | 5.4 | 1.5 | 50 | 40 |

Approved by [redacted]
Senior Manager



ALS Lot No. : 2537103
Client : Akara Resources Public Co., Ltd.
Project : CHATREE

## Analytical Results

| | | Client sample ID | TSF68056467 | TSF68056468 | TSF68056472 | TSF68056473 | TSF68056655 | TSF68056656 | TSF68056657 |
|---|---|---|---|---|---|---|---|---|---|
| | | Client sampling date / time | 14-May-25 | 14-May-25 | 14-May-25 | 14-May-25 | 14-May-25 | 14-May-25 | 14-May-25 |
| **Compound** | LOR | Unit | **2537103-16** | **2537103-17** | **2537103-18** | **2537103-19** | **2537103-20** | **2537103-21** | **2537103-22** |
| **EA015: Total Dissolved Solids** | | | | | | | | | |
| Total Dissolved solids | 5 | mg/L | 1820 | 2965 | 285 | 816 | 145 | 30 | 358 |
| **EA065: Total Hardness** | | | | | | | | | |
| Total Hardness | 1 | mg/L | 1359 | 1792 | 225 | 526 | 70 | 11 | 246 |
| **ED037P: Alkalinity** | | | | | | | | | |
| Bicarbonate Alkalinity | 1 | mg/L | 213 | 91 | 243 | 33 | 91 | 18 | 218 |
| Carbonate Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | 10.00 |
| Hydroxide Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Phenolphthalein Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | 5 |
| Total Alkalinity | 1 | mg/L | 213 | 91 | 243 | 33 | 91 | 18 | 228 |
| **ED041G: Sulfate** | | | | | | | | | |
| Sulfate | 1.0 | mg/L | 1268 | 2026 | 20.8 | 527 | 8.1 | 1.3 | 46.2 |
| **ED045G: Chloride Discrete analyzer** | | | | | | | | | |
| Chloride | 1.0 | mg/L | 7.4 | 82.6 | <1.0 | 8.1 | 1.0 | 1.3 | <1.0 |
| **ED093F: Dissolved Major Cations (GW & SW Dissolved)** | | | | | | | | | |
| Calcium | 0.10 | mg/L | 437 | 413 | 74.7 | 129 | 21.4 | 3.88 | 83.2 |
| Magnesium | 0.10 | mg/L | 63.2 | 185 | 9.33 | 49.8 | 3.96 | 0.37 | 9.17 |
| Potassium | 0.10 | mg/L | 3.87 | 20.0 | 0.80 | 1.17 | 1.13 | 0.12 | 2.13 |
| Sodium | 0.10 | mg/L | 51.1 | 148 | 16.8 | 31.5 | 7.46 | 3.23 | 15.5 |
| **EG020F: Dissolved Metals by ICP-MS (GW-Dissolved)** | | | | | | | | | |
| Arsenic | 0.001 | mg/L | <0.001 | <0.001 | 0.004 | <0.001 | <0.001 | <0.001 | 0.001 |
| Cobalt | 0.001 | mg/L | 0.003 | 0.02 | 0.001 | <0.001 | <0.001 | <0.001 | 0.003 |
| Copper | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Iron | 0.05 | mg/L | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Lead | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Manganese | 0.001 | mg/L | 4.20 | 9.43 | 0.37 | 0.22 | 0.12 | 0.03 | 0.78 |
| **EG035F: Dissolved Mercury by CVAFS (GW-Dissolved)** | | | | | | | | | |
| Mercury | 0.0001 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Weak Acid Dissociable Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EN055: Ionic Balance** | | | | | | | | | |
| Ionic Balance | ---- | % | 0.36 | 2.71 | 8.47 | 1.70 | 0.06 | 0.01 | 10.97 |
| Total Anions | 0.01 | mEq/L | 29.55 | 45.14 | 4.43 | 11.51 | 1.69 | 0.35 | 4.52 |
| Total Cations | 0.01 | mEq/L | 29.34 | 42.76 | 5.25 | 11.91 | 1.75 | 0.37 | 5.64 |
| **Turbidity** | | | | | | | | | |
| Turbidity | 0.1 | NTU | 2.8 | 0.75 | 11 | 2.6 | 9.1 | 8.0 | 8.1 |

Approved by [redacted]
Senior Manager

ALS Lot No. : 2537103
Client : Akara Resources Public Co., Ltd.
Project : CHATREE

## Analytical Results

| | | Client sample ID | TSF68056658 | TSF68056659 | TSF68056660 | TSF68056661 | TSF68056662 | TSF68056663 | TSF68056664 |
|---|---|---|---|---|---|---|---|---|---|
| | | Client sampling date / time | 14-May-25 | 14-May-25 | 14-May-25 | 14-May-25 | 14-May-25 | 14-May-25 | 14-May-25 |
| **Compound** | LOR | Unit | **2537103-23** | **2537103-24** | **2537103-25** | **2537103-26** | **2537103-27** | **2537103-28** | **2537103-29** |
| **EA015: Total Dissolved Solids** | | | | | | | | | |
| Total Dissolved solids | 5 | mg/L | 828 | 402 | 340 | 290 | 66 | 230 | 238 |
| **EA065: Total Hardness** | | | | | | | | | |
| Total Hardness | 1 | mg/L | 554 | 263 | 227 | 211 | 9 | 129 | 131 |
| **ED037P: Alkalinity** | | | | | | | | | |
| Bicarbonate Alkalinity | 1 | mg/L | 56 | 253 | 218 | 233 | 51 | 162 | 172 |
| Carbonate Alkalinity | 1 | mg/L | <1 | 10.00 | 10.00 | 20.00 | <1 | <1 | <1 |
| Hydroxide Alkalinity | 1 | mg/L | <1 | <1 | <1 | <1 | <1 | <1 | <1 |
| Phenolphthalein Alkalinity | 1 | mg/L | <1 | 5 | 5 | 10 | <1 | <1 | <1 |
| Total Alkalinity | 1 | mg/L | 56 | 263 | 228 | 253 | 51 | 162 | 172 |
| **ED041G: Sulfate** | | | | | | | | | |
| Sulfate | 1.0 | mg/L | 583 | 58.7 | 41.6 | 3.2 | 1.6 | 2.1 | 1.9 |
| **ED045G: Chloride Discrete analyzer** | | | | | | | | | |
| Chloride | 1.0 | mg/L | <1.0 | 1.4 | <1.0 | 2.8 | <1.0 | <1.0 | <1.0 |
| **ED093F: Dissolved Major Cations (GW & SW Dissolved)** | | | | | | | | | |
| Calcium | 0.10 | mg/L | 147 | 86.8 | 78.6 | 73.3 | 2.87 | 40.6 | 39.2 |
| Magnesium | 0.10 | mg/L | 45.3 | 11.2 | 7.60 | 6.86 | 0.45 | 6.62 | 8.08 |
| Potassium | 0.10 | mg/L | 6.69 | 0.94 | 0.94 | 0.68 | 0.30 | 1.55 | 1.72 |
| Sodium | 0.10 | mg/L | 46.0 | 27.9 | 16.3 | 16.9 | 17.9 | 12.6 | 13.1 |
| **EG020F: Dissolved Metals by ICP-MS (GW-Dissolved)** | | | | | | | | | |
| Arsenic | 0.001 | mg/L | <0.001 | 0.005 | 0.004 | 0.004 | <0.001 | <0.001 | <0.001 |
| Cobalt | 0.001 | mg/L | 0.03 | <0.001 | <0.001 | <0.001 | <0.001 | 0.002 | 0.003 |
| Copper | 0.001 | mg/L | 0.007 | 0.005 | <0.001 | 0.005 | 0.003 | <0.001 | <0.001 |
| Iron | 0.05 | mg/L | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 | <0.05 |
| Lead | 0.001 | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 |
| Manganese | 0.001 | mg/L | 3.08 | 0.09 | 0.19 | 0.25 | 0.04 | 0.36 | 0.48 |
| **EG035F: Dissolved Mercury by CVAFS (GW-Dissolved)** | | | | | | | | | |
| Mercury | 0.0001 | mg/L | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.0001 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Weak Acid Dissociable Cyanide | 0.002 | mg/L | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 | <0.002 |
| **EN055: Ionic Balance** | | | | | | | | | |
| Ionic Balance | ---- | % | 1.68 | 9.35 | 8.68 | 11.33 | 0.09 | 7.66 | 5.90 |
| Total Anions | 0.01 | mEq/L | 12.80 | 5.38 | 4.44 | 3.96 | 0.87 | 2.71 | 2.88 |
| Total Cations | 0.01 | mEq/L | 13.24 | 6.49 | 5.28 | 4.97 | 0.97 | 3.16 | 3.24 |
| **Turbidity** | | | | | | | | | |
| Turbidity | 0.1 | NTU | 0.80 | 0.95 | 1.8 | 3.1 | 1.2 | 16 | 27 |

Approved by [redacted]
Senior Manager



ALS Lot No. : 2537103
Client : Akara Resources Public Co., Ltd.
Project : CHATREE

## Analytical Results

| | | Client sample ID | 6805DC2 | ---- | ---- | ---- | ---- | ---- | ---- |
|---|---|---|---|---|---|---|---|---|---|
| | | Client sampling date / time | 15-May-25 | ---- | ---- | ---- | ---- | ---- | ---- |
| **Compound** | LOR | Unit | **2537103-30** | **----** | **----** | **----** | **----** | **----** | **----** |
| **EA015: Total Dissolved Solids** | | | | | | | | | |
| Total Dissolved solids | 5 | mg/L | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| **EA065: Total Hardness** | | | | | | | | | |
| Total Hardness | 1 | mg/L | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| **ED037P: Alkalinity** | | | | | | | | | |
| Bicarbonate Alkalinity | 1 | mg/L | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Carbonate Alkalinity | 1 | mg/L | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Hydroxide Alkalinity | 1 | mg/L | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Phenolphthalein Alkalinity | 1 | mg/L | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Total Alkalinity | 1 | mg/L | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| **ED041G: Sulfate** | | | | | | | | | |
| Sulfate | 1.0 | mg/L | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| **ED045G: Chloride Discrete analyzer** | | | | | | | | | |
| Chloride | 1.0 | mg/L | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| **ED093F: Dissolved Major Cations (GW & SW Dissolved)** | | | | | | | | | |
| Calcium | 0.10 | mg/L | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Magnesium | 0.10 | mg/L | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Potassium | 0.10 | mg/L | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Sodium | 0.10 | mg/L | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| **EG020F: Dissolved Metals by ICP-MS (GW-Dissolved)** | | | | | | | | | |
| Arsenic | 0.001 | mg/L | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Cobalt | 0.001 | mg/L | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Copper | 0.001 | mg/L | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Iron | 0.05 | mg/L | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Lead | 0.001 | mg/L | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Manganese | 0.001 | mg/L | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| **EG035F: Dissolved Mercury by CVAFS (GW-Dissolved)** | | | | | | | | | |
| Mercury | 0.0001 | mg/L | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Cyanide | 0.002 | mg/L | <0.002 | ---- | ---- | ---- | ---- | ---- | ---- |
| **EK025G: Cyanide Discrete analyzer** | | | | | | | | | |
| Weak Acid Dissociable Cyanide | 0.002 | mg/L | <0.002 | ---- | ---- | ---- | ---- | ---- | ---- |
| **EN055: Ionic Balance** | | | | | | | | | |
| Ionic Balance | ---- | % | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Total Anions | 0.01 | mEq/L | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| Total Cations | 0.01 | mEq/L | ---- | ---- | ---- | ---- | ---- | ---- | ---- |
| **Turbidity** | | | | | | | | | |
| Turbidity | 0.1 | NTU | ---- | ---- | ---- | ---- | ---- | ---- | ---- |

Approved by [redacted]
Senior Manager

# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2532667**
Date Received :Apr 04, 2025
Date Reported :Apr 12, 2025
Report Number :3276285-1



| | |
|---|---|
| **Sample Number** | 2532667-1 |
| **Sampled Date** | Apr 03, 2025 4:00 PM |
| **Sample Description** | Waste water |
| **Location** | 6804DC2 |
| **Date Analysis Commenced** | Apr 05, 2025 |
| **Condition of Sample** | Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Cyanide as CN | mg/L | 0.002 | 0.005 | Not Detected | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - CN (C, E) | Bangkok |
| Weak Acid Dissociable Cyanide | mg/L | 0.002 | 0.005 | Not Detected | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-CN (I) | Bangkok |

Remark :
- LOD : Limit of Detection
- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

**Approved by** [redacted]

[redacted]
Specialist 2

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.

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ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company

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# Analysis / Test Report

TESTING
No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2522673**
Date Received : Mar 07, 2025
Date Reported : Mar 15, 2025
Report Number : 3252841-1



| | |
|---|---|
| **Sample Number** | 2522673-1 |
| **Sampled Date** | Mar 07, 2025 4:00 PM |
| **Sample Description** | ไซยาไนด์ DC2 |
| **Location** | 6803DC2 |
| **Date Analysis Commenced** | Mar 10, 2025 |
| **Condition of Sample** | Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Cyanide as CN | mg/L | 0.002 | 0.005 | <0.005 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - CN (C, E) | Bangkok |
| Weak Acid Dissociable Cyanide * | mg/L | 0.002 | 0.005 | <0.005 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-CN (I) | Bangkok |

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.
- 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** [redacted]
Scientist (3)

ADDRESS 104 Phatthanakan 40, Phatthanakan Rd., Khwaeng Phatthanakan, Khet Suan Luang, Bangkok 10250 Thailand | PHONE +66 0 2760 3000 | FAX +66 0 2760 3197
ALS LABORATORY GROUP (THAILAND) CO., LTD. An ALS Limited Company
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# Analysis / Test Report

TESTING
No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2510865**
Date Received : Feb 07, 2025
Date Reported : Feb 21, 2025
Report Number : 3225773-1



| | |
|---|---|
| **Sample Number** | 2510865-1 |
| **Sampled Date** | Feb 06, 2025 1:28 PM |
| **Sample Description** | Wastewater |
| **Location** | 6802SP |
| **Date Analysis Commenced** | Feb 08, 2025 |
| **Condition of Sample** | Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Metals Testing** | | | | | | |
| Aluminium | mg/L | 0.003 | 0.005 | 0.006 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Antimony | mg/L | 0.0003 | 0.0005 | Not Detected | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Arsenic | mg/L | 0.0003 | 0.0005 | 0.002 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Barium | mg/L | 0.0003 | 0.0005 | 0.02 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Boron | mg/L | 0.003 | 0.005 | 0.55 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Cadmium | mg/L | 0.0003 | 0.0005 | 0.0006 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Calcium | mg/L | 0.03 | 0.05 | 451 | In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7 | Bangkok |
| Chromium | mg/L | 0.0003 | 0.0005 | Not Detected | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Cobalt | mg/L | 0.0003 | 0.0005 | 0.007 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Copper | mg/L | 0.0003 | 0.0005 | Not Detected | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Iron | mg/L | 0.003 | 0.005 | 4.33 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Lead | mg/L | 0.0003 | 0.0005 | Not Detected | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |

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**Approved by** [redacted]
Manager

# Analysis / Test Report

LABORATORY ACCREDITATION BLA-DSS TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2510865**
Date Received : Feb 07, 2025
Date Reported : Feb 21, 2025
Report Number : 3225773-1



| | |
|---|---|
| **Sample Number** | 2510865-1 |
| **Sampled Date** | Feb 06, 2025 1:28 PM |
| **Sample Description** | Wastewater |
| **Location** | 6802SP |
| **Date Analysis Commenced** | Feb 08, 2025 |
| **Condition of Sample** | Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Metals Testing** | | | | | | |
| Magnesium | mg/L | 0.03 | 0.05 | 55.9 | In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7 | Bangkok |
| Manganese | mg/L | 0.0003 | 0.0005 | 4.45 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Mercury | mg/L | 0.0001 | 0.0005 | Not Detected | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3112 | Bangkok |
| Molybdenum | mg/L | 0.0003 | 0.0005 | 0.07 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Nickel | mg/L | 0.0003 | 0.0005 | 0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Potassium | mg/L | 0.03 | 0.05 | 42.8 | In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7 | Bangkok |
| Selenium | mg/L | 0.0003 | 0.0005 | Not Detected | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Silver | mg/L | 0.0003 | 0.0005 | Not Detected | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Sodium | mg/L | 0.03 | 0.05 | 209 | In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7 | Bangkok |
| Zinc | mg/L | 0.003 | 0.005 | <0.005 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| **Water Testing** | | | | | | |
| Ammonia Nitrogen * | mg/L | - | 0.06 | 7.99 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-NH3 (B, F) | Bangkok |

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** [redacted]
Manager

# Analysis / Test Report

LABORATORY ACCREDITATION BLA-DSS
TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2510865**
Date Received : Feb 07, 2025
Date Reported : Feb 21, 2025
Report Number : 3225773-1



| | |
|---|---|
| **Sample Number** | 2510865-1 |
| **Sampled Date** | Feb 06, 2025 1:28 PM |
| **Sample Description** | Wastewater |
| **Location** | 6802SP |
| **Date Analysis Commenced** | Feb 08, 2025 |
| **Condition of Sample** | Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Bicarbonate Alkalinity as CaCO3 * | mg/L | - | 1 | 197 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Carbonate Alkalinity as CaCO3 * | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Carbonate Hardness as CaCO3 * | mg/L | - | 1 | 197 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Chloride * | mg/L | 0.15 | 0.5 | 32.8 | ISE Application | Bangkok |
| Cyanide as CN | mg/L | 0.002 | 0.005 | Not Detected | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - CN (C, E) | Bangkok |
| Hydroxide Alkalinity as CaCO3 * | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Nitrate as N * | mg/L | 0.06 | 0.2 | Not Detected | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-NO3 E | Bangkok |
| Non-Carbonate Hardness as CaCO3 * | mg/L | - | 1 | 1109 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Phenolphthalein Alkalinity as CaCO3 * | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Phosphate as P * | mg/L | 0.005 | 0.01 | Not Detected | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-P (E) | Bangkok |
| Residual Alkalinity * | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |

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** [redacted]
Manager

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# Analysis / Test Report

LABORATORY ACCREDITATION BLA-DSS
TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2510865**
Date Received : Feb 07, 2025
Date Reported : Feb 21, 2025
Report Number : 3225773-1



| | |
|---|---|
| **Sample Number** | 2510865-1 |
| **Sampled Date** | Feb 06, 2025 1:28 PM |
| **Sample Description** | Wastewater |
| **Location** | 6802SP |
| **Date Analysis Commenced** | Feb 08, 2025 |
| **Condition of Sample** | Contained in two glass vials and four plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Sulfate * | mg/L | 0.5 | 2 | 1444 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-SO4 (E) | Bangkok |
| Total Alkalinity as CaCO3 * | mg/L | - | 1 | 197 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Total Dissolved solids Dried at 180 degree C | mg/L | - | 5 | 2276 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C | Bangkok |
| Total Hardness as CaCO3 * | mg/L | - | 1 | 1305 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2340 C | Bangkok |
| Total Organic Carbon * | mg/L | 0.03 | 0.1 | 1.51 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B | Bangkok |
| Total Suspended Solids Dried at 103-105 degree C | mg/L | - | 5 | 10 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D | Bangkok |
| Weak Acid Dissociable Cyanide * | mg/L | 0.002 | 0.005 | Not Detected | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-CN (I) | Bangkok |

**Sampling By :** Theeraphol Sangthong

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.
-

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** [redacted]
Manager

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# Analysis / Test Report

TESTING
No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2510865**
Date Received : Feb 07, 2025
Date Reported : Feb 21, 2025
Report Number : 3225773-1



| | |
|---|---|
| **Sample Number** | 2510865-2 |
| **Sampled Date** | Feb 06, 2025 1:20 PM |
| **Sample Description** | Wastewater |
| **Location** | 6802UD |
| **Date Analysis Commenced** | Feb 08, 2025 |
| **Condition of Sample** | Contained in two glass vials and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Metals Testing** | | | | | | |
| Aluminium | mg/L | 0.003 | 0.005 | 0.02 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Antimony | mg/L | 0.0003 | 0.0005 | Not Detected | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Arsenic | mg/L | 0.0003 | 0.0005 | 0.0008 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Barium | mg/L | 0.0003 | 0.0005 | 0.04 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Boron | mg/L | 0.003 | 0.005 | 0.33 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Cadmium | mg/L | 0.0003 | 0.0005 | 0.0006 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Calcium | mg/L | 0.03 | 0.05 | 501 | In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7 | Bangkok |
| Chromium | mg/L | 0.0003 | 0.0005 | Not Detected | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Cobalt | mg/L | 0.0003 | 0.0005 | 0.02 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Copper | mg/L | 0.0003 | 0.0005 | Not Detected | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Iron | mg/L | 0.003 | 0.005 | 0.12 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Lead | mg/L | 0.0003 | 0.0005 | <0.0005 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |

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** [redacted]
Manager

# Analysis / Test Report

LABORATORY ACCREDITATION BLA-DSS
TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2510865**
Date Received : Feb 07, 2025
Date Reported : Feb 21, 2025
Report Number : 3225773-1



| | |
|---|---|
| **Sample Number** | 2510865-2 |
| **Sampled Date** | Feb 06, 2025 1:20 PM |
| **Sample Description** | Wastewater |
| **Location** | 6802UD |
| **Date Analysis Commenced** | Feb 08, 2025 |
| **Condition of Sample** | Contained in two glass vials and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Metals Testing** | | | | | | |
| Magnesium | mg/L | 0.03 | 0.05 | 86.0 | In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7 | Bangkok |
| Manganese | mg/L | 0.0003 | 0.0005 | 8.03 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Mercury | mg/L | 0.0001 | 0.0005 | Not Detected | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3112 | Bangkok |
| Molybdenum | mg/L | 0.0003 | 0.0005 | 0.02 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Nickel | mg/L | 0.0003 | 0.0005 | 0.001 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Potassium | mg/L | 0.03 | 0.05 | 38.9 | In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7 | Bangkok |
| Selenium | mg/L | 0.0003 | 0.0005 | Not Detected | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Silver | mg/L | 0.0003 | 0.0005 | Not Detected | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Sodium | mg/L | 0.03 | 0.05 | 300 | In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7 | Bangkok |
| Zinc | mg/L | 0.003 | 0.005 | Not Detected | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| **Water Testing** | | | | | | |
| Ammonia Nitrogen * | mg/L | - | 0.06 | 7.80 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-NH3 (B, F) | Bangkok |

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** [redacted]
Manager

# Analysis / Test Report

LABORATORY ACCREDITATION BLA-DSS
TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2510865**
Date Received : Feb 07, 2025
Date Reported : Feb 21, 2025
Report Number : 3225773-1



| | |
|---|---|
| **Sample Number** | 2510865-2 |
| **Sampled Date** | Feb 06, 2025 1:20 PM |
| **Sample Description** | Wastewater |
| **Location** | 6802UD |
| **Date Analysis Commenced** | Feb 08, 2025 |
| **Condition of Sample** | Contained in two glass vials and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Bicarbonate Alkalinity as CaCO3 * | mg/L | - | 1 | 136 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| BOD (5 days at 20 degree C) | mg/L | - | 2.0 | <2.0 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G | Bangkok |
| Carbonate Alkalinity as CaCO3 * | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Carbonate Hardness as CaCO3 * | mg/L | - | 1 | 136 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Chloride * | mg/L | 0.15 | 0.5 | 63.7 | ISE Application | Bangkok |
| COD | mg/L | - | 25 | <25 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D | Bangkok |
| Cyanide as CN | mg/L | 0.002 | 0.005 | Not Detected | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - CN (C, E) | Bangkok |
| Hydroxide Alkalinity as CaCO3 * | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Nitrate as N * | mg/L | 0.06 | 0.2 | <0.20 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-NO3 E | Bangkok |
| Non-Carbonate Hardness as CaCO3 * | mg/L | - | 1 | 1453 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Phenolphthalein Alkalinity as CaCO3 * | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Phosphate as P * | mg/L | 0.005 | 0.01 | Not Detected | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-P (E) | Bangkok |

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** [redacted]
Manager

# Analysis / Test Report

LABORATORY ACCREDITATION BLA-DSS
TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2510865**
Date Received : Feb 07, 2025
Date Reported : Feb 21, 2025
Report Number : 3225773-1



| | |
|---|---|
| **Sample Number** | 2510865-2 |
| **Sampled Date** | Feb 06, 2025 1:20 PM |
| **Sample Description** | Wastewater |
| **Location** | 6802UD |
| **Date Analysis Commenced** | Feb 08, 2025 |
| **Condition of Sample** | Contained in two glass vials and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Residual Alkalinity * | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Sulfate * | mg/L | 0.5 | 2 | 1952 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-SO4 (E) | Bangkok |
| Total Alkalinity as CaCO3 * | mg/L | - | 1 | 136 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Total Dissolved solids Dried at 180 degree C | mg/L | - | 5 | 2920 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C | Bangkok |
| Total Hardness as CaCO3 * | mg/L | - | 1 | 1589 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2340 C | Bangkok |
| Total Organic Carbon * | mg/L | 0.03 | 0.1 | 1.45 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B | Bangkok |
| Total Suspended Solids Dried at 103-105 degree C | mg/L | - | 5 | <5 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D | Bangkok |
| Weak Acid Dissociable Cyanide * | mg/L | 0.002 | 0.005 | Not Detected | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-CN (I) | Bangkok |

**Sampling By :** Theeraphol Sangthong

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.
-

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** [redacted]
Manager

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# Analysis / Test Report

LABORATORY ACCREDITATION BLA-DSS
TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2510865**
Date Received : Feb 07, 2025
Date Reported : Feb 21, 2025
Report Number : 3225773-1



| | |
|---|---|
| **Sample Number** | 2510865-3 |
| **Sampled Date** | Feb 06, 2025 2:17 PM |
| **Sample Description** | Wastewater |
| **Location** | 6802UD2 |
| **Date Analysis Commenced** | Feb 08, 2025 |
| **Condition of Sample** | Contained in two glass vials and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Metals Testing** | | | | | | |
| Aluminium | mg/L | 0.003 | 0.005 | 0.01 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Antimony | mg/L | 0.0003 | 0.0005 | Not Detected | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Arsenic | mg/L | 0.0003 | 0.0005 | 0.03 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Barium | mg/L | 0.0003 | 0.0005 | 0.03 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Boron | mg/L | 0.003 | 0.005 | 0.17 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Cadmium | mg/L | 0.0003 | 0.0005 | 0.0010 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Calcium | mg/L | 0.03 | 0.05 | 523 | In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7 | Bangkok |
| Chromium | mg/L | 0.0003 | 0.0005 | Not Detected | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Cobalt | mg/L | 0.0003 | 0.0005 | 0.06 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Copper | mg/L | 0.0003 | 0.0005 | Not Detected | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Iron | mg/L | 0.003 | 0.005 | 2.38 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Lead | mg/L | 0.0003 | 0.0005 | Not Detected | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |

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**Approved by** [redacted]
Manager

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# Analysis / Test Report

LABORATORY ACCREDITATION BLA-DSS
TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2510865**
Date Received : Feb 07, 2025
Date Reported : Feb 21, 2025
Report Number : 3225773-1



| | |
|---|---|
| **Sample Number** | 2510865-3 |
| **Sampled Date** | Feb 06, 2025 2:17 PM |
| **Sample Description** | Wastewater |
| **Location** | 6802UD2 |
| **Date Analysis Commenced** | Feb 08, 2025 |
| **Condition of Sample** | Contained in two glass vials and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Metals Testing** | | | | | | |
| Magnesium | mg/L | 0.03 | 0.05 | 12.0 | In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7 | Bangkok |
| Manganese | mg/L | 0.0003 | 0.0005 | 2.84 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Mercury | mg/L | 0.0001 | 0.0005 | Not Detected | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3112 | Bangkok |
| Molybdenum | mg/L | 0.0003 | 0.0005 | 2.91 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Nickel | mg/L | 0.0003 | 0.0005 | <0.0005 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Potassium | mg/L | 0.03 | 0.05 | 101 | In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7 | Bangkok |
| Selenium | mg/L | 0.0003 | 0.0005 | Not Detected | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Silver | mg/L | 0.0003 | 0.0005 | Not Detected | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| Sodium | mg/L | 0.03 | 0.05 | 409 | In-house method : STM 05-014 based on United States Environmental Protection Agency, 1994, EPA Method 200.7 | Bangkok |
| Zinc | mg/L | 0.003 | 0.005 | 0.01 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 3125 B,3030 F | Bangkok |
| **Water Testing** | | | | | | |
| Ammonia Nitrogen * | mg/L | - | 0.06 | 27.6 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-NH3 (B, F) | Bangkok |

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** [redacted]
Manager

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# Analysis / Test Report

LABORATORY ACCREDITATION BLA-DSS
TESTING No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2510865**
Date Received : Feb 07, 2025
Date Reported : Feb 21, 2025
Report Number : 3225773-1



| | |
|---|---|
| **Sample Number** | 2510865-3 |
| **Sampled Date** | Feb 06, 2025 2:17 PM |
| **Sample Description** | Wastewater |
| **Location** | 6802UD2 |
| **Date Analysis Commenced** | Feb 08, 2025 |
| **Condition of Sample** | Contained in two glass vials and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Bicarbonate Alkalinity as CaCO3 * | mg/L | - | 1 | 55 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| BOD (5 days at 20 degree C) | mg/L | - | 2.0 | 13.7 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5210 B, part 4500 - O G | Bangkok |
| Carbonate Alkalinity as CaCO3 * | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Carbonate Hardness as CaCO3 * | mg/L | - | 1 | 55 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Chloride * | mg/L | 0.15 | 0.5 | 106 | ISE Application | Bangkok |
| COD | mg/L | - | 25 | 67 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5220 D | Bangkok |
| Cyanide as CN | mg/L | 0.002 | 0.005 | 4.711 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - CN (C, E) | Bangkok |
| Hydroxide Alkalinity as CaCO3 * | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Nitrate as N * | mg/L | 0.06 | 0.2 | Not Detected | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-NO3 E | Bangkok |
| Non-Carbonate Hardness as CaCO3 * | mg/L | - | 1 | 1322 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Phenolphthalein Alkalinity as CaCO3 * | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Phosphate as P * | mg/L | 0.005 | 0.01 | Not Detected | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-P (E) | Bangkok |

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**Approved by** [redacted]
Manager

# Analysis / Test Report

TESTING
No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2510865**
Date Received : Feb 07, 2025
Date Reported : Feb 21, 2025
Report Number : 3225773-1



| | |
|---|---|
| **Sample Number** | 2510865-3 |
| **Sampled Date** | Feb 06, 2025 2:17 PM |
| **Sample Description** | Wastewater |
| **Location** | 6802UD2 |
| **Date Analysis Commenced** | Feb 08, 2025 |
| **Condition of Sample** | Contained in two glass vials and six plastic bottles, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Residual Alkalinity * | mg/L | - | 1 | <1 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Sulfate * | mg/L | 0.5 | 2 | 2134 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-SO4 (E) | Bangkok |
| Total Alkalinity as CaCO3 * | mg/L | - | 1 | 55 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2320 B | Bangkok |
| Total Dissolved solids Dried at 180 degree C | mg/L | - | 5 | 2940 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 C | Bangkok |
| Total Hardness as CaCO3 * | mg/L | - | 1 | 1377 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2340 C | Bangkok |
| Total Organic Carbon * | mg/L | 0.03 | 0.1 | 11.2 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 5310 B | Bangkok |
| Total Suspended Solids Dried at 103-105 degree C | mg/L | - | 5 | <5 | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 2540 D | Bangkok |
| Weak Acid Dissociable Cyanide * | mg/L | 0.002 | 0.005 | 4.711 | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-CN (I) | Bangkok |

**Sampling By :** Theeraphol Sangthong

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.
-

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** [redacted]
Manager

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# Analysis / Test Report

TESTING
No.0009

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Water Project
**Project Location** : CHATREE

**Lot ID: 2510865**
Date Received : Feb 07, 2025
Date Reported : Feb 21, 2025
Report Number : 3225773-1



| | |
|---|---|
| **Sample Number** | 2510865-4 |
| **Sampled Date** | Feb 06, 2025 2:49 PM |
| **Sample Description** | Wastewater |
| **Location** | 6802DC2 |
| **Date Analysis Commenced** | Feb 08, 2025 |
| **Condition of Sample** | Contained in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Water Testing** | | | | | | |
| Cyanide as CN | mg/L | 0.002 | 0.005 | Not Detected | Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500 - CN (C, E) | Bangkok |
| Weak Acid Dissociable Cyanide * | mg/L | 0.002 | 0.005 | Not Detected | Based on Standard Methods for the Examination of Water and Wastewater. APHA, AWWA & WEF, 24th ed., 2023, part 4500-CN (I) | Bangkok |

**Sampling By :** Theeraphol Sangthong

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.
-

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** [redacted]
Manager

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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Soil,Solid Wast,Plant, Fish, Food
**Project Location** :

**Lot ID: 2510871**
Date Received : Feb 07, 2025
Date Reported : Feb 14, 2025
Report Number : 3225799-1



| | |
|---|---|
| **Sample Number** | 2510871-1 |
| **Sampled Date** | Feb 06, 2025 8:30 AM |
| **Sample Description** | Tailing |
| **Location** | Spigot 5 |
| **Date Analysis Commenced** | Feb 08, 2025 |
| **Condition of Sample** | Packed in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Total Concentration Test (TTLC) : Chemical** | | | | | | |
| Cyanide | mg/kg | - | 0.2 | 12.8 | United States Environmental Protection Agency, EPA Method 9013 and 9010 B | Bangkok |

Remark :
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**Approved by** [redacted]
Section Head

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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Soil,Solid Wast,Plant, Fish, Food
**Project Location** :

**Lot ID: 2510871**
Date Received : Feb 07, 2025
Date Reported : Feb 14, 2025
Report Number : 3225799-1



| | |
|---|---|
| **Sample Number** | 2510871-2 |
| **Sampled Date** | Feb 06, 2025 8:50 AM |
| **Sample Description** | Tailing |
| **Location** | Spigot 21 |
| **Date Analysis Commenced** | Feb 08, 2025 |
| **Condition of Sample** | Packed in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Total Concentration Test (TTLC) : Chemical** | | | | | | |
| Cyanide | mg/kg | - | 0.2 | 15.4 | United States Environmental Protection Agency, EPA Method 9013 and 9010 B | Bangkok |

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**Approved by** [redacted]
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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Soil,Solid Wast,Plant, Fish, Food
**Project Location** :

**Lot ID: 2510871**
Date Received : Feb 07, 2025
Date Reported : Feb 14, 2025
Report Number : 3225799-1



| | |
|---|---|
| **Sample Number** | 2510871-3 |
| **Sampled Date** | Feb 06, 2025 9:10 AM |
| **Sample Description** | Tailing |
| **Location** | Spigot 51 |
| **Date Analysis Commenced** | Feb 08, 2025 |
| **Condition of Sample** | Packed in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Total Concentration Test (TTLC) : Chemical** | | | | | | |
| Cyanide | mg/kg | - | 0.2 | 22.2 | United States Environmental Protection Agency, EPA Method 9013 and 9010 B | Bangkok |

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# Analysis / Test Report

**Client** : Akara Resources Public Co., Ltd.
99 Moo 9, Tambon Khaochetluk, Amphur Thapklor, Phichit Thailand 66230
**P/O :**
**Project Name** : Soil,Solid Wast,Plant, Fish, Food
**Project Location** :

**Lot ID: 2510871**
Date Received : Feb 07, 2025
Date Reported : Feb 14, 2025
Report Number : 3225799-1



| | |
|---|---|
| **Sample Number** | 2510871-4 |
| **Sampled Date** | Feb 06, 2025 9:30 AM |
| **Sample Description** | Tailing |
| **Location** | Spigot 58 |
| **Date Analysis Commenced** | Feb 08, 2025 |
| **Condition of Sample** | Packed in one plastic bottle, sample containers comply to pretreatment - preservation standards (APHA, USEPA) |

| Analyte | Unit | LOD | LOQ (LOR) | Result | Method | Testing Location |
|---|---|---|---|---|---|---|
| **Total Concentration Test (TTLC) : Chemical** | | | | | | |
| Cyanide | mg/kg | - | 0.2 | 14.1 | United States Environmental Protection Agency, EPA Method 9013 and 9010 B | Bangkok |

Remark :
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- "<" : Lower than LOQ (Limit of Quantitation) / LOR (Limit of Reporting)

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** [redacted]
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