TETRA TECH

January 13, 2023

Mr. Len Zintak
Federal On-Scene Coordinator
U.S. Environmental Protection Agency, Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604-3507

**Subject:** **Results Letter – Revision 0**
**Morris Lithium Battery Fire Site – BB**
**900 East Benton Street, Morris, Illinois 60450**
**EPA Contract Number: 68-HE-0519-D0005**
**Task Order – Task Order Line-Item Number (TO-TOLIN): F0032-0001CI103**
**Document Tracking Number: 1607**

To Whom It May Concern:

Tetra Tech, Inc. (Tetra Tech), a contractor for the U.S. Environmental Protection Agency (EPA), conducted concrete chip sampling at the property located at 900 East Benton Street in Morris, Illinois. The sampling was part of investigative activities related to the Morris Lithium Battery Fire Site (the Site). Tetra Tech collected the samples on August 24, 2022 and October 6, 2022 to determine whether concentrations of contaminants in the concrete: (1) exceeded thresholds established under the Resource Conservation and Recovery Act (RCRA) for Subtitle D landfills and the Toxic Substances Control Act of 1976 (TSCA) disposal requirements; and (2) pose a threat to human health or the environment. The information generated by this sampling event may also aid in the development of a waste profile for eventual disposal of the material.

The attachments to this letter contain information regarding the concrete chip samples collected by Tetra Tech. Sample locations are presented in Attachment 1. Sample results—as compared to RCRA hazardous waste criteria and TSCA disposal requirements—are presented in Attachment 2. Finally, Attachment 3 contains a copy of the Eurofins Test America (Eurofins) analytical reports—Eurofins received the samples in University Park, Illinois for an analysis for total cyanide and sulfide, polychlorinated biphenyls (PCBs), percent solids, corrosivity, and Target Analyte List (TAL) metals, including lithium and nickel. In addition, Eurofins followed the Toxicity Characteristic Leaching Procedure (TCLP) to analyze RCRA metals and evaluated the samples for semi-volatile organic compounds (SVOCs).

The results of all concrete chip samples collected at the Site are below RCRA and TSCA hazardous waste disposal requirements. These results indicate that, with respect to these chemicals, the concrete should be acceptable for Subtitle D landfill disposal.

1 South Wacker Drive, Suite 3700
Chicago, IL 60606
Tel (312) 201-7700 | Fax (312) 201-0031
www.tetratech.com

If you have questions related to this sampling event, please contact EPA's on-scene coordinator, Leonard Zintak, at Zintak.Leonard@epa.gov or (312) 886-4246. You may also contact me at Joe.Sanders@tetratech.com or (312) 201-7700 x7702.

Respectfully,

Joseph Sanders
Project Manager

Enclosure

cc: Attachment 1. Concrete Sampling Locations
Attachment 2. Analytical Results Summary for Concrete Chip Samples
Attachment 3. Laboratory Analytical Results
Karl Schultz, Tetra Tech Program Manager

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Chicago, IL 60606
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# ATTACHMENT 1. CONCRETE SAMPLING LOCATIONS

## Legend

Sampling Area

Aliquot Location

Note: A 5-point composite sample was collected within each sampling area.

N

40 0 40

Feet

Morris Lithium Battery Fire
Morris, Grundy County, Illinois

**Attachment 1**

***Concrete Sampling Locations***

TETRA TECH

Prepared For: USEPA

Prepared By: Tetra Tech Inc.

File Path: G:\G\G9031-START V\Illinois\Morris\IndustrialFire\mxd

Date Saved: 8/16/2022

EPA Contract No.: 68-HE-0519-D0005

TO-TOLIN No.: F0032-0001CI103

# ATTACHMENT 2. ANALYTICAL RESULTS SUMMARY FOR CONCRETE CHIP SAMPLES

Attachment 2
Analytical Results Summary for Concrete Chip Samples
Morris Lithium Battery Fire Site
Morris, Grundy County, Illinois

| | TSCA Disposal Requirement | Hazardous Waste Characteristic Criteria | MLBF-C-F6-01-220824 | MLBF-C-B1C1-01-221006 |
|---|---|---|---|---|
| **Metals (mg/L)** | | | | |
| Arsenic | NE | 5 | 0.05 U | -- |
| Barium | NE | 100 | 0.27 J | 0.34 J |
| Cadmium | NE | 1 | 0.005 U | 0.0050 U |
| Chromium | NE | 5 | 0.027 | 0.011 J |
| Lead | NE | 5 | 0.05 UJ | 0.050 U |
| Selenium | NE | 1 | 0.05 U | 0.050 U |
| Silver | NE | 5 | 0.025 U | 0.025 U |
| **Mercury (mg/L)** | | | | |
| Mercury | NE | 0.2 | 0.0002 U | 0.0002 U |
| **Polychlorinated Biphenyls (mg/kg)** | | | | |
| PCB-1016 | 50 | NE | 26 U | 17 U |
| PCB-1221 | 50 | NE | 26 U | 17 U |
| PCB-1232 | 50 | NE | 26 U | 17 U |
| PCB-1242 | 50 | NE | 26 U | 17 U |
| PCB-1248 | 50 | NE | 26 U | 17 U |
| PCB-1254 | 50 | NE | 47 | 24 J |
| PCB-1260 | 50 | NE | 26 U | 17 U |
| PCB-1262 | 50 | NE | 26 U | 17 U |
| PCB-1268 | 50 | NE | 26 U | 17 U |
| **Semivolatile Organic Compounds (mg/L)** | | | | |
| 1,4-Dichlorobenzene | NE | 7.5 | 0.1 U | 0.1 UJ |
| 2,4,5-Trichlorophenol | NE | 400 | 0.5 UJ | 0.5 U |
| 2,4,6-Trichlorophenol | NE | 2 | 0.25 UJ | 0.25 U |
| 2,4-Dinitrotoluene | NE | 0.13 | 0.05 U | 0.05 UJ |
| 2-Methylphenol | NE | 200 | 0.1 UJ | 0.1 U |
| Hexachlorobenzene | NE | 0.13 | 0.025 U | 0.025 UJ |
| Hexachlorobutadiene | NE | 0.5 | 0.25 U | 0.25 UJ |
| Hexachloroethane | NE | 3 | 0.25 U | 0.25 UJ |
| Nitrobenzene | NE | 2 | 0.05 U | 0.05 UJ |
| Pentachlorophenol | NE | 100 | 1 UJ | 1 U |
| Pyridine | NE | 5 | 1 U | 1 UJ |
| 2-Methylphenol | NE | 200 | 0.1 UJ | 0.1 U |
| Hexachlorobenzene | NE | 0.13 | 0.025 U | 0.025 UJ |
| Hexachlorobutadiene | NE | 0.5 | 0.25 U | 0.25 UJ |
| Hexachloroethane | NE | 3 | 0.25 U | 0.25 UJ |
| Nitrobenzene | NE | 2 | 0.05 U | 0.05 UJ |
| Pentachlorophenol | NE | 100 | 1 UJ | 1 U |
| **Cyanide, Total and or Amenable (mg/L)** | | | | |
| Cyanide, Total | NE | NE | 0.23 U | -- |
| **Calc Sulfide, Acid Soluble and Insoluble (Titrimetric) (mg/kg)** | | | | |
| Sulfide | NE | NE | 10 U | 10 U |
| **pH (SU)** | | | | |
| pH | NE | ≤2 or ≥12.5 | 12.3 J | 12.2 J |

Notes: See last page.

Attachment 2
Analytical Results Summary for Concrete Chip Samples
Morris Lithium Battery Fire Site
Morris, Grundy County, Illinois

| | TSCA Disposal Requirement | Hazardous Waste Characteristic Criteria | MLBF-C-C2D2-01-221006 | MLBF-C-C2D2-02-221006-DUP |
|---|---|---|---|---|
| **Metals (mg/L)** | | | | |
| Arsenic | NE | 5 | -- | -- |
| Barium | NE | 100 | 0.29 J | 0.32 J |
| Cadmium | NE | 1 | 0.0050 U | 0.0050 U |
| Chromium | NE | 5 | 0.020 J | 0.020 J |
| Lead | NE | 5 | 0.050 U | 0.050 U |
| Selenium | NE | 1 | 0.050 U | 0.050 U |
| Silver | NE | 5 | 0.025 U | 0.025 U |
| **Mercury (mg/L)** | | | | |
| Mercury | NE | 0.2 | 0.0002 U | 0.0002 U |
| **Polychlorinated Biphenyls (mg/kg)** | | | | |
| PCB-1016 | 50 | NE | 18 U | 18 U |
| PCB-1221 | 50 | NE | 18 U | 18 U |
| PCB-1232 | 50 | NE | 18 U | 18 U |
| PCB-1242 | 50 | NE | 18 U | 18 U |
| PCB-1248 | 50 | NE | 18 U | 18 U |
| PCB-1254 | 50 | NE | 17 J | 18 J+ |
| PCB-1260 | 50 | NE | 18 U | 18 U |
| PCB-1262 | 50 | NE | 18 U | 18 U |
| PCB-1268 | 50 | NE | 18 U | 18 U |
| **Semivolatile Organic Compounds (mg/L)** | | | | |
| 1,4-Dichlorobenzene | NE | 7.5 | 0.1 UJ | 0.1 UJ |
| 2,4,5-Trichlorophenol | NE | 400 | 0.5 U | 0.5 U |
| 2,4,6-Trichlorophenol | NE | 2 | 0.25 U | 0.25 U |
| 2,4-Dinitrotoluene | NE | 0.13 | 0.05 UJ | 0.05 UJ |
| 2-Methylphenol | NE | 200 | 0.1 U | 0.1 U |
| Hexachlorobenzene | NE | 0.13 | 0.025 UJ | 0.025 UJ |
| Hexachlorobutadiene | NE | 0.5 | 0.25 UJ | 0.25 UJ |
| Hexachloroethane | NE | 3 | 0.25 UJ | 0.25 UJ |
| Nitrobenzene | NE | 2 | 0.05 UJ | 0.05 UJ |
| Pentachlorophenol | NE | 100 | 1 U | 1 U |
| Pyridine | NE | 5 | 1 UJ | 1 UJ |
| 2-Methylphenol | NE | 200 | 0.1 U | 0.1 U |
| Hexachlorobenzene | NE | 0.13 | 0.025 UJ | 0.025 UJ |
| Hexachlorobutadiene | NE | 0.5 | 0.25 UJ | 0.25 UJ |
| Hexachloroethane | NE | 3 | 0.25 UJ | 0.25 UJ |
| Nitrobenzene | NE | 2 | 0.05 UJ | 0.05 UJ |
| Pentachlorophenol | NE | 100 | 1 U | 1 U |
| **Cyanide, Total and or Amenable (mg/L)** | | | | |
| Cyanide, Total | NE | NE | -- | -- |
| **Calc Sulfide, Acid Soluble and Insoluble (Titrimetric) (mg/kg)** | | | | |
| Sulfide | NE | NE | 10 U | 10 U |
| **pH (SU)** | | | | |
| pH | NE | ≤2 or ≥12.5 | 12.3 J | 12.3 J |

Notes: See last page.

Attachment 2
Analytical Results Summary for Concrete Chip Samples
Morris Lithium Battery Fire Site
Morris, Grundy County, Illinois

| | TSCA Disposal Requirement | Hazardous Waste Characteristic Criteria | MLBF-C-D7-01-221006 | MLBF-C-E4-01-221006 |
|---|---|---|---|---|
| **Metals (mg/L)[1]** | | | | |
| Arsenic | NE | 5 | -- | -- |
| Barium | NE | 100 | 0.35 J | 0.29 J |
| Cadmium | NE | 1 | 0.0050 U | 0.0050 U |
| Chromium | NE | 5 | 0.018 J | 0.020 J |
| Lead | NE | 5 | 0.050 U | 0.050 U |
| Selenium | NE | 1 | 0.050 U | 0.050 U |
| Silver | NE | 5 | 0.025 U | 0.025 U |
| **Mercury (mg/L)[1]** | | | | |
| Mercury | NE | 0.2 | 0.0002 U | 0.0019 J- |
| **Polychlorinated Biphenyls (mg/kg)[2]** | | | | |
| PCB-1016 | 50 | NE | 18 U | 17 U |
| PCB-1221 | 50 | NE | 18 U | 17 U |
| PCB-1232 | 50 | NE | 18 U | 17 U |
| PCB-1242 | 50 | NE | 18 U | 17 U |
| PCB-1248 | 50 | NE | 18 U | 17 U |
| PCB-1254 | 50 | NE | 21 J | 40 J+ |
| PCB-1260 | 50 | NE | 18 U | 17 U |
| PCB-1262 | 50 | NE | 18 U | 17 U |
| PCB-1268 | 50 | NE | 18 U | 17 U |
| **Semivolatile Organic Compounds (mg/L)[1]** | | | | |
| 1,4-Dichlorobenzene | NE | 7.5 | 0.1 UJ | 0.1 UJ |
| 2,4,5-Trichlorophenol | NE | 400 | 0.5 U | 0.5 UJ |
| 2,4,6-Trichlorophenol | NE | 2 | 0.25 U | 0.25 U |
| 2,4-Dinitrotoluene | NE | 0.13 | 0.05 UJ | 0.05 UJ |
| 2-Methylphenol | NE | 200 | 0.1 U | 0.1 U |
| Hexachlorobenzene | NE | 0.13 | 0.025 UJ | 0.025 UJ |
| Hexachlorobutadiene | NE | 0.5 | 0.25 UJ | 0.25 UJ |
| Hexachloroethane | NE | 3 | 0.25 UJ | 0.25 UJ |
| Nitrobenzene | NE | 2 | 0.05 UJ | 0.05 UJ |
| Pentachlorophenol | NE | 100 | 1 U | 1 UJ |
| Pyridine | NE | 5 | 1 UJ | 1 UJ |
| 2-Methylphenol | NE | 200 | 0.1 U | 0.1 U |
| Hexachlorobenzene | NE | 0.13 | 0.025 UJ | 0.025 UJ |
| Hexachlorobutadiene | NE | 0.5 | 0.25 UJ | 0.25 UJ |
| Hexachloroethane | NE | 3 | 0.25 UJ | 0.25 UJ |
| Nitrobenzene | NE | 2 | 0.05 UJ | 0.05 UJ |
| Pentachlorophenol | NE | 100 | 1 U | 1 UJ |
| **Cyanide, Total and or Amenable (mg/L)[3]** | | | | |
| Cyanide, Total | NE | NE | -- | -- |
| **Calc Sulfide, Acid Soluble and Insoluble (Titrimetric) (mg/kg)[3]** | | | | |
| Sulfide | NE | NE | 10 U | 10 UJ |
| **pH (SU)[4]** | | | | |
| pH | NE | ≤2 or ≥12.5 | 12.2 J | 12.2 J |

Notes: See last page.

Attachment 2
Analytical Results Summary for Concrete Chip Samples
Morris Lithium Battery Fire Site
Morris, Grundy County, Illinois

Notes:
= result greater than the TSCA disposal requirement per 40 CFR 761.61
= result greater than the hazardous waste characteristic criteria

Result Qualifiers:
J- = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value, biased low.
J+ = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value, biased high.
J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U = analyte was not detected.

-- = Not analyzed
≥ = greater than or equal to
≤ = less than or equal to
MDL = Method detection limit
mg/kg = milligram per kilogram
mg/L = milligram per liter
NE = Not established
RL = Reporting limit
SU = Standard unit
TSCA = Toxic Substances Control Act

TSCA Disposal Requirement per Title 40 Code of Federal Regulation (CFR) 761.61
Corrosivity hazardous waste characteristic criteria per 40 CFR 261.22
Reactivity hazardous waste characteristic criteria per 40 CFR 261.23
Toxicity hazardous waste characteristic criteria per 40 CFR 261.24

# ATTACHMENT 3. LABORATORY ANALYTICAL REPORTS

eurofins | Environment Testing America

# ANALYTICAL REPORT

Eurofins Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-221285-1
Client Project/Site: Morris Lithium Battery Site

For:
Tetra Tech EM Inc.
1 South Wacker Drive 37 Floor
Ste. 3700
Chicago, Illinois 60606

Attn: Erica Schmandt

*Authorized for release by:*
*8/31/2022 5:47:46 PM*

Jim Knapp, Project Manager II
(630)758-0262
Jim.Knapp@et.eurofinsus.com

LINKS

Review your project results through my EOL

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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## Job ID: 500-221285-1

### Laboratory: Eurofins Chicago

**Narrative**

**Job Narrative**
**500-221285-1**

**Comments**
No additional comments.

**Receipt**
The sample was received on 8/24/2022 2:10 PM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 13.0º C.

**GC/MS Semi VOA**
Method 8270D: The continuing calibration verification (CCV) analyzed in batch 500-672487 was outside the method criteria for the following analyte(s): Pentachlorophenol. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270D: The continuing calibration verification (CCV) analyzed in 500-672487 was outside the method criteria for the following analyte(s): 2-Fluorobiphenyl (Surr) and Hexachloroethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270D: The following sample contained one acid surrogate outside acceptance limits: MLBF-C-F6-01-220824 (500-221285-1). The laboratory's SOP allows one acid and one base surrogate to be outside acceptance limits; therefore, re-extraction was not performed. These results have been reported and qualified.

Method 8270D: The following sample was diluted due to the nature of the sample matrix: MLBF-C-F6-01-220824 (500-221285-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**GC Semi VOA**
Method 8082A: Surrogate DCB Decachlorobiphenyl recovery for the following Continuing Calibration Verification (CCVIS) was outside control limits: (CCVIS 500-672139/3). The other surrogate was within limits; therefore, re-analysis was not performed.

Method 8082A: Surrogate Tetrachloro-m-xylene and DCB Decachlorobiphenyl recovery for the following the method blank (MB) were outside upper control limits: (MB 500-671936/1-A). However the other QC samples had acceptable limits; therefore, re-analysis was not performed.

Method 8082A: Surrogate DCB Decachlorobiphenyl recovery for the following samples was outside control limits: MLBF-C-F6-01-220824 (500-221285-1) and (LCS 500-671936/2-A). The other surrogate was within limits; therefore, re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**Metals**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**General Chemistry**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**Organic Prep**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Site

Job ID: 500-221285-1

## Client Sample ID: MLBF-C-F6-01-220824 — Lab Sample ID: 500-221285-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1254 | 47 | | 26 | 8.7 | ug/Kg | 1 | ☼ | 8082A | Total/NA |
| Aluminum | 6500 | | 20 | 8.1 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Arsenic | 2.2 | | 0.99 | 0.34 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Barium | 58 | | 0.99 | 0.11 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Beryllium | 0.41 | | 0.40 | 0.093 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Cadmium | 57 | B | 0.20 | 0.036 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Calcium | 160000 | B | 99 | 17 | mg/Kg | 5 | ☼ | 6010D | Total/NA |
| Chromium | 8.9 | | 0.99 | 0.49 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Cobalt | 4.7 | | 2.5 | 0.65 | mg/Kg | 5 | ☼ | 6010D | Total/NA |
| Copper | 16 | | 0.99 | 0.28 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Iron | 6700 | | 20 | 10 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Lead | 11 | | 0.50 | 0.23 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Magnesium | 43000 | B | 9.9 | 4.9 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Manganese | 430 | B | 0.99 | 0.14 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Nickel | 61 | | 0.99 | 0.29 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Potassium | 1600 | | 50 | 18 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Silver | 0.14 | J | 0.50 | 0.13 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Sodium | 500 | | 99 | 15 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Vanadium | 11 | | 0.50 | 0.12 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Zinc | 79 | | 2.0 | 0.87 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Lithium | 18 | | 0.99 | 0.30 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Barium | 0.27 | J | 0.50 | 0.050 | mg/L | 1 | | 6010D | TCLP |
| Chromium | 0.027 | | 0.025 | 0.010 | mg/L | 1 | | 6010D | TCLP |
| pH | 12.3 | HF | 0.2 | 0.2 | SU | 1 | | 9045D | Total/NA |

This Detection Summary does not include radiochemical test results.

# Method Summary

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Site

Job ID: 500-221285-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8270D | Semivolatile Organic Compounds (GC/MS) | SW846 | EET CHI |
| 8082A | Polychlorinated Biphenyls (PCBs) by Gas Chromatography | SW846 | EET CHI |
| 6010D | Metals (ICP) | SW846 | EET CHI |
| 7470A | Mercury (CVAA) | SW846 | EET CHI |
| 7471B | Mercury (CVAA) | SW846 | EET CHI |
| 9012B | Cyanide, Total andor Amenable | SW846 | EET CHI |
| 9034 | Sulfide, Acid soluble and Insoluble (Titrimetric) | SW846 | EET CHI |
| 9045D | pH | SW846 | EET CHI |
| Moisture | Percent Moisture | EPA | EET CHI |
| 1311 | TCLP Extraction | SW846 | EET CHI |
| 3010A | Preparation, Total Metals | SW846 | EET CHI |
| 3050B | Preparation, Metals | SW846 | EET CHI |
| 3510C | Liquid-Liquid Extraction (Separatory Funnel) | SW846 | EET CHI |
| 3541 | Automated Soxhlet Extraction | SW846 | EET CHI |
| 7470A | Preparation, Mercury | SW846 | EET CHI |
| 7471B | Preparation, Mercury | SW846 | EET CHI |
| 9010C | Cyanide, Distillation | SW846 | EET CHI |
| 9030B | Sulfide, Distillation (Acid Soluble and Insoluble) | SW846 | EET CHI |

**Protocol References:**

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

# Sample Summary

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Site

Job ID: 500-221285-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 500-221285-1 | MLBF-C-F6-01-220824 | Solid | 08/24/22 12:08 | 08/24/22 14:10 |

# Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Site

Job ID: 500-221285-1

## Client Sample ID: MLBF-C-F6-01-220824

**Date Collected: 08/24/22 12:08**
**Date Received: 08/24/22 14:10**

## Lab Sample ID: 500-221285-1

**Matrix: Solid**
**Percent Solids: 95.6**

### Method: 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2-Methylphenol | <100 | | 100 | 100 | ug/L | | 08/30/22 07:51 | 08/31/22 15:28 | 5 |
| 3 & 4 Methylphenol | <100 | | 100 | 100 | ug/L | | 08/30/22 07:51 | 08/31/22 15:28 | 5 |
| 1,4-Dichlorobenzene | <100 | | 100 | 100 | ug/L | | 08/30/22 07:51 | 08/31/22 15:28 | 5 |
| 2,4-Dinitrotoluene | <50 | | 50 | 50 | ug/L | | 08/30/22 07:51 | 08/31/22 15:28 | 5 |
| Hexachlorobenzene | <25 | | 25 | 25 | ug/L | | 08/30/22 07:51 | 08/31/22 15:28 | 5 |
| Hexachlorobutadiene | <250 | | 250 | 250 | ug/L | | 08/30/22 07:51 | 08/31/22 15:28 | 5 |
| Hexachloroethane | <250 | | 250 | 250 | ug/L | | 08/30/22 07:51 | 08/31/22 15:28 | 5 |
| Nitrobenzene | <50 | | 50 | 50 | ug/L | | 08/30/22 07:51 | 08/31/22 15:28 | 5 |
| Pentachlorophenol | <1000 | | 1000 | 1000 | ug/L | | 08/30/22 07:51 | 08/31/22 15:28 | 5 |
| Pyridine | <1000 | | 1000 | 1000 | ug/L | | 08/30/22 07:51 | 08/31/22 15:28 | 5 |
| 2,4,5-Trichlorophenol | <500 | | 500 | 500 | ug/L | | 08/30/22 07:51 | 08/31/22 15:28 | 5 |
| 2,4,6-Trichlorophenol | <250 | | 250 | 250 | ug/L | | 08/30/22 07:51 | 08/31/22 15:28 | 5 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorophenol (Surr)* | *21* | *S1-* | *27 - 110* | *08/30/22 07:51* | *08/31/22 15:28* | *5* |
| *Phenol-d5 (Surr)* | *25* | | *20 - 100* | *08/30/22 07:51* | *08/31/22 15:28* | *5* |
| *Nitrobenzene-d5 (Surr)* | *55* | | *36 - 120* | *08/30/22 07:51* | *08/31/22 15:28* | *5* |
| *2-Fluorobiphenyl* | *76* | | *34 - 110* | *08/30/22 07:51* | *08/31/22 15:28* | *5* |
| *2,4,6-Tribromophenol (Surr)* | *76* | | *40 - 145* | *08/30/22 07:51* | *08/31/22 15:28* | *5* |
| *Terphenyl-d14* | *102* | | *40 - 145* | *08/30/22 07:51* | *08/31/22 15:28* | *5* |

### Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | <26 | | 26 | 10 | ug/Kg | ☼ | 08/26/22 14:08 | 08/29/22 18:53 | 1 |
| PCB-1221 | <26 | | 26 | 10 | ug/Kg | ☼ | 08/26/22 14:08 | 08/29/22 18:53 | 1 |
| PCB-1232 | <26 | | 26 | 7.0 | ug/Kg | ☼ | 08/26/22 14:08 | 08/29/22 18:53 | 1 |
| PCB-1242 | <26 | | 26 | 10 | ug/Kg | ☼ | 08/26/22 14:08 | 08/29/22 18:53 | 1 |
| PCB-1248 | <26 | | 26 | 12 | ug/Kg | ☼ | 08/26/22 14:08 | 08/29/22 18:53 | 1 |
| **PCB-1254** | **47** | | 26 | 8.7 | ug/Kg | ☼ | 08/26/22 14:08 | 08/29/22 18:53 | 1 |
| PCB-1260 | <26 | | 26 | 9.7 | ug/Kg | ☼ | 08/26/22 14:08 | 08/29/22 18:53 | 1 |
| PCB-1262 | <26 | | 26 | 8.4 | ug/Kg | ☼ | 08/26/22 14:08 | 08/29/22 18:53 | 1 |
| PCB-1268 | <26 | | 26 | 15 | ug/Kg | ☼ | 08/26/22 14:08 | 08/29/22 18:53 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *103* | | *49 - 129* | *08/26/22 14:08* | *08/29/22 18:53* | *1* |
| *DCB Decachlorobiphenyl* | *127* | *S1+* | *37 - 121* | *08/26/22 14:08* | *08/29/22 18:53* | *1* |

### Method: 6010D - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Aluminum** | **6500** | | 20 | 8.1 | mg/Kg | ☼ | 08/29/22 09:09 | 08/30/22 15:43 | 1 |
| Antimony | <2.0 | | 2.0 | 0.39 | mg/Kg | ☼ | 08/29/22 09:09 | 08/30/22 15:43 | 1 |
| **Arsenic** | **2.2** | | 0.99 | 0.34 | mg/Kg | ☼ | 08/29/22 09:09 | 08/30/22 15:43 | 1 |
| **Barium** | **58** | | 0.99 | 0.11 | mg/Kg | ☼ | 08/29/22 09:09 | 08/30/22 15:43 | 1 |
| **Beryllium** | **0.41** | | 0.40 | 0.093 | mg/Kg | ☼ | 08/29/22 09:09 | 08/31/22 11:07 | 1 |
| **Cadmium** | **57** | **B** | 0.20 | 0.036 | mg/Kg | ☼ | 08/29/22 09:09 | 08/30/22 15:43 | 1 |
| **Calcium** | **160000** | **B** | 99 | 17 | mg/Kg | ☼ | 08/29/22 09:09 | 08/31/22 11:10 | 5 |
| **Chromium** | **8.9** | | 0.99 | 0.49 | mg/Kg | ☼ | 08/29/22 09:09 | 08/31/22 11:07 | 1 |
| **Cobalt** | **4.7** | | 2.5 | 0.65 | mg/Kg | ☼ | 08/29/22 09:09 | 08/31/22 11:10 | 5 |
| **Copper** | **16** | | 0.99 | 0.28 | mg/Kg | ☼ | 08/29/22 09:09 | 08/30/22 15:43 | 1 |
| **Iron** | **6700** | | 20 | 10 | mg/Kg | ☼ | 08/29/22 09:09 | 08/31/22 11:07 | 1 |

# Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Site

Job ID: 500-221285-1

## Client Sample ID: MLBF-C-F6-01-220824

**Date Collected: 08/24/22 12:08**
**Date Received: 08/24/22 14:10**

## Lab Sample ID: 500-221285-1

**Matrix: Solid**
**Percent Solids: 95.6**

### Method: 6010D - Metals (ICP) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Lead** | **11** | | 0.50 | 0.23 | mg/Kg | ☼ | 08/29/22 09:09 | 08/30/22 15:43 | 1 |
| **Magnesium** | **43000** | **B** | 9.9 | 4.9 | mg/Kg | ☼ | 08/29/22 09:09 | 08/31/22 11:07 | 1 |
| **Manganese** | **430** | **B** | 0.99 | 0.14 | mg/Kg | ☼ | 08/29/22 09:09 | 08/31/22 11:07 | 1 |
| **Nickel** | **61** | | 0.99 | 0.29 | mg/Kg | ☼ | 08/29/22 09:09 | 08/30/22 15:43 | 1 |
| **Potassium** | **1600** | | 50 | 18 | mg/Kg | ☼ | 08/29/22 09:09 | 08/30/22 15:43 | 1 |
| Selenium | <0.99 | | 0.99 | 0.58 | mg/Kg | ☼ | 08/29/22 09:09 | 08/30/22 15:43 | 1 |
| **Silver** | **0.14** | **J** | 0.50 | 0.13 | mg/Kg | ☼ | 08/29/22 09:09 | 08/30/22 15:43 | 1 |
| **Sodium** | **500** | | 99 | 15 | mg/Kg | ☼ | 08/29/22 09:09 | 08/30/22 15:43 | 1 |
| Thallium | <0.99 | | 0.99 | 0.50 | mg/Kg | ☼ | 08/29/22 09:09 | 08/30/22 15:43 | 1 |
| **Vanadium** | **11** | | 0.50 | 0.12 | mg/Kg | ☼ | 08/29/22 09:09 | 08/30/22 15:43 | 1 |
| **Zinc** | **79** | | 2.0 | 0.87 | mg/Kg | ☼ | 08/29/22 09:09 | 08/30/22 15:43 | 1 |
| **Lithium** | **18** | | 0.99 | 0.30 | mg/Kg | ☼ | 08/29/22 09:09 | 08/30/22 15:43 | 1 |

### Method: 6010D - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 08/26/22 16:39 | 08/29/22 16:05 | 1 |
| **Barium** | **0.27** | **J** | 0.50 | 0.050 | mg/L | | 08/26/22 16:39 | 08/29/22 16:05 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 08/26/22 16:39 | 08/29/22 16:05 | 1 |
| **Chromium** | **0.027** | | 0.025 | 0.010 | mg/L | | 08/26/22 16:39 | 08/29/22 16:05 | 1 |
| Lead | <0.050 | | 0.050 | 0.0075 | mg/L | | 08/26/22 16:39 | 08/30/22 14:34 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 08/26/22 16:39 | 08/29/22 16:05 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 08/26/22 16:39 | 08/29/22 16:05 | 1 |

### Method: 7470A - Mercury (CVAA) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.20 | | 0.20 | 0.20 | ug/L | | 08/26/22 11:35 | 08/29/22 10:27 | 1 |

### Method: 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <16 | | 16 | 5.5 | ug/Kg | ☼ | 08/26/22 15:20 | 08/29/22 09:12 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total | <0.23 | | 0.23 | 0.12 | mg/Kg | ☼ | 08/26/22 09:59 | 08/30/22 16:01 | 1 |
| Sulfide | <10 | | 10 | 4.8 | mg/Kg | ☼ | 08/29/22 17:37 | 08/31/22 14:33 | 1 |
| **pH** | **12.3** | **HF** | 0.2 | 0.2 | SU | | | 08/25/22 13:24 | 1 |

## Qualifiers

### GC/MS Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| S1- | Surrogate recovery exceeds control limits, low biased. |

### GC Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| S1+ | Surrogate recovery exceeds control limits, high biased. |

### Metals

| Qualifier | Qualifier Description |
|---|---|
| B | Compound was found in the blank and sample. |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

### General Chemistry

| Qualifier | Qualifier Description |
|---|---|
| HF | Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CFU | Colony Forming Unit |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MCL | EPA recommended "Maximum Contaminant Level" |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| MPN | Most Probable Number |
| MQL | Method Quantitation Limit |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| NEG | Negative / Absent |
| POS | Positive / Present |
| PQL | Practical Quantitation Limit |
| PRES | Presumptive |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| TNTC | Too Numerous To Count |

# QC Association Summary

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Site

Job ID: 500-221285-1

## GC/MS Semi VOA

### Leach Batch: 671768

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-221285-1 | MLBF-C-F6-01-220824 | TCLP | Solid | 1311 | |
| LB2 500-671768/1-C | Method Blank | TCLP | Solid | 1311 | |

### Prep Batch: 672234

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-221285-1 | MLBF-C-F6-01-220824 | TCLP | Solid | 3510C | 671768 |
| LB2 500-671768/1-C | Method Blank | TCLP | Solid | 3510C | 671768 |
| MB 500-672234/1-A | Method Blank | Total/NA | Solid | 3510C | |
| LCS 500-672234/2-A | Lab Control Sample | Total/NA | Solid | 3510C | |

### Analysis Batch: 672487

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-221285-1 | MLBF-C-F6-01-220824 | TCLP | Solid | 8270D | 672234 |
| LB2 500-671768/1-C | Method Blank | TCLP | Solid | 8270D | 672234 |
| MB 500-672234/1-A | Method Blank | Total/NA | Solid | 8270D | 672234 |
| LCS 500-672234/2-A | Lab Control Sample | Total/NA | Solid | 8270D | 672234 |

## GC Semi VOA

### Prep Batch: 671936

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-221285-1 | MLBF-C-F6-01-220824 | Total/NA | Solid | 3541 | |
| MB 500-671936/1-A | Method Blank | Total/NA | Solid | 3541 | |
| LCS 500-671936/2-A | Lab Control Sample | Total/NA | Solid | 3541 | |

### Analysis Batch: 672139

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-221285-1 | MLBF-C-F6-01-220824 | Total/NA | Solid | 8082A | 671936 |
| MB 500-671936/1-A | Method Blank | Total/NA | Solid | 8082A | 671936 |
| LCS 500-671936/2-A | Lab Control Sample | Total/NA | Solid | 8082A | 671936 |

## Metals

### Leach Batch: 671768

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-221285-1 | MLBF-C-F6-01-220824 | TCLP | Solid | 1311 | |
| LB2 500-671768/1-B | Method Blank | TCLP | Solid | 1311 | |
| LB2 500-671768/2-B | Method Blank | TCLP | Solid | 1311 | |

### Prep Batch: 671923

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-221285-1 | MLBF-C-F6-01-220824 | TCLP | Solid | 7470A | 671768 |
| LB2 500-671768/1-B | Method Blank | TCLP | Solid | 7470A | 671768 |
| MB 500-671923/12-A | Method Blank | Total/NA | Solid | 7470A | |
| LCS 500-671923/35-A | Lab Control Sample | Total/NA | Solid | 7470A | |

### Prep Batch: 671927

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-221285-1 | MLBF-C-F6-01-220824 | Total/NA | Solid | 7471B | |
| MB 500-671927/12-A | Method Blank | Total/NA | Solid | 7471B | |
| LCS 500-671927/13-A | Lab Control Sample | Total/NA | Solid | 7471B | |

# QC Association Summary

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Site

Job ID: 500-221285-1

## Metals

### Prep Batch: 671973

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-221285-1 | MLBF-C-F6-01-220824 | TCLP | Solid | 3010A | 671768 |
| LB2 500-671768/2-B | Method Blank | TCLP | Solid | 3010A | 671768 |
| LCS 500-671973/13-A | Lab Control Sample | Total/NA | Solid | 3010A | |

### Prep Batch: 672095

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-221285-1 | MLBF-C-F6-01-220824 | Total/NA | Solid | 3050B | |
| MB 500-672095/1-A | Method Blank | Total/NA | Solid | 3050B | |
| LCS 500-672095/2-A | Lab Control Sample | Total/NA | Solid | 3050B | |
| LCS 500-672095/2-A ^2 | Lab Control Sample | Total/NA | Solid | 3050B | |

### Analysis Batch: 672125

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-221285-1 | MLBF-C-F6-01-220824 | Total/NA | Solid | 7471B | 671927 |
| MB 500-671927/12-A | Method Blank | Total/NA | Solid | 7471B | 671927 |
| LCS 500-671927/13-A | Lab Control Sample | Total/NA | Solid | 7471B | 671927 |

### Analysis Batch: 672168

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-221285-1 | MLBF-C-F6-01-220824 | TCLP | Solid | 7470A | 671923 |
| LB2 500-671768/1-B | Method Blank | TCLP | Solid | 7470A | 671923 |
| MB 500-671923/12-A | Method Blank | Total/NA | Solid | 7470A | 671923 |
| LCS 500-671923/35-A | Lab Control Sample | Total/NA | Solid | 7470A | 671923 |

### Analysis Batch: 672268

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-221285-1 | MLBF-C-F6-01-220824 | TCLP | Solid | 6010D | 671973 |
| LB2 500-671768/2-B | Method Blank | TCLP | Solid | 6010D | 671973 |
| LCS 500-671973/13-A | Lab Control Sample | Total/NA | Solid | 6010D | 671973 |

### Analysis Batch: 672391

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-221285-1 | MLBF-C-F6-01-220824 | TCLP | Solid | 6010D | 671973 |

### Analysis Batch: 672473

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-221285-1 | MLBF-C-F6-01-220824 | Total/NA | Solid | 6010D | 672095 |
| MB 500-672095/1-A | Method Blank | Total/NA | Solid | 6010D | 672095 |
| LCS 500-672095/2-A ^2 | Lab Control Sample | Total/NA | Solid | 6010D | 672095 |

### Analysis Batch: 672603

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-221285-1 | MLBF-C-F6-01-220824 | Total/NA | Solid | 6010D | 672095 |
| 500-221285-1 | MLBF-C-F6-01-220824 | Total/NA | Solid | 6010D | 672095 |
| LCS 500-672095/2-A | Lab Control Sample | Total/NA | Solid | 6010D | 672095 |

## General Chemistry

### Analysis Batch: 671697

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-221285-1 | MLBF-C-F6-01-220824 | Total/NA | Solid | 9045D | |

## General Chemistry (Continued)

### Analysis Batch: 671697 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| LCS 500-671697/5 | Lab Control Sample | Total/NA | Solid | 9045D | |
| LCSD 500-671697/6 | Lab Control Sample Dup | Total/NA | Solid | 9045D | |

### Analysis Batch: 671708

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-221285-1 | MLBF-C-F6-01-220824 | Total/NA | Solid | Moisture | |

### Prep Batch: 671823

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-221285-1 | MLBF-C-F6-01-220824 | Total/NA | Solid | 9010C | |
| MB 500-671823/1-A | Method Blank | Total/NA | Solid | 9010C | |
| HLCS 500-671823/2-A | Lab Control Sample | Total/NA | Solid | 9010C | |
| LCS 500-671823/3-A | Lab Control Sample | Total/NA | Solid | 9010C | |
| LLCS 500-671823/4-A | Lab Control Sample | Total/NA | Solid | 9010C | |

### Prep Batch: 672214

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-221285-1 | MLBF-C-F6-01-220824 | Total/NA | Solid | 9030B | |
| MB 500-672214/1-A | Method Blank | Total/NA | Solid | 9030B | |
| LCS 500-672214/2-A | Lab Control Sample | Total/NA | Solid | 9030B | |

### Analysis Batch: 672411

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-221285-1 | MLBF-C-F6-01-220824 | Total/NA | Solid | 9012B | 671823 |
| MB 500-671823/1-A | Method Blank | Total/NA | Solid | 9012B | 671823 |
| HLCS 500-671823/2-A | Lab Control Sample | Total/NA | Solid | 9012B | 671823 |
| LCS 500-671823/3-A | Lab Control Sample | Total/NA | Solid | 9012B | 671823 |
| LLCS 500-671823/4-A | Lab Control Sample | Total/NA | Solid | 9012B | 671823 |

### Analysis Batch: 672612

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-221285-1 | MLBF-C-F6-01-220824 | Total/NA | Solid | 9034 | 672214 |
| MB 500-672214/1-A | Method Blank | Total/NA | Solid | 9034 | 672214 |
| LCS 500-672214/2-A | Lab Control Sample | Total/NA | Solid | 9034 | 672214 |

# Surrogate Summary

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Site

Job ID: 500-221285-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | | | |
|---|---|---|---|---|---|---|---|
| | | 2FP | PHL | NBZ | FBP | TBP | TPHL |
| Lab Sample ID | Client Sample ID | (27-110) | (20-100) | (36-120) | (34-110) | (40-145) | (40-145) |
| LCS 500-672234/2-A | Lab Control Sample | 80 | 40 | 78 | 104 | 81 | 105 |
| MB 500-672234/1-A | Method Blank | 54 | 30 | 61 | 76 | 62 | 113 |

**Surrogate Legend**

2FP = 2-Fluorophenol (Surr)
PHL = Phenol-d5 (Surr)
NBZ = Nitrobenzene-d5 (Surr)
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol (Surr)
TPHL = Terphenyl-d14

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

**Matrix: Solid** **Prep Type: TCLP**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | | | |
|---|---|---|---|---|---|---|---|
| | | 2FP | PHL | NBZ | FBP | TBP | TPHL |
| Lab Sample ID | Client Sample ID | (27-110) | (20-100) | (36-120) | (34-110) | (40-145) | (40-145) |
| 500-221285-1 | MLBF-C-F6-01-220824 | 21 S1- | 25 | 55 | 76 | 76 | 102 |
| LB2 500-671768/1-C | Method Blank | 58 | 31 | 70 | 91 | 74 | 126 |

**Surrogate Legend**

2FP = 2-Fluorophenol (Surr)
PHL = Phenol-d5 (Surr)
NBZ = Nitrobenzene-d5 (Surr)
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol (Surr)
TPHL = Terphenyl-d14

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|---|---|---|---|
| | | TCX1 | DCBP1 |
| Lab Sample ID | Client Sample ID | (49-129) | (37-121) |
| 500-221285-1 | MLBF-C-F6-01-220824 | 103 | 127 S1+ |
| LCS 500-671936/2-A | Lab Control Sample | 108 | 132 S1+ |
| MB 500-671936/1-A | Method Blank | 151 S1+ | 189 S1+ |

**Surrogate Legend**

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Site

Job ID: 500-221285-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 500-672234/1-A**
**Matrix: Solid**
**Analysis Batch: 672487**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 672234**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2-Methylphenol | <2.0 | | 2.0 | 2.0 | ug/L | | 08/30/22 07:51 | 08/31/22 10:17 | 1 |
| 3 & 4 Methylphenol | <2.0 | | 2.0 | 2.0 | ug/L | | 08/30/22 07:51 | 08/31/22 10:17 | 1 |
| 1,4-Dichlorobenzene | <2.0 | | 2.0 | 2.0 | ug/L | | 08/30/22 07:51 | 08/31/22 10:17 | 1 |
| 2,4-Dinitrotoluene | <1.0 | | 1.0 | 1.0 | ug/L | | 08/30/22 07:51 | 08/31/22 10:17 | 1 |
| Hexachlorobenzene | <0.50 | | 0.50 | 0.50 | ug/L | | 08/30/22 07:51 | 08/31/22 10:17 | 1 |
| Hexachlorobutadiene | <5.0 | | 5.0 | 5.0 | ug/L | | 08/30/22 07:51 | 08/31/22 10:17 | 1 |
| Hexachloroethane | <5.0 | | 5.0 | 5.0 | ug/L | | 08/30/22 07:51 | 08/31/22 10:17 | 1 |
| Nitrobenzene | <1.0 | | 1.0 | 1.0 | ug/L | | 08/30/22 07:51 | 08/31/22 10:17 | 1 |
| Pentachlorophenol | <20 | | 20 | 20 | ug/L | | 08/30/22 07:51 | 08/31/22 10:17 | 1 |
| Pyridine | <20 | | 20 | 20 | ug/L | | 08/30/22 07:51 | 08/31/22 10:17 | 1 |
| 2,4,5-Trichlorophenol | <10 | | 10 | 10 | ug/L | | 08/30/22 07:51 | 08/31/22 10:17 | 1 |
| 2,4,6-Trichlorophenol | <5.0 | | 5.0 | 5.0 | ug/L | | 08/30/22 07:51 | 08/31/22 10:17 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorophenol (Surr)* | *54* | | *27 - 110* | *08/30/22 07:51* | *08/31/22 10:17* | *1* |
| *Phenol-d5 (Surr)* | *30* | | *20 - 100* | *08/30/22 07:51* | *08/31/22 10:17* | *1* |
| *Nitrobenzene-d5 (Surr)* | *61* | | *36 - 120* | *08/30/22 07:51* | *08/31/22 10:17* | *1* |
| *2-Fluorobiphenyl* | *76* | | *34 - 110* | *08/30/22 07:51* | *08/31/22 10:17* | *1* |
| *2,4,6-Tribromophenol (Surr)* | *62* | | *40 - 145* | *08/30/22 07:51* | *08/31/22 10:17* | *1* |
| *Terphenyl-d14* | *113* | | *40 - 145* | *08/30/22 07:51* | *08/31/22 10:17* | *1* |

**Lab Sample ID: LCS 500-672234/2-A**
**Matrix: Solid**
**Analysis Batch: 672487**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 672234**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| 2-Methylphenol | 40.0 | 36.1 | | ug/L | | 90 | 53 - 115 |
| 3 & 4 Methylphenol | 40.0 | 30.9 | | ug/L | | 77 | 50 - 116 |
| 1,4-Dichlorobenzene | 40.0 | 24.0 | | ug/L | | 60 | 23 - 110 |
| 2,4-Dinitrotoluene | 40.0 | 36.2 | | ug/L | | 90 | 63 - 129 |
| Hexachlorobenzene | 40.0 | 41.2 | | ug/L | | 103 | 61 - 126 |
| Hexachlorobutadiene | 40.0 | 20.1 | | ug/L | | 50 | 20 - 100 |
| Hexachloroethane | 40.0 | 21.1 | | ug/L | | 53 | 20 - 100 |
| Nitrobenzene | 40.0 | 35.1 | | ug/L | | 88 | 54 - 121 |
| Pentachlorophenol | 80.0 | 55.7 | | ug/L | | 70 | 42 - 148 |
| Pyridine | 80.0 | 23.9 | | ug/L | | 30 | 15 - 110 |
| 2,4,5-Trichlorophenol | 40.0 | 39.9 | | ug/L | | 100 | 63 - 124 |
| 2,4,6-Trichlorophenol | 40.0 | 38.3 | | ug/L | | 96 | 62 - 121 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *2-Fluorophenol (Surr)* | *80* | | *27 - 110* |
| *Phenol-d5 (Surr)* | *40* | | *20 - 100* |
| *Nitrobenzene-d5 (Surr)* | *78* | | *36 - 120* |
| *2-Fluorobiphenyl* | *104* | | *34 - 110* |
| *2,4,6-Tribromophenol (Surr)* | *81* | | *40 - 145* |
| *Terphenyl-d14* | *105* | | *40 - 145* |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LB2 500-671768/1-C**
**Matrix: Solid**
**Analysis Batch: 672487**

**Client Sample ID: Method Blank**
**Prep Type: TCLP**
**Prep Batch: 672234**

| Analyte | LB2 Result | LB2 Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2-Methylphenol | <20 | | 20 | 20 | ug/L | | 08/30/22 07:51 | 08/31/22 12:16 | 1 |
| 3 & 4 Methylphenol | <20 | | 20 | 20 | ug/L | | 08/30/22 07:51 | 08/31/22 12:16 | 1 |
| 1,4-Dichlorobenzene | <20 | | 20 | 20 | ug/L | | 08/30/22 07:51 | 08/31/22 12:16 | 1 |
| 2,4-Dinitrotoluene | <10 | | 10 | 10 | ug/L | | 08/30/22 07:51 | 08/31/22 12:16 | 1 |
| Hexachlorobenzene | <5.0 | | 5.0 | 5.0 | ug/L | | 08/30/22 07:51 | 08/31/22 12:16 | 1 |
| Hexachlorobutadiene | <50 | | 50 | 50 | ug/L | | 08/30/22 07:51 | 08/31/22 12:16 | 1 |
| Hexachloroethane | <50 | | 50 | 50 | ug/L | | 08/30/22 07:51 | 08/31/22 12:16 | 1 |
| Nitrobenzene | <10 | | 10 | 10 | ug/L | | 08/30/22 07:51 | 08/31/22 12:16 | 1 |
| Pentachlorophenol | <200 | | 200 | 200 | ug/L | | 08/30/22 07:51 | 08/31/22 12:16 | 1 |
| Pyridine | <200 | | 200 | 200 | ug/L | | 08/30/22 07:51 | 08/31/22 12:16 | 1 |
| 2,4,5-Trichlorophenol | <100 | | 100 | 100 | ug/L | | 08/30/22 07:51 | 08/31/22 12:16 | 1 |
| 2,4,6-Trichlorophenol | <50 | | 50 | 50 | ug/L | | 08/30/22 07:51 | 08/31/22 12:16 | 1 |

| *Surrogate* | *LB2 %Recovery* | *LB2 Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorophenol (Surr)* | *58* | | *27 - 110* | *08/30/22 07:51* | *08/31/22 12:16* | *1* |
| *Phenol-d5 (Surr)* | *31* | | *20 - 100* | *08/30/22 07:51* | *08/31/22 12:16* | *1* |
| *Nitrobenzene-d5 (Surr)* | *70* | | *36 - 120* | *08/30/22 07:51* | *08/31/22 12:16* | *1* |
| *2-Fluorobiphenyl* | *91* | | *34 - 110* | *08/30/22 07:51* | *08/31/22 12:16* | *1* |
| *2,4,6-Tribromophenol (Surr)* | *74* | | *40 - 145* | *08/30/22 07:51* | *08/31/22 12:16* | *1* |
| *Terphenyl-d14* | *126* | | *40 - 145* | *08/30/22 07:51* | *08/31/22 12:16* | *1* |

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

**Lab Sample ID: MB 500-671936/1-A**
**Matrix: Solid**
**Analysis Batch: 672139**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 671936**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | <17 | | 17 | 6.6 | ug/Kg | | 08/26/22 14:08 | 08/29/22 12:02 | 1 |
| PCB-1221 | <17 | | 17 | 6.6 | ug/Kg | | 08/26/22 14:08 | 08/29/22 12:02 | 1 |
| PCB-1232 | <17 | | 17 | 4.5 | ug/Kg | | 08/26/22 14:08 | 08/29/22 12:02 | 1 |
| PCB-1242 | <17 | | 17 | 6.5 | ug/Kg | | 08/26/22 14:08 | 08/29/22 12:02 | 1 |
| PCB-1248 | <17 | | 17 | 7.9 | ug/Kg | | 08/26/22 14:08 | 08/29/22 12:02 | 1 |
| PCB-1254 | <17 | | 17 | 5.7 | ug/Kg | | 08/26/22 14:08 | 08/29/22 12:02 | 1 |
| PCB-1260 | <17 | | 17 | 6.3 | ug/Kg | | 08/26/22 14:08 | 08/29/22 12:02 | 1 |
| PCB-1262 | <17 | | 17 | 5.5 | ug/Kg | | 08/26/22 14:08 | 08/29/22 12:02 | 1 |
| PCB-1268 | <17 | | 17 | 9.7 | ug/Kg | | 08/26/22 14:08 | 08/29/22 12:02 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *151* | *S1+* | *49 - 129* | *08/26/22 14:08* | *08/29/22 12:02* | *1* |
| *DCB Decachlorobiphenyl* | *189* | *S1+* | *37 - 121* | *08/26/22 14:08* | *08/29/22 12:02* | *1* |

**Lab Sample ID: LCS 500-671936/2-A**
**Matrix: Solid**
**Analysis Batch: 672139**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 671936**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | | | 167 | 141 | | ug/Kg | | 85 | 57 - 120 | | |

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

**Lab Sample ID: LCS 500-671936/2-A**
**Matrix: Solid**
**Analysis Batch: 672139**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 671936**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| PCB-1260 | 167 | 169 | | ug/Kg | | 102 | 61 - 125 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Tetrachloro-m-xylene* | *108* | | *49 - 129* |
| *DCB Decachlorobiphenyl* | *132* | *S1+* | *37 - 121* |

## Method: 6010D - Metals (ICP)

**Lab Sample ID: LCS 500-671973/13-A**
**Matrix: Solid**
**Analysis Batch: 672268**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 671973**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Arsenic | 0.100 | 0.0988 | | mg/L | | 99 | 80 - 120 |
| Barium | 0.500 | 0.488 | J | mg/L | | 98 | 80 - 120 |
| Cadmium | 0.0500 | 0.0477 | | mg/L | | 95 | 80 - 120 |
| Chromium | 0.200 | 0.199 | | mg/L | | 99 | 80 - 120 |
| Lead | 0.100 | 0.0923 | | mg/L | | 92 | 80 - 120 |
| Selenium | 0.100 | 0.0936 | | mg/L | | 94 | 80 - 120 |
| Silver | 0.0500 | 0.0473 | | mg/L | | 95 | 80 - 120 |

**Lab Sample ID: MB 500-672095/1-A**
**Matrix: Solid**
**Analysis Batch: 672473**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 672095**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | <20 | | 20 | 8.2 | mg/Kg | | 08/29/22 09:09 | 08/30/22 13:45 | 1 |
| Antimony | <2.0 | | 2.0 | 0.39 | mg/Kg | | 08/29/22 09:09 | 08/30/22 13:45 | 1 |
| Arsenic | <1.0 | | 1.0 | 0.34 | mg/Kg | | 08/29/22 09:09 | 08/30/22 13:45 | 1 |
| Barium | <1.0 | | 1.0 | 0.11 | mg/Kg | | 08/29/22 09:09 | 08/30/22 13:45 | 1 |
| Beryllium | <0.40 | | 0.40 | 0.093 | mg/Kg | | 08/29/22 09:09 | 08/30/22 13:45 | 1 |
| Cadmium | 0.0721 | J | 0.20 | 0.036 | mg/Kg | | 08/29/22 09:09 | 08/30/22 13:45 | 1 |
| Calcium | 10.8 | J | 20 | 3.4 | mg/Kg | | 08/29/22 09:09 | 08/30/22 13:45 | 1 |
| Chromium | <1.0 | | 1.0 | 0.50 | mg/Kg | | 08/29/22 09:09 | 08/30/22 13:45 | 1 |
| Cobalt | <0.50 | | 0.50 | 0.13 | mg/Kg | | 08/29/22 09:09 | 08/30/22 13:45 | 1 |
| Copper | <1.0 | | 1.0 | 0.28 | mg/Kg | | 08/29/22 09:09 | 08/30/22 13:45 | 1 |
| Iron | <20 | | 20 | 10 | mg/Kg | | 08/29/22 09:09 | 08/30/22 13:45 | 1 |
| Lead | <0.50 | | 0.50 | 0.23 | mg/Kg | | 08/29/22 09:09 | 08/30/22 13:45 | 1 |
| Magnesium | 6.17 | J | 10 | 5.0 | mg/Kg | | 08/29/22 09:09 | 08/30/22 13:45 | 1 |
| Manganese | 0.196 | J | 1.0 | 0.15 | mg/Kg | | 08/29/22 09:09 | 08/30/22 13:45 | 1 |
| Nickel | <1.0 | | 1.0 | 0.29 | mg/Kg | | 08/29/22 09:09 | 08/30/22 13:45 | 1 |
| Potassium | <50 | | 50 | 18 | mg/Kg | | 08/29/22 09:09 | 08/30/22 13:45 | 1 |
| Selenium | <1.0 | | 1.0 | 0.59 | mg/Kg | | 08/29/22 09:09 | 08/30/22 13:45 | 1 |
| Silver | <0.50 | | 0.50 | 0.13 | mg/Kg | | 08/29/22 09:09 | 08/30/22 13:45 | 1 |
| Sodium | <100 | | 100 | 15 | mg/Kg | | 08/29/22 09:09 | 08/30/22 13:45 | 1 |
| Thallium | <1.0 | | 1.0 | 0.50 | mg/Kg | | 08/29/22 09:09 | 08/30/22 13:45 | 1 |
| Vanadium | <0.50 | | 0.50 | 0.12 | mg/Kg | | 08/29/22 09:09 | 08/30/22 13:45 | 1 |
| Zinc | <2.0 | | 2.0 | 0.88 | mg/Kg | | 08/29/22 09:09 | 08/30/22 13:45 | 1 |
| Lithium | <1.0 | | 1.0 | 0.30 | mg/Kg | | 08/29/22 09:09 | 08/30/22 13:45 | 1 |

# QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Site

Job ID: 500-221285-1

## Method: 6010D - Metals (ICP)

**Lab Sample ID: LCS 500-672095/2-A**
**Matrix: Solid**
**Analysis Batch: 672603**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 672095**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Manganese | 50.0 | 45.2 | | mg/Kg | | 90 | 80 - 120 |

**Lab Sample ID: LCS 500-672095/2-A ^2**
**Matrix: Solid**
**Analysis Batch: 672473**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 672095**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Aluminum | 200 | 209 | | mg/Kg | | 104 | 80 - 120 |
| Antimony | 50.0 | 49.8 | | mg/Kg | | 100 | 80 - 120 |
| Arsenic | 10.0 | 9.47 | | mg/Kg | | 95 | 80 - 120 |
| Barium | 200 | 211 | | mg/Kg | | 105 | 80 - 120 |
| Beryllium | 5.00 | 4.45 | | mg/Kg | | 89 | 80 - 120 |
| Cadmium | 5.00 | 5.06 | | mg/Kg | | 101 | 80 - 120 |
| Calcium | 1000 | 958 | | mg/Kg | | 96 | 80 - 120 |
| Chromium | 20.0 | 19.2 | | mg/Kg | | 96 | 80 - 120 |
| Cobalt | 50.0 | 50.2 | | mg/Kg | | 100 | 80 - 120 |
| Copper | 25.0 | 25.9 | | mg/Kg | | 104 | 80 - 120 |
| Iron | 100 | 110 | | mg/Kg | | 110 | 80 - 120 |
| Lead | 10.0 | 9.11 | | mg/Kg | | 91 | 80 - 120 |
| Magnesium | 1000 | 993 | | mg/Kg | | 99 | 80 - 120 |
| Nickel | 50.0 | 48.4 | | mg/Kg | | 97 | 80 - 120 |
| Potassium | 1000 | 1010 | | mg/Kg | | 101 | 80 - 120 |
| Selenium | 10.0 | 9.16 | | mg/Kg | | 92 | 80 - 120 |
| Silver | 5.00 | 4.48 | | mg/Kg | | 90 | 80 - 120 |
| Sodium | 1000 | 1080 | | mg/Kg | | 108 | 80 - 120 |
| Thallium | 10.0 | 9.40 | | mg/Kg | | 94 | 80 - 120 |
| Vanadium | 50.0 | 48.9 | | mg/Kg | | 98 | 80 - 120 |
| Zinc | 50.0 | 46.4 | | mg/Kg | | 93 | 80 - 120 |
| Lithium | 50.0 | 54.9 | | mg/Kg | | 110 | 80 - 120 |

**Lab Sample ID: LB2 500-671768/2-B**
**Matrix: Solid**
**Analysis Batch: 672268**

**Client Sample ID: Method Blank**
**Prep Type: TCLP**
**Prep Batch: 671973**

| Analyte | LB2 Result | LB2 Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | <0.050 | | 0.050 | 0.010 | mg/L | | 08/26/22 16:39 | 08/29/22 15:44 | 1 |
| Barium | <0.50 | | 0.50 | 0.050 | mg/L | | 08/26/22 16:39 | 08/29/22 15:44 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 08/26/22 16:39 | 08/29/22 15:44 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 08/26/22 16:39 | 08/29/22 15:44 | 1 |
| Lead | <0.050 | | 0.050 | 0.0075 | mg/L | | 08/26/22 16:39 | 08/29/22 15:44 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 08/26/22 16:39 | 08/29/22 15:44 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 08/26/22 16:39 | 08/29/22 15:44 | 1 |

# QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Site

Job ID: 500-221285-1

## Method: 7470A - Mercury (CVAA)

**Lab Sample ID: MB 500-671923/12-A**
**Matrix: Solid**
**Analysis Batch: 672168**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 671923**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.20 | | 0.20 | 0.20 | ug/L | | 08/26/22 11:35 | 08/29/22 08:54 | 1 |

**Lab Sample ID: LCS 500-671923/35-A**
**Matrix: Solid**
**Analysis Batch: 672168**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 671923**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Mercury | 2.00 | 1.84 | | ug/L | | 92 | 80 - 120 |

**Lab Sample ID: LB2 500-671768/1-B**
**Matrix: Solid**
**Analysis Batch: 672168**

**Client Sample ID: Method Blank**
**Prep Type: TCLP**
**Prep Batch: 671923**

| Analyte | LB2 Result | LB2 Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.20 | | 0.20 | 0.20 | ug/L | | 08/26/22 11:35 | 08/29/22 10:20 | 1 |

## Method: 7471B - Mercury (CVAA)

**Lab Sample ID: MB 500-671927/12-A**
**Matrix: Solid**
**Analysis Batch: 672125**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 671927**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <17 | | 17 | 5.6 | ug/Kg | | 08/26/22 15:20 | 08/29/22 08:19 | 1 |

**Lab Sample ID: LCS 500-671927/13-A**
**Matrix: Solid**
**Analysis Batch: 672125**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 671927**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Mercury | 167 | 136 | | ug/Kg | | 81 | 80 - 120 |

## Method: 9012B - Cyanide, Total andor Amenable

**Lab Sample ID: MB 500-671823/1-A**
**Matrix: Solid**
**Analysis Batch: 672411**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 671823**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total | <0.010 | | 0.010 | 0.0050 | mg/Kg | | 08/26/22 09:59 | 08/30/22 15:27 | 1 |

**Lab Sample ID: HLCS 500-671823/2-A**
**Matrix: Solid**
**Analysis Batch: 672411**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 671823**

| Analyte | Spike Added | HLCS Result | HLCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Cyanide, Total | 0.400 | 0.408 | | mg/Kg | | 102 | 90 - 110 |

## Method: 9012B - Cyanide, Total andor Amenable (Continued)

**Lab Sample ID: LCS 500-671823/3-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 672411** — **Prep Batch: 671823**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Cyanide, Total | 0.100 | 0.104 | | mg/Kg | | 104 | 85 - 115 |

**Lab Sample ID: LLCS 500-671823/4-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 672411** — **Prep Batch: 671823**

| Analyte | Spike Added | LLCS Result | LLCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Cyanide, Total | 0.0500 | 0.0481 | | mg/Kg | | 96 | 75 - 125 |

## Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

**Lab Sample ID: MB 500-672214/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 672612** — **Prep Batch: 672214**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Sulfide | <10 | | 10 | 4.7 | mg/Kg | | 08/29/22 16:56 | 08/31/22 14:24 | 1 |

**Lab Sample ID: LCS 500-672214/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 672612** — **Prep Batch: 672214**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Sulfide | 190 | 174 | | mg/Kg | | 92 | 80 - 120 |

# Lab Chronicle

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Site

Job ID: 500-221285-1

## Client Sample ID: MLBF-C-F6-01-220824

**Lab Sample ID: 500-221285-1**
**Date Collected: 08/24/22 12:08**
**Matrix: Solid**
**Date Received: 08/24/22 14:10**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| TCLP | Leach | 1311 | | | 671768 | OAJ | EET CHI | 08/25/22 14:22 - 08/26/22 08:22 [1] |
| TCLP | Prep | 3510C | | | 672234 | TS | EET CHI | 08/30/22 07:51 |
| TCLP | Analysis | 8270D | | 5 | 672487 | JSB | EET CHI | 08/31/22 15:28 |
| TCLP | Leach | 1311 | | | 671768 | OAJ | EET CHI | 08/25/22 14:22 - 08/26/22 08:22 [1] |
| TCLP | Prep | 3010A | | | 671973 | LMB | EET CHI | 08/26/22 16:39 - 08/26/22 17:09 [1] |
| TCLP | Analysis | 6010D | | 1 | 672391 | JJB | EET CHI | 08/30/22 14:34 |
| TCLP | Leach | 1311 | | | 671768 | OAJ | EET CHI | 08/25/22 14:22 - 08/26/22 08:22 [1] |
| TCLP | Prep | 3010A | | | 671973 | LMB | EET CHI | 08/26/22 16:39 - 08/26/22 17:09 [1] |
| TCLP | Analysis | 6010D | | 1 | 672268 | JJB | EET CHI | 08/29/22 16:05 |
| TCLP | Leach | 1311 | | | 671768 | OAJ | EET CHI | 08/25/22 14:22 - 08/26/22 08:22 [1] |
| TCLP | Prep | 7470A | | | 671923 | MJG | EET CHI | 08/26/22 11:35 - 08/26/22 13:35 [1] |
| TCLP | Analysis | 7470A | | 1 | 672168 | MJG | EET CHI | 08/29/22 10:27 |
| Total/NA | Analysis | 9045D | | 1 | 671697 | SMO | EET CHI | 08/25/22 13:24 - 08/25/22 13:26 [1] |
| Total/NA | Analysis | Moisture | | 1 | 671708 | LWN | EET CHI | 08/25/22 10:50 |

## Client Sample ID: MLBF-C-F6-01-220824

**Lab Sample ID: 500-221285-1**
**Date Collected: 08/24/22 12:08**
**Matrix: Solid**
**Date Received: 08/24/22 14:10**
**Percent Solids: 95.6**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3541 | | | 671936 | EK | EET CHI | 08/26/22 14:08 - 08/26/22 19:00 [1] |
| Total/NA | Analysis | 8082A | | 1 | 672139 | SS | EET CHI | 08/29/22 18:53 |
| Total/NA | Prep | 3050B | | | 672095 | BDE | EET CHI | 08/29/22 09:09 - 08/29/22 09:39 [1] |
| Total/NA | Analysis | 6010D | | 1 | 672473 | JJB | EET CHI | 08/30/22 15:43 |
| Total/NA | Prep | 3050B | | | 672095 | BDE | EET CHI | 08/29/22 09:09 - 08/29/22 09:39 [1] |
| Total/NA | Analysis | 6010D | | 1 | 672603 | JJB | EET CHI | 08/31/22 11:07 |
| Total/NA | Prep | 3050B | | | 672095 | BDE | EET CHI | 08/29/22 09:09 - 08/29/22 09:39 [1] |
| Total/NA | Analysis | 6010D | | 5 | 672603 | JJB | EET CHI | 08/31/22 11:10 |
| Total/NA | Prep | 7471B | | | 671927 | MJG | EET CHI | 08/26/22 15:20 |
| Total/NA | Analysis | 7471B | | 1 | 672125 | MJG | EET CHI | 08/29/22 09:12 |
| Total/NA | Prep | 9010C | | | 671823 | LP | EET CHI | 08/26/22 09:59 - 08/26/22 10:29 [1] |
| Total/NA | Analysis | 9012B | | 1 | 672411 | JMP | EET CHI | 08/30/22 16:01 |
| Total/NA | Prep | 9030B | | | 672214 | BC | EET CHI | 08/29/22 17:37 - 08/29/22 17:39 [1] |
| Total/NA | Analysis | 9034 | | 1 | 672612 | BC | EET CHI | 08/31/22 14:33 |

[1] Completion dates and times are reported or not reported per method requirements or individual lab discretion.

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

# Accreditation/Certification Summary

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Site

Job ID: 500-221285-1

## Laboratory: Eurofins Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| Illinois | NELAP | IL00035 | 04-30-23 |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte |
|---|---|---|---|
| 6010D | 3010A | Solid | Arsenic |
| 6010D | 3010A | Solid | Barium |
| 6010D | 3010A | Solid | Cadmium |
| 6010D | 3010A | Solid | Chromium |
| 6010D | 3010A | Solid | Lead |
| 6010D | 3010A | Solid | Selenium |
| 6010D | 3010A | Solid | Silver |
| 6010D | 3050B | Solid | Aluminum |
| 6010D | 3050B | Solid | Antimony |
| 6010D | 3050B | Solid | Arsenic |
| 6010D | 3050B | Solid | Barium |
| 6010D | 3050B | Solid | Beryllium |
| 6010D | 3050B | Solid | Cadmium |
| 6010D | 3050B | Solid | Calcium |
| 6010D | 3050B | Solid | Chromium |
| 6010D | 3050B | Solid | Cobalt |
| 6010D | 3050B | Solid | Copper |
| 6010D | 3050B | Solid | Iron |
| 6010D | 3050B | Solid | Lead |
| 6010D | 3050B | Solid | Lithium |
| 6010D | 3050B | Solid | Magnesium |
| 6010D | 3050B | Solid | Manganese |
| 6010D | 3050B | Solid | Nickel |
| 6010D | 3050B | Solid | Potassium |
| 6010D | 3050B | Solid | Selenium |
| 6010D | 3050B | Solid | Silver |
| 6010D | 3050B | Solid | Sodium |
| 6010D | 3050B | Solid | Thallium |
| 6010D | 3050B | Solid | Vanadium |
| 6010D | 3050B | Solid | Zinc |
| 7470A | 7470A | Solid | Mercury |
| 8082A | 3541 | Solid | PCB-1262 |
| 8082A | 3541 | Solid | PCB-1268 |
| Moisture | | Solid | Percent Moisture |
| Moisture | | Solid | Percent Solids |

| | | | |
|---|---|---|---|
| Indiana | State | C-IL-02 | 04-29-23 |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte |
|---|---|---|---|
| 6010D | 3010A | Solid | Arsenic |
| 6010D | 3010A | Solid | Barium |
| 6010D | 3010A | Solid | Cadmium |
| 6010D | 3010A | Solid | Chromium |
| 6010D | 3010A | Solid | Lead |
| 6010D | 3010A | Solid | Selenium |

## Laboratory: Eurofins Chicago (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte |
|---|---|---|---|
| 6010D | 3010A | Solid | Silver |
| 6010D | 3050B | Solid | Aluminum |
| 6010D | 3050B | Solid | Antimony |
| 6010D | 3050B | Solid | Arsenic |
| 6010D | 3050B | Solid | Barium |
| 6010D | 3050B | Solid | Beryllium |
| 6010D | 3050B | Solid | Cadmium |
| 6010D | 3050B | Solid | Calcium |
| 6010D | 3050B | Solid | Chromium |
| 6010D | 3050B | Solid | Cobalt |
| 6010D | 3050B | Solid | Copper |
| 6010D | 3050B | Solid | Iron |
| 6010D | 3050B | Solid | Lead |
| 6010D | 3050B | Solid | Lithium |
| 6010D | 3050B | Solid | Magnesium |
| 6010D | 3050B | Solid | Manganese |
| 6010D | 3050B | Solid | Nickel |
| 6010D | 3050B | Solid | Potassium |
| 6010D | 3050B | Solid | Selenium |
| 6010D | 3050B | Solid | Silver |
| 6010D | 3050B | Solid | Sodium |
| 6010D | 3050B | Solid | Thallium |
| 6010D | 3050B | Solid | Vanadium |
| 6010D | 3050B | Solid | Zinc |
| 7470A | 7470A | Solid | Mercury |
| 7471B | 7471B | Solid | Mercury |
| 8082A | 3541 | Solid | PCB-1016 |
| 8082A | 3541 | Solid | PCB-1221 |
| 8082A | 3541 | Solid | PCB-1232 |
| 8082A | 3541 | Solid | PCB-1242 |
| 8082A | 3541 | Solid | PCB-1248 |
| 8082A | 3541 | Solid | PCB-1254 |
| 8082A | 3541 | Solid | PCB-1260 |
| 8082A | 3541 | Solid | PCB-1262 |
| 8082A | 3541 | Solid | PCB-1268 |
| 8270D | 3510C | Solid | 1,4-Dichlorobenzene |
| 8270D | 3510C | Solid | 2,4,5-Trichlorophenol |
| 8270D | 3510C | Solid | 2,4,6-Trichlorophenol |
| 8270D | 3510C | Solid | 2,4-Dinitrotoluene |
| 8270D | 3510C | Solid | 2-Methylphenol |
| 8270D | 3510C | Solid | 3 & 4 Methylphenol |
| 8270D | 3510C | Solid | Hexachlorobenzene |
| 8270D | 3510C | Solid | Hexachlorobutadiene |
| 8270D | 3510C | Solid | Hexachloroethane |
| 8270D | 3510C | Solid | Nitrobenzene |
| 8270D | 3510C | Solid | Pentachlorophenol |
| 8270D | 3510C | Solid | Pyridine |

## Laboratory: Eurofins Chicago (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte |
|---|---|---|---|
| 9012B | 9010C | Solid | Cyanide, Total |
| 9034 | 9030B | Solid | Sulfide |
| 9045D | | Solid | pH |
| Moisture | | Solid | Percent Moisture |
| Moisture | | Solid | Percent Solids |

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| Wisconsin | State | 999580010 | 08-31-22 |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte |
|---|---|---|---|
| 6010D | 3050B | Solid | Lithium |
| 8082A | 3541 | Solid | PCB-1262 |
| 8082A | 3541 | Solid | PCB-1268 |
| Moisture | | Solid | Percent Moisture |
| Moisture | | Solid | Percent Solids |

# Chain of Custody Record

523956

eurofins

Environment Testing TestAmerica

Address MORRIS, IL

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TAL-8210

| Client Contact | Project Manager ERICA SCHMANDT | Site Contact JIM KNAPP | Date 8/24/2022 | COC No |
|---|---|---|---|---|
| Company Name TETRA TECH | Tel/Email ERICA.SCHMANDT@TETRATECH | Lab Contact | Carrier | 1 of 1 COCs |
| Address 1 S WACKER DRIVE SUITE 3700 | Analysis Turnaround Time | | | Sampler JS, ES, BM |
| City/State Zip CHICAGO, IL 60606 | ☐ CALENDAR DAYS ☑ WORKING DAYS | | | For Lab Use Only |
| Phone 805 896 6982 | TAT if different from Below 5 DAY | | | Walk-in Client |
| Fax | ☐ 2 weeks | | | Lab Sampling |
| Project Name MORRIS LITHIUM BATTERY SITE | ☐ 1 week | | | |
| Site 103X9031003200001C1103 | ☐ 2 days | | | Job / SDG No |
| PO # ETA-72 | ☐ 1 day | | | 500-221285 |

500-221285 COC

| | Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp, G=Grab) | Matrix | # of Cont. | Filtered Sample (Y/N) | Perform MS / MSD (Y/N) | TCLP METALS | TCLP SVOC | TAL METALS | TCL PCBS | CYANIDE | SULFIDE | pH | PERCENT SOLIDS | Sample Specific Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | MLBF-C-F6-01-220824 | 8/24/22 | 1208 | C | SOC | 3 | | N | X | X | X | X | X | X | X | X | |

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

Non Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact ☐ Yes ☐ No | Custody Seal No | Cooler Temp (°C) Obs'd 13.3 Corr'd 13.0 | Therm ID No

| Relinquished by | Company | Date/Time | Received by | Company | Date/Time |
|---|---|---|---|---|---|
| ERICA SCHMANDT | TETRA TECH | 8/24/22 1300 | | | |
| Relinquished by | Company | Date/Time | Received by | Company | Date/Time |
| | | | | | |
| Relinquished by | Company | Date/Time | Received in Laboratory by | Company | Date/Time |
| | | | | EBTA | 8/24/22 1410 |

# Login Sample Receipt Checklist

Client: Tetra Tech EM Inc.

Job Number: 500-221285-1

**Login Number: 221285**
**List Number: 1**
**Creator: Buckley, Paula M**

**List Source: Eurofins Chicago**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | Received same day of collection; chilling process has begun. |
| Cooler Temperature is recorded. | True | 13.0 |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | N/A | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

eurofins | Environment Testing

# ANALYTICAL REPORT

Eurofins Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

Laboratory Job ID: 500-223407-1
Client Project/Site: Morris Lithium Battery Fire

For:
Tetra Tech EM Inc.
1 South Wacker Drive 37 Floor
Ste. 3700
Chicago, Illinois 60606

Attn: Joe Sanders

*Authorized for release by:*
*11/1/2022 5:11:49 PM*

Jim Knapp, Project Manager II
(630)758-0262
Jim.Knapp@et.eurofinsus.com

LINKS

Review your project results through my EOL

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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## Job ID: 500-223407-1

### Laboratory: Eurofins Chicago

**Narrative**

**Job Narrative**
**500-223407-1**

**Comments**
No additional comments.

**Receipt**
The samples were received on 10/6/2022 4:45 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 22.3º C.

**GC/MS Semi VOA**
Method 8270D: The continuing calibration verification (CCV) associated with batch 500-680766 recovered above the upper control limit for 3 & 4 Methylphenol and 1,4-Dichlorobenzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: Surrogate recovery for the following sample was outside the upper control limit: MLBF-C-E4-01-221006 (500-223407-1). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8270D: The following samples were diluted due to the nature of the sample matrix: MLBF-C-E4-01-221006 (500-223407-1), MLBF-C-E4-01-221006 (500-223407-1[MS]), MLBF-C-E4-01-221006 (500-223407-1[MSD]), MLBF-C-D7-01-221006 (500-223407-2), MLBF-C-B1C1-01-221006 (500-223407-3), MLBF-C-C2D2-01-221006 (500-223407-4) and MLBF-C-C2D2-02-221006-DUP (500-223407-5). Elevated reporting limits (RLs) are provided.

Method 8270D: The tailing factor for Benzidine failed in the DFTPP analysis, respectively. The tailing factor was acceptable in the CCVIS. This indicates the system was in control and no corrective action was required. (DFTPP 500-680766/1)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**GC Semi VOA**
Method 8082A: Surrogate DCB Decachlorobiphenyl is outside acceptable control limits for MLBF-RINSATE-221006 (500-223407-6) however the other surrogate is within range; therefore, re-analysis was not performed.

Method 8082A: Tetrachloro-m-xylene and DCB Decachlorobiphenyl recovery for the following samples were outside upper control limits: MLBF-C-E4-01-221006 (500-223407-1), MLBF-C-E4-01-221006 (500-223407-1[MS]) and MLBF-C-E4-01-221006 (500-223407-1[MSD]). However all surrogate in the associated MS/MSD recoveries were within control limit; therefore, re-extraction and/or re-analysis was not performed.

Method 8082A: DCB Decachlorobiphenyl surrogate recovery for the following samples was outside control limits: MLBF-C-D7-01-221006 (500-223407-2) and MLBF-C-B1C1-01-221006 (500-223407-3). Tetrachloro-m-xylene surrogate was within the control limits; therefore, re-extraction and/or re-analysis was not performed.

Method 8082A: Surrogate Tetrachloro-m-xylene recovery for the following Continuing Calibration Verification (CCVIS) was outside control limits on the primary column: (CCVIS 500-680001/3). The other surrogate was within limits; therefore, re-analysis was not performed. Both surrogates were above the QC limits on the secondary column.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**Metals**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

**General Chemistry**
Method 9012B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 500-679237 and analytical batch 500-679714 were outside control limits. Spike was inadvertently omitted during prep. The associated laboratory control sample (LCS) recovery was within acceptance limits.

## Job ID: 500-223407-1 (Continued)

### Laboratory: Eurofins Chicago (Continued)

Method 9034: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 500-679475, 500-679475 and 500-679475 and analytical batch 500-679513 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**Organic Prep**
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

# Detection Summary

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Fire

Job ID: 500-223407-1

## Client Sample ID: MLBF-C-E4-01-221006 — Lab Sample ID: 500-223407-1

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1254 | 40 | | 17 | 5.9 | ug/Kg | 1 | ☼ | 8082A | Total/NA |
| Aluminum | 6200 | | 20 | 8.1 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Antimony | 0.53 | J B F1 | 2.0 | 0.39 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Arsenic | 2.3 | | 1.0 | 0.34 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Barium | 50 | | 1.0 | 0.11 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Beryllium | 0.45 | | 0.40 | 0.093 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Cadmium | 2.2 | F1 | 0.20 | 0.036 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Calcium | 170000 | | 100 | 17 | mg/Kg | 5 | ☼ | 6010D | Total/NA |
| Chromium | 9.6 | | 1.0 | 0.49 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Cobalt | 17 | | 2.5 | 0.65 | mg/Kg | 5 | ☼ | 6010D | Total/NA |
| Copper | 58 | F1 | 1.0 | 0.28 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Iron | 6500 | | 20 | 10 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Lead | 25 | F1 | 0.50 | 0.23 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Magnesium | 47000 | | 10 | 4.9 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Manganese | 440 | | 1.0 | 0.14 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Nickel | 23 | | 1.0 | 0.29 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Potassium | 860 | | 50 | 18 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Silver | 0.28 | J | 0.50 | 0.13 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Sodium | 430 | | 100 | 15 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Vanadium | 11 | | 0.50 | 0.12 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Zinc | 78 | F1 F2 | 2.0 | 0.88 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Lithium | 12 | | 1.0 | 0.30 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Barium | 0.29 | J | 0.50 | 0.050 | mg/L | 1 | | 6010D | TCLP |
| Chromium | 0.020 | J | 0.025 | 0.010 | mg/L | 1 | | 6010D | TCLP |
| Mercury | 1.9 | F1 | 0.20 | 0.20 | ug/L | 1 | | 7470A | TCLP |
| Mercury | 49 | F1 F2 | 16 | 5.4 | ug/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 12.2 | HF | 0.2 | 0.2 | SU | 1 | | 9045D | Total/NA |

## Client Sample ID: MLBF-C-D7-01-221006 — Lab Sample ID: 500-223407-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1254 | 21 | | 18 | 6.0 | ug/Kg | 1 | ☼ | 8082A | Total/NA |
| Aluminum | 7200 | | 20 | 8.3 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Arsenic | 2.6 | | 1.0 | 0.35 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Barium | 56 | | 1.0 | 0.12 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Beryllium | 0.49 | | 0.41 | 0.095 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Cadmium | 4.7 | | 0.20 | 0.037 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Calcium | 190000 | | 100 | 17 | mg/Kg | 5 | ☼ | 6010D | Total/NA |
| Chromium | 9.5 | | 1.0 | 0.50 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Cobalt | 4.6 | | 2.5 | 0.67 | mg/Kg | 5 | ☼ | 6010D | Total/NA |
| Copper | 8.9 | | 1.0 | 0.28 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Iron | 6800 | | 20 | 11 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Lead | 4.1 | | 0.51 | 0.23 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Magnesium | 44000 | | 10 | 5.0 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Manganese | 480 | | 1.0 | 0.15 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Nickel | 12 | | 1.0 | 0.30 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Potassium | 960 | | 51 | 18 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Silver | 0.15 | J | 0.51 | 0.13 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Sodium | 450 | | 100 | 15 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Vanadium | 12 | | 0.51 | 0.12 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Zinc | 40 | | 2.0 | 0.89 | mg/Kg | 1 | ☼ | 6010D | Total/NA |

This Detection Summary does not include radiochemical test results.

# Detection Summary

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Fire

Job ID: 500-223407-1

## Client Sample ID: MLBF-C-D7-01-221006 (Continued) — Lab Sample ID: 500-223407-2

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Lithium | 10 | | 1.0 | 0.30 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Barium | 0.35 | J | 0.50 | 0.050 | mg/L | 1 | | 6010D | TCLP |
| Chromium | 0.018 | J | 0.025 | 0.010 | mg/L | 1 | | 6010D | TCLP |
| Mercury | 48 | | 17 | 5.5 | ug/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 12.2 | HF | 0.2 | 0.2 | SU | 1 | | 9045D | Total/NA |

## Client Sample ID: MLBF-C-B1C1-01-221006 — Lab Sample ID: 500-223407-3

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1254 | 24 | | 17 | 5.8 | ug/Kg | 1 | ☼ | 8082A | Total/NA |
| Aluminum | 6500 | | 20 | 8.0 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Arsenic | 2.3 | | 0.98 | 0.33 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Barium | 51 | | 0.98 | 0.11 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Beryllium | 0.47 | | 0.39 | 0.091 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Cadmium | 0.20 | | 0.20 | 0.035 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Calcium | 180000 | | 98 | 17 | mg/Kg | 5 | ☼ | 6010D | Total/NA |
| Chromium | 9.2 | | 0.98 | 0.48 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Cobalt | 2.6 | | 0.98 | 0.26 | mg/Kg | 2 | ☼ | 6010D | Total/NA |
| Copper | 210 | | 2.0 | 0.55 | mg/Kg | 2 | ☼ | 6010D | Total/NA |
| Iron | 6700 | | 20 | 10 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Lead | 3.4 | | 0.49 | 0.23 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Magnesium | 48000 | | 9.8 | 4.9 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Manganese | 490 | | 0.98 | 0.14 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Nickel | 9.2 | | 0.98 | 0.28 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Potassium | 770 | | 49 | 17 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Sodium | 460 | | 98 | 14 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Vanadium | 11 | | 0.49 | 0.12 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Zinc | 35 | | 2.0 | 0.86 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Lithium | 6.7 | | 0.98 | 0.29 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Barium | 0.34 | J | 0.50 | 0.050 | mg/L | 1 | | 6010D | TCLP |
| Chromium | 0.011 | J | 0.025 | 0.010 | mg/L | 1 | | 6010D | TCLP |
| Mercury | 50 | | 17 | 5.6 | ug/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 12.2 | HF | 0.2 | 0.2 | SU | 1 | | 9045D | Total/NA |

## Client Sample ID: MLBF-C-C2D2-01-221006 — Lab Sample ID: 500-223407-4

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1254 | 17 | J | 18 | 5.9 | ug/Kg | 1 | ☼ | 8082A | Total/NA |
| Aluminum | 6500 | | 20 | 8.3 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Arsenic | 2.0 | | 1.0 | 0.35 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Barium | 47 | | 1.0 | 0.12 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Beryllium | 0.49 | | 0.41 | 0.095 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Cadmium | 0.47 | | 0.20 | 0.037 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Calcium | 180000 | | 100 | 17 | mg/Kg | 5 | ☼ | 6010D | Total/NA |
| Chromium | 10 | | 1.0 | 0.50 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Cobalt | 4.6 | | 2.5 | 0.67 | mg/Kg | 5 | ☼ | 6010D | Total/NA |
| Copper | 290 | | 5.1 | 1.4 | mg/Kg | 5 | ☼ | 6010D | Total/NA |
| Iron | 6900 | | 20 | 11 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Lead | 13 | | 0.51 | 0.24 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Magnesium | 45000 | | 10 | 5.0 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Manganese | 500 | | 1.0 | 0.15 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Nickel | 16 | | 1.0 | 0.30 | mg/Kg | 1 | ☼ | 6010D | Total/NA |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: MLBF-C-C2D2-01-221006 (Continued) — Lab Sample ID: 500-223407-4

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Potassium | 800 | | 51 | 18 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Silver | 0.17 | J | 0.51 | 0.13 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Sodium | 430 | | 100 | 15 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Vanadium | 11 | | 0.51 | 0.12 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Zinc | 64 | | 2.0 | 0.89 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Lithium | 8.9 | | 1.0 | 0.30 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Barium | 0.29 | J | 0.50 | 0.050 | mg/L | 1 | | 6010D | TCLP |
| Chromium | 0.020 | J | 0.025 | 0.010 | mg/L | 1 | | 6010D | TCLP |
| Mercury | 48 | | 17 | 5.5 | ug/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 12.3 | HF | 0.2 | 0.2 | SU | 1 | | 9045D | Total/NA |

## Client Sample ID: MLBF-C-C2D2-02-221006-DUP — Lab Sample ID: 500-223407-5

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1254 | 18 | | 18 | 6.0 | ug/Kg | 1 | ☼ | 8082A | Total/NA |
| Aluminum | 6600 | | 21 | 8.5 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Arsenic | 2.0 | | 1.0 | 0.35 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Barium | 48 | | 1.0 | 0.12 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Beryllium | 0.44 | | 0.41 | 0.097 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Cadmium | 0.46 | | 0.21 | 0.037 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Calcium | 180000 | | 100 | 18 | mg/Kg | 5 | ☼ | 6010D | Total/NA |
| Chromium | 10 | | 1.0 | 0.51 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Cobalt | 4.5 | | 2.6 | 0.68 | mg/Kg | 5 | ☼ | 6010D | Total/NA |
| Copper | 260 | | 5.2 | 1.5 | mg/Kg | 5 | ☼ | 6010D | Total/NA |
| Iron | 7000 | | 21 | 11 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Lead | 9.0 | | 0.52 | 0.24 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Magnesium | 44000 | | 10 | 5.1 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Manganese | 520 | | 1.0 | 0.15 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Nickel | 16 | | 1.0 | 0.30 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Potassium | 780 | | 52 | 18 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Silver | 0.21 | J | 0.52 | 0.13 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Sodium | 430 | | 100 | 15 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Vanadium | 11 | | 0.52 | 0.12 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Zinc | 63 | | 2.1 | 0.91 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Lithium | 8.3 | | 1.0 | 0.31 | mg/Kg | 1 | ☼ | 6010D | Total/NA |
| Barium | 0.32 | J | 0.50 | 0.050 | mg/L | 1 | | 6010D | TCLP |
| Chromium | 0.020 | J | 0.025 | 0.010 | mg/L | 1 | | 6010D | TCLP |
| Mercury | 7.0 | J | 16 | 5.3 | ug/Kg | 1 | ☼ | 7471B | Total/NA |
| pH | 12.3 | HF | 0.2 | 0.2 | SU | 1 | | 9045D | Total/NA |

## Client Sample ID: MLBF-RINSATE-221006 — Lab Sample ID: 500-223407-6

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Calcium | 0.41 | | 0.20 | 0.044 | mg/L | 1 | | 6020A | Total Recoverable |
| Copper | 0.0034 | | 0.0020 | 0.00050 | mg/L | 1 | | 6020A | Total Recoverable |
| Iron | 0.053 | J | 0.10 | 0.047 | mg/L | 1 | | 6020A | Total Recoverable |
| Lead | 0.00066 | | 0.00050 | 0.00019 | mg/L | 1 | | 6020A | Total Recoverable |
| Magnesium | 0.091 | J | 0.20 | 0.049 | mg/L | 1 | | 6020A | Total Recoverable |

This Detection Summary does not include radiochemical test results.

## Client Sample ID: MLBF-RINSATE-221006 (Continued)

## Lab Sample ID: 500-223407-6

| Analyte | Result | Qualifier | RL | MDL | Unit | Dil Fac | D | Method | Prep Type |
|---|---|---|---|---|---|---|---|---|---|
| Manganese | 0.0011 | J | 0.0025 | 0.00079 | mg/L | 1 | | 6020A | Total Recoverable |
| Sodium | 0.82 | | 0.20 | 0.077 | mg/L | 1 | | 6020A | Total Recoverable |
| pH | 9.9 | HF | 0.2 | 0.2 | SU | 1 | | 9040C | Total/NA |

This Detection Summary does not include radiochemical test results.

# Method Summary

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Fire

Job ID: 500-223407-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 8270D | Semivolatile Organic Compounds (GC/MS) | SW846 | EET CHI |
| 8082A | Polychlorinated Biphenyls (PCBs) by Gas Chromatography | SW846 | EET CHI |
| 6010D | Metals (ICP) | SW846 | EET CHI |
| 6020A | Metals (ICP/MS) | SW846 | EET CHI |
| 7470A | Mercury (CVAA) | SW846 | EET CHI |
| 7471B | Mercury (CVAA) | SW846 | EET CHI |
| 9012B | Cyanide, Total andor Amenable | SW846 | EET CHI |
| 9034 | Sulfide, Acid soluble and Insoluble (Titrimetric) | SW846 | EET CHI |
| 9040C | pH | SW846 | EET CHI |
| 9045D | pH | SW846 | EET CHI |
| Moisture | Percent Moisture | EPA | EET CHI |
| 1311 | TCLP Extraction | SW846 | EET CHI |
| 3005A | Preparation, Total Recoverable or Dissolved Metals | SW846 | EET CHI |
| 3010A | Preparation, Total Metals | SW846 | EET CHI |
| 3050B | Preparation, Metals | SW846 | EET CHI |
| 3510C | Liquid-Liquid Extraction (Separatory Funnel) | SW846 | EET CHI |
| 3541 | Automated Soxhlet Extraction | SW846 | EET CHI |
| 7470A | Preparation, Mercury | SW846 | EET CHI |
| 7471B | Preparation, Mercury | SW846 | EET CHI |
| 9010C | Cyanide, Distillation | SW846 | EET CHI |
| 9030B | Sulfide, Distillation (Acid Soluble and Insoluble) | SW846 | EET CHI |

**Protocol References:**

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

# Sample Summary

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Fire

Job ID: 500-223407-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 500-223407-1 | MLBF-C-E4-01-221006 | Solid | 10/06/22 10:40 | 10/06/22 16:45 |
| 500-223407-2 | MLBF-C-D7-01-221006 | Solid | 10/06/22 11:00 | 10/06/22 16:45 |
| 500-223407-3 | MLBF-C-B1C1-01-221006 | Solid | 10/06/22 11:20 | 10/06/22 16:45 |
| 500-223407-4 | MLBF-C-C2D2-01-221006 | Solid | 10/06/22 11:58 | 10/06/22 16:45 |
| 500-223407-5 | MLBF-C-C2D2-02-221006-DUP | Solid | 10/06/22 12:15 | 10/06/22 16:45 |
| 500-223407-6 | MLBF-RINSATE-221006 | Water | 10/06/22 12:30 | 10/06/22 16:45 |

# Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Fire

Job ID: 500-223407-1

## Client Sample ID: MLBF-C-E4-01-221006

**Date Collected: 10/06/22 10:40**
**Date Received: 10/06/22 16:45**

## Lab Sample ID: 500-223407-1

**Matrix: Solid**
**Percent Solids: 95.9**

### Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2-Methylphenol | <100 | | 100 | 100 | ug/L | | 10/20/22 10:28 | 10/21/22 12:04 | 5 |
| 3 & 4 Methylphenol | <100 | | 100 | 100 | ug/L | | 10/20/22 10:28 | 10/21/22 12:04 | 5 |
| 1,4-Dichlorobenzene | <100 | | 100 | 100 | ug/L | | 10/20/22 10:28 | 10/21/22 12:04 | 5 |
| 2,4-Dinitrotoluene | <50 | | 50 | 50 | ug/L | | 10/20/22 10:28 | 10/21/22 12:04 | 5 |
| Hexachlorobenzene | <25 | | 25 | 25 | ug/L | | 10/20/22 10:28 | 10/21/22 12:04 | 5 |
| Hexachlorobutadiene | <250 | | 250 | 250 | ug/L | | 10/20/22 10:28 | 10/21/22 12:04 | 5 |
| Hexachloroethane | <250 | | 250 | 250 | ug/L | | 10/20/22 10:28 | 10/21/22 12:04 | 5 |
| Nitrobenzene | <50 | | 50 | 50 | ug/L | | 10/20/22 10:28 | 10/21/22 12:04 | 5 |
| Pentachlorophenol | <1000 | | 1000 | 1000 | ug/L | | 10/20/22 10:28 | 10/21/22 12:04 | 5 |
| Pyridine | <1000 | | 1000 | 1000 | ug/L | | 10/20/22 10:28 | 10/21/22 12:04 | 5 |
| 2,4,5-Trichlorophenol | <500 | | 500 | 500 | ug/L | | 10/20/22 10:28 | 10/21/22 12:04 | 5 |
| 2,4,6-Trichlorophenol | <250 | | 250 | 250 | ug/L | | 10/20/22 10:28 | 10/21/22 12:04 | 5 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorophenol (Surr)* | *60* | | *27 - 110* | *10/20/22 10:28* | *10/21/22 12:04* | *5* |
| *Phenol-d5 (Surr)* | *31* | | *20 - 100* | *10/20/22 10:28* | *10/21/22 12:04* | *5* |
| *Nitrobenzene-d5 (Surr)* | *71* | | *36 - 120* | *10/20/22 10:28* | *10/21/22 12:04* | *5* |
| *2-Fluorobiphenyl* | *66* | | *34 - 110* | *10/20/22 10:28* | *10/21/22 12:04* | *5* |
| *2,4,6-Tribromophenol (Surr)* | *146* | *S1+* | *40 - 145* | *10/20/22 10:28* | *10/21/22 12:04* | *5* |
| *Terphenyl-d14* | *112* | | *40 - 145* | *10/20/22 10:28* | *10/21/22 12:04* | *5* |

### Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | <17 | | 17 | 6.8 | ug/Kg | ☼ | 10/15/22 07:45 | 10/17/22 22:49 | 1 |
| PCB-1221 | <17 | | 17 | 6.8 | ug/Kg | ☼ | 10/15/22 07:45 | 10/17/22 22:49 | 1 |
| PCB-1232 | <17 | | 17 | 4.7 | ug/Kg | ☼ | 10/15/22 07:45 | 10/17/22 22:49 | 1 |
| PCB-1242 | <17 | | 17 | 6.7 | ug/Kg | ☼ | 10/15/22 07:45 | 10/17/22 22:49 | 1 |
| PCB-1248 | <17 | | 17 | 8.2 | ug/Kg | ☼ | 10/15/22 07:45 | 10/17/22 22:49 | 1 |
| **PCB-1254** | **40** | | 17 | 5.9 | ug/Kg | ☼ | 10/15/22 07:45 | 10/17/22 22:49 | 1 |
| PCB-1260 | <17 | | 17 | 6.5 | ug/Kg | ☼ | 10/15/22 07:45 | 10/17/22 22:49 | 1 |
| PCB-1262 | <17 | | 17 | 5.7 | ug/Kg | ☼ | 10/15/22 07:45 | 10/17/22 22:49 | 1 |
| PCB-1268 | <17 | | 17 | 10 | ug/Kg | ☼ | 10/15/22 07:45 | 10/17/22 22:49 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *146* | *S1+* | *49 - 129* | *10/15/22 07:45* | *10/17/22 22:49* | *1* |
| *DCB Decachlorobiphenyl* | *138* | *S1+* | *37 - 121* | *10/15/22 07:45* | *10/17/22 22:49* | *1* |

### Method: SW846 6010D - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Aluminum** | **6200** | | 20 | 8.1 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:05 | 1 |
| **Antimony** | **0.53** | **J B F1** | 2.0 | 0.39 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:05 | 1 |
| **Arsenic** | **2.3** | | 1.0 | 0.34 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:05 | 1 |
| **Barium** | **50** | | 1.0 | 0.11 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:05 | 1 |
| **Beryllium** | **0.45** | | 0.40 | 0.093 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:05 | 1 |
| **Cadmium** | **2.2** | **F1** | 0.20 | 0.036 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:05 | 1 |
| **Calcium** | **170000** | | 100 | 17 | mg/Kg | ☼ | 10/12/22 17:06 | 10/17/22 20:49 | 5 |
| **Chromium** | **9.6** | | 1.0 | 0.49 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:05 | 1 |
| **Cobalt** | **17** | | 2.5 | 0.65 | mg/Kg | ☼ | 10/12/22 17:06 | 10/17/22 20:49 | 5 |
| **Copper** | **58** | **F1** | 1.0 | 0.28 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:05 | 1 |
| **Iron** | **6500** | | 20 | 10 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:05 | 1 |

# Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Fire

Job ID: 500-223407-1

## Client Sample ID: MLBF-C-E4-01-221006

**Date Collected: 10/06/22 10:40**
**Date Received: 10/06/22 16:45**

## Lab Sample ID: 500-223407-1

**Matrix: Solid**
**Percent Solids: 95.9**

### Method: SW846 6010D - Metals (ICP) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Lead** | **25** | **F1** | 0.50 | 0.23 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:05 | 1 |
| **Magnesium** | **47000** | | 10 | 4.9 | mg/Kg | ☼ | 10/12/22 17:06 | 10/17/22 20:26 | 1 |
| **Manganese** | **440** | | 1.0 | 0.14 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:05 | 1 |
| **Nickel** | **23** | | 1.0 | 0.29 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:05 | 1 |
| **Potassium** | **860** | | 50 | 18 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:05 | 1 |
| Selenium | <1.0 | | 1.0 | 0.59 | mg/Kg | ☼ | 10/12/22 17:06 | 10/17/22 20:26 | 1 |
| **Silver** | **0.28** | **J** | 0.50 | 0.13 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:05 | 1 |
| **Sodium** | **430** | | 100 | 15 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:05 | 1 |
| Thallium | <1.0 | | 1.0 | 0.50 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:05 | 1 |
| **Vanadium** | **11** | | 0.50 | 0.12 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:05 | 1 |
| **Zinc** | **78** | **F1 F2** | 2.0 | 0.88 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:05 | 1 |
| **Lithium** | **12** | | 1.0 | 0.30 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:05 | 1 |

### Method: SW846 6010D - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | <0.20 | | 0.20 | 0.20 | mg/L | | 10/17/22 07:44 | 10/17/22 23:24 | 1 |
| **Barium** | **0.29** | **J** | 0.50 | 0.050 | mg/L | | 10/17/22 07:44 | 10/17/22 23:24 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 10/17/22 07:44 | 10/17/22 23:24 | 1 |
| **Chromium** | **0.020** | **J** | 0.025 | 0.010 | mg/L | | 10/17/22 07:44 | 10/17/22 23:24 | 1 |
| Lead | <0.050 | | 0.050 | 0.0075 | mg/L | | 10/17/22 07:44 | 10/17/22 23:24 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 10/17/22 07:44 | 10/17/22 23:24 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 10/17/22 07:44 | 10/17/22 23:24 | 1 |

### Method: SW846 7470A - Mercury (CVAA) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Mercury** | **1.9** | **F1** | 0.20 | 0.20 | ug/L | | 10/17/22 12:00 | 10/18/22 12:00 | 1 |

### Method: SW846 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Mercury** | **49** | **F1 F2** | 16 | 5.4 | ug/Kg | ☼ | 10/14/22 15:00 | 10/17/22 09:05 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total (SW846 9012B) | <0.25 | F1 | 0.25 | 0.12 | mg/Kg | ☼ | 10/12/22 15:00 | 10/14/22 13:57 | 1 |
| Sulfide (SW846 9034) | <10 | F1 | 10 | 4.9 | mg/Kg | ☼ | 10/13/22 13:24 | 10/13/22 16:49 | 1 |
| **pH (SW846 9045D)** | **12.2** | **HF** | 0.2 | 0.2 | SU | | | 10/10/22 13:40 | 1 |

# Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Fire

Job ID: 500-223407-1

## Client Sample ID: MLBF-C-D7-01-221006

**Date Collected: 10/06/22 11:00**
**Date Received: 10/06/22 16:45**

## Lab Sample ID: 500-223407-2

**Matrix: Solid**
**Percent Solids: 94.5**

### Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2-Methylphenol | <100 | | 100 | 100 | ug/L | | 10/20/22 10:28 | 10/21/22 13:16 | 5 |
| 3 & 4 Methylphenol | <100 | | 100 | 100 | ug/L | | 10/20/22 10:28 | 10/21/22 13:16 | 5 |
| 1,4-Dichlorobenzene | <100 | | 100 | 100 | ug/L | | 10/20/22 10:28 | 10/21/22 13:16 | 5 |
| 2,4-Dinitrotoluene | <50 | | 50 | 50 | ug/L | | 10/20/22 10:28 | 10/21/22 13:16 | 5 |
| Hexachlorobenzene | <25 | | 25 | 25 | ug/L | | 10/20/22 10:28 | 10/21/22 13:16 | 5 |
| Hexachlorobutadiene | <250 | | 250 | 250 | ug/L | | 10/20/22 10:28 | 10/21/22 13:16 | 5 |
| Hexachloroethane | <250 | | 250 | 250 | ug/L | | 10/20/22 10:28 | 10/21/22 13:16 | 5 |
| Nitrobenzene | <50 | | 50 | 50 | ug/L | | 10/20/22 10:28 | 10/21/22 13:16 | 5 |
| Pentachlorophenol | <1000 | | 1000 | 1000 | ug/L | | 10/20/22 10:28 | 10/21/22 13:16 | 5 |
| Pyridine | <1000 | | 1000 | 1000 | ug/L | | 10/20/22 10:28 | 10/21/22 13:16 | 5 |
| 2,4,5-Trichlorophenol | <500 | | 500 | 500 | ug/L | | 10/20/22 10:28 | 10/21/22 13:16 | 5 |
| 2,4,6-Trichlorophenol | <250 | | 250 | 250 | ug/L | | 10/20/22 10:28 | 10/21/22 13:16 | 5 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorophenol (Surr)* | *56* | | *27 - 110* | *10/20/22 10:28* | *10/21/22 13:16* | *5* |
| *Phenol-d5 (Surr)* | *32* | | *20 - 100* | *10/20/22 10:28* | *10/21/22 13:16* | *5* |
| *Nitrobenzene-d5 (Surr)* | *60* | | *36 - 120* | *10/20/22 10:28* | *10/21/22 13:16* | *5* |
| *2-Fluorobiphenyl* | *65* | | *34 - 110* | *10/20/22 10:28* | *10/21/22 13:16* | *5* |
| *2,4,6-Tribromophenol (Surr)* | *82* | | *40 - 145* | *10/20/22 10:28* | *10/21/22 13:16* | *5* |
| *Terphenyl-d14* | *107* | | *40 - 145* | *10/20/22 10:28* | *10/21/22 13:16* | *5* |

### Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | <18 | | 18 | 6.9 | ug/Kg | ☼ | 10/15/22 07:45 | 10/17/22 23:33 | 1 |
| PCB-1221 | <18 | | 18 | 6.9 | ug/Kg | ☼ | 10/15/22 07:45 | 10/17/22 23:33 | 1 |
| PCB-1232 | <18 | | 18 | 4.8 | ug/Kg | ☼ | 10/15/22 07:45 | 10/17/22 23:33 | 1 |
| PCB-1242 | <18 | | 18 | 6.8 | ug/Kg | ☼ | 10/15/22 07:45 | 10/17/22 23:33 | 1 |
| PCB-1248 | <18 | | 18 | 8.3 | ug/Kg | ☼ | 10/15/22 07:45 | 10/17/22 23:33 | 1 |
| **PCB-1254** | **21** | | 18 | 6.0 | ug/Kg | ☼ | 10/15/22 07:45 | 10/17/22 23:33 | 1 |
| PCB-1260 | <18 | | 18 | 6.6 | ug/Kg | ☼ | 10/15/22 07:45 | 10/17/22 23:33 | 1 |
| PCB-1262 | <18 | | 18 | 5.8 | ug/Kg | ☼ | 10/15/22 07:45 | 10/17/22 23:33 | 1 |
| PCB-1268 | <18 | | 18 | 10 | ug/Kg | ☼ | 10/15/22 07:45 | 10/17/22 23:33 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *113* | | *49 - 129* | *10/15/22 07:45* | *10/17/22 23:33* | *1* |
| *DCB Decachlorobiphenyl* | *116* | | *37 - 121* | *10/15/22 07:45* | *10/17/22 23:33* | *1* |

### Method: SW846 6010D - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Aluminum** | **7200** | | 20 | 8.3 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:21 | 1 |
| Antimony | <2.0 | | 2.0 | 0.40 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:21 | 1 |
| **Arsenic** | **2.6** | | 1.0 | 0.35 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:21 | 1 |
| **Barium** | **56** | | 1.0 | 0.12 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:21 | 1 |
| **Beryllium** | **0.49** | | 0.41 | 0.095 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:21 | 1 |
| **Cadmium** | **4.7** | | 0.20 | 0.037 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:21 | 1 |
| **Calcium** | **190000** | | 100 | 17 | mg/Kg | ☼ | 10/12/22 17:06 | 10/17/22 21:08 | 5 |
| **Chromium** | **9.5** | | 1.0 | 0.50 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:21 | 1 |
| **Cobalt** | **4.6** | | 2.5 | 0.67 | mg/Kg | ☼ | 10/12/22 17:06 | 10/17/22 21:08 | 5 |
| **Copper** | **8.9** | | 1.0 | 0.28 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:21 | 1 |
| **Iron** | **6800** | | 20 | 11 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:21 | 1 |

# Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Fire

Job ID: 500-223407-1

## Client Sample ID: MLBF-C-D7-01-221006

**Date Collected: 10/06/22 11:00**
**Date Received: 10/06/22 16:45**

## Lab Sample ID: 500-223407-2

**Matrix: Solid**
**Percent Solids: 94.5**

### Method: SW846 6010D - Metals (ICP) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Lead** | **4.1** | | 0.51 | 0.23 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:21 | 1 |
| **Magnesium** | **44000** | | 10 | 5.0 | mg/Kg | ☼ | 10/12/22 17:06 | 10/17/22 21:05 | 1 |
| **Manganese** | **480** | | 1.0 | 0.15 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:21 | 1 |
| **Nickel** | **12** | | 1.0 | 0.30 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:21 | 1 |
| **Potassium** | **960** | | 51 | 18 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:21 | 1 |
| Selenium | <1.0 | | 1.0 | 0.60 | mg/Kg | ☼ | 10/12/22 17:06 | 10/17/22 21:05 | 1 |
| **Silver** | **0.15** | **J** | 0.51 | 0.13 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:21 | 1 |
| **Sodium** | **450** | | 100 | 15 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:21 | 1 |
| Thallium | <1.0 | | 1.0 | 0.51 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:21 | 1 |
| **Vanadium** | **12** | | 0.51 | 0.12 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:21 | 1 |
| **Zinc** | **40** | | 2.0 | 0.89 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:21 | 1 |
| **Lithium** | **10** | | 1.0 | 0.30 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:21 | 1 |

### Method: SW846 6010D - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | <0.20 | | 0.20 | 0.20 | mg/L | | 10/17/22 07:44 | 10/17/22 23:40 | 1 |
| **Barium** | **0.35** | **J** | 0.50 | 0.050 | mg/L | | 10/17/22 07:44 | 10/17/22 23:40 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 10/17/22 07:44 | 10/17/22 23:40 | 1 |
| **Chromium** | **0.018** | **J** | 0.025 | 0.010 | mg/L | | 10/17/22 07:44 | 10/17/22 23:40 | 1 |
| Lead | <0.050 | | 0.050 | 0.0075 | mg/L | | 10/17/22 07:44 | 10/17/22 23:40 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 10/17/22 07:44 | 10/17/22 23:40 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 10/17/22 07:44 | 10/17/22 23:40 | 1 |

### Method: SW846 7470A - Mercury (CVAA) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.20 | | 0.20 | 0.20 | ug/L | | 10/17/22 12:00 | 10/18/22 10:10 | 1 |

### Method: SW846 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Mercury** | **48** | | 17 | 5.5 | ug/Kg | ☼ | 10/14/22 15:00 | 10/17/22 09:13 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total (SW846 9012B) | <0.22 | | 0.22 | 0.11 | mg/Kg | ☼ | 10/12/22 15:00 | 10/14/22 14:12 | 1 |
| Sulfide (SW846 9034) | <10 | | 10 | 4.8 | mg/Kg | ☼ | 10/13/22 13:27 | 10/14/22 12:37 | 1 |
| **pH (SW846 9045D)** | **12.2** | **HF** | 0.2 | 0.2 | SU | | | 10/10/22 13:45 | 1 |

# Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Fire

Job ID: 500-223407-1

## Client Sample ID: MLBF-C-B1C1-01-221006

**Date Collected: 10/06/22 11:20**
**Date Received: 10/06/22 16:45**

## Lab Sample ID: 500-223407-3

**Matrix: Solid**
**Percent Solids: 94.8**

### Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2-Methylphenol | <100 | | 100 | 100 | ug/L | | 10/20/22 10:28 | 10/21/22 13:40 | 5 |
| 3 & 4 Methylphenol | <100 | | 100 | 100 | ug/L | | 10/20/22 10:28 | 10/21/22 13:40 | 5 |
| 1,4-Dichlorobenzene | <100 | | 100 | 100 | ug/L | | 10/20/22 10:28 | 10/21/22 13:40 | 5 |
| 2,4-Dinitrotoluene | <50 | | 50 | 50 | ug/L | | 10/20/22 10:28 | 10/21/22 13:40 | 5 |
| Hexachlorobenzene | <25 | | 25 | 25 | ug/L | | 10/20/22 10:28 | 10/21/22 13:40 | 5 |
| Hexachlorobutadiene | <250 | | 250 | 250 | ug/L | | 10/20/22 10:28 | 10/21/22 13:40 | 5 |
| Hexachloroethane | <250 | | 250 | 250 | ug/L | | 10/20/22 10:28 | 10/21/22 13:40 | 5 |
| Nitrobenzene | <50 | | 50 | 50 | ug/L | | 10/20/22 10:28 | 10/21/22 13:40 | 5 |
| Pentachlorophenol | <1000 | | 1000 | 1000 | ug/L | | 10/20/22 10:28 | 10/21/22 13:40 | 5 |
| Pyridine | <1000 | | 1000 | 1000 | ug/L | | 10/20/22 10:28 | 10/21/22 13:40 | 5 |
| 2,4,5-Trichlorophenol | <500 | | 500 | 500 | ug/L | | 10/20/22 10:28 | 10/21/22 13:40 | 5 |
| 2,4,6-Trichlorophenol | <250 | | 250 | 250 | ug/L | | 10/20/22 10:28 | 10/21/22 13:40 | 5 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorophenol (Surr)* | *61* | | *27 - 110* | *10/20/22 10:28* | *10/21/22 13:40* | *5* |
| *Phenol-d5 (Surr)* | *34* | | *20 - 100* | *10/20/22 10:28* | *10/21/22 13:40* | *5* |
| *Nitrobenzene-d5 (Surr)* | *63* | | *36 - 120* | *10/20/22 10:28* | *10/21/22 13:40* | *5* |
| *2-Fluorobiphenyl* | *59* | | *34 - 110* | *10/20/22 10:28* | *10/21/22 13:40* | *5* |
| *2,4,6-Tribromophenol (Surr)* | *125* | | *40 - 145* | *10/20/22 10:28* | *10/21/22 13:40* | *5* |
| *Terphenyl-d14* | *112* | | *40 - 145* | *10/20/22 10:28* | *10/21/22 13:40* | *5* |

### Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | <17 | | 17 | 6.7 | ug/Kg | ☼ | 10/15/22 07:45 | 10/17/22 23:48 | 1 |
| PCB-1221 | <17 | | 17 | 6.7 | ug/Kg | ☼ | 10/15/22 07:45 | 10/17/22 23:48 | 1 |
| PCB-1232 | <17 | | 17 | 4.6 | ug/Kg | ☼ | 10/15/22 07:45 | 10/17/22 23:48 | 1 |
| PCB-1242 | <17 | | 17 | 6.6 | ug/Kg | ☼ | 10/15/22 07:45 | 10/17/22 23:48 | 1 |
| PCB-1248 | <17 | | 17 | 8.1 | ug/Kg | ☼ | 10/15/22 07:45 | 10/17/22 23:48 | 1 |
| **PCB-1254** | **24** | | 17 | 5.8 | ug/Kg | ☼ | 10/15/22 07:45 | 10/17/22 23:48 | 1 |
| PCB-1260 | <17 | | 17 | 6.4 | ug/Kg | ☼ | 10/15/22 07:45 | 10/17/22 23:48 | 1 |
| PCB-1262 | <17 | | 17 | 5.6 | ug/Kg | ☼ | 10/15/22 07:45 | 10/17/22 23:48 | 1 |
| PCB-1268 | <17 | | 17 | 9.9 | ug/Kg | ☼ | 10/15/22 07:45 | 10/17/22 23:48 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *113* | | *49 - 129* | *10/15/22 07:45* | *10/17/22 23:48* | *1* |
| *DCB Decachlorobiphenyl* | *103* | | *37 - 121* | *10/15/22 07:45* | *10/17/22 23:48* | *1* |

### Method: SW846 6010D - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Aluminum** | **6500** | | 20 | 8.0 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:24 | 1 |
| Antimony | <2.0 | | 2.0 | 0.38 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:24 | 1 |
| **Arsenic** | **2.3** | | 0.98 | 0.33 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:24 | 1 |
| **Barium** | **51** | | 0.98 | 0.11 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:24 | 1 |
| **Beryllium** | **0.47** | | 0.39 | 0.091 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:24 | 1 |
| **Cadmium** | **0.20** | | 0.20 | 0.035 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:24 | 1 |
| **Calcium** | **180000** | | 98 | 17 | mg/Kg | ☼ | 10/12/22 17:06 | 10/17/22 21:18 | 5 |
| **Chromium** | **9.2** | | 0.98 | 0.48 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:24 | 1 |
| **Cobalt** | **2.6** | | 0.98 | 0.26 | mg/Kg | ☼ | 10/12/22 17:06 | 10/17/22 21:15 | 2 |
| **Copper** | **210** | | 2.0 | 0.55 | mg/Kg | ☼ | 10/12/22 17:06 | 10/17/22 21:15 | 2 |
| **Iron** | **6700** | | 20 | 10 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:24 | 1 |

# Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Fire

Job ID: 500-223407-1

## Client Sample ID: MLBF-C-B1C1-01-221006

**Date Collected: 10/06/22 11:20**
**Date Received: 10/06/22 16:45**

## Lab Sample ID: 500-223407-3

**Matrix: Solid**
**Percent Solids: 94.8**

### Method: SW846 6010D - Metals (ICP) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Lead** | **3.4** | | 0.49 | 0.23 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:24 | 1 |
| **Magnesium** | **48000** | | 9.8 | 4.9 | mg/Kg | ☼ | 10/12/22 17:06 | 10/17/22 21:12 | 1 |
| **Manganese** | **490** | | 0.98 | 0.14 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:24 | 1 |
| **Nickel** | **9.2** | | 0.98 | 0.28 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:24 | 1 |
| **Potassium** | **770** | | 49 | 17 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:24 | 1 |
| Selenium | <0.98 | | 0.98 | 0.58 | mg/Kg | ☼ | 10/12/22 17:06 | 10/17/22 21:12 | 1 |
| Silver | <0.49 | | 0.49 | 0.13 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:24 | 1 |
| **Sodium** | **460** | | 98 | 14 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:24 | 1 |
| Thallium | <0.98 | | 0.98 | 0.49 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:24 | 1 |
| **Vanadium** | **11** | | 0.49 | 0.12 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:24 | 1 |
| **Zinc** | **35** | | 2.0 | 0.86 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:24 | 1 |
| **Lithium** | **6.7** | | 0.98 | 0.29 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:24 | 1 |

### Method: SW846 6010D - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | <0.20 | | 0.20 | 0.20 | mg/L | | 10/17/22 07:44 | 10/17/22 23:44 | 1 |
| **Barium** | **0.34** | **J** | 0.50 | 0.050 | mg/L | | 10/17/22 07:44 | 10/17/22 23:44 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 10/17/22 07:44 | 10/17/22 23:44 | 1 |
| **Chromium** | **0.011** | **J** | 0.025 | 0.010 | mg/L | | 10/17/22 07:44 | 10/17/22 23:44 | 1 |
| Lead | <0.050 | | 0.050 | 0.0075 | mg/L | | 10/17/22 07:44 | 10/17/22 23:44 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 10/17/22 07:44 | 10/17/22 23:44 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 10/17/22 07:44 | 10/17/22 23:44 | 1 |

### Method: SW846 7470A - Mercury (CVAA) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.20 | | 0.20 | 0.20 | ug/L | | 10/17/22 12:00 | 10/18/22 10:12 | 1 |

### Method: SW846 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Mercury** | **50** | | 17 | 5.6 | ug/Kg | ☼ | 10/14/22 15:00 | 10/17/22 09:15 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total (SW846 9012B) | <0.25 | | 0.25 | 0.12 | mg/Kg | ☼ | 10/12/22 15:00 | 10/14/22 14:14 | 1 |
| Sulfide (SW846 9034) | <10 | | 10 | 4.8 | mg/Kg | ☼ | 10/13/22 13:28 | 10/14/22 12:37 | 1 |
| **pH (SW846 9045D)** | **12.2** | **HF** | 0.2 | 0.2 | SU | | | 10/10/22 13:54 | 1 |

# Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Fire

Job ID: 500-223407-1

## Client Sample ID: MLBF-C-C2D2-01-221006

**Date Collected: 10/06/22 11:58**
**Date Received: 10/06/22 16:45**

## Lab Sample ID: 500-223407-4

**Matrix: Solid**
**Percent Solids: 94.9**

### Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2-Methylphenol | <100 | | 100 | 100 | ug/L | | 10/20/22 10:28 | 10/21/22 14:03 | 5 |
| 3 & 4 Methylphenol | <100 | | 100 | 100 | ug/L | | 10/20/22 10:28 | 10/21/22 14:03 | 5 |
| 1,4-Dichlorobenzene | <100 | | 100 | 100 | ug/L | | 10/20/22 10:28 | 10/21/22 14:03 | 5 |
| 2,4-Dinitrotoluene | <50 | | 50 | 50 | ug/L | | 10/20/22 10:28 | 10/21/22 14:03 | 5 |
| Hexachlorobenzene | <25 | | 25 | 25 | ug/L | | 10/20/22 10:28 | 10/21/22 14:03 | 5 |
| Hexachlorobutadiene | <250 | | 250 | 250 | ug/L | | 10/20/22 10:28 | 10/21/22 14:03 | 5 |
| Hexachloroethane | <250 | | 250 | 250 | ug/L | | 10/20/22 10:28 | 10/21/22 14:03 | 5 |
| Nitrobenzene | <50 | | 50 | 50 | ug/L | | 10/20/22 10:28 | 10/21/22 14:03 | 5 |
| Pentachlorophenol | <1000 | | 1000 | 1000 | ug/L | | 10/20/22 10:28 | 10/21/22 14:03 | 5 |
| Pyridine | <1000 | | 1000 | 1000 | ug/L | | 10/20/22 10:28 | 10/21/22 14:03 | 5 |
| 2,4,5-Trichlorophenol | <500 | | 500 | 500 | ug/L | | 10/20/22 10:28 | 10/21/22 14:03 | 5 |
| 2,4,6-Trichlorophenol | <250 | | 250 | 250 | ug/L | | 10/20/22 10:28 | 10/21/22 14:03 | 5 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorophenol (Surr)* | *57* | | *27 - 110* | *10/20/22 10:28* | *10/21/22 14:03* | *5* |
| *Phenol-d5 (Surr)* | *37* | | *20 - 100* | *10/20/22 10:28* | *10/21/22 14:03* | *5* |
| *Nitrobenzene-d5 (Surr)* | *67* | | *36 - 120* | *10/20/22 10:28* | *10/21/22 14:03* | *5* |
| *2-Fluorobiphenyl* | *65* | | *34 - 110* | *10/20/22 10:28* | *10/21/22 14:03* | *5* |
| *2,4,6-Tribromophenol (Surr)* | *129* | | *40 - 145* | *10/20/22 10:28* | *10/21/22 14:03* | *5* |
| *Terphenyl-d14* | *111* | | *40 - 145* | *10/20/22 10:28* | *10/21/22 14:03* | *5* |

### Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | <18 | | 18 | 6.9 | ug/Kg | ☼ | 10/15/22 07:45 | 10/18/22 00:02 | 1 |
| PCB-1221 | <18 | | 18 | 6.9 | ug/Kg | ☼ | 10/15/22 07:45 | 10/18/22 00:02 | 1 |
| PCB-1232 | <18 | | 18 | 4.7 | ug/Kg | ☼ | 10/15/22 07:45 | 10/18/22 00:02 | 1 |
| PCB-1242 | <18 | | 18 | 6.8 | ug/Kg | ☼ | 10/15/22 07:45 | 10/18/22 00:02 | 1 |
| PCB-1248 | <18 | | 18 | 8.3 | ug/Kg | ☼ | 10/15/22 07:45 | 10/18/22 00:02 | 1 |
| **PCB-1254** | **17** | **J** | 18 | 5.9 | ug/Kg | ☼ | 10/15/22 07:45 | 10/18/22 00:02 | 1 |
| PCB-1260 | <18 | | 18 | 6.6 | ug/Kg | ☼ | 10/15/22 07:45 | 10/18/22 00:02 | 1 |
| PCB-1262 | <18 | | 18 | 5.7 | ug/Kg | ☼ | 10/15/22 07:45 | 10/18/22 00:02 | 1 |
| PCB-1268 | <18 | | 18 | 10 | ug/Kg | ☼ | 10/15/22 07:45 | 10/18/22 00:02 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *78* | | *49 - 129* | *10/15/22 07:45* | *10/18/22 00:02* | *1* |
| *DCB Decachlorobiphenyl* | *82* | | *37 - 121* | *10/15/22 07:45* | *10/18/22 00:02* | *1* |

### Method: SW846 6010D - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Aluminum** | **6500** | | 20 | 8.3 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:28 | 1 |
| Antimony | <2.0 | | 2.0 | 0.40 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:28 | 1 |
| **Arsenic** | **2.0** | | 1.0 | 0.35 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:28 | 1 |
| **Barium** | **47** | | 1.0 | 0.12 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:28 | 1 |
| **Beryllium** | **0.49** | | 0.41 | 0.095 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:28 | 1 |
| **Cadmium** | **0.47** | | 0.20 | 0.037 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:28 | 1 |
| **Calcium** | **180000** | | 100 | 17 | mg/Kg | ☼ | 10/12/22 17:06 | 10/17/22 21:31 | 5 |
| **Chromium** | **10** | | 1.0 | 0.50 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:28 | 1 |
| **Cobalt** | **4.6** | | 2.5 | 0.67 | mg/Kg | ☼ | 10/12/22 17:06 | 10/17/22 21:31 | 5 |
| **Copper** | **290** | | 5.1 | 1.4 | mg/Kg | ☼ | 10/12/22 17:06 | 10/17/22 21:31 | 5 |
| **Iron** | **6900** | | 20 | 11 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:28 | 1 |

# Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Fire

Job ID: 500-223407-1

## Client Sample ID: MLBF-C-C2D2-01-221006

**Date Collected: 10/06/22 11:58**
**Date Received: 10/06/22 16:45**

## Lab Sample ID: 500-223407-4

**Matrix: Solid**
**Percent Solids: 94.9**

### Method: SW846 6010D - Metals (ICP) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Lead** | **13** | | 0.51 | 0.24 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:28 | 1 |
| **Magnesium** | **45000** | | 10 | 5.0 | mg/Kg | ☼ | 10/12/22 17:06 | 10/17/22 21:28 | 1 |
| **Manganese** | **500** | | 1.0 | 0.15 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:28 | 1 |
| **Nickel** | **16** | | 1.0 | 0.30 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:28 | 1 |
| **Potassium** | **800** | | 51 | 18 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:28 | 1 |
| Selenium | <1.0 | | 1.0 | 0.60 | mg/Kg | ☼ | 10/12/22 17:06 | 10/17/22 21:28 | 1 |
| **Silver** | **0.17** | **J** | 0.51 | 0.13 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:28 | 1 |
| **Sodium** | **430** | | 100 | 15 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:28 | 1 |
| Thallium | <1.0 | | 1.0 | 0.51 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:28 | 1 |
| **Vanadium** | **11** | | 0.51 | 0.12 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:28 | 1 |
| **Zinc** | **64** | | 2.0 | 0.89 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:28 | 1 |
| **Lithium** | **8.9** | | 1.0 | 0.30 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:28 | 1 |

### Method: SW846 6010D - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | <0.20 | | 0.20 | 0.20 | mg/L | | 10/17/22 07:44 | 10/17/22 23:47 | 1 |
| **Barium** | **0.29** | **J** | 0.50 | 0.050 | mg/L | | 10/17/22 07:44 | 10/17/22 23:47 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 10/17/22 07:44 | 10/17/22 23:47 | 1 |
| **Chromium** | **0.020** | **J** | 0.025 | 0.010 | mg/L | | 10/17/22 07:44 | 10/17/22 23:47 | 1 |
| Lead | <0.050 | | 0.050 | 0.0075 | mg/L | | 10/17/22 07:44 | 10/17/22 23:47 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 10/17/22 07:44 | 10/17/22 23:47 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 10/17/22 07:44 | 10/17/22 23:47 | 1 |

### Method: SW846 7470A - Mercury (CVAA) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.20 | | 0.20 | 0.20 | ug/L | | 10/17/22 12:00 | 10/18/22 10:15 | 1 |

### Method: SW846 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Mercury** | **48** | | 17 | 5.5 | ug/Kg | ☼ | 10/14/22 15:00 | 10/17/22 09:21 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total (SW846 9012B) | <0.23 | | 0.23 | 0.11 | mg/Kg | ☼ | 10/12/22 15:00 | 10/14/22 14:18 | 1 |
| Sulfide (SW846 9034) | <10 | | 10 | 4.9 | mg/Kg | ☼ | 10/13/22 13:29 | 10/14/22 12:37 | 1 |
| **pH (SW846 9045D)** | **12.3** | **HF** | 0.2 | 0.2 | SU | | | 10/10/22 13:59 | 1 |

# Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Fire

Job ID: 500-223407-1

## Client Sample ID: MLBF-C-C2D2-02-221006-DUP

**Date Collected: 10/06/22 12:15**
**Date Received: 10/06/22 16:45**

## Lab Sample ID: 500-223407-5

**Matrix: Solid**
**Percent Solids: 94.7**

### Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2-Methylphenol | <100 | | 100 | 100 | ug/L | | 10/20/22 10:28 | 10/21/22 14:27 | 5 |
| 3 & 4 Methylphenol | <100 | | 100 | 100 | ug/L | | 10/20/22 10:28 | 10/21/22 14:27 | 5 |
| 1,4-Dichlorobenzene | <100 | | 100 | 100 | ug/L | | 10/20/22 10:28 | 10/21/22 14:27 | 5 |
| 2,4-Dinitrotoluene | <50 | | 50 | 50 | ug/L | | 10/20/22 10:28 | 10/21/22 14:27 | 5 |
| Hexachlorobenzene | <25 | | 25 | 25 | ug/L | | 10/20/22 10:28 | 10/21/22 14:27 | 5 |
| Hexachlorobutadiene | <250 | | 250 | 250 | ug/L | | 10/20/22 10:28 | 10/21/22 14:27 | 5 |
| Hexachloroethane | <250 | | 250 | 250 | ug/L | | 10/20/22 10:28 | 10/21/22 14:27 | 5 |
| Nitrobenzene | <50 | | 50 | 50 | ug/L | | 10/20/22 10:28 | 10/21/22 14:27 | 5 |
| Pentachlorophenol | <1000 | | 1000 | 1000 | ug/L | | 10/20/22 10:28 | 10/21/22 14:27 | 5 |
| Pyridine | <1000 | | 1000 | 1000 | ug/L | | 10/20/22 10:28 | 10/21/22 14:27 | 5 |
| 2,4,5-Trichlorophenol | <500 | | 500 | 500 | ug/L | | 10/20/22 10:28 | 10/21/22 14:27 | 5 |
| 2,4,6-Trichlorophenol | <250 | | 250 | 250 | ug/L | | 10/20/22 10:28 | 10/21/22 14:27 | 5 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorophenol (Surr)* | *60* | | *27 - 110* | *10/20/22 10:28* | *10/21/22 14:27* | *5* |
| *Phenol-d5 (Surr)* | *34* | | *20 - 100* | *10/20/22 10:28* | *10/21/22 14:27* | *5* |
| *Nitrobenzene-d5 (Surr)* | *64* | | *36 - 120* | *10/20/22 10:28* | *10/21/22 14:27* | *5* |
| *2-Fluorobiphenyl* | *66* | | *34 - 110* | *10/20/22 10:28* | *10/21/22 14:27* | *5* |
| *2,4,6-Tribromophenol (Surr)* | *80* | | *40 - 145* | *10/20/22 10:28* | *10/21/22 14:27* | *5* |
| *Terphenyl-d14* | *87* | | *40 - 145* | *10/20/22 10:28* | *10/21/22 14:27* | *5* |

### Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | <18 | | 18 | 6.9 | ug/Kg | ☼ | 10/15/22 07:45 | 10/18/22 00:17 | 1 |
| PCB-1221 | <18 | | 18 | 6.9 | ug/Kg | ☼ | 10/15/22 07:45 | 10/18/22 00:17 | 1 |
| PCB-1232 | <18 | | 18 | 4.8 | ug/Kg | ☼ | 10/15/22 07:45 | 10/18/22 00:17 | 1 |
| PCB-1242 | <18 | | 18 | 6.9 | ug/Kg | ☼ | 10/15/22 07:45 | 10/18/22 00:17 | 1 |
| PCB-1248 | <18 | | 18 | 8.4 | ug/Kg | ☼ | 10/15/22 07:45 | 10/18/22 00:17 | 1 |
| **PCB-1254** | **18** | | 18 | 6.0 | ug/Kg | ☼ | 10/15/22 07:45 | 10/18/22 00:17 | 1 |
| PCB-1260 | <18 | | 18 | 6.6 | ug/Kg | ☼ | 10/15/22 07:45 | 10/18/22 00:17 | 1 |
| PCB-1262 | <18 | | 18 | 5.8 | ug/Kg | ☼ | 10/15/22 07:45 | 10/18/22 00:17 | 1 |
| PCB-1268 | <18 | | 18 | 10 | ug/Kg | ☼ | 10/15/22 07:45 | 10/18/22 00:17 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *77* | | *49 - 129* | *10/15/22 07:45* | *10/18/22 00:17* | *1* |
| *DCB Decachlorobiphenyl* | *82* | | *37 - 121* | *10/15/22 07:45* | *10/18/22 00:17* | *1* |

### Method: SW846 6010D - Metals (ICP)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Aluminum** | **6600** | | 21 | 8.5 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:37 | 1 |
| Antimony | <2.1 | | 2.1 | 0.40 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:37 | 1 |
| **Arsenic** | **2.0** | | 1.0 | 0.35 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:37 | 1 |
| **Barium** | **48** | | 1.0 | 0.12 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:37 | 1 |
| **Beryllium** | **0.44** | | 0.41 | 0.097 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:37 | 1 |
| **Cadmium** | **0.46** | | 0.21 | 0.037 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:37 | 1 |
| **Calcium** | **180000** | | 100 | 18 | mg/Kg | ☼ | 10/12/22 17:06 | 10/17/22 21:38 | 5 |
| **Chromium** | **10** | | 1.0 | 0.51 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:37 | 1 |
| **Cobalt** | **4.5** | | 2.6 | 0.68 | mg/Kg | ☼ | 10/12/22 17:06 | 10/17/22 21:38 | 5 |
| **Copper** | **260** | | 5.2 | 1.5 | mg/Kg | ☼ | 10/12/22 17:06 | 10/17/22 21:38 | 5 |
| **Iron** | **7000** | | 21 | 11 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:37 | 1 |

# Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Fire

Job ID: 500-223407-1

## Client Sample ID: MLBF-C-C2D2-02-221006-DUP

**Lab Sample ID: 500-223407-5**

**Date Collected: 10/06/22 12:15**
**Date Received: 10/06/22 16:45**

**Matrix: Solid**
**Percent Solids: 94.7**

### Method: SW846 6010D - Metals (ICP) (Continued)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Lead** | **9.0** | | 0.52 | 0.24 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:37 | 1 |
| **Magnesium** | **44000** | | 10 | 5.1 | mg/Kg | ☼ | 10/12/22 17:06 | 10/17/22 21:35 | 1 |
| **Manganese** | **520** | | 1.0 | 0.15 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:37 | 1 |
| **Nickel** | **16** | | 1.0 | 0.30 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:37 | 1 |
| **Potassium** | **780** | | 52 | 18 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:37 | 1 |
| Selenium | <1.0 | | 1.0 | 0.61 | mg/Kg | ☼ | 10/12/22 17:06 | 10/17/22 21:35 | 1 |
| **Silver** | **0.21** | **J** | 0.52 | 0.13 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:37 | 1 |
| **Sodium** | **430** | | 100 | 15 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:37 | 1 |
| Thallium | <1.0 | | 1.0 | 0.52 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:37 | 1 |
| **Vanadium** | **11** | | 0.52 | 0.12 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:37 | 1 |
| **Zinc** | **63** | | 2.1 | 0.91 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:37 | 1 |
| **Lithium** | **8.3** | | 1.0 | 0.31 | mg/Kg | ☼ | 10/12/22 17:06 | 10/15/22 23:37 | 1 |

### Method: SW846 6010D - Metals (ICP) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | <0.20 | | 0.20 | 0.20 | mg/L | | 10/17/22 07:44 | 10/17/22 23:51 | 1 |
| **Barium** | **0.32** | **J** | 0.50 | 0.050 | mg/L | | 10/17/22 07:44 | 10/17/22 23:51 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 10/17/22 07:44 | 10/17/22 23:51 | 1 |
| **Chromium** | **0.020** | **J** | 0.025 | 0.010 | mg/L | | 10/17/22 07:44 | 10/17/22 23:51 | 1 |
| Lead | <0.050 | | 0.050 | 0.0075 | mg/L | | 10/17/22 07:44 | 10/17/22 23:51 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 10/17/22 07:44 | 10/17/22 23:51 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 10/17/22 07:44 | 10/17/22 23:51 | 1 |

### Method: SW846 7470A - Mercury (CVAA) - TCLP

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.20 | | 0.20 | 0.20 | ug/L | | 10/17/22 12:00 | 10/18/22 10:17 | 1 |

### Method: SW846 7471B - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| **Mercury** | **7.0** | **J** | 16 | 5.3 | ug/Kg | ☼ | 10/14/22 15:00 | 10/17/22 09:23 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total (SW846 9012B) | <0.24 | | 0.24 | 0.12 | mg/Kg | ☼ | 10/12/22 15:00 | 10/14/22 14:20 | 1 |
| Sulfide (SW846 9034) | <10 | | 10 | 4.9 | mg/Kg | ☼ | 10/13/22 13:30 | 10/14/22 12:37 | 1 |
| **pH (SW846 9045D)** | **12.3** | **HF** | 0.2 | 0.2 | SU | | | 10/10/22 14:03 | 1 |

# Client Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Fire

Job ID: 500-223407-1

## Client Sample ID: MLBF-RINSATE-221006

**Lab Sample ID: 500-223407-6**

**Date Collected: 10/06/22 12:30**
**Matrix: Water**
**Date Received: 10/06/22 16:45**

### Method: SW846 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | <0.38 | | 0.38 | 0.064 | ug/L | | 10/11/22 07:41 | 10/11/22 18:15 | 1 |
| PCB-1221 | <0.38 | | 0.38 | 0.19 | ug/L | | 10/11/22 07:41 | 10/11/22 18:15 | 1 |
| PCB-1232 | <0.38 | | 0.38 | 0.19 | ug/L | | 10/11/22 07:41 | 10/11/22 18:15 | 1 |
| PCB-1242 | <0.38 | | 0.38 | 0.19 | ug/L | | 10/11/22 07:41 | 10/11/22 18:15 | 1 |
| PCB-1248 | <0.38 | | 0.38 | 0.19 | ug/L | | 10/11/22 07:41 | 10/11/22 18:15 | 1 |
| PCB-1254 | <0.38 | | 0.38 | 0.19 | ug/L | | 10/11/22 07:41 | 10/11/22 18:15 | 1 |
| PCB-1260 | <0.38 | | 0.38 | 0.067 | ug/L | | 10/11/22 07:41 | 10/11/22 18:15 | 1 |
| PCB-1262 | <0.38 | | 0.38 | 0.19 | ug/L | | 10/11/22 07:41 | 10/11/22 18:15 | 1 |
| PCB-1268 | <0.38 | | 0.38 | 0.19 | ug/L | | 10/11/22 07:41 | 10/11/22 18:15 | 1 |

| *Surrogate* | *%Recovery* | *Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *63* | | *30 - 120* | *10/11/22 07:41* | *10/11/22 18:15* | *1* |
| *DCB Decachlorobiphenyl* | *18* | *S1-* | *30 - 140* | *10/11/22 07:41* | *10/11/22 18:15* | *1* |

### Method: SW846 6020A - Metals (ICP/MS) - Total Recoverable

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | <0.10 | | 0.10 | 0.025 | mg/L | | 10/13/22 09:28 | 10/14/22 02:39 | 1 |
| Antimony | <0.0030 | | 0.0030 | 0.0013 | mg/L | | 10/13/22 09:28 | 10/14/22 02:39 | 1 |
| Arsenic | <0.0010 | | 0.0010 | 0.00023 | mg/L | | 10/13/22 09:28 | 10/14/22 02:39 | 1 |
| Barium | <0.0025 | | 0.0025 | 0.00073 | mg/L | | 10/13/22 09:28 | 10/14/22 02:39 | 1 |
| Beryllium | <0.0010 | | 0.0010 | 0.00053 | mg/L | | 10/13/22 09:28 | 10/14/22 02:39 | 1 |
| Cadmium | <0.00050 | | 0.00050 | 0.00017 | mg/L | | 10/13/22 09:28 | 10/14/22 02:39 | 1 |
| **Calcium** | **0.41** | | 0.20 | 0.044 | mg/L | | 10/13/22 09:28 | 10/14/22 02:39 | 1 |
| Chromium | <0.0050 | | 0.0050 | 0.0011 | mg/L | | 10/13/22 09:28 | 10/14/22 02:39 | 1 |
| Cobalt | <0.0010 | | 0.0010 | 0.00040 | mg/L | | 10/13/22 09:28 | 10/14/22 02:39 | 1 |
| **Copper** | **0.0034** | | 0.0020 | 0.00050 | mg/L | | 10/13/22 09:28 | 10/14/22 02:39 | 1 |
| **Iron** | **0.053** | **J** | 0.10 | 0.047 | mg/L | | 10/13/22 09:28 | 10/14/22 02:39 | 1 |
| **Lead** | **0.00066** | | 0.00050 | 0.00019 | mg/L | | 10/13/22 09:28 | 10/14/22 02:39 | 1 |
| Lithium | <0.010 | | 0.010 | 0.0025 | mg/L | | 10/13/22 09:28 | 10/14/22 02:39 | 1 |
| **Magnesium** | **0.091** | **J** | 0.20 | 0.049 | mg/L | | 10/13/22 09:28 | 10/14/22 02:39 | 1 |
| **Manganese** | **0.0011** | **J** | 0.0025 | 0.00079 | mg/L | | 10/13/22 09:28 | 10/14/22 02:39 | 1 |
| Nickel | <0.0020 | | 0.0020 | 0.00063 | mg/L | | 10/13/22 09:28 | 10/14/22 02:39 | 1 |
| Potassium | <0.50 | | 0.50 | 0.11 | mg/L | | 10/13/22 09:28 | 10/14/22 02:39 | 1 |
| Selenium | <0.0025 | | 0.0025 | 0.00098 | mg/L | | 10/13/22 09:28 | 10/14/22 02:39 | 1 |
| Silver | <0.00050 | | 0.00050 | 0.00012 | mg/L | | 10/13/22 09:28 | 10/14/22 02:39 | 1 |
| **Sodium** | **0.82** | | 0.20 | 0.077 | mg/L | | 10/13/22 09:28 | 10/14/22 02:39 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.00057 | mg/L | | 10/13/22 09:28 | 10/14/22 02:39 | 1 |
| Vanadium | <0.0050 | | 0.0050 | 0.0022 | mg/L | | 10/13/22 09:28 | 10/14/22 02:39 | 1 |
| Zinc | <0.020 | | 0.020 | 0.0069 | mg/L | | 10/13/22 09:28 | 10/14/22 02:39 | 1 |

### Method: SW846 7470A - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.20 | | 0.20 | 0.098 | ug/L | | 10/13/22 12:10 | 10/14/22 09:26 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Sulfide (SW846 9034) | <1.0 | | 1.0 | 0.23 | mg/L | | | 10/11/22 15:16 | 1 |
| **pH (SW846 9040C)** | **9.9** | **HF** | 0.2 | 0.2 | SU | | | 10/20/22 15:11 | 1 |

## Qualifiers

### GC/MS Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| S1+ | Surrogate recovery exceeds control limits, high biased. |

### GC Semi VOA

| Qualifier | Qualifier Description |
|---|---|
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| S1- | Surrogate recovery exceeds control limits, low biased. |
| S1+ | Surrogate recovery exceeds control limits, high biased. |

### Metals

| Qualifier | Qualifier Description |
|---|---|
| 4 | MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable. |
| B | Compound was found in the blank and sample. |
| F1 | MS and/or MSD recovery exceeds control limits. |
| F2 | MS/MSD RPD exceeds control limits |
| F3 | Duplicate RPD exceeds the control limit |
| J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

### General Chemistry

| Qualifier | Qualifier Description |
|---|---|
| F1 | MS and/or MSD recovery exceeds control limits. |
| HF | Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CFU | Colony Forming Unit |
| CNF | Contains No Free Liquid |
| DER | Duplicate Error Ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL | Detection Limit (DoD/DOE) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision Level Concentration (Radiochemistry) |
| EDL | Estimated Detection Limit (Dioxin) |
| LOD | Limit of Detection (DoD/DOE) |
| LOQ | Limit of Quantitation (DoD/DOE) |
| MCL | EPA recommended "Maximum Contaminant Level" |
| MDA | Minimum Detectable Activity (Radiochemistry) |
| MDC | Minimum Detectable Concentration (Radiochemistry) |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| MPN | Most Probable Number |
| MQL | Method Quantitation Limit |
| NC | Not Calculated |
| ND | Not Detected at the reporting limit (or MDL or EDL if shown) |
| NEG | Negative / Absent |
| POS | Positive / Present |
| PQL | Practical Quantitation Limit |
| PRES | Presumptive |
| QC | Quality Control |
| RER | Relative Error Ratio (Radiochemistry) |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |

## Glossary (Continued)

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| TNTC | Too Numerous To Count |

# QC Association Summary

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Fire

Job ID: 500-223407-1

## GC/MS Semi VOA

### Leach Batch: 679726

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-223407-1 | MLBF-C-E4-01-221006 | TCLP | Solid | 1311 | |
| 500-223407-2 | MLBF-C-D7-01-221006 | TCLP | Solid | 1311 | |
| 500-223407-3 | MLBF-C-B1C1-01-221006 | TCLP | Solid | 1311 | |
| 500-223407-4 | MLBF-C-C2D2-01-221006 | TCLP | Solid | 1311 | |
| 500-223407-5 | MLBF-C-C2D2-02-221006-DUP | TCLP | Solid | 1311 | |
| LB2 500-679726/1-C | Method Blank | TCLP | Solid | 1311 | |
| 500-223407-1 MS | MLBF-C-E4-01-221006 | TCLP | Solid | 1311 | |
| 500-223407-1 MSD | MLBF-C-E4-01-221006 | TCLP | Solid | 1311 | |

### Prep Batch: 680601

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-223407-1 | MLBF-C-E4-01-221006 | TCLP | Solid | 3510C | 679726 |
| 500-223407-2 | MLBF-C-D7-01-221006 | TCLP | Solid | 3510C | 679726 |
| 500-223407-3 | MLBF-C-B1C1-01-221006 | TCLP | Solid | 3510C | 679726 |
| 500-223407-4 | MLBF-C-C2D2-01-221006 | TCLP | Solid | 3510C | 679726 |
| 500-223407-5 | MLBF-C-C2D2-02-221006-DUP | TCLP | Solid | 3510C | 679726 |
| LB2 500-679726/1-C | Method Blank | TCLP | Solid | 3510C | 679726 |
| MB 500-680601/1-A | Method Blank | Total/NA | Solid | 3510C | |
| LCS 500-680601/2-A | Lab Control Sample | Total/NA | Solid | 3510C | |
| 500-223407-1 MS | MLBF-C-E4-01-221006 | TCLP | Solid | 3510C | 679726 |
| 500-223407-1 MSD | MLBF-C-E4-01-221006 | TCLP | Solid | 3510C | 679726 |

### Analysis Batch: 680766

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-223407-1 | MLBF-C-E4-01-221006 | TCLP | Solid | 8270D | 680601 |
| 500-223407-2 | MLBF-C-D7-01-221006 | TCLP | Solid | 8270D | 680601 |
| 500-223407-3 | MLBF-C-B1C1-01-221006 | TCLP | Solid | 8270D | 680601 |
| 500-223407-4 | MLBF-C-C2D2-01-221006 | TCLP | Solid | 8270D | 680601 |
| 500-223407-5 | MLBF-C-C2D2-02-221006-DUP | TCLP | Solid | 8270D | 680601 |
| LB2 500-679726/1-C | Method Blank | TCLP | Solid | 8270D | 680601 |
| MB 500-680601/1-A | Method Blank | Total/NA | Solid | 8270D | 680601 |
| LCS 500-680601/2-A | Lab Control Sample | Total/NA | Solid | 8270D | 680601 |
| 500-223407-1 MS | MLBF-C-E4-01-221006 | TCLP | Solid | 8270D | 680601 |
| 500-223407-1 MSD | MLBF-C-E4-01-221006 | TCLP | Solid | 8270D | 680601 |

## GC Semi VOA

### Prep Batch: 678933

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-223407-6 | MLBF-RINSATE-221006 | Total/NA | Water | 3510C | |
| MB 500-678933/1-A | Method Blank | Total/NA | Water | 3510C | |
| LCS 500-678933/4-A | Lab Control Sample | Total/NA | Water | 3510C | |
| LCSD 500-678933/5-A | Lab Control Sample Dup | Total/NA | Water | 3510C | |

### Analysis Batch: 679122

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-223407-6 | MLBF-RINSATE-221006 | Total/NA | Water | 8082A | 678933 |
| MB 500-678933/1-A | Method Blank | Total/NA | Water | 8082A | 678933 |
| LCS 500-678933/4-A | Lab Control Sample | Total/NA | Water | 8082A | 678933 |
| LCSD 500-678933/5-A | Lab Control Sample Dup | Total/NA | Water | 8082A | 678933 |

# QC Association Summary

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Fire

Job ID: 500-223407-1

## GC Semi VOA

### Prep Batch: 679758

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-223407-1 | MLBF-C-E4-01-221006 | Total/NA | Solid | 3541 | |
| 500-223407-2 | MLBF-C-D7-01-221006 | Total/NA | Solid | 3541 | |
| 500-223407-3 | MLBF-C-B1C1-01-221006 | Total/NA | Solid | 3541 | |
| 500-223407-4 | MLBF-C-C2D2-01-221006 | Total/NA | Solid | 3541 | |
| 500-223407-5 | MLBF-C-C2D2-02-221006-DUP | Total/NA | Solid | 3541 | |
| MB 500-679758/1-A | Method Blank | Total/NA | Solid | 3541 | |
| LCS 500-679758/2-A | Lab Control Sample | Total/NA | Solid | 3541 | |
| 500-223407-1 MS | MLBF-C-E4-01-221006 | Total/NA | Solid | 3541 | |
| 500-223407-1 MSD | MLBF-C-E4-01-221006 | Total/NA | Solid | 3541 | |

### Analysis Batch: 680001

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-223407-1 | MLBF-C-E4-01-221006 | Total/NA | Solid | 8082A | 679758 |
| 500-223407-2 | MLBF-C-D7-01-221006 | Total/NA | Solid | 8082A | 679758 |
| 500-223407-3 | MLBF-C-B1C1-01-221006 | Total/NA | Solid | 8082A | 679758 |
| 500-223407-4 | MLBF-C-C2D2-01-221006 | Total/NA | Solid | 8082A | 679758 |
| 500-223407-5 | MLBF-C-C2D2-02-221006-DUP | Total/NA | Solid | 8082A | 679758 |
| MB 500-679758/1-A | Method Blank | Total/NA | Solid | 8082A | 679758 |
| LCS 500-679758/2-A | Lab Control Sample | Total/NA | Solid | 8082A | 679758 |
| 500-223407-1 MS | MLBF-C-E4-01-221006 | Total/NA | Solid | 8082A | 679758 |
| 500-223407-1 MSD | MLBF-C-E4-01-221006 | Total/NA | Solid | 8082A | 679758 |

## Metals

### Prep Batch: 679336

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-223407-1 | MLBF-C-E4-01-221006 | Total/NA | Solid | 3050B | |
| 500-223407-2 | MLBF-C-D7-01-221006 | Total/NA | Solid | 3050B | |
| 500-223407-3 | MLBF-C-B1C1-01-221006 | Total/NA | Solid | 3050B | |
| 500-223407-4 | MLBF-C-C2D2-01-221006 | Total/NA | Solid | 3050B | |
| 500-223407-5 | MLBF-C-C2D2-02-221006-DUP | Total/NA | Solid | 3050B | |
| MB 500-679336/1-A | Method Blank | Total/NA | Solid | 3050B | |
| LCS 500-679336/2-A | Lab Control Sample | Total/NA | Solid | 3050B | |
| 500-223407-1 MS | MLBF-C-E4-01-221006 | Total/NA | Solid | 3050B | |
| 500-223407-1 MSD | MLBF-C-E4-01-221006 | Total/NA | Solid | 3050B | |
| 500-223407-1 DU | MLBF-C-E4-01-221006 | Total/NA | Solid | 3050B | |

### Prep Batch: 679429

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-223407-6 | MLBF-RINSATE-221006 | Total Recoverable | Water | 3005A | |
| MB 500-679429/1-A | Method Blank | Total Recoverable | Water | 3005A | |
| LCS 500-679429/2-A | Lab Control Sample | Total Recoverable | Water | 3005A | |

### Prep Batch: 679462

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-223407-6 | MLBF-RINSATE-221006 | Total/NA | Water | 7470A | |
| MB 500-679462/12-A | Method Blank | Total/NA | Water | 7470A | |
| LCS 500-679462/13-A | Lab Control Sample | Total/NA | Water | 7470A | |

# QC Association Summary

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Fire

Job ID: 500-223407-1

## Metals

### Prep Batch: 679634

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-223407-1 | MLBF-C-E4-01-221006 | Total/NA | Solid | 7471B | |
| 500-223407-2 | MLBF-C-D7-01-221006 | Total/NA | Solid | 7471B | |
| 500-223407-3 | MLBF-C-B1C1-01-221006 | Total/NA | Solid | 7471B | |
| 500-223407-4 | MLBF-C-C2D2-01-221006 | Total/NA | Solid | 7471B | |
| 500-223407-5 | MLBF-C-C2D2-02-221006-DUP | Total/NA | Solid | 7471B | |
| MB 500-679634/12-A | Method Blank | Total/NA | Solid | 7471B | |
| LCS 500-679634/13-A | Lab Control Sample | Total/NA | Solid | 7471B | |
| 500-223407-1 MS | MLBF-C-E4-01-221006 | Total/NA | Solid | 7471B | |
| 500-223407-1 MSD | MLBF-C-E4-01-221006 | Total/NA | Solid | 7471B | |
| 500-223407-1 DU | MLBF-C-E4-01-221006 | Total/NA | Solid | 7471B | |

### Analysis Batch: 679657

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-223407-6 | MLBF-RINSATE-221006 | Total Recoverable | Water | 6020A | 679429 |
| MB 500-679429/1-A | Method Blank | Total Recoverable | Water | 6020A | 679429 |
| LCS 500-679429/2-A | Lab Control Sample | Total Recoverable | Water | 6020A | 679429 |

### Analysis Batch: 679678

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-223407-6 | MLBF-RINSATE-221006 | Total/NA | Water | 7470A | 679462 |
| MB 500-679462/12-A | Method Blank | Total/NA | Water | 7470A | 679462 |
| LCS 500-679462/13-A | Lab Control Sample | Total/NA | Water | 7470A | 679462 |

### Leach Batch: 679726

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-223407-1 | MLBF-C-E4-01-221006 | TCLP | Solid | 1311 | |
| 500-223407-2 | MLBF-C-D7-01-221006 | TCLP | Solid | 1311 | |
| 500-223407-3 | MLBF-C-B1C1-01-221006 | TCLP | Solid | 1311 | |
| 500-223407-4 | MLBF-C-C2D2-01-221006 | TCLP | Solid | 1311 | |
| 500-223407-5 | MLBF-C-C2D2-02-221006-DUP | TCLP | Solid | 1311 | |
| LB2 500-679726/1-B | Method Blank | TCLP | Solid | 1311 | |
| LB2 500-679726/2-B | Method Blank | TCLP | Solid | 1311 | |
| 500-223407-1 MS | MLBF-C-E4-01-221006 | TCLP | Solid | 1311 | |
| 500-223407-1 MSD | MLBF-C-E4-01-221006 | TCLP | Solid | 1311 | |
| 500-223407-1 DU | MLBF-C-E4-01-221006 | TCLP | Solid | 1311 | |

### Prep Batch: 679836

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-223407-1 | MLBF-C-E4-01-221006 | TCLP | Solid | 3010A | 679726 |
| 500-223407-2 | MLBF-C-D7-01-221006 | TCLP | Solid | 3010A | 679726 |
| 500-223407-3 | MLBF-C-B1C1-01-221006 | TCLP | Solid | 3010A | 679726 |
| 500-223407-4 | MLBF-C-C2D2-01-221006 | TCLP | Solid | 3010A | 679726 |
| 500-223407-5 | MLBF-C-C2D2-02-221006-DUP | TCLP | Solid | 3010A | 679726 |
| LB2 500-679726/1-B | Method Blank | TCLP | Solid | 3010A | 679726 |
| LCS 500-679836/7-A | Lab Control Sample | Total/NA | Solid | 3010A | |
| 500-223407-1 MS | MLBF-C-E4-01-221006 | TCLP | Solid | 3010A | 679726 |
| 500-223407-1 MSD | MLBF-C-E4-01-221006 | TCLP | Solid | 3010A | 679726 |
| 500-223407-1 DU | MLBF-C-E4-01-221006 | TCLP | Solid | 3010A | 679726 |

# QC Association Summary

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Fire

Job ID: 500-223407-1

## Metals

### Analysis Batch: 679838

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-223407-1 | MLBF-C-E4-01-221006 | Total/NA | Solid | 6010D | 679336 |
| 500-223407-2 | MLBF-C-D7-01-221006 | Total/NA | Solid | 6010D | 679336 |
| 500-223407-3 | MLBF-C-B1C1-01-221006 | Total/NA | Solid | 6010D | 679336 |
| 500-223407-4 | MLBF-C-C2D2-01-221006 | Total/NA | Solid | 6010D | 679336 |
| 500-223407-5 | MLBF-C-C2D2-02-221006-DUP | Total/NA | Solid | 6010D | 679336 |
| MB 500-679336/1-A | Method Blank | Total/NA | Solid | 6010D | 679336 |
| LCS 500-679336/2-A | Lab Control Sample | Total/NA | Solid | 6010D | 679336 |
| 500-223407-1 MS | MLBF-C-E4-01-221006 | Total/NA | Solid | 6010D | 679336 |
| 500-223407-1 MSD | MLBF-C-E4-01-221006 | Total/NA | Solid | 6010D | 679336 |
| 500-223407-1 DU | MLBF-C-E4-01-221006 | Total/NA | Solid | 6010D | 679336 |

### Analysis Batch: 679918

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-223407-1 | MLBF-C-E4-01-221006 | Total/NA | Solid | 7471B | 679634 |
| 500-223407-2 | MLBF-C-D7-01-221006 | Total/NA | Solid | 7471B | 679634 |
| 500-223407-3 | MLBF-C-B1C1-01-221006 | Total/NA | Solid | 7471B | 679634 |
| 500-223407-4 | MLBF-C-C2D2-01-221006 | Total/NA | Solid | 7471B | 679634 |
| 500-223407-5 | MLBF-C-C2D2-02-221006-DUP | Total/NA | Solid | 7471B | 679634 |
| MB 500-679634/12-A | Method Blank | Total/NA | Solid | 7471B | 679634 |
| LCS 500-679634/13-A | Lab Control Sample | Total/NA | Solid | 7471B | 679634 |
| 500-223407-1 MS | MLBF-C-E4-01-221006 | Total/NA | Solid | 7471B | 679634 |
| 500-223407-1 MSD | MLBF-C-E4-01-221006 | Total/NA | Solid | 7471B | 679634 |
| 500-223407-1 DU | MLBF-C-E4-01-221006 | Total/NA | Solid | 7471B | 679634 |

### Prep Batch: 679952

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-223407-1 | MLBF-C-E4-01-221006 | TCLP | Solid | 7470A | 679726 |
| 500-223407-2 | MLBF-C-D7-01-221006 | TCLP | Solid | 7470A | 679726 |
| 500-223407-3 | MLBF-C-B1C1-01-221006 | TCLP | Solid | 7470A | 679726 |
| 500-223407-4 | MLBF-C-C2D2-01-221006 | TCLP | Solid | 7470A | 679726 |
| 500-223407-5 | MLBF-C-C2D2-02-221006-DUP | TCLP | Solid | 7470A | 679726 |
| LB2 500-679726/2-B | Method Blank | TCLP | Solid | 7470A | 679726 |
| MB 500-679952/12-A | Method Blank | Total/NA | Solid | 7470A | |
| LCS 500-679952/14-A | Lab Control Sample | Total/NA | Solid | 7470A | |
| LCS 500-679952/23-A | Lab Control Sample | Total/NA | Solid | 7470A | |
| 500-223407-1 MS | MLBF-C-E4-01-221006 | TCLP | Solid | 7470A | 679726 |
| 500-223407-1 MSD | MLBF-C-E4-01-221006 | TCLP | Solid | 7470A | 679726 |
| 500-223407-1 DU | MLBF-C-E4-01-221006 | TCLP | Solid | 7470A | 679726 |

### Analysis Batch: 680095

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-223407-1 | MLBF-C-E4-01-221006 | Total/NA | Solid | 6010D | 679336 |
| 500-223407-1 | MLBF-C-E4-01-221006 | Total/NA | Solid | 6010D | 679336 |
| 500-223407-2 | MLBF-C-D7-01-221006 | Total/NA | Solid | 6010D | 679336 |
| 500-223407-2 | MLBF-C-D7-01-221006 | Total/NA | Solid | 6010D | 679336 |
| 500-223407-3 | MLBF-C-B1C1-01-221006 | Total/NA | Solid | 6010D | 679336 |
| 500-223407-3 | MLBF-C-B1C1-01-221006 | Total/NA | Solid | 6010D | 679336 |
| 500-223407-3 | MLBF-C-B1C1-01-221006 | Total/NA | Solid | 6010D | 679336 |
| 500-223407-4 | MLBF-C-C2D2-01-221006 | Total/NA | Solid | 6010D | 679336 |
| 500-223407-4 | MLBF-C-C2D2-01-221006 | Total/NA | Solid | 6010D | 679336 |
| 500-223407-5 | MLBF-C-C2D2-02-221006-DUP | Total/NA | Solid | 6010D | 679336 |

## Metals (Continued)

### Analysis Batch: 680095 (Continued)

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-223407-5 | MLBF-C-C2D2-02-221006-DUP | Total/NA | Solid | 6010D | 679336 |
| MB 500-679336/1-A | Method Blank | Total/NA | Solid | 6010D | 679336 |
| LCS 500-679336/2-A | Lab Control Sample | Total/NA | Solid | 6010D | 679336 |
| 500-223407-1 MS | MLBF-C-E4-01-221006 | Total/NA | Solid | 6010D | 679336 |
| 500-223407-1 MS | MLBF-C-E4-01-221006 | Total/NA | Solid | 6010D | 679336 |
| 500-223407-1 MSD | MLBF-C-E4-01-221006 | Total/NA | Solid | 6010D | 679336 |
| 500-223407-1 MSD | MLBF-C-E4-01-221006 | Total/NA | Solid | 6010D | 679336 |
| 500-223407-1 DU | MLBF-C-E4-01-221006 | Total/NA | Solid | 6010D | 679336 |
| 500-223407-1 DU | MLBF-C-E4-01-221006 | Total/NA | Solid | 6010D | 679336 |

### Analysis Batch: 680101

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-223407-1 | MLBF-C-E4-01-221006 | TCLP | Solid | 6010D | 679836 |
| 500-223407-2 | MLBF-C-D7-01-221006 | TCLP | Solid | 6010D | 679836 |
| 500-223407-3 | MLBF-C-B1C1-01-221006 | TCLP | Solid | 6010D | 679836 |
| 500-223407-4 | MLBF-C-C2D2-01-221006 | TCLP | Solid | 6010D | 679836 |
| 500-223407-5 | MLBF-C-C2D2-02-221006-DUP | TCLP | Solid | 6010D | 679836 |
| LB2 500-679726/1-B | Method Blank | TCLP | Solid | 6010D | 679836 |
| LCS 500-679836/7-A | Lab Control Sample | Total/NA | Solid | 6010D | 679836 |
| 500-223407-1 MS | MLBF-C-E4-01-221006 | TCLP | Solid | 6010D | 679836 |
| 500-223407-1 MSD | MLBF-C-E4-01-221006 | TCLP | Solid | 6010D | 679836 |
| 500-223407-1 DU | MLBF-C-E4-01-221006 | TCLP | Solid | 6010D | 679836 |

### Analysis Batch: 680143

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-223407-1 | MLBF-C-E4-01-221006 | TCLP | Solid | 7470A | 679952 |
| 500-223407-2 | MLBF-C-D7-01-221006 | TCLP | Solid | 7470A | 679952 |
| 500-223407-3 | MLBF-C-B1C1-01-221006 | TCLP | Solid | 7470A | 679952 |
| 500-223407-4 | MLBF-C-C2D2-01-221006 | TCLP | Solid | 7470A | 679952 |
| 500-223407-5 | MLBF-C-C2D2-02-221006-DUP | TCLP | Solid | 7470A | 679952 |
| LB2 500-679726/2-B | Method Blank | TCLP | Solid | 7470A | 679952 |
| MB 500-679952/12-A | Method Blank | Total/NA | Solid | 7470A | 679952 |
| LCS 500-679952/14-A | Lab Control Sample | Total/NA | Solid | 7470A | 679952 |
| LCS 500-679952/23-A | Lab Control Sample | Total/NA | Solid | 7470A | 679952 |
| 500-223407-1 MS | MLBF-C-E4-01-221006 | TCLP | Solid | 7470A | 679952 |
| 500-223407-1 MSD | MLBF-C-E4-01-221006 | TCLP | Solid | 7470A | 679952 |
| 500-223407-1 DU | MLBF-C-E4-01-221006 | TCLP | Solid | 7470A | 679952 |

## General Chemistry

### Analysis Batch: 678462

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-223407-1 | MLBF-C-E4-01-221006 | Total/NA | Solid | Moisture | |
| 500-223407-2 | MLBF-C-D7-01-221006 | Total/NA | Solid | Moisture | |
| 500-223407-3 | MLBF-C-B1C1-01-221006 | Total/NA | Solid | Moisture | |
| 500-223407-4 | MLBF-C-C2D2-01-221006 | Total/NA | Solid | Moisture | |
| 500-223407-5 | MLBF-C-C2D2-02-221006-DUP | Total/NA | Solid | Moisture | |
| 500-223407-1 DU | MLBF-C-E4-01-221006 | Total/NA | Solid | Moisture | |

# QC Association Summary

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Fire

Job ID: 500-223407-1

## General Chemistry

### Analysis Batch: 678748

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-223407-1 | MLBF-C-E4-01-221006 | Total/NA | Solid | 9045D | |
| 500-223407-2 | MLBF-C-D7-01-221006 | Total/NA | Solid | 9045D | |
| 500-223407-3 | MLBF-C-B1C1-01-221006 | Total/NA | Solid | 9045D | |
| 500-223407-4 | MLBF-C-C2D2-01-221006 | Total/NA | Solid | 9045D | |
| 500-223407-5 | MLBF-C-C2D2-02-221006-DUP | Total/NA | Solid | 9045D | |
| LCS 500-678748/5 | Lab Control Sample | Total/NA | Solid | 9045D | |
| LCSD 500-678748/6 | Lab Control Sample Dup | Total/NA | Solid | 9045D | |

### Prep Batch: 679237

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-223407-1 | MLBF-C-E4-01-221006 | Total/NA | Solid | 9010C | |
| 500-223407-2 | MLBF-C-D7-01-221006 | Total/NA | Solid | 9010C | |
| 500-223407-3 | MLBF-C-B1C1-01-221006 | Total/NA | Solid | 9010C | |
| 500-223407-4 | MLBF-C-C2D2-01-221006 | Total/NA | Solid | 9010C | |
| 500-223407-5 | MLBF-C-C2D2-02-221006-DUP | Total/NA | Solid | 9010C | |
| MB 500-679237/1-A | Method Blank | Total/NA | Solid | 9010C | |
| HLCS 500-679237/2-A | Lab Control Sample | Total/NA | Solid | 9010C | |
| LCS 500-679237/3-A | Lab Control Sample | Total/NA | Solid | 9010C | |
| LLCS 500-679237/4-A | Lab Control Sample | Total/NA | Solid | 9010C | |
| 500-223407-1 MS | MLBF-C-E4-01-221006 | Total/NA | Solid | 9010C | |
| 500-223407-1 MSD | MLBF-C-E4-01-221006 | Total/NA | Solid | 9010C | |

### Analysis Batch: 679258

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-223407-6 | MLBF-RINSATE-221006 | Total/NA | Water | 9034 | |
| MB 500-679258/1 | Method Blank | Total/NA | Water | 9034 | |
| LCS 500-679258/2 | Lab Control Sample | Total/NA | Water | 9034 | |
| 500-223407-6 MS | MLBF-RINSATE-221006 | Total/NA | Water | 9034 | |
| 500-223407-6 MSD | MLBF-RINSATE-221006 | Total/NA | Water | 9034 | |

### Prep Batch: 679475

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-223407-1 | MLBF-C-E4-01-221006 | Total/NA | Solid | 9030B | |
| 500-223407-2 | MLBF-C-D7-01-221006 | Total/NA | Solid | 9030B | |
| 500-223407-3 | MLBF-C-B1C1-01-221006 | Total/NA | Solid | 9030B | |
| 500-223407-4 | MLBF-C-C2D2-01-221006 | Total/NA | Solid | 9030B | |
| 500-223407-5 | MLBF-C-C2D2-02-221006-DUP | Total/NA | Solid | 9030B | |
| MB 500-679475/1-A | Method Blank | Total/NA | Solid | 9030B | |
| LCS 500-679475/2-A | Lab Control Sample | Total/NA | Solid | 9030B | |
| 500-223407-1 MS | MLBF-C-E4-01-221006 | Total/NA | Solid | 9030B | |
| 500-223407-1 MSD | MLBF-C-E4-01-221006 | Total/NA | Solid | 9030B | |

### Analysis Batch: 679513

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-223407-1 | MLBF-C-E4-01-221006 | Total/NA | Solid | 9034 | 679475 |
| MB 500-679475/1-A | Method Blank | Total/NA | Solid | 9034 | 679475 |
| LCS 500-679475/2-A | Lab Control Sample | Total/NA | Solid | 9034 | 679475 |
| 500-223407-1 MS | MLBF-C-E4-01-221006 | Total/NA | Solid | 9034 | 679475 |
| 500-223407-1 MSD | MLBF-C-E4-01-221006 | Total/NA | Solid | 9034 | 679475 |

# QC Association Summary

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Fire

Job ID: 500-223407-1

## General Chemistry

### Analysis Batch: 679689

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-223407-2 | MLBF-C-D7-01-221006 | Total/NA | Solid | 9034 | 679475 |
| 500-223407-3 | MLBF-C-B1C1-01-221006 | Total/NA | Solid | 9034 | 679475 |
| 500-223407-4 | MLBF-C-C2D2-01-221006 | Total/NA | Solid | 9034 | 679475 |
| 500-223407-5 | MLBF-C-C2D2-02-221006-DUP | Total/NA | Solid | 9034 | 679475 |

### Analysis Batch: 679714

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-223407-1 | MLBF-C-E4-01-221006 | Total/NA | Solid | 9012B | 679237 |
| 500-223407-2 | MLBF-C-D7-01-221006 | Total/NA | Solid | 9012B | 679237 |
| 500-223407-3 | MLBF-C-B1C1-01-221006 | Total/NA | Solid | 9012B | 679237 |
| 500-223407-4 | MLBF-C-C2D2-01-221006 | Total/NA | Solid | 9012B | 679237 |
| 500-223407-5 | MLBF-C-C2D2-02-221006-DUP | Total/NA | Solid | 9012B | 679237 |
| MB 500-679237/1-A | Method Blank | Total/NA | Solid | 9012B | 679237 |
| HLCS 500-679237/2-A | Lab Control Sample | Total/NA | Solid | 9012B | 679237 |
| LCS 500-679237/3-A | Lab Control Sample | Total/NA | Solid | 9012B | 679237 |
| LLCS 500-679237/4-A | Lab Control Sample | Total/NA | Solid | 9012B | 679237 |
| 500-223407-1 MS | MLBF-C-E4-01-221006 | Total/NA | Solid | 9012B | 679237 |
| 500-223407-1 MSD | MLBF-C-E4-01-221006 | Total/NA | Solid | 9012B | 679237 |

### Analysis Batch: 680546

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| 500-223407-6 | MLBF-RINSATE-221006 | Total/NA | Water | 9040C | |
| LCS 500-680546/5 | Lab Control Sample | Total/NA | Water | 9040C | |
| LCSD 500-680546/6 | Lab Control Sample Dup | Total/NA | Water | 9040C | |
| 500-223407-6 DU | MLBF-RINSATE-221006 | Total/NA | Water | 9040C | |

# Surrogate Summary

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Fire

Job ID: 500-223407-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | | | |
|---|---|---|---|---|---|---|---|
| | | 2FP | PHL | NBZ | FBP | TBP | TPHL |
| Lab Sample ID | Client Sample ID | (27-110) | (20-100) | (36-120) | (34-110) | (40-145) | (40-145) |
| LCS 500-680601/2-A | Lab Control Sample | 57 | 45 | 82 | 82 | 112 | 105 |
| MB 500-680601/1-A | Method Blank | 60 | 32 | 88 | 81 | 89 | 112 |

**Surrogate Legend**

2FP = 2-Fluorophenol (Surr)
PHL = Phenol-d5 (Surr)
NBZ = Nitrobenzene-d5 (Surr)
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol (Surr)
TPHL = Terphenyl-d14

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

**Matrix: Solid** **Prep Type: TCLP**

| | | Percent Surrogate Recovery (Acceptance Limits) | | | | | |
|---|---|---|---|---|---|---|---|
| | | 2FP | PHL | NBZ | FBP | TBP | TPHL |
| Lab Sample ID | Client Sample ID | (27-110) | (20-100) | (36-120) | (34-110) | (40-145) | (40-145) |
| 500-223407-1 | MLBF-C-E4-01-221006 | 60 | 31 | 71 | 66 | 146 S1+ | 112 |
| 500-223407-1 MS | MLBF-C-E4-01-221006 | 74 | 41 | 71 | 97 | 140 | 111 |
| 500-223407-1 MSD | MLBF-C-E4-01-221006 | 68 | 42 | 80 | 99 | 143 | 112 |
| 500-223407-2 | MLBF-C-D7-01-221006 | 56 | 32 | 60 | 65 | 82 | 107 |
| 500-223407-3 | MLBF-C-B1C1-01-221006 | 61 | 34 | 63 | 59 | 125 | 112 |
| 500-223407-4 | MLBF-C-C2D2-01-221006 | 57 | 37 | 67 | 65 | 129 | 111 |
| 500-223407-5 | MLBF-C-C2D2-02-221006-DUP | 60 | 34 | 64 | 66 | 80 | 87 |
| LB2 500-679726/1-C | Method Blank | 56 | 23 | 86 | 80 | 109 | 119 |

**Surrogate Legend**

2FP = 2-Fluorophenol (Surr)
PHL = Phenol-d5 (Surr)
NBZ = Nitrobenzene-d5 (Surr)
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol (Surr)
TPHL = Terphenyl-d14

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

**Matrix: Solid** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|---|---|---|---|
| | | TCX2 | DCBP2 |
| Lab Sample ID | Client Sample ID | (49-129) | (37-121) |
| 500-223407-1 | MLBF-C-E4-01-221006 | 146 S1+ | 138 S1+ |
| 500-223407-1 MS | MLBF-C-E4-01-221006 | 102 | 108 |
| 500-223407-1 MSD | MLBF-C-E4-01-221006 | 91 | 94 |
| 500-223407-2 | MLBF-C-D7-01-221006 | 113 | 116 |
| 500-223407-3 | MLBF-C-B1C1-01-221006 | 113 | 103 |
| 500-223407-4 | MLBF-C-C2D2-01-221006 | 78 | 82 |
| 500-223407-5 | MLBF-C-C2D2-02-221006-DUP | 77 | 82 |
| LCS 500-679758/2-A | Lab Control Sample | 95 | 98 |
| MB 500-679758/1-A | Method Blank | 92 | 96 |

**Surrogate Legend**

TCX = Tetrachloro-m-xylene

# Surrogate Summary

Client: Tetra Tech EM Inc.
Job ID: 500-223407-1
Project/Site: Morris Lithium Battery Fire

DCBP = DCB Decachlorobiphenyl

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

**Matrix: Water** **Prep Type: Total/NA**

| | | Percent Surrogate Recovery (Acceptance Limits) | |
|---|---|---|---|
| | | TCX2 | DCBP2 |
| Lab Sample ID | Client Sample ID | (30-120) | (30-140) |
| 500-223407-6 | MLBF-RINSATE-221006 | 63 | 18 S1- |
| LCS 500-678933/4-A | Lab Control Sample | 84 | 94 |
| LCSD 500-678933/5-A | Lab Control Sample Dup | 88 | 98 |
| MB 500-678933/1-A | Method Blank | 95 | 112 |

**Surrogate Legend**

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

# QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Fire

Job ID: 500-223407-1

## Method: 8270D - Semivolatile Organic Compounds (GC/MS)

**Lab Sample ID: MB 500-680601/1-A**
**Matrix: Solid**
**Analysis Batch: 680766**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 680601**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2-Methylphenol | <2.0 | | 2.0 | 2.0 | ug/L | | 10/20/22 10:28 | 10/21/22 08:54 | 1 |
| 3 & 4 Methylphenol | <2.0 | | 2.0 | 2.0 | ug/L | | 10/20/22 10:28 | 10/21/22 08:54 | 1 |
| 1,4-Dichlorobenzene | <2.0 | | 2.0 | 2.0 | ug/L | | 10/20/22 10:28 | 10/21/22 08:54 | 1 |
| 2,4-Dinitrotoluene | <1.0 | | 1.0 | 1.0 | ug/L | | 10/20/22 10:28 | 10/21/22 08:54 | 1 |
| Hexachlorobenzene | <0.50 | | 0.50 | 0.50 | ug/L | | 10/20/22 10:28 | 10/21/22 08:54 | 1 |
| Hexachlorobutadiene | <5.0 | | 5.0 | 5.0 | ug/L | | 10/20/22 10:28 | 10/21/22 08:54 | 1 |
| Hexachloroethane | <5.0 | | 5.0 | 5.0 | ug/L | | 10/20/22 10:28 | 10/21/22 08:54 | 1 |
| Nitrobenzene | <1.0 | | 1.0 | 1.0 | ug/L | | 10/20/22 10:28 | 10/21/22 08:54 | 1 |
| Pentachlorophenol | <20 | | 20 | 20 | ug/L | | 10/20/22 10:28 | 10/21/22 08:54 | 1 |
| Pyridine | <20 | | 20 | 20 | ug/L | | 10/20/22 10:28 | 10/21/22 08:54 | 1 |
| 2,4,5-Trichlorophenol | <10 | | 10 | 10 | ug/L | | 10/20/22 10:28 | 10/21/22 08:54 | 1 |
| 2,4,6-Trichlorophenol | <5.0 | | 5.0 | 5.0 | ug/L | | 10/20/22 10:28 | 10/21/22 08:54 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorophenol (Surr)* | *60* | | *27 - 110* | *10/20/22 10:28* | *10/21/22 08:54* | *1* |
| *Phenol-d5 (Surr)* | *32* | | *20 - 100* | *10/20/22 10:28* | *10/21/22 08:54* | *1* |
| *Nitrobenzene-d5 (Surr)* | *88* | | *36 - 120* | *10/20/22 10:28* | *10/21/22 08:54* | *1* |
| *2-Fluorobiphenyl* | *81* | | *34 - 110* | *10/20/22 10:28* | *10/21/22 08:54* | *1* |
| *2,4,6-Tribromophenol (Surr)* | *89* | | *40 - 145* | *10/20/22 10:28* | *10/21/22 08:54* | *1* |
| *Terphenyl-d14* | *112* | | *40 - 145* | *10/20/22 10:28* | *10/21/22 08:54* | *1* |

**Lab Sample ID: LCS 500-680601/2-A**
**Matrix: Solid**
**Analysis Batch: 680766**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 680601**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| 2-Methylphenol | 40.0 | 29.3 | | ug/L | | 73 | 53 - 115 |
| 3 & 4 Methylphenol | 40.0 | 31.1 | | ug/L | | 78 | 50 - 116 |
| 1,4-Dichlorobenzene | 40.0 | 26.9 | | ug/L | | 67 | 23 - 110 |
| 2,4-Dinitrotoluene | 40.0 | 37.9 | | ug/L | | 95 | 63 - 129 |
| Hexachlorobenzene | 40.0 | 36.6 | | ug/L | | 92 | 61 - 126 |
| Hexachlorobutadiene | 40.0 | 24.7 | | ug/L | | 62 | 20 - 100 |
| Hexachloroethane | 40.0 | 23.8 | | ug/L | | 59 | 20 - 100 |
| Nitrobenzene | 40.0 | 32.9 | | ug/L | | 82 | 54 - 121 |
| Pentachlorophenol | 80.0 | 61.4 | | ug/L | | 77 | 42 - 148 |
| Pyridine | 80.0 | 32.5 | | ug/L | | 41 | 15 - 110 |
| 2,4,5-Trichlorophenol | 40.0 | 35.2 | | ug/L | | 88 | 63 - 124 |
| 2,4,6-Trichlorophenol | 40.0 | 36.0 | | ug/L | | 90 | 62 - 121 |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *2-Fluorophenol (Surr)* | *57* | | *27 - 110* |
| *Phenol-d5 (Surr)* | *45* | | *20 - 100* |
| *Nitrobenzene-d5 (Surr)* | *82* | | *36 - 120* |
| *2-Fluorobiphenyl* | *82* | | *34 - 110* |
| *2,4,6-Tribromophenol (Surr)* | *112* | | *40 - 145* |
| *Terphenyl-d14* | *105* | | *40 - 145* |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: LB2 500-679726/1-C**
**Matrix: Solid**
**Analysis Batch: 680766**

**Client Sample ID: Method Blank**
**Prep Type: TCLP**
**Prep Batch: 680601**

| Analyte | LB2 Result | LB2 Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| 2-Methylphenol | <20 | | 20 | 20 | ug/L | | 10/20/22 10:28 | 10/21/22 10:29 | 1 |
| 3 & 4 Methylphenol | <20 | | 20 | 20 | ug/L | | 10/20/22 10:28 | 10/21/22 10:29 | 1 |
| 1,4-Dichlorobenzene | <20 | | 20 | 20 | ug/L | | 10/20/22 10:28 | 10/21/22 10:29 | 1 |
| 2,4-Dinitrotoluene | <10 | | 10 | 10 | ug/L | | 10/20/22 10:28 | 10/21/22 10:29 | 1 |
| Hexachlorobenzene | <5.0 | | 5.0 | 5.0 | ug/L | | 10/20/22 10:28 | 10/21/22 10:29 | 1 |
| Hexachlorobutadiene | <50 | | 50 | 50 | ug/L | | 10/20/22 10:28 | 10/21/22 10:29 | 1 |
| Hexachloroethane | <50 | | 50 | 50 | ug/L | | 10/20/22 10:28 | 10/21/22 10:29 | 1 |
| Nitrobenzene | <10 | | 10 | 10 | ug/L | | 10/20/22 10:28 | 10/21/22 10:29 | 1 |
| Pentachlorophenol | <200 | | 200 | 200 | ug/L | | 10/20/22 10:28 | 10/21/22 10:29 | 1 |
| Pyridine | <200 | | 200 | 200 | ug/L | | 10/20/22 10:28 | 10/21/22 10:29 | 1 |
| 2,4,5-Trichlorophenol | <100 | | 100 | 100 | ug/L | | 10/20/22 10:28 | 10/21/22 10:29 | 1 |
| 2,4,6-Trichlorophenol | <50 | | 50 | 50 | ug/L | | 10/20/22 10:28 | 10/21/22 10:29 | 1 |

| *Surrogate* | *LB2 %Recovery* | *LB2 Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *2-Fluorophenol (Surr)* | *56* | | *27 - 110* | *10/20/22 10:28* | *10/21/22 10:29* | *1* |
| *Phenol-d5 (Surr)* | *23* | | *20 - 100* | *10/20/22 10:28* | *10/21/22 10:29* | *1* |
| *Nitrobenzene-d5 (Surr)* | *86* | | *36 - 120* | *10/20/22 10:28* | *10/21/22 10:29* | *1* |
| *2-Fluorobiphenyl* | *80* | | *34 - 110* | *10/20/22 10:28* | *10/21/22 10:29* | *1* |
| *2,4,6-Tribromophenol (Surr)* | *109* | | *40 - 145* | *10/20/22 10:28* | *10/21/22 10:29* | *1* |
| *Terphenyl-d14* | *119* | | *40 - 145* | *10/20/22 10:28* | *10/21/22 10:29* | *1* |

**Lab Sample ID: 500-223407-1 MS**
**Matrix: Solid**
**Analysis Batch: 680766**

**Client Sample ID: MLBF-C-E4-01-221006**
**Prep Type: TCLP**
**Prep Batch: 680601**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| 2-Methylphenol | <100 | | 1600 | 1220 | | ug/L | | 76 | 53 - 115 |
| 3 & 4 Methylphenol | <100 | | 1600 | 1070 | | ug/L | | 67 | 50 - 116 |
| 1,4-Dichlorobenzene | <100 | | 1600 | 1110 | | ug/L | | 69 | 23 - 110 |
| 2,4-Dinitrotoluene | <50 | | 1600 | 2000 | | ug/L | | 125 | 63 - 129 |
| Hexachlorobenzene | <25 | | 1600 | 1970 | | ug/L | | 123 | 61 - 126 |
| Hexachlorobutadiene | <250 | | 1600 | 1310 | | ug/L | | 82 | 20 - 100 |
| Hexachloroethane | <250 | | 1600 | 1180 | | ug/L | | 74 | 20 - 100 |
| Nitrobenzene | <50 | | 1600 | 1090 | | ug/L | | 68 | 54 - 121 |
| Pentachlorophenol | <1000 | | 3200 | <4000 | | ug/L | | NC | 42 - 148 |
| Pyridine | <1000 | | 3200 | <4000 | | ug/L | | NC | 15 - 110 |
| 2,4,5-Trichlorophenol | <500 | | 1600 | <2000 | | ug/L | | NC | 63 - 124 |
| 2,4,6-Trichlorophenol | <250 | | 1600 | 1740 | | ug/L | | 109 | 62 - 121 |

| *Surrogate* | *MS %Recovery* | *MS Qualifier* | *Limits* |
|---|---|---|---|
| *2-Fluorophenol (Surr)* | *74* | | *27 - 110* |
| *Phenol-d5 (Surr)* | *41* | | *20 - 100* |
| *Nitrobenzene-d5 (Surr)* | *71* | | *36 - 120* |
| *2-Fluorobiphenyl* | *97* | | *34 - 110* |
| *2,4,6-Tribromophenol (Surr)* | *140* | | *40 - 145* |
| *Terphenyl-d14* | *111* | | *40 - 145* |

## Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

**Lab Sample ID: 500-223407-1 MSD** — **Client Sample ID: MLBF-C-E4-01-221006**
**Matrix: Solid** — **Prep Type: TCLP**
**Analysis Batch: 680766** — **Prep Batch: 680601**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2-Methylphenol | <100 | | 1600 | 1250 | | ug/L | | 78 | 53 - 115 | 3 | 20 |
| 3 & 4 Methylphenol | <100 | | 1600 | 1170 | | ug/L | | 73 | 50 - 116 | 9 | 20 |
| 1,4-Dichlorobenzene | <100 | | 1600 | 1170 | | ug/L | | 73 | 23 - 110 | 5 | 20 |
| 2,4-Dinitrotoluene | <50 | | 1600 | 2060 | | ug/L | | 128 | 63 - 129 | 3 | 20 |
| Hexachlorobenzene | <25 | | 1600 | 2020 | | ug/L | | 126 | 61 - 126 | 2 | 20 |
| Hexachlorobutadiene | <250 | | 1600 | 1170 | | ug/L | | 73 | 20 - 100 | 12 | 20 |
| Hexachloroethane | <250 | | 1600 | 1240 | | ug/L | | 78 | 20 - 100 | 5 | 20 |
| Nitrobenzene | <50 | | 1600 | 1230 | | ug/L | | 77 | 54 - 121 | 12 | 20 |
| Pentachlorophenol | <1000 | | 3200 | <4000 | | ug/L | | NC | 42 - 148 | NC | 20 |
| Pyridine | <1000 | | 3200 | <4000 | | ug/L | | NC | 15 - 110 | NC | 20 |
| 2,4,5-Trichlorophenol | <500 | | 1600 | <2000 | | ug/L | | NC | 63 - 124 | NC | 20 |
| 2,4,6-Trichlorophenol | <250 | | 1600 | 1750 | | ug/L | | 110 | 62 - 121 | 1 | 20 |

| *Surrogate* | *MSD %Recovery* | *MSD Qualifier* | *Limits* |
|---|---|---|---|
| *2-Fluorophenol (Surr)* | *68* | | *27 - 110* |
| *Phenol-d5 (Surr)* | *42* | | *20 - 100* |
| *Nitrobenzene-d5 (Surr)* | *80* | | *36 - 120* |
| *2-Fluorobiphenyl* | *99* | | *34 - 110* |
| *2,4,6-Tribromophenol (Surr)* | *143* | | *40 - 145* |
| *Terphenyl-d14* | *112* | | *40 - 145* |

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

**Lab Sample ID: MB 500-678933/1-A** — **Client Sample ID: Method Blank**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 679122** — **Prep Batch: 678933**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | <0.40 | | 0.40 | 0.067 | ug/L | | 10/11/22 07:41 | 10/11/22 16:55 | 1 |
| PCB-1221 | <0.40 | | 0.40 | 0.20 | ug/L | | 10/11/22 07:41 | 10/11/22 16:55 | 1 |
| PCB-1232 | <0.40 | | 0.40 | 0.20 | ug/L | | 10/11/22 07:41 | 10/11/22 16:55 | 1 |
| PCB-1242 | <0.40 | | 0.40 | 0.20 | ug/L | | 10/11/22 07:41 | 10/11/22 16:55 | 1 |
| PCB-1248 | <0.40 | | 0.40 | 0.20 | ug/L | | 10/11/22 07:41 | 10/11/22 16:55 | 1 |
| PCB-1254 | <0.40 | | 0.40 | 0.20 | ug/L | | 10/11/22 07:41 | 10/11/22 16:55 | 1 |
| PCB-1260 | <0.40 | | 0.40 | 0.070 | ug/L | | 10/11/22 07:41 | 10/11/22 16:55 | 1 |
| PCB-1262 | <0.40 | | 0.40 | 0.20 | ug/L | | 10/11/22 07:41 | 10/11/22 16:55 | 1 |
| PCB-1268 | <0.40 | | 0.40 | 0.20 | ug/L | | 10/11/22 07:41 | 10/11/22 16:55 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *95* | | *30 - 120* | *10/11/22 07:41* | *10/11/22 16:55* | *1* |
| *DCB Decachlorobiphenyl* | *112* | | *30 - 140* | *10/11/22 07:41* | *10/11/22 16:55* | *1* |

**Lab Sample ID: LCS 500-678933/4-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 679122** — **Prep Batch: 678933**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| PCB-1016 | 4.00 | 3.78 | | ug/L | | 94 | 56 - 120 |

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

**Lab Sample ID: LCS 500-678933/4-A**
**Matrix: Water**
**Analysis Batch: 679122**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 678933**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PCB-1260 | | | 4.00 | 4.01 | | ug/L | | 100 | 53 - 137 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Tetrachloro-m-xylene* | *84* | | *30 - 120* |
| *DCB Decachlorobiphenyl* | *94* | | *30 - 140* |

**Lab Sample ID: LCSD 500-678933/5-A**
**Matrix: Water**
**Analysis Batch: 679122**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 678933**

| Analyte | | | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | | | 4.00 | 3.90 | | ug/L | | 97 | 56 - 120 | 3 | 20 |
| PCB-1260 | | | 4.00 | 4.09 | | ug/L | | 102 | 53 - 137 | 2 | 20 |

| *Surrogate* | *LCSD %Recovery* | *LCSD Qualifier* | *Limits* |
|---|---|---|---|
| *Tetrachloro-m-xylene* | *88* | | *30 - 120* |
| *DCB Decachlorobiphenyl* | *98* | | *30 - 140* |

**Lab Sample ID: MB 500-679758/1-A**
**Matrix: Solid**
**Analysis Batch: 680001**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 679758**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | <17 | | 17 | 6.6 | ug/Kg | | 10/15/22 07:45 | 10/17/22 22:04 | 1 |
| PCB-1221 | <17 | | 17 | 6.6 | ug/Kg | | 10/15/22 07:45 | 10/17/22 22:04 | 1 |
| PCB-1232 | <17 | | 17 | 4.5 | ug/Kg | | 10/15/22 07:45 | 10/17/22 22:04 | 1 |
| PCB-1242 | <17 | | 17 | 6.5 | ug/Kg | | 10/15/22 07:45 | 10/17/22 22:04 | 1 |
| PCB-1248 | <17 | | 17 | 7.9 | ug/Kg | | 10/15/22 07:45 | 10/17/22 22:04 | 1 |
| PCB-1254 | <17 | | 17 | 5.7 | ug/Kg | | 10/15/22 07:45 | 10/17/22 22:04 | 1 |
| PCB-1260 | <17 | | 17 | 6.3 | ug/Kg | | 10/15/22 07:45 | 10/17/22 22:04 | 1 |
| PCB-1262 | <17 | | 17 | 5.5 | ug/Kg | | 10/15/22 07:45 | 10/17/22 22:04 | 1 |
| PCB-1268 | <17 | | 17 | 9.7 | ug/Kg | | 10/15/22 07:45 | 10/17/22 22:04 | 1 |

| *Surrogate* | *MB %Recovery* | *MB Qualifier* | *Limits* | *Prepared* | *Analyzed* | *Dil Fac* |
|---|---|---|---|---|---|---|
| *Tetrachloro-m-xylene* | *92* | | *49 - 129* | *10/15/22 07:45* | *10/17/22 22:04* | *1* |
| *DCB Decachlorobiphenyl* | *96* | | *37 - 121* | *10/15/22 07:45* | *10/17/22 22:04* | *1* |

**Lab Sample ID: LCS 500-679758/2-A**
**Matrix: Solid**
**Analysis Batch: 680001**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 679758**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | | | 167 | 129 | | ug/Kg | | 77 | 57 - 120 | | |
| PCB-1260 | | | 167 | 137 | | ug/Kg | | 82 | 61 - 125 | | |

| *Surrogate* | *LCS %Recovery* | *LCS Qualifier* | *Limits* |
|---|---|---|---|
| *Tetrachloro-m-xylene* | *95* | | *49 - 129* |

## Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

**Lab Sample ID: LCS 500-679758/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 680001** — **Prep Batch: 679758**

| Surrogate | LCS %Recovery | LCS Qualifier | Limits |
|---|---|---|---|
| DCB Decachlorobiphenyl | 98 | | 37 - 121 |

**Lab Sample ID: 500-223407-1 MS** — **Client Sample ID: MLBF-C-E4-01-221006**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 680001** — **Prep Batch: 679758**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | <17 | | 174 | 126 | | ug/Kg | ☼ | 72 | 57 - 120 |
| PCB-1260 | <17 | | 174 | 141 | | ug/Kg | ☼ | 81 | 61 - 125 |

| Surrogate | MS %Recovery | MS Qualifier | Limits |
|---|---|---|---|
| Tetrachloro-m-xylene | 102 | | 49 - 129 |
| DCB Decachlorobiphenyl | 108 | | 37 - 121 |

**Lab Sample ID: 500-223407-1 MSD** — **Client Sample ID: MLBF-C-E4-01-221006**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 680001** — **Prep Batch: 679758**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 | <17 | | 174 | 121 | | ug/Kg | ☼ | 70 | 57 - 120 | 4 | 30 |
| PCB-1260 | <17 | | 174 | 130 | | ug/Kg | ☼ | 75 | 61 - 125 | 8 | 30 |

| Surrogate | MSD %Recovery | MSD Qualifier | Limits |
|---|---|---|---|
| Tetrachloro-m-xylene | 91 | | 49 - 129 |
| DCB Decachlorobiphenyl | 94 | | 37 - 121 |

## Method: 6010D - Metals (ICP)

**Lab Sample ID: MB 500-679336/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 679838** — **Prep Batch: 679336**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | <20 | | 20 | 8.2 | mg/Kg | | 10/12/22 17:06 | 10/15/22 22:58 | 1 |
| Antimony | 0.641 | J | 2.0 | 0.39 | mg/Kg | | 10/12/22 17:06 | 10/15/22 22:58 | 1 |
| Arsenic | <1.0 | | 1.0 | 0.34 | mg/Kg | | 10/12/22 17:06 | 10/15/22 22:58 | 1 |
| Barium | <1.0 | | 1.0 | 0.11 | mg/Kg | | 10/12/22 17:06 | 10/15/22 22:58 | 1 |
| Beryllium | <0.40 | | 0.40 | 0.093 | mg/Kg | | 10/12/22 17:06 | 10/15/22 22:58 | 1 |
| Cadmium | <0.20 | | 0.20 | 0.036 | mg/Kg | | 10/12/22 17:06 | 10/15/22 22:58 | 1 |
| Calcium | <20 | | 20 | 3.4 | mg/Kg | | 10/12/22 17:06 | 10/15/22 22:58 | 1 |
| Chromium | <1.0 | | 1.0 | 0.50 | mg/Kg | | 10/12/22 17:06 | 10/15/22 22:58 | 1 |
| Cobalt | <0.50 | | 0.50 | 0.13 | mg/Kg | | 10/12/22 17:06 | 10/15/22 22:58 | 1 |
| Copper | <1.0 | | 1.0 | 0.28 | mg/Kg | | 10/12/22 17:06 | 10/15/22 22:58 | 1 |
| Iron | <20 | | 20 | 10 | mg/Kg | | 10/12/22 17:06 | 10/15/22 22:58 | 1 |
| Lead | <0.50 | | 0.50 | 0.23 | mg/Kg | | 10/12/22 17:06 | 10/15/22 22:58 | 1 |
| Magnesium | <10 | | 10 | 5.0 | mg/Kg | | 10/12/22 17:06 | 10/15/22 22:58 | 1 |
| Manganese | <1.0 | | 1.0 | 0.15 | mg/Kg | | 10/12/22 17:06 | 10/15/22 22:58 | 1 |
| Nickel | <1.0 | | 1.0 | 0.29 | mg/Kg | | 10/12/22 17:06 | 10/15/22 22:58 | 1 |

## Method: 6010D - Metals (ICP) (Continued)

**Lab Sample ID: MB 500-679336/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 679838** — **Prep Batch: 679336**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Potassium | <50 | | 50 | 18 | mg/Kg | | 10/12/22 17:06 | 10/15/22 22:58 | 1 |
| Silver | <0.50 | | 0.50 | 0.13 | mg/Kg | | 10/12/22 17:06 | 10/15/22 22:58 | 1 |
| Sodium | <100 | | 100 | 15 | mg/Kg | | 10/12/22 17:06 | 10/15/22 22:58 | 1 |
| Thallium | <1.0 | | 1.0 | 0.50 | mg/Kg | | 10/12/22 17:06 | 10/15/22 22:58 | 1 |
| Vanadium | <0.50 | | 0.50 | 0.12 | mg/Kg | | 10/12/22 17:06 | 10/15/22 22:58 | 1 |
| Zinc | <2.0 | | 2.0 | 0.88 | mg/Kg | | 10/12/22 17:06 | 10/15/22 22:58 | 1 |
| Lithium | <1.0 | | 1.0 | 0.30 | mg/Kg | | 10/12/22 17:06 | 10/15/22 22:58 | 1 |

**Lab Sample ID: MB 500-679336/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 680095** — **Prep Batch: 679336**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Selenium | <1.0 | | 1.0 | 0.59 | mg/Kg | | 10/12/22 17:06 | 10/17/22 20:19 | 1 |

**Lab Sample ID: LCS 500-679336/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 679838** — **Prep Batch: 679336**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Aluminum | 200 | 185 | | mg/Kg | | 93 | 80 - 120 |
| Antimony | 50.0 | 47.2 | | mg/Kg | | 94 | 80 - 120 |
| Arsenic | 10.0 | 9.11 | | mg/Kg | | 91 | 80 - 120 |
| Barium | 200 | 200 | | mg/Kg | | 100 | 80 - 120 |
| Beryllium | 5.00 | 4.66 | | mg/Kg | | 93 | 80 - 120 |
| Cadmium | 5.00 | 4.55 | | mg/Kg | | 91 | 80 - 120 |
| Calcium | 1000 | 970 | | mg/Kg | | 97 | 80 - 120 |
| Chromium | 20.0 | 18.7 | | mg/Kg | | 94 | 80 - 120 |
| Cobalt | 50.0 | 48.6 | | mg/Kg | | 97 | 80 - 120 |
| Copper | 25.0 | 23.9 | | mg/Kg | | 95 | 80 - 120 |
| Iron | 100 | 93.0 | | mg/Kg | | 93 | 80 - 120 |
| Lead | 10.0 | 9.43 | | mg/Kg | | 94 | 80 - 120 |
| Magnesium | 1000 | 920 | | mg/Kg | | 92 | 80 - 120 |
| Manganese | 50.0 | 46.0 | | mg/Kg | | 92 | 80 - 120 |
| Nickel | 50.0 | 47.4 | | mg/Kg | | 95 | 80 - 120 |
| Potassium | 1000 | 939 | | mg/Kg | | 94 | 80 - 120 |
| Silver | 5.00 | 4.26 | | mg/Kg | | 85 | 80 - 120 |
| Sodium | 1000 | 949 | | mg/Kg | | 95 | 80 - 120 |
| Thallium | 10.0 | 9.03 | | mg/Kg | | 90 | 80 - 120 |
| Vanadium | 50.0 | 47.7 | | mg/Kg | | 95 | 80 - 120 |
| Zinc | 50.0 | 47.1 | | mg/Kg | | 94 | 80 - 120 |
| Lithium | 50.0 | 49.6 | | mg/Kg | | 99 | 80 - 120 |

**Lab Sample ID: LCS 500-679336/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 680095** — **Prep Batch: 679336**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Selenium | 10.0 | 8.87 | | mg/Kg | | 89 | 80 - 120 |

## Method: 6010D - Metals (ICP) (Continued)

**Lab Sample ID: 500-223407-1 MS** — **Client Sample ID: MLBF-C-E4-01-221006**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 679838** — **Prep Batch: 679336**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | 6200 | | 208 | 6710 | 4 | mg/Kg | ☼ | 253 | 75 - 125 |
| Antimony | 0.53 | J B F1 | 51.9 | 21.4 | F1 | mg/Kg | ☼ | 40 | 75 - 125 |
| Arsenic | 2.3 | | 10.4 | 12.0 | | mg/Kg | ☼ | 94 | 75 - 125 |
| Barium | 50 | | 208 | 238 | | mg/Kg | ☼ | 91 | 75 - 125 |
| Beryllium | 0.45 | | 5.19 | 5.33 | | mg/Kg | ☼ | 94 | 75 - 125 |
| Cadmium | 2.2 | F1 | 5.19 | 5.62 | F1 | mg/Kg | ☼ | 66 | 75 - 125 |
| Chromium | 9.6 | | 20.8 | 25.5 | | mg/Kg | ☼ | 76 | 75 - 125 |
| Copper | 58 | F1 | 26.0 | 57.1 | F1 | mg/Kg | ☼ | -3 | 75 - 125 |
| Iron | 6500 | | 104 | 6620 | 4 | mg/Kg | ☼ | 136 | 75 - 125 |
| Lead | 25 | F1 | 10.4 | 14.0 | F1 | mg/Kg | ☼ | -107 | 75 - 125 |
| Manganese | 440 | | 51.9 | 472 | 4 | mg/Kg | ☼ | 53 | 75 - 125 |
| Nickel | 23 | | 51.9 | 63.7 | | mg/Kg | ☼ | 78 | 75 - 125 |
| Potassium | 860 | | 1040 | 2000 | | mg/Kg | ☼ | 110 | 75 - 125 |
| Silver | 0.28 | J | 5.19 | 4.75 | | mg/Kg | ☼ | 86 | 75 - 125 |
| Sodium | 430 | | 1040 | 1430 | | mg/Kg | ☼ | 96 | 75 - 125 |
| Thallium | <1.0 | | 10.4 | 9.08 | | mg/Kg | ☼ | 87 | 75 - 125 |
| Vanadium | 11 | | 51.9 | 55.3 | | mg/Kg | ☼ | 85 | 75 - 125 |
| Zinc | 78 | F1 F2 | 51.9 | 90.5 | F1 | mg/Kg | ☼ | 23 | 75 - 125 |
| Lithium | 12 | | 51.9 | 60.2 | | mg/Kg | ☼ | 94 | 75 - 125 |

**Lab Sample ID: 500-223407-1 MS** — **Client Sample ID: MLBF-C-E4-01-221006**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 680095** — **Prep Batch: 679336**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Magnesium | 47000 | | 1040 | 47100 | 4 | mg/Kg | ☼ | -13 | 75 - 125 |
| Selenium | <1.0 | | 10.4 | 8.30 | | mg/Kg | ☼ | 80 | 75 - 125 |

**Lab Sample ID: 500-223407-1 MS** — **Client Sample ID: MLBF-C-E4-01-221006**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 680095** — **Prep Batch: 679336**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Calcium | 170000 | | 1040 | 171000 | 4 | mg/Kg | ☼ | 284 | 75 - 125 |
| Cobalt | 17 | | 51.9 | 71.8 | | mg/Kg | ☼ | 105 | 75 - 125 |

**Lab Sample ID: 500-223407-1 MSD** — **Client Sample ID: MLBF-C-E4-01-221006**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 679838** — **Prep Batch: 679336**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Aluminum | 6200 | | 191 | 7030 | 4 | mg/Kg | ☼ | 441 | 75 - 125 | 5 | 20 |
| Antimony | 0.53 | J B F1 | 47.7 | 18.3 | F1 | mg/Kg | ☼ | 37 | 75 - 125 | 15 | 20 |
| Arsenic | 2.3 | | 9.54 | 11.4 | | mg/Kg | ☼ | 96 | 75 - 125 | 5 | 20 |
| Barium | 50 | | 191 | 223 | | mg/Kg | ☼ | 91 | 75 - 125 | 6 | 20 |
| Beryllium | 0.45 | | 4.77 | 4.87 | | mg/Kg | ☼ | 93 | 75 - 125 | 9 | 20 |
| Cadmium | 2.2 | F1 | 4.77 | 6.04 | | mg/Kg | ☼ | 80 | 75 - 125 | 7 | 20 |
| Chromium | 9.6 | | 19.1 | 24.2 | | mg/Kg | ☼ | 77 | 75 - 125 | 5 | 20 |
| Copper | 58 | F1 | 23.8 | 70.1 | F1 | mg/Kg | ☼ | 51 | 75 - 125 | 20 | 20 |

## Method: 6010D - Metals (ICP) (Continued)

**Lab Sample ID: 500-223407-1 MSD** — **Client Sample ID: MLBF-C-E4-01-221006**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 679838** — **Prep Batch: 679336**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Iron | 6500 | | 95.4 | 6630 | 4 | mg/Kg | ☼ | 163 | 75 - 125 | 0 | 20 |
| Lead | 25 | F1 | 9.54 | 15.4 | F1 | mg/Kg | ☼ | -103 | 75 - 125 | 9 | 20 |
| Manganese | 440 | | 47.7 | 485 | 4 | mg/Kg | ☼ | 85 | 75 - 125 | 3 | 20 |
| Nickel | 23 | | 47.7 | 61.7 | | mg/Kg | ☼ | 81 | 75 - 125 | 3 | 20 |
| Potassium | 860 | | 954 | 1870 | | mg/Kg | ☼ | 106 | 75 - 125 | 7 | 20 |
| Silver | 0.28 | J | 4.77 | 4.36 | | mg/Kg | ☼ | 85 | 75 - 125 | 9 | 20 |
| Sodium | 430 | | 954 | 1320 | | mg/Kg | ☼ | 93 | 75 - 125 | 8 | 20 |
| Thallium | <1.0 | | 9.54 | 8.05 | | mg/Kg | ☼ | 84 | 75 - 125 | 12 | 20 |
| Vanadium | 11 | | 47.7 | 51.3 | | mg/Kg | ☼ | 84 | 75 - 125 | 7 | 20 |
| Zinc | 78 | F1 F2 | 47.7 | 115 | F2 | mg/Kg | ☼ | 76 | 75 - 125 | 24 | 20 |
| Lithium | 12 | | 47.7 | 58.0 | | mg/Kg | ☼ | 97 | 75 - 125 | 4 | 20 |

**Lab Sample ID: 500-223407-1 MSD** — **Client Sample ID: MLBF-C-E4-01-221006**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 680095** — **Prep Batch: 679336**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Magnesium | 47000 | | 954 | 47200 | 4 | mg/Kg | ☼ | 2 | 75 - 125 | 0 | 20 |
| Selenium | <1.0 | | 9.54 | 7.87 | | mg/Kg | ☼ | 82 | 75 - 125 | 5 | 20 |

**Lab Sample ID: 500-223407-1 MSD** — **Client Sample ID: MLBF-C-E4-01-221006**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 680095** — **Prep Batch: 679336**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Calcium | 170000 | | 954 | 185000 | 4 | mg/Kg | ☼ | 1713 | 75 - 125 | 8 | 20 |
| Cobalt | 17 | | 47.7 | 65.0 | | mg/Kg | ☼ | 100 | 75 - 125 | 10 | 20 |

**Lab Sample ID: 500-223407-1 DU** — **Client Sample ID: MLBF-C-E4-01-221006**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 679838** — **Prep Batch: 679336**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Aluminum | 6200 | | | 6320 | | mg/Kg | ☼ | | | 2 | 20 |
| Antimony | 0.53 | J B F1 | | <1.9 | | mg/Kg | ☼ | | | NC | 20 |
| Arsenic | 2.3 | | | 2.14 | | mg/Kg | ☼ | | | 5 | 20 |
| Barium | 50 | | | 50.5 | | mg/Kg | ☼ | | | 2 | 20 |
| Beryllium | 0.45 | | | 0.481 | | mg/Kg | ☼ | | | 7 | 20 |
| Cadmium | 2.2 | F1 | | 2.57 | | mg/Kg | ☼ | | | 15 | 20 |
| Chromium | 9.6 | | | 9.40 | | mg/Kg | ☼ | | | 2 | 20 |
| Copper | 58 | F1 | | 60.0 | | mg/Kg | ☼ | | | 4 | 20 |
| Iron | 6500 | | | 6590 | | mg/Kg | ☼ | | | 2 | 20 |
| Lead | 25 | F1 | | 8.72 | F3 | mg/Kg | ☼ | | | 97 | 20 |
| Manganese | 440 | | | 447 | | mg/Kg | ☼ | | | 0.6 | 20 |
| Nickel | 23 | | | 23.0 | | mg/Kg | ☼ | | | 0.8 | 20 |
| Potassium | 860 | | | 830 | | mg/Kg | ☼ | | | 4 | 20 |
| Silver | 0.28 | J | | 0.244 | J | mg/Kg | ☼ | | | 16 | 20 |
| Sodium | 430 | | | 417 | | mg/Kg | ☼ | | | 4 | 20 |
| Thallium | <1.0 | | | <0.96 | | mg/Kg | ☼ | | | NC | 20 |

## Method: 6010D - Metals (ICP) (Continued)

**Lab Sample ID: 500-223407-1 DU** — **Client Sample ID: MLBF-C-E4-01-221006**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 679838** — **Prep Batch: 679336**

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| Vanadium | 11 | | 10.7 | | mg/Kg | ☼ | 3 | 20 |
| Zinc | 78 | F1 F2 | 129 | F3 | mg/Kg | ☼ | 49 | 20 |
| Lithium | 12 | | 12.9 | | mg/Kg | ☼ | 10 | 20 |

**Lab Sample ID: 500-223407-1 DU** — **Client Sample ID: MLBF-C-E4-01-221006**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 680095** — **Prep Batch: 679336**

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| Magnesium | 47000 | | 45700 | | mg/Kg | ☼ | 3 | 20 |
| Selenium | <1.0 | | <0.96 | | mg/Kg | ☼ | NC | 20 |

**Lab Sample ID: 500-223407-1 DU** — **Client Sample ID: MLBF-C-E4-01-221006**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 680095** — **Prep Batch: 679336**

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| Calcium | 170000 | | 171000 | | mg/Kg | ☼ | 1 | 20 |
| Cobalt | 17 | | 25.9 | F3 | mg/Kg | ☼ | 39 | 20 |

**Lab Sample ID: LCS 500-679836/7-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 680101** — **Prep Batch: 679836**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Aluminum | 2.00 | 1.93 | | mg/L | | 96 | 80 - 120 |
| Barium | 0.500 | 0.506 | | mg/L | | 101 | 80 - 120 |
| Cadmium | 0.0500 | 0.0481 | | mg/L | | 96 | 80 - 120 |
| Chromium | 0.200 | 0.198 | | mg/L | | 99 | 80 - 120 |
| Lead | 0.100 | 0.0921 | | mg/L | | 92 | 80 - 120 |
| Selenium | 0.100 | 0.105 | | mg/L | | 105 | 80 - 120 |
| Silver | 0.0500 | 0.0467 | | mg/L | | 93 | 80 - 120 |

**Lab Sample ID: LB2 500-679726/1-B** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: TCLP**
**Analysis Batch: 680101** — **Prep Batch: 679836**

| Analyte | LB2 Result | LB2 Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | <0.20 | | 0.20 | 0.20 | mg/L | | 10/17/22 07:44 | 10/17/22 23:07 | 1 |
| Barium | <0.50 | | 0.50 | 0.050 | mg/L | | 10/17/22 07:44 | 10/17/22 23:07 | 1 |
| Cadmium | <0.0050 | | 0.0050 | 0.0020 | mg/L | | 10/17/22 07:44 | 10/17/22 23:07 | 1 |
| Chromium | <0.025 | | 0.025 | 0.010 | mg/L | | 10/17/22 07:44 | 10/17/22 23:07 | 1 |
| Lead | <0.050 | | 0.050 | 0.0075 | mg/L | | 10/17/22 07:44 | 10/17/22 23:07 | 1 |
| Selenium | <0.050 | | 0.050 | 0.020 | mg/L | | 10/17/22 07:44 | 10/17/22 23:07 | 1 |
| Silver | <0.025 | | 0.025 | 0.010 | mg/L | | 10/17/22 07:44 | 10/17/22 23:07 | 1 |

## Method: 6010D - Metals (ICP) (Continued)

**Lab Sample ID: 500-223407-1 MS** — **Client Sample ID: MLBF-C-E4-01-221006**
**Matrix: Solid** — **Prep Type: TCLP**
**Analysis Batch: 680101** — **Prep Batch: 679836**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | <0.20 | | 2.00 | 2.05 | | mg/L | | 103 | 75 - 125 |
| Barium | 0.29 | J | 0.500 | 0.797 | | mg/L | | 101 | 75 - 125 |
| Cadmium | <0.0050 | | 0.0500 | 0.0531 | | mg/L | | 106 | 75 - 125 |
| Chromium | 0.020 | J | 0.200 | 0.205 | | mg/L | | 93 | 75 - 125 |
| Lead | <0.050 | | 0.100 | 0.100 | | mg/L | | 100 | 75 - 125 |
| Selenium | <0.050 | | 0.100 | 0.101 | | mg/L | | 101 | 75 - 125 |
| Silver | <0.025 | | 0.0500 | 0.0505 | | mg/L | | 101 | 75 - 125 |

**Lab Sample ID: 500-223407-1 MSD** — **Client Sample ID: MLBF-C-E4-01-221006**
**Matrix: Solid** — **Prep Type: TCLP**
**Analysis Batch: 680101** — **Prep Batch: 679836**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Aluminum | <0.20 | | 2.00 | 2.02 | | mg/L | | 101 | 75 - 125 | 1 | 20 |
| Barium | 0.29 | J | 0.500 | 0.775 | | mg/L | | 97 | 75 - 125 | 3 | 20 |
| Cadmium | <0.0050 | | 0.0500 | 0.0516 | | mg/L | | 103 | 75 - 125 | 3 | 20 |
| Chromium | 0.020 | J | 0.200 | 0.201 | | mg/L | | 91 | 75 - 125 | 2 | 20 |
| Lead | <0.050 | | 0.100 | 0.0969 | | mg/L | | 97 | 75 - 125 | 3 | 20 |
| Selenium | <0.050 | | 0.100 | 0.101 | | mg/L | | 101 | 75 - 125 | 0 | 20 |
| Silver | <0.025 | | 0.0500 | 0.0500 | | mg/L | | 100 | 75 - 125 | 1 | 20 |

**Lab Sample ID: 500-223407-1 DU** — **Client Sample ID: MLBF-C-E4-01-221006**
**Matrix: Solid** — **Prep Type: TCLP**
**Analysis Batch: 680101** — **Prep Batch: 679836**

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| Aluminum | <0.20 | | <0.20 | | mg/L | | NC | 20 |
| Barium | 0.29 | J | 0.292 | J | mg/L | | 0.09 | 20 |
| Cadmium | <0.0050 | | <0.0050 | | mg/L | | NC | 20 |
| Chromium | 0.020 | J | 0.0193 | J | mg/L | | 1 | 20 |
| Lead | <0.050 | | <0.050 | | mg/L | | NC | 20 |
| Selenium | <0.050 | | <0.050 | | mg/L | | NC | 20 |
| Silver | <0.025 | | <0.025 | | mg/L | | NC | 20 |

## Method: 6020A - Metals (ICP/MS)

**Lab Sample ID: MB 500-679429/1-A** — **Client Sample ID: Method Blank**
**Matrix: Water** — **Prep Type: Total Recoverable**
**Analysis Batch: 679657** — **Prep Batch: 679429**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | <0.10 | | 0.10 | 0.025 | mg/L | | 10/13/22 09:28 | 10/14/22 00:53 | 1 |
| Antimony | <0.0030 | | 0.0030 | 0.0013 | mg/L | | 10/13/22 09:28 | 10/14/22 00:53 | 1 |
| Arsenic | <0.0010 | | 0.0010 | 0.00023 | mg/L | | 10/13/22 09:28 | 10/14/22 00:53 | 1 |
| Barium | <0.0025 | | 0.0025 | 0.00073 | mg/L | | 10/13/22 09:28 | 10/14/22 00:53 | 1 |
| Beryllium | <0.0010 | | 0.0010 | 0.00053 | mg/L | | 10/13/22 09:28 | 10/14/22 00:53 | 1 |
| Cadmium | <0.00050 | | 0.00050 | 0.00017 | mg/L | | 10/13/22 09:28 | 10/14/22 00:53 | 1 |
| Calcium | <0.20 | | 0.20 | 0.044 | mg/L | | 10/13/22 09:28 | 10/14/22 00:53 | 1 |
| Chromium | <0.0050 | | 0.0050 | 0.0011 | mg/L | | 10/13/22 09:28 | 10/14/22 00:53 | 1 |

## Method: 6020A - Metals (ICP/MS) (Continued)

**Lab Sample ID: MB 500-679429/1-A**
**Matrix: Water**
**Analysis Batch: 679657**

**Client Sample ID: Method Blank**
**Prep Type: Total Recoverable**
**Prep Batch: 679429**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cobalt | <0.0010 | | 0.0010 | 0.00040 | mg/L | | 10/13/22 09:28 | 10/14/22 00:53 | 1 |
| Copper | <0.0020 | | 0.0020 | 0.00050 | mg/L | | 10/13/22 09:28 | 10/14/22 00:53 | 1 |
| Iron | <0.10 | | 0.10 | 0.047 | mg/L | | 10/13/22 09:28 | 10/14/22 00:53 | 1 |
| Lead | <0.00050 | | 0.00050 | 0.00019 | mg/L | | 10/13/22 09:28 | 10/14/22 00:53 | 1 |
| Lithium | <0.010 | | 0.010 | 0.0025 | mg/L | | 10/13/22 09:28 | 10/14/22 00:53 | 1 |
| Magnesium | <0.20 | | 0.20 | 0.049 | mg/L | | 10/13/22 09:28 | 10/14/22 00:53 | 1 |
| Manganese | <0.0025 | | 0.0025 | 0.00079 | mg/L | | 10/13/22 09:28 | 10/14/22 00:53 | 1 |
| Nickel | <0.0020 | | 0.0020 | 0.00063 | mg/L | | 10/13/22 09:28 | 10/14/22 00:53 | 1 |
| Potassium | <0.50 | | 0.50 | 0.11 | mg/L | | 10/13/22 09:28 | 10/14/22 00:53 | 1 |
| Selenium | <0.0025 | | 0.0025 | 0.00098 | mg/L | | 10/13/22 09:28 | 10/14/22 00:53 | 1 |
| Silver | <0.00050 | | 0.00050 | 0.00012 | mg/L | | 10/13/22 09:28 | 10/14/22 00:53 | 1 |
| Sodium | <0.20 | | 0.20 | 0.077 | mg/L | | 10/13/22 09:28 | 10/14/22 00:53 | 1 |
| Thallium | <0.0020 | | 0.0020 | 0.00057 | mg/L | | 10/13/22 09:28 | 10/14/22 00:53 | 1 |
| Vanadium | <0.0050 | | 0.0050 | 0.0022 | mg/L | | 10/13/22 09:28 | 10/14/22 00:53 | 1 |
| Zinc | <0.020 | | 0.020 | 0.0069 | mg/L | | 10/13/22 09:28 | 10/14/22 00:53 | 1 |

**Lab Sample ID: LCS 500-679429/2-A**
**Matrix: Water**
**Analysis Batch: 679657**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total Recoverable**
**Prep Batch: 679429**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Aluminum | 2.00 | 2.06 | | mg/L | | 103 | 80 - 120 |
| Antimony | 0.500 | 0.531 | | mg/L | | 106 | 80 - 120 |
| Arsenic | 0.100 | 0.101 | | mg/L | | 101 | 80 - 120 |
| Barium | 0.500 | 0.527 | | mg/L | | 105 | 80 - 120 |
| Beryllium | 0.0500 | 0.0485 | | mg/L | | 97 | 80 - 120 |
| Cadmium | 0.0500 | 0.0513 | | mg/L | | 103 | 80 - 120 |
| Calcium | 10.0 | 10.4 | | mg/L | | 104 | 80 - 120 |
| Chromium | 0.200 | 0.204 | | mg/L | | 102 | 80 - 120 |
| Cobalt | 0.500 | 0.510 | | mg/L | | 102 | 80 - 120 |
| Copper | 0.250 | 0.259 | | mg/L | | 103 | 80 - 120 |
| Iron | 1.00 | 1.04 | | mg/L | | 104 | 80 - 120 |
| Lead | 0.100 | 0.105 | | mg/L | | 105 | 80 - 120 |
| Lithium | 0.100 | 0.0997 | | mg/L | | 100 | 80 - 120 |
| Magnesium | 10.0 | 10.2 | | mg/L | | 102 | 80 - 120 |
| Manganese | 0.500 | 0.517 | | mg/L | | 103 | 80 - 120 |
| Nickel | 0.500 | 0.521 | | mg/L | | 104 | 80 - 120 |
| Potassium | 10.0 | 10.5 | | mg/L | | 105 | 80 - 120 |
| Selenium | 0.100 | 0.105 | | mg/L | | 105 | 80 - 120 |
| Silver | 0.0500 | 0.0523 | | mg/L | | 105 | 80 - 120 |
| Sodium | 10.0 | 10.1 | | mg/L | | 101 | 80 - 120 |
| Thallium | 0.100 | 0.103 | | mg/L | | 103 | 80 - 120 |
| Vanadium | 0.500 | 0.505 | | mg/L | | 101 | 80 - 120 |
| Zinc | 0.500 | 0.522 | | mg/L | | 104 | 80 - 120 |

## Method: 7470A - Mercury (CVAA)

**Lab Sample ID: MB 500-679462/12-A** — **Client Sample ID: Method Blank**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 679678** — **Prep Batch: 679462**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.20 | | 0.20 | 0.098 | ug/L | | 10/13/22 12:10 | 10/14/22 08:48 | 1 |

**Lab Sample ID: LCS 500-679462/13-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 679678** — **Prep Batch: 679462**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Mercury | 2.00 | 1.89 | | ug/L | | 95 | 80 - 120 |

**Lab Sample ID: MB 500-679952/12-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 680143** — **Prep Batch: 679952**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.20 | | 0.20 | 0.20 | ug/L | | 10/17/22 12:00 | 10/18/22 09:51 | 1 |

**Lab Sample ID: LCS 500-679952/14-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 680143** — **Prep Batch: 679952**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Mercury | 2.00 | 1.77 | | ug/L | | 89 | 80 - 120 |

**Lab Sample ID: LCS 500-679952/23-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 680143** — **Prep Batch: 679952**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Mercury | 2.00 | 1.79 | | ug/L | | 90 | 80 - 120 |

**Lab Sample ID: LB2 500-679726/2-B** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: TCLP**
**Analysis Batch: 680143** — **Prep Batch: 679952**

| Analyte | LB2 Result | LB2 Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <0.20 | | 0.20 | 0.20 | ug/L | | 10/17/22 12:00 | 10/18/22 09:53 | 1 |

**Lab Sample ID: 500-223407-1 MS** — **Client Sample ID: MLBF-C-E4-01-221006**
**Matrix: Solid** — **Prep Type: TCLP**
**Analysis Batch: 680143** — **Prep Batch: 679952**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 1.9 | F1 | 1.00 | 0.795 | F1 | ug/L | | -113 | 75 - 125 |

**Lab Sample ID: 500-223407-1 MSD** — **Client Sample ID: MLBF-C-E4-01-221006**
**Matrix: Solid** — **Prep Type: TCLP**
**Analysis Batch: 680143** — **Prep Batch: 679952**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 1.9 | F1 | 1.00 | 0.835 | F1 | ug/L | | -109 | 75 - 125 | 5 | 20 |

# QC Sample Results

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Fire

Job ID: 500-223407-1

## Method: 7470A - Mercury (CVAA)

**Lab Sample ID: 500-223407-1 DU** — **Client Sample ID: MLBF-C-E4-01-221006**
**Matrix: Solid** — **Prep Type: TCLP**
**Analysis Batch: 680143** — **Prep Batch: 679952**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 1.9 | F1 | | <0.20 | | ug/L | | | | NC | 20 |

## Method: 7471B - Mercury (CVAA)

**Lab Sample ID: MB 500-679634/12-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 679918** — **Prep Batch: 679634**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | <17 | | 17 | 5.6 | ug/Kg | | 10/14/22 15:00 | 10/17/22 08:28 | 1 |

**Lab Sample ID: LCS 500-679634/13-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 679918** — **Prep Batch: 679634**

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | | | 167 | 159 | | ug/Kg | | 95 | 80 - 120 | | |

**Lab Sample ID: 500-223407-1 MS** — **Client Sample ID: MLBF-C-E4-01-221006**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 679918** — **Prep Batch: 679634**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 49 | F1 F2 | 81.1 | 126 | | ug/Kg | ☼ | 94 | 75 - 125 | | |

**Lab Sample ID: 500-223407-1 MSD** — **Client Sample ID: MLBF-C-E4-01-221006**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 679918** — **Prep Batch: 679634**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 49 | F1 F2 | 80.8 | 44.1 | F1 F2 | ug/Kg | ☼ | -7 | 75 - 125 | 96 | 20 |

**Lab Sample ID: 500-223407-1 DU** — **Client Sample ID: MLBF-C-E4-01-221006**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 679918** — **Prep Batch: 679634**

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 49 | F1 F2 | | 45.6 | | ug/Kg | ☼ | | | 8 | 20 |

## Method: 9012B - Cyanide, Total andor Amenable

**Lab Sample ID: MB 500-679237/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 679714** — **Prep Batch: 679237**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total | <0.24 | | 0.24 | 0.12 | mg/Kg | | 10/12/22 15:00 | 10/14/22 13:18 | 1 |

## Method: 9012B - Cyanide, Total andor Amenable (Continued)

**Lab Sample ID: HLCS 500-679237/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 679714** — **Prep Batch: 679237**

| Analyte | Spike Added | HLCS Result | HLCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Cyanide, Total | 9.60 | 9.60 | | mg/Kg | | 100 | 90 - 110 |

**Lab Sample ID: LCS 500-679237/3-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 679714** — **Prep Batch: 679237**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Cyanide, Total | 2.40 | 2.38 | | mg/Kg | | 99 | 85 - 115 |

**Lab Sample ID: LLCS 500-679237/4-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 679714** — **Prep Batch: 679237**

| Analyte | Spike Added | LLCS Result | LLCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Cyanide, Total | 1.20 | 1.07 | | mg/Kg | | 89 | 75 - 125 |

**Lab Sample ID: 500-223407-1 MS** — **Client Sample ID: MLBF-C-E4-01-221006**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 679714** — **Prep Batch: 679237**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total | <0.25 | F1 | 1.09 | <0.22 | F1 | mg/Kg | ☼ | 0 | 75 - 125 |

**Lab Sample ID: 500-223407-1 MSD** — **Client Sample ID: MLBF-C-E4-01-221006**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 679714** — **Prep Batch: 679237**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cyanide, Total | <0.25 | F1 | 1.13 | <0.23 | F1 | mg/Kg | ☼ | 0 | 75 - 125 | NC | 20 |

## Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric)

**Lab Sample ID: MB 500-679258/1** — **Client Sample ID: Method Blank**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 679258**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Sulfide | <1.0 | | 1.0 | 0.23 | mg/L | | | 10/11/22 15:04 | 1 |

**Lab Sample ID: LCS 500-679258/2** — **Client Sample ID: Lab Control Sample**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 679258**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Sulfide | 9.89 | 9.01 | | mg/L | | 91 | 80 - 120 |

## Method: 9034 - Sulfide, Acid soluble and Insoluble (Titrimetric) (Continued)

**Lab Sample ID: 500-223407-6 MS** — **Client Sample ID: MLBF-RINSATE-221006**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 679258**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Sulfide | <1.0 | | 9.89 | 8.93 | | mg/L | | 90 | 75 - 125 |

**Lab Sample ID: 500-223407-6 MSD** — **Client Sample ID: MLBF-RINSATE-221006**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 679258**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sulfide | <1.0 | | 9.89 | 9.46 | | mg/L | | 96 | 75 - 125 | 6 | 20 |

**Lab Sample ID: MB 500-679475/1-A** — **Client Sample ID: Method Blank**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 679513** — **Prep Batch: 679475**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Sulfide | <10 | | 10 | 4.7 | mg/Kg | | 10/13/22 13:18 | 10/13/22 16:27 | 1 |

**Lab Sample ID: LCS 500-679475/2-A** — **Client Sample ID: Lab Control Sample**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 679513** — **Prep Batch: 679475**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|
| Sulfide | 198 | 162 | | mg/Kg | | 82 | 80 - 120 |

**Lab Sample ID: 500-223407-1 MS** — **Client Sample ID: MLBF-C-E4-01-221006**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 679513** — **Prep Batch: 679475**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec Limits |
|---|---|---|---|---|---|---|---|---|---|
| Sulfide | <10 | F1 | 196 | 129 | F1 | mg/Kg | ☼ | 66 | 75 - 125 |

**Lab Sample ID: 500-223407-1 MSD** — **Client Sample ID: MLBF-C-E4-01-221006**
**Matrix: Solid** — **Prep Type: Total/NA**
**Analysis Batch: 679513** — **Prep Batch: 679475**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Sulfide | <10 | F1 | 206 | 126 | F1 | mg/Kg | ☼ | 61 | 75 - 125 | 2 | 20 |

## Method: 9040C - pH

**Lab Sample ID: 500-223407-6 DU** — **Client Sample ID: MLBF-RINSATE-221006**
**Matrix: Water** — **Prep Type: Total/NA**
**Analysis Batch: 680546**

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| pH | 9.9 | HF | 9.9 | | SU | | 0.1 | |

# Lab Chronicle

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Fire

Job ID: 500-223407-1

## Client Sample ID: MLBF-C-E4-01-221006 — Lab Sample ID: 500-223407-1

**Date Collected: 10/06/22 10:40** — **Matrix: Solid**
**Date Received: 10/06/22 16:45**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| TCLP | Leach | 1311 | | | 679726 | OAJ | EET CHI | 10/14/22 14:05 - 10/15/22 08:05 [1] |
| TCLP | Prep | 3510C | | | 680601 | DAK | EET CHI | 10/20/22 10:28 |
| TCLP | Analysis | 8270D | | 5 | 680766 | LEG | EET CHI | 10/21/22 12:04 |
| TCLP | Leach | 1311 | | | 679726 | OAJ | EET CHI | 10/14/22 14:05 - 10/15/22 08:05 [1] |
| TCLP | Prep | 3010A | | | 679836 | BDE | EET CHI | 10/17/22 07:44 - 10/17/22 08:14 [1] |
| TCLP | Analysis | 6010D | | 1 | 680101 | JJB | EET CHI | 10/17/22 23:24 |
| TCLP | Leach | 1311 | | | 679726 | OAJ | EET CHI | 10/14/22 14:05 - 10/15/22 08:05 [1] |
| TCLP | Prep | 7470A | | | 679952 | MJG | EET CHI | 10/17/22 12:00 - 10/17/22 14:00 [1] |
| TCLP | Analysis | 7470A | | 1 | 680143 | MJG | EET CHI | 10/18/22 12:00 |
| Total/NA | Analysis | 9045D | | 1 | 678748 | SMO | EET CHI | 10/10/22 13:40 - 10/10/22 13:45 [1] |
| Total/NA | Analysis | Moisture | | 1 | 678462 | LWN | EET CHI | 10/07/22 10:03 |

## Client Sample ID: MLBF-C-E4-01-221006 — Lab Sample ID: 500-223407-1

**Date Collected: 10/06/22 10:40** — **Matrix: Solid**
**Date Received: 10/06/22 16:45** — **Percent Solids: 95.9**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3541 | | | 679758 | KN | EET CHI | 10/15/22 07:45 - 10/15/22 15:30 [1] |
| Total/NA | Analysis | 8082A | | 1 | 680001 | SS | EET CHI | 10/17/22 22:49 |
| Total/NA | Prep | 3050B | | | 679336 | LMB | EET CHI | 10/12/22 17:06 - 10/12/22 17:36 [1] |
| Total/NA | Analysis | 6010D | | 1 | 679838 | JJB | EET CHI | 10/15/22 23:05 |
| Total/NA | Prep | 3050B | | | 679336 | LMB | EET CHI | 10/12/22 17:06 - 10/12/22 17:36 [1] |
| Total/NA | Analysis | 6010D | | 1 | 680095 | JJB | EET CHI | 10/17/22 20:26 |
| Total/NA | Prep | 3050B | | | 679336 | LMB | EET CHI | 10/12/22 17:06 - 10/12/22 17:36 [1] |
| Total/NA | Analysis | 6010D | | 5 | 680095 | JJB | EET CHI | 10/17/22 20:49 |
| Total/NA | Prep | 7471B | | | 679634 | MJG | EET CHI | 10/14/22 15:00 |
| Total/NA | Analysis | 7471B | | 1 | 679918 | MJG | EET CHI | 10/17/22 09:05 |
| Total/NA | Prep | 9010C | | | 679237 | KF | EET CHI | 10/12/22 15:00 - 10/12/22 15:30 [1] |
| Total/NA | Analysis | 9012B | | 1 | 679714 | LP | EET CHI | 10/14/22 13:57 |
| Total/NA | Prep | 9030B | | | 679475 | BC | EET CHI | 10/13/22 13:24 - 10/13/22 13:25 [1] |
| Total/NA | Analysis | 9034 | | 1 | 679513 | BC | EET CHI | 10/13/22 16:49 |

## Client Sample ID: MLBF-C-D7-01-221006 — Lab Sample ID: 500-223407-2

**Date Collected: 10/06/22 11:00** — **Matrix: Solid**
**Date Received: 10/06/22 16:45**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| TCLP | Leach | 1311 | | | 679726 | OAJ | EET CHI | 10/14/22 14:05 - 10/15/22 08:05 [1] |
| TCLP | Prep | 3510C | | | 680601 | DAK | EET CHI | 10/20/22 10:28 |
| TCLP | Analysis | 8270D | | 5 | 680766 | LEG | EET CHI | 10/21/22 13:16 |
| TCLP | Leach | 1311 | | | 679726 | OAJ | EET CHI | 10/14/22 14:05 - 10/15/22 08:05 [1] |
| TCLP | Prep | 3010A | | | 679836 | BDE | EET CHI | 10/17/22 07:44 - 10/17/22 08:14 [1] |
| TCLP | Analysis | 6010D | | 1 | 680101 | JJB | EET CHI | 10/17/22 23:40 |

# Lab Chronicle

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Fire

Job ID: 500-223407-1

## Client Sample ID: MLBF-C-D7-01-221006 — Lab Sample ID: 500-223407-2

**Date Collected: 10/06/22 11:00** — **Matrix: Solid**
**Date Received: 10/06/22 16:45**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| TCLP | Leach | 1311 | | | 679726 | OAJ | EET CHI | 10/14/22 14:05 - 10/15/22 08:05 ¹ |
| TCLP | Prep | 7470A | | | 679952 | MJG | EET CHI | 10/17/22 12:00 - 10/17/22 14:00 ¹ |
| TCLP | Analysis | 7470A | | 1 | 680143 | MJG | EET CHI | 10/18/22 10:10 |
| Total/NA | Analysis | 9045D | | 1 | 678748 | SMO | EET CHI | 10/10/22 13:45 - 10/10/22 13:49 ¹ |
| Total/NA | Analysis | Moisture | | 1 | 678462 | LWN | EET CHI | 10/07/22 10:03 |

## Client Sample ID: MLBF-C-D7-01-221006 — Lab Sample ID: 500-223407-2

**Date Collected: 10/06/22 11:00** — **Matrix: Solid**
**Date Received: 10/06/22 16:45** — **Percent Solids: 94.5**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3541 | | | 679758 | KN | EET CHI | 10/15/22 07:45 - 10/15/22 15:30 ¹ |
| Total/NA | Analysis | 8082A | | 1 | 680001 | SS | EET CHI | 10/17/22 23:33 |
| Total/NA | Prep | 3050B | | | 679336 | LMB | EET CHI | 10/12/22 17:06 - 10/12/22 17:36 ¹ |
| Total/NA | Analysis | 6010D | | 1 | 679838 | JJB | EET CHI | 10/15/22 23:21 |
| Total/NA | Prep | 3050B | | | 679336 | LMB | EET CHI | 10/12/22 17:06 - 10/12/22 17:36 ¹ |
| Total/NA | Analysis | 6010D | | 1 | 680095 | JJB | EET CHI | 10/17/22 21:05 |
| Total/NA | Prep | 3050B | | | 679336 | LMB | EET CHI | 10/12/22 17:06 - 10/12/22 17:36 ¹ |
| Total/NA | Analysis | 6010D | | 5 | 680095 | JJB | EET CHI | 10/17/22 21:08 |
| Total/NA | Prep | 7471B | | | 679634 | MJG | EET CHI | 10/14/22 15:00 |
| Total/NA | Analysis | 7471B | | 1 | 679918 | MJG | EET CHI | 10/17/22 09:13 |
| Total/NA | Prep | 9010C | | | 679237 | KF | EET CHI | 10/12/22 15:00 - 10/12/22 15:30 ¹ |
| Total/NA | Analysis | 9012B | | 1 | 679714 | LP | EET CHI | 10/14/22 14:12 |
| Total/NA | Prep | 9030B | | | 679475 | BC | EET CHI | 10/13/22 13:27 - 10/13/22 13:28 ¹ |
| Total/NA | Analysis | 9034 | | 1 | 679689 | BC | EET CHI | 10/14/22 12:37 |

## Client Sample ID: MLBF-C-B1C1-01-221006 — Lab Sample ID: 500-223407-3

**Date Collected: 10/06/22 11:20** — **Matrix: Solid**
**Date Received: 10/06/22 16:45**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| TCLP | Leach | 1311 | | | 679726 | OAJ | EET CHI | 10/14/22 14:05 - 10/15/22 08:05 ¹ |
| TCLP | Prep | 3510C | | | 680601 | DAK | EET CHI | 10/20/22 10:28 |
| TCLP | Analysis | 8270D | | 5 | 680766 | LEG | EET CHI | 10/21/22 13:40 |
| TCLP | Leach | 1311 | | | 679726 | OAJ | EET CHI | 10/14/22 14:05 - 10/15/22 08:05 ¹ |
| TCLP | Prep | 3010A | | | 679836 | BDE | EET CHI | 10/17/22 07:44 - 10/17/22 08:14 ¹ |
| TCLP | Analysis | 6010D | | 1 | 680101 | JJB | EET CHI | 10/17/22 23:44 |
| TCLP | Leach | 1311 | | | 679726 | OAJ | EET CHI | 10/14/22 14:05 - 10/15/22 08:05 ¹ |
| TCLP | Prep | 7470A | | | 679952 | MJG | EET CHI | 10/17/22 12:00 - 10/17/22 14:00 ¹ |
| TCLP | Analysis | 7470A | | 1 | 680143 | MJG | EET CHI | 10/18/22 10:12 |
| Total/NA | Analysis | 9045D | | 1 | 678748 | SMO | EET CHI | 10/10/22 13:54 - 10/10/22 13:59 ¹ |
| Total/NA | Analysis | Moisture | | 1 | 678462 | LWN | EET CHI | 10/07/22 10:03 |

# Lab Chronicle

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Fire

Job ID: 500-223407-1

## Client Sample ID: MLBF-C-B1C1-01-221006

**Lab Sample ID: 500-223407-3**
**Date Collected: 10/06/22 11:20**
**Matrix: Solid**
**Date Received: 10/06/22 16:45**
**Percent Solids: 94.8**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3541 | | | 679758 | KN | EET CHI | 10/15/22 07:45 - 10/15/22 15:30 ¹ |
| Total/NA | Analysis | 8082A | | 1 | 680001 | SS | EET CHI | 10/17/22 23:48 |
| Total/NA | Prep | 3050B | | | 679336 | LMB | EET CHI | 10/12/22 17:06 - 10/12/22 17:36 ¹ |
| Total/NA | Analysis | 6010D | | 1 | 679838 | JJB | EET CHI | 10/15/22 23:24 |
| Total/NA | Prep | 3050B | | | 679336 | LMB | EET CHI | 10/12/22 17:06 - 10/12/22 17:36 ¹ |
| Total/NA | Analysis | 6010D | | 1 | 680095 | JJB | EET CHI | 10/17/22 21:12 |
| Total/NA | Prep | 3050B | | | 679336 | LMB | EET CHI | 10/12/22 17:06 - 10/12/22 17:36 ¹ |
| Total/NA | Analysis | 6010D | | 2 | 680095 | JJB | EET CHI | 10/17/22 21:15 |
| Total/NA | Prep | 3050B | | | 679336 | LMB | EET CHI | 10/12/22 17:06 - 10/12/22 17:36 ¹ |
| Total/NA | Analysis | 6010D | | 5 | 680095 | JJB | EET CHI | 10/17/22 21:18 |
| Total/NA | Prep | 7471B | | | 679634 | MJG | EET CHI | 10/14/22 15:00 |
| Total/NA | Analysis | 7471B | | 1 | 679918 | MJG | EET CHI | 10/17/22 09:15 |
| Total/NA | Prep | 9010C | | | 679237 | KF | EET CHI | 10/12/22 15:00 - 10/12/22 15:30 ¹ |
| Total/NA | Analysis | 9012B | | 1 | 679714 | LP | EET CHI | 10/14/22 14:14 |
| Total/NA | Prep | 9030B | | | 679475 | BC | EET CHI | 10/13/22 13:28 - 10/13/22 13:29 ¹ |
| Total/NA | Analysis | 9034 | | 1 | 679689 | BC | EET CHI | 10/14/22 12:37 |

## Client Sample ID: MLBF-C-C2D2-01-221006

**Lab Sample ID: 500-223407-4**
**Date Collected: 10/06/22 11:58**
**Matrix: Solid**
**Date Received: 10/06/22 16:45**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| TCLP | Leach | 1311 | | | 679726 | OAJ | EET CHI | 10/14/22 14:05 - 10/15/22 08:05 ¹ |
| TCLP | Prep | 3510C | | | 680601 | DAK | EET CHI | 10/20/22 10:28 |
| TCLP | Analysis | 8270D | | 5 | 680766 | LEG | EET CHI | 10/21/22 14:03 |
| TCLP | Leach | 1311 | | | 679726 | OAJ | EET CHI | 10/14/22 14:05 - 10/15/22 08:05 ¹ |
| TCLP | Prep | 3010A | | | 679836 | BDE | EET CHI | 10/17/22 07:44 - 10/17/22 08:14 ¹ |
| TCLP | Analysis | 6010D | | 1 | 680101 | JJB | EET CHI | 10/17/22 23:47 |
| TCLP | Leach | 1311 | | | 679726 | OAJ | EET CHI | 10/14/22 14:05 - 10/15/22 08:05 ¹ |
| TCLP | Prep | 7470A | | | 679952 | MJG | EET CHI | 10/17/22 12:00 - 10/17/22 14:00 ¹ |
| TCLP | Analysis | 7470A | | 1 | 680143 | MJG | EET CHI | 10/18/22 10:15 |
| Total/NA | Analysis | 9045D | | 1 | 678748 | SMO | EET CHI | 10/10/22 13:59 - 10/10/22 14:03 ¹ |
| Total/NA | Analysis | Moisture | | 1 | 678462 | LWN | EET CHI | 10/07/22 10:03 |

## Client Sample ID: MLBF-C-C2D2-01-221006

**Lab Sample ID: 500-223407-4**
**Date Collected: 10/06/22 11:58**
**Matrix: Solid**
**Date Received: 10/06/22 16:45**
**Percent Solids: 94.9**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3541 | | | 679758 | KN | EET CHI | 10/15/22 07:45 - 10/15/22 15:30 ¹ |
| Total/NA | Analysis | 8082A | | 1 | 680001 | SS | EET CHI | 10/18/22 00:02 |
| Total/NA | Prep | 3050B | | | 679336 | LMB | EET CHI | 10/12/22 17:06 - 10/12/22 17:36 ¹ |
| Total/NA | Analysis | 6010D | | 1 | 679838 | JJB | EET CHI | 10/15/22 23:28 |
| Total/NA | Prep | 3050B | | | 679336 | LMB | EET CHI | 10/12/22 17:06 - 10/12/22 17:36 ¹ |
| Total/NA | Analysis | 6010D | | 1 | 680095 | JJB | EET CHI | 10/17/22 21:28 |

# Lab Chronicle

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Fire

Job ID: 500-223407-1

## Client Sample ID: MLBF-C-C2D2-01-221006

**Lab Sample ID: 500-223407-4**
**Date Collected: 10/06/22 11:58**
**Matrix: Solid**
**Date Received: 10/06/22 16:45**
**Percent Solids: 94.9**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3050B | | | 679336 | LMB | EET CHI | 10/12/22 17:06 - 10/12/22 17:36 ¹ |
| Total/NA | Analysis | 6010D | | 5 | 680095 | JJB | EET CHI | 10/17/22 21:31 |
| Total/NA | Prep | 7471B | | | 679634 | MJG | EET CHI | 10/14/22 15:00 |
| Total/NA | Analysis | 7471B | | 1 | 679918 | MJG | EET CHI | 10/17/22 09:21 |
| Total/NA | Prep | 9010C | | | 679237 | KF | EET CHI | 10/12/22 15:00 - 10/12/22 15:30 ¹ |
| Total/NA | Analysis | 9012B | | 1 | 679714 | LP | EET CHI | 10/14/22 14:18 |
| Total/NA | Prep | 9030B | | | 679475 | BC | EET CHI | 10/13/22 13:29 - 10/13/22 13:30 ¹ |
| Total/NA | Analysis | 9034 | | 1 | 679689 | BC | EET CHI | 10/14/22 12:37 |

## Client Sample ID: MLBF-C-C2D2-02-221006-DUP

**Lab Sample ID: 500-223407-5**
**Date Collected: 10/06/22 12:15**
**Matrix: Solid**
**Date Received: 10/06/22 16:45**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| TCLP | Leach | 1311 | | | 679726 | OAJ | EET CHI | 10/14/22 14:05 - 10/15/22 08:05 ¹ |
| TCLP | Prep | 3510C | | | 680601 | DAK | EET CHI | 10/20/22 10:28 |
| TCLP | Analysis | 8270D | | 5 | 680766 | LEG | EET CHI | 10/21/22 14:27 |
| TCLP | Leach | 1311 | | | 679726 | OAJ | EET CHI | 10/14/22 14:05 - 10/15/22 08:05 ¹ |
| TCLP | Prep | 3010A | | | 679836 | BDE | EET CHI | 10/17/22 07:44 - 10/17/22 08:14 ¹ |
| TCLP | Analysis | 6010D | | 1 | 680101 | JJB | EET CHI | 10/17/22 23:51 |
| TCLP | Leach | 1311 | | | 679726 | OAJ | EET CHI | 10/14/22 14:05 - 10/15/22 08:05 ¹ |
| TCLP | Prep | 7470A | | | 679952 | MJG | EET CHI | 10/17/22 12:00 - 10/17/22 14:00 ¹ |
| TCLP | Analysis | 7470A | | 1 | 680143 | MJG | EET CHI | 10/18/22 10:17 |
| Total/NA | Analysis | 9045D | | 1 | 678748 | SMO | EET CHI | 10/10/22 14:03 - 10/10/22 14:08 ¹ |
| Total/NA | Analysis | Moisture | | 1 | 678462 | LWN | EET CHI | 10/07/22 10:03 |

## Client Sample ID: MLBF-C-C2D2-02-221006-DUP

**Lab Sample ID: 500-223407-5**
**Date Collected: 10/06/22 12:15**
**Matrix: Solid**
**Date Received: 10/06/22 16:45**
**Percent Solids: 94.7**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3541 | | | 679758 | KN | EET CHI | 10/15/22 07:45 - 10/15/22 15:30 ¹ |
| Total/NA | Analysis | 8082A | | 1 | 680001 | SS | EET CHI | 10/18/22 00:17 |
| Total/NA | Prep | 3050B | | | 679336 | LMB | EET CHI | 10/12/22 17:06 - 10/12/22 17:36 ¹ |
| Total/NA | Analysis | 6010D | | 1 | 679838 | JJB | EET CHI | 10/15/22 23:37 |
| Total/NA | Prep | 3050B | | | 679336 | LMB | EET CHI | 10/12/22 17:06 - 10/12/22 17:36 ¹ |
| Total/NA | Analysis | 6010D | | 1 | 680095 | JJB | EET CHI | 10/17/22 21:35 |
| Total/NA | Prep | 3050B | | | 679336 | LMB | EET CHI | 10/12/22 17:06 - 10/12/22 17:36 ¹ |
| Total/NA | Analysis | 6010D | | 5 | 680095 | JJB | EET CHI | 10/17/22 21:38 |
| Total/NA | Prep | 7471B | | | 679634 | MJG | EET CHI | 10/14/22 15:00 |
| Total/NA | Analysis | 7471B | | 1 | 679918 | MJG | EET CHI | 10/17/22 09:23 |
| Total/NA | Prep | 9010C | | | 679237 | KF | EET CHI | 10/12/22 15:00 - 10/12/22 15:30 ¹ |
| Total/NA | Analysis | 9012B | | 1 | 679714 | LP | EET CHI | 10/14/22 14:20 |
| Total/NA | Prep | 9030B | | | 679475 | BC | EET CHI | 10/13/22 13:30 - 10/13/22 13:31 ¹ |
| Total/NA | Analysis | 9034 | | 1 | 679689 | BC | EET CHI | 10/14/22 12:37 |

# Lab Chronicle

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Fire

Job ID: 500-223407-1

## Client Sample ID: MLBF-RINSATE-221006

**Date Collected: 10/06/22 12:30**
**Date Received: 10/06/22 16:45**

## Lab Sample ID: 500-223407-6

**Matrix: Water**

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Analyst | Lab | Prepared or Analyzed |
|---|---|---|---|---|---|---|---|---|
| Total/NA | Prep | 3510C | | | 678933 | FRG | EET CHI | 10/11/22 07:41 |
| Total/NA | Analysis | 8082A | | 1 | 679122 | SS | EET CHI | 10/11/22 18:15 |
| Total Recoverable | Prep | 3005A | | | 679429 | BDE | EET CHI | 10/13/22 09:28 - 10/13/22 09:58 [1] |
| Total Recoverable | Analysis | 6020A | | 1 | 679657 | FXG | EET CHI | 10/14/22 02:39 |
| Total/NA | Prep | 7470A | | | 679462 | OAJ | EET CHI | 10/13/22 12:10 - 10/13/22 14:10 [1] |
| Total/NA | Analysis | 7470A | | 1 | 679678 | MJG | EET CHI | 10/14/22 09:26 |
| Total/NA | Analysis | 9034 | | 1 | 679258 | BC | EET CHI | 10/11/22 15:16 |
| Total/NA | Analysis | 9040C | | 1 | 680546 | SMO | EET CHI | 10/20/22 15:11 - 10/20/22 15:15 [1] |

[1] Completion dates and times are reported or not reported per method requirements or individual lab discretion.

**Laboratory References:**

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

# Accreditation/Certification Summary

Client: Tetra Tech EM Inc.
Project/Site: Morris Lithium Battery Fire

Job ID: 500-223407-1

## Laboratory: Eurofins Chicago

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|
| Illinois | NELAP | IL00035 | 04-30-23 |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte |
|---|---|---|---|
| 6010D | 3010A | Solid | Aluminum |
| 6010D | 3010A | Solid | Barium |
| 6010D | 3010A | Solid | Cadmium |
| 6010D | 3010A | Solid | Chromium |
| 6010D | 3010A | Solid | Lead |
| 6010D | 3010A | Solid | Selenium |
| 6010D | 3010A | Solid | Silver |
| 6010D | 3050B | Solid | Aluminum |
| 6010D | 3050B | Solid | Antimony |
| 6010D | 3050B | Solid | Arsenic |
| 6010D | 3050B | Solid | Barium |
| 6010D | 3050B | Solid | Beryllium |
| 6010D | 3050B | Solid | Cadmium |
| 6010D | 3050B | Solid | Calcium |
| 6010D | 3050B | Solid | Chromium |
| 6010D | 3050B | Solid | Cobalt |
| 6010D | 3050B | Solid | Copper |
| 6010D | 3050B | Solid | Iron |
| 6010D | 3050B | Solid | Lead |
| 6010D | 3050B | Solid | Lithium |
| 6010D | 3050B | Solid | Magnesium |
| 6010D | 3050B | Solid | Manganese |
| 6010D | 3050B | Solid | Nickel |
| 6010D | 3050B | Solid | Potassium |
| 6010D | 3050B | Solid | Selenium |
| 6010D | 3050B | Solid | Silver |
| 6010D | 3050B | Solid | Sodium |
| 6010D | 3050B | Solid | Thallium |
| 6010D | 3050B | Solid | Vanadium |
| 6010D | 3050B | Solid | Zinc |
| 6020A | 3005A | Water | Lithium |
| 7470A | 7470A | Solid | Mercury |
| 8082A | 3510C | Water | PCB-1262 |
| 8082A | 3510C | Water | PCB-1268 |
| 8082A | 3541 | Solid | PCB-1262 |
| 8082A | 3541 | Solid | PCB-1268 |
| Moisture | | Solid | Percent Moisture |
| Moisture | | Solid | Percent Solids |

| | | | |
|---|---|---|---|
| Indiana | State | C-IL-02 | 04-29-23 |

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte |
|---|---|---|---|
| 6010D | 3010A | Solid | Aluminum |
| 6010D | 3010A | Solid | Barium |
| 6010D | 3010A | Solid | Cadmium |

## Laboratory: Eurofins Chicago (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte |
|---|---|---|---|
| 6010D | 3010A | Solid | Chromium |
| 6010D | 3010A | Solid | Lead |
| 6010D | 3010A | Solid | Selenium |
| 6010D | 3010A | Solid | Silver |
| 6010D | 3050B | Solid | Aluminum |
| 6010D | 3050B | Solid | Antimony |
| 6010D | 3050B | Solid | Arsenic |
| 6010D | 3050B | Solid | Barium |
| 6010D | 3050B | Solid | Beryllium |
| 6010D | 3050B | Solid | Cadmium |
| 6010D | 3050B | Solid | Calcium |
| 6010D | 3050B | Solid | Chromium |
| 6010D | 3050B | Solid | Cobalt |
| 6010D | 3050B | Solid | Copper |
| 6010D | 3050B | Solid | Iron |
| 6010D | 3050B | Solid | Lead |
| 6010D | 3050B | Solid | Lithium |
| 6010D | 3050B | Solid | Magnesium |
| 6010D | 3050B | Solid | Manganese |
| 6010D | 3050B | Solid | Nickel |
| 6010D | 3050B | Solid | Potassium |
| 6010D | 3050B | Solid | Selenium |
| 6010D | 3050B | Solid | Silver |
| 6010D | 3050B | Solid | Sodium |
| 6010D | 3050B | Solid | Thallium |
| 6010D | 3050B | Solid | Vanadium |
| 6010D | 3050B | Solid | Zinc |
| 6020A | 3005A | Water | Aluminum |
| 6020A | 3005A | Water | Antimony |
| 6020A | 3005A | Water | Arsenic |
| 6020A | 3005A | Water | Barium |
| 6020A | 3005A | Water | Beryllium |
| 6020A | 3005A | Water | Cadmium |
| 6020A | 3005A | Water | Calcium |
| 6020A | 3005A | Water | Chromium |
| 6020A | 3005A | Water | Cobalt |
| 6020A | 3005A | Water | Copper |
| 6020A | 3005A | Water | Iron |
| 6020A | 3005A | Water | Lead |
| 6020A | 3005A | Water | Lithium |
| 6020A | 3005A | Water | Magnesium |
| 6020A | 3005A | Water | Manganese |
| 6020A | 3005A | Water | Nickel |
| 6020A | 3005A | Water | Potassium |
| 6020A | 3005A | Water | Selenium |
| 6020A | 3005A | Water | Silver |
| 6020A | 3005A | Water | Sodium |

## Laboratory: Eurofins Chicago (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte |
|---|---|---|---|
| 6020A | 3005A | Water | Thallium |
| 6020A | 3005A | Water | Vanadium |
| 6020A | 3005A | Water | Zinc |
| 7470A | 7470A | Solid | Mercury |
| 7470A | 7470A | Water | Mercury |
| 7471B | 7471B | Solid | Mercury |
| 8082A | 3510C | Water | PCB-1016 |
| 8082A | 3510C | Water | PCB-1221 |
| 8082A | 3510C | Water | PCB-1232 |
| 8082A | 3510C | Water | PCB-1242 |
| 8082A | 3510C | Water | PCB-1248 |
| 8082A | 3510C | Water | PCB-1254 |
| 8082A | 3510C | Water | PCB-1260 |
| 8082A | 3510C | Water | PCB-1262 |
| 8082A | 3510C | Water | PCB-1268 |
| 8082A | 3541 | Solid | PCB-1016 |
| 8082A | 3541 | Solid | PCB-1221 |
| 8082A | 3541 | Solid | PCB-1232 |
| 8082A | 3541 | Solid | PCB-1242 |
| 8082A | 3541 | Solid | PCB-1248 |
| 8082A | 3541 | Solid | PCB-1254 |
| 8082A | 3541 | Solid | PCB-1260 |
| 8082A | 3541 | Solid | PCB-1262 |
| 8082A | 3541 | Solid | PCB-1268 |
| 8270D | 3510C | Solid | 1,4-Dichlorobenzene |
| 8270D | 3510C | Solid | 2,4,5-Trichlorophenol |
| 8270D | 3510C | Solid | 2,4,6-Trichlorophenol |
| 8270D | 3510C | Solid | 2,4-Dinitrotoluene |
| 8270D | 3510C | Solid | 2-Methylphenol |
| 8270D | 3510C | Solid | 3 & 4 Methylphenol |
| 8270D | 3510C | Solid | Hexachlorobenzene |
| 8270D | 3510C | Solid | Hexachlorobutadiene |
| 8270D | 3510C | Solid | Hexachloroethane |
| 8270D | 3510C | Solid | Nitrobenzene |
| 8270D | 3510C | Solid | Pentachlorophenol |
| 8270D | 3510C | Solid | Pyridine |
| 9012B | 9010C | Solid | Cyanide, Total |
| 9034 | | Water | Sulfide |
| 9034 | 9030B | Solid | Sulfide |
| 9040C | | Water | pH |
| 9045D | | Solid | pH |
| Moisture | | Solid | Percent Moisture |
| Moisture | | Solid | Percent Solids |

| | | | |
|---|---|---|---|
| Wisconsin | State | 999580010 | 08-31-23 |

# Accreditation/Certification Summary

Client: Tetra Tech EM Inc.
Job ID: 500-223407-1
Project/Site: Morris Lithium Battery Fire

## Laboratory: Eurofins Chicago (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

| Authority | Program | Identification Number | Expiration Date |
|---|---|---|---|

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

| Analysis Method | Prep Method | Matrix | Analyte |
|---|---|---|---|
| 6010D | 3050B | Solid | Lithium |
| 6020A | 3005A | Water | Lithium |
| 8082A | 3510C | Water | PCB-1262 |
| 8082A | 3510C | Water | PCB-1268 |
| 8082A | 3541 | Solid | PCB-1262 |
| 8082A | 3541 | Solid | PCB-1268 |
| Moisture | | Solid | Percent Moisture |
| Moisture | | Solid | Percent Solids |

# Chain of Custody Record

524382

eurofins

Environment Testing TestAmerica

Address MORRIS, IL

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TAL-8210

| Client Contact | Project Manager JOE SANDERS | Site Contact JOE SANDERS | Date 10/06/2022 | COC No |
|---|---|---|---|---|
| Company Name TETRA TECH | Tel/Email JOE SANDERS@TETRATECH.com | Lab Contact Jim Knapp | Carrier | 1 of 1 COCs |
| Address 1 S WACKER DRIVE, SUITE 3700 | Analysis Turnaround Time | | | Sampler JS, HF |
| City/State/Zip CHICAGO, IL 606606 | ☐ CALENDAR DAYS ☑ WORKING DAYS | | | For Lab Use Only |
| Phone 309-830-0754 | TAT if different from Below 10 DAY | | | Walk-in Client |
| Fax | ☐ 2 weeks | | | Lab Sampling |
| Project Name MORRIS LITHIUM BATTERY SITE | ☐ 1 week | | | |
| Site 103X90310032000 1C1103 | ☐ 2 days | | | Job / SDG No |
| P O # 8TA-72 | ☐ 1 day | | | 500-223407 |

500-223407 COC

| | Sample Identification | Sample Date | Sample Time | Sample Type (C=Comp G=Grab) | Matrix | # of Cont. | Filtered Sample (Y/N) | Perform MS / MSD (Y/N) | TCLP METALS | TCLP SVOC | TAL METALS + Li | TCL PCBS | CYANIDE | SULFIDE | pH | PERCENT SOLIDS | Sample Specific Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | MLBF-C-E4-01-221006 | 10/6/22 | 1040 | C | conc | 6 | | Y | | | | | | | | | MS/MSD |
| 2 | MLBF-C-D7-01-221006 | 10/6/22 | 1100 | C | conc | 2 | | N | | | | | | | | | |
| 3 | MLBF-C-B1C1-01-221006 | 10/6/22 | 1120 | C | conc | 2 | | N | | | | | | | | | |
| 4 | MLBF-C-C2D2-01-221006 | 10/6/22 | 1158 | C | conc | 2 | | N | | | | | | | | | |
| 5 | MLBF-C-C2D2-02-221006-DUP | 10/6/22 | 1215 | C | conc | 2 | | N | | | | | | | | | |
| 6 | MLBF-RINSATE-221006 | 10/6/22 | 1230 | G | L | 6 | | N | | | | | | | | | |

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

Non Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

22.5 → 22.3

Custody Seals Intact. ☐ Yes ☐ No | Custody Seal No | Cooler Temp (°C) Obs'd _____ Corr'd _____ Therm ID No _____

| Relinquished by | Company | Date/Time | Received by | Company | Date/Time |
|---|---|---|---|---|---|
| Joseph Sanders | Tetra Tech | 10/6/22 1645 | | | |
| Relinquished by | Company | Date/Time | Received by | Company | Date/Time |
| | | | | | |
| Relinquished by | Company | Date/Time | Received in Laboratory by | Company | Date/Time |
| | | | Stephanie Hernandez | EETA | 10/6/22 1645 |

# Login Sample Receipt Checklist

Client: Tetra Tech EM Inc.

Job Number: 500-223407-1

**Login Number: 223407**
**List Number: 1**
**Creator: Hernandez, Stephanie**

**List Source: Eurofins Chicago**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | True | |
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | Received same day of collection; chilling process has begun. |
| Cooler Temperature is recorded. | True | 22.3 |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time (excluding tests with immediate HTs) | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | N/A | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |