

ANALYTICAL REPORT

Eurofins TestAmerica, Phoenix
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Suite 189
Phoenix, AZ 85040
Tel: (602)437-3340

Laboratory Job ID: 550-169325-1

Laboratory Sample Delivery Group: 2071-2107-06

Client Project/Site: Site #: B866

For:

Tetra Tech, Inc.
1560 Broadway, Suite 1400
Denver, Colorado 80202

Attn: Edvin Aleksandrov

Authorized for release by:
8/24/2021 5:12:41 PM

Carlene McCutcheon, Project Manager II
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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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Definitions/Glossary

Client: Tetra Tech, Inc.
Project/Site: Site #: B866

Job ID: 550-169325-1
SDG: 2071-2107-06

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 |

Case Narrative

Client: Tetra Tech, Inc.
Project/Site: Site #: B866

Job ID: 550-169325-1
SDG: 2071-2107-06

Job ID: 550-169325-1

Laboratory: Eurofins TestAmerica, Phoenix

Narrative

Job Narrative 550-169325-1

Comments

No additional comments.

Receipt

The samples were received on 8/19/2021 10:30 AM. Unless otherwise noted below, the samples arrived in good condition.

Metals

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

Industrial Hygiene

Method 7303: The Method Blank, Field Blank (or other QC results) were not used to correct client sample results associated with preparation batch 550-251105 and analytical batch 550-251307.

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

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Site #: B866

Job ID: 550-169325-1
SDG: 2071-2107-06

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---------------|------------------|--------|----------------|----------------|
| 550-169325-1 | VF001081721 | Air | 08/17/21 00:00 | 08/19/21 10:30 |
| 550-169325-2 | VF002081721 | Air | 08/17/21 00:00 | 08/19/21 10:30 |
| 550-169325-3 | VF003081721 | Air | 08/17/21 00:00 | 08/19/21 10:30 |
| 550-169325-4 | VF003081721FB | Air | 08/17/21 00:00 | 08/19/21 10:30 |

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Detection Summary

Client: Tetra Tech, Inc.
Project/Site: Site #: B866

Job ID: 550-169325-1
SDG: 2071-2107-06

Client Sample ID: VF001081721

Lab Sample ID: 550-169325-1

☐ No Detections.

Client Sample ID: VF002081721

Lab Sample ID: 550-169325-2

☐ No Detections.

Client Sample ID: VF003081721

Lab Sample ID: 550-169325-3

☐ No Detections.

Client Sample ID: VF003081721FB

Lab Sample ID: 550-169325-4

☐ No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Phoenix

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Site #: B866

Job ID: 550-169325-1
SDG: 2071-2107-06

Client Sample ID: VF001081721

Lab Sample ID: 550-169325-1

Date Collected: 08/17/21 00:00

Matrix: Air

Date Received: 08/19/21 10:30

Sample Air Volume: 2391 L

Sample Container: IH - MCE, 0.8 micron, 37-mm Filter

Method: PE-MET-012 - NIOSH Method 7303

| Analyte | Result ug/Sample | Result ug/m3 | Result Qualifier | RL ug/Sample | Prepared | Analyzed | Dil Fac |
|---------|---------------------|-----------------|---------------------|-----------------|----------------|----------------|---------|
| Arsenic | <0.500 | <0.209 | | 0.500 | 08/20/21 14:47 | 08/23/21 18:29 | 1 |
| Lead | <0.250 | <0.105 | | 0.250 | 08/20/21 14:47 | 08/23/21 18:29 | 1 |

Client Sample ID: VF002081721

Lab Sample ID: 550-169325-2

Date Collected: 08/17/21 00:00

Matrix: Air

Date Received: 08/19/21 10:30

Sample Air Volume: 2619 L

Sample Container: IH - MCE, 0.8 micron, 37-mm Filter

Method: PE-MET-012 - NIOSH Method 7303

| Analyte | Result ug/Sample | Result ug/m3 | Result Qualifier | RL ug/Sample | Prepared | Analyzed | Dil Fac |
|---------|---------------------|-----------------|---------------------|-----------------|----------------|----------------|---------|
| Arsenic | <0.500 | <0.191 | | 0.500 | 08/20/21 14:47 | 08/23/21 18:31 | 1 |
| Lead | <0.250 | <0.0955 | | 0.250 | 08/20/21 14:47 | 08/23/21 18:31 | 1 |

Client Sample ID: VF003081721

Lab Sample ID: 550-169325-3

Date Collected: 08/17/21 00:00

Matrix: Air

Date Received: 08/19/21 10:30

Sample Air Volume: 1285 L

Sample Container: IH - MCE, 0.8 micron, 37-mm Filter

Method: PE-MET-012 - NIOSH Method 7303

| Analyte | Result ug/Sample | Result ug/m3 | Result Qualifier | RL ug/Sample | Prepared | Analyzed | Dil Fac |
|---------|---------------------|-----------------|---------------------|-----------------|----------------|----------------|---------|
| Arsenic | <0.500 | <0.389 | | 0.500 | 08/20/21 14:47 | 08/23/21 18:34 | 1 |
| Lead | <0.250 | <0.195 | | 0.250 | 08/20/21 14:47 | 08/23/21 18:34 | 1 |

Client Sample ID: VF003081721FB

Lab Sample ID: 550-169325-4

Date Collected: 08/17/21 00:00

Matrix: Air

Date Received: 08/19/21 10:30

Sample Air Volume: 0 L

Sample Container: IH - MCE, 0.8 micron, 37-mm Filter

Method: PE-MET-012 - NIOSH Method 7303

| Analyte | Result ug/Sample | Result ug/m3 | Result Qualifier | RL ug/Sample | Prepared | Analyzed | Dil Fac |
|---------|---------------------|-----------------|---------------------|-----------------|----------------|----------------|---------|
| Arsenic | <0.500 | | | 0.500 | 08/20/21 14:47 | 08/23/21 18:36 | 1 |
| Lead | <0.250 | | | 0.250 | 08/20/21 14:47 | 08/23/21 18:36 | 1 |

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: Site #: B866

Job ID: 550-169325-1
SDG: 2071-2107-06

Method: PE-MET-012 - NIOSH Method 7303

Lab Sample ID: MB 550-251105/1-A

Matrix: Air

Analysis Batch: 251307

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 251105

| Analyte | MB Result | MB Qualifier | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---------|--------------|-----------------|-------|-----------|---|----------------|----------------|---------|
| Arsenic | <0.500 | | 0.500 | ug/Sample | | 08/20/21 14:47 | 08/23/21 18:21 | 1 |
| Lead | <0.250 | | 0.250 | ug/Sample | | 08/20/21 14:47 | 08/23/21 18:21 | 1 |

Lab Sample ID: LCS 550-251105/2-A

Matrix: Air

Analysis Batch: 251307

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 251105

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---------|----------------|---------------|------------------|-----------|---|------|-----------------|
| Arsenic | 25.0 | 24.28 | | ug/Sample | | 97 | 80 - 120 |
| Lead | 25.0 | 25.28 | | ug/Sample | | 101 | 80 - 120 |

Lab Sample ID: LCSD 550-251105/3-A

Matrix: Air

Analysis Batch: 251307

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 251105

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---------|----------------|----------------|-------------------|-----------|---|------|-----------------|-----|--------------|
| Arsenic | 25.0 | 24.91 | | ug/Sample | | 100 | 80 - 120 | 3 | 20 |
| Lead | 25.0 | 25.83 | | ug/Sample | | 103 | 80 - 120 | 2 | 20 |

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Site #: B866

Job ID: 550-169325-1
SDG: 2071-2107-06

IH - Metals

Prep Batch: 251105

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|-------------|------------|
| 550-169325-1 | VF001081721 | Total/NA | Air | Filter Prep | |
| 550-169325-2 | VF002081721 | Total/NA | Air | Filter Prep | |
| 550-169325-3 | VF003081721 | Total/NA | Air | Filter Prep | |
| 550-169325-4 | VF003081721FB | Total/NA | Air | Filter Prep | |
| MB 550-251105/1-A | Method Blank | Total/NA | Air | Filter Prep | |
| LCS 550-251105/2-A | Lab Control Sample | Total/NA | Air | Filter Prep | |
| LCSD 550-251105/3-A | Lab Control Sample Dup | Total/NA | Air | Filter Prep | |

Analysis Batch: 251307

| Lab Sample ID | Client Sample ID | Prep Type | Matrix | Method | Prep Batch |
|---------------------|------------------------|-----------|--------|------------|------------|
| 550-169325-1 | VF001081721 | Total/NA | Air | PE-MET-012 | 251105 |
| 550-169325-2 | VF002081721 | Total/NA | Air | PE-MET-012 | 251105 |
| 550-169325-3 | VF003081721 | Total/NA | Air | PE-MET-012 | 251105 |
| 550-169325-4 | VF003081721FB | Total/NA | Air | PE-MET-012 | 251105 |
| MB 550-251105/1-A | Method Blank | Total/NA | Air | PE-MET-012 | 251105 |
| LCS 550-251105/2-A | Lab Control Sample | Total/NA | Air | PE-MET-012 | 251105 |
| LCSD 550-251105/3-A | Lab Control Sample Dup | Total/NA | Air | PE-MET-012 | 251105 |

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Site #: B866

Job ID: 550-169325-1
SDG: 2071-2107-06

Client Sample ID: VF001081721

Lab Sample ID: 550-169325-1

Date Collected: 08/17/21 00:00

Matrix: Air

Date Received: 08/19/21 10:30

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | Filter Prep | | | 251105 | 08/20/21 14:47 | CXK | TAL PHX |
| Total/NA | Analysis | PE-MET-012 | | 1 | 251307 | 08/23/21 18:29 | MGM | TAL PHX |

Client Sample ID: VF002081721

Lab Sample ID: 550-169325-2

Date Collected: 08/17/21 00:00

Matrix: Air

Date Received: 08/19/21 10:30

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | Filter Prep | | | 251105 | 08/20/21 14:47 | CXK | TAL PHX |
| Total/NA | Analysis | PE-MET-012 | | 1 | 251307 | 08/23/21 18:31 | MGM | TAL PHX |

Client Sample ID: VF003081721

Lab Sample ID: 550-169325-3

Date Collected: 08/17/21 00:00

Matrix: Air

Date Received: 08/19/21 10:30

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | Filter Prep | | | 251105 | 08/20/21 14:47 | CXK | TAL PHX |
| Total/NA | Analysis | PE-MET-012 | | 1 | 251307 | 08/23/21 18:34 | MGM | TAL PHX |

Client Sample ID: VF003081721FB

Lab Sample ID: 550-169325-4

Date Collected: 08/17/21 00:00

Matrix: Air

Date Received: 08/19/21 10:30

| Prep Type | Batch Type | Batch Method | Run | Dilution Factor | Batch Number | Prepared or Analyzed | Analyst | Lab |
|-----------|------------|--------------|-----|-----------------|--------------|----------------------|---------|---------|
| Total/NA | Prep | Filter Prep | | | 251105 | 08/20/21 14:47 | CXK | TAL PHX |
| Total/NA | Analysis | PE-MET-012 | | 1 | 251307 | 08/23/21 18:36 | MGM | TAL PHX |

Laboratory References:

TAL PHX = Eurofins TestAmerica, Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Site #: B866

Job ID: 550-169325-1
SDG: 2071-2107-06

Laboratory: Eurofins TestAmerica, Phoenix

The accreditations/certifications listed below are applicable to this report.

| Authority | Program | Identification Number | Expiration Date |
|---------------|---|-----------------------|-----------------|
| AIHA-LAP, LLC | Industrial Hygiene Laboratory Accreditation Program (IHLAP) | 154268 | 10-01-21 |

Method Summary

Client: Tetra Tech, Inc.
Project/Site: Site #: B866

Job ID: 550-169325-1
SDG: 2071-2107-06

| Method | Method Description | Protocol | Laboratory |
|-------------|------------------------|----------|------------|
| PE-MET-012 | NIOSH Method 7303 | NIOSH | TAL PHX |
| Filter Prep | Preparation, IH Filter | NIOSH | TAL PHX |

Protocol References:

NIOSH = NIOSH Manual Of Analytical Methods, National Institute For Occupational Safety And Health, 4th Edition, August 1994 and it's Supplements

Laboratory References:

TAL PHX = Eurofins TestAmerica, Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

Project Code: 2071-2107-06

Contact Phone [REDACTED]

Lab Phone: 602-437-3340

169325

[illegible]

| |
|--------------------------|
| SAMPLES TRANSFERRED FROM |
| CHAIN OF CUSTODY # |

| Items/Reason | Relinquished by (Signature and Organization) | Date/Time | Received by (Signature and Organization) | Date/Time | Sample Condition Upon Receipt |
|-----------------|--|---------------|--|--------------|-------------------------------|
| 4 MLE cassettes | [Redacted] (Tetra Tech) | 8/10/21 13:00 | | | |
| | | | | | |
| | | | | | |
| | | | [Redacted] | 8-19-21 1230 | [Redacted] |

AmB FE po

Login Sample Receipt Checklist

Client: Tetra Tech, Inc.

Job Number: 550-169325-1

SDG Number: 2071-2107-06

Login Number: 169325

List Source: Eurofins TestAmerica, Phoenix

List Number: 1

Creator: Gravlin, Andrea

| Question | Answer | Comment |
|--|--------|------------------------------------|
| Radioactivity wasn't checked or is \leq 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. | False | Thermal preservation not required. |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| 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 $<6\text{mm}$ (1/4"). | True | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |