

ANALYTICAL RESULTS SUMMARY

GC SEMI-VOLATILES

PROJECT NAME : R36767

TETRA TECH, EMI

240 Continental Drive, Suite 200

Newark, DE - 19713

Phone No: 302-738-7551

ORDER ID : P4962

ATTENTION : Ava Heiss



Laboratory Certification ID # 20012



| | |
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Cover Page

Order ID : P4962

Project ID : R36767

Client : Tetra Tech, EMI

Lab Sample Number

P4962-01

Client Sample Number

C0NB8

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature : _____

Date: 11/29/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

CASE NARRATIVE

Tetra Tech, EMI
Project Name: R36767
Project # N/A
Chemtech Project # P4962
Test Name: TCLP Herbicide

A. Number of Samples and Date of Receipt:

1 Solid sample was received on 11/22/2024.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: TCLP Extraction and TCLP Herbicide. This data package contains results for TCLP Herbicide.

C. Analytical Techniques:

The analysis was performed on instrument ECD_S. The front column is RTX-CLPesticides which is 30 meters, 0.32 mm ID, 0.5 um df, Catalog # 11139. The rear column is RTX-CLPesticides2 which is 30 meters, 0.32 mm ID, 0.25 um df, Catalog #: 11324. The analysis of TCLP Herbicides was based on method 8151A and extraction was done based on method 3510 and TCLP extraction method was 1311.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for C0RB8MS [2,4-DCAA(1) - 36%, 2,4-DCAA(2) - 36%], C0RB8MSD [2,4-DCAA(1) - 37%, 2 and 4-DCAA(2) - 36%] Confirms with original sample & ms, msd.

The Retention Times were acceptable for all samples.

The MS {P4961-01MS} with File ID: PS028650.D recoveries met the requirements for all compounds except for 2,4,5-TP(Silvex)[155%] Due to matrix interference.

The MSD {P4961-01MSD} with File ID: PS028651.D recoveries met the acceptable requirements except for 2,4,5-TP(Silvex)[156%] Due to matrix interference.

The RPD met criteria .

The Blank Spike met requirements for all samples .

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements .

The Continuous Calibration met the requirements .



284 Sheffield Street, Mountainside, NJ 07092
Phone: 908 789 8900 Fax: 908 789 8922

E. Additional Comments:

F. Manual Integration Comments:

Please refer to the Manual integration Report included with the Run Logs for information on the manual integrations performed.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature_____

DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following “Results Qualifiers” are used:

| | |
|-----------|--|
| Value | If the result is a value greater than or equal to the detection limit, report the value |
| U | Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. “10 U”. This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required. |
| ND | Indicates the analyte was analyzed for, but not detected |
| J | Indicates an estimated value. This flag is used: <ol style="list-style-type: none"> (1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.) (2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others. |
| B | Indicates the analyte was found in the blank as well as the sample report as “12 B”. |
| E | Indicates the analyte ‘s concentration exceeds the calibrated range of the instrument for that specific analysis. |
| D | This flag identifies all compounds identified in an analysis at a secondary dilution factor. |
| P | This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a “P”. |
| N | This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used. |
| A | This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product. |
| Q | Indicates the LCS did not meet the control limits requirements |

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: P4962

Completed

For thorough review, the report must have the following:

GENERAL:

Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)

✓

Check chain-of-custody for proper relinquish/return of samples

✓

Is the chain of custody signed and complete

✓

Check internal chain-of-custody for proper relinquish/return of samples /sample extracts

✓

Collect information for each project id from server. Were all requirements followed

✓

COVER PAGE:

Do numbers of samples correspond to the number of samples in the Chain of Custody on login page

✓

Do lab numbers and client Ids on cover page agree with the Chain of Custody

✓

CHAIN OF CUSTODY:

Do requested analyses on Chain of Custody agree with form I results

✓

Do requested analyses on Chain of Custody agree with the log-in page

✓

Were the correct method log-in for analysis according to the Analytical Request and Chain of Custody

✓

Were the samples received within hold time

✓

Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: SOHIL JODHANI

Date: 11/29/2024

LAB CHRONICLE

| | | | |
|----------|-----------------|------------|------------------------|
| OrderID: | P4962 | OrderDate: | 11/22/2024 10:47:29 AM |
| Client: | Tetra Tech, EMI | Project: | R36767 |
| Contact: | Ava Heiss | Location: | L61 |

| LabID | ClientID | Matrix | Test | Method | Sample Date | Prep Date | Anal Date | Received |
|----------|----------|--------|----------------|--------|-------------|-----------|-----------|----------|
| P4962-01 | CONB8 | TCLP | TCLP Herbicide | 8151A | 11/20/24 | 11/26/24 | 11/26/24 | 11/22/24 |

Hit Summary Sheet
SW-846

| | | | |
|-----------------|------------------------|--------------------|---------------|
| SDG No.: | P4962 | Order ID: | P4962 |
| Client: | Tetra Tech, EMI | Project ID: | R36767 |

| Sample ID | Client ID | Matrix | Parameter | Concentration | C | MDL | RDL | Units |
|----------------------|-----------|--------|-----------|---------------|---|-----|-----|-------|
| Client ID : | | | | | | | | |
| Total Concentration: | | | | 0.000 | | | | |



SAMPLE DATA

Report of Analysis

| | | | | | |
|--------------------|-----------------|-----------|--------------------|----------------|-----------|
| Client: | Tetra Tech, EMI | | Date Collected: | 11/20/24 | |
| Project: | R36767 | | Date Received: | 11/22/24 | |
| Client Sample ID: | C0NB8 | | SDG No.: | P4962 | |
| Lab Sample ID: | P4962-01 | | Matrix: | TCLP | |
| Analytical Method: | SW8151A | | % Solid: | 0 | Decanted: |
| Sample Wt/Vol: | 100 | Units: mL | Final Vol: | 10000 | uL |
| Soil Aliquot Vol: | | uL | Test: | TCLP Herbicide | |
| Extraction Type: | | | Injection Volume : | | |
| GPC Factor : | 1.0 | PH : | | | |
| Prep Method : | 8151A | | | | |

| | | | | |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
| PS028652.D | 1 | 11/26/24 11:10 | 11/26/24 22:25 | PB165273 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|-------------------|-------------------|-------|-----------|----------|------------|----------|
| TARGETS | | | | | | |
| 94-75-7 | 2,4-D | 4.90 | U | 4.90 | 20.0 | ug/L |
| 93-72-1 | 2,4,5-TP (Silvex) | 4.50 | U | 4.50 | 20.0 | ug/L |
| SURROGATES | | | | | | |
| 19719-28-9 | 2,4-DCAA | 245 | | 39 - 175 | 49% | SPK: 500 |

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

| | | | | | |
|--------------------|-----------------|-----------|--------------------|----------------|-----------|
| Client: | Tetra Tech, EMI | | Date Collected: | | |
| Project: | R36767 | | Date Received: | 11/26/24 | |
| Client Sample ID: | PB165159TB | | SDG No.: | P4962 | |
| Lab Sample ID: | PB165159TB | | Matrix: | TCLP | |
| Analytical Method: | SW8151A | | % Solid: | 0 | Decanted: |
| Sample Wt/Vol: | 100 | Units: mL | Final Vol: | 10000 | uL |
| Soil Aliquot Vol: | | uL | Test: | TCLP Herbicide | |
| Extraction Type: | | | Injection Volume : | | |
| GPC Factor : | 1.0 | PH : | | | |
| Prep Method : | 8151A | | | | |

| | | | | |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
| PS028646.D | 1 | 11/26/24 11:10 | 11/26/24 20:01 | PB165273 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|-------------------|-------------------|-------|-----------|----------|------------|----------|
| TARGETS | | | | | | |
| 94-75-7 | 2,4-D | 4.90 | U | 4.90 | 20.0 | ug/L |
| 93-72-1 | 2,4,5-TP (Silvex) | 4.50 | U | 4.50 | 20.0 | ug/L |
| SURROGATES | | | | | | |
| 19719-28-9 | 2,4-DCAA | 274 | | 39 - 175 | 55% | SPK: 500 |

Comments:

U = Not Detected

LOQ = Limit of Quantitation

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LOD = Limit of Detection

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M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

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D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit



QC SUMMARY

Surrogate Summary

SDG No.: **P4962**

Client: **Tetra Tech, EMI**

Analytical Method: **8151A**

| Lab Sample ID | Client ID | Parameter | Column | Spike | Result | Rec | Qual | Limits | |
|------------------|------------------|-----------|--------|-------|--------|-----|------|--------|------|
| | | | | | | | | Low | High |
| I.BLK-PS028631.D | PIBLK-PS028631.D | 2,4-DCAA | 1 | 500 | 492 | 98 | | 39 | 175 |
| | | 2,4-DCAA | 2 | 500 | 492 | 98 | | 39 | 175 |
| I.BLK-PS028638.D | PIBLK-PS028638.D | 2,4-DCAA | 1 | 500 | 484 | 97 | | 39 | 175 |
| | | 2,4-DCAA | 2 | 500 | 483 | 97 | | 39 | 175 |
| PB165273BL | PB165273BL | 2,4-DCAA | 1 | 500 | 508 | 102 | | 39 | 175 |
| | | 2,4-DCAA | 2 | 500 | 497 | 99 | | 39 | 175 |
| PB165273BS | PB165273BS | 2,4-DCAA | 1 | 500 | 491 | 98 | | 39 | 175 |
| | | 2,4-DCAA | 2 | 500 | 491 | 98 | | 39 | 175 |
| PB165159TB | PB165159TB | 2,4-DCAA | 1 | 500 | 274 | 55 | | 39 | 175 |
| | | 2,4-DCAA | 2 | 500 | 267 | 53 | | 39 | 175 |
| I.BLK-PS028647.D | PIBLK-PS028647.D | 2,4-DCAA | 1 | 500 | 496 | 99 | | 39 | 175 |
| | | 2,4-DCAA | 2 | 500 | 502 | 100 | | 39 | 175 |
| P4961-01MS | C0RB8MS | 2,4-DCAA | 1 | 500 | 181 | 36 | * | 39 | 175 |
| | | 2,4-DCAA | 2 | 500 | 179 | 36 | * | 39 | 175 |
| P4961-01MSD | C0RB8MSD | 2,4-DCAA | 1 | 500 | 183 | 37 | * | 39 | 175 |
| | | 2,4-DCAA | 2 | 500 | 178 | 36 | * | 39 | 175 |
| P4962-01 | C0NB8 | 2,4-DCAA | 1 | 500 | 245 | 49 | | 39 | 175 |
| | | 2,4-DCAA | 2 | 500 | 231 | 46 | | 39 | 175 |
| I.BLK-PS028654.D | PIBLK-PS028654.D | 2,4-DCAA | 1 | 500 | 493 | 99 | | 39 | 175 |
| | | 2,4-DCAA | 2 | 500 | 498 | 100 | | 39 | 175 |

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: P4962

Client: Tetra Tech, EMI

Analytical Method: 8151A

DataFile : PS028650.D

| Lab Sample ID: | Parameter | Spike | Sample Result | Result | Units | Rec | Rec Qual | RPD | RPD Qual | Low | Limits High | RPD |
|---------------------------------|------------------|-------|------------------|--------|-------|-----|-------------|-----|-------------|-----|----------------|-----|
| Client Sample ID: P4961-01MS | C0RB8MS | | | | | | | | | | | |
| | 2,4-D | 50 | 0 | 46.4 | ug/L | 93 | | | | 65 | 135 | |
| | 2,4,5-TP(Silvex) | 50 | 0 | 77.4 | ug/L | 155 | * | | | 62 | 139 | |

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: P4962

Client: Tetra Tech, EMI

Analytical Method: 8151A

DataFile : PS028651.D

| Lab Sample ID: | Parameter | Spike | Sample Result | Result | Units | Rec | Rec Qual | RPD | RPD Qual | Low | Limits High | RPD |
|----------------------------------|------------------|-------|------------------|--------|-------|-----|-------------|-----|-------------|-----|----------------|-----|
| Client Sample ID: P4961-01MSD | C0RB8MSD | | | | | | | | | | | |
| | 2,4-D | 50 | 0 | 47.5 | ug/L | 95 | | 2 | | 65 | 135 | 20 |
| | 2,4,5-TP(Silvex) | 50 | 0 | 78.2 | ug/L | 156 | * | 1 | | 62 | 139 | 20 |

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P4962

Client: Tetra Tech, EMI

Analytical Method: 8151A Datafile : PS028645.D

| Lab Sample ID | Parameter | Spike | Result | Units | Rec | RPD | Qual | RPD | | Limits | | RPD |
|---------------|------------------|-------|--------|-------|-----|-----|------|------|-----|--------|--|-----|
| | | | | | | | | Qual | Low | High | | |
| PB165273BS | 2,4-D | 5 | 4.90 | ug/L | 98 | | | | 83 | 130 | | |
| | 2,4,5-TP(Silvex) | 5 | 4.70 | ug/L | 94 | | | | 78 | 127 | | |

A

B

C

D

E

F

G

H

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB165273BL

Lab Name: CHEMTECH

Contract: TETR16

Lab Code: CHEM Case No.: P4962

SAS No.: P4962 SDG NO.: P4962

Lab Sample ID: PB165273BL

Lab File ID: PS028644.D

Matrix: (soil/water) water

Extraction: (Type) _____

Sulfur Cleanup: (Y/N) N

Date Extracted: 11/26/2024

Date Analyzed (1): 11/26/2024

Date Analyzed (2): 11/26/2024

Time Analyzed (1): 19:13

Time Analyzed (2): 19:13

Instrument ID (1): ECD_S

Instrument ID (2): ECD_S

GC Column (1): RTX-CLP ID: 0.32 (mm)

GC Column (2): RTX-CLP2 ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

| EPA SAMPLE NO. | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED 1 | DATE ANALYZED 2 |
|-------------------|------------------|----------------|--------------------|--------------------|
| PB165273BS | PB165273BS | PS028645.D | 11/26/2024 | 11/26/2024 |
| PB165159TB | PB165159TB | PS028646.D | 11/26/2024 | 11/26/2024 |
| C0RB8MS | P4961-01MS | PS028650.D | 11/26/2024 | 11/26/2024 |
| C0RB8MSD | P4961-01MSD | PS028651.D | 11/26/2024 | 11/26/2024 |
| C0NB8 | P4962-01 | PS028652.D | 11/26/2024 | 11/26/2024 |

COMMENTS: _____



QC SAMPLE DATA

Report of Analysis

| | | | | | |
|--------------------|-----------------|-----------|--------------------|----------------|-----------|
| Client: | Tetra Tech, EMI | | Date Collected: | | |
| Project: | R36767 | | Date Received: | | |
| Client Sample ID: | PB165273BL | | SDG No.: | P4962 | |
| Lab Sample ID: | PB165273BL | | Matrix: | TCLP | |
| Analytical Method: | SW8151A | | % Solid: | 0 | Decanted: |
| Sample Wt/Vol: | 1000 | Units: mL | Final Vol: | 10000 | uL |
| Soil Aliquot Vol: | | uL | Test: | TCLP Herbicide | |
| Extraction Type: | | | Injection Volume : | | |
| GPC Factor : | 1.0 | PH : | | | |
| Prep Method : | SW3510C | | | | |

| | | | | |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
| PS028644.D | 1 | 11/26/24 11:10 | 11/26/24 19:13 | PB165273 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|-------------------|-------------------|-------|-----------|----------|------------|----------|
| TARGETS | | | | | | |
| 94-75-7 | 2,4-D | 0.49 | U | 0.49 | 2.00 | ug/L |
| 93-72-1 | 2,4,5-TP (Silvex) | 0.45 | U | 0.45 | 2.00 | ug/L |
| SURROGATES | | | | | | |
| 19719-28-9 | 2,4-DCAA | 508 | | 39 - 175 | 102% | SPK: 500 |

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

| | | | | | |
|--------------------|------------------|-----------|--------------------|----------------|-----------|
| Client: | Tetra Tech, EMI | | Date Collected: | 11/26/24 | |
| Project: | R36767 | | Date Received: | 11/26/24 | |
| Client Sample ID: | PIBLK-PS028631.D | | SDG No.: | P4962 | |
| Lab Sample ID: | I.BLK-PS028631.D | | Matrix: | TCLP | |
| Analytical Method: | SW8151A | | % Solid: | 0 | Decanted: |
| Sample Wt/Vol: | 1000 | Units: mL | Final Vol: | 10000 | uL |
| Soil Aliquot Vol: | | uL | Test: | TCLP Herbicide | |
| Extraction Type: | | | Injection Volume : | | |
| GPC Factor : | 1.0 | PH : | | | |
| Prep Method : | SW3510C | | | | |

| | | | | |
|-------------------|-----------|-----------|---------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
| PS028631.D | 1 | | 11/26/24 | PS112624 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|-------------------|-------------------|-------|-----------|----------|------------|----------|
| TARGETS | | | | | | |
| 94-75-7 | 2,4-D | 0.49 | U | 0.49 | 2.00 | ug/L |
| 93-72-1 | 2,4,5-TP (Silvex) | 0.45 | U | 0.45 | 2.00 | ug/L |
| SURROGATES | | | | | | |
| 19719-28-9 | 2,4-DCAA | 492 | | 39 - 175 | 98% | SPK: 500 |

Comments:

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Report of Analysis

| | | | | | |
|--------------------|------------------|-----------|--------------------|----------------|-----------|
| Client: | Tetra Tech, EMI | | Date Collected: | 11/26/24 | |
| Project: | R36767 | | Date Received: | 11/26/24 | |
| Client Sample ID: | PIBLK-PS028638.D | | SDG No.: | P4962 | |
| Lab Sample ID: | I.BLK-PS028638.D | | Matrix: | TCLP | |
| Analytical Method: | SW8151A | | % Solid: | 0 | Decanted: |
| Sample Wt/Vol: | 1000 | Units: mL | Final Vol: | 10000 | uL |
| Soil Aliquot Vol: | | uL | Test: | TCLP Herbicide | |
| Extraction Type: | | | Injection Volume : | | |
| GPC Factor : | 1.0 | PH : | | | |
| Prep Method : | SW3510C | | | | |

| | | | | |
|-------------------|-----------|-----------|---------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
| PS028638.D | 1 | | 11/26/24 | PS112624 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|-------------------|-------------------|-------|-----------|----------|------------|----------|
| TARGETS | | | | | | |
| 94-75-7 | 2,4-D | 0.49 | U | 0.49 | 2.00 | ug/L |
| 93-72-1 | 2,4,5-TP (Silvex) | 0.45 | U | 0.45 | 2.00 | ug/L |
| SURROGATES | | | | | | |
| 19719-28-9 | 2,4-DCAA | 484 | | 39 - 175 | 97% | SPK: 500 |

Comments:

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Report of Analysis

| | | | | | |
|--------------------|------------------|-----------|--------------------|----------------|-----------|
| Client: | Tetra Tech, EMI | | Date Collected: | 11/26/24 | |
| Project: | R36767 | | Date Received: | 11/26/24 | |
| Client Sample ID: | PIBLK-PS028647.D | | SDG No.: | P4962 | |
| Lab Sample ID: | I.BLK-PS028647.D | | Matrix: | TCLP | |
| Analytical Method: | SW8151A | | % Solid: | 0 | Decanted: |
| Sample Wt/Vol: | 1000 | Units: mL | Final Vol: | 10000 | uL |
| Soil Aliquot Vol: | | uL | Test: | TCLP Herbicide | |
| Extraction Type: | | | Injection Volume : | | |
| GPC Factor : | 1.0 | PH : | | | |
| Prep Method : | SW3510C | | | | |

| | | | | |
|-------------------|-----------|-----------|---------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
| PS028647.D | 1 | | 11/26/24 | PS112624 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|-------------------|-------------------|-------|-----------|----------|------------|----------|
| TARGETS | | | | | | |
| 94-75-7 | 2,4-D | 0.49 | U | 0.49 | 2.00 | ug/L |
| 93-72-1 | 2,4,5-TP (Silvex) | 0.45 | U | 0.45 | 2.00 | ug/L |
| SURROGATES | | | | | | |
| 19719-28-9 | 2,4-DCAA | 502 | | 39 - 175 | 100% | SPK: 500 |

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

| | | | | | |
|--------------------|------------------|-----------|--------------------|----------------|-----------|
| Client: | Tetra Tech, EMI | | Date Collected: | 11/26/24 | |
| Project: | R36767 | | Date Received: | 11/26/24 | |
| Client Sample ID: | PIBLK-PS028654.D | | SDG No.: | P4962 | |
| Lab Sample ID: | I.BLK-PS028654.D | | Matrix: | TCLP | |
| Analytical Method: | SW8151A | | % Solid: | 0 | Decanted: |
| Sample Wt/Vol: | 1000 | Units: mL | Final Vol: | 10000 | uL |
| Soil Aliquot Vol: | | uL | Test: | TCLP Herbicide | |
| Extraction Type: | | | Injection Volume : | | |
| GPC Factor : | 1.0 | PH : | | | |
| Prep Method : | SW3510C | | | | |

| | | | | |
|-------------------|-----------|-----------|---------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
| PS028654.D | 1 | | 11/26/24 | PS112624 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|-------------------|-------------------|-------|-----------|----------|------------|----------|
| TARGETS | | | | | | |
| 94-75-7 | 2,4-D | 0.49 | U | 0.49 | 2.00 | ug/L |
| 93-72-1 | 2,4,5-TP (Silvex) | 0.45 | U | 0.45 | 2.00 | ug/L |
| SURROGATES | | | | | | |
| 19719-28-9 | 2,4-DCAA | 498 | | 39 - 175 | 100% | SPK: 500 |

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

| | | | | | |
|--------------------|-----------------|-----------|--------------------|----------------|-----------|
| Client: | Tetra Tech, EMI | | Date Collected: | | |
| Project: | R36767 | | Date Received: | | |
| Client Sample ID: | PB165273BS | | SDG No.: | P4962 | |
| Lab Sample ID: | PB165273BS | | Matrix: | TCLP | |
| Analytical Method: | SW8151A | | % Solid: | 0 | Decanted: |
| Sample Wt/Vol: | 1000 | Units: mL | Final Vol: | 10000 | uL |
| Soil Aliquot Vol: | | uL | Test: | TCLP Herbicide | |
| Extraction Type: | | | Injection Volume : | | |
| GPC Factor : | 1.0 | PH : | | | |
| Prep Method : | SW3510C | | | | |

| | | | | |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
| PS028645.D | 1 | 11/26/24 11:10 | 11/26/24 19:37 | PB165273 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|-------------------|-------------------|-------|-----------|----------|------------|----------|
| TARGETS | | | | | | |
| 94-75-7 | 2,4-D | 4.90 | | 0.49 | 2.00 | ug/L |
| 93-72-1 | 2,4,5-TP (Silvex) | 4.70 | | 0.45 | 2.00 | ug/L |
| SURROGATES | | | | | | |
| 19719-28-9 | 2,4-DCAA | 491 | | 39 - 175 | 98% | SPK: 500 |

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

| | | | | | |
|--------------------|-----------------|-----------|--------------------|----------------|-----------|
| Client: | Tetra Tech, EMI | | Date Collected: | 11/20/24 | |
| Project: | R36767 | | Date Received: | 11/22/24 | |
| Client Sample ID: | C0RB8MS | | SDG No.: | P4962 | |
| Lab Sample ID: | P4961-01MS | | Matrix: | TCLP | |
| Analytical Method: | SW8151A | | % Solid: | 0 | Decanted: |
| Sample Wt/Vol: | 100 | Units: mL | Final Vol: | 10000 | uL |
| Soil Aliquot Vol: | | uL | Test: | TCLP Herbicide | |
| Extraction Type: | | | Injection Volume : | | |
| GPC Factor : | 1.0 | PH : | | | |
| Prep Method : | SW3510C | | | | |

| | | | | |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
| PS028650.D | 1 | 11/26/24 11:10 | 11/26/24 21:37 | PB165273 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|-------------------|-------------------|-------|-----------|----------|------------|----------|
| TARGETS | | | | | | |
| 94-75-7 | 2,4-D | 46.4 | | 4.90 | 20.0 | ug/L |
| 93-72-1 | 2,4,5-TP (Silvex) | 77.4 | P | 4.50 | 20.0 | ug/L |
| SURROGATES | | | | | | |
| 19719-28-9 | 2,4-DCAA | 181 | * | 39 - 175 | 36% | SPK: 500 |

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit

Report of Analysis

| | | | | | |
|--------------------|-----------------|-----------|--------------------|----------------|-----------|
| Client: | Tetra Tech, EMI | | Date Collected: | 11/20/24 | |
| Project: | R36767 | | Date Received: | 11/22/24 | |
| Client Sample ID: | C0RB8MSD | | SDG No.: | P4962 | |
| Lab Sample ID: | P4961-01MSD | | Matrix: | TCLP | |
| Analytical Method: | SW8151A | | % Solid: | 0 | Decanted: |
| Sample Wt/Vol: | 100 | Units: mL | Final Vol: | 10000 | uL |
| Soil Aliquot Vol: | | uL | Test: | TCLP Herbicide | |
| Extraction Type: | | | Injection Volume : | | |
| GPC Factor : | 1.0 | PH : | | | |
| Prep Method : | SW3510C | | | | |

| | | | | |
|-------------------|-----------|----------------|----------------|---------------|
| File ID/Qc Batch: | Dilution: | Prep Date | Date Analyzed | Prep Batch ID |
| PS028651.D | 1 | 11/26/24 11:10 | 11/26/24 22:01 | PB165273 |

| CAS Number | Parameter | Conc. | Qualifier | MDL | LOQ / CRQL | Units |
|-------------------|-------------------|-------|-----------|----------|------------|----------|
| TARGETS | | | | | | |
| 94-75-7 | 2,4-D | 47.5 | | 4.90 | 20.0 | ug/L |
| 93-72-1 | 2,4,5-TP (Silvex) | 78.2 | P | 4.50 | 20.0 | ug/L |
| SURROGATES | | | | | | |
| 19719-28-9 | 2,4-DCAA | 183 | * | 39 - 175 | 37% | SPK: 500 |

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

P = Indicates >25% difference for detected concentrations between the two GC columns

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.

() = Laboratory InHouse Limit



CALIBRATION SUMMARY

RETENTION TIMES OF INITIAL CALIBRATION

Contract: TETR16

Lab Code: CHEM Case No.: P4962 SAS No.: P4962 SDG NO.: P4962

Instrument ID: ECD_S Calibration Date(s): 11/26/2024 11/26/2024

Calibration Times: 12:48 14:25

GC Column: RTX-CLP ID: 0.32 (mm)

| | | |
|--------------|----------------------------|-----------------------------|
| LAB FILE ID: | RT 200 = <u>PS028632.D</u> | RT 500 = <u>PS028633.D</u> |
| | RT 750 = <u>PS028634.D</u> | RT 1000 = <u>PS028635.D</u> |
| | | RT 1500 = <u>PS028636.D</u> |

| COMPOUND | RT 200 | RT 500 | RT 750 | RT 1000 | RT 1500 | MEAN RT | RT WINDOW FROM TO | |
|------------------|--------|--------|--------|---------|---------|------------|----------------------|------|
| 2,4,5-TP(Silvex) | 9.23 | 9.23 | 9.23 | 9.23 | 9.23 | 9.23 | 9.13 | 9.33 |
| 2,4-D | 8.35 | 8.35 | 8.35 | 8.35 | 8.35 | 8.35 | 8.25 | 8.45 |
| 2,4-DCAA | 7.23 | 7.23 | 7.23 | 7.23 | 7.23 | 7.23 | 7.13 | 7.33 |

RETENTION TIMES OF INITIAL CALIBRATION

Contract: TETR16

Lab Code: CHEM Case No.: P4962 SAS No.: P4962 SDG NO.: P4962

Instrument ID: ECD_S Calibration Date(s): 11/26/2024 11/26/2024

Calibration Times: 12:48 14:25

GC Column: RTX-CLP2 ID: 0.32 (mm)

| | | |
|--------------|----------------------------|-----------------------------|
| LAB FILE ID: | RT 200 = <u>PS028632.D</u> | RT 500 = <u>PS028633.D</u> |
| | RT 750 = <u>PS028634.D</u> | RT 1000 = <u>PS028635.D</u> |
| | | RT 1500 = <u>PS028636.D</u> |

| COMPOUND | RT 200 | RT 500 | RT 750 | RT 1000 | RT 1500 | MEAN RT | RT WINDOW FROM TO | |
|------------------|--------|--------|--------|---------|---------|------------|----------------------|------|
| 2,4,5-TP(Silvex) | 9.87 | 9.87 | 9.87 | 9.87 | 9.87 | 9.87 | 9.77 | 9.97 |
| 2,4-D | 8.97 | 8.97 | 8.97 | 8.97 | 8.97 | 8.97 | 8.87 | 9.07 |
| 2,4-DCAA | 7.73 | 7.72 | 7.72 | 7.73 | 7.73 | 7.72 | 7.62 | 7.82 |

CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: TETR16

Lab Code: CHEM **Case No.:** P4962 **SAS No.:** P4962 **SDG NO.:** P4962

Instrument ID: ECD_S **Calibration Date(s):** 11/26/2024 11/26/2024
Calibration Times: 12:48 14:25

GC Column: RTX-CLP **ID:** 0.32 (mm)

| LAB FILE ID: | | CF 200 = <u>PS028632.D</u> | | CF 500 = <u>PS028633.D</u> | | | |
|----------------------------|-------------|-----------------------------|-------------|-----------------------------|-------------|-------------|-------|
| CF 750 = <u>PS028634.D</u> | | CF 1000 = <u>PS028635.D</u> | | CF 1500 = <u>PS028636.D</u> | | | |
| COMPOUND | CF 200 | CF 500 | CF 750 | CF 1000 | CF 1500 | CF | % RSD |
| 2,4,5-TP(Silvex) | 20271400000 | 18910000000 | 18123500000 | 17499500000 | 16594600000 | 18279800000 | 8 |
| 2,4-D | 3843050000 | 3484790000 | 3301520000 | 3180130000 | 3051260000 | 3372150000 | 9 |
| 2,4-DCAA | 2980930000 | 2776190000 | 2647410000 | 2550090000 | 2457090000 | 2682340000 | 8 |

CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: TETR16

Lab Code: CHEM **Case No.:** P4962 **SAS No.:** P4962 **SDG NO.:** P4962

Instrument ID: ECD_S **Calibration Date(s):** 11/26/2024 11/26/2024
Calibration Times: 12:48 14:25

GC Column: RTX-CLP2 **ID:** 0.32 (mm)

| LAB FILE ID: | | CF 200 = | <u>PS028632.D</u> | CF 500 = | <u>PS028633.D</u> | | |
|---------------------|------------|-------------------|-------------------|-------------------|-------------------|-------------------|----------|
| CF 750 = | | <u>PS028634.D</u> | CF 1000 = | <u>PS028635.D</u> | CF 1500 = | <u>PS028636.D</u> | |
| COMPOUND | CF 200 | CF 500 | CF 750 | CF 1000 | CF 1500 | CF | % RSD |
| 2,4,5-TP(Silvex) | 9649960000 | 9698620000 | 9598260000 | 9499290000 | 9266470000 | 9542520000 | 2 |
| 2,4-D | 1782570000 | 1704130000 | 1676500000 | 1652880000 | 1638760000 | 1690970000 | 3 |
| 2,4-DCAA | 1414130000 | 1352070000 | 1334210000 | 1323400000 | 1311340000 | 1347030000 | 3 |

CALIBRATION VERIFICATION SUMMARY

Contract: TETR16

Lab Code: CHEM Case No.: P4962 SAS No.: P4962 SDG NO.: P4962

Continuing Calib Date: 11/26/2024 Initial Calibration Date(s): 11/26/2024 11/26/2024

Continuing Calib Time: 16:01 Initial Calibration Time(s): 12:48 14:25

GC Column: RTX-CLP ID: 0.32 (mm)

| COMPOUND | CCAL RT | AVG RT | RT WINDOW | | DIFF RT |
|------------------|------------|-----------|-----------|------|------------|
| | | | FROM | TO | |
| 2,4-DCAA | 7.23 | 7.23 | 7.13 | 7.33 | 0.00 |
| 2,4-D | 8.35 | 8.35 | 8.25 | 8.45 | 0.00 |
| 2,4,5-TP(Silvex) | 9.23 | 9.23 | 9.13 | 9.33 | 0.00 |

CALIBRATION VERIFICATION SUMMARY

Contract: TETR16

Lab Code: CHEM Case No.: P4962 SAS No.: P4962 SDG NO.: P4962

Continuing Calib Date: 11/26/2024 Initial Calibration Date(s): 11/26/2024 11/26/2024

Continuing Calib Time: 16:01 Initial Calibration Time(s): 12:48 14:25

GC Column: RTX-CLP2 ID: 0.32 (mm)

| COMPOUND | CCAL RT | AVG RT | RT WINDOW | | DIFF RT |
|------------------|------------|-----------|-----------|------|------------|
| | | | FROM | TO | |
| 2,4-DCAA | 7.72 | 7.72 | 7.62 | 7.82 | 0.00 |
| 2,4-D | 8.97 | 8.97 | 8.87 | 9.07 | 0.00 |
| 2,4,5-TP(Silvex) | 9.87 | 9.87 | 9.77 | 9.97 | 0.00 |

CALIBRATION VERIFICATION SUMMARY

Contract: TETR16

Lab Code: CHEM Case No.: P4962 SAS No.: P4962 SDG NO.: P4962

GC Column: RTX-CLP ID: 0.32 (mm) Initi. Calib. Date(s): 11/26/2024 11/26/2024

Client Sample No.: CCAL01 Date Analyzed: 11/26/2024

Lab Sample No.: HSTDCCC750 Data File : PS028639.D Time Analyzed: 16:01

| COMPOUND | RT | RT WINDOW | | CALC AMOUNT(ng) | NOM AMOUNT(ng) | %D |
|------------------|-------|-----------|-------|--------------------|-------------------|------|
| | | FROM | TO | | | |
| 2,4,5-TP(Silvex) | 9.227 | 9.128 | 9.328 | 708.020 | 712.500 | -0.6 |
| 2,4-D | 8.350 | 8.251 | 8.451 | 691.320 | 705.000 | -1.9 |
| 2,4-DCAA | 7.226 | 7.126 | 7.326 | 740.220 | 750.000 | -1.3 |

CALIBRATION VERIFICATION SUMMARY

Contract: TETR16

Lab Code: CHEM Case No.: P4962 SAS No.: P4962 SDG NO.: P4962

GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 11/26/2024 11/26/2024

Client Sample No.: CCAL01 Date Analyzed: 11/26/2024

Lab Sample No.: HSTDCCC750 Data File : PS028639.D Time Analyzed: 16:01

| COMPOUND | RT | RT WINDOW FROM TO | | CALC AMOUNT(ng) | NOM AMOUNT(ng) | %D |
|------------------|-------|----------------------|-------|--------------------|-------------------|------|
| 2,4,5-TP(Silvex) | 9.873 | 9.773 | 9.973 | 720.270 | 712.500 | 1.1 |
| 2,4-D | 8.968 | 8.869 | 9.069 | 700.640 | 705.000 | -0.6 |
| 2,4-DCAA | 7.724 | 7.624 | 7.824 | 743.470 | 750.000 | -0.9 |

A

B

C

D

E

F

G

H

CALIBRATION VERIFICATION SUMMARY

Contract: TETR16

Lab Code: CHEM Case No.: P4962 SAS No.: P4962 SDG NO.: P4962

Continuing Calib Date: 11/26/2024 Initial Calibration Date(s): 11/26/2024 11/26/2024

Continuing Calib Time: 20:49 Initial Calibration Time(s): 12:48 14:25

GC Column: RTX-CLP ID: 0.32 (mm)

| COMPOUND | CCAL RT | AVG RT | RT WINDOW | | DIFF RT |
|------------------|------------|-----------|-----------|------|------------|
| | | | FROM | TO | |
| 2,4-DCAA | 7.23 | 7.23 | 7.13 | 7.33 | 0.00 |
| 2,4-D | 8.35 | 8.35 | 8.25 | 8.45 | 0.00 |
| 2,4,5-TP(Silvex) | 9.23 | 9.23 | 9.13 | 9.33 | 0.00 |

CALIBRATION VERIFICATION SUMMARY

Contract: TETR16

Lab Code: CHEM Case No.: P4962 SAS No.: P4962 SDG NO.: P4962

Continuing Calib Date: 11/26/2024 Initial Calibration Date(s): 11/26/2024 11/26/2024

Continuing Calib Time: 20:49 Initial Calibration Time(s): 12:48 14:25

GC Column: RTX-CLP2 ID: 0.32 (mm)

| COMPOUND | CCAL RT | AVG RT | RT WINDOW FROM TO | | DIFF RT |
|------------------|------------|-----------|------------------------|------|------------|
| 2,4-DCAA | 7.72 | 7.72 | 7.62 | 7.82 | 0.00 |
| 2,4-D | 8.97 | 8.97 | 8.87 | 9.07 | 0.00 |
| 2,4,5-TP(Silvex) | 9.87 | 9.87 | 9.77 | 9.97 | 0.00 |

CALIBRATION VERIFICATION SUMMARY

Contract: TETR16

Lab Code: CHEM Case No.: P4962 SAS No.: P4962 SDG NO.: P4962

GC Column: RTX-CLP ID: 0.32 (mm) Initi. Calib. Date(s): 11/26/2024 11/26/2024

Client Sample No.: CCAL02 Date Analyzed: 11/26/2024

Lab Sample No.: HSTDCCC750 Data File : PS028648.D Time Analyzed: 20:49

| COMPOUND | RT | RT WINDOW | | CALC AMOUNT(ng) | NOM AMOUNT(ng) | %D |
|------------------|-------|-----------|-------|--------------------|-------------------|------|
| | | FROM | TO | | | |
| 2,4,5-TP(Silvex) | 9.228 | 9.128 | 9.328 | 707.630 | 712.500 | -0.7 |
| 2,4-D | 8.351 | 8.251 | 8.451 | 689.170 | 705.000 | -2.2 |
| 2,4-DCAA | 7.227 | 7.126 | 7.326 | 744.540 | 750.000 | -0.7 |

CALIBRATION VERIFICATION SUMMARY

Contract: TETR16

Lab Code: CHEM Case No.: P4962 SAS No.: P4962 SDG NO.: P4962

GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 11/26/2024 11/26/2024

Client Sample No.: CCAL02 Date Analyzed: 11/26/2024

Lab Sample No.: HSTDCCC750 Data File : PS028648.D Time Analyzed: 20:49

| COMPOUND | RT | RT WINDOW FROM TO | | CALC AMOUNT(ng) | NOM AMOUNT(ng) | %D |
|------------------|-------|----------------------|-------|--------------------|-------------------|-----|
| 2,4,5-TP(Silvex) | 9.872 | 9.773 | 9.973 | 727.030 | 712.500 | 2.0 |
| 2,4-D | 8.968 | 8.869 | 9.069 | 711.090 | 705.000 | 0.9 |
| 2,4-DCAA | 7.723 | 7.624 | 7.824 | 752.870 | 750.000 | 0.4 |

CALIBRATION VERIFICATION SUMMARY

Contract: TETR16

Lab Code: CHEM Case No.: P4962 SAS No.: P4962 SDG NO.: P4962

Continuing Calib Date: 11/26/2024 Initial Calibration Date(s): 11/26/2024 11/26/2024

Continuing Calib Time: 23:37 Initial Calibration Time(s): 12:48 14:25

GC Column: RTX-CLP ID: 0.32 (mm)

| COMPOUND | CCAL RT | AVG RT | RT WINDOW FROM TO | | DIFF RT |
|------------------|------------|-----------|------------------------|------|------------|
| 2,4-DCAA | 7.23 | 7.23 | 7.13 | 7.33 | 0.00 |
| 2,4-D | 8.35 | 8.35 | 8.25 | 8.45 | 0.00 |
| 2,4,5-TP(Silvex) | 9.23 | 9.23 | 9.13 | 9.33 | 0.00 |

CALIBRATION VERIFICATION SUMMARY

Contract: TETR16

Lab Code: CHEM Case No.: P4962 SAS No.: P4962 SDG NO.: P4962

Continuing Calib Date: 11/26/2024 Initial Calibration Date(s): 11/26/2024 11/26/2024

Continuing Calib Time: 23:37 Initial Calibration Time(s): 12:48 14:25

GC Column: RTX-CLP2 ID: 0.32 (mm)

| COMPOUND | CCAL RT | AVG RT | RT WINDOW | | DIFF RT |
|------------------|------------|-----------|-----------|------|------------|
| | | | FROM | TO | |
| 2,4-DCAA | 7.72 | 7.72 | 7.62 | 7.82 | 0.00 |
| 2,4-D | 8.97 | 8.97 | 8.87 | 9.07 | 0.00 |
| 2,4,5-TP(Silvex) | 9.87 | 9.87 | 9.77 | 9.97 | 0.00 |

CALIBRATION VERIFICATION SUMMARY

Contract: TETR16

Lab Code: CHEM Case No.: P4962 SAS No.: P4962 SDG NO.: P4962

GC Column: RTX-CLP ID: 0.32 (mm) Initi. Calib. Date(s): 11/26/2024 11/26/2024

Client Sample No.: CCAL03 Date Analyzed: 11/26/2024

Lab Sample No.: HSTDCCC750 Data File : PS028655.D Time Analyzed: 23:37

| COMPOUND | RT | RT WINDOW | | CALC AMOUNT(ng) | NOM AMOUNT(ng) | %D |
|------------------|-------|-----------|-------|--------------------|-------------------|------|
| | | FROM | TO | | | |
| 2,4,5-TP(Silvex) | 9.228 | 9.128 | 9.328 | 712.830 | 712.500 | 0.0 |
| 2,4-D | 8.351 | 8.251 | 8.451 | 693.910 | 705.000 | -1.6 |
| 2,4-DCAA | 7.226 | 7.126 | 7.326 | 734.170 | 750.000 | -2.1 |

CALIBRATION VERIFICATION SUMMARY

Contract: TETR16

Lab Code: CHEM Case No.: P4962 SAS No.: P4962 SDG NO.: P4962

GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 11/26/2024 11/26/2024

Client Sample No.: CCAL03 Date Analyzed: 11/26/2024

Lab Sample No.: HSTDCCC750 Data File : PS028655.D Time Analyzed: 23:37

| COMPOUND | RT | RT WINDOW | | CALC AMOUNT(ng) | NOM AMOUNT(ng) | %D |
|------------------|-------|-----------|-------|--------------------|-------------------|-----|
| | | FROM | TO | | | |
| 2,4,5-TP(Silvex) | 9.871 | 9.773 | 9.973 | 729.110 | 712.500 | 2.3 |
| 2,4-D | 8.968 | 8.869 | 9.069 | 715.560 | 705.000 | 1.5 |
| 2,4-DCAA | 7.724 | 7.624 | 7.824 | 752.570 | 750.000 | 0.3 |

Analytical Sequence

| | |
|-------------------------|---|
| Client: Tetra Tech, EMI | SDG No.: P4962 |
| Project: R36767 | Instrument ID: ECD_S |
| GC Column: RTX-CLP | ID: 0.32 (mm) Inst. Calib. Date(s): 11/26/2024 11/26/2024 |

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES,
AND STANDARDS IS GIVEN BELOW:

| EPA SAMPLE NO. | LAB SAMPLE ID | DATE ANALYZED | TIME ANALYZED | DATAFILE | DCAA RT # | RT # |
|-------------------|------------------|------------------|------------------|------------|--------------|------|
| 1.BLK | 1.BLK | 11/26/2024 | 12:24 | PS028631.D | 7.23 | 0.00 |
| HSTDICC200 | HSTDICC200 | 11/26/2024 | 12:48 | PS028632.D | 7.23 | 0.00 |
| HSTDICC500 | HSTDICC500 | 11/26/2024 | 13:13 | PS028633.D | 7.23 | 0.00 |
| HSTDICC750 | HSTDICC750 | 11/26/2024 | 13:37 | PS028634.D | 7.23 | 0.00 |
| HSTDICC1000 | HSTDICC1000 | 11/26/2024 | 14:01 | PS028635.D | 7.23 | 0.00 |
| HSTDICC1500 | HSTDICC1500 | 11/26/2024 | 14:25 | PS028636.D | 7.23 | 0.00 |
| 1.BLK | 1.BLK | 11/26/2024 | 15:37 | PS028638.D | 7.23 | 0.00 |
| HSTDCCC750 | HSTDCCC750 | 11/26/2024 | 16:01 | PS028639.D | 7.23 | 0.00 |
| PB165273BL | PB165273BL | 11/26/2024 | 19:13 | PS028644.D | 7.23 | 0.00 |
| PB165273BS | PB165273BS | 11/26/2024 | 19:37 | PS028645.D | 7.23 | 0.00 |
| PB165159TB | PB165159TB | 11/26/2024 | 20:01 | PS028646.D | 7.23 | 0.00 |
| 1.BLK | 1.BLK | 11/26/2024 | 20:25 | PS028647.D | 7.23 | 0.00 |
| HSTDCCC750 | HSTDCCC750 | 11/26/2024 | 20:49 | PS028648.D | 7.23 | 0.00 |
| C0RB8MS | P4961-01MS | 11/26/2024 | 21:37 | PS028650.D | 7.23 | 0.00 |
| C0RB8MSD | P4961-01MSD | 11/26/2024 | 22:01 | PS028651.D | 7.23 | 0.00 |
| C0NB8 | P4962-01 | 11/26/2024 | 22:25 | PS028652.D | 7.23 | 0.00 |
| 1.BLK | 1.BLK | 11/26/2024 | 23:13 | PS028654.D | 7.23 | 0.00 |
| HSTDCCC750 | HSTDCCC750 | 11/26/2024 | 23:37 | PS028655.D | 7.23 | 0.00 |

Analytical Sequence

| | |
|-------------------------|---|
| Client: Tetra Tech, EMI | SDG No.: P4962 |
| Project: R36767 | Instrument ID: ECD_S |
| GC Column: RTX-CLP2 | ID: 0.32 (mm) Inst. Calib. Date(s): 11/26/2024 11/26/2024 |

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES,
AND STANDARDS IS GIVEN BELOW:

| EPA SAMPLE NO. | LAB SAMPLE ID | DATE ANALYZED | TIME ANALYZED | DATAFILE | DCAA RT # | RT # |
|-------------------|------------------|------------------|------------------|------------|--------------|------|
| 1.BLK | 1.BLK | 11/26/2024 | 12:24 | PS028631.D | 7.72 | 0.00 |
| HSTDICC200 | HSTDICC200 | 11/26/2024 | 12:48 | PS028632.D | 7.73 | 0.00 |
| HSTDICC500 | HSTDICC500 | 11/26/2024 | 13:13 | PS028633.D | 7.72 | 0.00 |
| HSTDICC750 | HSTDICC750 | 11/26/2024 | 13:37 | PS028634.D | 7.72 | 0.00 |
| HSTDICC1000 | HSTDICC1000 | 11/26/2024 | 14:01 | PS028635.D | 7.73 | 0.00 |
| HSTDICC1500 | HSTDICC1500 | 11/26/2024 | 14:25 | PS028636.D | 7.73 | 0.00 |
| 1.BLK | 1.BLK | 11/26/2024 | 15:37 | PS028638.D | 7.72 | 0.00 |
| HSTDCCC750 | HSTDCCC750 | 11/26/2024 | 16:01 | PS028639.D | 7.72 | 0.00 |
| PB165273BL | PB165273BL | 11/26/2024 | 19:13 | PS028644.D | 7.72 | 0.00 |
| PB165273BS | PB165273BS | 11/26/2024 | 19:37 | PS028645.D | 7.72 | 0.00 |
| PB165159TB | PB165159TB | 11/26/2024 | 20:01 | PS028646.D | 7.72 | 0.00 |
| 1.BLK | 1.BLK | 11/26/2024 | 20:25 | PS028647.D | 7.72 | 0.00 |
| HSTDCCC750 | HSTDCCC750 | 11/26/2024 | 20:49 | PS028648.D | 7.72 | 0.00 |
| C0RB8MS | P4961-01MS | 11/26/2024 | 21:37 | PS028650.D | 7.72 | 0.00 |
| C0RB8MSD | P4961-01MSD | 11/26/2024 | 22:01 | PS028651.D | 7.72 | 0.00 |
| C0NB8 | P4962-01 | 11/26/2024 | 22:25 | PS028652.D | 7.72 | 0.00 |
| 1.BLK | 1.BLK | 11/26/2024 | 23:13 | PS028654.D | 7.72 | 0.00 |
| HSTDCCC750 | HSTDCCC750 | 11/26/2024 | 23:37 | PS028655.D | 7.72 | 0.00 |

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

C0RB8MS

Contract: TETR16

Lab Code: CHEM

Case No.: P4962

SAS No.: P4962

SDG NO.: P4962

Lab Sample ID: P4961-01MS

Date(s) Analyzed: 11/26/2024

11/26/2024

Instrument ID (1): ECD_S

Instrument ID (2): ECD_S

GC Column: (1): RTX-CLP ID: 0.32 (mm)

GC Column:(2): RTX-CLP2 ID: 0.32 (mm)

| ANALYTE | COL | RT | RT WINDOW | | CONCENTRATION | %RPD |
|------------------|-----|------|-----------|------|---------------|------|
| | | | FROM | TO | | |
| 2,4-D | 1 | 8.35 | 8.30 | 8.40 | 46.0 | 0.9 |
| | 2 | 8.97 | 8.92 | 9.02 | 46.4 | |
| 2,4,5-TP(Silvex) | 1 | 9.23 | 9.18 | 9.28 | 43.0 | 57.1 |
| | 2 | 9.88 | 9.83 | 9.93 | 77.4 | |

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

C0RB8MSD

Contract: TETR16

Lab Code: CHEM

Case No.: P4962

SAS No.: P4962

SDG NO.: P4962

Lab Sample ID: P4961-01MSD

Date(s) Analyzed: 11/26/2024

11/26/2024

Instrument ID (1): ECD_S

Instrument ID (2): ECD_S

GC Column: (1): RTX-CLP

ID: 0.32 (mm)

GC Column:(2): RTX-CLP2

ID: 0.32 (mm)

| ANALYTE | COL | RT | RT WINDOW | | CONCENTRATION | %RPD |
|------------------|-----|------|-----------|------|---------------|------|
| | | | FROM | TO | | |
| 2,4-D | 1 | 8.35 | 8.30 | 8.40 | 46.1 | 3 |
| | 2 | 8.97 | 8.92 | 9.02 | 47.5 | |
| 2,4,5-TP(Silvex) | 1 | 9.23 | 9.18 | 9.28 | 43.4 | 57.2 |
| | 2 | 9.88 | 9.83 | 9.93 | 78.2 | |

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

PB165273BS

Contract: TETR16

Lab Code: CHEM

Case No.: P4962

SAS No.: P4962

SDG NO.: P4962

Lab Sample ID: PB165273BS

Date(s) Analyzed: 11/26/2024

11/26/2024

Instrument ID (1): ECD_S

Instrument ID (2): ECD_S

GC Column: (1): RTX-CLP ID: 0.32 (mm)

GC Column:(2): RTX-CLP2 ID: 0.32 (mm)

| ANALYTE | COL | RT | RT WINDOW | | CONCENTRATION | %RPD |
|------------------|-----|------|-----------|------|---------------|------|
| | | | FROM | TO | | |
| 2,4-D | 1 | 8.35 | 8.30 | 8.40 | 4.90 | 0 |
| | 2 | 8.97 | 8.92 | 9.02 | 4.90 | |
| 2,4,5-TP(Silvex) | 1 | 9.23 | 9.18 | 9.28 | 4.70 | 0 |
| | 2 | 9.87 | 9.82 | 9.92 | 4.70 | |



SHIPPING DOCUMENTS

No: 3-112124-090646-0005

Lab: Alliance Tech Group

DAS #: R36767



Lab Contact: Yazmeen Gomez

Cooler #:

Lab Phone: 908-789-8900

[illegible]

| | |
|---|--|
| Special Instructions: | Shipment for Case Complete? Y Samples Transferred From Chain of Custody # |
| Analysis Key: TCLP HERB=Chlorinated Herbicides - TCLP | |

| Items/Reason | Relinquished by (Signature and Organization) | Date/Time | Received by (Signature and Organization) | Date/Time | Sample Condition Upon Receipt |
|--------------|--|------------------|---|------------------|---|
| Samples |  Tt | 11-21-24 1600 |  | 11-22-24 1005 | 29°C IR gun #1 custody seals intact Temp Bill. present |
| | | | | | |
| | | | | | |

Laboratory Certification

| Certified By | License No. |
|----------------------|------------------|
| | |
| CAS EPA CLP Contract | 68HERH20D0011 |
| | |
| Connecticut | PH-0830 |
| | |
| DOD ELAP (ANAB) | L2219 |
| | |
| Maine | 2024021 |
| | |
| Maryland | 296 |
| | |
| New Hampshire | 255424 Rev 1 |
| | |
| New Jersey | 20012 |
| | |
| New York | 11376 |
| | |
| Pennsylvania | 68-00548 |
| | |
| Soil Permit | 525-24-234-08441 |
| | |
| Texas | T104704488 |