

ANALYTICAL RESULTS SUMMARY

VOLATILE ORGANICS
METALS
GC SEMI-VOLATILES
SEMI-VOLATILE ORGANICS

PROJECT NAME : CTO WE13

TETRA TECH NUS, INC.

661 Andersen Drive

Suite 200

Pittsburgh, PA - 15220-2745

Phone No: 412-921-7090

ORDER ID : P5316

ATTENTION : Ernie Wu



Laboratory Certification ID # 20012



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Cover Page

Order ID : P5316

Project ID : CTO WE13

Client : Tetra Tech NUS, Inc.

Lab Sample Number

P5316-01
P5316-02
P5316-03
P5316-04

Client Sample Number

TT-304-IDWSO-20241217-1
TT-304-IDWSO-20241217-2
TT-304-IDWSO-20241217-3
TT-304-IDWSO-20241217-4

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: 12/31/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

CASE NARRATIVE

Tetra Tech NUS, Inc.

Project Name: CTO WE13

Project Manager : Ernie Wu

Chemtech Project # P5316

Test Name: VOCMS Group4

A. Number of Samples and Date of Receipt:

4 Solid samples were received on 12/17/2024.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Mercury, Metals Group1, Metals ICP-Group1, PCB Group1, PESTICIDE Group1, SVOCMS Group2 and VOCMS Group4. This data package contains results for VOCMS Group4.

C. Analytical Techniques:

The analysis performed on instrument MSVOA_Y were done using GC column Rxi-624SIL MS 30m, 0.25mm, 1.4 um, Cat. #13868. The analysis of VOCMS Group4 was based on method 8260D.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for

TT-304-IDWSO-20241217-4 [1,2-Dichloroethane-d4 - 70%, 4-Bromofluorobenzene - 43%] and

TT-304-IDWSO-20241217-4RE [4-Bromofluorobenzene - 71%], sample was reanalyzed to confirm the failure and reported.

The Internal Standards Areas met the acceptable requirements except for TT-304-IDWSO-20241217-4, sample was reanalyzed to confirm the failure and reported.

The Retention Times were acceptable for all samples.

The RPD met criteria .

The Blank Spike met requirements for all samples .

The Blank Spike Duplicate met requirements for all samples .

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

The %RSD is greater than 20% in the Initial Calibration method (82Y121724S.M) for Acetone, Chloroform this compound is passing on Linear Regression.

The %RSD is greater than 20% in the Initial Calibration method (82Y122624S.M) for Toluene-d8 this compound is passing on Linear Regression.

The Continuous Calibration met the requirements .
The Tuning criteria met requirements.

E. Additional Comments:

The laboratory certifies that the all-electronic diskette deliverable exactly match the data summary forms (i.e. Form Is).”

Samples for MS/MSD for VOC analysis were not provided with this set of samples. The Blank Spike Duplicate is reported with the data.

Trip Blank was not provided with this set of samples.
The not QT review data is reported in the Miscellaneous.
The soil samples results are based on a dry weight basis.

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <20% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 20% for the Initial Calibration curve for SW-846 analysis.

F. Manual Integration Comments:

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

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Signature_____

CASE NARRATIVE

Tetra Tech NUS, Inc.

Project Name: CTO WE13

Project Manager: Ernie Wu

Chemtech Project # P5316

Test Name: SVOCMS Group2

A. Number of Samples and Date of Receipt:

4 Solid samples were received on 12/17/2024.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Mercury, Metals Group1, Metals ICP-Group1, PCB Group1, PESTICIDE Group1, SVOCMS Group2 and VOCMS Group4. This data package contains results for SVOCMS Group2.

C. Analytical Techniques:

The samples were analyzed on instrument BNA_F using GC Column DB-UI 8270D which is 20 meters, 0.18 mm ID, 0.36 um df The analysis of SVOCMS Group2 was based on method 8270E and extraction was done based on method 3541.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for TT-304-IDWSO-20241217-1 [Terphenyl-d14 - 48%], as per method two surrogates are allowed to failed, no corrective action was taken..

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds .

The MSD recoveries met the acceptable requirements .

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 File ID BF140942.D met the requirements except for Benzo(g,h,i)perylene,Dibenzo(a,h)anthracene and Indeno(1,2,3-cd)pyrene. The associate samples have no positive hit for these compounds therefore no corrective action was taken.

The Tuning criteria met requirements.

E. Additional Comments:

The laboratory certifies that the all-electronic diskette deliverable exactly match the data summary forms (i.e. Form Is).

The Form 6 is not included in the data package because the Initial Calibration was performed using 7 points.

The not QT review data is reported in the Miscellaneous.

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <15% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 15% for the Initial Calibration curve for SW-846 analysis.

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_____

CASE NARRATIVE

Tetra Tech NUS, Inc.

Project Name: CTO WE13

Project Manager: Ernie Wu

Chemtech Project # P5316

Test Name: PESTICIDE Group1

A. Number of Samples and Date of Receipt:

4 Solid samples were received on 12/17/2024.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Mercury, Metals Group1, Metals ICP-Group1, PCB Group1, PESTICIDE Group1, SVOCMS Group2 and VOCMS Group4. This data package contains results for PESTICIDE Group1.

C. Analytical Techniques:

The analysis was performed on instrument ECD_L. The front column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0.5 um df, Catalog # 7HM-G016-17. The rear column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25 um df, Catalog #: 7HMG017- 11. The analysis of PESTICIDE Group1s was based on method 8081B and extraction was done based on method 3541.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds .

The MSD recoveries met the acceptable requirements .

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 .

E. Additional Comments:

The laboratory certifies that the all-electronic diskette deliverable exactly match the data summary forms (i.e. Form Is).

The not QT review data is reported in the Miscellaneous.

The soil samples results are based on a dry weight basis.



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

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_____

CASE NARRATIVE

Tetra Tech NUS, Inc.

Project Name: CTO WE13

Project Manager: Ernie Wu

Chemtech Project # P5316

Test Name: PCB Group1

A. Number of Samples and Date of Receipt:

4 Solid samples were received on 12/17/2024.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Mercury, Metals Group1, Metals ICP-Group1, PCB Group1, PESTICIDE Group1, SVOCMS Group2 and VOCMS Group4. This data package contains results for PCB Group1.

C. Analytical Techniques:

The analyses were performed on instrument GCECD_O. The front column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0.5 um df, Catalogue # 7HM-G016-17. The rear column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25 µm; Catalogue # 7HM-G017-11. The analysis of PCB Group1s was based on method 8082A and extraction was done based on method 3541.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for OU4-VSL-07-121224MS [Decachlorobiphenyl(2) - 137%] as per method one surrogate is allowed to failed, therefore no corrective action was taken.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds .

The MSD recoveries met the acceptable requirements .

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 .



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E. Additional Comments:

The laboratory certifies that the all-electronic diskette deliverable exactly match the data summary forms (i.e. Form Is).

The not QT review data is reported in the Miscellaneous.
The soil samples results are based on a dry weight basis.

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_____

CASE NARRATIVE

Tetra Tech NUS, Inc.

Project Name: CTO WE13

Project Manager : Ernie Wu

Chemtech Project # P5316

Test Name: Metals ICP-Group1,Mercury

A. Number of Samples and Date of Receipt:

4 Solid samples were received on 12/17/2024.

B. Parameters:

According to the Chain of Custody document, the following analyses were requested: Mercury, Metals Group1, Metals ICP-Group1, PCB Group1, PESTICIDE Group1, SVOCMS Group2 and VOCMS Group4. This data package contains results for Metals ICP-Group1,Mercury.

C. Analytical Techniques:

The analysis of Metals ICP-Group1 was based on method 6010D, digestion based on method 3050 (soils). The analysis and digestion of Mercury was based on method 7471B.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Blank Spike met requirements for all samples.

The Duplicate analysis met criteria for all samples.

The Matrix Spike (RBR251688MS) analysis met criteria for all samples except for Arsenic, Beryllium, Chromium, Selenium, and Silver due to Chemical Interference during Digestion Process.

The Matrix Spike Duplicate (RBR251688MSD) analysis met criteria for all samples except for Arsenic, Beryllium, Chromium, Copper, Selenium and Silver due to Chemical Interference during Digestion Process.

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

The Calibration met the requirements.

The Serial Dilution met the acceptable requirements.

E. Additional Comments:

The laboratory certifies that the all-electronic diskette deliverable exactly match the data summary forms (i.e. Form Is).



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Signature_____

DATA REPORTING QUALIFIERS- INORGANIC

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

J	Indicates the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL).
U	Indicates the analyte was analyzed for, but not detected.
ND	Indicates the analyte was analyzed for, but not detected
E	Indicates the reported value is estimated because of the presence of interference
M	Indicates Duplicate injection precision not met.
N	Indicates the spiked sample recovery is not within control limits.
S	Indicates the reported value was determined by the Method of Standard Addition (MSA).
*	Indicates that the duplicate analysis is not within control limits.
+	Indicates the correlation coefficient for the MSA is less than 0.995.
D	Indicates the reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
M	Method qualifiers “P” for ICP instrument “PM” for ICP when Microwave Digestion is used “CV” for Manual Cold Vapor AA “AV” for automated Cold Vapor AA “CA” for MIDI-Distillation Spectrophotometric “AS” for Semi -Automated Spectrophotometric “C” for Manual Spectrophotometric “T” for Titrimetric “NR” for analyte not required to be analyzed
OR	Indicates the analyte’s concentration exceeds the calibrated range of the instrument for that specific analysis.
Q	Indicates the LCS did not meet the control limits requirements
H	Sample Analysis Out Of Hold Time

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: (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 #: P5316

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 Castody

✓

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: 12/31/2024

LAB CHRONICLE

OrderID:	P5316	OrderDate:	12/17/2024 3:44:00 PM
Client:	Tetra Tech NUS, Inc.	Project:	CTO WE13
Contact:	Ernie Wu	Location:	L51,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P5316-01	TT-304-IDWSO-20241 217-1	SOIL	VOCMS Group4	8260D	12/17/24		12/26/24	12/17/24
P5316-02	TT-304-IDWSO-20241 217-2	SOIL	VOCMS Group4	8260D	12/17/24		12/26/24	12/17/24
P5316-03	TT-304-IDWSO-20241 217-3	SOIL	VOCMS Group4	8260D	12/17/24		12/26/24	12/17/24
P5316-04	TT-304-IDWSO-20241 217-4	SOIL	VOCMS Group4	8260D	12/17/24		12/20/24	12/17/24
P5316-04RE	TT-304-IDWSO-20241 217-4RE	SOIL	VOCMS Group4	8260D	12/17/24		12/20/24	12/17/24

Hit Summary Sheet
SW-846

SDG No.: P5316

Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID:	TT-304-IDWSO-20241217-2								
P5316-02	TT-304-IDWSO-20 SOIL	Acetone		22.8	J	6.80	21.7	27.1	ug/Kg
P5316-02	TT-304-IDWSO-20 SOIL	Methylene Chloride		14.3		3.70	8.70	10.8	ug/Kg
		Total Voc :		37.1					
		Total Concentration:		37.1					

A

B

C

D

E

F

G



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	12/17/24	
Project:	CTO WE13			Date Received:	12/17/24	
Client Sample ID:	TT-304-IDWSO-20241217-1			SDG No.:	P5316	
Lab Sample ID:	P5316-01			Matrix:	SOIL	
Analytical Method:	SW8260			% Solid:	68.6	
Sample Wt/Vol:	5.77	Units:	g	Final Vol:	5000	uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group4	
GC Column:	RXI-624	ID :	0.25	Level :	LOW	
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY020718.D	1		12/26/24 15:41	VY122624

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
75-01-4	Vinyl Chloride	3.20	U	0.97	3.20	6.30	ug/Kg
75-35-4	1,1-Dichloroethene	3.20	U	0.99	3.20	6.30	ug/Kg
67-64-1	Acetone	25.3	U	7.90	25.3	31.6	ug/Kg
1634-04-4	Methyl tert-butyl Ether	3.20	U	0.85	3.20	6.30	ug/Kg
75-09-2	Methylene Chloride	10.1	U	4.30	10.1	12.6	ug/Kg
156-60-5	trans-1,2-Dichloroethene	3.20	U	1.10	3.20	6.30	ug/Kg
75-34-3	1,1-Dichloroethane	3.20	U	0.80	3.20	6.30	ug/Kg
78-93-3	2-Butanone	25.3	U	7.20	25.3	31.6	ug/Kg
56-23-5	Carbon Tetrachloride	3.20	U	1.10	3.20	6.30	ug/Kg
156-59-2	cis-1,2-Dichloroethene	3.20	U	0.77	3.20	6.30	ug/Kg
67-66-3	Chloroform	5.10	U	0.85	5.10	6.30	ug/Kg
71-55-6	1,1,1-Trichloroethane	3.20	U	0.99	3.20	6.30	ug/Kg
71-43-2	Benzene	3.20	U	0.91	3.20	6.30	ug/Kg
107-06-2	1,2-Dichloroethane	3.20	U	0.77	3.20	6.30	ug/Kg
79-01-6	Trichloroethene	3.20	U	0.95	3.20	6.30	ug/Kg
108-88-3	Toluene	3.20	U	0.85	3.20	6.30	ug/Kg
127-18-4	Tetrachloroethene	3.20	U	1.10	3.20	6.30	ug/Kg
108-90-7	Chlorobenzene	3.20	U	0.93	3.20	6.30	ug/Kg
100-41-4	Ethyl Benzene	3.20	U	0.78	3.20	6.30	ug/Kg
1330-20-7	Total Xylenes	9.50	U	2.58	9.50	18.9	ug/Kg
103-65-1	n-propylbenzene	3.20	U	0.81	3.20	6.30	ug/Kg
98-06-6	tert-Butylbenzene	3.20	U	0.85	3.20	6.30	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	3.20	U	1.70	3.20	6.30	ug/Kg
135-98-8	sec-Butylbenzene	3.20	U	0.85	3.20	6.30	ug/Kg
541-73-1	1,3-Dichlorobenzene	3.20	U	0.93	3.20	6.30	ug/Kg
106-46-7	1,4-Dichlorobenzene	3.20	U	1.00	3.20	6.30	ug/Kg
104-51-8	n-Butylbenzene	3.20	U	0.80	3.20	6.30	ug/Kg
95-50-1	1,2-Dichlorobenzene	3.20	U	0.75	3.20	6.30	ug/Kg
123-91-1	1,4-Dioxane	100	U	53.7	100	130	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	58.5		71 - 136		117%	SPK: 50

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	12/17/24	
Project:	CTO WE13		Date Received:	12/17/24	
Client Sample ID:	TT-304-IDWSO-20241217-1		SDG No.:	P5316	
Lab Sample ID:	P5316-01		Matrix:	SOIL	
Analytical Method:	SW8260		% Solid:	68.6	
Sample Wt/Vol:	5.77	Units: g	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group4	
GC Column:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY020718.D	1		12/26/24 15:41	VY122624

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
1868-53-7	Dibromofluoromethane	55.2		78 - 119		110%	SPK: 50
2037-26-5	Toluene-d8	52.6		85 - 116		105%	SPK: 50
460-00-4	4-Bromofluorobenzene	46.7		79 - 119		93%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	93100	7.713				
540-36-3	1,4-Difluorobenzene	143000	8.622				
3114-55-4	Chlorobenzene-d5	120000	11.42				
3855-82-1	1,4-Dichlorobenzene-d4	47800	13.352				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	12/17/24	
Project:	CTO WE13			Date Received:	12/17/24	
Client Sample ID:	TT-304-IDWSO-20241217-2			SDG No.:	P5316	
Lab Sample ID:	P5316-02			Matrix:	SOIL	
Analytical Method:	SW8260			% Solid:	74.4	
Sample Wt/Vol:	6.2	Units:	g	Final Vol:	5000	uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group4	
GC Column:	RXI-624	ID :	0.25	Level :	LOW	
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY020720.D	1		12/26/24 16:28	VY122624

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
75-01-4	Vinyl Chloride	2.70	U	0.83	2.70	5.40	ug/Kg
75-35-4	1,1-Dichloroethene	2.70	U	0.85	2.70	5.40	ug/Kg
67-64-1	Acetone	22.8	J	6.80	21.7	27.1	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.70	U	0.73	2.70	5.40	ug/Kg
75-09-2	Methylene Chloride	14.3		3.70	8.70	10.8	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.70	U	0.91	2.70	5.40	ug/Kg
75-34-3	1,1-Dichloroethane	2.70	U	0.68	2.70	5.40	ug/Kg
78-93-3	2-Butanone	21.7	U	6.20	21.7	27.1	ug/Kg
56-23-5	Carbon Tetrachloride	2.70	U	0.94	2.70	5.40	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.70	U	0.66	2.70	5.40	ug/Kg
67-66-3	Chloroform	4.30	U	0.73	4.30	5.40	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.70	U	0.85	2.70	5.40	ug/Kg
71-43-2	Benzene	2.70	U	0.78	2.70	5.40	ug/Kg
107-06-2	1,2-Dichloroethane	2.70	U	0.66	2.70	5.40	ug/Kg
79-01-6	Trichloroethene	2.70	U	0.81	2.70	5.40	ug/Kg
108-88-3	Toluene	2.70	U	0.73	2.70	5.40	ug/Kg
127-18-4	Tetrachloroethene	2.70	U	0.96	2.70	5.40	ug/Kg
108-90-7	Chlorobenzene	2.70	U	0.80	2.70	5.40	ug/Kg
100-41-4	Ethyl Benzene	2.70	U	0.67	2.70	5.40	ug/Kg
1330-20-7	Total Xylenes	8.10	U	2.26	8.10	16.2	ug/Kg
103-65-1	n-propylbenzene	2.70	U	0.69	2.70	5.40	ug/Kg
98-06-6	tert-Butylbenzene	2.70	U	0.73	2.70	5.40	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	2.70	U	1.50	2.70	5.40	ug/Kg
135-98-8	sec-Butylbenzene	2.70	U	0.73	2.70	5.40	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.70	U	0.80	2.70	5.40	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.70	U	0.87	2.70	5.40	ug/Kg
104-51-8	n-Butylbenzene	2.70	U	0.68	2.70	5.40	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.70	U	0.64	2.70	5.40	ug/Kg
123-91-1	1,4-Dioxane	86.7	U	46.1	86.7	110	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	58.7		71 - 136		117%	SPK: 50

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	12/17/24	
Project:	CTO WE13		Date Received:	12/17/24	
Client Sample ID:	TT-304-IDWSO-20241217-2		SDG No.:	P5316	
Lab Sample ID:	P5316-02		Matrix:	SOIL	
Analytical Method:	SW8260		% Solid:	74.4	
Sample Wt/Vol:	6.2	Units: g	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group4	
GC Column:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY020720.D	1		12/26/24 16:28	VY122624

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
1868-53-7	Dibromofluoromethane	55.8		78 - 119		112%	SPK: 50
2037-26-5	Toluene-d8	52.4		85 - 116		105%	SPK: 50
460-00-4	4-Bromofluorobenzene	47.9		79 - 119		96%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	90600	7.713				
540-36-3	1,4-Difluorobenzene	141000	8.621				
3114-55-4	Chlorobenzene-d5	117000	11.42				
3855-82-1	1,4-Dichlorobenzene-d4	47300	13.352				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	12/17/24		
Project:	CTO WE13			Date Received:	12/17/24		
Client Sample ID:	TT-304-IDWSO-20241217-3			SDG No.:	P5316		
Lab Sample ID:	P5316-03			Matrix:	SOIL		
Analytical Method:	SW8260			% Solid:	78.8		
Sample Wt/Vol:	5.91	Units:	g	Final Vol:	5000	uL	
Soil Aliquot Vol:			uL	Test:	VOCMS Group4		
GC Column:	RXI-624	ID :	0.25	Level :	LOW		
Prep Method :							

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY020722.D	1		12/26/24 17:15	VY122624

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
75-01-4	Vinyl Chloride	2.70	U	0.83	2.70	5.40	ug/Kg
75-35-4	1,1-Dichloroethene	2.70	U	0.84	2.70	5.40	ug/Kg
67-64-1	Acetone	21.5	U	6.70	21.5	26.8	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.70	U	0.72	2.70	5.40	ug/Kg
75-09-2	Methylene Chloride	8.60	U	3.70	8.60	10.7	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.70	U	0.90	2.70	5.40	ug/Kg
75-34-3	1,1-Dichloroethane	2.70	U	0.68	2.70	5.40	ug/Kg
78-93-3	2-Butanone	21.5	U	6.10	21.5	26.8	ug/Kg
56-23-5	Carbon Tetrachloride	2.70	U	0.93	2.70	5.40	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.70	U	0.65	2.70	5.40	ug/Kg
67-66-3	Chloroform	4.30	U	0.72	4.30	5.40	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.70	U	0.84	2.70	5.40	ug/Kg
71-43-2	Benzene	2.70	U	0.77	2.70	5.40	ug/Kg
107-06-2	1,2-Dichloroethane	2.70	U	0.65	2.70	5.40	ug/Kg
79-01-6	Trichloroethene	2.70	U	0.81	2.70	5.40	ug/Kg
108-88-3	Toluene	2.70	U	0.72	2.70	5.40	ug/Kg
127-18-4	Tetrachloroethene	2.70	U	0.96	2.70	5.40	ug/Kg
108-90-7	Chlorobenzene	2.70	U	0.79	2.70	5.40	ug/Kg
100-41-4	Ethyl Benzene	2.70	U	0.67	2.70	5.40	ug/Kg
1330-20-7	Total Xylenes	8.10	U	2.15	8.10	16.1	ug/Kg
103-65-1	n-propylbenzene	2.70	U	0.69	2.70	5.40	ug/Kg
98-06-6	tert-Butylbenzene	2.70	U	0.72	2.70	5.40	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	2.70	U	1.50	2.70	5.40	ug/Kg
135-98-8	sec-Butylbenzene	2.70	U	0.72	2.70	5.40	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.70	U	0.79	2.70	5.40	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.70	U	0.86	2.70	5.40	ug/Kg
104-51-8	n-Butylbenzene	2.70	U	0.68	2.70	5.40	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.70	U	0.63	2.70	5.40	ug/Kg
123-91-1	1,4-Dioxane	85.9	U	45.6	85.9	110	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	55.9		71 - 136		112%	SPK: 50

Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	12/17/24	
Project:	CTO WE13			Date Received:	12/17/24	
Client Sample ID:	TT-304-IDWSO-20241217-3			SDG No.:	P5316	
Lab Sample ID:	P5316-03			Matrix:	SOIL	
Analytical Method:	SW8260			% Solid:	78.8	
Sample Wt/Vol:	5.91	Units:	g	Final Vol:	5000	uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group4	
GC Column:	RXI-624	ID :	0.25	Level :	LOW	
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY020722.D	1		12/26/24 17:15	VY122624

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
1868-53-7	Dibromofluoromethane	54.7		78 - 119		109%	SPK: 50
2037-26-5	Toluene-d8	52.6		85 - 116		105%	SPK: 50
460-00-4	4-Bromofluorobenzene	49.2		79 - 119		98%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	95000	7.713				
540-36-3	1,4-Difluorobenzene	149000	8.616				
3114-55-4	Chlorobenzene-d5	128000	11.42				
3855-82-1	1,4-Dichlorobenzene-d4	55500	13.353				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	12/17/24	
Project:	CTO WE13			Date Received:	12/17/24	
Client Sample ID:	TT-304-IDWSO-20241217-4			SDG No.:	P5316	
Lab Sample ID:	P5316-04			Matrix:	SOIL	
Analytical Method:	SW8260			% Solid:	72.3	
Sample Wt/Vol:	5.56	Units:	g	Final Vol:	5000	uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group4	
GC Column:	RXI-624	ID :	0.25	Level :	LOW	
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY020672.D	1		12/20/24 15:44	VY122024

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
75-01-4	Vinyl Chloride	3.10	U	0.96	3.10	6.20	ug/Kg
75-35-4	1,1-Dichloroethene	3.10	U	0.97	3.10	6.20	ug/Kg
67-64-1	Acetone	24.9	U	7.80	24.9	31.1	ug/Kg
1634-04-4	Methyl tert-butyl Ether	3.10	U	0.83	3.10	6.20	ug/Kg
75-09-2	Methylene Chloride	10.0	U	4.20	10.0	12.4	ug/Kg
156-60-5	trans-1,2-Dichloroethene	3.10	U	1.00	3.10	6.20	ug/Kg
75-34-3	1,1-Dichloroethane	3.10	U	0.78	3.10	6.20	ug/Kg
78-93-3	2-Butanone	24.9	U	7.10	24.9	31.1	ug/Kg
56-23-5	Carbon Tetrachloride	3.10	U	1.10	3.10	6.20	ug/Kg
156-59-2	cis-1,2-Dichloroethene	3.10	U	0.76	3.10	6.20	ug/Kg
67-66-3	Chloroform	5.00	U	0.83	5.00	6.20	ug/Kg
71-55-6	1,1,1-Trichloroethane	3.10	U	0.97	3.10	6.20	ug/Kg
71-43-2	Benzene	3.10	U	0.90	3.10	6.20	ug/Kg
107-06-2	1,2-Dichloroethane	3.10	U	0.76	3.10	6.20	ug/Kg
79-01-6	Trichloroethene	3.10	U	0.93	3.10	6.20	ug/Kg
108-88-3	Toluene	3.10	U	0.83	3.10	6.20	ug/Kg
127-18-4	Tetrachloroethene	3.10	U	1.10	3.10	6.20	ug/Kg
108-90-7	Chlorobenzene	3.10	U	0.92	3.10	6.20	ug/Kg
100-41-4	Ethyl Benzene	3.10	U	0.77	3.10	6.20	ug/Kg
1330-20-7	Total Xylenes	9.30	U	2.57	9.30	18.6	ug/Kg
103-65-1	n-propylbenzene	3.10	U	0.80	3.10	6.20	ug/Kg
98-06-6	tert-Butylbenzene	3.10	U	0.83	3.10	6.20	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	3.10	U	1.70	3.10	6.20	ug/Kg
135-98-8	sec-Butylbenzene	3.10	U	0.83	3.10	6.20	ug/Kg
541-73-1	1,3-Dichlorobenzene	3.10	U	0.92	3.10	6.20	ug/Kg
106-46-7	1,4-Dichlorobenzene	3.10	U	1.00	3.10	6.20	ug/Kg
104-51-8	n-Butylbenzene	3.10	U	0.78	3.10	6.20	ug/Kg
95-50-1	1,2-Dichlorobenzene	3.10	U	0.73	3.10	6.20	ug/Kg
123-91-1	1,4-Dioxane	99.5	U	52.9	99.5	120	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	34.9	*	71 - 136		70%	SPK: 50

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	12/17/24	
Project:	CTO WE13		Date Received:	12/17/24	
Client Sample ID:	TT-304-IDWSO-20241217-4		SDG No.:	P5316	
Lab Sample ID:	P5316-04		Matrix:	SOIL	
Analytical Method:	SW8260		% Solid:	72.3	
Sample Wt/Vol:	5.56	Units: g	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group4	
GC Column:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY020672.D	1		12/20/24 15:44	VY122024

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
1868-53-7	Dibromofluoromethane	42.9		78 - 119		86%	SPK: 50
2037-26-5	Toluene-d8	45.2		85 - 116		90%	SPK: 50
460-00-4	4-Bromofluorobenzene	21.7	*	79 - 119		43%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	21200	7.713				
540-36-3	1,4-Difluorobenzene	29900	8.616				
3114-55-4	Chlorobenzene-d5	18800	11.414				
3855-82-1	1,4-Dichlorobenzene-d4	4330	13.347				
TENTATIVE IDENTIFIED COMPOUNDS							
75-43-4	Dichlorofluoromethane	N.D					

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	12/17/24	
Project:	CTO WE13			Date Received:	12/17/24	
Client Sample ID:	TT-304-IDWSO-20241217-4RE			SDG No.:	P5316	
Lab Sample ID:	P5316-04RE			Matrix:	SOIL	
Analytical Method:	SW8260			% Solid:	72.3	
Sample Wt/Vol:	5.36	Units:	g	Final Vol:	5000	uL
Soil Aliquot Vol:			uL	Test:	VOCMS Group4	
GC Column:	RXI-624	ID :	0.25	Level :	LOW	
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY020675.D	1		12/20/24 16:52	VY122024

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
75-01-4	Vinyl Chloride	3.20	U	0.99	3.20	6.50	ug/Kg
75-35-4	1,1-Dichloroethene	3.20	U	1.00	3.20	6.50	ug/Kg
67-64-1	Acetone	25.8	U	8.10	25.8	32.3	ug/Kg
1634-04-4	Methyl tert-butyl Ether	3.20	U	0.86	3.20	6.50	ug/Kg
75-09-2	Methylene Chloride	10.3	U	4.40	10.3	12.9	ug/Kg
156-60-5	trans-1,2-Dichloroethene	3.20	U	1.10	3.20	6.50	ug/Kg
75-34-3	1,1-Dichloroethane	3.20	U	0.81	3.20	6.50	ug/Kg
78-93-3	2-Butanone	25.8	U	7.30	25.8	32.3	ug/Kg
56-23-5	Carbon Tetrachloride	3.20	U	1.10	3.20	6.50	ug/Kg
156-59-2	cis-1,2-Dichloroethene	3.20	U	0.79	3.20	6.50	ug/Kg
67-66-3	Chloroform	5.20	U	0.86	5.20	6.50	ug/Kg
71-55-6	1,1,1-Trichloroethane	3.20	U	1.00	3.20	6.50	ug/Kg
71-43-2	Benzene	3.20	U	0.93	3.20	6.50	ug/Kg
107-06-2	1,2-Dichloroethane	3.20	U	0.79	3.20	6.50	ug/Kg
79-01-6	Trichloroethene	3.20	U	0.97	3.20	6.50	ug/Kg
108-88-3	Toluene	3.20	U	0.86	3.20	6.50	ug/Kg
127-18-4	Tetrachloroethene	3.20	U	1.10	3.20	6.50	ug/Kg
108-90-7	Chlorobenzene	3.20	U	0.95	3.20	6.50	ug/Kg
100-41-4	Ethyl Benzene	3.20	U	0.80	3.20	6.50	ug/Kg
1330-20-7	Total Xylenes	9.70	U	2.60	9.70	19.4	ug/Kg
103-65-1	n-propylbenzene	3.20	U	0.83	3.20	6.50	ug/Kg
98-06-6	tert-Butylbenzene	3.20	U	0.86	3.20	6.50	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	3.20	U	1.80	3.20	6.50	ug/Kg
135-98-8	sec-Butylbenzene	3.20	U	0.86	3.20	6.50	ug/Kg
541-73-1	1,3-Dichlorobenzene	3.20	U	0.95	3.20	6.50	ug/Kg
106-46-7	1,4-Dichlorobenzene	3.20	U	1.00	3.20	6.50	ug/Kg
104-51-8	n-Butylbenzene	3.20	U	0.81	3.20	6.50	ug/Kg
95-50-1	1,2-Dichlorobenzene	3.20	U	0.76	3.20	6.50	ug/Kg
123-91-1	1,4-Dioxane	100	U	54.8	100	130	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	50.8		71 - 136		102%	SPK: 50

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	12/17/24	
Project:	CTO WE13		Date Received:	12/17/24	
Client Sample ID:	TT-304-IDWSO-20241217-4RE		SDG No.:	P5316	
Lab Sample ID:	P5316-04RE		Matrix:	SOIL	
Analytical Method:	SW8260		% Solid:	72.3	
Sample Wt/Vol:	5.36	Units: g	Final Vol:	5000	uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group4	
GC Column:	RXI-624	ID : 0.25	Level :	LOW	
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY020675.D	1		12/20/24 16:52	VY122024

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
1868-53-7	Dibromofluoromethane	45.9		78 - 119		92%	SPK: 50
2037-26-5	Toluene-d8	48.7		85 - 116		97%	SPK: 50
460-00-4	4-Bromofluorobenzene	35.3	*	79 - 119		71%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	164000	7.707				
540-36-3	1,4-Difluorobenzene	291000	8.616				
3114-55-4	Chlorobenzene-d5	242000	11.414				
3855-82-1	1,4-Dichlorobenzene-d4	90500	13.346				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

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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

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



QC SUMMARY

Surrogate Summary

SDG No.: P5316

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260D

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits	
						Low	High
P5316-01	TT-304-IDWSO-20241217-1	1,2-Dichloroethane-d4	50	58.5	117	71	136
		Dibromofluoromethane	50	55.2	110	78	119
		Toluene-d8	50	52.6	105	85	116
		4-Bromofluorobenzene	50	46.7	93	79	119
P5316-02	TT-304-IDWSO-20241217-2	1,2-Dichloroethane-d4	50	58.7	117	71	136
		Dibromofluoromethane	50	55.8	112	78	119
		Toluene-d8	50	52.4	105	85	116
		4-Bromofluorobenzene	50	48.0	96	79	119
P5316-03	TT-304-IDWSO-20241217-3	1,2-Dichloroethane-d4	50	55.9	112	71	136
		Dibromofluoromethane	50	54.7	109	78	119
		Toluene-d8	50	52.6	105	85	116
		4-Bromofluorobenzene	50	49.2	98	79	119
P5316-04	TT-304-IDWSO-20241217-4	1,2-Dichloroethane-d4	50	34.9	70 *	71	136
		Dibromofluoromethane	50	42.9	86	78	119
		Toluene-d8	50	45.2	90	85	116
		4-Bromofluorobenzene	50	21.7	43 *	79	119
P5316-04RE	TT-304-IDWSO-20241217-4RE	1,2-Dichloroethane-d4	50	50.8	102	71	136
		Dibromofluoromethane	50	45.9	92	78	119
		Toluene-d8	50	48.7	97	85	116
		4-Bromofluorobenzene	50	35.3	71 *	79	119
VY1220SBL01	VY1220SBL01	1,2-Dichloroethane-d4	50	49.0	98	71	136
		Dibromofluoromethane	50	50.7	101	78	119
		Toluene-d8	50	49.8	100	85	116
		4-Bromofluorobenzene	50	44.5	89	79	119
VY1220SBS01	VY1220SBS01	1,2-Dichloroethane-d4	50	43.1	86	71	136
		Dibromofluoromethane	50	46.1	92	78	119
		Toluene-d8	50	46.6	93	85	116
		4-Bromofluorobenzene	50	44.2	88	79	119
VY1226SBL01	VY1226SBL01	1,2-Dichloroethane-d4	50	64.7	129	71	136
		Dibromofluoromethane	50	57.6	115	78	119
		Toluene-d8	50	52.6	105	85	116
		4-Bromofluorobenzene	50	51.0	102	79	119
VY1226SBS01	VY1226SBS01	1,2-Dichloroethane-d4	50	55.0	110	71	136
		Dibromofluoromethane	50	52.1	104	78	119
		Toluene-d8	50	50.6	101	85	116
		4-Bromofluorobenzene	50	51.8	104	79	119
VY1226SBSD01	VY1226SBSD01	1,2-Dichloroethane-d4	50	57.3	115	71	136
		Dibromofluoromethane	50	53.1	106	78	119
		Toluene-d8	50	52.1	104	85	116
		4-Bromofluorobenzene	50	52.9	106	79	119

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P5316

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260D

Datafile : VY020666.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits	RPD
									High	
VY1220SBS01	Vinyl chloride	20	15.8	ug/Kg	79			56	135	
	1,1-Dichloroethene	20	16.1	ug/Kg	81			70	131	
	Acetone	100	63.0	ug/Kg	63			36	164	
	Methyl tert-butyl Ether	20	19.9	ug/Kg	100			73	125	
	Methylene Chloride	20	17.7	ug/Kg	89			70	128	
	trans-1,2-Dichloroethene	20	21.5	ug/Kg	108			74	125	
	1,1-Dichloroethane	20	21.4	ug/Kg	107			76	125	
	2-Butanone	100	91.7	ug/Kg	92			51	148	
	Carbon Tetrachloride	20	22.4	ug/Kg	112			70	135	
	cis-1,2-Dichloroethene	20	20.9	ug/Kg	104			77	123	
	Chloroform	20	19.1	ug/Kg	96			78	123	
	1,1,1-Trichloroethane	20	21.7	ug/Kg	109			73	130	
	Benzene	20	22.1	ug/Kg	111			77	121	
	1,2-Dichloroethane	20	21.0	ug/Kg	105			73	128	
	Trichloroethene	20	21.9	ug/Kg	110			77	123	
	Toluene	20	22.1	ug/Kg	111			77	121	
	Tetrachloroethene	20	21.9	ug/Kg	110			73	128	
	Chlorobenzene	20	22.3	ug/Kg	112			79	120	
	Ethyl Benzene	20	22.2	ug/Kg	111			76	122	
	m/p-Xylenes	40	44.7	ug/Kg	112			77	124	
	o-Xylene	20	22.2	ug/Kg	111			77	123	
	N-propylbenzene	20	22.0	ug/Kg	110			73	125	
	tert-Butylbenzene	20	20.9	ug/Kg	104			73	125	
	1,2,4-Trimethylbenzene	20	24.5	ug/Kg	123			75	123	
	Sec-butylbenzene	20	21.8	ug/Kg	109			73	126	
	1,3-Dichlorobenzene	20	21.6	ug/Kg	108			77	121	
	1,4-Dichlorobenzene	20	21.6	ug/Kg	108			75	120	
	n-Butylbenzene	20	22.3	ug/Kg	112			70	128	
	1,2-Dichlorobenzene	20	21.5	ug/Kg	108			78	121	
	1,4-Dioxane	400	370	ug/Kg	93			55	138	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P5316

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260D

Datafile : VY020715.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VY1226SBS01	Vinyl chloride	20	17.7	ug/Kg	89			56	135	
	1,1-Dichloroethene	20	19.1	ug/Kg	96			70	131	
	Acetone	100	94.4	ug/Kg	94			36	164	
	Methyl tert-butyl Ether	20	19.6	ug/Kg	98			73	125	
	Methylene Chloride	20	20.7	ug/Kg	104			70	128	
	trans-1,2-Dichloroethene	20	19.0	ug/Kg	95			74	125	
	1,1-Dichloroethane	20	19.7	ug/Kg	99			76	125	
	2-Butanone	100	110	ug/Kg	110			51	148	
	Carbon Tetrachloride	20	19.7	ug/Kg	99			70	135	
	cis-1,2-Dichloroethene	20	19.3	ug/Kg	97			77	123	
	Chloroform	20	20.1	ug/Kg	101			78	123	
	1,1,1-Trichloroethane	20	19.4	ug/Kg	97			73	130	
	Benzene	20	20.0	ug/Kg	100			77	121	
	1,2-Dichloroethane	20	20.4	ug/Kg	102			73	128	
	Trichloroethene	20	19.4	ug/Kg	97			77	123	
	Toluene	20	20.3	ug/Kg	102			77	121	
	Tetrachloroethene	20	20.9	ug/Kg	104			73	128	
	Chlorobenzene	20	19.8	ug/Kg	99			79	120	
	Ethyl Benzene	20	20.2	ug/Kg	101			76	122	
	m/p-Xylenes	40	41.6	ug/Kg	104			77	124	
	o-Xylene	20	20.7	ug/Kg	104			77	123	
	N-propylbenzene	20	20.0	ug/Kg	100			73	125	
	tert-Butylbenzene	20	19.8	ug/Kg	99			73	125	
	1,2,4-Trimethylbenzene	20	20.0	ug/Kg	100			75	123	
	Sec-butylbenzene	20	20.0	ug/Kg	100			73	126	
	1,3-Dichlorobenzene	20	19.7	ug/Kg	99			77	121	
	1,4-Dichlorobenzene	20	19.9	ug/Kg	100			75	120	
	n-Butylbenzene	20	19.9	ug/Kg	100			70	128	
	1,2-Dichlorobenzene	20	20.3	ug/Kg	102			78	121	
	1,4-Dioxane	400	450	ug/Kg	113			55	138	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P5316

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8260D

Datafile : VY020716.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits	RPD
									High	
VY1226SBSD01	Vinyl chloride	20	18.1	ug/Kg	91	2		56	135	20
	1,1-Dichloroethene	20	18.9	ug/Kg	95	1		70	131	20
	Acetone	100	99.3	ug/Kg	99	5		36	164	20
	Methyl tert-butyl Ether	20	20.6	ug/Kg	103	5		73	125	20
	Methylene Chloride	20	19.7	ug/Kg	99	5		70	128	20
	trans-1,2-Dichloroethene	20	19.3	ug/Kg	97	2		74	125	20
	1,1-Dichloroethane	20	20.0	ug/Kg	100	1		76	125	20
	2-Butanone	100	110	ug/Kg	110	0		51	148	20
	Carbon Tetrachloride	20	19.0	ug/Kg	95	4		70	135	20
	cis-1,2-Dichloroethene	20	19.7	ug/Kg	99	2		77	123	20
	Chloroform	20	19.9	ug/Kg	100	1		78	123	20
	1,1,1-Trichloroethane	20	19.5	ug/Kg	98	1		73	130	20
	Benzene	20	19.4	ug/Kg	97	3		77	121	20
	1,2-Dichloroethane	20	19.5	ug/Kg	98	4		73	128	20
	Trichloroethene	20	19.6	ug/Kg	98	1		77	123	20
	Toluene	20	19.7	ug/Kg	99	3		77	121	20
	Tetrachloroethene	20	19.4	ug/Kg	97	7		73	128	20
	Chlorobenzene	20	20.1	ug/Kg	101	2		79	120	20
	Ethyl Benzene	20	19.7	ug/Kg	99	2		76	122	20
	m/p-Xylenes	40	40.0	ug/Kg	100	4		77	124	20
	o-Xylene	20	19.5	ug/Kg	98	6		77	123	20
	N-propylbenzene	20	19.4	ug/Kg	97	3		73	125	20
	tert-Butylbenzene	20	19.7	ug/Kg	99	0		73	125	20
	1,2,4-Trimethylbenzene	20	19.7	ug/Kg	99	1		75	123	20
	Sec-butylbenzene	20	19.5	ug/Kg	98	2		73	126	20
	1,3-Dichlorobenzene	20	19.8	ug/Kg	99	0		77	121	20
	1,4-Dichlorobenzene	20	19.4	ug/Kg	97	3		75	120	20
	n-Butylbenzene	20	19.5	ug/Kg	98	2		70	128	20
	1,2-Dichlorobenzene	20	20.0	ug/Kg	100	2		78	121	20
	1,4-Dioxane	400	460	ug/Kg	115	2		55	138	20

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VY1220SBL01

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: P5316

SAS No.: P5316 SDG NO.: P5316

Lab File ID: VY020665.D

Lab Sample ID: VY1220SBL01

Date Analyzed: 12/20/2024

Time Analyzed: 11:24

GC Column: RXI-624 ID: 0.25 (mm)

Heated Purge: (Y/N) Y

Instrument ID: MSVOA_Y

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VY1220SBS01	VY1220SBS01	VY020666.D	12/20/2024
TT-304-IDWSO-20241217-4	P5316-04	VY020672.D	12/20/2024
TT-304-IDWSO-20241217-4RE	P5316-04RE	VY020675.D	12/20/2024

COMMENTS: _____

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VY1226SBL01

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: P5316

SAS No.: P5316 SDG NO.: P5316

Lab File ID: VY020714.D

Lab Sample ID: VY1226SBL01

Date Analyzed: 12/26/2024

Time Analyzed: 13:56

GC Column: RXI-624 ID: 0.25 (mm)

Heated Purge: (Y/N) Y

Instrument ID: MSVOA_Y

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VY1226SBS01	VY1226SBS01	VY020715.D	12/26/2024
VY1226SBSD01	VY1226SBSD01	VY020716.D	12/26/2024
TT-304-IDWSO-20241217-1	P5316-01	VY020718.D	12/26/2024
TT-304-IDWSO-20241217-2	P5316-02	VY020720.D	12/26/2024
TT-304-IDWSO-20241217-3	P5316-03	VY020722.D	12/26/2024

COMMENTS: _____

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316
Lab File ID: VY020611.D BFB Injection Date: 12/17/2024
Instrument ID: MSVOA_Y BFB Injection Time: 09:00
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.8
75	30.0 - 60.0% of mass 95	52.6
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	1 (1.3) 1
174	50.0 - 100.0% of mass 95	77.1
175	5.0 - 9.0% of mass 174	6.2 (8) 1
176	95.0 - 101.0% of mass 174	74.2 (96.3) 1
177	5.0 - 9.0% of mass 176	4.8 (6.5) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDICC010	VSTDICC010	VY020613.D	12/17/2024	10:01
VSTDICC020	VSTDICC020	VY020614.D	12/17/2024	10:23
VSTDICCC050	VSTDICCC050	VY020615.D	12/17/2024	10:51
VSTDICC100	VSTDICC100	VY020616.D	12/17/2024	11:14
VSTDICC150	VSTDICC150	VY020617.D	12/17/2024	11:37
VSTDICC005	VSTDICC005	VY020619.D	12/17/2024	14:51

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316
Lab File ID: VY020663.D BFB Injection Date: 12/20/2024
Instrument ID: MSVOA_Y BFB Injection Time: 08:37
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.3
75	30.0 - 60.0% of mass 95	50.6
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.9 (1.1) 1
174	50.0 - 100.0% of mass 95	85.2
175	5.0 - 9.0% of mass 174	6.8 (8) 1
176	95.0 - 101.0% of mass 174	81.8 (96) 1
177	5.0 - 9.0% of mass 176	5.5 (6.7) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC050	VSTDCCC050	VY020664.D	12/20/2024	09:09
VY1220SBL01	VY1220SBL01	VY020665.D	12/20/2024	11:24
VY1220SBS01	VY1220SBS01	VY020666.D	12/20/2024	13:12
TT-304-IDWSO-20241217-4	P5316-04	VY020672.D	12/20/2024	15:44
TT-304-IDWSO-20241217-4RE	P5316-04RE	VY020675.D	12/20/2024	16:52
VSTDCCC050EC	VSTDCCC050	VY020682.D	12/20/2024	19:35

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316
Lab File ID: VY020705.D BFB Injection Date: 12/26/2024
Instrument ID: MSVOA_Y BFB Injection Time: 08:29
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: Y/N Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.9
75	30.0 - 60.0% of mass 95	56.5
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.0 (0.0) 1
174	50.0 - 100.0% of mass 95	88.9
175	5.0 - 9.0% of mass 174	4.7 (5.3) 1
176	95.0 - 101.0% of mass 174	85.2 (95.8) 1
177	5.0 - 9.0% of mass 176	6 (7) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDIC005	VSTDIC005	VY020706.D	12/26/2024	09:31
VSTDIC010	VSTDIC010	VY020707.D	12/26/2024	09:53
VSTDIC020	VSTDIC020	VY020708.D	12/26/2024	10:16
VSTDIC050	VSTDIC050	VY020709.D	12/26/2024	10:39
VSTDIC150	VSTDIC150	VY020710.D	12/26/2024	11:01
VSTDIC100	VSTDIC100	VY020711.D	12/26/2024	11:51
VY1226SBL01	VY1226SBL01	VY020714.D	12/26/2024	13:56
VY1226SBS01	VY1226SBS01	VY020715.D	12/26/2024	14:32
VY1226SBSD01	VY1226SBSD01	VY020716.D	12/26/2024	14:54
TT-304-IDWSO-20241217-1	P5316-01	VY020718.D	12/26/2024	15:41
TT-304-IDWSO-20241217-2	P5316-02	VY020720.D	12/26/2024	16:28
TT-304-IDWSO-20241217-3	P5316-03	VY020722.D	12/26/2024	17:15
VSTDCCC050EC	VSTDCCC050	VY020728.D	12/26/2024	19:34

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316
Lab File ID: VY020664.D Date Analyzed: 12/20/2024
Instrument ID: MSVOA_Y Time Analyzed: 09:09
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	162547	7.71	240673	8.62	212145	11.42
UPPER LIMIT	325094	8.213	481346	9.116	424290	11.92
LOWER LIMIT	81273.5	7.213	120337	8.116	106073	10.92
EPA SAMPLE NO.						
TT-304-IDWSO-20241217-4	21219 *	7.71	29944 *	8.62	18784 *	11.41
TT-304-IDWSO-20241217-4RE	164449	7.71	291183	8.62	241631	11.41
VY1220SBL01	159056	7.71	246351	8.62	208495	11.41
VY1220SBS01	157442	7.71	237485	8.62	207752	11.42

IS1 = Pentafluorobenzene

IS2 = 1,4-Difluorobenzene

IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.

* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316
Lab File ID: VY020664.D Date Analyzed: 12/20/2024
Instrument ID: MSVOA_Y Time Analyzed: 09:09
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

	IS4 AREA #	RT #				
12 HOUR STD	119359	13.353				
UPPER LIMIT	238718	13.853				
LOWER LIMIT	59679.5	12.853				
EPA SAMPLE NO.						
TT-304-IDWSO-20241217-4	4327 *	13.35				
TT-304-IDWSO-20241217-4RE	90485	13.35				
VY1220SBL01	109647	13.35				
VY1220SBS01	116933	13.35				

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316
Lab File ID: VY020709.D Date Analyzed: 12/26/2024
Instrument ID: MSVOA_Y Time Analyzed: 10:39
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	95919	7.72	134605	8.62	116249	11.42
UPPER LIMIT	191838	8.22	269210	9.122	232498	11.92
LOWER LIMIT	47959.5	7.22	67302.5	8.122	58124.5	10.92
EPA SAMPLE NO.						
TT-304-IDWSO-20241217-1	93149	7.71	143334	8.62	120055	11.42
TT-304-IDWSO-20241217-2	90592	7.71	140817	8.62	117470	11.42
TT-304-IDWSO-20241217-3	95048	7.71	149227	8.62	128468	11.42
VY1226SBL01	99549	7.72	157271	8.62	133794	11.42
VY1226SBS01	120044	7.72	165739	8.62	139363	11.42
VY1226SBSD01	115773	7.71	164224	8.62	140702	11.42

IS1 = Pentafluorobenzene
IS2 = 1,4-Difluorobenzene
IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316
Lab File ID: VY020709.D Date Analyzed: 12/26/2024
Instrument ID: MSVOA_Y Time Analyzed: 10:39
GC Column: RXI-624 ID: 0.25 (mm) Heated Purge: (Y/N) Y

	IS4 AREA #	RT #				
12 HOUR STD	60351	13.353				
UPPER LIMIT	120702	13.853				
LOWER LIMIT	30175.5	12.853				
EPA SAMPLE NO.						
TT-304-IDWSO-20241217-1	47762	13.35				
TT-304-IDWSO-20241217-2	47280	13.35				
TT-304-IDWSO-20241217-3	55512	13.35				
VY1226SBL01	56315	13.35				
VY1226SBS01	74040	13.35				
VY1226SBSD01	73666	13.35				

IS4 = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.

* Values outside of QC limits.



QC SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	VY1220SBL01		SDG No.:	P5316
Lab Sample ID:	VY1220SBL01		Matrix:	SOIL
Analytical Method:	SW8260		% Solid:	100
Sample Wt/Vol:	5	Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group4
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY020665.D	1		12/20/24 11:24	VY122024

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
75-01-4	Vinyl Chloride	2.50	U	0.77	2.50	5.00	ug/Kg
75-35-4	1,1-Dichloroethene	2.50	U	0.78	2.50	5.00	ug/Kg
67-64-1	Acetone	20.0	U	6.20	20.0	25.0	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.50	U	0.67	2.50	5.00	ug/Kg
75-09-2	Methylene Chloride	8.00	U	3.40	8.00	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.50	U	0.84	2.50	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	2.50	U	0.63	2.50	5.00	ug/Kg
78-93-3	2-Butanone	20.0	U	5.70	20.0	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	2.50	U	0.87	2.50	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.50	U	0.61	2.50	5.00	ug/Kg
67-66-3	Chloroform	4.00	U	0.67	4.00	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.50	U	0.78	2.50	5.00	ug/Kg
71-43-2	Benzene	2.50	U	0.72	2.50	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	2.50	U	0.61	2.50	5.00	ug/Kg
79-01-6	Trichloroethene	2.50	U	0.75	2.50	5.00	ug/Kg
108-88-3	Toluene	2.50	U	0.67	2.50	5.00	ug/Kg
127-18-4	Tetrachloroethene	2.50	U	0.89	2.50	5.00	ug/Kg
108-90-7	Chlorobenzene	2.50	U	0.74	2.50	5.00	ug/Kg
100-41-4	Ethyl Benzene	2.50	U	0.62	2.50	5.00	ug/Kg
1330-20-7	Total Xylenes	7.50	U	2.10	7.50	15.0	ug/Kg
103-65-1	n-propylbenzene	2.50	U	0.64	2.50	5.00	ug/Kg
98-06-6	tert-Butylbenzene	2.50	U	0.67	2.50	5.00	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	2.50	U	1.40	2.50	5.00	ug/Kg
135-98-8	sec-Butylbenzene	2.50	U	0.67	2.50	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.50	U	0.74	2.50	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.50	U	0.80	2.50	5.00	ug/Kg
104-51-8	n-Butylbenzene	2.50	U	0.63	2.50	5.00	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.50	U	0.59	2.50	5.00	ug/Kg
123-91-1	1,4-Dioxane	80.0	U	42.5	80.0	100	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	49.1		71 - 136		98%	SPK: 50

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	VY1220SBL01		SDG No.:	P5316
Lab Sample ID:	VY1220SBL01		Matrix:	SOIL
Analytical Method:	SW8260		% Solid:	100
Sample Wt/Vol:	5	Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group4
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY020665.D	1		12/20/24 11:24	VY122024

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
1868-53-7	Dibromofluoromethane	50.7		78 - 119		101%	SPK: 50
2037-26-5	Toluene-d8	49.8		85 - 116		100%	SPK: 50
460-00-4	4-Bromofluorobenzene	44.5		79 - 119		89%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	159000	7.707				
540-36-3	1,4-Difluorobenzene	246000	8.616				
3114-55-4	Chlorobenzene-d5	208000	11.414				
3855-82-1	1,4-Dichlorobenzene-d4	110000	13.347				
TENTATIVE IDENTIFIED COMPOUNDS							
001066-40-6	Silanol, trimethyl-	8.80	J			6.88	ug/Kg

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	VY1226SBL01		SDG No.:	P5316
Lab Sample ID:	VY1226SBL01		Matrix:	SOIL
Analytical Method:	SW8260		% Solid:	100
Sample Wt/Vol:	5	Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group4
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY020714.D	1		12/26/24 13:56	VY122624

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
75-01-4	Vinyl Chloride	2.50	U	0.77	2.50	5.00	ug/Kg
75-35-4	1,1-Dichloroethene	2.50	U	0.78	2.50	5.00	ug/Kg
67-64-1	Acetone	20.0	U	6.20	20.0	25.0	ug/Kg
1634-04-4	Methyl tert-butyl Ether	2.50	U	0.67	2.50	5.00	ug/Kg
75-09-2	Methylene Chloride	8.00	U	3.40	8.00	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	2.50	U	0.84	2.50	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	2.50	U	0.63	2.50	5.00	ug/Kg
78-93-3	2-Butanone	20.0	U	5.70	20.0	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	2.50	U	0.87	2.50	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	2.50	U	0.61	2.50	5.00	ug/Kg
67-66-3	Chloroform	4.00	U	0.67	4.00	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	2.50	U	0.78	2.50	5.00	ug/Kg
71-43-2	Benzene	2.50	U	0.72	2.50	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	2.50	U	0.61	2.50	5.00	ug/Kg
79-01-6	Trichloroethene	2.50	U	0.75	2.50	5.00	ug/Kg
108-88-3	Toluene	2.50	U	0.67	2.50	5.00	ug/Kg
127-18-4	Tetrachloroethene	2.50	U	0.89	2.50	5.00	ug/Kg
108-90-7	Chlorobenzene	2.50	U	0.74	2.50	5.00	ug/Kg
100-41-4	Ethyl Benzene	2.50	U	0.62	2.50	5.00	ug/Kg
1330-20-7	Total Xylenes	7.50	U	2.10	7.50	15.0	ug/Kg
103-65-1	n-propylbenzene	2.50	U	0.64	2.50	5.00	ug/Kg
98-06-6	tert-Butylbenzene	2.50	U	0.67	2.50	5.00	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	2.50	U	1.40	2.50	5.00	ug/Kg
135-98-8	sec-Butylbenzene	2.50	U	0.67	2.50	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	2.50	U	0.74	2.50	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	2.50	U	0.80	2.50	5.00	ug/Kg
104-51-8	n-Butylbenzene	2.50	U	0.63	2.50	5.00	ug/Kg
95-50-1	1,2-Dichlorobenzene	2.50	U	0.59	2.50	5.00	ug/Kg
123-91-1	1,4-Dioxane	80.0	U	42.5	80.0	100	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	64.7		71 - 136		129%	SPK: 50

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	VY1226SBL01		SDG No.:	P5316
Lab Sample ID:	VY1226SBL01		Matrix:	SOIL
Analytical Method:	SW8260		% Solid:	100
Sample Wt/Vol:	5	Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group4
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY020714.D	1		12/26/24 13:56	VY122624

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
1868-53-7	Dibromofluoromethane	57.6		78 - 119		115%	SPK: 50
2037-26-5	Toluene-d8	52.6		85 - 116		105%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.0		79 - 119		102%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	99500	7.719				
540-36-3	1,4-Difluorobenzene	157000	8.622				
3114-55-4	Chlorobenzene-d5	134000	11.42				
3855-82-1	1,4-Dichlorobenzene-d4	56300	13.352				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	VY1220SBS01		SDG No.:	P5316
Lab Sample ID:	VY1220SBS01		Matrix:	SOIL
Analytical Method:	SW8260		% Solid:	100
Sample Wt/Vol:	5	Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group4
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY020666.D	1		12/20/24 13:12	VY122024

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
75-01-4	Vinyl Chloride	15.8		0.77	2.50	5.00	ug/Kg
75-35-4	1,1-Dichloroethene	16.1		0.78	2.50	5.00	ug/Kg
67-64-1	Acetone	63.0		6.20	20.0	25.0	ug/Kg
1634-04-4	Methyl tert-butyl Ether	19.9		0.67	2.50	5.00	ug/Kg
75-09-2	Methylene Chloride	17.7		3.40	8.00	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	21.5		0.84	2.50	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	21.4		0.63	2.50	5.00	ug/Kg
78-93-3	2-Butanone	91.7		5.70	20.0	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	22.4		0.87	2.50	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	20.9		0.61	2.50	5.00	ug/Kg
67-66-3	Chloroform	19.1		0.67	4.00	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	21.7		0.78	2.50	5.00	ug/Kg
71-43-2	Benzene	22.1		0.72	2.50	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	21.0		0.61	2.50	5.00	ug/Kg
79-01-6	Trichloroethene	21.9		0.75	2.50	5.00	ug/Kg
108-88-3	Toluene	22.1		0.67	2.50	5.00	ug/Kg
127-18-4	Tetrachloroethene	21.9		0.89	2.50	5.00	ug/Kg
108-90-7	Chlorobenzene	22.3		0.74	2.50	5.00	ug/Kg
100-41-4	Ethyl Benzene	22.2		0.62	2.50	5.00	ug/Kg
1330-20-7	Total Xylenes	66.9		2.10	7.50	15.0	ug/Kg
103-65-1	n-propylbenzene	22.0		0.64	2.50	5.00	ug/Kg
98-06-6	tert-Butylbenzene	20.9		0.67	2.50	5.00	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	24.5		1.40	2.50	5.00	ug/Kg
135-98-8	sec-Butylbenzene	21.8		0.67	2.50	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	21.6		0.74	2.50	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	21.6		0.80	2.50	5.00	ug/Kg
104-51-8	n-Butylbenzene	22.3		0.63	2.50	5.00	ug/Kg
95-50-1	1,2-Dichlorobenzene	21.5		0.59	2.50	5.00	ug/Kg
123-91-1	1,4-Dioxane	370		42.5	80.0	100	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	43.1		71 - 136		86%	SPK: 50

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	VY1220SBS01		SDG No.:	P5316
Lab Sample ID:	VY1220SBS01		Matrix:	SOIL
Analytical Method:	SW8260		% Solid:	100
Sample Wt/Vol:	5	Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group4
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY020666.D	1		12/20/24 13:12	VY122024

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
1868-53-7	Dibromofluoromethane	46.1		78 - 119		92%	SPK: 50
2037-26-5	Toluene-d8	46.6		85 - 116		93%	SPK: 50
460-00-4	4-Bromofluorobenzene	44.2		79 - 119		88%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	157000	7.713				
540-36-3	1,4-Difluorobenzene	237000	8.615				
3114-55-4	Chlorobenzene-d5	208000	11.42				
3855-82-1	1,4-Dichlorobenzene-d4	117000	13.352				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	VY1226SBS01		SDG No.:	P5316
Lab Sample ID:	VY1226SBS01		Matrix:	SOIL
Analytical Method:	SW8260		% Solid:	100
Sample Wt/Vol:	5	Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group4
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY020715.D	1		12/26/24 14:32	VY122624

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
75-01-4	Vinyl Chloride	17.7		0.77	2.50	5.00	ug/Kg
75-35-4	1,1-Dichloroethene	19.1		0.78	2.50	5.00	ug/Kg
67-64-1	Acetone	94.4		6.20	20.0	25.0	ug/Kg
1634-04-4	Methyl tert-butyl Ether	19.6		0.67	2.50	5.00	ug/Kg
75-09-2	Methylene Chloride	20.7		3.40	8.00	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	19.0		0.84	2.50	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	19.7		0.63	2.50	5.00	ug/Kg
78-93-3	2-Butanone	110		5.70	20.0	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	19.7		0.87	2.50	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	19.3		0.61	2.50	5.00	ug/Kg
67-66-3	Chloroform	20.1		0.67	4.00	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	19.4		0.78	2.50	5.00	ug/Kg
71-43-2	Benzene	20.0		0.72	2.50	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	20.4		0.61	2.50	5.00	ug/Kg
79-01-6	Trichloroethene	19.4		0.75	2.50	5.00	ug/Kg
108-88-3	Toluene	20.3		0.67	2.50	5.00	ug/Kg
127-18-4	Tetrachloroethene	20.9		0.89	2.50	5.00	ug/Kg
108-90-7	Chlorobenzene	19.8		0.74	2.50	5.00	ug/Kg
100-41-4	Ethyl Benzene	20.2		0.62	2.50	5.00	ug/Kg
1330-20-7	Total Xylenes	62.3		2.10	7.50	15.0	ug/Kg
103-65-1	n-propylbenzene	20.0		0.64	2.50	5.00	ug/Kg
98-06-6	tert-Butylbenzene	19.8		0.67	2.50	5.00	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	20.0		1.40	2.50	5.00	ug/Kg
135-98-8	sec-Butylbenzene	20.0		0.67	2.50	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	19.7		0.74	2.50	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	19.9		0.80	2.50	5.00	ug/Kg
104-51-8	n-Butylbenzene	19.9		0.63	2.50	5.00	ug/Kg
95-50-1	1,2-Dichlorobenzene	20.3		0.59	2.50	5.00	ug/Kg
123-91-1	1,4-Dioxane	450		42.5	80.0	100	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	55.0		71 - 136		110%	SPK: 50

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	VY1226SBS01		SDG No.:	P5316
Lab Sample ID:	VY1226SBS01		Matrix:	SOIL
Analytical Method:	SW8260		% Solid:	100
Sample Wt/Vol:	5	Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group4
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY020715.D	1		12/26/24 14:32	VY122624

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
1868-53-7	Dibromofluoromethane	52.1		78 - 119		104%	SPK: 50
2037-26-5	Toluene-d8	50.6		85 - 116		101%	SPK: 50
460-00-4	4-Bromofluorobenzene	51.8		79 - 119		104%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	120000	7.72				
540-36-3	1,4-Difluorobenzene	166000	8.622				
3114-55-4	Chlorobenzene-d5	139000	11.42				
3855-82-1	1,4-Dichlorobenzene-d4	74000	13.353				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	VY1226SBSD01		SDG No.:	P5316
Lab Sample ID:	VY1226SBSD01		Matrix:	SOIL
Analytical Method:	SW8260		% Solid:	100
Sample Wt/Vol:	5	Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group4
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY020716.D	1		12/26/24 14:54	VY122624

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
75-01-4	Vinyl Chloride	18.1		0.77	2.50	5.00	ug/Kg
75-35-4	1,1-Dichloroethene	18.9		0.78	2.50	5.00	ug/Kg
67-64-1	Acetone	99.3		6.20	20.0	25.0	ug/Kg
1634-04-4	Methyl tert-butyl Ether	20.6		0.67	2.50	5.00	ug/Kg
75-09-2	Methylene Chloride	19.7		3.40	8.00	10.0	ug/Kg
156-60-5	trans-1,2-Dichloroethene	19.3		0.84	2.50	5.00	ug/Kg
75-34-3	1,1-Dichloroethane	20.0		0.63	2.50	5.00	ug/Kg
78-93-3	2-Butanone	110		5.70	20.0	25.0	ug/Kg
56-23-5	Carbon Tetrachloride	19.0		0.87	2.50	5.00	ug/Kg
156-59-2	cis-1,2-Dichloroethene	19.7		0.61	2.50	5.00	ug/Kg
67-66-3	Chloroform	19.9		0.67	4.00	5.00	ug/Kg
71-55-6	1,1,1-Trichloroethane	19.5		0.78	2.50	5.00	ug/Kg
71-43-2	Benzene	19.4		0.72	2.50	5.00	ug/Kg
107-06-2	1,2-Dichloroethane	19.5		0.61	2.50	5.00	ug/Kg
79-01-6	Trichloroethene	19.6		0.75	2.50	5.00	ug/Kg
108-88-3	Toluene	19.7		0.67	2.50	5.00	ug/Kg
127-18-4	Tetrachloroethene	19.4		0.89	2.50	5.00	ug/Kg
108-90-7	Chlorobenzene	20.1		0.74	2.50	5.00	ug/Kg
100-41-4	Ethyl Benzene	19.7		0.62	2.50	5.00	ug/Kg
1330-20-7	Total Xylenes	59.5		2.10	7.50	15.0	ug/Kg
103-65-1	n-propylbenzene	19.4		0.64	2.50	5.00	ug/Kg
98-06-6	tert-Butylbenzene	19.7		0.67	2.50	5.00	ug/Kg
95-63-6	1,2,4-Trimethylbenzene	19.7		1.40	2.50	5.00	ug/Kg
135-98-8	sec-Butylbenzene	19.5		0.67	2.50	5.00	ug/Kg
541-73-1	1,3-Dichlorobenzene	19.8		0.74	2.50	5.00	ug/Kg
106-46-7	1,4-Dichlorobenzene	19.4		0.80	2.50	5.00	ug/Kg
104-51-8	n-Butylbenzene	19.5		0.63	2.50	5.00	ug/Kg
95-50-1	1,2-Dichlorobenzene	20.0		0.59	2.50	5.00	ug/Kg
123-91-1	1,4-Dioxane	460		42.5	80.0	100	ug/Kg
SURROGATES							
17060-07-0	1,2-Dichloroethane-d4	57.3		71 - 136		115%	SPK: 50

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	VY1226SBSD01		SDG No.:	P5316
Lab Sample ID:	VY1226SBSD01		Matrix:	SOIL
Analytical Method:	SW8260		% Solid:	100
Sample Wt/Vol:	5	Units: g	Final Vol:	5000 uL
Soil Aliquot Vol:		uL	Test:	VOCMS Group4
GC Column:	RXI-624	ID : 0.25	Level :	LOW
Prep Method :				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VY020716.D	1		12/26/24 14:54	VY122624

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
1868-53-7	Dibromofluoromethane	53.2		78 - 119		106%	SPK: 50
2037-26-5	Toluene-d8	52.1		85 - 116		104%	SPK: 50
460-00-4	4-Bromofluorobenzene	52.9		79 - 119		106%	SPK: 50
INTERNAL STANDARDS							
363-72-4	Pentafluorobenzene	116000	7.713				
540-36-3	1,4-Difluorobenzene	164000	8.622				
3114-55-4	Chlorobenzene-d5	141000	11.42				
3855-82-1	1,4-Dichlorobenzene-d4	73700	13.353				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

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J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



CALIBRATION SUMMARY

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG No.: P5316
Instrument ID: MSVOA_Y Calibration Date(s): 12/17/2024 12/17/2024
Heated Purge: (Y/N) Y Calibration Time(s): 10:01 14:51
GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:		RRF010 = VY020613.D		RRF020 = VY020614.D		RRF050 = VY020615.D		RRF100 = VY020616.D		RRF150 = VY020617.D		RRF005 = VY020619.D	
COMPOUND	RRF010	RRF020	RRF050	RRF100	RRF150	RRF005	RRF	% RSD					
Vinyl Chloride	0.443	0.469	0.371	0.440	0.374	0.487	0.431	11.3					
1,1-Dichloroethene	0.701	0.637	0.589	0.638	0.528	0.667	0.627	9.7					
Acetone	0.141	0.107	0.098	0.110		0.168	0.125	23.2					
Methyl tert-butyl Ether	1.799	1.584	1.663	1.652	1.466	1.542	1.618	7.1					
Methylene Chloride	0.758	0.683	0.617	0.665	0.596	0.766	0.681	10.3					
trans-1,2-Dichloroethene	0.771	0.703	0.710	0.692	0.636	0.707	0.703	6.2					
1,1-Dichloroethane	1.401	1.307	1.323	1.300	1.173	1.333	1.306	5.7					
2-Butanone	0.245	0.191	0.197	0.195	0.166	0.228	0.204	13.9					
Carbon Tetrachloride	0.768	0.715	0.701	0.697	0.656	0.730	0.711	5.2					
cis-1,2-Dichloroethene	0.875	0.815	0.817	0.797	0.724	0.827	0.809	6.1					
Chloroform	1.768	1.465	1.378	1.302	1.186	2.069	1.528	21.6					
1,1,1-Trichloroethane	1.298	1.215	1.198	1.183	1.086	1.219	1.200	5.7					
Benzene	2.055	1.900	1.859	1.847	1.713	1.927	1.883	5.9					
1,2-Dichloroethane	0.546	0.499	0.500	0.498	0.452	0.502	0.500	6					
Trichloroethene	0.501	0.462	0.458	0.453	0.422	0.481	0.463	5.8					
Toluene	1.247	1.185	1.167	1.165	1.082	1.176	1.170	4.5					
Tetrachloroethene	0.505	0.464	0.452	0.446	0.422	0.533	0.470	8.7					
Chlorobenzene	1.501	1.397	1.374	1.381	1.293	1.441	1.398	5					
Ethyl Benzene	2.747	2.583	2.556	2.543	2.414	2.633	2.579	4.2					
m/p-Xylenes	1.031	0.951	0.953	0.942	0.892	0.984	0.959	4.8					
o-Xylene	0.956	0.892	0.898	0.887	0.842	0.894	0.895	4.1					
n-propylbenzene	5.566	5.397	5.283	5.151	4.837	5.307	5.257	4.7					
tert-Butylbenzene	3.378	3.288	3.215	3.178	2.992	3.188	3.206	4					
1,2,4-Trimethylbenzene	3.660	3.534	3.536	3.429	3.224	3.454	3.473	4.2					
sec-Butylbenzene	4.894	4.777	4.690	4.543	4.263	4.806	4.662	4.9					
1,3-Dichlorobenzene	1.982	1.912	1.864	1.832	1.702	1.966	1.876	5.5					
1,4-Dichlorobenzene	1.980	1.852	1.832	1.797	1.680	2.008	1.858	6.5					
n-Butylbenzene	3.755	3.736	3.749	3.599	3.393	3.625	3.643	3.8					
1,2-Dichlorobenzene	1.735	1.614	1.606	1.602	1.501	1.694	1.626	5					
1,2-Dichloroethane-d4	0.619	0.487	0.569	0.507	0.467	0.636	0.548	13					

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG No.: P5316
Instrument ID: MSVOA_Y Calibration Date(s): 12/17/2024 12/17/2024
Heated Purge: (Y/N) Y Calibration Time(s): 10:01 14:51
GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:		RRF010 = VY020613.D		RRF020 = VY020614.D		RRF050 = VY020615.D			
		RRF100 = VY020616.D		RRF150 = VY020617.D		RRF005 = VY020619.D			
COMPOUND	RRF010	RRF020	RRF050	RRF100	RRF150	RRF005	RRF	% RSD	
Dibromofluoromethane	0.385	0.328	0.360	0.325	0.313	0.404	0.352	10.4	
Toluene-d8	1.314	1.127	1.271	1.143	1.100	1.445	1.233	10.9	
4-Bromofluorobenzene	0.538	0.448	0.480	0.433	0.412	0.585	0.482	13.9	
1,4-Dioxane	3.173	2.476	2.673	2.757	2.467	2.462	2.668	10.4	

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG No.: P5316
Instrument ID: MSVOA_Y Calibration Date(s): 12/26/2024 12/26/2024
Heated Purge: (Y/N) Y Calibration Time(s): 09:31 11:51
GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:	RRF005 = VY020706.D	RRF010 = VY020707.D	RRF020 = VY020708.D	RRF050 = VY020709.D	RRF150 = VY020710.D	RRF100 = VY020711.D		
COMPOUND	RRF005	RRF010	RRF020	RRF050	RRF150	RRF100	RRF	% RSD
Vinyl Chloride	0.168	0.195	0.176	0.192	0.178	0.181	0.182	5.6
1,1-Dichloroethene	0.326	0.359	0.330	0.352	0.340	0.344	0.342	3.7
Acetone	0.050	0.068	0.045	0.054	0.048	0.046	0.052	16.8
Methyl tert-butyl Ether	0.880	1.004	0.922	1.015	0.942	0.951	0.952	5.3
Methylene Chloride	0.324	0.365	0.328	0.343	0.329	0.338	0.338	4.5
trans-1,2-Dichloroethene	0.339	0.378	0.356	0.391	0.368	0.378	0.368	5
1,1-Dichloroethane	0.571	0.661	0.596	0.620	0.591	0.620	0.609	5.1
2-Butanone	0.069	0.069	0.066	0.080	0.071	0.067	0.070	7
Carbon Tetrachloride	0.556	0.644	0.581	0.614	0.593	0.606	0.599	5
cis-1,2-Dichloroethene	0.419	0.460	0.426	0.462	0.432	0.447	0.441	4.1
Chloroform	0.839	0.821	0.753	0.788	0.742	0.762	0.784	5
1,1,1-Trichloroethane	0.814	0.897	0.826	0.859	0.816	0.831	0.840	3.8
Benzene	0.969	1.104	1.040	1.089	1.041	1.083	1.054	4.7
1,2-Dichloroethane	0.297	0.352	0.325	0.364	0.342	0.348	0.338	7
Trichloroethene	0.288	0.336	0.315	0.324	0.309	0.317	0.315	5.1
Toluene	0.654	0.751	0.722	0.745	0.723	0.741	0.723	4.9
Tetrachloroethene	0.308	0.360	0.348	0.351	0.337	0.346	0.342	5.3
Chlorobenzene	0.925	1.044	0.976	1.002	0.943	0.985	0.979	4.3
Ethyl Benzene	1.540	1.810	1.715	1.778	1.682	1.743	1.711	5.6
m/p-Xylenes	0.590	0.691	0.649	0.675	0.643	0.667	0.653	5.4
o-Xylene	0.552	0.666	0.639	0.650	0.603	0.632	0.624	6.6
n-propylbenzene	3.521	4.231	3.972	3.896	3.774	3.902	3.883	6
tert-Butylbenzene	2.487	2.888	2.751	2.727	2.632	2.687	2.695	4.9
1,2,4-Trimethylbenzene	2.513	2.946	2.860	2.888	2.777	2.867	2.809	5.5
sec-Butylbenzene	3.316	3.880	3.730	3.676	3.540	3.653	3.633	5.3
1,3-Dichlorobenzene	1.428	1.670	1.567	1.578	1.529	1.579	1.559	5.1
1,4-Dichlorobenzene	1.492	1.625	1.562	1.572	1.502	1.549	1.550	3.1
n-Butylbenzene	2.356	2.894	2.764	2.757	2.683	2.760	2.702	6.8
1,2-Dichlorobenzene	1.197	1.374	1.362	1.410	1.328	1.347	1.336	5.5
1,2-Dichloroethane-d4	0.335	0.402	0.313	0.516	0.433	0.457	0.410	18.7

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: TETR06
Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG No.: P5316
Instrument ID: MSVOA_Y Calibration Date(s): 12/26/2024 12/26/2024
Heated Purge: (Y/N) Y Calibration Time(s): 09:31 11:51
GC Column: RXI-624 ID: 0.25 (mm)

LAB FILE ID:		RRF005 = VY020706.D		RRF010 = VY020707.D		RRF020 = VY020708.D		
		RRF050 = VY020709.D		RRF150 = VY020710.D		RRF100 = VY020711.D		
COMPOUND	RRF005	RRF010	RRF020	RRF050	RRF150	RRF100	$\overline{\text{RRF}}$	% RSD
Dibromofluoromethane	0.235	0.274	0.232	0.319	0.284	0.307	0.275	13.1
Toluene-d8	0.733	0.883	0.733	1.227	1.093	1.158	0.971	22.4
4-Bromofluorobenzene	0.303	0.378	0.319	0.426	0.373	0.397	0.366	12.8
1,4-Dioxane	1.014	1.439	1.316	1.680	1.562	1.428	1.407	16.3

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG No.: P5316

Instrument ID: MSVOA_Y Calibration Date/Time: 12/20/2024 09:09

Lab File ID: VY020664.D Init. Calib. Date(s): 12/17/2024 12/17/2024

Heated Purge: (Y/N) Y Init. Calib. Time(s): 10:01 14:51

GC Column: RXI-624 ID: 0.25 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Vinyl Chloride	0.431	0.372		-13.69	20
1,1-Dichloroethene	0.627	0.646		3.03	20
Acetone	0.125	0.112		-10.4	20
Methyl tert-butyl Ether	1.618	1.677		3.65	20
Methylene Chloride	0.681	0.700		2.79	20
trans-1,2-Dichloroethene	0.703	0.742		5.55	20
1,1-Dichloroethane	1.306	1.384	0.1	5.97	20
2-Butanone	0.204	0.195		-4.41	20
Carbon Tetrachloride	0.711	0.793		11.53	20
cis-1,2-Dichloroethene	0.809	0.845		4.45	20
Chloroform	1.528	1.402		-8.25	20
1,1,1-Trichloroethane	1.200	1.268		5.67	20
Benzene	1.883	2.064		9.61	20
1,2-Dichloroethane	0.500	0.539		7.8	20
Trichloroethene	0.463	0.499		7.78	20
Toluene	1.170	1.291		10.34	20
Tetrachloroethene	0.470	0.508		8.09	20
Chlorobenzene	1.398	1.523	0.3	8.94	20
Ethyl Benzene	2.579	2.864		11.05	20
m/p-Xylenes	0.959	1.049		9.39	20
o-Xylene	0.895	0.981		9.61	20
n-propylbenzene	5.257	5.794		10.22	20
tert-Butylbenzene	3.206	3.568		11.29	20
1,2,4-Trimethylbenzene	3.473	3.805		9.56	20
sec-Butylbenzene	4.662	5.155		10.57	20
1,3-Dichlorobenzene	1.876	2.012		7.25	20
1,4-Dichlorobenzene	1.858	1.956		5.27	20
n-Butylbenzene	3.643	4.041		10.93	20
1,2-Dichlorobenzene	1.626	1.718		5.66	20
1,2-Dichloroethane-d4	0.548	0.442		-19.34	20
Dibromofluoromethane	0.352	0.306		-13.07	20
Toluene-d8	1.233	1.077		-12.65	20
4-Bromofluorobenzene	0.482	0.406		-15.77	20
1,4-Dioxane	2.668	2.620	0.05	-1.8	50

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG No.: P5316

Instrument ID: MSVOA_Y Calibration Date/Time: 12/20/2024 19:35

Lab File ID: VY020682.D Init. Calib. Date(s): 12/17/2024 12/17/2024

Heated Purge: (Y/N) Y Init. Calib. Time(s): 10:01 14:51

GC Column: RXI-624 ID: 0.25 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Vinyl Chloride	0.431	0.262		-39.21	50
1,1-Dichloroethene	0.627	0.500		-20.25	50
Acetone	0.125	0.087		-30.4	50
Methyl tert-butyl Ether	1.618	1.685		4.14	50
Methylene Chloride	0.681	0.659		-3.23	50
trans-1,2-Dichloroethene	0.703	0.713		1.42	50
1,1-Dichloroethane	1.306	1.366	0.1	4.59	50
2-Butanone	0.204	0.202		-0.98	50
Carbon Tetrachloride	0.711	0.692		-2.67	50
cis-1,2-Dichloroethene	0.809	0.836		3.34	50
Chloroform	1.528	1.423		-6.87	50
1,1,1-Trichloroethane	1.200	1.204		0.33	50
Benzene	1.883	1.905		1.17	50
1,2-Dichloroethane	0.500	0.515		3	50
Trichloroethene	0.463	0.463		0	50
Toluene	1.170	1.198		2.39	50
Tetrachloroethene	0.470	0.443		-5.74	50
Chlorobenzene	1.398	1.409	0.3	0.79	50
Ethyl Benzene	2.579	2.542		-1.43	50
m/p-Xylenes	0.959	0.944		-1.56	50
o-Xylene	0.895	0.891		-0.45	50
n-propylbenzene	5.257	4.958		-5.69	50
tert-Butylbenzene	3.206	3.020		-5.8	50
1,2,4-Trimethylbenzene	3.473	3.335		-3.97	50
sec-Butylbenzene	4.662	4.327		-7.19	50
1,3-Dichlorobenzene	1.876	1.803		-3.89	50
1,4-Dichlorobenzene	1.858	1.784		-3.98	50
n-Butylbenzene	3.643	3.417		-6.2	50
1,2-Dichlorobenzene	1.626	1.586		-2.46	50
1,2-Dichloroethane-d4	0.548	0.472		-13.87	50
Dibromofluoromethane	0.352	0.311		-11.65	50
Toluene-d8	1.233	1.049		-14.92	50
4-Bromofluorobenzene	0.482	0.406		-15.77	50
1,4-Dioxane	2.668	2.853	0.05	6.93	50

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG No.: P5316

Instrument ID: MSVOA_Y Calibration Date/Time: 12/26/2024 19:34

Lab File ID: VY020728.D Init. Calib. Date(s): 12/26/2024 12/26/2024

Heated Purge: (Y/N) Y Init. Calib. Time(s): 09:31 11:51

GC Column: RXI-624 ID: 0.25 (mm)

COMPOUND	RRF	RRF050	MIN RRF	%D	MAX%D
Vinyl Chloride	0.182	0.179		-1.65	50
1,1-Dichloroethene	0.342	0.342		0	50
Acetone	0.052	0.049		-5.77	50
Methyl tert-butyl Ether	0.952	0.995		4.52	50
Methylene Chloride	0.338	0.368		8.88	50
trans-1,2-Dichloroethene	0.368	0.389		5.71	50
1,1-Dichloroethane	0.609	0.649	0.1	6.57	50
2-Butanone	0.070	0.077		10	50
Carbon Tetrachloride	0.599	0.539		-10.18	50
cis-1,2-Dichloroethene	0.441	0.465		5.44	50
Chloroform	0.784	0.803		2.42	50
1,1,1-Trichloroethane	0.840	0.815		-2.98	50
Benzene	1.054	1.074		1.9	50
1,2-Dichloroethane	0.338	0.338		0	50
Trichloroethene	0.315	0.307		-2.54	50
Toluene	0.723	0.732		1.25	50
Tetrachloroethene	0.342	0.319		-6.72	50
Chlorobenzene	0.979	0.970	0.3	-0.92	50
Ethyl Benzene	1.711	1.696		-0.88	50
m/p-Xylenes	0.653	0.644		-1.38	50
o-Xylene	0.624	0.616		-1.28	50
n-propylbenzene	3.883	3.687		-5.05	50
tert-Butylbenzene	2.695	2.503		-7.12	50
1,2,4-Trimethylbenzene	2.809	2.733		-2.71	50
sec-Butylbenzene	3.633	3.391		-6.66	50
1,3-Dichlorobenzene	1.559	1.481		-5	50
1,4-Dichlorobenzene	1.550	1.470		-5.16	50
n-Butylbenzene	2.702	2.492		-7.77	50
1,2-Dichlorobenzene	1.336	1.313		-1.72	50
1,2-Dichloroethane-d4	0.410	0.485		18.29	50
Dibromofluoromethane	0.275	0.305		10.91	50
Toluene-d8	0.971	1.170		20.49	50
4-Bromofluorobenzene	0.366	0.411		12.3	50
1,4-Dioxane	1.407	1.590	0.05	13.01	50

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

LAB CHRONICLE

OrderID:	P5316	OrderDate:	12/17/2024 3:44:00 PM
Client:	Tetra Tech NUS, Inc.	Project:	CTO WE13
Contact:	Ernie Wu	Location:	L51,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P5316-01	TT-304-IDWSO-20241 217-1	SOIL	SVOCMS Group2	8270E	12/17/24	12/18/24	12/20/24	12/17/24



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

Hit Summary Sheet
SW-846

SDG No.: P5316
Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID :				0.000					
Total Svoc :					0.00				
Total Concentration:					0.00				



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	12/17/24	
Project:	CTO WE13		Date Received:	12/17/24	
Client Sample ID:	TT-304-IDWSO-20241217-1		SDG No.:	P5316	
Lab Sample ID:	P5316-01		Matrix:	SOIL	
Analytical Method:	SW8270		% Solid:	68.6	
Sample Wt/Vol:	30.04	Units: g	Final Vol:	1000	uL
Soil Aliquot Vol:		uL	Test:	SVOCMS Group2	
Extraction Type :		Decanted : N	Level :	LOW	
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N	PH :
Prep Method :	SW3541				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF140945.D	1	12/18/24 11:35	12/20/24 12:51	PB165705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
108-95-2	Phenol	190	U	120	190	250	ug/Kg
95-48-7	2-Methylphenol	190	U	120	190	250	ug/Kg
65794-96-9	3+4-Methylphenols	390	U	120	390	480	ug/Kg
91-20-3	Naphthalene	190	U	120	190	250	ug/Kg
208-96-8	Acenaphthylene	190	U	130	190	250	ug/Kg
83-32-9	Acenaphthene	190	U	120	190	250	ug/Kg
86-73-7	Fluorene	190	U	120	190	250	ug/Kg
87-86-5	Pentachlorophenol	390	U	110	390	480	ug/Kg
120-12-7	Anthracene	190	U	120	190	250	ug/Kg
206-44-0	Fluoranthene	190	U	120	190	250	ug/Kg
129-00-0	Pyrene	190	U	120	190	250	ug/Kg
56-55-3	Benzo(a)anthracene	190	U	120	190	250	ug/Kg
218-01-9	Chrysene	190	U	120	190	250	ug/Kg
205-99-2	Benzo(b)fluoranthene	190	U	120	190	250	ug/Kg
207-08-9	Benzo(k)fluoranthene	190	U	120	190	250	ug/Kg
50-32-8	Benzo(a)pyrene	190	U	140	190	250	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	190	U	110	190	250	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	190	U	120	190	250	ug/Kg
191-24-2	Benzo(g,h,i)perylene	190	U	120	190	250	ug/Kg
SURROGATES							
367-12-4	2-Fluorophenol	92.6		35 - 115		62%	SPK: 150
13127-88-3	Phenol-d6	97.5		34 - 127		65%	SPK: 150
4165-60-0	Nitrobenzene-d5	59.0		37 - 122		59%	SPK: 100
321-60-8	2-Fluorobiphenyl	56.2		44 - 115		56%	SPK: 100
118-79-6	2,4,6-Tribromophenol	86.1		39 - 132		57%	SPK: 150
1718-51-0	Terphenyl-d14	48.0	*	54 - 127		48%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	57900		6.845			
1146-65-2	Naphthalene-d8	221000		8.128			

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	12/17/24	
Project:	CTO WE13		Date Received:	12/17/24	
Client Sample ID:	TT-304-IDWSO-20241217-1		SDG No.:	P5316	
Lab Sample ID:	P5316-01		Matrix:	SOIL	
Analytical Method:	SW8270		% Solid:	68.6	
Sample Wt/Vol:	30.04	Units: g	Final Vol:	1000	uL
Soil Aliquot Vol:		uL	Test:	SVOCMS Group2	
Extraction Type :		Decanted : N	Level :	LOW	
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N	PH :
Prep Method :	SW3541				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF140945.D	1	12/18/24 11:35	12/20/24 12:51	PB165705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
15067-26-2	Acenaphthene-d10	123000	9.886				
1517-22-2	Phenanthrene-d10	210000	11.374				
1719-03-5	Chrysene-d12	174000	14.033				
1520-96-3	Perylene-d12	136000	15.533				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



QC SUMMARY

Surrogate Summary

SW-846

SDG No.: P5316

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270E

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
P5306-09MS	OU4-VSL-11-121224MS	2-Fluorophenol	150	131	88		35	115
		Phenol-d6	150	134	90		34	127
		Nitrobenzene-d5	100	89.0	89		37	122
		2-Fluorobiphenyl	100	84.0	84		44	115
		2,4,6-Tribromophenol	150	122	82		39	132
		Terphenyl-d14	100	91.0	91		54	127
P5306-09MSD	OU4-VSL-11-121224MSD	2-Fluorophenol	150	142	95		35	115
		Phenol-d6	150	140	94		34	127
		Nitrobenzene-d5	100	89.7	90		37	122
		2-Fluorobiphenyl	100	86.8	87		44	115
		2,4,6-Tribromophenol	150	134	90		39	132
		Terphenyl-d14	100	92.3	92		54	127
P5316-01	TT-304-IDWSO-20241217-1	2-Fluorophenol	150	92.6	62		35	115
		Phenol-d6	150	97.5	65		34	127
		Nitrobenzene-d5	100	59.0	59		37	122
		2-Fluorobiphenyl	100	56.2	56		44	115
		2,4,6-Tribromophenol	150	86.1	57		39	132
		Terphenyl-d14	100	48.0	48	*	54	127
PB165705BL	PB165705BL	2-Fluorophenol	150	150	100		35	115
		Phenol-d6	150	153	102		34	127
		Nitrobenzene-d5	100	107	107		37	122
		2-Fluorobiphenyl	100	103	103		44	115
		2,4,6-Tribromophenol	150	146	97		39	132
		Terphenyl-d14	100	110	110		54	127
PB165705BS	PB165705BS	2-Fluorophenol	150	143	96		35	115
		Phenol-d6	150	136	91		34	127
		Nitrobenzene-d5	100	91.6	92		37	122
		2-Fluorobiphenyl	100	105	105		44	115
		2,4,6-Tribromophenol	150	135	90		39	132
		Terphenyl-d14	100	121	121		54	127

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: P5316

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8270E

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Low	Limits High	RPD
Lab Sample ID: P5306-09MS		Client Sample ID: OU4-VSL-11-121224MS		DataFile: BF140948.D							
Phenol	1800	0	2000	ug/Kg	111				34	121	
2-Methylphenol	1800	0	1900	ug/Kg	106				32	122	
3+4-Methylphenols	1800	0	2000	ug/Kg	111				34	119	
Naphthalene	1800	0	1800	ug/Kg	100				35	123	
Acenaphthylene	1800	0	2000	ug/Kg	111				32	132	
Acenaphthene	1800	0	1900	ug/Kg	106				40	123	
Fluorene	1800	0	1800	ug/Kg	100				43	125	
Pentachlorophenol	3500	0	2800	ug/Kg	80				25	133	
Anthracene	1800	0	1900	ug/Kg	106				47	123	
Fluoranthene	1800	0	1700	ug/Kg	94				50	127	
Pyrene	1800	0	2000	ug/Kg	111				47	127	
Benzo(a)anthracene	1800	0	1900	ug/Kg	106				49	126	
Chrysene	1800	0	1800	ug/Kg	100				50	124	
Benzo(b)fluoranthene	1800	0	1700	ug/Kg	94				45	132	
Benzo(k)fluoranthene	1800	0	2000	ug/Kg	111				47	132	
Benzo(a)pyrene	1800	0	2000	ug/Kg	111				45	129	
Indeno(1,2,3-cd)pyrene	1800	0	2400	ug/Kg	133				45	133	
Dibenz(a,h)anthracene	1800	0	2300	ug/Kg	128				45	134	
Benzo(g,h,i)perylene	1800	0	2200	ug/Kg	122				43	134	

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: P5316

Client: Tetra Tech NUS, Inc.

Analytical Method: SW8270E

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Low	Limits High	RPD
Lab Sample ID: P5306-09MSD		Client Sample ID: OU4-VSL-11-121224MSD		DataFile: BF140949.D							
Phenol	1800	0	2100	ug/Kg	117	5			34	121	20
2-Methylphenol	1800	0	2000	ug/Kg	111	5			32	122	20
3+4-Methylphenols	1800	0	2000	ug/Kg	111	0			34	119	20
Naphthalene	1800	0	1900	ug/Kg	106	6			35	123	20
Acenaphthylene	1800	0	2100	ug/Kg	117	5			32	132	20
Acenaphthene	1800	0	2000	ug/Kg	111	5			40	123	20
Fluorene	1800	0	1900	ug/Kg	106	6			43	125	20
Pentachlorophenol	3600	0	3000	ug/Kg	83	4			25	133	20
Anthracene	1800	0	2200	ug/Kg	122	14			47	123	20
Fluoranthene	1800	0	2000	ug/Kg	111	17			50	127	20
Pyrene	1800	0	2000	ug/Kg	111	0			47	127	20
Benzo(a)anthracene	1800	0	1900	ug/Kg	106	0			49	126	20
Chrysene	1800	0	1900	ug/Kg	106	6			50	124	20
Benzo(b)fluoranthene	1800	0	1900	ug/Kg	106	12			45	132	20
Benzo(k)fluoranthene	1800	0	2000	ug/Kg	111	0			47	132	20
Benzo(a)pyrene	1800	0	2100	ug/Kg	117	5			45	129	20
Indeno(1,2,3-cd)pyrene	1800	0	2400	ug/Kg	133	0			45	133	20
Dibenz(a,h)anthracene	1800	0	2400	ug/Kg	133	4			45	134	20
Benzo(g,h,i)perylene	1800	0	2200	ug/Kg	122	0			43	134	20

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P5316

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270E

DataFile: BF140944.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB165705BS	Phenol	1700	1600	ug/Kg	94				34	121	
	2-Methylphenol	1700	1600	ug/Kg	94				32	122	
	3+4-Methylphenols	1700	1700	ug/Kg	100				34	119	
	Naphthalene	1700	1600	ug/Kg	94				35	123	
	Acenaphthylene	1700	1800	ug/Kg	106				32	132	
	Acenaphthene	1700	1800	ug/Kg	106				40	123	
	Fluorene	1700	1500	ug/Kg	88				43	125	
	Pentachlorophenol	3300	2900	ug/Kg	88				25	133	
	Anthracene	1700	2000	ug/Kg	118				47	123	
	Fluoranthene	1700	1900	ug/Kg	112				50	127	
	Pyrene	1700	1900	ug/Kg	112				47	127	
	Benzo(a)anthracene	1700	1800	ug/Kg	106				49	126	
	Chrysene	1700	1800	ug/Kg	106				50	124	
	Benzo(b)fluoranthene	1700	1800	ug/Kg	106				45	132	
	Benzo(k)fluoranthene	1700	1800	ug/Kg	106				47	132	
	Benzo(a)pyrene	1700	1900	ug/Kg	112				45	129	
	Indeno(1,2,3-cd)pyrene	1700	2200	ug/Kg	129				45	133	
	Dibenz(a,h)anthracene	1700	2100	ug/Kg	124				45	134	
	Benzo(g,h,i)perylene	1700	2100	ug/Kg	124				43	134	

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB165705BL

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: P5316

SAS No.: P5316 SDG NO.: P5316

Lab File ID: BF140943.D

Lab Sample ID: PB165705BL

Instrument ID: BNA_F

Date Extracted: 12/18/2024

Matrix: (soil/water) SOIL

Date Analyzed: 12/20/2024

Level: (low/med) LOW

Time Analyzed: 11:41

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB165705BS	PB165705BS	BF140944.D	12/20/2024
TT-304-IDWSO-20241217-1	P5316-01	BF140945.D	12/20/2024
OU4-VSL-11-121224MS	P5306-09MS	BF140948.D	12/20/2024
OU4-VSL-11-121224MSD	P5306-09MSD	BF140949.D	12/20/2024

COMMENTS: _____

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: P5316 SDG NO.: P5316

Lab File ID: BF140854.D

DFTPP Injection Date: 12/16/2024

Instrument ID: BNA_F

DFTPP Injection Time: 11:21

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	35.6
68	Less than 2.0% of mass 69	0.7 (1.9) 1
69	Mass 69 relative abundance	36
70	Less than 2.0% of mass 69	0.2 (0.6) 1
127	10.0 - 80.0% of mass 198	48.5
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 60.0% of mass 198	28.9
365	Greater than 1% of mass 198	3.7
441	Present, but less than mass 443	13.6
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	16.9 (19.4) 2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDICC2.5	SSTDICC2.5	BF140855.D	12/16/2024	12:13
SSTDICC005	SSTDICC005	BF140856.D	12/16/2024	12:39
SSTDICC010	SSTDICC010	BF140857.D	12/16/2024	13:05
SSTDICC020	SSTDICC020	BF140858.D	12/16/2024	14:00
SSTDICCC040	SSTDICCC040	BF140859.D	12/16/2024	14:26
SSTDICC050	SSTDICC050	BF140860.D	12/16/2024	15:23
SSTDICC060	SSTDICC060	BF140861.D	12/16/2024	15:49
SSTDICC080	SSTDICC080	BF140862.D	12/16/2024	16:15

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: P5316

SDG NO.: P5316

Lab File ID: BF140941.D

DFTPP Injection Date: 12/20/2024

Instrument ID: BNA_F

DFTPP Injection Time: 09:47

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	29.6
68	Less than 2.0% of mass 69	0.6 (1.9) 1
69	Mass 69 relative abundance	32.2
70	Less than 2.0% of mass 69	0.0 (0.0) 1
127	10.0 - 80.0% of mass 198	44.8
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.6
275	10.0 - 60.0% of mass 198	30.8
365	Greater than 1% of mass 198	3.7
441	Present, but less than mass 443	16.2
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	18.7 (18.7) 2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC040	SSTDCCC040	BF140942.D	12/20/2024	11:15
PB165705BL	PB165705BL	BF140943.D	12/20/2024	11:41
PB165705BS	PB165705BS	BF140944.D	12/20/2024	12:07
TT-304-IDWSO-20241217-1	P5316-01	BF140945.D	12/20/2024	12:51
OU4-VSL-11-121224MS	P5306-09MS	BF140948.D	12/20/2024	14:10
OU4-VSL-11-121224MSD	P5306-09MSD	BF140949.D	12/20/2024	14:36
SSTDCCC040EC	SSTDCCC040	BF140959.D	12/20/2024	19:24

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

EPA Sample No.: SSTDCCC040 Date Analyzed: 12/20/2024

Lab File ID: BF140942.D Time Analyzed: 11:15

Instrument ID: BNA_F GC Column: DB-UI ID: 0.18 (mm)

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	74814	6.851	271589	8.13	162319	9.89
UPPER LIMIT	149628	7.351	543178	8.634	324638	10.386
LOWER LIMIT	37407	6.351	135795	7.634	81159.5	9.386
EPA SAMPLE NO.						
01 PB165705BL	64872	6.85	228592	8.13	136709	9.89
02 PB165705BS	71247	6.85	255665	8.13	141292	9.89
03 TT-304-IDWSO-20241217-1	57889	6.85	220576	8.13	122567	9.89
04 OU4-VSL-11-121224MS	55385	6.85	209218	8.13	115521	9.89
05 OU4-VSL-11-121224MSD	45949	6.85	175670	8.13	102157	9.89

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.

* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

EPA Sample No.: SSTDCCC040 Date Analyzed: 12/20/2024

Lab File ID: BF140942.D Time Analyzed: 11:15

Instrument ID: BNA_F GC Column: DB-UI ID: 0.18 (mm)

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	282660	11.38	164316	14.033	129329	15.533
UPPER LIMIT	565320	11.88	328632	14.533	258658	16.033
LOWER LIMIT	141330	10.88	82158	13.533	64664.5	15.033
EPA SAMPLE NO.						
01 PB165705BL	270487	11.38	174504	14.03	118300	15.52
02 PB165705BS	237962	11.38	149220	14.03	113763	15.52
03 TT-304-IDWSO-20241217-1	209736	11.37	174197	14.03	135546	15.53
04 OU4-VSL-11-121224MS	219277	11.38	133308	14.03	114231	15.52
05 OU4-VSL-11-121224MSD	188148	11.38	131096	14.05	113765	15.56

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.

* Values outside of QC limits.



QC SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:		
Project:	CTO WE13		Date Received:		
Client Sample ID:	PB165705BL		SDG No.:	P5316	
Lab Sample ID:	PB165705BL		Matrix:	SOIL	
Analytical Method:	SW8270		% Solid:	100	
Sample Wt/Vol:	30.02	Units: g	Final Vol:	1000	uL
Soil Aliquot Vol:		uL	Test:	SVOCMS Group2	
Extraction Type :		Decanted : N	Level :	LOW	
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N	PH :
Prep Method :	SW3541				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF140943.D	1	12/18/24 08:56	12/20/24 11:41	PB165705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
108-95-2	Phenol	130	U	82.8	130	170	ug/Kg
95-48-7	2-Methylphenol	130	U	80.5	130	170	ug/Kg
65794-96-9	3+4-Methylphenols	270	U	79.7	270	330	ug/Kg
91-20-3	Naphthalene	130	U	82.5	130	170	ug/Kg
208-96-8	Acenaphthylene	130	U	86.4	130	170	ug/Kg
83-32-9	Acenaphthene	130	U	81.0	130	170	ug/Kg
86-73-7	Fluorene	130	U	85.4	130	170	ug/Kg
87-86-5	Pentachlorophenol	270	U	77.2	270	330	ug/Kg
120-12-7	Anthracene	130	U	84.3	130	170	ug/Kg
206-44-0	Fluoranthene	130	U	81.6	130	170	ug/Kg
129-00-0	Pyrene	130	U	82.9	130	170	ug/Kg
56-55-3	Benzo(a)anthracene	130	U	80.6	130	170	ug/Kg
218-01-9	Chrysene	130	U	79.4	130	170	ug/Kg
205-99-2	Benzo(b)fluoranthene	130	U	81.0	130	170	ug/Kg
207-08-9	Benzo(k)fluoranthene	130	U	82.5	130	170	ug/Kg
50-32-8	Benzo(a)pyrene	130	U	92.9	130	170	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	130	U	78.0	130	170	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	130	U	81.1	130	170	ug/Kg
191-24-2	Benzo(g,h,i)perylene	130	U	80.0	130	170	ug/Kg
SURROGATES							
367-12-4	2-Fluorophenol	150		35 - 115		100%	SPK: 150
13127-88-3	Phenol-d6	153		34 - 127		102%	SPK: 150
4165-60-0	Nitrobenzene-d5	107		37 - 122		107%	SPK: 100
321-60-8	2-Fluorobiphenyl	103		44 - 115		103%	SPK: 100
118-79-6	2,4,6-Tribromophenol	146		39 - 132		97%	SPK: 150
1718-51-0	Terphenyl-d14	110		54 - 127		110%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	64900	6.845				
1146-65-2	Naphthalene-d8	229000	8.128				

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	PB165705BL		SDG No.:	P5316
Lab Sample ID:	PB165705BL		Matrix:	SOIL
Analytical Method:	SW8270		% Solid:	100
Sample Wt/Vol:	30.02	Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:		uL	Test:	SVOCMS Group2
Extraction Type :		Decanted : N	Level :	LOW
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF140943.D	1	12/18/24 08:56	12/20/24 11:41	PB165705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
15067-26-2	Acenaphthene-d10	137000	9.886				
1517-22-2	Phenanthrene-d10	270000	11.375				
1719-03-5	Chrysene-d12	175000	14.027				
1520-96-3	Perylene-d12	118000	15.521				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:		
Project:	CTO WE13		Date Received:		
Client Sample ID:	PB165705BS		SDG No.:	P5316	
Lab Sample ID:	PB165705BS		Matrix:	SOIL	
Analytical Method:	SW8270		% Solid:	100	
Sample Wt/Vol:	30.01	Units: g	Final Vol:	1000	uL
Soil Aliquot Vol:		uL	Test:	SVOCMS Group2	
Extraction Type :		Decanted : N	Level :	LOW	
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N	PH :
Prep Method :	SW3541				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF140944.D	1	12/18/24 08:56	12/20/24 12:07	PB165705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
108-95-2	Phenol	1600		82.9	130	170	ug/Kg
95-48-7	2-Methylphenol	1600		80.6	130	170	ug/Kg
65794-96-9	3+4-Methylphenols	1700		79.8	270	330	ug/Kg
91-20-3	Naphthalene	1600		82.6	130	170	ug/Kg
208-96-8	Acenaphthylene	1800		86.5	130	170	ug/Kg
83-32-9	Acenaphthene	1800		81.1	130	170	ug/Kg
86-73-7	Fluorene	1500		85.5	130	170	ug/Kg
87-86-5	Pentachlorophenol	2900	E	77.3	270	330	ug/Kg
120-12-7	Anthracene	2000		84.4	130	170	ug/Kg
206-44-0	Fluoranthene	1900		81.7	130	170	ug/Kg
129-00-0	Pyrene	1900		83.0	130	170	ug/Kg
56-55-3	Benzo(a)anthracene	1800		80.7	130	170	ug/Kg
218-01-9	Chrysene	1800		79.5	130	170	ug/Kg
205-99-2	Benzo(b)fluoranthene	1800		81.1	130	170	ug/Kg
207-08-9	Benzo(k)fluoranthene	1800		82.6	130	170	ug/Kg
50-32-8	Benzo(a)pyrene	1900		93.0	130	170	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	2200		78.1	130	170	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	2100		81.2	130	170	ug/Kg
191-24-2	Benzo(g,h,i)perylene	2100		80.1	130	170	ug/Kg
SURROGATES							
367-12-4	2-Fluorophenol	143		35 - 115		96%	SPK: 150
13127-88-3	Phenol-d6	136		34 - 127		91%	SPK: 150
4165-60-0	Nitrobenzene-d5	91.6		37 - 122		92%	SPK: 100
321-60-8	2-Fluorobiphenyl	105		44 - 115		105%	SPK: 100
118-79-6	2,4,6-Tribromophenol	135		39 - 132		90%	SPK: 150
1718-51-0	Terphenyl-d14	121		54 - 127		121%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	71200	6.851				
1146-65-2	Naphthalene-d8	256000	8.128				

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:		
Project:	CTO WE13		Date Received:		
Client Sample ID:	PB165705BS		SDG No.:	P5316	
Lab Sample ID:	PB165705BS		Matrix:	SOIL	
Analytical Method:	SW8270		% Solid:	100	
Sample Wt/Vol:	30.01	Units: g	Final Vol:	1000	uL
Soil Aliquot Vol:		uL	Test:	SVOCMS Group2	
Extraction Type :		Decanted : N	Level :	LOW	
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N	PH :
Prep Method :	SW3541				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF140944.D	1	12/18/24 08:56	12/20/24 12:07	PB165705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
15067-26-2	Acenaphthene-d10	141000	9.886				
1517-22-2	Phenanthrene-d10	238000	11.38				
1719-03-5	Chrysene-d12	149000	14.033				
1520-96-3	Perylene-d12	114000	15.521				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	12/12/24
Project:	CTO WE13	Date Received:	12/17/24
Client Sample ID:	OU4-VSL-11-121224MS	SDG No.:	P5316
Lab Sample ID:	P5306-09MS	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	93.6
Sample Wt/Vol:	30.1 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group2
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF140948.D	1	12/18/24 08:56	12/20/24 14:10	PB165705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
108-95-2	Phenol	2000		88.3	140	180	ug/Kg
95-48-7	2-Methylphenol	1900		85.8	140	180	ug/Kg
65794-96-9	3+4-Methylphenols	2000		85.0	290	350	ug/Kg
91-20-3	Naphthalene	1800		88.0	140	180	ug/Kg
208-96-8	Acenaphthylene	2000		92.1	140	180	ug/Kg
83-32-9	Acenaphthene	1900		86.4	140	180	ug/Kg
86-73-7	Fluorene	1800		91.0	140	180	ug/Kg
87-86-5	Pentachlorophenol	2800		82.3	290	350	ug/Kg
120-12-7	Anthracene	1900		89.9	140	180	ug/Kg
206-44-0	Fluoranthene	1700		87.0	140	180	ug/Kg
129-00-0	Pyrene	2000		88.4	140	180	ug/Kg
56-55-3	Benzo(a)anthracene	1900		85.9	140	180	ug/Kg
218-01-9	Chrysene	1800		84.7	140	180	ug/Kg
205-99-2	Benzo(b)fluoranthene	1700		86.4	140	180	ug/Kg
207-08-9	Benzo(k)fluoranthene	2000		88.0	140	180	ug/Kg
50-32-8	Benzo(a)pyrene	2000		99.0	140	180	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	2400		83.2	140	180	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	2300		86.5	140	180	ug/Kg
191-24-2	Benzo(g,h,i)perylene	2200		85.3	140	180	ug/Kg
SURROGATES							
367-12-4	2-Fluorophenol	131		35 - 115		88%	SPK: 150
13127-88-3	Phenol-d6	134		34 - 127		90%	SPK: 150
4165-60-0	Nitrobenzene-d5	89.0		37 - 122		89%	SPK: 100
321-60-8	2-Fluorobiphenyl	84.0		44 - 115		84%	SPK: 100
118-79-6	2,4,6-Tribromophenol	122		39 - 132		82%	SPK: 150
1718-51-0	Terphenyl-d14	91.0		54 - 127		91%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	55400		6.851			
1146-65-2	Naphthalene-d8	209000		8.128			

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	12/12/24
Project:	CTO WE13		Date Received:	12/17/24
Client Sample ID:	OU4-VSL-11-121224MS		SDG No.:	P5316
Lab Sample ID:	P5306-09MS		Matrix:	SOIL
Analytical Method:	SW8270		% Solid:	93.6
Sample Wt/Vol:	30.1	Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:		uL	Test:	SVOCMS Group2
Extraction Type :		Decanted : N	Level :	LOW
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF140948.D	1	12/18/24 08:56	12/20/24 14:10	PB165705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
15067-26-2	Acenaphthene-d10	116000	9.886				
1517-22-2	Phenanthrene-d10	219000	11.38				
1719-03-5	Chrysene-d12	133000	14.033				
1520-96-3	Perylene-d12	114000	15.521				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	12/12/24
Project:	CTO WE13	Date Received:	12/17/24
Client Sample ID:	OU4-VSL-11-121224MSD	SDG No.:	P5316
Lab Sample ID:	P5306-09MSD	Matrix:	SOIL
Analytical Method:	SW8270	% Solid:	93.6
Sample Wt/Vol:	30.08 Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOCMS Group2
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF140949.D	1	12/18/24 08:56	12/20/24 14:36	PB165705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
108-95-2	Phenol	2100		88.3	140	180	ug/Kg
95-48-7	2-Methylphenol	2000		85.9	140	180	ug/Kg
65794-96-9	3+4-Methylphenols	2000		85.0	290	350	ug/Kg
91-20-3	Naphthalene	1900		88.0	140	180	ug/Kg
208-96-8	Acenaphthylene	2100		92.2	140	180	ug/Kg
83-32-9	Acenaphthene	2000		86.4	140	180	ug/Kg
86-73-7	Fluorene	1900		91.1	140	180	ug/Kg
87-86-5	Pentachlorophenol	3000	E	82.4	290	350	ug/Kg
120-12-7	Anthracene	2200		89.9	140	180	ug/Kg
206-44-0	Fluoranthene	2000		87.1	140	180	ug/Kg
129-00-0	Pyrene	2000		88.4	140	180	ug/Kg
56-55-3	Benzo(a)anthracene	1900		86.0	140	180	ug/Kg
218-01-9	Chrysene	1900		84.7	140	180	ug/Kg
205-99-2	Benzo(b)fluoranthene	1900		86.4	140	180	ug/Kg
207-08-9	Benzo(k)fluoranthene	2000		88.0	140	180	ug/Kg
50-32-8	Benzo(a)pyrene	2100		99.1	140	180	ug/Kg
193-39-5	Indeno(1,2,3-cd)pyrene	2400		83.2	140	180	ug/Kg
53-70-3	Dibenzo(a,h)anthracene	2400		86.5	140	180	ug/Kg
191-24-2	Benzo(g,h,i)perylene	2200		85.3	140	180	ug/Kg
SURROGATES							
367-12-4	2-Fluorophenol	142		35 - 115		95%	SPK: 150
13127-88-3	Phenol-d6	140		34 - 127		94%	SPK: 150
4165-60-0	Nitrobenzene-d5	89.7		37 - 122		90%	SPK: 100
321-60-8	2-Fluorobiphenyl	86.8		44 - 115		87%	SPK: 100
118-79-6	2,4,6-Tribromophenol	134		39 - 132		90%	SPK: 150
1718-51-0	Terphenyl-d14	92.3		54 - 127		92%	SPK: 100
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	45900	6.851				
1146-65-2	Naphthalene-d8	176000	8.128				

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	12/12/24
Project:	CTO WE13		Date Received:	12/17/24
Client Sample ID:	OU4-VSL-11-121224MSD		SDG No.:	P5316
Lab Sample ID:	P5306-09MSD		Matrix:	SOIL
Analytical Method:	SW8270		% Solid:	93.6
Sample Wt/Vol:	30.08	Units: g	Final Vol:	1000 uL
Soil Aliquot Vol:		uL	Test:	SVOCMS Group2
Extraction Type :		Decanted : N	Level :	LOW
Injection Volume :		GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3541			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BF140949.D	1	12/18/24 08:56	12/20/24 14:36	PB165705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
15067-26-2	Acenaphthene-d10	102000	9.886				
1517-22-2	Phenanthrene-d10	188000	11.38				
1719-03-5	Chrysene-d12	131000	14.045				
1520-96-3	Perylene-d12	114000	15.562				

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products



CALIBRATION SUMMARY

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
 Method File : 8270-BF121624.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Mon Dec 16 16:59:50 2024
 Response Via : Initial Calibration

Calibration Files

2.5 =BF140855.D 5 =BF140856.D 10 =BF140857.D 20 =BF140858.D 40 =BF140859.D 50 =BF140860.D 60 =BF140861.D 80 =BF140862.D

Compound	2.5	5	10	20	40	50	60	80	Avg	%RSD

1) I 1,4-Dichlorobenzen...	-----ISTD-----									
2) 1,4-Dioxane	0.547	0.536	0.537	0.503	0.520	0.527	0.492	0.523	3.76	
3) Pyridine	1.203	1.182	1.284	1.222	1.221	1.235	1.136	1.212	3.78	
4) n-Nitrosodimet...	0.598	0.593	0.626	0.603	0.621	0.648	0.587	0.611	3.58	
5) S 2-Fluorophenol	1.211	1.236	1.279	1.199	1.231	1.242	1.107	1.215	4.45	
6) Aniline	1.408	1.461	1.448	1.374	1.364	1.369	1.208	1.376	6.06	
7) S Phenol-d6	1.692	1.661	1.661	1.567	1.576	1.623	1.485	1.609	4.45	
8) 2-Chlorophenol	1.343	1.379	1.357	1.301	1.313	1.351	1.230	1.325	3.75	
9) Benzaldehyde	1.048	1.051	0.993	0.864	0.823	0.800	0.663	0.892	16.27	
10) C Phenol	1.756	1.690	1.733	1.630	1.643	1.688	1.534	1.668	4.44	
11) bis(2-Chloroet...	1.277	1.242	1.281	1.227	1.237	1.267	1.176	1.244	2.93	
12) 1,3-Dichlorobe...	1.584	1.540	1.557	1.469	1.495	1.530	1.394	1.510	4.21	
13) C 1,4-Dichlorobe...	1.607	1.601	1.583	1.497	1.495	1.546	1.397	1.532	4.91	
14) 1,2-Dichlorobe...	1.521	1.495	1.509	1.436	1.403	1.434	1.322	1.446	4.86	
15) Benzyl Alcohol	1.146	1.143	1.236	1.150	1.143	1.179	1.056	1.151	4.64	
16) 2,2'-oxybis(1-...	1.563	1.495	1.519	1.438	1.438	1.443	1.359	1.465	4.53	
17) 2-Methylphenol	1.081	1.105	1.080	1.039	1.039	1.067	0.993	1.058	3.51	
18) Hexachloroethane	0.600	0.580	0.585	0.556	0.557	0.580	0.535	0.570	3.86	
19) P n-Nitroso-di-n...	1.005	1.030	1.004	0.999	0.922	0.938	0.949	0.873	0.965	5.52
20) 3+4-Methylphenols	1.503	1.491	1.440	1.355	1.360	1.396	1.273	1.403	5.82	

21) I Naphthalene-d8	-----ISTD-----									
22) Acetophenone	0.526	0.503	0.520	0.493	0.496	0.518	0.446	0.500	5.41	
23) S Nitrobenzene-d5	0.406	0.401	0.420	0.393	0.397	0.415	0.366	0.400	4.42	
24) Nitrobenzene	0.418	0.411	0.425	0.402	0.408	0.429	0.375	0.410	4.40	
25) Isophorone	0.681	0.672	0.690	0.651	0.664	0.700	0.631	0.670	3.55	
26) C 2-Nitrophenol	0.183	0.185	0.193	0.187	0.191	0.201	0.180	0.189	3.79	
27) 2,4-Dimethylph...	0.221	0.220	0.225	0.220	0.219	0.228	0.210	0.220	2.61	
28) bis(2-Chloroet...	0.431	0.414	0.429	0.417	0.418	0.426	0.394	0.418	3.04	
29) C 2,4-Dichloroph...	0.300	0.310	0.313	0.299	0.301	0.316	0.290	0.304	3.07	
30) 1,2,4-Trichlor...	0.360	0.354	0.357	0.341	0.342	0.362	0.325	0.349	3.77	
31) Naphthalene	1.138	1.125	1.126	1.067	1.090	1.124	1.020	1.099	3.86	
32) Benzoic acid		0.173	0.192	0.212	0.220	0.237	0.220	0.209	10.98	
33) 4-Chloroaniline	0.371	0.375	0.377	0.361	0.358	0.363	0.349	0.365	2.74	
34) C Hexachlorobuta...	0.239	0.235	0.244	0.232	0.233	0.239	0.219	0.235	3.42	
35) Caprolactam	0.085	0.090	0.090	0.090	0.089	0.092	0.097	0.091	3.88	
36) C 4-Chloro-3-met...	0.342	0.347	0.347	0.338	0.332	0.342	0.348	0.342	1.72	
37) 2-Methylnaphth...	0.744	0.734	0.740	0.721	0.700	0.719	0.729	0.727	2.08	
38) 1-Methylnaphth...	0.758	0.743	0.716	0.706	0.686	0.706	0.716	0.719	3.36	

Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
 Method File : 8270-BF121624.M

39) I	Acenaphthene-d10	-----ISTD-----									
40)	1,2,4,5-Tetrac...	0.622	0.573	0.641	0.580	0.576	0.622	0.689	0.615	6.88	
41) P	Hexachlorocycl...	0.091	0.120	0.142	0.163	0.183	0.221	0.153	30.05		
42) S	2,4,6-Tribromo...	0.235	0.236	0.242	0.240	0.235	0.243	0.225	0.237	2.56	
43) C	2,4,6-Trichlor...	0.348	0.339	0.386	0.364	0.357	0.395	0.446	0.376	9.68	
44)	2,4,5-Trichlor...	0.413	0.365	0.426	0.397	0.395	0.426	0.475	0.414	8.28	
45) S	2-Fluorobiphenyl	1.560	1.410	1.538	1.369	1.345	1.445	1.517	1.455	5.85	
46)	1,1'-Biphenyl	1.678	1.512	1.639	1.513	1.463	1.575	1.752	1.590	6.54	
47)	2-Chloronaphth...	1.236	1.157	1.254	1.169	1.124	1.206	1.370	1.217	6.69	
48)	2-Nitroaniline	0.350	0.346	0.372	0.358	0.341	0.378	0.428	0.367	8.14	
49)	Acenaphthylene	1.874	1.821	1.880	1.734	1.696	1.783	1.727	1.788	4.09	
50)	Dimethylphthalate	1.431	1.367	1.438	1.359	1.308	1.417	1.549	1.410	5.45	
51)	2,6-Dinitrotol...	0.320	0.317	0.328	0.312	0.303	0.321	0.355	0.322	5.06	
52) C	Acenaphthene	1.228	1.190	1.166	1.113	1.100	1.148	1.049	1.142	5.25	
53)	3-Nitroaniline	0.322	0.316	0.328	0.316	0.325	0.325	0.307	0.320	2.29	
54) P	2,4-Dinitrophenol	0.088	0.108	0.134	0.145	0.160	0.157	0.132	21.60		
55)	Dibenzofuran	1.920	1.876	1.830	1.728	1.705	1.746	1.583	1.770	6.48	
56) P	4-Nitrophenol	0.091	0.133	0.165	0.169	0.176	0.167	0.150	21.61		
57)	2,4-Dinitrotol...	0.435	0.438	0.440	0.419	0.421	0.426	0.389	0.424	4.12	
58)	Fluorene	1.573	1.522	1.492	1.444	1.429	1.425	1.335	1.460	5.29	
59)	2,3,4,6-Tetrac...	0.297	0.312	0.345	0.354	0.356	0.356	0.341	0.337	6.99	
60)	Diethylphthalate	1.562	1.484	1.496	1.439	1.446	1.461	1.346	1.462	4.48	
61)	4-Chlorophenyl...	0.780	0.750	0.759	0.716	0.727	0.728	0.674	0.733	4.62	
62)	4-Nitroaniline	0.329	0.333	0.339	0.338	0.343	0.339	0.320	0.334	2.37	
63)	Azobenzene	1.482	1.411	1.394	1.368	1.358	1.334	1.273	1.375	4.74	
64) I	Phenanthrene-d10	-----ISTD-----									
65)	4,6-Dinitro-2-...	0.099	0.109	0.117	0.118	0.129	0.109	0.113	8.96		
66) c	n-Nitrosodiphe...	0.639	0.679	0.644	0.599	0.592	0.626	0.527	0.615	7.90	
67)	4-Bromophenyl-...	0.225	0.248	0.236	0.220	0.214	0.231	0.192	0.224	7.97	
68)	Hexachlorobenzene	0.257	0.280	0.268	0.246	0.245	0.258	0.223	0.254	7.24	
69)	Atrazine	0.200	0.204	0.193	0.168	0.153	0.157	0.127	0.172	16.48	
70) C	Pentachlorophenol	0.062	0.082	0.098	0.102	0.106	0.106	0.093	18.65		
71)	Phenanthrene	1.125	1.081	1.072	0.983	0.988	1.013	0.937	1.028	6.45	
72)	Anthracene	1.091	1.064	1.053	0.970	0.978	1.000	0.934	1.013	5.66	
73)	Carbazole	1.086	1.018	1.026	0.952	0.972	0.970	0.920	0.992	5.58	
74)	Di-n-butylphth...	1.245	1.206	1.232	1.129	1.185	1.186	0.968	1.164	8.12	
75) C	Fluoranthene	1.364	1.291	1.251	1.130	1.138	1.175	0.943	1.184	11.51	
76) I	Chrysene-d12	-----ISTD-----									
77)	Benzidine	0.319	0.401	0.404	0.493	0.454	0.378	0.408	14.76		
78)	Pyrene	1.904	1.719	1.650	1.699	1.761	1.769	1.948	1.779	6.12	
79) S	Terphenyl-d14	1.354	1.247	1.218	1.206	1.212	1.260	1.381	1.268	5.58	
80)	Butylbenzylphth...	0.650	0.616	0.621	0.646	0.672	0.681	0.696	0.654	4.59	
81)	Benzo(a)anthra...	1.494	1.473	1.421	1.359	1.388	1.418	1.369	1.417	3.60	
82)	3,3'-Dichlorob...	0.429	0.427	0.449	0.412	0.432	0.446	0.399	0.428	4.14	
83)	Chrysene	1.361	1.284	1.364	1.271	1.254	1.283	1.206	1.289	4.40	
84)	Bis(2-ethylhex...	0.804	0.807	0.875	0.821	0.855	0.890	0.855	0.844	3.99	
85) c	Di-n-octyl pht...	1.267	1.170	1.348	1.223	1.341	1.324	1.263	1.277	5.17	

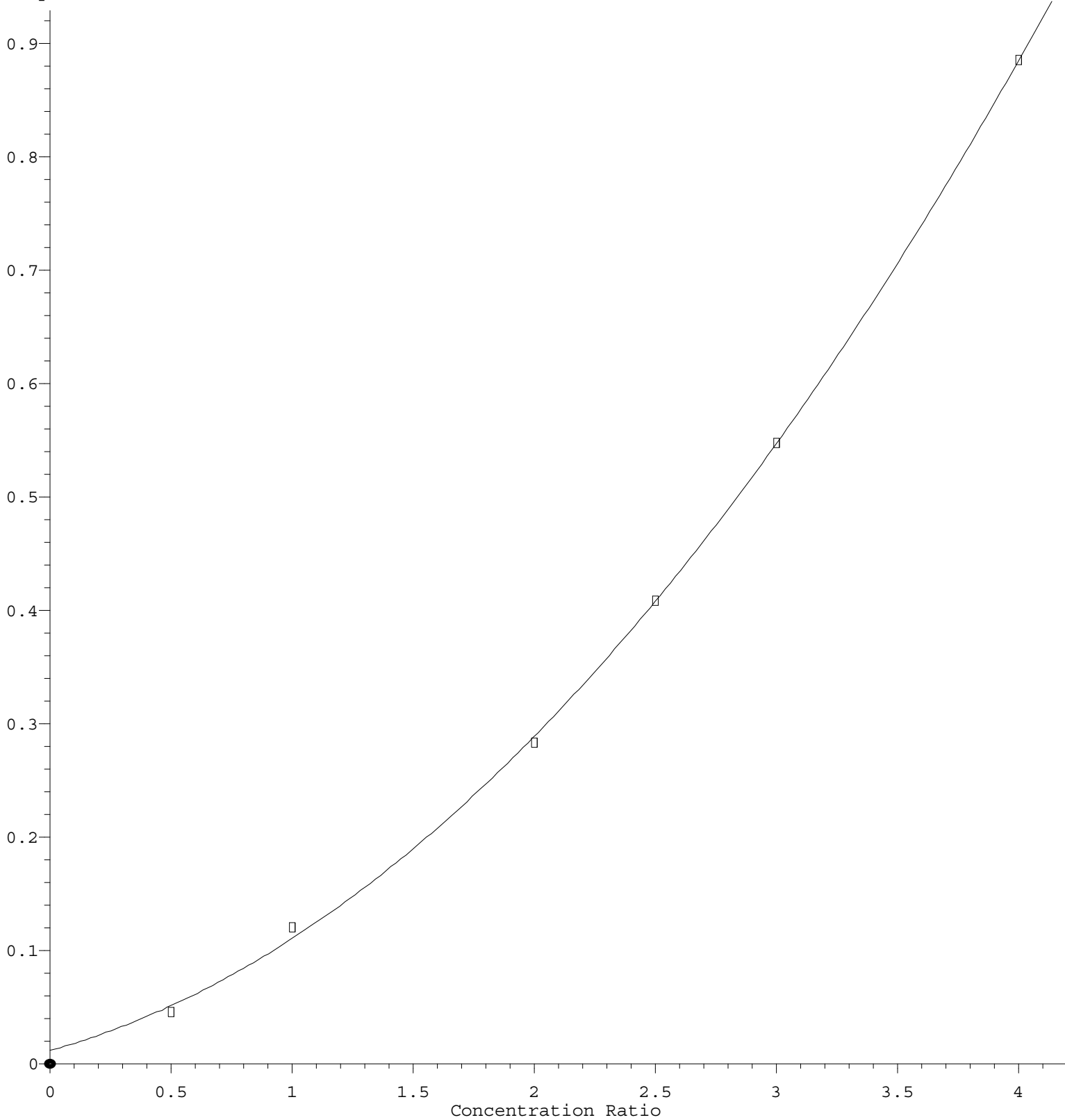
Method Path : Z:\svoasrv\HPCHEM1\BNA_F\Methods\
Method File : 8270-BF121624.M

86) I	Perylene-d12	-----ISTD-----									
87)	Indeno(1,2,3-c...	1.130	1.174	1.330	1.269	1.109	1.330	1.395	1.248	8.90	
88)	Benzo(b)fluora...	1.454	1.466	1.450	1.294	1.263	1.442	1.349	1.388	6.11	
89)	Benzo(k)fluora...	1.318	1.250	1.223	1.224	1.142	1.182	0.996	1.191	8.57	
90) C	Benzo(a)pyrene	1.099	1.084	1.134	1.073	1.056	1.122	1.042	1.087	3.10	
91)	Dibenzo(a,h)an...	0.913	0.986	1.092	1.058	0.918	1.116	1.154	1.034	9.30	
92)	Benzo(g,h,i)pe...	0.961	0.972	1.094	1.073	0.944	1.098	1.225	1.052	9.53	

(#) = Out of Range

Hexachlorocyclopentadiene

Response Ratio



6

A

B

C

D

E

F

G

$$R = 3.984e-002 A^2 + 5.892e-002 A + 1.177e-002$$

Coef of Det (r^2) = 0.999663 Curve Fit: Quadratic

Method Name: Z:\svoasrv\HPCHEM1\BNA F\Methods\817 of 250 21624.M

Calibration Table Last Updated: Mon Dec 16 16:59:50 2024

2,4-Dinitrophenol

Response Ratio

6

A

B

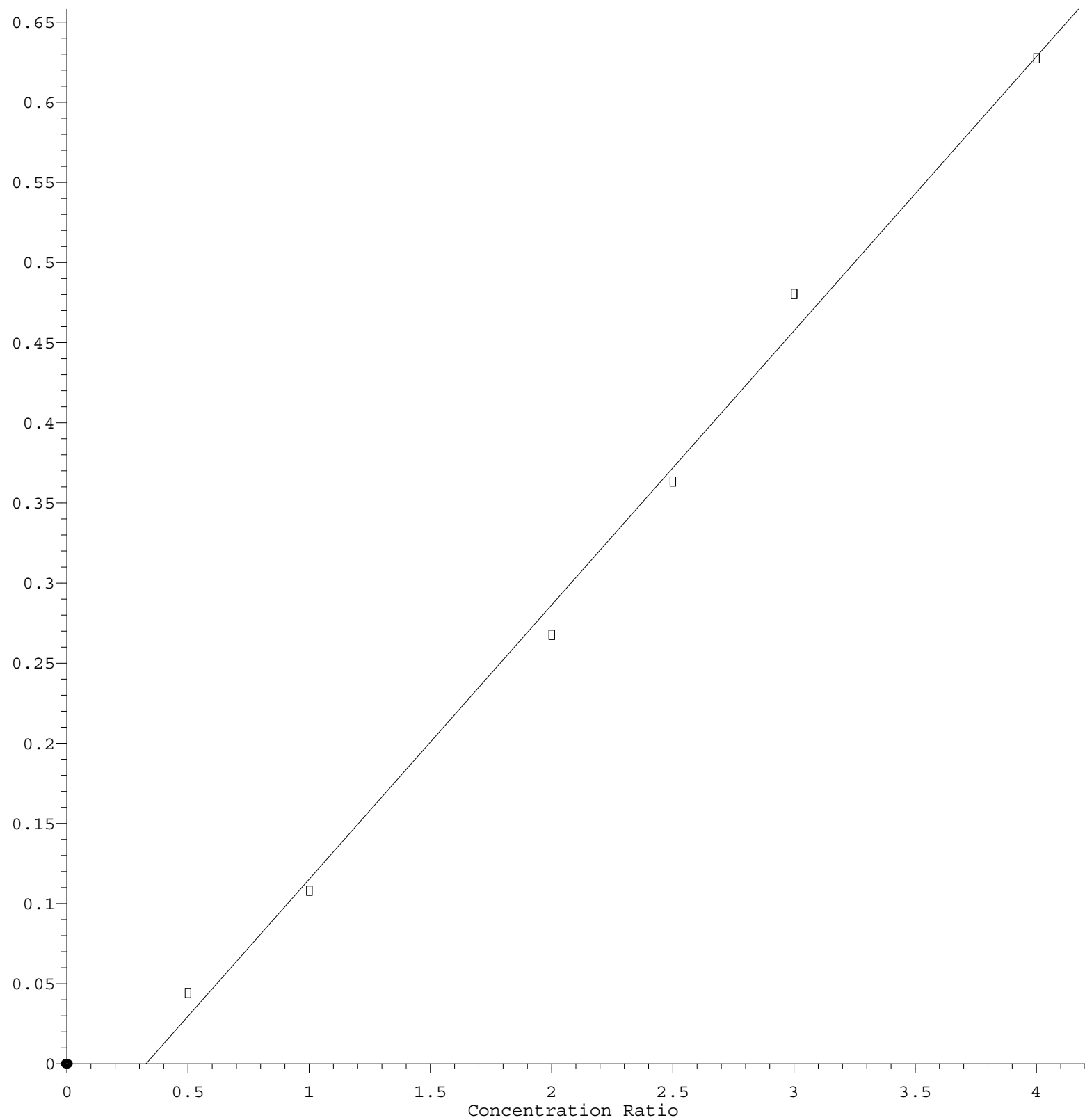
C

D

E

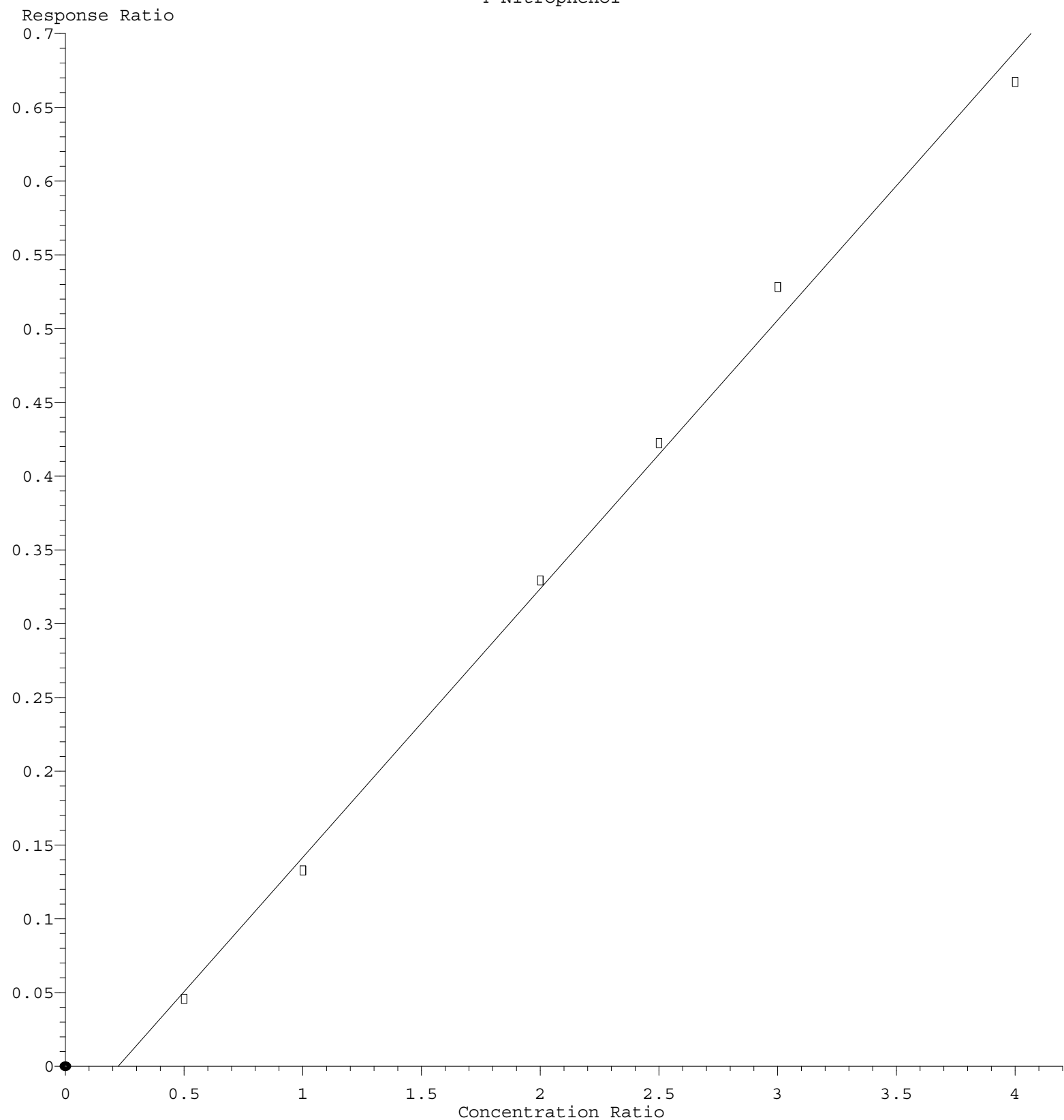
F

G



Response = 1.713e-001 * Amt - 5.602e-002
 Coef of Det (r^2) = 0.995067 Curve Fit: Linear
 Method Name: Z:\svoasrv\HPCHEM1\BNA F\Methods\827 of 250 21624.M
 Calibration Table Last Updated: Mon Dec 16 16:59:50 2024

4-Nitrophenol



Response = 1.822e-001 * Amt - 4.046e-002
 Coef of Det (r^2) = 0.995956 Curve Fit: Linear
 Method Name: Z:\svoasrv\HPCHEM1\BNA F\Methods\8376121624.M
 Calibration Table Last Updated: Mon Dec 16 16:59:50 2024

6

A

B

C

D

E

F

G

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG No.: P5316

Instrument ID: BNA_F Calibration Date/Time: 12/20/2024 11:15

Lab File ID: BF140942.D Init. Calib. Date(s): 12/16/2024 12/16/2024

EPA Sample No.: SSTDCCC040 Init. Calib. Time(s): 12:13 16:15

GC Column: DB-UI ID: 0.18 (mm)

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
2-Fluorophenol	1.215	1.104		-9.1	
Phenol-d6	1.609	1.494		-7.1	
Phenol	1.668	1.561		-6.4	20.0
2-Methylphenol	1.058	1.007		-4.8	
3+4-Methylphenols	1.403	1.351		-3.7	
Nitrobenzene-d5	0.400	0.385		-3.8	
Naphthalene	1.099	1.079		-1.8	
2-Fluorobiphenyl	1.455	1.340		-7.9	
Acenaphthylene	1.788	1.741		-2.6	
Acenaphthene	1.142	1.107		-3.1	20.0
Fluorene	1.460	1.356		-7.1	
2,4,6-Tribromophenol	0.237	0.214		-9.7	
Pentachlorophenol	0.093	0.077		-17.2	20.0
Anthracene	1.013	0.983		-3.0	
Fluoranthene	1.184	1.083		-8.5	20.0
Pyrene	1.779	1.904		7.0	
Terphenyl-d14	1.268	1.393		9.9	
Benzo (a) anthracene	1.417	1.356		-4.3	
Chrysene	1.289	1.279		-0.8	
Benzo (b) fluoranthene	1.388	1.319		-5.0	
Benzo (k) fluoranthene	1.191	1.123		-5.7	
Benzo (a) pyrene	1.087	1.066		-1.9	20.0
Indeno (1,2,3-cd) pyrene	1.248	1.605		28.6	
Dibenzo (a,h) anthracene	1.034	1.335		29.1	
Benzo (g,h,i) perylene	1.052	1.276		21.3	

All other compounds must meet a minimum RRF of 0.010.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG No.: P5316

Instrument ID: BNA_F Calibration Date/Time: 12/20/2024 19:24

Lab File ID: BF140959.D Init. Calib. Date(s): 12/16/2024 12/16/2024

EPA Sample No.: SSTDCCC040EC Init. Calib. Time(s): 12:13 16:15

GC Column: DB-UI ID: 0.18 (mm)

COMPOUND	RRF	RRF040	MIN RRF	%D	MAX%D
2-Fluorophenol	1.215	1.203		-1.0	50.0
Phenol-d6	1.609	1.593		-1.0	50.0
Phenol	1.668	1.653		-0.9	50.0
2-Methylphenol	1.058	1.065		0.7	50.0
3+4-Methylphenols	1.403	1.384		-1.4	50.0
Nitrobenzene-d5	0.400	0.389		-2.8	50.0
Naphthalene	1.099	1.086		-1.2	50.0
2-Fluorobiphenyl	1.455	1.388		-4.6	50.0
Acenaphthylene	1.788	1.788		0.0	50.0
Acenaphthene	1.142	1.133		-0.8	50.0
Fluorene	1.460	1.425		-2.4	50.0
2,4,6-Tribromophenol	0.237	0.232		-2.1	50.0
Pentachlorophenol	0.093	0.075		-19.4	50.0
Anthracene	1.013	0.994		-1.9	50.0
Fluoranthene	1.184	1.218		2.9	50.0
Pyrene	1.779	1.725		-3.0	50.0
Terphenyl-d14	1.268	1.207		-4.8	50.0
Benzo (a) anthracene	1.417	1.404		-0.9	50.0
Chrysene	1.289	1.227		-4.8	50.0
Benzo (b) fluoranthene	1.388	1.367		-1.5	50.0
Benzo (k) fluoranthene	1.191	1.086		-8.8	50.0
Benzo (a) pyrene	1.087	1.030		-5.2	50.0
Indeno (1,2,3-cd) pyrene	1.248	1.208		-3.2	50.0
Dibenzo (a,h) anthracene	1.034	0.996		-3.7	50.0
Benzo (g,h,i) perylene	1.052	0.977		-7.1	50.0

All other compounds must meet a minimum RRF of 0.010.

LAB CHRONICLE

OrderID:	P5316	OrderDate:	12/17/2024 3:44:00 PM
Client:	Tetra Tech NUS, Inc.	Project:	CTO WE13
Contact:	Ernie Wu	Location:	L51,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P5316-01	TT-304-IDWSO-20241 217-1	SOIL			12/17/24			12/17/24
			PCB Group1	8082A		12/18/24	12/19/24	
			PESTICIDE Group1	8081B		12/18/24	12/18/24	

Hit Summary Sheet SW-846

SDG No.: P5316

Order ID: P5316

Client: Tetra Tech NUS, Inc.

Project ID: CTO WE13

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
-----------	-----------	--------	-----------	---------------	---	-----	-----	-----	-------

Client ID :

Total Concentration: 0.000



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	12/17/24	
Project:	CTO WE13		Date Received:	12/17/24	
Client Sample ID:	TT-304-IDWSO-20241217-1		SDG No.:	P5316	
Lab Sample ID:	P5316-01		Matrix:	SOIL	
Analytical Method:	SW8081		% Solid:	68.6	Decanted:
Sample Wt/Vol:	30.05	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	PESTICIDE Group1	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL093420.D	1	12/18/24 08:10	12/18/24 16:45	PB165704

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
319-84-6	alpha-BHC	1.20	U	0.26	1.20	2.50	ug/kg
319-85-7	beta-BHC	1.20	U	0.71	1.20	2.50	ug/kg
319-86-8	delta-BHC	1.20	U	0.68	1.20	2.50	ug/kg
58-89-9	gamma-BHC (Lindane)	1.20	U	0.28	1.20	2.50	ug/kg
76-44-8	Heptachlor	1.20	U	0.25	1.20	2.50	ug/kg
309-00-2	Aldrin	1.20	U	0.20	1.20	2.50	ug/kg
959-98-8	Endosulfan I	1.20	U	0.25	1.20	2.50	ug/kg
60-57-1	Dieldrin	1.20	U	0.22	1.20	2.50	ug/kg
72-55-9	4,4-DDE	1.20	U	0.19	1.20	2.50	ug/kg
72-20-8	Endrin	1.20	U	0.23	1.20	2.50	ug/kg
33213-65-9	Endosulfan II	1.20	U	0.44	1.20	2.50	ug/kg
72-54-8	4,4-DDD	1.20	U	0.28	1.20	2.50	ug/kg
1031-07-8	Endosulfan Sulfate	1.20	U	0.19	1.20	2.50	ug/kg
50-29-3	4,4-DDT	1.20	U	0.25	1.20	2.50	ug/kg
5103-71-9	alpha-Chlordane	1.20	U	0.25	1.20	2.50	ug/kg
SURROGATES							
2051-24-3	Decachlorobiphenyl	17.3		55 - 130		86%	SPK: 20
877-09-8	Tetrachloro-m-xylene	17.2		42 - 129		86%	SPK: 20

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	12/17/24	
Project:	CTO WE13		Date Received:	12/17/24	
Client Sample ID:	TT-304-IDWSO-20241217-1		SDG No.:	P5316	
Lab Sample ID:	P5316-01		Matrix:	SOIL	
Analytical Method:	SW8081		% Solid:	68.6	Decanted:
Sample Wt/Vol:	30.05	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	PESTICIDE Group1	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL093420.D	1	12/18/24 08:10	12/18/24 16:45	PB165704

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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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



QC SUMMARY

Surrogate Summary

SDG No.: **P5316**

Client: **Tetra Tech NUS, Inc.**

Analytical Method: **8081B**

Lab Sample ID	Client ID	Parameter	Column	Spike	Result	Rec	Qual	Limits	
								Low	High
I.BLK-PL093230.D	PIBLK-PL093230.D	Decachlorobiphenyl	1	20	21.6	108		30	135
		Tetrachloro-m-xylene	1	20	21.2	106		44	124
		Decachlorobiphenyl	2	20	21.5	107		30	135
		Tetrachloro-m-xylene	2	20	20.4	102		44	124
I.BLK-PL093414.D	PIBLK-PL093414.D	Decachlorobiphenyl	1	20	24.8	124		30	135
		Tetrachloro-m-xylene	1	20	20.3	102		44	124
		Decachlorobiphenyl	2	20	23.4	117		30	135
		Tetrachloro-m-xylene	2	20	19.5	98		44	124
PB165704BL	PB165704BL	Decachlorobiphenyl	1	20	23.3	117		55	130
		Tetrachloro-m-xylene	1	20	19.2	96		42	129
		Decachlorobiphenyl	2	20	22.4	112		55	130
		Tetrachloro-m-xylene	2	20	18.4	92		42	129
PB165704BS	PB165704BS	Decachlorobiphenyl	1	20	23.6	118		55	130
		Tetrachloro-m-xylene	1	20	19.2	96		42	129
		Decachlorobiphenyl	2	20	22.6	113		55	130
		Tetrachloro-m-xylene	2	20	18.6	93		42	129
P5316-01	TT-304-IDWSO-20241217-1	Decachlorobiphenyl	1	20	17.3	86		55	130
		Tetrachloro-m-xylene	1	20	17.1	85		42	129
		Decachlorobiphenyl	2	20	15.9	80		55	130
		Tetrachloro-m-xylene	2	20	17.2	86		42	129
P5306-01MS	OU4-VSL-07-121224MS	Decachlorobiphenyl	1	20	21.2	106		55	130
		Tetrachloro-m-xylene	1	20	18.9	94		42	129
		Decachlorobiphenyl	2	20	19.7	99		55	130
		Tetrachloro-m-xylene	2	20	18.7	93		42	129
P5306-01MSD	OU4-VSL-07-121224MSD	Decachlorobiphenyl	1	20	21.1	106		55	130
		Tetrachloro-m-xylene	1	20	19.1	96		42	129
		Decachlorobiphenyl	2	20	19.8	99		55	130
		Tetrachloro-m-xylene	2	20	18.8	94		42	129
I.BLK-PL093426.D	PIBLK-PL093426.D	Decachlorobiphenyl	1	20	23.9	119		30	135
		Tetrachloro-m-xylene	1	20	20.5	103		44	124
		Decachlorobiphenyl	2	20	22.9	115		30	135
		Tetrachloro-m-xylene	2	20	19.8	99		44	124

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: P5316

Client: Tetra Tech NUS, Inc.

Analytical Method: 8081B

DataFile : PL093422.D

Lab Sample ID:	Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Low	Limits High	RPD
Client Sample ID: OU4-VSL-07-121224MS												
P5306-01MS	alpha-BHC	18.31	0	18.3	ug/kg	100				45	137	
	beta-BHC	18.31	0	18.5	ug/kg	101				50	136	
	delta-BHC	18.31	0	17.3	ug/kg	94				47	139	
	gamma-BHC (Lindane)	18.31	0	18.0	ug/kg	98				49	135	
	Heptachlor	18.31	0	19.1	ug/kg	104				47	136	
	Aldrin	18.31	0	18.1	ug/kg	99				45	136	
	Endosulfan I	18.31	0	19.0	ug/kg	104				53	132	
	Dieldrin	18.31	0	18.9	ug/kg	103				56	136	
	4,4'-DDE	18.31	0	19.0	ug/kg	104				56	134	
	Endrin	18.31	0	19.8	ug/kg	108				57	140	
	Endosulfan II	18.31	0	19.2	ug/kg	105				53	134	
	4,4'-DDD	18.31	0	19.2	ug/kg	105				56	139	
	Endosulfan sulfate	18.31	0	19.1	ug/kg	104				55	136	
	4,4'-DDT	18.31	0	20.1	ug/kg	110				50	141	
	alpha-Chlordane	18.31	0	19.2	ug/kg	105				54	133	

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: P5316

Client: Tetra Tech NUS, Inc.

Analytical Method: 8081B

DataFile : PL093423.D

Lab Sample ID:	Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Low	Limits High	RPD
Client Sample ID: OU4-VSL-07-121224MSD												
P5306-01MSD	alpha-BHC	18.34	0	18.5	ug/kg	101		1		45	137	20
	beta-BHC	18.34	0	18.6	ug/kg	101		0		50	136	20
	delta-BHC	18.34	0	17.4	ug/kg	95		1		47	139	20
	gamma-BHC (Lindane)	18.34	0	18.2	ug/kg	99		1		49	135	20
	Heptachlor	18.34	0	19.2	ug/kg	105		1		47	136	20
	Aldrin	18.34	0	18.2	ug/kg	99		0		45	136	20
	Endosulfan I	18.34	0	19.1	ug/kg	104		0		53	132	20
	Dieldrin	18.34	0	19.1	ug/kg	104		1		56	136	20
	4,4'-DDE	18.34	0	19.2	ug/kg	105		1		56	134	20
	Endrin	18.34	0	20.1	ug/kg	110		2		57	140	20
	Endosulfan II	18.34	0	19.3	ug/kg	105		0		53	134	20
	4,4'-DDD	18.34	0	19.4	ug/kg	106		1		56	139	20
	Endosulfan sulfate	18.34	0	19.2	ug/kg	105		1		55	136	20
	4,4'-DDT	18.34	0	20.2	ug/kg	110		0		50	141	20
	alpha-Chlordane	18.34	0	19.2	ug/kg	105		0		54	133	20

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P5316

Client: Tetra Tech NUS, Inc.

Analytical Method: **8081B** Datafile : PL093417.D

Lab Sample ID	Parameter	Spike	Result	Units	Rec	RPD	Qual	RPD		Limits		RPD
								Qual	Low	High		
PB165704BS	alpha-BHC	16.66	16.8	ug/kg	101				45	137		
	beta-BHC	16.66	16.8	ug/kg	101				50	136		
	delta-BHC	16.66	15.7	ug/kg	94				47	139		
	gamma-BHC (Lindane)	16.66	16.6	ug/kg	100				49	135		
	Heptachlor	16.66	17.6	ug/kg	106				47	136		
	Aldrin	16.66	16.6	ug/kg	100				45	136		
	Endosulfan I	16.66	17.8	ug/kg	107				53	132		
	Dieldrin	16.66	17.9	ug/kg	107				56	136		
	4,4'-DDE	16.66	17.6	ug/kg	106				56	134		
	Endrin	16.66	18.8	ug/kg	113				57	140		
	Endosulfan II	16.66	18.3	ug/kg	110				53	134		
	4,4'-DDD	16.66	17.9	ug/kg	107				56	139		
	Endosulfan sulfate	16.66	17.9	ug/kg	107				55	136		
	4,4'-DDT	16.66	18.7	ug/kg	112				50	141		
	alpha-Chlordane	16.66	17.8	ug/kg	107				54	133		

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB165704BL

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: P5316

SAS No.: P5316 SDG NO.: P5316

Lab Sample ID: PB165704BL

Lab File ID: PL093416.D

Matrix: (soil/water) Solid

Extraction: (Type) _____

Sulfur Cleanup: (Y/N) N

Date Extracted: 12/18/2024

Date Analyzed (1): 12/18/2024

Date Analyzed (2): 12/18/2024

Time Analyzed (1): 15:49

Time Analyzed (2): 15:49

Instrument ID (1): ECD_L

Instrument ID (2): ECD_L

GC Column (1): ZB-MR1 ID: 0.32 (mm)

GC Column (2): ZB-MR2 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
PB165704BS	PB165704BS	PL093417.D	12/18/2024	12/18/2024
TT-304-IDWSO-20241217-1	P5316-01	PL093420.D	12/18/2024	12/18/2024
OU4-VSL-07-121224MS	P5306-01MS	PL093422.D	12/18/2024	12/18/2024
OU4-VSL-07-121224MSD	P5306-01MSD	PL093423.D	12/18/2024	12/18/2024

COMMENTS: _____



QC SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:		
Project:	CTO WE13		Date Received:		
Client Sample ID:	PB165704BL		SDG No.:	P5316	
Lab Sample ID:	PB165704BL		Matrix:	SOIL	
Analytical Method:	SW8081		% Solid:	100	Decanted:
Sample Wt/Vol:	30.02	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	PESTICIDE Group1	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL093416.D	1	12/18/24 08:10	12/18/24 15:49	PB165704

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
319-84-6	alpha-BHC	0.83	U	0.18	0.83	1.70	ug/kg
319-85-7	beta-BHC	0.83	U	0.49	0.83	1.70	ug/kg
319-86-8	delta-BHC	0.83	U	0.47	0.83	1.70	ug/kg
58-89-9	gamma-BHC (Lindane)	0.83	U	0.19	0.83	1.70	ug/kg
76-44-8	Heptachlor	0.83	U	0.17	0.83	1.70	ug/kg
309-00-2	Aldrin	0.83	U	0.14	0.83	1.70	ug/kg
959-98-8	Endosulfan I	0.83	U	0.17	0.83	1.70	ug/kg
60-57-1	Dieldrin	0.83	U	0.15	0.83	1.70	ug/kg
72-55-9	4,4-DDE	0.83	U	0.13	0.83	1.70	ug/kg
72-20-8	Endrin	0.83	U	0.16	0.83	1.70	ug/kg
33213-65-9	Endosulfan II	0.83	U	0.30	0.83	1.70	ug/kg
72-54-8	4,4-DDD	0.83	U	0.19	0.83	1.70	ug/kg
1031-07-8	Endosulfan Sulfate	0.83	U	0.13	0.83	1.70	ug/kg
50-29-3	4,4-DDT	0.83	U	0.17	0.83	1.70	ug/kg
5103-71-9	alpha-Chlordane	0.83	U	0.17	0.83	1.70	ug/kg
SURROGATES							
2051-24-3	Decachlorobiphenyl	23.3		55 - 130		117%	SPK: 20
877-09-8	Tetrachloro-m-xylene	19.2		42 - 129		96%	SPK: 20

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:		
Project:	CTO WE13		Date Received:		
Client Sample ID:	PB165704BL		SDG No.:	P5316	
Lab Sample ID:	PB165704BL		Matrix:	SOIL	
Analytical Method:	SW8081		% Solid:	100	Decanted:
Sample Wt/Vol:	30.02	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	PESTICIDE Group1	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL093416.D	1	12/18/24 08:10	12/18/24 15:49	PB165704

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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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 NUS, Inc.		Date Collected:	11/25/24	
Project:	CTO WE13		Date Received:	11/25/24	
Client Sample ID:	PIBLK-PL093230.D		SDG No.:	P5316	
Lab Sample ID:	I.BLK-PL093230.D		Matrix:	WATER	
Analytical Method:	SW8081		% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	PESTICIDE Group1	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL093230.D	1		11/25/24	PL112524

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
319-84-6	alpha-BHC	0.025	U	0.0061	0.025	0.050	ug/L
319-85-7	beta-BHC	0.025	U	0.014	0.025	0.050	ug/L
319-86-8	delta-BHC	0.025	U	0.015	0.025	0.050	ug/L
58-89-9	gamma-BHC (Lindane)	0.025	U	0.0049	0.025	0.050	ug/L
76-44-8	Heptachlor	0.025	U	0.0054	0.025	0.050	ug/L
309-00-2	Aldrin	0.025	U	0.0044	0.025	0.050	ug/L
959-98-8	Endosulfan I	0.025	U	0.0050	0.025	0.050	ug/L
60-57-1	Dieldrin	0.025	U	0.0047	0.025	0.050	ug/L
72-55-9	4,4-DDE	0.025	U	0.0045	0.025	0.050	ug/L
72-20-8	Endrin	0.010	U	0.0043	0.010	0.050	ug/L
33213-65-9	Endosulfan II	0.025	U	0.0075	0.025	0.050	ug/L
72-54-8	4,4-DDD	0.025	U	0.0092	0.025	0.050	ug/L
1031-07-8	Endosulfan Sulfate	0.025	U	0.0035	0.025	0.050	ug/L
50-29-3	4,4-DDT	0.025	U	0.0044	0.025	0.050	ug/L
5103-71-9	alpha-Chlordane	0.025	U	0.0060	0.025	0.050	ug/L
SURROGATES							
2051-24-3	Decachlorobiphenyl	21.6		30 - 135		108%	SPK: 20
877-09-8	Tetrachloro-m-xylene	21.2		44 - 124		106%	SPK: 20

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	11/25/24	
Project:	CTO WE13		Date Received:	11/25/24	
Client Sample ID:	PIBLK-PL093230.D		SDG No.:	P5316	
Lab Sample ID:	I.BLK-PL093230.D		Matrix:	WATER	
Analytical Method:	SW8081		% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	PESTICIDE Group1	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL093230.D	1		11/25/24	PL112524

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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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 NUS, Inc.		Date Collected:	12/18/24	
Project:	CTO WE13		Date Received:	12/18/24	
Client Sample ID:	PIBLK-PL093414.D		SDG No.:	P5316	
Lab Sample ID:	I.BLK-PL093414.D		Matrix:	WATER	
Analytical Method:	SW8081		% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	PESTICIDE Group1	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL093414.D	1		12/18/24	p1121824

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
319-84-6	alpha-BHC	0.025	U	0.0061	0.025	0.050	ug/L
319-85-7	beta-BHC	0.025	U	0.014	0.025	0.050	ug/L
319-86-8	delta-BHC	0.025	U	0.015	0.025	0.050	ug/L
58-89-9	gamma-BHC (Lindane)	0.025	U	0.0049	0.025	0.050	ug/L
76-44-8	Heptachlor	0.025	U	0.0054	0.025	0.050	ug/L
309-00-2	Aldrin	0.025	U	0.0044	0.025	0.050	ug/L
959-98-8	Endosulfan I	0.025	U	0.0050	0.025	0.050	ug/L
60-57-1	Dieldrin	0.025	U	0.0047	0.025	0.050	ug/L
72-55-9	4,4-DDE	0.025	U	0.0045	0.025	0.050	ug/L
72-20-8	Endrin	0.010	U	0.0043	0.010	0.050	ug/L
33213-65-9	Endosulfan II	0.025	U	0.0075	0.025	0.050	ug/L
72-54-8	4,4-DDD	0.025	U	0.0092	0.025	0.050	ug/L
1031-07-8	Endosulfan Sulfate	0.025	U	0.0035	0.025	0.050	ug/L
50-29-3	4,4-DDT	0.025	U	0.0044	0.025	0.050	ug/L
5103-71-9	alpha-Chlordane	0.025	U	0.0060	0.025	0.050	ug/L
SURROGATES							
2051-24-3	Decachlorobiphenyl	24.8		30 - 135		124%	SPK: 20
877-09-8	Tetrachloro-m-xylene	20.3		44 - 124		102%	SPK: 20

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	12/18/24	
Project:	CTO WE13		Date Received:	12/18/24	
Client Sample ID:	PIBLK-PL093414.D		SDG No.:	P5316	
Lab Sample ID:	I.BLK-PL093414.D		Matrix:	WATER	
Analytical Method:	SW8081		% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	PESTICIDE Group1	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL093414.D	1		12/18/24	p1121824

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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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 NUS, Inc.		Date Collected:	12/18/24	
Project:	CTO WE13		Date Received:	12/18/24	
Client Sample ID:	PIBLK-PL093426.D		SDG No.:	P5316	
Lab Sample ID:	I.BLK-PL093426.D		Matrix:	WATER	
Analytical Method:	SW8081		% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	PESTICIDE Group1	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL093426.D	1		12/18/24	p1121824

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
319-84-6	alpha-BHC	0.025	U	0.0061	0.025	0.050	ug/L
319-85-7	beta-BHC	0.025	U	0.014	0.025	0.050	ug/L
319-86-8	delta-BHC	0.025	U	0.015	0.025	0.050	ug/L
58-89-9	gamma-BHC (Lindane)	0.025	U	0.0049	0.025	0.050	ug/L
76-44-8	Heptachlor	0.025	U	0.0054	0.025	0.050	ug/L
309-00-2	Aldrin	0.025	U	0.0044	0.025	0.050	ug/L
959-98-8	Endosulfan I	0.025	U	0.0050	0.025	0.050	ug/L
60-57-1	Dieldrin	0.025	U	0.0047	0.025	0.050	ug/L
72-55-9	4,4-DDE	0.025	U	0.0045	0.025	0.050	ug/L
72-20-8	Endrin	0.010	U	0.0043	0.010	0.050	ug/L
33213-65-9	Endosulfan II	0.025	U	0.0075	0.025	0.050	ug/L
72-54-8	4,4-DDD	0.025	U	0.0092	0.025	0.050	ug/L
1031-07-8	Endosulfan Sulfate	0.025	U	0.0035	0.025	0.050	ug/L
50-29-3	4,4-DDT	0.025	U	0.0044	0.025	0.050	ug/L
5103-71-9	alpha-Chlordane	0.025	U	0.0060	0.025	0.050	ug/L
SURROGATES							
2051-24-3	Decachlorobiphenyl	23.9		30 - 135		119%	SPK: 20
877-09-8	Tetrachloro-m-xylene	20.5		44 - 124		103%	SPK: 20

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	12/18/24	
Project:	CTO WE13		Date Received:	12/18/24	
Client Sample ID:	PIBLK-PL093426.D		SDG No.:	P5316	
Lab Sample ID:	I.BLK-PL093426.D		Matrix:	WATER	
Analytical Method:	SW8081		% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	PESTICIDE Group1	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL093426.D	1		12/18/24	p1121824

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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Comments:

U = Not Detected	J = Estimated Value
LOQ = Limit of Quantitation	B = Analyte Found in Associated Method Blank
MDL = Method Detection Limit	N = Presumptive Evidence of a Compound
LOD = Limit of Detection	* = Values outside of QC limits
E = Value Exceeds Calibration Range	D = Dilution
P = Indicates >25% difference for detected concentrations between the two GC columns	S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
Q = indicates LCS control criteria did not meet requirements	() = Laboratory InHouse Limit
M = MS/MSD acceptance criteria did not meet requirements	

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:		
Project:	CTO WE13		Date Received:		
Client Sample ID:	PB165704BS		SDG No.:	P5316	
Lab Sample ID:	PB165704BS		Matrix:	SOIL	
Analytical Method:	SW8081		% Solid:	100	Decanted:
Sample Wt/Vol:	30.01	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	PESTICIDE Group1	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL093417.D	1	12/18/24 08:10	12/18/24 16:03	PB165704

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
319-84-6	alpha-BHC	16.8		0.18	0.83	1.70	ug/kg
319-85-7	beta-BHC	16.8		0.49	0.83	1.70	ug/kg
319-86-8	delta-BHC	15.7		0.47	0.83	1.70	ug/kg
58-89-9	gamma-BHC (Lindane)	16.6		0.19	0.83	1.70	ug/kg
76-44-8	Heptachlor	17.6		0.17	0.83	1.70	ug/kg
309-00-2	Aldrin	16.6		0.14	0.83	1.70	ug/kg
959-98-8	Endosulfan I	17.8		0.17	0.83	1.70	ug/kg
60-57-1	Dieldrin	17.9		0.15	0.83	1.70	ug/kg
72-55-9	4,4-DDE	17.6		0.13	0.83	1.70	ug/kg
72-20-8	Endrin	18.8		0.16	0.83	1.70	ug/kg
33213-65-9	Endosulfan II	18.3		0.30	0.83	1.70	ug/kg
72-54-8	4,4-DDD	17.9		0.19	0.83	1.70	ug/kg
1031-07-8	Endosulfan Sulfate	17.9		0.13	0.83	1.70	ug/kg
50-29-3	4,4-DDT	18.7		0.17	0.83	1.70	ug/kg
5103-71-9	alpha-Chlordane	17.8		0.17	0.83	1.70	ug/kg
SURROGATES							
2051-24-3	Decachlorobiphenyl	23.6		55 - 130		118%	SPK: 20
877-09-8	Tetrachloro-m-xylene	19.2		42 - 129		96%	SPK: 20

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	PB165704BS		SDG No.:	P5316
Lab Sample ID:	PB165704BS		Matrix:	SOIL
Analytical Method:	SW8081		% Solid:	100
Sample Wt/Vol:	30.01	Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:		uL	Test:	PESTICIDE Group1
Extraction Type:			Injection Volume :	
GPC Factor :	1.0	PH :		
Prep Method :	SW3541B			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL093417.D	1	12/18/24 08:10	12/18/24 16:03	PB165704

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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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 NUS, Inc.		Date Collected:	12/12/24	
Project:	CTO WE13		Date Received:	12/17/24	
Client Sample ID:	OU4-VSL-07-121224MS		SDG No.:	P5316	
Lab Sample ID:	P5306-01MS		Matrix:	SOIL	
Analytical Method:	SW8081		% Solid:	90.8	Decanted:
Sample Wt/Vol:	30.07	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	PESTICIDE Group1	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL093422.D	1	12/18/24 08:10	12/18/24 17:11	PB165704

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
319-84-6	alpha-BHC	18.3		0.20	0.91	1.90	ug/kg
319-85-7	beta-BHC	18.5		0.54	0.91	1.90	ug/kg
319-86-8	delta-BHC	17.3		0.52	0.91	1.90	ug/kg
58-89-9	gamma-BHC (Lindane)	18.0		0.21	0.91	1.90	ug/kg
76-44-8	Heptachlor	19.1		0.19	0.91	1.90	ug/kg
309-00-2	Aldrin	18.1		0.15	0.91	1.90	ug/kg
959-98-8	Endosulfan I	19.0		0.19	0.91	1.90	ug/kg
60-57-1	Dieldrin	18.9		0.16	0.91	1.90	ug/kg
72-55-9	4,4-DDE	19.0		0.14	0.91	1.90	ug/kg
72-20-8	Endrin	19.8		0.18	0.91	1.90	ug/kg
33213-65-9	Endosulfan II	19.2		0.33	0.91	1.90	ug/kg
72-54-8	4,4-DDD	19.2		0.21	0.91	1.90	ug/kg
1031-07-8	Endosulfan Sulfate	19.1		0.14	0.91	1.90	ug/kg
50-29-3	4,4-DDT	20.1		0.19	0.91	1.90	ug/kg
5103-71-9	alpha-Chlordane	19.2		0.19	0.91	1.90	ug/kg
SURROGATES							
2051-24-3	Decachlorobiphenyl	21.2		55 - 130		106%	SPK: 20
877-09-8	Tetrachloro-m-xylene	18.9		42 - 129		94%	SPK: 20

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	12/12/24	
Project:	CTO WE13		Date Received:	12/17/24	
Client Sample ID:	OU4-VSL-07-121224MS		SDG No.:	P5316	
Lab Sample ID:	P5306-01MS		Matrix:	SOIL	
Analytical Method:	SW8081		% Solid:	90.8	Decanted:
Sample Wt/Vol:	30.07	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	PESTICIDE Group1	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL093422.D	1	12/18/24 08:10	12/18/24 17:11	PB165704

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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Comments:

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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

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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 NUS, Inc.		Date Collected:	12/12/24	
Project:	CTO WE13		Date Received:	12/17/24	
Client Sample ID:	OU4-VSL-07-121224MSD		SDG No.:	P5316	
Lab Sample ID:	P5306-01MSD		Matrix:	SOIL	
Analytical Method:	SW8081		% Solid:	90.8	Decanted:
Sample Wt/Vol:	30.03	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	PESTICIDE Group1	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL093423.D	1	12/18/24 08:10	12/18/24 17:24	PB165704

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
319-84-6	alpha-BHC	18.5		0.20	0.91	1.90	ug/kg
319-85-7	beta-BHC	18.6		0.54	0.91	1.90	ug/kg
319-86-8	delta-BHC	17.4		0.52	0.91	1.90	ug/kg
58-89-9	gamma-BHC (Lindane)	18.2		0.21	0.91	1.90	ug/kg
76-44-8	Heptachlor	19.2		0.19	0.91	1.90	ug/kg
309-00-2	Aldrin	18.2		0.15	0.91	1.90	ug/kg
959-98-8	Endosulfan I	19.1		0.19	0.91	1.90	ug/kg
60-57-1	Dieldrin	19.1		0.17	0.91	1.90	ug/kg
72-55-9	4,4-DDE	19.2		0.14	0.91	1.90	ug/kg
72-20-8	Endrin	20.1		0.18	0.91	1.90	ug/kg
33213-65-9	Endosulfan II	19.3		0.33	0.91	1.90	ug/kg
72-54-8	4,4-DDD	19.4		0.21	0.91	1.90	ug/kg
1031-07-8	Endosulfan Sulfate	19.2		0.14	0.91	1.90	ug/kg
50-29-3	4,4-DDT	20.2		0.19	0.91	1.90	ug/kg
5103-71-9	alpha-Chlordane	19.2		0.19	0.91	1.90	ug/kg
SURROGATES							
2051-24-3	Decachlorobiphenyl	21.1		55 - 130		106%	SPK: 20
877-09-8	Tetrachloro-m-xylene	19.1		42 - 129		96%	SPK: 20

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	12/12/24	
Project:	CTO WE13		Date Received:	12/17/24	
Client Sample ID:	OU4-VSL-07-121224MSD		SDG No.:	P5316	
Lab Sample ID:	P5306-01MSD		Matrix:	SOIL	
Analytical Method:	SW8081		% Solid:	90.8	Decanted:
Sample Wt/Vol:	30.03	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	PESTICIDE Group1	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PL093423.D	1	12/18/24 08:10	12/18/24 17:24	PB165704

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
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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: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

Instrument ID: ECD_L Calibration Date(s): 11/25/2024 11/25/2024

Calibration Times: 11:32 12:25

GC Column: ZB-MR2 ID: 0.32 (mm)

LAB FILE ID:	RT 100 = <u>PL093233.D</u>	RT 075 = <u>PL093234.D</u>
RT 050 = <u>PL093235.D</u>	RT 025 = <u>PL093236.D</u>	RT 005 = <u>PL093237.D</u>

COMPOUND	RT 100	RT 075	RT 050	RT 025	RT 005	MEAN RT	RT WINDOW	
							FROM	TO
4,4'-DDD	6.71	6.71	6.71	6.71	6.71	6.71	6.61	6.81
4,4'-DDE	6.19	6.19	6.19	6.19	6.19	6.19	6.09	6.29
4,4'-DDT	7.02	7.02	7.02	7.02	7.02	7.02	6.92	7.12
Aldrin	5.25	5.26	5.26	5.25	5.26	5.25	5.15	5.35
alpha-BHC	3.99	3.99	3.99	3.99	3.99	3.99	3.89	4.09
alpha-Chlordane	6.02	6.02	6.02	6.02	6.02	6.02	5.92	6.12
beta-BHC	4.52	4.52	4.52	4.52	4.52	4.52	4.42	4.62
Decachlorobiphenyl	9.05	9.05	9.05	9.05	9.05	9.05	8.95	9.15
delta-BHC	4.77	4.77	4.77	4.77	4.77	4.77	4.67	4.87
Dieldrin	6.34	6.34	6.34	6.34	6.34	6.34	6.24	6.44
Endosulfan I	6.07	6.07	6.07	6.07	6.07	6.07	5.97	6.17
Endosulfan II	6.79	6.79	6.79	6.79	6.79	6.79	6.69	6.89
Endosulfan sulfate	7.16	7.16	7.16	7.16	7.16	7.16	7.06	7.26
Endrin	6.57	6.57	6.57	6.57	6.57	6.57	6.47	6.67
gamma-BHC (Lindane)	4.32	4.33	4.33	4.32	4.32	4.32	4.22	4.42
Heptachlor	4.91	4.91	4.91	4.91	4.91	4.91	4.81	5.01
Tetrachloro-m-xylene	3.54	3.54	3.54	3.54	3.54	3.54	3.44	3.64

RETENTION TIMES OF INITIAL CALIBRATION

Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

Instrument ID: ECD_L Calibration Date(s): 11/25/2024 11/25/2024

Calibration Times: 11:32 12:25

GC Column: ZB-MR1 ID: 0.32 (mm)

LAB FILE ID:	RT 100 = <u>PL093233.D</u>	RT 075 = <u>PL093234.D</u>
RT 050 = <u>PL093235.D</u>	RT 025 = <u>PL093236.D</u>	RT 005 = <u>PL093237.D</u>

COMPOUND	RT 100	RT 075	RT 050	RT 025	RT 005	MEAN RT	RT WINDOW	
							FROM	TO
4,4'-DDD	5.79	5.78	5.79	5.78	5.79	5.78	5.68	5.88
4,4'-DDE	5.23	5.23	5.23	5.23	5.23	5.23	5.13	5.33
4,4'-DDT	6.04	6.04	6.04	6.04	6.04	6.03	5.93	6.13
Aldrin	4.23	4.22	4.23	4.22	4.22	4.22	4.12	4.32
alpha-BHC	3.28	3.28	3.28	3.28	3.28	3.28	3.18	3.38
alpha-Chlordane	5.04	5.04	5.04	5.04	5.04	5.04	4.94	5.14
beta-BHC	3.91	3.91	3.91	3.91	3.91	3.91	3.81	4.01
Decachlorobiphenyl	7.91	7.91	7.91	7.91	7.91	7.91	7.81	8.01
delta-BHC	4.14	4.14	4.14	4.14	4.14	4.14	4.04	4.24
Dieldrin	5.36	5.36	5.36	5.36	5.36	5.36	5.26	5.46
Endosulfan I	5.10	5.10	5.10	5.10	5.10	5.10	5.00	5.20
Endosulfan II	5.93	5.93	5.93	5.93	5.93	5.93	5.83	6.03
Endosulfan sulfate	6.33	6.33	6.33	6.33	6.33	6.33	6.23	6.43
Endrin	5.64	5.64	5.64	5.64	5.64	5.64	5.54	5.74
gamma-BHC (Lindane)	3.61	3.61	3.61	3.61	3.61	3.61	3.51	3.71
Heptachlor	3.95	3.95	3.95	3.95	3.95	3.94	3.84	4.04
Tetrachloro-m-xylene	2.77	2.77	2.77	2.77	2.77	2.77	2.67	2.87

CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: TETR06

Lab Code: CHEM **Case No.:** P5316 **SAS No.:** P5316 **SDG NO.:** P5316

Instrument ID: ECD_L **Calibration Date(s):** 11/25/2024 11/25/2024
Calibration Times: 11:32 12:25

GC Column: ZB-MR2 **ID:** 0.32 (mm)

LAB FILE ID:		CF 100 = <u>PL093233.D</u>		CF 075 = <u>PL093234.D</u>			
CF 050 = <u>PL093235.D</u>		CF 025 = <u>PL093236.D</u>		CF 005 = <u>PL093237.D</u>			
COMPOUND	CF 100	CF 075	CF 050	CF 025	CF 005	CF	% RSD
4,4'-DDD	1733160000	1808650000	1850720000	1925860000	1843070000	1832290000	4
4,4'-DDE	2221210000	2350500000	2360510000	2470590000	2293780000	2339320000	4
4,4'-DDT	1832790000	1947390000	1967960000	2054550000	1836470000	1927830000	5
Aldrin	2864930000	2979570000	3025940000	3161520000	3003890000	3007170000	4
alpha-BHC	3546710000	3634980000	3627190000	3670430000	3362830000	3568430000	3
alpha-Chlordane	2430330000	2540140000	2604520000	2738720000	2641650000	2591070000	4
beta-BHC	1384220000	1466250000	1517740000	1604570000	1575890000	1509730000	6
Decachlorobiphenyl	1636890000	1805930000	1768720000	1908190000	1572960000	1738540000	8
delta-BHC	3155870000	3296970000	3306540000	3378330000	3405360000	3308610000	3
Dieldrin	2424230000	2526570000	2583130000	2696740000	2585100000	2563150000	4
Endosulfan I	2275880000	2386120000	2450130000	2582940000	2475880000	2434190000	5
Endosulfan II	2033520000	2140370000	2196030000	2317560000	2214970000	2180490000	5
Endosulfan sulfate	1881360000	2004670000	2075560000	2212740000	2189070000	2072680000	7
Endrin	2015080000	2111400000	2119300000	2210550000	2031060000	2097480000	4
gamma-BHC (Lindane)	3326530000	3429060000	3428820000	3506080000	3202850000	3378670000	3
Heptachlor	2864790000	3012490000	3073870000	3224760000	3104640000	3056110000	4
Tetrachloro-m-xylene	2478960000	2567570000	2623850000	2737290000	2587160000	2598970000	4

CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: TETR06

Lab Code: CHEM **Case No.:** P5316 **SAS No.:** P5316 **SDG NO.:** P5316

Instrument ID: ECD_L **Calibration Date(s):** 11/25/2024 11/25/2024
Calibration Times: 11:32 12:25

GC Column: ZB-MR1 **ID:** 0.32 (mm)

LAB FILE ID:		CF 100 = <u>PL093233.D</u>		CF 075 = <u>PL093234.D</u>			
CF 050 = <u>PL093235.D</u>		CF 025 = <u>PL093236.D</u>		CF 005 = <u>PL093237.D</u>			
COMPOUND	CF 100	CF 075	CF 050	CF 025	CF 005	CF	% RSD
4,4'-DDD	2938310000	3008290000	2954750000	2869940000	2245840000	2803430000	11
4,4'-DDE	3669800000	3789570000	3752520000	3699990000	2988240000	3580020000	9
4,4'-DDT	3053250000	3213950000	3132520000	3008670000	2400480000	2961770000	11
Aldrin	4176660000	4246280000	4177830000	4064810000	3228690000	3978850000	11
alpha-BHC	4584280000	4598400000	4521370000	4323420000	3319640000	4269420000	13
alpha-Chlordane	3719860000	3823200000	3792490000	3768450000	3047300000	3630260000	9
beta-BHC	1761950000	1816770000	1832380000	1861530000	1621710000	1778870000	5
Decachlorobiphenyl	2704170000	2907150000	2926840000	3026130000	2717990000	2856460000	5
delta-BHC	4412200000	4529140000	4463710000	4313560000	3613930000	4266510000	9
Dieldrin	3827290000	3925470000	3861790000	3769600000	3043370000	3685500000	10
Endosulfan I	3413930000	3518860000	3499260000	3473610000	2809170000	3342970000	9
Endosulfan II	3179530000	3325230000	3323650000	3252480000	2764060000	3168990000	7
Endosulfan sulfate	2980440000	3120030000	3136930000	3121900000	2839030000	3039660000	4
Endrin	3285480000	3406140000	3321940000	3229670000	2703080000	3189260000	9
gamma-BHC (Lindane)	4399940000	4444240000	4357890000	4207630000	3289050000	4139750000	12
Heptachlor	4159950000	4268960000	4232300000	4183330000	3383120000	4045530000	9
Tetrachloro-m-xylene	2925820000	2968760000	2977700000	3001480000	2546340000	2884020000	7

CALIBRATION VERIFICATION SUMMARY

Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

Continuing Calib Date: 12/18/2024 Initial Calibration Date(s): 11/25/2024 11/25/2024

Continuing Calib Time: 14:24 Initial Calibration Time(s): 11:32 12:25

GC Column: ZB-MR1 ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
Decachlorobiphenyl	9.06	9.05	8.95	9.15	-0.01
Tetrachloro-m-xylene	3.54	3.54	3.44	3.64	0.00
alpha-BHC	4.00	3.99	3.89	4.09	-0.01
beta-BHC	4.53	4.52	4.42	4.62	-0.01
delta-BHC	4.77	4.77	4.67	4.87	0.00
gamma-BHC (Lindane)	4.33	4.33	4.23	4.43	0.00
Heptachlor	4.92	4.91	4.81	5.01	-0.01
Aldrin	5.26	5.26	5.16	5.36	0.00
Endosulfan I	6.07	6.07	5.97	6.17	0.00
Dieldrin	6.35	6.34	6.24	6.44	-0.01
4,4'-DDE	6.20	6.19	6.09	6.29	-0.01
Endrin	6.58	6.57	6.47	6.67	0.00
Endosulfan II	6.80	6.79	6.69	6.89	-0.01
4,4'-DDD	6.71	6.71	6.61	6.81	0.00
Endosulfan sulfate	7.16	7.16	7.06	7.26	0.00
4,4'-DDT	7.03	7.02	6.92	7.12	-0.01
alpha-Chlordane	6.02	6.02	5.92	6.12	0.00

CALIBRATION VERIFICATION SUMMARY

Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

Continuing Calib Date: 12/18/2024 Initial Calibration Date(s): 11/25/2024 11/25/2024

Continuing Calib Time: 14:24 Initial Calibration Time(s): 11:32 12:25

GC Column: ZB-MR2 ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
Decachlorobiphenyl	7.91	7.91	7.81	8.01	0.00
Tetrachloro-m-xylene	2.78	2.77	2.67	2.87	-0.01
alpha-BHC	3.28	3.28	3.18	3.38	0.00
beta-BHC	3.91	3.91	3.81	4.01	0.00
delta-BHC	4.14	4.14	4.04	4.24	0.00
gamma-BHC (Lindane)	3.61	3.61	3.51	3.71	0.00
Heptachlor	3.95	3.95	3.85	4.05	0.00
Aldrin	4.23	4.23	4.13	4.33	0.00
Endosulfan I	5.10	5.10	5.00	5.20	0.00
Dieldrin	5.36	5.36	5.26	5.46	0.00
4,4'-DDE	5.23	5.23	5.13	5.33	0.00
Endrin	5.64	5.64	5.54	5.74	0.00
Endosulfan II	5.93	5.93	5.83	6.03	0.00
4,4'-DDD	5.79	5.79	5.69	5.89	0.00
Endosulfan sulfate	6.34	6.33	6.23	6.43	-0.01
4,4'-DDT	6.04	6.04	5.94	6.14	0.00
alpha-Chlordane	5.04	5.04	4.94	5.14	0.00

CALIBRATION VERIFICATION SUMMARY

Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 11/25/2024 11/25/2024

Client Sample No.: CCAL01 Date Analyzed: 12/18/2024

Lab Sample No.: PSTDCCC050 Data File : PL093415.D Time Analyzed: 14:24

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
4,4'-DDD	6.712	6.608	6.808	54.320	50.000	8.6
4,4'-DDE	6.195	6.090	6.290	52.890	50.000	5.8
4,4'-DDT	7.026	6.922	7.122	54.440	50.000	8.9
Aldrin	5.259	5.155	5.355	52.760	50.000	5.5
alpha-BHC	3.997	3.892	4.092	54.060	50.000	8.1
alpha-Chlordane	6.021	5.916	6.116	52.540	50.000	5.1
beta-BHC	4.527	4.423	4.623	52.320	50.000	4.6
Decachlorobiphenyl	9.058	8.954	9.154	57.880	50.000	15.8
delta-BHC	4.774	4.670	4.870	52.050	50.000	4.1
Dieldrin	6.347	6.242	6.442	52.610	50.000	5.2
Endosulfan I	6.071	5.967	6.167	52.440	50.000	4.9
Endosulfan II	6.796	6.692	6.892	53.100	50.000	6.2
Endosulfan sulfate	7.161	7.056	7.256	53.010	50.000	6.0
Endrin	6.575	6.472	6.672	55.380	50.000	10.8
gamma-BHC (Lindane)	4.329	4.225	4.425	53.920	50.000	7.8
Heptachlor	4.918	4.813	5.013	52.780	50.000	5.6
Tetrachloro-m-xylene	3.541	3.436	3.636	53.140	50.000	6.3

CALIBRATION VERIFICATION SUMMARY

Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 11/25/2024 11/25/2024

Client Sample No.: CCAL01 Date Analyzed: 12/18/2024

Lab Sample No.: PSTDCCC050 Data File : PL093415.D Time Analyzed: 14:24

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
4,4'-DDD	5.787	5.685	5.885	56.990	50.000	14.0
4,4'-DDE	5.232	5.130	5.330	56.250	50.000	12.5
4,4'-DDT	6.037	5.935	6.135	57.720	50.000	15.4
Aldrin	4.227	4.125	4.325	56.670	50.000	13.3
alpha-BHC	3.279	3.176	3.376	56.990	50.000	14.0
alpha-Chlordane	5.043	4.941	5.141	56.400	50.000	12.8
beta-BHC	3.909	3.807	4.007	55.080	50.000	10.2
Decachlorobiphenyl	7.914	7.812	8.012	57.470	50.000	14.9
delta-BHC	4.138	4.035	4.235	55.650	50.000	11.3
Dieldrin	5.364	5.262	5.462	56.950	50.000	13.9
Endosulfan I	5.099	4.997	5.197	50.910	50.000	1.8
Endosulfan II	5.934	5.832	6.032	57.220	50.000	14.4
Endosulfan sulfate	6.337	6.234	6.434	56.230	50.000	12.5
Endrin	5.639	5.537	5.737	58.340	50.000	16.7
gamma-BHC (Lindane)	3.609	3.506	3.706	57.010	50.000	14.0
Heptachlor	3.947	3.845	4.045	56.740	50.000	13.5
Tetrachloro-m-xylene	2.776	2.674	2.874	55.470	50.000	10.9

CALIBRATION VERIFICATION SUMMARY

Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

Continuing Calib Date: 12/18/2024 Initial Calibration Date(s): 11/25/2024 11/25/2024

Continuing Calib Time: 18:18 Initial Calibration Time(s): 11:32 12:25

GC Column: ZB-MR1 ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
Decachlorobiphenyl	9.06	9.05	8.95	9.15	-0.01
Tetrachloro-m-xylene	3.54	3.54	3.44	3.64	0.00
alpha-BHC	4.00	3.99	3.89	4.09	0.00
beta-BHC	4.53	4.52	4.42	4.62	-0.01
delta-BHC	4.77	4.77	4.67	4.87	0.00
gamma-BHC (Lindane)	4.33	4.33	4.23	4.43	0.00
Heptachlor	4.92	4.91	4.81	5.01	-0.01
Aldrin	5.26	5.26	5.16	5.36	0.00
Endosulfan I	6.07	6.07	5.97	6.17	0.00
Dieldrin	6.35	6.34	6.24	6.44	-0.01
4,4'-DDE	6.19	6.19	6.09	6.29	0.00
Endrin	6.57	6.57	6.47	6.67	0.00
Endosulfan II	6.80	6.79	6.69	6.89	-0.01
4,4'-DDD	6.71	6.71	6.61	6.81	0.00
Endosulfan sulfate	7.16	7.16	7.06	7.26	0.00
4,4'-DDT	7.03	7.02	6.92	7.12	-0.01
alpha-Chlordane	6.02	6.02	5.92	6.12	0.00

CALIBRATION VERIFICATION SUMMARY

Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

Continuing Calib Date: 12/18/2024 Initial Calibration Date(s): 11/25/2024 11/25/2024

Continuing Calib Time: 18:18 Initial Calibration Time(s): 11:32 12:25

GC Column: ZB-MR2 ID: 0.32 (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
Decachlorobiphenyl	7.91	7.91	7.81	8.01	0.00
Tetrachloro-m-xylene	2.78	2.77	2.67	2.87	-0.01
alpha-BHC	3.28	3.28	3.18	3.38	0.00
beta-BHC	3.91	3.91	3.81	4.01	0.00
delta-BHC	4.14	4.14	4.04	4.24	0.00
gamma-BHC (Lindane)	3.61	3.61	3.51	3.71	0.00
Heptachlor	3.95	3.95	3.85	4.05	0.00
Aldrin	4.23	4.23	4.13	4.33	0.00
Endosulfan I	5.10	5.10	5.00	5.20	0.00
Dieldrin	5.36	5.36	5.26	5.46	0.00
4,4'-DDE	5.23	5.23	5.13	5.33	0.00
Endrin	5.64	5.64	5.54	5.74	0.00
Endosulfan II	5.94	5.93	5.83	6.03	0.00
4,4'-DDD	5.79	5.79	5.69	5.89	0.00
Endosulfan sulfate	6.34	6.33	6.23	6.43	-0.01
4,4'-DDT	6.04	6.04	5.94	6.14	0.00
alpha-Chlordane	5.04	5.04	4.94	5.14	0.00

CALIBRATION VERIFICATION SUMMARY

Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 11/25/2024 11/25/2024

Client Sample No.: CCAL02 Date Analyzed: 12/18/2024

Lab Sample No.: PSTDCCC050 Data File : PL093427.D Time Analyzed: 18:18

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
4,4'-DDD	6.711	6.608	6.808	49.090	50.000	-1.8
4,4'-DDE	6.194	6.090	6.290	47.160	50.000	-5.7
4,4'-DDT	7.025	6.922	7.122	48.250	50.000	-3.5
Aldrin	5.258	5.155	5.355	46.780	50.000	-6.4
alpha-BHC	3.995	3.892	4.092	47.510	50.000	-5.0
alpha-Chlordane	6.020	5.916	6.116	46.660	50.000	-6.7
beta-BHC	4.526	4.423	4.623	46.620	50.000	-6.8
Decachlorobiphenyl	9.057	8.954	9.154	52.070	50.000	4.1
delta-BHC	4.773	4.670	4.870	45.820	50.000	-8.4
Dieldrin	6.346	6.242	6.442	46.760	50.000	-6.5
Endosulfan I	6.071	5.967	6.167	46.550	50.000	-6.9
Endosulfan II	6.795	6.692	6.892	47.450	50.000	-5.1
Endosulfan sulfate	7.159	7.056	7.256	47.290	50.000	-5.4
Endrin	6.574	6.472	6.672	49.110	50.000	-1.8
gamma-BHC (Lindane)	4.328	4.225	4.425	47.560	50.000	-4.9
Heptachlor	4.916	4.813	5.013	46.670	50.000	-6.7
Tetrachloro-m-xylene	3.540	3.436	3.636	46.880	50.000	-6.2

CALIBRATION VERIFICATION SUMMARY

Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 11/25/2024 11/25/2024

Client Sample No.: CCAL02 Date Analyzed: 12/18/2024

Lab Sample No.: PSTDCCC050 Data File : PL093427.D Time Analyzed: 18:18

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
4,4'-DDD	5.788	5.685	5.885	51.970	50.000	3.9
4,4'-DDE	5.232	5.130	5.330	50.760	50.000	1.5
4,4'-DDT	6.038	5.935	6.135	51.110	50.000	2.2
Aldrin	4.227	4.125	4.325	50.780	50.000	1.6
alpha-BHC	3.278	3.176	3.376	50.980	50.000	2.0
alpha-Chlordane	5.044	4.941	5.141	50.880	50.000	1.8
beta-BHC	3.908	3.807	4.007	49.650	50.000	-0.7
Decachlorobiphenyl	7.913	7.812	8.012	53.120	50.000	6.2
delta-BHC	4.137	4.035	4.235	49.850	50.000	-0.3
Dieldrin	5.364	5.262	5.462	51.040	50.000	2.1
Endosulfan I	5.099	4.997	5.197	47.490	50.000	-5.0
Endosulfan II	5.935	5.832	6.032	51.340	50.000	2.7
Endosulfan sulfate	6.337	6.234	6.434	51.090	50.000	2.2
Endrin	5.639	5.537	5.737	52.190	50.000	4.4
gamma-BHC (Lindane)	3.608	3.506	3.706	51.000	50.000	2.0
Heptachlor	3.947	3.845	4.045	50.770	50.000	1.5
Tetrachloro-m-xylene	2.776	2.674	2.874	49.910	50.000	-0.2

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 11/25/2024 11/25/2024

Client Sample No. (PEM): PEM - PL093231.D Date Analyzed: 11/25/2024

Lab Sample No.(PEM): PEM Time Analyzed: 11:05

PEM COMPOUND	RT	RT WINDOW		CALC	NOM	%D
		FROM	TO	AMOUNT(ng)	AMOUNT(ng)	
Decachlorobiphenyl	9.054	8.950	9.150	20.040	20.000	0.2
Tetrachloro-m-xylene	3.536	3.490	3.590	20.160	20.000	0.8
alpha-BHC	3.991	3.940	4.040	10.350	10.000	3.5
beta-BHC	4.522	4.470	4.570	10.650	10.000	6.5
gamma-BHC (Lindane)	4.324	4.270	4.370	10.190	10.000	1.9
Endrin	6.572	6.500	6.640	45.410	50.000	-9.2
4,4'-DDT	7.022	6.950	7.090	89.610	100.000	-10.4
Methoxychlor	7.497	7.430	7.570	212.340	250.000	-15.1

GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 11/25/2024 11/25/2024

Client Sample No. (PEM): PEM - PL093231.D Date Analyzed: 11/25/2024

Lab Sample No.(PEM): PEM Time Analyzed: 11:05

PEM COMPOUND	RT	RT WINDOW		CALC	NOM	%D
		FROM	TO	AMOUNT(ng)	AMOUNT(ng)	
Decachlorobiphenyl	7.912	7.810	8.010	19.260	20.000	-3.7
Tetrachloro-m-xylene	2.774	2.720	2.820	19.400	20.000	-3.0
alpha-BHC	3.276	3.230	3.330	9.230	10.000	-7.7
beta-BHC	3.906	3.860	3.960	9.990	10.000	-0.1
gamma-BHC (Lindane)	3.607	3.560	3.660	8.790	10.000	-12.1
Endrin	5.637	5.570	5.710	46.140	50.000	-7.7
4,4'-DDT	6.036	5.970	6.110	100.270	100.000	0.3
Methoxychlor	6.610	6.540	6.680	224.790	250.000	-10.1

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 11/25/2024 11/25/2024

Client Sample No. (PEM): PEM - PL093408.D Date Analyzed: 12/18/2024

Lab Sample No.(PEM): PEM Time Analyzed: 10:48

PEM COMPOUND	RT	RT WINDOW		CALC	NOM	%D
		FROM	TO	AMOUNT(ng)	AMOUNT(ng)	
Decachlorobiphenyl	9.054	8.950	9.150	24.780	20.000	23.9
Tetrachloro-m-xylene	3.539	3.490	3.590	22.120	20.000	10.6
alpha-BHC	3.994	3.940	4.040	11.650	10.000	16.5
beta-BHC	4.525	4.470	4.580	11.820	10.000	18.2
gamma-BHC (Lindane)	4.327	4.280	4.380	11.580	10.000	15.8
Endrin	6.572	6.500	6.640	50.580	50.000	1.2
4,4'-DDT	7.024	6.950	7.090	102.080	100.000	2.1
Methoxychlor	7.500	7.430	7.570	234.290	250.000	-6.3

GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 11/25/2024 11/25/2024

Client Sample No. (PEM): PEM - PL093408.D Date Analyzed: 12/18/2024

Lab Sample No.(PEM): PEM Time Analyzed: 10:48

PEM COMPOUND	RT	RT WINDOW		CALC	NOM	%D
		FROM	TO	AMOUNT(ng)	AMOUNT(ng)	
Decachlorobiphenyl	7.912	7.810	8.010	22.950	20.000	14.8
Tetrachloro-m-xylene	2.775	2.720	2.830	22.150	20.000	10.8
alpha-BHC	3.278	3.230	3.330	10.600	10.000	6.0
beta-BHC	3.908	3.860	3.960	11.560	10.000	15.6
gamma-BHC (Lindane)	3.608	3.560	3.660	10.110	10.000	1.1
Endrin	5.638	5.570	5.710	53.450	50.000	6.9
4,4'-DDT	6.036	5.970	6.110	118.430	100.000	18.4
Methoxychlor	6.611	6.540	6.680	266.160	250.000	6.5

Analytical Sequence

Client: Tetra Tech NUS, Inc.

SDG No.: P5316

Project: CTO WE13

Instrument ID: ECD_L

GC Column: ZB-MR2

ID: 0.32 (mm)

Inst. Calib. Date(s): 11/25/2024

11/25/2024

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	DCB RT #	TCX RT #
LBLK	LBLK	11/25/2024	10:52	PL093230.D	9.05	3.54
PEM	PEM	11/25/2024	11:05	PL093231.D	9.05	3.54
RESCHK	RESCHK	11/25/2024	11:18	PL093232.D	9.05	3.54
PSTDICC100	PSTDICC100	11/25/2024	11:32	PL093233.D	9.05	3.54
PSTDICC075	PSTDICC075	11/25/2024	11:45	PL093234.D	9.05	3.54
PSTDICC050	PSTDICC050	11/25/2024	11:58	PL093235.D	9.05	3.54
PSTDICC025	PSTDICC025	11/25/2024	12:11	PL093236.D	9.05	3.54
PSTDICC005	PSTDICC005	11/25/2024	12:25	PL093237.D	9.05	3.54
PCHLORICC500	PCHLORICC500	11/25/2024	13:04	PL093240.D	9.05	3.54
PTOXICC500	PTOXICC500	11/25/2024	14:11	PL093245.D	9.05	3.54
PEM	PEM	12/18/2024	10:48	PL093408.D	9.05	3.54
LBLK	LBLK	12/18/2024	14:10	PL093414.D	9.07	3.55
PSTDCCC050	PSTDCCC050	12/18/2024	14:24	PL093415.D	9.06	3.54
PB165704BL	PB165704BL	12/18/2024	15:49	PL093416.D	9.06	3.55
PB165704BS	PB165704BS	12/18/2024	16:03	PL093417.D	9.06	3.54
TT-304-IDWSO-20241217-1	P5316-01	12/18/2024	16:45	PL093420.D	9.06	3.54
OU4-VSL-07-121224MS	P5306-01MS	12/18/2024	17:11	PL093422.D	9.06	3.54
OU4-VSL-07-121224MSD	P5306-01MSD	12/18/2024	17:24	PL093423.D	9.06	3.54
LBLK	LBLK	12/18/2024	18:04	PL093426.D	9.06	3.54
PSTDCCC050	PSTDCCC050	12/18/2024	18:18	PL093427.D	9.06	3.54

Analytical Sequence

Client: Tetra Tech NUS, Inc.

SDG No.: P5316

Project: CTO WE13

Instrument ID: ECD_L

GC Column: ZB-MR1

ID: 0.32 (mm)

Inst. Calib. Date(s): 11/25/2024

11/25/2024

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	DCB RT #	TCX RT #
IBLK	IBLK	11/25/2024	10:52	PL093230.D	7.91	2.77
PEM	PEM	11/25/2024	11:05	PL093231.D	7.91	2.77
RESCHK	RESCHK	11/25/2024	11:18	PL093232.D	7.91	2.77
PSTDICC100	PSTDICC100	11/25/2024	11:32	PL093233.D	7.91	2.77
PSTDICC075	PSTDICC075	11/25/2024	11:45	PL093234.D	7.91	2.77
PSTDICC050	PSTDICC050	11/25/2024	11:58	PL093235.D	7.91	2.77
PSTDICC025	PSTDICC025	11/25/2024	12:11	PL093236.D	7.91	2.77
PSTDICC005	PSTDICC005	11/25/2024	12:25	PL093237.D	7.91	2.77
PCHLORICC500	PCHLORICC500	11/25/2024	13:04	PL093240.D	7.91	2.77
PTOXICC500	PTOXICC500	11/25/2024	14:11	PL093245.D	7.91	2.77
PEM	PEM	12/18/2024	10:48	PL093408.D	7.91	2.78
IBLK	IBLK	12/18/2024	14:10	PL093414.D	7.92	2.78
PSTDCCC050	PSTDCCC050	12/18/2024	14:24	PL093415.D	7.91	2.78
PB165704BL	PB165704BL	12/18/2024	15:49	PL093416.D	7.92	2.78
PB165704BS	PB165704BS	12/18/2024	16:03	PL093417.D	7.91	2.78
TT-304-IDWSO-20241217-1	P5316-01	12/18/2024	16:45	PL093420.D	7.91	2.78
OU4-VSL-07-121224MS	P5306-01MS	12/18/2024	17:11	PL093422.D	7.91	2.78
OU4-VSL-07-121224MSD	P5306-01MSD	12/18/2024	17:24	PL093423.D	7.91	2.78
IBLK	IBLK	12/18/2024	18:04	PL093426.D	7.91	2.78
PSTDCCC050	PSTDCCC050	12/18/2024	18:18	PL093427.D	7.91	2.78

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

OU4-VSL-07-121224MS

Contract: TETR06

Lab Code: CHEM

Case No.: P5316

SAS No.: P5316

SDG NO.: P5316

Lab Sample ID: P5306-01MS

Date(s) Analyzed: 12/18/2024

12/18/2024

Instrument ID (1): ECD_L

Instrument ID (2): ECD_L

GC Column: (1): ZB-MR1

ID: 0.32 (mm)

GC Column: (2): ZB-MR2

ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
4,4'-DDD	1	6.71	6.66	6.76	19.2	1.6
	2	5.79	5.74	5.84	18.9	
4,4'-DDE	1	6.19	6.14	6.24	18.2	4.3
	2	5.23	5.18	5.28	19.0	
4,4'-DDT	1	7.02	6.97	7.07	19.5	3
	2	6.04	5.99	6.09	20.1	
alpha-BHC	1	4.00	3.95	4.05	17.4	5
	2	3.28	3.23	3.33	18.3	
Aldrin	1	5.26	5.21	5.31	17.3	4.5
	2	4.23	4.18	4.28	18.1	
alpha-Chlordane	1	6.02	5.97	6.07	18.1	5.9
	2	5.04	4.99	5.09	19.2	
Endosulfan II	1	6.79	6.74	6.84	19.0	1
	2	5.93	5.88	5.98	19.2	
Endosulfan sulfate	1	7.16	7.11	7.21	18.5	3.2
	2	6.34	6.29	6.39	19.1	
beta-BHC	1	4.53	4.48	4.58	17.8	3.9
	2	3.91	3.86	3.96	18.5	
delta-BHC	1	4.77	4.72	4.82	16.6	4.1
	2	4.14	4.09	4.19	17.3	
Endosulfan I	1	6.07	6.02	6.12	18.0	5.4
	2	5.10	5.05	5.15	19.0	
Dieldrin	1	6.34	6.29	6.39	18.0	4.9
	2	5.36	5.31	5.41	18.9	
gamma-BHC (Lindane)	1	4.33	4.28	4.38	17.4	3.4
	2	3.61	3.56	3.66	18.0	
Heptachlor	1	4.92	4.87	4.97	18.0	5.9
	2	3.95	3.90	4.00	19.1	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

OU4-VSL-07-121224MS

Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

Lab Sample ID: P5306-01MS Date(s) Analyzed: 12/18/2024 12/18/2024

Instrument ID (1): ECD_L Instrument ID (2): ECD_L

GC Column: (1): ZB-MR1 ID: 0.32 (mm) GC Column:(2): ZB-MR2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Endrin	1	6.57	6.52	6.62	19.1	3.6
	2	5.64	5.59	5.69	19.8	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

OU4-VSL-07-121224MSD

Contract: TETR06

Lab Code: CHEM

Case No.: P5316

SAS No.: P5316

SDG NO.: P5316

Lab Sample ID: P5306-01MSD

Date(s) Analyzed: 12/18/2024

12/18/2024

Instrument ID (1): ECD_L

Instrument ID (2): ECD_L

GC Column: (1): ZB-MR1

ID: 0.32 (mm)

GC Column: (2): ZB-MR2

ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
4,4'-DDD	1	6.71	6.66	6.76	19.4	2.6
	2	5.79	5.74	5.84	18.9	
4,4'-DDT	1	7.02	6.97	7.07	19.4	4
	2	6.04	5.99	6.09	20.2	
alpha-BHC	1	4.00	3.95	4.05	17.7	4.4
	2	3.28	3.23	3.33	18.5	
Aldrin	1	5.26	5.21	5.31	17.4	4.5
	2	4.23	4.18	4.28	18.2	
beta-BHC	1	4.53	4.48	4.58	18.0	3.3
	2	3.91	3.86	3.96	18.6	
alpha-Chlordane	1	6.02	5.97	6.07	18.2	5.3
	2	5.04	4.99	5.09	19.2	
4,4'-DDE	1	6.19	6.14	6.24	18.4	4.3
	2	5.23	5.18	5.28	19.2	
Endosulfan II	1	6.79	6.74	6.84	19.0	1.6
	2	5.93	5.88	5.98	19.3	
Endosulfan sulfate	1	7.16	7.11	7.21	18.6	3.2
	2	6.34	6.29	6.39	19.2	
gamma-BHC (Lindane)	1	4.33	4.28	4.38	17.6	3.4
	2	3.61	3.56	3.66	18.2	
Heptachlor	1	4.92	4.87	4.97	18.0	6.5
	2	3.95	3.90	4.00	19.2	
delta-BHC	1	4.77	4.72	4.82	16.7	4.1
	2	4.14	4.09	4.19	17.4	
Endosulfan I	1	6.07	6.02	6.12	18.1	5.4
	2	5.10	5.05	5.15	19.1	
Dieldrin	1	6.35	6.30	6.40	18.0	5.9
	2	5.36	5.31	5.41	19.1	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

OU4-VSL-07-121224MSD

Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

Lab Sample ID: P5306-01MSD Date(s) Analyzed: 12/18/2024 12/18/2024

Instrument ID (1): ECD_L Instrument ID (2): ECD_L

GC Column: (1): ZB-MR1 ID: 0.32 (mm) GC Column:(2): ZB-MR2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Endrin	1	6.57	6.52	6.62	19.2	4.6
	2	5.64	5.59	5.69	20.1	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

PB165704BS

Contract: TETR06

Lab Code: CHEM

Case No.: P5316

SAS No.: P5316

SDG NO.: P5316

Lab Sample ID: PB165704BS

Date(s) Analyzed: 12/18/2024

12/18/2024

Instrument ID (1): ECD_L

Instrument ID (2): ECD_L

GC Column: (1): ZB-MR1

ID: 0.32 (mm)

GC Column: (2): ZB-MR2

ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Endosulfan sulfate	1	7.16	7.11	7.21	16.8	6.3
	2	6.34	6.29	6.39	17.9	
alpha-BHC	1	4.00	3.95	4.05	16.0	4.9
	2	3.28	3.23	3.33	16.8	
Aldrin	1	5.26	5.21	5.31	15.7	5.6
	2	4.23	4.18	4.28	16.6	
beta-BHC	1	4.53	4.48	4.58	15.9	5.5
	2	3.91	3.86	3.96	16.8	
delta-BHC	1	4.77	4.72	4.82	14.9	5.2
	2	4.14	4.09	4.19	15.7	
Endosulfan I	1	6.07	6.02	6.12	16.6	7
	2	5.10	5.05	5.15	17.8	
alpha-Chlordane	1	6.02	5.97	6.07	16.7	6.4
	2	5.04	4.99	5.09	17.8	
4,4'-DDE	1	6.19	6.14	6.24	16.7	5.2
	2	5.23	5.18	5.28	17.6	
Dieldrin	1	6.35	6.30	6.40	16.6	7.5
	2	5.36	5.31	5.41	17.9	
Endrin	1	6.58	6.53	6.63	17.6	6.6
	2	5.64	5.59	5.69	18.8	
gamma-BHC (Lindane)	1	4.33	4.28	4.38	15.8	4.9
	2	3.61	3.56	3.66	16.6	
Heptachlor	1	4.92	4.87	4.97	16.5	6.5
	2	3.95	3.90	4.00	17.6	
Endosulfan II	1	6.80	6.75	6.85	17.1	6.8
	2	5.93	5.88	5.98	18.3	
4,4'-DDD	1	6.71	6.66	6.76	17.3	3.4
	2	5.79	5.74	5.84	17.9	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

PB165704BS

Contract: TETR06

Lab Code: CHEM

Case No.: P5316

SAS No.: P5316

SDG NO.: P5316

Lab Sample ID: PB165704BS

Date(s) Analyzed: 12/18/2024

12/18/2024

Instrument ID (1): ECD_L

Instrument ID (2): ECD_L

GC Column: (1): ZB-MR1

ID: 0.32 (mm)

GC Column:(2): ZB-MR2

ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
4,4'-DDT	1	7.02	6.97	7.07	17.8	4.9
	2	6.04	5.99	6.09	18.7	

LAB CHRONICLE

OrderID:	P5316	OrderDate:	12/17/2024 3:44:00 PM
Client:	Tetra Tech NUS, Inc.	Project:	CTO WE13
Contact:	Ernie Wu	Location:	L51,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P5316-01	TT-304-IDWSO-20241 217-1	SOIL	PCB Group1	8082A	12/17/24	12/18/24	12/19/24	12/17/24

Hit Summary Sheet
SW-846

SDG No.: P5316

Order ID: P5316

Client: Tetra Tech NUS, Inc.

Project ID: CTO WE13

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
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Client ID :

Total Concentration: 0.000



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	12/17/24	
Project:	CTO WE13		Date Received:	12/17/24	
Client Sample ID:	TT-304-IDWSO-20241217-1		SDG No.:	P5316	
Lab Sample ID:	P5316-01		Matrix:	SOIL	
Analytical Method:	SW8082A		% Solid:	68.6	Decanted:
Sample Wt/Vol:	30.05	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	PCB Group1	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PO108648.D	1	12/18/24 08:10	12/19/24 00:02	PB165703

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
12674-11-2	Aroclor-1016	12.1	U	4.90	12.1	24.7	ug/kg
11104-28-2	Aroclor-1221	18.9	U	9.30	18.9	24.7	ug/kg
11141-16-5	Aroclor-1232	18.9	U	4.90	18.9	24.7	ug/kg
53469-21-9	Aroclor-1242	12.1	U	4.90	12.1	24.7	ug/kg
12672-29-6	Aroclor-1248	18.9	U	11.5	18.9	24.7	ug/kg
11097-69-1	Aroclor-1254	18.9	U	4.00	18.9	24.7	ug/kg
37324-23-5	Aroclor-1262	12.1	U	6.70	12.1	24.7	ug/kg
11100-14-4	Aroclor-1268	18.9	U	5.00	18.9	24.7	ug/kg
11096-82-5	Aroclor-1260	12.1	U	4.20	12.1	24.7	ug/kg
SURROGATES							
877-09-8	Tetrachloro-m-xylene	18.1		44 - 130		90%	SPK: 20
2051-24-3	Decachlorobiphenyl	17.9		60 - 125		89%	SPK: 20

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



QC SUMMARY

Surrogate Summary

SDG No.: **P5316**

Client: **Tetra Tech NUS, Inc.**

Analytical Method: **8082A**

Lab Sample ID	Client ID	Parameter	Column	Spike	Result	Rec	Qual	Limits	
								Low	High
I.BLK-PO108361.D	PIBLK-PO108361.D	Tetrachloro-m-xylene	1	20	23.0	115		60	140
		Decachlorobiphenyl	1	20	23.6	118		60	140
		Tetrachloro-m-xylene	2	20	21.6	108		60	140
		Decachlorobiphenyl	2	20	23.6	118		60	140
I.BLK-PO108624.D	PIBLK-PO108624.D	Tetrachloro-m-xylene	1	20	20.4	102		60	140
		Decachlorobiphenyl	1	20	20.2	101		60	140
		Tetrachloro-m-xylene	2	20	21.3	107		60	140
		Decachlorobiphenyl	2	20	23.4	117		60	140
PB165703BL	PB165703BL	Tetrachloro-m-xylene	1	20	18.9	94		44	130
		Decachlorobiphenyl	1	20	19.2	96		60	125
		Tetrachloro-m-xylene	2	20	19.5	98		44	130
		Decachlorobiphenyl	2	20	22.0	110		60	125
PB165703BS	PB165703BS	Tetrachloro-m-xylene	1	20	17.7	89		44	130
		Decachlorobiphenyl	1	20	19.3	96		60	125
		Tetrachloro-m-xylene	2	20	18.4	92		44	130
		Decachlorobiphenyl	2	20	22.3	112		60	125
P5306-01MS	OU4-VSL-07-121224MS	Tetrachloro-m-xylene	1	20	22.4	112		44	130
		Decachlorobiphenyl	1	20	23.8	119		60	125
		Tetrachloro-m-xylene	2	20	23.1	115		44	130
		Decachlorobiphenyl	2	20	27.4	137	*	60	125
P5306-01MSD	OU4-VSL-07-121224MSD	Tetrachloro-m-xylene	1	20	22.5	112		44	130
		Decachlorobiphenyl	1	20	20.6	103		60	125
		Tetrachloro-m-xylene	2	20	23.3	117		44	130
		Decachlorobiphenyl	2	20	23.9	119		60	125
I.BLK-PO108639.D	PIBLK-PO108639.D	Tetrachloro-m-xylene	1	20	20.5	103		60	140
		Decachlorobiphenyl	1	20	20.3	102		60	140
		Tetrachloro-m-xylene	2	20	21.5	108		60	140
		Decachlorobiphenyl	2	20	24.1	121		60	140
P5316-01	TT-304-IDWSO-20241217-1	Tetrachloro-m-xylene	1	20	17.2	86		44	130
		Decachlorobiphenyl	1	20	15.2	76		60	125
		Tetrachloro-m-xylene	2	20	18.1	90		44	130
		Decachlorobiphenyl	2	20	17.9	89		60	125
I.BLK-PO108653.D	PIBLK-PO108653.D	Tetrachloro-m-xylene	1	20	20.6	103		60	140
		Decachlorobiphenyl	1	20	20.4	102		60	140
		Tetrachloro-m-xylene	2	20	21.5	108		60	140
		Decachlorobiphenyl	2	20	24.0	120		60	140

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: P5316

Client: Tetra Tech NUS, Inc.

Analytical Method: 8082A

DataFile : PO108632.D

Lab Sample ID:	Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Low	Limits High	RPD
Client Sample ID: OU4-VSL-07-121224MS												
P5306-01MS	AR1016	183.3	0	239	ug/kg	130				47	134	
	AR1260	183.3	0	242	ug/kg	132				53	140	

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: P5316

Client: Tetra Tech NUS, Inc.

Analytical Method: 8082A

DataFile : PO108633.D

Lab Sample ID:	Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Low	Limits High	RPD
Client Sample ID: OU4-VSL-07-121224MSD												
P5306-01MSD	AR1016	183.2	0	229	ug/kg	125		4		47	134	20
	AR1260	183.2	0	220	ug/kg	120		10		53	140	20

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P5316

Client: Tetra Tech NUS, Inc.

Analytical Method: 8082A Datafile : PO108626.D

Lab Sample ID	Parameter	Spike	Result	Units	Rec	RPD	Qual	RPD		Limits		RPD
								Qual	Low	High		
PB165703BS	AR1016	166.6	159	ug/kg	95				47	134		
	AR1260	166.6	165	ug/kg	99				53	140		

A

B

C

D

E

F

G

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB165703BL

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: P5316

SAS No.: P5316 SDG NO.: P5316

Lab Sample ID: PB165703BL

Lab File ID: PO108625.D

Matrix: (soil/water) Solid

Extraction: (Type) _____

Sulfur Cleanup: (Y/N) N

Date Extracted: 12/18/2024

Date Analyzed (1): 12/18/2024

Date Analyzed (2): 12/18/2024

Time Analyzed (1): 16:18

Time Analyzed (2): 16:18

Instrument ID (1): ECD_O

Instrument ID (2): ECD_O

GC Column (1): ZB-MR1 ID: 0.32 (mm)

GC Column (2): ZB-MR2 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
PB165703BS	PB165703BS	PO108626.D	12/18/2024	12/18/2024
OU4-VSL-07-121224MS	P5306-01MS	PO108632.D	12/18/2024	12/18/2024
OU4-VSL-07-121224MSD	P5306-01MSD	PO108633.D	12/18/2024	12/18/2024
TT-304-IDWSO-20241217-1	P5316-01	PO108648.D	12/19/2024	12/19/2024

COMMENTS: _____



CALIBRATION SUMMARY

RETENTION TIMES OF INITIAL CALIBRATION

Contract: TETR06
Lab Code: CHEM **Case No.:** P5316 **SAS No.:** P5316 **SDG NO.:** P5316
Instrument ID: ECD_O **Calibration Date(s):** 12/06/2024 12/06/2024
Calibration Times: 14:19 22:34

GC Column: ZB-MR1 **ID:** 0.32 (mm)

LAB FILE ID: **RT 1000 =** PO108362.D **RT 750 =** PO108363.D
RT 500 = PO108364.D **RT 250 =** PO108365.D **RT 050 =** PO108366.D

COMPOUND		RT 1000	RT 750	RT 500	RT 250	RT 050	MEAN RT	RT WINDOW	
								FROM	TO
Aroclor-1016-1	(1)	4.81	4.81	4.81	4.81	4.81	4.81	4.71	4.91
Aroclor-1016-2	(2)	4.83	4.83	4.83	4.83	4.83	4.83	4.73	4.93
Aroclor-1016-3	(3)	4.89	4.89	4.89	4.89	4.89	4.89	4.79	4.99
Aroclor-1016-4	(4)	5.01	5.01	5.01	5.01	5.01	5.01	4.91	5.11
Aroclor-1016-5	(5)	5.27	5.27	5.27	5.27	5.27	5.27	5.17	5.37
Aroclor-1260-1	(1)	6.31	6.31	6.31	6.31	6.31	6.31	6.21	6.41
Aroclor-1260-2	(2)	6.50	6.50	6.50	6.50	6.50	6.50	6.40	6.60
Aroclor-1260-3	(3)	6.87	6.87	6.87	6.87	6.87	6.87	6.77	6.97
Aroclor-1260-4	(4)	7.13	7.13	7.13	7.13	7.13	7.13	7.03	7.23
Aroclor-1260-5	(5)	7.37	7.37	7.37	7.37	7.37	7.37	7.27	7.47
Decachlorobiphenyl		8.79	8.79	8.79	8.79	8.79	8.79	8.69	8.89
Tetrachloro-m-xylene		3.71	3.71	3.71	3.71	3.71	3.71	3.61	3.81
Aroclor-1242-1	(1)	4.81	4.81	4.81	4.81	4.81	4.81	4.71	4.91
Aroclor-1242-2	(2)	4.83	4.83	4.83	4.83	4.83	4.83	4.73	4.93
Aroclor-1242-3	(3)	4.88	4.88	4.88	4.88	4.88	4.88	4.78	4.98
Aroclor-1242-4	(4)	5.01	5.01	5.01	5.00	5.00	5.01	4.91	5.11
Aroclor-1242-5	(5)	5.66	5.66	5.66	5.66	5.66	5.66	5.56	5.76
Decachlorobiphenyl		8.79	8.79	8.79	8.79	8.79	8.79	8.69	8.89
Tetrachloro-m-xylene		3.71	3.71	3.71	3.71	3.71	3.71	3.61	3.81
Aroclor-1248-1	(1)	4.81	4.81	4.81	4.81	4.81	4.81	4.71	4.91
Aroclor-1248-2	(2)	5.05	5.05	5.05	5.05	5.05	5.05	4.95	5.15
Aroclor-1248-3	(3)	5.26	5.26	5.26	5.26	5.26	5.26	5.16	5.36
Aroclor-1248-4	(4)	5.62	5.62	5.62	5.62	5.62	5.62	5.52	5.72
Aroclor-1248-5	(5)	5.66	5.66	5.66	5.66	5.66	5.66	5.56	5.76
Decachlorobiphenyl		8.79	8.79	8.79	8.79	8.79	8.79	8.69	8.89
Tetrachloro-m-xylene		3.71	3.71	3.71	3.71	3.71	3.71	3.61	3.81
Aroclor-1254-1	(1)	5.62	5.62	5.62	5.62	5.62	5.62	5.52	5.72
Aroclor-1254-2	(2)	5.77	5.77	5.77	5.77	5.77	5.77	5.67	5.87
Aroclor-1254-3	(3)	6.18	6.17	6.17	6.17	6.17	6.17	6.07	6.27
Aroclor-1254-4	(4)	6.40	6.40	6.40	6.40	6.40	6.40	6.30	6.50
Aroclor-1254-5	(5)	6.83	6.83	6.83	6.83	6.83	6.83	6.73	6.93
Decachlorobiphenyl		8.79	8.79	8.79	8.79	8.79	8.79	8.69	8.89
Tetrachloro-m-xylene		3.71	3.71	3.71	3.71	3.71	3.71	3.61	3.81
Aroclor-1268-1	(1)	7.65	7.65	7.65	7.66	7.66	7.65	7.55	7.75
Aroclor-1268-2	(2)	7.72	7.72	7.72	7.72	7.72	7.72	7.62	7.82
Aroclor-1268-3	(3)	7.93	7.93	7.93	7.93	7.93	7.93	7.83	8.03
Aroclor-1268-4	(4)	8.22	8.22	8.22	8.22	8.22	8.22	8.12	8.32
Aroclor-1268-5	(5)	8.52	8.52	8.52	8.52	8.52	8.52	8.42	8.62

RETENTION TIMES OF INITIAL CALIBRATION

Decachlorobiphenyl	8.79	8.79	8.79	8.79	8.79	8.79	8.69	8.89
Tetrachloro-m-xylene	3.71	3.71	3.71	3.71	3.71	3.71	3.61	3.81

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RETENTION TIMES OF INITIAL CALIBRATION

Contract: TETR06
Lab Code: CHEM **Case No.:** P5316 **SAS No.:** P5316 **SDG NO.:** P5316
Instrument ID: ECD_O **Calibration Date(s):** 12/06/2024 12/06/2024
Calibration Times: 14:19 22:34

GC Column: ZB-MR2 **ID:** 0.32 (mm)

LAB FILE ID: **RT 1000 =** PO108362.D **RT 750 =** PO108363.D
RT 500 = PO108364.D **RT 250 =** PO108365.D **RT 050 =** PO108366.D

COMPOUND		RT 1000	RT 750	RT 500	RT 250	RT 050	MEAN RT	RT WINDOW	
								FROM	TO
Aroclor-1016-1	(1)	4.80	4.80	4.80	4.80	4.80	4.80	4.70	4.90
Aroclor-1016-2	(2)	4.82	4.82	4.82	4.82	4.82	4.82	4.72	4.92
Aroclor-1016-3	(3)	4.99	4.99	4.99	4.99	4.99	4.99	4.89	5.09
Aroclor-1016-4	(4)	5.04	5.04	5.04	5.04	5.04	5.04	4.94	5.14
Aroclor-1016-5	(5)	5.25	5.25	5.25	5.25	5.25	5.25	5.15	5.35
Aroclor-1260-1	(1)	6.29	6.29	6.29	6.29	6.29	6.29	6.19	6.39
Aroclor-1260-2	(2)	6.47	6.47	6.47	6.47	6.47	6.47	6.37	6.57
Aroclor-1260-3	(3)	6.63	6.63	6.63	6.63	6.63	6.63	6.53	6.73
Aroclor-1260-4	(4)	7.10	7.10	7.10	7.10	7.10	7.10	7.00	7.20
Aroclor-1260-5	(5)	7.34	7.34	7.34	7.34	7.34	7.34	7.24	7.44
Decachlorobiphenyl		8.74	8.74	8.74	8.74	8.74	8.74	8.64	8.84
Tetrachloro-m-xylene		3.71	3.71	3.71	3.71	3.71	3.71	3.61	3.81
Aroclor-1242-1	(1)	4.80	4.80	4.80	4.80	4.80	4.80	4.70	4.90
Aroclor-1242-2	(2)	4.82	4.82	4.82	4.82	4.82	4.82	4.72	4.92
Aroclor-1242-3	(3)	4.99	4.99	4.99	4.99	4.99	4.99	4.89	5.09
Aroclor-1242-4	(4)	5.08	5.08	5.08	5.08	5.08	5.08	4.98	5.18
Aroclor-1242-5	(5)	5.60	5.60	5.60	5.60	5.60	5.60	5.50	5.70
Decachlorobiphenyl		8.74	8.74	8.74	8.74	8.74	8.74	8.64	8.84
Tetrachloro-m-xylene		3.71	3.71	3.71	3.71	3.71	3.71	3.61	3.81
Aroclor-1248-1	(1)	4.80	4.80	4.80	4.80	4.80	4.80	4.70	4.90
Aroclor-1248-2	(2)	5.04	5.04	5.03	5.03	5.04	5.04	4.94	5.14
Aroclor-1248-3	(3)	5.08	5.08	5.08	5.08	5.08	5.08	4.98	5.18
Aroclor-1248-4	(4)	5.25	5.25	5.25	5.25	5.25	5.25	5.15	5.35
Aroclor-1248-5	(5)	5.64	5.64	5.64	5.64	5.64	5.64	5.54	5.74
Decachlorobiphenyl		8.74	8.74	8.74	8.74	8.74	8.74	8.64	8.84
Tetrachloro-m-xylene		3.71	3.71	3.71	3.71	3.71	3.71	3.61	3.81
Aroclor-1254-1	(1)	5.60	5.60	5.60	5.60	5.60	5.60	5.50	5.70
Aroclor-1254-2	(2)	5.75	5.75	5.75	5.75	5.75	5.75	5.65	5.85
Aroclor-1254-3	(3)	6.15	6.15	6.15	6.15	6.15	6.15	6.05	6.25
Aroclor-1254-4	(4)	6.38	6.38	6.38	6.38	6.38	6.38	6.28	6.48
Aroclor-1254-5	(5)	6.80	6.80	6.80	6.80	6.80	6.80	6.70	6.90
Decachlorobiphenyl		8.74	8.74	8.74	8.74	8.74	8.74	8.64	8.84
Tetrachloro-m-xylene		3.71	3.71	3.71	3.71	3.71	3.71	3.61	3.81
Aroclor-1268-1	(1)	7.62	7.62	7.62	7.62	7.62	7.62	7.52	7.72
Aroclor-1268-2	(2)	7.69	7.69	7.69	7.69	7.69	7.69	7.59	7.79
Aroclor-1268-3	(3)	7.90	7.90	7.90	7.90	7.90	7.90	7.80	8.00
Aroclor-1268-4	(4)	8.18	8.18	8.18	8.18	8.18	8.18	8.08	8.28
Aroclor-1268-5	(5)	8.48	8.48	8.48	8.48	8.48	8.48	8.38	8.58

RETENTION TIMES OF INITIAL CALIBRATION

Decachlorobiphenyl	8.74	8.74	8.74	8.74	8.74	8.74	8.64	8.84
Tetrachloro-m-xylene	3.71	3.71	3.71	3.71	3.71	3.71	3.61	3.81

CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: TETR06
Lab Code: CHEM **Case No.:** P5316 **SAS No.:** P5316 **SDG NO.:** P5316
Instrument ID: ECD_O
Calibration Date(s): 12/06/2024 12/06/2024
Calibration Times: 14:19 22:34
GC Column: ZB-MR1 **ID:** 0.32 (mm)

LAB FILE ID:		CF 1000 = <u>PO108362.D</u>		CF 750 = <u>PO108363.D</u>			
CF 500 = <u>PO108364.D</u>		CF 250 = <u>PO108365.D</u>		CF 050 = <u>PO108366.D</u>			
COMPOUND		CF 1000	CF 750	CF 500	CF 250	CF 050	% RSD
Aroclor-1016-1	(1)	291946997	297743768	310620664	319628964	322276700	4
Aroclor-1016-2	(2)	404548343	410201719	419086158	434302728	418957120	3
Aroclor-1016-3	(3)	276313882	283350735	295214768	305005424	303271420	4
Aroclor-1016-4	(4)	219460370	224028880	231955104	239248200	241192240	4
Aroclor-1016-5	(5)	230837381	238568924	249276722	260302648	279364560	8
Aroclor-1260-1	(1)	430087746	435401064	458150304	486996644	475087940	5
Aroclor-1260-2	(2)	526959551	526383048	555764632	590931960	578558580	5
Aroclor-1260-3	(3)	436965341	443883275	464184392	487588856	485769460	5
Aroclor-1260-4	(4)	403312630	406530869	426472890	444299896	446086500	5
Aroclor-1260-5	(5)	957132439	955503789	984649950	1000570432	961557080	2
Decachlorobiphenyl		7019975940	7102279760	7343195240	7645101200	7409935200	3
Tetrachloro-m-xylene		8754554380	8783699800	8926447760	8858353120	8177601800	3
Aroclor-1242-1	(1)	247125512	244458381	250566506	269052152	275422740	5
Aroclor-1242-2	(2)	337820704	332549081	339649972	356992284	358797680	3
Aroclor-1242-3	(3)	232389462	228960781	237971694	251417972	255318460	5
Aroclor-1242-4	(4)	184244210	179103536	186955244	196540012	206728220	6
Aroclor-1242-5	(5)	194011522	194743607	197474576	218140108	233983940	9
Decachlorobiphenyl		7151632520	7167100640	7259242160	7695082840	7616154000	4
Tetrachloro-m-xylene		8921368150	8691850413	8750108140	8842570400	8500038400	2
Aroclor-1248-1	(1)	180443308	190883876	199902132	213303984	216831760	8
Aroclor-1248-2	(2)	246301061	262357348	276907834	298582396	301778920	9
Aroclor-1248-3	(3)	307776547	326479597	342321706	362333244	366087160	7
Aroclor-1248-4	(4)	437732929	457834677	479474244	502800428	504795820	6
Aroclor-1248-5	(5)	308766537	323271540	339143702	357998428	363873980	7
Decachlorobiphenyl		7041971050	7340001867	7677772660	8334328560	8377267200	8
Tetrachloro-m-xylene		8742483090	9116744787	9342439560	9446963040	8577776400	4
Aroclor-1254-1	(1)	463230517	487037587	512031514	533861324	572040640	8
Aroclor-1254-2	(2)	407035308	429134731	452892530	476390932	511836900	9
Aroclor-1254-3	(3)	665923649	695083201	726473802	743208540	769953480	6
Aroclor-1254-4	(4)	404280854	421077525	444268156	458648100	465789400	6
Aroclor-1254-5	(5)	578915300	604639081	636092894	662542188	693421140	7
Decachlorobiphenyl		7146512650	7451889427	7845842200	8029803560	8289288000	6
Tetrachloro-m-xylene		8916956510	9205112240	9483653100	9313097600	8995829000	3
Aroclor-1268-1	(1)	1246089127	1198545457	1234114434	1276827264	1264498100	2

CALIBRATION FACTOR OF INITIAL CALIBRATION

Aroclor-1268-2	(2)	1144198522	1088520925	1112229462	1147435628	1115923840	1121661675	2
Aroclor-1268-3	(3)	940965396	832346444	919340748	953365360	884986220	906200834	5
Aroclor-1268-4	(4)	385949324	370268229	384086808	404665236	389544200	386902759	3
Aroclor-1268-5	(5)	2890019913	2756282528	2773652360	2815336668	2624622080	2771982710	4
Decachlorobiphenyl		13116054520	12684928373	12985206200	13660251040	13550255000	13199339027	3
Tetrachloro-m-xylene		9439924600	8926085107	9366220020	9585299080	8679584000	9199422561	4

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CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

Instrument ID: ECD_O Calibration Date(s): 12/06/2024 12/06/2024

Calibration Times: 14:19 22:34

GC Column: ZB-MR2 ID: 0.32 (mm)

LAB FILE ID:		CF 1000 = <u>PO108362.D</u>		CF 750 = <u>PO108363.D</u>			
CF 500 = <u>PO108364.D</u>		CF 250 = <u>PO108365.D</u>		CF 050 = <u>PO108366.D</u>			
COMPOUND		CF 1000	CF 750	CF 500	CF 250	CF 050	% RSD
Aroclor-1016-1	(1)	153895169	156728372	161981056	169073964	160692820	160474276
Aroclor-1016-2	(2)	216342839	218481491	224728354	232664856	218246400	222092788
Aroclor-1016-3	(3)	120117826	122069885	126984464	131660600	128335340	125833623
Aroclor-1016-4	(4)	96843518	100727947	106065160	112123848	108269060	104805907
Aroclor-1016-5	(5)	124135109	128707045	133919966	139473364	149819760	135211049
Aroclor-1260-1	(1)	220557751	224688929	233372252	247245708	244312440	234035416
Aroclor-1260-2	(2)	265498816	268435476	278836448	291165028	298902840	280567722
Aroclor-1260-3	(3)	247895049	250737920	258985508	271036448	289186460	263568277
Aroclor-1260-4	(4)	206205103	207830825	214807128	221847076	213061100	212750246
Aroclor-1260-5	(5)	485216265	483370987	491130416	498849136	461100640	483933489
Decachlorobiphenyl		3766442770	3798929547	3925647180	4081005080	3802565400	3874917995
Tetrachloro-m-xylene		5125815400	5157614040	5227779180	5235220160	4600485000	5069382756
Aroclor-1242-1	(1)	129471703	129065633	132661290	141454628	146186400	135767931
Aroclor-1242-2	(2)	181117644	180316532	183263990	191612732	190980420	185458264
Aroclor-1242-3	(3)	100948316	100485531	102947708	108518220	114012140	105382383
Aroclor-1242-4	(4)	100375229	100398940	104407974	111868140	119593080	107328673
Aroclor-1242-5	(5)	119243844	118999972	122020908	130935164	140800680	126400114
Decachlorobiphenyl		3837824030	3881889067	3932164520	4142632320	3981873600	3955276707
Tetrachloro-m-xylene		5175637870	5056121747	5062590080	5077379040	4694060200	5013157787
Aroclor-1248-1	(1)	96151235	101173276	106208356	111512520	110549280	105118933
Aroclor-1248-2	(2)	134456241	142517627	150226096	159660040	159777460	149327493
Aroclor-1248-3	(3)	143332101	151082947	159714030	169070604	168858280	158411592
Aroclor-1248-4	(4)	168393487	177299203	184813874	193701216	188544620	182550480
Aroclor-1248-5	(5)	162171392	168228800	176144562	182809080	188663420	175603451
Decachlorobiphenyl		3812249930	3973614533	4145380680	4445118560	4295672800	4134407301
Tetrachloro-m-xylene		4965646150	5143987440	5236574340	5255843080	4633325600	5047075322
Aroclor-1254-1	(1)	245816740	256457156	269229946	279215328	303441080	270832050
Aroclor-1254-2	(2)	215464605	225390397	238770420	248817564	271658880	240020373
Aroclor-1254-3	(3)	351887512	364509791	380441060	386791796	393925500	375511132
Aroclor-1254-4	(4)	202983022	209924784	220508360	226093392	228876240	217677160
Aroclor-1254-5	(5)	301571990	312619885	327015726	332817532	339773740	322759775
Decachlorobiphenyl		3941299730	4071714027	4258931580	4374402200	4331619600	4195593427
Tetrachloro-m-xylene		5092418740	5228867107	5367266300	5227916200	4998387200	5182971109
Aroclor-1268-1	(1)	656711077	629047555	645909990	662020976	635929760	645923872

CALIBRATION FACTOR OF INITIAL CALIBRATION

Aroclor-1268-2	(2)	598855523	573599667	581583226	594062960	559533920	581527059	3
Aroclor-1268-3	(3)	514109640	473779721	502419092	515326152	488714860	498869893	4
Aroclor-1268-4	(4)	204541613	194882907	202546298	212150808	201074520	203039229	3
Aroclor-1268-5	(5)	1554458685	1488724905	1492118486	1500575756	1388253260	1484826218	4
Decachlorobiphenyl		7216327300	6964723040	7142803680	7406390760	7194775600	7185004076	2
Tetrachloro-m-xylene		5353757740	5060175947	5259788400	5326606440	4764065600	5152878825	5

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INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

Instrument ID: ECD_O Date(s) Analyzed: 12/06/2024 12/06/2024

GC Column: ZB-MR1 ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW		CALIBRATION FACTOR
				FROM	TO	
Aroclor-1221	500	1	3.93	3.83	4.03	113144000
		2	4.01	3.91	4.11	86720400
		3	4.09	3.99	4.19	254206000
		4	0.00			0
		5	0.00			0
Aroclor-1232	500	1	4.09	3.99	4.19	204770000
		2	4.59	4.49	4.69	114353000
		3	4.83	4.73	4.93	197477000
		4	5.01	4.91	5.11	108380000
		5	5.05	4.95	5.15	78329400
Aroclor-1262	500	1	6.87	6.77	6.97	658396000
		2	7.37	7.27	7.47	1111710000
		3	7.65	7.55	7.75	436856000
		4	7.72	7.62	7.82	806298000
		5	8.22	8.12	8.32	354936000

INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

Instrument ID: ECD_O Date(s) Analyzed: 12/06/2024 12/06/2024

GC Column: ZB-MR2 ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW		CALIBRATION FACTOR
				FROM	TO	
Aroclor-1221	500	1	3.92	3.82	4.02	62122600
		2	4.01	3.91	4.11	47445000
		3	4.08	3.98	4.18	140587000
		4	0.00			0
		5	0.00			0
Aroclor-1232	500	1	4.08	3.98	4.18	112052000
		2	4.82	4.72	4.92	105754000
		3	4.99	4.89	5.09	60347200
		4	5.08	4.98	5.18	55556400
		5	5.25	5.15	5.35	57576200
Aroclor-1262	500	1	6.84	6.74	6.94	337974000
		2	7.34	7.24	7.44	571854000
		3	7.62	7.52	7.72	224428000
		4	7.69	7.59	7.79	409588000
		5	8.18	8.08	8.28	184828000

CALIBRATION VERIFICATION SUMMARY

Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

Continuing Calib Date: 12/18/2024 Initial Calibration Date(s): 12/06/2024 12/06/2024

Continuing Calib Time: 14:46 Initial Calibration Time(s): 14:19 22:34

GC Column: ZB-MR1 ID: 0.32 (mm)

COMPOUND		CCAL RT	AVG RT	RT WINDOW		DIFF RT
				FROM	TO	
Aroclor-1016-1	(1)	4.80	4.81	4.71	4.91	0.01
Aroclor-1016-2	(2)	4.82	4.83	4.73	4.93	0.01
Aroclor-1016-3	(3)	4.88	4.89	4.79	4.99	0.01
Aroclor-1016-4	(4)	5.00	5.01	4.91	5.11	0.01
Aroclor-1016-5	(5)	5.26	5.27	5.17	5.37	0.01
Aroclor-1260-1	(1)	6.30	6.31	6.21	6.41	0.01
Aroclor-1260-2	(2)	6.49	6.50	6.40	6.60	0.01
Aroclor-1260-3	(3)	6.86	6.87	6.77	6.97	0.01
Aroclor-1260-4	(4)	7.12	7.13	7.03	7.23	0.01
Aroclor-1260-5	(5)	7.36	7.37	7.27	7.47	0.01
Tetrachloro-m-xylene		3.71	3.71	3.61	3.81	0.00
Decachlorobiphenyl		8.78	8.79	8.69	8.89	0.02

CALIBRATION VERIFICATION SUMMARY

Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

Continuing Calib Date: 12/18/2024 Initial Calibration Date(s): 12/06/2024 12/06/2024

Continuing Calib Time: 14:46 Initial Calibration Time(s): 14:19 22:34

GC Column: ZB-MR2 ID: 0.32 (mm)

COMPOUND		CCAL RT	AVG RT	RT WINDOW		DIFF RT
				FROM	TO	
Aroclor-1016-1	(1)	4.79	4.80	4.70	4.90	0.01
Aroclor-1016-2	(2)	4.81	4.82	4.72	4.92	0.01
Aroclor-1016-3	(3)	4.99	4.99	4.89	5.09	0.00
Aroclor-1016-4	(4)	5.03	5.04	4.94	5.14	0.01
Aroclor-1016-5	(5)	5.24	5.25	5.15	5.35	0.01
Aroclor-1260-1	(1)	6.28	6.29	6.19	6.39	0.01
Aroclor-1260-2	(2)	6.46	6.47	6.37	6.57	0.01
Aroclor-1260-3	(3)	6.62	6.63	6.53	6.73	0.01
Aroclor-1260-4	(4)	7.09	7.10	7.00	7.20	0.01
Aroclor-1260-5	(5)	7.33	7.34	7.24	7.44	0.01
Tetrachloro-m-xylene		3.70	3.71	3.61	3.81	0.01
Decachlorobiphenyl		8.72	8.74	8.64	8.84	0.02

CALIBRATION VERIFICATION SUMMARY

Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 12/06/2024 12/06/2024

Client Sample No.: CCAL01 Date Analyzed: 12/18/2024

Lab Sample No.: AR1660CCC500 Data File : PO108620.D Time Analyzed: 14:46

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Aroclor-1016-1	4.802	4.709	4.909	474.580	500.000	-5.1
Aroclor-1016-2	4.822	4.729	4.929	475.440	500.000	-4.9
Aroclor-1016-3	4.878	4.785	4.985	475.580	500.000	-4.9
Aroclor-1016-4	4.999	4.907	5.107	474.750	500.000	-5.1
Aroclor-1016-5	5.257	5.165	5.365	473.130	500.000	-5.4
Aroclor-1260-1	6.300	6.210	6.410	455.930	500.000	-8.8
Aroclor-1260-2	6.489	6.398	6.598	462.940	500.000	-7.4
Aroclor-1260-3	6.859	6.769	6.969	466.590	500.000	-6.7
Aroclor-1260-4	7.119	7.029	7.229	461.520	500.000	-7.7
Aroclor-1260-5	7.360	7.270	7.470	462.190	500.000	-7.6
Decachlorobiphenyl	8.775	8.691	8.891	44.110	50.000	-11.8
Tetrachloro-m-xylene	3.706	3.610	3.810	48.140	50.000	-3.7

CALIBRATION VERIFICATION SUMMARY

Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 12/06/2024 12/06/2024

Client Sample No.: CCAL01 Date Analyzed: 12/18/2024

Lab Sample No.: AR1660CCC500 Data File : PO108620.D Time Analyzed: 14:46

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Aroclor-1016-1	4.790	4.698	4.898	530.530	500.000	6.1
Aroclor-1016-2	4.810	4.718	4.918	527.700	500.000	5.5
Aroclor-1016-3	4.986	4.894	5.094	521.780	500.000	4.4
Aroclor-1016-4	5.027	4.935	5.135	514.400	500.000	2.9
Aroclor-1016-5	5.241	5.150	5.350	524.590	500.000	4.9
Aroclor-1260-1	6.276	6.186	6.386	524.770	500.000	5.0
Aroclor-1260-2	6.462	6.373	6.573	525.150	500.000	5.0
Aroclor-1260-3	6.616	6.527	6.727	523.700	500.000	4.7
Aroclor-1260-4	7.089	7.000	7.200	541.420	500.000	8.3
Aroclor-1260-5	7.328	7.239	7.439	546.360	500.000	9.3
Decachlorobiphenyl	8.724	8.641	8.841	50.970	50.000	1.9
Tetrachloro-m-xylene	3.703	3.608	3.808	52.590	50.000	5.2

CALIBRATION VERIFICATION SUMMARY

Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

Continuing Calib Date: 12/18/2024 Initial Calibration Date(s): 12/06/2024 12/06/2024

Continuing Calib Time: 20:04 Initial Calibration Time(s): 14:19 22:34

GC Column: ZB-MR1 ID: 0.32 (mm)

COMPOUND		CCAL RT	AVG RT	RT WINDOW		DIFF RT
				FROM	TO	
Aroclor-1016-1	(1)	4.80	4.81	4.71	4.91	0.01
Aroclor-1016-2	(2)	4.82	4.83	4.73	4.93	0.01
Aroclor-1016-3	(3)	4.88	4.89	4.79	4.99	0.01
Aroclor-1016-4	(4)	5.00	5.01	4.91	5.11	0.01
Aroclor-1016-5	(5)	5.26	5.27	5.17	5.37	0.01
Aroclor-1260-1	(1)	6.30	6.31	6.21	6.41	0.01
Aroclor-1260-2	(2)	6.49	6.50	6.40	6.60	0.01
Aroclor-1260-3	(3)	6.86	6.87	6.77	6.97	0.01
Aroclor-1260-4	(4)	7.12	7.13	7.03	7.23	0.01
Aroclor-1260-5	(5)	7.36	7.37	7.27	7.47	0.01
Tetrachloro-m-xylene		3.71	3.71	3.61	3.81	0.00
Decachlorobiphenyl		8.78	8.79	8.69	8.89	0.02

CALIBRATION VERIFICATION SUMMARY

Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

Continuing Calib Date: 12/18/2024 Initial Calibration Date(s): 12/06/2024 12/06/2024

Continuing Calib Time: 20:04 Initial Calibration Time(s): 14:19 22:34

GC Column: ZB-MR2 ID: 0.32 (mm)

COMPOUND		CCAL RT	AVG RT	RT WINDOW		DIFF RT
				FROM	TO	
Aroclor-1016-1	(1)	4.79	4.80	4.70	4.90	0.01
Aroclor-1016-2	(2)	4.81	4.82	4.72	4.92	0.01
Aroclor-1016-3	(3)	4.99	4.99	4.89	5.09	0.00
Aroclor-1016-4	(4)	5.03	5.04	4.94	5.14	0.01
Aroclor-1016-5	(5)	5.24	5.25	5.15	5.35	0.01
Aroclor-1260-1	(1)	6.28	6.29	6.19	6.39	0.01
Aroclor-1260-2	(2)	6.46	6.47	6.37	6.57	0.01
Aroclor-1260-3	(3)	6.62	6.63	6.53	6.73	0.01
Aroclor-1260-4	(4)	7.09	7.10	7.00	7.20	0.01
Aroclor-1260-5	(5)	7.33	7.34	7.24	7.44	0.01
Tetrachloro-m-xylene		3.70	3.71	3.61	3.81	0.01
Decachlorobiphenyl		8.73	8.74	8.64	8.84	0.01

CALIBRATION VERIFICATION SUMMARY

Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 12/06/2024 12/06/2024

Client Sample No.: CCAL02 Date Analyzed: 12/18/2024

Lab Sample No.: AR1660CCC500 Data File : PO108635.D Time Analyzed: 20:04

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Aroclor-1016-1	4.803	4.709	4.909	498.640	500.000	-0.3
Aroclor-1016-2	4.823	4.729	4.929	505.570	500.000	1.1
Aroclor-1016-3	4.879	4.785	4.985	503.330	500.000	0.7
Aroclor-1016-4	5.000	4.907	5.107	503.810	500.000	0.8
Aroclor-1016-5	5.258	5.165	5.365	505.700	500.000	1.1
Aroclor-1260-1	6.301	6.210	6.410	488.870	500.000	-2.2
Aroclor-1260-2	6.490	6.398	6.598	489.350	500.000	-2.1
Aroclor-1260-3	6.859	6.769	6.969	496.430	500.000	-0.7
Aroclor-1260-4	7.119	7.029	7.229	491.890	500.000	-1.6
Aroclor-1260-5	7.360	7.270	7.470	495.310	500.000	-0.9
Decachlorobiphenyl	8.775	8.691	8.891	46.280	50.000	-7.4
Tetrachloro-m-xylene	3.706	3.610	3.810	50.760	50.000	1.5

CALIBRATION VERIFICATION SUMMARY

Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 12/06/2024 12/06/2024

Client Sample No.: CCAL02 Date Analyzed: 12/18/2024

Lab Sample No.: AR1660CCC500 Data File : PO108635.D Time Analyzed: 20:04

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Aroclor-1016-1	4.791	4.698	4.898	552.620	500.000	10.5
Aroclor-1016-2	4.811	4.718	4.918	552.950	500.000	10.6
Aroclor-1016-3	4.986	4.894	5.094	541.900	500.000	8.4
Aroclor-1016-4	5.028	4.935	5.135	532.940	500.000	6.6
Aroclor-1016-5	5.242	5.150	5.350	555.680	500.000	11.1
Aroclor-1260-1	6.277	6.186	6.386	553.460	500.000	10.7
Aroclor-1260-2	6.463	6.373	6.573	552.480	500.000	10.5
Aroclor-1260-3	6.617	6.527	6.727	553.540	500.000	10.7
Aroclor-1260-4	7.089	7.000	7.200	574.670	500.000	14.9
Aroclor-1260-5	7.329	7.239	7.439	580.680	500.000	16.1
Decachlorobiphenyl	8.725	8.641	8.841	54.120	50.000	8.2
Tetrachloro-m-xylene	3.704	3.608	3.808	55.170	50.000	10.3

CALIBRATION VERIFICATION SUMMARY

Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

Continuing Calib Date: 12/19/2024 Initial Calibration Date(s): 12/06/2024 12/06/2024

Continuing Calib Time: 01:03 Initial Calibration Time(s): 14:19 22:34

GC Column: ZB-MR1 ID: 0.32 (mm)

COMPOUND		CCAL RT	AVG RT	RT WINDOW		DIFF RT
				FROM	TO	
Aroclor-1016-1	(1)	4.80	4.81	4.71	4.91	0.01
Aroclor-1016-2	(2)	4.82	4.83	4.73	4.93	0.01
Aroclor-1016-3	(3)	4.88	4.89	4.79	4.99	0.01
Aroclor-1016-4	(4)	5.00	5.01	4.91	5.11	0.01
Aroclor-1016-5	(5)	5.26	5.27	5.17	5.37	0.01
Aroclor-1260-1	(1)	6.30	6.31	6.21	6.41	0.01
Aroclor-1260-2	(2)	6.49	6.50	6.40	6.60	0.01
Aroclor-1260-3	(3)	6.86	6.87	6.77	6.97	0.01
Aroclor-1260-4	(4)	7.12	7.13	7.03	7.23	0.01
Aroclor-1260-5	(5)	7.36	7.37	7.27	7.47	0.01
Tetrachloro-m-xylene		3.71	3.71	3.61	3.81	0.00
Decachlorobiphenyl		8.77	8.79	8.69	8.89	0.02

CALIBRATION VERIFICATION SUMMARY

Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

Continuing Calib Date: 12/19/2024 Initial Calibration Date(s): 12/06/2024 12/06/2024

Continuing Calib Time: 01:03 Initial Calibration Time(s): 14:19 22:34

GC Column: ZB-MR2 ID: 0.32 (mm)

COMPOUND		CCAL RT	AVG RT	RT WINDOW		DIFF RT
				FROM	TO	
Aroclor-1016-1	(1)	4.79	4.80	4.70	4.90	0.01
Aroclor-1016-2	(2)	4.81	4.82	4.72	4.92	0.01
Aroclor-1016-3	(3)	4.99	4.99	4.89	5.09	0.00
Aroclor-1016-4	(4)	5.03	5.04	4.94	5.14	0.01
Aroclor-1016-5	(5)	5.24	5.25	5.15	5.35	0.01
Aroclor-1260-1	(1)	6.28	6.29	6.19	6.39	0.01
Aroclor-1260-2	(2)	6.46	6.47	6.37	6.57	0.01
Aroclor-1260-3	(3)	6.62	6.63	6.53	6.73	0.01
Aroclor-1260-4	(4)	7.09	7.10	7.00	7.20	0.01
Aroclor-1260-5	(5)	7.33	7.34	7.24	7.44	0.01
Tetrachloro-m-xylene		3.70	3.71	3.61	3.81	0.01
Decachlorobiphenyl		8.73	8.74	8.64	8.84	0.01

CALIBRATION VERIFICATION SUMMARY

Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

GC Column: ZB-MR1 ID: 0.32 (mm) Initi. Calib. Date(s): 12/06/2024 12/06/2024

Client Sample No.: CCAL03 Date Analyzed: 12/19/2024

Lab Sample No.: AR1660CCC500 Data File : PO108649.D Time Analyzed: 01:03

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Aroclor-1016-1	4.803	4.709	4.909	506.530	500.000	1.3
Aroclor-1016-2	4.822	4.729	4.929	505.100	500.000	1.0
Aroclor-1016-3	4.878	4.785	4.985	509.000	500.000	1.8
Aroclor-1016-4	4.999	4.907	5.107	508.070	500.000	1.6
Aroclor-1016-5	5.257	5.165	5.365	507.310	500.000	1.5
Aroclor-1260-1	6.300	6.210	6.410	493.950	500.000	-1.2
Aroclor-1260-2	6.489	6.398	6.598	493.160	500.000	-1.4
Aroclor-1260-3	6.858	6.769	6.969	500.940	500.000	0.2
Aroclor-1260-4	7.118	7.029	7.229	498.360	500.000	-0.3
Aroclor-1260-5	7.359	7.270	7.470	503.010	500.000	0.6
Decachlorobiphenyl	8.773	8.691	8.891	46.710	50.000	-6.6
Tetrachloro-m-xylene	3.706	3.610	3.810	51.090	50.000	2.2

CALIBRATION VERIFICATION SUMMARY

Contract: TETR06

Lab Code: CHEM Case No.: P5316 SAS No.: P5316 SDG NO.: P5316

GC Column: ZB-MR2 ID: 0.32 (mm) Initi. Calib. Date(s): 12/06/2024 12/06/2024

Client Sample No.: CCAL03 Date Analyzed: 12/19/2024

Lab Sample No.: AR1660CCC500 Data File : PO108649.D Time Analyzed: 01:03

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
Aroclor-1016-1	4.791	4.698	4.898	562.100	500.000	12.4
Aroclor-1016-2	4.810	4.718	4.918	562.390	500.000	12.5
Aroclor-1016-3	4.986	4.894	5.094	555.600	500.000	11.1
Aroclor-1016-4	5.028	4.935	5.135	547.020	500.000	9.4
Aroclor-1016-5	5.241	5.150	5.350	566.660	500.000	13.3
Aroclor-1260-1	6.276	6.186	6.386	562.810	500.000	12.6
Aroclor-1260-2	6.462	6.373	6.573	562.140	500.000	12.4
Aroclor-1260-3	6.617	6.527	6.727	563.250	500.000	12.7
Aroclor-1260-4	7.089	7.000	7.200	582.400	500.000	16.5
Aroclor-1260-5	7.328	7.239	7.439	587.540	500.000	17.5
Decachlorobiphenyl	8.725	8.641	8.841	55.060	50.000	10.1
Tetrachloro-m-xylene	3.704	3.608	3.808	55.980	50.000	12.0

Analytical Sequence

Client: Tetra Tech NUS, Inc.

SDG No.: P5316

Project: CTO WE13

Instrument ID: ECD_O

GC Column: ZB-MR1

ID: 0.32 (mm)

Inst. Calib. Date(s): 12/06/2024

12/06/2024

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	DCB RT #	TCX RT #
IBLK	IBLK	12/06/2024	14:01	PO108361.D	8.79	3.71
AR1660ICC1000	AR1660ICC1000	12/06/2024	14:19	PO108362.D	8.79	3.71
AR1660ICC750	AR1660ICC750	12/06/2024	14:38	PO108363.D	8.79	3.71
AR1660ICC500	AR1660ICC500	12/06/2024	14:56	PO108364.D	8.79	3.71
AR1660ICC250	AR1660ICC250	12/06/2024	15:14	PO108365.D	8.79	3.71
AR1660ICC050	AR1660ICC050	12/06/2024	15:33	PO108366.D	8.79	3.71
AR1221ICC500	AR1221ICC500	12/06/2024	15:51	PO108367.D	8.79	3.71
AR1232ICC500	AR1232ICC500	12/06/2024	16:09	PO108368.D	8.79	3.71
AR1242ICC1000	AR1242ICC1000	12/06/2024	16:28	PO108369.D	8.79	3.71
AR1242ICC750	AR1242ICC750	12/06/2024	16:46	PO108370.D	8.79	3.71
AR1242ICC500	AR1242ICC500	12/06/2024	17:04	PO108371.D	8.79	3.71
AR1242ICC250	AR1242ICC250	12/06/2024	17:23	PO108372.D	8.79	3.71
AR1242ICC050	AR1242ICC050	12/06/2024	17:41	PO108373.D	8.79	3.71
AR1248ICC1000	AR1248ICC1000	12/06/2024	17:59	PO108374.D	8.79	3.71
AR1248ICC750	AR1248ICC750	12/06/2024	18:18	PO108375.D	8.79	3.71
AR1248ICC500	AR1248ICC500	12/06/2024	18:36	PO108376.D	8.79	3.71
AR1248ICC250	AR1248ICC250	12/06/2024	18:54	PO108377.D	8.79	3.71
AR1248ICC050	AR1248ICC050	12/06/2024	19:13	PO108378.D	8.79	3.71
AR1254ICC1000	AR1254ICC1000	12/06/2024	19:31	PO108379.D	8.79	3.71
AR1254ICC750	AR1254ICC750	12/06/2024	19:49	PO108380.D	8.79	3.71
AR1254ICC500	AR1254ICC500	12/06/2024	20:08	PO108381.D	8.79	3.71
AR1254ICC250	AR1254ICC250	12/06/2024	20:26	PO108382.D	8.79	3.71
AR1254ICC050	AR1254ICC050	12/06/2024	20:44	PO108383.D	8.79	3.71
AR1262ICC500	AR1262ICC500	12/06/2024	21:03	PO108384.D	8.79	3.71
AR1268ICC1000	AR1268ICC1000	12/06/2024	21:21	PO108385.D	8.79	3.71
AR1268ICC750	AR1268ICC750	12/06/2024	21:39	PO108386.D	8.79	3.71
AR1268ICC500	AR1268ICC500	12/06/2024	21:58	PO108387.D	8.79	3.71
AR1268ICC250	AR1268ICC250	12/06/2024	22:16	PO108388.D	8.79	3.71
AR1268ICC050	AR1268ICC050	12/06/2024	22:34	PO108389.D	8.79	3.71
AR1660CCC500	AR1660CCC500	12/18/2024	14:46	PO108620.D	8.78	3.71
IBLK	IBLK	12/18/2024	15:59	PO108624.D	8.78	3.71
PB165703BL	PB165703BL	12/18/2024	16:18	PO108625.D	8.78	3.71
PB165703BS	PB165703BS	12/18/2024	16:36	PO108626.D	8.78	3.71
OU4-VSL-07-121224MS	P5306-01MS	12/18/2024	18:26	PO108632.D	8.78	3.71
OU4-VSL-07-121224MSD	P5306-01MSD	12/18/2024	18:44	PO108633.D	8.78	3.71
AR1660CCC500	AR1660CCC500	12/18/2024	20:04	PO108635.D	8.78	3.71
IBLK	IBLK	12/18/2024	21:17	PO108639.D	8.78	3.71
TT-304-IDWSO-20241217-1	P5316-01	12/19/2024	00:02	PO108648.D	8.78	3.71
AR1660CCC500	AR1660CCC500	12/19/2024	01:03	PO108649.D	8.77	3.71
IBLK	IBLK	12/19/2024	02:16	PO108653.D	8.77	3.71

Analytical Sequence

Client: Tetra Tech NUS, Inc.

SDG No.: P5316

Project: CTO WE13

Instrument ID: ECD_O

GC Column: ZB-MR2

ID: 0.32 (mm)

Inst. Calib. Date(s): 12/06/2024

12/06/2024

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	DCB RT #	TCX RT #
IBLK	IBLK	12/06/2024	14:01	PO108361.D	8.74	3.71
AR1660ICC1000	AR1660ICC1000	12/06/2024	14:19	PO108362.D	8.74	3.71
AR1660ICC750	AR1660ICC750	12/06/2024	14:38	PO108363.D	8.74	3.71
AR1660ICC500	AR1660ICC500	12/06/2024	14:56	PO108364.D	8.74	3.71
AR1660ICC250	AR1660ICC250	12/06/2024	15:14	PO108365.D	8.74	3.71
AR1660ICC050	AR1660ICC050	12/06/2024	15:33	PO108366.D	8.74	3.71
AR1221ICC500	AR1221ICC500	12/06/2024	15:51	PO108367.D	8.74	3.71
AR1232ICC500	AR1232ICC500	12/06/2024	16:09	PO108368.D	8.74	3.71
AR1242ICC1000	AR1242ICC1000	12/06/2024	16:28	PO108369.D	8.74	3.71
AR1242ICC750	AR1242ICC750	12/06/2024	16:46	PO108370.D	8.74	3.71
AR1242ICC500	AR1242ICC500	12/06/2024	17:04	PO108371.D	8.74	3.71
AR1242ICC250	AR1242ICC250	12/06/2024	17:23	PO108372.D	8.74	3.71
AR1242ICC050	AR1242ICC050	12/06/2024	17:41	PO108373.D	8.74	3.71
AR1248ICC1000	AR1248ICC1000	12/06/2024	17:59	PO108374.D	8.74	3.71
AR1248ICC750	AR1248ICC750	12/06/2024	18:18	PO108375.D	8.74	3.71
AR1248ICC500	AR1248ICC500	12/06/2024	18:36	PO108376.D	8.74	3.71
AR1248ICC250	AR1248ICC250	12/06/2024	18:54	PO108377.D	8.74	3.71
AR1248ICC050	AR1248ICC050	12/06/2024	19:13	PO108378.D	8.74	3.71
AR1254ICC1000	AR1254ICC1000	12/06/2024	19:31	PO108379.D	8.74	3.71
AR1254ICC750	AR1254ICC750	12/06/2024	19:49	PO108380.D	8.74	3.71
AR1254ICC500	AR1254ICC500	12/06/2024	20:08	PO108381.D	8.74	3.71
AR1254ICC250	AR1254ICC250	12/06/2024	20:26	PO108382.D	8.74	3.71
AR1254ICC050	AR1254ICC050	12/06/2024	20:44	PO108383.D	8.74	3.71
AR1262ICC500	AR1262ICC500	12/06/2024	21:03	PO108384.D	8.74	3.71
AR1268ICC1000	AR1268ICC1000	12/06/2024	21:21	PO108385.D	8.74	3.71
AR1268ICC750	AR1268ICC750	12/06/2024	21:39	PO108386.D	8.74	3.71
AR1268ICC500	AR1268ICC500	12/06/2024	21:58	PO108387.D	8.74	3.71
AR1268ICC250	AR1268ICC250	12/06/2024	22:16	PO108388.D	8.74	3.71
AR1268ICC050	AR1268ICC050	12/06/2024	22:34	PO108389.D	8.74	3.71
AR1660CCC500	AR1660CCC500	12/18/2024	14:46	PO108620.D	8.72	3.70
IBLK	IBLK	12/18/2024	15:59	PO108624.D	8.73	3.70
PB165703BL	PB165703BL	12/18/2024	16:18	PO108625.D	8.73	3.70
PB165703BS	PB165703BS	12/18/2024	16:36	PO108626.D	8.73	3.70
OU4-VSL-07-121224MS	P5306-01MS	12/18/2024	18:26	PO108632.D	8.73	3.70
OU4-VSL-07-121224MSD	P5306-01MSD	12/18/2024	18:44	PO108633.D	8.73	3.70
AR1660CCC500	AR1660CCC500	12/18/2024	20:04	PO108635.D	8.73	3.70
IBLK	IBLK	12/18/2024	21:17	PO108639.D	8.73	3.70
TT-304-IDWSO-20241217-1	P5316-01	12/19/2024	00:02	PO108648.D	8.72	3.70
AR1660CCC500	AR1660CCC500	12/19/2024	01:03	PO108649.D	8.73	3.70
IBLK	IBLK	12/19/2024	02:16	PO108653.D	8.73	3.70



QC SAMPLE DATA

Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:		
Project:	CTO WE13		Date Received:		
Client Sample ID:	PB165703BL		SDG No.:	P5316	
Lab Sample ID:	PB165703BL		Matrix:	SOIL	
Analytical Method:	SW8082A		% Solid:	100	Decanted:
Sample Wt/Vol:	30.03	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	PCB Group1	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PO108625.D	1	12/18/24 08:10	12/18/24 16:18	PB165703

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
12674-11-2	Aroclor-1016	8.30	U	3.40	8.30	17.0	ug/kg
11104-28-2	Aroclor-1221	13.0	U	6.40	13.0	17.0	ug/kg
11141-16-5	Aroclor-1232	13.0	U	3.40	13.0	17.0	ug/kg
53469-21-9	Aroclor-1242	8.30	U	3.40	8.30	17.0	ug/kg
12672-29-6	Aroclor-1248	13.0	U	7.90	13.0	17.0	ug/kg
11097-69-1	Aroclor-1254	13.0	U	2.70	13.0	17.0	ug/kg
37324-23-5	Aroclor-1262	8.30	U	4.60	8.30	17.0	ug/kg
11100-14-4	Aroclor-1268	13.0	U	3.40	13.0	17.0	ug/kg
11096-82-5	Aroclor-1260	8.30	U	2.90	8.30	17.0	ug/kg
SURROGATES							
877-09-8	Tetrachloro-m-xylene	19.5		44 - 130		98%	SPK: 20
2051-24-3	Decachlorobiphenyl	22.0		60 - 125		110%	SPK: 20

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 NUS, Inc.		Date Collected:	12/06/24	
Project:	CTO WE13		Date Received:	12/06/24	
Client Sample ID:	PIBLK-PO108361.D		SDG No.:	P5316	
Lab Sample ID:	I.BLK-PO108361.D		Matrix:	WATER	
Analytical Method:	SW8082A		% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	PCB Group1	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	5030				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PO108361.D	1		12/06/24	PO120624

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
12674-11-2	Aroclor-1016	0.40	U	0.15	0.40	0.50	ug/L
11104-28-2	Aroclor-1221	0.40	U	0.23	0.40	0.50	ug/L
11141-16-5	Aroclor-1232	0.40	U	0.37	0.40	0.50	ug/L
53469-21-9	Aroclor-1242	0.40	U	0.16	0.40	0.50	ug/L
12672-29-6	Aroclor-1248	0.40	U	0.12	0.40	0.50	ug/L
11097-69-1	Aroclor-1254	0.40	U	0.11	0.40	0.50	ug/L
11096-82-5	Aroclor-1260	0.40	U	0.15	0.40	0.50	ug/L
37324-23-5	Aroclor-1262	0.40	U	0.14	0.40	0.50	ug/L
11100-14-4	Aroclor-1268	0.40	U	0.12	0.40	0.50	ug/L
SURROGATES							
877-09-8	Tetrachloro-m-xylene	21.6		60 - 140		108%	SPK: 20
2051-24-3	Decachlorobiphenyl	23.6		60 - 140		118%	SPK: 20

Comments:

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B = Analyte Found in Associated Method Blank

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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 NUS, Inc.		Date Collected:	12/18/24	
Project:	CTO WE13		Date Received:	12/18/24	
Client Sample ID:	PIBLK-PO108624.D		SDG No.:	P5316	
Lab Sample ID:	I.BLK-PO108624.D		Matrix:	WATER	
Analytical Method:	SW8082A		% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	PCB Group1	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	5030				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PO108624.D	1		12/18/24	PO121824

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
12674-11-2	Aroclor-1016	0.40	U	0.15	0.40	0.50	ug/L
11104-28-2	Aroclor-1221	0.40	U	0.23	0.40	0.50	ug/L
11141-16-5	Aroclor-1232	0.40	U	0.37	0.40	0.50	ug/L
53469-21-9	Aroclor-1242	0.40	U	0.16	0.40	0.50	ug/L
12672-29-6	Aroclor-1248	0.40	U	0.12	0.40	0.50	ug/L
11097-69-1	Aroclor-1254	0.40	U	0.11	0.40	0.50	ug/L
11096-82-5	Aroclor-1260	0.40	U	0.15	0.40	0.50	ug/L
37324-23-5	Aroclor-1262	0.40	U	0.14	0.40	0.50	ug/L
11100-14-4	Aroclor-1268	0.40	U	0.12	0.40	0.50	ug/L
SURROGATES							
877-09-8	Tetrachloro-m-xylene	20.4		60 - 140		102%	SPK: 20
2051-24-3	Decachlorobiphenyl	20.2		60 - 140		101%	SPK: 20

Comments:

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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 NUS, Inc.		Date Collected:	12/18/24	
Project:	CTO WE13		Date Received:	12/18/24	
Client Sample ID:	PIBLK-PO108639.D		SDG No.:	P5316	
Lab Sample ID:	I.BLK-PO108639.D		Matrix:	WATER	
Analytical Method:	SW8082A		% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	PCB Group1	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	5030				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PO108639.D	1		12/18/24	PO121824

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
12674-11-2	Aroclor-1016	0.40	U	0.15	0.40	0.50	ug/L
11104-28-2	Aroclor-1221	0.40	U	0.23	0.40	0.50	ug/L
11141-16-5	Aroclor-1232	0.40	U	0.37	0.40	0.50	ug/L
53469-21-9	Aroclor-1242	0.40	U	0.16	0.40	0.50	ug/L
12672-29-6	Aroclor-1248	0.40	U	0.12	0.40	0.50	ug/L
11097-69-1	Aroclor-1254	0.40	U	0.11	0.40	0.50	ug/L
11096-82-5	Aroclor-1260	0.40	U	0.15	0.40	0.50	ug/L
37324-23-5	Aroclor-1262	0.40	U	0.14	0.40	0.50	ug/L
11100-14-4	Aroclor-1268	0.40	U	0.12	0.40	0.50	ug/L
SURROGATES							
877-09-8	Tetrachloro-m-xylene	20.5		60 - 140		103%	SPK: 20
2051-24-3	Decachlorobiphenyl	20.3		60 - 140		102%	SPK: 20

Comments:

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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.

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Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	12/19/24	
Project:	CTO WE13		Date Received:	12/19/24	
Client Sample ID:	PIBLK-PO108653.D		SDG No.:	P5316	
Lab Sample ID:	I.BLK-PO108653.D		Matrix:	WATER	
Analytical Method:	SW8082A		% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	PCB Group1	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	5030				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PO108653.D	1		12/19/24	PO121824

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
12674-11-2	Aroclor-1016	0.40	U	0.15	0.40	0.50	ug/L
11104-28-2	Aroclor-1221	0.40	U	0.23	0.40	0.50	ug/L
11141-16-5	Aroclor-1232	0.40	U	0.37	0.40	0.50	ug/L
53469-21-9	Aroclor-1242	0.40	U	0.16	0.40	0.50	ug/L
12672-29-6	Aroclor-1248	0.40	U	0.12	0.40	0.50	ug/L
11097-69-1	Aroclor-1254	0.40	U	0.11	0.40	0.50	ug/L
11096-82-5	Aroclor-1260	0.40	U	0.15	0.40	0.50	ug/L
37324-23-5	Aroclor-1262	0.40	U	0.14	0.40	0.50	ug/L
11100-14-4	Aroclor-1268	0.40	U	0.12	0.40	0.50	ug/L
SURROGATES							
877-09-8	Tetrachloro-m-xylene	20.6		60 - 140		103%	SPK: 20
2051-24-3	Decachlorobiphenyl	20.4		60 - 140		102%	SPK: 20

Comments:

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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 NUS, Inc.		Date Collected:		
Project:	CTO WE13		Date Received:		
Client Sample ID:	PB165703BS		SDG No.:	P5316	
Lab Sample ID:	PB165703BS		Matrix:	SOIL	
Analytical Method:	SW8082A		% Solid:	100	Decanted:
Sample Wt/Vol:	30.02	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	PCB Group1	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PO108626.D	1	12/18/24 08:10	12/18/24 16:36	PB165703

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
12674-11-2	Aroclor-1016	159		3.40	8.30	17.0	ug/kg
11104-28-2	Aroclor-1221	13.0	U	6.40	13.0	17.0	ug/kg
11141-16-5	Aroclor-1232	13.0	U	3.40	13.0	17.0	ug/kg
53469-21-9	Aroclor-1242	8.30	U	3.40	8.30	17.0	ug/kg
12672-29-6	Aroclor-1248	13.0	U	7.90	13.0	17.0	ug/kg
11097-69-1	Aroclor-1254	13.0	U	2.70	13.0	17.0	ug/kg
37324-23-5	Aroclor-1262	8.30	U	4.60	8.30	17.0	ug/kg
11100-14-4	Aroclor-1268	13.0	U	3.40	13.0	17.0	ug/kg
11096-82-5	Aroclor-1260	165		2.90	8.30	17.0	ug/kg
SURROGATES							
877-09-8	Tetrachloro-m-xylene	18.4		44 - 130		92%	SPK: 20
2051-24-3	Decachlorobiphenyl	22.3		60 - 125		112%	SPK: 20

Comments:

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LOQ = Limit of Quantitation

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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 NUS, Inc.		Date Collected:	12/12/24	
Project:	CTO WE13		Date Received:	12/17/24	
Client Sample ID:	OU4-VSL-07-121224MS		SDG No.:	P5316	
Lab Sample ID:	P5306-01MS		Matrix:	SOIL	
Analytical Method:	SW8082A		% Solid:	90.8	Decanted:
Sample Wt/Vol:	30.04	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	PCB Group1	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PO108632.D	1	12/18/24 08:10	12/18/24 18:26	PB165703

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
12674-11-2	Aroclor-1016	239		3.70	9.10	18.7	ug/kg
11104-28-2	Aroclor-1221	14.3	U	7.10	14.3	18.7	ug/kg
11141-16-5	Aroclor-1232	14.3	U	3.70	14.3	18.7	ug/kg
53469-21-9	Aroclor-1242	9.10	U	3.70	9.10	18.7	ug/kg
12672-29-6	Aroclor-1248	14.3	U	8.70	14.3	18.7	ug/kg
11097-69-1	Aroclor-1254	14.3	U	3.00	14.3	18.7	ug/kg
37324-23-5	Aroclor-1262	9.10	U	5.00	9.10	18.7	ug/kg
11100-14-4	Aroclor-1268	14.3	U	3.80	14.3	18.7	ug/kg
11096-82-5	Aroclor-1260	242		3.20	9.10	18.7	ug/kg
SURROGATES							
877-09-8	Tetrachloro-m-xylene	23.1		44 - 130		115%	SPK: 20
2051-24-3	Decachlorobiphenyl	27.4	*	60 - 125		137%	SPK: 20

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 NUS, Inc.		Date Collected:	12/12/24	
Project:	CTO WE13		Date Received:	12/17/24	
Client Sample ID:	OU4-VSL-07-121224MSD		SDG No.:	P5316	
Lab Sample ID:	P5306-01MSD		Matrix:	SOIL	
Analytical Method:	SW8082A		% Solid:	90.8	Decanted:
Sample Wt/Vol:	30.06	Units: g	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	PCB Group1	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3541B				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PO108633.D	1	12/18/24 08:10	12/18/24 18:44	PB165703

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units(Dry Weight)
TARGETS							
12674-11-2	Aroclor-1016	229		3.70	9.10	18.7	ug/kg
11104-28-2	Aroclor-1221	14.3	U	7.00	14.3	18.7	ug/kg
11141-16-5	Aroclor-1232	14.3	U	3.70	14.3	18.7	ug/kg
53469-21-9	Aroclor-1242	9.10	U	3.70	9.10	18.7	ug/kg
12672-29-6	Aroclor-1248	14.3	U	8.70	14.3	18.7	ug/kg
11097-69-1	Aroclor-1254	14.3	U	3.00	14.3	18.7	ug/kg
37324-23-5	Aroclor-1262	9.10	U	5.00	9.10	18.7	ug/kg
11100-14-4	Aroclor-1268	14.3	U	3.80	14.3	18.7	ug/kg
11096-82-5	Aroclor-1260	220		3.20	9.10	18.7	ug/kg
SURROGATES							
877-09-8	Tetrachloro-m-xylene	23.3		44 - 130		117%	SPK: 20
2051-24-3	Decachlorobiphenyl	23.9		60 - 125		119%	SPK: 20

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

LAB CHRONICLE

OrderID:	P5316	OrderDate:	12/17/2024 3:44:00 PM
Client:	Tetra Tech NUS, Inc.	Project:	CTO WE13
Contact:	Ernie Wu	Location:	L51,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P5316-01	TT-304-IDWSO-20241 217-1	SOIL			12/17/24			12/17/24
			Mercury	7471B		12/20/24	12/20/24	
			Metals ICP-Group1	6010D		12/20/24	12/20/24	

Hit Summary Sheet
SW-846

SDG No.: P5316 **Order ID:** P5316
Client: Tetra Tech NUS, Inc. **Project ID:** CTO WE13

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID : TT-304-IDWSO-20241217-1									
P5316-01	TT-304-IDWSO-20241217-1	SOIL	Arsenic	1.62		0.38	1.04	1.30	mg/Kg
P5316-01	TT-304-IDWSO-20241217-1	SOIL	Barium	8.67		0.83	1.63	6.51	mg/Kg
P5316-01	TT-304-IDWSO-20241217-1	SOIL	Beryllium	0.11	J	0.016	0.098	0.39	mg/Kg
P5316-01	TT-304-IDWSO-20241217-1	SOIL	Chromium	2.82		0.070	0.16	0.65	mg/Kg
P5316-01	TT-304-IDWSO-20241217-1	SOIL	Copper	5.10		0.61	1.04	1.30	mg/Kg
P5316-01	TT-304-IDWSO-20241217-1	SOIL	Lead	2.58		0.20	0.63	0.78	mg/Kg
P5316-01	TT-304-IDWSO-20241217-1	SOIL	Manganese	41.7		0.092	0.33	1.30	mg/Kg
P5316-01	TT-304-IDWSO-20241217-1	SOIL	Nickel	2.36	J	0.12	0.65	2.60	mg/Kg
P5316-01	TT-304-IDWSO-20241217-1	SOIL	Zinc	7.94		0.14	0.65	2.60	mg/Kg



SAMPLE DATA

A

B

C

D

E

F

G

H

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	12/17/24
Project:	CTO WE13	Date Received:	12/17/24
Client Sample ID:	TT-304-IDWSO-20241217-1	SDG No.:	P5316
Lab Sample ID:	P5316-01	Matrix:	SOIL
Level (low/med):	low	% Solid:	68.6

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.	Prep Met.
7440-38-2	Arsenic	1.62	N	1	0.38	1.04	1.30	mg/Kg	12/20/24 10:45	12/20/24 17:04	SW6010	SW3050
7440-39-3	Barium	8.67		1	0.83	1.63	6.51	mg/Kg	12/20/24 10:45	12/20/24 17:04	SW6010	SW3050
7440-41-7	Beryllium	0.11	JN	1	0.016	0.098	0.39	mg/Kg	12/20/24 10:45	12/20/24 17:04	SW6010	SW3050
7440-43-9	Cadmium	0.098	U	1	0.021	0.098	0.39	mg/Kg	12/20/24 10:45	12/20/24 17:04	SW6010	SW3050
7440-47-3	Chromium	2.82	N	1	0.070	0.16	0.65	mg/Kg	12/20/24 10:45	12/20/24 17:04	SW6010	SW3050
7440-50-8	Copper	5.10	N	1	0.61	1.04	1.30	mg/Kg	12/20/24 10:45	12/20/24 17:04	SW6010	SW3050
7439-92-1	Lead	2.58		1	0.20	0.63	0.78	mg/Kg	12/20/24 10:45	12/20/24 17:04	SW6010	SW3050
7439-96-5	Manganese	41.7		1	0.092	0.33	1.30	mg/Kg	12/20/24 10:45	12/20/24 17:04	SW6010	SW3050
7439-97-6	Mercury	0.014	U	1	0.0080	0.014	0.017	mg/Kg	12/20/24 10:15	12/20/24 14:34	SW7471B	
7440-02-0	Nickel	2.36	J	1	0.12	0.65	2.60	mg/Kg	12/20/24 10:45	12/20/24 17:04	SW6010	SW3050
7782-49-2	Selenium	1.04	UN	1	0.43	1.04	1.30	mg/Kg	12/20/24 10:45	12/20/24 17:04	SW6010	SW3050
7440-22-4	Silver	0.33	UN	1	0.068	0.33	0.65	mg/Kg	12/20/24 10:45	12/20/24 17:04	SW6010	SW3050
7440-66-6	Zinc	7.94		1	0.14	0.65	2.60	mg/Kg	12/20/24 10:45	12/20/24 17:04	SW6010	SW3050

Color Before:	Brown	Clarity Before:	Texture:	Medium
Color After:	Yellow	Clarity After:	Artifacts:	
Comments:	Metals Group1			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N =Spiked sample recovery not within control limits



METAL CALIBRATION DATA



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- 2a -

Client:	<u>Tetra Tech NUS, Inc.</u>	SDG No.:	<u>P5316</u>	
Contract:	<u>TETR06</u>	Lab Code:	<u>CHEM</u>	Case No.: <u>P5316</u> SAS No.: <u>P5316</u>
Initial Calibration Source:	<u>EPA</u>			
Continuing Calibration Source:	<u>PLASMA-PURE</u>			

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV28	Mercury	4.01	4.0	100	90 - 110	CV	12/20/2024	14:13	LB134050

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. SDG No.: P5316

Contract: TETR06 Lab Code: CHEM Case No.: P5316 SAS No.: P5316

Initial Calibration Source: EPA

Continuing Calibration Source: PLASMA-PURE

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV57	Mercury	5.05	5.0	101	90 - 110	CV	12/20/2024	14:17	LB134050
CCV58	Mercury	4.92	5.0	98	90 - 110	CV	12/20/2024	14:43	LB134050
CCV59	Mercury	4.90	5.0	98	90 - 110	CV	12/20/2024	15:01	LB134050

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. SDG No.: P5316
 Contract: TETR06 Lab Code: CHEM Case No.: P5316 SAS No.: P5316
 Initial Calibration Source: EPA
 Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV01	Arsenic	1020	1000	102	90 - 110	P	12/20/2024	16:07	LB134054
	Barium	471	520	91	90 - 110	P	12/20/2024	16:07	LB134054
	Beryllium	486	510	95	90 - 110	P	12/20/2024	16:07	LB134054
	Cadmium	502	510	98	90 - 110	P	12/20/2024	16:07	LB134054
	Chromium	534	520	103	90 - 110	P	12/20/2024	16:07	LB134054
	Copper	522	510	102	90 - 110	P	12/20/2024	16:07	LB134054
	Lead	1000	1000	100	90 - 110	P	12/20/2024	16:07	LB134054
	Manganese	494	520	95	90 - 110	P	12/20/2024	16:07	LB134054
	Nickel	510	530	96	90 - 110	P	12/20/2024	16:07	LB134054
	Selenium	1020	1000	102	90 - 110	P	12/20/2024	16:07	LB134054
	Silver	251	250	100	90 - 110	P	12/20/2024	16:07	LB134054
	Zinc	1010	1000	101	90 - 110	P	12/20/2024	16:07	LB134054

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. SDG No.: P5316
Contract: TETR06 Lab Code: CHEM Case No.: P5316 SAS No.: P5316
Initial Calibration Source: EPA
Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV01	Arsenic	19.0	20.0	95	80 - 120	P	12/20/2024	16:11	LB134054
	Barium	87.9	100	88	80 - 120	P	12/20/2024	16:11	LB134054
	Beryllium	5.75	6.0	96	80 - 120	P	12/20/2024	16:11	LB134054
	Cadmium	5.80	6.0	97	80 - 120	P	12/20/2024	16:11	LB134054
	Chromium	9.98	10.0	100	80 - 120	P	12/20/2024	16:11	LB134054
	Copper	21.8	20.0	109	80 - 120	P	12/20/2024	16:11	LB134054
	Lead	12.1	12.0	101	80 - 120	P	12/20/2024	16:11	LB134054
	Manganese	19.3	20.0	97	80 - 120	P	12/20/2024	16:11	LB134054
	Nickel	38.9	40.0	97	80 - 120	P	12/20/2024	16:11	LB134054
	Selenium	19.7	20.0	98	80 - 120	P	12/20/2024	16:11	LB134054
	Silver	10.3	10.0	103	80 - 120	P	12/20/2024	16:11	LB134054
	Zinc	38.9	40.0	97	80 - 120	P	12/20/2024	16:11	LB134054

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** P5316
Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5316 **SAS No.:** P5316
Initial Calibration Source: EPA
Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Arsenic	4800	5000	96	90 - 110	P	12/20/2024	16:47	LB134054
	Barium	9130	10000	91	90 - 110	P	12/20/2024	16:47	LB134054
	Beryllium	237	250	95	90 - 110	P	12/20/2024	16:47	LB134054
	Cadmium	2420	2500	97	90 - 110	P	12/20/2024	16:47	LB134054
	Chromium	1000	1000	100	90 - 110	P	12/20/2024	16:47	LB134054
	Copper	1220	1250	97	90 - 110	P	12/20/2024	16:47	LB134054
	Lead	4830	5000	96	90 - 110	P	12/20/2024	16:47	LB134054
	Manganese	2410	2500	96	90 - 110	P	12/20/2024	16:47	LB134054
	Nickel	2410	2500	96	90 - 110	P	12/20/2024	16:47	LB134054
	Selenium	4790	5000	96	90 - 110	P	12/20/2024	16:47	LB134054
	Silver	1220	1250	98	90 - 110	P	12/20/2024	16:47	LB134054
	Zinc	2440	2500	98	90 - 110	P	12/20/2024	16:47	LB134054
CCV02	Arsenic	5010	5000	100	90 - 110	P	12/20/2024	17:29	LB134054
	Barium	9240	10000	92	90 - 110	P	12/20/2024	17:29	LB134054
	Beryllium	242	250	97	90 - 110	P	12/20/2024	17:29	LB134054
	Cadmium	2490	2500	100	90 - 110	P	12/20/2024	17:29	LB134054
	Chromium	1020	1000	102	90 - 110	P	12/20/2024	17:29	LB134054
	Copper	1260	1250	101	90 - 110	P	12/20/2024	17:29	LB134054
	Lead	4970	5000	99	90 - 110	P	12/20/2024	17:29	LB134054
	Manganese	2460	2500	99	90 - 110	P	12/20/2024	17:29	LB134054
	Nickel	2480	2500	99	90 - 110	P	12/20/2024	17:29	LB134054
	Selenium	5020	5000	100	90 - 110	P	12/20/2024	17:29	LB134054
	Silver	1250	1250	100	90 - 110	P	12/20/2024	17:29	LB134054
	Zinc	2500	2500	100	90 - 110	P	12/20/2024	17:29	LB134054
CCV03	Arsenic	4960	5000	99	90 - 110	P	12/20/2024	18:12	LB134054
	Barium	9430	10000	94	90 - 110	P	12/20/2024	18:12	LB134054
	Beryllium	244	250	98	90 - 110	P	12/20/2024	18:12	LB134054
	Cadmium	2480	2500	99	90 - 110	P	12/20/2024	18:12	LB134054
	Chromium	1020	1000	102	90 - 110	P	12/20/2024	18:12	LB134054
	Copper	1250	1250	100	90 - 110	P	12/20/2024	18:12	LB134054
	Lead	4950	5000	99	90 - 110	P	12/20/2024	18:12	LB134054
	Manganese	2480	2500	99	90 - 110	P	12/20/2024	18:12	LB134054
	Nickel	2480	2500	99	90 - 110	P	12/20/2024	18:12	LB134054
	Selenium	4960	5000	99	90 - 110	P	12/20/2024	18:12	LB134054

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** P5316

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5316 **SAS No.:** P5316

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV03	Silver	1250	1250	100	90 - 110	P	12/20/2024	18:12	LB134054
	Zinc	2500	2500	100	90 - 110	P	12/20/2024	18:12	LB134054
CCV04	Arsenic	4910	5000	98	90 - 110	P	12/20/2024	19:02	LB134054
	Barium	9150	10000	92	90 - 110	P	12/20/2024	19:02	LB134054
	Beryllium	240	250	96	90 - 110	P	12/20/2024	19:02	LB134054
	Cadmium	2440	2500	98	90 - 110	P	12/20/2024	19:02	LB134054
	Chromium	1010	1000	101	90 - 110	P	12/20/2024	19:02	LB134054
	Copper	1240	1250	99	90 - 110	P	12/20/2024	19:02	LB134054
	Lead	4890	5000	98	90 - 110	P	12/20/2024	19:02	LB134054
	Manganese	2450	2500	98	90 - 110	P	12/20/2024	19:02	LB134054
	Nickel	2440	2500	98	90 - 110	P	12/20/2024	19:02	LB134054
	Selenium	4920	5000	98	90 - 110	P	12/20/2024	19:02	LB134054
CCV05	Silver	1240	1250	99	90 - 110	P	12/20/2024	19:02	LB134054
	Zinc	2470	2500	99	90 - 110	P	12/20/2024	19:02	LB134054
	Arsenic	5060	5000	101	90 - 110	P	12/20/2024	19:57	LB134054
	Barium	9370	10000	94	90 - 110	P	12/20/2024	19:57	LB134054
	Beryllium	242	250	97	90 - 110	P	12/20/2024	19:57	LB134054
	Cadmium	2510	2500	100	90 - 110	P	12/20/2024	19:57	LB134054
	Chromium	1030	1000	103	90 - 110	P	12/20/2024	19:57	LB134054
	Copper	1270	1250	102	90 - 110	P	12/20/2024	19:57	LB134054
	Lead	5020	5000	100	90 - 110	P	12/20/2024	19:57	LB134054
	Manganese	2490	2500	99	90 - 110	P	12/20/2024	19:57	LB134054
CCV06	Nickel	2510	2500	100	90 - 110	P	12/20/2024	19:57	LB134054
	Selenium	5070	5000	102	90 - 110	P	12/20/2024	19:57	LB134054
	Silver	1260	1250	101	90 - 110	P	12/20/2024	19:57	LB134054
	Zinc	2520	2500	101	90 - 110	P	12/20/2024	19:57	LB134054
	Arsenic	4830	5000	96	90 - 110	P	12/20/2024	20:47	LB134054
	Barium	9020	10000	90	90 - 110	P	12/20/2024	20:47	LB134054
	Beryllium	237	250	95	90 - 110	P	12/20/2024	20:47	LB134054
	Cadmium	2410	2500	96	90 - 110	P	12/20/2024	20:47	LB134054
	Chromium	995	1000	100	90 - 110	P	12/20/2024	20:47	LB134054
	Copper	1220	1250	98	90 - 110	P	12/20/2024	20:47	LB134054
	Lead	4800	5000	96	90 - 110	P	12/20/2024	20:47	LB134054
	Manganese	2420	2500	97	90 - 110	P	12/20/2024	20:47	LB134054

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. SDG No.: P5316
Contract: TETR06 Lab Code: CHEM Case No.: P5316 SAS No.: P5316
Initial Calibration Source: EPA
Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV06	Nickel	2400	2500	96	90 - 110	P	12/20/2024	20:47	LB134054
	Selenium	4830	5000	97	90 - 110	P	12/20/2024	20:47	LB134054
	Silver	1210	1250	97	90 - 110	P	12/20/2024	20:47	LB134054
	Zinc	2420	2500	97	90 - 110	P	12/20/2024	20:47	LB134054
CCV07	Arsenic	4880	5000	98	90 - 110	P	12/20/2024	21:37	LB134054
	Barium	9110	10000	91	90 - 110	P	12/20/2024	21:37	LB134054
	Beryllium	242	250	97	90 - 110	P	12/20/2024	21:37	LB134054
	Cadmium	2430	2500	97	90 - 110	P	12/20/2024	21:37	LB134054
	Chromium	1010	1000	101	90 - 110	P	12/20/2024	21:37	LB134054
	Copper	1230	1250	99	90 - 110	P	12/20/2024	21:37	LB134054
	Lead	4860	5000	97	90 - 110	P	12/20/2024	21:37	LB134054
	Manganese	2460	2500	98	90 - 110	P	12/20/2024	21:37	LB134054
	Nickel	2430	2500	97	90 - 110	P	12/20/2024	21:37	LB134054
	Selenium	4890	5000	98	90 - 110	P	12/20/2024	21:37	LB134054
	Silver	1230	1250	99	90 - 110	P	12/20/2024	21:37	LB134054
	Zinc	2460	2500	98	90 - 110	P	12/20/2024	21:37	LB134054
	Arsenic	5020	5000	100	90 - 110	P	12/20/2024	23:01	LB134054
	Barium	9290	10000	93	90 - 110	P	12/20/2024	23:01	LB134054
CCV08	Beryllium	238	250	95	90 - 110	P	12/20/2024	23:01	LB134054
	Cadmium	2480	2500	99	90 - 110	P	12/20/2024	23:01	LB134054
	Chromium	1020	1000	102	90 - 110	P	12/20/2024	23:01	LB134054
	Copper	1260	1250	101	90 - 110	P	12/20/2024	23:01	LB134054
	Lead	4960	5000	99	90 - 110	P	12/20/2024	23:01	LB134054
	Manganese	2450	2500	98	90 - 110	P	12/20/2024	23:01	LB134054
	Nickel	2480	2500	99	90 - 110	P	12/20/2024	23:01	LB134054
	Selenium	5050	5000	101	90 - 110	P	12/20/2024	23:01	LB134054
	Silver	1250	1250	100	90 - 110	P	12/20/2024	23:01	LB134054
	Zinc	2480	2500	99	90 - 110	P	12/20/2024	23:01	LB134054
	Arsenic	4940	5000	99	90 - 110	P	12/20/2024	23:55	LB134054
	Barium	9220	10000	92	90 - 110	P	12/20/2024	23:55	LB134054
	Beryllium	239	250	96	90 - 110	P	12/20/2024	23:55	LB134054
	Cadmium	2450	2500	98	90 - 110	P	12/20/2024	23:55	LB134054
CCV09	Chromium	1020	1000	102	90 - 110	P	12/20/2024	23:55	LB134054
	Copper	1250	1250	100	90 - 110	P	12/20/2024	23:55	LB134054

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. SDG No.: P5316
Contract: TETR06 Lab Code: CHEM Case No.: P5316 SAS No.: P5316
Initial Calibration Source: EPA
Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV09	Lead	4900	5000	98	90 - 110	P	12/20/2024	23:55	LB134054
	Manganese	2460	2500	98	90 - 110	P	12/20/2024	23:55	LB134054
	Nickel	2450	2500	98	90 - 110	P	12/20/2024	23:55	LB134054
	Selenium	4950	5000	99	90 - 110	P	12/20/2024	23:55	LB134054
	Silver	1240	1250	99	90 - 110	P	12/20/2024	23:55	LB134054
	Zinc	2460	2500	98	90 - 110	P	12/20/2024	23:55	LB134054

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. SDG No.: P5316
Contract: TETR06 Lab Code: CHEM Case No.: P5316 SAS No.: P5316
Initial Calibration Source: EPA
Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV01	Arsenic	1050	1000	105	90 - 110	P	12/23/2024	11:17	LB134066
	Barium	484	520	93	90 - 110	P	12/23/2024	11:17	LB134066
	Beryllium	472	510	93	90 - 110	P	12/23/2024	11:17	LB134066
	Cadmium	508	510	100	90 - 110	P	12/23/2024	11:17	LB134066
	Chromium	532	520	102	90 - 110	P	12/23/2024	11:17	LB134066
	Copper	530	510	104	90 - 110	P	12/23/2024	11:17	LB134066
	Lead	1020	1000	102	90 - 110	P	12/23/2024	11:17	LB134066
	Manganese	490	520	94	90 - 110	P	12/23/2024	11:17	LB134066
	Nickel	519	530	98	90 - 110	P	12/23/2024	11:17	LB134066
	Selenium	1050	1000	105	90 - 110	P	12/23/2024	11:17	LB134066
	Silver	260	250	104	90 - 110	P	12/23/2024	11:17	LB134066
	Zinc	1030	1000	103	90 - 110	P	12/23/2024	11:17	LB134066

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. SDG No.: P5316

Contract: TETR06 Lab Code: CHEM Case No.: P5316 SAS No.: P5316

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
LLICV01	Arsenic	20.6	20.0	103	80 - 120	P	12/23/2024	11:37	LB134066
	Barium	90.4	100	90	80 - 120	P	12/23/2024	11:37	LB134066
	Beryllium	5.75	6.0	96	80 - 120	P	12/23/2024	11:37	LB134066
	Cadmium	5.89	6.0	98	80 - 120	P	12/23/2024	11:37	LB134066
	Chromium	9.87	10.0	99	80 - 120	P	12/23/2024	11:37	LB134066
	Copper	21.8	20.0	109	80 - 120	P	12/23/2024	11:37	LB134066
	Lead	12.0	12.0	100	80 - 120	P	12/23/2024	11:37	LB134066
	Manganese	19.5	20.0	98	80 - 120	P	12/23/2024	11:37	LB134066
	Nickel	39.3	40.0	98	80 - 120	P	12/23/2024	11:37	LB134066
	Selenium	19.0	20.0	95	80 - 120	P	12/23/2024	11:37	LB134066
	Silver	10.8	10.0	108	80 - 120	P	12/23/2024	11:37	LB134066
	Zinc	45.7	40.0	114	80 - 120	P	12/23/2024	11:37	LB134066

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** P5316
Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5316 **SAS No.:** P5316
Initial Calibration Source: EPA
Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV01	Arsenic	5110	5000	102	90 - 110	P	12/23/2024	12:31	LB134066
	Barium	9710	10000	97	90 - 110	P	12/23/2024	12:31	LB134066
	Beryllium	232	250	93	90 - 110	P	12/23/2024	12:31	LB134066
	Cadmium	2450	2500	98	90 - 110	P	12/23/2024	12:31	LB134066
	Chromium	998	1000	100	90 - 110	P	12/23/2024	12:31	LB134066
	Copper	1280	1250	102	90 - 110	P	12/23/2024	12:31	LB134066
	Lead	4890	5000	98	90 - 110	P	12/23/2024	12:31	LB134066
	Manganese	2380	2500	95	90 - 110	P	12/23/2024	12:31	LB134066
	Nickel	2470	2500	99	90 - 110	P	12/23/2024	12:31	LB134066
	Selenium	5190	5000	104	90 - 110	P	12/23/2024	12:31	LB134066
	Silver	1250	1250	100	90 - 110	P	12/23/2024	12:31	LB134066
	Zinc	2450	2500	98	90 - 110	P	12/23/2024	12:31	LB134066
CCV02	Arsenic	5360	5000	107	90 - 110	P	12/23/2024	13:43	LB134066
	Barium	10100	10000	101	90 - 110	P	12/23/2024	13:43	LB134066
	Beryllium	230	250	92	90 - 110	P	12/23/2024	13:43	LB134066
	Cadmium	2500	2500	100	90 - 110	P	12/23/2024	13:43	LB134066
	Chromium	1000	1000	100	90 - 110	P	12/23/2024	13:43	LB134066
	Copper	1340	1250	107	90 - 110	P	12/23/2024	13:43	LB134066
	Lead	4990	5000	100	90 - 110	P	12/23/2024	13:43	LB134066
	Manganese	2410	2500	96	90 - 110	P	12/23/2024	13:43	LB134066
	Nickel	2530	2500	101	90 - 110	P	12/23/2024	13:43	LB134066
	Selenium	5480	5000	110	90 - 110	P	12/23/2024	13:43	LB134066
	Silver	1270	1250	102	90 - 110	P	12/23/2024	13:43	LB134066
	Zinc	2450	2500	98	90 - 110	P	12/23/2024	13:43	LB134066
CCV03	Arsenic	5340	5000	107	90 - 110	P	12/23/2024	14:07	LB134066
	Barium	10200	10000	102	90 - 110	P	12/23/2024	14:07	LB134066
	Beryllium	230	250	92	90 - 110	P	12/23/2024	14:07	LB134066
	Cadmium	2470	2500	99	90 - 110	P	12/23/2024	14:07	LB134066
	Chromium	1000	1000	100	90 - 110	P	12/23/2024	14:07	LB134066
	Copper	1340	1250	107	90 - 110	P	12/23/2024	14:07	LB134066
	Lead	4940	5000	99	90 - 110	P	12/23/2024	14:07	LB134066
	Manganese	2400	2500	96	90 - 110	P	12/23/2024	14:07	LB134066
	Nickel	2510	2500	100	90 - 110	P	12/23/2024	14:07	LB134066
	Selenium	5480	5000	110	90 - 110	P	12/23/2024	14:07	LB134066

Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. **SDG No.:** P5316

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5316 **SAS No.:** P5316

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV03	Silver	1270	1250	102	90 - 110	P	12/23/2024	14:07	LB134066
	Zinc	2450	2500	98	90 - 110	P	12/23/2024	14:07	LB134066
CCV04	Arsenic	5210	5000	104	90 - 110	P	12/23/2024	15:06	LB134066
	Barium	9720	10000	97	90 - 110	P	12/23/2024	15:06	LB134066
	Beryllium	226	250	90	90 - 110	P	12/23/2024	15:06	LB134066
	Cadmium	2450	2500	98	90 - 110	P	12/23/2024	15:06	LB134066
	Chromium	998	1000	100	90 - 110	P	12/23/2024	15:06	LB134066
	Copper	1300	1250	104	90 - 110	P	12/23/2024	15:06	LB134066
	Lead	4870	5000	97	90 - 110	P	12/23/2024	15:06	LB134066
	Manganese	2330	2500	93	90 - 110	P	12/23/2024	15:06	LB134066
	Nickel	2480	2500	99	90 - 110	P	12/23/2024	15:06	LB134066
	Selenium	5340	5000	107	90 - 110	P	12/23/2024	15:06	LB134066
CCV05	Silver	1250	1250	100	90 - 110	P	12/23/2024	15:06	LB134066
	Zinc	2350	2500	94	90 - 110	P	12/23/2024	15:06	LB134066
	Arsenic	5380	5000	108	90 - 110	P	12/23/2024	16:06	LB134066
	Barium	9910	10000	99	90 - 110	P	12/23/2024	16:06	LB134066
	Beryllium	227	250	91	90 - 110	P	12/23/2024	16:06	LB134066
	Cadmium	2470	2500	99	90 - 110	P	12/23/2024	16:06	LB134066
	Chromium	1010	1000	101	90 - 110	P	12/23/2024	16:06	LB134066
	Copper	1340	1250	108	90 - 110	P	12/23/2024	16:06	LB134066
	Lead	4920	5000	98	90 - 110	P	12/23/2024	16:06	LB134066
	Manganese	2360	2500	94	90 - 110	P	12/23/2024	16:06	LB134066
CCV06	Nickel	2510	2500	100	90 - 110	P	12/23/2024	16:06	LB134066
	Selenium	5500	5000	110	90 - 110	P	12/23/2024	16:06	LB134066
	Silver	1270	1250	102	90 - 110	P	12/23/2024	16:06	LB134066
	Zinc	2350	2500	94	90 - 110	P	12/23/2024	16:06	LB134066
	Arsenic	5350	5000	107	90 - 110	P	12/23/2024	16:54	LB134066
	Barium	10100	10000	101	90 - 110	P	12/23/2024	16:54	LB134066
	Beryllium	243	250	97	90 - 110	P	12/23/2024	16:54	LB134066
	Cadmium	2540	2500	102	90 - 110	P	12/23/2024	16:54	LB134066
	Chromium	1040	1000	104	90 - 110	P	12/23/2024	16:54	LB134066
	Copper	1350	1250	108	90 - 110	P	12/23/2024	16:54	LB134066
	Lead	5030	5000	100	90 - 110	P	12/23/2024	16:54	LB134066
	Manganese	2430	2500	97	90 - 110	P	12/23/2024	16:54	LB134066

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Tetra Tech NUS, Inc. SDG No.: P5316

Contract: TETR06 Lab Code: CHEM Case No.: P5316 SAS No.: P5316

Initial Calibration Source: EPA

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV06	Nickel	2560	2500	102	90 - 110	P	12/23/2024	16:54	LB134066
	Selenium	5460	5000	109	90 - 110	P	12/23/2024	16:54	LB134066
	Silver	1280	1250	103	90 - 110	P	12/23/2024	16:54	LB134066
	Zinc	2340	2500	94	90 - 110	P	12/23/2024	16:54	LB134066

Metals

- 2b -

CRDL STANDARD FOR AA & ICP

Client: Tetra Tech NUS, Inc. **SDG No.:** P5316
Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5316 **SAS No.:** P5316
Initial Calibration Source: _____
Continuing Calibration Source: _____

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CRA	Mercury	0.19	0.2	97	40 - 160	CV	12/20/2024	14:22	LB134050
CRI01	Arsenic	21.1	20.0	106	40 - 160	P	12/20/2024	16:26	LB134054
	Barium	87.8	100	88	40 - 160	P	12/20/2024	16:26	LB134054
	Beryllium	5.71	6.0	95	40 - 160	P	12/20/2024	16:26	LB134054
	Cadmium	5.88	6.0	98	40 - 160	P	12/20/2024	16:26	LB134054
	Chromium	10.2	10.0	102	40 - 160	P	12/20/2024	16:26	LB134054
	Copper	21.8	20.0	109	40 - 160	P	12/20/2024	16:26	LB134054
	Lead	11.1	12.0	93	40 - 160	P	12/20/2024	16:26	LB134054
	Manganese	18.9	20.0	95	40 - 160	P	12/20/2024	16:26	LB134054
	Nickel	39.0	40.0	98	40 - 160	P	12/20/2024	16:26	LB134054
	Selenium	18.3	20.0	92	40 - 160	P	12/20/2024	16:26	LB134054
	Silver	10.3	10.0	103	40 - 160	P	12/20/2024	16:26	LB134054
	Zinc	38.8	40.0	97	40 - 160	P	12/20/2024	16:26	LB134054
CRI01	Arsenic	19.2	20.0	96	40 - 160	P	12/23/2024	11:51	LB134066
	Barium	92.0	100	92	40 - 160	P	12/23/2024	11:51	LB134066
	Beryllium	5.71	6.0	95	40 - 160	P	12/23/2024	11:51	LB134066
	Cadmium	5.81	6.0	97	40 - 160	P	12/23/2024	11:51	LB134066
	Chromium	9.74	10.0	97	40 - 160	P	12/23/2024	11:51	LB134066
	Copper	21.9	20.0	110	40 - 160	P	12/23/2024	11:51	LB134066
	Lead	11.0	12.0	92	40 - 160	P	12/23/2024	11:51	LB134066
	Manganese	19.6	20.0	98	40 - 160	P	12/23/2024	11:51	LB134066
	Nickel	39.3	40.0	98	40 - 160	P	12/23/2024	11:51	LB134066
	Selenium	17.1	20.0	86	40 - 160	P	12/23/2024	11:51	LB134066
	Silver	11.0	10.0	110	40 - 160	P	12/23/2024	11:51	LB134066
	Zinc	41.4	40.0	104	40 - 160	P	12/23/2024	11:51	LB134066



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

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client:	Tetra Tech NUS, Inc.				SDG No.:	P5316				
Contract:	TETR06	Lab Code:	CHEM	Case No.:	P5316	SAS No.:	P5316			
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB28	Mercury	0.20	+/-0.20	U	0.16	0.20	CV	12/20/2024	14:15	LB134050

Metals

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: <u>Tetra Tech NUS, Inc.</u>		SDG No.: <u>P5316</u>								
Contract: <u>TETR06</u>	Lab Code: <u>CHEM</u>	Case No.: <u>P5316</u>	SAS No.: <u>P5316</u>							
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB57	Mercury	0.20	+/-0.20	U	0.16	0.20	CV	12/20/2024	14:20	LB134050
CCB58	Mercury	0.20	+/-0.20	U	0.16	0.20	CV	12/20/2024	14:45	LB134050
CCB59	Mercury	0.20	+/-0.20	U	0.16	0.20	CV	12/20/2024	15:03	LB134050

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** P5316
Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5316 **SAS No.:** P5316

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/20/2024	16:21	LB134054
	Barium	100	+/-100	U	25.0	100	P	12/20/2024	16:21	LB134054
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/20/2024	16:21	LB134054
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/20/2024	16:21	LB134054
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/20/2024	16:21	LB134054
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/20/2024	16:21	LB134054
	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/20/2024	16:21	LB134054
	Manganese	20.0	+/-20.0	U	5.00	20.0	P	12/20/2024	16:21	LB134054
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/20/2024	16:21	LB134054
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/20/2024	16:21	LB134054
	Silver	10.0	+/-10.0	U	5.00	10.0	P	12/20/2024	16:21	LB134054
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/20/2024	16:21	LB134054

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc.		SDG No.: P5316								
Contract: TETR06	Lab Code: CHEM	Case No.: P5316			SAS No.: P5316					
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/20/2024	16:51	LB134054
	Barium	14.0	+/-100	J	25.0	100	P	12/20/2024	16:51	LB134054
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/20/2024	16:51	LB134054
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/20/2024	16:51	LB134054
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/20/2024	16:51	LB134054
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/20/2024	16:51	LB134054
	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/20/2024	16:51	LB134054
	Manganese	5.60	+/-20.0	J	5.00	20.0	P	12/20/2024	16:51	LB134054
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/20/2024	16:51	LB134054
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/20/2024	16:51	LB134054
	Silver	10.0	+/-10.0	U	5.00	10.0	P	12/20/2024	16:51	LB134054
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/20/2024	16:51	LB134054
CCB02	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/20/2024	17:34	LB134054
	Barium	100	+/-100	U	25.0	100	P	12/20/2024	17:34	LB134054
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/20/2024	17:34	LB134054
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/20/2024	17:34	LB134054
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/20/2024	17:34	LB134054
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/20/2024	17:34	LB134054
	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/20/2024	17:34	LB134054
	Manganese	20.0	+/-20.0	U	5.00	20.0	P	12/20/2024	17:34	LB134054
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/20/2024	17:34	LB134054
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/20/2024	17:34	LB134054
	Silver	10.0	+/-10.0	U	5.00	10.0	P	12/20/2024	17:34	LB134054
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/20/2024	17:34	LB134054
CCB03	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/20/2024	18:16	LB134054
	Barium	100	+/-100	U	25.0	100	P	12/20/2024	18:16	LB134054
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/20/2024	18:16	LB134054
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/20/2024	18:16	LB134054
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/20/2024	18:16	LB134054
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/20/2024	18:16	LB134054
	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/20/2024	18:16	LB134054
	Manganese	20.0	+/-20.0	U	5.00	20.0	P	12/20/2024	18:16	LB134054
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/20/2024	18:16	LB134054
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/20/2024	18:16	LB134054
	Silver	10.0	+/-10.0	U	5.00	10.0	P	12/20/2024	18:16	LB134054
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/20/2024	18:16	LB134054
CCB04	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/20/2024	19:11	LB134054
	Barium	100	+/-100	U	25.0	100	P	12/20/2024	19:11	LB134054
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/20/2024	19:11	LB134054

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc.		SDG No.: P5316								
Contract: TETR06	Lab Code: CHEM	Case No.: P5316	SAS No.: P5316							
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB04	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/20/2024	19:11	LB134054
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/20/2024	19:11	LB134054
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/20/2024	19:11	LB134054
	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/20/2024	19:11	LB134054
	Manganese	20.0	+/-20.0	U	5.00	20.0	P	12/20/2024	19:11	LB134054
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/20/2024	19:11	LB134054
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/20/2024	19:11	LB134054
	Silver	10.0	+/-10.0	U	5.00	10.0	P	12/20/2024	19:11	LB134054
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/20/2024	19:11	LB134054
CCB05	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/20/2024	20:01	LB134054
	Barium	100	+/-100	U	25.0	100	P	12/20/2024	20:01	LB134054
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/20/2024	20:01	LB134054
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/20/2024	20:01	LB134054
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/20/2024	20:01	LB134054
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/20/2024	20:01	LB134054
	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/20/2024	20:01	LB134054
	Manganese	20.0	+/-20.0	U	5.00	20.0	P	12/20/2024	20:01	LB134054
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/20/2024	20:01	LB134054
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/20/2024	20:01	LB134054
	Silver	10.0	+/-10.0	U	5.00	10.0	P	12/20/2024	20:01	LB134054
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/20/2024	20:01	LB134054
CCB06	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/20/2024	20:51	LB134054
	Barium	100	+/-100	U	25.0	100	P	12/20/2024	20:51	LB134054
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/20/2024	20:51	LB134054
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/20/2024	20:51	LB134054
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/20/2024	20:51	LB134054
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/20/2024	20:51	LB134054
	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/20/2024	20:51	LB134054
	Manganese	20.0	+/-20.0	U	5.00	20.0	P	12/20/2024	20:51	LB134054
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/20/2024	20:51	LB134054
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/20/2024	20:51	LB134054
	Silver	10.0	+/-10.0	U	5.00	10.0	P	12/20/2024	20:51	LB134054
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/20/2024	20:51	LB134054
CCB07	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/20/2024	22:04	LB134054
	Barium	100	+/-100	U	25.0	100	P	12/20/2024	22:04	LB134054
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/20/2024	22:04	LB134054
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/20/2024	22:04	LB134054
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/20/2024	22:04	LB134054
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/20/2024	22:04	LB134054

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc.		SDG No.: P5316								
Contract: TETR06	Lab Code: CHEM	Case No.: P5316	SAS No.: P5316							
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB07	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/20/2024	22:04	LB134054
	Manganese	20.0	+/-20.0	U	5.00	20.0	P	12/20/2024	22:04	LB134054
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/20/2024	22:04	LB134054
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/20/2024	22:04	LB134054
	Silver	10.0	+/-10.0	U	5.00	10.0	P	12/20/2024	22:04	LB134054
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/20/2024	22:04	LB134054
CCB08	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/20/2024	23:12	LB134054
	Barium	100	+/-100	U	25.0	100	P	12/20/2024	23:12	LB134054
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/20/2024	23:12	LB134054
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/20/2024	23:12	LB134054
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/20/2024	23:12	LB134054
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/20/2024	23:12	LB134054
	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/20/2024	23:12	LB134054
	Manganese	20.0	+/-20.0	U	5.00	20.0	P	12/20/2024	23:12	LB134054
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/20/2024	23:12	LB134054
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/20/2024	23:12	LB134054
	Silver	10.0	+/-10.0	U	5.00	10.0	P	12/20/2024	23:12	LB134054
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/20/2024	23:12	LB134054
CCB09	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/21/2024	00:05	LB134054
	Barium	100	+/-100	U	25.0	100	P	12/21/2024	00:05	LB134054
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/21/2024	00:05	LB134054
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/21/2024	00:05	LB134054
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/21/2024	00:05	LB134054
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/21/2024	00:05	LB134054
	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/21/2024	00:05	LB134054
	Manganese	20.0	+/-20.0	U	5.00	20.0	P	12/21/2024	00:05	LB134054
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/21/2024	00:05	LB134054
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/21/2024	00:05	LB134054
	Silver	10.0	+/-10.0	U	5.00	10.0	P	12/21/2024	00:05	LB134054
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/21/2024	00:05	LB134054

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** P5316
Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5316 **SAS No.:** P5316

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB01	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	11:44	LB134066
	Barium	100	+/-100	U	25.0	100	P	12/23/2024	11:44	LB134066
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/23/2024	11:44	LB134066
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/23/2024	11:44	LB134066
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/23/2024	11:44	LB134066
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	11:44	LB134066
	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/23/2024	11:44	LB134066
	Manganese	20.0	+/-20.0	U	5.00	20.0	P	12/23/2024	11:44	LB134066
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/23/2024	11:44	LB134066
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	11:44	LB134066
	Silver	10.0	+/-10.0	U	5.00	10.0	P	12/23/2024	11:44	LB134066
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/23/2024	11:44	LB134066

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc.		SDG No.: P5316								
Contract: TETR06	Lab Code: CHEM	Case No.: P5316	SAS No.: P5316							
Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB01	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	12:35	LB134066
	Barium	100	+/-100	U	25.0	100	P	12/23/2024	12:35	LB134066
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/23/2024	12:35	LB134066
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/23/2024	12:35	LB134066
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/23/2024	12:35	LB134066
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	12:35	LB134066
	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/23/2024	12:35	LB134066
	Manganese	20.0	+/-20.0	U	5.00	20.0	P	12/23/2024	12:35	LB134066
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/23/2024	12:35	LB134066
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	12:35	LB134066
	Silver	10.0	+/-10.0	U	5.00	10.0	P	12/23/2024	12:35	LB134066
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/23/2024	12:35	LB134066
CCB02	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	13:47	LB134066
	Barium	100	+/-100	U	25.0	100	P	12/23/2024	13:47	LB134066
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/23/2024	13:47	LB134066
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/23/2024	13:47	LB134066
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/23/2024	13:47	LB134066
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	13:47	LB134066
	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/23/2024	13:47	LB134066
	Manganese	20.0	+/-20.0	U	5.00	20.0	P	12/23/2024	13:47	LB134066
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/23/2024	13:47	LB134066
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	13:47	LB134066
	Silver	10.0	+/-10.0	U	5.00	10.0	P	12/23/2024	13:47	LB134066
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/23/2024	13:47	LB134066
CCB03	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	14:11	LB134066
	Barium	100	+/-100	U	25.0	100	P	12/23/2024	14:11	LB134066
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/23/2024	14:11	LB134066
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/23/2024	14:11	LB134066
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/23/2024	14:11	LB134066
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	14:11	LB134066
	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/23/2024	14:11	LB134066
	Manganese	20.0	+/-20.0	U	5.00	20.0	P	12/23/2024	14:11	LB134066
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/23/2024	14:11	LB134066
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	14:11	LB134066
	Silver	10.0	+/-10.0	U	5.00	10.0	P	12/23/2024	14:11	LB134066
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/23/2024	14:11	LB134066
CCB04	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	15:10	LB134066
	Barium	100	+/-100	U	25.0	100	P	12/23/2024	15:10	LB134066
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/23/2024	15:10	LB134066

Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc. SDG No.: P5316
Contract: TETR06 Lab Code: CHEM Case No.: P5316 SAS No.: P5316

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB04	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/23/2024	15:10	LB134066
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/23/2024	15:10	LB134066
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	15:10	LB134066
	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/23/2024	15:10	LB134066
	Manganese	20.0	+/-20.0	U	5.00	20.0	P	12/23/2024	15:10	LB134066
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/23/2024	15:10	LB134066
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	15:10	LB134066
	Silver	10.0	+/-10.0	U	5.00	10.0	P	12/23/2024	15:10	LB134066
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/23/2024	15:10	LB134066
CCB05	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	16:10	LB134066
	Barium	100	+/-100	U	25.0	100	P	12/23/2024	16:10	LB134066
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/23/2024	16:10	LB134066
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/23/2024	16:10	LB134066
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/23/2024	16:10	LB134066
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	16:10	LB134066
	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/23/2024	16:10	LB134066
	Manganese	20.0	+/-20.0	U	5.00	20.0	P	12/23/2024	16:10	LB134066
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/23/2024	16:10	LB134066
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	16:10	LB134066
	Silver	1.18	+/-10.0	J	5.00	10.0	P	12/23/2024	16:10	LB134066
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/23/2024	16:10	LB134066
CCB06	Arsenic	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	16:58	LB134066
	Barium	100	+/-100	U	25.0	100	P	12/23/2024	16:58	LB134066
	Beryllium	6.00	+/-6.00	U	1.50	6.00	P	12/23/2024	16:58	LB134066
	Cadmium	6.00	+/-6.00	U	1.50	6.00	P	12/23/2024	16:58	LB134066
	Chromium	10.0	+/-10.0	U	5.00	10.0	P	12/23/2024	16:58	LB134066
	Copper	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	16:58	LB134066
	Lead	12.0	+/-12.0	U	9.60	12.0	P	12/23/2024	16:58	LB134066
	Manganese	20.0	+/-20.0	U	5.00	20.0	P	12/23/2024	16:58	LB134066
	Nickel	40.0	+/-40.0	U	10.0	40.0	P	12/23/2024	16:58	LB134066
	Selenium	20.0	+/-20.0	U	16.0	20.0	P	12/23/2024	16:58	LB134066
	Silver	10.0	+/-10.0	U	5.00	10.0	P	12/23/2024	16:58	LB134066
	Zinc	40.0	+/-40.0	U	10.0	40.0	P	12/23/2024	16:58	LB134066

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc.

SDG No.: P5316

Instrument: CV1

Sample ID	Analyte	Result (mg/Kg)	Acceptance Limit	Conc Qual	LOD mg/Kg	CRQL mg/Kg	M	Analysis Date	Analysis Time	Run
PB165798BL		SOLID		Batch Number:		PB165798		Prep Date:	12/20/2024	
	Mercury	0.013	<0.013	U	0.010	0.013	CV	12/20/2024	14:29	LB134050

Metals
- 3b -
PREPARATION BLANK SUMMARY

Client: Tetra Tech NUS, Inc.

SDG No.: P5316

Instrument: P4

Sample ID	Analyte	Result (mg/Kg)	Acceptance Limit	Conc Qual	LOD mg/Kg	CRQL mg/Kg	M	Analysis Date	Analysis Time	Run
PB165786BL	SOLID			Batch Number:	PB165786			Prep Date:	12/20/2024	
	Arsenic	0.89	<0.89	U	0.71	0.89	P	12/20/2024	22:46	LB134054
	Barium	4.42	<4.42	U	1.11	4.42	P	12/20/2024	22:46	LB134054
	Beryllium	0.27	<0.27	U	0.066	0.27	P	12/20/2024	22:46	LB134054
	Cadmium	0.27	<0.27	U	0.066	0.27	P	12/20/2024	22:46	LB134054
	Chromium	0.44	<0.44	U	0.11	0.44	P	12/20/2024	22:46	LB134054
	Copper	0.89	<0.89	U	0.71	0.89	P	12/20/2024	22:46	LB134054
	Lead	0.53	<0.53	U	0.43	0.53	P	12/20/2024	22:46	LB134054
	Manganese	0.89	<0.89	U	0.22	0.89	P	12/20/2024	22:46	LB134054
	Nickel	1.77	<1.77	U	0.44	1.77	P	12/20/2024	22:46	LB134054
	Selenium	0.89	<0.89	U	0.71	0.89	P	12/20/2024	22:46	LB134054
	Silver	0.44	<0.44	U	0.22	0.44	P	12/20/2024	22:46	LB134054
	Zinc	1.77	<1.77	U	0.44	1.77	P	12/20/2024	22:46	LB134054

Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: <u>Tetra Tech NUS, Inc.</u>	SDG No.: <u>P5316</u>	
Contract: <u>TETR06</u>	Lab Code: <u>CHEM</u>	Case No.: <u>P5316</u> SAS No.: <u>P5316</u>
ICS Source: <u>EPA</u>	Instrument ID: <u>P4</u>	

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSA01	Arsenic	-1.51			-20	20	12/20/2024	16:30	LB134054
	Barium	2.79	6.0	46	-94	106	12/20/2024	16:30	LB134054
	Beryllium	1.43			-6	6	12/20/2024	16:30	LB134054
	Cadmium	-0.99	1.0	99	-5	7	12/20/2024	16:30	LB134054
	Chromium	60.0	52.0	115	42	62	12/20/2024	16:30	LB134054
	Copper	16.4	2.0	820	-18	22	12/20/2024	16:30	LB134054
	Lead	6.97			-12	12	12/20/2024	16:30	LB134054
	Manganese	4.79	7.0	68	-13	27	12/20/2024	16:30	LB134054
	Nickel	2.13	2.0	106	-38	42	12/20/2024	16:30	LB134054
	Selenium	-16.6			-20	20	12/20/2024	16:30	LB134054
	Silver	-3.17			-10	10	12/20/2024	16:30	LB134054
	Zinc	0.10			-40	40	12/20/2024	16:30	LB134054
ICSAB01	Arsenic	113	104	109	88.4	120	12/20/2024	16:34	LB134054
	Barium	460	537	86	437	637	12/20/2024	16:34	LB134054
	Beryllium	492	495	99	420	570	12/20/2024	16:34	LB134054
	Cadmium	1040	972	107	826	1120	12/20/2024	16:34	LB134054
	Chromium	604	542	111	460	624	12/20/2024	16:34	LB134054
	Copper	520	511	102	434	588	12/20/2024	16:34	LB134054
	Lead	56.2	49.0	115	37	61	12/20/2024	16:34	LB134054
	Manganese	487	507	96	430	584	12/20/2024	16:34	LB134054
	Nickel	1040	954	109	810	1100	12/20/2024	16:34	LB134054
	Selenium	34.2	46.0	74	26	66	12/20/2024	16:34	LB134054
	Silver	201	201	100	170	232	12/20/2024	16:34	LB134054
	Zinc	1080	952	113	809	1095	12/20/2024	16:34	LB134054
ICSA01	Arsenic	-0.83			-20	20	12/23/2024	11:55	LB134066
	Barium	2.71	6.0	45	-94	106	12/23/2024	11:55	LB134066
	Beryllium	1.22			-6	6	12/23/2024	11:55	LB134066
	Cadmium	5.83	1.0	583	-5	7	12/23/2024	11:55	LB134066
	Chromium	58.0	52.0	112	42	62	12/23/2024	11:55	LB134066
	Copper	16.1	2.0	805	-18	22	12/23/2024	11:55	LB134066
	Lead	7.19			-12	12	12/23/2024	11:55	LB134066
	Manganese	4.79	7.0	68	-13	27	12/23/2024	11:55	LB134066
	Nickel	2.98	2.0	149	-38	42	12/23/2024	11:55	LB134066
	Selenium	-12.8			-20	20	12/23/2024	11:55	LB134066
	Silver	3.28			-10	10	12/23/2024	11:55	LB134066
	Zinc	7.82			-40	40	12/23/2024	11:55	LB134066
ICSAB01	Arsenic	116	104	112	88.4	120	12/23/2024	12:06	LB134066
	Barium	486	537	90	437	637	12/23/2024	12:06	LB134066
	Beryllium	477	495	96	420	570	12/23/2024	12:06	LB134066
	Cadmium	1040	972	107	826	1120	12/23/2024	12:06	LB134066
	Chromium	581	542	107	460	624	12/23/2024	12:06	LB134066
	Copper	565	511	111	434	588	12/23/2024	12:06	LB134066

Metals
- 4 -
INTERFERENCE CHECK SAMPLE

Client: Tetra Tech NUS, Inc. **SDG No.:** P5316
Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5316 **SAS No.:** P5316
ICS Source: EPA **Instrument ID:** P4

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Low Limit (ug/L)	High Limit (ug/L)	Analysis Date	Analysis Time	Run Number
ICSAB01	Lead	55.4	49.0	113	37	61	12/23/2024	12:06	LB134066
	Manganese	478	507	94	430	584	12/23/2024	12:06	LB134066
	Nickel	1040	954	109	810	1100	12/23/2024	12:06	LB134066
	Selenium	37.4	46.0	81	26	66	12/23/2024	12:06	LB134066
	Silver	203	201	101	170	232	12/23/2024	12:06	LB134066
	Zinc	1070	952	112	809	1095	12/23/2024	12:06	LB134066



METAL QC DATA

A

B

C

D

E

F

G

H

metals
- 5a -
MATRIX SPIKE SUMMARY

client:	<u>Tetra Tech NUS, Inc.</u>	level:	<u>low</u>	sdg no.:	<u>P5316</u>
contract:	<u>TETR06</u>	lab code:	<u>CHEM</u>	case no.:	<u>P5316</u>
matrix:	<u>Solid</u>	sample id:	<u>P5355-01</u>	client id:	<u>RBR251688MS</u>
Percent Solids for Sample:	81.7	Spiked ID:	P5355-01MS	Percent Solids for Spike Sample:	81.7

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/Kg	82 - 111	40.3		4.65		45.1	79	N	P
Barium	mg/Kg	83 - 113	351		332		11.3	170		P
Beryllium	mg/Kg	83 - 113	7.89		0.99		11.3	61	N	P
Cadmium	mg/Kg	82 - 113	14.6		3.59		11.3	97		P
Chromium	mg/Kg	85 - 113	36.4		19.6		22.6	74	N	P
Copper	mg/Kg	81 - 117	51.2		37.2		16.9	83		P
Lead	mg/Kg	81 - 112	151		95.0		56.4	99		P
Manganese	mg/Kg	84 - 114	2320		2230		11.3	816		P
Nickel	mg/Kg	83 - 113	82.2		52.2		28.2	106		P
Selenium	mg/Kg	78 - 111	81.0		1.08	U	110	74	N	P
Silver	mg/Kg	82 - 112	4.31		0.99		4.2	79	N	P
Zinc	mg/Kg	82 - 113	137		127		11.3	85		P

metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client:	<u>Tetra Tech NUS, Inc.</u>	level:	<u>low</u>	sdg no.:	<u>P5316</u>
contract:	<u>TETR06</u>	lab code:	<u>CHEM</u>	case no.:	<u>P5316</u>
matrix:	<u>Solid</u>	sample id:	<u>P5355-01</u>	client id:	<u>RBR251688MSD</u>
Percent Solids for Sample:	81.7	Spiked ID:	P5355-01MSD	Percent Solids for Spike Sample:	81.7

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/Kg	82 - 111	37.5		4.65		42.6	77	N	P
Barium	mg/Kg	83 - 113	333		332		10.6	8		P
Beryllium	mg/Kg	83 - 113	7.46		0.99		10.6	61	N	P
Cadmium	mg/Kg	82 - 113	13.7		3.59		10.6	95		P
Chromium	mg/Kg	85 - 113	34.3		19.6		21.3	69	N	P
Copper	mg/Kg	81 - 117	47.9		37.2		16.0	67	N	P
Lead	mg/Kg	81 - 112	141		95.0		53.2	87		P
Manganese	mg/Kg	84 - 114	2200		2230		10.6	-321		P
Nickel	mg/Kg	83 - 113	77.0		52.2		26.6	93		P
Selenium	mg/Kg	78 - 111	75.6		1.08	U	110	69	N	P
Silver	mg/Kg	82 - 112	4.06		0.99		4.0	77	N	P
Zinc	mg/Kg	82 - 113	128		127		10.6	5		P

metals
- 5a -
MATRIX SPIKE SUMMARY

client: <u>Tetra Tech NUS, Inc.</u>	level: <u>low</u>	sdg no.: <u>P5316</u>
contract: <u>TETR06</u>	lab code: <u>CHEM</u>	case no.: <u>P5316</u> sas no.: <u>P5316</u>
matrix: <u>Solid</u>	sample id: <u>P5365-01</u>	client id: <u>TAPFTA-SB01I-4.5-121924-00-T1MS</u>
Percent Solids for Sample: <u>90.1</u>	Spiked ID: <u>P5365-01MS</u>	Percent Solids for Spike Sample: <u>90.1</u>

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	mg/Kg	80 - 124	0.29		0.0080	J	0.29	99		CV

metals
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: <u>Tetra Tech NUS, Inc.</u>	level: <u>low</u>	sdg no.: <u>P5316</u>
contract: <u>TETR06</u>	lab code: <u>CHEM</u>	case no.: <u>P5316</u> sas no.: <u>P5316</u>
matrix: <u>Solid</u>	sample id: <u>P5365-01</u>	client id: <u>TAPFTA-SB01I-4.5-121924-00-T1MSD</u>
Percent Solids for Sample: <u>90.1</u>	Spiked ID: <u>P5365-01MSD</u>	Percent Solids for Spike Sample: <u>90.1</u>

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	mg/Kg	80 - 124	0.30		0.0080	J	0.28	106		CV

Metals
- 5b -
POST DIGEST SPIKE SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** P5316

Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5316 **SAS No.:** P5316

Matrix: Solid **Level:** LOW **Client ID:** RBR251688A

Sample ID: P5355-01 **Spiked ID:** P5355-01A

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/Kg	82 - 111	39.6		4.65		43.1	81		P
Beryllium	mg/Kg	83 - 113	7.82		0.99		10.8	63		P
Chromium	mg/Kg	85 - 113	35.7		19.6		21.6	74		P
Copper	mg/Kg	81 - 117	49.2		37.2		16.2	74		P
Selenium	mg/Kg	78 - 111	80.1		1.08	U	110	73		P
Silver	mg/Kg	82 - 112	4.29		0.99		4.00	82		P

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: Tetra Tech NUS, Inc. **Level:** LOW **SDG No.:** P5316
Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5316 **SAS No.:** P5316
Matrix: Solid **Sample ID:** P5355-01 **Client ID:** RBR251688DUP
Percent Solids for Sample: 81.7 **Duplicate ID** P5355-01DUP **Percent Solids for Spike Sample:** 81.7

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/Kg	20	4.65		4.32		7		P
Barium	mg/Kg	20	332		308		8		P
Beryllium	mg/Kg	20	0.99		0.94		5		P
Cadmium	mg/Kg	20	3.59		3.46		4		P
Chromium	mg/Kg	20	19.6		18.6		5		P
Copper	mg/Kg	20	37.2		35.0		6		P
Lead	mg/Kg	20	95.0		89.7		6		P
Manganese	mg/Kg	20	2230		2080		7		P
Nickel	mg/Kg	20	52.2		49.5		5		P
Selenium	mg/Kg	20	1.08	U	1.01	U			P
Silver	mg/Kg	20	0.99		1.00		1		P
Zinc	mg/Kg	20	127		117		8		P

“A control limit of $\pm 20\%$ RPD for each matrix applies for sample values greater than 10 times Detection Limit”

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: Tetra Tech NUS, Inc. **Level:** LOW **SDG No.:** P5316
Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5316 **SAS No.:** P5316
Matrix: Solid **Sample ID:** P5355-01MS **Client ID:** RBR251688MSD
Percent Solids for Sample: 81.7 **Duplicate ID** P5355-01MSD **Percent Solids for Spike Sample:** 81.7

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/Kg	20	40.3		37.5		7		P
Barium	mg/Kg	20	351		333		5		P
Beryllium	mg/Kg	20	7.89		7.46		6		P
Cadmium	mg/Kg	20	14.6		13.7		6		P
Chromium	mg/Kg	20	36.4		34.3		6		P
Copper	mg/Kg	20	51.2		47.9		7		P
Lead	mg/Kg	20	151		141		7		P
Manganese	mg/Kg	20	2320		2200		5		P
Nickel	mg/Kg	20	82.2		77.0		7		P
Selenium	mg/Kg	20	81.0		75.6		7		P
Silver	mg/Kg	20	4.31		4.06		6		P
Zinc	mg/Kg	20	137		128		7		P

“A control limit of $\pm 20\%$ RPD for each matrix applies for sample values greater than 10 times Detection Limit”

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: Tetra Tech NUS, Inc. **Level:** LOW **SDG No.:** P5316
Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5316 **SAS No.:** P5316
Matrix: Solid **Sample ID:** P5365-01 **Client ID:** TAPFTA-SB01I-4.5-121924-00-T1DUP
Percent Solids for Sample: 90.1 **Duplicate ID** P5365-01DUP **Percent Solids for Spike Sample:** 90.1

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	mg/Kg	20	0.0080	J	0.0080	J	0		CV

“A control limit of $\pm 20\%$ RPD for each matrix applies for sample values greater than 10 times Detection Limit”

Metals

- 6 -

DUPLICATE SAMPLE SUMMARY

Client: Tetra Tech NUS, Inc. **Level:** LOW **SDG No.:** P5316
Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5316 **SAS No.:** P5316
Matrix: Solid **Sample ID:** P5365-01MS **Client ID:** TAPFTA-SB01I-4.5-121924-00-T1MSD
Percent Solids for Sample: 90.1 **Duplicate ID** P5365-01MSD **Percent Solids for Spike Sample:** 90.1

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	mg/Kg	20	0.29		0.30		3		CV

“A control limit of $\pm 20\%$ RPD for each matrix applies for sample values greater than 10 times Detection Limit”

Metals

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LABORATORY CONTROL SAMPLE SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** P5316
Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5316 **SAS No.:** P5316

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB165786BS							
Arsenic	mg/Kg	35.4	35.9		101	82 - 111	P
Barium	mg/Kg	8.8	7.76		88	83 - 113	P
Beryllium	mg/Kg	8.8	8.43		96	83 - 113	P
Cadmium	mg/Kg	8.8	8.61		98	82 - 113	P
Chromium	mg/Kg	17.7	18.2		103	85 - 113	P
Copper	mg/Kg	13.3	13.7		103	81 - 117	P
Lead	mg/Kg	44.2	43.1		98	81 - 112	P
Manganese	mg/Kg	8.8	8.70		99	84 - 114	P
Nickel	mg/Kg	22.1	21.9		99	83 - 113	P
Selenium	mg/Kg	88.5	88.4		100	78 - 111	P
Silver	mg/Kg	3.3	3.35		102	82 - 112	P
Zinc	mg/Kg	8.8	8.90		101	82 - 113	P

Metals

- 7 -

LABORATORY CONTROL SAMPLE SUMMARY

Client: Tetra Tech NUS, Inc. **SDG No.:** P5316
Contract: TETR06 **Lab Code:** CHEM **Case No.:** P5316 **SAS No.:** P5316

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB165798BS Mercury	mg/Kg	0.25	0.26		106	80 - 124	CV

Metals
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ICP SERIAL DILUTIONS

SAMPLE NO.

RBR251688L

Lab Name: Chemtech Consulting Group **Contract:** TETR06
Lab Code: CHEM **Lb No.:** lb134066 **Lab Sample ID :** P5355-01L **SDG No.:** P5316
Matrix (soil/water): Solid **Level (low/med):** LOW
Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)		Serial Dilution Result (S)		% Differ-ence		Q	M
	C		C					
Arsenic	4.65		5.15	J	11			P
Barium	332		432		30			P
Beryllium	0.99		1.39	J	40			P
Cadmium	3.59		2.45		32			P
Chromium	19.6		27.2		38			P
Copper	37.2		53.8		45			P
Lead	95.0		105		11			P
Manganese	2230		3150		41			P
Nickel	52.2		56.7		9			P
Selenium	1.08	U	5.39	U				P
Silver	0.99		1.78	J	79			P
Zinc	127		170		34			P

Metals
-9 -
ICP SERIAL DILUTIONS

SAMPLE NO.

TAPFTA-SB01I-4.5-121924-00-T1L

Lab Name: Chemtech Consulting Group **Contract:** TETR06
Lab Code: CHEM **Lb No.:** lb134050 **Lab Sample ID :** P5365-01L **SDG No.:** P5316
Matrix (soil/water): Solid **Level (low/med):** LOW
Concentration Units: mg/Kg

Analyte	Initial Sample Result (I) C	Serial Dilution Result (S) C	% Differ- ence	Q	M
Mercury	0.0080 J	0.066 U	100.0		CV



METAL PREPARATION & INSTRUMENT DATA

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc.

SDG No.: P5316

Contract: TETR06

Lab Code: CHEM

Case No.: P5316

SAS No.: P5316

Instrument ID: _____

Date: _____

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		Al	Ca	Fe	Mg	Ag
Arsenic	193.759	0.0000000	0.0000000	-0.0000440	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000930	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0007850	0.0000000	0.0000000
Lead	220.353	-0.0000920	0.0000000	0.0000380	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	-0.0001440	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	-0.0001490	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0001050	0.0000000	0.0000000

Metals

- 11 -

ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc.

SDG No.: P5316

Contract: TETR06

Lab Code: CHEM

Case No.: P5316

SAS No.: P5316

Instrument ID: _____

Date: _____

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		As	Ba	Be	Cd	Co
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0002870
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0000000	0.0000000	0.0009530
Lead	220.353	0.0000000	0.0003170	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0000000	-0.0003570
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Metals

- 11 -

ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc.

SDG No.: P5316

Contract: TETR06

Lab Code: CHEM

Case No.: P5316

SAS No.: P5316

Instrument ID: _____

Date: _____

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		Cr	Cu	K	Mn	Mo
Arsenic	193.759	-0.0029000	0.0000000	0.0000000	0.0000000	0.0004900
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	-0.0000710	-0.0003400
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000070	0.0002200	0.0000000
Copper	224.700	0.0000000	0.0000000	0.0000000	0.0006510	0.0020500
Lead	220.353	0.0000000	0.0000000	0.0000000	0.0001400	-0.0008600
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0007460	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	-0.0000120
Zinc	213.800	0.0000000	0.0009010	0.0000000	0.0000000	0.0000000

Metals

- 11 -

ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc.

SDG No.: P5316

Contract: TETR06

Lab Code: CHEM

Case No.: P5316

SAS No.: P5316

Instrument ID: _____

Date: _____

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		Na	Ni	Pb	Sb	Se
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	224.700	0.0000000	-0.0047000	0.0036100	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0006580	0.0000000	0.0000000	0.0001290
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0003330	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0067600	0.0000000	0.0000000	0.0000000

Metals

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ICP INTERELEMENT CORRECTION FACTORS

Client: Tetra Tech NUS, Inc.

SDG No.: P5316

Contract: TETR06

Lab Code: CHEM

Case No.: P5316

SAS No.: P5316

Instrument ID: _____

Date: _____

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		Sn	Ti	Tl	V	Zn
Arsenic	193.759	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	234.861	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000630	0.0001280	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0001110	0.0000000
Copper	224.700	0.0000000	0.0003840	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	-0.0003610	0.0000000	0.0000000	0.0000000
Manganese	257.610	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.068	0.0000000	-0.0007420	0.0000000	0.0000000	0.0000000
Zinc	213.800	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000



METAL PREPARATION & ANALYICAL SUMMARY

Metals
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SAMPLE PREPARATION SUMMARY

Client: Tetra Tech NUS, Inc.

SDG No.: P5316

Contract: TETR06

Lab Code: CHEM

Method:

Case No.: P5316

SAS No.: P5316

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(g)	Final Sample Volume (mL)	Percent Solids
Batch Number: PB165786							
P5316-01	TT-304-IDWSO-20241217-1	SAM	SOLID	12/20/2024	2.24	100.0	68.60
P5355-01DUP	RBR251688DUP	DUP	SOLID	12/20/2024	2.43	100.0	81.70
P5355-01MS	RBR251688MS	MS	SOLID	12/20/2024	2.17	100.0	81.70
P5355-01MSD	RBR251688MSD	MSD	SOLID	12/20/2024	2.30	100.0	81.70
PB165786BL	PB165786BL	MB	SOLID	12/20/2024	2.26	100.0	100.00
PB165786BS	PB165786BS	LCS	SOLID	12/20/2024	2.26	100.0	100.00

Metals
- 13 -
SAMPLE PREPARATION SUMMARY

Client:

Tetra Tech NUS, Inc.

Contract:

TETR06

Lab Code:

CHEM

SDG No.:

P5316

Method:

Case No.:

P5316

SAS No.:

P5316

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(g)	Final Sample Volume (mL)	Percent Solids
Batch Number: PB165798							
P5316-01	TT-304-IDWSO-20241217-1	SAM	SOLID	12/20/2024	0.59	35.0	68.60
P5365-01DUP	TAPFTA-SB01I-4.5-121924-00-T1DUP	DUP	SOLID	12/20/2024	0.58	35.0	90.10
P5365-01MS	TAPFTA-SB01I-4.5-121924-00-T1MS	MS	SOLID	12/20/2024	0.54	35.0	90.10
P5365-01MSD	TAPFTA-SB01I-4.5-121924-00-T1MSD	MSD	SOLID	12/20/2024	0.56	35.0	90.10
PB165798BL	PB165798BL	MB	SOLID	12/20/2024	0.54	35.0	100.00
PB165798BS	PB165798BS	LCS	SOLID	12/20/2024	0.57	35.0	100.00

metals
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ANALYSIS RUN LOG

Client: Tetra Tech NUS, Inc. **Contract:** TETR06

Lab code: CHEM **Case no.:** P5316 **Sas no.:** P5316 **Sdg no.:** P5316

Instrument id number: **Method:** **Run number:** LB134050

Start date: 12/20/2024 **End date:** 12/20/2024

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1358	HG
S0.2	S0.2	1	1400	HG
S2.5	S2.5	1	1403	HG
S5	S5	1	1405	HG
S7.5	S7.5	1	1407	HG
S10	S10	1	1410	HG
ICV28	ICV28	1	1413	HG
ICB28	ICB28	1	1415	HG
CCV57	CCV57	1	1417	HG
CCB57	CCB57	1	1420	HG
CRA	CRA	1	1422	HG
PB165798BL	PB165798BL	1	1429	HG
PB165798BS	PB165798BS	1	1431	HG
P5316-01	TT-304-IDWSO-20241217-1	1	1434	HG
CCV58	CCV58	1	1443	HG
CCB58	CCB58	1	1445	HG
P5365-01DUP	TAPFTA-SB01I-4.5-121924-00-'	1	1450	HG
P5365-01MS	TAPFTA-SB01I-4.5-121924-00-'	1	1452	HG
P5365-01MSD	TAPFTA-SB01I-4.5-121924-00-'	1	1454	HG
P5365-01L	TAPFTA-SB01I-4.5-121924-00-'	5	1456	HG
CCV59	CCV59	1	1501	HG
CCB59	CCB59	1	1503	HG

metals
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ANALYSIS RUN LOG

Client: Tetra Tech NUS, Inc. **Contract:** TETR06

Lab code: CHEM **Case no.:** P5316 **Sas no.:** P5316 **Sdg no.:** P5316

Instrument id number: **Method:** **Run number:** LB134054

Start date: 12/20/2024 **End date:** 12/21/2024

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1541	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
S1	S1	1	1546	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
S2	S2	1	1550	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
S3	S3	1	1554	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
S4	S4	1	1558	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
S5	S5	1	1603	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
ICV01	ICV01	1	1607	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
LLICV01	LLICV01	1	1611	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
ICB01	ICB01	1	1621	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
CRI01	CRI01	1	1626	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
ICSA01	ICSA01	1	1630	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
ICSAB01	ICSAB01	1	1634	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
CCV01	CCV01	1	1647	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
CCB01	CCB01	1	1651	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
P5316-01	TT-304-IDWSO-20241217-1	1	1704	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
CCV02	CCV02	1	1729	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
CCB02	CCB02	1	1734	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
CCV03	CCV03	1	1812	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
CCB03	CCB03	1	1816	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
CCV04	CCV04	1	1902	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
CCB04	CCB04	1	1911	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
CCV05	CCV05	1	1957	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
CCB05	CCB05	1	2001	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
CCV06	CCV06	1	2047	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
CCB06	CCB06	1	2051	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
CCV07	CCV07	1	2137	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
CCB07	CCB07	1	2204	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
PB165786BL	PB165786BL	1	2246	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
CCV08	CCV08	1	2301	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
CCB08	CCB08	1	2312	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
PB165786BS	PB165786BS	1	2317	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
CCV09	CCV09	1	2355	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
CCB09	CCB09	1	0005	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn

metals
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ANALYSIS RUN LOG

Client: Tetra Tech NUS, Inc. **Contract:** TETR06

Lab code: CHEM **Case no.:** P5316 **Sas no.:** P5316 **Sdg no.:** P5316

Instrument id number: **Method:** **Run number:** LB134066

Start date: 12/23/2024 **End date:** 12/23/2024

Lab sample id.	Client Sample Id	d/f	Time	Parameter list
S0	S0	1	1051	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
S1	S1	1	1056	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
S2	S2	1	1100	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
S3	S3	1	1104	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
S4	S4	1	1109	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
S5	S5	1	1113	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
ICV01	ICV01	1	1117	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
LLICV01	LLICV01	1	1137	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
ICB01	ICB01	1	1144	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
CRI01	CRI01	1	1151	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
ICSA01	ICSA01	1	1155	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
ICSAB01	ICSAB01	1	1206	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
CCV01	CCV01	1	1231	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
CCB01	CCB01	1	1235	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
CCV02	CCV02	1	1343	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
CCB02	CCB02	1	1347	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
CCV03	CCV03	1	1407	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
CCB03	CCB03	1	1411	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
CCV04	CCV04	1	1506	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
CCB04	CCB04	1	1510	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
P5355-01DUP	RBR251688DUP	1	1522	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
P5355-01L	RBR251688L	5	1527	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
P5355-01MS	RBR251688MS	1	1531	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
P5355-01MSD	RBR251688MSD	1	1536	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
P5355-01A	RBR251688A	1	1540	Ag,As,Be,Cr,Cu,Se
CCV05	CCV05	1	1606	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
CCB05	CCB05	1	1610	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
CCV06	CCV06	1	1654	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn
CCB06	CCB06	1	1658	Ag,As,Ba,Be,Cd,Cr,Cu,Mn,Ni,Pb,Se,Zn



SHIPPING DOCUMENTS

P5316

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : P5316 TETR06

Order Date : 12/17/2024 3:44:00 PM

Project Mgr :

Client Name : Tetra Tech NUS, Inc.

Project Name : CTO WE13

Report Type : Level 4

Client Contact : Ernie Wu

Receive DateTime : 12/17/2024 12:00:00 AM

EDD Type : ADAPT

Invoice Name : Tetra Tech NUS, Inc.

Purchase Order :

18:30

Hard Copy Date :

Invoice Contact : Ernie Wu

Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
P5316-01	TT-304-IDWSO-20241217-1	Solid	12/17/2024	13:00	VOCMS Group4		8260D	10 Bus. Days	2 days
P5316-02	TT-304-IDWSO-20241217-2	Solid	12/17/2024	13:05	VOCMS Group4		8260D	10 Bus. Days	
P5316-03	TT-304-IDWSO-20241217-3	Solid	12/17/2024	13:10	VOCMS Group4		8260D	10 Bus. Days	
P5316-04	TT-304-IDWSO-20241217-4	Solid	12/17/2024	13:15	VOCMS Group4		8260D	10 Bus. Days	
P5316-05	TT-304-IDWSO-20241217-5	Solid	12/17/2024	13:20	VOCMS Group4		8260D	10 Bus. Days	

Relinquished By :

Date / Time : 12-18-24 10:45

Received By :

Date / Time : 12-18-24 10:45

Storage Area : VOA Refridgerator Room