

LAB CHRONICLE

OrderID:	Q2667	OrderDate:	7/22/2025 11:01:14 AM
Client:	Tetra Tech, EMI	Project:	R36982
Contact:	Ava Heiss	Location:	D31

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2667-01	C0AP2	TCLP	TCLP Herbicide	8151A	07/21/25	07/23/25	07/25/25	07/22/25
Q2667-02	C0AP3	TCLP	TCLP Herbicide	8151A	07/21/25	07/23/25	07/25/25	07/22/25



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

Hit Summary Sheet
SW-846

SDG No.: Q2667

Order ID: Q2667

Client: Tetra Tech, EMI

Project ID: R36982

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

Client ID :

Total Concentration: 0.000

A
B
C
D
E
F
G
H



SAMPLE DATA

Report of Analysis

Client:	Tetra Tech, EMI		Date Collected:		
Project:	R36982		Date Received:	07/23/25	
Client Sample ID:	PB168953TB		SDG No.:	Q2667	
Lab Sample ID:	PB168953TB		Matrix:	TCLP	
Analytical Method:	8151A		% Solid:	0	Decanted:
Sample Wt/Vol:	100	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	TCLP Herbicide	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	8151A				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS031240.D	1	07/23/25 11:45	07/24/25 21:29	PB169001

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	9.20	U	9.20	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	7.80	U	7.80	20.0	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	579		61 - 136	116%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Report of Analysis

Client:	Tetra Tech, EMI		Date Collected:	07/21/25	
Project:	R36982		Date Received:	07/22/25	
Client Sample ID:	C0AP2		SDG No.:	Q2667	
Lab Sample ID:	Q2667-01		Matrix:	TCLP	
Analytical Method:	8151A		% Solid:	0	Decanted:
Sample Wt/Vol:	100	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	TCLP Herbicide	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	8151A				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS031246.D	1	07/23/25 11:45	07/25/25 00:41	PB169001

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	9.20	U	9.20	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	7.80	U	7.80	20.0	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	487		61 - 136	97%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Report of Analysis

Client:	Tetra Tech, EMI		Date Collected:	07/21/25	
Project:	R36982		Date Received:	07/22/25	
Client Sample ID:	C0AP3		SDG No.:	Q2667	
Lab Sample ID:	Q2667-02		Matrix:	TCLP	
Analytical Method:	8151A		% Solid:	0	Decanted:
Sample Wt/Vol:	100	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	TCLP Herbicide	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	8151A				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS031247.D	1	07/23/25 11:45	07/25/25 01:05	PB169001

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	9.20	U	9.20	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	7.80	U	7.80	20.0	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	483		61 - 136	97%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit



QC SUMMARY

Surrogate Summary

SDG No.: Q2667

Client: Tetra Tech, EMI

Analytical Method: 8151A

Lab Sample ID	Client ID	Parameter	Column	Spike	Result	Recovery(%)	Qual	Limits(%)	
								Low	High
I.BLK-PS031156.D	PIBLK-PS031156.D	2,4-DCAA	1	500	397	79		61	136
		2,4-DCAA	2	500	504	101		61	136
I.BLK-PS031232.D	PIBLK-PS031232.D	2,4-DCAA	1	500	412	82		61	136
		2,4-DCAA	2	500	491	98		61	136
Q2641-02MS	P001-CONCRETE001-01MS	2,4-DCAA	1	500	452	90		61	136
		2,4-DCAA	2	500	499	100		61	136
Q2641-02MSD	P001-CONCRETE001-01MSD	2,4-DCAA	1	500	418	84		61	136
		2,4-DCAA	2	500	463	93		61	136
PB169001BL	PB169001BL	2,4-DCAA	1	500	407	81		61	136
		2,4-DCAA	2	500	473	95		61	136
PB169001BS	PB169001BS	2,4-DCAA	1	500	488	98		61	136
		2,4-DCAA	2	500	501	100		61	136
PB168953TB	PB168953TB	2,4-DCAA	1	500	579	116		61	136
		2,4-DCAA	2	500	500	100		61	136
I.BLK-PS031242.D	PIBLK-PS031242.D	2,4-DCAA	1	500	422	84		61	136
		2,4-DCAA	2	500	498	100		61	136
Q2667-01	C0AP2	2,4-DCAA	1	500	429	86		61	136
		2,4-DCAA	2	500	487	97		61	136
Q2667-02	C0AP3	2,4-DCAA	1	500	403	81		61	136
		2,4-DCAA	2	500	483	97		61	136
I.BLK-PS031251.D	PIBLK-PS031251.D	2,4-DCAA	1	500	374	75		61	136
		2,4-DCAA	2	500	470	94		61	136

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.:	<u>Q2667</u>	Analytical Method:	<u>8151A</u>
Client:	<u>Tetra Tech, EMI</u>	DataFile :	<u>PS031234.D</u>

	Parameter	Spike	Sample	Result	Units	Rec	Rec	RPD		Low	Limits	RPD
			Result				Qual	RPD	Qual		High	
Lab Sample ID:	Q2641-02MS	Client Sample ID:		P001-CONCRETE001-01M								
	(Column 1)											
	2,4-D	50	0	80.3	ug/L	161	*			65	135	
	2,4,5-TP(Silvex)	50	0	77.7	ug/L	155	*			62	139	
Lab Sample ID:	Q2641-02MS	Client Sample ID:		P001-CONCRETE001-01M								
	(Column 2)											
	2,4-D	50	0	86.2	ug/L	172	*			65	135	
	2,4,5-TP(Silvex)	50	0	76.7	ug/L	153	*			62	139	

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.:	<u>Q2667</u>	Analytical Method:	<u>8151A</u>
Client:	<u>Tetra Tech, EMI</u>	DataFile :	<u>PS031235.D</u>

		Sample				Rec		RPD		Limits	
Parameter	Spike	Result	Result	Units	Rec	Qual	RPD	Qual	Low	High	RPD
Lab Sample ID:	Q2641-02MSD	Client Sample ID:	P001-CONCRETE001-01M								
(Column 1)											
2,4-D	50	0	76.2	ug/L	152	*	6		65	135	20
2,4,5-TP(Silvex)	50	0	73.8	ug/L	148	*	5		62	139	20
Lab Sample ID:	Q2641-02MSD	Client Sample ID:	P001-CONCRETE001-01M								
(Column 2)											
2,4-D	50	0	80.9	ug/L	162	*	6		65	135	20
2,4,5-TP(Silvex)	50	0	72.7	ug/L	145	*	5		62	139	20

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.:	<u>Q2667</u>	Analytical Method:	<u>8151A</u>
Client:	<u>Tetra Tech, EMI</u>	Datafile :	<u>PS031237.D</u>

Lab Sample ID	Parameter	Spike	Result	Units	Rec	RPD	Qual	RPD	Low	Limits	RPD
								Qual		High	
PB169001BS (Column 1)	2,4-D	5	6.00	ug/L	120				83	130	
	2,4,5-TP(Silvex)	5	5.60	ug/L	112				78	127	
PB169001BS (Column 2)	2,4-D	5	5.50	ug/L	110				83	130	
	2,4,5-TP(Silvex)	5	5.30	ug/L	106				78	127	

4C

PESTICIDE METHOD BLANK SUMMARY

Client ID

PB169001BL

Lab Name: Alliance

Contract: TETR16

Lab Code: ACE

SDG NO.: Q2667

Lab Sample ID: PB169001BL

Lab File ID: PS031236.D

Matrix: (soil/water) water

Extraction: (Type) SEPF

Sulfur Cleanup: (Y/N) N

Date Extracted: 07/23/2025

Date Analyzed (1): 07/24/2025

Date Analyzed (2): 07/24/2025

Time Analyzed (1): 19:52

Time Analyzed (2): 19:52

Instrument ID (1): ECD_S

Instrument ID (2): ECD_S

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

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

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED 1	DATE ANALYZED 2
P001-CONCRETE001-01MS	Q2641-02MS	PS031234.D	07/24/2025	07/24/2025
P001-CONCRETE001-01MSD	Q2641-02MSD	PS031235.D	07/24/2025	07/24/2025
PB169001BS	PB169001BS	PS031237.D	07/24/2025	07/24/2025
PB168953TB	PB168953TB	PS031240.D	07/24/2025	07/24/2025
C0AP2	Q2667-01	PS031246.D	07/25/2025	07/25/2025
C0AP3	Q2667-02	PS031247.D	07/25/2025	07/25/2025

COMMENTS: _____



QC SAMPLE DATA

Report of Analysis

Client:	Tetra Tech, EMI		Date Collected:		
Project:	R36982		Date Received:		
Client Sample ID:	PB169001BL		SDG No.:	Q2667	
Lab Sample ID:	PB169001BL		Matrix:	TCLP	
Analytical Method:	8151A		% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	TCLP Herbicide	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS031236.D	1	07/23/25 11:45	07/24/25 19:52	PB169001

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	0.92	U	0.92	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.78	U	0.78	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	473		61 - 136	95%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Report of Analysis

Client:	Tetra Tech, EMI		Date Collected:	07/21/25	
Project:	R36982		Date Received:	07/21/25	
Client Sample ID:	PIBLK-PS031156.D		SDG No.:	Q2667	
Lab Sample ID:	I.BLK-PS031156.D		Matrix:	TCLP	
Analytical Method:	8151A		% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	TCLP Herbicide	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS031156.D	1		07/21/25	ps072125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	0.92	U	0.92	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.78	U	0.78	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	504		61 - 136	101%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Report of Analysis

Client:	Tetra Tech, EMI		Date Collected:	07/24/25	
Project:	R36982		Date Received:	07/24/25	
Client Sample ID:	PIBLK-PS031232.D		SDG No.:	Q2667	
Lab Sample ID:	I.BLK-PS031232.D		Matrix:	TCLP	
Analytical Method:	8151A		% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	TCLP Herbicide	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS031232.D	1		07/24/25	PS072425

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	0.92	U	0.92	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.78	U	0.78	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	491		61 - 136	98%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Report of Analysis

Client:	Tetra Tech, EMI		Date Collected:	07/24/25	
Project:	R36982		Date Received:	07/24/25	
Client Sample ID:	PIBLK-PS031242.D		SDG No.:	Q2667	
Lab Sample ID:	I.BLK-PS031242.D		Matrix:	TCLP	
Analytical Method:	8151A		% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	TCLP Herbicide	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS031242.D	1		07/24/25	PS072425

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	0.92	U	0.92	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.78	U	0.78	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	498		61 - 136	100%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Report of Analysis

Client:	Tetra Tech, EMI		Date Collected:	07/25/25	
Project:	R36982		Date Received:	07/25/25	
Client Sample ID:	PIBLK-PS031251.D		SDG No.:	Q2667	
Lab Sample ID:	I.BLK-PS031251.D		Matrix:	TCLP	
Analytical Method:	8151A		% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	TCLP Herbicide	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS031251.D	1		07/25/25	PS072425

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	0.92	U	0.92	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.78	U	0.78	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	470		61 - 136	94%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Report of Analysis

Client:	Tetra Tech, EMI		Date Collected:		
Project:	R36982		Date Received:		
Client Sample ID:	PB169001BS		SDG No.:	Q2667	
Lab Sample ID:	PB169001BS		Matrix:	TCLP	
Analytical Method:	8151A		% Solid:	0	Decanted:
Sample Wt/Vol:	1000	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	TCLP Herbicide	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS031237.D	1	07/23/25 11:45	07/24/25 20:16	PB169001

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	6.00		0.92	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	5.60		0.78	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	501		61 - 136	100%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Report of Analysis

Client:	Tetra Tech, EMI		Date Collected:	07/16/25	
Project:	R36982		Date Received:	07/18/25	
Client Sample ID:	P001-CONCRETE001-01MS		SDG No.:	Q2667	
Lab Sample ID:	Q2641-02MS		Matrix:	TCLP	
Analytical Method:	8151A		% Solid:	0	Decanted:
Sample Wt/Vol:	100	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	TCLP Herbicide	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS031234.D	1	07/23/25 11:45	07/24/25 19:04	PB169001

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	86.2		9.20	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	77.7		7.80	20.0	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	499		61 - 136	100%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Report of Analysis

Client:	Tetra Tech, EMI		Date Collected:	07/16/25	
Project:	R36982		Date Received:	07/18/25	
Client Sample ID:	P001-CONCRETE001-01MSD		SDG No.:	Q2667	
Lab Sample ID:	Q2641-02MSD		Matrix:	TCLP	
Analytical Method:	8151A		% Solid:	0	Decanted:
Sample Wt/Vol:	100	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	TCLP Herbicide	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS031235.D	1	07/23/25 11:45	07/24/25 19:28	PB169001

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	80.9		9.20	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	73.8		7.80	20.0	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	463		61 - 136	93%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit



CALIBRATION SUMMARY



A
B
C
D
E
F
G
H

Calibration Times: **15:02** **16:39**

LAB FILE ID:	RT 200 =	<u>PS031157.D</u>	RT 500 =	<u>PS031158.D</u>
	RT 750 =	PS031159.D	RT 1000 =	PS031160.D
			RT 1500 =	PS031161.D

[illegible]



A
B
C
D
E
F
G
H

Calibration Times: **15:02** **16:39**

LAB FILE ID:	RT 200 =	<u>PS031157.D</u>	RT 500 =	<u>PS031158.D</u>
	RT 750 =	PS031159.D	RT 1000 =	PS031160.D
			RT 1500 =	PS031161.D

[illegible]

CALIBRATION FACTOR OF INITIAL CALIBRATION

Lab Name: Alliance
Lab Code: ACE
Instrument ID: ECD_S

Contract: TETR16
SDG NO.: Q2667

Calibration Date(s): 07/21/2025 07/21/2025
Calibration Times: 15:02 16:39

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

LAB FILE ID:		CF 200 =	<u>PS031157.D</u>	CF 500 =	<u>PS031158.D</u>		
CF 750 =		<u>PS031159.D</u>	CF 1000 =	<u>PS031160.D</u>	CF 1500 =	<u>PS031161.D</u>	
COMPOUND	CF 200	CF 500	CF 750	CF 1000	CF 1500	CF	% RSD
2,4,5-TP(Silvex)	24592600000	22780000000	21638700000	20857200000	19899400000	21953600000	8
2,4-D	4193860000	3820730000	3654460000	3552490000	3453030000	3734920000	8
2,4-DCAA	5091100000	4403340000	4248720000	4081100000	3917010000	4348250000	10

CALIBRATION FACTOR OF INITIAL CALIBRATION

Lab Name: Alliance
Lab Code: ACE
Instrument ID: ECD_S

Contract: TETR16
SDG NO.: Q2667

Calibration Date(s): 07/21/2025 07/21/2025
Calibration Times: 15:02 16:39

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

LAB FILE ID:		CF 200 =	<u>PS031157.D</u>	CF 500 =	<u>PS031158.D</u>		
CF 750 =		<u>PS031159.D</u>	CF 1000 =	<u>PS031160.D</u>	CF 1500 =	<u>PS031161.D</u>	
COMPOUND	CF 200	CF 500	CF 750	CF 1000	CF 1500	CF	% RSD
2,4,5-TP(Silvex)	16137400000	15454900000	14840900000	14348100000	13689700000	14894200000	6
2,4-D	1930260000	1742600000	1656200000	1604210000	1558320000	1698320000	9
2,4-DCAA	1147310000	1039810000	988394000	963101000	936229000	1014970000	8

INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: Alliance

Contract: TETR16

Lab Code: ACE

SDG NO.: Q2667

Instrument ID: _____

Date(s) Analyzed: _____

GC Column: _____

ID: _____ (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW		CALIBRATION FACTOR
				FROM	TO	
		1				
		2				
		3				
		4				
		5				

CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance

Contract: TETR16

Lab Code: ACE

SDG NO.: Q2667

Continuing Calib Date: 07/24/2025

Initial Calibration Date(s): 07/21/2025 07/21/2025

Continuing Calib Time: 18:39

Initial Calibration Time(s): 15:02 16:39

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
2,4-DCAA	7.32	7.33	7.23	7.43	0.01
2,4-D	8.45	8.46	8.36	8.56	0.01
2,4,5-TP(Silvex)	9.34	9.34	9.24	9.44	0.00

CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance

Contract: TETR16

Lab Code: ACE

SDG NO.: Q2667

Continuing Calib Date: 07/24/2025

Initial Calibration Date(s): 07/21/2025 07/21/2025

Continuing Calib Time: 18:39

Initial Calibration Time(s): 15:02 16:39

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
2,4-DCAA	7.76	7.77	7.67	7.87	0.01
2,4-D	9.02	9.02	8.92	9.12	0.00
2,4,5-TP(Silvex)	9.93	9.93	9.83	10.03	0.00

CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance **Contract:** TETR16
Lab Code: ACE **SDG NO.:** Q2667
GC Column: RTX-CLP **ID:** 0.32 (mm) **Initi. Calib. Date(s):** 07/21/2025 07/21/2025

Client Sample No.: CCAL01 **Date Analyzed:** 07/24/2025
Lab Sample No.: HSTDCCC750 **Data File :** PS031233.D **Time Analyzed:** 18:39

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-TP(Silvex)	9.335	9.242	9.442	689.480	712.500	-3.2
2,4-D	8.451	8.356	8.556	729.310	705.000	3.4
2,4-DCAA	7.319	7.225	7.425	666.340	750.000	-11.2

CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance **Contract:** TETR16
Lab Code: ACE **SDG NO.:** Q2667
GC Column: RTX-CLP2 **ID:** 0.32 (mm) **Initi. Calib. Date(s):** 07/21/2025 07/21/2025

Client Sample No.: CCAL01 **Date Analyzed:** 07/24/2025
Lab Sample No.: HSTDCCC750 **Data File :** PS031233.D **Time Analyzed:** 18:39

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	9.926	9.829	10.029	671.800	712.500	-5.7
2,4-D	9.021	8.924	9.124	696.610	705.000	-1.2
2,4-DCAA	7.764	7.666	7.866	693.770	750.000	-7.5

CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance

Contract: TETR16

Lab Code: ACE

SDG NO.: Q2667

Continuing Calib Date: 07/24/2025

Initial Calibration Date(s): 07/21/2025 07/21/2025

Continuing Calib Time: 23:29

Initial Calibration Time(s): 15:02 16:39

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
2,4-DCAA	7.32	7.33	7.23	7.43	0.01
2,4-D	8.45	8.46	8.36	8.56	0.01
2,4,5-TP(Silvex)	9.34	9.34	9.24	9.44	0.00

CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance

Contract: TETR16

Lab Code: ACE

SDG NO.: Q2667

Continuing Calib Date: 07/24/2025

Initial Calibration Date(s): 07/21/2025 07/21/2025

Continuing Calib Time: 23:29

Initial Calibration Time(s): 15:02 16:39

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
2,4-DCAA	7.76	7.77	7.67	7.87	0.01
2,4-D	9.02	9.02	8.92	9.12	0.00
2,4,5-TP(Silvex)	9.93	9.93	9.83	10.03	0.00

CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance **Contract:** TETR16
Lab Code: ACE **SDG NO.:** Q2667
GC Column: RTX-CLP **ID:** 0.32 (mm) **Initi. Calib. Date(s):** 07/21/2025 07/21/2025

Client Sample No.: CCAL02 **Date Analyzed:** 07/24/2025
Lab Sample No.: HSTDCCC750 **Data File :** PS031243.D **Time Analyzed:** 23:29

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	9.335	9.242	9.442	685.930	712.500	-3.7
2,4-D	8.451	8.356	8.556	727.900	705.000	3.2
2,4-DCAA	7.320	7.225	7.425	669.120	750.000	-10.8

CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance **Contract:** TETR16
Lab Code: ACE **SDG NO.:** Q2667
GC Column: RTX-CLP2 **ID:** 0.32 (mm) **Initi. Calib. Date(s):** 07/21/2025 07/21/2025

Client Sample No.: CCAL02 **Date Analyzed:** 07/24/2025
Lab Sample No.: HSTDCCC750 **Data File :** PS031243.D **Time Analyzed:** 23:29

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	9.926	9.829	10.029	666.400	712.500	-6.5
2,4-D	9.022	8.924	9.124	695.080	705.000	-1.4
2,4-DCAA	7.764	7.666	7.866	688.880	750.000	-8.1

CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance

Contract: TETR16

Lab Code: ACE

SDG NO.: Q2667

Continuing Calib Date: 07/25/2025

Initial Calibration Date(s): 07/21/2025 07/21/2025

Continuing Calib Time: 03:54

Initial Calibration Time(s): 15:02 16:39

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
2,4-DCAA	7.32	7.33	7.23	7.43	0.01
2,4-D	8.45	8.46	8.36	8.56	0.01
2,4,5-TP(Silvex)	9.34	9.34	9.24	9.44	0.00

CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance

Contract: TETR16

Lab Code: ACE

SDG NO.: Q2667

Continuing Calib Date: 07/25/2025

Initial Calibration Date(s): 07/21/2025 07/21/2025

Continuing Calib Time: 03:54

Initial Calibration Time(s): 15:02 16:39

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
2,4-DCAA	7.77	7.77	7.67	7.87	0.00
2,4-D	9.02	9.02	8.92	9.12	0.00
2,4,5-TP(Silvex)	9.93	9.93	9.83	10.03	0.00

CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance **Contract:** TETR16
Lab Code: ACE **SDG NO.:** Q2667
GC Column: RTX-CLP **ID:** 0.32 (mm) **Initi. Calib. Date(s):** 07/21/2025 07/21/2025

Client Sample No.: CCAL03 **Date Analyzed:** 07/25/2025
Lab Sample No.: HSTDCCC750 **Data File :** PS031252.D **Time Analyzed:** 03:54

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	9.336	9.242	9.442	649.880	712.500	-8.8
2,4-D	8.452	8.356	8.556	681.610	705.000	-3.3
2,4-DCAA	7.321	7.225	7.425	622.120	750.000	-17.1

CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance **Contract:** TETR16
Lab Code: ACE **SDG NO.:** Q2667
GC Column: RTX-CLP2 **ID:** 0.32 (mm) **Initi. Calib. Date(s):** 07/21/2025 07/21/2025

Client Sample No.: CCAL03 **Date Analyzed:** 07/25/2025
Lab Sample No.: HSTDCCC750 **Data File :** PS031252.D **Time Analyzed:** 03:54

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	9.928	9.829	10.029	653.600	712.500	-8.3
2,4-D	9.024	8.924	9.124	678.870	705.000	-3.7
2,4-DCAA	7.766	7.666	7.866	682.020	750.000	-9.1

Analytical Sequence

Client: Tetra Tech, EMI	SDG No.: Q2667	
Project: R36982	Instrument ID: ECD_S	
GC Column: RTX-CLP	ID: 0.32 (mm)	Inst. Calib. Date(s): 07/21/2025 07/21/2025

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

CLIENT ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DATAFILE	DCAA RT #	RT #
IBLK	IBLK	07/21/2025	14:38	PS031156.D	7.33	0.00
HSTDICC200	HSTDICC200	07/21/2025	15:02	PS031157.D	7.33	0.00
HSTDICC500	HSTDICC500	07/21/2025	15:26	PS031158.D	7.33	0.00
HSTDICC750	HSTDICC750	07/21/2025	15:51	PS031159.D	7.33	0.00
HSTDICC1000	HSTDICC1000	07/21/2025	16:15	PS031160.D	7.33	0.00
HSTDICC1500	HSTDICC1500	07/21/2025	16:39	PS031161.D	7.33	0.00
IBLK	IBLK	07/24/2025	17:27	PS031232.D	7.32	0.00
HSTDCCC750	HSTDCCC750	07/24/2025	18:39	PS031233.D	7.32	0.00
P001-CONCRETE001-01MS	Q2641-02MS	07/24/2025	19:04	PS031234.D	7.32	0.00
P001-CONCRETE001-01MSD	Q2641-02MSD	07/24/2025	19:28	PS031235.D	7.32	0.00
PB169001BL	PB169001BL	07/24/2025	19:52	PS031236.D	7.32	0.00
PB169001BS	PB169001BS	07/24/2025	20:16	PS031237.D	7.32	0.00
PB168953TB	PB168953TB	07/24/2025	21:29	PS031240.D	7.32	0.00
IBLK	IBLK	07/24/2025	22:17	PS031242.D	7.32	0.00
HSTDCCC750	HSTDCCC750	07/24/2025	23:29	PS031243.D	7.32	0.00
C0AP2	Q2667-01	07/25/2025	00:41	PS031246.D	7.32	0.00
C0AP3	Q2667-02	07/25/2025	01:05	PS031247.D	7.32	0.00
IBLK	IBLK	07/25/2025	02:42	PS031251.D	7.32	0.00
HSTDCCC750	HSTDCCC750	07/25/2025	03:54	PS031252.D	7.32	0.00

Analytical Sequence

Client: Tetra Tech, EMI	SDG No.: Q2667	
Project: R36982	Instrument ID: ECD_S	
GC Column: RTX-CLP2	ID: 0.32 (mm)	Inst. Calib. Date(s): 07/21/2025 07/21/2025

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

CLIENT ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DATAFILE	DCAA RT #	RT #
IBLK	IBLK	07/21/2025	14:38	PS031156.D	7.77	0.00
HSTDICC200	HSTDICC200	07/21/2025	15:02	PS031157.D	7.77	0.00
HSTDICC500	HSTDICC500	07/21/2025	15:26	PS031158.D	7.77	0.00
HSTDICC750	HSTDICC750	07/21/2025	15:51	PS031159.D	7.77	0.00
HSTDICC1000	HSTDICC1000	07/21/2025	16:15	PS031160.D	7.77	0.00
HSTDICC1500	HSTDICC1500	07/21/2025	16:39	PS031161.D	7.77	0.00
IBLK	IBLK	07/24/2025	17:27	PS031232.D	7.76	0.00
HSTDCCC750	HSTDCCC750	07/24/2025	18:39	PS031233.D	7.76	0.00
P001-CONCRETE001-01MS	Q2641-02MS	07/24/2025	19:04	PS031234.D	7.76	0.00
P001-CONCRETE001-01MSD	Q2641-02MSD	07/24/2025	19:28	PS031235.D	7.76	0.00
PB169001BL	PB169001BL	07/24/2025	19:52	PS031236.D	7.76	0.00
PB169001BS	PB169001BS	07/24/2025	20:16	PS031237.D	7.76	0.00
PB168953TB	PB168953TB	07/24/2025	21:29	PS031240.D	7.76	0.00
IBLK	IBLK	07/24/2025	22:17	PS031242.D	7.76	0.00
HSTDCCC750	HSTDCCC750	07/24/2025	23:29	PS031243.D	7.76	0.00
C0AP2	Q2667-01	07/25/2025	00:41	PS031246.D	7.77	0.00
C0AP3	Q2667-02	07/25/2025	01:05	PS031247.D	7.76	0.00
IBLK	IBLK	07/25/2025	02:42	PS031251.D	7.77	0.00
HSTDCCC750	HSTDCCC750	07/25/2025	03:54	PS031252.D	7.77	0.00

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

P001-CONCRETE001-01MS

Lab Name: Alliance

Contract: TETR16

Lab Code: ACE

SDG NO.: Q2667

Lab Sample ID: Q2641-02MS

Date(s) Analyzed: 07/24/2025 07/24/2025

Instrument ID (1): ECD_S

Instrument ID (2): ECD_S

GC Column: (1): RTX-CLP

ID: 0.32 (mm)

GC Column:(2): RTX-CLP2

ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
2,4-D	1	8.45	8.40	8.50	80.3	7.1
	2	9.02	8.97	9.07	86.2	
2,4,5-TP(Silvex)	1	9.34	9.29	9.39	77.7	1.3
	2	9.93	9.88	9.98	76.7	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

P001-CONCRETE001-01MSD

Lab Name: Alliance

Contract: TETR16

Lab Code: ACE

SDG NO.: Q2667

Lab Sample ID: Q2641-02MSD

Date(s) Analyzed: 07/24/2025 07/24/2025

Instrument ID (1): ECD_S

Instrument ID (2): ECD_S

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

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

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
2,4-D	1	8.45	8.40	8.50	76.2	6
	2	9.02	8.97	9.07	80.9	
2,4,5-TP(Silvex)	1	9.34	9.29	9.39	73.8	1.5
	2	9.93	9.88	9.98	72.7	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

PB169001BS

Lab Name: Alliance

Contract: TETR16

Lab Code: ACE

SDG NO.: Q2667

Lab Sample ID: PB169001BS

Date(s) Analyzed: 07/24/2025 07/24/2025

Instrument ID (1): ECD_S

Instrument ID (2): ECD_S

GC Column: (1): RTX-CLP

ID: 0.32 (mm)

GC Column:(2): RTX-CLP2

ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
2,4,5-TP(Silvex)	1	9.34	9.29	9.39	5.60	5.5
	2	9.93	9.88	9.98	5.30	
2,4-D	1	8.45	8.40	8.50	6.00	8.7
	2	9.02	8.97	9.07	5.50	