

Cover Page

Order ID : Q1488

Project ID : Amtrak Sawtooth Bridges 2025

Client : Portal Partners Tri-Venture

Lab Sample Number

Q1488-01
Q1488-02
Q1488-03
Q1488-04
Q1488-05
Q1488-06
Q1488-07
Q1488-08
Q1488-09
Q1488-10
Q1488-11
Q1488-12
Q1488-13
Q1488-14
Q1488-15

Client Sample Number

ENV-101-SB01
ENV-101-SB01
ENV-101-SB02
ENV-101-SB02
ENV-102-SB01
ENV-102-SB01
ENV-102-SB02
ENV-102-SB02
ENV-104-SB01
ENV-104-SB01
ENV-104-SB02
ENV-104-SB02
ENV-102-GW01
ENV-104-GW01
TB03042025

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: 3/17/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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 #: Q1488

Completed

For thorough review, the report must have the following:

GENERAL:

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

✓

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

✓

Is the chain of custody signed and complete

✓

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

✓

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

✓

COVER PAGE:

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

✓

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

✓

CHAIN OF CUSTODY:

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

✓

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

✓

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

✓

Were the samples received within hold time

✓

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

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: PRIYANKA DAVE

Date: 03/17/2025

LAB CHRONICLE

OrderID:	Q1488	OrderDate:	3/4/2025 3:39:00 PM
Client:	Portal Partners Tri-Venture	Project:	Amtrak Sawtooth Bridges 2025
Contact:	Joseph Krupansky	Location:	H31,VOA Ref. #2 Soil,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1488-01	ENV-101-SB01	SOIL			03/04/25			03/04/25
			PCB	8082A		03/05/25	03/05/25	
			EPH	NJEPH		03/10/25	03/10/25	
Q1488-02	ENV-101-SB01	TCLP			03/04/25			03/04/25
			TCLP Herbicide	8151A		03/11/25	03/12/25	
			TCLP Pesticide	8081B		03/11/25	03/12/25	
Q1488-03	ENV-101-SB02	SOIL			03/04/25			03/04/25
			PCB	8082A		03/05/25	03/05/25	
			EPH	NJEPH		03/10/25	03/10/25	
Q1488-04	ENV-101-SB02	TCLP			03/04/25			03/04/25
			TCLP Herbicide	8151A		03/11/25	03/12/25	
			TCLP Pesticide	8081B		03/11/25	03/12/25	
Q1488-05	ENV-102-SB01	SOIL			03/04/25			03/04/25
			PCB	8082A		03/05/25	03/05/25	
			EPH	NJEPH		03/10/25	03/10/25	
			EPH	NJEPH		03/10/25	03/11/25	
Q1488-06	ENV-102-SB01	TCLP			03/04/25			03/04/25
			TCLP Herbicide	8151A		03/11/25	03/12/25	
			TCLP Pesticide	8081B		03/11/25	03/12/25	
Q1488-07	ENV-102-SB02	SOIL			03/04/25			03/04/25
			PCB	8082A		03/05/25	03/05/25	
			EPH	NJEPH		03/10/25	03/10/25	
			EPH	NJEPH		03/10/25	03/11/25	
Q1488-08	ENV-102-SB02	TCLP			03/04/25			03/04/25
			TCLP Herbicide	8151A		03/11/25	03/12/25	

LAB CHRONICLE

			TCLP Pesticide	8081B		03/11/25	03/12/25	
Q1488-09	ENV-104-SB01	SOIL			03/04/25			03/04/25
			PCB	8082A		03/05/25	03/05/25	
			EPH	NJEPH		03/10/25	03/10/25	
			EPH	NJEPH		03/10/25	03/11/25	
Q1488-10	ENV-104-SB01	TCLP			03/04/25			03/04/25
			TCLP Herbicide	8151A		03/11/25	03/12/25	
			TCLP Pesticide	8081B		03/11/25	03/12/25	
Q1488-11	ENV-104-SB02	SOIL			03/04/25			03/04/25
			PCB	8082A		03/05/25	03/05/25	
			EPH	NJEPH		03/10/25	03/10/25	
			EPH	NJEPH		03/10/25	03/11/25	
Q1488-12	ENV-104-SB02	TCLP			03/04/25			03/04/25
			TCLP Herbicide	8151A		03/11/25	03/12/25	
			TCLP Pesticide	8081B		03/11/25	03/12/25	
Q1488-13	ENV-102-GW01	Water			03/04/25			03/04/25
			EPH	NJEPH		03/05/25	03/05/25	
			PCB	8082A		03/06/25	03/06/25	
Q1488-14	ENV-104-GW01	Water			03/04/25			03/04/25
			EPH	NJEPH		03/05/25	03/05/25	
			PCB	8082A		03/06/25	03/06/25	



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

Hit Summary Sheet
SW-846

SDG No.: Q1488

Order ID: Q1488

Client: Portal Partners Tri-Venture

Project ID: Amtrak Sawtooth Bridges 2025

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

Total Concentration: 0.000



QC SUMMARY

Surrogate Summary

SDG No.: Q1488

Client: Portal Partners Tri-Venture

Analytical Method: 8151A

Lab Sample ID	Client ID	Parameter	Column	Spike	Result	Rec	Qual	Limits	
								Low	High
I.BLK-PS029233.D	PIBLK-PS029233.D	2,4-DCAA	1	500	476	95		70 (39)	130 (175)
		2,4-DCAA	2	500	494	99		70 (39)	130 (175)
I.BLK-PS029395.D	PIBLK-PS029395.D	2,4-DCAA	1	500	500	100		70 (39)	130 (175)
		2,4-DCAA	2	500	478	96		70 (39)	130 (175)
PB167090BL	PB167090BL	2,4-DCAA	1	500	482	96		70 (39)	130 (175)
		2,4-DCAA	2	500	427	85		70 (39)	130 (175)
PB167090BS	PB167090BS	2,4-DCAA	1	500	521	104		70 (39)	130 (175)
		2,4-DCAA	2	500	469	94		70 (39)	130 (175)
PB167020TB	PB167020TB	2,4-DCAA	1	500	525	105		70 (39)	130 (175)
		2,4-DCAA	2	500	417	83		70 (39)	130 (175)
Q1488-02	ENV-101-SB01	2,4-DCAA	1	500	458	92		70 (39)	130 (175)
		2,4-DCAA	2	500	343	69	*	70 (39)	130 (175)
Q1488-02MS	ENV-101-SB01MS	2,4-DCAA	1	500	489	98		70 (39)	130 (175)
		2,4-DCAA	2	500	365	73		70 (39)	130 (175)
Q1488-02MSD	ENV-101-SB01MSD	2,4-DCAA	1	500	483	97		70 (39)	130 (175)
		2,4-DCAA	2	500	356	71		70 (39)	130 (175)
I.BLK-PS029404.D	PIBLK-PS029404.D	2,4-DCAA	1	500	502	100		70 (39)	130 (175)
		2,4-DCAA	2	500	486	97		70 (39)	130 (175)
Q1488-04	ENV-101-SB02	2,4-DCAA	1	500	490	98		70 (39)	130 (175)
		2,4-DCAA	2	500	363	73		70 (39)	130 (175)
Q1488-06	ENV-102-SB01	2,4-DCAA	1	500	542	108		70 (39)	130 (175)
		2,4-DCAA	2	500	392	78		70 (39)	130 (175)
Q1488-08	ENV-102-SB02	2,4-DCAA	1	500	537	107		70 (39)	130 (175)
		2,4-DCAA	2	500	382	76		70 (39)	130 (175)
Q1488-10	ENV-104-SB01	2,4-DCAA	1	500	255	51	*	70 (39)	130 (175)
		2,4-DCAA	2	500	196	39	*	70 (39)	130 (175)
Q1488-12	ENV-104-SB02	2,4-DCAA	1	500	351	70		70 (39)	130 (175)
		2,4-DCAA	2	500	281	56	*	70 (39)	130 (175)
I.BLK-PS029416.D	PIBLK-PS029416.D	2,4-DCAA	1	500	502	100		70 (39)	130 (175)
		2,4-DCAA	2	500	493	99		70 (39)	130 (175)

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1488

Client: Portal Partners Tri-Venture

Analytical Method: 8151A

DataFile : PS029402.D

Lab Sample ID:	Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Low	Limits High	RPD
Client Sample ID:	ENV-101-SB01MS											
Q1488-02MS	2,4-D	50	0	52.7	ug/L	105				70 (65)	130 (135)	
	2,4,5-TP(Silvex)	50	0	70.2	ug/L	140	*			70 (62)	130 (139)	

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1488

Client: Portal Partners Tri-Venture

Analytical Method: 8151A

DataFile : PS029403.D

Lab Sample ID:	Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Low	Limits High	RPD
Client Sample ID:	ENV-101-SB01MSD											
Q1488-02MSD	2,4-D	50	0	53.1	ug/L	106		1		70 (65)	130 (135)	20 (20)
	2,4,5-TP(Silvex)	50	0	75.8	ug/L	152	*	8		70 (62)	130 (139)	20 (20)



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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1488

Client: Portal Partners Tri-Venture

Analytical Method: 8151A Datafile : PS029398.D

Lab Sample ID	Parameter	Spike	Result	Units	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB167090BS	2,4-D	5	4.80	ug/L	96				70 (83)	130 (130)	
	2,4,5-TP(Silvex)	5	5.10	ug/L	102				70 (78)	130 (127)	

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB167090BL

Lab Name: CHEMTECH

Contract: PORT06

Lab Code: CHEM Case No.: Q1488

SAS No.: Q1488 SDG NO.: Q1488

Lab Sample ID: PB167090BL

Lab File ID: PS029397.D

Matrix: (soil/water) water

Extraction: (Type) SEPF

Sulfur Cleanup: (Y/N) N

Date Extracted: 03/11/2025

Date Analyzed (1): 03/12/2025

Date Analyzed (2): 03/12/2025

Time Analyzed (1): 09:57

Time Analyzed (2): 09:57

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
PB167090BS	PB167090BS	PS029398.D	03/12/2025	03/12/2025
PB167020TB	PB167020TB	PS029399.D	03/12/2025	03/12/2025
ENV-101-SB01	Q1488-02	PS029401.D	03/12/2025	03/12/2025
ENV-101-SB01MS	Q1488-02MS	PS029402.D	03/12/2025	03/12/2025
ENV-101-SB01MSD	Q1488-02MSD	PS029403.D	03/12/2025	03/12/2025
ENV-101-SB02	Q1488-04	PS029406.D	03/12/2025	03/12/2025
ENV-102-SB01	Q1488-06	PS029407.D	03/12/2025	03/12/2025
ENV-102-SB02	Q1488-08	PS029408.D	03/12/2025	03/12/2025
ENV-104-SB01	Q1488-10	PS029409.D	03/12/2025	03/12/2025
ENV-104-SB02	Q1488-12	PS029410.D	03/12/2025	03/12/2025

COMMENTS: _____



SAMPLE DATA

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/04/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/04/25
Client Sample ID:	ENV-101-SB01	SDG No.:	Q1488
Lab Sample ID:	Q1488-02	Matrix:	TCLP
Analytical Method:	SW8151A	% Solid:	0
Sample Wt/Vol:	100	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	TCLP Herbicide
GPC Factor :	1.0	PH :	
Prep Method :	8151A	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS029401.D	1	03/11/25 11:30	03/12/25 11:50	PB167090

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	458		70 (39) - 130 (175)	92%	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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS031225\
 Data File : PS029401.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 12 Mar 2025 11:50
 Operator : AR\AJ
 Sample : Q1488-02
 Misc :
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 ENV-101-SB01

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Mar 13 02:29:16 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
 Quant Title : 8080.M
 QLast Update : Sat Feb 22 01:02:20 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds						
4) S 2,4-DCAA	7.158	7.617	1885.5E6	322.4E6	457.574	342.904 #

Target Compounds

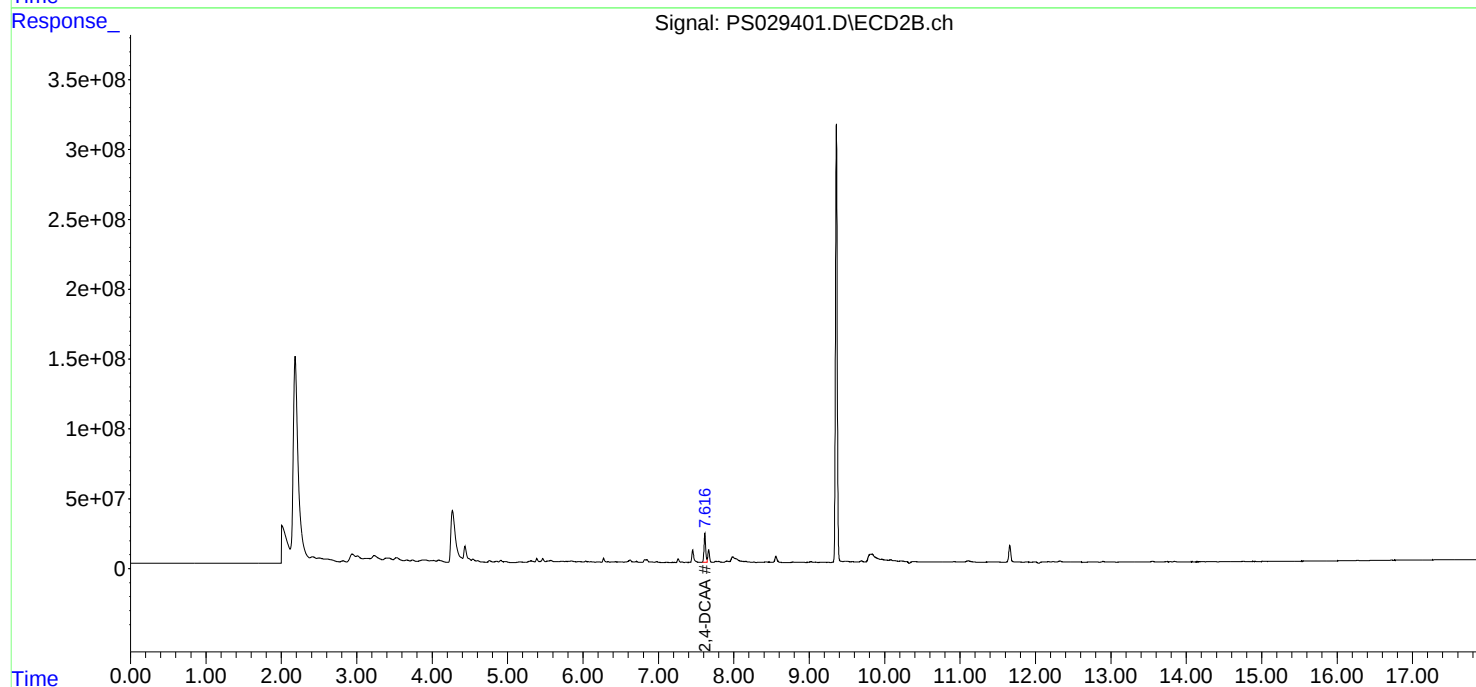
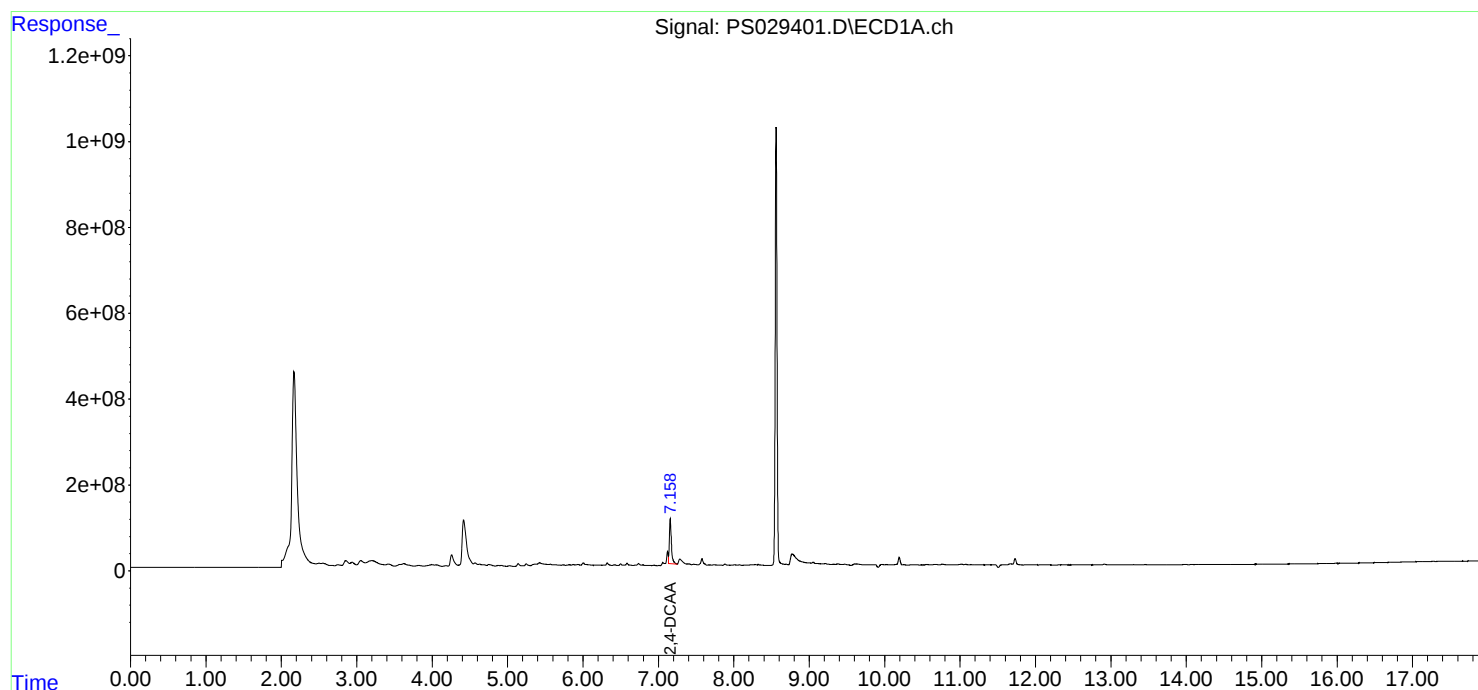
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

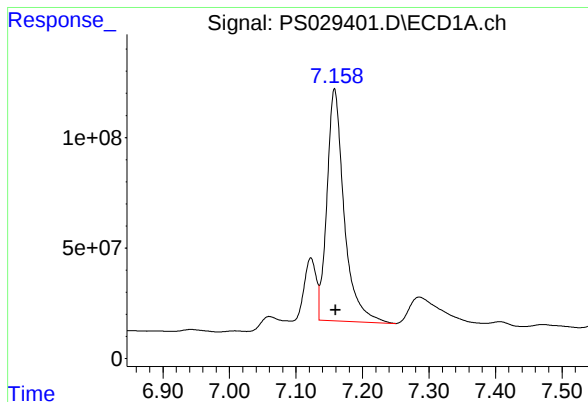
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS031225\
Data File : PS029401.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 Mar 2025 11:50
Operator : AR\AJ
Sample : Q1488-02
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
ENV-101-SB01

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 13 02:29:16 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
Quant Title : 8080.M
QLast Update : Sat Feb 22 01:02:20 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

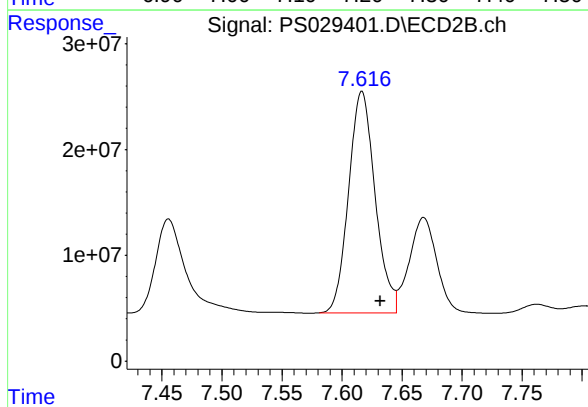




#4 2,4-DCAA

R.T.: 7.158 min
Delta R.T.: -0.002 min
Response: 1885467323
Conc: 457.57 ng/ml

Instrument :
ECD_S
ClientSampleId :
ENV-101-SB01



#4 2,4-DCAA

R.T.: 7.617 min
Delta R.T.: -0.015 min
Response: 322443923
Conc: 342.90 ng/ml

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/04/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/04/25
Client Sample ID:	ENV-101-SB02	SDG No.:	Q1488
Lab Sample ID:	Q1488-04	Matrix:	TCLP
Analytical Method:	SW8151A	% Solid:	0
Sample Wt/Vol:	100	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	TCLP Herbicide
GPC Factor :	1.0	PH :	
Prep Method :	8151A	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS029406.D	1	03/11/25 11:30	03/12/25 13:50	PB167090

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	490		70 (39) - 130 (175)	98%	SPK: 500

Comments:

U = Not Detected
 LOQ = Limit of Quantitation
 MDL = Method Detection Limit
 LOD = Limit of Detection
 E = Value Exceeds Calibration Range
 P = Indicates >25% difference for detected concentrations between the two GC columns
 Q = indicates LCS control criteria did not meet requirements
 M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
 B = Analyte Found in Associated Method Blank
 N = Presumptive Evidence of a Compound
 * = Values outside of QC limits
 D = Dilution
 S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
 () = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS031225\
 Data File : PS029406.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 12 Mar 2025 13:50
 Operator : AR\AJ
 Sample : Q1488-04
 Misc :
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 ENV-101-SB02

Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 03/13/2025
 Supervised By :Ankita Jodhani 03/13/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Mar 13 02:30:16 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
 Quant Title : 8080.M
 QLast Update : Sat Feb 22 01:02:20 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
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 System Monitoring Compounds

4) S	2,4-DCAA	7.155	7.619	2018.9E6	340.9E6	489.952m	362.498m#
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Target Compounds

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS031225\
Data File : PS029406.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 Mar 2025 13:50
Operator : AR\AJ
Sample : Q1488-04
Misc :
ALS Vial : 11 Sample Multiplier: 1

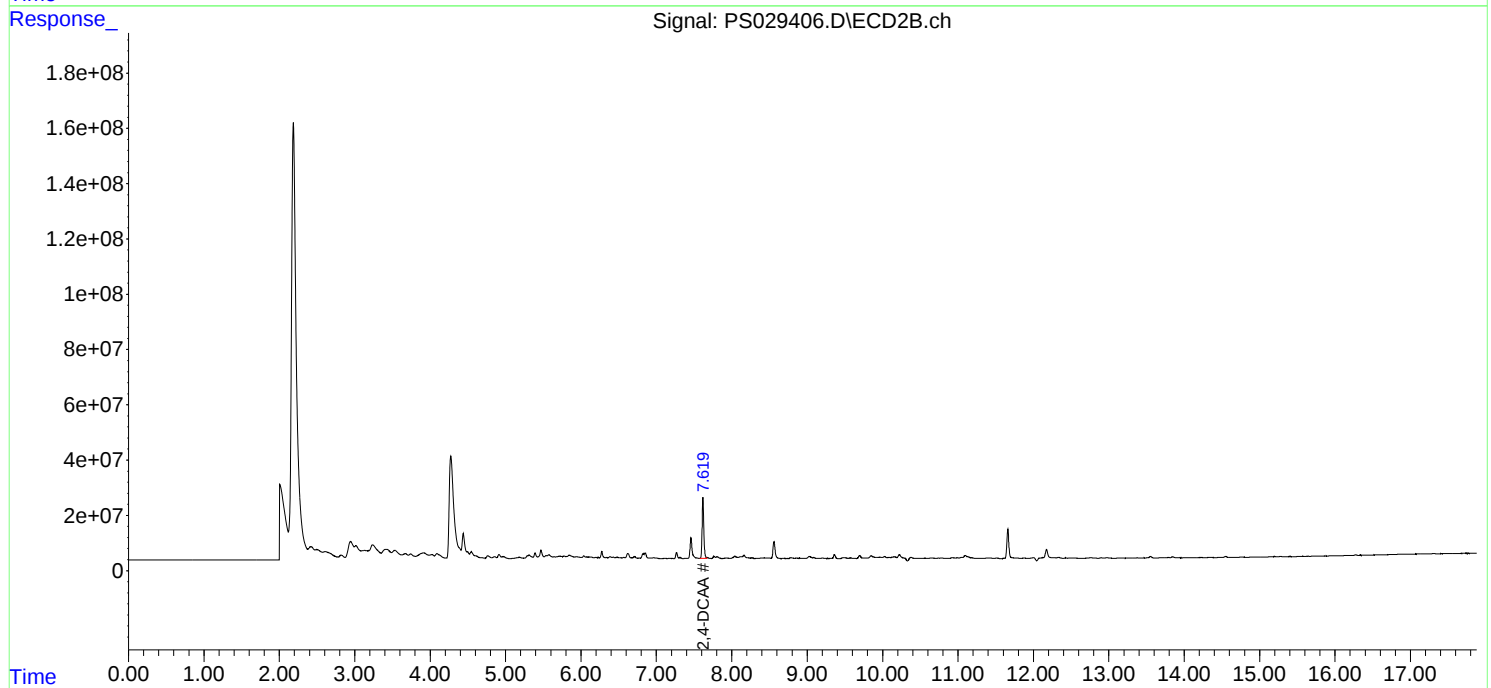
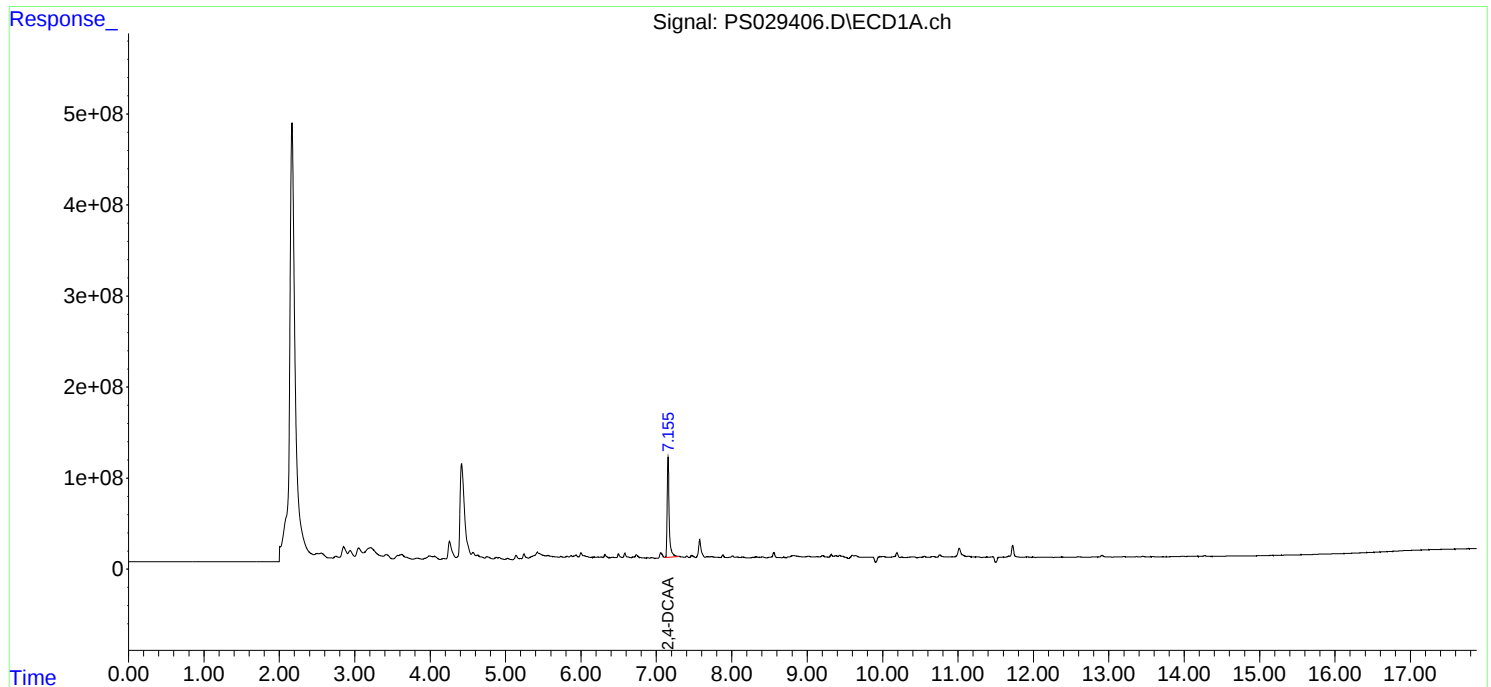
Instrument :
ECD_S
ClientSampleId :
ENV-101-SB02

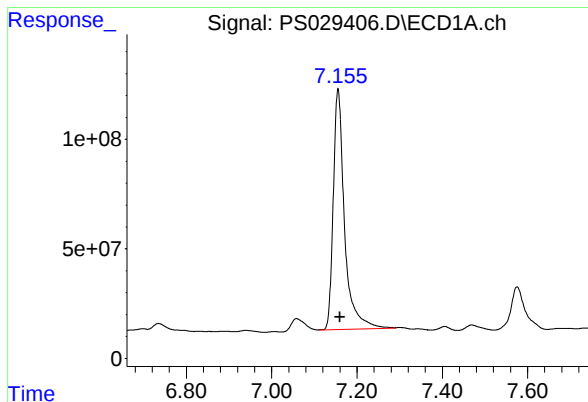
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 03/13/2025
Supervised By :Ankita Jodhani 03/13/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 13 02:30:16 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
Quant Title : 8080.M
QLast Update : Sat Feb 22 01:02:20 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm





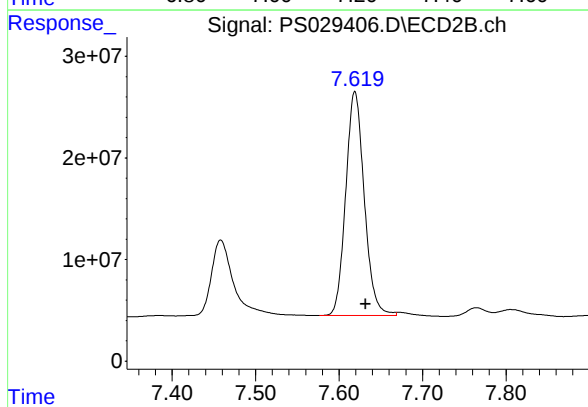
#4 2,4-DCAA

R.T.: 7.155 min
Delta R.T.: -0.005 min
Response: 2018887357
Conc: 489.95 ng/ml

Instrument :
ECD_S
ClientSampleId :
ENV-101-SB02

Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 03/13/2025
Supervised By :Ankita Jodhani 03/13/2025



#4 2,4-DCAA

R.T.: 7.619 min
Delta R.T.: -0.013 min
Response: 340868419
Conc: 362.50 ng/ml

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/04/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/04/25
Client Sample ID:	ENV-102-SB01	SDG No.:	Q1488
Lab Sample ID:	Q1488-06	Matrix:	TCLP
Analytical Method:	SW8151A	% Solid:	0
Sample Wt/Vol:	100	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	TCLP Herbicide
GPC Factor :	1.0	PH :	
Prep Method :	8151A	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS029407.D	1	03/11/25 11:30	03/12/25 14:14	PB167090

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	542		70 (39) - 130 (175)	108%	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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS031225\
 Data File : PS029407.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 12 Mar 2025 14:14
 Operator : AR\AJ
 Sample : Q1488-06
 Misc :
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 ENV-102-SB01

Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 03/13/2025
 Supervised By :Ankita Jodhani 03/13/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Mar 13 02:30:27 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
 Quant Title : 8080.M
 QLast Update : Sat Feb 22 01:02:20 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
----------	------	------	--------	--------	-------	-------

 System Monitoring Compounds

4) S	2,4-DCAA	7.155	7.618	2232.7E6	368.6E6	541.853m	391.940m#
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Target Compounds

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS031225\
Data File : PS029407.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 Mar 2025 14:14
Operator : AR\AJ
Sample : Q1488-06
Misc :
ALS Vial : 12 Sample Multiplier: 1

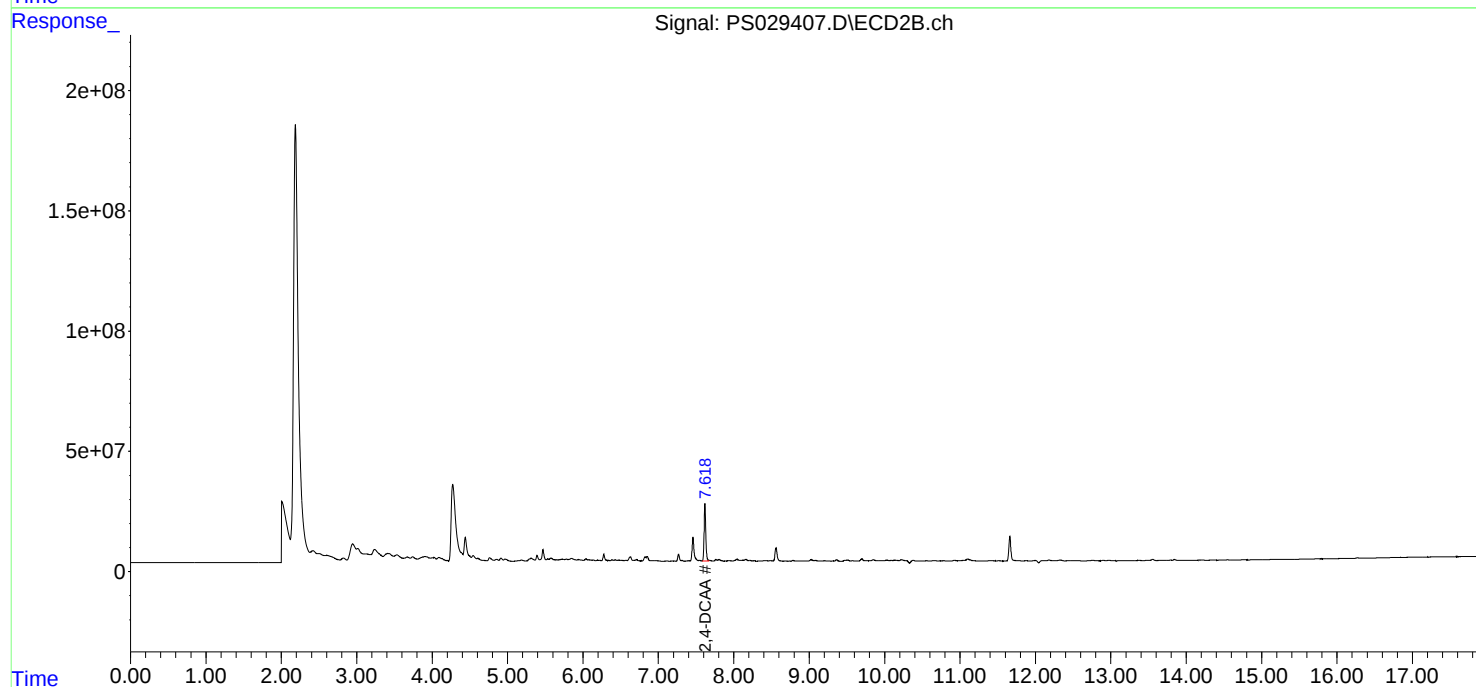
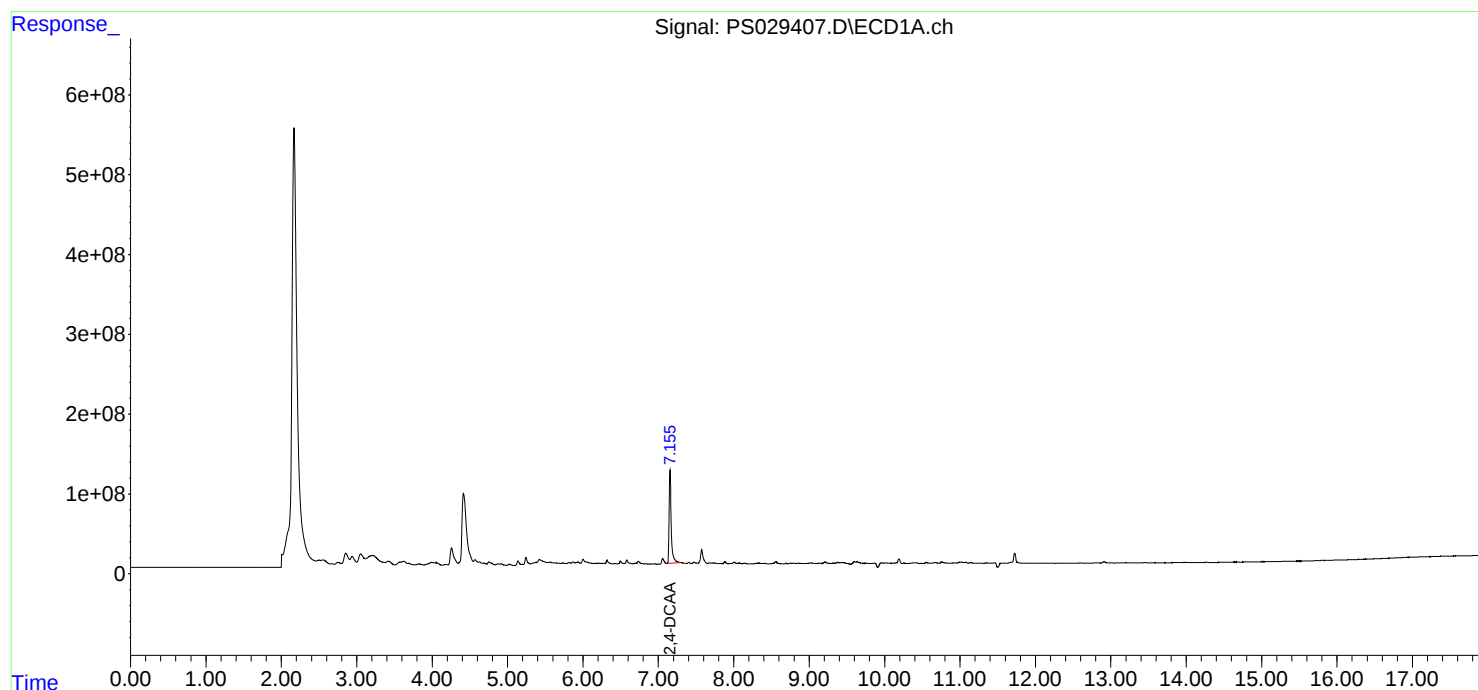
Instrument :
ECD_S
ClientSampleId :
ENV-102-SB01

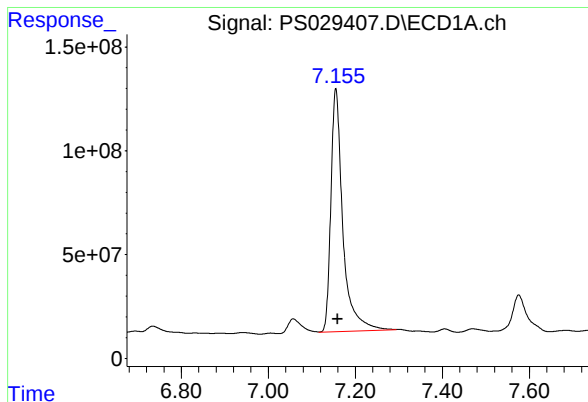
Manual Integrations
APPROVED

Reviewed By : Abdul Mirza 03/13/2025
Supervised By : Ankita Jodhani 03/13/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 13 02:30:27 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
Quant Title : 8080.M
QLast Update : Sat Feb 22 01:02:20 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm





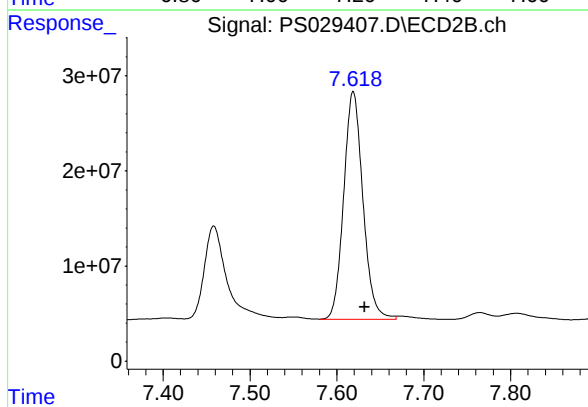
#4 2,4-DCAA

R.T.: 7.155 min
Delta R.T.: -0.005 min
Response: 2232747485
Conc: 541.85 ng/ml

Instrument :
ECD_S
ClientSampleId :
ENV-102-SB01

Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 03/13/2025
Supervised By :Ankita Jodhani 03/13/2025



#4 2,4-DCAA

R.T.: 7.618 min
Delta R.T.: -0.014 min
Response: 368554347
Conc: 391.94 ng/ml

Report of Analysis

Client:	Portal Partners Tri-Venture			Date Collected:	03/04/25	
Project:	Amtrak Sawtooth Bridges 2025			Date Received:	03/04/25	
Client Sample ID:	ENV-102-SB02			SDG No.:	Q1488	
Lab Sample ID:	Q1488-08			Matrix:	TCLP	
Analytical Method:	SW8151A			% Solid:	0	Decanted:
Sample Wt/Vol:	100	Units:	mL	Final Vol:	10000	uL
Soil Aliquot Vol:			uL	Test:	TCLP Herbicide	
Extraction Type:				Injection Volume :		
GPC Factor :	1.0		PH :			
Prep Method :	8151A					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS029408.D	1	03/11/25 11:30	03/12/25 14:38	PB167090

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	537		70 (39) - 130 (175)	107%	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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS031225\
 Data File : PS029408.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 12 Mar 2025 14:38
 Operator : AR\AJ
 Sample : Q1488-08
 Misc :
 ALS Vial : 13 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 ENV-102-SB02

Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 03/13/2025
 Supervised By :Ankita Jodhani 03/13/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Mar 13 02:30:38 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
 Quant Title : 8080.M
 QLast Update : Sat Feb 22 01:02:20 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
----------	------	------	--------	--------	-------	-------

System Monitoring Compounds

4) S	2,4-DCAA	7.155	7.618	2214.2E6	359.1E6	537.342m	381.932m#
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Target Compounds

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS031225\
Data File : PS029408.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 Mar 2025 14:38
Operator : AR\AJ
Sample : Q1488-08
Misc :
ALS Vial : 13 Sample Multiplier: 1

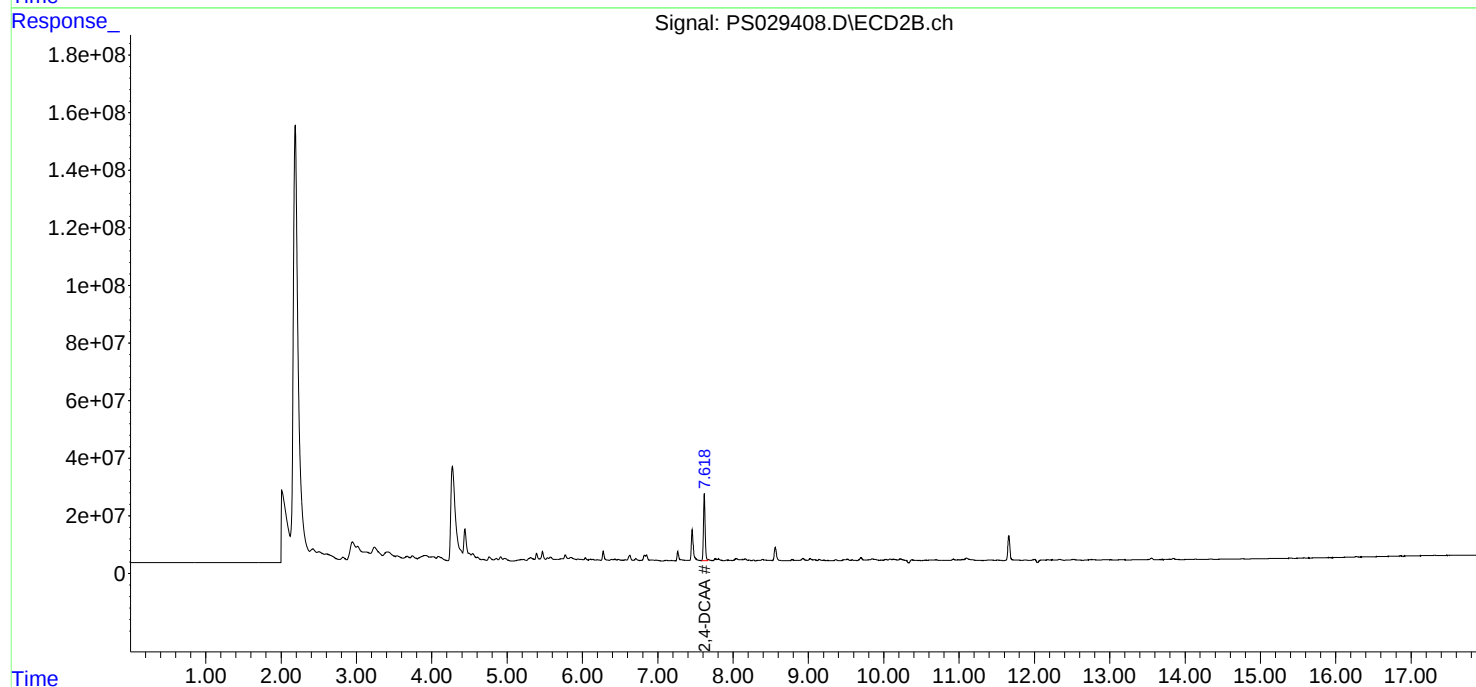
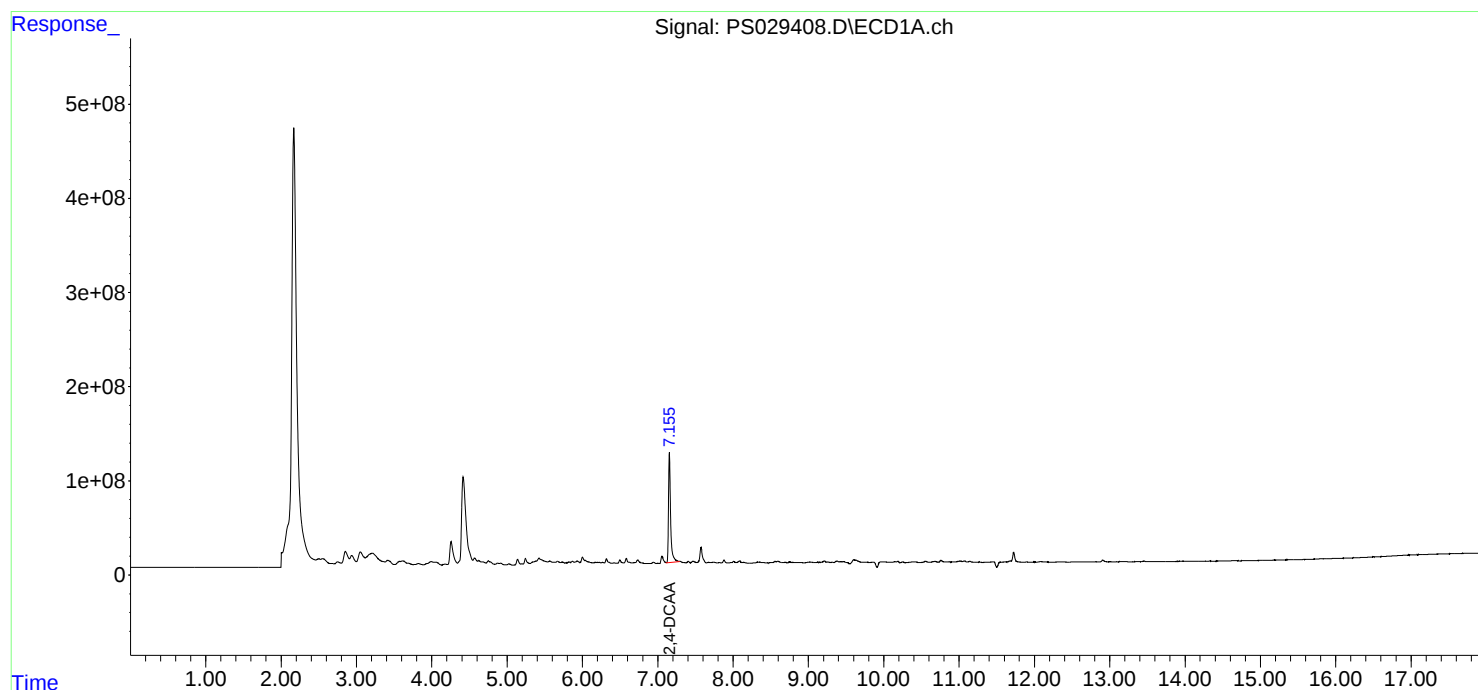
Instrument :
ECD_S
ClientSampleId :
ENV-102-SB02

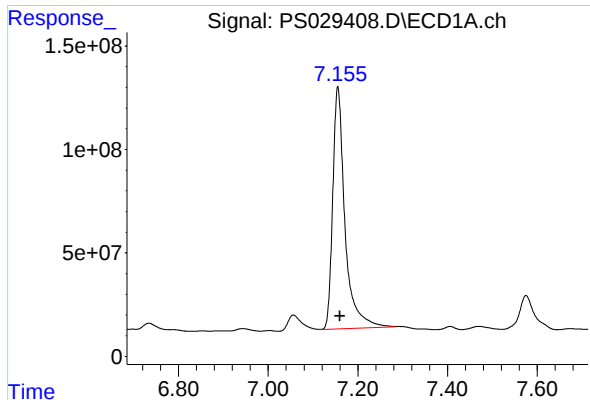
Manual Integrations
APPROVED

Reviewed By : Abdul Mirza 03/13/2025
Supervised By : Ankita Jodhani 03/13/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 13 02:30:38 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
Quant Title : 8080.M
QLast Update : Sat Feb 22 01:02:20 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm





#4 2,4-DCAA

R.T.: 7.155 min
Delta R.T.: -0.005 min
Response: 2214158385
Conc: 537.34 ng/ml

Instrument :

ECD_S

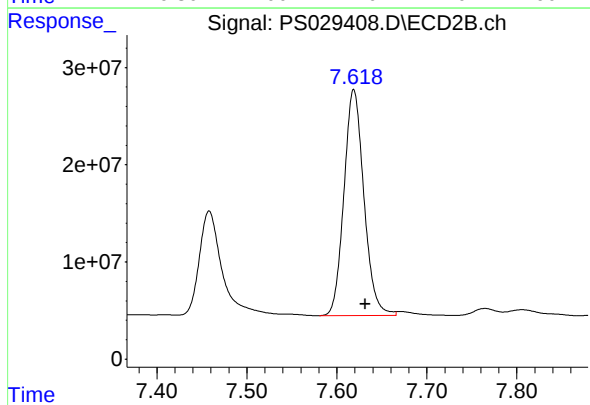
ClientSampleId :

ENV-102-SB02

Manual Integrations

APPROVED

Reviewed By :Abdul Mirza 03/13/2025
Supervised By :Ankita Jodhani 03/13/2025



#4 2,4-DCAA

R.T.: 7.618 min
Delta R.T.: -0.014 min
Response: 359143211
Conc: 381.93 ng/ml

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/04/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/04/25
Client Sample ID:	ENV-104-SB01	SDG No.:	Q1488
Lab Sample ID:	Q1488-10	Matrix:	TCLP
Analytical Method:	SW8151A	% Solid:	0
Sample Wt/Vol:	100	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	TCLP Herbicide
GPC Factor :	1.0	PH :	
Prep Method :	8151A	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS029409.D	1	03/11/25 11:30	03/12/25 15:02	PB167090

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	255	*	70 (39) - 130 (175)	51%	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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS031225\
 Data File : PS029409.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 12 Mar 2025 15:02
 Operator : AR\AJ
 Sample : Q1488-10
 Misc :
 ALS Vial : 14 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 ENV-104-SB01

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Mar 13 02:30:49 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
 Quant Title : 8080.M
 QLast Update : Sat Feb 22 01:02:20 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds						
4) S 2,4-DCAA	7.156	7.619	1050.5E6	184.7E6	254.947	196.418

Target Compounds

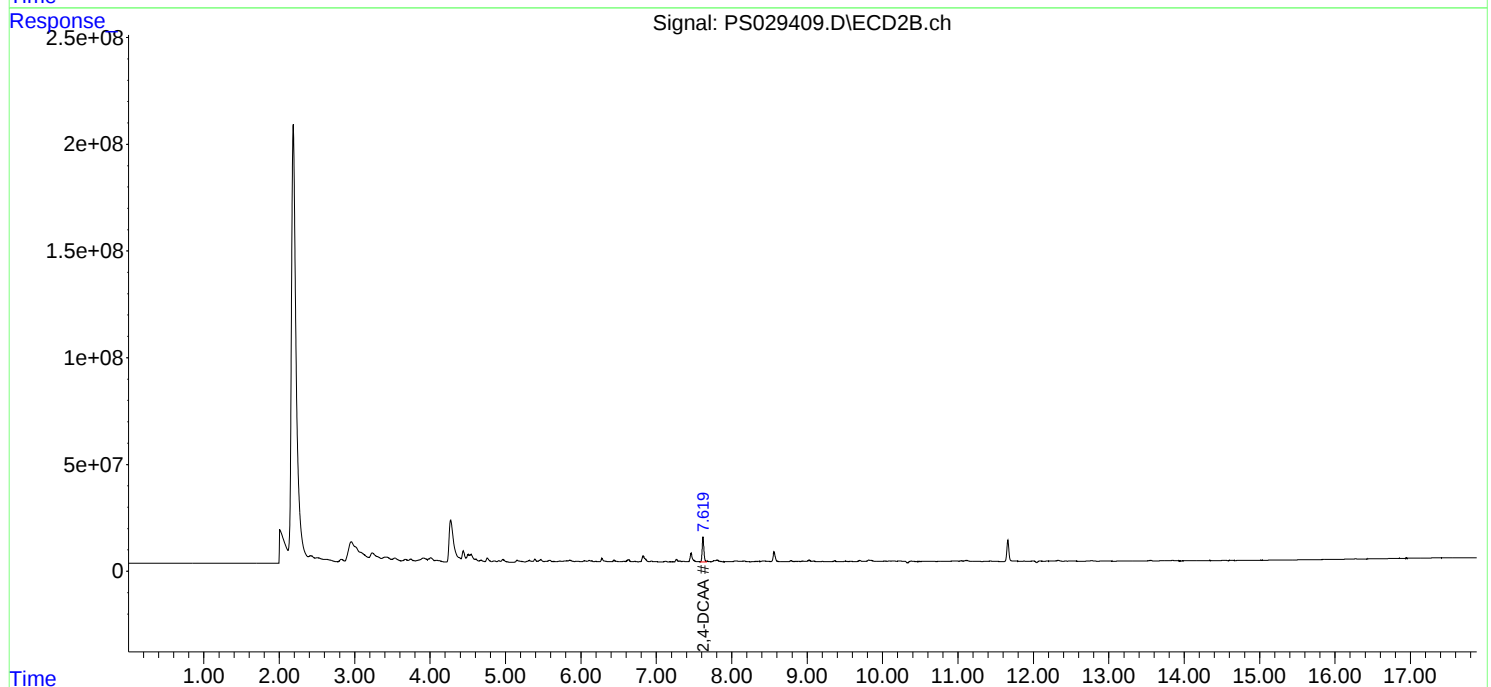
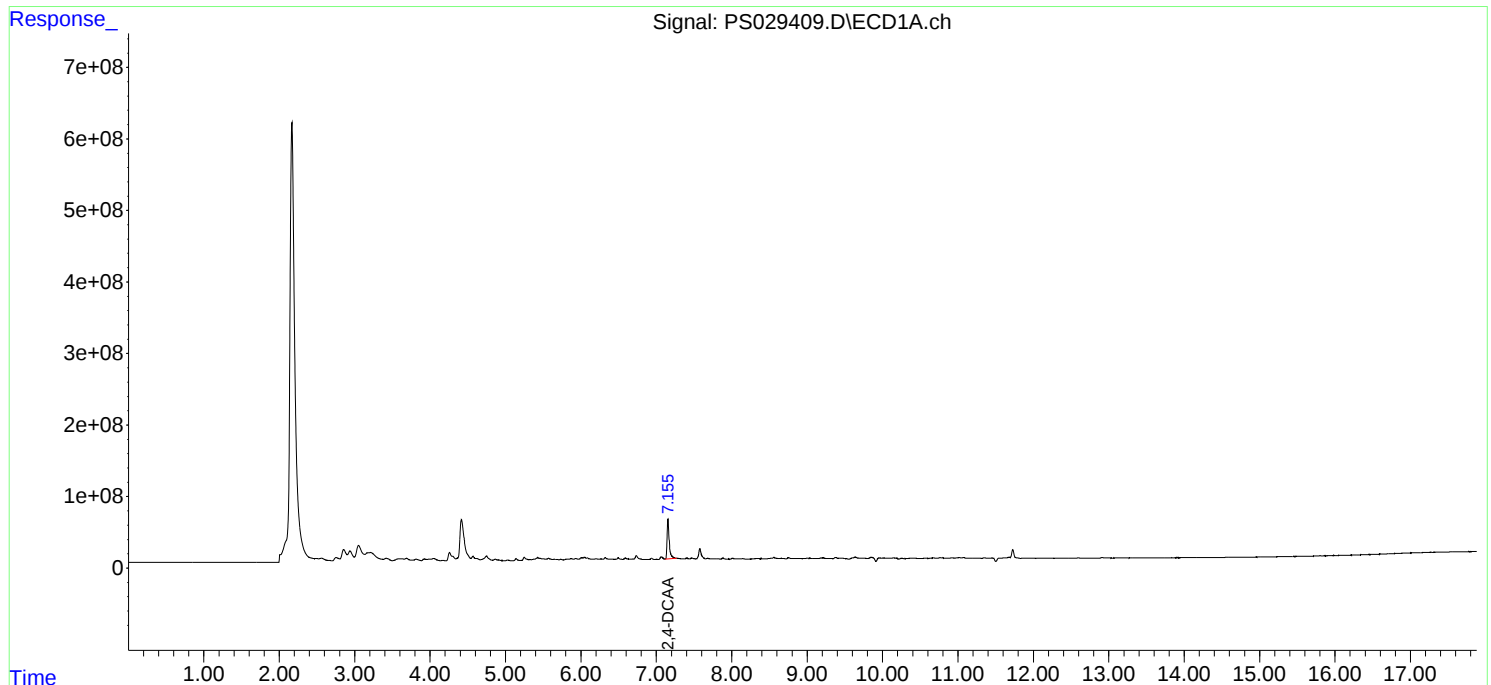
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

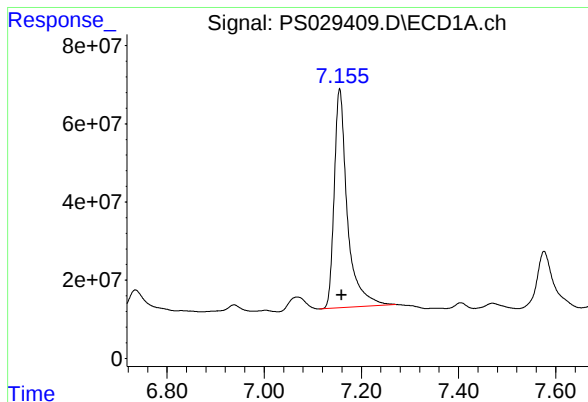
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS031225\
Data File : PS029409.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 Mar 2025 15:02
Operator : AR\AJ
Sample : Q1488-10
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
ENV-104-SB01

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 13 02:30:49 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
Quant Title : 8080.M
QLast Update : Sat Feb 22 01:02:20 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm





#4 2,4-DCAA

R.T.: 7.156 min

Delta R.T.: -0.004 min

Response: 1050528376

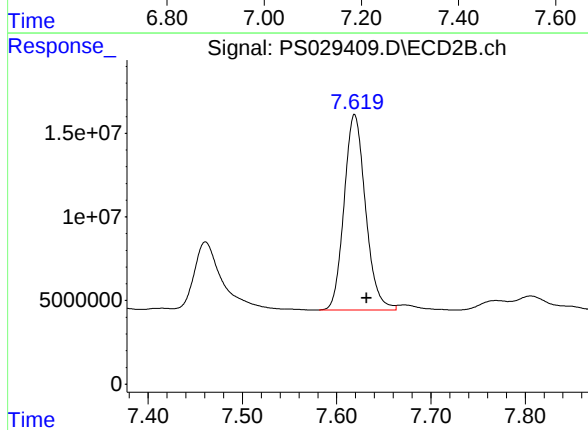
Conc: 254.95 ng/ml

Instrument :

ECD_S

ClientSampleId :

ENV-104-SB01



#4 2,4-DCAA

R.T.: 7.619 min

Delta R.T.: -0.013 min

Response: 184698120

Conc: 196.42 ng/ml

Report of Analysis

Client:	Portal Partners Tri-Venture			Date Collected:	03/04/25		
Project:	Amtrak Sawtooth Bridges 2025			Date Received:	03/04/25		
Client Sample ID:	ENV-104-SB02			SDG No.:	Q1488		
Lab Sample ID:	Q1488-12			Matrix:	TCLP		
Analytical Method:	SW8151A			% Solid:	0		Decanted:
Sample Wt/Vol:	100	Units:	mL	Final Vol:	10000		uL
Soil Aliquot Vol:	uL			Test:	TCLP Herbicide		
Extraction Type:				Injection Volume :			
GPC Factor :	1.0	PH :					
Prep Method :	8151A						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS029410.D	1	03/11/25 11:30	03/12/25 15:27	PB167090

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	351		70 (39) - 130 (175)	70%	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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS031225\
 Data File : PS029410.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 12 Mar 2025 15:27
 Operator : AR\AJ
 Sample : Q1488-12
 Misc :
 ALS Vial : 15 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 ENV-104-SB02

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Mar 13 02:31:00 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
 Quant Title : 8080.M
 QLast Update : Sat Feb 22 01:02:20 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds						
4) S 2,4-DCAA	7.155	7.619	1446.2E6	264.2E6	350.971	280.965

Target Compounds

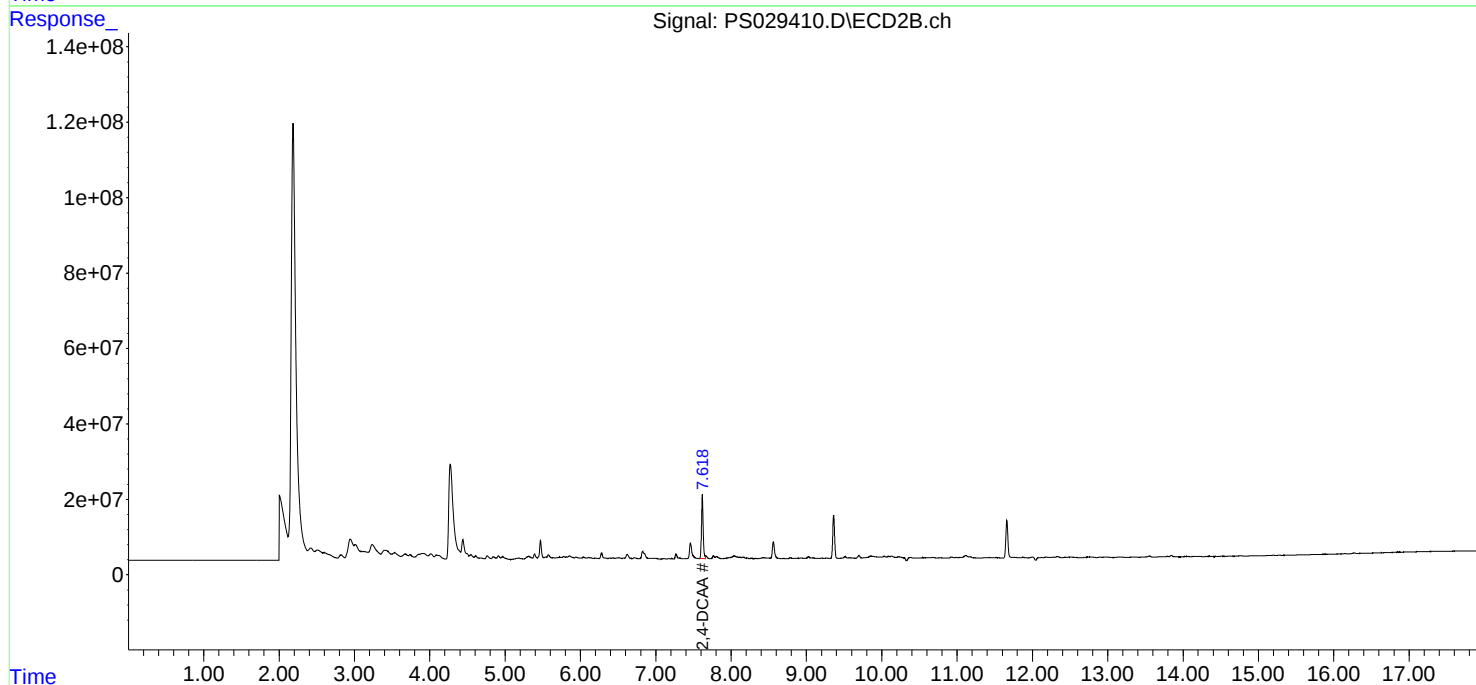
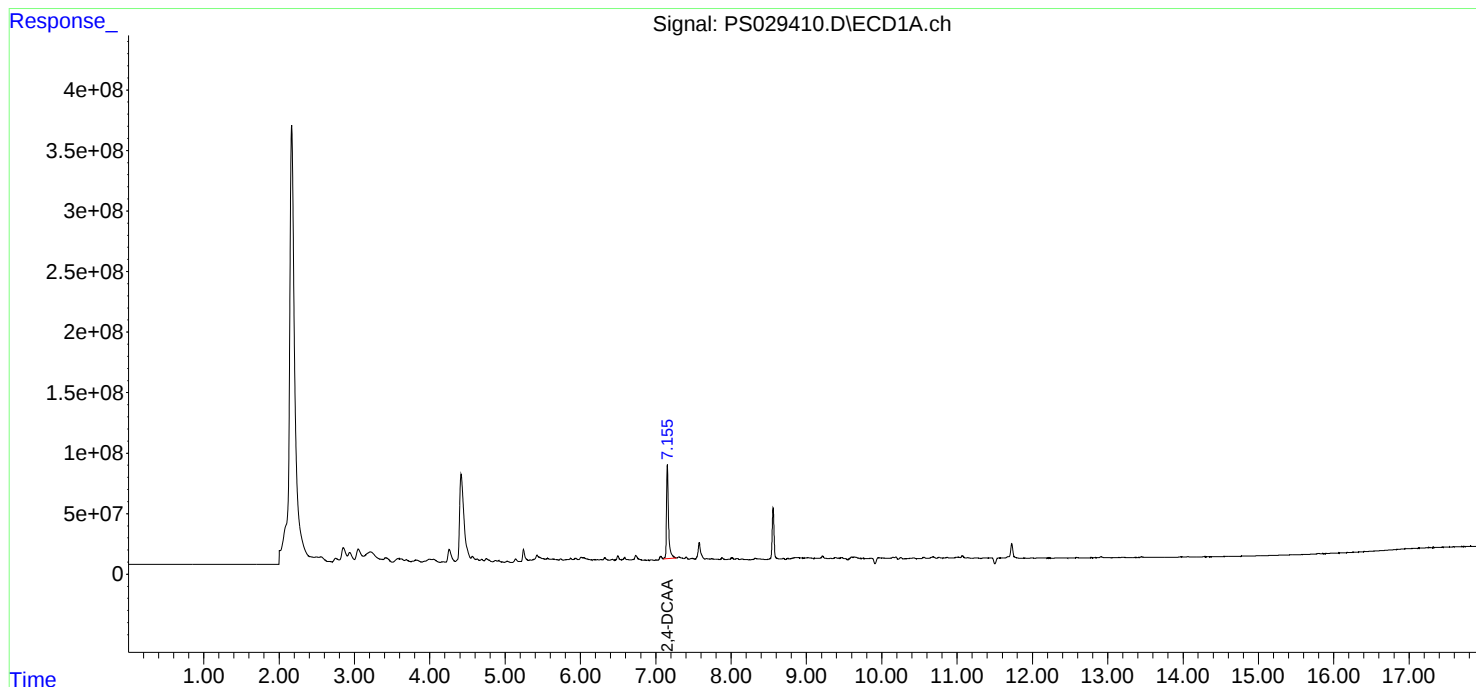
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

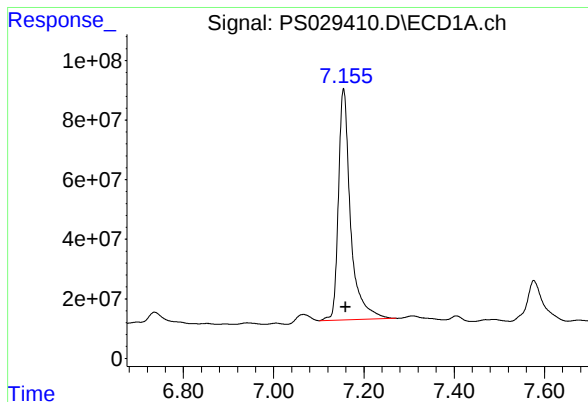
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS031225\
Data File : PS029410.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 Mar 2025 15:27
Operator : AR\AJ
Sample : Q1488-12
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
ENV-104-SB02

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 13 02:31:00 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
Quant Title : 8080.M
QLast Update : Sat Feb 22 01:02:20 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

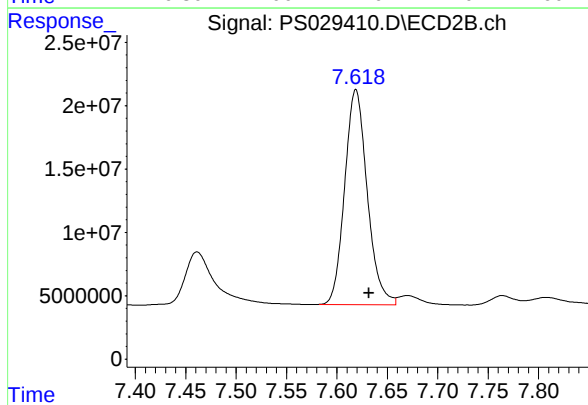




#4 2,4-DCAA

R.T.: 7.155 min
Delta R.T.: -0.005 min
Response: 1446203268
Conc: 350.97 ng/ml

Instrument :
ECD_S
ClientSampleId :
ENV-104-SB02



#4 2,4-DCAA

R.T.: 7.619 min
Delta R.T.: -0.013 min
Response: 264200374
Conc: 280.96 ng/ml



CALIBRATION SUMMARY

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

[illegible]

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

[illegible]



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

CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: PORT06
Lab Code: CHEM **Case No.:** Q1488 **SAS No.:** Q1488 **SDG NO.:** Q1488
Instrument ID: ECD_S **Calibration Date(s):** 02/21/2025 02/21/2025
Calibration Times: 19:56 21:32

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

LAB FILE ID:		CF 200 =	<u>PS029234.D</u>	CF 500 =	<u>PS029235.D</u>		
CF 750 =		<u>PS029236.D</u>	CF 1000 =	<u>PS029237.D</u>	CF 1500 =	<u>PS029238.D</u>	
COMPOUND	CF 200	CF 500	CF 750	CF 1000	CF 1500	CF	% RSD
2,4,5-TP(Silvex)	28468600000	25326000000	23950000000	23359600000	21830500000	24586900000	10
2,4-D	5578960000	4794680000	4576300000	4498750000	4303460000	4750430000	10
2,4-DCAA	4834500000	4175340000	3953240000	3904380000	3735430000	4120580000	10



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

CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: PORT06
Lab Code: CHEM **Case No.:** Q1488 **SAS No.:** Q1488 **SDG NO.:** Q1488
Instrument ID: ECD_S **Calibration Date(s):** 02/21/2025 02/21/2025
Calibration Times: 19:56 21:32

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

LAB FILE ID:		CF 200 = <u>PS029234.D</u>	CF 500 = <u>PS029235.D</u>				
CF 750 = <u>PS029236.D</u>		CF 1000 = <u>PS029237.D</u>	CF 1500 = <u>PS029238.D</u>				
COMPOUND	CF 200	CF 500	CF 750	CF 1000	CF 1500	CF	% RSD
2,4,5-TP(Silvex)	9297750000	9072730000	8996050000	9011120000	8805850000	9036700000	2
2,4-D	1363000000	1257020000	1239960000	1254990000	1234500000	1269900000	4
2,4-DCAA	1014780000	934728000	917942000	923871000	910342000	940333000	5

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS022125\
 Data File : PS029234.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 21 Feb 2025 19:56
 Operator : AR\AJ
 Sample : HSTDICC200
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDICC200

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Feb 22 00:46:30 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
 Quant Title : 8080.M
 QLast Update : Sat Feb 22 00:45:48 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
4) S	2,4-DCAA	7.161	7.633	966.9E6	203.0E6	244.585	221.099
Target Compounds							
1) T	Dalapon	2.596	2.647	1142.0E6	433.1E6	214.059	210.711
2) T	3,5-DICHL...	6.343	6.605	1252.0E6	283.3E6	220.475	204.397
3) T	4-Nitroph...	6.963	7.165	432.8E6	156.3E6	186.506	200.822
5) T	DICAMBA	7.343	7.827	3685.1E6	960.7E6	217.406	187.446
6) T	MCPD	7.519	7.928	211.8E6	40449994	17.087	17.193
7) T	MCPA	7.666	8.167	314.8E6	56152825	18.744	17.627
8) T	DICHLORPROP	8.043	8.537	1036.6E6	262.9E6	236.416	211.141
9) T	2,4-D	8.274	8.863	1048.8E6	256.2E6	229.191	206.654
10) T	Pentachlo...	8.564	9.379	14573.6E6	4615.9E6	245.609	201.204
11) T	2,4,5-TP ...	9.139	9.756	5409.0E6	1766.6E6	225.847	196.372
12) T	2,4,5-T	9.431	10.172	5625.4E6	1601.6E6	226.279	196.193
13) T	2,4-DB	10.001	10.735	852.9E6	150.7E6	208.417	200.943
14) T	DINOSEB	11.195	11.110	3606.9E6	1198.6E6	223.327	201.128
15) T	Picloram	11.011	12.188	6139.0E6	2015.5E6	202.335	171.699
16) T	DCPA	11.491	12.144	6822.9E6	2326.8E6	233.593	196.624

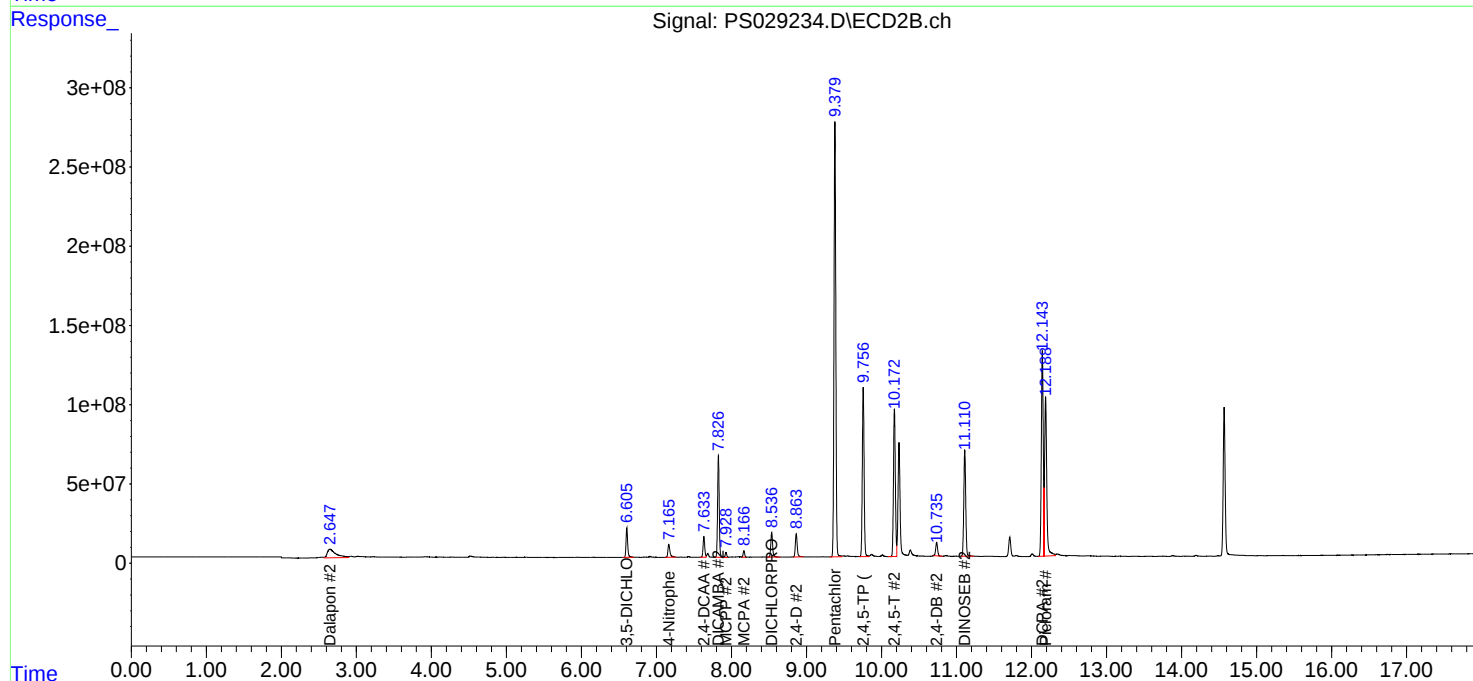
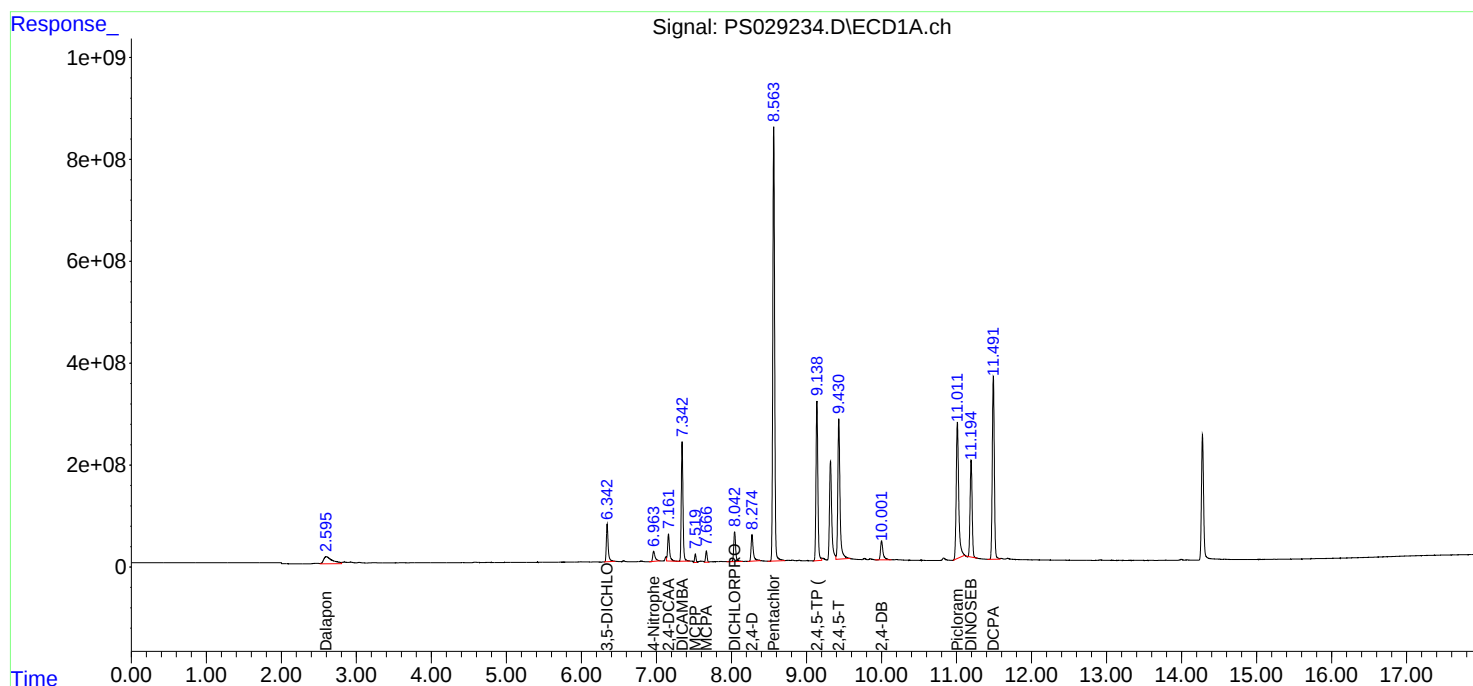
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS022125\
Data File : PS029234.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Feb 2025 19:56
Operator : AR\AJ
Sample : HSTDICC200
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDICC200

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 22 00:46:30 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
Quant Title : 8080.M
QLast Update : Sat Feb 22 00:45:48 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS022125\
 Data File : PS029235.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 21 Feb 2025 20:20
 Operator : AR\AJ
 Sample : HSTDICC500
 Misc :
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDICC500

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Feb 22 00:46:57 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
 Quant Title : 8080.M
 QLast Update : Sat Feb 22 00:45:48 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
4) S	2,4-DCAA	7.159	7.632	2087.7E6	467.4E6	528.092	509.143
Target Compounds							
1) T	Dalapon	2.600	2.647	2511.9E6	954.7E6	470.830	464.533
2) T	3,5-DICHL...	6.341	6.604	2763.0E6	657.1E6	486.564	474.062
3) T	4-Nitroph...	6.959	7.162	1060.1E6	360.9E6	456.796	463.544
5) T	DICAMBA	7.342	7.826	8312.3E6	2386.5E6	490.391	465.655
6) T	MCPD	7.521	7.930	561.5E6	108.2E6	45.295	45.999
7) T	MCPA	7.669	8.169	771.2E6	147.5E6	45.913	46.301
8) T	DICHLORPROP	8.042	8.536	2175.3E6	597.3E6	496.110	479.719
9) T	2,4-D	8.272	8.862	2253.5E6	590.8E6	492.428	476.467
10) T	Pentachlo...	8.564	9.378	31867.7E6	11155.7E6	537.064	486.268
11) T	2,4,5-TP ...	9.138	9.756	12029.9E6	4309.5E6	502.291	479.049
12) T	2,4,5-T	9.429	10.171	12477.7E6	3902.8E6	501.914	478.101
13) T	2,4-DB	9.999	10.734	1985.6E6	358.2E6	485.225	477.677
14) T	DINOSEB	11.194	11.109	8007.8E6	2843.2E6	495.817	477.108
15) T	Picloram	11.007	12.186	14681.6E6	5312.2E6	483.886	452.539
16) T	DCPA	11.489	12.143	14931.6E6	5704.8E6	511.208	482.083

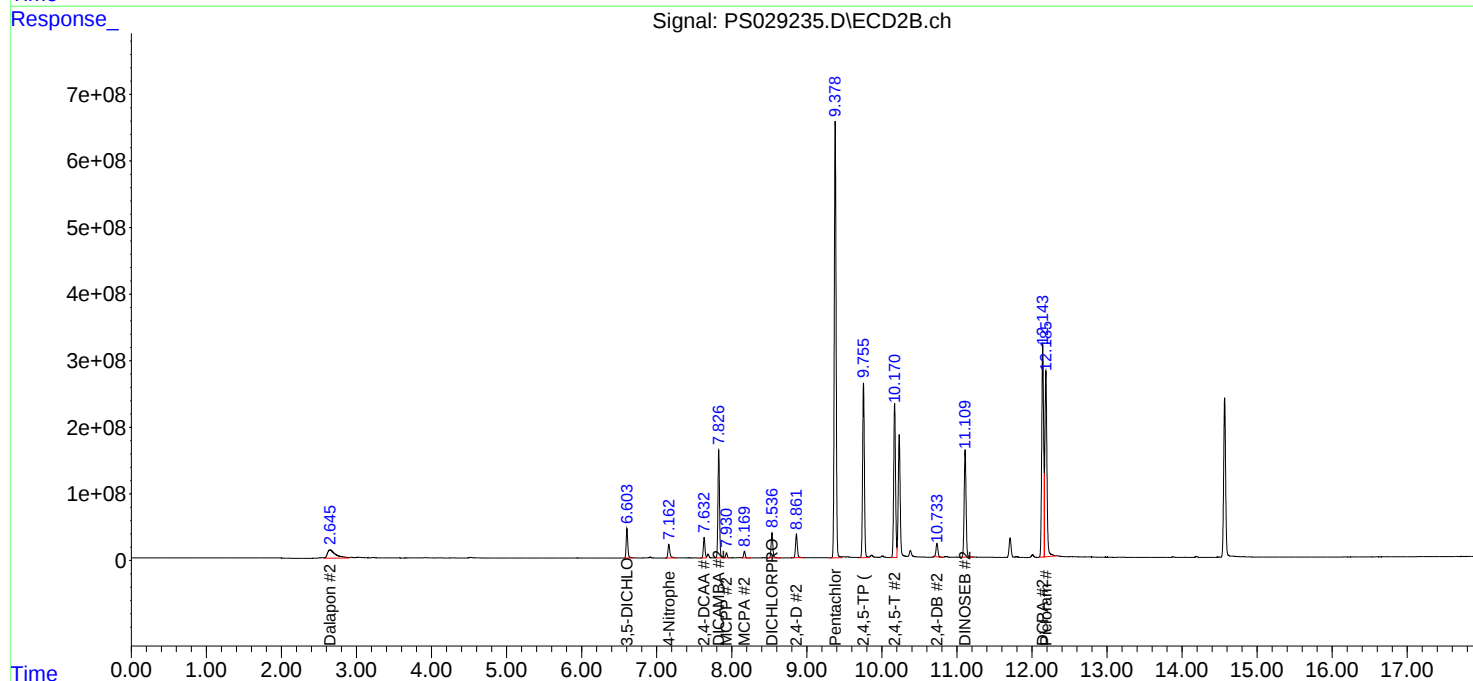
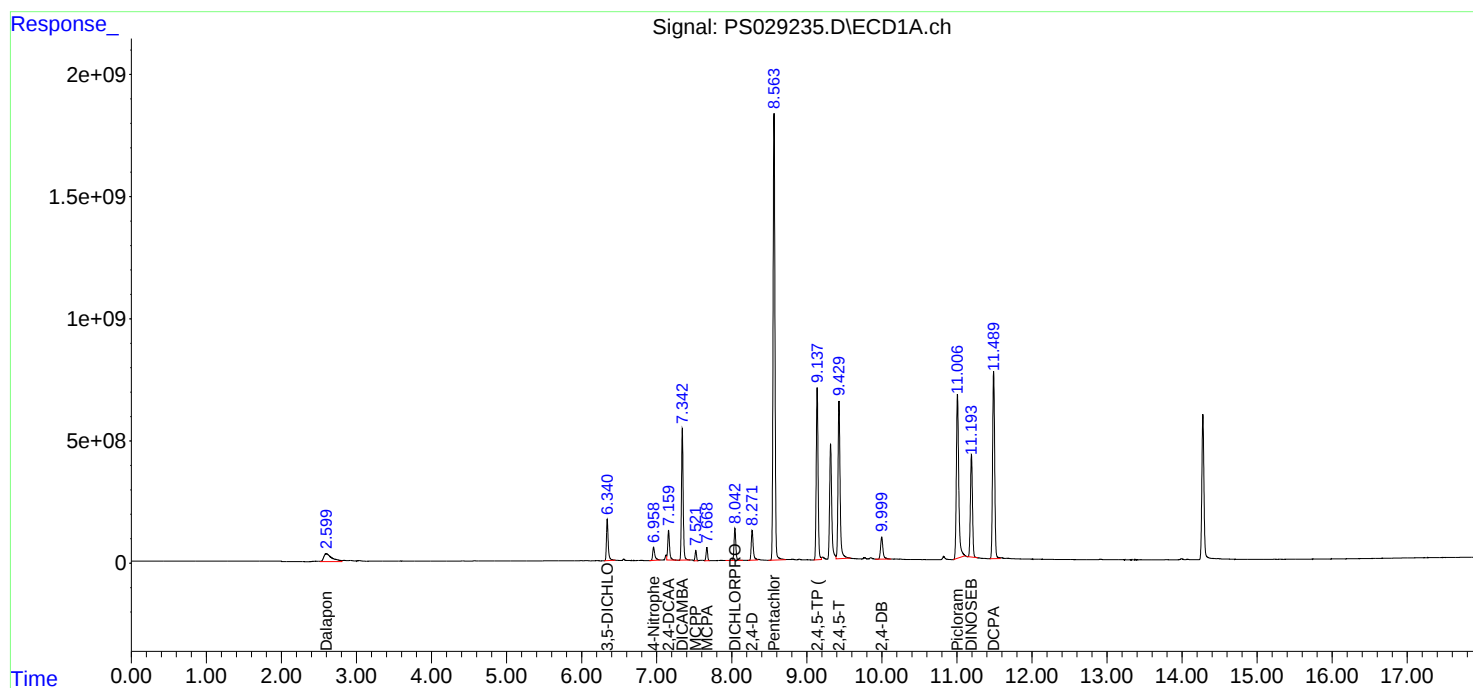
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS022125\
Data File : PS029235.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Feb 2025 20:20
Operator : AR\AJ
Sample : HSTDICC500
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDICC500

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 22 00:46:57 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
Quant Title : 8080.M
QLast Update : Sat Feb 22 00:45:48 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS022125\
 Data File : PS029236.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 21 Feb 2025 20:44
 Operator : AR\AJ
 Sample : HSTDICC750
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDICC750

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Feb 22 00:47:20 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
 Quant Title : 8080.M
 QLast Update : Sat Feb 22 00:45:48 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
4) S	2,4-DCAA	7.160	7.632	2964.9E6	688.5E6	750.000	750.000
Target Compounds							
1) T	Dalapon	2.600	2.651	3641.1E6	1402.7E6	682.500	682.500
2) T	3,5-DICHL...	6.341	6.604	3960.8E6	966.9E6	697.500	697.500
3) T	4-Nitroph...	6.959	7.162	1583.9E6	531.3E6	682.500	682.500
5) T	DICAMBA	7.343	7.826	11950.0E6	3613.1E6	705.000	705.000
6) T	MCPD	7.524	7.932	873.9E6	165.9E6	70.500	70.500
7) T	MCPA	7.671	8.172	1171.5E6	222.2E6	69.750	69.750
8) T	DICHLORPROP	8.042	8.536	3091.2E6	877.8E6	705.000	705.000
9) T	2,4-D	8.271	8.861	3226.3E6	874.2E6	705.000	705.000
10) T	Pentachlo...	8.567	9.379	42277.5E6	16345.7E6	712.500	712.500
11) T	2,4,5-TP ...	9.138	9.756	17064.4E6	6409.7E6	712.500	712.500
12) T	2,4,5-T	9.429	10.170	17713.0E6	5816.3E6	712.500	712.500
13) T	2,4-DB	9.998	10.734	2915.6E6	534.3E6	712.500	712.500
14) T	DINOSEB	11.194	11.109	11386.3E6	4201.2E6	705.000	705.000
15) T	Picloram	11.007	12.185	21617.9E6	8363.8E6	712.500	712.500
16) T	DCPA	11.490	12.144	21030.2E6	8520.2E6	720.000	720.000

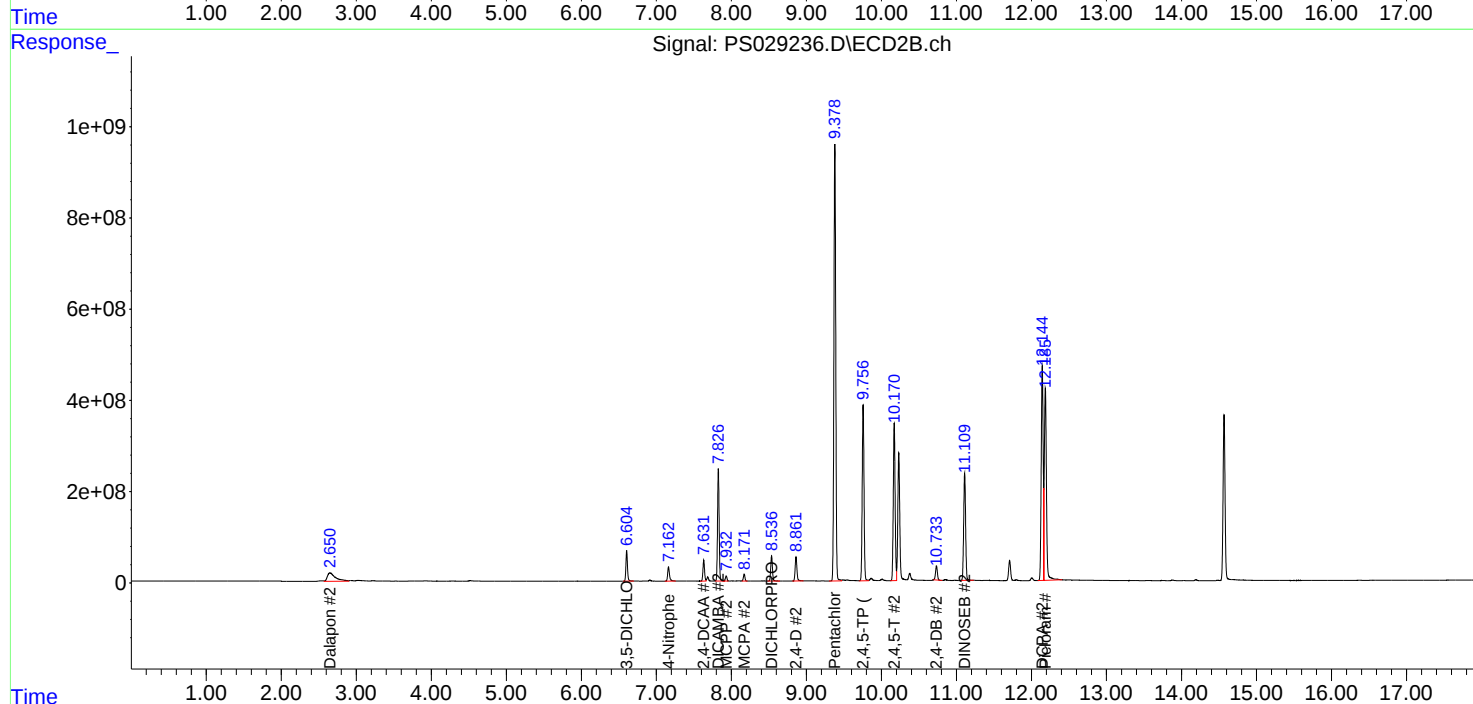
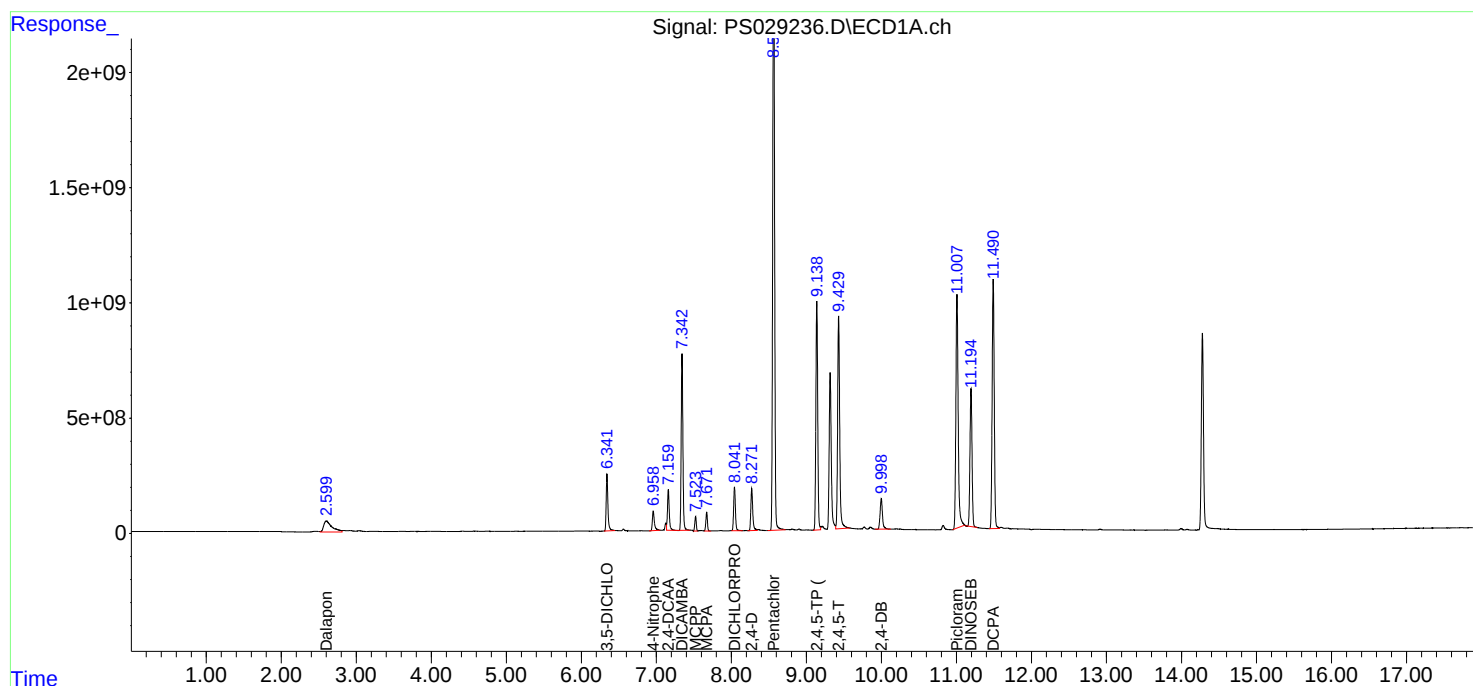
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS022125\
Data File : PS029236.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Feb 2025 20:44
Operator : AR\AJ
Sample : HSTDICC750
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDICC750

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 22 00:47:20 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
Quant Title : 8080.M
QLast Update : Sat Feb 22 00:45:48 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS022125\
 Data File : PS029237.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 21 Feb 2025 21:08
 Operator : AR\AJ
 Sample : HSTDICC1000
 Misc :
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDICC1000

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Feb 22 00:47:44 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
 Quant Title : 8080.M
 QLast Update : Sat Feb 22 00:45:48 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
4) S	2,4-DCAA	7.160	7.632	3904.4E6	923.9E6	987.641	1006.459
Target Compounds							
1) T	Dalapon	2.602	2.649	4808.4E6	1862.5E6	901.290	906.192
2) T	3,5-DICHL...	6.341	6.604	5190.9E6	1296.8E6	914.113	935.505
3) T	4-Nitroph...	6.958	7.162	2125.8E6	711.9E6	916.034	914.527
5) T	DICAMBA	7.343	7.827	15712.3E6	4925.7E6	926.955	961.111
6) T	MCPD	7.525	7.934	1212.8E6	229.1E6	97.837	97.378
7) T	MCPA	7.674	8.174	1599.1E6	305.2E6	95.210	95.798
8) T	DICHLORPROP	8.042	8.536	4060.0E6	1174.5E6	925.954	943.257
9) T	2,4-D	8.271	8.861	4228.8E6	1179.7E6	924.070	951.397
10) T	Pentachlo...	8.569	9.379	47978.9E6	21616.5E6	808.586	942.252
11) T	2,4,5-TP ...	9.138	9.756	22191.6E6	8560.6E6	926.582	951.592
12) T	2,4,5-T	9.429	10.171	22908.3E6	7785.2E6	921.482	953.703
13) T	2,4-DB	9.998	10.734	3903.0E6	722.5E6	953.785	963.503
14) T	DINOSEB	11.194	11.109	14868.4E6	5641.4E6	920.597	946.685
15) T	Picloram	11.007	12.185	28555.1E6	11497.8E6	941.140	979.475
16) T	DCPA	11.490	12.143	27030.8E6	11366.5E6	925.442	960.520

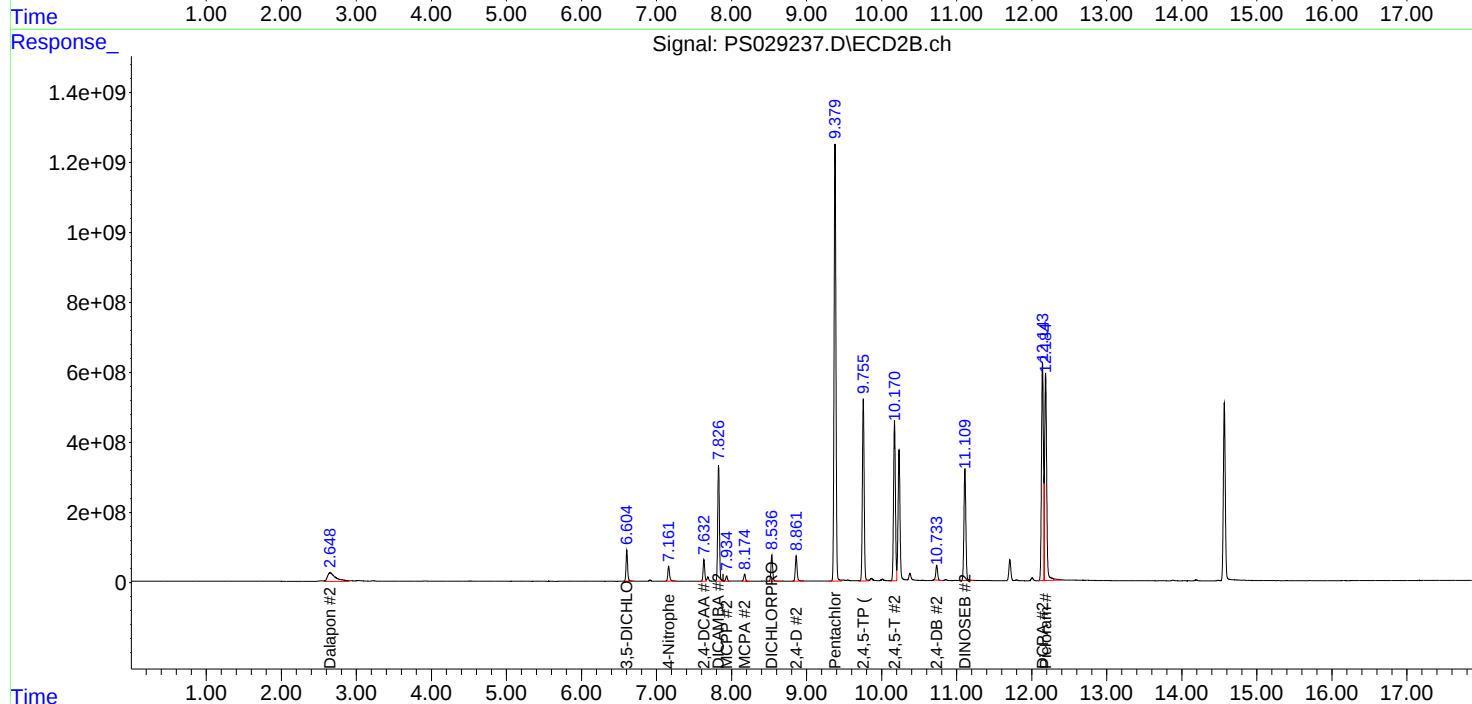
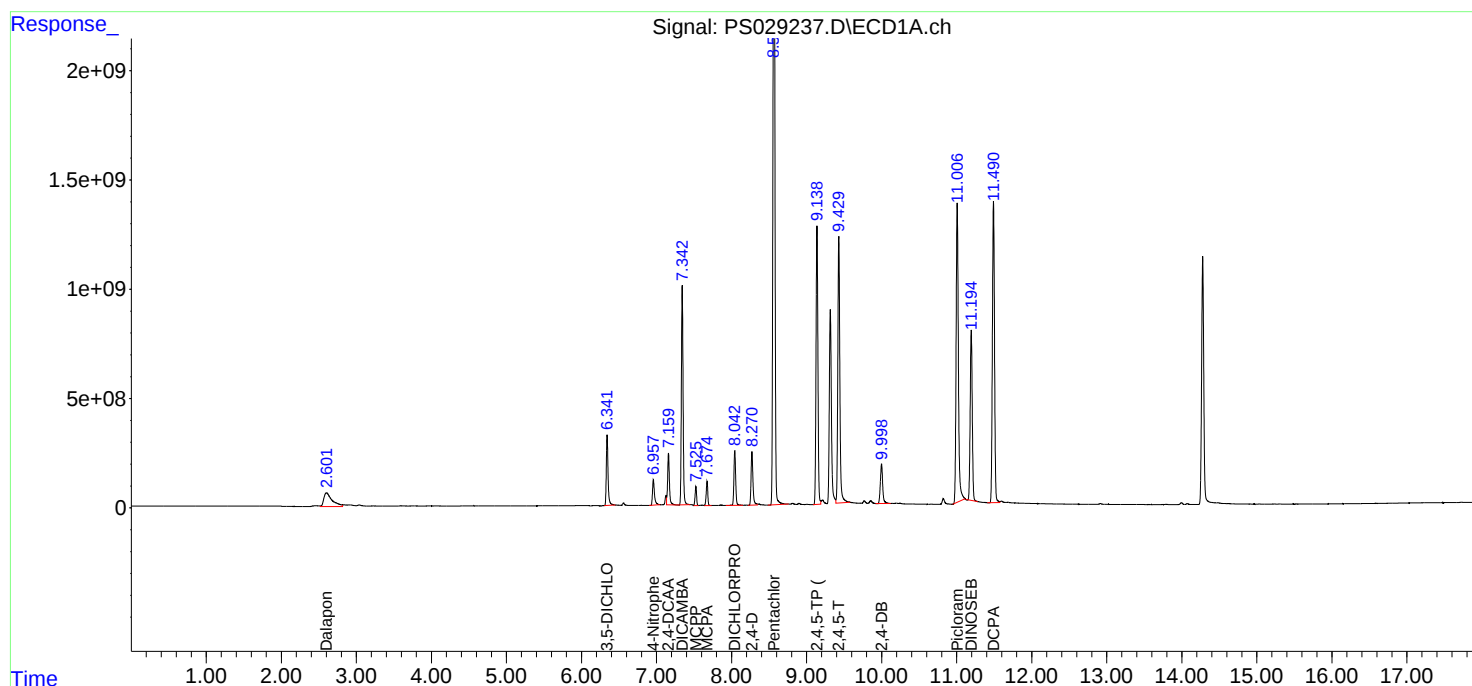
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS022125\
Data File : PS029237.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Feb 2025 21:08
Operator : AR\AJ
Sample : HSTDICC1000
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 22 00:47:44 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
Quant Title : 8080.M
QLast Update : Sat Feb 22 00:45:48 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS022125\
 Data File : PS029238.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 21 Feb 2025 21:32
 Operator : AR\AJ
 Sample : HSTDICC1500
 Misc :
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDICC1500

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Feb 22 00:48:08 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
 Quant Title : 8080.M
 QLast Update : Sat Feb 22 00:45:48 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
4) S	2,4-DCAA	7.159	7.631	5603.2E6	1365.5E6	1417.359	1487.581
Target Compounds							
1) T	Dalapon	2.599	2.650	7080.6E6	2737.9E6	1327.200	1332.102
2) T	3,5-DICHL...	6.341	6.603	7424.8E6	1902.1E6	1307.522	1372.147
3) T	4-Nitroph...	6.957	7.161	3188.9E6	1057.7E6	1374.098	1358.752
5) T	DICAMBA	7.342	7.826	22386.1E6	7349.3E6	1320.684	1434.025
6) T	MCPD	7.528	7.937	1849.5E6	345.7E6	149.200	146.934
7) T	MCPA	7.678	8.179	2403.1E6	459.1E6	143.079	144.104
8) T	DICHLORPROP	8.042	8.536	5832.5E6	1734.2E6	1330.222	1392.771
9) T	2,4-D	8.270	8.861	6067.9E6	1740.7E6	1325.935	1403.795
10) T	Pentachlo...	8.571	9.379	54359.2E6	30762.8E6	916.113	1340.930 #
11) T	2,4,5-TP ...	9.138	9.756	31108.4E6	12548.3E6	1298.890	1394.873
12) T	2,4,5-T	9.428	10.170	32195.4E6	11467.8E6	1295.051	1404.828
13) T	2,4-DB	9.996	10.733	5711.1E6	1098.1E6	1395.655	1464.450
14) T	DINOSEB	11.193	11.109	21096.9E6	8350.5E6	1306.243	1401.292
15) T	Picloram	11.005	12.184	41466.5E6	17354.9E6	1366.686	1478.435
16) T	DCPA	11.489	12.143	37451.6E6	16567.6E6	1282.213	1400.042

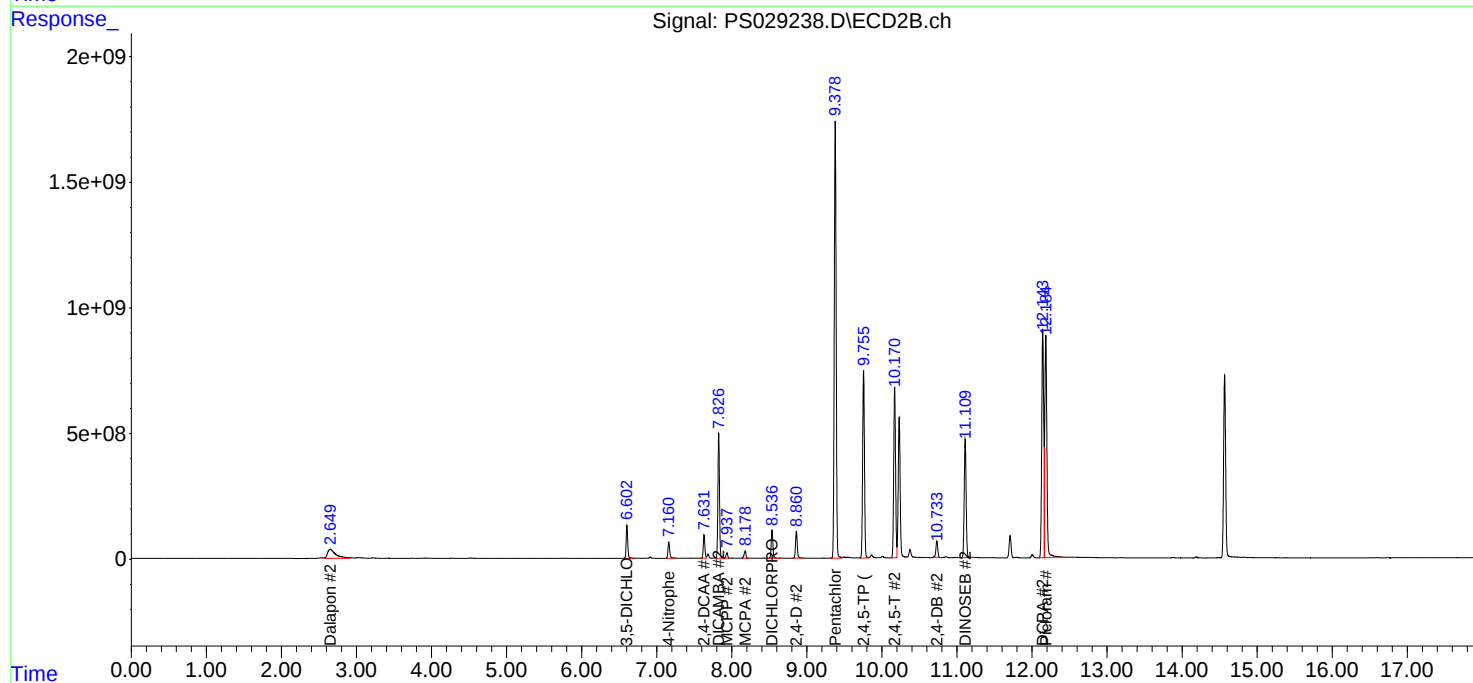
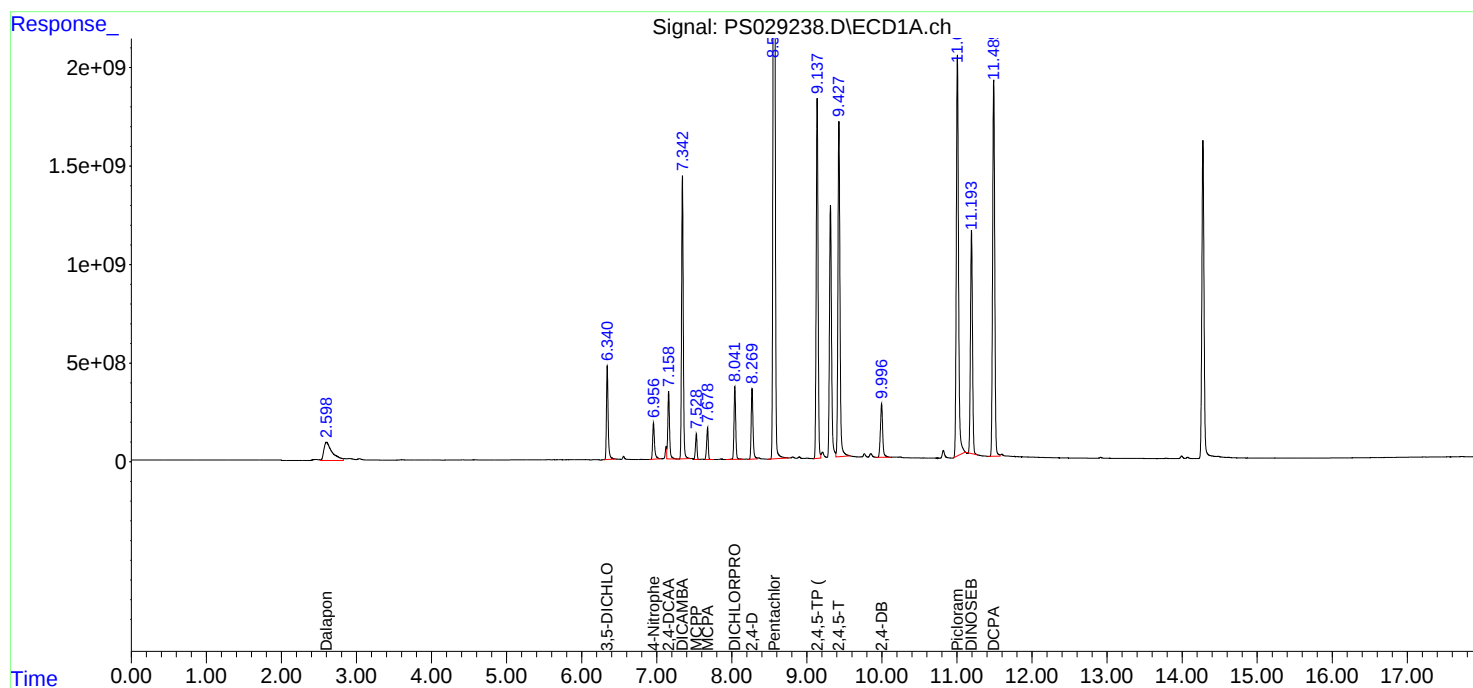
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS022125\
Data File : PS029238.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Feb 2025 21:32
Operator : AR\AJ
Sample : HSTDICC1500
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 22 00:48:08 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
Quant Title : 8080.M
QLast Update : Sat Feb 22 00:45:48 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS022125\
 Data File : PS029239.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 21 Feb 2025 21:56
 Operator : AR\AJ
 Sample : HSTDICV750
 Misc :
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 ICVPS022125

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Feb 22 00:48:31 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
 Quant Title : 8080.M
 QLast Update : Sat Feb 22 00:45:48 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
4) S	2,4-DCAA	7.159	7.631	3006.3E6	696.2E6	760.470	758.413
Target Compounds							
1) T	Dalapon	2.601	2.647	3672.9E6	1411.4E6	688.464	686.734
2) T	3,5-DICHL...	6.341	6.603	3997.2E6	979.2E6	703.903	706.431
3) T	4-Nitroph...	6.958	7.162	1586.8E6	534.7E6	683.748	686.872
5) T	DICAMBA	7.342	7.826	12149.2E6	3655.7E6	716.752	713.308
6) T	MCPD	7.523	7.931	877.8E6	168.1E6	70.814	71.451
7) T	MCPA	7.671	8.171	1179.4E6	225.5E6	70.221	70.791
8) T	DICHLORPROP	8.042	8.535	3120.1E6	886.8E6	711.599	712.198
9) T	2,4-D	8.270	8.860	3260.0E6	886.8E6	712.372	715.191
10) T	Pentachlo...	8.566	9.378	42728.6E6	16556.0E6	720.103	721.667
11) T	2,4,5-TP ...	9.137	9.755	17209.4E6	6480.5E6	718.554	720.373
12) T	2,4,5-T	9.428	10.169	17943.6E6	5874.7E6	721.778	719.658
13) T	2,4-DB	9.997	10.733	2931.8E6	536.7E6	716.459	715.709
14) T	DINOSEB	11.193	11.109	11470.9E6	4251.4E6	710.238	713.421
15) T	Picloram	11.006	12.183	21726.9E6	8497.3E6	716.090	723.872
16) T	DCPA	11.489	12.143	21240.2E6	8598.4E6	727.190	726.606

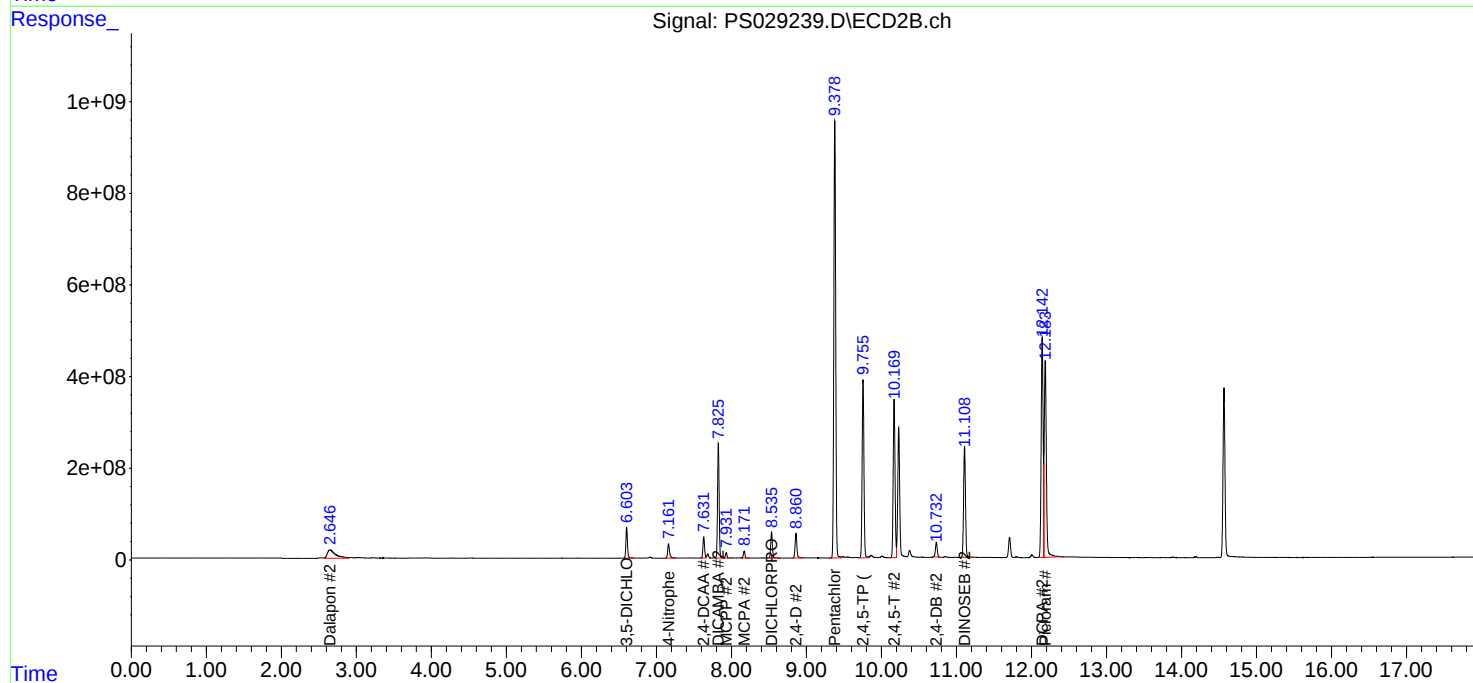
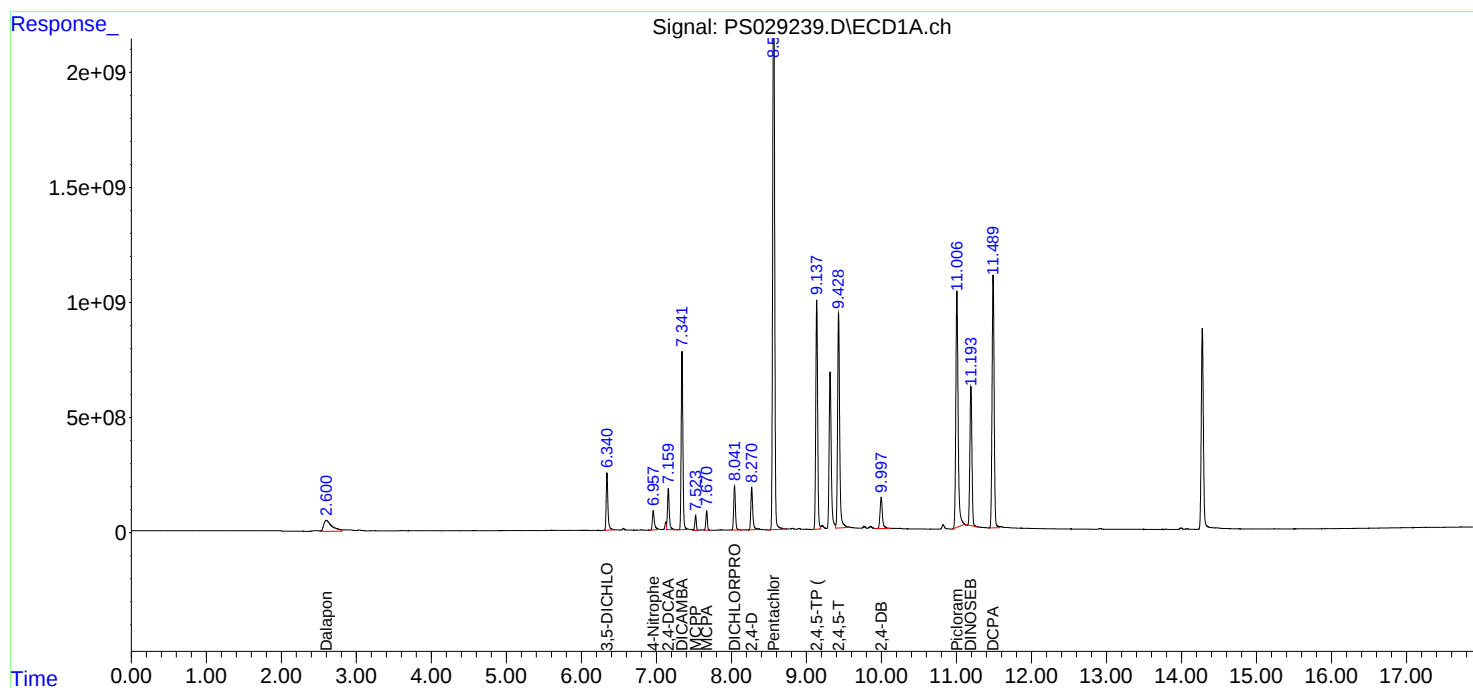
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS022125\
Data File : PS029239.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Feb 2025 21:56
Operator : AR\AJ
Sample : HSTDICV750
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
ICVPS022125

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 22 00:48:31 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
Quant Title : 8080.M
QLast Update : Sat Feb 22 00:45:48 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm





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Fax : 908 789 8922

CALIBRATION VERIFICATION SUMMARY

Contract: PORT06

Lab Code: CHEM Case No.: Q1488 SAS No.: Q1488 SDG NO.: Q1488

Continuing Calib Date: 03/12/2025 Initial Calibration Date(s): 02/21/2025 02/21/2025

Continuing Calib Time: 09:27 Initial Calibration Time(s): 19:56 21:32

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
2,4-DCAA	7.16	7.16	7.06	7.26	0.00
2,4-D	8.27	8.27	8.17	8.37	0.00
2,4,5-TP(Silvex)	9.13	9.14	9.04	9.24	0.01



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CALIBRATION VERIFICATION SUMMARY

Contract: PORT06

Lab Code: CHEM Case No.: Q1488 SAS No.: Q1488 SDG NO.: Q1488

Continuing Calib Date: 03/12/2025 Initial Calibration Date(s): 02/21/2025 02/21/2025

Continuing Calib Time: 09:27 Initial Calibration Time(s): 19:56 21:32

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
2,4-DCAA	7.62	7.63	7.53	7.73	0.01
2,4-D	8.85	8.86	8.76	8.96	0.01
2,4,5-TP(Silvex)	9.74	9.76	9.66	9.86	0.02



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CALIBRATION VERIFICATION SUMMARY

Contract: PORT06

Lab Code: CHEM Case No.: Q1488 SAS No.: Q1488 SDG NO.: Q1488

GC Column: RTX-CLP ID: 0.32 (mm) Initi. Calib. Date(s): 02/21/2025 02/21/2025

Client Sample No.: CCAL01 Date Analyzed: 03/12/2025

Lab Sample No.: HSTDCCC750 Data File : PS029396.D Time Analyzed: 09:27

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-TP(Silvex)	9.132	9.038	9.238	754.570	712.500	5.9
2,4-D	8.267	8.171	8.371	724.490	705.000	2.8
2,4-DCAA	7.156	7.060	7.260	777.430	750.000	3.7



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CALIBRATION VERIFICATION SUMMARY

Contract: PORT06

Lab Code: CHEM Case No.: Q1488 SAS No.: Q1488 SDG NO.: Q1488

GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 02/21/2025 02/21/2025

Client Sample No.: CCAL01 Date Analyzed: 03/12/2025

Lab Sample No.: HSTDCCC750 Data File : PS029396.D Time Analyzed: 09:27

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-TP(Silvex)	9.741	9.656	9.856	742.300	712.500	4.2
2,4-D	8.848	8.761	8.961	701.440	705.000	-0.5
2,4-DCAA	7.620	7.532	7.732	730.650	750.000	-2.6

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS031225\
 Data File : PS029396.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 12 Mar 2025 09:27
 Operator : AR\AJ
 Sample : HSTDCCC750
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :

ECD_S

ClientSampleId :

HSTDCCC750

Manual Integrations**APPROVED**

Reviewed By :Abdul Mirza 03/13/2025

Supervised By :Ankita Jodhani 03/13/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Mar 13 02:28:15 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
 Quant Title : 8080.M
 QLast Update : Sat Feb 22 01:02:20 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
4) S	2,4-DCAA	7.156	7.620	3203.5E6	687.1E6	777.434	730.651
Target Compounds							
1) T	Dalapon	2.599	2.644	3905.3E6	1436.8E6	707.446	678.658
2) T	3,5-DICHL...	6.338	6.596	4259.7E6	966.4E6	728.008	682.440
3) T	4-Nitroph...	6.955	7.152	1577.7E6	518.7E6	674.170	650.416
5) T	DICAMBA	7.337	7.813	13032.5E6	3704.4E6	750.463	718.883m
6) T	MCPD	7.519	7.920	893.9E6	161.7E6	72.519	69.144
7) T	MCPA	7.667	8.159	1251.0E6	222.8E6	73.823	69.863
8) T	DICHLORPROP	8.037	8.523	3346.0E6	902.4E6	727.950	705.699
9) T	2,4-D	8.267	8.848	3441.6E6	890.8E6	724.489	701.444
10) T	Pentachlo...	8.563	9.364	44316.3E6	17181.8E6	759.411	746.622
11) T	2,4,5-TP ...	9.132	9.741	18552.6E6	6708.0E6	754.573	742.303
12) T	2,4,5-T	9.424	10.155	19163.5E6	5979.0E6	751.844	728.233
13) T	2,4-DB	9.992	10.718	3025.1E6	573.0E6	724.509	748.411m
14) T	DINOSEB	11.185	11.093	12346.1E6	4320.0E6	742.362m	712.698m
15) T	Picloram	11.000	12.167	22302.7E6	8287.8E6	730.196	716.789
16) T	DCPA	11.482	12.126	22722.6E6	8957.4E6	757.332	756.753

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS031225\
Data File : PS029396.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 Mar 2025 09:27
Operator : AR\AJ
Sample : HSTDCCC750
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :

ECD_S

ClientSampleId :

HSTDCCC750

Manual Integrations

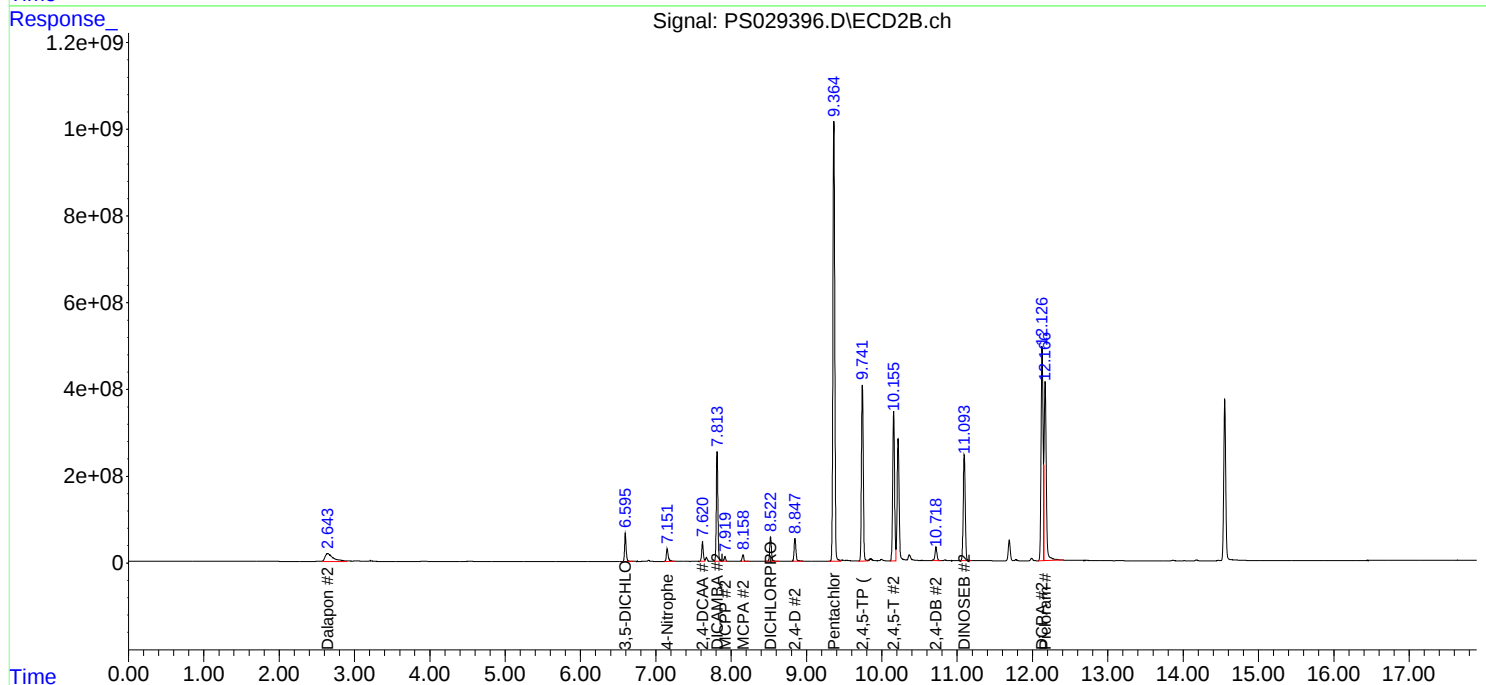
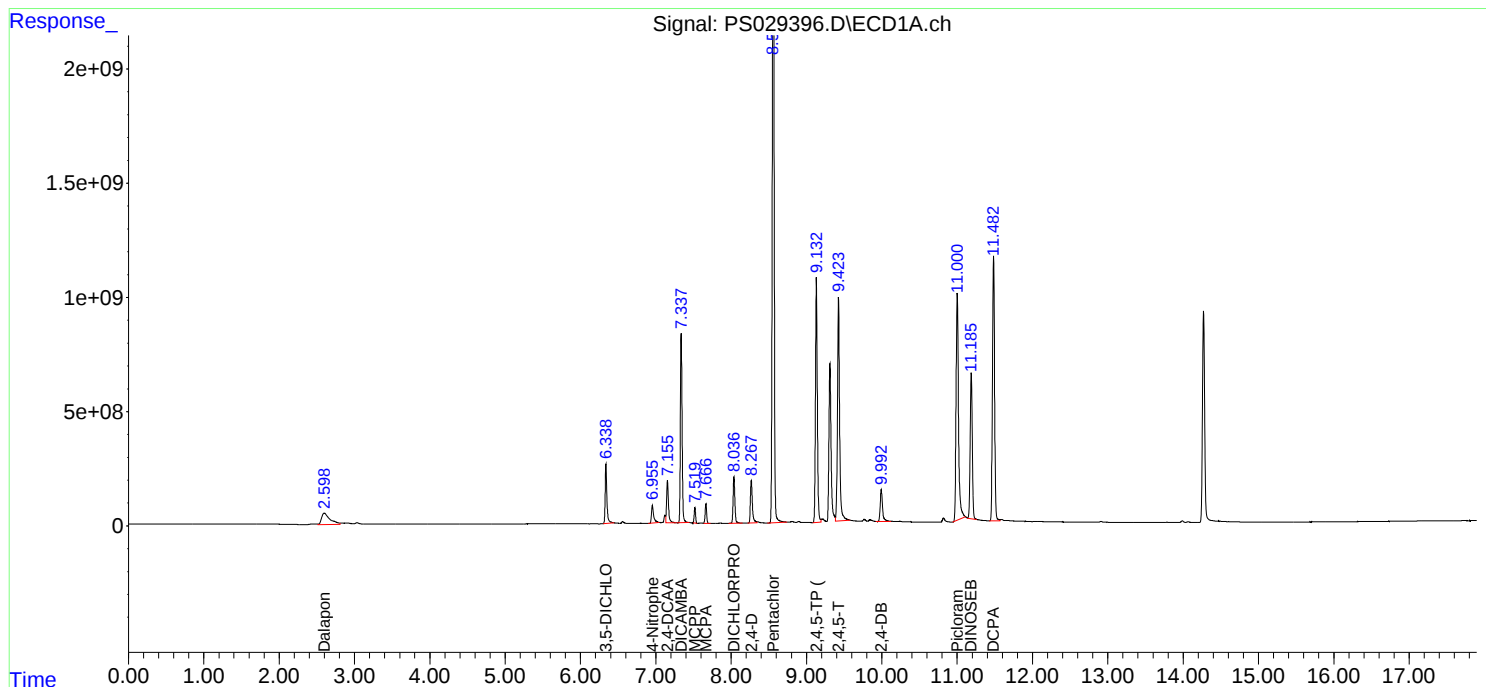
APPROVED

Reviewed By :Abdul Mirza 03/13/2025

Supervised By :Ankita Jodhani 03/13/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 13 02:28:15 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
Quant Title : 8080.M
QLast Update : Sat Feb 22 01:02:20 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm





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CALIBRATION VERIFICATION SUMMARY

Contract: PORT06

Lab Code: CHEM Case No.: Q1488 SAS No.: Q1488 SDG NO.: Q1488

Continuing Calib Date: 03/12/2025 Initial Calibration Date(s): 02/21/2025 02/21/2025

Continuing Calib Time: 13:26 Initial Calibration Time(s): 19:56 21:32

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
2,4-DCAA	7.16	7.16	7.06	7.26	0.00
2,4-D	8.27	8.27	8.17	8.37	0.00
2,4,5-TP(Silvex)	9.13	9.14	9.04	9.24	0.01



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CALIBRATION VERIFICATION SUMMARY

Contract: PORT06

Lab Code: CHEM Case No.: Q1488 SAS No.: Q1488 SDG NO.: Q1488

Continuing Calib Date: 03/12/2025 Initial Calibration Date(s): 02/21/2025 02/21/2025

Continuing Calib Time: 13:26 Initial Calibration Time(s): 19:56 21:32

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
2,4-DCAA	7.62	7.63	7.53	7.73	0.01
2,4-D	8.85	8.86	8.76	8.96	0.01
2,4,5-TP(Silvex)	9.74	9.76	9.66	9.86	0.02



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CALIBRATION VERIFICATION SUMMARY

Contract: PORT06

Lab Code: CHEM Case No.: Q1488 SAS No.: Q1488 SDG NO.: Q1488

GC Column: RTX-CLP ID: 0.32 (mm) Initi. Calib. Date(s): 02/21/2025 02/21/2025

Client Sample No.: CCAL02 Date Analyzed: 03/12/2025

Lab Sample No.: HSTDCCC750 Data File : PS029405.D Time Analyzed: 13:26

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	9.132	9.038	9.238	769.220	712.500	8.0
2,4-D	8.266	8.171	8.371	737.740	705.000	4.6
2,4-DCAA	7.155	7.060	7.260	795.560	750.000	6.1



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CALIBRATION VERIFICATION SUMMARY

Contract: PORT06

Lab Code: CHEM Case No.: Q1488 SAS No.: Q1488 SDG NO.: Q1488

GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 02/21/2025 02/21/2025

Client Sample No.: CCAL02 Date Analyzed: 03/12/2025

Lab Sample No.: HSTDCCC750 Data File : PS029405.D Time Analyzed: 13:26

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-TP(Silvex)	9.741	9.656	9.856	758.770	712.500	6.5
2,4-D	8.847	8.761	8.961	719.310	705.000	2.0
2,4-DCAA	7.619	7.532	7.732	746.890	750.000	-0.4

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS031225\
 Data File : PS029405.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 12 Mar 2025 13:26
 Operator : AR\AJ
 Sample : HSTDCCC750
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :

ECD_S

ClientSampleId :

HSTDCCC750

Manual Integrations

APPROVED

Reviewed By :Abdul Mirza 03/13/2025

Supervised By :Ankita Jodhani 03/13/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Mar 13 02:29:58 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
 Quant Title : 8080.M
 QLast Update : Sat Feb 22 01:02:20 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds						
4) S 2,4-DCAA	7.155	7.619	3278.1E6	702.3E6	795.555	746.889
Target Compounds						
1) T Dalapon	2.599	2.643	3842.0E6	1421.8E6	695.977	671.594
2) T 3,5-DICHL...	6.338	6.595	4352.9E6	992.8E6	743.944	701.064
3) T 4-Nitroph...	6.955	7.151	1625.2E6	540.8E6	694.493	678.041
5) T DICAMBA	7.337	7.812	13304.4E6	3791.6E6	766.122	735.818m
6) T MCPP	7.518	7.919	916.2E6	163.8E6	74.329	70.026
7) T MCPA	7.666	8.158	1282.3E6	228.1E6	75.670	71.517
8) T DICHLORPROP	8.037	8.522	3424.0E6	926.4E6	744.917	724.453
9) T 2,4-D	8.266	8.847	3504.6E6	913.4E6	737.737	719.308
10) T Pentachlo...	8.562	9.363	45171.1E6	17611.4E6	774.059	765.293
11) T 2,4,5-TP ...	9.132	9.741	18912.7E6	6856.8E6	769.219	758.774
12) T 2,4,5-T	9.424	10.155	19513.8E6	6095.1E6	765.587	742.376
13) T 2,4-DB	9.993	10.717	3061.9E6	577.1E6	733.324	753.754m
14) T DINOSEB	11.185	11.092	12482.3E6	4333.8E6	750.550m	714.976m
15) T Picloram	11.001	12.166	21743.7E6	8099.6E6	711.892	700.507
16) T DCPA	11.482	12.126	23149.6E6	9155.5E6	771.563	773.490

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS031225\
Data File : PS029405.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 Mar 2025 13:26
Operator : AR\AJ
Sample : HSTDCCC750
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :

ECD_S

ClientSampleId :

HSTDCCC750

Manual Integrations

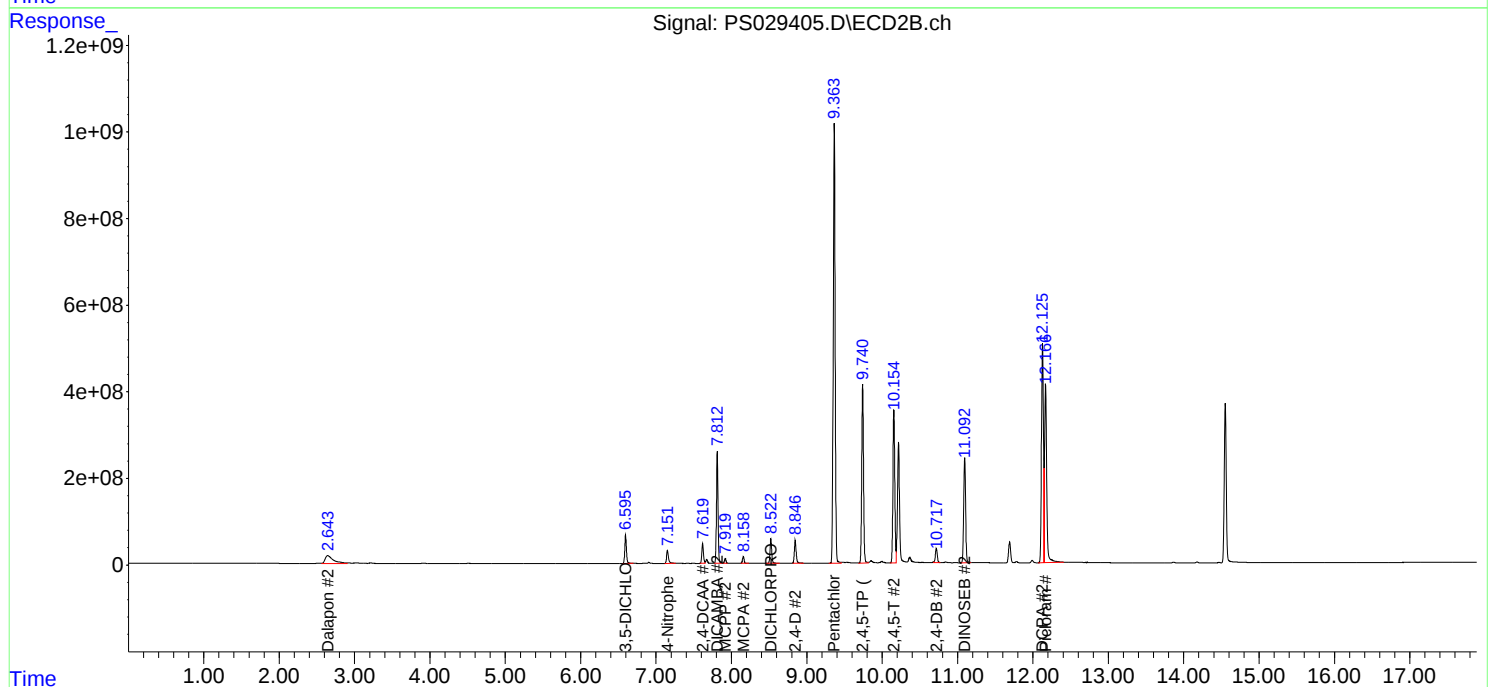
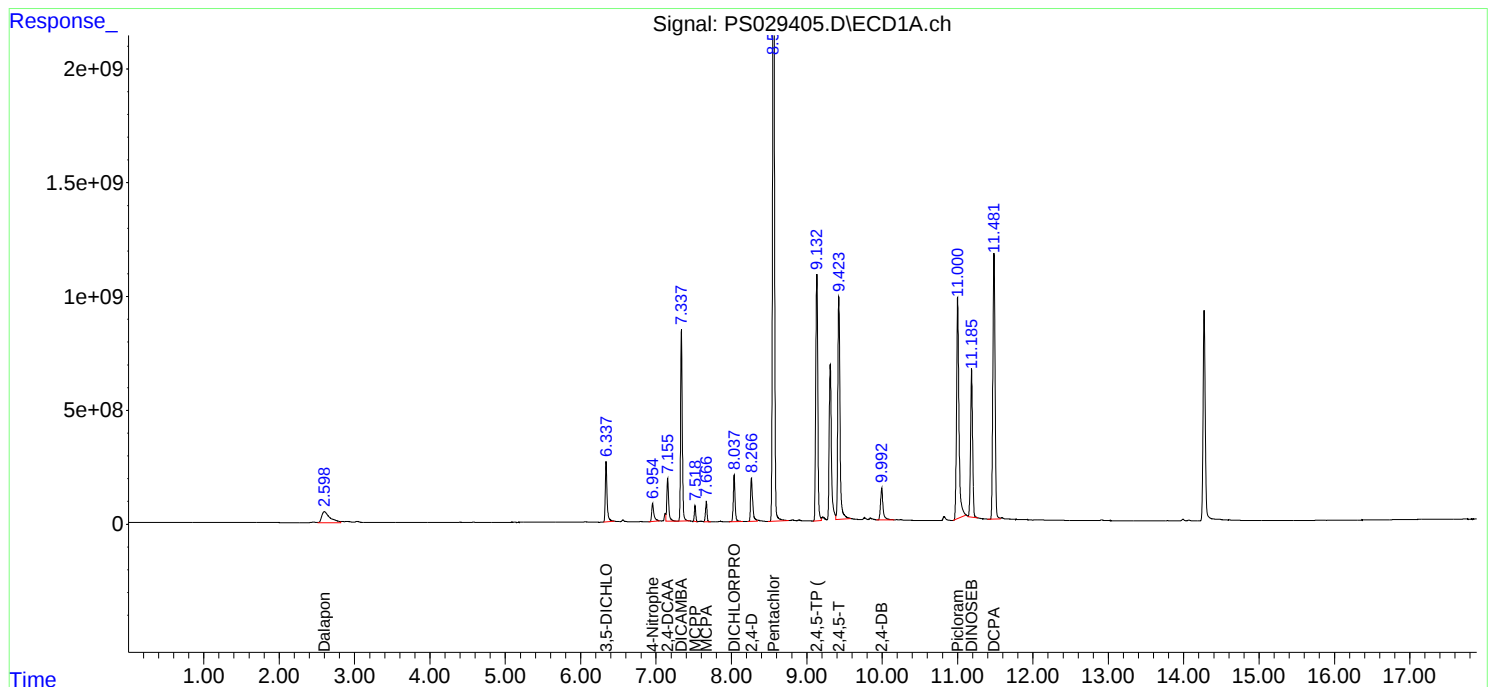
APPROVED

Reviewed By :Abdul Mirza 03/13/2025

Supervised By :Ankita Jodhani 03/13/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 13 02:29:58 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
Quant Title : 8080.M
QLast Update : Sat Feb 22 01:02:20 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm





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CALIBRATION VERIFICATION SUMMARY

Contract: PORT06

Lab Code: CHEM Case No.: Q1488 SAS No.: Q1488 SDG NO.: Q1488

Continuing Calib Date: 03/12/2025 Initial Calibration Date(s): 02/21/2025 02/21/2025

Continuing Calib Time: 18:15 Initial Calibration Time(s): 19:56 21:32

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
2,4-DCAA	7.15	7.16	7.06	7.26	0.01
2,4-D	8.27	8.27	8.17	8.37	0.00
2,4,5-TP(Silvex)	9.13	9.14	9.04	9.24	0.01



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CALIBRATION VERIFICATION SUMMARY

Contract: PORT06

Lab Code: CHEM Case No.: Q1488 SAS No.: Q1488 SDG NO.: Q1488

Continuing Calib Date: 03/12/2025 Initial Calibration Date(s): 02/21/2025 02/21/2025

Continuing Calib Time: 18:15 Initial Calibration Time(s): 19:56 21:32

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
2,4-DCAA	7.62	7.63	7.53	7.73	0.01
2,4-D	8.85	8.86	8.76	8.96	0.01
2,4,5-TP(Silvex)	9.74	9.76	9.66	9.86	0.02



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CALIBRATION VERIFICATION SUMMARY

Contract: PORT06

Lab Code: CHEM Case No.: Q1488 SAS No.: Q1488 SDG NO.: Q1488

GC Column: RTX-CLP ID: 0.32 (mm) Initi. Calib. Date(s): 02/21/2025 02/21/2025

Client Sample No.: CCAL03 Date Analyzed: 03/12/2025

Lab Sample No.: HSTDCCC750 Data File : PS029417.D Time Analyzed: 18:15

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-TP(Silvex)	9.131	9.038	9.238	768.960	712.500	7.9
2,4-D	8.267	8.171	8.371	735.450	705.000	4.3
2,4-DCAA	7.154	7.060	7.260	797.340	750.000	6.3



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CALIBRATION VERIFICATION SUMMARY

Contract: PORT06

Lab Code: CHEM Case No.: Q1488 SAS No.: Q1488 SDG NO.: Q1488

GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 02/21/2025 02/21/2025

Client Sample No.: CCAL03 Date Analyzed: 03/12/2025

Lab Sample No.: HSTDCCC750 Data File : PS029417.D Time Analyzed: 18:15

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-TP(Silvex)	9.739	9.656	9.856	761.330	712.500	6.9
2,4-D	8.846	8.761	8.961	720.000	705.000	2.1
2,4-DCAA	7.619	7.532	7.732	749.630	750.000	0.0

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS031225\
 Data File : PS029417.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 12 Mar 2025 18:15
 Operator : AR\AJ
 Sample : HSTDCCC750
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :

ECD_S

ClientSampleId :

HSTDCCC750

Manual Integrations**APPROVED**

Reviewed By :Abdul Mirza 03/13/2025

Supervised By :Ankita Jodhani 03/13/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Mar 13 02:32:12 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
 Quant Title : 8080.M
 QLast Update : Sat Feb 22 01:02:20 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
4) S	2,4-DCAA	7.154	7.619	3285.5E6	704.9E6	797.345m	749.627
Target Compounds							
1) T	Dalapon	2.599	2.642	3776.3E6	1403.3E6	684.081	662.829
2) T	3,5-DICHL...	6.338	6.594	4347.4E6	997.0E6	743.002	704.024
3) T	4-Nitroph...	6.955	7.151	1605.7E6	540.8E6	686.163	678.061
5) T	DICAMBA	7.337	7.811	13324.0E6	3807.5E6	767.246	738.890m
6) T	MCPD	7.517	7.918	988.4E6	164.6E6	80.192m	70.388
7) T	MCPA	7.665	8.157	1288.1E6	227.8E6	76.013	71.423
8) T	DICHLORPROP	8.037	8.521	3422.1E6	927.0E6	744.506	724.927
9) T	2,4-D	8.267	8.846	3493.7E6	914.3E6	735.449	719.998
10) T	Pentachlo...	8.558	9.362	45135.2E6	17687.1E6	773.443	768.582
11) T	2,4,5-TP ...	9.131	9.739	18906.4E6	6879.9E6	768.962	761.325
12) T	2,4,5-T	9.423	10.154	19473.9E6	6105.7E6	764.020	743.665
13) T	2,4-DB	9.992	10.716	3006.5E6	587.9E6	720.044	767.918m
14) T	DINOSEB	11.184	11.090	12348.9E6	4301.8E6	742.531m	709.687m
15) T	Picloram	11.001	12.164	21035.8E6	7885.2E6	688.717	681.971
16) T	DCPA	11.482	12.124	23198.8E6	9171.5E6	773.204	774.846

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS031225\
Data File : PS029417.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 Mar 2025 18:15
Operator : AR\AJ
Sample : HSTDCCC750
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :

ECD_S

ClientSampleId :

HSTDCCC750

Manual Integrations

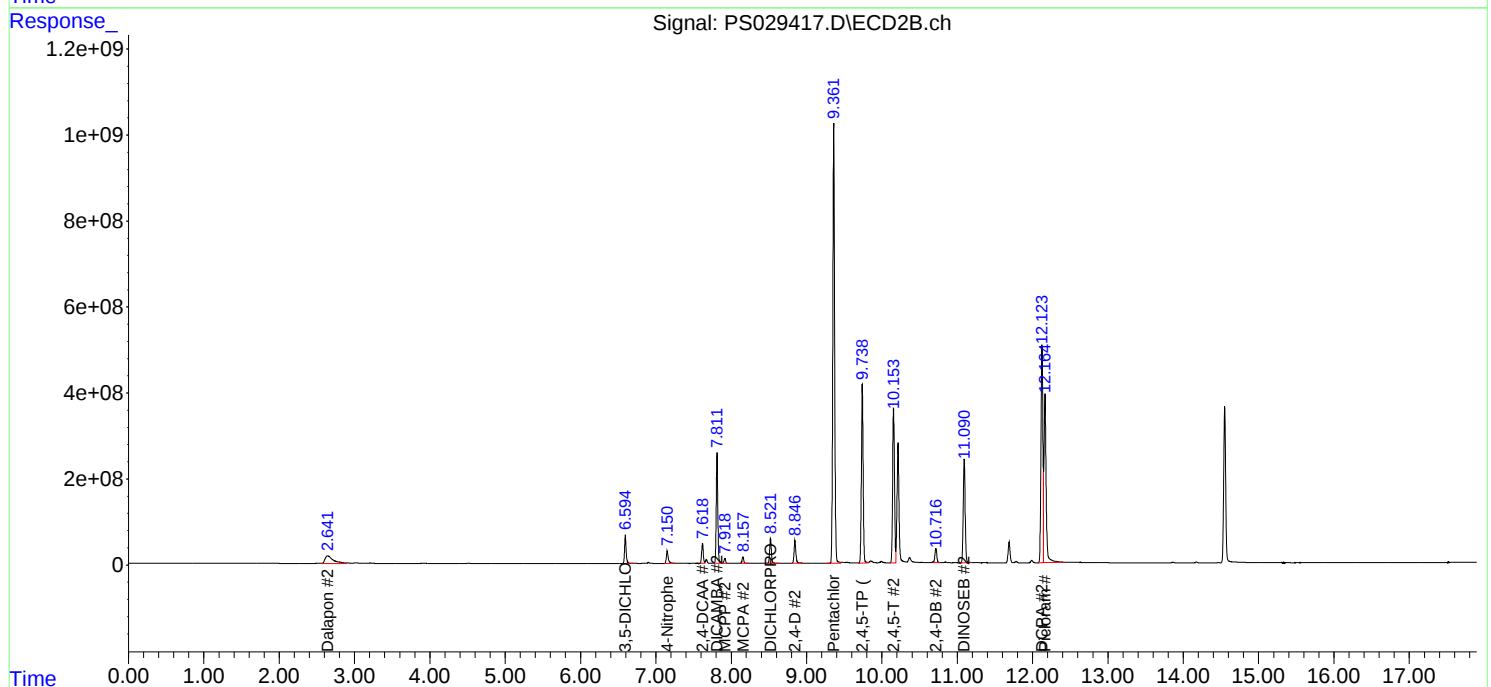
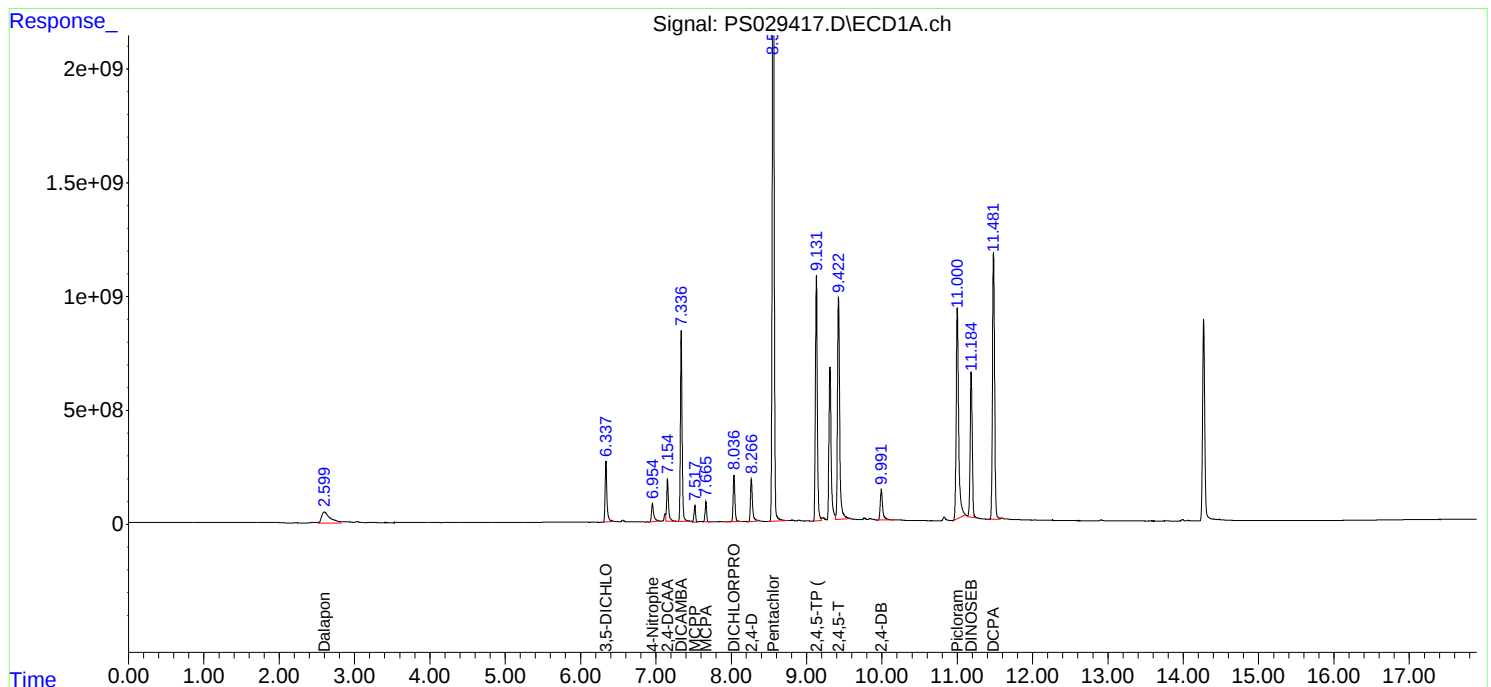
APPROVED

Reviewed By :Abdul Mirza 03/13/2025

Supervised By :Ankita Jodhani 03/13/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 13 02:32:12 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
Quant Title : 8080.M
QLast Update : Sat Feb 22 01:02:20 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm



Analytical Sequence

Client: Portal Partners Tri-Venture	SDG No.: Q1488	
Project: Amtrak Sawtooth Bridges 2025	Instrument ID: ECD_S	
GC Column: RTX-CLP	ID: 0.32 (mm)	Inst. Calib. Date(s): 02/21/2025 02/21/2025

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

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DATAFILE	DCAA RT #	RT #
IBLK	IBLK	02/21/2025	19:32	PS029233.D	7.16	0.00
HSTDICC200	HSTDICC200	02/21/2025	19:56	PS029234.D	7.16	0.00
HSTDICC500	HSTDICC500	02/21/2025	20:20	PS029235.D	7.16	0.00
HSTDICC750	HSTDICC750	02/21/2025	20:44	PS029236.D	7.16	0.00
HSTDICC1000	HSTDICC1000	02/21/2025	21:08	PS029237.D	7.16	0.00
HSTDICC1500	HSTDICC1500	02/21/2025	21:32	PS029238.D	7.16	0.00
IBLK	IBLK	03/12/2025	09:03	PS029395.D	7.16	0.00
HSTDCCC750	HSTDCCC750	03/12/2025	09:27	PS029396.D	7.16	0.00
PB167090BL	PB167090BL	03/12/2025	09:57	PS029397.D	7.16	0.00
PB167090BS	PB167090BS	03/12/2025	10:21	PS029398.D	7.16	0.00
PB167020TB	PB167020TB	03/12/2025	10:45	PS029399.D	7.15	0.00
ENV-101-SB01	Q1488-02	03/12/2025	11:50	PS029401.D	7.16	0.00
ENV-101-SB01MS	Q1488-02MS	03/12/2025	12:14	PS029402.D	7.16	0.00
ENV-101-SB01MSD	Q1488-02MSD	03/12/2025	12:38	PS029403.D	7.16	0.00
IBLK	IBLK	03/12/2025	13:02	PS029404.D	7.16	0.00
HSTDCCC750	HSTDCCC750	03/12/2025	13:26	PS029405.D	7.16	0.00
ENV-101-SB02	Q1488-04	03/12/2025	13:50	PS029406.D	7.16	0.00
ENV-102-SB01	Q1488-06	03/12/2025	14:14	PS029407.D	7.16	0.00
ENV-102-SB02	Q1488-08	03/12/2025	14:38	PS029408.D	7.16	0.00
ENV-104-SB01	Q1488-10	03/12/2025	15:02	PS029409.D	7.16	0.00
ENV-104-SB02	Q1488-12	03/12/2025	15:27	PS029410.D	7.16	0.00
IBLK	IBLK	03/12/2025	17:51	PS029416.D	7.16	0.00
HSTDCCC750	HSTDCCC750	03/12/2025	18:15	PS029417.D	7.15	0.00

Analytical Sequence

Client: Portal Partners Tri-Venture	SDG No.: Q1488
Project: Amtrak Sawtooth Bridges 2025	Instrument ID: ECD_S
GC Column: RTX-CLP2	ID: 0.32 (mm) Inst. Calib. Date(s): 02/21/2025 02/21/2025

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

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DATAFILE	DCAA RT #	RT #
IBLK	IBLK	02/21/2025	19:32	PS029233.D	7.63	0.00
HSTDICC200	HSTDICC200	02/21/2025	19:56	PS029234.D	7.63	0.00
HSTDICC500	HSTDICC500	02/21/2025	20:20	PS029235.D	7.63	0.00
HSTDICC750	HSTDICC750	02/21/2025	20:44	PS029236.D	7.63	0.00
HSTDICC1000	HSTDICC1000	02/21/2025	21:08	PS029237.D	7.63	0.00
HSTDICC1500	HSTDICC1500	02/21/2025	21:32	PS029238.D	7.63	0.00
IBLK	IBLK	03/12/2025	09:03	PS029395.D	7.62	0.00
HSTDCCC750	HSTDCCC750	03/12/2025	09:27	PS029396.D	7.62	0.00
PB167090BL	PB167090BL	03/12/2025	09:57	PS029397.D	7.62	0.00
PB167090BS	PB167090BS	03/12/2025	10:21	PS029398.D	7.62	0.00
PB167020TB	PB167020TB	03/12/2025	10:45	PS029399.D	7.62	0.00
ENV-101-SB01	Q1488-02	03/12/2025	11:50	PS029401.D	7.62	0.00
ENV-101-SB01MS	Q1488-02MS	03/12/2025	12:14	PS029402.D	7.62	0.00
ENV-101-SB01MSD	Q1488-02MSD	03/12/2025	12:38	PS029403.D	7.62	0.00
IBLK	IBLK	03/12/2025	13:02	PS029404.D	7.62	0.00
HSTDCCC750	HSTDCCC750	03/12/2025	13:26	PS029405.D	7.62	0.00
ENV-101-SB02	Q1488-04	03/12/2025	13:50	PS029406.D	7.62	0.00
ENV-102-SB01	Q1488-06	03/12/2025	14:14	PS029407.D	7.62	0.00
ENV-102-SB02	Q1488-08	03/12/2025	14:38	PS029408.D	7.62	0.00
ENV-104-SB01	Q1488-10	03/12/2025	15:02	PS029409.D	7.62	0.00
ENV-104-SB02	Q1488-12	03/12/2025	15:27	PS029410.D	7.62	0.00
IBLK	IBLK	03/12/2025	17:51	PS029416.D	7.62	0.00
HSTDCCC750	HSTDCCC750	03/12/2025	18:15	PS029417.D	7.62	0.00

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

ENV-101-SB01MS

Contract: PORT06

Lab Code: CHEM Case No.: Q1488

SAS No.: Q1488

SDG NO.: Q1488

Lab Sample ID: Q1488-02MS

Date(s) Analyzed: 03/12/2025 03/12/2025

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	8.27	8.22	8.32	52.7	7.7
	2	8.85	8.80	8.90	48.8	
2,4,5-TP(Silvex)	1	9.13	9.08	9.18	52.1	29.6
	2	9.74	9.69	9.79	70.2	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

ENV-101-SB01MSD

Contract: PORT06

Lab Code: CHEM **Case No.:** Q1488

SAS No.: Q1488

SDG NO.: Q1488

Lab Sample ID: Q1488-02MSD

Date(s) Analyzed: 03/12/2025 03/12/2025

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	8.27	8.22	8.32	53.1	7.2
	2	8.85	8.80	8.90	49.4	
2,4,5-TP(Silvex)	1	9.13	9.08	9.18	52.1	37.1
	2	9.74	9.69	9.79	75.8	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

PB167090BS

Contract: PORT06

Lab Code: CHEM

Case No.: Q1488

SAS No.: Q1488

SDG NO.: Q1488

Lab Sample ID: PB167090BS

Date(s) Analyzed: 03/12/2025

03/12/2025

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	9.13	9.08	9.18	5.10	8.2
	2	9.74	9.69	9.79	4.70	
2,4-D	1	8.27	8.22	8.32	4.80	6.5
	2	8.85	8.80	8.90	4.50	



QC SAMPLE DATA

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	PB167090BL	SDG No.:	Q1488
Lab Sample ID:	PB167090BL	Matrix:	TCLP
Analytical Method:	SW8151A	% Solid:	0 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Herbicide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS029397.D	1	03/11/25 11:30	03/12/25 09:57	PB167090

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	482		70 (39) - 130 (175)	96%	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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS031225\
Data File : PS029397.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 Mar 2025 09:57
Operator : AR\AJ
Sample : PB167090BL
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
PB167090BL

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 13 02:28:32 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
Quant Title : 8080.M
QLast Update : Sat Feb 22 01:02:20 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
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System Monitoring Compounds

4) S	2,4-DCAA	7.157	7.618	1984.7E6	401.4E6	481.668	426.855
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Target Compounds

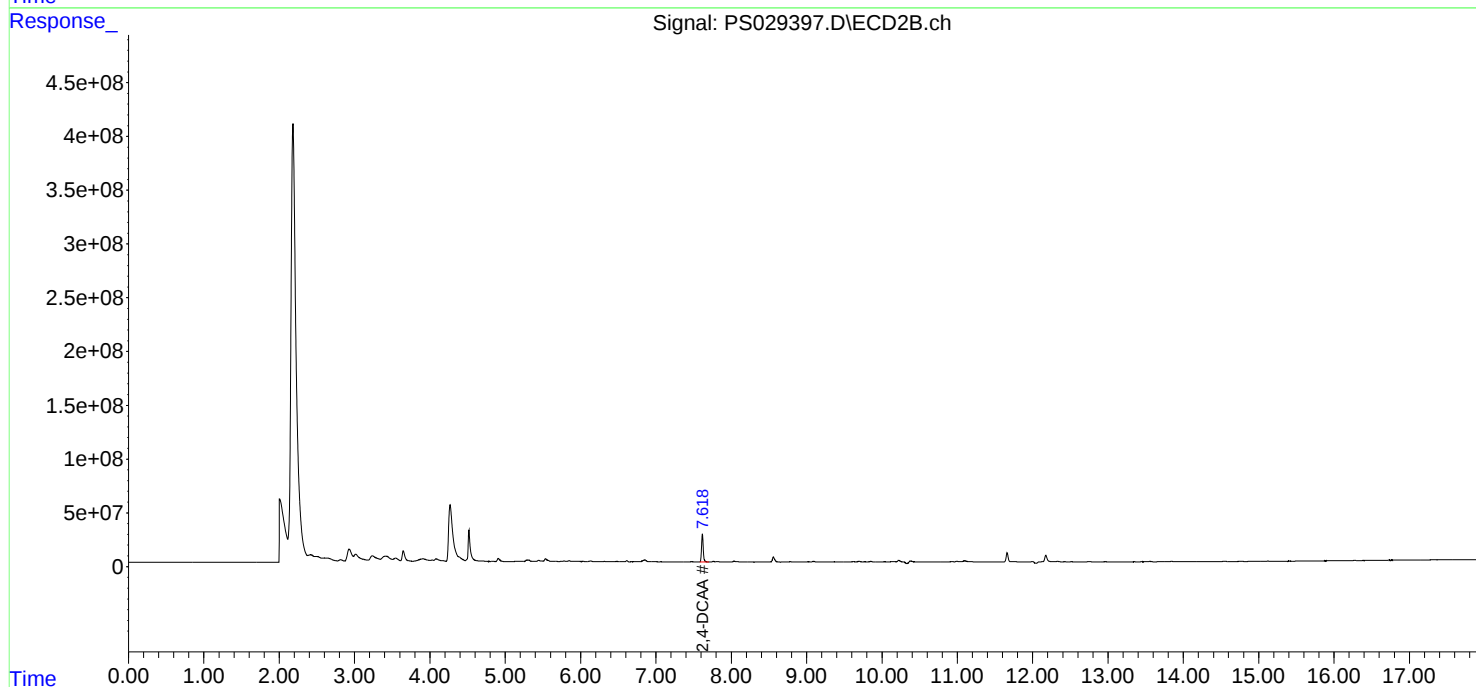
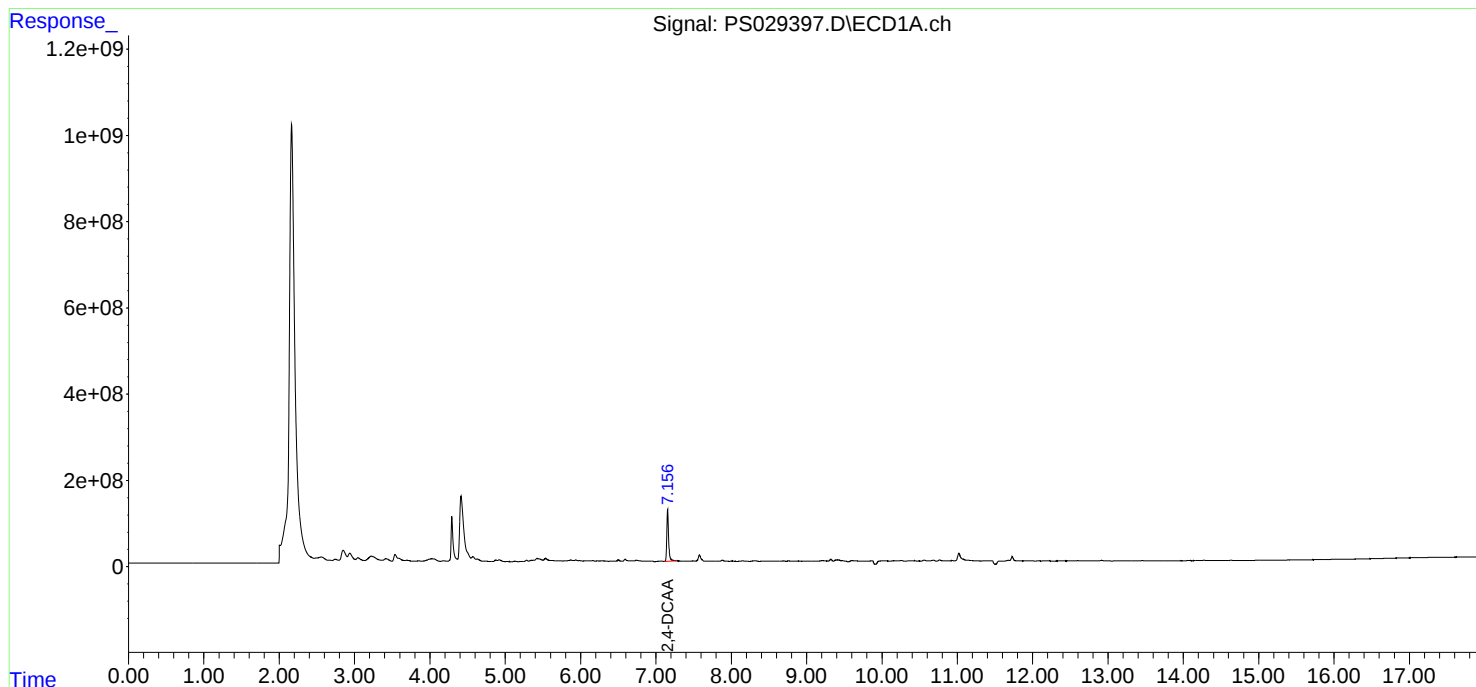
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

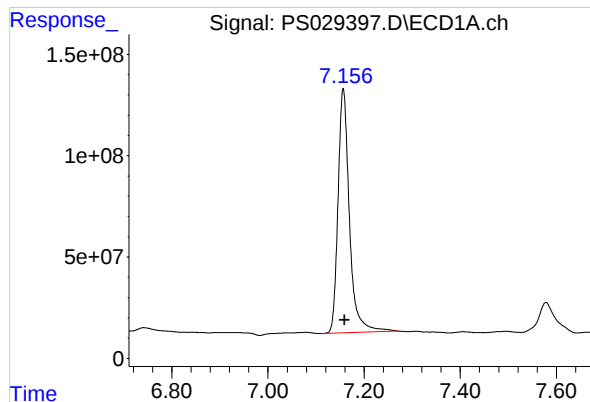
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS031225\
Data File : PS029397.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 Mar 2025 09:57
Operator : AR\AJ
Sample : PB167090BL
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
PB167090BL

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 13 02:28:32 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
Quant Title : 8080.M
QLast Update : Sat Feb 22 01:02:20 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm





#4 2,4-DCAA

R.T.: 7.157 min

Delta R.T.: -0.003 min

Response: 1984749906

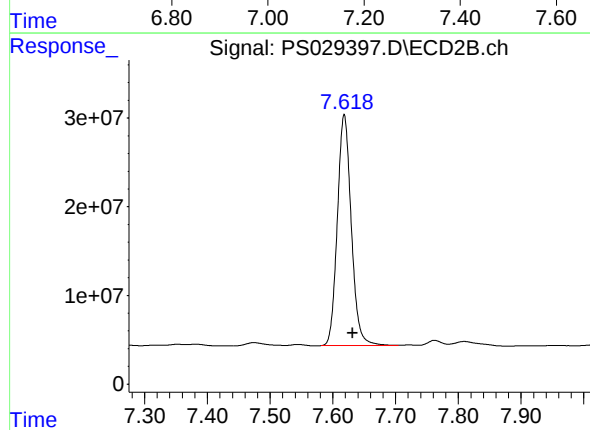
Conc: 481.67 ng/ml

Instrument :

ECD_S

ClientSampleId :

PB167090BL



#4 2,4-DCAA

R.T.: 7.618 min

Delta R.T.: -0.014 min

Response: 401385970

Conc: 426.86 ng/ml

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	02/21/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	02/21/25
Client Sample ID:	PIBLK-PS029233.D	SDG No.:	Q1488
Lab Sample ID:	I.BLK-PS029233.D	Matrix:	TCLP
Analytical Method:	SW8151A	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Decanted:	
Soil Aliquot Vol:	uL	Final Vol:	10000 uL
Extraction Type:		Test:	TCLP Herbicide
GPC Factor :	1.0	Injection Volume :	
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS029233.D	1		02/21/25	ps022125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	0.49	U	0.49	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.45	U	0.45	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	494		70 (39) - 130 (175)	99%	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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS022125\
Data File : PS029233.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Feb 2025 19:32
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 22 01:05:08 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
Quant Title : 8080.M
QLast Update : Sat Feb 22 01:02:20 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds						
4) S 2,4-DCAA	7.161	7.633	1959.5E6	464.9E6	475.547	494.404

Target Compounds

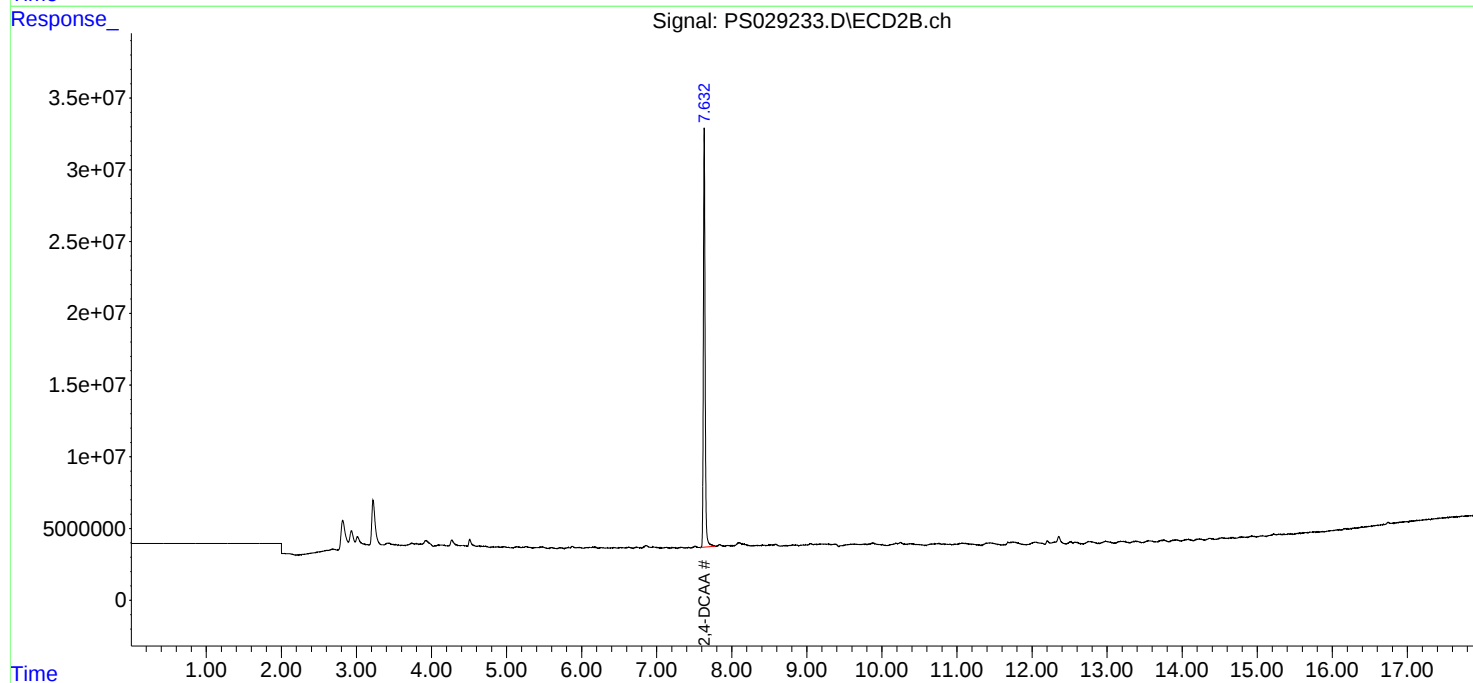
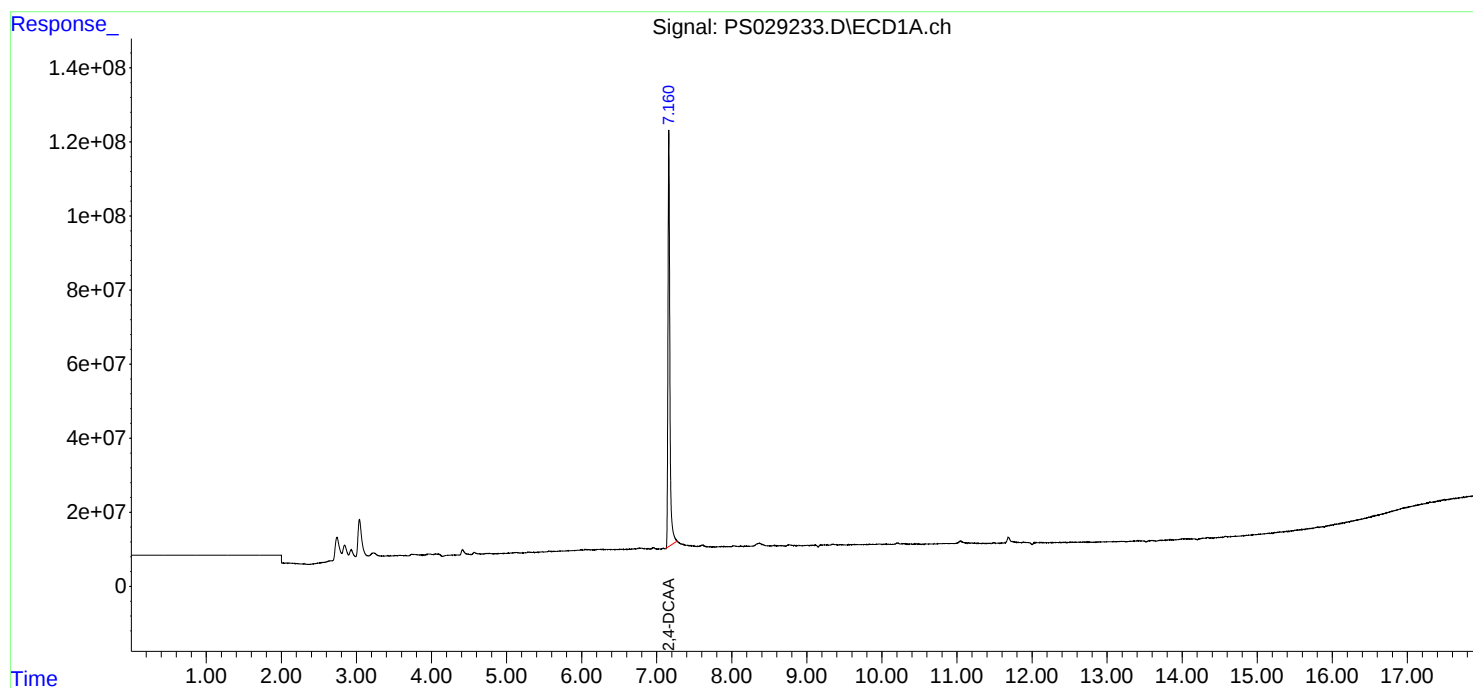
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

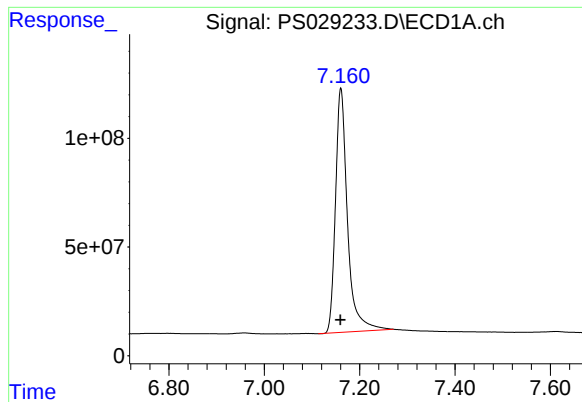
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS022125\
Data File : PS029233.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Feb 2025 19:32
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 22 01:05:08 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
Quant Title : 8080.M
QLast Update : Sat Feb 22 01:02:20 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

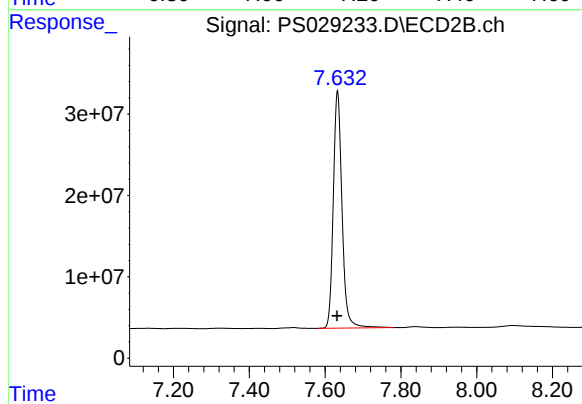




#4 2,4-DCAA

R.T.: 7.161 min
Delta R.T.: 0.000 min
Response: 1959528224
Conc: 475.55 ng/ml

Instrument :
ECD_S
ClientSampleId :
I.BLK



#4 2,4-DCAA

R.T.: 7.633 min
Delta R.T.: 0.000 min
Response: 464904309
Conc: 494.40 ng/ml

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/12/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/12/25
Client Sample ID:	PIBLK-PS029395.D	SDG No.:	Q1488
Lab Sample ID:	I.BLK-PS029395.D	Matrix:	TCLP
Analytical Method:	SW8151A	% Solid:	0
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	TCLP Herbicide
GPC Factor :	1.0	PH :	
Prep Method :	SW3510C	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS029395.D	1		03/12/25	ps031225

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	500		70 (39) - 130 (175)	100%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS031225\
Data File : PS029395.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 Mar 2025 09:03
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 13 02:28:03 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
Quant Title : 8080.M
QLast Update : Sat Feb 22 01:02:20 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds						
4) S 2,4-DCAA	7.156	7.620	2061.7E6	449.9E6	500.352	478.444

Target Compounds

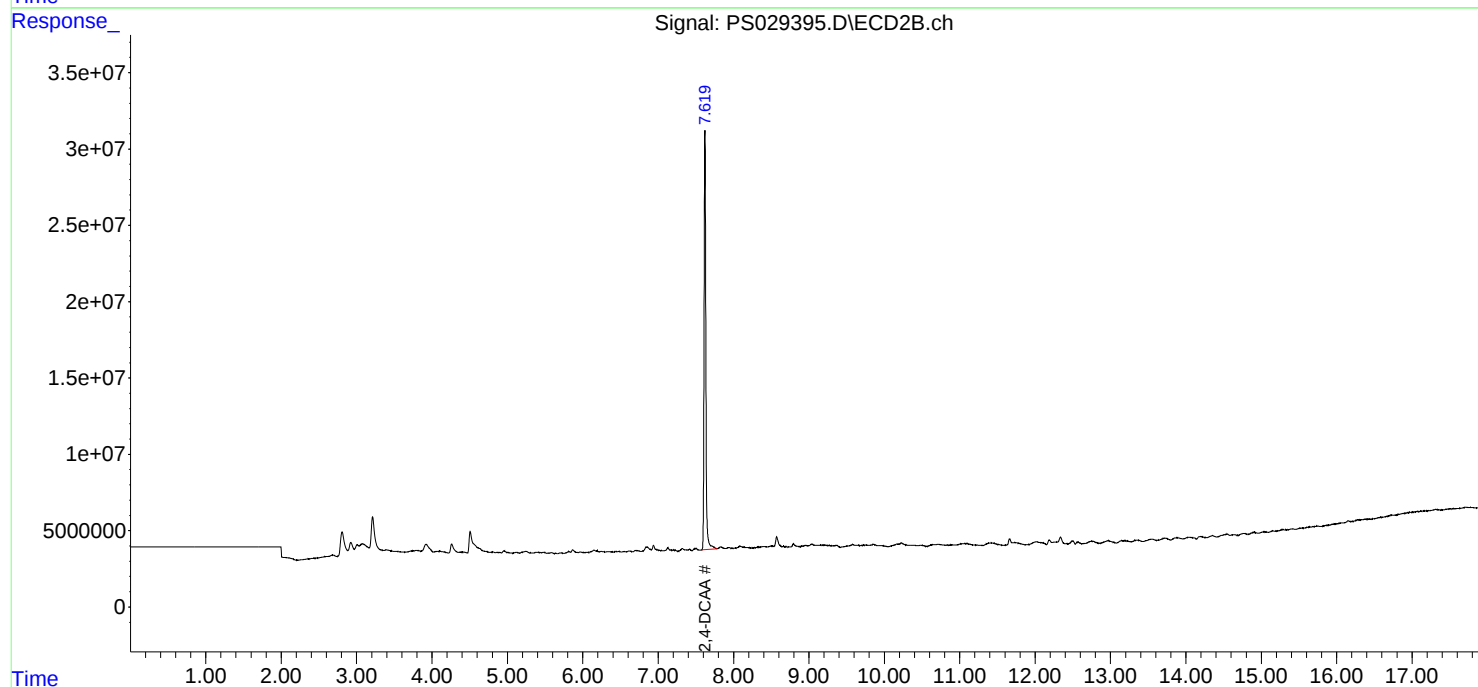
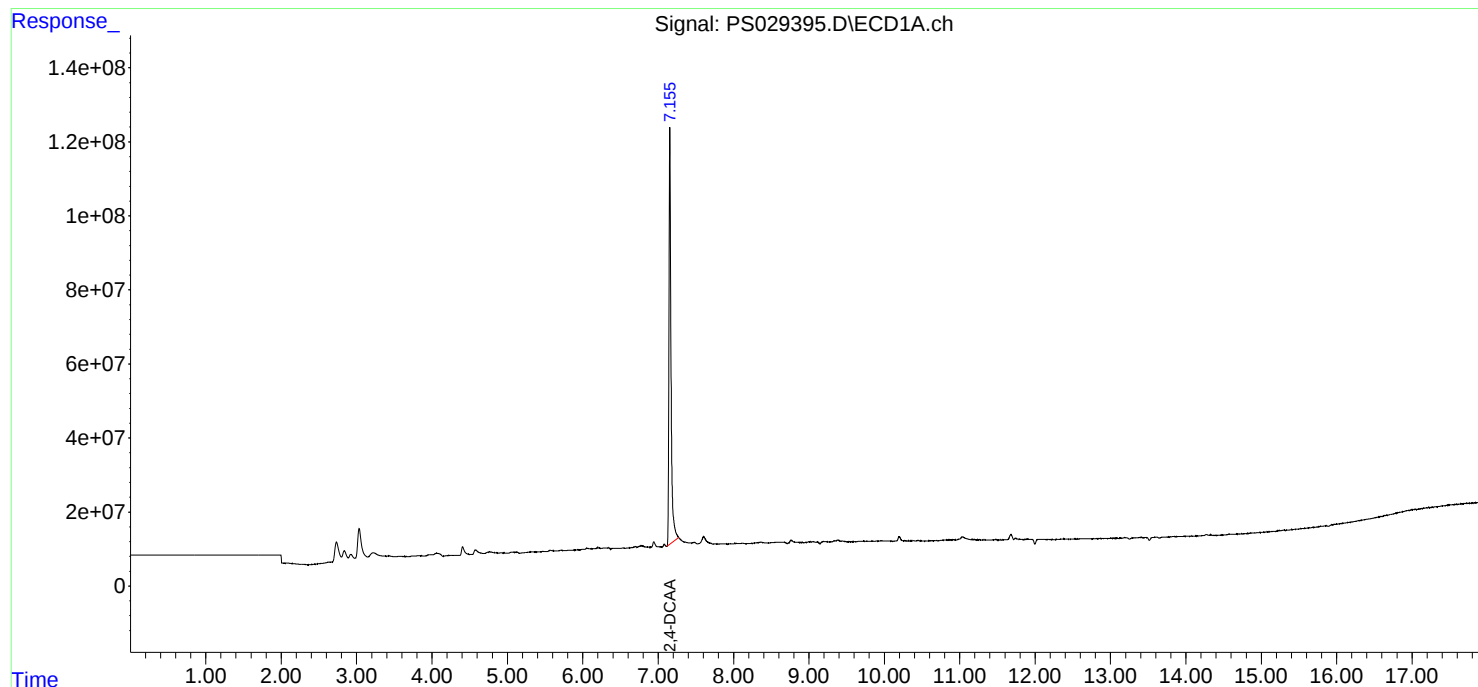
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

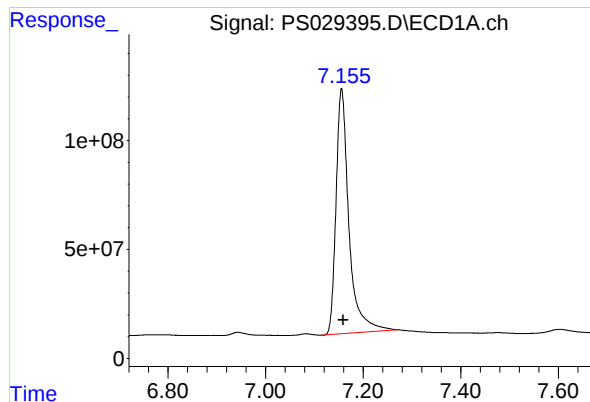
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS031225\
Data File : PS029395.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 Mar 2025 09:03
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 13 02:28:03 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
Quant Title : 8080.M
QLast Update : Sat Feb 22 01:02:20 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm





#4 2,4-DCAA

R.T.: 7.156 min

Delta R.T.: -0.004 min

Response: 2061739888

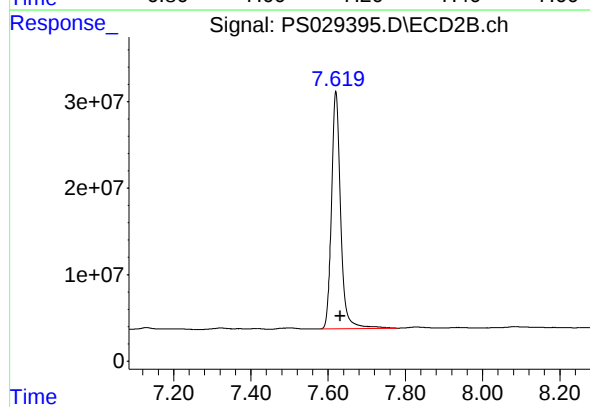
Conc: 500.35 ng/ml

Instrument :

ECD_S

ClientSampleId :

I.BLK



#4 2,4-DCAA

R.T.: 7.620 min

Delta R.T.: -0.012 min

Response: 449896888

Conc: 478.44 ng/ml

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/12/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/12/25
Client Sample ID:	PIBLK-PS029404.D	SDG No.:	Q1488
Lab Sample ID:	I.BLK-PS029404.D	Matrix:	TCLP
Analytical Method:	SW8151A	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Decanted:	
Soil Aliquot Vol:	uL	Final Vol:	10000 uL
Extraction Type:		Test:	TCLP Herbicide
GPC Factor :	1.0	Injection Volume :	
PH :			
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS029404.D	1		03/12/25	ps031225

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	502		70 (39) - 130 (175)	100%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS031225\
 Data File : PS029404.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 12 Mar 2025 13:02
 Operator : AR\AJ
 Sample : I.BLK
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 I.BLK

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Mar 13 02:29:49 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
 Quant Title : 8080.M
 QLast Update : Sat Feb 22 01:02:20 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
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System Monitoring Compounds

4) S	2,4-DCAA	7.155	7.620	2068.5E6	457.4E6	501.999	486.452
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Target Compounds

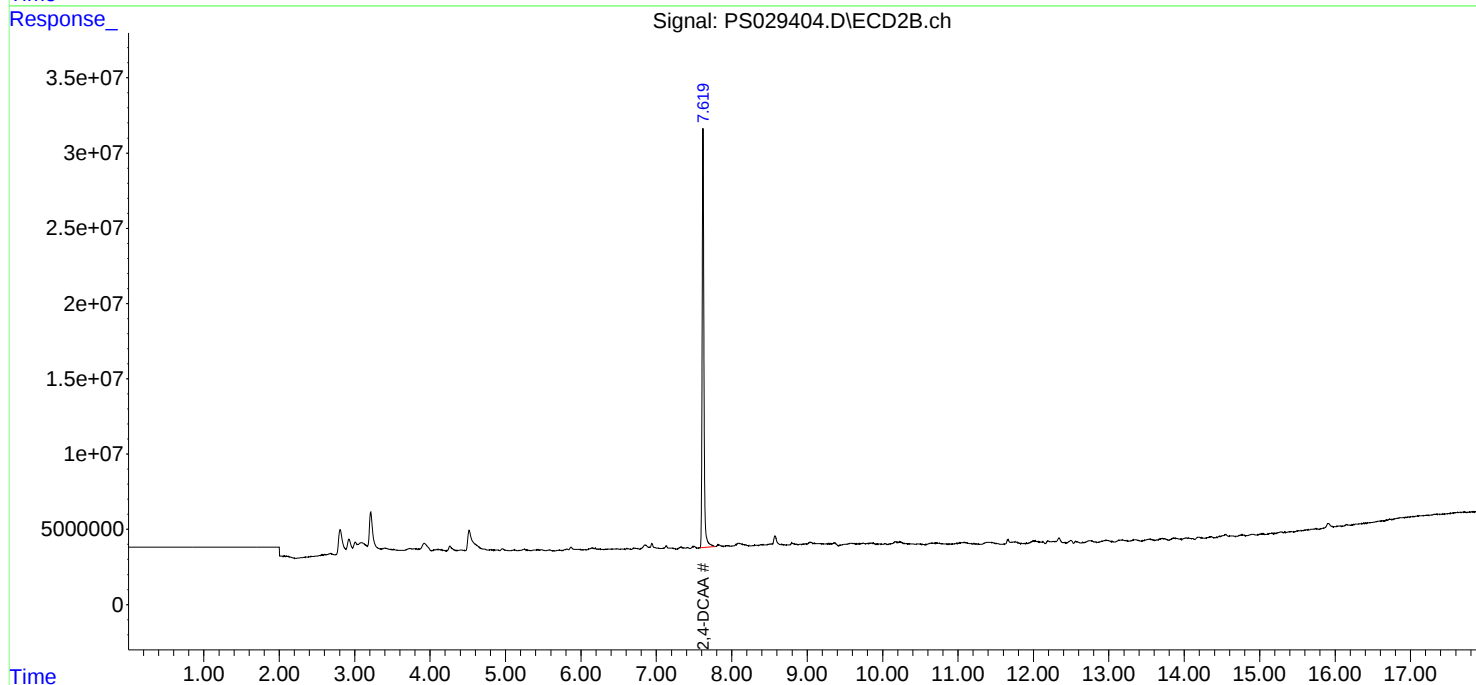
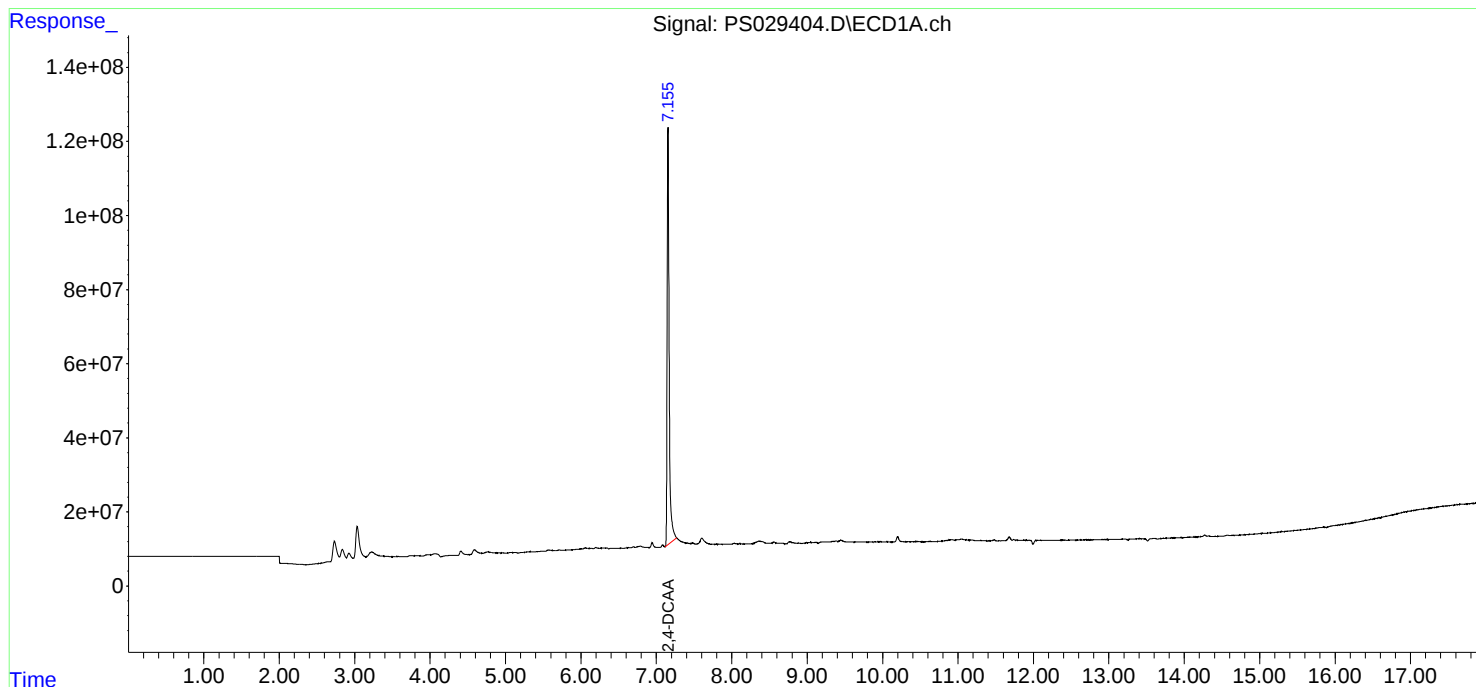
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

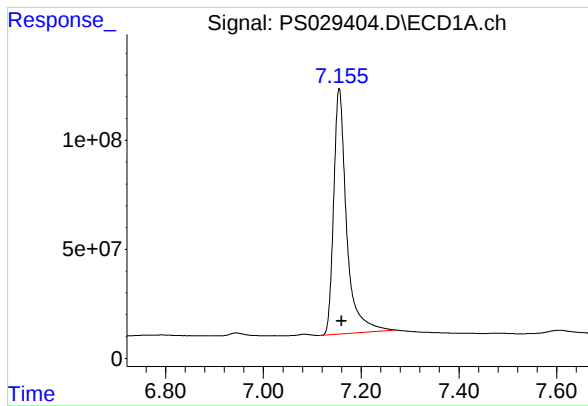
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS031225\
Data File : PS029404.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 Mar 2025 13:02
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 13 02:29:49 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
Quant Title : 8080.M
QLast Update : Sat Feb 22 01:02:20 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

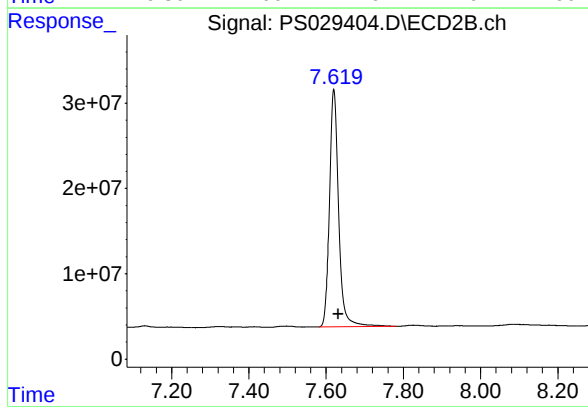




#4 2,4-DCAA

R.T.: 7.155 min
Delta R.T.: -0.005 min
Response: 2068526721
Conc: 502.00 ng/ml

Instrument :
ECD_S
ClientSampleId :
I.BLK



#4 2,4-DCAA

R.T.: 7.620 min
Delta R.T.: -0.012 min
Response: 457427053
Conc: 486.45 ng/ml

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/12/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/12/25
Client Sample ID:	PIBLK-PS029416.D	SDG No.:	Q1488
Lab Sample ID:	I.BLK-PS029416.D	Matrix:	TCLP
Analytical Method:	SW8151A	% Solid:	0 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Herbicide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS029416.D	1		03/12/25	ps031225

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	502		70 (39) - 130 (175)	100%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS031225\
Data File : PS029416.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 Mar 2025 17:51
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 13 02:32:03 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
Quant Title : 8080.M
QLast Update : Sat Feb 22 01:02:20 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
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System Monitoring Compounds

4) S	2,4-DCAA	7.155	7.619	2068.4E6	463.6E6	501.957	493.025
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Target Compounds

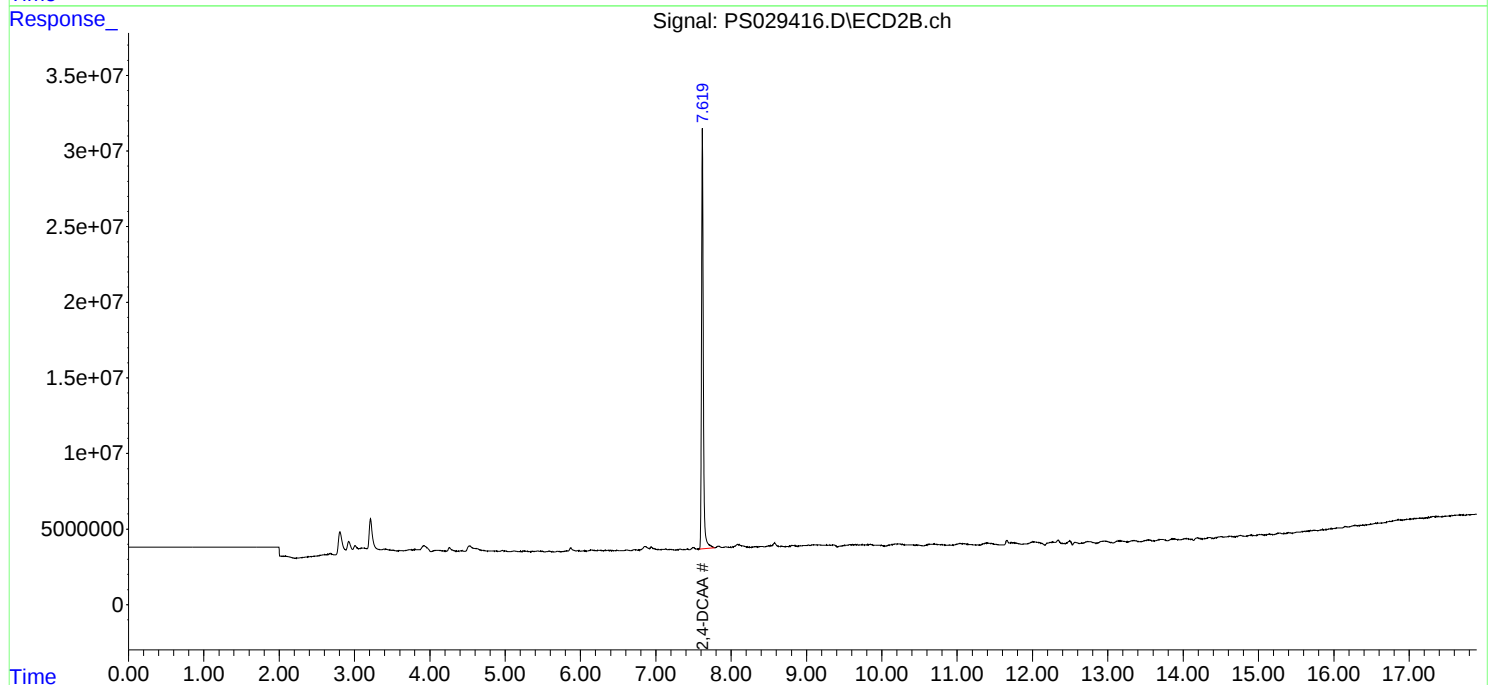
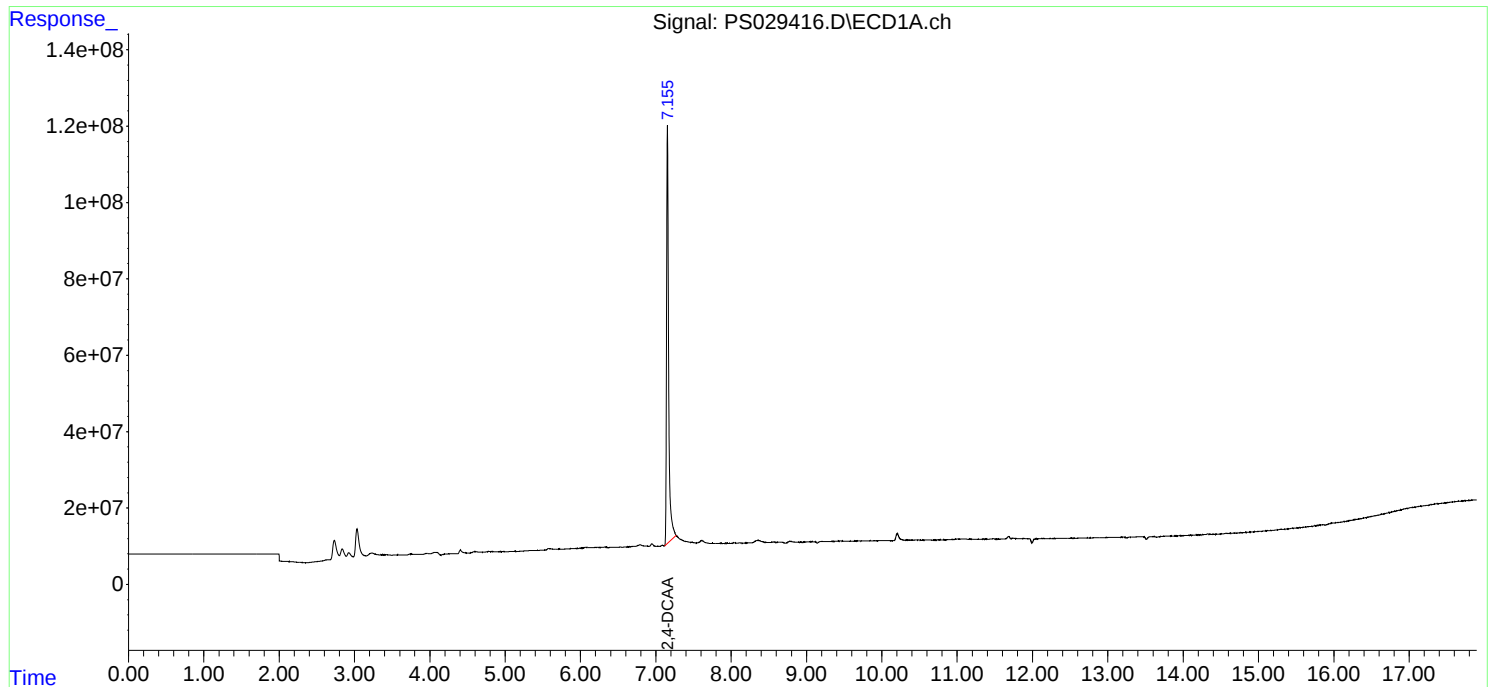
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

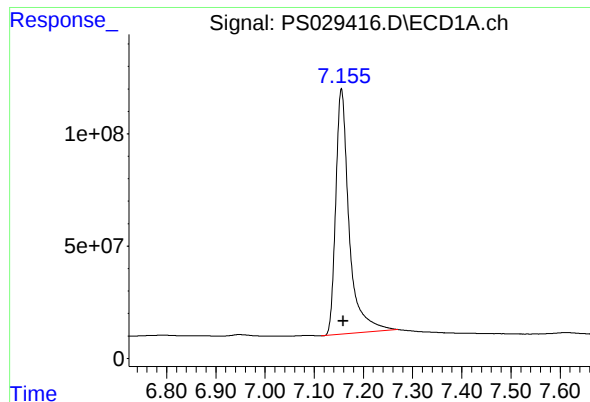
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS031225\
Data File : PS029416.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 Mar 2025 17:51
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 13 02:32:03 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
Quant Title : 8080.M
QLast Update : Sat Feb 22 01:02:20 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

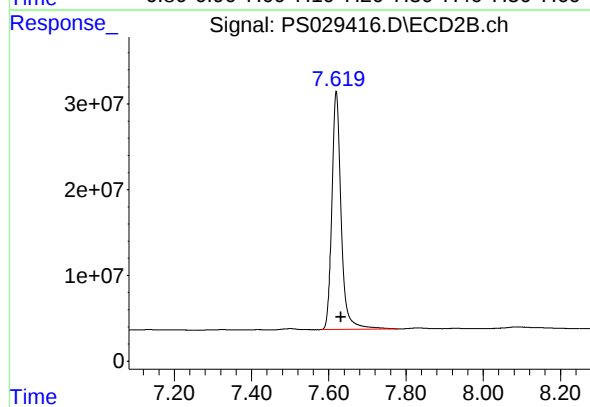




#4 2,4-DCAA

R.T.: 7.155 min
Delta R.T.: -0.004 min
Response: 2068354981
Conc: 501.96 ng/ml

Instrument :
ECD_S
ClientSampleId :
I.BLK



#4 2,4-DCAA

R.T.: 7.619 min
Delta R.T.: -0.013 min
Response: 463607769
Conc: 493.03 ng/ml

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	PB167090BS	SDG No.:	Q1488
Lab Sample ID:	PB167090BS	Matrix:	TCLP
Analytical Method:	SW8151A	% Solid:	0 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Herbicide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS029398.D	1	03/11/25 11:30	03/12/25 10:21	PB167090

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	4.80		0.92	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	5.10		0.78	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	521		70 (39) - 130 (175)	104%	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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS031225\
 Data File : PS029398.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 12 Mar 2025 10:21
 Operator : AR\AJ
 Sample : PB167090BS
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Instrument :

ECD_S

ClientSampleId :

PB167090BS

Manual Integrations

APPROVED

Reviewed By :Abdul Mirza 03/13/2025

Supervised By :Ankita Jodhani 03/13/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Mar 13 02:28:42 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
 Quant Title : 8080.M
 QLast Update : Sat Feb 22 01:02:20 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
4) S	2,4-DCAA	7.156	7.620	2145.3E6	441.0E6	520.621	468.998
Target Compounds							
1) T	Dalapon	2.598	2.644	2585.9E6	951.5E6	468.442	449.438
2) T	3,5-DICHL...	6.338	6.595	2863.8E6	623.4E6	489.448	440.249
3) T	4-Nitroph...	6.957	7.153	966.2E6	333.1E6	412.870	417.664
5) T	DICAMBA	7.337	7.813	8630.9E6	2303.0E6	497.000	446.932m
6) T	MCP	7.516	7.917	529.3E6	100.2E6	42.944	42.819
7) T	MCPA	7.663	8.156	786.9E6	139.8E6	46.439	43.815
8) T	DICHLORPROP	8.037	8.523	2253.7E6	585.9E6	490.318	458.155
9) T	2,4-D	8.268	8.848	2291.3E6	576.8E6	482.338	454.200
10) T	Pentachlo...	8.558	9.364	33171.8E6	11102.8E6	568.436	482.465
11) T	2,4,5-TP ...	9.132	9.741	12560.8E6	4277.8E6	510.871	473.378
12) T	2,4,5-T	9.424	10.155	12911.2E6	3787.7E6	506.547	461.338
13) T	2,4-DB	9.993	10.718	1928.9E6	362.3E6	461.965	473.273m
14) T	DINOSEB	11.185	11.093	8178.4E6	2708.4E6	491.764m	446.818m
15) T	Picloram	11.002	12.167	13656.6E6	4781.1E6	447.121	413.502
16) T	DCPA	11.482	12.126	15402.3E6	5660.9E6	513.349	478.255

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS031225\
Data File : PS029398.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 Mar 2025 10:21
Operator : AR\AJ
Sample : PB167090BS
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :

ECD_S

ClientSampleId :

PB167090BS

Manual Integrations

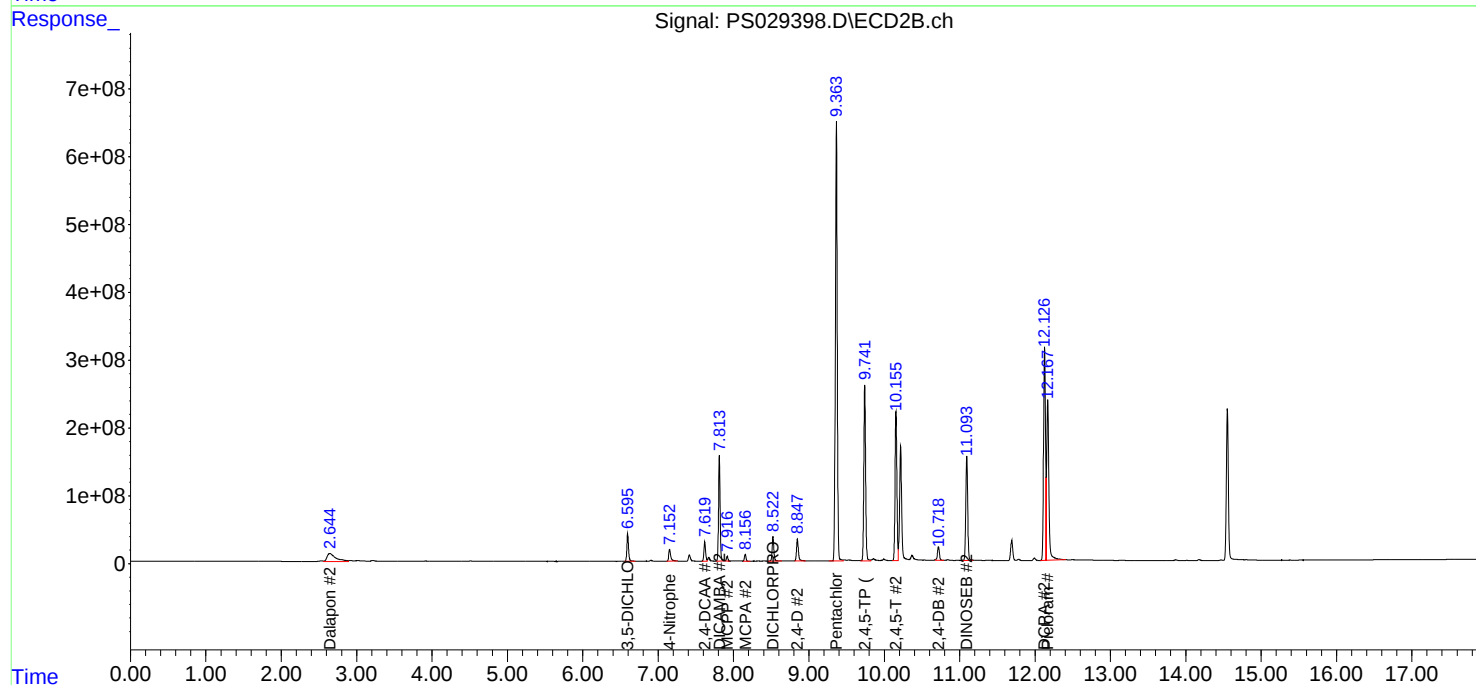
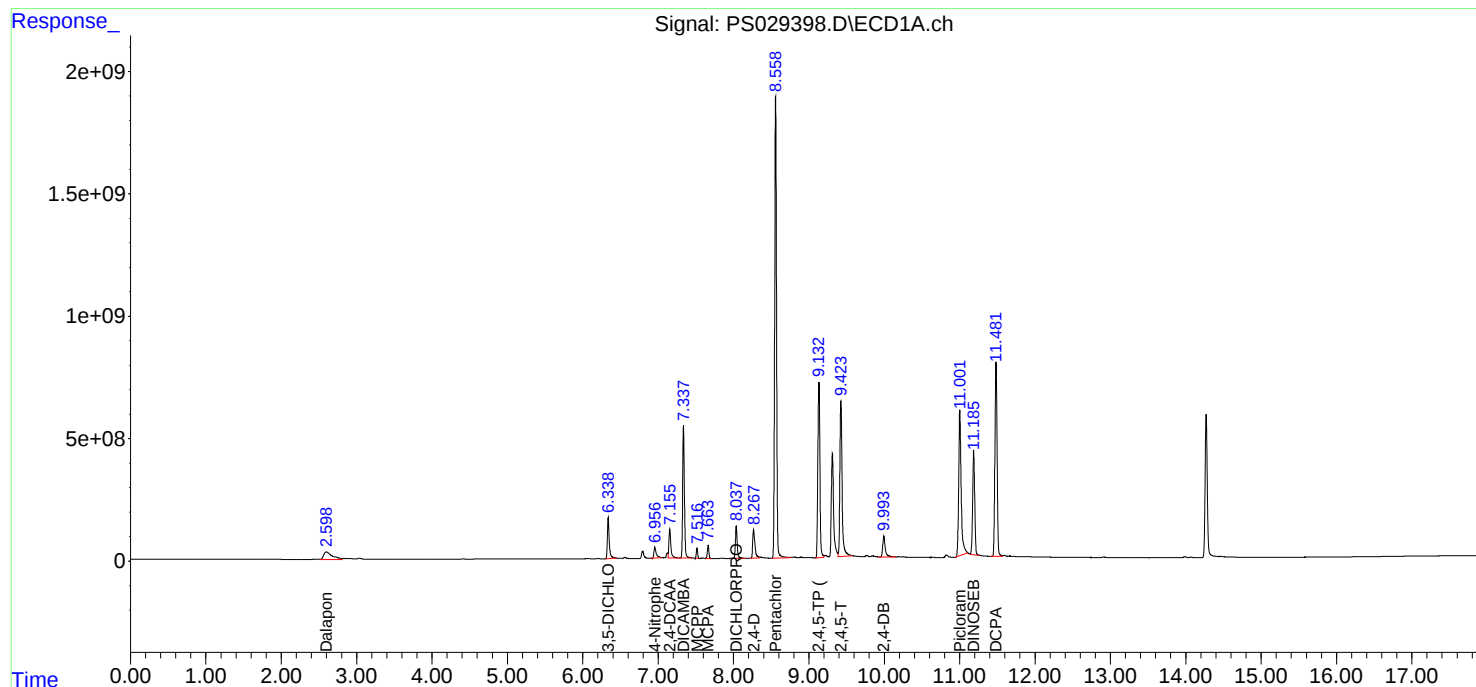
APPROVED

Reviewed By :Abdul Mirza 03/13/2025

Supervised By :Ankita Jodhani 03/13/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 13 02:28:42 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
Quant Title : 8080.M
QLast Update : Sat Feb 22 01:02:20 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm



Report of Analysis

Client:	Portal Partners Tri-Venture			Date Collected:	03/04/25	
Project:	Amtrak Sawtooth Bridges 2025			Date Received:	03/04/25	
Client Sample ID:	ENV-101-SB01MS			SDG No.:	Q1488	
Lab Sample ID:	Q1488-02MS			Matrix:	TCLP	
Analytical Method:	SW8151A			% Solid:	0	Decanted:
Sample Wt/Vol:	100	Units:	mL	Final Vol:	10000	uL
Soil Aliquot Vol:			uL	Test:	TCLP Herbicide	
Extraction Type:				Injection Volume :		
GPC Factor :	1.0		PH :			
Prep Method :	SW3510C					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS029402.D	1	03/11/25 11:30	03/12/25 12:14	PB167090

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	52.7		9.20	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	70.2	P	7.80	20.0	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	489		70 (39) - 130 (175)	98%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS031225\
 Data File : PS029402.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 12 Mar 2025 12:14
 Operator : AR\AJ
 Sample : Q1488-02MS
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 ENV-101-SB01MS

Manual Integrations
 APPROVED

Reviewed By : Abdul Mirza 03/13/2025
 Supervised By : Ankita Jodhani 03/13/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Mar 13 02:29:27 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
 Quant Title : 8080.M
 QLast Update : Sat Feb 22 01:02:20 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
 Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds						
4) S 2,4-DCAA	7.156	7.619	2015.2E6	343.0E6	489.060	364.774 #
Target Compounds						
1) T Dalapon	2.597	2.645	1473.8E6	702.5E6	266.980m	331.805m
2) T 3,5-DICHL...	6.337	6.594	2716.3E6	568.1E6	464.228	401.160
3) T 4-Nitroph...	6.958	7.157	25936624	6145422	11.083m	7.705m#
5) T DICAMBA	7.336	7.811	7585.8E6	2107.0E6	436.818m	408.898m
6) T MCPP	7.515	7.916	558.8E6	98960114	45.333m	42.306
7) T MCPA	7.663	8.155	697.5E6	224.6E6	41.161	70.423 #
8) T DICHLORPROP	8.036	8.521	2074.9E6	623.9E6	451.422	487.917
9) T 2,4-D	8.265	8.845	2505.7E6	619.4E6	527.474	487.792
10) T Pentachlo...	8.560	9.361	38770.7E6	13195.5E6	664.380	573.399
11) T 2,4,5-TP ...	9.131	9.740	12815.6E6	6346.5E6	521.238	702.301 #
12) T 2,4,5-T	9.421	10.153	12298.4E6	3771.6E6	482.502	459.377
13) T 2,4-DB	9.991	10.715	1492.2E6	367.3E6	357.371m	479.765m#
14) T DINOSEB	11.185	11.091	5773.1E6	1864.9E6	347.133m	307.664m
15) T Picloram	11.000	12.165	12199.8E6	4089.9E6	399.425	353.724
16) T DCPA	11.479	12.125	12060.0E6	5304.0E6	401.953	448.102

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS031225\
Data File : PS029402.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 Mar 2025 12:14
Operator : AR\AJ
Sample : Q1488-02MS
Misc :
ALS Vial : 9 Sample Multiplier: 1

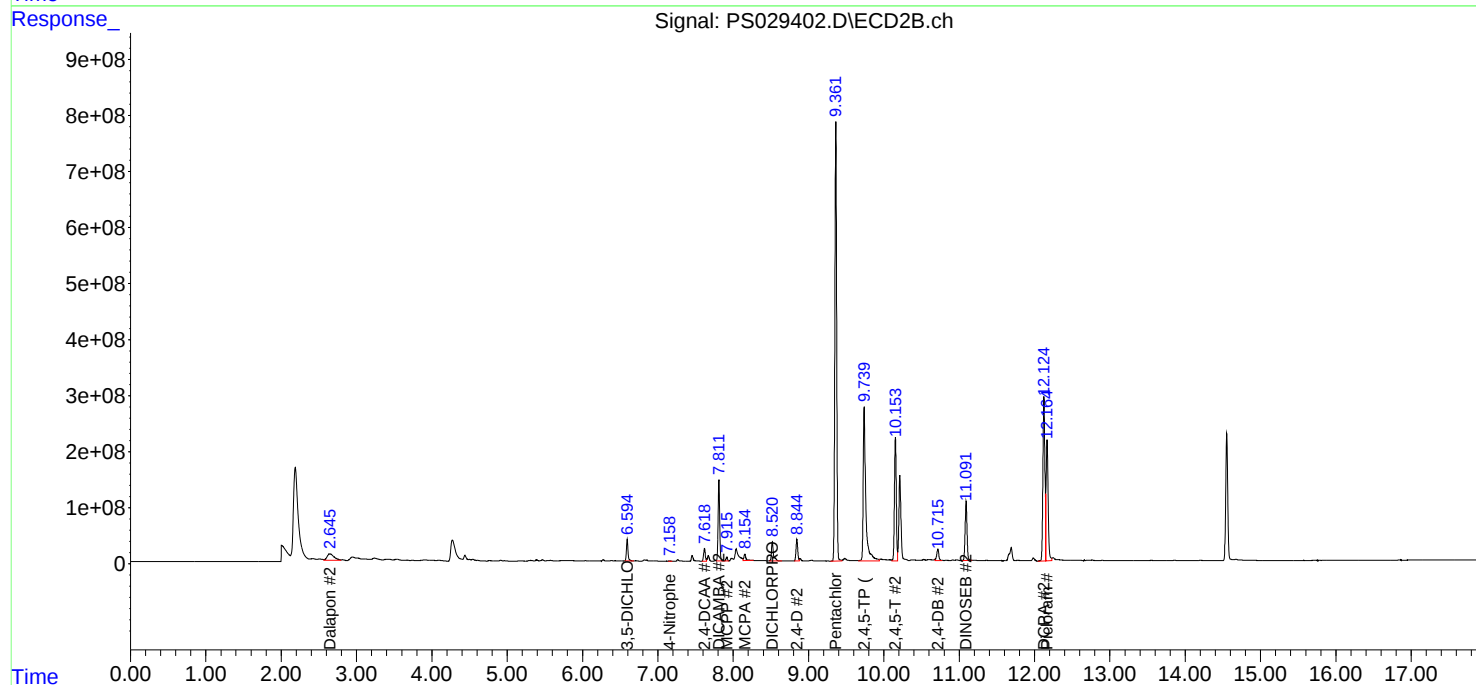
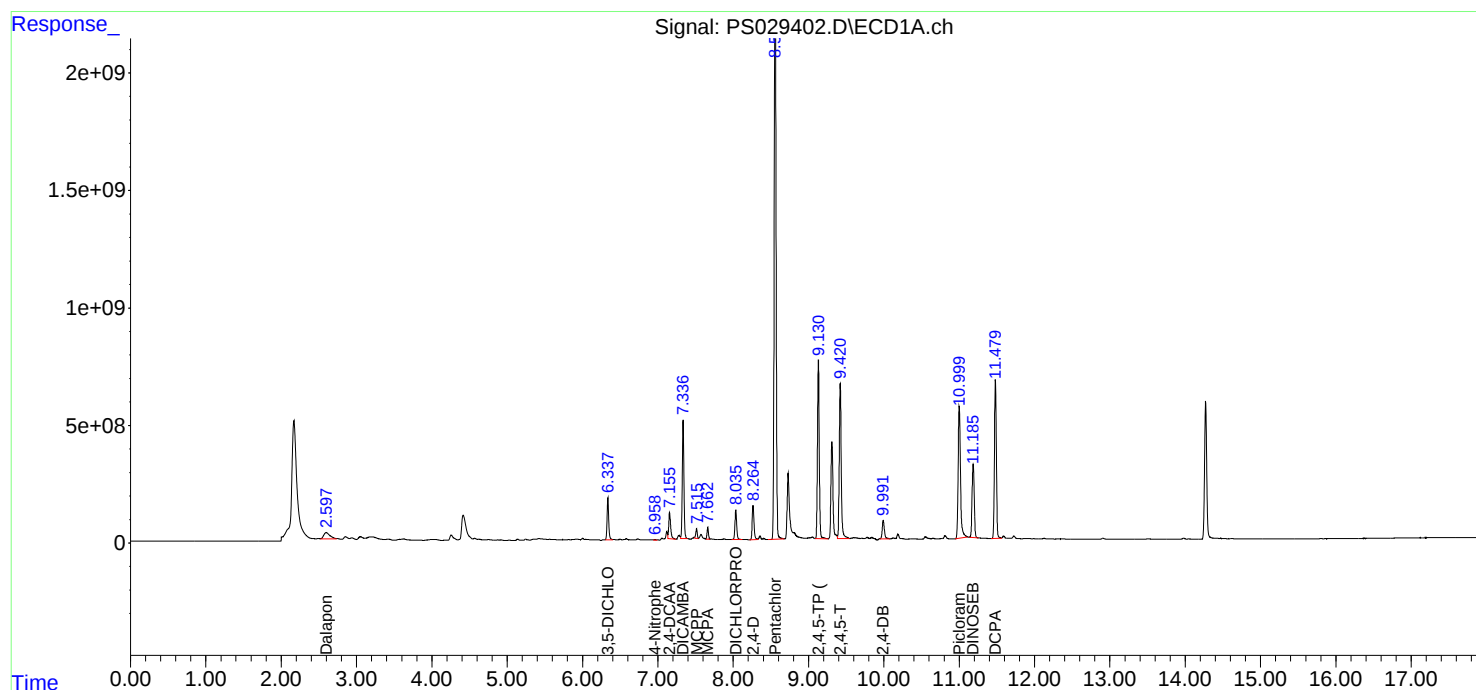
Instrument :
ECD_S
ClientSampleId :
ENV-101-SB01MS

Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 03/13/2025
Supervised By :Ankita Jodhani 03/13/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 13 02:29:27 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
Quant Title : 8080.M
QLast Update : Sat Feb 22 01:02:20 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm



Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	03/04/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	03/04/25
Client Sample ID:	ENV-101-SB01MSD	SDG No.:	Q1488
Lab Sample ID:	Q1488-02MSD	Matrix:	TCLP
Analytical Method:	SW8151A	% Solid:	0
Sample Wt/Vol:	100	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	TCLP Herbicide
GPC Factor :	1.0	PH :	
Prep Method :	SW3510C	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS029403.D	1	03/11/25 11:30	03/12/25 12:38	PB167090

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	53.1		9.20	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	75.8	P	7.80	20.0	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	483		70 (39) - 130 (175)	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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS031225\
 Data File : PS029403.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 12 Mar 2025 12:38
 Operator : AR\AJ
 Sample : Q1488-02MSD
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

Instrument :

ECD_S

ClientSampleId :

ENV-101-SB01MSD

Manual Integrations

APPROVED

Reviewed By :Abdul Mirza 03/13/2025

Supervised By :Ankita Jodhani 03/13/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Mar 13 02:29:38 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
 Quant Title : 8080.M
 QLast Update : Sat Feb 22 01:02:20 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml

System Monitoring Compounds							
4) S	2,4-DCAA	7.156	7.619	1989.3E6	334.6E6	482.766	355.858 #
Target Compounds							
1) T	Dalapon	2.599	2.646	1562.5E6	626.6E6	283.039m	295.965m
2) T	3,5-DICHL...	6.337	6.594	2697.2E6	548.3E6	460.964	387.161m
3) T	4-Nitroph...	6.959	7.158	28607104	6831113	12.224m	8.565m#
5) T	DICAMBA	7.336	7.812	7483.1E6	2088.1E6	430.907m	405.225m
6) T	MCP	7.516	7.917	556.7E6	99930565	45.166m	42.721
7) T	MCPA	7.663	8.156	707.2E6	246.4E6	41.733	77.260 #
8) T	DICHLORPROP	8.036	8.522	2069.8E6	616.3E6	450.312	481.979
9) T	2,4-D	8.265	8.846	2521.6E6	627.1E6	530.821	493.833
10) T	Pentachlo...	8.558	9.363	38188.8E6	12922.3E6	654.408	561.531
11) T	2,4,5-TP ...	9.131	9.742	12808.4E6	6851.8E6	520.944	758.224 #
12) T	2,4,5-T	9.422	10.154	12413.7E6	3809.8E6	487.028	464.030
13) T	2,4-DB	9.991	10.716	1495.8E6	369.2E6	358.242m	482.191m#
14) T	DINOSEB	11.185	11.092	5623.2E6	1816.7E6	338.118m	299.713m
15) T	Picloram	11.000	12.165	12160.3E6	4088.2E6	398.129	353.580
16) T	DCPA	11.479	12.125	12041.0E6	5298.2E6	401.319	447.613

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS031225\
Data File : PS029403.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 Mar 2025 12:38
Operator : AR\AJ
Sample : Q1488-02MSD
Misc :
ALS Vial : 10 Sample Multiplier: 1

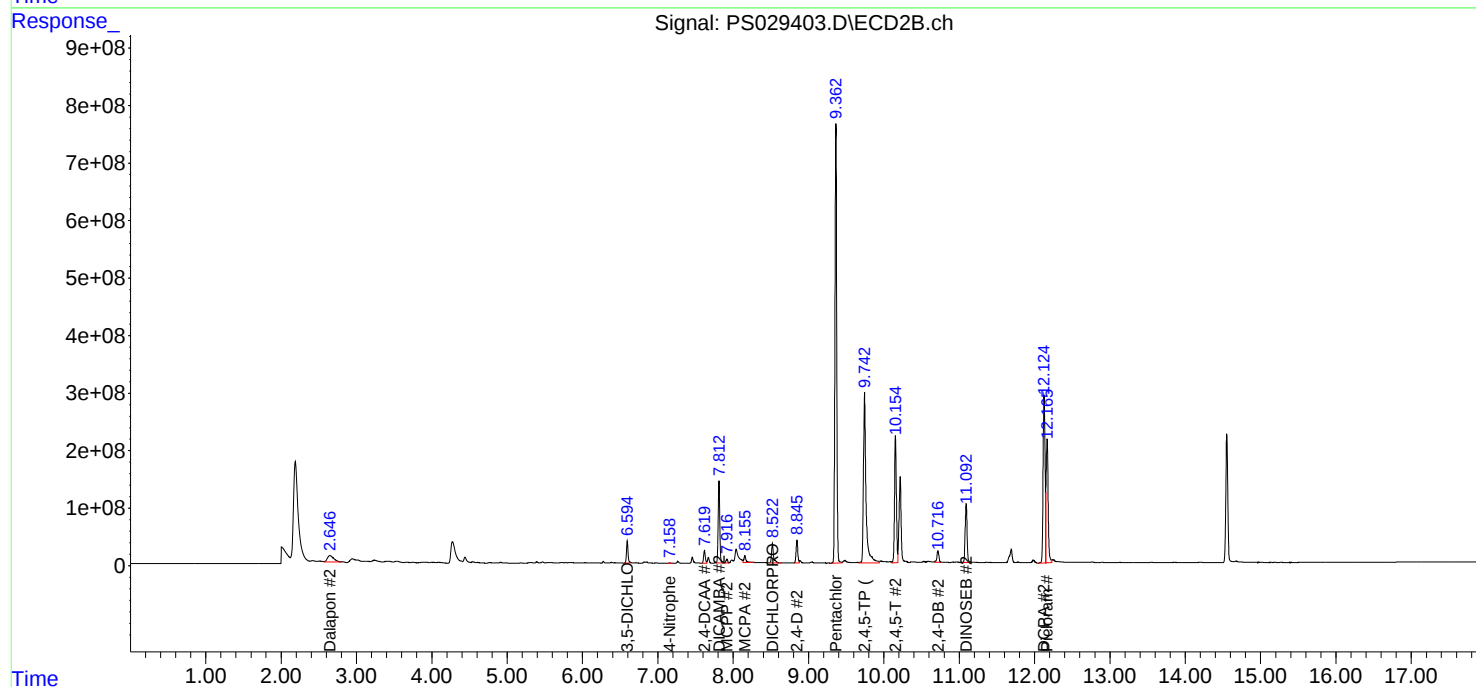
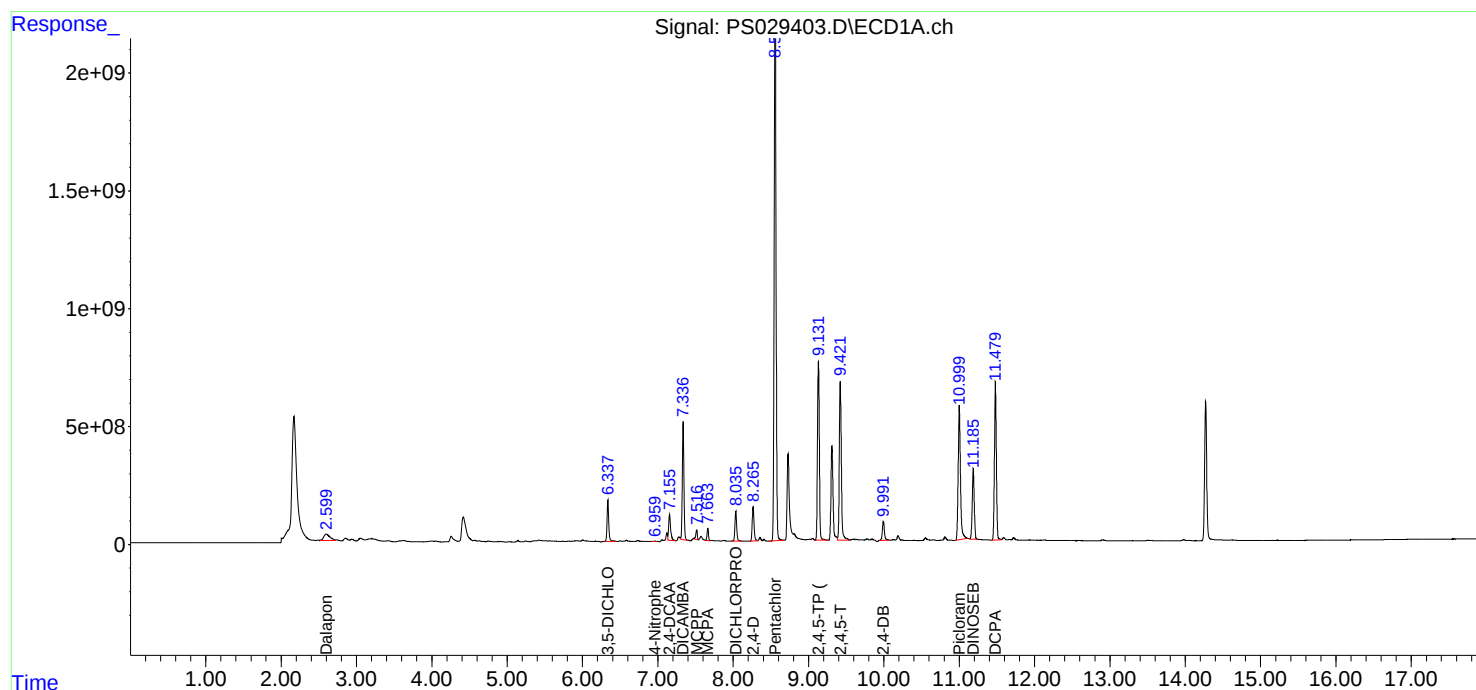
Instrument :
ECD_S
ClientSampleId :
ENV-101-SB01MSD

Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 03/13/2025
Supervised By :Ankita Jodhani 03/13/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 13 02:29:38 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS022125.M
Quant Title : 8080.M
QLast Update : Sat Feb 22 01:02:20 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm





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

Manual Integration Report

Sequence:

ps022125

Instrument

ECD_s

Sample ID

File ID

Parameter

Review By

Review On

Supervised
By

Supervised On

Reason

Manual Integration Report

Sequence:	ps031225	Instrument	ECD_s
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
HSTDCCC750	PS029396.D	2,4-DB #2	Abdul	3/13/2025 8:40:01 AM	Ankita	3/13/2025 10:13:02	Peak Integrated by Software
HSTDCCC750	PS029396.D	DICAMBA #2	Abdul	3/13/2025 8:40:01 AM	Ankita	3/13/2025 10:13:02	Peak Integrated by Software
HSTDCCC750	PS029396.D	DINOSEB	Abdul	3/13/2025 8:40:01 AM	Ankita	3/13/2025 10:13:02	Peak Integrated by Software
HSTDCCC750	PS029396.D	DINOSEB #2	Abdul	3/13/2025 8:40:01 AM	Ankita	3/13/2025 10:13:02	Peak Integrated by Software
PB167090BS	PS029398.D	2,4-DB #2	Abdul	3/13/2025 8:40:07 AM	Ankita	3/13/2025 10:13:04	Peak Integrated by Software
PB167090BS	PS029398.D	DICAMBA #2	Abdul	3/13/2025 8:40:07 AM	Ankita	3/13/2025 10:13:04	Peak Integrated by Software
PB167090BS	PS029398.D	DINOSEB	Abdul	3/13/2025 8:40:07 AM	Ankita	3/13/2025 10:13:04	Peak Integrated by Software
PB167090BS	PS029398.D	DINOSEB #2	Abdul	3/13/2025 8:40:07 AM	Ankita	3/13/2025 10:13:04	Peak Integrated by Software
PB167020TB	PS029399.D	2,4-DCAA	Abdul	3/13/2025 8:40:16 AM	Ankita	3/13/2025 10:13:07	Peak Integrated by Software
Q1488-02MS	PS029402.D	2,4-DB	Abdul	3/13/2025 8:40:29 AM	Ankita	3/13/2025 10:13:13	Peak Integrated by Software
Q1488-02MS	PS029402.D	2,4-DB #2	Abdul	3/13/2025 8:40:29 AM	Ankita	3/13/2025 10:13:13	Peak Integrated by Software
Q1488-02MS	PS029402.D	4-Nitrophenol	Abdul	3/13/2025 8:40:29 AM	Ankita	3/13/2025 10:13:13	Peak Integrated by Software
Q1488-02MS	PS029402.D	4-Nitrophenol #2	Abdul	3/13/2025 8:40:29 AM	Ankita	3/13/2025 10:13:13	Peak Integrated by Software

Manual Integration Report

Sequence:	ps031225	Instrument	ECD_s
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q1488-02MS	PS029402.D	Dalapon	Abdul	3/13/2025 8:40:29 AM	Ankita	3/13/2025 10:13:13	Peak Integrated by Software
Q1488-02MS	PS029402.D	Dalapon #2	Abdul	3/13/2025 8:40:29 AM	Ankita	3/13/2025 10:13:13	Peak Integrated by Software
Q1488-02MS	PS029402.D	DICAMBA	Abdul	3/13/2025 8:40:29 AM	Ankita	3/13/2025 10:13:13	Peak Integrated by Software
Q1488-02MS	PS029402.D	DICAMBA #2	Abdul	3/13/2025 8:40:29 AM	Ankita	3/13/2025 10:13:13	Peak Integrated by Software
Q1488-02MS	PS029402.D	DINOSEB	Abdul	3/13/2025 8:40:29 AM	Ankita	3/13/2025 10:13:13	Peak Integrated by Software
Q1488-02MS	PS029402.D	DINOSEB #2	Abdul	3/13/2025 8:40:29 AM	Ankita	3/13/2025 10:13:13	Peak Integrated by Software
Q1488-02MS	PS029402.D	MCPD	Abdul	3/13/2025 8:40:29 AM	Ankita	3/13/2025 10:13:13	Peak Integrated by Software
Q1488-02MSD	PS029403.D	2,4-DB	Abdul	3/13/2025 8:40:36 AM	Ankita	3/13/2025 10:13:14	Peak Integrated by Software
Q1488-02MSD	PS029403.D	2,4-DB #2	Abdul	3/13/2025 8:40:36 AM	Ankita	3/13/2025 10:13:14	Peak Integrated by Software
Q1488-02MSD	PS029403.D	3,5-DICHLOROBENZOIC ACID #2	Abdul	3/13/2025 8:40:36 AM	Ankita	3/13/2025 10:13:14	Peak Integrated by Software
Q1488-02MSD	PS029403.D	4-Nitrophenol	Abdul	3/13/2025 8:40:36 AM	Ankita	3/13/2025 10:13:14	Peak Integrated by Software
Q1488-02MSD	PS029403.D	4-Nitrophenol #2	Abdul	3/13/2025 8:40:36 AM	Ankita	3/13/2025 10:13:14	Peak Integrated by Software
Q1488-02MSD	PS029403.D	Dalapon	Abdul	3/13/2025 8:40:36 AM	Ankita	3/13/2025 10:13:14	Peak Integrated by Software

Manual Integration Report

Sequence:	ps031225	Instrument	ECD_s
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q1488-02MSD	PS029403.D	Dalapon #2	Abdul	3/13/2025 8:40:36 AM	Ankita	3/13/2025 10:13:14	Peak Integrated by Software
Q1488-02MSD	PS029403.D	DICAMBA	Abdul	3/13/2025 8:40:36 AM	Ankita	3/13/2025 10:13:14	Peak Integrated by Software
Q1488-02MSD	PS029403.D	DICAMBA #2	Abdul	3/13/2025 8:40:36 AM	Ankita	3/13/2025 10:13:14	Peak Integrated by Software
Q1488-02MSD	PS029403.D	DINOSEB	Abdul	3/13/2025 8:40:36 AM	Ankita	3/13/2025 10:13:14	Peak Integrated by Software
Q1488-02MSD	PS029403.D	DINOSEB #2	Abdul	3/13/2025 8:40:36 AM	Ankita	3/13/2025 10:13:14	Peak Integrated by Software
Q1488-02MSD	PS029403.D	MCPP	Abdul	3/13/2025 8:40:36 AM	Ankita	3/13/2025 10:13:14	Peak Integrated by Software
HSTDCCC750	PS029405.D	2,4-DB #2	Abdul	3/13/2025 8:40:43 AM	Ankita	3/13/2025 10:13:14	Peak Integrated by Software
HSTDCCC750	PS029405.D	DICAMBA #2	Abdul	3/13/2025 8:40:43 AM	Ankita	3/13/2025 10:13:14	Peak Integrated by Software
HSTDCCC750	PS029405.D	DINOSEB	Abdul	3/13/2025 8:40:43 AM	Ankita	3/13/2025 10:13:14	Peak Integrated by Software
HSTDCCC750	PS029405.D	DINOSEB #2	Abdul	3/13/2025 8:40:43 AM	Ankita	3/13/2025 10:13:14	Peak Integrated by Software
Q1488-04	PS029406.D	2,4-DCAA	Abdul	3/13/2025 8:40:49 AM	Ankita	3/13/2025 10:13:16	Peak Integrated by Software
Q1488-04	PS029406.D	2,4-DCAA #2	Abdul	3/13/2025 8:40:49 AM	Ankita	3/13/2025 10:13:16	Peak Integrated by Software
Q1488-06	PS029407.D	2,4-DCAA	Abdul	3/13/2025 8:40:55 AM	Ankita	3/13/2025 10:13:17	Peak Integrated by Software

Manual Integration Report

Sequence:	ps031225	Instrument	ECD_s
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q1488-06	PS029407.D	2,4-DCAA #2	Abdul	3/13/2025 8:40:55 AM	Ankita	3/13/2025 10:13:17	Peak Integrated by Software
Q1488-08	PS029408.D	2,4-DCAA	Abdul	3/13/2025 8:40:59 AM	Ankita	3/13/2025 10:13:19	Peak Integrated by Software
Q1488-08	PS029408.D	2,4-DCAA #2	Abdul	3/13/2025 8:40:59 AM	Ankita	3/13/2025 10:13:19	Peak Integrated by Software
HSTDCCC750	PS029417.D	2,4-DB #2	Abdul	3/13/2025 8:41:18 AM	Ankita	3/13/2025 10:13:29	Peak Integrated by Software
HSTDCCC750	PS029417.D	2,4-DCAA	Abdul	3/13/2025 8:41:18 AM	Ankita	3/13/2025 10:13:29	Peak Integrated by Software
HSTDCCC750	PS029417.D	DICAMBA #2	Abdul	3/13/2025 8:41:18 AM	Ankita	3/13/2025 10:13:29	Peak Integrated by Software
HSTDCCC750	PS029417.D	DINOSEB	Abdul	3/13/2025 8:41:18 AM	Ankita	3/13/2025 10:13:29	Peak Integrated by Software
HSTDCCC750	PS029417.D	DINOSEB #2	Abdul	3/13/2025 8:41:18 AM	Ankita	3/13/2025 10:13:29	Peak Integrated by Software
HSTDCCC750	PS029417.D	MCPP	Abdul	3/13/2025 8:41:18 AM	Ankita	3/13/2025 10:13:29	Peak Integrated by Software

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS022125

Review By	Abdul	Review On	2/22/2025 8:32:12 PM
Supervise By	Ankita	Supervise On	2/24/2025 3:48:02 PM
SubDirectory	PS022125	HP Acquire Method	HP Processing Method ps0221258151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24064,PP24065,PP24066,PP24067,PP24068		
CCC Internal Standard/PEM	PP24066		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24069,PP24070		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	HEXANE	PS029232.D	21 Feb 2025 19:08	AR\AJ	Ok
2	I.BLK	PS029233.D	21 Feb 2025 19:32	AR\AJ	Ok
3	HSTDICC200	PS029234.D	21 Feb 2025 19:56	AR\AJ	Ok
4	HSTDICC500	PS029235.D	21 Feb 2025 20:20	AR\AJ	Ok
5	HSTDICC750	PS029236.D	21 Feb 2025 20:44	AR\AJ	Ok
6	HSTDICC1000	PS029237.D	21 Feb 2025 21:08	AR\AJ	Ok
7	HSTDICC1500	PS029238.D	21 Feb 2025 21:32	AR\AJ	Ok
8	HSTDICV750	PS029239.D	21 Feb 2025 21:56	AR\AJ	Ok
9	I.BLK	PS029240.D	21 Feb 2025 22:20	AR\AJ	Ok
10	HSTDCCC750	PS029241.D	21 Feb 2025 22:44	AR\AJ	Ok
11	Q1383-03	PS029242.D	21 Feb 2025 23:08	AR\AJ	Ok,M
12	Q1383-05	PS029243.D	21 Feb 2025 23:32	AR\AJ	Ok,M
13	Q1383-07	PS029244.D	21 Feb 2025 23:56	AR\AJ	Ok,M
14	Q1383-09	PS029245.D	22 Feb 2025 00:20	AR\AJ	Ok,M
15	Q1383-11	PS029246.D	22 Feb 2025 00:44	AR\AJ	Ok,M
16	Q1383-13	PS029247.D	22 Feb 2025 01:08	AR\AJ	ReRun
17	Q1383-15	PS029248.D	22 Feb 2025 01:32	AR\AJ	Ok,M
18	Q1383-17	PS029249.D	22 Feb 2025 01:56	AR\AJ	Ok
19	Q1383-19	PS029250.D	22 Feb 2025 02:20	AR\AJ	Ok
20	I.BLK	PS029251.D	22 Feb 2025 02:44	AR\AJ	Ok
21	HSTDCCC750	PS029252.D	22 Feb 2025 03:08	AR\AJ	Ok

M : Manual Integration

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS031225

Review By	Abdul	Review On	3/13/2025 8:41:54 AM
Supervise By	Ankita	Supervise On	3/13/2025 10:13:47 AM
SubDirectory	PS031225	HP Acquire Method	HP Processing Method ps022125 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24064,PP24065,PP24066,PP24067,PP24068		
CCC Internal Standard/PEM	PP24066		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24069,PP24070		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	HEXANE	PS029394.D	12 Mar 2025 08:39	AR\AJ	Ok
2	I.BLK	PS029395.D	12 Mar 2025 09:03	AR\AJ	Ok
3	HSTDCCC750	PS029396.D	12 Mar 2025 09:27	AR\AJ	Ok,M
4	PB167090BL	PS029397.D	12 Mar 2025 09:57	AR\AJ	Ok
5	PB167090BS	PS029398.D	12 Mar 2025 10:21	AR\AJ	Ok,M
6	PB167020TB	PS029399.D	12 Mar 2025 10:45	AR\AJ	Ok,M
7	PB167049TB	PS029400.D	12 Mar 2025 11:09	AR\AJ	Ok,M
8	Q1488-02	PS029401.D	12 Mar 2025 11:50	AR\AJ	Ok
9	Q1488-02MS	PS029402.D	12 Mar 2025 12:14	AR\AJ	Ok,M
10	Q1488-02MSD	PS029403.D	12 Mar 2025 12:38	AR\AJ	Ok,M
11	I.BLK	PS029404.D	12 Mar 2025 13:02	AR\AJ	Ok
12	HSTDCCC750	PS029405.D	12 Mar 2025 13:26	AR\AJ	Ok,M
13	Q1488-04	PS029406.D	12 Mar 2025 13:50	AR\AJ	Ok,M
14	Q1488-06	PS029407.D	12 Mar 2025 14:14	AR\AJ	Ok,M
15	Q1488-08	PS029408.D	12 Mar 2025 14:38	AR\AJ	Ok,M
16	Q1488-10	PS029409.D	12 Mar 2025 15:02	AR\AJ	Ok
17	Q1488-12	PS029410.D	12 Mar 2025 15:27	AR\AJ	Ok
18	Q1514-02	PS029411.D	12 Mar 2025 15:51	AR\AJ	Ok,M
19	Q1514-04	PS029412.D	12 Mar 2025 16:15	AR\AJ	Ok,M
20	Q1514-06	PS029413.D	12 Mar 2025 16:39	AR\AJ	Ok,M
21	Q1523-03	PS029414.D	12 Mar 2025 17:03	AR\AJ	Ok,M

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QCBatch ID # PS031225

Review By	Abdul	Review On	3/13/2025 8:41:54 AM
Supervise By	Ankita	Supervise On	3/13/2025 10:13:47 AM
SubDirectory	PS031225	HP Acquire Method	HP Processing Method ps022125 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24064,PP24065,PP24066,PP24067,PP24068		
CCC Internal Standard/PEM	PP24066		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24069,PP24070		

22	Q1523-06	PS029415.D	12 Mar 2025 17:27	AR\AJ	Ok,M
23	I.BLK	PS029416.D	12 Mar 2025 17:51	AR\AJ	Ok
24	HSTDCCC750	PS029417.D	12 Mar 2025 18:15	AR\AJ	Ok,M

M : Manual Integration

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS022125

Review By	Abdul	Review On	2/22/2025 8:32:12 PM
Supervise By	Ankita	Supervise On	2/24/2025 3:48:02 PM
SubDirectory	PS022125	HP Acquire Method	HP Processing Method ps0221258151

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	PP24064,PP24065,PP24066,PP24067,PP24068
CCC Internal Standard/PEM	PP24066
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24069,PP24070

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	HEXANE	HEXANE	PS029232.D	21 Feb 2025 19:08		AR\AJ	Ok
2	I.BLK	I.BLK	PS029233.D	21 Feb 2025 19:32		AR\AJ	Ok
3	HSTDICC200	HSTDICC200	PS029234.D	21 Feb 2025 19:56		AR\AJ	Ok
4	HSTDICC500	HSTDICC500	PS029235.D	21 Feb 2025 20:20		AR\AJ	Ok
5	HSTDICC750	HSTDICC750	PS029236.D	21 Feb 2025 20:44	Method fail for comp 10	AR\AJ	Ok
6	HSTDICC1000	HSTDICC1000	PS029237.D	21 Feb 2025 21:08		AR\AJ	Ok
7	HSTDICC1500	HSTDICC1500	PS029238.D	21 Feb 2025 21:32		AR\AJ	Ok
8	HSTDICV750	ICVPS022125	PS029239.D	21 Feb 2025 21:56		AR\AJ	Ok
9	I.BLK	I.BLK	PS029240.D	21 Feb 2025 22:20		AR\AJ	Ok
10	HSTDCCC750	HSTDCCC750	PS029241.D	21 Feb 2025 22:44		AR\AJ	Ok
11	Q1383-03	OU4-PCS-TC-12-02172	PS029242.D	21 Feb 2025 23:08		AR\AJ	Ok,M
12	Q1383-05	OU4-PCS-TC-13-02172	PS029243.D	21 Feb 2025 23:32		AR\AJ	Ok,M
13	Q1383-07	OU4-PCS-TC-14-02172	PS029244.D	21 Feb 2025 23:56		AR\AJ	Ok,M
14	Q1383-09	OU4-PCS-TC-15-02172	PS029245.D	22 Feb 2025 00:20		AR\AJ	Ok,M
15	Q1383-11	OU4-PCS-TC-16-02172	PS029246.D	22 Feb 2025 00:44		AR\AJ	Ok,M
16	Q1383-13	OU4-PCS-TC-17-02172	PS029247.D	22 Feb 2025 01:08	2,4-DCAA high in 1st column	AR\AJ	ReRun
17	Q1383-15	OU4-PCS-TC-18-02172	PS029248.D	22 Feb 2025 01:32		AR\AJ	Ok,M
18	Q1383-17	OU4-PCS-TC-19-02172	PS029249.D	22 Feb 2025 01:56		AR\AJ	Ok

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS022125

Review By	Abdul	Review On	2/22/2025 8:32:12 PM
Supervise By	Ankita	Supervise On	2/24/2025 3:48:02 PM
SubDirectory	PS022125	HP Acquire Method	HP Processing Method ps0221258151

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	PP24064,PP24065,PP24066,PP24067,PP24068
CCC Internal Standard/PEM	PP24066
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24069,PP24070

19	Q1383-19	OU4-PCS-TC-20-02172	PS029250.D	22 Feb 2025 02:20		AR\AJ	Ok
20	I.BLK	I.BLK	PS029251.D	22 Feb 2025 02:44		AR\AJ	Ok
21	HSTDCCC750	HSTDCCC750	PS029252.D	22 Feb 2025 03:08		AR\AJ	Ok

M : Manual Integration

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS031225

Review By	Abdul	Review On	3/13/2025 8:41:54 AM
Supervise By	Ankita	Supervise On	3/13/2025 10:13:47 AM
SubDirectory	PS031225	HP Acquire Method	HP Processing Method ps022125 8151

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	PP24064,PP24065,PP24066,PP24067,PP24068
CCC Internal Standard/PEM	PP24066
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24069,PP24070

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	HEXANE	HEXANE	PS029394.D	12 Mar 2025 08:39		AR\AJ	Ok
2	I.BLK	I.BLK	PS029395.D	12 Mar 2025 09:03		AR\AJ	Ok
3	HSTDCCC750	HSTDCCC750	PS029396.D	12 Mar 2025 09:27		AR\AJ	Ok,M
4	PB167090BL	PB167090BL	PS029397.D	12 Mar 2025 09:57		AR\AJ	Ok
5	PB167090BS	PB167090BS	PS029398.D	12 Mar 2025 10:21		AR\AJ	Ok,M
6	PB167020TB	PB167020TB	PS029399.D	12 Mar 2025 10:45		AR\AJ	Ok,M
7	PB167049TB	PB167049TB	PS029400.D	12 Mar 2025 11:09		AR\AJ	Ok,M
8	Q1488-02	ENV-101-SB01	PS029401.D	12 Mar 2025 11:50		AR\AJ	Ok
9	Q1488-02MS	ENV-101-SB01MS	PS029402.D	12 Mar 2025 12:14	some compound recovery fail	AR\AJ	Ok,M
10	Q1488-02MSD	ENV-101-SB01MSD	PS029403.D	12 Mar 2025 12:38	some compound recovery fail	AR\AJ	Ok,M
11	I.BLK	I.BLK	PS029404.D	12 Mar 2025 13:02		AR\AJ	Ok
12	HSTDCCC750	HSTDCCC750	PS029405.D	12 Mar 2025 13:26		AR\AJ	Ok,M
13	Q1488-04	ENV-101-SB02	PS029406.D	12 Mar 2025 13:50		AR\AJ	Ok,M
14	Q1488-06	ENV-102-SB01	PS029407.D	12 Mar 2025 14:14		AR\AJ	Ok,M
15	Q1488-08	ENV-102-SB02	PS029408.D	12 Mar 2025 14:38		AR\AJ	Ok,M
16	Q1488-10	ENV-104-SB01	PS029409.D	12 Mar 2025 15:02		AR\AJ	Ok
17	Q1488-12	ENV-104-SB02	PS029410.D	12 Mar 2025 15:27		AR\AJ	Ok
18	Q1514-02	ENV-105-SB01	PS029411.D	12 Mar 2025 15:51		AR\AJ	Ok,M

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS031225

Review By	Abdul	Review On	3/13/2025 8:41:54 AM
Supervise By	Ankita	Supervise On	3/13/2025 10:13:47 AM
SubDirectory	PS031225	HP Acquire Method	HP Processing Method ps022125 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24064,PP24065,PP24066,PP24067,PP24068		
CCC	PP24066		
Internal Standard/PEM	PP24069,PP24070		
ICV/I.BLK			
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

19	Q1514-04	ENV-105-SB02	PS029412.D	12 Mar 2025 16:15		AR\AJ	Ok,M
20	Q1514-06	ENV-103-SB01	PS029413.D	12 Mar 2025 16:39		AR\AJ	Ok,M
21	Q1523-03	WC-A1-01-C	PS029414.D	12 Mar 2025 17:03		AR\AJ	Ok,M
22	Q1523-06	WC-A2-02-C	PS029415.D	12 Mar 2025 17:27		AR\AJ	Ok,M
23	I.BLK	I.BLK	PS029416.D	12 Mar 2025 17:51		AR\AJ	Ok
24	HSTDCCC750	HSTDCCC750	PS029417.D	12 Mar 2025 18:15		AR\AJ	Ok,M

M : Manual Integration

SOP ID : M1311-TCLP-15

SDG No : N/A

Weigh By : JP

Balance ID : WC SC-7

pH Meter ID : WC PH METER-1

Extraction By : JP

Filter By : JP

Pipette ID : WC

Tumbler ID : T-1 / T-2

TCLP Filter ID : 115525

Start Prep Date : 03/06/2025 Time : 17:00

End Prep Date : 03/07/2025 Time : 11:20

Combination Ratio : 20

ZHE Cleaning Batch : N/A

Initial Room Temperature: 25 °C

Final Room Temperature: 22 °C

TCLP Technician Signature : *JP*

Supervisor By : *IL*

Standard Name	MLS USED	STD REF. # FROM LOG
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Chemical Used	ML/SAMPLE U	Lot Number
TCLP-FLUID-1	N/A	WP110802
HCL-TCLP,1N	N/A	WP110803
HNO3-TCLP,1N	N/A	WP110804
pH Strips	W3172.	W1931,W1934,W3171,W3172
pH Strips	W1941,W1942	W3166,W1938,W1939,W1940,
1L Amber bottle	N/A	90424-08
120ml Plastic bottle	N/A	405130101
1:1 HNO3	N/A	MP84041

Extraction Conformance/Non-Conformance Comments:

Matrix spikes are added after filtration and before preservation. Particle size reduction is not required. TUMBLER T-1 / T-2 checked, 30 rpm. q1514-06 is used for MS-MSD.

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
03/07/25 12:30	<i>JP</i> / <i>TCLP Room</i>	<i>JP</i> / <i>RJ / E-1</i>
	Preparation Group	Analysis Group

Sample ID	ClientID	TCLP Vessel ID	Sample Wt (g)	Volume Extraction Fluid #1 (mL)	Multi phasic	Phase Miscible	Phases Combined	Final Leachate PH	Metals Leachate Adj. PH	Prep Pos
PB167020TB	LEB020	15	N/A	2000	N/A	N/A	N/A	4.94	1.5	T-2
Q1488-02	ENV-101-SB01	01	100.02	2000	N/A	N/A	N/A	3.5	1.5	T-1
Q1488-04	ENV-101-SB02	02	100.01	2000	N/A	N/A	N/A	4.0	1.0	T-1
Q1488-06	ENV-102-SB01	03	100.03	2000	N/A	N/A	N/A	3.5	1.5	T-1
Q1488-08	ENV-102-SB02	04	100.04	2000	N/A	N/A	N/A	4.5	1.0	T-1
Q1488-10	ENV-104-SB01	05	100.03	2000	N/A	N/A	N/A	3.0	1.5	T-1
Q1488-12	ENV-104-SB02	06	100.02	2000	N/A	N/A	N/A	4.0	1.0	T-1
Q1490-02	CLAY-SLUDGE-DRUMS	07	100.01	2000	N/A	N/A	N/A	5.5	1.5	T-1
Q1494-04	ASPHALT-SOIL	08	100.02	2000	N/A	N/A	N/A	6.0	1.0	T-1
Q1494-06	SOIL	09	100.03	2000	N/A	N/A	N/A	7.0	1.5	T-1
Q1494-08	SOIL-COMP	10	100.04	2000	N/A	N/A	N/A	6.2	1.0	T-1
Q1510-01	FMC-25-0001-0005	11	100.01	2000	N/A	N/A	N/A	3.0	1.5	T-2
Q1514-02	ENV-105-SB01	12	100.02	2000	N/A	N/A	N/A	5.6	1.0	T-2
Q1514-04	ENV-105-SB02	13	100.03	2000	N/A	N/A	N/A	5.8	1.5	T-2
Q1514-06	ENV-103-SB01	14	100.02	2000	N/A	N/A	N/A	7.0	1.0	T-2

SampleID	ClientID	Sample Weight (g)	Filter Weight (g)	Filtrate (mL)	Filter + Solid (After 100°C)	% solids	% Dry Solids
PB167020TB	LEB020	N/A	N/A	N/A	N/A	N/A	N/A
Q1488-02	ENV-101-SB01	N/A	N/A	N/A	N/A	100	N/A
Q1488-04	ENV-101-SB02	N/A	N/A	N/A	N/A	100	N/A
Q1488-06	ENV-102-SB01	N/A	N/A	N/A	N/A	100	N/A
Q1488-08	ENV-102-SB02	N/A	N/A	N/A	N/A	100	N/A
Q1488-10	ENV-104-SB01	N/A	N/A	N/A	N/A	100	N/A
Q1488-12	ENV-104-SB02	N/A	N/A	N/A	N/A	100	N/A
Q1490-02	CLAY-SLUDGE-DRUMS	N/A	N/A	N/A	N/A	100	N/A
Q1494-04	ASPHALT-SOIL	N/A	N/A	N/A	N/A	100	N/A
Q1494-06	SOIL	N/A	N/A	N/A	N/A	100	N/A
Q1494-08	SOIL-COMP	N/A	N/A	N/A	N/A	100	N/A
Q1510-01	FMC-25-0001-0005	N/A	N/A	N/A	N/A	100	N/A
Q1514-02	ENV-105-SB01	N/A	N/A	N/A	N/A	100	N/A
Q1514-04	ENV-105-SB02	N/A	N/A	N/A	N/A	100	N/A
Q1514-06	ENV-103-SB01	N/A	N/A	N/A	N/A	100	N/A

Hot Block ID : WC S-1 /WC S-2
Thermometer ID : FLASHPOINT

SampleID	ClientID	Sample Weight (g)	Volume DI Water (mL)	PH after 5 min stir	PH after 10 min stir	Extraction Fluid 1 or 2	pH Extraction Fluid
PB167020TB	LEB020	N/A	N/A	N/A	N/A	#1	4.94
Q1488-02	ENV-101-SB01	5.01	96.5	6.2	2.5	#1	4.94
Q1488-04	ENV-101-SB02	5.02	96.5	6.6	2.0	#1	4.94
Q1488-06	ENV-102-SB01	5.03	96.5	6.2	2.5	#1	4.94
Q1488-08	ENV-102-SB02	5.04	96.5	7.2	2.5	#1	4.94
Q1488-10	ENV-104-SB01	5.03	96.5	6.6	2.0	#1	4.94
Q1488-12	ENV-104-SB02	5.02	96.5	7.0	2.5	#1	4.94
Q1490-02	CLAY-SLUDGE-DRUMS	5.04	96.5	7.0	2.5	#1	4.94
Q1494-04	ASPHALT-SOIL	5.01	96.5	8.6	3.0	#1	4.94
Q1494-06	SOIL	5.02	96.5	9.1	4.0	#1	4.94
Q1494-08	SOIL-COMP	5.04	96.5	8.6	3.5	#1	4.94
Q1510-01	FMC-25-0001-0005	5.03	96.5	5.6	1.5	#1	4.94
Q1514-02	ENV-105-SB01	5.01	96.5	7.6	2.5	#1	4.94
Q1514-04	ENV-105-SB02	5.02	96.5	8.0	3.0	#1	4.94
Q1514-06	ENV-103-SB01	5.03	96.5	9.1	3.5	#1	4.94

WORKLIST(Hardcopy Internal Chain)

WorkList Name : tclp q1490

WorkList ID : 188086

Department : TCLP Extraction

Date : 03-06-2025 11:40:13

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1488-02	ENV-101-SB01	Solid	TCLP Extraction	Cool 4 deg C	PORT06	H31	03/04/2025	1311
Q1488-04	ENV-101-SB02	Solid	TCLP Extraction	Cool 4 deg C	PORT06	H31	03/04/2025	1311
Q1488-06	ENV-102-SB01	Solid	TCLP Extraction	Cool 4 deg C	PORT06	H31	03/04/2025	1311
Q1488-08	ENV-102-SB02	Solid	TCLP Extraction	Cool 4 deg C	PORT06	H31	03/04/2025	1311
Q1488-10	ENV-104-SB01	Solid	TCLP Extraction	Cool 4 deg C	PORT06	H31	03/04/2025	1311
Q1488-12	ENV-104-SB02	Solid	TCLP Extraction	Cool 4 deg C	PORT06	H31	03/04/2025	1311
Q1490-02	CLAY-SLUDGE-DRUMS	Solid	TCLP Extraction	Cool 4 deg C	PORT06	H31	03/04/2025	1311
Q1494-04	ASPHALT-SOIL	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	I21	03/05/2025	1311
Q1494-06	SOIL	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	I31	03/05/2025	1311
Q1494-08	SOIL-COMP	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	I31	03/05/2025	1311
Q1510-01	FMC-25-0001-0005	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	I31	03/05/2025	1311
Q1514-02	ENV-105-SB01	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	I21	03/06/2025	1311
Q1514-04	ENV-105-SB02	Solid	TCLP Extraction	Cool 4 deg C	PORT06	I31	03/05/2025	1311
Q1514-06	ENV-103-SB01	Solid	TCLP Extraction	Cool 4 deg C	PORT06	I31	03/05/2025	1311

Date/Time 03/06/25 16:10

Raw Sample Received by: SA WOC

Raw Sample Relinquished by: CP SM

Date/Time 03/06/25 18:00

Raw Sample Received by: CP SM

Raw Sample Relinquished by: SA WOC

SOP ID: M8151A-Herbicide-22

Clean Up SOP #: N/A

Matrix : Water

Welgh By: N/A **Extraction By:** RS

Balance check: N/A **Filter By:** RS

Balance ID: N/A **pH Meter ID:** N/A

pH Strip Lot#: E3880 **Hood ID:** 4,5,7

Extraction Start Date : 03/11/2025

Extraction Start Time : 11:30

Extraction End Date : 03/11/2025

Extraction End Time : 18:30

Concentration By: EH

Supervisor By : RUPESH

Extraction Method: ☒ Seperatory Funnel ☐ Continious Liquid/Liquid ☐ Sonication ☐ Waste Dilution ☐ Soxhlet

Standarded Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
Spike Sol 1	1.0ML	5/500 PPM	PP24193
Surrogate	1.0ML	5000 PPB	PP24196
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
Ether	N/A	E3881
Acidified Na2SO4	N/A	EP2576
12N H2SO4	N/A	EP2552
NAOH 6N	N/A	EP2553
ISO OCTANE	N/A	E3554
METHANOL	N/A	V14150
Diazomethane	N/A	EP2588
Hexane	N/A	E3877
NACL	N/A	M4459
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

pH Adjusted with 6N NaOH>12 prior to Hydrolysis, PH adjusted with cold 12N H2SO4<2 after Hydrolysis, Derivatization procedure is completed and samples are ready to Analyze, 40ml Vial Lot # 03-40BTS721.

KD Bath ID: N/A **Envap ID:** NEVAP-02

KD Bath Temperature: N/A **Envap Temperature:** 40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
3/11/25	RS (Ext Lab)	JP-PESH/B.
18:35	Preparation Group	Analysis Group

Analytical Method: M8151A-Herbicide-22

Concentration Date: 03/11/2025

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB167020TB	PB167020TB	TCLP Herbicide	100	6	RUPESH	rajesh	10			SEP-1
PB167049TB	PB167049TB	TCLP Herbicide	100	6	RUPESH	rajesh	10			2
PB167090BL	HBLK090	TCLP Herbicide	1000	6	RUPESH	rajesh	10			3
PB167090BS	HLCS090	TCLP Herbicide	1000	6	RUPESH	rajesh	10			4
Q1488-02	ENV-101-SB01	TCLP Herbicide	100	6	RUPESH	rajesh	10	A		5
Q1488-02MS	ENV-101-SB01MS	TCLP Herbicide	100	6	RUPESH	rajesh	10	A		6
Q1488-02MS D	ENV-101-SB01MSD	TCLP Herbicide	100	6	RUPESH	rajesh	10	A		7
Q1488-04	ENV-101-SB02	TCLP Herbicide	100	6	RUPESH	rajesh	10	A		8
Q1488-06	ENV-102-SB01	TCLP Herbicide	100	6	RUPESH	rajesh	10	A		9
Q1488-08	ENV-102-SB02	TCLP Herbicide	100	6	RUPESH	rajesh	10	A		10
Q1488-10	ENV-104-SB01	TCLP Herbicide	100	6	RUPESH	rajesh	10	A		11
Q1488-12	ENV-104-SB02	TCLP Herbicide	100	6	RUPESH	rajesh	10	A		12
Q1514-02	ENV-105-SB01	TCLP Herbicide	100	6	RUPESH	rajesh	10	A		13
Q1514-04	ENV-105-SB02	TCLP Herbicide	100	6	RUPESH	rajesh	10	A		14
Q1514-06	ENV-103-SB01	TCLP Herbicide	100	6	RUPESH	rajesh	10	A		15
Q1523-03	WC-A1-01-C	TCLP Herbicide	100	6	RUPESH	rajesh	10	A		16
Q1523-06	WC-A2-02-C	TCLP Herbicide	100	6	RUPESH	rajesh	10	A		170

* Extracts relinquished on the same date as received.

RS
3/11

Sample ID	ClientID	TCLP Vessel ID	Sample Wt (g)	Volume Extraction Fluid #1 (mL)	Multi phasic	Phase Miscible	Phases Combined	Final Leachate PH	Metals Leachate Adj. PH	Prep Pos
PB167020TB	LEB020	15	N/A	2000	N/A	N/A	N/A	4.94	1.5	T-2
Q1488-02	ENV-101-SB01	01	100.02	2000	N/A	N/A	N/A	3.5	1.5	T-1
Q1488-04	ENV-101-SB02	02	100.01	2000	N/A	N/A	N/A	4.0	1.0	T-1
Q1488-06	ENV-102-SB01	03	100.03	2000	N/A	N/A	N/A	3.5	1.5	T-1
Q1488-08	ENV-102-SB02	04	100.04	2000	N/A	N/A	N/A	4.5	1.0	T-1
Q1488-10	ENV-104-SB01	05	100.03	2000	N/A	N/A	N/A	3.0	1.5	T-1
Q1488-12	ENV-104-SB02	06	100.02	2000	N/A	N/A	N/A	4.0	1.0	T-1
Q1490-02	CLAY-SLUDGE-DRUMS	07	100.01	2000	N/A	N/A	N/A	5.5	1.5	T-1
Q1494-04	ASPHALT-SOIL	08	100.02	2000	N/A	N/A	N/A	6.0	1.0	T-1
Q1494-06	SOIL	09	100.03	2000	N/A	N/A	N/A	7.0	1.5	T-1
Q1494-08	SOIL-COMP	10	100.04	2000	N/A	N/A	N/A	6.2	1.0	T-1
Q1510-01	FMC-25-0001-0005	11	100.01	2000	N/A	N/A	N/A	3.0	1.5	T-2
Q1514-02	ENV-105-SB01	12	100.02	2000	N/A	N/A	N/A	5.6	1.0	T-2
Q1514-04	ENV-105-SB02	13	100.03	2000	N/A	N/A	N/A	5.8	1.5	T-2
Q1514-06	ENV-103-SB01	14	100.02	2000	N/A	N/A	N/A	7.0	1.0	T-2

03/07/25
121.30

Sample ID	ClientID	TCLP Vessel ID	Sample Wt (g)	Volume Extraction Fluid #1 (mL)	Multi phasic	Phase Miscible	Phases Combined	Final Leachate PH	Metals Leachate Adj. PH	Prep Pos
PB167049TB	LEB049	10	N/A	2000	N/A	N/A	N/A	4.94	1.0	T-1
Q1523-03	WC-A1-01-C	01	100.02	2000	N/A	N/A	N/A	11.5	1.0	T-1
Q1523-06	WC-A2-02-C	02	100.01	2000	N/A	N/A	N/A	11.5	1.5	T-1
Q1534-06	OR-363-COMP-16	03	100.03	2000	N/A	N/A	N/A	4.0	1.0	T-1
Q1534-12	OR-363-COMP-17	04	100.02	2000	N/A	N/A	N/A	4.5	1.5	T-1
Q1534-18	OR-363-COMP-18	05	100.03	2000	N/A	N/A	N/A	4.0	1.5	T-1
Q1534-24	OR-363OR-363-COMP-19-	06	100.02	2000	N/A	N/A	N/A	4.5	1.0	T-1
Q1537-05	COMP-1	07	100.03	2000	N/A	N/A	N/A	10.0	1.5	T-1
Q1537-06	COMP-2	08	100.02	2000	N/A	N/A	N/A	11.0	1.0	T-1
Q1537-07	COMP-3	09	100.04	2000	N/A	N/A	N/A	11.0	1.5	T-1

03/11/2025
11:00

Prep Standard - Chemical Standard Summary

Order ID : Q1488

Test : TCLP Herbicide

Prepbatch ID : PB167090,

Sequence ID/Qc Batch ID: ps031225,

Standard ID :

EP2552,EP2553,EP2576,PP24061,PP24062,PP24064,PP24065,PP24066,PP24067,PP24068,PP24069,PP24070,PP24193,PP24196,

Chemical ID :

E3370,E3551,E3554,E3657,E3826,E3873,E3881,M5173,P10549,P11180,P11181,P12619,P12629,P12686,P12708,P12709,P13510,P13511,P13512,P13513,P13526,P13527,P13528,W3112,

Extractions STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3883	12N H2SO4 solution	EP2552	10/21/2024	04/21/2025	Rajesh Parikh	None	None	RUPESHKUMAR SHAH 10/21/2024

FROM 333.00000ml of M5173 + 667.00000ml of W3112 = Final Quantity: 1000.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3884	6 N NAOH	EP2553	10/21/2024	04/21/2025	Rajesh Parikh	Extraction_SC ALE_2 (EX-SC-2)	None	RUPESHKUMAR SHAH 10/21/2024

FROM 1000.00000ml of W3112 + 240.00000gram of E3657 = Final Quantity: 1000.000 ml



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
601	Acidified Sodium Sulphate 2	EP2576	01/06/2025	06/02/2025	Rajesh Parikh	Extraction_SC ALE_2 (EX-SC-2)	None	RUPESHKUMAR SHAH 01/06/2025
<u>FROM</u>	100.00000ml of E3370 + 150.00000ml of M5173 + 3000.00000ml of E3551 = Final Quantity: 3000.000 gram							

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1321	2/200 PPM Herb Mega Mix	PP24061	11/26/2024	05/09/2025	Ankita Jodhani	None	None	Yogesh Patel
<u>FROM</u>	0.20000ml of P10549 + 1.00000ml of P11180 + 1.00000ml of P12619 + 1.00000ml of P12629 + 1.00000ml of P12686 + 95.80000ml of E3826 = Final Quantity: 100.000 ml							



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Fax : 908 789 8922

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Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1453	1000 PPB Herb MIX STD	PP24065	11/26/2024	05/09/2025	Ankita Jodhani	None	None	Yogesh Patel
								11/27/2024

FROM 0.50000ml of E3826 + 0.50000ml of PP24061 = Final Quantity: 1.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1454	750 PPB Herb MIX STD	PP24066	11/26/2024	05/09/2025	Ankita Jodhani	None	None	Yogesh Patel
								11/27/2024

FROM 0.25000ml of E3826 + 0.75000ml of PP24065 = Final Quantity: 1.000 ml

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1455	500 PPB Herb MIX STD	PP24067	11/26/2024	05/09/2025	Ankita Jodhani	None	None	Yogesh Patel
								11/27/2024

FROM 0.75000ml of E3826 + 0.25000ml of PP24061 = Final Quantity: 1.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1456	200 PPB Herb MIX STD	PP24068	11/26/2024	05/09/2025	Ankita Jodhani	None	None	Yogesh Patel
								11/27/2024

FROM 0.90000ml of E3826 + 0.10000ml of PP24061 = Final Quantity: 1.000 ml

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1854	1000 PPB HERB MIX ICV STD	PP24069	11/26/2024	05/09/2025	Ankita Jodhani	None	None	Yogesh Patel
								11/27/2024

FROM 0.50000ml of E3826 + 0.50000ml of PP24062 = Final Quantity: 1.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1691	750 PPB ICV HERB STD	PP24070	11/26/2024	05/09/2025	Ankita Jodhani	None	None	Yogesh Patel
								11/27/2024

FROM 0.25000ml of E3826 + 0.75000ml of PP24069 = Final Quantity: 1.000 ml

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1848	5000/500000 PPB Herbicide Spike (Free Acid)	PP24193	02/12/2025	07/29/2025	Abdul Mirza	None	None	Ankita Jodhani
								02/13/2025

FROM 0.50000ml of P13528 + 1.00000ml of P13526 + 1.00000ml of P13527 + 47.50000ml of E3873 = Final Quantity: 50.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
60	5000 PPB Herbicide Surg Spike (Free Acid)	PP24196	02/18/2025	07/29/2025	Abdul Mirza	None	None	Ankita Jodhani
								02/21/2025

FROM 1.25000ml of P13510 + 1.25000ml of P13511 + 1.25000ml of P13512 + 1.25000ml of P13513 + 195.00000ml of E3873 = Final Quantity: 200.000 ml

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9244-03 / Ether, Anhydrous, Purified (cs/4x4L)	0000288039	07/17/2025	08/01/2022 / Rajesh	07/13/2022 / Rajesh	E3370

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1	313201	07/01/2025	01/03/2024 / Rajesh	07/20/2023 / Rajesh	E3551

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9335-02 / Iso-Octane (2,2,4-Trimethypentane) Ultra Resi-Analyzed Grade	63160	11/05/2025	08/09/2023 / Rajesh	08/09/2023 / Rajesh	E3554

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19510-5 / Sodium Hydroxide Pellets 2.5 Kg, Pk of 4	23B1556310	12/31/2025	12/04/2023 / Rajesh	12/01/2023 / Rajesh	E3657

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9262-03 / Hexane, Ultra-Resi (cs/4x4L)	24G1962003	05/09/2025	11/09/2024 / Rajesh	11/07/2024 / Rajesh	E3826

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H2762008	07/29/2025	01/29/2025 / Rajesh	01/29/2025 / Rajesh	E3873

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC04977-3 / Ether, Anhydrous, Glass Distilled, HRGC/HPLC, 4L	242789	08/14/2025	02/14/2025 / Rajesh	01/06/2025 / Rajesh	E3881

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L)	0000281827	06/02/2025	06/01/2022 /	04/05/2022 / william	M5173

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32254 / Dalapon Methyl Ester, 1000 ug/ml	A0170243	05/26/2025	11/26/2024 / Ankita	04/06/2021 / dhaval	P10549

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32050 / Herbicide, 8000 series, 515 Surrogate [ester] 2,4-dichlorophenyl acetic acid methyl ester, 1mL, 200ug/mL, Hexane	A0172864	05/26/2025	11/26/2024 / Ankita	11/01/2021 / Abdul	P11180

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32050 / Herbicide, 8000 series, 515 Surrogate [ester] 2,4-dichlorophenyl acetic acid methyl ester, 1mL, 200ug/mL, Hexane	A0172864	05/26/2025	11/26/2024 / Ankita	11/01/2021 / Abdul	P11181

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32062 / Herbicide Mix, 500/8000, Standard #4 [methyl ester] 200ug/mL, hexane, 1mL/ampul	A0155055	05/26/2025	11/26/2024 / Ankita	07/03/2023 / Abdul	P12619

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32055 / Herbicide Mix, 500/8000, Standard #1 [methyl ester] 200ug/mL, hexane, 1mL/ampul	A192429	05/26/2025	11/26/2024 / Ankita	07/03/2023 / Abdul	P12629

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32059 / Herbicide Mix#3 (Methyl Ester), 20000 ug/ml	A0199844	05/26/2025	11/26/2024 / Ankita	07/24/2023 / Abdul	P12686

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Agilent Technologies	HBM-8151M / Chlorinated Herbicide Mixtures, Methyl Esters	0006752480	05/26/2025	11/26/2024 / Ankita	08/09/2023 / Abdul	P12708

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Agilent Technologies	HBM-8151M / Chlorinated Herbicide Mixtures, Methyl Esters	0006752480	05/26/2025	11/26/2024 / Ankita	08/09/2023 / Abdul	P12708

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Agilent Technologies	HBM-8151M / Chlorinated Herbicide Mixtures, Methyl Esters	0006752480	05/26/2025	11/26/2024 / Ankita	08/09/2023 / Abdul	P12709

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Agilent Technologies	HBM-8151M / Chlorinated Herbicide Mixtures, Methyl Esters	0006752480	05/26/2025	11/26/2024 / Ankita	08/09/2023 / Abdul	P12709

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32049 / Herbicide, 8000 series, 515 Surrogate [free acid] 2,4-dichlorophenyl acetic acid, 1mL, 200ug/mL,	A0212676	08/18/2025	02/18/2025 / Abdul	08/16/2024 / yogesh	P13510

MeOH

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32049 / Herbicide, 8000 series, 515 Surrogate [free acid] 2,4-dichlorophenyl acetic acid, 1mL, 200ug/mL,	A0212676	08/18/2025	02/18/2025 / Abdul	08/16/2024 / yogesh	P13511

MeOH

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32049 / Herbicide, 8000 series, 515 Surrogate [free acid] 2,4-dichlorophenyl acetic acid, 1mL, 200ug/mL,	A0212676	08/18/2025	02/18/2025 / Abdul	08/16/2024 / yogesh	P13512

MeOH

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32049 / Herbicide, 8000 series, 515 Surrogate [free acid] 2,4-dichlorophenyl acetic acid, 1mL, 200ug/mL,	A0212676	08/18/2025	02/18/2025 / Abdul	08/16/2024 / yogesh	P13513

MeOH

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Agilent Technologies	HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids	0006810955	08/12/2025	02/12/2025 / Abdul	09/03/2024 / Abdul	P13526

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Agilent Technologies	HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids	0006810955	08/12/2025	02/12/2025 / Abdul	09/03/2024 / Abdul	P13526

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Agilent Technologies	HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids	0006810955	08/12/2025	02/12/2025 / Abdul	09/03/2024 / Abdul	P13527

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Agilent Technologies	HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids	0006810955	08/12/2025	02/12/2025 / Abdul	09/03/2024 / Abdul	P13527

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Agilent Technologies	HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids	0006810955	08/12/2025	02/12/2025 / Abdul	09/03/2024 / Abdul	P13528

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Agilent Technologies	HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids	0006810955	08/12/2025	02/12/2025 / Abdul	09/03/2024 / Abdul	P13528

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	W3112

Ether, Anhydrous
BAKER ANALYZED® A.C.S. Reagent
Contains BHT as a Preservative
Suitable for Fat Extraction



Material No.: 9244-03
Batch No.: 0000288039
Manufactured Date: 2021/07/22
Expiration Date: 2023/07/22
Revision No: 1

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

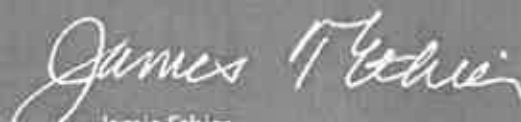
Test	Specification	Result
Assay ((C ₂ H ₅) ₂ O) (by GC, corrected for water)	>= 99.0 %	100.0
Alcohol (C ₂ H ₅ OH)	Passes Test	PT
Carbonyl Compounds (as HCHO) (by polarography)	<= 0.001 %	< 0.001
Color (APHA)	<= 10	< 5
Peroxide (as H ₂ O ₂)	<= 1 ppm	< 1
Preservative (BHT)	>= 7 ppm	9
Residue after Evaporation	<= 0.0010 %	< 0.0010
Titration Acid (μeq/g)	<= 0.2	< 0.2
Water (by KF, coulometric)	<= 0.01 %	0.01

For Laboratory, Research or Manufacturing Use
Meets Reagent Specifications for testing USP/NF monographs

Country of Origin: US

Recd. by RP on 7/13/22

E 3370


Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700



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QUÍMICOS
MONTERREY, S.A. DE C.V.**

MIRADOR 201, COL. MIRADOR
MONTERREY, N.L. MEXICO
CP 64070
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www.pqm.com.mx

CERTIFICATE OF ANALYSIS

PRODUCT :	SODIUM SULFATE CRYSTALS ANHYDROUS		
QUALITY :	ACS (CODE RMB3375)	FORMULA :	Na ₂ SO ₄
SPECIFICATION NUMBER :	6399	RELEASE DATE:	ABR/21/2023
LOT NUMBER :	313201		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na ₂ SO ₄)	Min. 99.0%	99.7 %
pH of a 5% solution at 25°C	5.2 - 9.2	6.1
Insoluble matter	Max. 0.01%	0.005 %
Loss on ignition	Max. 0.5%	0.1 %
Chloride (Cl)	Max. 0.001%	<0.001 %
Nitrogen compounds (as N)	Max. 5 ppm	<5 ppm
Phosphate (PO ₄)	Max. 0.001%	<0.001 %
Heavy metals (as Pb)	Max. 5 ppm	<5 ppm
Iron (Fe)	Max. 0.001%	<0.001 %
Calcium (Ca)	Max. 0.01%	0.002 %
Magnesium (Mg)	Max. 0.005%	0.001 %
Potassium (K)	Max. 0.008%	0.003 %
Extraction-concentration suitability	Passes test	Passes test
Appearance	Passes test	Passes test
Identification	Passes test	Passes test
Solubility and foreign matter	Passes test	Passes test
Retained on US Standard No. 10 sieve	Max. 1%	0.1 %
Retained on US Standard No. 60 sieve	Min. 94%	97.3 %
Through US Standard No. 60 sieve	Max. 5%	2.5 %
Through US Standard No. 100 sieve	Max. 10%	0.1 %
COMMENTS		
QC: PhC Irma Belmares		

If you need further details, please call our factory or contact our local distributor.

Recd. by R3 on 7/24/23 E 3551

RC-02-01, Ed. 3

Certificate of Analysis



Date of Release: 6/9/2023
Name: 2,2,4-Trimethylpentane [Isooctane]
OmniSolv®
Item No: TX1389 all size codes
Lot / Batch No: 63160
Country of Origin: Germany

Characteristic	Requirement		Results	Units
	Min.	Max.		
Assay (GC)	99.5		> 99.99	%
Capillary ECD responsive substances (as PCNB)		5	0.24	ng/L
Color (APHA)		10	< 10	
Evaporation residue		1	< 0.5	ppm
Filtered through 0.2 µm filter			Passes test	
Fluorescence (as quinine base)		250	71	ppt
Form			Clear liquid	
Infrared Spectrum			Conforms	
Refractive index (at 20°C)			1.3915	
UV Abs. at 200 nm		1.00	0.137	AU
UV Abs. at 220 nm		0.05	0.024	AU
UV Abs. at 230 nm		0.02	0.003	AU
UV Abs. at 250 nm		0.005	0.003	AU
UV Abs. at 270 nm		0.005	0.002	AU
UV Abs. at 300 nm		0.005	0.004	AU
UV Cut-off		200	191.1	nm
Water (H ₂ O)		0.01	0.001	%

Michael Hutchinson,

Quality Control Manager

This document has been produced electronically and is valid without a signature.

EMD Millipore is a division of Merck KGaA, Darmstadt, Germany
EMD Millipore Corporation
400 Summit Drive,
Burlington, MA 01803
U.S.A.

Recd by RP on 8/9/23

E3554



Certificate of Analysis

Sodium Hydroxide (Pellets)

Material: 0583
Grade: ACS GRADE
Batch Number: 23B1556310

Chemical Formula: NaOH
Molecular Weight: 40
CAS #: 1310-73-2
Appearance:

Manufacture Date: 12/14/2022
Expiration Date: 12/31/2025

Storage: Room Temperature

Pellets

TEST	SPECIFICATION	ANALYSIS	DISPOSITION
Calcium	$\leq 0.005 \%$	$< 0.005 \%$	PASS
Chloride	$\leq 0.005 \%$	0.002 %	PASS
Heavy Metals	$\leq 0.002 \%$	$< 0.002 \%$	PASS
Iron	$\leq 0.001 \%$	$< 0.001 \%$	PASS
Magnesium	$\leq 0.002 \%$	$< 0.002 \%$	PASS
Mercury	$\leq 0.1 \text{ ppm}$	$< 0.1 \text{ ppm}$	PASS
Nickel	$\leq 0.001 \%$	$< 0.001 \%$	PASS
Nitrogen Compounds	$\leq 0.001 \%$	$< 0.001 \%$	PASS
Phosphate	$\leq 0.001 \%$	$< 0.001 \%$	PASS
Potassium	$\leq 0.02 \%$	$< 0.02 \%$	PASS
Purity	$\geq 97.0 \%$	99.2 %	PASS
Sodium Carbonate	$\leq 1.0 \%$	0.5 %	PASS
Sulfate	$\leq 0.003 \%$	$< 0.003 \%$	PASS

Internal ID #: 710

Signature

We certify that this batch conforms to the specifications listed.

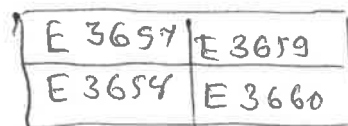
This document has been electronically produced and is valid without a signature.

Leona Edwardson, Quality Control Sr. Manager - Solon
VWR Chemicals, LLC.
28600 Fountain Parkway, Solon OH 44139 USA

Additional Information

Analysis may have been rounded to significant digits in specification limits.

Product meets analytical specifications of the grades listed.



n-Hexane 95%
ULTRA RESI-ANALYZED
For Organic Residue Analysis



Material No.: 9262-03
Batch No.: 24G1962003
Manufactured Date: 2024-05-23
Expiration Date: 2025-08-22
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	3
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	1
ECD-Sensitive Impurities (as Ethylene Dibromide) - Single Impurity Peak (ng/mL)	≤ 5	1
Assay (Total Saturated C ₆ Isomers) (by GC, corrected for water)	$\geq 99.5 \%$	99.7 %
Assay (as n-Hexane) (by GC, corrected for water)	$\geq 95 \%$	98 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.1 ppm
Substances Darkened by H ₂ SO ₄	Passes Test	Passes Test
Water (by KF, coulometric)	$\leq 0.05 \%$	< 0.01 %

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

E 3826

Rec'd by RP on 11/7/24

Jamie Croak
Director Quality Operations, Bioscience Production

Acetone

BAKER RESI-ANALYZED® Reagent

For Organic Residue Analysis

avantor™



Material No.: 9254-03

Batch No.: 24H2762008

Manufactured Date: 2024-04-18

Expiration Date: 2027-04-18

Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	>= 99.4 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.0 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titration Acid (μeq/g)	<= 0.3	0.2
Titration Base (μeq/g)	<= 0.6	<0.1
Water (H ₂ O)	<= 0.5 %	<0.1 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	1

For Laboratory, Research, or Manufacturing Use

MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr & DC

Recd. by RP on 1/29/25

E 3873

Jamie Croak
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials LLC

Certificate of Analysis

1 Reagent Lane
 Fair Lawn, NJ 07410
 201.796.7100 tel
 201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System
 Standard ISO9001:2015 by SAI Global Certificate Number CERT - 0120633

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	E199	Quality Test / Release Date	08/02/2024
Lot Number	242789	Expiration Date	Jun/2025
Description	ETHYL ETHER, PESTICIDE GRADE		
Country of Origin	Mexico		
Chemical Origin	Organic - synthetic		
BSE/TSE Comment	This product was derived from synthetic raw materials and the manufacturing process excluded contamination with any animal products.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear, colorless liquid free of suspended matter
ASSAY	%	>= 99.5	99.97
COLOR	APHA	<= 10	5
EVAPORATION RESIDUE	ppm	<= 3	0.2
GC-ECD ANALYSIS	pg/ml	<= 10	<1
OPTICAL ABS AT 218 NM	ABSORBANCE UNITS	<= 1.00	0.19
OPTICAL ABS AT 250 NM	ABSORBANCE UNITS	<= 0.08	0.05
OPTICAL ABS AT 270 NM	ABSORBANCE UNITS	<= 0.02	0.01
OPTICAL ABS AT 300 NM	ABSORBANCE UNITS	<= 0.01	0.002
OPTICAL ABS AT 350 NM	ABSORBANCE UNITS	<= 0.01	<0.001
PEROXIDE	ppm	<= 5	<1
PRESERVATIVE - ETHANOL	%	Inclusive Between 1.5 - 2.5	1.8
WATER (H2O)	%	<= 0.08	0.003

Kalyan Paruchuri

Kalyan Paruchuri - Quality Control Supervisor - Bridgewater

E 3881

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
 If there are any questions with this certificate, please call at (800) 227-6701.

*Based on suggested storage condition.

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis



Material No.: 9530-33
Batch No.: 0000281827
Manufactured Date: 2021/03/30
Retest Date: 2026/03/29
Revision No: 1

Certificate of Analysis

Test	Specification	Result
ACS – Assay (as HCl) (by acid–base titrn)	36.5 – 38.0 %	37.6
ACS – Color (APHA)	<= 10	5
ACS – Residue after Ignition	<= 3 ppm	1
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.189
ACS – Bromide (Br)	<= 0.005 %	< 0.005
ACS – Extractable Organic Substances	<= 5 ppm	< 1
ACS – Free Chlorine (as Cl ₂)	<= 0.5 ppm	< 0.5
Phosphate (PO ₄)	<= 0.05 ppm	< 0.03
Sulfate (SO ₄)	<= 0.5 ppm	< 0.3
Sulfite (SO ₃)	<= 0.8 ppm	0.3
Ammonium (NH ₄)	<= 3 ppm	< 1
Trace Impurities – Arsenic (As)	<= 0.010 ppm	< 0.003
Trace Impurities – Aluminum (Al)	<= 10.0 ppb	0.5
Arsenic and Antimony (as As)	<= 5 ppb	< 3
Trace Impurities – Barium (Ba)	<= 1.0 ppb	< 0.2
Trace Impurities – Beryllium (Be)	<= 1.0 ppb	< 0.2
Trace Impurities – Bismuth (Bi)	<= 10.0 ppb	< 1.0
Trace Impurities – Boron (B)	<= 20.0 ppb	< 5.0
Trace Impurities – Cadmium (Cd)	<= 1.0 ppb	< 0.3
Trace Impurities – Calcium (Ca)	<= 50.0 ppb	15.0
Trace Impurities – Chromium (Cr)	<= 1.0 ppb	< 0.4
Trace Impurities – Cobalt (Co)	<= 1.0 ppb	< 0.3
Trace Impurities – Copper (Cu)	<= 1.0 ppb	< 0.1
Trace Impurities – Gallium (Ga)	<= 1.0 ppb	< 0.2

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Test	Specification	Result
Trace Impurities – Germanium (Ge)	<= 3.0 ppb	< 2.0
Trace Impurities – Gold (Au)	<= 4.0 ppb	3.0
Heavy Metals (as Pb)	<= 100 ppb	< 50
Trace Impurities – Iron (Fe)	<= 15.0 ppb	1.0
Trace Impurities – Lead (Pb)	<= 1.0 ppb	< 0.5
Trace Impurities – Lithium (Li)	<= 1.0 ppb	< 0.2
Trace Impurities – Magnesium (Mg)	<= 10.0 ppb	< 0.4
Trace Impurities – Manganese (Mn)	<= 1.0 ppb	< 0.4
Trace Impurities – Mercury (Hg)	<= 0.5 ppb	0.2
Trace Impurities – Molybdenum (Mo)	<= 10.0 ppb	< 5.0
Trace Impurities – Nickel (Ni)	<= 4.0 ppb	< 0.3
Trace Impurities – Niobium (Nb)	<= 1.0 ppb	< 0.2
Trace Impurities – Potassium (K)	<= 9.0 ppb	< 2.0
Trace Impurities – Selenium (Se), For Information Only	ppb	1.0
Trace Impurities – Silicon (Si)	<= 100.0 ppb	18.0
Trace Impurities – Silver (Ag)	<= 1.0 ppb	< 0.3
Trace Impurities – Sodium (Na)	<= 100.0 ppb	< 5.0
Trace Impurities – Strontium (Sr)	<= 1.0 ppb	< 0.2
Trace Impurities – Tantalum (Ta)	<= 1.0 ppb	< 0.9
Trace Impurities – Thallium (Tl)	<= 5.0 ppb	< 2.0
Trace Impurities – Tin (Sn)	<= 5.0 ppb	< 0.8
Trace Impurities – Titanium (Ti)	<= 1.0 ppb	< 0.2
Trace Impurities – Vanadium (V)	<= 1.0 ppb	< 0.2
Trace Impurities – Zinc (Zn)	<= 5.0 ppb	0.4
Trace Impurities – Zirconium (Zr)	<= 1.0 ppb	< 0.1

For Laboratory, Research or Manufacturing Use

Product Information (not specifications):

Appearance (clear, fuming liquid)

Meets ACS Specifications

Country of Origin: US

Packaging Site: Phillipsburg Mfg Ctr & DC


Jamie Ethier
Vice President Global Quality

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:

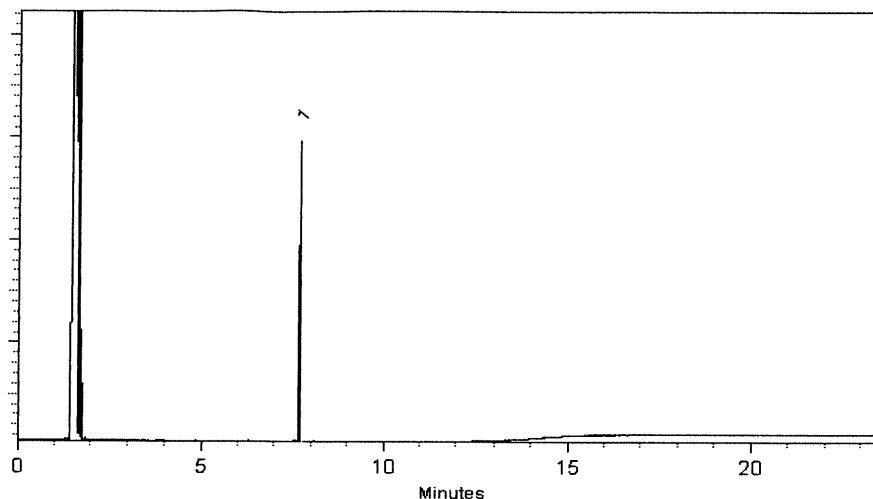
250°C

Det. Temp:

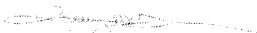
330°C

Det. Type:

FID

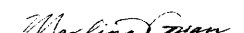


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Katelyn McGinnis - Operations Tech I

Date Mixed: 28-May-2021

Balance: B345965662


Marlene Cowan - Operations Tech I

Date Passed: 02-Jun-2021

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

1911177
70
P 111 86
AR
11/02/21



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32050 Lot No.: A0172864
Description : 2,4-Dichlorophenylacetic Acid Methyl Ester Standard
515 Surrogate (ester) 2, 4-dichlorophenyl Acetic Acid Methyl Ester
200µg/mL, Hexane, 1mL/ampul
Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : February 29, 2028 Storage: 10°C or colder
Handling: This product is photosensitive. Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	2,4-Dichlorophenyl acetic acid methyl ester	202.0 µg/mL	+/- 1.4323 µg/mL Gravimetric
	CAS # 55954-23-9 (Lot CSC42194-01)		+/- 6.8182 µg/mL Unstressed
	Purity 99%		+/- 6.8182 µg/mL Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

P11177
↓
P11186
—
AR
01/02/21

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:

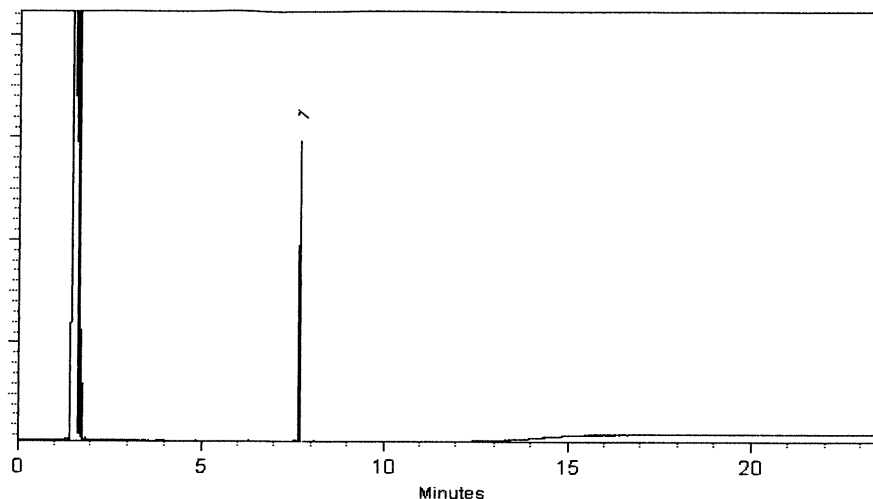
250°C

Det. Temp:

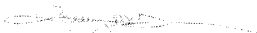
330°C

Det. Type:

FID

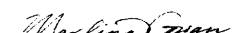


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Katelyn McGinnis - Operations Tech I

Date Mixed: 28-May-2021

Balance: B345965662


Marlene Cowan - Operations Tech I

Date Passed: 02-Jun-2021

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

1911177
70
P 111 86
AR
11/02/21



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32050 **Lot No.:** A0172864

Description : 2,4-Dichlorophenylacetic Acid Methyl Ester Standard

515 Surrogate (ester) 2, 4-dichlorophenyl Acetic Acid Methyl Ester
200µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 29, 2028 **Storage:** 10°C or colder

Handling: This product is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	2,4-Dichlorophenyl acetic acid methyl ester	202.0 µg/mL	+/- 1.4323 µg/mL Gravimetric
	CAS # 55954-23-9 (Lot CSC42194-01)		+/- 6.8182 µg/mL Unstressed
	Purity 99%		+/- 6.8182 µg/mL Stressed

Solvent: Hexane
CAS # 110-54-3
Purity 99%

P11177
↓
P11186
—
AR
01/02/21



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32062 **Lot No.:** A0155055

Description : Herbicide Mix #4/ME (Methyl Ester)

Herbicide Mix #4/ME (Methyl Ester) 200µg/mL,
Hexane/Methyl-tert-butyl-ether, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2026 **Storage:** 10°C or colder

P12616 / (5)
↓
P12620
✓ *Paul* = 7/5/2023

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	3,5-Dichlorobenzoic acid methyl ester CAS # 2905-67-1 (Lot 3903900) Purity 99%	200.0 µg/mL	+/- 1.4182 µg/mL Gravimetric +/- 6.7507 µg/mL Unstressed +/- 6.7507 µg/mL Stressed
2	4-Nitroanisole CAS # 100-17-4 (Lot 24765/7) Purity 99%	200.0 µg/mL	+/- 1.4182 µg/mL Gravimetric +/- 6.7507 µg/mL Unstressed +/- 6.7507 µg/mL Stressed
3	Pentachloroanisole CAS # 1825-21-4 (Lot 7921100) Purity 99%	200.0 µg/mL	+/- 1.4182 µg/mL Gravimetric +/- 6.7507 µg/mL Unstressed +/- 6.7507 µg/mL Stressed
4	Chloramben methyl ester CAS # 7286-84-2 (Lot 6487100) Purity 98%	199.9 µg/mL	+/- 1.4176 µg/mL Gravimetric +/- 6.7480 µg/mL Unstressed +/- 6.7480 µg/mL Stressed
5	Bentazon methyl ester CAS # 61592-45-8 (Lot 817100) Purity 99%	200.0 µg/mL	+/- 1.4182 µg/mL Gravimetric +/- 6.7507 µg/mL Unstressed +/- 6.7507 µg/mL Stressed
6	Picloram methyl ester CAS # 14143-55-6 (Lot 386-21B) Purity 98%	201.9 µg/mL	+/- 1.4315 µg/mL Gravimetric +/- 6.8141 µg/mL Unstressed +/- 6.8141 µg/mL Stressed
7	DCPA methyl ester (Chlorthal-dimethyl) CAS # 1861-32-1 (Lot 8008700) Purity 99%	200.0 µg/mL	+/- 1.4182 µg/mL Gravimetric +/- 6.7507 µg/mL Unstressed +/- 6.7507 µg/mL Stressed

8	Acifluorfen methyl ester	200.0 µg/mL	+/- 1.4182	µg/mL	Gravimetric
	CAS # 50594-67-7 (Lot 6282300)		+/- 6.7507	µg/mL	Unstressed
	Purity 99%		+/- 6.7507	µg/mL	Stressed

Solvent: Hexane/Methyl-tert-butyl-ether
CAS # 110-54-3/1634-04-4
Purity 99%

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:

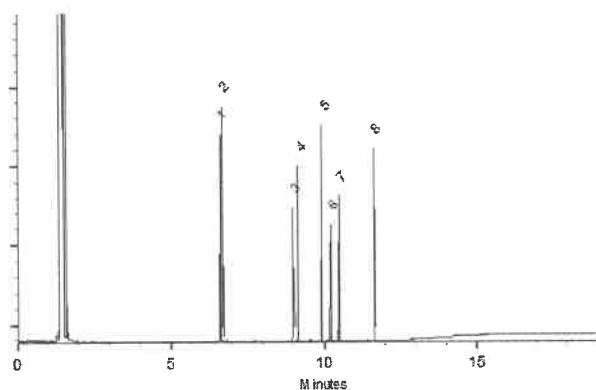
250°C

Det. Temp:

330°C

Det. Type:

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Michael Maje

Date Mixed: 14-Nov-2019 **Balance:** 1128353505

Justine Albertson
Justine Albertson - Operations Tech-ARM QC

Date Passed: 18-Nov-2019

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32055 **Lot No.:** A0192429

Description : Herbicide Mix #1/ME (Methyl Ester)
Herbicide Mix #1/ME (Methyl Ester) 200 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2029 **Storage:** 10°C or colder

Handling: This product is photosensitive. **Ship:** Ambient

P12626 / 5
P12630
7/5/2023

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Dicamba methyl ester	6597-78-0	11705400	99%	201.6 µg/mL	+/- 3.4204
2	Dichlorprop methyl ester	57153-17-0	11672100	99%	201.4 µg/mL	+/- 3.4170
3	2,4-D methyl ester	1928-38-7	10048000	99%	201.2 µg/mL	+/- 3.4136
4	2,4,5-TP (silvex) methyl ester	4841-20-7	6364900	99%	201.2 µg/mL	+/- 3.4136
5	2,4,5-T methyl ester	1928-37-6	6875800	98%	200.7 µg/mL	+/- 3.4052
6	Dinoseb methyl ether	6099-79-2	12914300	99%	200.8 µg/mL	+/- 3.4068
7	2,4-DB methyl ester	18625-12-2	12542000	99%	201.0 µg/mL	+/- 3.4102

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Quality Confirmation Test

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

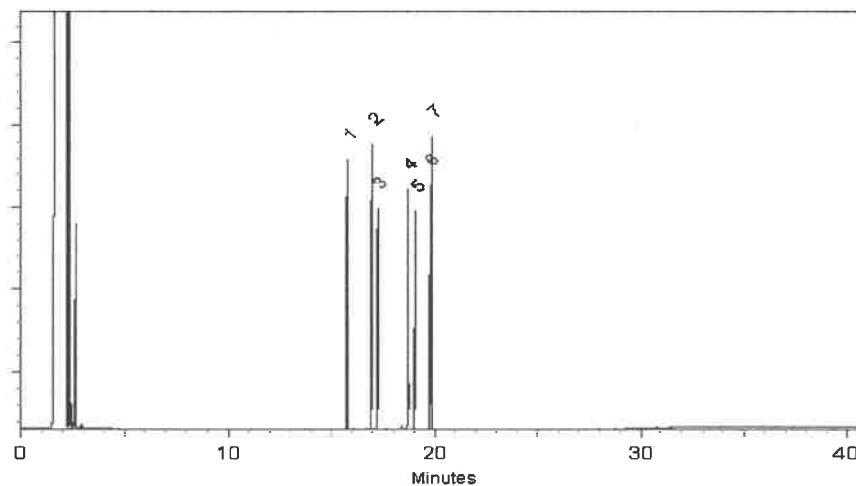
FID

Split Vent:

2 ml/min.

Inj. Vol

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Penelope Riglin - Operations Tech I

Date Mixed: 09-Dec-2022

Balance Serial # 1128360905


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 12-Dec-2022

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32059 **Lot No.:** A0199844

Description : Herbicide Mix #3/ME (Methyl Ester)
Herbicide Mix #3/ME (Methyl Ester) 20,000 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2030 **Storage:** 10°C or colder

Handling: This product is photosensitive. **Ship:** Ambient

P 12685 / (S)
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P 12689
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RAU= 7/24/23

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	MCPP (Mecoprop) methyl ester	23844-56-6	14546400	99%	20,035.0 µg/mL	+/- 360.1907
2	MCPA methyl ester	2436-73-9	SL201209	99%	20,055.0 µg/mL	+/- 360.5503

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Hexane
CAS # 110-54-3
Purity 99%

Quality Confirmation Test

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

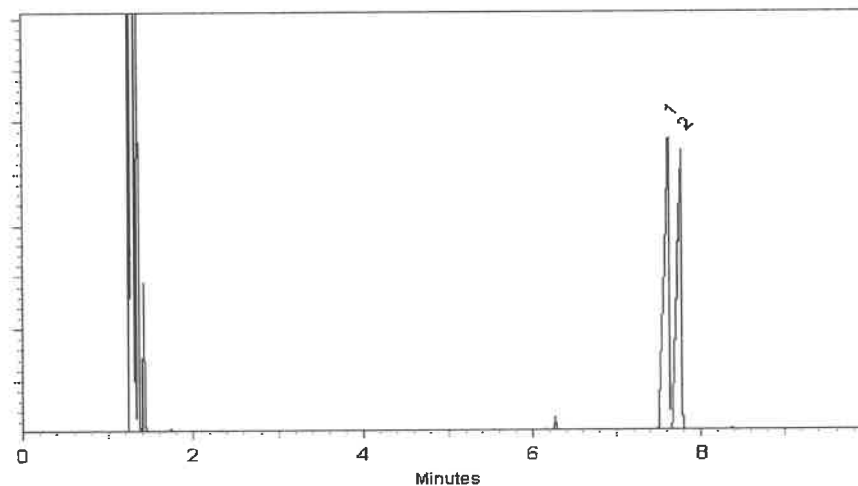
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Morgan Craighead - Mix Technician

Date Mixed: 12-Jul-2023

Balance Serial # B442140311


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 19-Jul-2023

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

P12706
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P12715
/ (10)
/ 1
/ 8/15/23

ISO 17034

Reference Material Certificate
Product Information Sheet

Product Name: Chlorinated Methylated Herbicides Standard

Lot Number: 0006752480

Product Number: HBM-8151M-1

Lot Issue Date: 18-Jul-2023

Storage Conditions: Store at Room Temperature (15° to 30°C).

Expiration Date: 31-Aug-2025

Component Name	Concentration	Uncertainty	CAS#	Analyte Lot
acifluorfen methyl ester	100.3 ±	0.5 µg/mL	050594-67-7	RM03058
bentazon methyl derivative	100.2 ±	0.5 µg/mL	061592-45-8	RM13829
chloramben methyl ester	100.4 ±	0.5 µg/mL	007286-84-2	RM03055
2,4-D methyl ester	100.2 ±	0.5 µg/mL	001928-38-7	RM03040
dalapon methyl ester	100.4 ±	0.5 µg/mL	017640-02-7	RM14219
2,4-DB methyl ester	100.2 ±	0.5 µg/mL	018625-12-2	RM03029
DCPA	100.2 ±	0.5 µg/mL	001861-32-1	RM13426
dicamba methyl ester	100.4 ±	0.5 µg/mL	006597-78-0	RM03039
methyl-3,5-dichlorobenzoate	100.1 ±	0.5 µg/mL	002905-67-1	RM03048
dichlorprop methyl ester	100.4 ±	0.5 µg/mL	057153-17-0	NT02086
dinoseb methyl ether	100.5 ±	0.5 µg/mL	006099-79-2	RM03051
MCPA methyl ester	10031 ±	50 µg/mL	002436-73-9	RM12863
MCPP methyl ester	10031 ±	50 µg/mL	023844-56-6	RM20060
4-nitroanisole	100.3 ±	0.5 µg/mL	000100-17-4	RM02806
pentachloroanisole	100.4 ±	0.5 µg/mL	001825-21-4	RM02457
picloram methyl ester	100.2 ±	0.5 µg/mL	014143-55-6	RM03044
silvex methyl ester	100.2 ±	0.5 µg/mL	004841-20-7	RM03799
2,4,5-T methyl ester	100.4 ±	0.5 µg/mL	001928-37-6	RM03033

Matrix: methanol (methyl alcohol)

Description:

This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

**Instructions for Use:**

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

Intended Use:

This analytical reference standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

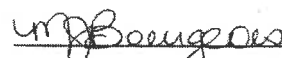
Expiration of Certification:

The certification of this analytical reference standard is valid until the expiration date specified above, provided the material is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the material is damaged, contaminated, or otherwise modified.

Maintenance of Certification:

If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:


Monica Bourgeois
QMS Representative

P12706 / (10)
↓
P12715
✓ RAUF
8.15.23



ISO 17034
Cert No. AR-1936

RM was produced in accordance with the TUV/SUD registered ISO
9001:2015 Quality Management System. Cert# 951215321

Page: 2 of 2

www.agilent.com/quality/
CSD-QA-015.2

ISO 17025
Cert No. AT-1937

P12706
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P12715
/ (10)
/ 1
/ 8/15/23

ISO 17034

Reference Material Certificate
Product Information Sheet

Product Name: Chlorinated Methylated Herbicides Standard

Lot Number: 0006752480

Product Number: HBM-8151M-1

Lot Issue Date: 18-Jul-2023

Storage Conditions: Store at Room Temperature (15° to 30°C).

Expiration Date: 31-Aug-2025

Component Name	Concentration	Uncertainty	CAS#	Analyte Lot
acifluorfen methyl ester	100.3 ±	0.5 µg/mL	050594-67-7	RM03058
bentazon methyl derivative	100.2 ±	0.5 µg/mL	061592-45-8	RM13829
chloramben methyl ester	100.4 ±	0.5 µg/mL	007286-84-2	RM03055
2,4-D methyl ester	100.2 ±	0.5 µg/mL	001928-38-7	RM03040
dalapon methyl ester	100.4 ±	0.5 µg/mL	017640-02-7	RM14219
2,4-DB methyl ester	100.2 ±	0.5 µg/mL	018625-12-2	RM03029
DCPA	100.2 ±	0.5 µg/mL	001861-32-1	RM13426
dicamba methyl ester	100.4 ±	0.5 µg/mL	006597-78-0	RM03039
methyl-3,5-dichlorobenzoate	100.1 ±	0.5 µg/mL	002905-67-1	RM03048
dichlorprop methyl ester	100.4 ±	0.5 µg/mL	057153-17-0	NT02086
dinoseb methyl ether	100.5 ±	0.5 µg/mL	006099-79-2	RM03051
MCPA methyl ester	10031 ±	50 µg/mL	002436-73-9	RM12863
MCPP methyl ester	10031 ±	50 µg/mL	023844-56-6	RM20060
4-nitroanisole	100.3 ±	0.5 µg/mL	000100-17-4	RM02806
pentachloroanisole	100.4 ±	0.5 µg/mL	001825-21-4	RM02457
picloram methyl ester	100.2 ±	0.5 µg/mL	014143-55-6	RM03044
silvex methyl ester	100.2 ±	0.5 µg/mL	004841-20-7	RM03799
2,4,5-T methyl ester	100.4 ±	0.5 µg/mL	001928-37-6	RM03033

Matrix: methanol (methyl alcohol)

Description:

This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

**Instructions for Use:**

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

Intended Use:

This analytical reference standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

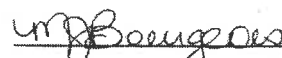
Expiration of Certification:

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Maintenance of Certification:

If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:


Monica Bourgeois
QMS Representative

P12706 / (10)
↓
P12715
✓ RAUF
8.15.23



ISO 17034
Cert No. AR-1936

RM was produced in accordance with the TUV/SUD registered ISO 9001:2015 Quality Management System. Cert# 951215321

Page: 2 of 2

www.agilent.com/quality/
CSD-QA-015.2

ISO 17025
Cert No. AT-1937



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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32049 **Lot No.:** A0212676
Description : 2,4-Dichlorophenylacetic Acid Standard
2, 4-Dichlorophenyl Acetic Acid 200µg/mL, Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : March 31, 2027 **Storage:** 10°C or colder
Handling: This product is photosensitive. **Ship:** Ambient

P13697 } Y.P.
↓
P13515 } 08/15/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2,4-dichlorophenylacetic acid	19719-28-9	STBK3827	99%	200.0 µg/mL	+/- 2.7154

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Specific Reference Material Notes:

Failure to derivatize this standard will lead to incorrect quantitative results.

Quality Confirmation Test

Column:

150mm x 4.6mm
Allure C18 Cat. (#9164565)

Flow Rate:

1.0 ml/min.

Mobile Phase A:

0.14% H₃PO₄ in water

Mobile Phase B:

acetonitrile

Mobile Phase Composition:

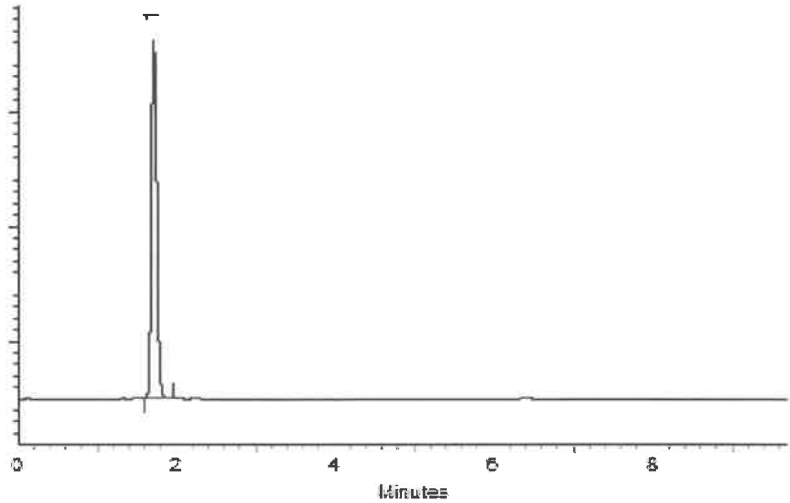
90%B Isocratic

Det. Type:

Wavelength: 220 & 254 nm

Inj. Vol

5µl

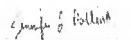


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Ethan Winiarski - Operations Tech I

Date Mixed: 11-Jun-2024

Balance Serial # B345965662


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-Jun-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32049 **Lot No.:** A0212676
Description : 2,4-Dichlorophenylacetic Acid Standard
2, 4-Dichlorophenyl Acetic Acid 200µg/mL, Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : March 31, 2027 **Storage:** 10°C or colder
Handling: This product is photosensitive. **Ship:** Ambient

P13697 } Y.P.
↓
P13515 } 08/15/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2,4-dichlorophenylacetic acid	19719-28-9	STBK3827	99%	200.0 µg/mL	+/- 2.7154

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Specific Reference Material Notes:

Failure to derivatize this standard will lead to incorrect quantitative results.

Quality Confirmation Test

Column:
150mm x 4.6mm
Allure C18 Cat. (#9164565)

Flow Rate:
1.0 ml/min.

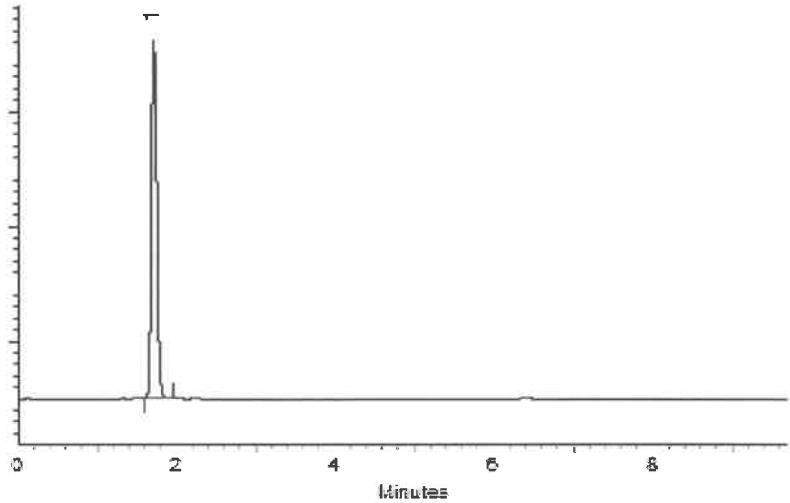
Mobile Phase A:
0.14% H₃PO₄ in water

Mobile Phase B:
acetonitrile

Mobile Phase Composition:
90%B Isocratic

Det. Type:
Wavelength: 220 & 254 nm

Inj. Vol
5µl

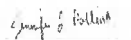


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Ethan Winiarski - Operations Tech I

Date Mixed: 11-Jun-2024

Balance Serial # B345965662


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-Jun-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32049 **Lot No.:** A0212676
Description : 2,4-Dichlorophenylacetic Acid Standard
2, 4-Dichlorophenyl Acetic Acid 200µg/mL, Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : March 31, 2027 **Storage:** 10°C or colder
Handling: This product is photosensitive. **Ship:** Ambient

P13697 } Y.P.
↓
P13515 } 08/15/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2,4-dichlorophenylacetic acid	19719-28-9	STBK3827	99%	200.0 µg/mL	+/- 2.7154

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Specific Reference Material Notes:

Failure to derivatize this standard will lead to incorrect quantitative results.

Quality Confirmation Test

Column:

150mm x 4.6mm
Allure C18 Cat. (#9164565)

Flow Rate:

1.0 ml/min.

Mobile Phase A:

0.14% H₃PO₄ in water

Mobile Phase B:

acetonitrile

Mobile Phase Composition:

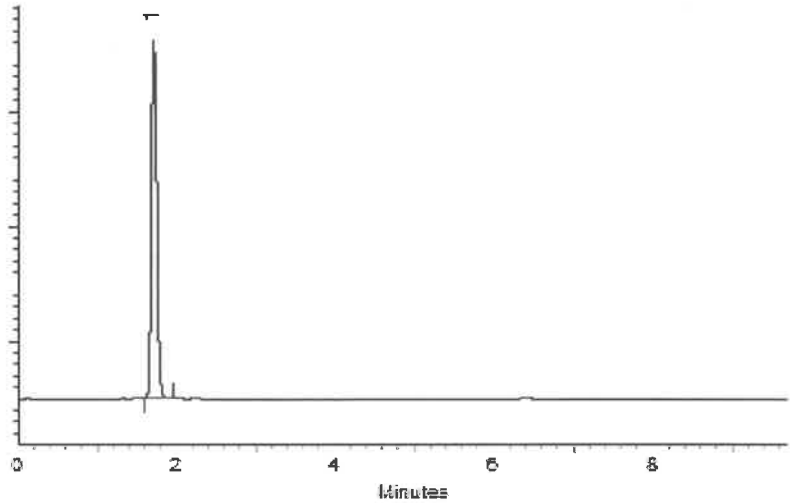
90%B Isocratic

Det. Type:

Wavelength: 220 & 254 nm

Inj. Vol

5µl

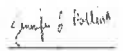


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Ethan Winiarski - Operations Tech I

Date Mixed: 11-Jun-2024

Balance Serial # B345965662


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-Jun-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32049 **Lot No.:** A0212676
Description : 2,4-Dichlorophenylacetic Acid Standard
2, 4-Dichlorophenyl Acetic Acid 200µg/mL, Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : March 31, 2027 **Storage:** 10°C or colder
Handling: This product is photosensitive. **Ship:** Ambient

P13697 } Y.P.
↓
P13515 } 08/15/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2,4-dichlorophenylacetic acid	19719-28-9	STBK3827	99%	200.0 µg/mL	+/- 2.7154

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Specific Reference Material Notes:

Failure to derivatize this standard will lead to incorrect quantitative results.

Quality Confirmation Test

Column:

150mm x 4.6mm
Allure C18 Cat. (#9164565)

Flow Rate:

1.0 ml/min.

Mobile Phase A:

0.14% H₃PO₄ in water

Mobile Phase B:

acetonitrile

Mobile Phase Composition:

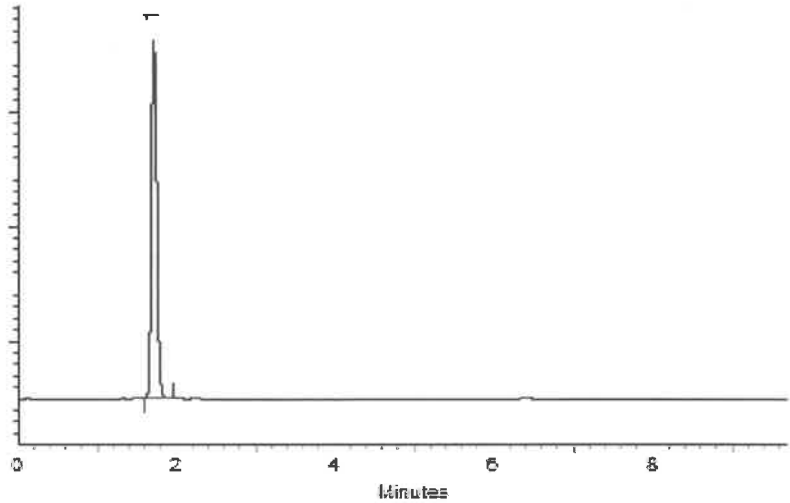
90%B Isocratic

Det. Type:

Wavelength: 220 & 254 nm

Inj. Vol

5µl

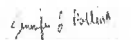


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Ethan Winiarski - Operations Tech I

Date Mixed: 11-Jun-2024

Balance Serial # B345965662


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-Jun-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reference Material Certificate
Product Information Sheet

Product Name: Chlorinated Herbicides Standard
Product Number: HBM-8151A-1
Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006810955
Lot Issue Date: 20-Aug-2024
Expiration Date: 30-Sep-2026

Component Name	Concentration	Uncertainty	CAS#	Analyte Lot
acifluorfen	100.2 ±	0.5 µg/mL	050594-66-6	NT02057
bentazon	100.4 ±	0.5 µg/mL	025057-89-0	RM21359
chloramben	100.3 ±	0.5 µg/mL	000133-90-4	RM02698
2,4-D	100.4 ±	0.5 µg/mL	000094-75-7	RM17172
dalapon	100.4 ±	0.5 µg/mL	000075-99-0	RM19677
2,4-DB	100.1 ±	0.5 µg/mL	000094-82-6	RM02866
tetrachloroterephthalic acid	100.4 ±	0.5 µg/mL	002136-79-0	RM15140
dicamba	100.3 ±	0.5 µg/mL	001918-00-9	RM22113
3,5-dichlorobenzoic acid	100.4 ±	0.5 µg/mL	000051-36-5	RM02768
dichlorprop	100.2 ±	0.5 µg/mL	000120-36-5	RM21688
dinoseb	100.3 ±	0.5 µg/mL	000088-85-7	RM22275
MCPA	10019 ±	50 µg/mL	000094-74-6	RM12220
MCPP (mecoprop)	10011 ±	50 µg/mL	000093-65-2	RM09273
4-nitrophenol	100.4 ±	0.5 µg/mL	000100-02-7	RM02391
pentachlorophenol	100.2 ±	0.5 µg/mL	000087-86-5	RM02474
picloram	100.4 ±	0.5 µg/mL	001918-02-1	RM20442
silvex	100.5 ±	0.5 µg/mL	000093-72-1	RM22116
2,4,5-T	100.3 ±	0.5 µg/mL	000093-76-5	RM19314

Matrix: methanol (methyl alcohol)

Description:

This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

P13520
↓
P13536 } (18)

BACF
9/4/2024

Reference Material Certificate
Product Information Sheet

Product Name: Chlorinated Herbicides Standard
Product Number: HBM-8151A-1
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Lot Issue Date: 20-Aug-2024
Expiration Date: 30-Sep-2026

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3,5-dichlorobenzoic acid	100.4 ±	0.5 µg/mL	000051-36-5	RM02768
dichlorprop	100.2 ±	0.5 µg/mL	000120-36-5	RM21688
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MCPP (mecoprop)	10011 ±	50 µg/mL	000093-65-2	RM09273
4-nitrophenol	100.4 ±	0.5 µg/mL	000100-02-7	RM02391
pentachlorophenol	100.2 ±	0.5 µg/mL	000087-86-5	RM02474
picloram	100.4 ±	0.5 µg/mL	001918-02-1	RM20442
silvex	100.5 ±	0.5 µg/mL	000093-72-1	RM22116
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P13520
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P13536
18
BALT
9/4/2024

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P13520
↓
P13536 } (18)

BACF
9/4/2024



SHIPPING DOCUMENTS

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Gannett Fleming
ADDRESS: 1010 Adams Ave
CITY: Audubon STATE: PA ZIP: 19405
ATTENTION: Joe Krupansky
PHONE: 610-301-8342 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Amtrak replacement of SB
PROJECT NO: 9500000819 LOCATION: Kearny NJ
PROJECT MANAGER: Joe Krupansky
e-mail: jkrup@BENK.COM
PHONE: 610-301-8342 FAX:

CLIENT BILLING INFORMATION

BILL TO: Alliance PO#:
ADDRESS: 284 Sheffield St
CITY: Mountainside STATE: NJ ZIP: 07093
ATTENTION: Samantha Peasho PHONE: 908-788-3148

ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) _____ DAYS*
HARDCOPY (DATA PACKAGE): 10 DAYS*
EDD: 10 DAYS*

*TO BE APPROVED BY CHEMTECH

STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

☐ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data)
☐ Level 2 (Results + QC) ☒ NJ Reduced ☐ US EPA CLP
☐ Level 3 (Results + QC) ☐ NYS ASP A ☐ NYS ASP B
+ Raw Data ☐ Other
☐ EDD FORMAT BENK EDD

1. PCBs 2. TAN Metals 3. TCL-VOC+10 4. Hex Chromium 5. TCL-SVOCs-BNN-20 6. EPM 7. PCRA 8. TCLP 9.

PRESERVATIVES

COMMENTS

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES										COMMENTS ← Specify Preservatives A-HCl D-NaOH B-HNO3 E-ICE C-H2SO4 F-OTHER
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	
1.	ENV-101-SB01	S		X	3/4/25	910	9	X	X	X	X	X	X	X	X		
2.	ENV-101-SB02	S				920	8	X	X	X	X	X	X	X	X		
3.	ENV-102-SB01	S				1005	9	X	X	X	X	X	X	X	X		
4.	ENV-102-SB02	S				1025	9	X	X	X	X	X	X	X	X		
5.	ENV-102-GW01	GW				1045	8	X	X	X	X	X	X				
6.	ENV-104-SB01	S				1200	9	X	X	X	X	X	X	X	X		
7.	ENV-104-SB02	S				1210	9	X	X	X	X	X	X	X	X		
8.	ENV-104-GW01	GW		V		1230	8	X	X	X	X	X	X				
9.	TB03042025	W				N/A	2			X							
10.																	

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME: 3/4/25 1427	RECEIVED BY:	Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 3.7 °C
1. [Signature]	3/4/25	1. [Signature]	Comments:
RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	
2.		2.	
RELINQUISHED BY SAMPLER:	DATE/TIME: 3-4-25 1527	RECEIVED BY:	
3. [Signature]	3-4-25	3.	

Page ____ of ____

CLIENT: ☐ Hand Delivered ☐ Other

Shipment Complete

☐ YES ☐ NO

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 : Q1488	PORT06	Order Date : 3/4/2025 3:39:00 PM	Project Mgr :
Client Name : Portal Partners Tri-Venture		Project Name : Amtrak Sawtooth Bridges 2	Report Type : NJ Reduced
Client Contact : Joseph Krupansky		Receive DateTime : 3/4/2025 3:27:00 PM	EDD Type : EXCEL NJCLEANUP
Invoice Name : Portal Partners Tri-Venture		Purchase Order :	Hard Copy Date :
Invoice Contact : Joseph Krupansky			Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1488-01	ENV-101-SB01	Solid	03/04/2025	09:10					
					VOC-TCLVOA-10		8260D	10 Bus. Days	
Q1488-03	ENV-101-SB02	Solid	03/04/2025	09:20					
					VOC-TCLVOA-10		8260D	10 Bus. Days	
Q1488-05	ENV-102-SB01	Solid	03/04/2025	10:05					
					VOC-TCLVOA-10		8260D	10 Bus. Days	
Q1488-07	ENV-102-SB02	Solid	03/04/2025	10:25					
					VOC-TCLVOA-10		8260D	10 Bus. Days	
Q1488-09	ENV-104-SB01	Solid	03/04/2025	12:00					
					VOC-TCLVOA-10		8260D	10 Bus. Days	
Q1488-11	ENV-104-SB02	Solid	03/04/2025	12:10					
					VOC-TCLVOA-10		8260D	10 Bus. Days	
Q1488-13	ENV-102-GW01	Water	03/04/2025	10:45					
					VOC-TCLVOA-10		8260-Low	10 Bus. Days	
Q1488-14	ENV-104-GW01	Water	03/04/2025	12:30					

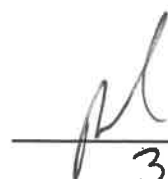
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Invoice Name : Portal Partners Tri-Venture		Purchase Order :	Hard Copy Date :
Invoice Contact : Joseph Krupansky			Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1488-15	TB03042025	Water	03/04/2025	00:00	VOC-TCLVOA-10		8260-Low	10 Bus. Days	
					VOC-TCLVOA-10		8260-Low	10 Bus. Days	

Relinquished By: 

Date / Time : 3-4-25 1615

Received By: 

Date / Time : 3-4-25 16:15

Storage Area : VOA Refridgerator Room