

Cover Page

Order ID : Q2832

Project ID : Amtrak Sawtooth Bridges 2025

Client : Portal Partners Tri-Venture

Lab Sample Number

Q2832-01
Q2832-02
Q2832-03
Q2832-04
Q2832-05
Q2832-06
Q2832-07
Q2832-08
Q2832-09
Q2832-10

Client Sample Number

TG-S01
TG-S01
TG-S02
TG-S02
TG-S03
TG-S03
TG-S04
TG-S04
TG-S05
TG-S05

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: 8/26/2025

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 #: Q2832

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: PRATIK PATEL

Date: 08/26/2025

LAB CHRONICLE

OrderID:	Q2832	OrderDate:	8/12/2025 9:37:00 AM
Client:	Portal Partners Tri-Venture	Project:	Amtrak Sawtooth Bridges 2025
Contact:	Joseph Krupansky	Location:	J21,VOA Lab

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2832-01	TG-S01	SOIL			08/11/25			08/12/25
			PCB	8082A		08/13/25	08/13/25	
Q2832-02	TG-S01	TCLP			08/11/25			08/12/25
			TCLP Herbicide	8151A		08/15/25	08/15/25	
			TCLP Pesticide	8081B		08/15/25	08/15/25	
Q2832-03	TG-S02	SOIL			08/11/25			08/12/25
			PCB	8082A		08/13/25	08/13/25	
Q2832-03DL	TG-S02DL	SOIL			08/11/25			08/12/25
			PCB	8082A		08/13/25	08/14/25	
Q2832-04	TG-S02	TCLP			08/11/25			08/12/25
			TCLP Herbicide	8151A		08/15/25	08/15/25	
			TCLP Pesticide	8081B		08/15/25	08/15/25	
Q2832-04RE	TG-S02RE	TCLP			08/11/25			08/12/25
			TCLP Herbicide	8151A		08/15/25	08/18/25	
Q2832-05	TG-S03	SOIL			08/11/25			08/12/25
			PCB	8082A		08/13/25	08/13/25	
Q2832-05DL	TG-S03DL	SOIL			08/11/25			08/12/25
			PCB	8082A		08/13/25	08/14/25	
Q2832-06	TG-S03	TCLP			08/11/25			08/12/25
			TCLP Herbicide	8151A		08/15/25	08/15/25	
			TCLP Pesticide	8081B		08/15/25	08/15/25	
Q2832-06RE	TG-S03RE	TCLP			08/11/25			08/12/25
			TCLP Herbicide	8151A		08/15/25	08/18/25	

LAB CHRONICLE

Q2832-07	TG-S04	SOIL			08/11/25			08/12/25
			PCB	8082A		08/13/25	08/13/25	
Q2832-07DL	TG-S04DL	SOIL			08/11/25			08/12/25
			PCB	8082A		08/13/25	08/14/25	
Q2832-08	TG-S04	TCLP			08/11/25			08/12/25
			TCLP Herbicide	8151A		08/15/25	08/15/25	
			TCLP Pesticide	8081B		08/15/25	08/15/25	
Q2832-08RE	TG-S04RE	TCLP			08/11/25			08/12/25
			TCLP Herbicide	8151A		08/15/25	08/18/25	
Q2832-09	TG-S05	SOIL			08/12/25			08/12/25
			PCB	8082A		08/13/25	08/13/25	
Q2832-10	TG-S05	TCLP			08/12/25			08/12/25
			TCLP Herbicide	8151A		08/15/25	08/15/25	
			TCLP Pesticide	8081B		08/15/25	08/15/25	
Q2832-10RE	TG-S05RE	TCLP			08/12/25			08/12/25
			TCLP Herbicide	8151A		08/15/25	08/18/25	



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

Hit Summary Sheet
SW-846

SDG No.: Q2832

Order ID: Q2832

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.: **Q2832**

Client: **Portal Partners Tri-Venture**

Analytical Method: **8151A**

Lab Sample ID	Client ID	Parameter	Column	Spike	Result	Recovery(%)	Qual	Limits(%)	
								Low	High
I.BLK-PS031378.D	PIBLK-PS031378.D	2,4-DCAA	1	500	421	84		70 (61)	130 (136)
		2,4-DCAA	2	500	503	101		70 (61)	130 (136)
I.BLK-PS031453.D	PIBLK-PS031453.D	2,4-DCAA	1	500	506	101		70 (61)	130 (136)
		2,4-DCAA	2	500	540	108		70 (61)	130 (136)
PB169278BL	PB169278BL	2,4-DCAA	1	500	450	90		70 (61)	130 (136)
		2,4-DCAA	2	500	509	102		70 (61)	130 (136)
PB169278BS	PB169278BS	2,4-DCAA	1	500	561	112		70 (61)	130 (136)
		2,4-DCAA	2	500	509	102		70 (61)	130 (136)
PB169212TB	PB169212TB	2,4-DCAA	1	500	442	88		70 (61)	130 (136)
		2,4-DCAA	2	500	482	96		70 (61)	130 (136)
Q2832-02	TG-S01	2,4-DCAA	1	500	671	134	*	70 (61)	130 (136)
		2,4-DCAA	2	500	751	150	*	70 (61)	130 (136)
I.BLK-PS031460.D	PIBLK-PS031460.D	2,4-DCAA	1	500	516	103		70 (61)	130 (136)
		2,4-DCAA	2	500	554	111		70 (61)	130 (136)
Q2832-02MS	TG-S01MS	2,4-DCAA	1	500	774	155	*	70 (61)	130 (136)
		2,4-DCAA	2	500	876	175	*	70 (61)	130 (136)
Q2832-02MSD	TG-S01MSD	2,4-DCAA	1	500	780	156	*	70 (61)	130 (136)
		2,4-DCAA	2	500	880	176	*	70 (61)	130 (136)
Q2832-04	TG-S02	2,4-DCAA	1	500	634	127		70 (61)	130 (136)
		2,4-DCAA	2	500	719	144	*	70 (61)	130 (136)
Q2832-06	TG-S03	2,4-DCAA	1	500	654	131	*	70 (61)	130 (136)
		2,4-DCAA	2	500	738	148	*	70 (61)	130 (136)
Q2832-08	TG-S04	2,4-DCAA	1	500	677	135	*	70 (61)	130 (136)
		2,4-DCAA	2	500	769	154	*	70 (61)	130 (136)
Q2832-10	TG-S05	2,4-DCAA	1	500	675	135	*	70 (61)	130 (136)
		2,4-DCAA	2	500	758	152	*	70 (61)	130 (136)
I.BLK-PS031472.D	PIBLK-PS031472.D	2,4-DCAA	1	500	521	104		70 (61)	130 (136)
		2,4-DCAA	2	500	568	114		70 (61)	130 (136)
I.BLK-PS031481.D	PIBLK-PS031481.D	2,4-DCAA	1	500	466	93		70 (61)	130 (136)
		2,4-DCAA	2	500	502	100		70 (61)	130 (136)
Q2832-04RE	TG-S02RE	2,4-DCAA	1	500	632	126		70 (61)	130 (136)
		2,4-DCAA	2	500	720	144	*	70 (61)	130 (136)
Q2832-06RE	TG-S03RE	2,4-DCAA	1	500	646	129		70 (61)	130 (136)
		2,4-DCAA	2	500	729	146	*	70 (61)	130 (136)
Q2832-08RE	TG-S04RE	2,4-DCAA	1	500	673	135	*	70 (61)	130 (136)
		2,4-DCAA	2	500	768	154	*	70 (61)	130 (136)
Q2832-10RE	TG-S05RE	2,4-DCAA	1	500	654	131	*	70 (61)	130 (136)
		2,4-DCAA	2	500	746	149	*	70 (61)	130 (136)
I.BLK-PS031490.D	PIBLK-PS031490.D	2,4-DCAA	1	500	469	94		70 (61)	130 (136)
		2,4-DCAA	2	500	516	103		70 (61)	130 (136)

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.:	<u>Q2832</u>	Analytical Method:	<u>8151A</u>
Client:	<u>Portal Partners Tri-Venture</u>	DataFile :	<u>PS031462.D</u>

		Sample				Rec		RPD		Limits	
Parameter	Spike	Result	Result	Units	Rec	Qual	RPD	Qual	Low	High	RPD
Lab Sample ID:	Q2832-02MS	Client Sample ID:	TG-S01MS								
(Column 1)											
2,4-D	50	0	91.7	ug/L	183	*			70 (65)	130 (135)	
2,4,5-TP(Silvex)	50	0	75.7	ug/L	151	*			70 (62)	130 (139)	
Lab Sample ID:	Q2832-02MS	Client Sample ID:	TG-S01MS								
(Column 2)											
2,4-D	50	0	83.2	ug/L	166	*			70 (65)	130 (135)	
2,4,5-TP(Silvex)	50	0	76.1	ug/L	152	*			70 (62)	130 (139)	

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.:	<u>Q2832</u>	Analytical Method:	<u>8151A</u>
Client:	<u>Portal Partners Tri-Venture</u>	DataFile :	<u>PS031463.D</u>

		Sample				Rec		RPD		Limits	
Parameter	Spike	Result	Result	Units	Rec	Qual	RPD	Qual	Low	High	RPD
Lab Sample ID:	Q2832-02MSD		Client Sample ID:	TG-S01MSD							
(Column 1)											
2,4-D	50	0	92.0	ug/L	184	*	1		70 (65)	130 (135)	20 (20)
2,4,5-TP(Silvex)	50	0	76.5	ug/L	153	*	1		70 (62)	130 (139)	20 (20)
Lab Sample ID:	Q2832-02MSD		Client Sample ID:	TG-S01MSD							
(Column 2)											
2,4-D	50	0	79.7	ug/L	159	*	4		70 (65)	130 (135)	20 (20)
2,4,5-TP(Silvex)	50	0	80.4	ug/L	161	*	6		70 (62)	130 (139)	20 (20)

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.:	<u>Q2832</u>	Analytical Method:	<u>8151A</u>
Client:	<u>Portal Partners Tri-Venture</u>	Datafile :	<u>PS031456.D</u>

Lab Sample ID	Parameter	Spike	Result	Units	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB169278BS (Column 1)	2,4-D	5	5.30	ug/L	106				70 (83)	130 (130)	
	2,4,5-TP(Silvex)	5	5.50	ug/L	110				70 (78)	130 (127)	
PB169278BS (Column 2)	2,4-D	5	4.80	ug/L	96				70 (83)	130 (130)	
	2,4,5-TP(Silvex)	5	5.00	ug/L	100				70 (78)	130 (127)	

4C

PESTICIDE METHOD BLANK SUMMARY

Client ID

PB169278BL

Lab Name: Alliance

Contract: PORT06

Lab Code: ACE

SDG NO.: Q2832

Lab Sample ID: PB169278BL

Lab File ID: PS031455.D

Matrix: (soil/water) water

Extraction: (Type) SEPF

Sulfur Cleanup: (Y/N) N

Date Extracted: 08/15/2025

Date Analyzed (1): 08/15/2025

Date Analyzed (2): 08/15/2025

Time Analyzed (1): 17:04

Time Analyzed (2): 17:04

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
PB169278BS	PB169278BS	PS031456.D	08/15/2025	08/15/2025
PB169212TB	PB169212TB	PS031457.D	08/15/2025	08/15/2025
TG-S01	Q2832-02	PS031459.D	08/15/2025	08/15/2025
TG-S01MS	Q2832-02MS	PS031462.D	08/15/2025	08/15/2025
TG-S01MSD	Q2832-02MSD	PS031463.D	08/15/2025	08/15/2025
TG-S02	Q2832-04	PS031464.D	08/15/2025	08/15/2025
TG-S03	Q2832-06	PS031465.D	08/15/2025	08/15/2025
TG-S04	Q2832-08	PS031466.D	08/15/2025	08/15/2025
TG-S05	Q2832-10	PS031467.D	08/15/2025	08/15/2025

COMMENTS: _____



SAMPLE DATA

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	08/15/25
Client Sample ID:	PB169212TB	SDG No.:	Q2832
Lab Sample ID:	PB169212TB	Matrix:	TCLP
Analytical Method:	8151A	% Solid:	0 Decanted:
Sample Wt/Vol:	100 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Herbicide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		
Prep Method :	8151A		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS031457.D	1	08/15/25 08:45	08/15/25 17:52	PB169278

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	482		70 (61) - 130 (136)	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\PS081525\
Data File : PS031457.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 15 Aug 2025 17:52
Operator : AR\AJ
Sample : PB169212TB
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
PB169212TB

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 18 03:47:29 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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	7.291	7.744	1402.4E6	407.7E6	441.841	482.245

Target Compounds

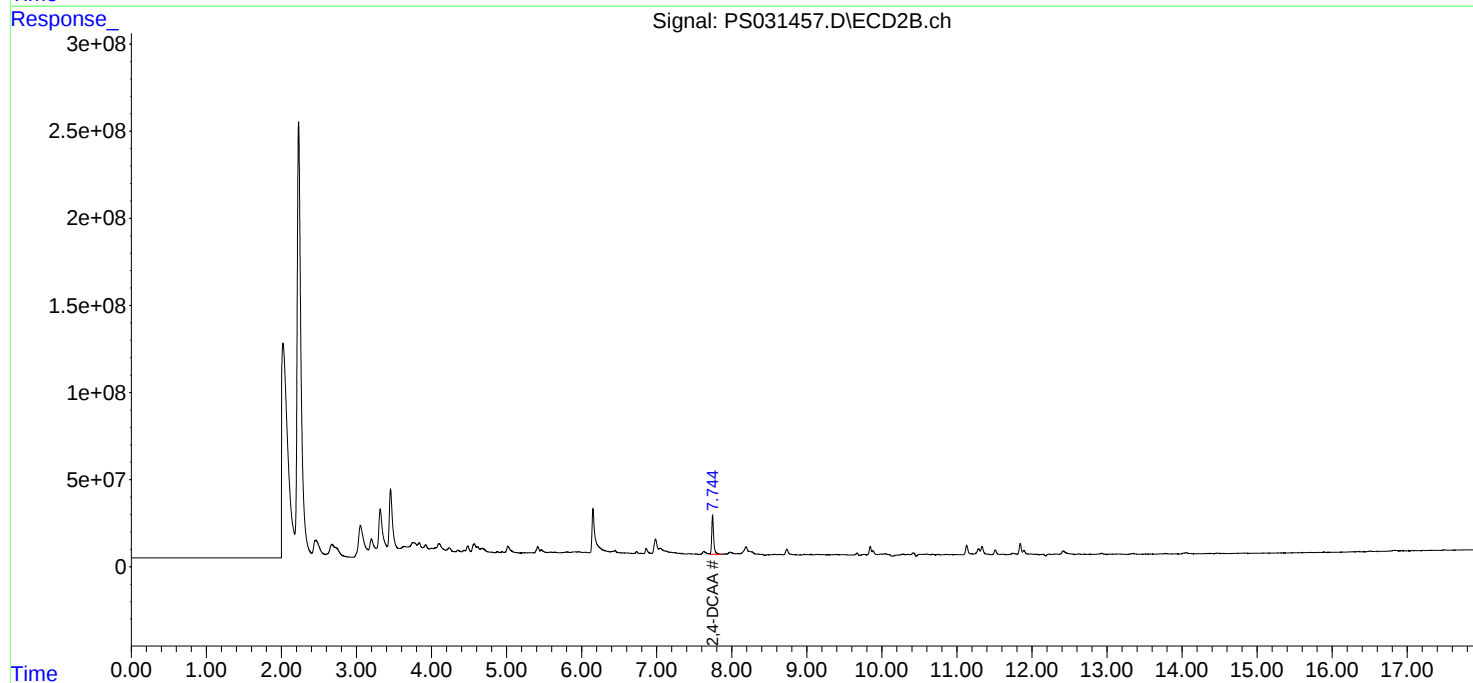
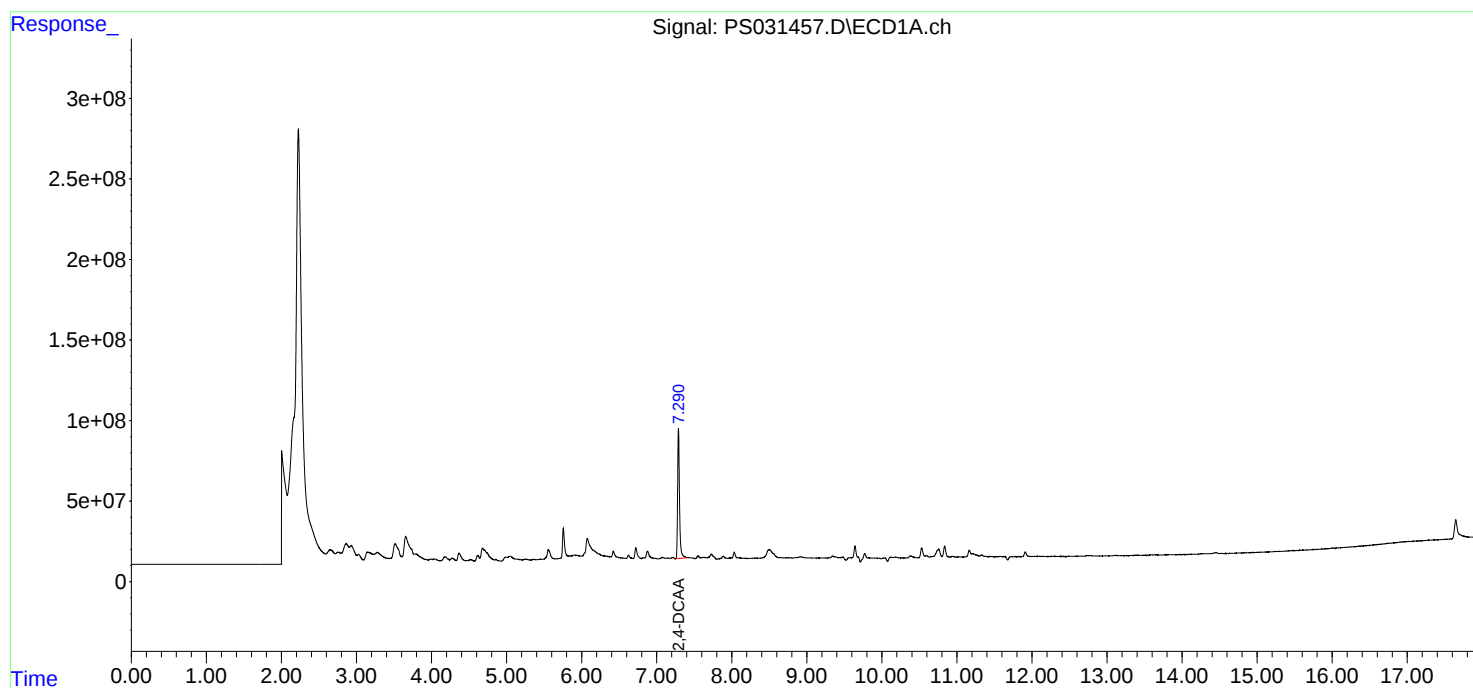
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS081525\
Data File : PS031457.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 15 Aug 2025 17:52
Operator : AR\AJ
Sample : PB169212TB
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
PB169212TB

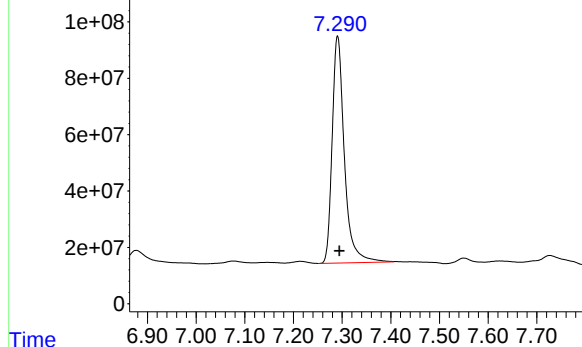
Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 18 03:47:29 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 2025
Response via : Initial Calibration
Integrator: ChemStation

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



Signal: PS031457.D\ECD1A.ch

#4 2,4-DCAA

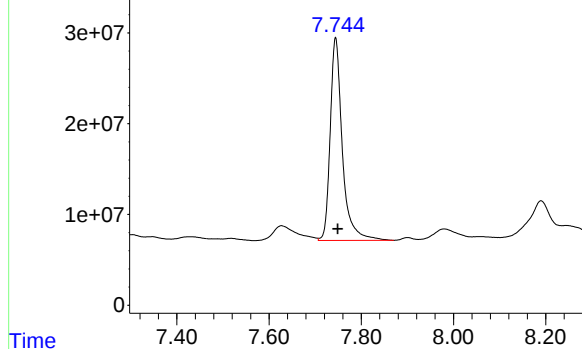


R.T.: 7.291 min
Delta R.T.: -0.004 min
Response: 1402397569
Conc: 441.84 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB169212TB

Signal: PS031457.D\ECD2B.ch

#4 2,4-DCAA



R.T.: 7.744 min
Delta R.T.: -0.005 min
Response: 407661209
Conc: 482.25 ng/ml

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	08/11/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	08/12/25
Client Sample ID:	TG-S01	SDG No.:	Q2832
Lab Sample ID:	Q2832-02	Matrix:	TCLP
Analytical Method:	8151A	% 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
PS031459.D	1	08/15/25 08:45	08/15/25 18:40	PB169278

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	751	*	70 (61) - 130 (136)	150%	SPK: 500

Comments:

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LOQ = Limit of Quantitation

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

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B = Analyte Found in Associated Method Blank

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS081525\
Data File : PS031459.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 15 Aug 2025 18:40
Operator : AR\AJ
Sample : Q2832-02
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
TG-S01

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 18 03:48:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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	7.289	7.743	2128.7E6	634.4E6	670.679	750.506

Target Compounds

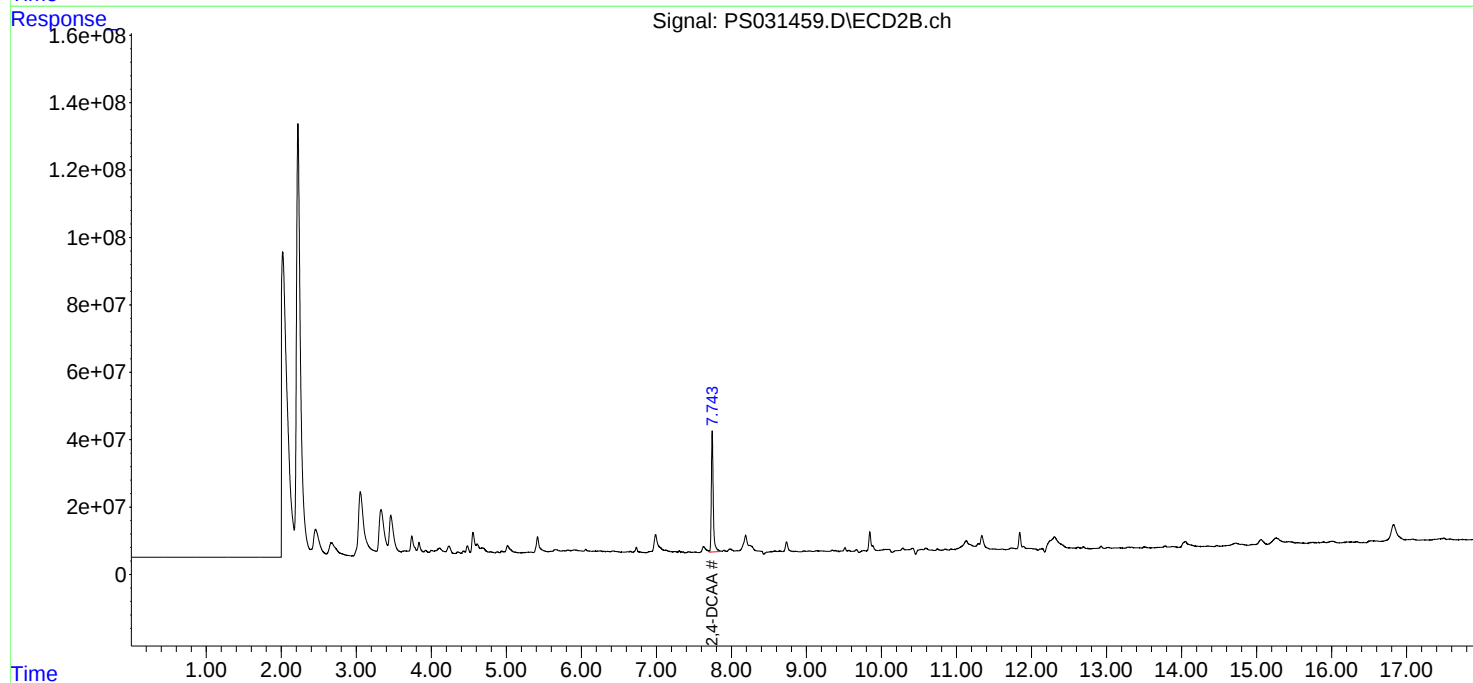
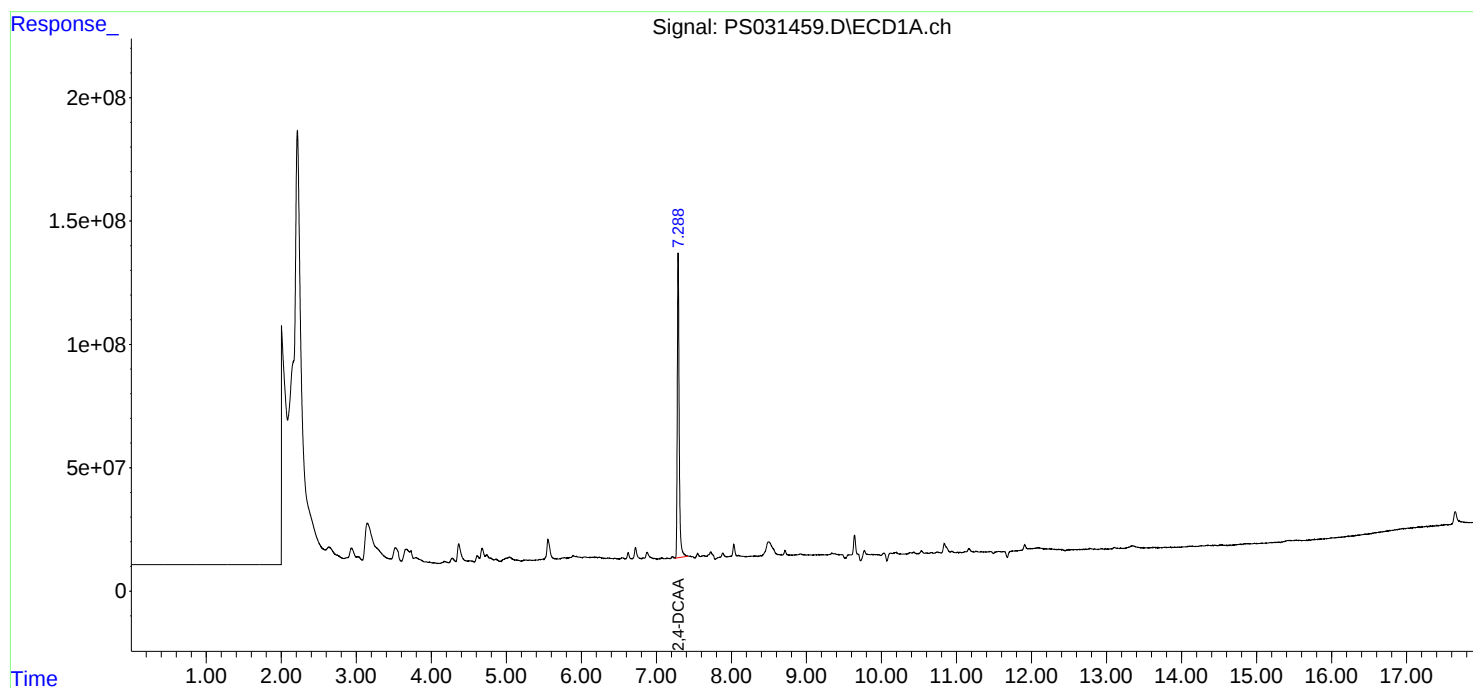
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

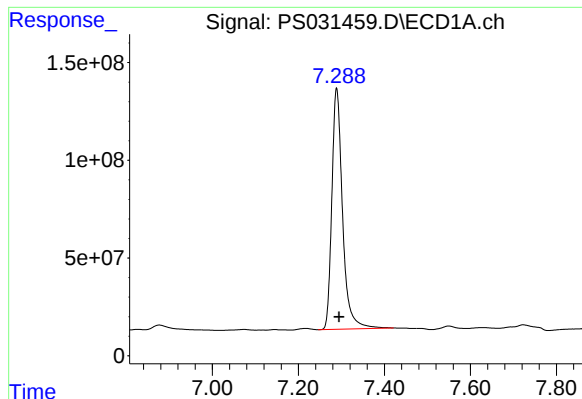
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS081525\
Data File : PS031459.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 15 Aug 2025 18:40
Operator : AR\AJ
Sample : Q2832-02
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
TG-S01

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 18 03:48:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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

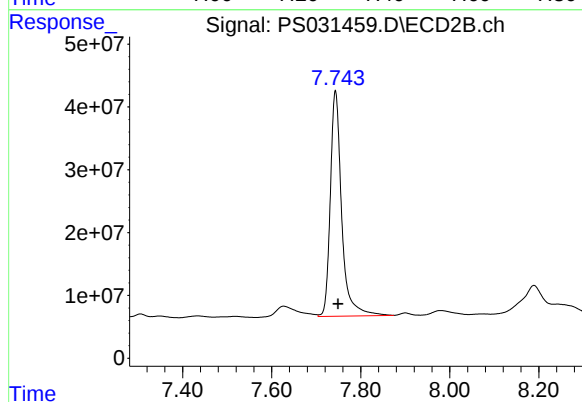




#4 2,4-DCAA

R.T.: 7.289 min
Delta R.T.: -0.006 min
Response: 2128726921
Conc: 670.68 ng/ml

Instrument :
ECD_S
ClientSampleId :
TG-S01



#4 2,4-DCAA

R.T.: 7.743 min
Delta R.T.: -0.006 min
Response: 634432768
Conc: 750.51 ng/ml

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	08/11/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	08/12/25
Client Sample ID:	TG-S02	SDG No.:	Q2832
Lab Sample ID:	Q2832-04	Matrix:	TCLP
Analytical Method:	8151A	% 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
PS031464.D	1	08/15/25 08:45	08/15/25 21:29	PB169278

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	719	*	70 (61) - 130 (136)	144%	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\PS081525\
Data File : PS031464.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 15 Aug 2025 21:29
Operator : AR\AJ
Sample : Q2832-04
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
TG-S02

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 18 03:49:46 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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	7.289	7.744	2010.9E6	607.6E6	633.550	718.823

Target Compounds

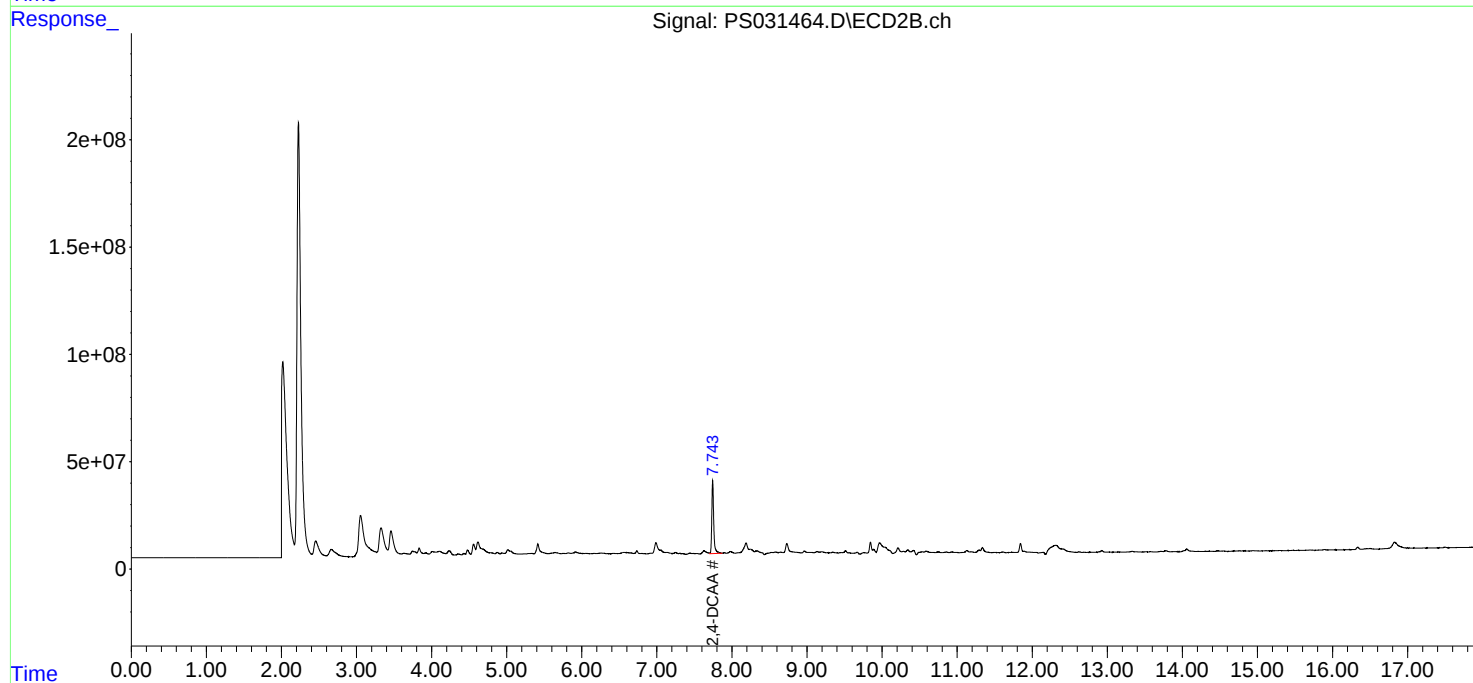
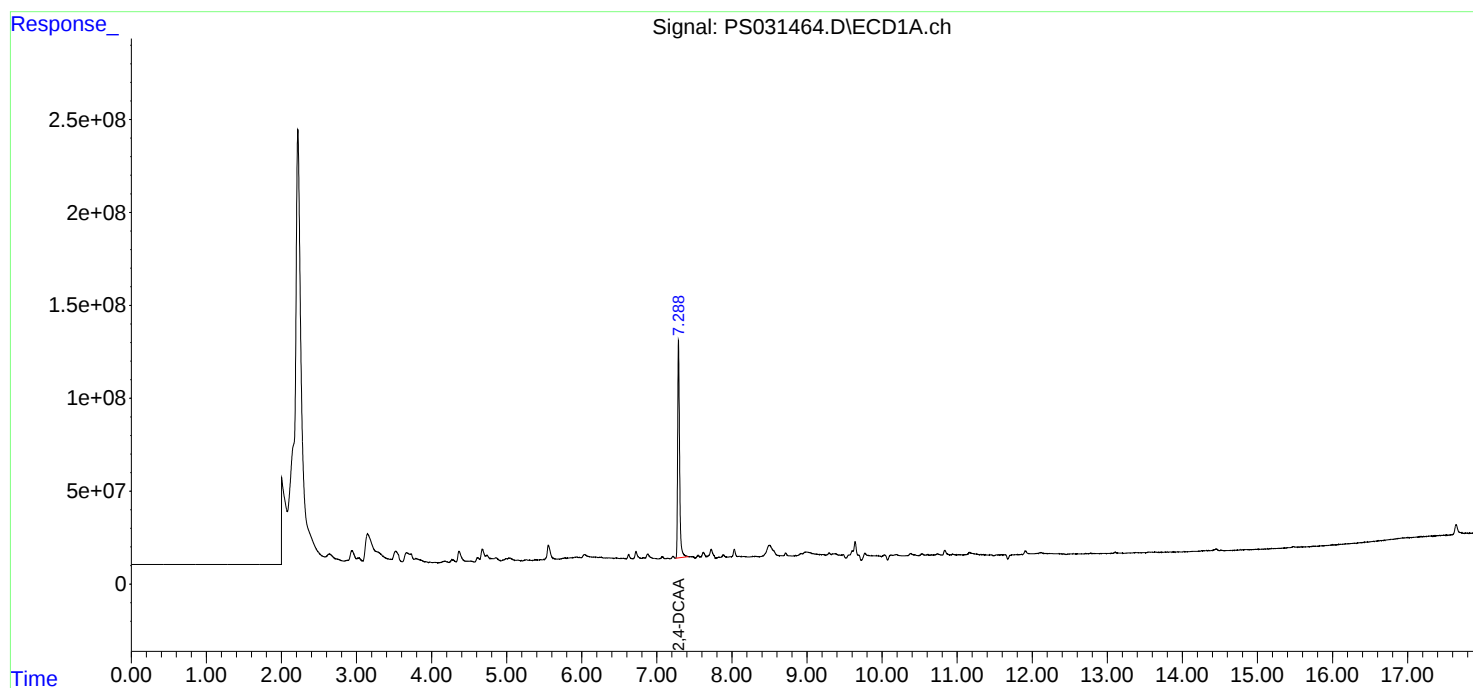
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

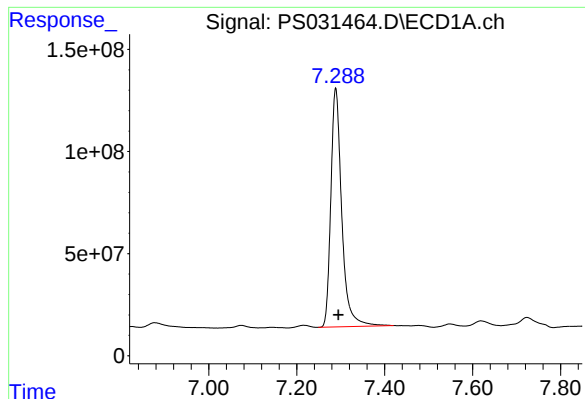
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS081525\
Data File : PS031464.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 15 Aug 2025 21:29
Operator : AR\AJ
Sample : Q2832-04
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
TG-S02

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 18 03:49:46 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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

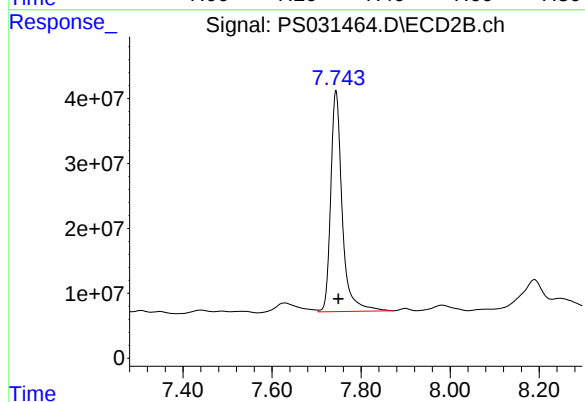




#4 2,4-DCAA

R.T.: 7.289 min
Delta R.T.: -0.006 min
Response: 2010881452
Conc: 633.55 ng/ml

Instrument :
ECD_S
ClientSampleId :
TG-S02



#4 2,4-DCAA

R.T.: 7.744 min
Delta R.T.: -0.006 min
Response: 607649516
Conc: 718.82 ng/ml

Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:	08/11/25	
Project:	Amtrak Sawtooth Bridges 2025		Date Received:	08/12/25	
Client Sample ID:	TG-S02RE		SDG No.:	Q2832	
Lab Sample ID:	Q2832-04RE		Matrix:	TCLP	
Analytical Method:	8151A		% Solid:	0	Decanted:
Sample Wt/Vol:	100	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	TCLP Herbicide	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	8151A				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS031486.D	1	08/15/25 08:45	08/18/25 15:57	PB169278

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	720	*	70 (61) - 130 (136)	144%	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\PS081825\
Data File : PS031486.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Aug 2025 15:57
Operator : AR\AJ
Sample : Q2832-04RE
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
TG-S02RE

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 19 07:45:37 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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	7.289	7.743	2005.7E6	608.4E6	631.919	719.692

Target Compounds

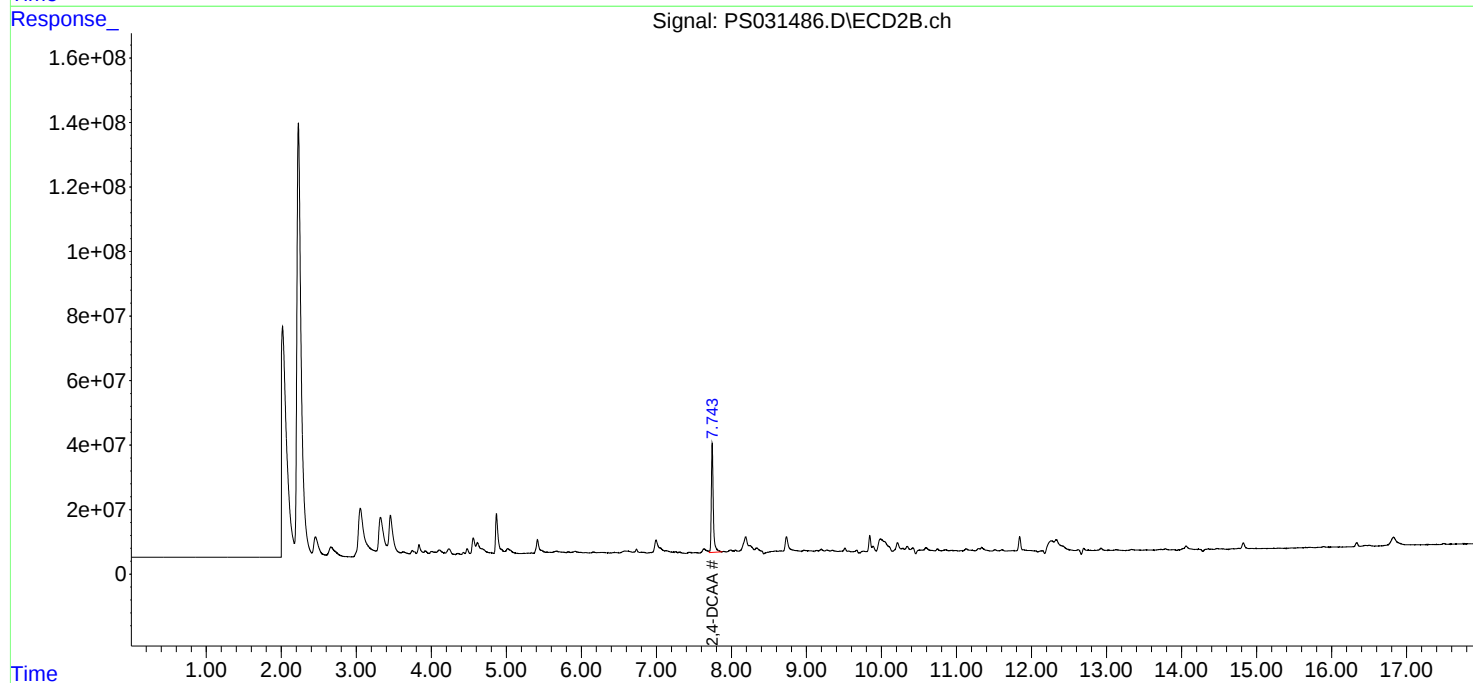
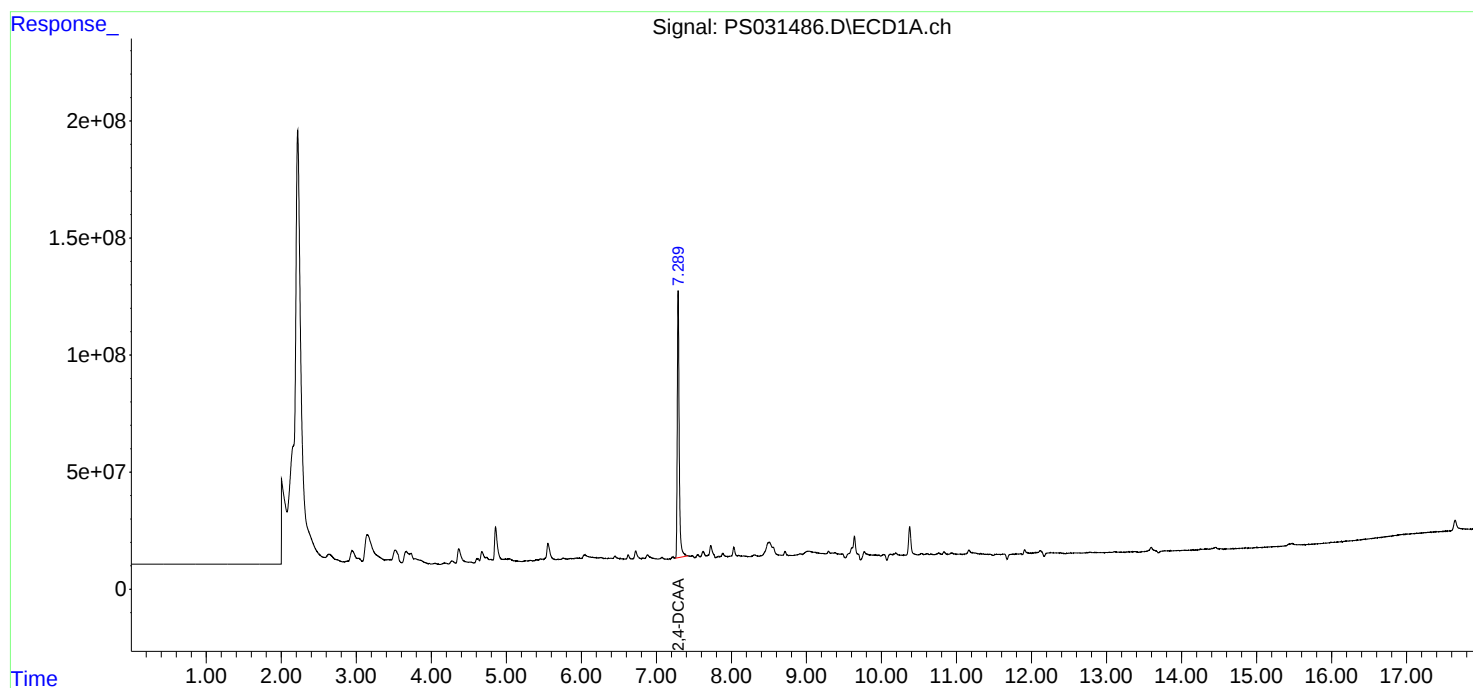
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

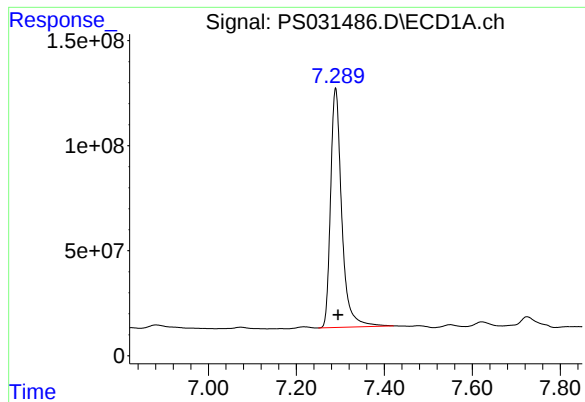
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS081825\
Data File : PS031486.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Aug 2025 15:57
Operator : AR\AJ
Sample : Q2832-04RE
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
TG-S02RE

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 19 07:45:37 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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

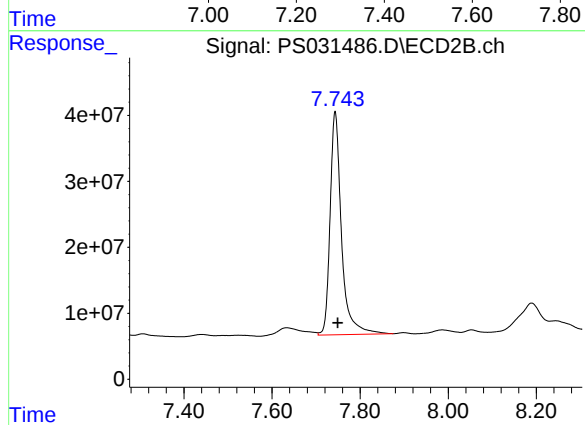




#4 2,4-DCAA

R.T.: 7.289 min
Delta R.T.: -0.006 min
Response: 2005701850
Conc: 631.92 ng/ml

Instrument :
ECD_S
ClientSampleId :
TG-S02RE



#4 2,4-DCAA

R.T.: 7.743 min
Delta R.T.: -0.006 min
Response: 608384473
Conc: 719.69 ng/ml

Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:	08/11/25	
Project:	Amtrak Sawtooth Bridges 2025		Date Received:	08/12/25	
Client Sample ID:	TG-S03		SDG No.:	Q2832	
Lab Sample ID:	Q2832-06		Matrix:	TCLP	
Analytical Method:	8151A		% Solid:	0	Decanted:
Sample Wt/Vol:	100	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	TCLP Herbicide	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	8151A				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS031465.D	1	08/15/25 08:45	08/15/25 21:54	PB169278

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	738	*	70 (61) - 130 (136)	148%	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\PS081525\
Data File : PS031465.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 15 Aug 2025 21:54
Operator : AR\AJ
Sample : Q2832-06
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
TG-S03

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 18 03:50:05 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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	7.289	7.744	2075.9E6	624.2E6	654.021	738.377

Target Compounds

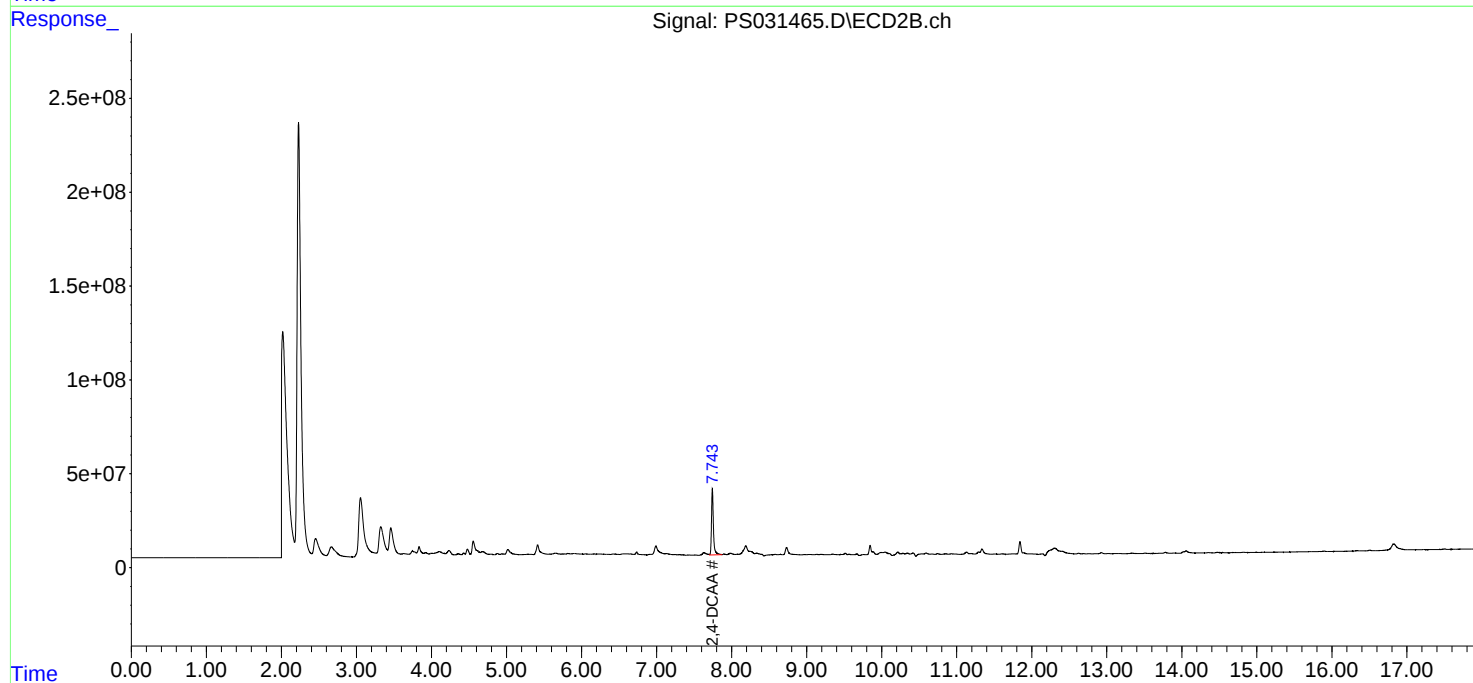
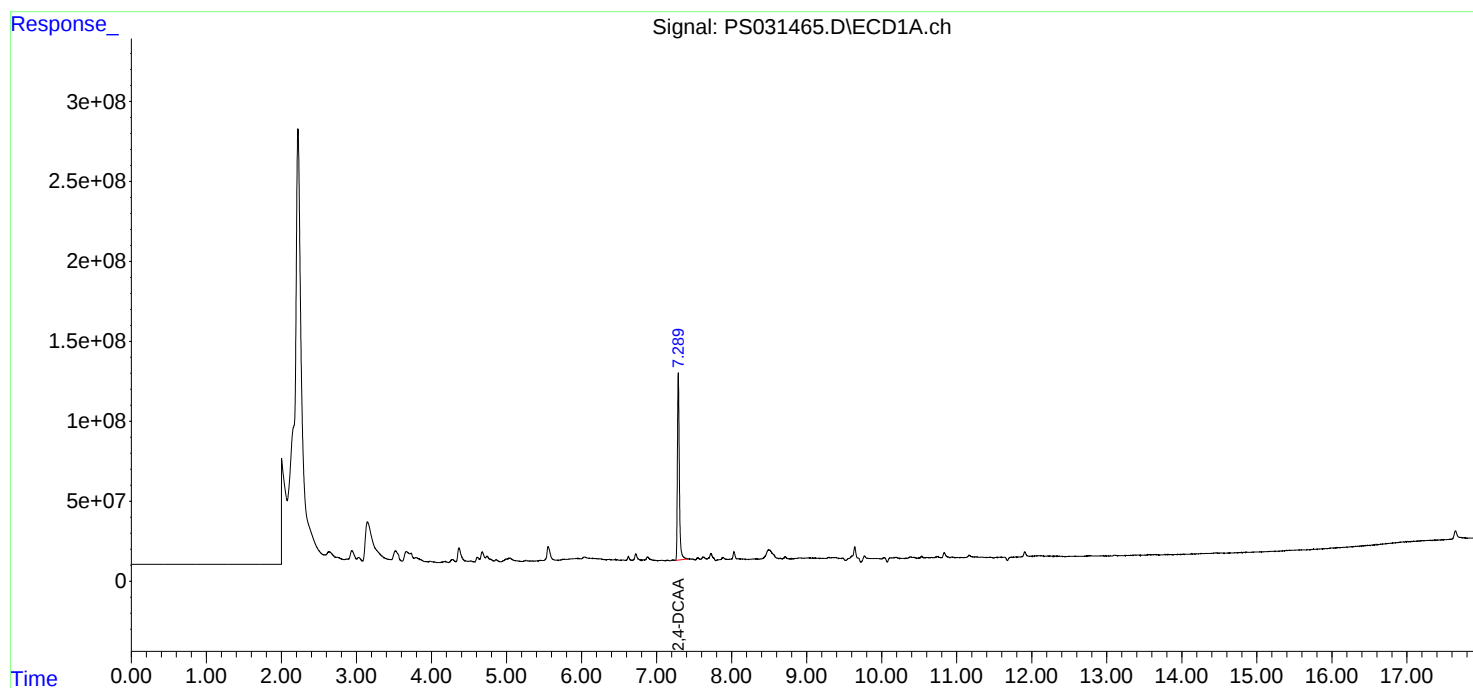
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

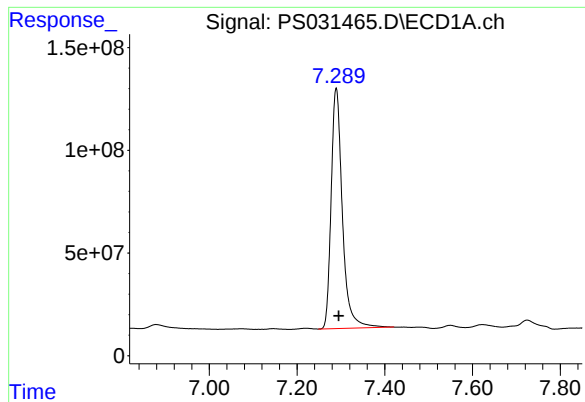
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS081525\
Data File : PS031465.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 15 Aug 2025 21:54
Operator : AR\AJ
Sample : Q2832-06
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
TG-S03

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 18 03:50:05 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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

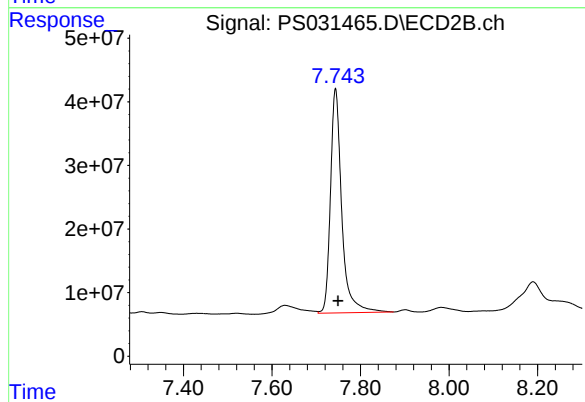




#4 2,4-DCAA

R.T.: 7.289 min
Delta R.T.: -0.005 min
Response: 2075854477
Conc: 654.02 ng/ml

Instrument :
ECD_S
ClientSampleId :
TG-S03



#4 2,4-DCAA

R.T.: 7.744 min
Delta R.T.: -0.006 min
Response: 624178986
Conc: 738.38 ng/ml

Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:	08/11/25	
Project:	Amtrak Sawtooth Bridges 2025		Date Received:	08/12/25	
Client Sample ID:	TG-S03RE		SDG No.:	Q2832	
Lab Sample ID:	Q2832-06RE		Matrix:	TCLP	
Analytical Method:	8151A		% Solid:	0	Decanted:
Sample Wt/Vol:	100	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	TCLP Herbicide	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	8151A				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS031487.D	1	08/15/25 08:45	08/18/25 16:21	PB169278

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	729	*	70 (61) - 130 (136)	146%	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\PS081825\
Data File : PS031487.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Aug 2025 16:21
Operator : AR\AJ
Sample : Q2832-06RE
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
TG-S03RE

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 19 07:46:00 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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	7.288	7.743	2050.3E6	616.6E6	645.971	729.386

Target Compounds

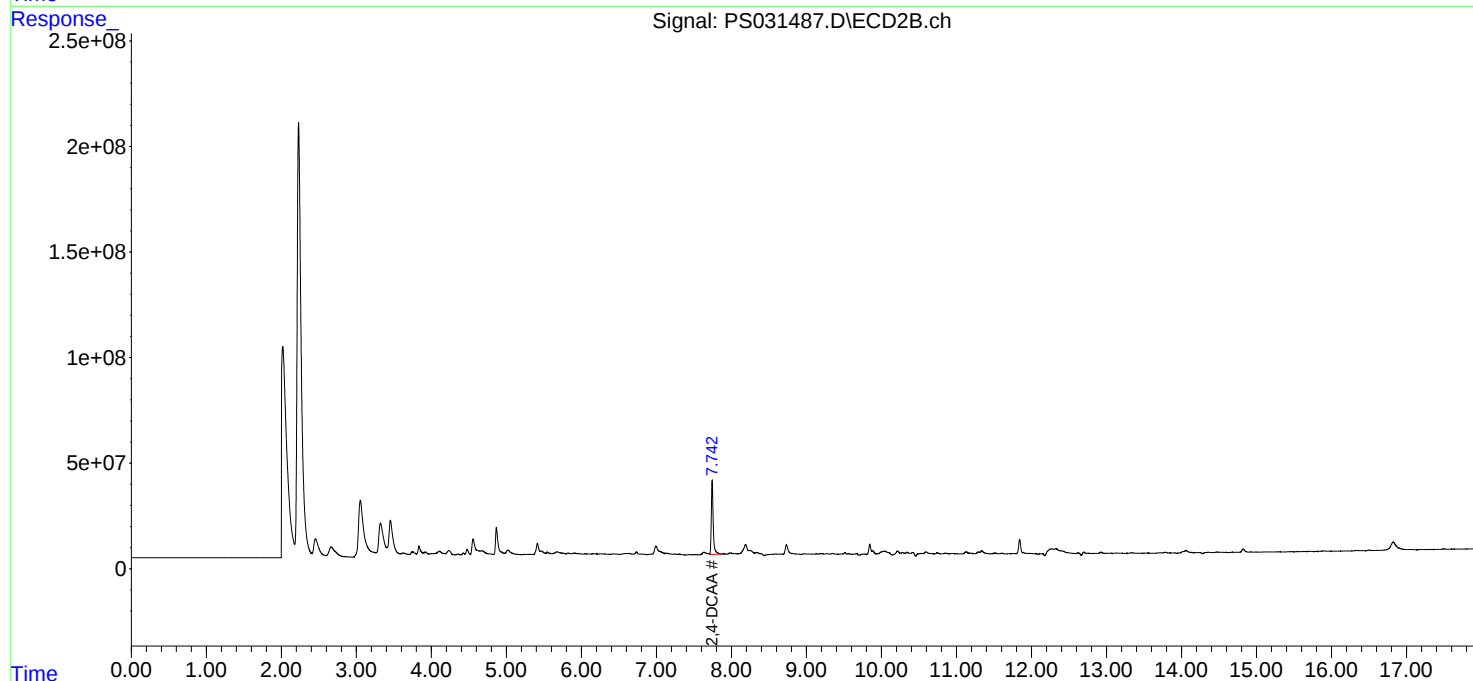
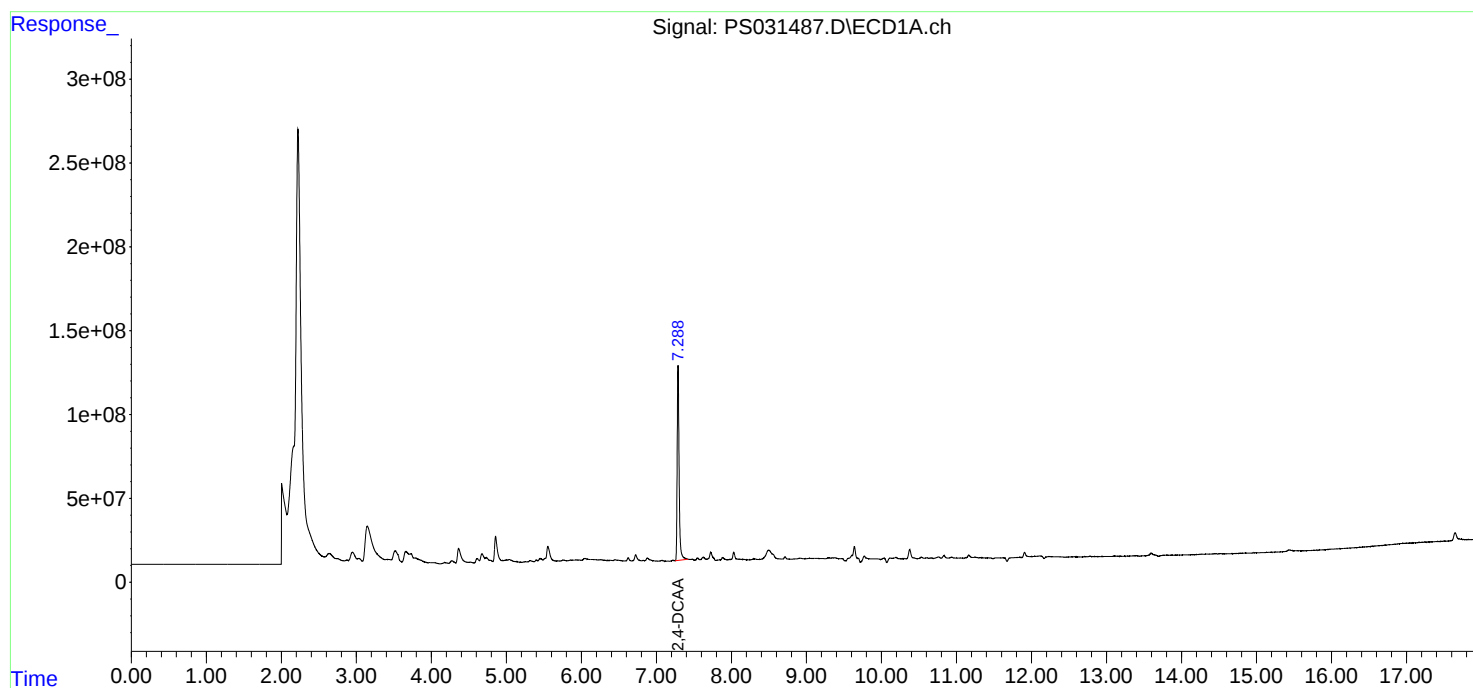
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

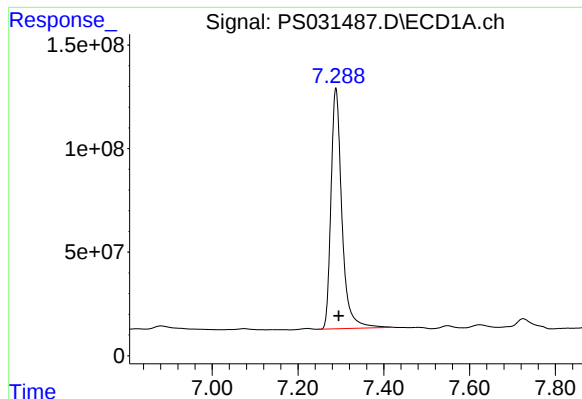
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS081825\
Data File : PS031487.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Aug 2025 16:21
Operator : AR\AJ
Sample : Q2832-06RE
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
TG-S03RE

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 19 07:46:00 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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

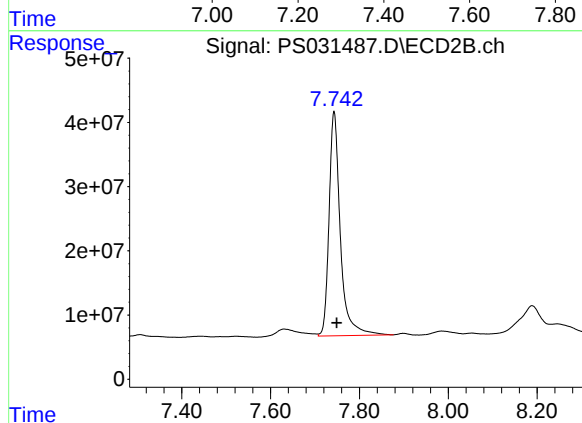




#4 2,4-DCAA

R.T.: 7.288 min
Delta R.T.: -0.006 min
Response: 2050305367
Conc: 645.97 ng/ml

Instrument :
ECD_S
ClientSampleId :
TG-S03RE



#4 2,4-DCAA

R.T.: 7.743 min
Delta R.T.: -0.006 min
Response: 616579020
Conc: 729.39 ng/ml

Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:	08/11/25	
Project:	Amtrak Sawtooth Bridges 2025		Date Received:	08/12/25	
Client Sample ID:	TG-S04		SDG No.:	Q2832	
Lab Sample ID:	Q2832-08		Matrix:	TCLP	
Analytical Method:	8151A		% Solid:	0	Decanted:
Sample Wt/Vol:	100	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	TCLP Herbicide	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	8151A				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS031466.D	1	08/15/25 08:45	08/15/25 22:18	PB169278

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	769	*	70 (61) - 130 (136)	154%	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\PS081525\
 Data File : PS031466.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 15 Aug 2025 22:18
 Operator : AR\AJ
 Sample : Q2832-08
 Misc :
 ALS Vial : 13 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 TG-S04

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 18 03:50:24 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
 Quant Title : 8080.M
 QLast Update : Fri Aug 08 03:17:54 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	7.289	7.743	2150.2E6	650.4E6	677.457	769.377

Target Compounds

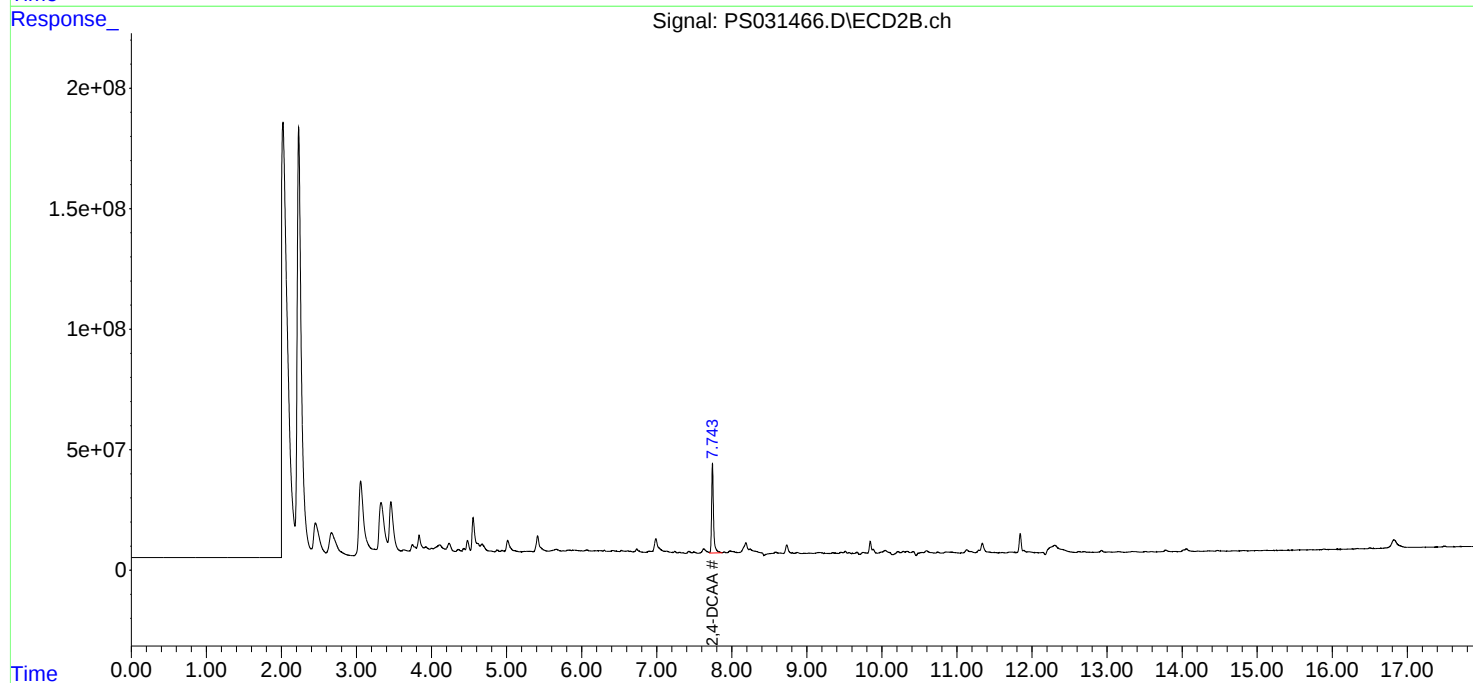
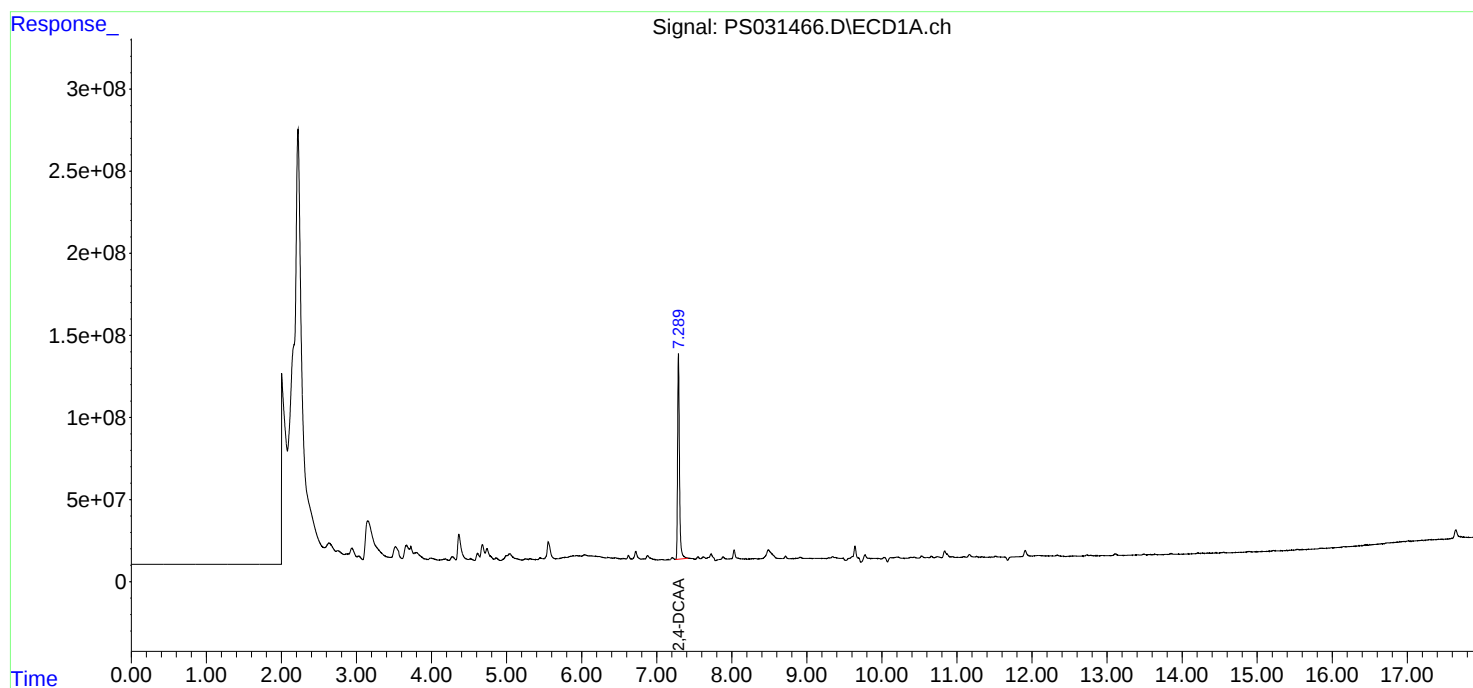
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

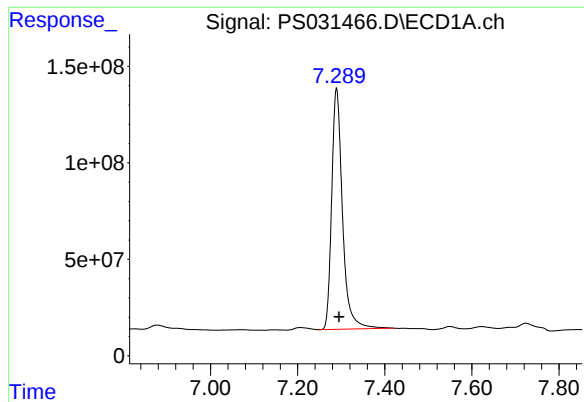
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS081525\
Data File : PS031466.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 15 Aug 2025 22:18
Operator : AR\AJ
Sample : Q2832-08
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
TG-S04

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 18 03:50:24 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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

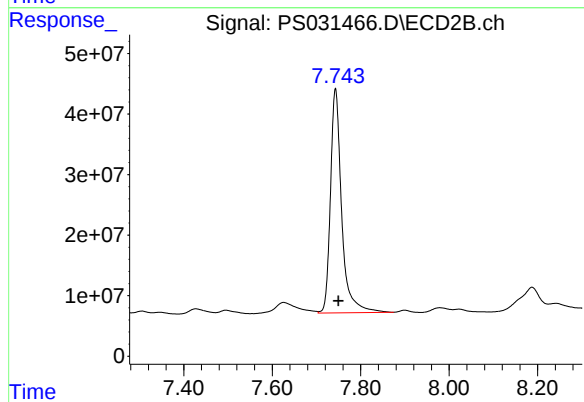




#4 2,4-DCAA

R.T.: 7.289 min
Delta R.T.: -0.005 min
Response: 2150238985
Conc: 677.46 ng/ml

Instrument :
ECD_S
ClientSampleId :
TG-S04



#4 2,4-DCAA

R.T.: 7.743 min
Delta R.T.: -0.006 min
Response: 650384519
Conc: 769.38 ng/ml

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	08/11/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	08/12/25
Client Sample ID:	TG-S04RE	SDG No.:	Q2832
Lab Sample ID:	Q2832-08RE	Matrix:	TCLP
Analytical Method:	8151A	% 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
PS031488.D	1	08/15/25 08:45	08/18/25 16:45	PB169278

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	768	*	70 (61) - 130 (136)	154%	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\PS081825\
Data File : PS031488.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Aug 2025 16:45
Operator : AR\AJ
Sample : Q2832-08RE
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
TG-S04RE

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 19 07:46:21 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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	7.288	7.743	2134.9E6	649.2E6	672.621	767.990

Target Compounds

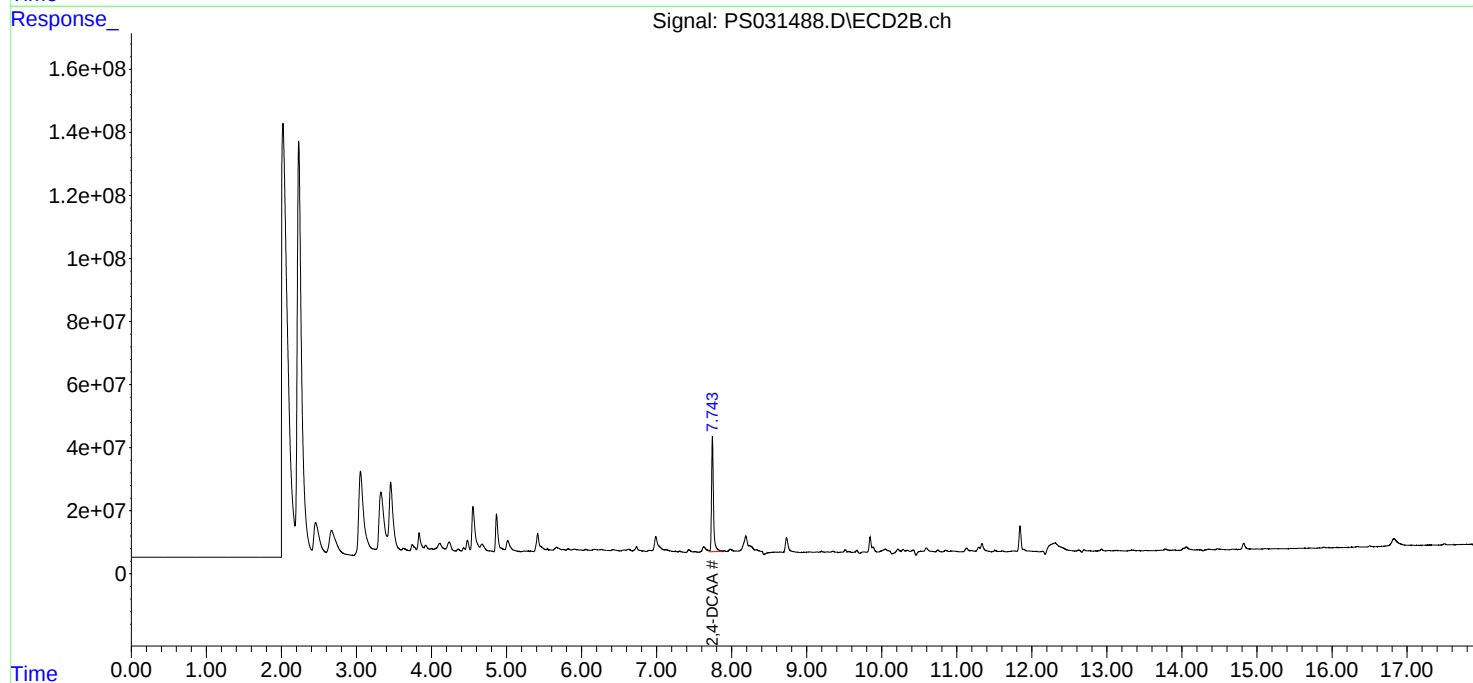
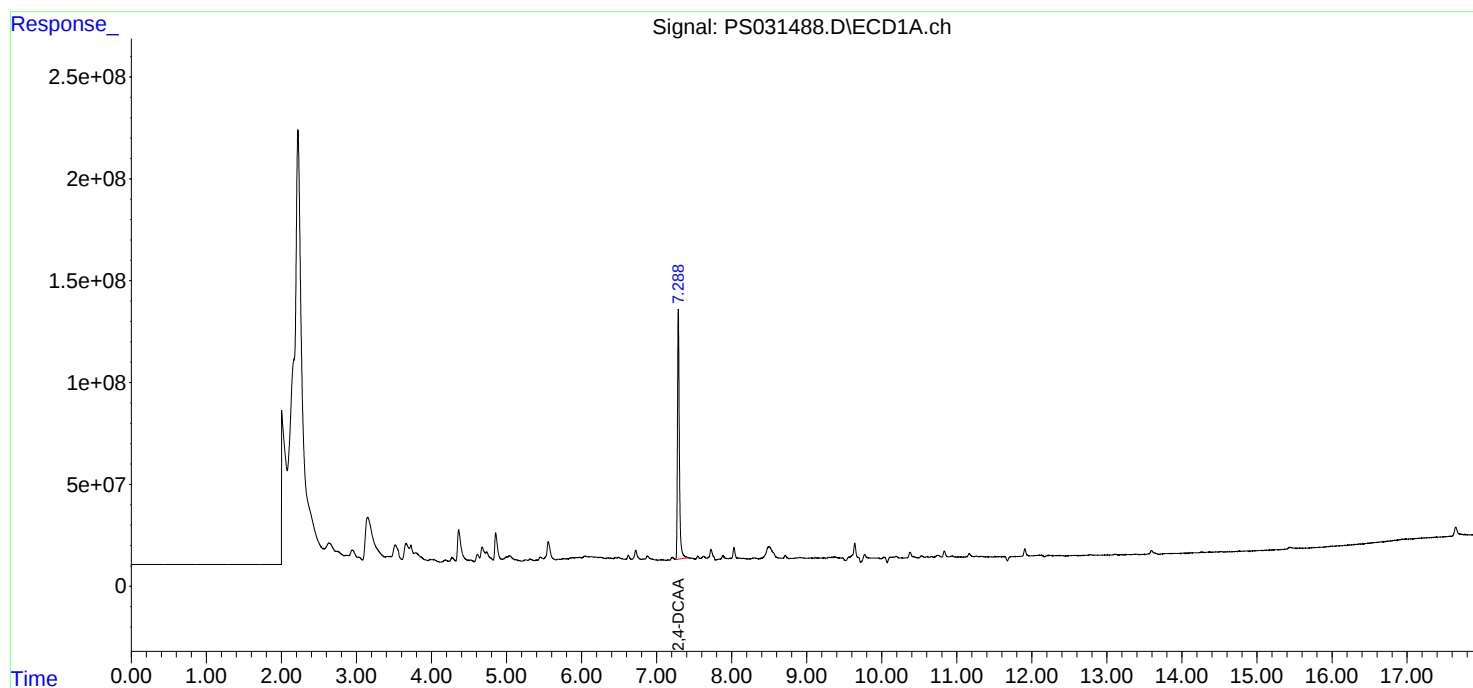
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

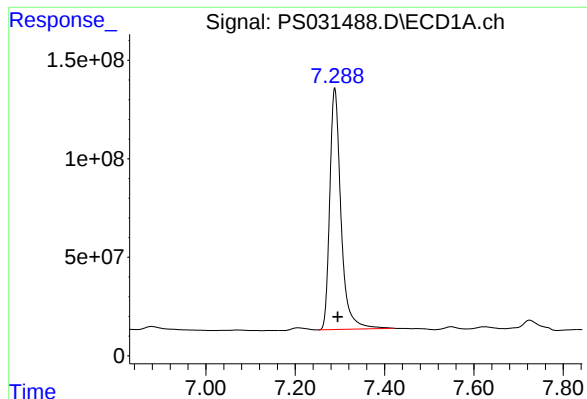
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS081825\
Data File : PS031488.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Aug 2025 16:45
Operator : AR\AJ
Sample : Q2832-08RE
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
TG-S04RE

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 19 07:46:21 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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

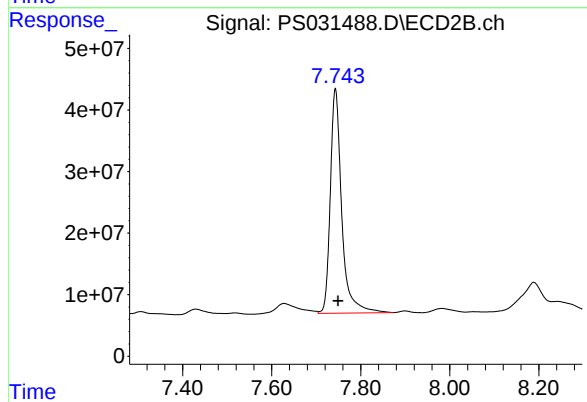




#4 2,4-DCAA

R.T.: 7.288 min
Delta R.T.: -0.006 min
Response: 2134890077
Conc: 672.62 ng/ml

Instrument :
ECD_S
ClientSampleId :
TG-S04RE



#4 2,4-DCAA

R.T.: 7.743 min
Delta R.T.: -0.006 min
Response: 649212257
Conc: 767.99 ng/ml

Report of Analysis

Client:	Portal Partners Tri-Venture		Date Collected:	08/12/25	
Project:	Amtrak Sawtooth Bridges 2025		Date Received:	08/12/25	
Client Sample ID:	TG-S05		SDG No.:	Q2832	
Lab Sample ID:	Q2832-10		Matrix:	TCLP	
Analytical Method:	8151A		% Solid:	0	Decanted:
Sample Wt/Vol:	100	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	TCLP Herbicide	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	8151A				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS031467.D	1	08/15/25 08:45	08/15/25 22:42	PB169278

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	758	*	70 (61) - 130 (136)	152%	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\PS081525\
Data File : PS031467.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 15 Aug 2025 22:42
Operator : AR\AJ
Sample : Q2832-10
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
TG-S05

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 18 03:50:44 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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	7.288	7.742	2142.0E6	641.0E6	674.852	758.224

Target Compounds

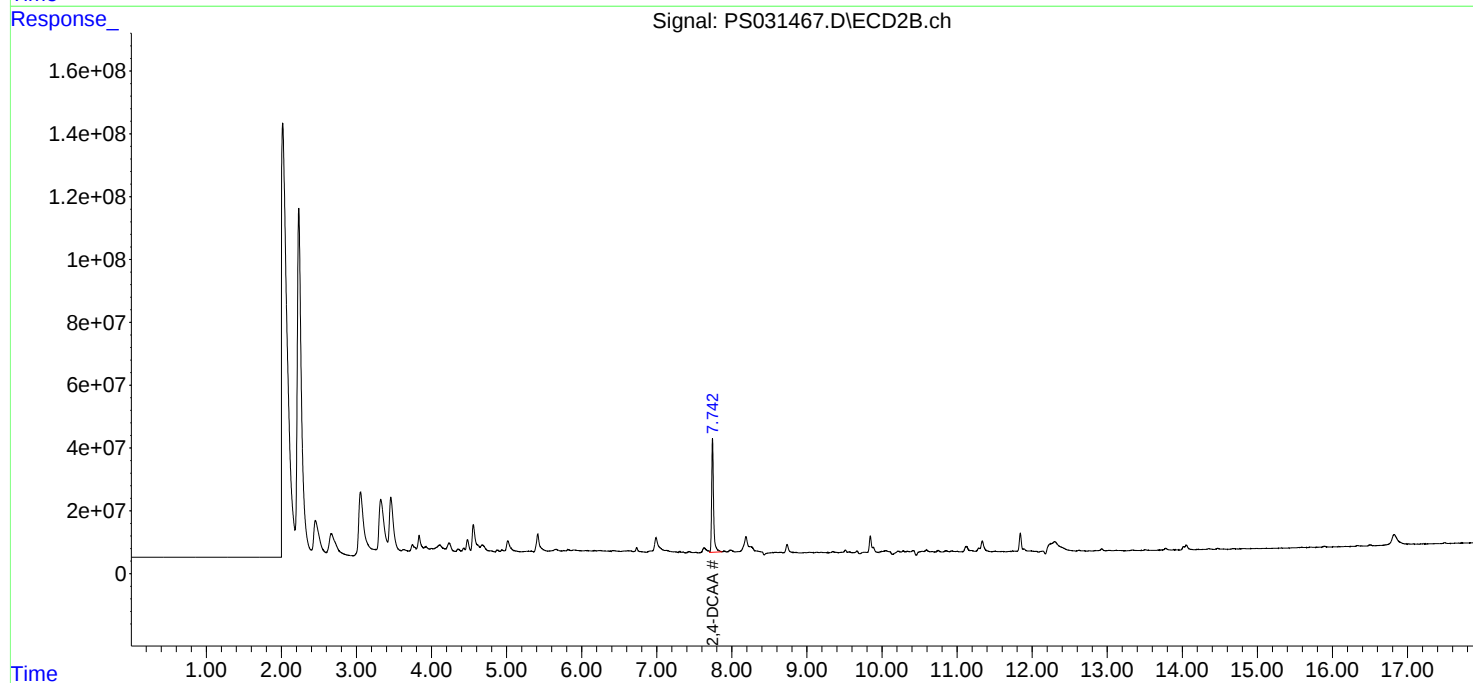
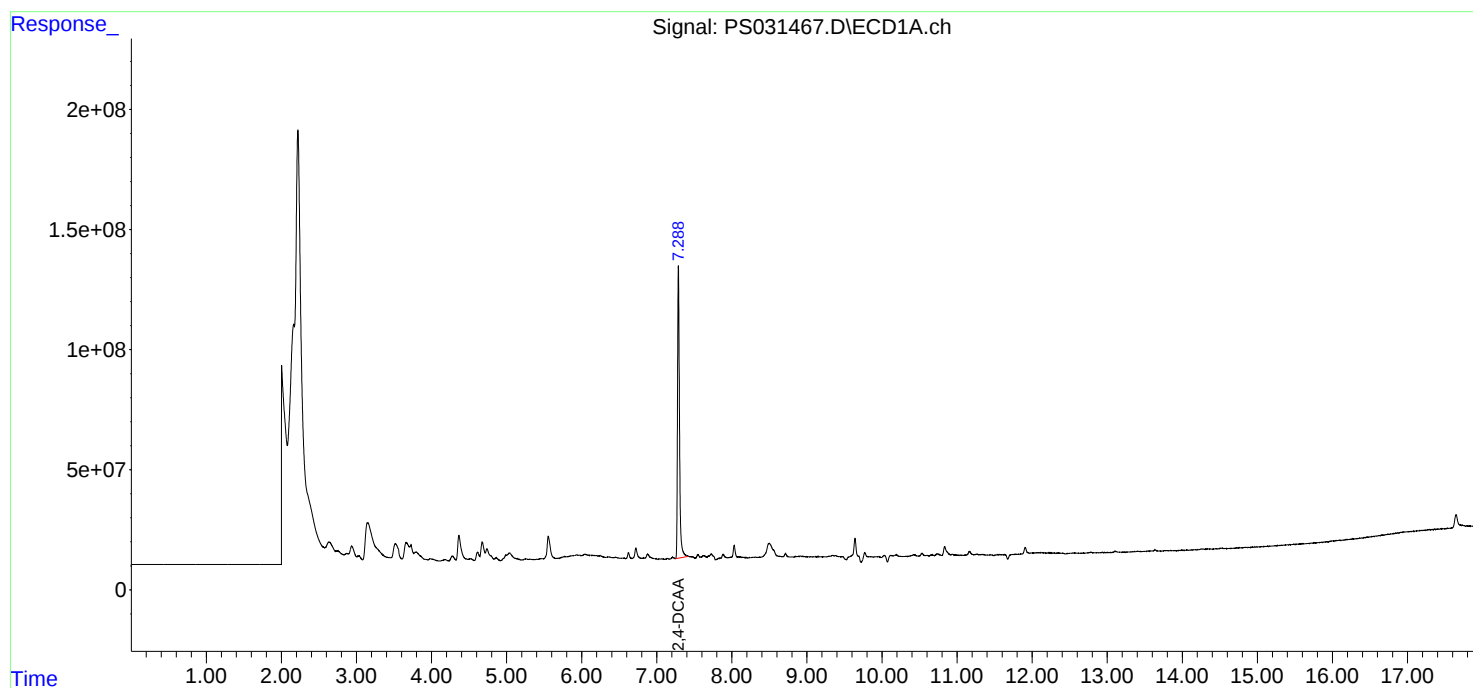
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

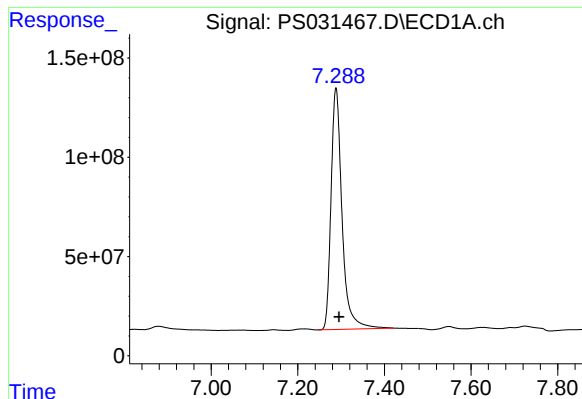
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS081525\
Data File : PS031467.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 15 Aug 2025 22:42
Operator : AR\AJ
Sample : Q2832-10
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
TG-S05

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 18 03:50:44 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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

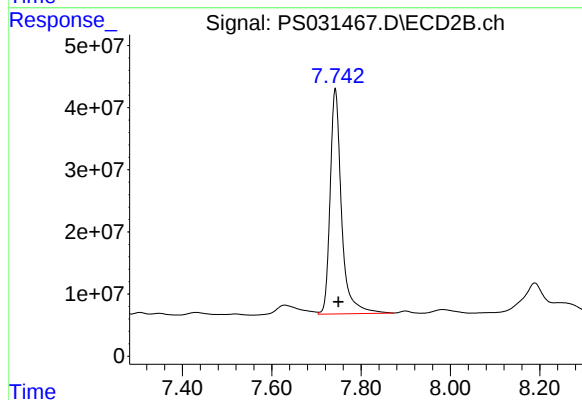




#4 2,4-DCAA

R.T.: 7.288 min
Delta R.T.: -0.007 min
Response: 2141971363
Conc: 674.85 ng/ml

Instrument :
ECD_S
ClientSampleId :
TG-S05



#4 2,4-DCAA

R.T.: 7.742 min
Delta R.T.: -0.007 min
Response: 640956461
Conc: 758.22 ng/ml

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	08/12/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	08/12/25
Client Sample ID:	TG-S05RE	SDG No.:	Q2832
Lab Sample ID:	Q2832-10RE	Matrix:	TCLP
Analytical Method:	8151A	% 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
PS031489.D	1	08/15/25 08:45	08/18/25 17:09	PB169278

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	746	*	70 (61) - 130 (136)	149%	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\PS081825\
Data File : PS031489.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Aug 2025 17:09
Operator : AR\AJ
Sample : Q2832-10RE
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
TG-S05RE

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 19 07:46:42 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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	7.288	7.743	2075.0E6	630.6E6	653.745	745.933

Target Compounds

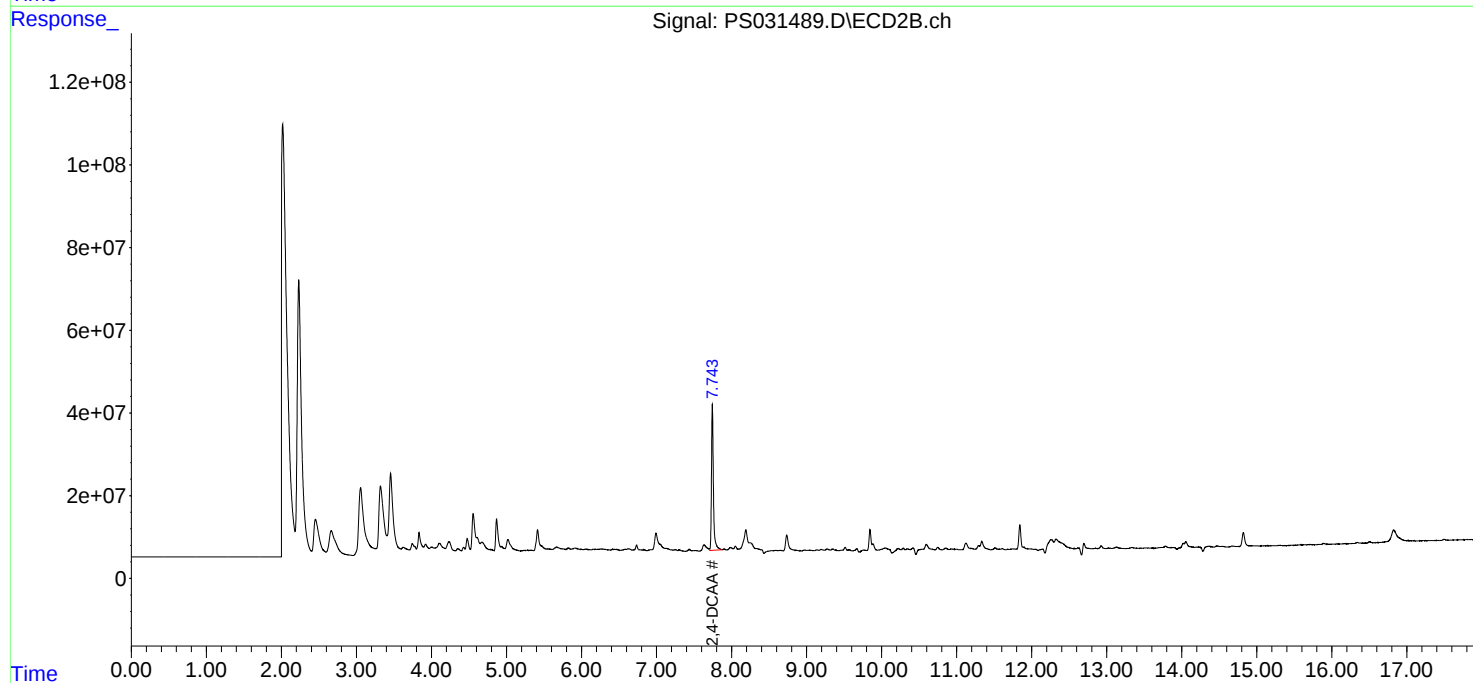
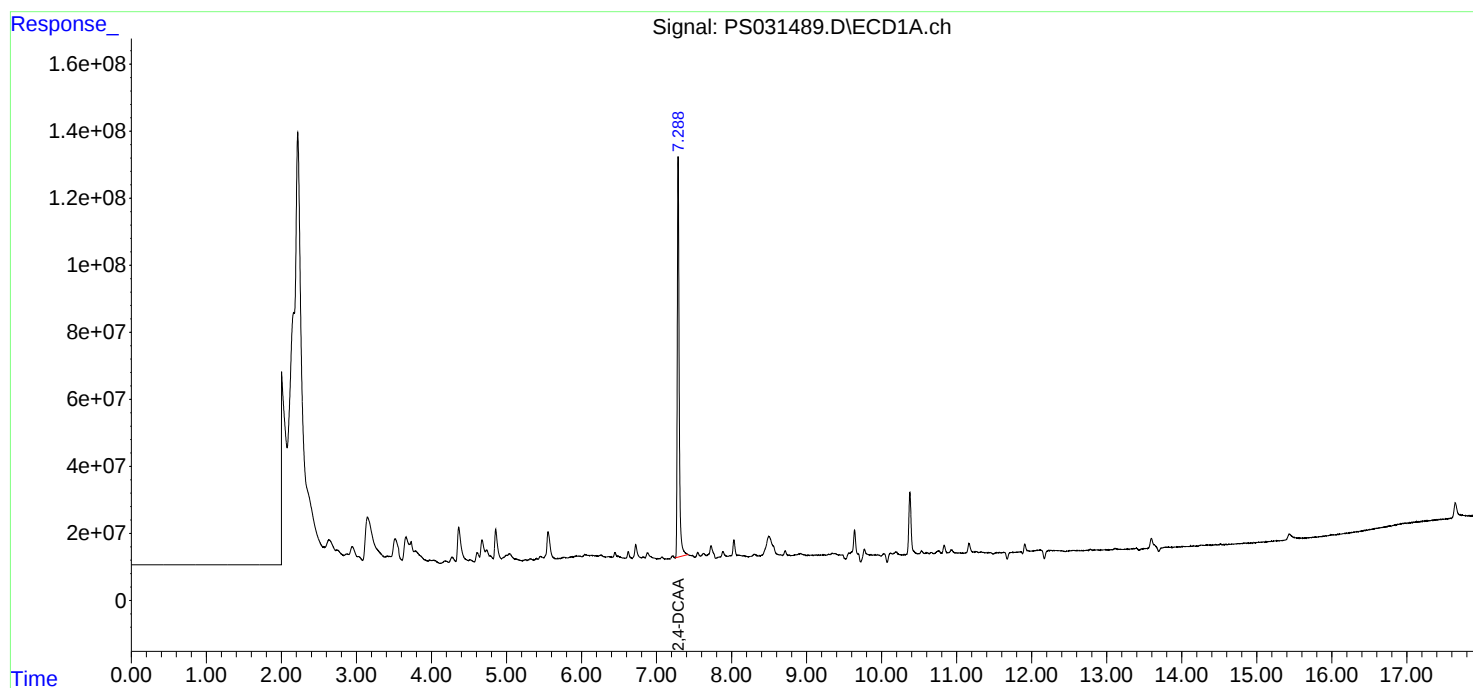
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

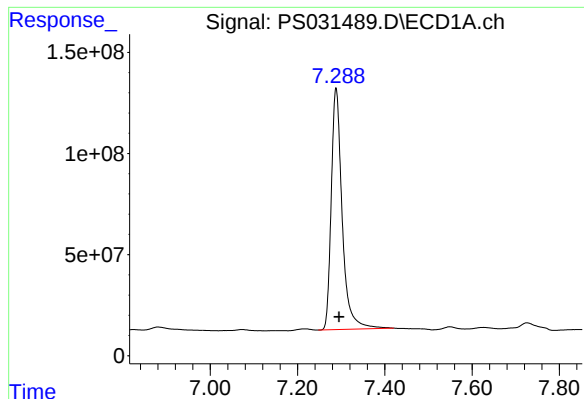
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS081825\
Data File : PS031489.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Aug 2025 17:09
Operator : AR\AJ
Sample : Q2832-10RE
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
TG-S05RE

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 19 07:46:42 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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

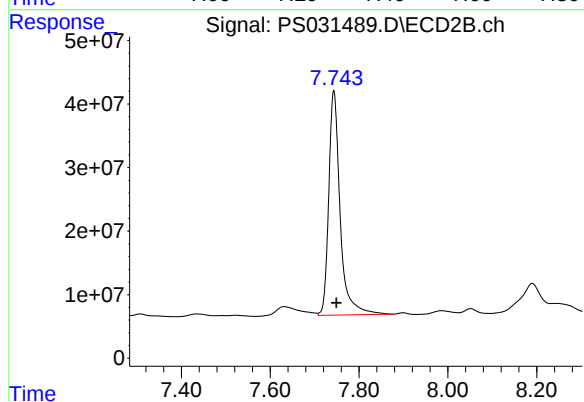




#4 2,4-DCAA

R.T.: 7.288 min
Delta R.T.: -0.007 min
Response: 2074979258
Conc: 653.75 ng/ml

Instrument :
ECD_S
ClientSampleId :
TG-S05RE



#4 2,4-DCAA

R.T.: 7.743 min
Delta R.T.: -0.006 min
Response: 630566969
Conc: 745.93 ng/ml



CALIBRATION SUMMARY

RETENTION TIMES OF INITIAL CALIBRATION

Lab Name:	<u>Alliance</u>	Contract:	<u>PORT06</u>
Lab Code:	<u>ACE</u>	SDG NO.:	<u>Q2832</u>
Instrument ID:	<u>ECD_S</u>	Calibration Date(s):	<u>08/07/2025</u> <u>08/07/2025</u>
		Calibration Times:	<u>12:02</u> <u>13:38</u>

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

LAB FILE ID:	RT 200 = <u>PS031379.D</u>	RT 500 = <u>PS031380.D</u>
RT 750 = <u>PS031381.D</u>	RT 1000 = <u>PS031382.D</u>	RT 1500 = <u>PS031383.D</u>

COMPOUND	RT 200	RT 500	RT 750	RT 1000	RT 1500	MEAN RT	RT WINDOW FROM TO	
2,4,5-TP(Silvex)	9.30	9.30	9.30	9.30	9.30	9.30	9.20	9.40
2,4-D	8.43	8.42	8.42	8.42	8.42	8.42	8.32	8.52
2,4-DCAA	7.30	7.30	7.30	7.29	7.29	7.29	7.19	7.39

Calibration Times: 12:02 13:38

LAB FILE ID:	RT 200 =	<u>PS031379.D</u>	RT 500 =	<u>PS031380.D</u>
	RT 750 =	PS031381.D	RT 1000 =	PS031382.D
			RT 1500 =	PS031383.D

[illegible]



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

CALIBRATION FACTOR OF INITIAL CALIBRATION

Lab Name: Alliance

Contract: PORT06

Lab Code: ACE

SDG NO.: Q2832

Instrument ID: ECD_S

Calibration Date(s): 08/07/2025 08/07/2025

Calibration Times: 12:02 13:38

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

LAB FILE ID:		CF 200 =	<u>PS031379.D</u>	CF 500 =	<u>PS031380.D</u>		
CF 750 =		<u>PS031381.D</u>	CF 1000 =	<u>PS031382.D</u>	CF 1500 =	<u>PS031383.D</u>	
COMPOUND	CF 200	CF 500	CF 750	CF 1000	CF 1500	CF	% RSD
2,4,5-TP(Silvex)	18839000000	18369900000	17907800000	17569300000	16932500000	17923700000	4
2,4-D	3359960000	2835460000	2754100000	2719120000	2715430000	2876820000	10
2,4-DCAA	3597170000	3293120000	3103110000	3009470000	2867080000	3173990000	9



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

CALIBRATION FACTOR OF INITIAL CALIBRATION

Lab Name: Alliance

Contract: PORT06

Lab Code: ACE

SDG NO.: Q2832

Instrument ID: ECD_S

Calibration Date(s): 08/07/2025 08/07/2025

Calibration Times: 12:02 13:38

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

LAB FILE ID:		CF 200 =	<u>PS031379.D</u>	CF 500 =	<u>PS031380.D</u>		
CF 750 =		<u>PS031381.D</u>	CF 1000 =	<u>PS031382.D</u>	CF 1500 =	<u>PS031383.D</u>	
COMPOUND	CF 200	CF 500	CF 750	CF 1000	CF 1500	CF	% RSD
2,4,5-TP(Silvex)	13728500000	13523000000	13089500000	12836400000	12402700000	13116000000	4
2,4-D	1540750000	1470040000	1417550000	1385470000	1322620000	1427290000	6
2,4-DCAA	909289000	862278000	831824000	818654000	804653000	845340000	5

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS080725\
 Data File : PS031379.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 07 Aug 2025 12:02
 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: Aug 08 03:11:37 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
 Quant Title : 8080.M
 QLast Update : Fri Aug 08 03:11:03 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	7.296	7.751	719.4E6	181.9E6	231.843	218.625
Target Compounds							
1) T	Dalapon	2.676	2.696	1075.2E6	545.6E6	209.879	210.662
2) T	3,5-DICHL...	6.461	6.702	989.6E6	277.2E6	213.739	209.104
3) T	4-Nitroph...	7.104	7.306	197.2E6	204.1E6	190.292	160.746
5) T	DICAMBA	7.481	7.947	2847.6E6	1092.7E6	206.171	193.355
6) T	MCPD	7.658	8.042	111.0E6	26621232	13.111	14.333
7) T	MCPA	7.806	8.288	163.7E6	46873653	16.168	16.267
8) T	DICHLORPROP	8.190	8.667	685.7E6	279.8E6	223.160	214.711
9) T	2,4-D	8.427	9.011	631.7E6	289.7E6	229.357	204.339
10) T	Pentachlo...	8.721	9.518	10500.8E6	6889.1E6	209.380	194.022
11) T	2,4,5-TP ...	9.300	9.904	3579.4E6	2608.4E6	199.880	199.276
12) T	2,4,5-T	9.597	10.334	2703.5E6	2254.0E6	183.200	189.777
13) T	2,4-DB	10.174	10.903	335.4E6	191.1E6	173.316	200.093
14) T	DINOSEB	11.373	11.278	2419.6E6	1812.7E6	189.568	190.587
15) T	Picloram	11.203	12.405	2131.3E6	2640.7E6	161.767	146.404
16) T	DCPA	11.672	12.319	4467.1E6	3839.1E6	195.020	193.521

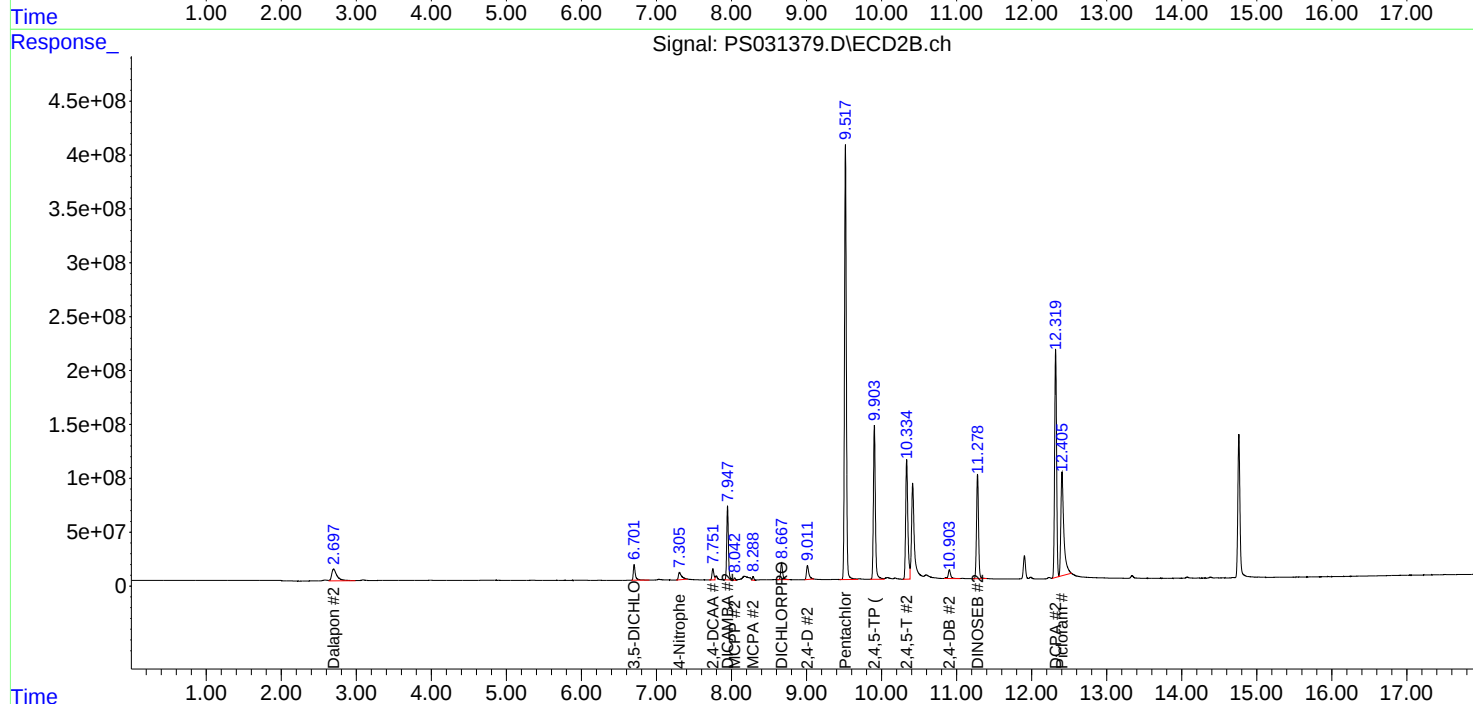
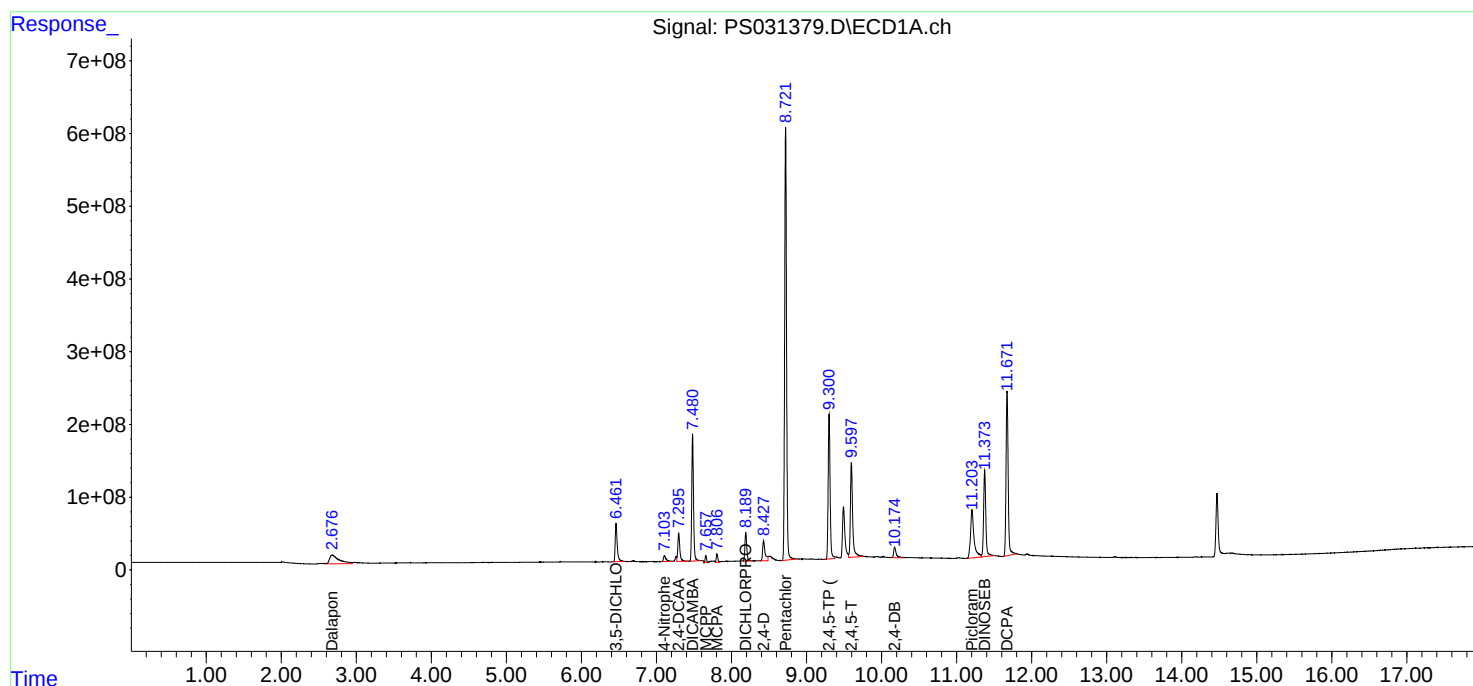
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS080725\
Data File : PS031379.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 07 Aug 2025 12:02
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: Aug 08 03:11:37 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:11:03 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\PS080725\
 Data File : PS031380.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 07 Aug 2025 12:26
 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: Aug 08 03:11:52 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
 Quant Title : 8080.M
 QLast Update : Fri Aug 08 03:11:03 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	7.295	7.749	1646.6E6	431.1E6	530.617	518.305
Target Compounds							
1) T	Dalapon	2.675	2.696	2447.3E6	1238.7E6	477.724	478.255
2) T	3,5-DICHL...	6.461	6.699	2261.7E6	644.0E6	488.515	485.809
3) T	4-Nitroph...	7.100	7.293	476.5E6	576.9E6	459.697	454.376
5) T	DICAMBA	7.481	7.947	6753.8E6	2706.0E6	488.984	478.811
6) T	MCPD	7.659	8.043	378.5E6	85050954	44.726	45.791
7) T	MCPA	7.808	8.291	455.4E6	137.0E6	44.966	47.543
8) T	DICHLORPROP	8.190	8.666	1529.2E6	641.6E6	497.653	492.401
9) T	2,4-D	8.424	9.007	1332.7E6	690.9E6	483.884	487.405
10) T	Pentachlo...	8.721	9.518	24872.6E6	17363.9E6	495.944	489.029
11) T	2,4,5-TP ...	9.301	9.903	8725.7E6	6423.4E6	487.257	490.729
12) T	2,4,5-T	9.596	10.331	6947.8E6	5745.2E6	470.808	483.725
13) T	2,4-DB	10.172	10.900	884.7E6	460.3E6	457.178	481.996
14) T	DINOSEB	11.374	11.278	6052.7E6	4520.7E6	474.211	475.314
15) T	Picloram	11.199	12.398	5937.0E6	8060.9E6	450.624	446.911
16) T	DCPA	11.672	12.320	11298.7E6	9750.1E6	493.263	491.488

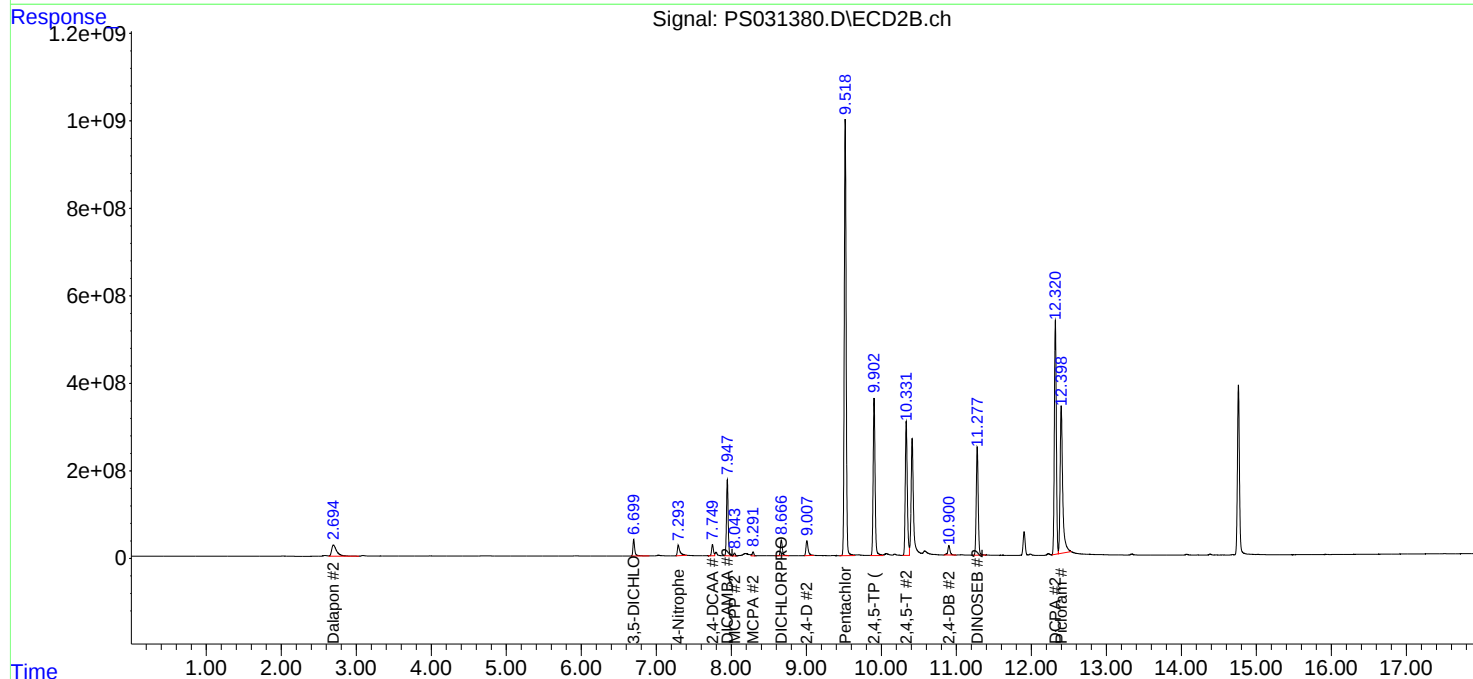
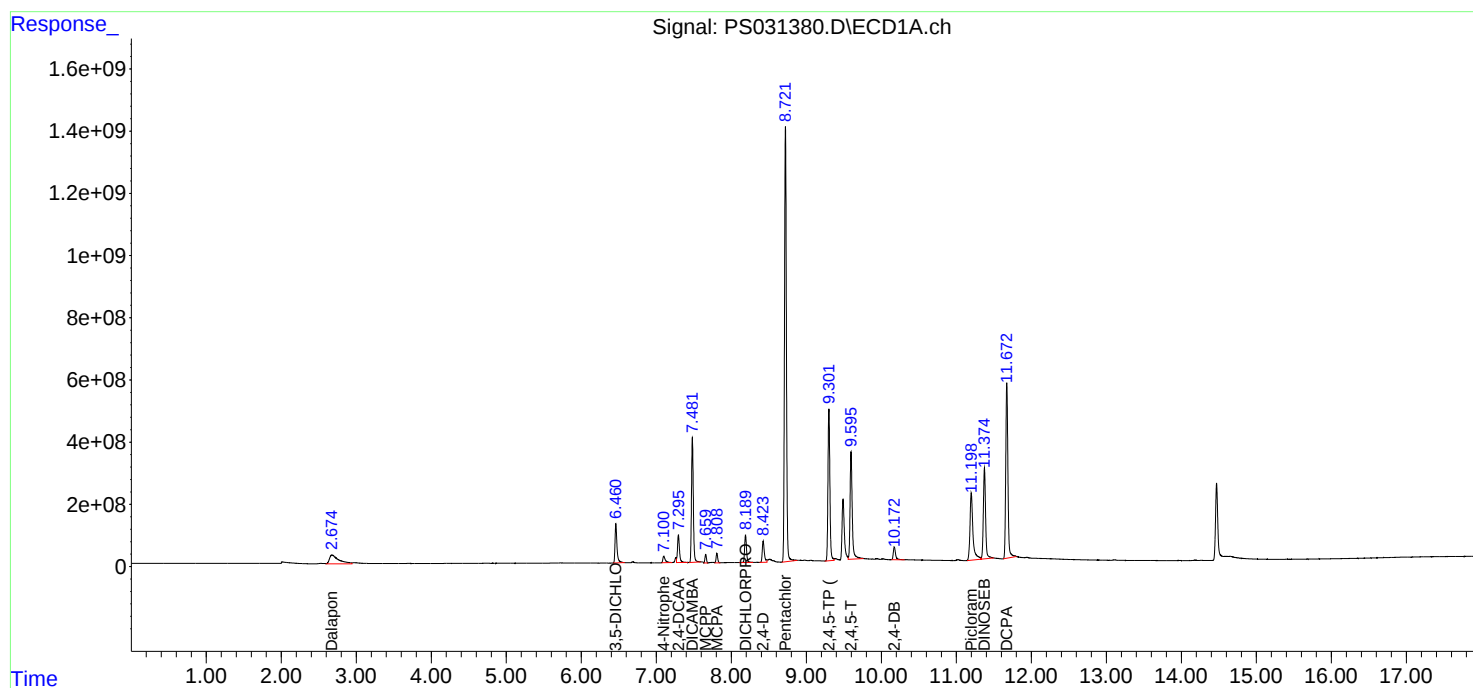
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS080725\
Data File : PS031380.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 07 Aug 2025 12:26
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: Aug 08 03:11:52 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:11:03 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\PS080725\
 Data File : PS031381.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 07 Aug 2025 12:50
 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: Aug 08 03:12:06 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
 Quant Title : 8080.M
 QLast Update : Fri Aug 08 03:11:03 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	7.295	7.749	2327.3E6	623.9E6	750.000	750.000
Target Compounds							
1) T	Dalapon	2.674	2.695	3496.4E6	1767.7E6	682.500	682.500
2) T	3,5-DICHL...	6.461	6.699	3229.3E6	924.7E6	697.500	697.500
3) T	4-Nitroph...	7.098	7.291	707.4E6	866.5E6	682.500	682.500
5) T	DICAMBA	7.481	7.947	9737.4E6	3984.3E6	705.000	705.000
6) T	MCPD	7.661	8.045	596.7E6	130.9E6	70.500	70.500
7) T	MCPA	7.809	8.293	706.4E6	201.0E6	69.750	69.750
8) T	DICHLORPROP	8.189	8.666	2166.3E6	918.6E6	705.000	705.000
9) T	2,4-D	8.424	9.006	1941.6E6	999.4E6	705.000	705.000
10) T	Pentachlo...	8.722	9.518	35733.3E6	25298.7E6	712.500	712.500
11) T	2,4,5-TP ...	9.300	9.903	12759.3E6	9326.3E6	712.500	712.500
12) T	2,4,5-T	9.595	10.331	10514.5E6	8462.3E6	712.500	712.500
13) T	2,4-DB	10.170	10.899	1378.8E6	680.5E6	712.500	712.500
14) T	DINOSEB	11.373	11.278	8998.4E6	6705.2E6	705.000	705.000
15) T	Picloram	11.197	12.395	9387.2E6	12851.3E6	712.500	712.500
16) T	DCPA	11.673	12.320	16492.3E6	14283.3E6	720.000	720.000

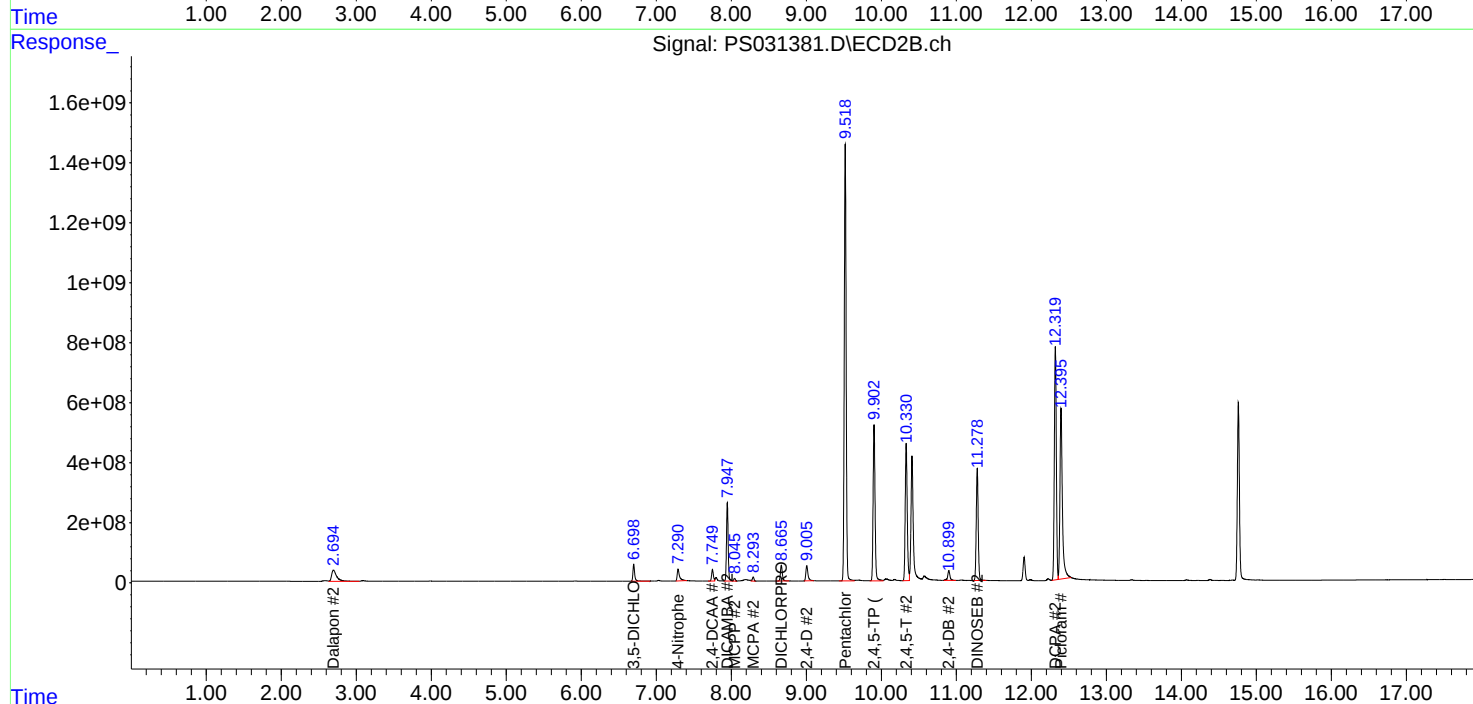
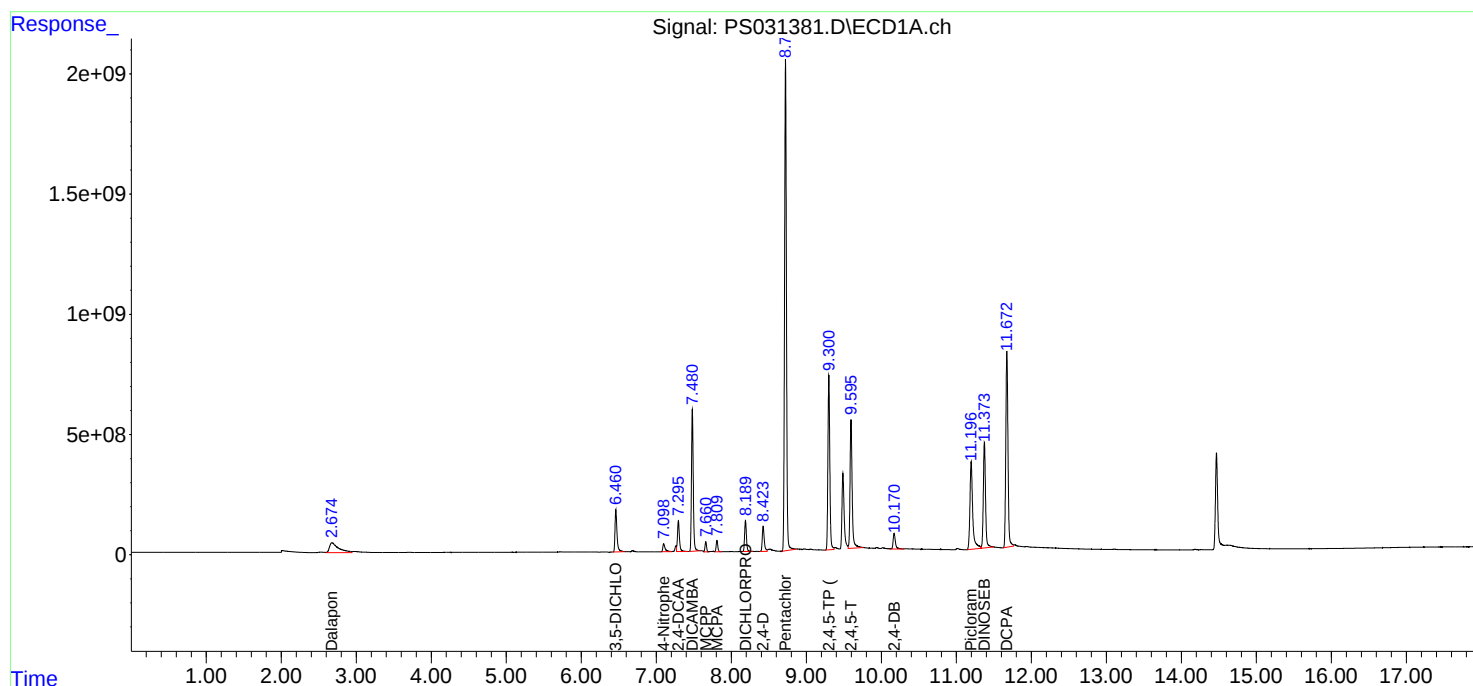
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS080725\
Data File : PS031381.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 07 Aug 2025 12:50
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: Aug 08 03:12:06 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:11:03 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\PS080725\
 Data File : PS031382.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 07 Aug 2025 13:14
 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: Aug 08 03:12:18 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
 Quant Title : 8080.M
 QLast Update : Fri Aug 08 03:11:03 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	7.294	7.748	3009.5E6	818.7E6	969.824	984.167
Target Compounds							
1) T	Dalapon	2.679	2.696	4569.2E6	2308.8E6	891.909	891.440
2) T	3,5-DICHL...	6.460	6.698	4169.1E6	1208.0E6	900.495	911.214
3) T	4-Nitroph...	7.097	7.288	930.4E6	1144.9E6	897.570	901.723
5) T	DICAMBA	7.481	7.947	12691.2E6	5297.9E6	918.854	937.448
6) T	MCPD	7.661	8.046	818.4E6	177.0E6	96.698	95.299
7) T	MCPA	7.811	8.295	961.9E6	270.0E6	94.977	93.689
8) T	DICHLORPROP	8.189	8.665	2817.3E6	1196.7E6	916.865	918.405
9) T	2,4-D	8.423	9.004	2556.0E6	1302.3E6	928.062	918.729
10) T	Pentachlo...	8.725	9.518	43590.7E6	33125.7E6	869.172	932.937
11) T	2,4,5-TP ...	9.300	9.902	16690.8E6	12194.6E6	932.040	931.632
12) T	2,4,5-T	9.594	10.330	14154.4E6	11213.3E6	959.146	944.127
13) T	2,4-DB	10.170	10.898	1880.0E6	900.2E6	971.467	942.536
14) T	DINOSEB	11.373	11.278	11881.3E6	8860.8E6	930.865	931.640
15) T	Picloram	11.195	12.393	13105.2E6	17956.4E6	994.700	995.535
16) T	DCPA	11.672	12.319	21625.4E6	18742.0E6	944.095	944.752

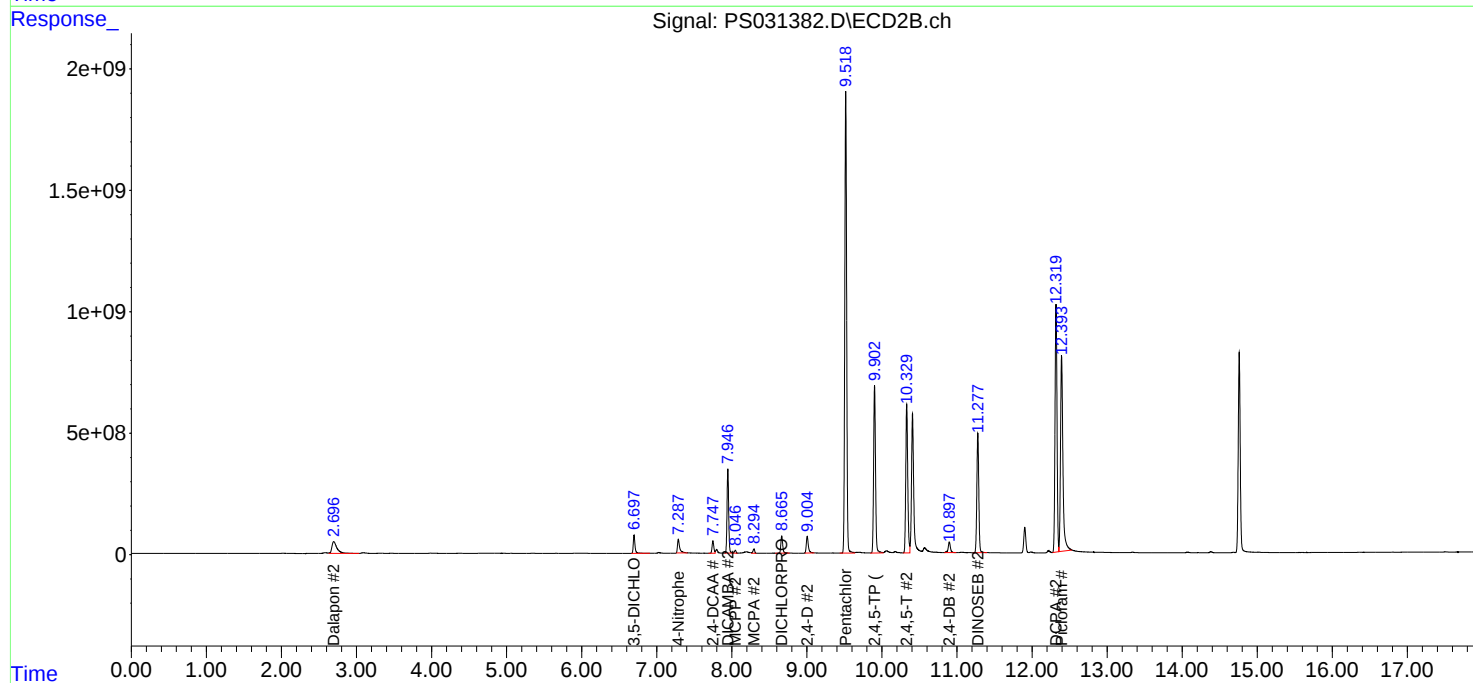
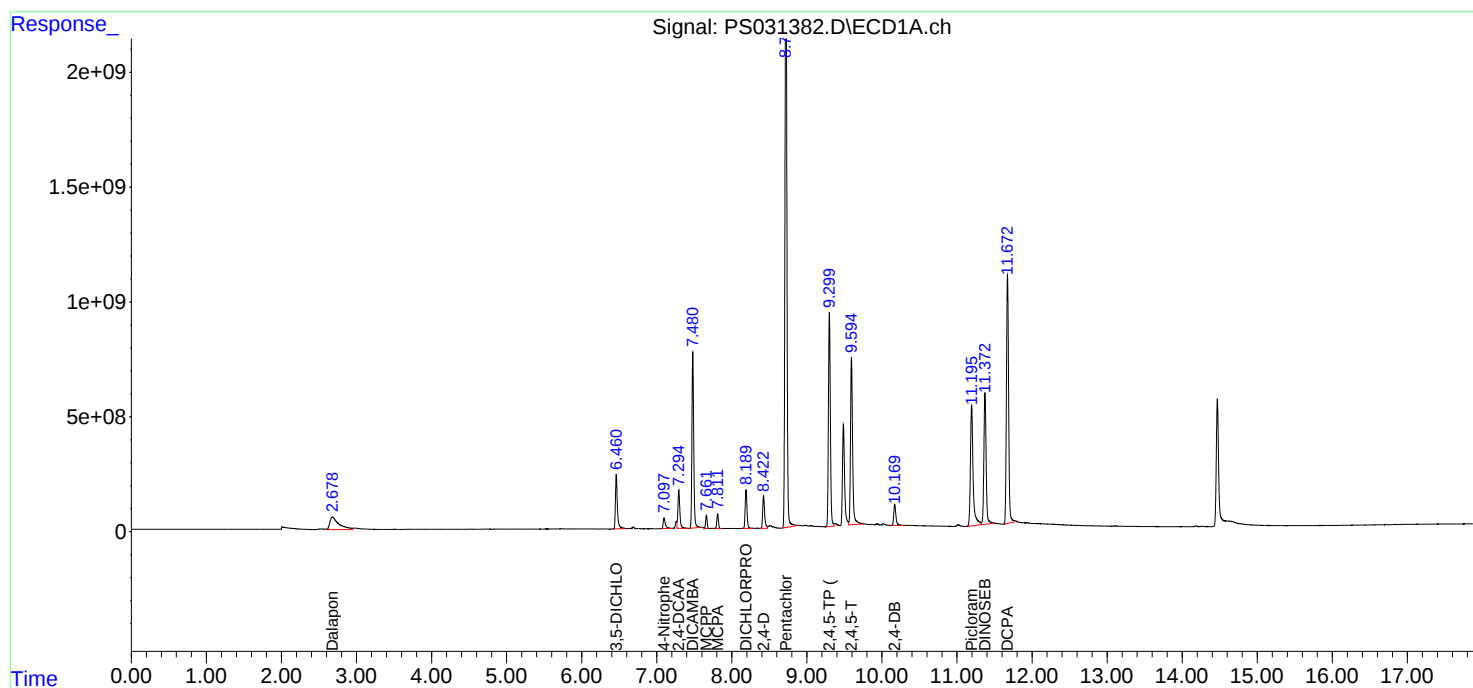
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS080725\
Data File : PS031382.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 07 Aug 2025 13:14
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: Aug 08 03:12:18 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:11:03 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\PS080725\
 Data File : PS031383.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 07 Aug 2025 13:38
 Operator : AR\AJ
 Sample : HSTDICC1500
 Misc :
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDICC1500

Manual Integrations
 APPROVED

Reviewed By :Abdul Mirza 08/08/2025
 Supervised By :mohammad ahmed 08/11/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 08 03:12:32 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
 Quant Title : 8080.M
 QLast Update : Fri Aug 08 03:11:03 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	7.293	7.746	4300.6E6	1207.0E6	1385.909	1451.003
Target Compounds							
1) T	Dalapon	2.675	2.695	6571.4E6	3354.7E6	1282.748	1295.259
2) T	3,5-DICHL...	6.459	6.696	5991.0E6	1757.4E6	1294.004	1325.654
3) T	4-Nitroph...	7.094	7.284	1321.9E6	1866.5E6	1275.258	1470.093m
5) T	DICAMBA	7.480	7.946	18333.3E6	7834.1E6	1327.348	1386.217
6) T	MCPD	7.663	8.048	1283.0E6	264.1E6	151.602	142.200
7) T	MCPA	7.813	8.298	1498.1E6	387.4E6	147.916	134.444
8) T	DICHLORPROP	8.188	8.665	4076.4E6	1756.7E6	1326.622	1348.210
9) T	2,4-D	8.421	9.002	3828.8E6	1864.9E6	1390.203	1315.572
10) T	Pentachlo...	8.730	9.516	51861.9E6	44106.6E6	1034.094	1242.198
11) T	2,4,5-TP ...	9.298	9.901	24128.8E6	17673.8E6	1347.386	1350.223
12) T	2,4,5-T	9.593	10.329	21009.4E6	16473.4E6	1423.670	1387.004
13) T	2,4-DB	10.167	10.896	2944.9E6	1348.9E6	1521.765	1412.360
14) T	DINOSEB	11.372	11.277	17259.4E6	12812.8E6	1352.227	1347.159
15) T	Picloram	11.192	12.390	20782.9E6	28274.2E6	1577.444	1567.574
16) T	DCPA	11.672	12.319	31189.0E6	27119.8E6	1361.610	1367.066

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS080725\
Data File : PS031383.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 07 Aug 2025 13:38
Operator : AR\AJ
Sample : HSTDICC1500
Misc :
ALS Vial : 7 Sample Multiplier: 1

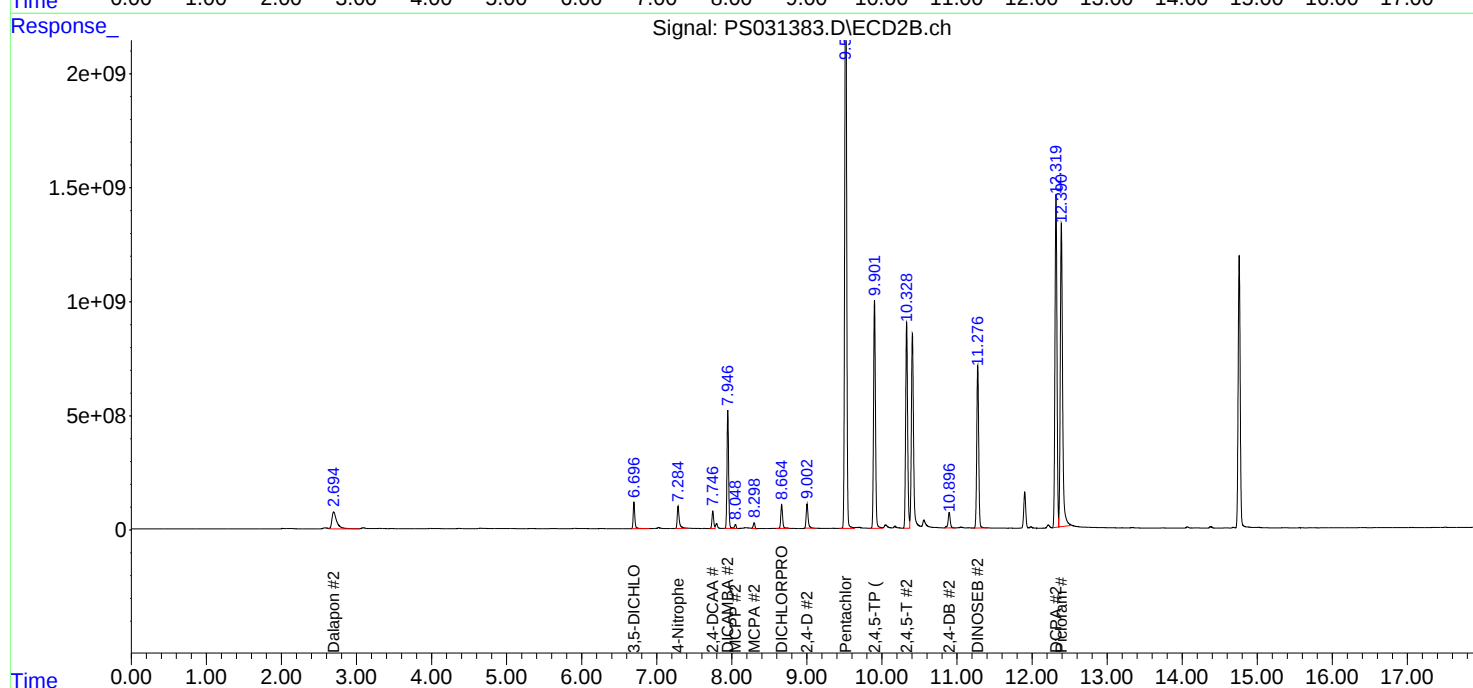
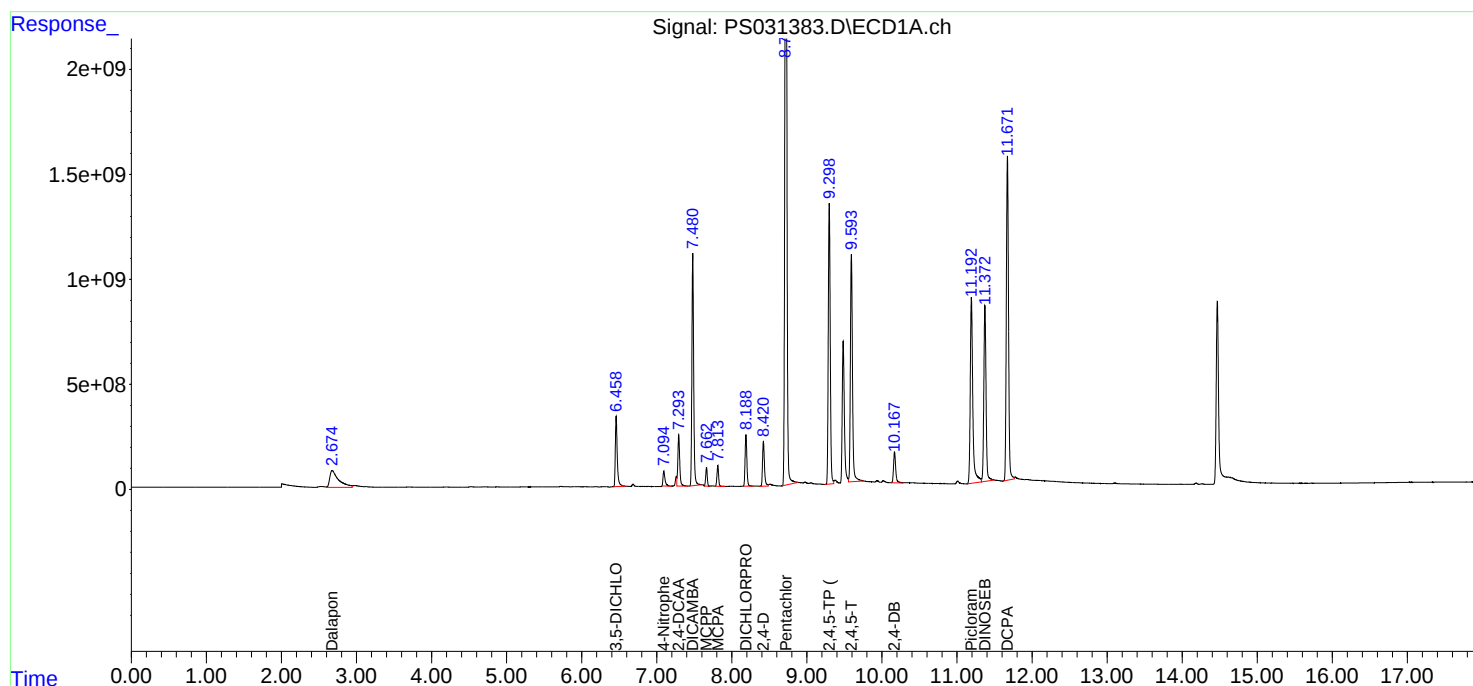
Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 08/08/2025
Supervised By :mohammad ahmed 08/11/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 03:12:32 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:11:03 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\PS080725\
 Data File : PS031384.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 07 Aug 2025 14:02
 Operator : AR\AJ
 Sample : HSTDICV750
 Misc :
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 ICVPS080725

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 08 03:20:50 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
 Quant Title : 8080.M
 QLast Update : Fri Aug 08 03:11:03 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	7.294	7.748	2401.8E6	648.9E6	756.708	767.599
Target Compounds							
1) T	Dalapon	2.675	2.695	3580.3E6	1814.5E6	682.100	681.872
2) T	3,5-DICHL...	6.460	6.699	3328.0E6	960.1E6	705.343	710.144
3) T	4-Nitroph...	7.098	7.290	723.7E6	890.2E6	701.493	708.271
5) T	DICAMBA	7.480	7.947	10059.4E6	4154.0E6	720.256	730.997
6) T	MCPD	7.660	8.045	619.1E6	136.0E6	76.951	76.930
7) T	MCPA	7.809	8.293	732.2E6	206.9E6	73.509	73.757
8) T	DICHLORPROP	8.189	8.666	2241.9E6	952.0E6	706.688	713.071
9) T	2,4-D	8.423	9.005	2032.0E6	1036.1E6	706.334	725.922
10) T	Pentachlo...	8.721	9.518	36978.3E6	26330.5E6	770.181	756.005
11) T	2,4,5-TP ...	9.299	9.903	13227.4E6	9717.0E6	737.981	740.852
12) T	2,4,5-T	9.595	10.331	10944.8E6	8824.0E6	747.023	745.289
13) T	2,4-DB	10.171	10.899	1426.6E6	709.3E6	742.362	735.166
14) T	DINOSEB	11.373	11.278	8967.1E6	6659.3E6	707.266	704.174
15) T	Picloram	11.197	12.395	9930.2E6	13568.1E6	760.694	774.008
16) T	DCPA	11.673	12.320	17169.5E6	14922.6E6	753.732	757.478

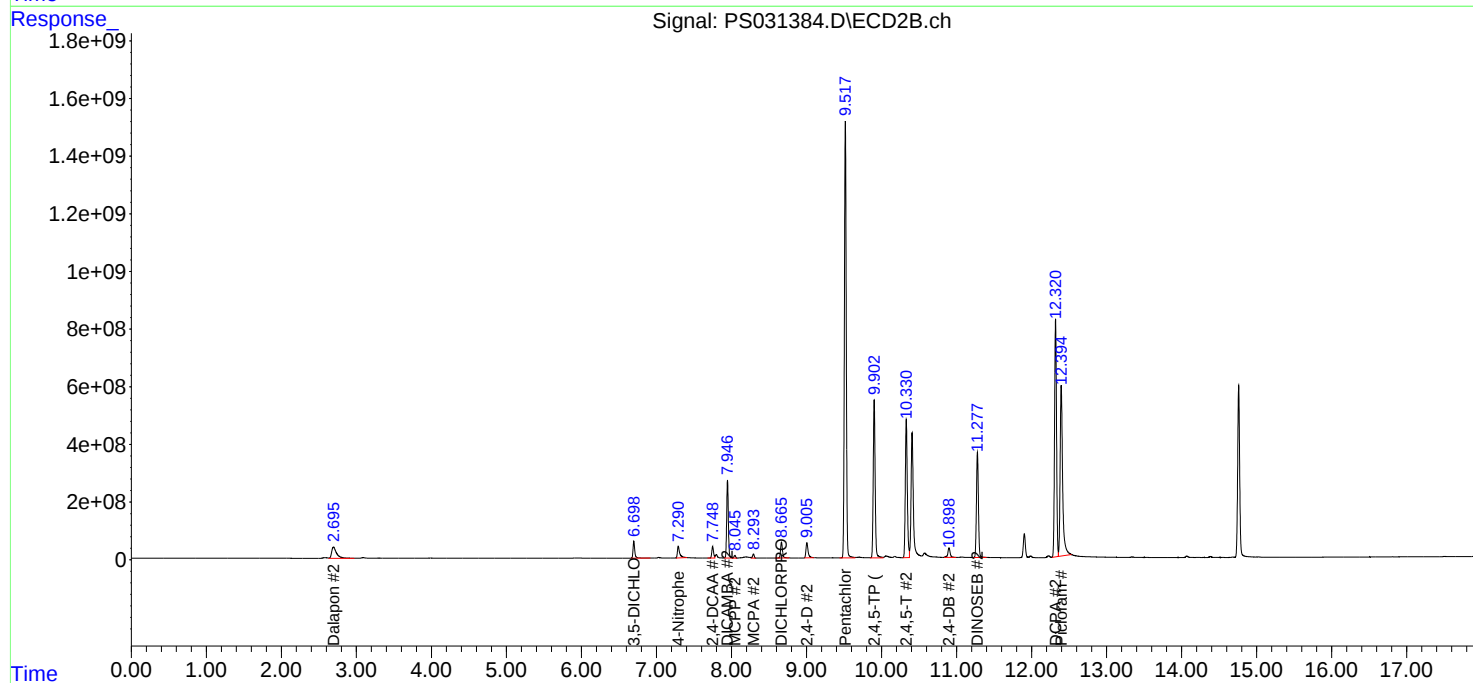
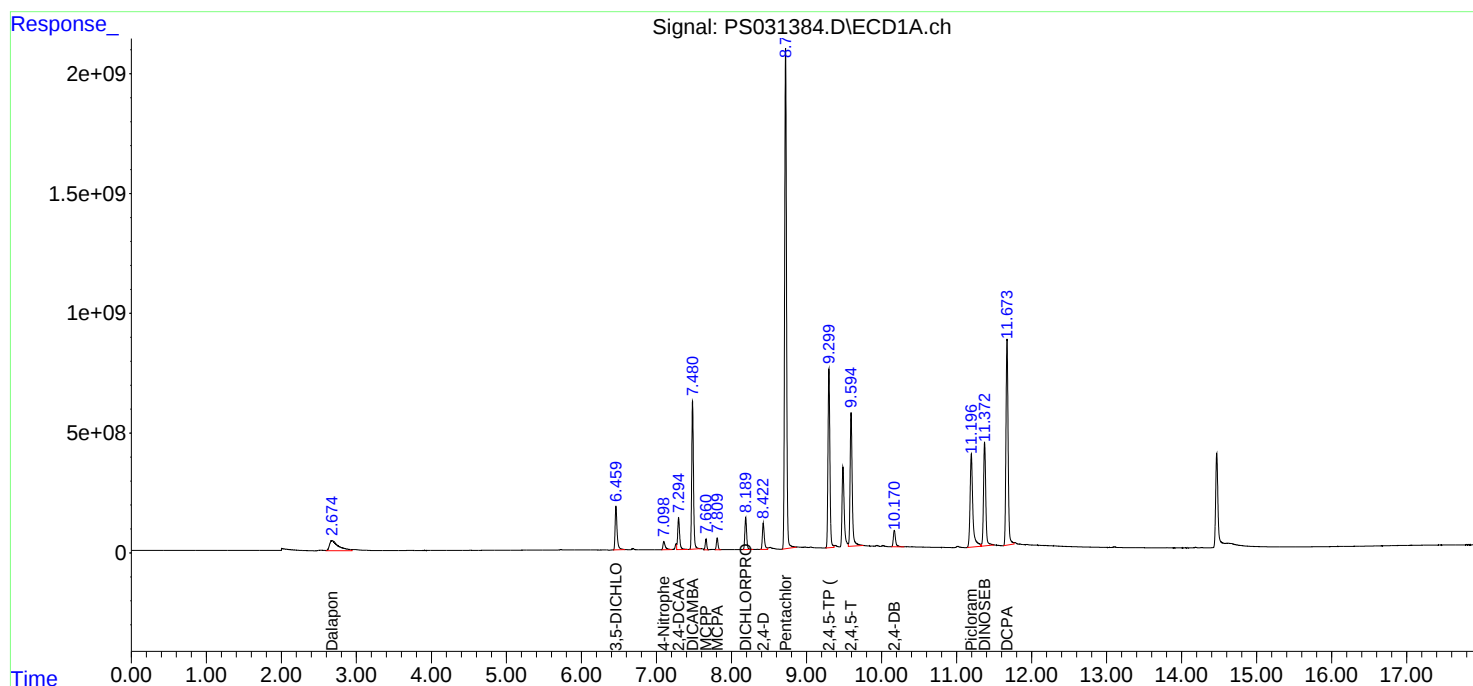
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS080725\
Data File : PS031384.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 07 Aug 2025 14:02
Operator : AR\AJ
Sample : HSTDICV750
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
ICVPS080725

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 08 03:20:50 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:11:03 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

Lab Name: Alliance

Contract: PORT06

Lab Code: ACE

SDG NO.: Q2832

Continuing Calib Date: 08/15/2025

Initial Calibration Date(s): 08/07/2025 08/07/2025

Continuing Calib Time: 10:56

Initial Calibration Time(s): 12:02 13:38

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
2,4-DCAA	7.29	7.30	7.20	7.40	0.01
2,4-D	8.42	8.42	8.32	8.52	0.00
2,4,5-TP(Silvex)	9.29	9.30	9.20	9.40	0.01



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CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance

Contract: PORT06

Lab Code: ACE

SDG NO.: Q2832

Continuing Calib Date: 08/15/2025

Initial Calibration Date(s): 08/07/2025 08/07/2025

Continuing Calib Time: 10:56

Initial Calibration Time(s): 12:02 13:38

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
2,4-DCAA	7.75	7.75	7.65	7.85	0.01
2,4-D	9.00	9.01	8.91	9.11	0.01
2,4,5-TP(Silvex)	9.90	9.90	9.80	10.00	0.00



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CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance **Contract:** PORT06
Lab Code: ACE **SDG NO.:** Q2832
GC Column: RTX-CLP **ID:** 0.32 (mm) **Initi. Calib. Date(s):** 08/07/2025 08/07/2025

Client Sample No.: CCAL01 **Date Analyzed:** 08/15/2025
Lab Sample No.: HSTDCCC750 **Data File :** PS031454.D **Time Analyzed:** 10:56

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	9.293	9.200	9.400	702.270	712.500	-1.4
2,4-D	8.417	8.324	8.524	683.000	705.000	-3.1
2,4-DCAA	7.290	7.195	7.395	706.660	750.000	-5.8



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CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance **Contract:** PORT06
Lab Code: ACE **SDG NO.:** Q2832
GC Column: RTX-CLP2 **ID:** 0.32 (mm) **Initi. Calib. Date(s):** 08/07/2025 08/07/2025

Client Sample No.: CCAL01 **Date Analyzed:** 08/15/2025
Lab Sample No.: HSTDCCC750 **Data File :** PS031454.D **Time Analyzed:** 10:56

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-TP(Silvex)	9.897	9.803	10.003	643.260	712.500	-9.7
2,4-D	9.001	8.906	9.106	606.930	705.000	-13.9
2,4-DCAA	7.745	7.649	7.849	659.270	750.000	-12.1

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS081525\
 Data File : PS031454.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 15 Aug 2025 10:56
 Operator : AR\AJ
 Sample : HSTDCCC750
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDCCC750

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 18 03:46:27 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
 Quant Title : 8080.M
 QLast Update : Fri Aug 08 03:17:54 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	7.290	7.745	2242.9E6	557.3E6	706.658	659.275
Target Compounds							
1) T	Dalapon	2.675	2.697	3020.6E6	1476.8E6	575.470	554.981
2) T	3,5-DICHL...	6.456	6.696	3130.6E6	843.3E6	663.495	623.766
3) T	4-Nitroph...	7.095	7.289	644.0E6	717.1E6	624.236	570.526
5) T	DICAMBA	7.475	7.942	9358.2E6	3599.1E6	670.050	633.344
6) T	MCPD	7.654	8.040	537.9E6	113.6E6	66.861	64.278
7) T	MCPA	7.803	8.287	657.0E6	168.0E6	65.956	59.900
8) T	DICHLORPROP	8.183	8.661	2104.1E6	835.6E6	663.234	625.887
9) T	2,4-D	8.417	9.001	1964.9E6	866.3E6	683.004	606.929
10) T	Pentachlo...	8.715	9.513	34357.5E6	23072.7E6	715.596	662.468
11) T	2,4,5-TP ...	9.293	9.897	12587.3E6	8437.0E6	702.271	643.260
12) T	2,4,5-T	9.588	10.326	10685.6E6	7575.3E6	729.330	639.819
13) T	2,4-DB	10.164	10.894	1429.4E6	585.0E6	743.818	606.267
14) T	DINOSEB	11.365	11.272	9018.6E6	6076.1E6	711.329	642.499
15) T	Picloram	11.190	12.390	9594.3E6	11290.2E6	734.962	644.060
16) T	DCPA	11.664	12.313	16617.6E6	12821.4E6	729.502	650.818

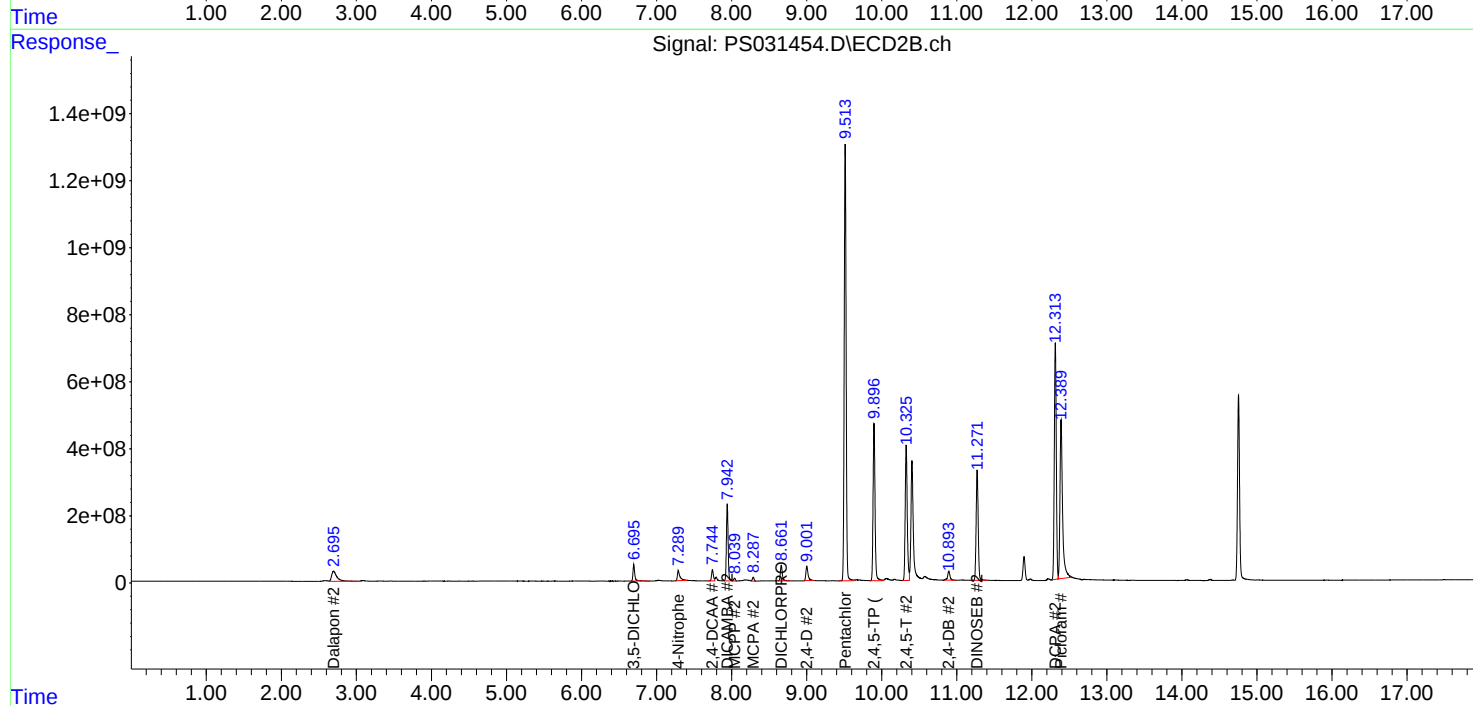
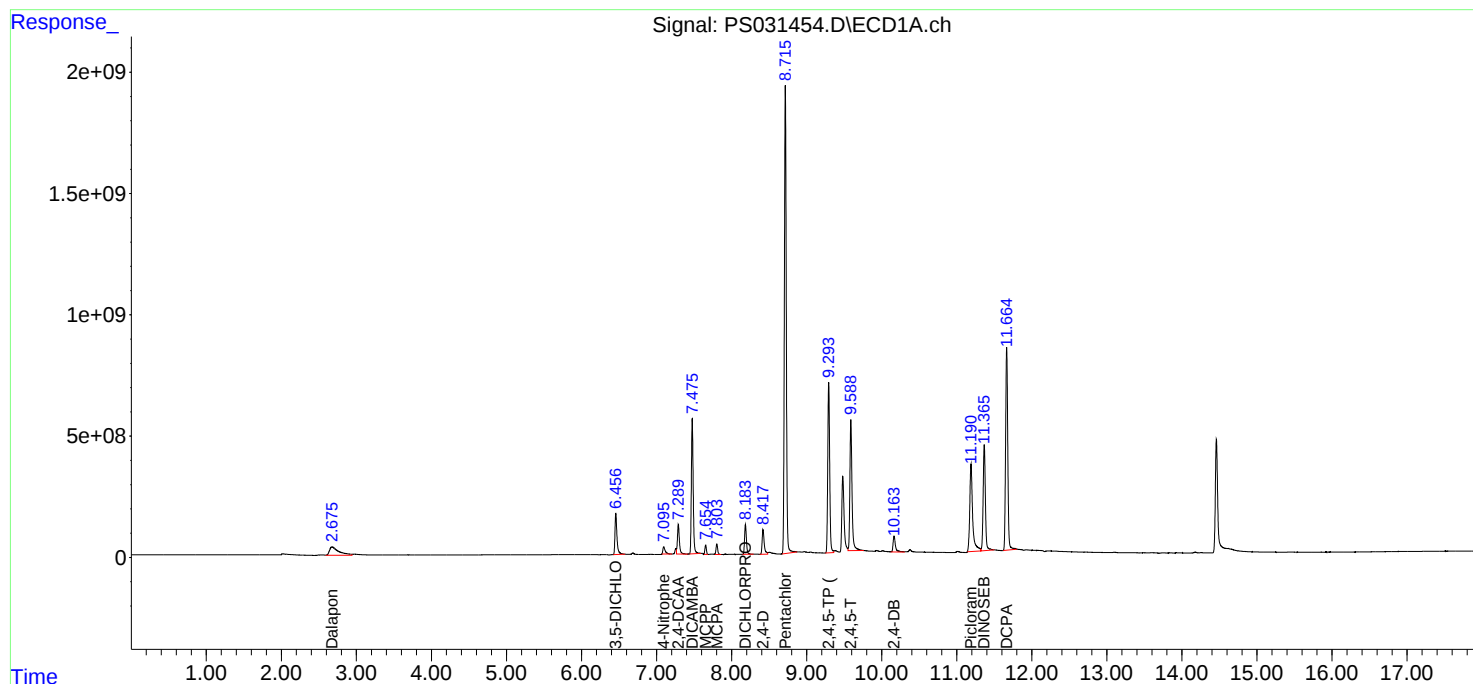
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS081525\
Data File : PS031454.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 15 Aug 2025 10:56
Operator : AR\AJ
Sample : HSTDCCC750
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 18 03:46:27 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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

Lab Name: Alliance

Contract: PORT06

Lab Code: ACE

SDG NO.: Q2832

Continuing Calib Date: 08/15/2025

Initial Calibration Date(s): 08/07/2025 08/07/2025

Continuing Calib Time: 19:29

Initial Calibration Time(s): 12:02 13:38

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
2,4-DCAA	7.29	7.30	7.20	7.40	0.01
2,4-D	8.42	8.42	8.32	8.52	0.00
2,4,5-TP(Silvex)	9.29	9.30	9.20	9.40	0.01



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CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance

Contract: PORT06

Lab Code: ACE

SDG NO.: Q2832

Continuing Calib Date: 08/15/2025

Initial Calibration Date(s): 08/07/2025 08/07/2025

Continuing Calib Time: 19:29

Initial Calibration Time(s): 12:02 13:38

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
2,4-DCAA	7.74	7.75	7.65	7.85	0.01
2,4-D	9.00	9.01	8.91	9.11	0.01
2,4,5-TP(Silvex)	9.90	9.90	9.80	10.00	0.00



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CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance Contract: PORT06
Lab Code: ACE SDG NO.: Q2832
GC Column: RTX-CLP ID: 0.32 (mm) Initi. Calib. Date(s): 08/07/2025 08/07/2025

Client Sample No.: CCAL02 Date Analyzed: 08/15/2025
Lab Sample No.: HSTDCCC750 Data File : PS031461.D Time Analyzed: 19:29

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-TP(Silvex)	9.293	9.200	9.400	725.120	712.500	1.8
2,4-D	8.417	8.324	8.524	711.490	705.000	0.9
2,4-DCAA	7.290	7.195	7.395	730.280	750.000	-2.6



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CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance **Contract:** PORT06
Lab Code: ACE **SDG NO.:** Q2832
GC Column: RTX-CLP2 **ID:** 0.32 (mm) **Initi. Calib. Date(s):** 08/07/2025 08/07/2025

Client Sample No.: CCAL02 **Date Analyzed:** 08/15/2025
Lab Sample No.: HSTDCCC750 **Data File :** PS031461.D **Time Analyzed:** 19:29

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	9.897	9.803	10.003	667.310	712.500	-6.3
2,4-D	9.001	8.906	9.106	632.480	705.000	-10.3
2,4-DCAA	7.744	7.649	7.849	681.040	750.000	-9.2

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS081525\
 Data File : PS031461.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 15 Aug 2025 19:29
 Operator : AR\AJ
 Sample : HSTDCCC750
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDCCC750

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 18 03:48:46 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
 Quant Title : 8080.M
 QLast Update : Fri Aug 08 03:17:54 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	7.290	7.744	2317.9E6	575.7E6	730.281	681.042
Target Compounds							
1) T	Dalapon	2.676	2.696	3039.6E6	1467.8E6	579.097	551.584
2) T	3,5-DICHL...	6.456	6.696	3241.9E6	856.6E6	687.098	633.607
3) T	4-Nitroph...	7.095	7.289	688.4E6	750.6E6	667.292	597.207
5) T	DICAMBA	7.475	7.942	9636.9E6	3740.5E6	690.004	658.221
6) T	MCPD	7.654	8.040	567.7E6	119.7E6	70.568	67.702
7) T	MCPA	7.803	8.288	687.7E6	177.7E6	69.041	63.349
8) T	DICHLORPROP	8.183	8.661	2175.3E6	872.7E6	685.681	653.663
9) T	2,4-D	8.417	9.001	2046.8E6	902.7E6	711.488	632.479
10) T	Pentachlo...	8.715	9.513	35767.0E6	24029.3E6	744.954	689.933
11) T	2,4,5-TP ...	9.293	9.897	12996.9E6	8752.4E6	725.121	667.308
12) T	2,4,5-T	9.588	10.326	11074.8E6	7877.1E6	755.893	665.307
13) T	2,4-DB	10.164	10.894	1460.0E6	612.1E6	759.753	634.378
14) T	DINOSEB	11.365	11.272	9253.3E6	6248.7E6	729.845	660.756
15) T	Picloram	11.189	12.390	9692.1E6	11520.4E6	742.453	657.192
16) T	DCPA	11.663	12.313	17118.6E6	13402.6E6	751.497	680.323

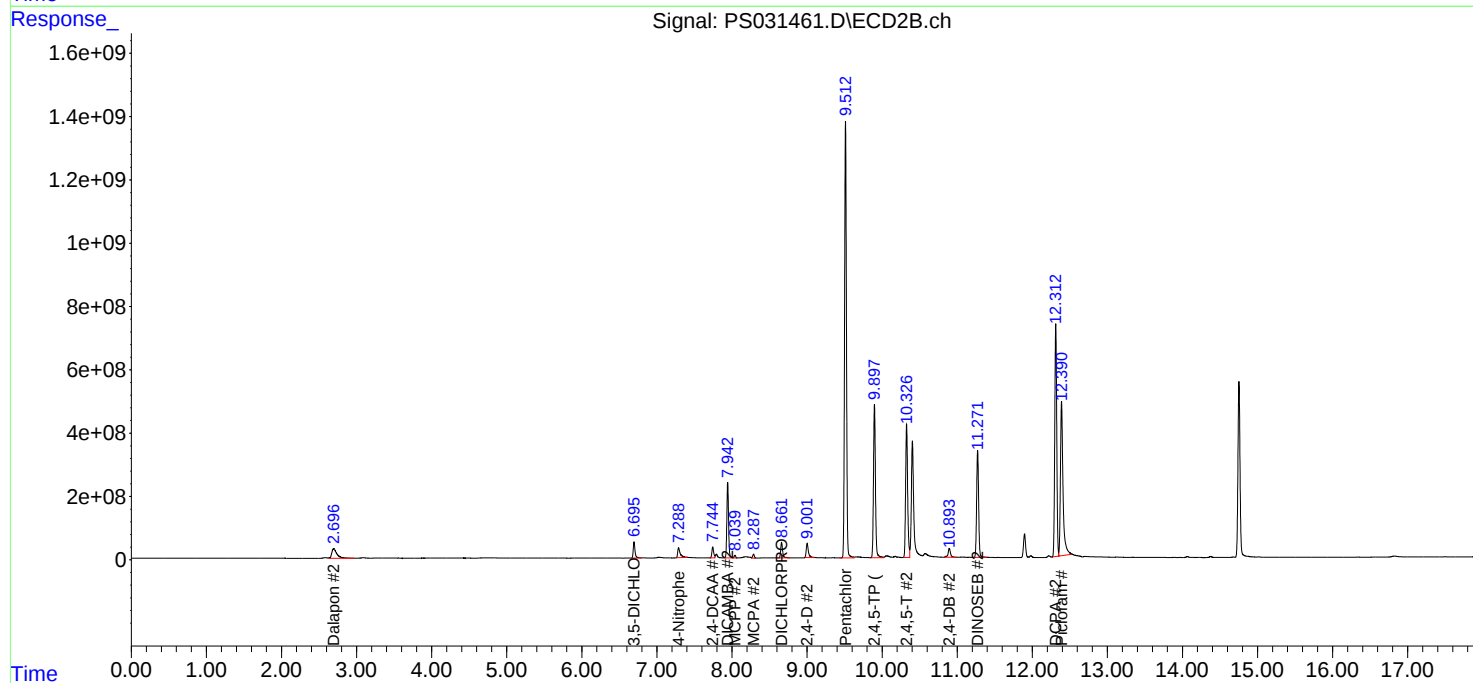
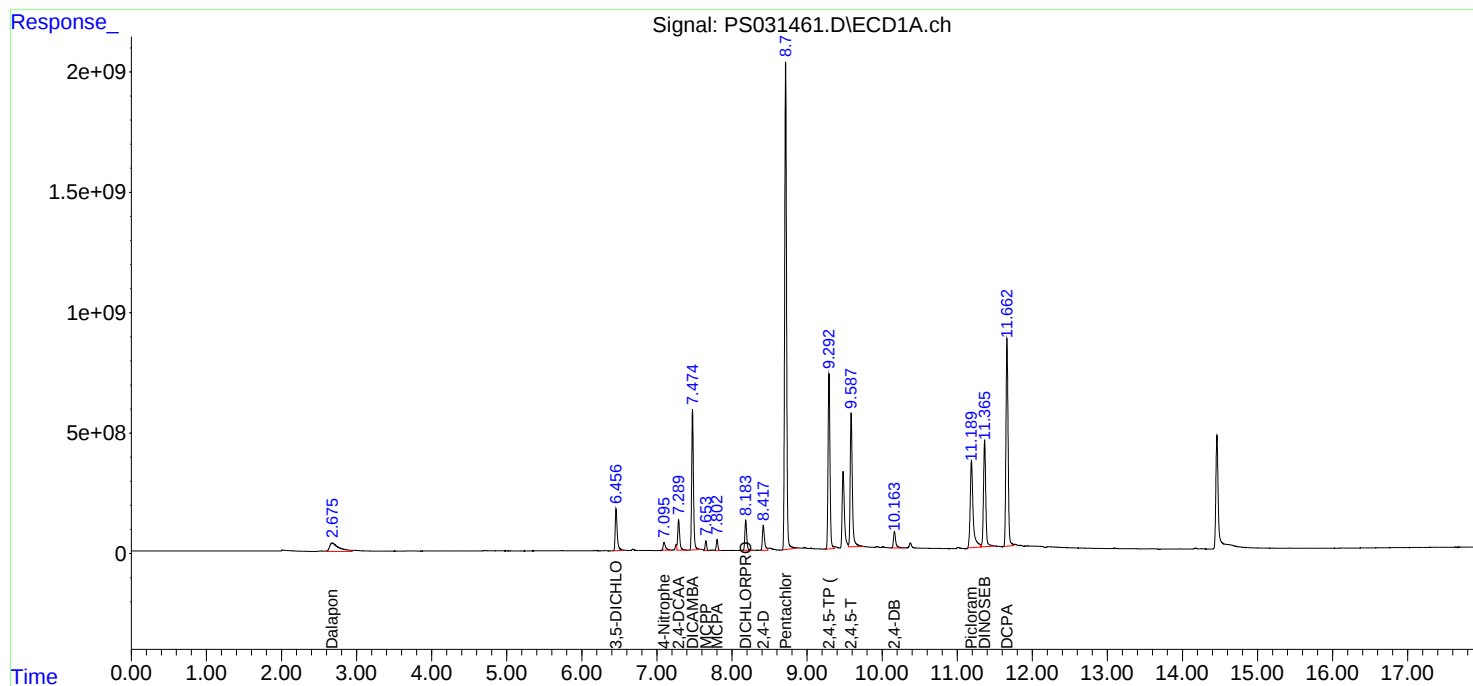
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS081525\
Data File : PS031461.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 15 Aug 2025 19:29
Operator : AR\AJ
Sample : HSTDCCC750
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 18 03:48:46 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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

Lab Name: Alliance

Contract: PORT06

Lab Code: ACE

SDG NO.: Q2832

Continuing Calib Date: 08/16/2025

Initial Calibration Date(s): 08/07/2025

08/07/2025

Continuing Calib Time: 01:07

Initial Calibration Time(s): 12:02

13:38

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
2,4-DCAA	7.29	7.30	7.20	7.40	0.01
2,4-D	8.42	8.42	8.32	8.52	0.00
2,4,5-TP(Silvex)	9.29	9.30	9.20	9.40	0.01



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CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance

Contract: PORT06

Lab Code: ACE

SDG NO.: Q2832

Continuing Calib Date: 08/16/2025

Initial Calibration Date(s): 08/07/2025

08/07/2025

Continuing Calib Time: 01:07

Initial Calibration Time(s): 12:02

13:38

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
2,4-DCAA	7.74	7.75	7.65	7.85	0.01
2,4-D	9.00	9.01	8.91	9.11	0.01
2,4,5-TP(Silvex)	9.90	9.90	9.80	10.00	0.00



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CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance **Contract:** PORT06
Lab Code: ACE **SDG NO.:** Q2832
GC Column: RTX-CLP **ID:** 0.32 (mm) **Initi. Calib. Date(s):** 08/07/2025 08/07/2025

Client Sample No.: CCAL03 **Date Analyzed:** 08/16/2025
Lab Sample No.: HSTDCCC750 **Data File :** PS031473.D **Time Analyzed:** 01:07

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	9.292	9.200	9.400	734.760	712.500	3.1
2,4-D	8.416	8.324	8.524	719.350	705.000	2.0
2,4-DCAA	7.289	7.195	7.395	748.270	750.000	-0.2



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CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance Contract: PORT06
Lab Code: ACE SDG NO.: Q2832
GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 08/07/2025 08/07/2025

Client Sample No.: CCAL03 Date Analyzed: 08/16/2025
Lab Sample No.: HSTDCCC750 Data File : PS031473.D Time Analyzed: 01:07

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-TP(Silvex)	9.896	9.803	10.003	695.480	712.500	-2.4
2,4-D	9.000	8.906	9.106	646.840	705.000	-8.2
2,4-DCAA	7.744	7.649	7.849	703.470	750.000	-6.2

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS081525\
 Data File : PS031473.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 16 Aug 2025 01:07
 Operator : AR\AJ
 Sample : HSTDCCC750
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDCCC750

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 18 03:52:49 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
 Quant Title : 8080.M
 QLast Update : Fri Aug 08 03:17:54 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	7.289	7.744	2375.0E6	594.7E6	748.266	703.467
Target Compounds							
1) T	Dalapon	2.674	2.694	3023.6E6	1501.3E6	576.035	564.183
2) T	3,5-DICHL...	6.456	6.696	3308.8E6	917.2E6	701.266	678.439
3) T	4-Nitroph...	7.095	7.289	715.0E6	785.9E6	693.022	625.238
5) T	DICAMBA	7.474	7.941	9865.4E6	3872.1E6	706.364	681.380
6) T	MCPD	7.653	8.039	570.2E6	114.7E6	70.871	64.892
7) T	MCPA	7.802	8.286	708.0E6	181.4E6	71.071	64.674
8) T	DICHLORPROP	8.182	8.660	2206.0E6	901.1E6	695.362	674.932
9) T	2,4-D	8.416	9.000	2069.4E6	923.2E6	719.348	646.835
10) T	Pentachlo...	8.714	9.512	36519.2E6	25123.3E6	760.621	721.345
11) T	2,4,5-TP ...	9.292	9.896	13169.5E6	9122.0E6	734.755	695.484
12) T	2,4,5-T	9.587	10.324	11115.7E6	8175.0E6	758.688	690.467
13) T	2,4-DB	10.163	10.892	1457.6E6	629.7E6	758.466	652.618
14) T	DINOSEB	11.364	11.270	9157.3E6	6348.2E6	722.272	671.274
15) T	Picloram	11.190	12.389	9567.5E6	11792.9E6	732.906	672.739
16) T	DCPA	11.662	12.312	17411.2E6	14168.8E6	764.343	719.216

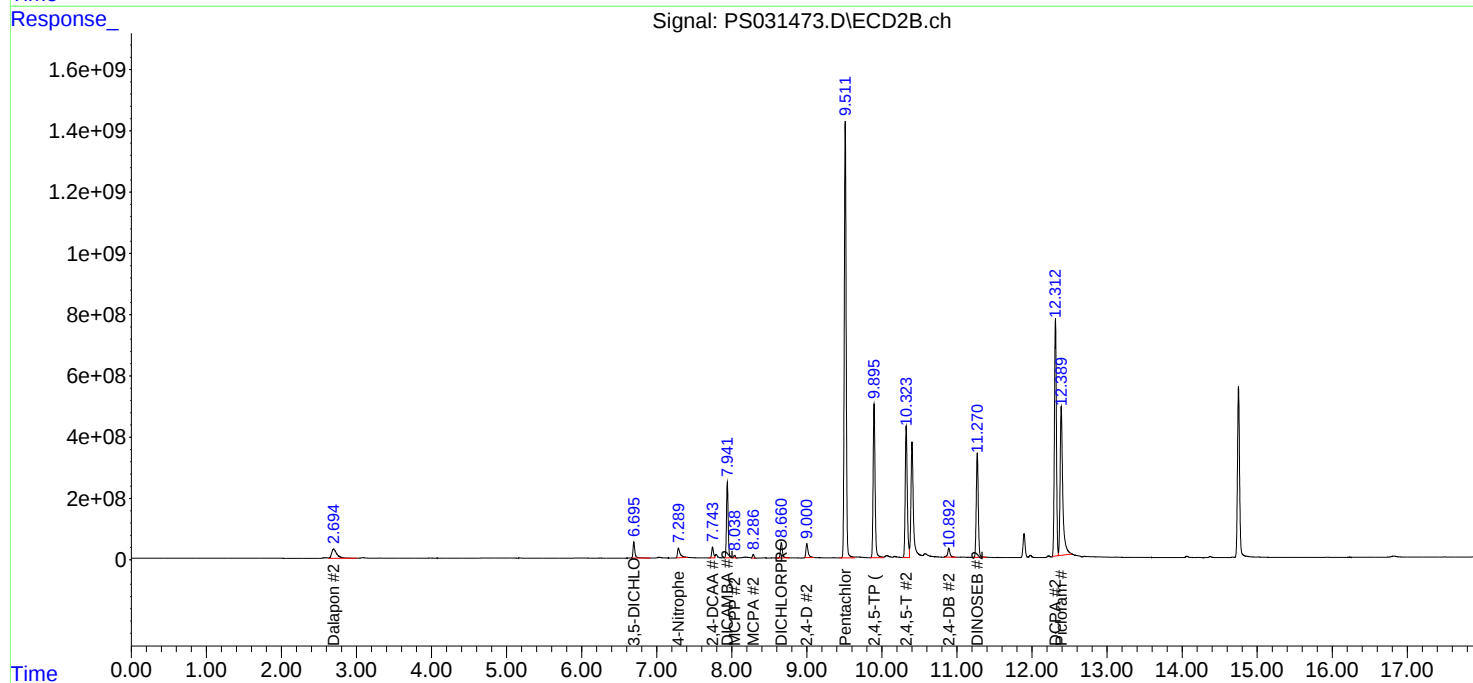
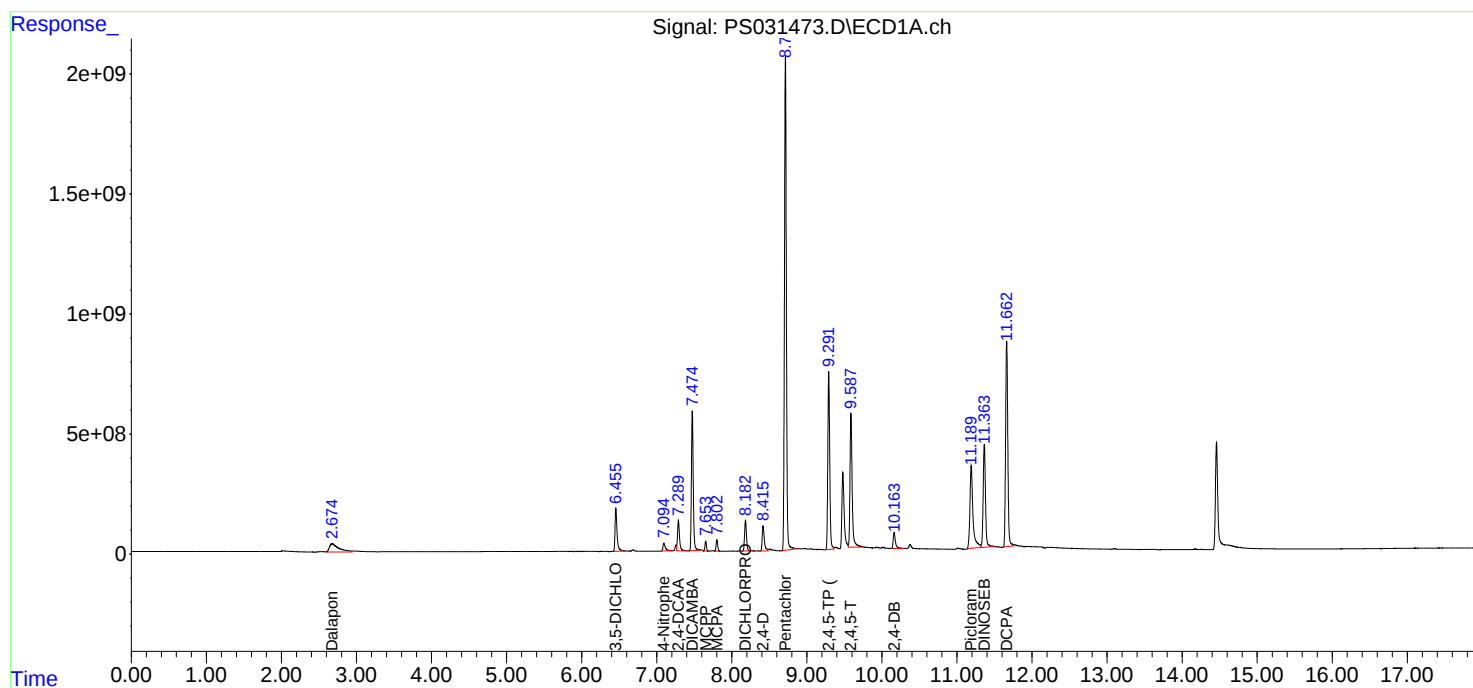
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS081525\
Data File : PS031473.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 16 Aug 2025 01:07
Operator : AR\AJ
Sample : HSTDCCC750
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 18 03:52:49 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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

Lab Name: Alliance

Contract: PORT06

Lab Code: ACE

SDG NO.: Q2832

Continuing Calib Date: 08/18/2025

Initial Calibration Date(s): 08/07/2025

08/07/2025

Continuing Calib Time: 12:23

Initial Calibration Time(s): 12:02

13:38

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
2,4-DCAA	7.29	7.30	7.20	7.40	0.01
2,4-D	8.42	8.42	8.32	8.52	0.00
2,4,5-TP(Silvex)	9.29	9.30	9.20	9.40	0.01



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CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance

Contract: PORT06

Lab Code: ACE

SDG NO.: Q2832

Continuing Calib Date: 08/18/2025

Initial Calibration Date(s): 08/07/2025 08/07/2025

Continuing Calib Time: 12:23

Initial Calibration Time(s): 12:02 13:38

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
2,4-DCAA	7.74	7.75	7.65	7.85	0.01
2,4-D	9.00	9.01	8.91	9.11	0.01
2,4,5-TP(Silvex)	9.90	9.90	9.80	10.00	0.00



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CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance **Contract:** PORT06
Lab Code: ACE **SDG NO.:** Q2832
GC Column: RTX-CLP **ID:** 0.32 (mm) **Initi. Calib. Date(s):** 08/07/2025 08/07/2025

Client Sample No.: CCAL04 **Date Analyzed:** 08/18/2025
Lab Sample No.: HSTDCCC750 **Data File :** PS031482.D **Time Analyzed:** 12:23

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-TP(Silvex)	9.292	9.200	9.400	697.840	712.500	-2.1
2,4-D	8.417	8.324	8.524	673.700	705.000	-4.4
2,4-DCAA	7.289	7.195	7.395	714.250	750.000	-4.8



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CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance Contract: PORT06

Lab Code: ACE SDG NO.: Q2832

GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 08/07/2025 08/07/2025

Client Sample No.: CCAL04 Date Analyzed: 08/18/2025

Lab Sample No.: HSTDCCC750 Data File : PS031482.D Time Analyzed: 12:23

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-TP(Silvex)	9.896	9.803	10.003	661.360	712.500	-7.2
2,4-D	9.002	8.906	9.106	622.860	705.000	-11.7
2,4-DCAA	7.744	7.649	7.849	656.580	750.000	-12.5

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS081825\
 Data File : PS031482.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 18 Aug 2025 12:23
 Operator : AR\AJ
 Sample : HSTDCCC750
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDCCC750

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 19 07:43:52 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
 Quant Title : 8080.M
 QLast Update : Fri Aug 08 03:17:54 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	7.289	7.744	2267.0E6	555.0E6	714.253	656.577
Target Compounds							
1) T	Dalapon	2.672	2.695	3126.8E6	1528.0E6	595.708	574.214
2) T	3,5-DICHL...	6.456	6.696	3138.7E6	866.2E6	665.219	640.750
3) T	4-Nitroph...	7.096	7.291	696.8E6	724.7E6	675.392	576.571
5) T	DICAMBA	7.475	7.942	9394.3E6	3657.1E6	672.636	643.554
6) T	MCPD	7.653	8.039	535.3E6	114.0E6	66.539	64.482
7) T	MCPA	7.802	8.286	658.9E6	173.5E6	66.147	61.840
8) T	DICHLORPROP	8.182	8.661	2107.1E6	848.2E6	664.202	635.321
9) T	2,4-D	8.417	9.002	1938.1E6	889.0E6	673.703	622.865
10) T	Pentachlo...	8.714	9.512	34649.3E6	23742.7E6	721.673	681.705
11) T	2,4,5-TP ...	9.292	9.896	12507.8E6	8674.4E6	697.836	661.362
12) T	2,4,5-T	9.588	10.325	10413.0E6	7684.6E6	710.723	649.051
13) T	2,4-DB	10.164	10.893	1310.0E6	588.2E6	681.690	609.649
14) T	DINOSEB	11.364	11.271	8665.7E6	6034.2E6	683.501	638.066
15) T	Picloram	11.191	12.392	8315.7E6	10435.1E6	637.018	595.278
16) T	DCPA	11.662	12.312	16509.5E6	13741.3E6	724.759	697.516

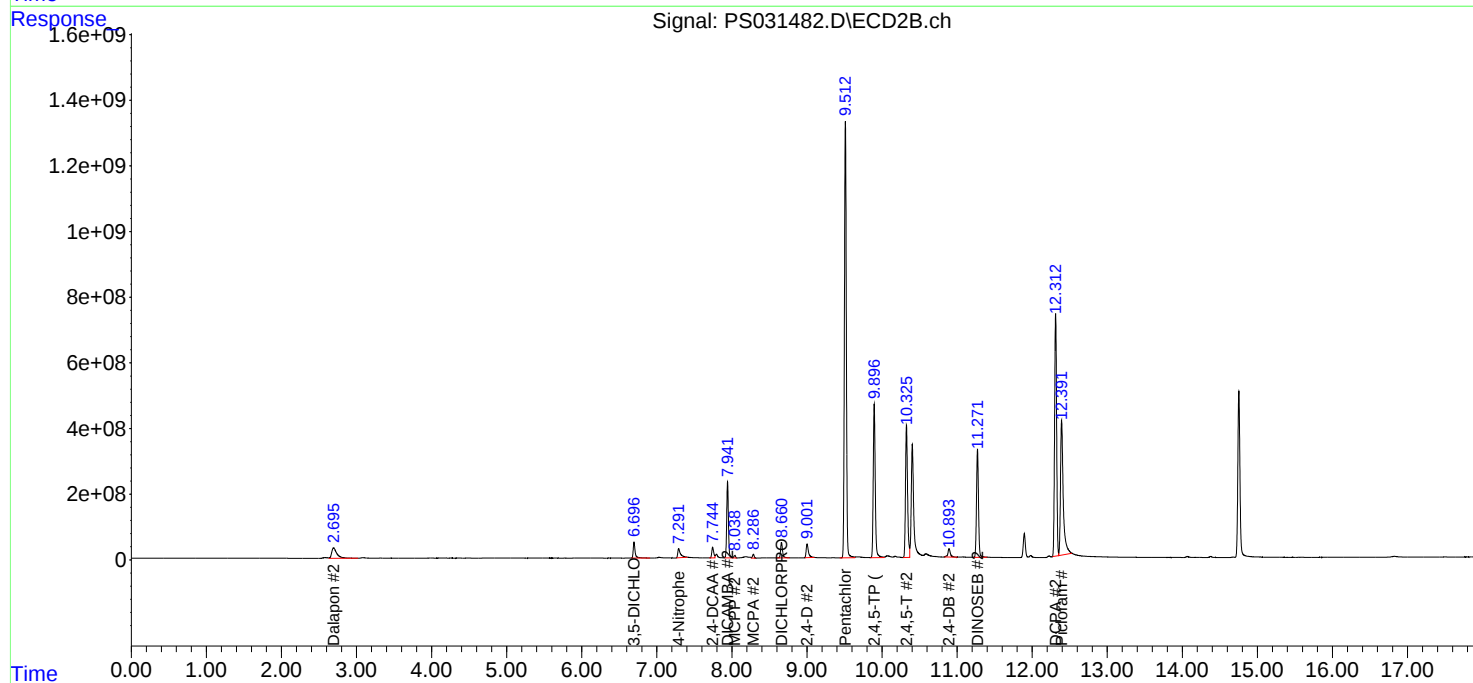
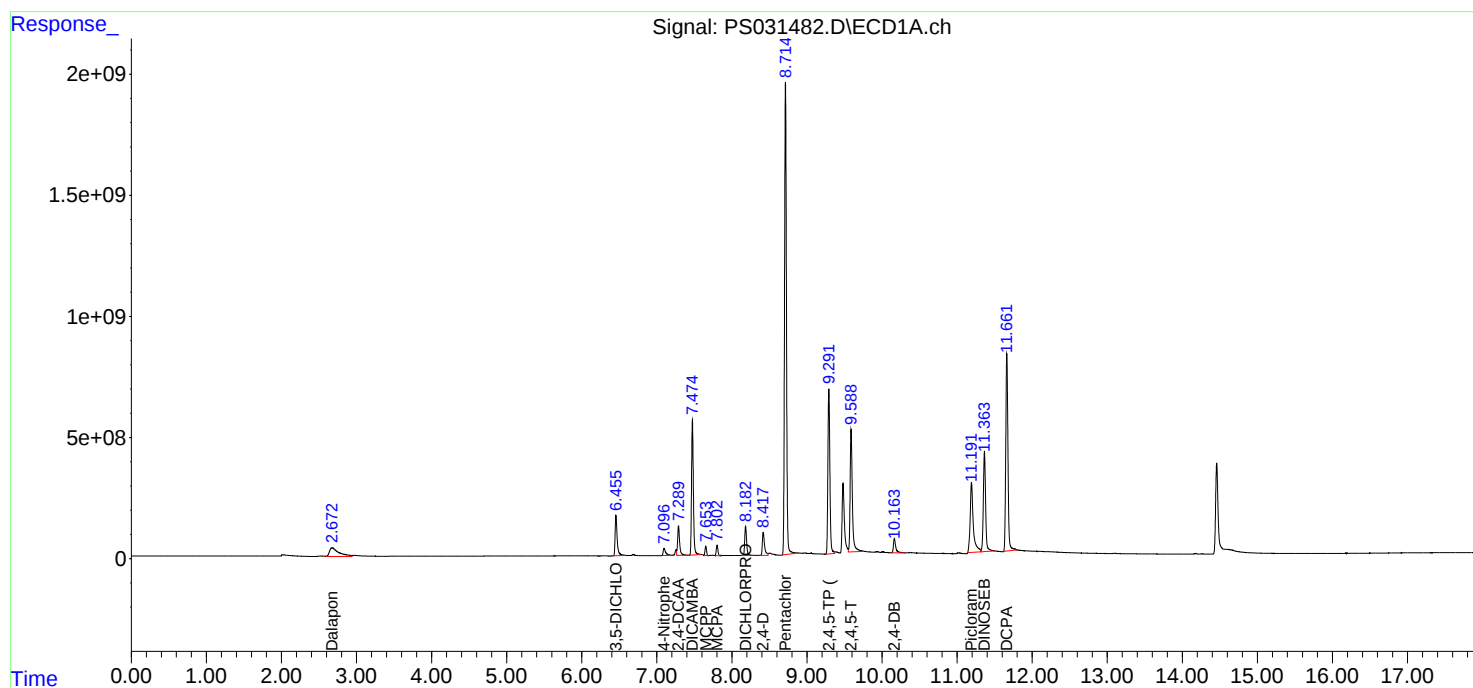
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS081825\
Data File : PS031482.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Aug 2025 12:23
Operator : AR\AJ
Sample : HSTDCCC750
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 19 07:43:52 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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

Lab Name: Alliance

Contract: PORT06

Lab Code: ACE

SDG NO.: Q2832

Continuing Calib Date: 08/18/2025

Initial Calibration Date(s): 08/07/2025 08/07/2025

Continuing Calib Time: 18:09

Initial Calibration Time(s): 12:02 13:38

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
2,4-DCAA	7.29	7.30	7.20	7.40	0.01
2,4-D	8.42	8.42	8.32	8.52	0.00
2,4,5-TP(Silvex)	9.29	9.30	9.20	9.40	0.01



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Fax : 908 789 8922

CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance

Contract: PORT06

Lab Code: ACE

SDG NO.: Q2832

Continuing Calib Date: 08/18/2025

Initial Calibration Date(s): 08/07/2025 08/07/2025

Continuing Calib Time: 18:09

Initial Calibration Time(s): 12:02 13:38

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
2,4-DCAA	7.74	7.75	7.65	7.85	0.01
2,4-D	9.00	9.01	8.91	9.11	0.01
2,4,5-TP(Silvex)	9.90	9.90	9.80	10.00	0.00



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CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance **Contract:** PORT06
Lab Code: ACE **SDG NO.:** Q2832
GC Column: RTX-CLP **ID:** 0.32 (mm) **Initi. Calib. Date(s):** 08/07/2025 08/07/2025

Client Sample No.: CCAL05 **Date Analyzed:** 08/18/2025
Lab Sample No.: HSTDCCC750 **Data File :** PS031491.D **Time Analyzed:** 18:09

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-TP(Silvex)	9.292	9.200	9.400	689.180	712.500	-3.3
2,4-D	8.418	8.324	8.524	669.990	705.000	-5.0
2,4-DCAA	7.289	7.195	7.395	706.000	750.000	-5.9



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CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance Contract: PORT06

Lab Code: ACE SDG NO.: Q2832

GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 08/07/2025 08/07/2025

Client Sample No.: CCAL05 Date Analyzed: 08/18/2025

Lab Sample No.: HSTDCCC750 Data File : PS031491.D Time Analyzed: 18:09

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-TP(Silvex)	9.895	9.803	10.003	657.320	712.500	-7.7
2,4-D	9.001	8.906	9.106	602.080	705.000	-14.6
2,4-DCAA	7.744	7.649	7.849	660.480	750.000	-11.9

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS081825\
 Data File : PS031491.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 18 Aug 2025 18:09
 Operator : AR\AJ
 Sample : HSTDCCC750
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDCCC750

Manual Integrations
 APPROVED

Reviewed By :Abdul Mirza 08/19/2025
 Supervised By :mohammad ahmed 08/20/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 19 07:47:23 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
 Quant Title : 8080.M
 QLast Update : Fri Aug 08 03:17:54 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	7.289	7.744	2240.8E6	558.3E6	706.000	660.477
Target Compounds							
1) T	Dalapon	2.675	2.693	3046.9E6	1487.7E6	580.475	559.058
2) T	3,5-DICHL...	6.456	6.695	3111.3E6	860.7E6	659.402	636.656
3) T	4-Nitroph...	7.096	7.290	635.4E6	715.0E6	615.901	568.853
5) T	DICAMBA	7.474	7.941	9248.8E6	3630.0E6	662.218	638.788
6) T	MCPD	7.652	8.038	522.8E6	104.7E6	64.990	59.237
7) T	MCPA	7.801	8.285	664.4E6	170.3E6	66.697	60.691
8) T	DICHLORPROP	8.182	8.660	2088.5E6	805.9E6	658.331	603.621
9) T	2,4-D	8.418	9.001	1927.4E6	859.3E6	669.989	602.081
10) T	Pentachlo...	8.713	9.511	34210.7E6	23588.8E6	712.539	677.285
11) T	2,4,5-TP ...	9.292	9.895	12352.6E6	8621.4E6	689.177	657.316
12) T	2,4,5-T	9.588	10.325	10219.0E6	7664.4E6	697.484	647.341
13) T	2,4-DB	10.164	10.893	1312.7E6	583.3E6	683.077	604.542
14) T	DINOSEB	11.363	11.270	8313.5E6	5797.5E6	655.714	613.037
15) T	Picloram	11.190	12.391	8801.1E6	10496.9E6	674.196m	598.804
16) T	DCPA	11.662	12.311	16311.7E6	13834.7E6	716.076	702.256m

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS081825\
Data File : PS031491.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Aug 2025 18:09
Operator : AR\AJ
Sample : HSTDCCC750
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :

ECD_S

ClientSampleId :

HSTDCCC750

Manual Integrations

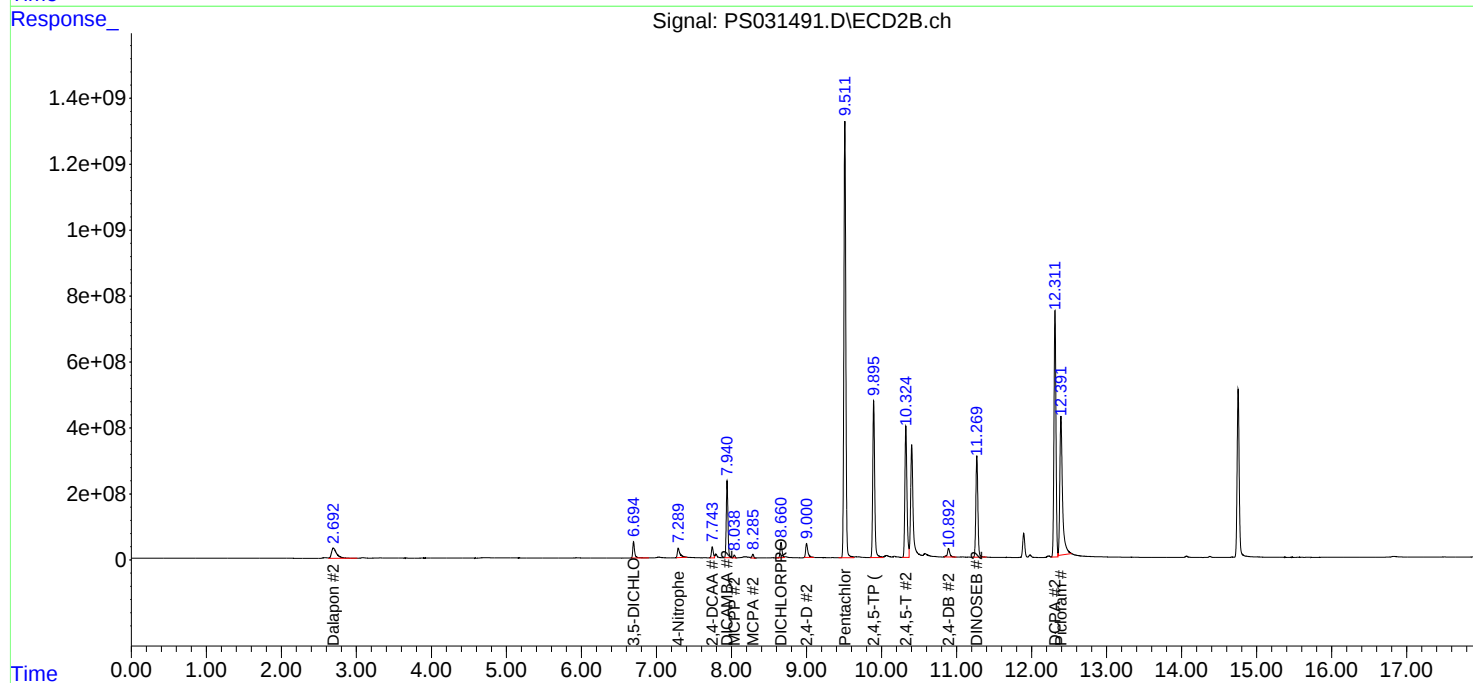
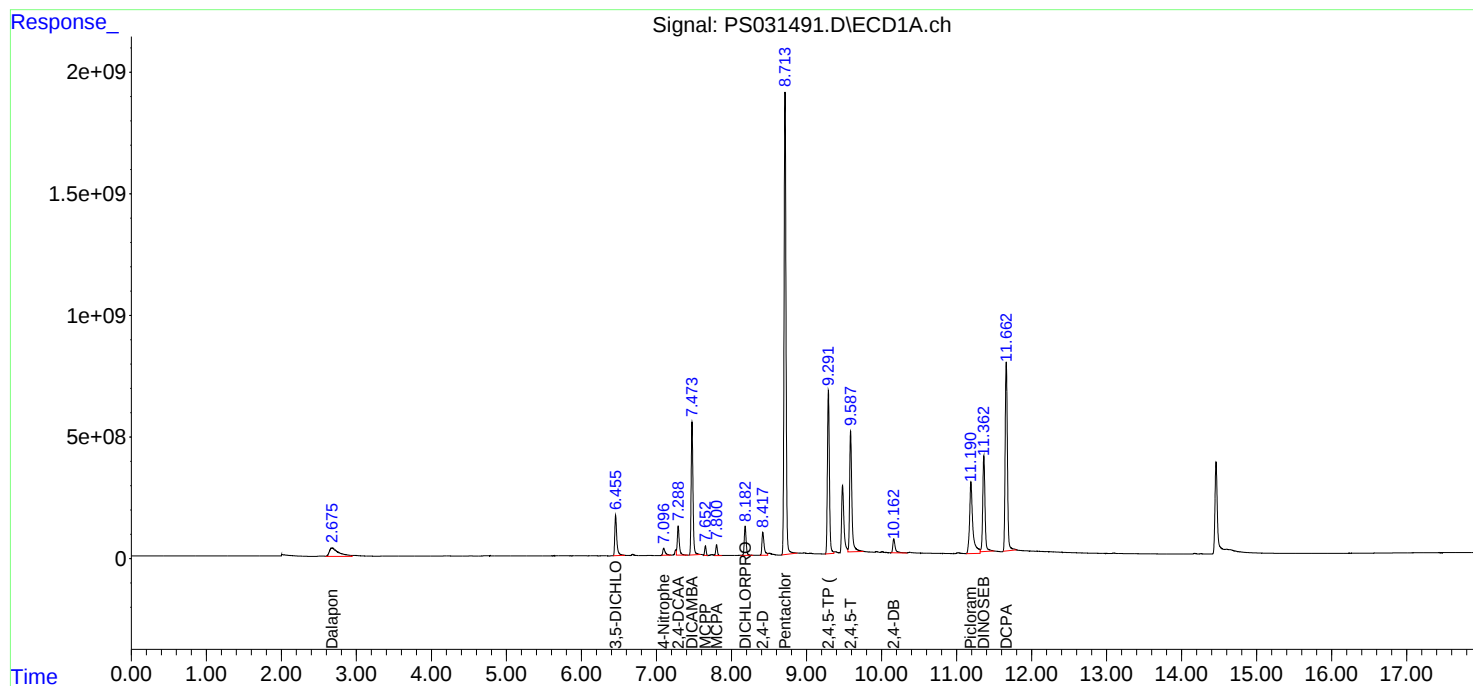
APPROVED

Reviewed By :Abdul Mirza 08/19/2025

Supervised By :mohammad ahmed 08/20/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 19 07:47:23 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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.: Q2832
Project: Amtrak Sawtooth Bridges 2025	Instrument ID: ECD_S
GC Column: RTX-CLP	ID: 0.32 (mm) Inst. Calib. Date(s): 08/07/2025 08/07/2025

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

CLIENT ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DATAFILE	DCAA RT #	RT #
IBLK	IBLK	08/07/2025	11:38	PS031378.D	7.30	0.00
HSTDICC200	HSTDICC200	08/07/2025	12:02	PS031379.D	7.30	0.00
HSTDICC500	HSTDICC500	08/07/2025	12:26	PS031380.D	7.30	0.00
HSTDICC750	HSTDICC750	08/07/2025	12:50	PS031381.D	7.30	0.00
HSTDICC1000	HSTDICC1000	08/07/2025	13:14	PS031382.D	7.29	0.00
HSTDICC1500	HSTDICC1500	08/07/2025	13:38	PS031383.D	7.29	0.00
IBLK	IBLK	08/15/2025	10:32	PS031453.D	7.29	0.00
HSTDCCC750	HSTDCCC750	08/15/2025	10:56	PS031454.D	7.29	0.00
PB169278BL	PB169278BL	08/15/2025	17:04	PS031455.D	7.29	0.00
PB169278BS	PB169278BS	08/15/2025	17:28	PS031456.D	7.29	0.00
PB169212TB	PB169212TB	08/15/2025	17:52	PS031457.D	7.29	0.00
TG-S01	Q2832-02	08/15/2025	18:40	PS031459.D	7.29	0.00
IBLK	IBLK	08/15/2025	19:05	PS031460.D	7.29	0.00
HSTDCCC750	HSTDCCC750	08/15/2025	19:29	PS031461.D	7.29	0.00
TG-S01MS	Q2832-02MS	08/15/2025	20:41	PS031462.D	7.29	0.00
TG-S01MSD	Q2832-02MSD	08/15/2025	21:05	PS031463.D	7.29	0.00
TG-S02	Q2832-04	08/15/2025	21:29	PS031464.D	7.29	0.00
TG-S03	Q2832-06	08/15/2025	21:54	PS031465.D	7.29	0.00
TG-S04	Q2832-08	08/15/2025	22:18	PS031466.D	7.29	0.00
TG-S05	Q2832-10	08/15/2025	22:42	PS031467.D	7.29	0.00
IBLK	IBLK	08/16/2025	00:43	PS031472.D	7.29	0.00
HSTDCCC750	HSTDCCC750	08/16/2025	01:07	PS031473.D	7.29	0.00
IBLK	IBLK	08/18/2025	11:59	PS031481.D	7.29	0.00
HSTDCCC750	HSTDCCC750	08/18/2025	12:23	PS031482.D	7.29	0.00
TG-S02RE	Q2832-04RE	08/18/2025	15:57	PS031486.D	7.29	0.00
TG-S03RE	Q2832-06RE	08/18/2025	16:21	PS031487.D	7.29	0.00
TG-S04RE	Q2832-08RE	08/18/2025	16:45	PS031488.D	7.29	0.00
TG-S05RE	Q2832-10RE	08/18/2025	17:09	PS031489.D	7.29	0.00
IBLK	IBLK	08/18/2025	17:44	PS031490.D	7.29	0.00
HSTDCCC750	HSTDCCC750	08/18/2025	18:09	PS031491.D	7.29	0.00

Analytical Sequence

Client: Portal Partners Tri-Venture	SDG No.: Q2832
Project: Amtrak Sawtooth Bridges 2025	Instrument ID: ECD_S
GC Column: RTX-CLP2	ID: 0.32 (mm) Inst. Calib. Date(s): 08/07/2025 08/07/2025

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

CLIENT ID	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DATAFILE	DCAA RT #	RT #
IBLK	IBLK	08/07/2025	11:38	PS031378.D	7.75	0.00
HSTDICC200	HSTDICC200	08/07/2025	12:02	PS031379.D	7.75	0.00
HSTDICC500	HSTDICC500	08/07/2025	12:26	PS031380.D	7.75	0.00
HSTDICC750	HSTDICC750	08/07/2025	12:50	PS031381.D	7.75	0.00
HSTDICC1000	HSTDICC1000	08/07/2025	13:14	PS031382.D	7.75	0.00
HSTDICC1500	HSTDICC1500	08/07/2025	13:38	PS031383.D	7.75	0.00
IBLK	IBLK	08/15/2025	10:32	PS031453.D	7.75	0.00
HSTDCCC750	HSTDCCC750	08/15/2025	10:56	PS031454.D	7.75	0.00
PB169278BL	PB169278BL	08/15/2025	17:04	PS031455.D	7.74	0.00
PB169278BS	PB169278BS	08/15/2025	17:28	PS031456.D	7.74	0.00
PB169212TB	PB169212TB	08/15/2025	17:52	PS031457.D	7.74	0.00
TG-S01	Q2832-02	08/15/2025	18:40	PS031459.D	7.74	0.00
IBLK	IBLK	08/15/2025	19:05	PS031460.D	7.75	0.00
HSTDCCC750	HSTDCCC750	08/15/2025	19:29	PS031461.D	7.74	0.00
TG-S01MS	Q2832-02MS	08/15/2025	20:41	PS031462.D	7.74	0.00
TG-S01MSD	Q2832-02MSD	08/15/2025	21:05	PS031463.D	7.74	0.00
TG-S02	Q2832-04	08/15/2025	21:29	PS031464.D	7.74	0.00
TG-S03	Q2832-06	08/15/2025	21:54	PS031465.D	7.74	0.00
TG-S04	Q2832-08	08/15/2025	22:18	PS031466.D	7.74	0.00
TG-S05	Q2832-10	08/15/2025	22:42	PS031467.D	7.74	0.00
IBLK	IBLK	08/16/2025	00:43	PS031472.D	7.75	0.00
HSTDCCC750	HSTDCCC750	08/16/2025	01:07	PS031473.D	7.74	0.00
IBLK	IBLK	08/18/2025	11:59	PS031481.D	7.75	0.00
HSTDCCC750	HSTDCCC750	08/18/2025	12:23	PS031482.D	7.74	0.00
TG-S02RE	Q2832-04RE	08/18/2025	15:57	PS031486.D	7.74	0.00
TG-S03RE	Q2832-06RE	08/18/2025	16:21	PS031487.D	7.74	0.00
TG-S04RE	Q2832-08RE	08/18/2025	16:45	PS031488.D	7.74	0.00
TG-S05RE	Q2832-10RE	08/18/2025	17:09	PS031489.D	7.74	0.00
IBLK	IBLK	08/18/2025	17:44	PS031490.D	7.74	0.00
HSTDCCC750	HSTDCCC750	08/18/2025	18:09	PS031491.D	7.74	0.00

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

PB169278BS

Lab Name: Alliance

Contract: PORT06

Lab Code: ACE

SDG NO.: Q2832

Lab Sample ID: PB169278BS

Date(s) Analyzed: 08/15/2025 08/15/2025

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	9.29	9.24	9.34	5.50	9.5
	2	9.90	9.85	9.95	5.00	
2,4-D	1	8.42	8.37	8.47	5.30	9.9
	2	9.00	8.95	9.05	4.80	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

TG-S01MS

Lab Name: Alliance

Contract: PORT06

Lab Code: ACE

SDG NO.: Q2832

Lab Sample ID: Q2832-02MS

Date(s) Analyzed: 08/15/2025 08/15/2025

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	8.42	8.37	8.47	91.7	9.7
	2	9.00	8.95	9.05	83.2	
2,4,5-TP(Silvex)	1	9.29	9.24	9.34	75.7	0.5
	2	9.90	9.85	9.95	76.1	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

TG-S01MSD

Lab Name: Alliance

Contract: PORT06

Lab Code: ACE

SDG NO.: Q2832

Lab Sample ID: Q2832-02MSD

Date(s) Analyzed: 08/15/2025 08/15/2025

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	8.42	8.37	8.47	92.0	14.3
	2	9.00	8.95	9.05	79.7	
2,4,5-TP(Silvex)	1	9.29	9.24	9.34	76.5	5
	2	9.90	9.85	9.95	80.4	



QC SAMPLE DATA

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	PB169278BL	SDG No.:	Q2832
Lab Sample ID:	PB169278BL	Matrix:	TCLP
Analytical Method:	8151A	% Solid:	0 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Herbicide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS031455.D	1	08/15/25 08:45	08/15/25 17:04	PB169278

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	509		70 (61) - 130 (136)	102%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS081525\
Data File : PS031455.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 15 Aug 2025 17:04
Operator : AR\AJ
Sample : PB169278BL
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
PB169278BL

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 18 03:46:48 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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	7.291	7.739	1428.5E6	430.5E6	450.077	509.257

Target Compounds

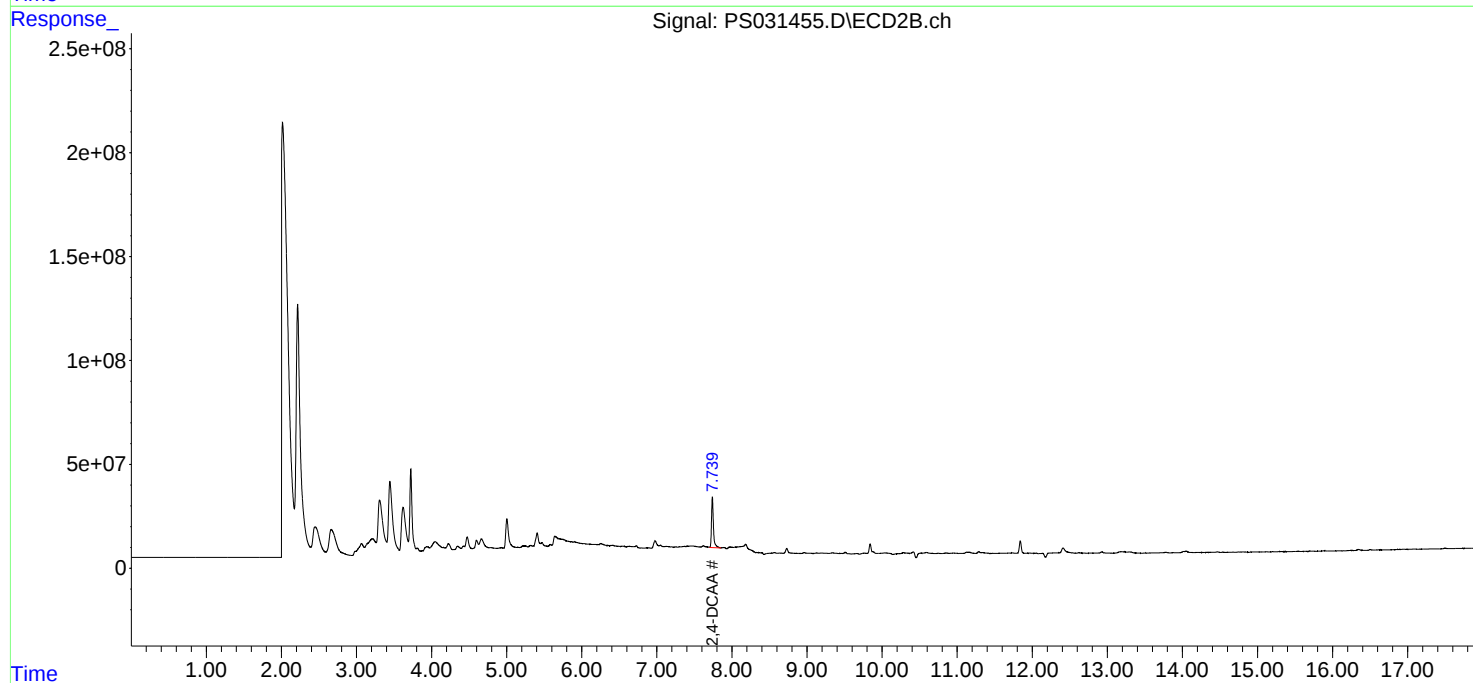
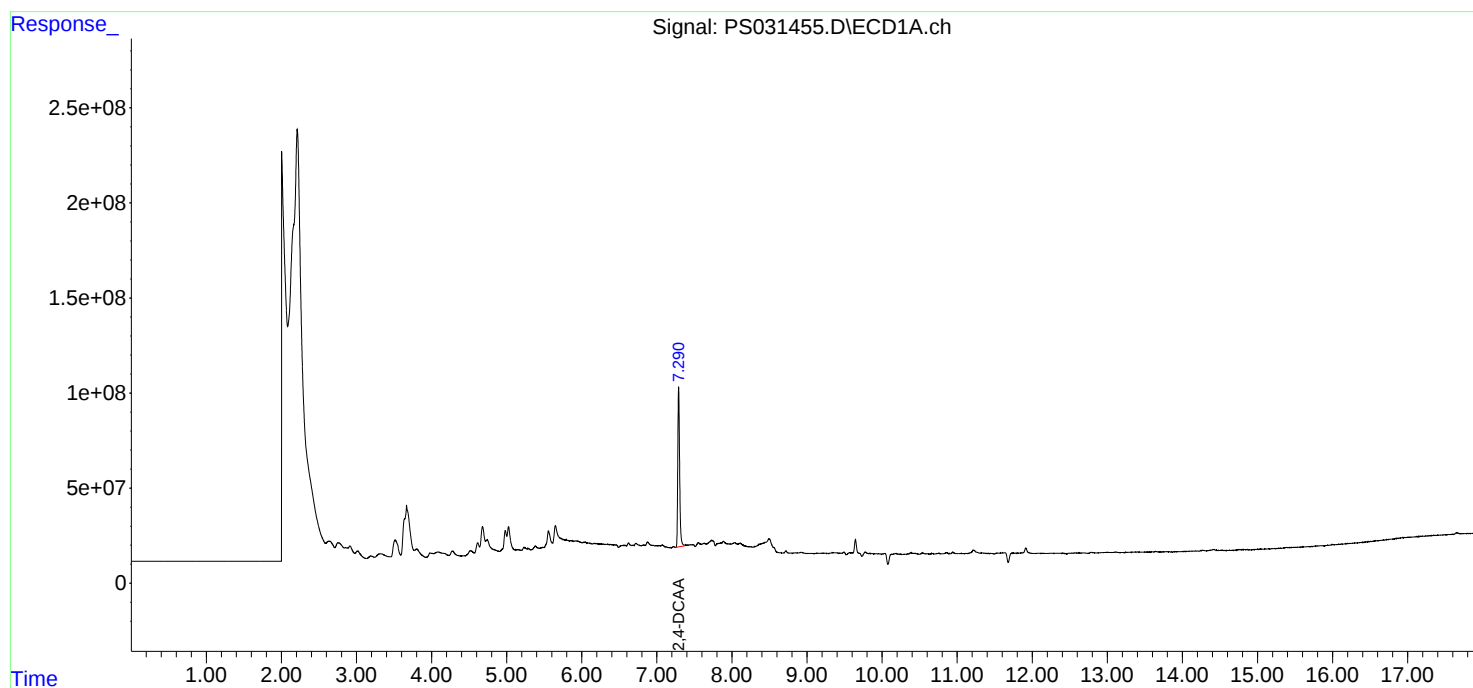
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

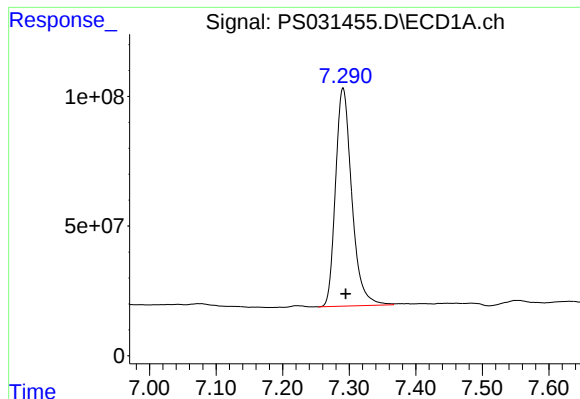
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS081525\
Data File : PS031455.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 15 Aug 2025 17:04
Operator : AR\AJ
Sample : PB169278BL
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
PB169278BL

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 18 03:46:48 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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

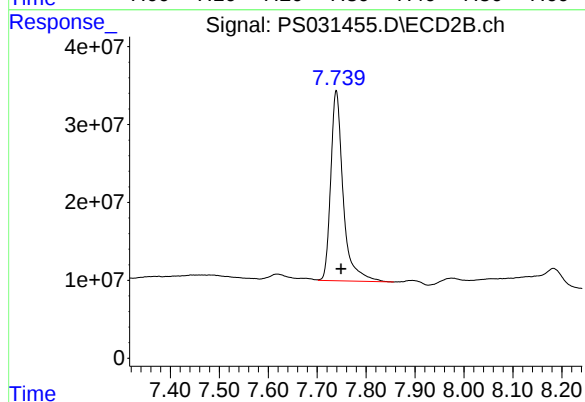




#4 2,4-DCAA

R.T.: 7.291 min
Delta R.T.: -0.004 min
Response: 1428540207
Conc: 450.08 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB169278BL



#4 2,4-DCAA

R.T.: 7.739 min
Delta R.T.: -0.010 min
Response: 430495148
Conc: 509.26 ng/ml

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	08/07/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	08/07/25
Client Sample ID:	PIBLK-PS031378.D	SDG No.:	Q2832
Lab Sample ID:	I.BLK-PS031378.D	Matrix:	TCLP
Analytical Method:	8151A	% 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
PS031378.D	1		08/07/25	ps080725

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	503		70 (61) - 130 (136)	101%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS080725\
Data File : PS031378.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 07 Aug 2025 11:38
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: Aug 08 03:20:40 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:11:03 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	7.295	7.750	1335.9E6	425.4E6	420.882	503.242

Target Compounds

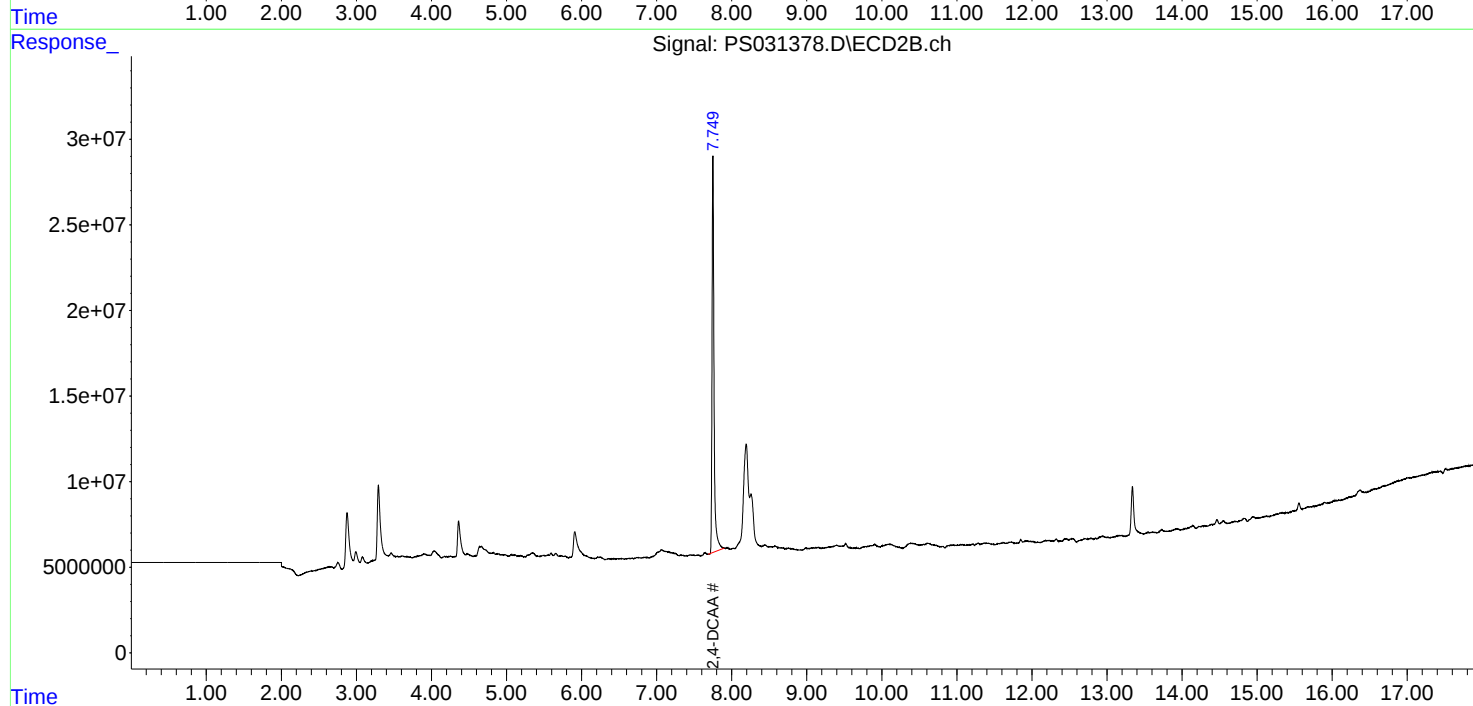
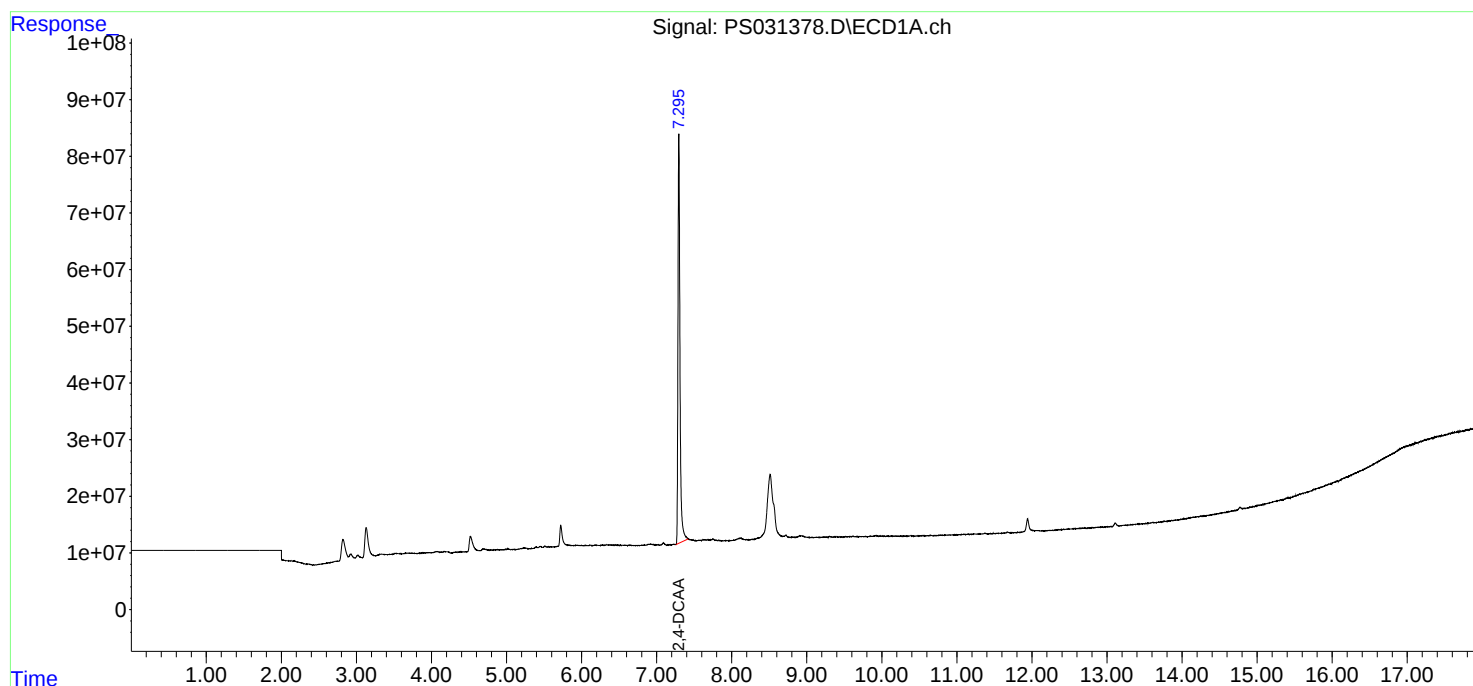
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS080725\
Data File : PS031378.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 07 Aug 2025 11:38
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: Aug 08 03:20:40 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:11:03 2025
Response via : Initial Calibration
Integrator: ChemStation

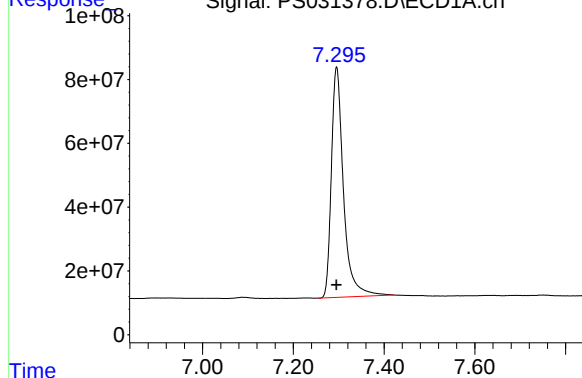
Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm



Response

Signal: PS031378.D\ECD1A.ch

#4 2,4-DCAA



R.T.: 7.295 min
Delta R.T.: 0.000 min
Response: 1335874357
Conc: 420.88 ng/ml

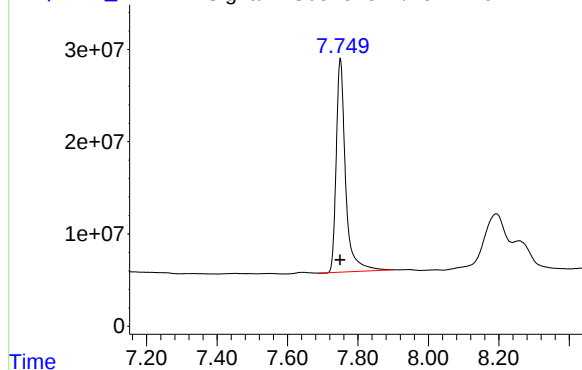
Instrument :
ECD_S
ClientSampleId :
I.BLK

Time

Response_

Signal: PS031378.D\ECD2B.ch

#4 2,4-DCAA



R.T.: 7.750 min
Delta R.T.: 0.000 min
Response: 425410554
Conc: 503.24 ng/ml

Time

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	08/15/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	08/15/25
Client Sample ID:	PIBLK-PS031453.D	SDG No.:	Q2832
Lab Sample ID:	I.BLK-PS031453.D	Matrix:	TCLP
Analytical Method:	8151A	% 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
PS031453.D	1		08/15/25	PS081525

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	540		70 (61) - 130 (136)	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\PS081525\
Data File : PS031453.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 15 Aug 2025 10:32
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: Aug 18 03:46:09 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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	7.291	7.745	1605.2E6	456.8E6	505.736	540.322

Target Compounds

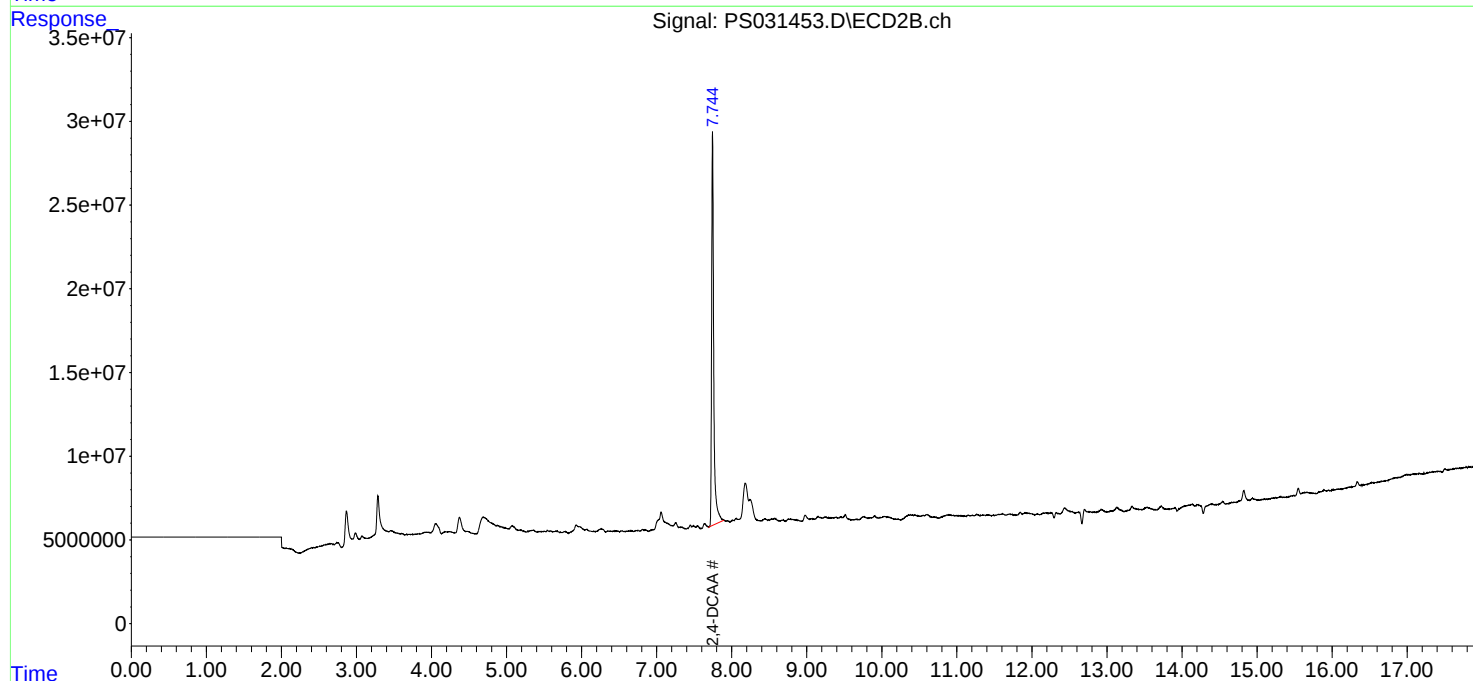
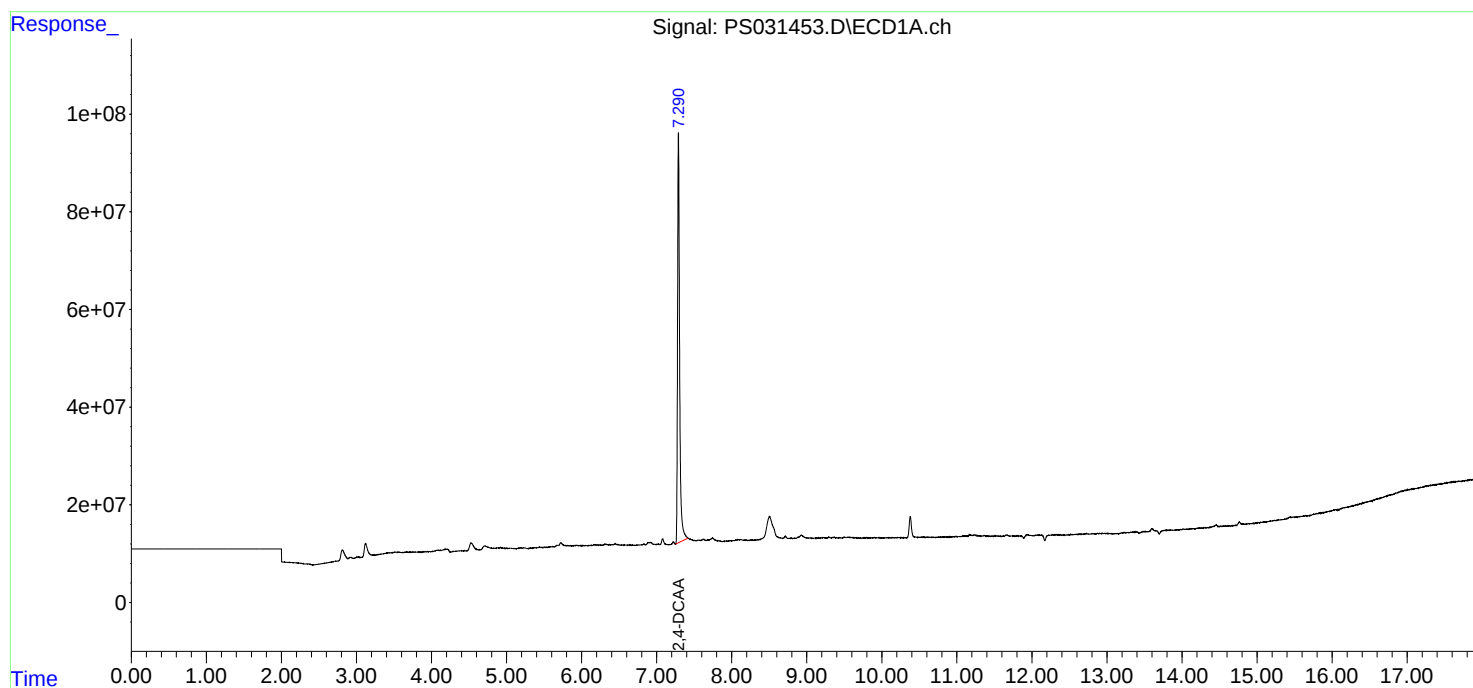
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

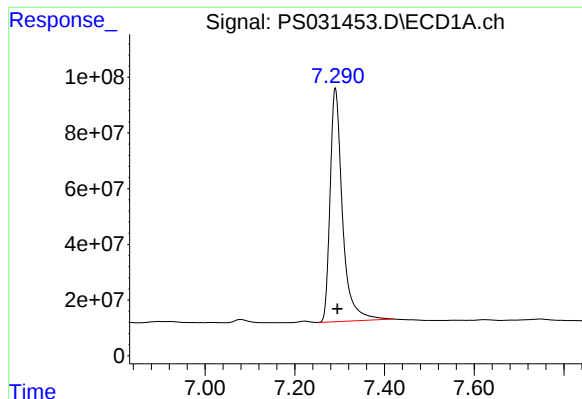
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS081525\
Data File : PS031453.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 15 Aug 2025 10:32
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 18 03:46:09 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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

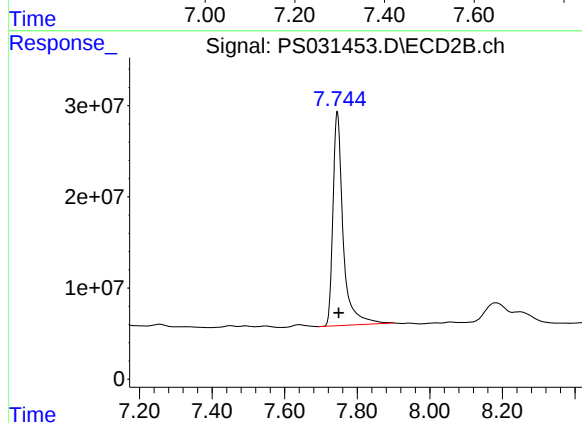




#4 2,4-DCAA

R.T.: 7.291 min
Delta R.T.: -0.004 min
Response: 1605198763
Conc: 505.74 ng/ml

Instrument :
ECD_S
ClientSampleId :
I.BLK



#4 2,4-DCAA

R.T.: 7.745 min
Delta R.T.: -0.004 min
Response: 456755586
Conc: 540.32 ng/ml

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	08/15/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	08/15/25
Client Sample ID:	PIBLK-PS031460.D	SDG No.:	Q2832
Lab Sample ID:	I.BLK-PS031460.D	Matrix:	TCLP
Analytical Method:	8151A	% 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
PS031460.D	1		08/15/25	PS081525

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	554		70 (61) - 130 (136)	111%	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\PS081525\
Data File : PS031460.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 15 Aug 2025 19:05
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: Aug 18 03:48:30 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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	7.290	7.746	1639.0E6	468.5E6	516.376	554.207

Target Compounds

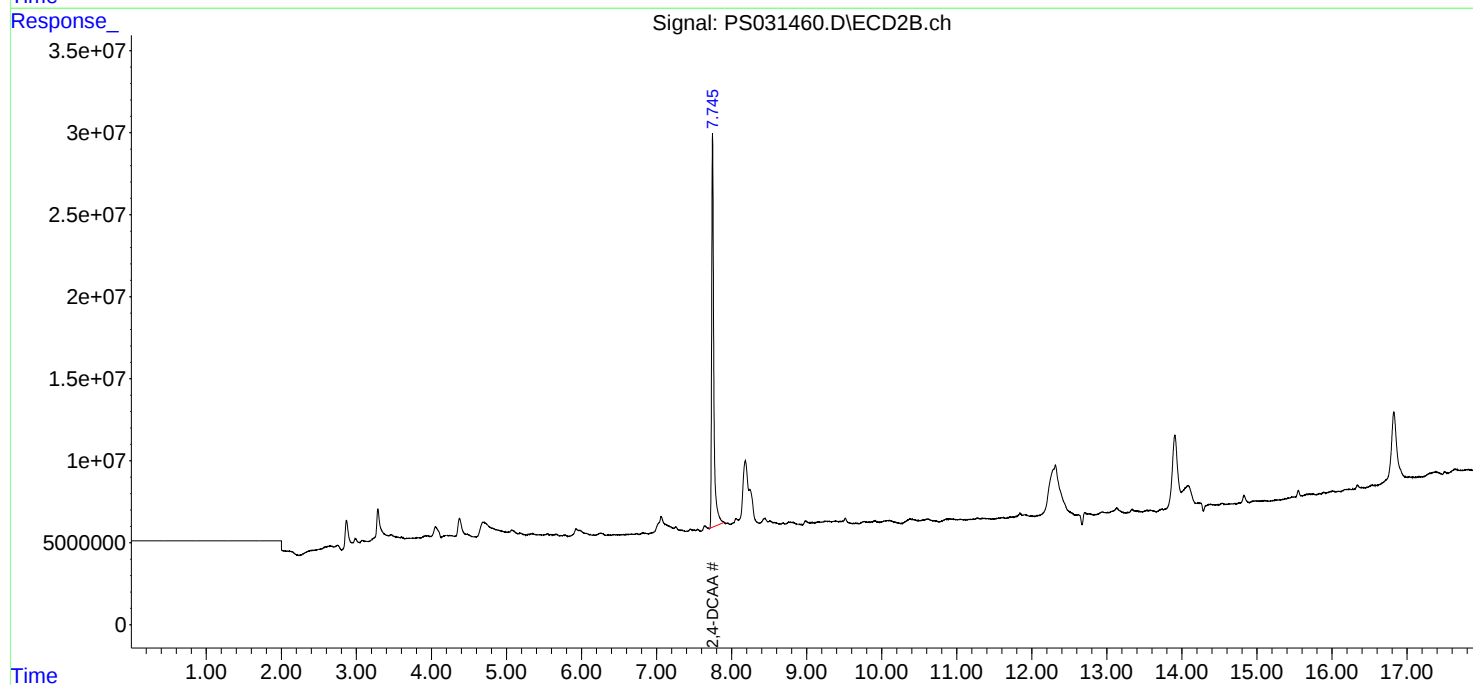
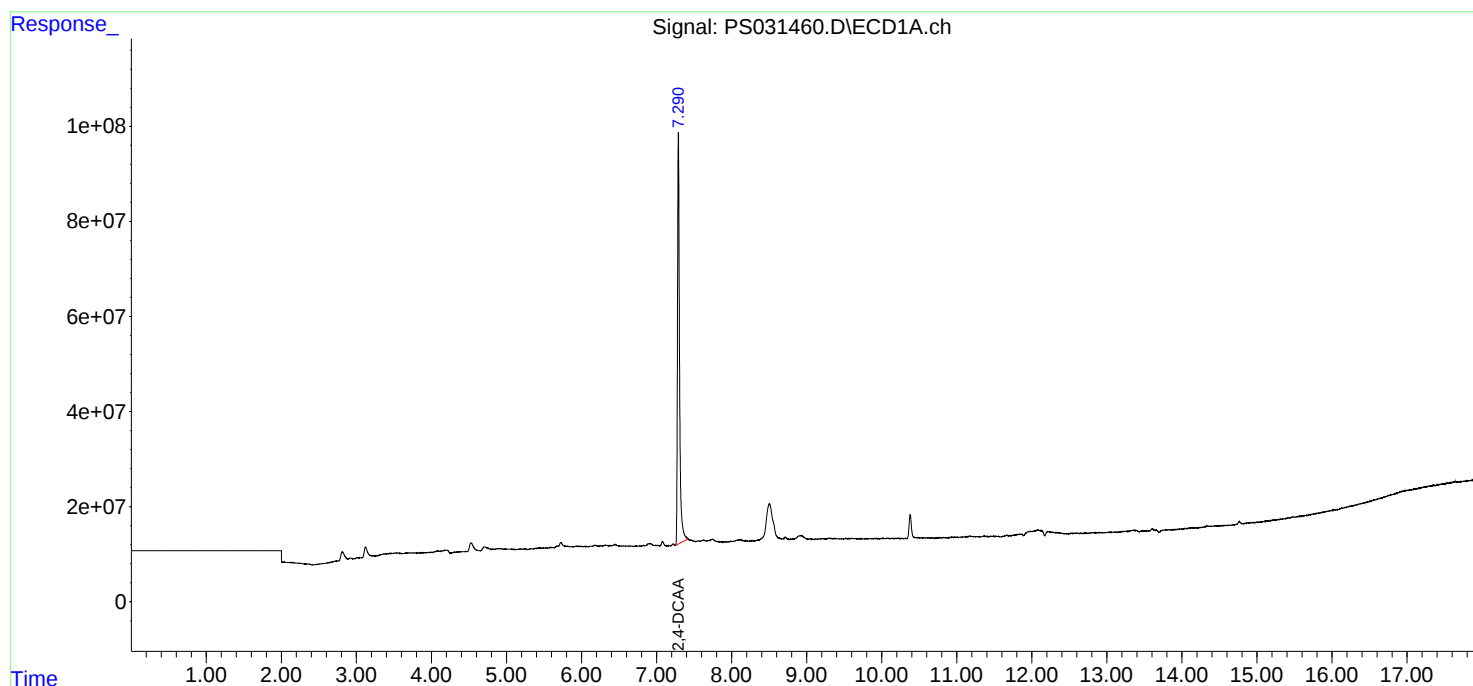
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS081525\
Data File : PS031460.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 15 Aug 2025 19:05
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: Aug 18 03:48:30 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 2025
Response via : Initial Calibration
Integrator: ChemStation

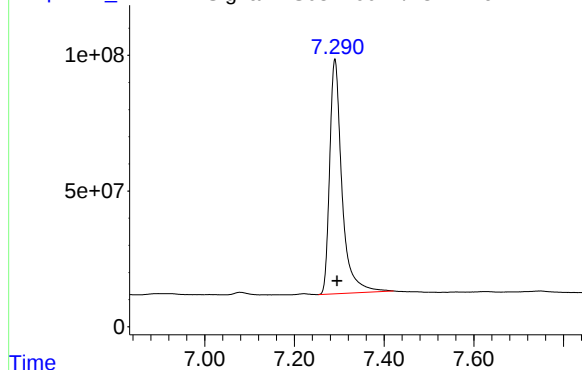
Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm



Response_

Signal: PS031460.D\ECD1A.ch

#4 2,4-DCAA



R.T.: 7.290 min
Delta R.T.: -0.005 min
Response: 1638972636
Conc: 516.38 ng/ml

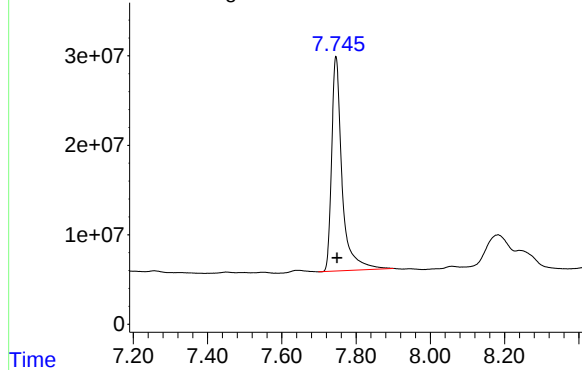
Instrument :
ECD_S
ClientSampleId :
I.BLK

Time

Response_

Signal: PS031460.D\ECD2B.ch

#4 2,4-DCAA



R.T.: 7.746 min
Delta R.T.: -0.003 min
Response: 468493420
Conc: 554.21 ng/ml

Time

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	08/16/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	08/16/25
Client Sample ID:	PIBLK-PS031472.D	SDG No.:	Q2832
Lab Sample ID:	I.BLK-PS031472.D	Matrix:	TCLP
Analytical Method:	8151A	% 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
PS031472.D	1		08/16/25	PS081525

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	568		70 (61) - 130 (136)	114%	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\PS081525\
 Data File : PS031472.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 16 Aug 2025 00:43
 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: Aug 18 03:52:31 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
 Quant Title : 8080.M
 QLast Update : Fri Aug 08 03:17:54 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	7.290	7.745	1653.6E6	480.4E6	520.997	568.300

Target Compounds

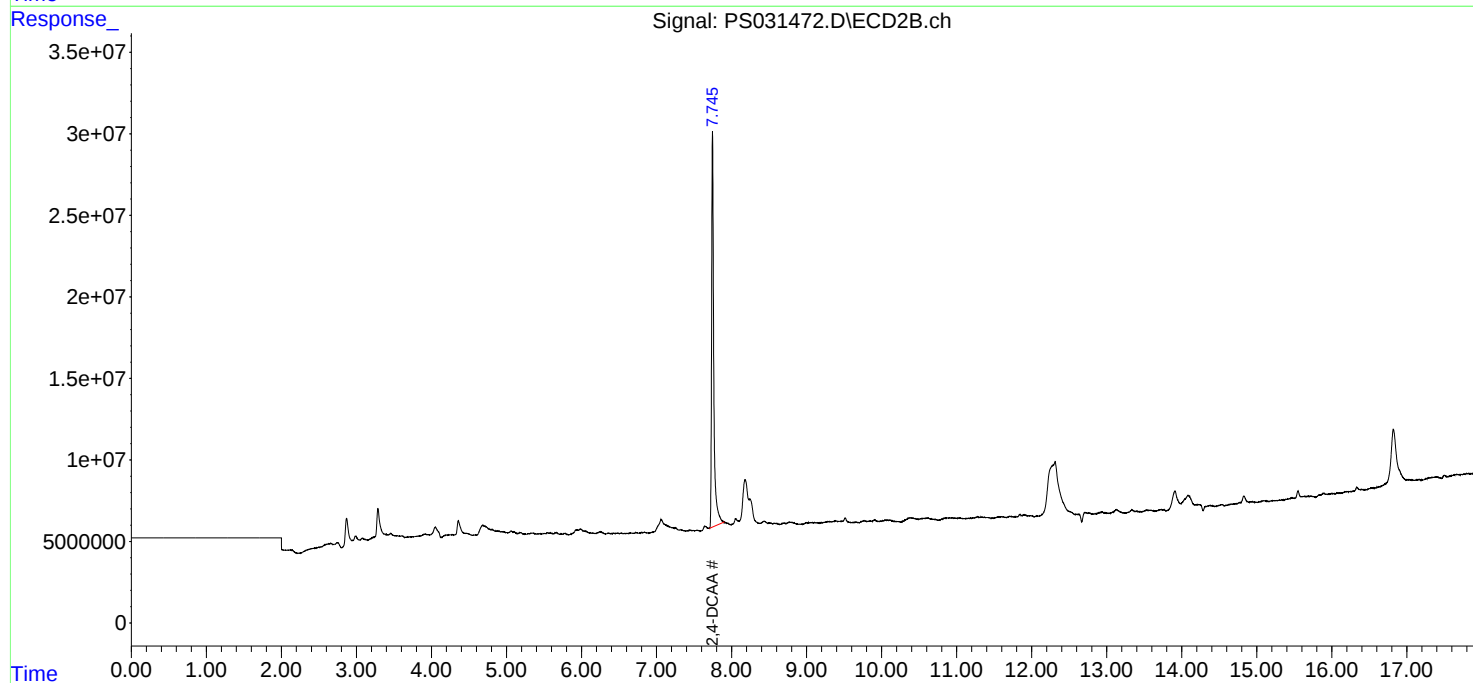
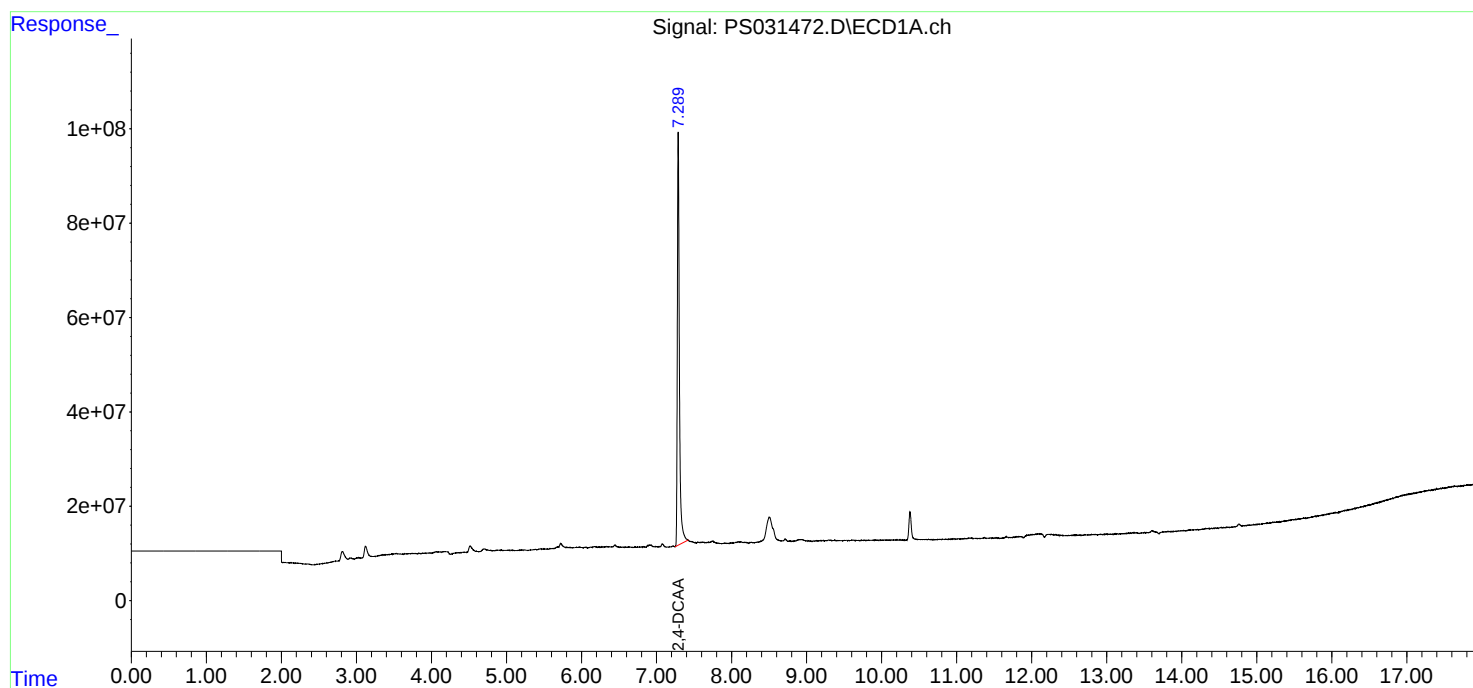
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

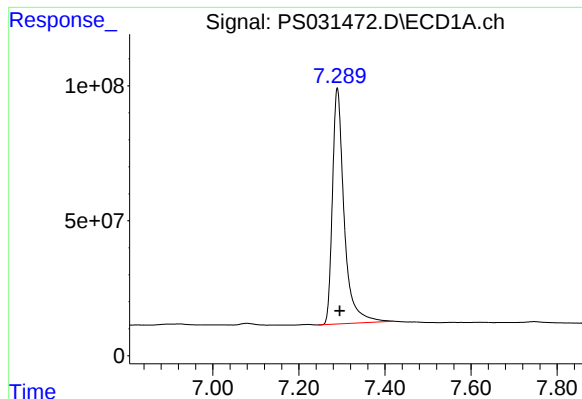
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS081525\
Data File : PS031472.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 16 Aug 2025 00:43
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 18 03:52:31 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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

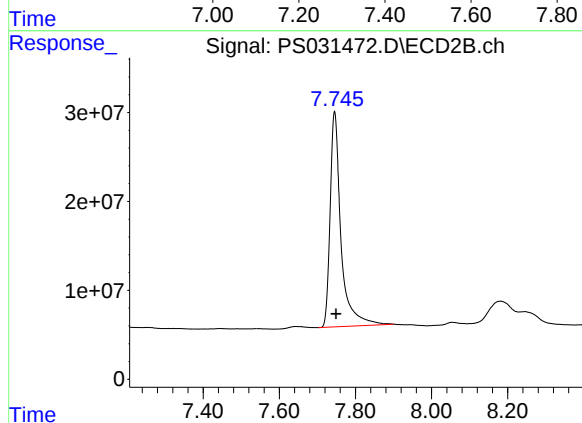




#4 2,4-DCAA

R.T.: 7.290 min
Delta R.T.: -0.005 min
Response: 1653636951
Conc: 521.00 ng/ml

Instrument :
ECD_S
ClientSampleId :
I.BLK



#4 2,4-DCAA

R.T.: 7.745 min
Delta R.T.: -0.004 min
Response: 480406289
Conc: 568.30 ng/ml

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	08/18/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	08/18/25
Client Sample ID:	PIBLK-PS031481.D	SDG No.:	Q2832
Lab Sample ID:	I.BLK-PS031481.D	Matrix:	TCLP
Analytical Method:	8151A	% 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
PS031481.D	1		08/18/25	PS081825

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 (61) - 130 (136)	100%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS081825\
Data File : PS031481.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Aug 2025 11:59
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: Aug 19 07:43:29 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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	7.291	7.747	1480.1E6	424.6E6	466.324	502.329

Target Compounds

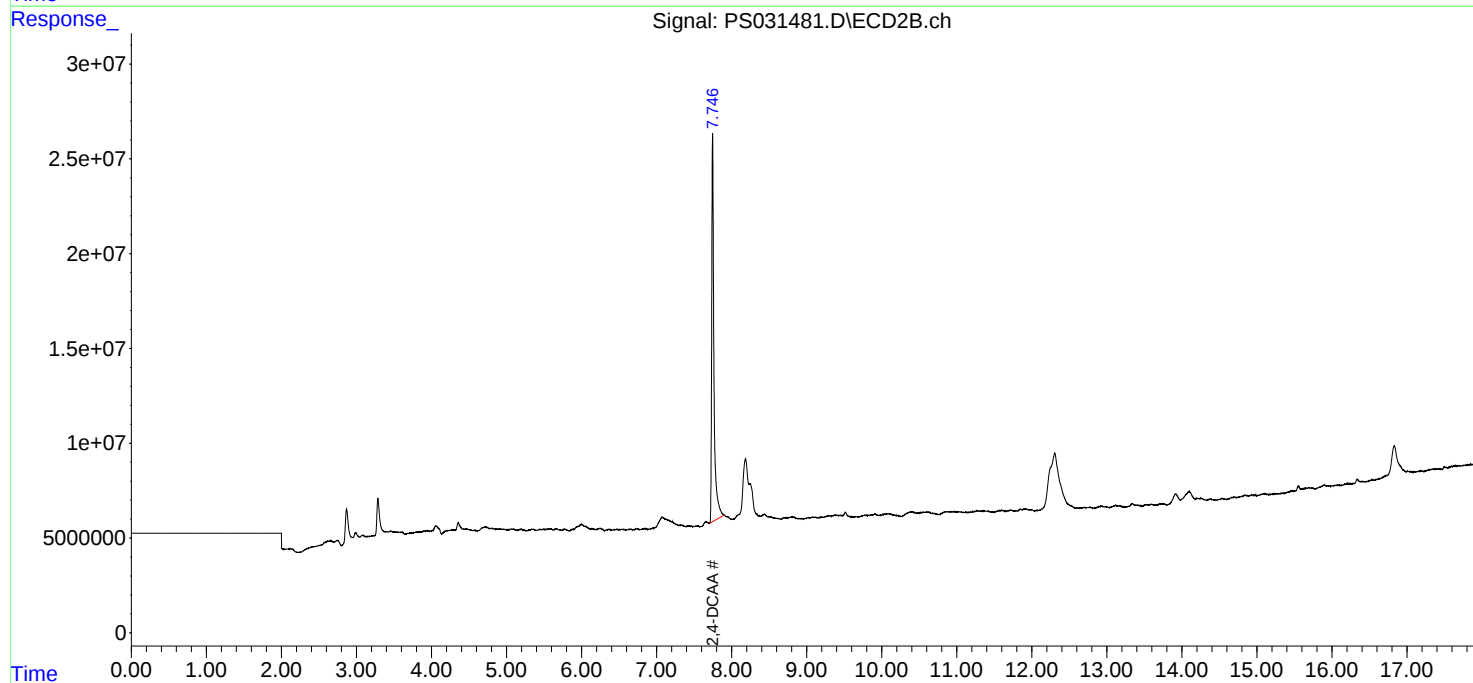
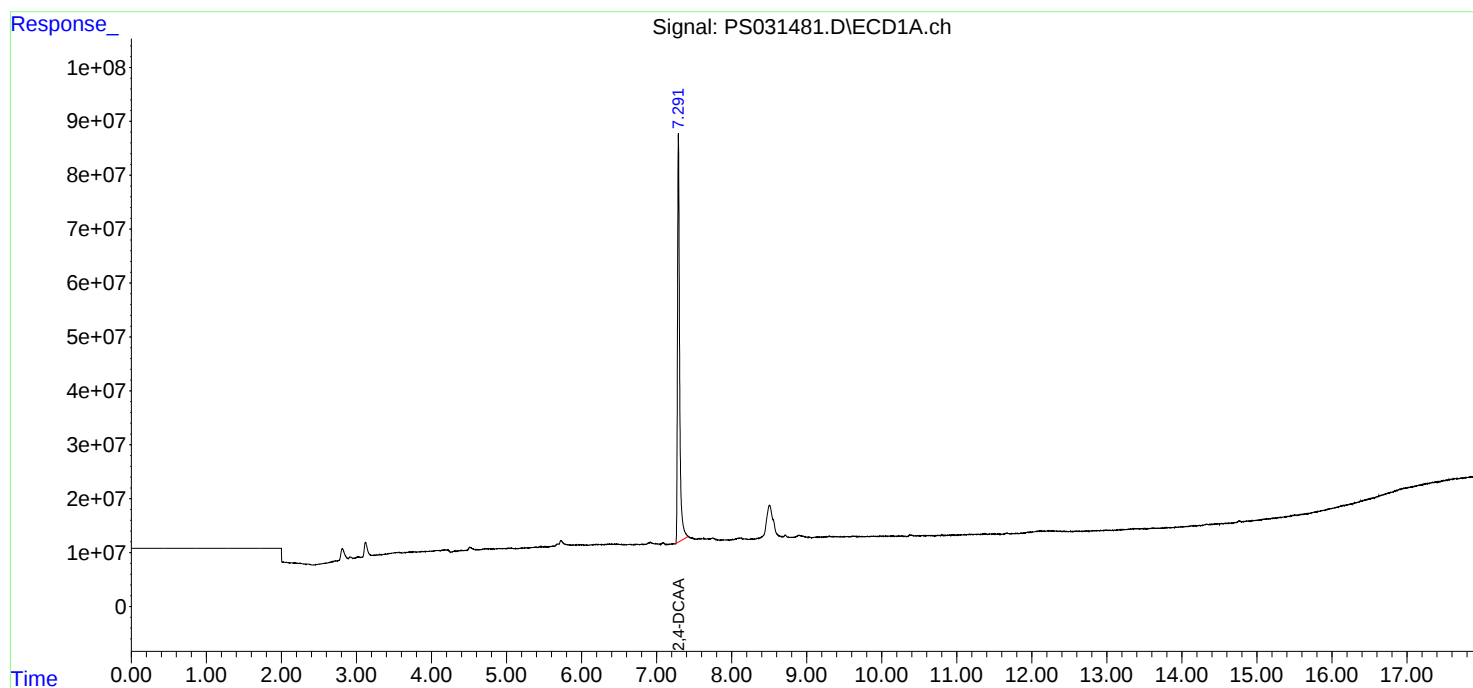
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

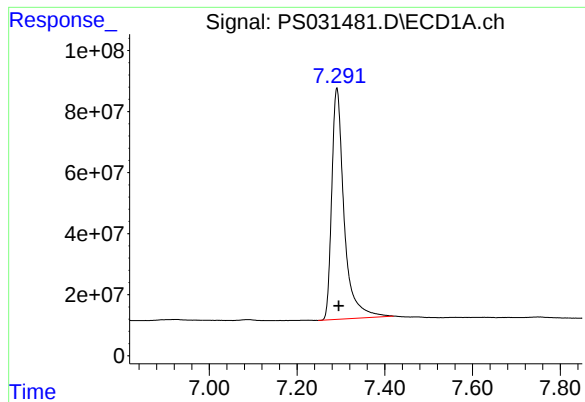
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS081825\
Data File : PS031481.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Aug 2025 11:59
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 19 07:43:29 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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

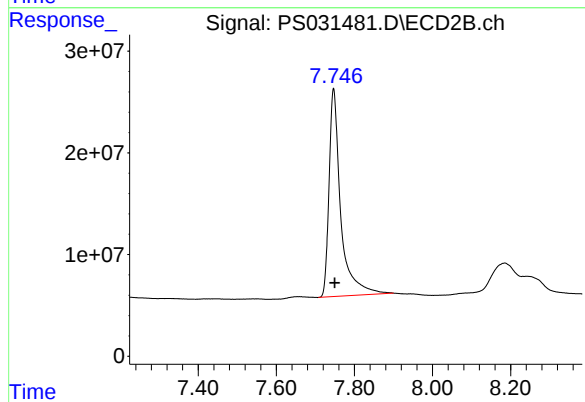




#4 2,4-DCAA

R.T.: 7.291 min
Delta R.T.: -0.004 min
Response: 1480106289
Conc: 466.32 ng/ml

Instrument :
ECD_S
ClientSampleId :
I.BLK



#4 2,4-DCAA

R.T.: 7.747 min
Delta R.T.: -0.003 min
Response: 424638971
Conc: 502.33 ng/ml

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	08/18/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	08/18/25
Client Sample ID:	PIBLK-PS031490.D	SDG No.:	Q2832
Lab Sample ID:	I.BLK-PS031490.D	Matrix:	TCLP
Analytical Method:	8151A	% 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
PS031490.D	1		08/18/25	PS081825

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	516		70 (61) - 130 (136)	103%	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\PS081825\
Data File : PS031490.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Aug 2025 17:44
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: Aug 19 07:47:04 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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	7.292	7.744	1489.0E6	435.9E6	469.132	515.669

Target Compounds

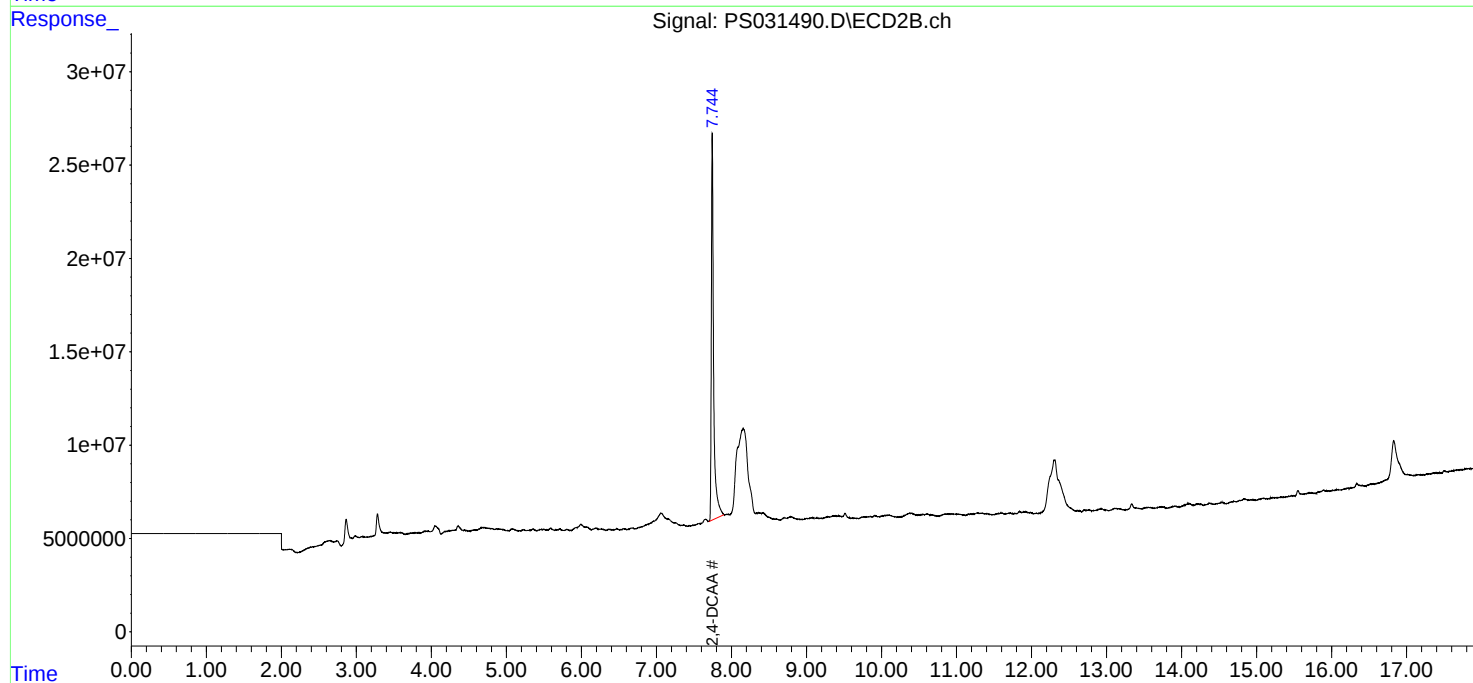
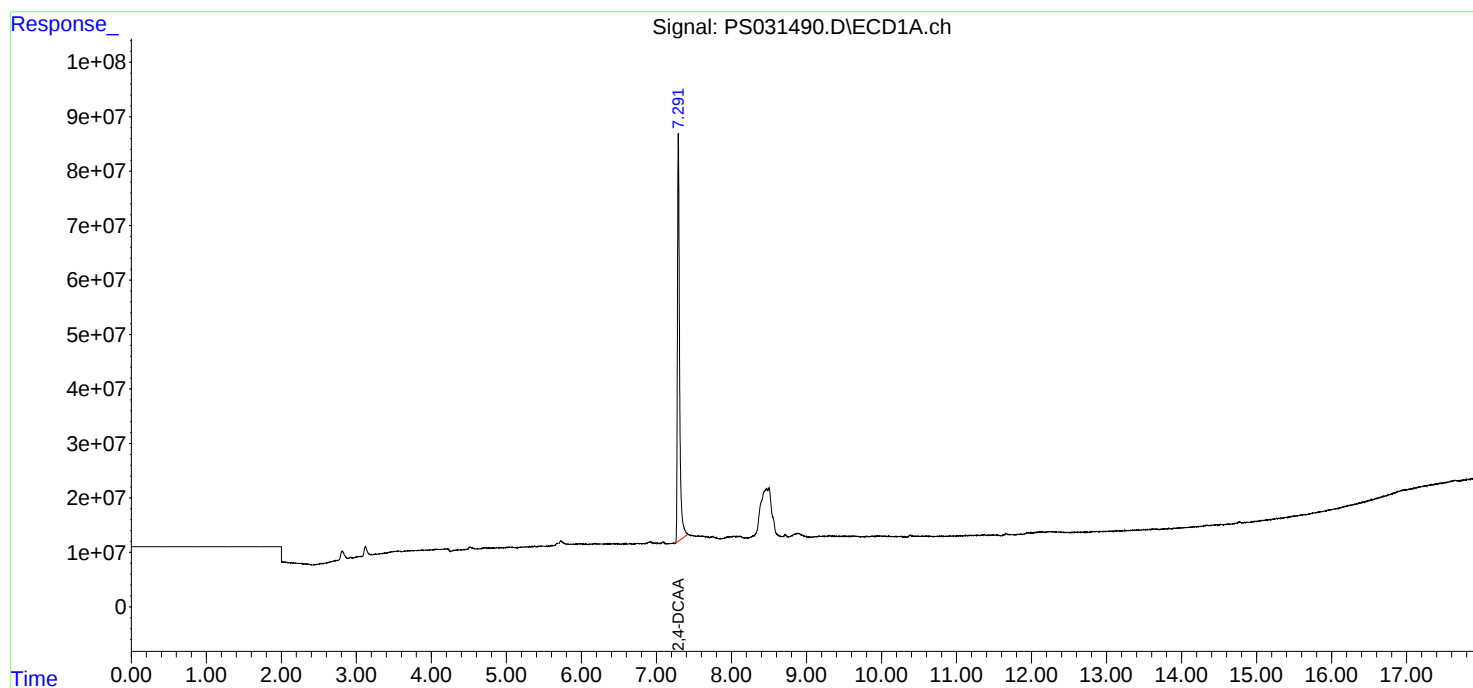
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

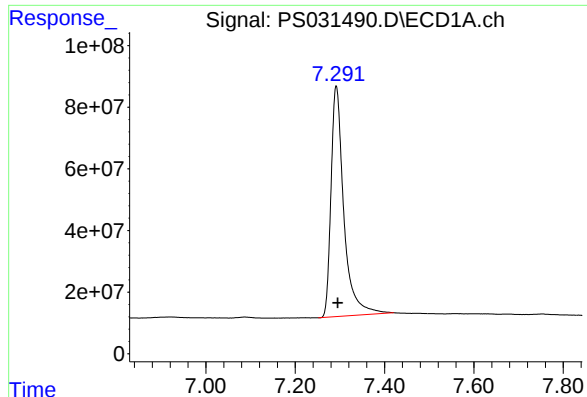
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS081825\
Data File : PS031490.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 18 Aug 2025 17:44
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 19 07:47:04 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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

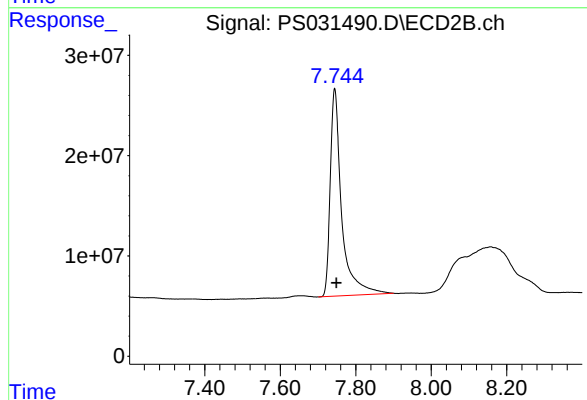




#4 2,4-DCAA

R.T.: 7.292 min
Delta R.T.: -0.003 min
Response: 1489020460
Conc: 469.13 ng/ml

Instrument :
ECD_S
ClientSampleId :
I.BLK



#4 2,4-DCAA

R.T.: 7.744 min
Delta R.T.: -0.005 min
Response: 435915192
Conc: 515.67 ng/ml

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	PB169278BS	SDG No.:	Q2832
Lab Sample ID:	PB169278BS	Matrix:	TCLP
Analytical Method:	8151A	% Solid:	0 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Herbicide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS031456.D	1	08/15/25 08:45	08/15/25 17:28	PB169278

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	5.30		0.92	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	5.50		0.78	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	561		70 (61) - 130 (136)	112%	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\PS081525\
 Data File : PS031456.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 15 Aug 2025 17:28
 Operator : AR\AJ
 Sample : PB169278BS
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 PB169278BS

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 18 03:47:08 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
 Quant Title : 8080.M
 QLast Update : Fri Aug 08 03:17:54 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	7.290	7.744	1780.6E6	430.4E6	561.008	509.119
Target Compounds							
1) T	Dalapon	2.675	2.694	2463.6E6	1202.1E6	469.350	451.732
2) T	3,5-DICHL...	6.457	6.695	2452.5E6	657.9E6	519.793	486.653
3) T	4-Nitroph...	7.097	7.292	513.2E6	536.3E6	497.436	426.705
5) T	DICAMBA	7.475	7.941	7262.2E6	2773.3E6	519.972	488.032
6) T	MCPD	7.653	8.037	404.0E6	84283294	50.218	47.676
7) T	MCPA	7.802	8.285	489.9E6	129.6E6	49.178	46.182
8) T	DICHLORPROP	8.184	8.661	1660.7E6	655.8E6	523.475	491.209
9) T	2,4-D	8.419	9.002	1535.5E6	678.7E6	533.765	475.544
10) T	Pentachlo...	8.716	9.512	26991.5E6	17993.5E6	562.178	516.632
11) T	2,4,5-TP ...	9.294	9.897	9796.9E6	6593.7E6	546.586	502.722
12) T	2,4,5-T	9.590	10.326	8148.5E6	5820.1E6	556.168	491.574
13) T	2,4-DB	10.166	10.894	1017.7E6	445.5E6	529.576	461.694
14) T	DINOSEB	11.366	11.271	6914.4E6	4643.3E6	545.362	490.994
15) T	Picloram	11.192	12.392	6747.6E6	7825.6E6	516.889	446.419
16) T	DCPA	11.666	12.313	13012.0E6	10226.9E6	571.218	519.123

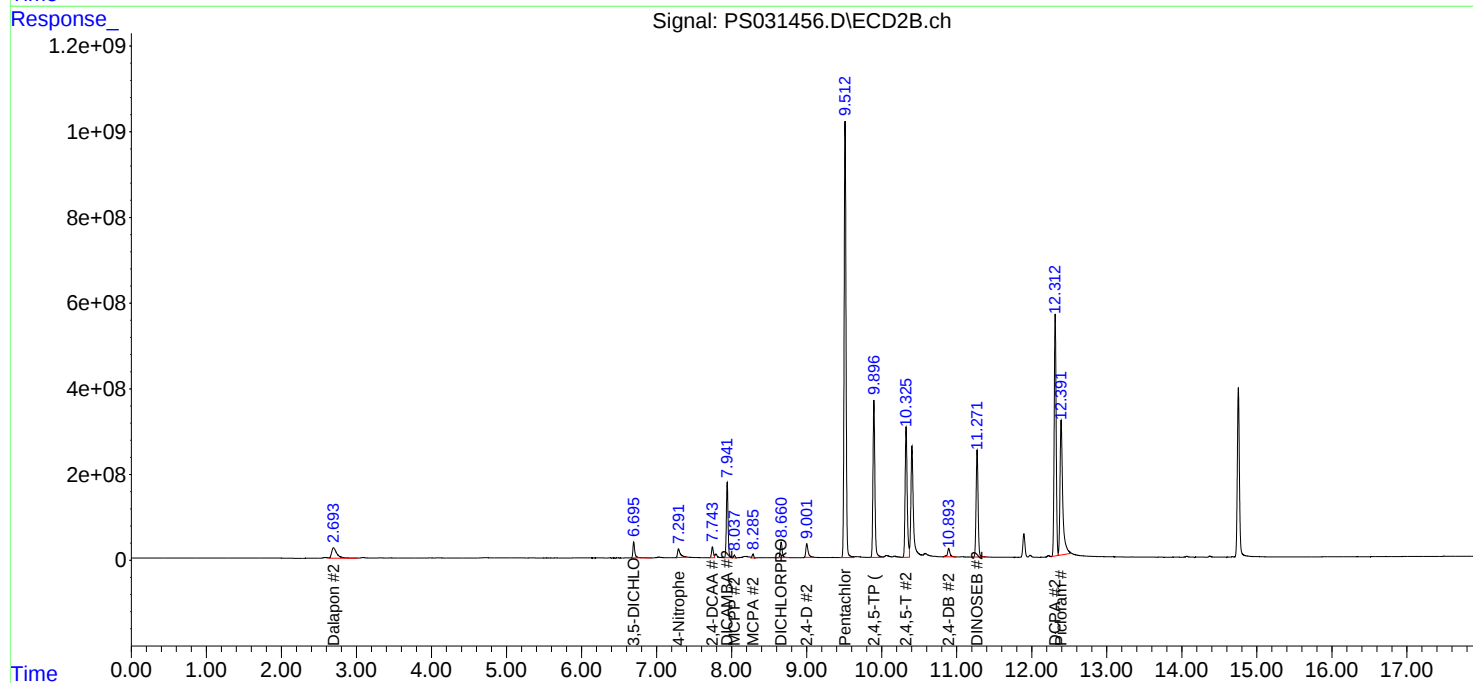
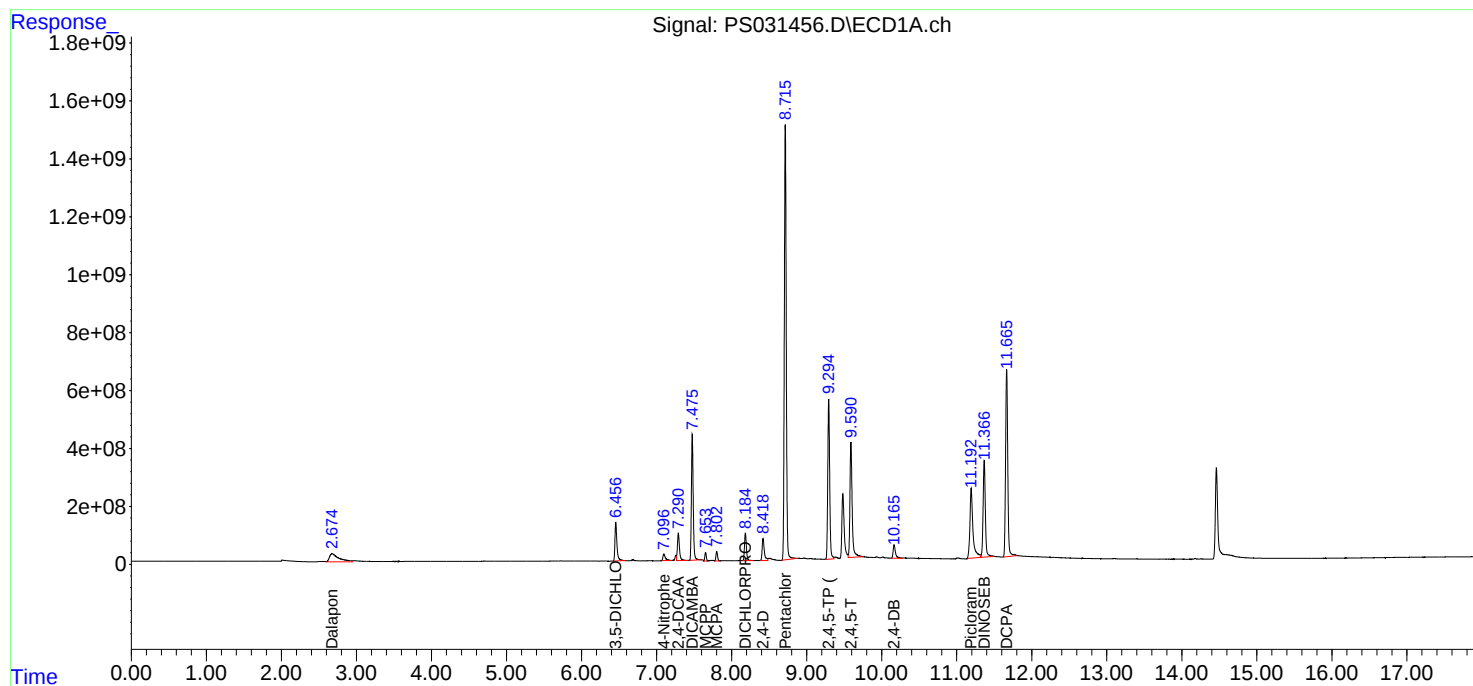
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS081525\
Data File : PS031456.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 15 Aug 2025 17:28
Operator : AR\AJ
Sample : PB169278BS
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
PB169278BS

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 18 03:47:08 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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:	08/11/25	
Project:	Amtrak Sawtooth Bridges 2025		Date Received:	08/12/25	
Client Sample ID:	TG-S01MS		SDG No.:	Q2832	
Lab Sample ID:	Q2832-02MS		Matrix:	TCLP	
Analytical Method:	8151A		% Solid:	0	Decanted:
Sample Wt/Vol:	100	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	TCLP Herbicide	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS031462.D	1	08/15/25 08:45	08/15/25 20:41	PB169278

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	91.7		9.20	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	76.1		7.80	20.0	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	876	*	70 (61) - 130 (136)	175%	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\PS081525\
 Data File : PS031462.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 15 Aug 2025 20:41
 Operator : AR\AJ
 Sample : Q2832-02MS
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 TG-S01MS

Manual Integrations
 APPROVED

Reviewed By :Abdul Mirza 08/18/2025
 Supervised By :mohammad ahmed 08/19/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 18 03:49:05 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
 Quant Title : 8080.M
 QLast Update : Fri Aug 08 03:17:54 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	7.289	7.743	2456.8E6	740.2E6	774.039	875.567
Target Compounds							
1) T	Dalapon	2.677	2.698	3052.8E6	1458.5E6	581.605	548.095
2) T	3,5-DICHL...	6.457	6.695	2444.5E6	618.9E6	518.090	457.807
3) T	4-Nitroph...	7.102	7.308	18021383	26219699	17.468m	20.861m
5) T	DICAMBA	7.475	7.942	6803.0E6	2742.1E6	487.092	482.543
6) T	MCPD	7.654	8.041	549.5E6	112.9E6	68.300	63.840
7) T	MCPA	7.804	8.289	832.9E6	226.5E6	83.616	80.719
8) T	DICHLORPROP	8.182	8.660	2254.7E6	883.6E6	710.732	661.840
9) T	2,4-D	8.416	8.998	2636.7E6	1187.6E6	916.520	832.073
10) T	Pentachlo...	8.715	9.513	24773.9E6	16593.7E6	515.990	476.442
11) T	2,4,5-TP ...	9.292	9.896	13562.4E6	9984.4E6	756.675	761.238m
12) T	2,4,5-T	9.588	10.324	12396.3E6	9015.1E6	846.092	761.424
13) T	2,4-DB	10.163	10.891	1614.5E6	725.9E6	840.143	752.371
14) T	DINOSEB	11.365	11.272	5331.9E6	3479.1E6	420.551	367.890
15) T	Picloram	11.189	12.388	7071.9E6	8778.5E6	541.734	500.776
16) T	DCPA	11.663	12.313	11966.4E6	10688.7E6	525.319	542.563

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS081525\
Data File : PS031462.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 15 Aug 2025 20:41
Operator : AR\AJ
Sample : Q2832-02MS
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :

ECD_S

ClientSampleId :

TG-S01MS

Manual Integrations

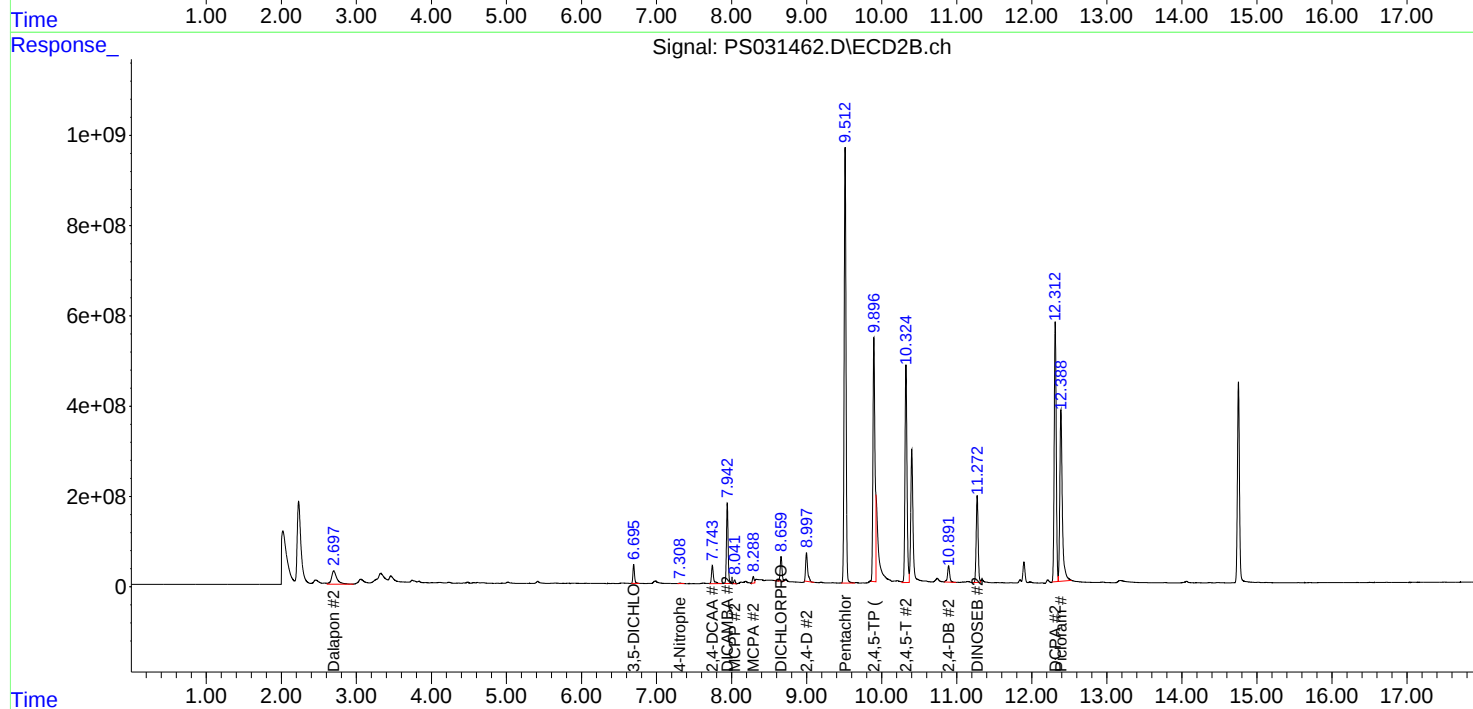
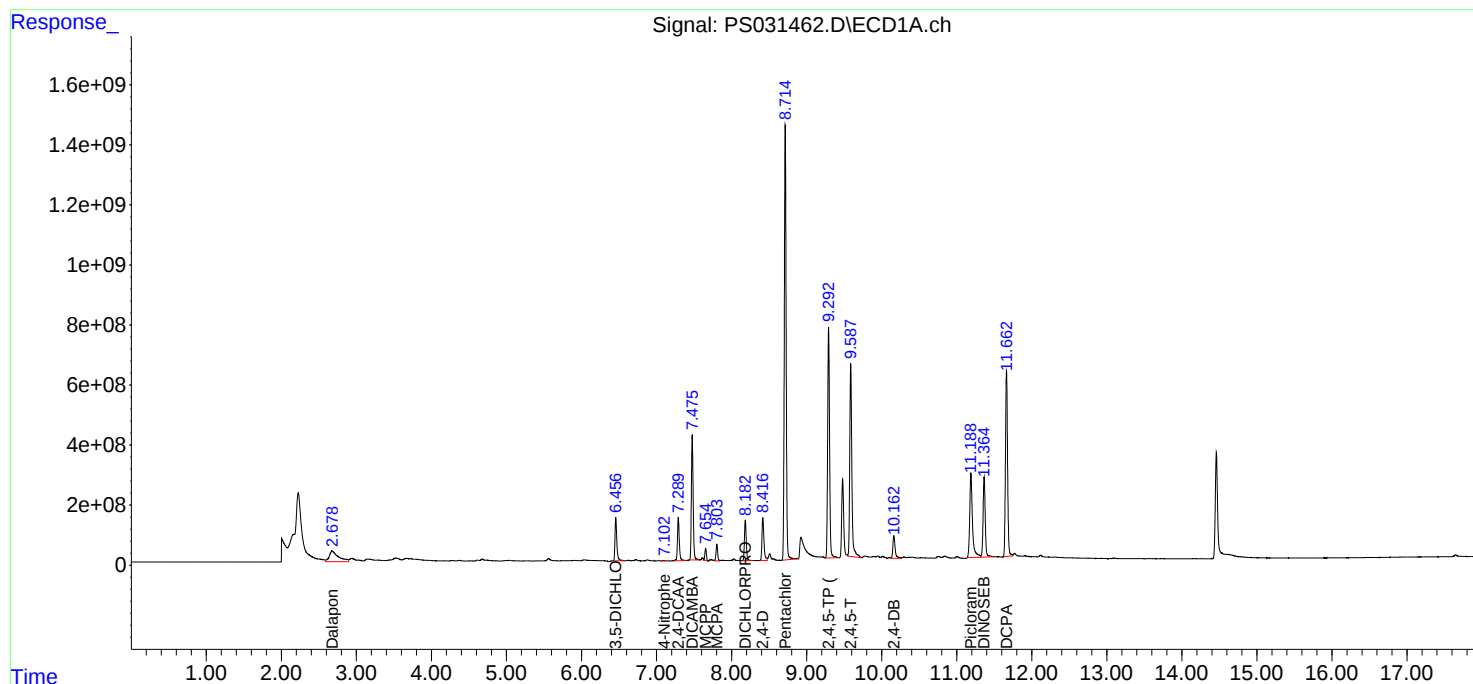
APPROVED

Reviewed By :Abdul Mirza 08/18/2025

Supervised By :mohammad ahmed 08/19/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 18 03:49:05 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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:	08/11/25	
Project:	Amtrak Sawtooth Bridges 2025		Date Received:	08/12/25	
Client Sample ID:	TG-S01MSD		SDG No.:	Q2832	
Lab Sample ID:	Q2832-02MSD		Matrix:	TCLP	
Analytical Method:	8151A		% Solid:	0	Decanted:
Sample Wt/Vol:	100	Units: mL	Final Vol:	10000	uL
Soil Aliquot Vol:		uL	Test:	TCLP Herbicide	
Extraction Type:			Injection Volume :		
GPC Factor :	1.0	PH :			
Prep Method :	SW3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS031463.D	1	08/15/25 08:45	08/15/25 21:05	PB169278

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	92.0		9.20	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	80.4		7.80	20.0	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	880	*	70 (61) - 130 (136)	176%	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\PS081525\
 Data File : PS031463.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 15 Aug 2025 21:05
 Operator : AR\AJ
 Sample : Q2832-02MSD
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 TG-S01MSD

Manual Integrations
 APPROVED

Reviewed By :Abdul Mirza 08/18/2025
 Supervised By :mohammad ahmed 08/19/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Aug 18 03:49:26 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
 Quant Title : 8080.M
 QLast Update : Fri Aug 08 03:17:54 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	7.289	7.743	2475.6E6	743.7E6	779.973	879.735
Target Compounds							
1) T	Dalapon	2.675	2.699	3069.8E6	1457.7E6	584.850	547.814
2) T	3,5-DICHL...	6.456	6.695	2476.2E6	623.7E6	524.809	461.309
3) T	4-Nitroph...	7.100	7.307	19299897	24426942	18.707m	19.434m
5) T	DICAMBA	7.475	7.942	6888.1E6	2779.2E6	493.190	489.066
6) T	MCPD	7.654	8.040	553.8E6	114.1E6	68.841	64.536
7) T	MCPA	7.804	8.289	845.9E6	243.9E6	84.915	86.924
8) T	DICHLORPROP	8.182	8.659	2271.0E6	893.5E6	715.853	669.248
9) T	2,4-D	8.415	8.997	2646.8E6	1137.5E6	920.035	796.938
10) T	Pentachlo...	8.715	9.512	25007.9E6	16772.4E6	520.864	481.572
11) T	2,4,5-TP ...	9.292	9.896	13706.9E6	10551.6E6	764.735	804.479m
12) T	2,4,5-T	9.586	10.324	12537.9E6	9150.0E6	855.758	772.823
13) T	2,4-DB	10.162	10.891	1613.6E6	729.0E6	839.671	755.577
14) T	DINOSEB	11.365	11.271	5395.6E6	3527.2E6	425.572	372.971
15) T	Picloram	11.189	12.388	7118.9E6	8886.2E6	545.340	506.924
16) T	DCPA	11.663	12.313	12202.0E6	10904.7E6	535.661	553.525

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS081525\
Data File : PS031463.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 15 Aug 2025 21:05
Operator : AR\AJ
Sample : Q2832-02MSD
Misc :
ALS Vial : 10 Sample Multiplier: 1

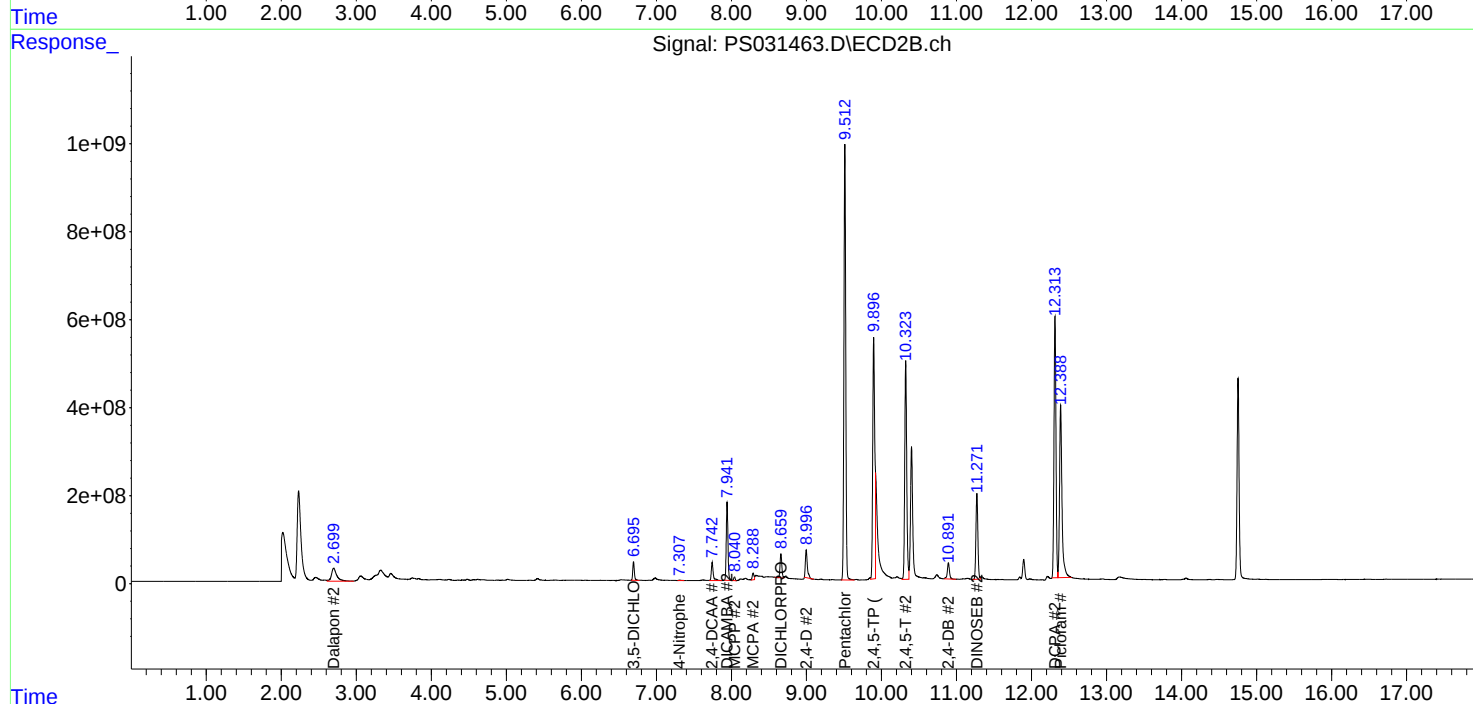
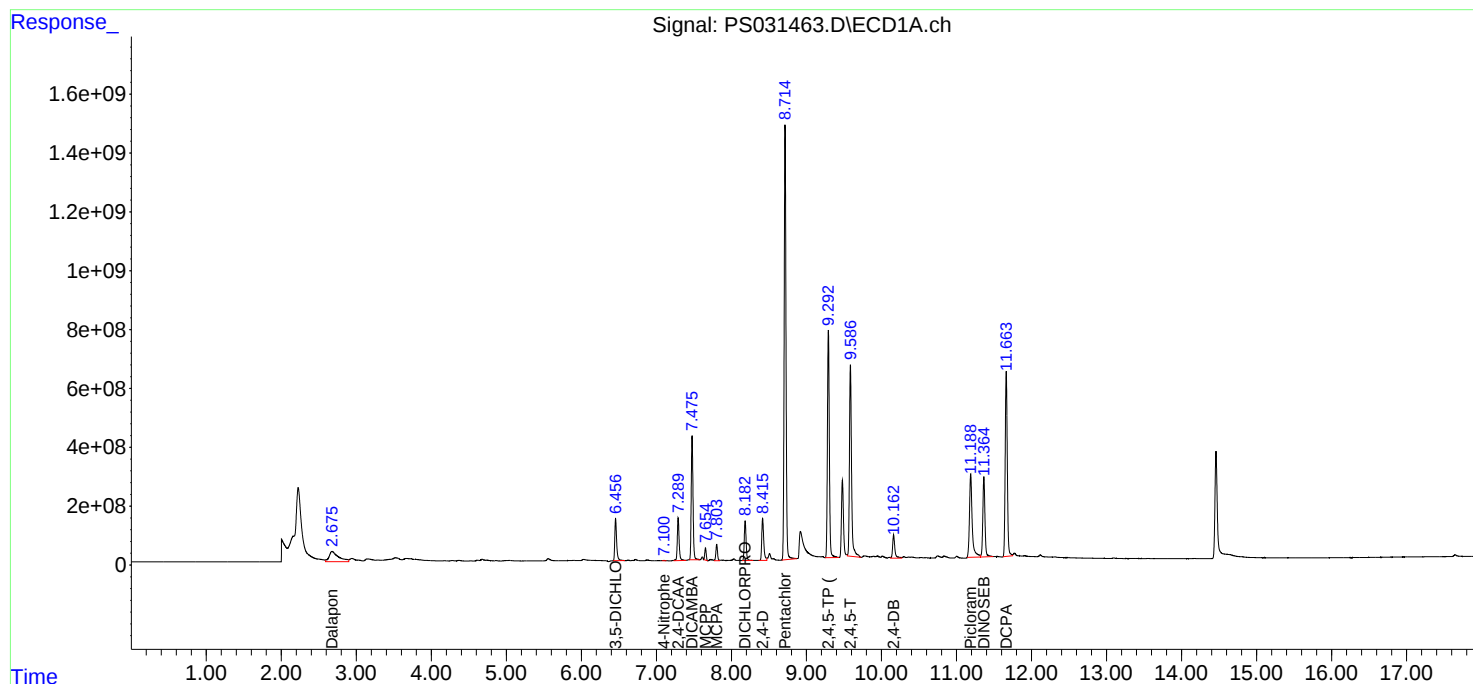
Instrument :
ECD_S
ClientSampleId :
TG-S01MSD

Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 08/18/2025
Supervised By :mohammad ahmed 08/19/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 18 03:49:26 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS080725.M
Quant Title : 8080.M
QLast Update : Fri Aug 08 03:17:54 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



Manual Integration Report

Sequence:	ps080725	Instrument	ECD_s
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
HSTDICC1500	PS031383.D	4-Nitrophenol #2	Abdul	8/8/2025 8:23:31 AM	mohammad	8/11/2025 1:55:16	Peak Integrated by Software
HSTDCCC750	PS031392.D	Picloram	Abdul	8/8/2025 8:23:34 AM	mohammad	8/11/2025 1:55:16	Peak Integrated by Software

Manual Integration Report

Sequence:

PS081525

Instrument

ECD_s

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q2832-02MS	PS031462.D	2,4,5-TP (SILVEX) #2	Abdul	8/18/2025 7:48:55 AM	mohammad	8/19/2025 1:27:14	Peak Integrated by Software
Q2832-02MS	PS031462.D	4-Nitrophenol	Abdul	8/18/2025 7:48:55 AM	mohammad	8/19/2025 1:27:14	Peak Integrated by Software
Q2832-02MS	PS031462.D	4-Nitrophenol #2	Abdul	8/18/2025 7:48:55 AM	mohammad	8/19/2025 1:27:14	Peak Integrated by Software
Q2832-02MSD	PS031463.D	2,4,5-TP (SILVEX) #2	Abdul	8/18/2025 7:48:58 AM	mohammad	8/19/2025 1:27:14	Peak Integrated by Software
Q2832-02MSD	PS031463.D	4-Nitrophenol	Abdul	8/18/2025 7:48:58 AM	mohammad	8/19/2025 1:27:14	Peak Integrated by Software
Q2832-02MSD	PS031463.D	4-Nitrophenol #2	Abdul	8/18/2025 7:48:58 AM	mohammad	8/19/2025 1:27:14	Peak Integrated by Software

Manual Integration Report

Sequence:

PS081825

Instrument

ECD_s

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
HSTDCCC750	PS031476.D	MCPP #2	Abdul	8/19/2025 11:17:39 AM	mohammad	8/20/2025 3:05:29	Peak Integrated by Software
HSTDCCC750	PS031491.D	DCPA #2	Abdul	8/19/2025 11:18:22 AM	mohammad	8/20/2025 3:05:29	Peak Integrated by Software
HSTDCCC750	PS031491.D	Picloram	Abdul	8/19/2025 11:18:22 AM	mohammad	8/20/2025 3:05:29	Peak Integrated by Software

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS080725

Review By	Abdul	Review On	8/8/2025 8:24:12 AM
Supervise By	mohammad	Supervise On	8/11/2025 1:55:16 AM
SubDirectory	PS080725	HP Acquire Method	HP Processing Method ps080725 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24553,PP24554,PP24556,PP24557,PP24558,PP24559,PP24560		
CCC Internal Standard/PEM	PP24559		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24562		

Sr#	Sampleld	Data File Name	Date-Time	Operator	Status
1	HEXANE	PS031377.D	07 Aug 2025 11:14	AR\AJ	Ok
2	I.BLK	PS031378.D	07 Aug 2025 11:38	AR\AJ	Ok
3	HSTDICC200	PS031379.D	07 Aug 2025 12:02	AR\AJ	Ok
4	HSTDICC500	PS031380.D	07 Aug 2025 12:26	AR\AJ	Ok
5	HSTDICC750	PS031381.D	07 Aug 2025 12:50	AR\AJ	Ok
6	HSTDICC1000	PS031382.D	07 Aug 2025 13:14	AR\AJ	Ok
7	HSTDICC1500	PS031383.D	07 Aug 2025 13:38	AR\AJ	Ok,M
8	HSTDICV750	PS031384.D	07 Aug 2025 14:02	AR\AJ	Ok
9	I.BLK	PS031385.D	07 Aug 2025 14:27	AR\AJ	Not Ok
10	HSTDCCC750	PS031386.D	07 Aug 2025 14:51	AR\AJ	Ok
11	PB169160BL	PS031387.D	07 Aug 2025 16:03	AR\AJ	Not Ok
12	PB169160BS	PS031388.D	07 Aug 2025 16:27	AR\AJ	Not Ok
13	PB169160BSD	PS031389.D	07 Aug 2025 16:51	AR\AJ	Not Ok
14	Q2759-04	PS031390.D	07 Aug 2025 17:15	AR\AJ	Not Ok
15	I.BLK	PS031391.D	07 Aug 2025 17:40	AR\AJ	Not Ok
16	HSTDCCC750	PS031392.D	07 Aug 2025 18:04	AR\AJ	Ok,M

M : Manual Integration

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS081525

Review By	Abdul	Review On	8/18/2025 7:49:18 AM
Supervise By	mohammad	Supervise On	8/19/2025 1:27:14 AM
SubDirectory	PS081525	HP Acquire Method	HP Processing Method ps080725 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24553,PP24802,PP24556,PP24557,PP24558,PP24559,PP24560,PP24803,PP24804		
CCC Internal Standard/PEM	PP24559		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24804		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	HEXANE	PS031452.D	15 Aug 2025 10:08	AR\AJ	Ok
2	I.BLK	PS031453.D	15 Aug 2025 10:32	AR\AJ	Ok
3	HSTDCCC750	PS031454.D	15 Aug 2025 10:56	AR\AJ	Ok
4	PB169278BL	PS031455.D	15 Aug 2025 17:04	AR\AJ	Ok
5	PB169278BS	PS031456.D	15 Aug 2025 17:28	AR\AJ	Ok
6	PB169212TB	PS031457.D	15 Aug 2025 17:52	AR\AJ	Ok
7	Q2732-03	PS031458.D	15 Aug 2025 18:16	AR\AJ	ReRun
8	Q2832-02	PS031459.D	15 Aug 2025 18:40	AR\AJ	Ok
9	I.BLK	PS031460.D	15 Aug 2025 19:05	AR\AJ	Ok
10	HSTDCCC750	PS031461.D	15 Aug 2025 19:29	AR\AJ	Ok
11	Q2832-02MS	PS031462.D	15 Aug 2025 20:41	AR\AJ	Ok,M
12	Q2832-02MSD	PS031463.D	15 Aug 2025 21:05	AR\AJ	Ok,M
13	Q2832-04	PS031464.D	15 Aug 2025 21:29	AR\AJ	ReRun
14	Q2832-06	PS031465.D	15 Aug 2025 21:54	AR\AJ	ReRun
15	Q2832-08	PS031466.D	15 Aug 2025 22:18	AR\AJ	ReRun
16	Q2832-10	PS031467.D	15 Aug 2025 22:42	AR\AJ	ReRun
17	Q2836-03	PS031468.D	15 Aug 2025 23:06	AR\AJ	Ok
18	Q2836-07	PS031469.D	15 Aug 2025 23:30	AR\AJ	Not Ok
19	Q2836-11	PS031470.D	15 Aug 2025 23:54	AR\AJ	Not Ok
20	Q2836-15	PS031471.D	16 Aug 2025 00:18	AR\AJ	ReRun
21	I.BLK	PS031472.D	16 Aug 2025 00:43	AR\AJ	Ok

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS081525

Review By	Abdul	Review On	8/18/2025 7:49:18 AM
Supervise By	mohammad	Supervise On	8/19/2025 1:27:14 AM
SubDirectory	PS081525	HP Acquire Method	HP Processing Method ps080725 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24553,PP24802,PP24556,PP24557,PP24558,PP24559,PP24560,PP24803,PP24804		
CCC Internal Standard/PEM	PP24559		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24804		

22	HSTDCCC750	PS031473.D	16 Aug 2025 01:07	AR\AJ	Ok
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M : Manual Integration

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS081825

Review By		Review On	
Supervise By		Supervise On	
SubDirectory	PS081825	HP Acquire Method	HP Processing Method ps080725 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24553,PP24802,PP24556,PP24557,PP24558,PP24559,PP24560,PP24803,PP24804		
CCC Internal Standard/PEM	PP24559		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24804		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	HEXANE	PS031474.D	18 Aug 2025 08:36	AR\AJ	Ok
2	I.BLK	PS031475.D	18 Aug 2025 09:00	AR\AJ	Ok
3	HSTDCCC750	PS031476.D	18 Aug 2025 09:58	AR\AJ	Ok,M
4	Q2732-03	PS031477.D	18 Aug 2025 10:23	AR\AJ	Ok,M
5	Q2836-07	PS031478.D	18 Aug 2025 10:47	AR\AJ	Ok
6	Q2836-11	PS031479.D	18 Aug 2025 11:11	AR\AJ	Ok
7	Q2836-15	PS031480.D	18 Aug 2025 11:35	AR\AJ	Ok
8	I.BLK	PS031481.D	18 Aug 2025 11:59	AR\AJ	Ok
9	HSTDCCC750	PS031482.D	18 Aug 2025 12:23	AR\AJ	Ok
10	Q2832-02RE	PS031483.D	18 Aug 2025 14:44	AR\AJ	Not Ok
11	Q2832-02MS	PS031484.D	18 Aug 2025 15:08	AR\AJ	Not Ok
12	Q2832-02MSD	PS031485.D	18 Aug 2025 15:32	AR\AJ	Not Ok
13	Q2832-04RE	PS031486.D	18 Aug 2025 15:57	AR\AJ	Confirms
14	Q2832-06RE	PS031487.D	18 Aug 2025 16:21	AR\AJ	Confirms
15	Q2832-08RE	PS031488.D	18 Aug 2025 16:45	AR\AJ	Confirms
16	Q2832-10RE	PS031489.D	18 Aug 2025 17:09	AR\AJ	Confirms
17	I.BLK	PS031490.D	18 Aug 2025 17:44	AR\AJ	Ok
18	HSTDCCC750	PS031491.D	18 Aug 2025 18:09	AR\AJ	Ok,M

M : Manual Integration

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS080725

Review By	Abdul	Review On	8/8/2025 8:24:12 AM
Supervise By	mohammad	Supervise On	8/11/2025 1:55:16 AM
SubDirectory	PS080725	HP Acquire Method	HP Processing Method ps080725 8151

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	PP24553,PP24554,PP24556,PP24557,PP24558,PP24559,PP24560
CCC	PP24559
Internal Standard/PEM	
ICV/I.BLK	PP24562
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	HEXANE	HEXANE	PS031377.D	07 Aug 2025 11:14		AR\AJ	Ok
2	I.BLK	I.BLK	PS031378.D	07 Aug 2025 11:38		AR\AJ	Ok
3	HSTDICC200	HSTDICC200	PS031379.D	07 Aug 2025 12:02		AR\AJ	Ok
4	HSTDICC500	HSTDICC500	PS031380.D	07 Aug 2025 12:26		AR\AJ	Ok
5	HSTDICC750	HSTDICC750	PS031381.D	07 Aug 2025 12:50		AR\AJ	Ok
6	HSTDICC1000	HSTDICC1000	PS031382.D	07 Aug 2025 13:14		AR\AJ	Ok
7	HSTDICC1500	HSTDICC1500	PS031383.D	07 Aug 2025 13:38		AR\AJ	Ok,M
8	HSTDICV750	ICVPS080725	PS031384.D	07 Aug 2025 14:02		AR\AJ	Ok
9	I.BLK	I.BLK	PS031385.D	07 Aug 2025 14:27	Looks like hexan	AR\AJ	Not Ok
10	HSTDCCC750	HSTDCCC750	PS031386.D	07 Aug 2025 14:51		AR\AJ	Ok
11	PB169160BL	PB169160BL	PS031387.D	07 Aug 2025 16:03	Opening IBLK fail	AR\AJ	Not Ok
12	PB169160BS	PB169160BS	PS031388.D	07 Aug 2025 16:27	Opening IBLK fail	AR\AJ	Not Ok
13	PB169160BSD	PB169160BSD	PS031389.D	07 Aug 2025 16:51	Opening IBLK fail	AR\AJ	Not Ok
14	Q2759-04	LIQUID-DRUM	PS031390.D	07 Aug 2025 17:15	Opening IBLK fail	AR\AJ	Not Ok
15	I.BLK	I.BLK	PS031391.D	07 Aug 2025 17:40	Opening IBLK fail	AR\AJ	Not Ok
16	HSTDCCC750	HSTDCCC750	PS031392.D	07 Aug 2025 18:04		AR\AJ	Ok,M

M : Manual Integration

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS081525

Review By	Abdul	Review On	8/18/2025 7:49:18 AM
Supervise By	mohammad	Supervise On	8/19/2025 1:27:14 AM
SubDirectory	PS081525	HP Acquire Method	HP Processing Method ps080725 8151

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	PP24553,PP24802,PP24556,PP24557,PP24558,PP24559,PP24560,PP24803,PP24804
CCC	PP24559
Internal Standard/PEM	
ICV/I.BLK	PP24804
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	HEXANE	HEXANE	PS031452.D	15 Aug 2025 10:08		AR\AJ	Ok
2	I.BLK	I.BLK	PS031453.D	15 Aug 2025 10:32		AR\AJ	Ok
3	HSTDCCC750	HSTDCCC750	PS031454.D	15 Aug 2025 10:56		AR\AJ	Ok
4	PB169278BL	PB169278BL	PS031455.D	15 Aug 2025 17:04		AR\AJ	Ok
5	PB169278BS	PB169278BS	PS031456.D	15 Aug 2025 17:28		AR\AJ	Ok
6	PB169212TB	PB169212TB	PS031457.D	15 Aug 2025 17:52		AR\AJ	Ok
7	Q2732-03	WC-A7-01-C	PS031458.D	15 Aug 2025 18:16	surrogate fail	AR\AJ	ReRun
8	Q2832-02	TG-S01	PS031459.D	15 Aug 2025 18:40	surrogate fail, Surrogate fail confirm with MS/MSD	AR\AJ	Ok
9	I.BLK	I.BLK	PS031460.D	15 Aug 2025 19:05		AR\AJ	Ok
10	HSTDCCC750	HSTDCCC750	PS031461.D	15 Aug 2025 19:29		AR\AJ	Ok
11	Q2832-02MS	TG-S01MS	PS031462.D	15 Aug 2025 20:41	Surrogate Fail , recovery fail for some compounds	AR\AJ	Ok,M
12	Q2832-02MSD	TG-S01MSD	PS031463.D	15 Aug 2025 21:05	Surrogate Fail , recovery fail for some compounds	AR\AJ	Ok,M
13	Q2832-04	TG-S02	PS031464.D	15 Aug 2025 21:29	surrogate fail	AR\AJ	ReRun
14	Q2832-06	TG-S03	PS031465.D	15 Aug 2025 21:54	surrogate fail	AR\AJ	ReRun
15	Q2832-08	TG-S04	PS031466.D	15 Aug 2025 22:18	surrogate fail	AR\AJ	ReRun
16	Q2832-10	TG-S05	PS031467.D	15 Aug 2025 22:42	surrogate fail	AR\AJ	ReRun
17	Q2836-03	WC-A2-15-C	PS031468.D	15 Aug 2025 23:06		AR\AJ	Ok

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS081525

Review By	Abdul	Review On	8/18/2025 7:49:18 AM
Supervise By	mohammad	Supervise On	8/19/2025 1:27:14 AM
SubDirectory	PS081525	HP Acquire Method	HP Processing Method ps080725 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24553,PP24802,PP24556,PP24557,PP24558,PP24559,PP24560,PP24803,PP24804		
CCC	PP24559		
Internal Standard/PEM	PP24804		
ICV/I.BLK			
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

18	Q2836-07	WC-A2-16-C	PS031469.D	15 Aug 2025 23:30	surrogate fail	AR\AJ	Not Ok
19	Q2836-11	WC-A2-17-C	PS031470.D	15 Aug 2025 23:54	surrogate fail	AR\AJ	Not Ok
20	Q2836-15	WC-A5-02-C	PS031471.D	16 Aug 2025 00:18	surrogate fail	AR\AJ	ReRun
21	I.BLK	I.BLK	PS031472.D	16 Aug 2025 00:43		AR\AJ	Ok
22	HSTDCCC750	HSTDCCC750	PS031473.D	16 Aug 2025 01:07		AR\AJ	Ok

M : Manual Integration

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS081825

Review By	Review On
Supervise By	Supervise On
SubDirectory	PS081825
HP Acquire Method	HP Processing Method
	ps080725 8151
STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	PP24553,PP24802,PP24556,PP24557,PP24558,PP24559,PP24560,PP24803,PP24804
CCC	PP24559
Internal Standard/PEM	
ICV/I.BLK	PP24804
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	HEXANE	HEXANE	PS031474.D	18 Aug 2025 08:36		AR\AJ	Ok
2	I.BLK	I.BLK	PS031475.D	18 Aug 2025 09:00		AR\AJ	Ok
3	HSTDCCC750	HSTDCCC750	PS031476.D	18 Aug 2025 09:58		AR\AJ	Ok,M
4	Q2732-03	WC-A7-01-C	PS031477.D	18 Aug 2025 10:23		AR\AJ	Ok,M
5	Q2836-07	WC-A2-16-C	PS031478.D	18 Aug 2025 10:47		AR\AJ	Ok
6	Q2836-11	WC-A2-17-C	PS031479.D	18 Aug 2025 11:11		AR\AJ	Ok
7	Q2836-15	WC-A5-02-C	PS031480.D	18 Aug 2025 11:35		AR\AJ	Ok
8	I.BLK	I.BLK	PS031481.D	18 Aug 2025 11:59		AR\AJ	Ok
9	HSTDCCC750	HSTDCCC750	PS031482.D	18 Aug 2025 12:23		AR\AJ	Ok
10	Q2832-02RE	TG-S01RE	PS031483.D	18 Aug 2025 14:44	surrogate fail, not required	AR\AJ	Not Ok
11	Q2832-02MS	TG-S01MS	PS031484.D	18 Aug 2025 15:08	not required	AR\AJ	Not Ok
12	Q2832-02MSD	TG-S01MSD	PS031485.D	18 Aug 2025 15:32	not required	AR\AJ	Not Ok
13	Q2832-04RE	TG-S02RE	PS031486.D	18 Aug 2025 15:57	surrogate fail	AR\AJ	Confirms
14	Q2832-06RE	TG-S03RE	PS031487.D	18 Aug 2025 16:21	surrogate fail	AR\AJ	Confirms
15	Q2832-08RE	TG-S04RE	PS031488.D	18 Aug 2025 16:45	surrogate fail	AR\AJ	Confirms
16	Q2832-10RE	TG-S05RE	PS031489.D	18 Aug 2025 17:09	surrogate fail	AR\AJ	Confirms
17	I.BLK	I.BLK	PS031490.D	18 Aug 2025 17:44		AR\AJ	Ok
18	HSTDCCC750	HSTDCCC750	PS031491.D	18 Aug 2025 18:09		AR\AJ	Ok,M

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS081825

Review By		Review On	
Supervise By		Supervise On	
SubDirectory	PS081825	HP Acquire Method	HP Processing Method ps080725 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24553,PP24802,PP24556,PP24557,PP24558,PP24559,PP24560,PP24803,PP24804		
CCC Internal Standard/PEM	PP24559		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24804		

M : Manual Integration

SOP ID :	M1311-TCLP-16	
SDG No :	N/A	Start Prep Date : 08/12/2025 Time : 17:00
Weigh By :	JP	End Prep Date : 08/13/2025 Time : 10:35
Balance ID :	WC SC-7	Combination Ratio : 20
pH Meter ID :	WC PH METER-1	ZHE Cleaning Batch : N/A 70
Extraction By :	JP	Initial Room Temperature: 24 °C
Filter By :	JP	Final Room Temperature: 22 °C
Pipette ID :	WC	TCLP Technician Signature : <i>JP</i>
Tumbler ID :	T-1 / T-2	Supervisor By : <i>RM</i>
TCLP Filter ID :	115525	

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	WP112804
HCL-TCLP,1N	N/A	WP112797
HNO3-TCLP,1N	N/A	WP112799
pH Strips	N/A	W1931,W1934,W3171,W3172
pH Strips	W1940,W1941,W1942	W3166,W1938,W1939,
1 Liter Amber	N/A	90924-08
120ml Plastic bottle	N/A	2738
1:1 HNO3	N/A	MP84041

Extraction Conformance/Non-Conformance Comments:

Matrix spikes are added after filtration and before preservation. TUMBLER T-1 / T-2 checked,30 rpm. Particle size reduction is not required. Q2838-08 IS USED for MS-MSD.

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
08/13/25 11:50	<i>JP</i> / <i>ICN Room</i>	<i>SPS.</i> / <i>RJ / E+L</i>
	Preparation Group	Analysis Group

/ RM

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
PB169212TB	LEB212	13	N/A	2000	N/A	N/A	N/A	4.93	1.5	T-2
Q2732-03	WC-A7-01-C	01	100.02	2000	N/A	N/A	N/A	11.0	1.0	T-1
Q2832-02	TG-S01	02	100.02	2000	N/A	N/A	N/A	6.0	1.5	T-1
Q2832-04	TG-S02	03	100.03	2000	N/A	N/A	N/A	6.2	1.0	T-1
Q2832-06	TG-S03	04	100.02	2000	N/A	N/A	N/A	5.8	1.5	T-1
Q2832-08	TG-S04	05	100.01	2000	N/A	N/A	N/A	5.6	1.0	T-1
Q2832-10	TG-S05	06	100.02	2000	N/A	N/A	N/A	5.0	1.0	T-1
Q2836-03	WC-A2-15-C	07	100.03	2000	N/A	N/A	N/A	11.5	1.5	T-1
Q2836-07	WC-A2-16-C	08	100.02	2000	N/A	N/A	N/A	11.5	1.0	T-1
Q2836-11	WC-A2-17-C	09	100.03	2000	N/A	N/A	N/A	11.5	1.5	T-1
Q2836-15	WC-A5-02-C	10	100.02	2000	N/A	N/A	N/A	11.0	1.5	T-1
Q2838-04	TP-11	11	100.01	2000	N/A	N/A	N/A	5.6	1.0	T-2
Q2838-08	TP-10	12	100.02	2000	N/A	N/A	N/A	5.6	1.5	T-2

SampleID	ClientID	Sample Weight (g)	Filter Weight (g)	Filtrate (mL)	Filter + Solid (After 100°C)	% solids	% Dry Solids
PB169212TB	LEB212	N/A	N/A	N/A	N/A	N/A	N/A
Q2732-03	WC-A7-01-C	N/A	N/A	N/A	N/A	100	N/A
Q2832-02	TG-S01	N/A	N/A	N/A	N/A	100	N/A
Q2832-04	TG-S02	N/A	N/A	N/A	N/A	100	N/A
Q2832-06	TG-S03	N/A	N/A	N/A	N/A	100	N/A
Q2832-08	TG-S04	N/A	N/A	N/A	N/A	100	N/A
Q2832-10	TG-S05	N/A	N/A	N/A	N/A	100	N/A
Q2836-03	WC-A2-15-C	N/A	N/A	N/A	N/A	100	N/A
Q2836-07	WC-A2-16-C	N/A	N/A	N/A	N/A	100	N/A
Q2836-11	WC-A2-17-C	N/A	N/A	N/A	N/A	100	N/A
Q2836-15	WC-A5-02-C	N/A	N/A	N/A	N/A	100	N/A
Q2838-04	TP-11	N/A	N/A	N/A	N/A	100	N/A
Q2838-08	TP-10	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
PB169212TB	LEB212	N/A	N/A	N/A	N/A	#1	4.93
Q2732-03	WC-A7-01-C	5.02	96.5	11.5	4.5	#1	4.93
Q2832-02	TG-S01	5.02	96.5	8.4	3.5	#1	4.93
Q2832-04	TG-S02	5.01	96.5	8.4	3.5	#1	4.93
Q2832-06	TG-S03	5.02	96.5	8.2	3.0	#1	4.93
Q2832-08	TG-S04	5.03	96.5	8.0	3.0	#1	4.93
Q2832-10	TG-S05	5.04	96.5	7.0	2.5	#1	4.93
Q2836-03	WC-A2-15-C	5.03	96.5	12.0	4.5	#1	4.93
Q2836-07	WC-A2-16-C	5.02	96.5	12.0	4.5	#1	4.93
Q2836-11	WC-A2-17-C	5.03	96.5	12.5	4.5	#1	4.93
Q2836-15	WC-A5-02-C	5.02	96.5	11.5	4.5	#1	4.93
Q2838-04	TP-11	5.03	96.5	7.6	3.0	#1	4.93
Q2838-08	TP-10	5.02	96.5	7.2	2.5	#1	4.93

WORKLIST(Hardcopy Internal Chain)

WorkList Name : tcip q2832

WorkList ID : 191220

Department : TCLP Extraction

Date : 08-12-2025 11:53:16

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2732-03	WC-A7-01-C	Solid	TCLP Extraction	Cool 4 deg C	ENTA05	J21	08/12/2025	1311
Q2832-02	TG-S01	Solid	TCLP Extraction	Cool 4 deg C	PORT06	J21	08/11/2025	1311
Q2832-04	TG-S02	Solid	TCLP Extraction	Cool 4 deg C	PORT06	J21	08/11/2025	1311
Q2832-06	TG-S03	Solid	TCLP Extraction	Cool 4 deg C	PORT06	J21	08/11/2025	1311
Q2832-08	TG-S04	Solid	TCLP Extraction	Cool 4 deg C	PORT06	J21	08/11/2025	1311
Q2832-10	TG-S02	Solid	TCLP Extraction	Cool 4 deg C	PORT06	J21	08/12/2025	1311
Q2836-03	WC-A2-15-C	Solid	TCLP Extraction	Cool 4 deg C	ENTA05	J23	08/12/2025	1311
Q2836-07	WC-A2-16-C	Solid	TCLP Extraction	Cool 4 deg C	ENTA05	J23	08/12/2025	1311
Q2836-11	WC-A2-17-C	Solid	TCLP Extraction	Cool 4 deg C	ENTA05	J23	08/12/2025	1311
Q2836-15	WC-A5-02-C	Solid	TCLP Extraction	Cool 4 deg C	ENTA05	J23	08/12/2025	1311
Q2838-04	TP-11	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	D21	08/12/2025	1311
Q2838-08	TP-10	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	D21	08/12/2025	1311

Date/Time 08/12/25 14:30

Raw Sample Received by: CP SM

Raw Sample Relinquished by: CP SM

Date/Time 08/12/25

Raw Sample Received by: CP SM

Raw Sample Relinquished by: CP SM

SOP ID: M8151A-Herbicide-23

Clean Up SOP #: N/A

Extraction Start Date : 08/15/2025

Matrx : Water

Extraction Start Time : 08:45

Welgh By: N/A

Extraction By: RS

Extraction End Date : 08/15/2025

Balance check: N/A

Filter By: RS

Extraction End Time : 15:45

Balance ID: N/A

pH Meter ID: N/A

Concentration By: RS

pH Strip Lot#: E3880

Hood ID: 4,5,7

Supervisor By : RUPESH

Extraction Method: ☒ Separatory Funnel

☐ Continious Liquid/Liquid

☐ Sonication

☐ Waste Dilution

☐ Soxhlet

Standard Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
Spike Sol 1	1.0ML	5/500 PPM	PP24654
Surrogate	1.0ML	5000 PPB	PP24737
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	E3952
Acidified Na2SO4	N/A	EP2633
12N H2SO4	N/A	EP2605
NAOH 6N	N/A	EP2606
ISO OCTANE	N/A	E3554
METHANOL	N/A	V14622
Diazomethane	N/A	EP2631
Hexane	N/A	E3962
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 # 03-40BTS723.

KD Bath ID: N/A

Envap ID: NEVAP-02

KD Bath Temperature: N/A

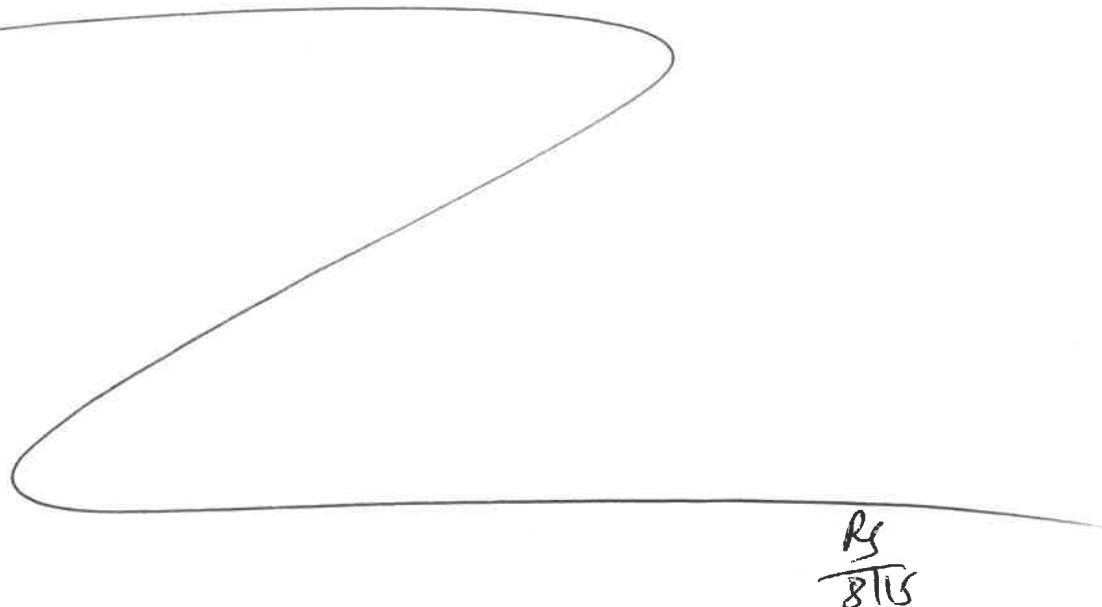
Envap Temperature: 40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
8/15/25 15:50	RS (Ext Lab)	Y-P-pestIPU3
	Preparation Group	Analysis Group

Analytical Method: M8151A-Herbicide-23

Concentration Date: 08/15/2025

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB169212TB	PB169212TB	TCLP Herbicide	100	6	RUPESH	ritesh	10			SEP-1
PB169278BL	HBLK278	TCLP Herbicide	1000	6	RUPESH	ritesh	10			2
PB169278BS	HLCS278	TCLP Herbicide	1000	6	RUPESH	ritesh	10			3
Q2732-03	WC-A7-01-C	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		4
Q2832-02	TG-S01	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		5
Q2832-02MS	TG-S01MS	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		6
Q2832-02MS D	TG-S01MSD	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		7
Q2832-04	TG-S02	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		8
Q2832-06	TG-S03	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		9
Q2832-08	TG-S04	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		10
Q2832-10	TG-S05	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		11
Q2836-03	WC-A2-15-C	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		12
Q2836-07	WC-A2-16-C	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		13
Q2836-11	WC-A2-17-C	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		14
Q2836-15	WC-A5-02-C	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		15



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
PB169212TB	LEB212	13	N/A	2000	N/A	N/A	N/A	4.93	1.5	T-2
Q2732-03	WC-A7-01-C	01	100.02	2000	N/A	N/A	N/A	11.0	1.0	T-1
Q2832-02	TG-S01	02	100.02	2000	N/A	N/A	N/A	6.0	1.5	T-1
Q2832-04	TG-S02	03	100.03	2000	N/A	N/A	N/A	6.2	1.0	T-1
Q2832-06	TG-S03	04	100.02	2000	N/A	N/A	N/A	5.8	1.5	T-1
Q2832-08	TG-S04	05	100.01	2000	N/A	N/A	N/A	5.6	1.0	T-1
Q2832-10	TG-S05	06	100.02	2000	N/A	N/A	N/A	5.0	1.0	T-1
Q2836-03	WC-A2-15-C	07	100.03	2000	N/A	N/A	N/A	11.5	1.5	T-1
Q2836-07	WC-A2-16-C	08	100.02	2000	N/A	N/A	N/A	11.5	1.0	T-1
Q2836-11	WC-A2-17-C	09	100.03	2000	N/A	N/A	N/A	11.5	1.5	T-1
Q2836-15	WC-A5-02-C	10	100.02	2000	N/A	N/A	N/A	11.0	1.5	T-1
Q2838-04	TP-11	11	100.01	2000	N/A	N/A	N/A	5.6	1.0	T-2
Q2838-08	TP-10	12	100.02	2000	N/A	N/A	N/A	5.6	1.5	T-2

08/13/25
121.00

Prep Standard - Chemical Standard Summary

Order ID : Q2832

Test : TCLP Herbicide

Prepbatch ID : PB169278,

Sequence ID/Qc Batch ID: PS081525,PS081825,

Standard ID :

EP2605,EP2606,EP2633,PP24553,PP24556,PP24557,PP24558,PP24559,PP24560,PP24654,PP24737,PP24802,PP24803,PP24804,

Chemical ID :

E3554,E3657,E3875,E3933,E3940,E3952,E3956,E3962,M6041,M6157,P 11183,P12620,P12630,P12689,P12711,P13543,P13544,P13545,P13546,P13971,P13977,P14064,P14065,P14066,P8829,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	EP2605	04/21/2025	10/21/2025	RUPESHKUMAR SHAH	None	None	Riteshkumar Patel
04/21/2025								

FROM 333.00000ml of M6041 + 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	EP2606	04/21/2025	10/21/2025	RUPESHKUMAR SHAH	Extraction_SC ALE_2 (EX-SC-2)	None	Riteshkumar Patel
04/21/2025								

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	EP2633	08/15/2025	11/07/2025	RUPESHKUMAR SHAH	Extraction_SCALE_2 (EX-SC-2)	None	Riteshkumar Patel 08/18/2025
<u>FROM</u>	1000.00000ml of E3952 + 150.00000ml of M6157 + 3000.00000ml of E3875 = 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	PP24553	05/12/2025	11/05/2025	Abdul Mirza	None	None	Yogesh Patel 05/22/2025
<u>FROM</u>	0.20000ml of P8829 + 1.00000ml of P11183 + 1.00000ml of P12620 + 1.00000ml of P12630 + 1.00000ml of P12689 + 95.80000ml of E3933 = Final Quantity: 100.000 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>
1456	200 PPB Herb MIX STD	PP24556	05/12/2025	11/05/2025	Abdul Mirza	None	None	Yogesh Patel
								05/22/2025

FROM 0.90000ml of E3933 + 0.10000ml of PP24553 = 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>
1455	500 PPB Herb MIX STD	PP24557	05/12/2025	11/05/2025	Abdul Mirza	None	None	Yogesh Patel
								05/22/2025

FROM 0.75000ml of E3933 + 0.25000ml of PP24553 = 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>
1453	1000 PPB Herb MIX STD	PP24558	05/12/2025	11/05/2025	Abdul Mirza	None	None	Yogesh Patel
								05/22/2025

FROM 0.50000ml of E3933 + 0.50000ml of PP24553 = 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	PP24559	05/12/2025	11/05/2025	Abdul Mirza	None	None	Yogesh Patel
								05/22/2025

FROM 0.25000ml of E3933 + 0.75000ml of PP24558 = 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>
1452	1500 PPB HERB MIX STD	PP24560	05/12/2025	11/05/2025	Abdul Mirza	None	None	Yogesh Patel
								05/22/2025

FROM 0.25000ml of E3933 + 0.75000ml of PP24553 = 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>
1848	5000/500000 PPB Herbicide Spike (Free Acid)	PP24654	06/18/2025	12/11/2025	Abdul Mirza	None	None	Yogesh Patel
								07/23/2025

FROM 1.25000ml of P13543 + 1.25000ml of P13544 + 1.25000ml of P13545 + 1.25000ml of P13546 + 95.00000ml of E3940 = Final Quantity: 100.000 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)	PP24737	07/18/2025	01/18/2026	Abdul Mirza	None	None	Yogesh Patel 07/21/2025
<u>FROM</u> 1.25000ml of P13977 + 1.25000ml of P14064 + 1.25000ml of P14065 + 1.25000ml of P14066 + 195.00000ml of E3956 = Final Quantity: 200.000 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>
1851	2/200 PPM Herb Mega Mix 2nd Source	PP24802	08/07/2025	08/31/2025	Abdul Mirza	None	None	Yogesh Patel 08/19/2025
<u>FROM</u> 0.50000ml of P13971 + 1.00000ml of P12711 + 48.50000ml of E3962 = Final Quantity: 50.000 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	PP24803	08/07/2025	08/31/2025	Abdul Mirza	None	None	Yogesh Patel
								08/19/2025

FROM 0.50000ml of E3962 + 0.50000ml of PP24802 = 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	PP24804	08/07/2025	08/31/2025	Abdul Mirza	None	None	Yogesh Patel
								08/19/2025

FROM 0.25000ml of E3962 + 0.75000ml of PP24803 = Final Quantity: 1.000 ml

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9335-02 / Iso-Octane (2,2,4-Trimethylpentane) 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 #
PCI Scientific Supply, Inc.	PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1	417203	01/28/2026	07/28/2025 / RUPESH	01/29/2025 / Rajesh	E3875

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)	25C0362005	11/05/2025	05/05/2025 / RUPESH	04/23/2025 / RUPESH	E3933

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)	24H1462005	12/11/2025	06/11/2025 / Rajesh	06/04/2025 / Rajesh	E3940

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)	250419	05/31/2026	07/09/2025 / RUPESH	07/09/2025 / RUPESH	E3952

CHEMICAL RECEIPT LOG BOOK

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)	25C0362005	04/30/2026	07/16/2025 / RUPESH	07/16/2025 / RUPESH	E3956

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)	25C0362005	04/30/2026	08/05/2025 / RUPESH	07/30/2025 / RUPESH	E3962

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)	23D2462010	03/20/2028	08/16/2024 / mohan	08/16/2024 / mohan	M6041

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)	24i1262013	11/07/2025	05/07/2025 / RUPESH	02/18/2025 / Mohan	M6157

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	11/12/2025	05/12/2025 / Abdul	11/01/2021 / Abdul	P11183

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	11/12/2025	05/12/2025 / Abdul	07/03/2023 / Abdul	P12620

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	11/12/2025	05/12/2025 / Abdul	07/03/2023 / Abdul	P12630

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	11/12/2025	05/12/2025 / Abdul	07/24/2023 / Abdul	P12689

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	08/31/2025	08/07/2025 / Abdul	08/09/2023 / Abdul	P12711

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	08/31/2025	08/07/2025 / Abdul	08/09/2023 / Abdul	P12711

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	12/18/2025	06/18/2025 / Abdul	09/24/2024 / Abdul	P13543

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	12/18/2025	06/18/2025 / Abdul	09/24/2024 / Abdul	P13543

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	12/18/2025	06/18/2025 / Abdul	09/24/2024 / Abdul	P13544

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	12/18/2025	06/18/2025 / Abdul	09/24/2024 / Abdul	P13544

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	12/18/2025	06/18/2025 / Abdul	09/24/2024 / Abdul	P13545

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	12/18/2025	06/18/2025 / Abdul	09/24/2024 / Abdul	P13545

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	12/18/2025	06/18/2025 / Abdul	09/24/2024 / Abdul	P13546

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	12/18/2025	06/18/2025 / Abdul	09/24/2024 / Abdul	P13546

CHEMICAL RECEIPT LOG BOOK

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	A0221255	11/12/2025	05/12/2025 / Abdul	04/02/2025 / Abdul	P13971

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	A0221255	01/18/2026	07/18/2025 / Abdul	04/02/2025 / Abdul	P13977

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	A0221255	01/18/2026	07/18/2025 / Abdul	06/23/2025 / anahy	P14064

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	A0221255	01/18/2026	07/18/2025 / Abdul	06/23/2025 / anahy	P14065

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	A0221255	01/18/2026	07/18/2025 / Abdul	06/23/2025 / anahy	P14066

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32254 / Dalapon Methyl Ester, 1000 ug/ml	A0148063	11/12/2025	05/12/2025 / Abdul	08/16/2019 / Stephen	P8829

CHEMICAL RECEIPT LOG BOOK

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 / lwona	07/03/2024 / lwona	W3112

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.

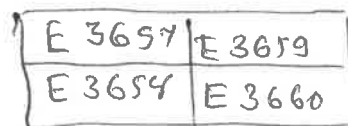
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Leona Edwardson, Quality Control Sr. Manager - Solon
VWR Chemicals, LLC.
28600 Fountain Parkway, Solon OH 44139 USA

Additional Information

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

Product meets analytical specifications of the grades listed.





**PRODUCTOS
QUÍMICOS
MONTERREY, S.A. DE C.V.**

MIRADOR 201, COL. MIRADOR
MONTERREY, N.L. MÉXICO
CP 64070
TEL +52 81 13 52 67 67
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:	MAY/23/2024
LOT NUMBER :	417203		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na ₂ SO ₄)	Min. 99.0%	99.8 %
pH of a 5% solution at 25°C	5.2 - 9.2	6.2
Insoluble matter	Max. 0.01%	0.001 %
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%	0.001 %
Magnesium (Mg)	Max. 0.005%	0.001 %
Potassium (K)	Max. 0.008%	0.001 %
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%	0.2 %
Retained on US Standard No. 60 sieve	Min. 94%	96.2 %
Through US Standard No. 60 sieve	Max. 5%	3.5 %
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.

RE-02-01, Ed. 3

E 3875

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

 **avantors**TM



Material No.: 9262-03

Batch No.: 25C0362005

Manufactured Date: 2025-01-29

Expiration Date: 2026-04-30

Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	≤ 10	6
ECD-Sensitive Impurities (as EthyleneDibromide) - Single Impurity Peak (ng/mL)	≤ 5	5
Assay (Total Saturated C ₆ Isomers) (by GC, corrected for water)	$\geq 99.5 \%$	100.0 %
Assay (as n-Hexane) (by GC, corrected for water)	$\geq 95 \%$	100 %
Color (APHA)	≤ 10	10
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: United States

Packaging Site: Phillipsburg Mfg Ctr & DC

E3933



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

Acetone

BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

Avantor™



Material No.: 9254-03

Batch No.: 24H1462005

Manufactured Date: 2024-05-24

Expiration Date: 2027-05-24

Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	>= 99.4 %	99.8 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.2 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 %	0.2 %
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

Rec'd by RP on 6/11/25

E3940

J. Croak

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

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

Catalogue Number	E198
Lot Number	250419
Description	ETHYL ETHER, HPLC GRADE
CAS Number	60-29-7
Quality Test/Release Date	02/Jun/2025
Suggested retest date	31/May/2026
Country of Origin	Mexico
Declaration of Origin	Organic - synthetic
BSE/TSE	This product was derived from synthetic raw materials and the manufacturing process excluded contamination with any animal products.

Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear, colorless liquid free of suspended matter
ASSAY	%	>= 99	99.95
CARBONYL COMPOUNDS	%	<= 0.001	<0.001
COLOR	APHA	<= 10	5
DENSITY AT 25 DEGREES C	GM/ML	Inclusive Between 0.708 - 0.710	0.710
EVAPORATION RESIDUE	ppm	<= 5	0.1
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
OPTICAL ABS AT 218 NM	ABSORBANCE UNITS	<= 1.00	0.15
OPTICAL ABS AT 254 NM	ABSORBANCE UNITS	<= 0.07	0.03
OPTICAL ABS AT 280 NM	ABSORBANCE UNITS	<= 0.02	0.003
OPTICAL ABS AT 350 NM	ABSORBANCE UNITS	<= 0.01	<0.001
PEROXIDE	ppm	<= 5	<1
PRESERVATIVE - ETHANOL	%	Inclusive Between 1.5 - 2.5	1.6
REFRACTIVE INDEX @ 25 DEG C		Inclusive Between 1.3490 - 1.3520	1.3498
SUBSTANCES DARKENED BY H2SO4	PASS/FAIL	= PASS TEST	PASS TEST
TITRATABLE ACID	MEQ/G	<= 0.0002	<0.00003
WATER (H2O)	%	<= 0.01	0.008



Matthew Micek
QC Supervisor

Received on 7/9/25
E3952

Products are processed under ISO 9001:2015 quality management systems and samples are tested for conformance to the noted specifications. Certain data may have been supplied by third parties. We disclaim the implied warranties of merchantability and fitness for a particular purpose, and the accuracy of third-party data or information associated with the product. Products are for research use or further manufacturing. Products are not for direct administration to humans or animals. It is the responsibility of the final formulator or end user to determine suitability, and to qualify and/or validate each product for its intended use.

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

 **avantors™**



Material No.: 9262-03

Batch No.: 25C0362005

Manufactured Date: 2025-01-29

Expiration Date: 2026-04-30

Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	≤ 10	6
ECD-Sensitive Impurities (as EthyleneDibromide) - Single Impurity Peak (ng/mL)	≤ 5	5
Assay (Total Saturated C ₆ Isomers) (by GC, corrected for water)	$\geq 99.5 \%$	100.0 %
Assay (as n-Hexane) (by GC, corrected for water)	$\geq 95 \%$	100 %
Color (APHA)	≤ 10	10
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: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

Received on 7/16/25

E3956



Jamie Croak
Director Quality Operations, Bioscience Production

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



Material No.: 9262-03
Batch No.: 25C0362005
Manufactured Date: 2025-01-29
Expiration Date: 2026-04-30
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	≤ 10	6
ECD-Sensitive Impurities (as EthyleneDibromide) - Single Impurity Peak (ng/mL)	≤ 5	5
Assay (Total Saturated C ₆ Isomers) (by GC, corrected for water)	$\geq 99.5 \%$	100.0 %
Assay (as n-Hexane) (by GC, corrected for water)	$\geq 95 \%$	100 %
Color (APHA)	≤ 10	10
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: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

Received on 7/30/25

E3962

Jamie Croak
Director Quality Operations, Bioscience Production

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

avantor™



Material No.: 9673-33
Batch No.: 23D2462010
Manufactured Date: 2023-03-22
Retest Date: 2028-03-20
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (H ₂ SO ₄)	95.0 – 98.0 %	96.1 %
Appearance	Passes Test	Passes Test
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Substances Reducing Permanganate (as SO ₂)	≤ 2 ppm	< 2 ppm
Ammonium (NH ₄)	≤ 1 ppm	1 ppm
Chloride (Cl)	≤ 0.1 ppm	< 0.1 ppm
Nitrate (NO ₃)	≤ 0.2 ppm	< 0.1 ppm
Phosphate (PO ₄)	≤ 0.5 ppm	< 0.1 ppm
Trace Impurities – Aluminum (Al)	≤ 30.0 ppb	< 5.0 ppb
Arsenic and Antimony (as As)	≤ 4.0 ppb	< 2.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	8.5 ppb
Trace Impurities – Cadmium (Cd)	≤ 2.0 ppb	< 0.3 ppb
Trace Impurities – Chromium (Cr)	≤ 6.0 ppb	< 0.4 ppb
Trace Impurities – Cobalt (Co)	≤ 0.5 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gold (Au)	≤ 10.0 ppb	0.5 ppb
Heavy Metals (as Pb)	≤ 500.0 ppb	< 100.0 ppb
Trace Impurities – Iron (Fe)	≤ 50.0 ppb	1.3 ppb
Trace Impurities – Lead (Pb)	≤ 0.5 ppb	< 0.5 ppb
Trace Impurities – Magnesium (Mg)	≤ 7.0 ppb	0.8 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	< 0.1 ppb
Trace Impurities – Nickel (Ni)	≤ 2.0 ppb	0.3 ppb
Trace Impurities – Potassium (K)	≤ 500.0 ppb	< 2.0 ppb
Trace Impurities – Selenium (Se)	≤ 50.0 ppb	< 0.1 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	31.5 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	< 0.3 ppb

>>> Continued on page 2 >>>

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

 **avantor™**

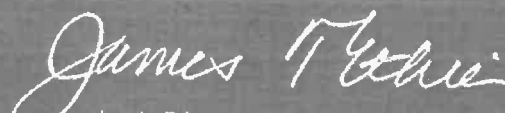


Material No.: 9673-33
Batch No.: 23D2462010

Test	Specification	Result
Trace Impurities – Sodium (Na)	≤ 500.0 ppb	5.4 ppb
Trace Impurities – Strontium (Sr)	≤ 5.0 ppb	< 0.2 ppb
Trace Impurities – Tin (Sn)	≤ 5.0 ppb	< 0.8 ppb
Trace Impurities – Zinc (Zn)	≤ 5.0 ppb	0.4 ppb

For Laboratory, Research, or Manufacturing Use

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


Jamie Ethier
Vice President Global Quality

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

avantor™



M6157
MS

Material No.: 9673-33

Batch No.: 24I1262013

Manufactured Date: 2024-08-07

Retest Date: 2029-08-06

Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (H ₂ SO ₄)	95.0 – 98.0 %	96.2 %
Appearance	Passes Test	Passes Test
ACS – Color (APHA)	<= 10	5
ACS – Residue after Ignition	<= 3 ppm	<1 ppm
ACS – Substances Reducing Permanganate(as SO ₂)	<= 2 ppm	<2 ppm
Ammonium (NH ₄)	<= 1 ppm	<1 ppm
Chloride (Cl)	<= 0.1 ppm	<0.1 ppm
Nitrate (NO ₃)	<= 0.2 ppm	0.1 ppm
Phosphate (PO ₄)	<= 0.5 ppm	<0.1 ppm
Trace Impurities – Aluminum (Al)	<= 30.0 ppb	<5.0 ppb
Arsenic & Antimony (as As)	<= 4.0 ppb	<2.0 ppb
Trace Impurities – Boron (B)	<= 10.0 ppb	<5.0 ppb
Trace Impurities – Cadmium (Cd)	<= 2.0 ppb	<1.0 ppb
Trace Impurities – Chromium (Cr)	<= 6.0 ppb	<1.0 ppb
Trace Impurities – Cobalt (Co)	<= 0.5 ppb	<0.3 ppb
Trace Impurities – Copper (Cu)	<= 1.0 ppb	<1.0 ppb
Trace Impurities – Gold (Au)	<= 10.0 ppb	<5.0 ppb
Heavy Metals (as Pb)	<= 500.0 ppb	<100.0 ppb
Trace Impurities – Iron (Fe)	<= 50.0 ppb	<1.0 ppb
Trace Impurities – Lead (Pb)	<= 0.5 ppb	<0.5 ppb
Trace Impurities – Magnesium (Mg)	<= 7.0 ppb	<1.0 ppb
Trace Impurities – Manganese (Mn)	<= 1.0 ppb	<1.0 ppb
Trace Impurities – Mercury (Hg)	<= 0.5 ppb	<0.1 ppb
Trace Impurities – Nickel (Ni)	<= 2.0 ppb	<0.3 ppb
Trace Impurities – Potassium (K)	<= 500.0 ppb	<10.0 ppb
Trace Impurities – Selenium (Se)	<= 50.0 ppb	7.2 ppb
Trace Impurities – Silicon (Si)	<= 100.0 ppb	12.8 ppb
Trace Impurities – Silver (Ag)	<= 1.0 ppb	<1.0 ppb

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

Avantor Performance Materials LLC

Sulfuric Acid

BAKER INSTRA-ANALYZED® Reagent

For Trace Metal Analysis

Low Selenium

 **avantors**™



Material No.: 9673-33

Batch No.: 2411262013

Test	Specification	Result
Trace Impurities – Sodium (Na)	≤ 500.0 ppb	< 5.0 ppb
Trace Impurities – Strontium (Sr)	≤ 5.0 ppb	< 1.0 ppb
Trace Impurities – Tin (Sn)	≤ 5.0 ppb	1.1 ppb
Trace Impurities – Zinc (Zn)	≤ 5.0 ppb	< 1.0 ppb

For Laboratory, Research, or Manufacturing Use

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr & DC



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

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:

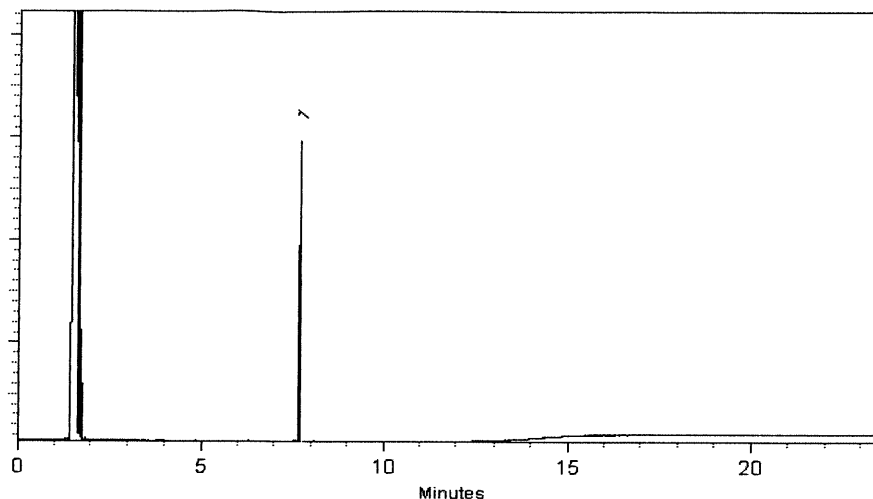
250°C

Det. Temp:

330°C

Det. Type:

FID

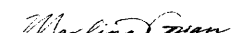


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


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
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Fax: (814)353-1309

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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
Date = 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:

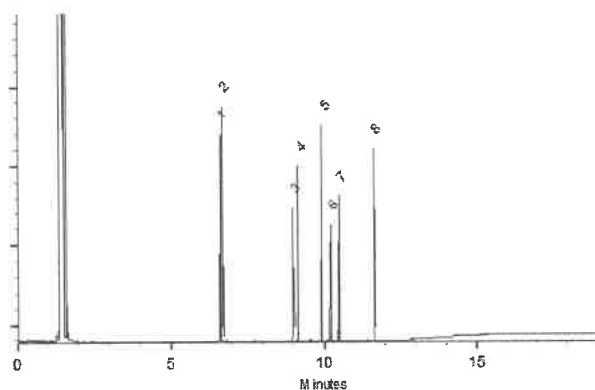
250°C

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

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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. : 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:

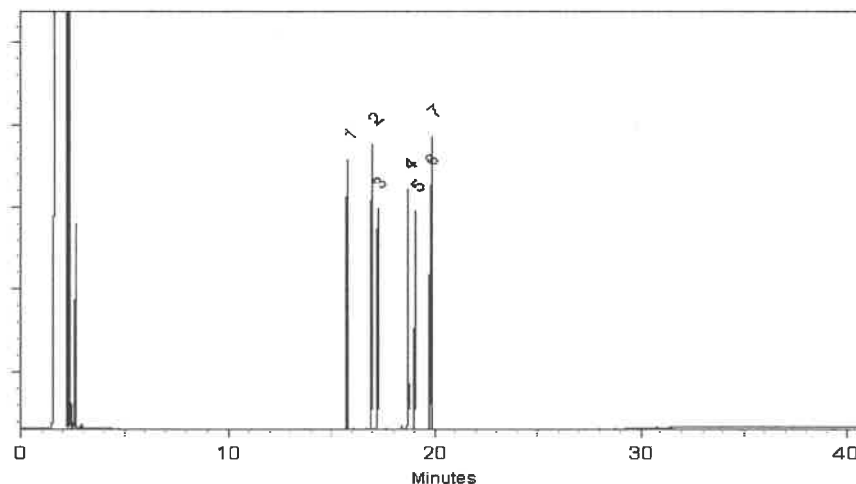
FID

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

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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. : 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)
↓
P 12689
↓
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:

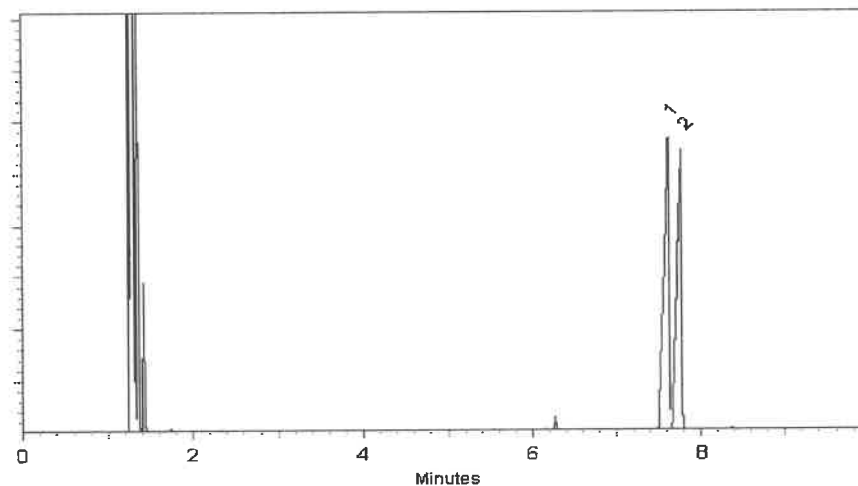
FID

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
↓
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.

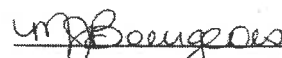
Expiration of Certification:

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

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.

P13541
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P13561
20
9/25/2024

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:

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P13541
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P13561
20
9/25/2024

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
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2,4-D	100.4 ±	0.5 µg/mL	000094-75-7	RM17172
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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
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2,4,5-T	100.3 ±	0.5 µg/mL	000093-76-5	RM19314

Matrix: methanol (methyl alcohol)

Description:

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P13561
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9/25/2024

Reference Material Certificate
Product Information Sheet

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Product Number: HBM-8151A-1
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MCPP (mecoprop)	10011 ±	50 µg/mL	000093-65-2	RM09273
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pentachlorophenol	100.2 ±	0.5 µg/mL	000087-86-5	RM02474
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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

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P13541
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P13561
20
9/25/2024



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. : 32050 **Lot No.:** A0221255

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 : October 31, 2031 **Storage:** 10°C or colder

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

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2,4-Dichlorophenyl acetic acid methyl ester	55954-23-9	13054200	99%	202.0 µg/mL	+/- 3.4272

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

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

13968
↓
13977

10

AWF
4/16/2025

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:

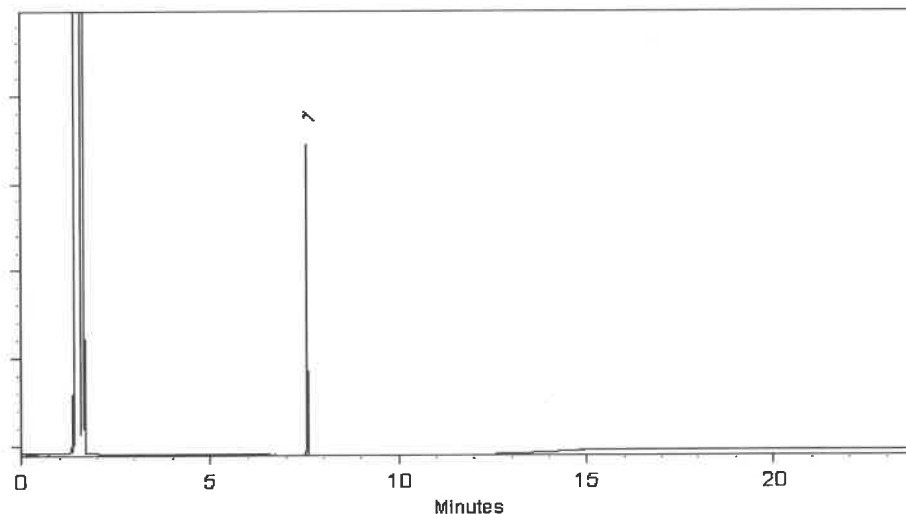
FID

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.


Ethan Winiarski - Operations Tech I

Date Mixed: 20-Jan-2025

Balance Serial # B345965662


Brittany Federinko - Operations Tech I

Date Passed: 22-Jan-2025

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

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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. : 32050 **Lot No.:** A0221255

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 : October 31, 2031 **Storage:** 10°C or colder

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

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2,4-Dichlorophenyl acetic acid methyl ester	55954-23-9	13054200	99%	202.0 µg/mL	+/- 3.4272

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

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

13968
↓
13977

10

AWF
4/16/2025

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:

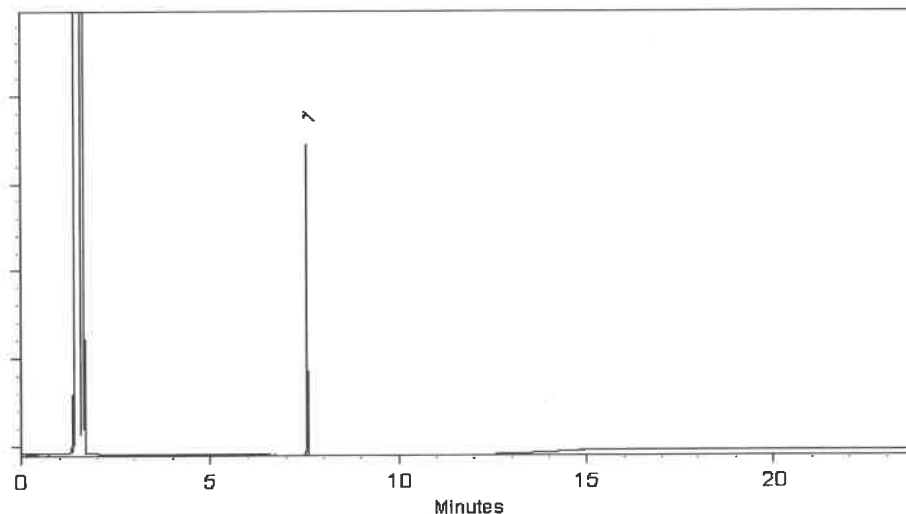
FID

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.


Ethan Winiarski - Operations Tech I

Date Mixed: 20-Jan-2025

Balance Serial # B345965662


Brittany Federinko - Operations Tech I

Date Passed: 22-Jan-2025

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



110 Benner Circle
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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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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.:** A0221255

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 : October 31, 2031 **Storage:** 10°C or colder

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

P14064
↓
P14073 } AC
6/23/25

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2,4-Dichlorophenyl acetic acid methyl ester	55954-23-9	13054200	99%	202.0 µg/mL	+/- 3.4272

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

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



110 Benner Circle
Bellefonte, PA 16823-8812
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Certificate of Analysis

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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.:** A0221255

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 : October 31, 2031 **Storage:** 10°C or colder

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

P14064
↓
P14073 } AC
6/23/25

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2,4-Dichlorophenyl acetic acid methyl ester	55954-23-9	13054200	99%	202.0 µg/mL	+/- 3.4272

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

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



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

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Certificate of Analysis

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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. : 32050 **Lot No.:** A0221255

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 : October 31, 2031 **Storage:** 10°C or colder

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

P14064
↓
P14073 } AC
6/23/25

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2,4-Dichlorophenyl acetic acid methyl ester	55954-23-9	13054200	99%	202.0 µg/mL	+/- 3.4272

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

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



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01



ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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. : 32254 **Lot No.:** A0148063
Description : Dalapon methyl ester Standard
Dalapon methyl ester 1000µg/mL, Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : April 30, 2026 **Storage:** 10°C or colder
Handling: This product is photosensitive.

Received by
SG on 8/16/19
P8828
P8826

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Dalapon methyl ester CAS # 17640-02-7 Purity 98% (Lot 1764600)	999.6 µg/mL	+/- 10.0697 µg/mL Gravimetric +/- 34.4896 µg/mL Unstressed +/- 34.4896 µg/mL Stressed

Solvent: Methanol
CAS # 67-56-1
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:

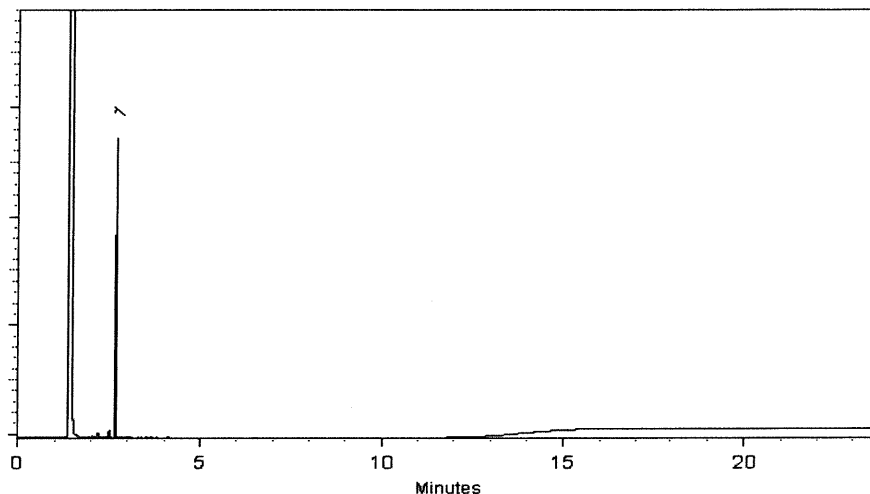
250°C

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.

Russ Bookhamer - Operations Technician I

Date Mixed: 11-Apr-2019

Balance: 1127510105

Feng-Yin Lo - QC Analyst

Date Passed: 15-Apr-2019

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



SHIPPING DOCUMENTS

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: **Gannett Fleming**
ADDRESS: **1010 Abrams Ave**
CITY: **Auburn** STATE: **PA** ZIP: **19403**
ATTENTION: **Joe Krupansky**
PHONE: **610-301-8342** FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: **Amtrak Replacement of Southern Bridges**
PROJECT NO.: LOCATION: **Keansburg, NJ**
PROJECT MANAGER: **Joe Krupansky**
e-mail: **Gjake@bemsys.com**
PHONE: **610-301-8342** FAX:

CLIENT BILLING INFORMATION

BILL TO: **Alliance** PO#: **284**
ADDRESS: **284 Sheffield St**
CITY: **Mountainside** STATE: **NJ** ZIP: **07092**
ATTENTION: **Yazmen Gueez** PHONE: **908-728-3998**

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
X EDD FORMAT **DEM EDD**

1. **TCL-Sink+25**
2. **TCL-Vol+10**
3. **PLBs**
4. **EPH**
5. **TAL Metals**
6. **TCLP Full Set**
7. **RLRA (PQ)**
8. **CRV/CCL**
9.

PRESERVATIVES

COMMENTS

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	
1.	TG-S01	S		X	8/1/15	0815	9	X	X	X	X	X	X	X	X	X	
2.	TG-S02	I		I	9/15	0915	9	I	I	I	I	I	I	I	I	I	
3.	TG-S03	I		I	11/10	1110	9	I	I	I	I	I	I	I	I	I	
4.	TG-S04	I		I	13/15	1315	9	I	I	I	I	I	I	I	I	I	
5.	TG-S05	I		I	8/1/15	0725	9	I	I	I	I	I	I	I	I	I	
6.																	
7.																	
8.																	
9.																	
10.																	

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

RELINQUISHED BY SAMPLER: 1. [Signature]	DATE/TIME: 8/1/15 0910	RECEIVED BY: 1. [Signature]	Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP: 1.9 C
RELINQUISHED BY SAMPLER: 2. [Signature]	DATE/TIME:	RECEIVED BY: 2. [Signature]	Comments: If Can't
RELINQUISHED BY SAMPLER: 3. [Signature]	DATE/TIME:	RECEIVED BY: 3. [Signature]	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	TX-C25-00189
Virginia	460312

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q2832 PORT06

Order Date : 8/12/2025 9:37:00 AM

Project Mgr :

Client Name : Portal Partners Tri-Venture

Project Name : Amtrak Sawtooth Bridges 2

Report Type : NJ Reduced

Client Contact : Joseph Krupansky

Receive DateTime : 8/12/2025 9:10:00 AM

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
Q2832-01	TG-S01	Solid	08/11/2025	08:15	VOC-TCLVOA-10		8260D	10 Bus. Days	
Q2832-03	TG-S02	Solid	08/11/2025	09:15	VOC-TCLVOA-10		8260D	10 Bus. Days	
Q2832-05	TG-S03	Solid	08/11/2025	11:10	VOC-TCLVOA-10		8260D	10 Bus. Days	
Q2832-07	TG-S04	Solid	08/11/2025	13:45	VOC-TCLVOA-10		8260D	10 Bus. Days	
Q2832-09	TG-S05	Solid	08/12/2025	07:25	VOC-TCLVOA-10		8260D	10 Bus. Days	

Relinquished By : af

Date / Time : 8/12/25 10:15

Received By : Sam

Date / Time : 08/12/25 10:15

Storage Area : VOA Refridgerator Room