

**DATA PACKAGE
GC SEMI-VOLATILES**

PROJECT NAME : R36982

TETRA TECH, EMI

240 Continental Drive, Suite 200

Newark, DE - 19713

Phone No: 302-738-7551

ORDER ID : Q2667

ATTENTION : Ava Heiss



Laboratory Certification ID # 20012

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Cover Page

Order ID : Q2667

Project ID : R36982

Client : Tetra Tech, EMI

Lab Sample Number

Q2667-01
Q2667-02

Client Sample Number

C0AP2
C0AP3

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.

APPROVED

Signature :

By Nimisha Pandya, QA/QC Supervisor at 9:46 am, Aug 18, 2025

Date: 8/18/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



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

CASE NARRATIVE

Tetra Tech, EMI

Project Name: R36982

Project # N/A

Order ID # Q2667

Test Name: TCLP Herbicide

A. Number of Samples and Date of Receipt:

2 Solid samples were received on 07/22/2025.

B. Parameters

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

C. Analytical Techniques:

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

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries were met for all analysis.

The Retention Times were met for all analysis.

The MS {Q2641-02MS} with File ID: PS031234.D recoveries met the requirements for all compounds except for [2,4,5-TP(Silvex)(1)155% - 2,4,5-TP(Silvex)(2)153%] and [2,4-D(1)161% - 2,4-D(2)172%] due to matrix interference.

The MSD {Q2641-02MSD} with File ID: PS031235.D recoveries met the requirements for all compounds except for [2,4,5-TP(Silvex)(1)148% - 2,4,5-TP(Silvex)(2)145%] and [2,4-D(1)152% - 2,4-D(2)162%] due to matrix interference.

The RPD were met for all analysis.

The Blank Spike met requirements for all compounds.

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

The Initial Calibration met the requirements.

The Continuous Calibration met the requirements.

E. Additional Comments:

This Data Package has been revised to correct Project Name and Client Name.



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F. Manual Integration Comments:

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

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

APPROVED

By Nimisha Pandya, QA/QC Supervisor at 9:46 am, Aug 18, 2025

Signature _____

DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following "Results Qualifiers" are used:

- Value** If the result is a value greater than or equal to the detection limit, report the value
- U** Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. "10 U". This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
- ND** Indicates the analyte was analyzed for, but not detected
- J** Indicates an estimated value. This flag is used:
(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



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GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY

ORDER ID: Q2667

MATRIX: TCLP

METHOD: 8151A/3510/1311

	NA	NO	YES
1. Chromatograms Labeled/Compounds Identified.			✓
2. Standard Summary Submitted.			✓
3. Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis, 12 HOURS IF 8000 SERIES METHOD.			✓
The Initial Calibration met the requirements.			
The Continuous Calibration met the requirements.			
4. Blank Contamination - If yes, list compounds and concentrations in each blank:			✓
5. Surrogate Recoveries Meet Criteria			✓
If not met, list those compounds and their recoveries which fall outside the acceptable ranges.			
6. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria			✓
If not met, list those compounds and their recoveries which fall outside the acceptable range.			
The MS {Q2641-02MS} with File ID: PS031234.D recoveries met the requirements for all compounds except for [2,4,5-TP(Silvex)(1)155% - 2,4,5-TP(Silvex)(2)153%] and [2,4-D(1)161% - 2,4-D(2)172%]due to matrix interference.			
The MSD {Q2641-02MSD} with File ID: PS031235.D recoveries met the requirements for all compounds except for [2,4,5-TP(Silvex)(1)148% - 2,4,5-TP(Silvex)(2)145%] and [2,4-D(1)152% - 2,4-D(2)162%]due to matrix interference.			
The Blank Spike met requirements for all compounds.			
The RPD were met for all analysis.			
7. Retention Time Shift Meet Criteria (if applicable)			✓
Comments:			
8. Extraction Holding Time Met			✓
If not met, list number of days exceeded for each sample:			



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GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)

NA NO YES

9. Analysis Holding Time Met ✓

If not met, list those compounds and their recoveries which fall outside the acceptable range.

ADDITIONAL COMMENTS:

This Data Package has been revised to correct Project Name and Client Name.

REVIEWED

Sohil Jodhani, QA/QC Director , 8/18/2025, 9:06:49 AM

QA REVIEW

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q2667

Completed

For thorough review, the report must have the following:

GENERAL:

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

✓

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

✓

Is the chain of custody signed and complete

✓

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

✓

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

✓

COVER PAGE:

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

✓

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

✓

CHAIN OF CUSTODY:

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

✓

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

✓

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

✓

Were the samples received within hold time

✓

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

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: SOHIL JODHANI

Date: 08/18/2025

LAB CHRONICLE

OrderID:	Q2667	OrderDate:	7/22/2025 11:01:14 AM					
Client:	Tetra Tech, EMI	Project:	R36982					
Contact:	Ava Heiss	Location:	D31					
<hr/>								
LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2667-01	COAP2	TCLP	TCLP Herbicide	8151A	07/21/25	07/23/25	07/25/25	07/22/25
Q2667-02	COAP3	TCLP	TCLP Herbicide	8151A	07/21/25	07/23/25	07/25/25	07/22/25

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Hit Summary Sheet SW-846

SDG No.: Q2667

Order ID: Q2667

Client: Tetra Tech, EMI

Project ID: R36982

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

Total Concentration: 0.000

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QC SUMMARY

Surrogate Summary

SDG No.: **Q2667**

Client: **Tetra Tech, EMI**

Analytical Method: **8151A**

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

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q2667

Analytical Method: 8151A

Client: Tetra Tech, EMI

DataFile : PS031234.D

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

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q2667

Analytical Method: 8151A

Client: Tetra Tech, EMI

DataFile : PS031235.D

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

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2667

Analytical Method: 8151A

Client: Tetra Tech, EMI

Datafile : PS031237.D

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

4C

PESTICIDE METHOD BLANK SUMMARY

Client ID

PB169001BL

Lab Name: Alliance

Contract: TETR16

Lab Code: ACE

SDG NO.: Q2667

Lab Sample ID: PB169001BL

Lab File ID: PS031236.D

Matrix: (soil/water) water

Extraction: (Type) SEPF

Sulfur Cleanup: (Y/N) N

Date Extracted: 07/23/2025

Date Analyzed (1): 07/24/2025

Date Analyzed (2): 07/24/2025

Time Analyzed (1): 19:52

Time Analyzed (2): 19:52

Instrument ID (1): ECD_S

Instrument ID (2): ECD_S

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

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

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

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

COMMENTS:



SAMPLE

DATA

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Fax : 908 789 8922

Report of Analysis

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

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

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

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072425\
 Data File : PS031240.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 24 Jul 2025 21:29
 Operator : AR\AJ
 Sample : PB168953TB
 Misc :
 ALS Vial : 19 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
PB168953TB

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jul 25 03:46:00 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 03:18:42 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 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 0.25 μ m

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

4) S	2,4-DCAA	7.319	7.763	2515.6E6	507.8E6	578.528	500.310
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Target Compounds

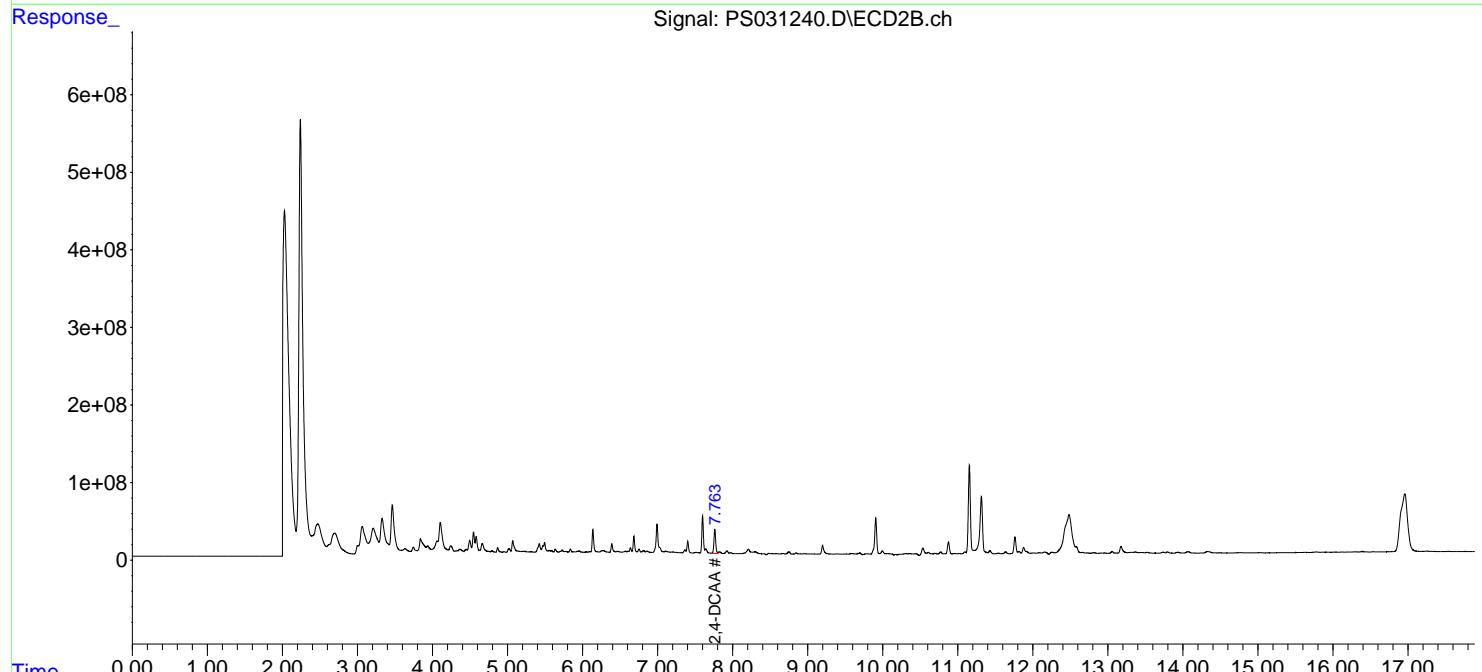
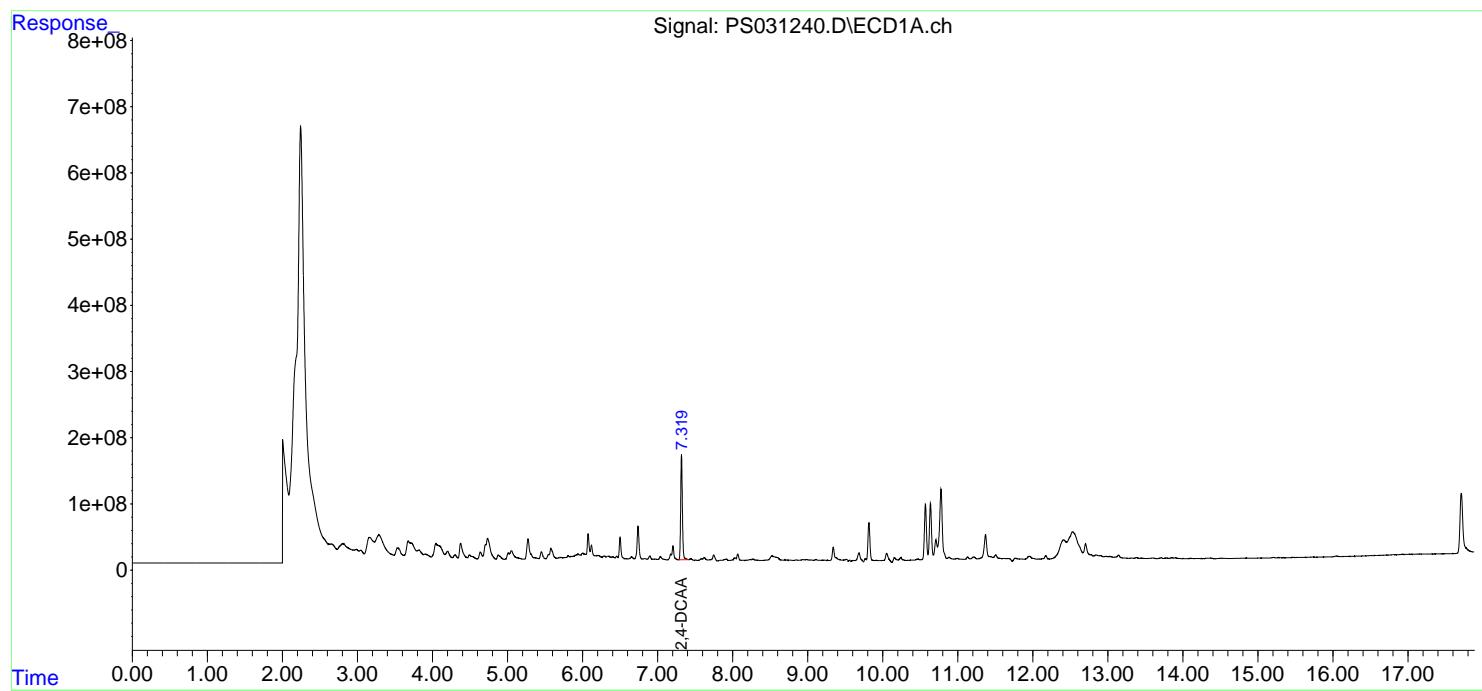
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

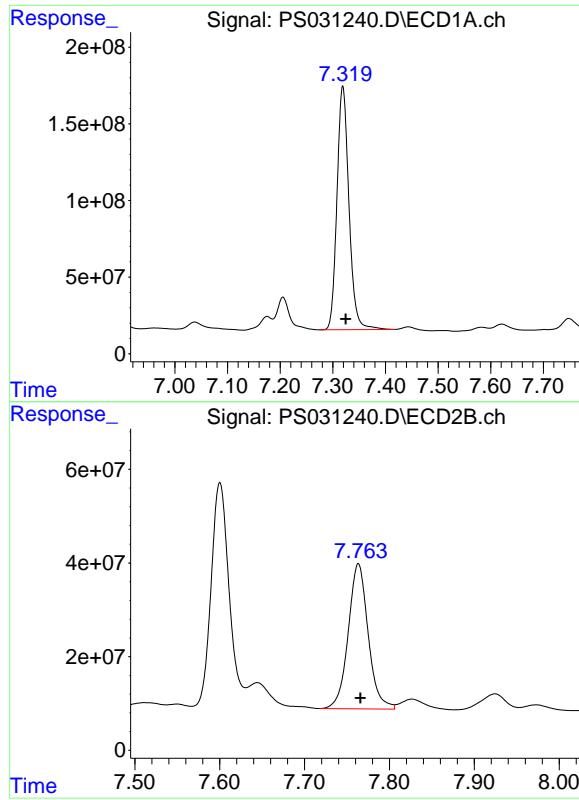
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072425\
 Data File : PS031240.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 24 Jul 2025 21:29
 Operator : AR\AJ
 Sample : PB168953TB
 Misc :
 ALS Vial : 19 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 PB168953TB

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jul 25 03:46:00 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 03:18:42 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 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 0.25 μ m





#4 2,4-DCAA

R.T.: 7.319 min
Delta R.T.: -0.006 min
Response: 2515586880
Conc: 578.53 ng/ml

Instrument: ECD_S
ClientSampleId: PB168953TB

#4 2,4-DCAA

R.T.: 7.763 min
Delta R.T.: -0.003 min
Response: 507798579
Conc: 500.31 ng/ml



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Fax : 908 789 8922

Report of Analysis

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

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

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

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072425\
 Data File : PS031246.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 25 Jul 2025 00:41
 Operator : AR\AJ
 Sample : Q2667-01
 Misc :
 ALS Vial : 23 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
COAP2

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jul 25 03:49:26 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 03:18:42 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 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 0.25 μ m

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

System Monitoring Compounds

4) S	2,4-DCAA	7.320	7.765	1865.8E6	494.1E6	429.082	486.815
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Target Compounds

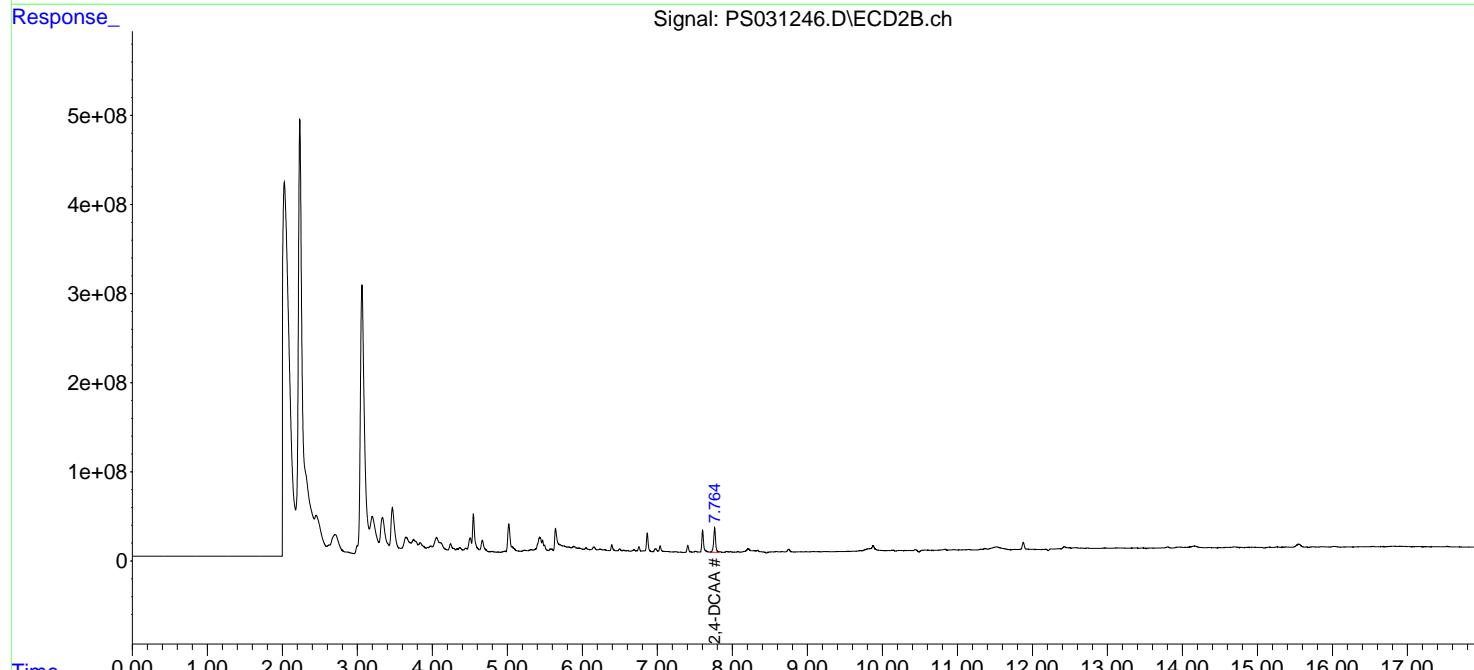
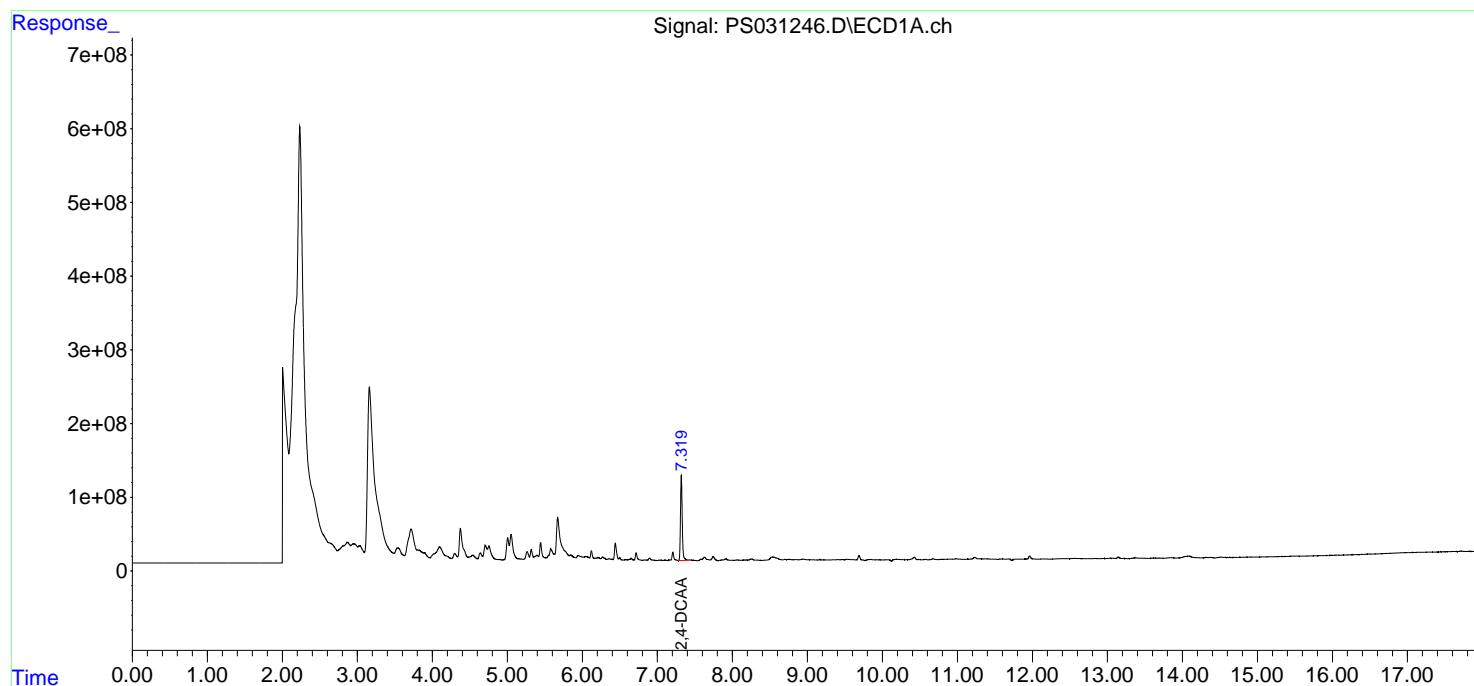
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

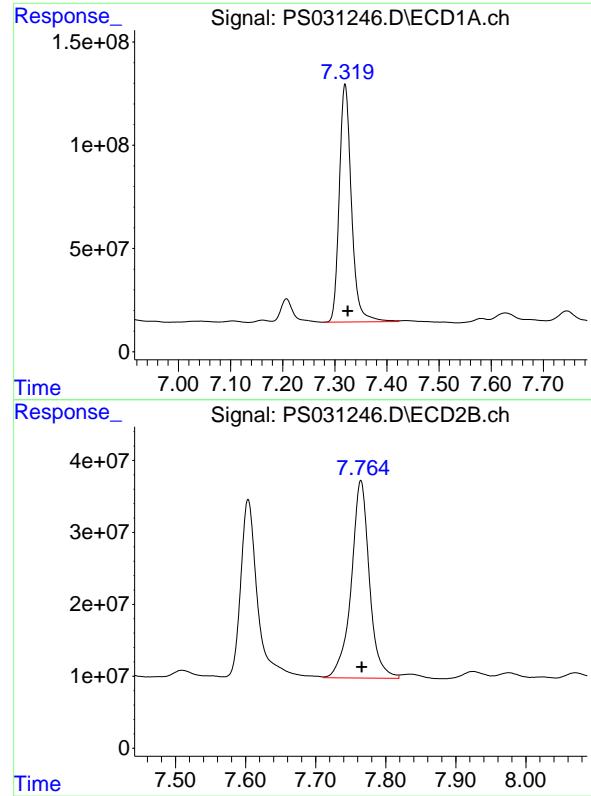
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072425\
 Data File : PS031246.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 25 Jul 2025 00:41
 Operator : AR\AJ
 Sample : Q2667-01
 Misc :
 ALS Vial : 23 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
COAP2

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jul 25 03:49:26 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 03:18:42 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 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 0.25 μ m





#4 2,4-DCAA

R.T.: 7.320 min
Delta R.T.: -0.005 min
Response: 1865756365
Conc: 429.08 ng/ml

Instrument: ECD_S
ClientSampleId: COAP2

#4 2,4-DCAA

R.T.: 7.765 min
Delta R.T.: -0.001 min
Response: 494101959
Conc: 486.82 ng/ml



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Report of Analysis

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

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

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

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072425\
 Data File : PS031247.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 25 Jul 2025 01:05
 Operator : AR\AJ
 Sample : Q2667-02
 Misc :
 ALS Vial : 24 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
COAP3

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jul 25 03:49:49 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 03:18:42 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 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 0.25 μ m

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

4) S	2,4-DCAA	7.320	7.764	1752.5E6	490.3E6	403.046	483.034
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Target Compounds

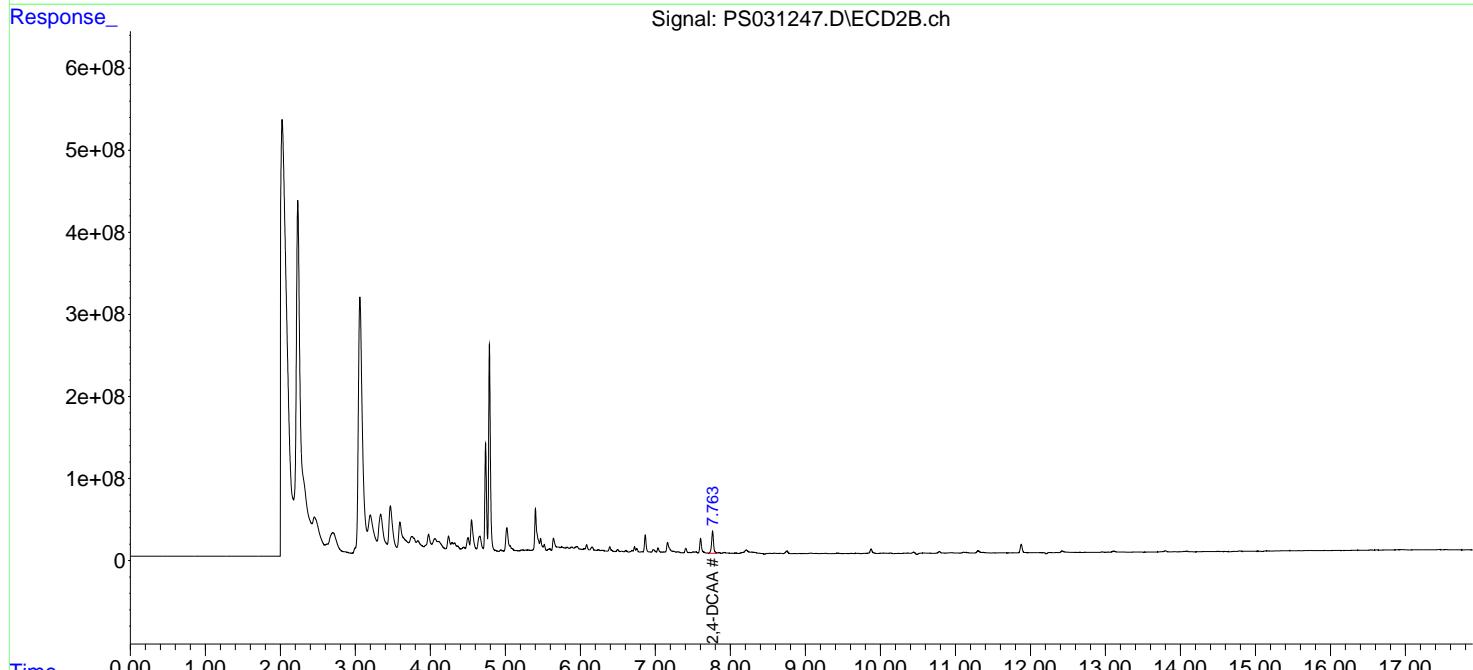
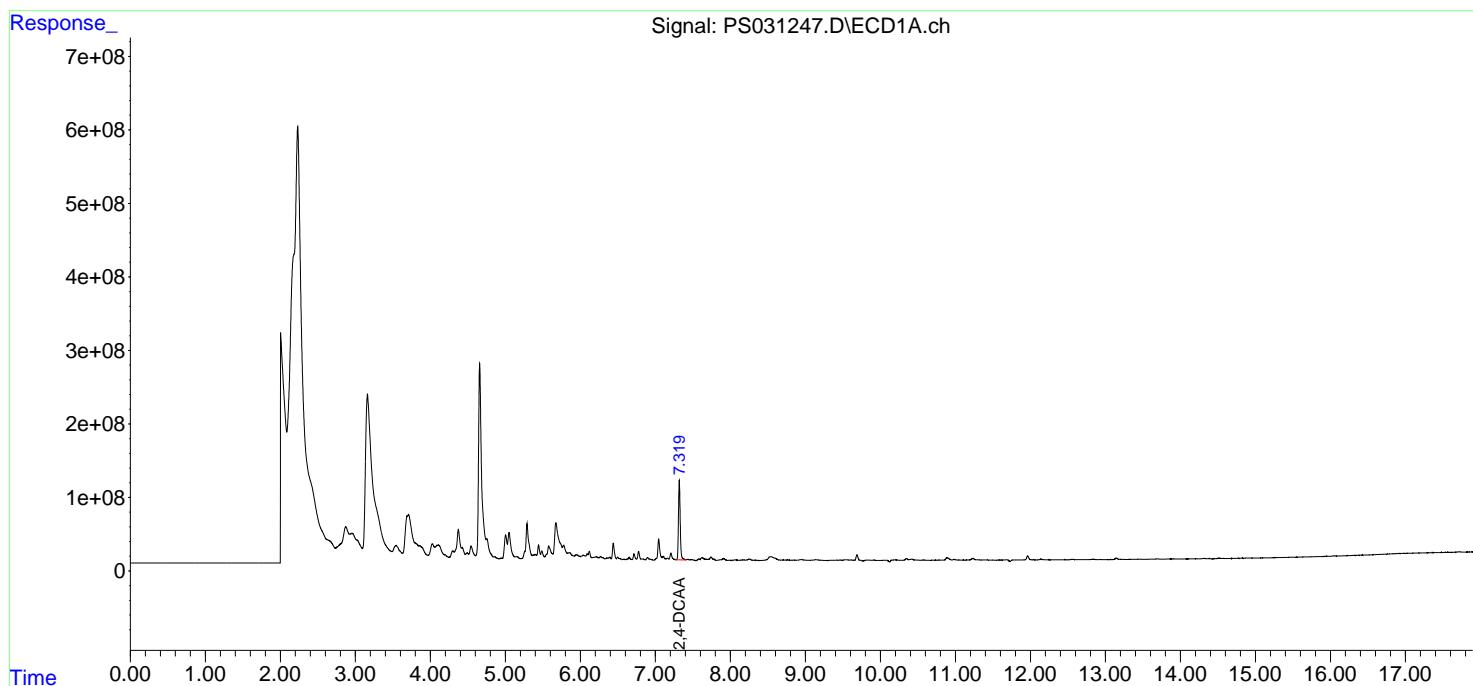
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

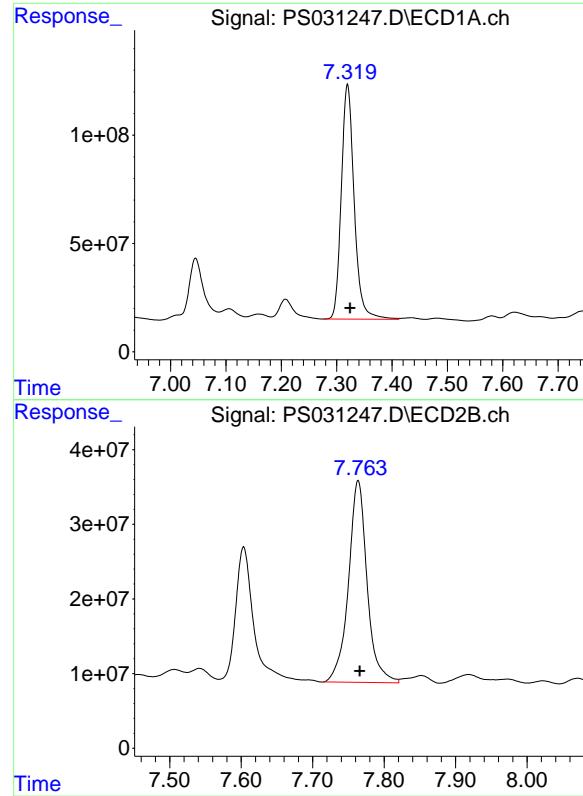
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072425\
 Data File : PS031247.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 25 Jul 2025 01:05
 Operator : AR\AJ
 Sample : Q2667-02
 Misc :
 ALS Vial : 24 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
COAP3

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jul 25 03:49:49 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 03:18:42 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 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 0.25 μ m





#4 2,4-DCAA

R.T.: 7.320 min
Delta R.T.: -0.005 min
Response: 1752545357
Conc: 403.05 ng/ml

Instrument: ECD_S
ClientSampleId: COAP3

#4 2,4-DCAA

R.T.: 7.764 min
Delta R.T.: -0.002 min
Response: 490264444
Conc: 483.03 ng/ml



CALIBRATION

SUMMARY



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RETENTION TIMES OF INITIAL CALIBRATION

Lab Name:	<u>Alliance</u>	Contract:	<u>TETR16</u>
Lab Code:	<u>ACE</u>	SDG NO.:	<u>Q2667</u>
Instrument ID:	<u>ECD_S</u>	Calibration Date(s):	<u>07/21/2025</u> <u>07/21/2025</u>
		Calibration Times:	<u>15:02</u> <u>16:39</u>

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

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

COMPOUND	RT 200	RT 500	RT 750	RT 1000	RT 1500	MEAN RT	RT WINDOW	
							FROM	TO
2,4,5-TP(Silvex)	9.34	9.34	9.34	9.34	9.34	9.34	9.24	9.44
2,4-D	8.46	8.46	8.46	8.46	8.46	8.46	8.36	8.56
2,4-DCAA	7.33	7.33	7.33	7.33	7.33	7.33	7.23	7.43



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RETENTION TIMES OF INITIAL CALIBRATION

Lab Name:	<u>Alliance</u>	Contract:	<u>TETR16</u>
Lab Code:	<u>ACE</u>	SDG NO.:	<u>Q2667</u>
Instrument ID:	<u>ECD_S</u>	Calibration Date(s):	<u>07/21/2025</u> <u>07/21/2025</u>
		Calibration Times:	<u>15:02</u> <u>16:39</u>

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

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

COMPOUND	RT 200	RT 500	RT 750	RT 1000	RT 1500	MEAN RT	RT WINDOW	
							FROM	TO
2,4,5-TP(Silvex)	9.93	9.93	9.93	9.93	9.93	9.93	9.83	10.03
2,4-D	9.03	9.03	9.02	9.03	9.02	9.03	8.93	9.13
2,4-DCAA	7.77	7.77	7.77	7.77	7.77	7.77	7.67	7.87



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CALIBRATION FACTOR OF INITIAL CALIBRATION

Lab Name:	Alliance	Contract:	TETR16
Lab Code:	ACE	SDG NO.:	Q2667
Instrument ID:	ECD_S	Calibration Date(s):	07/21/2025
		Calibration Times:	15:02 16:39
GC Column:	RTX-CLP	ID:	0.32 (mm)

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



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CALIBRATION FACTOR OF INITIAL CALIBRATION

Lab Name:	Alliance	Contract:	TETR16
Lab Code:	ACE	SDG NO.:	Q2667
Instrument ID:	ECD_S	Calibration Date(s):	07/21/2025
		Calibration Times:	15:02 16:39
GC Column:	RTX-CLP2	ID:	0.32 (mm)

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

COMPOUND	CF 200	CF 500	CF 750	CF 1000	CF 1500	CF	% RSD
2,4,5-TP(Silvex)	16137400000	15454900000	14840900000	14348100000	13689700000	14894200000	6
2,4-D	1930260000	1742600000	1656200000	1604210000	1558320000	1698320000	9
2,4-DCAA	1147310000	1039810000	988394000	963101000	936229000	1014970000	8

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072125\
 Data File : PS031157.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 21 Jul 2025 15:02
 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: Jul 22 03:09:27 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 02:56:38 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 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 0.25 μ m

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

4) S 2,4-DCAA 7.326 7.768 1018.2E6 229.5E6 239.653 232.155

Target Compounds

1) T	Dalapon	2.687	2.705	1249.0E6	569.9E6	201.812	204.583
2) T	3,5-DICHL...	6.488	6.715	1193.9E6	320.5E6	222.298	215.115
3) T	4-Nitroph...	7.126	7.303	335.6E6	347.8E6	209.026	194.908
5) T	DICAMBA	7.514	7.968	3423.2E6	1271.2E6	210.405	198.102
6) T	MCPP	7.692	8.063	154.0E6	34811617	14.961	16.279
7) T	MCPA	7.841	8.311	215.4E6	57174138	17.126	18.096
8) T	DICHLORPROP	8.226	8.689	851.7E6	328.0E6	231.204	222.621
9) T	2,4-D	8.459	9.027	788.4E6	362.9E6	215.749	219.109
10) T	Pentachlo...	8.764	9.547	12562.1E6	8086.5E6	219.208	202.357
11) T	2,4,5-TP ...	9.343	9.930	4672.6E6	3066.1E6	215.937	206.598
12) T	2,4,5-T	9.638	10.358	3901.2E6	2914.7E6	199.977	205.894
13) T	2,4-DB	10.215	10.925	587.5E6	240.7E6	198.311	208.016
14) T	DINOSEB	11.428	11.308	3210.0E6	2260.5E6	208.197	201.011
15) T	Picloram	11.242	12.422	3638.6E6	4580.3E6	180.740	180.371
16) T	DCPA	11.725	12.352	6177.1E6	4718.4E6	218.100	203.744

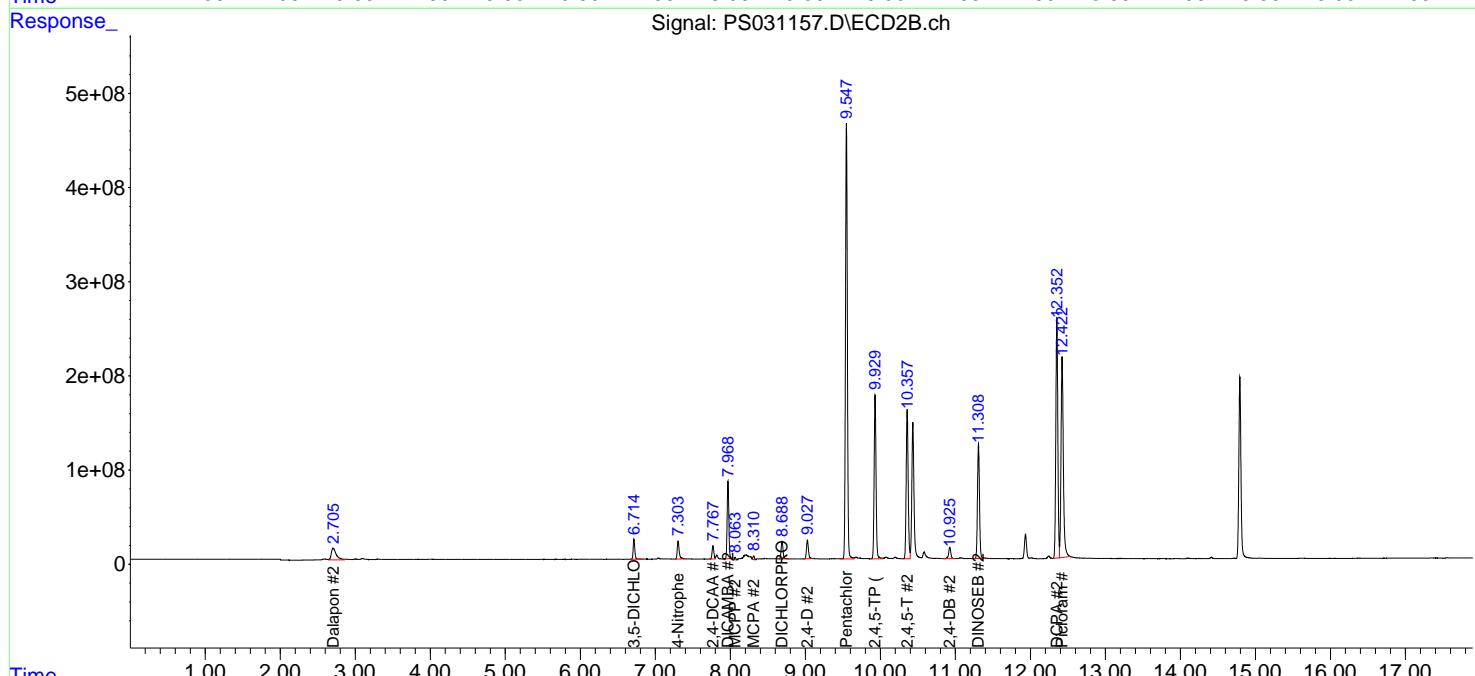
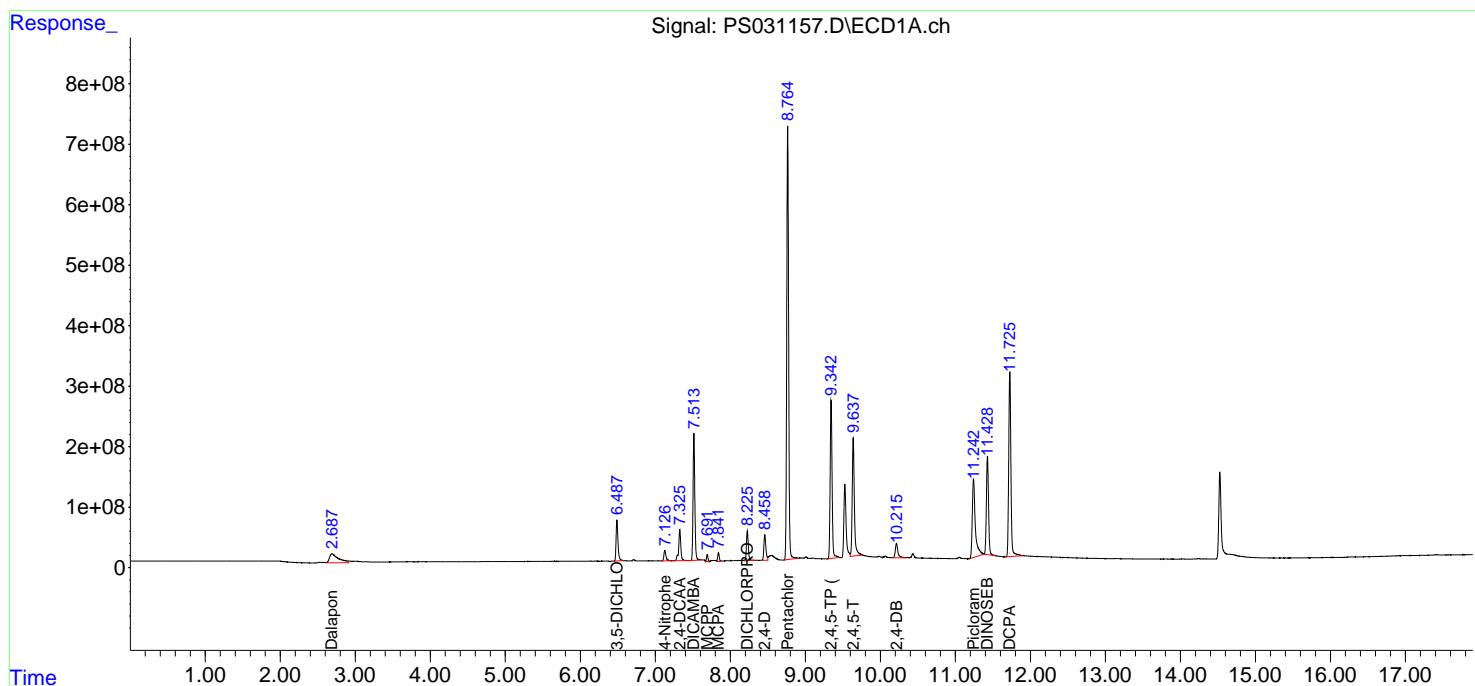
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

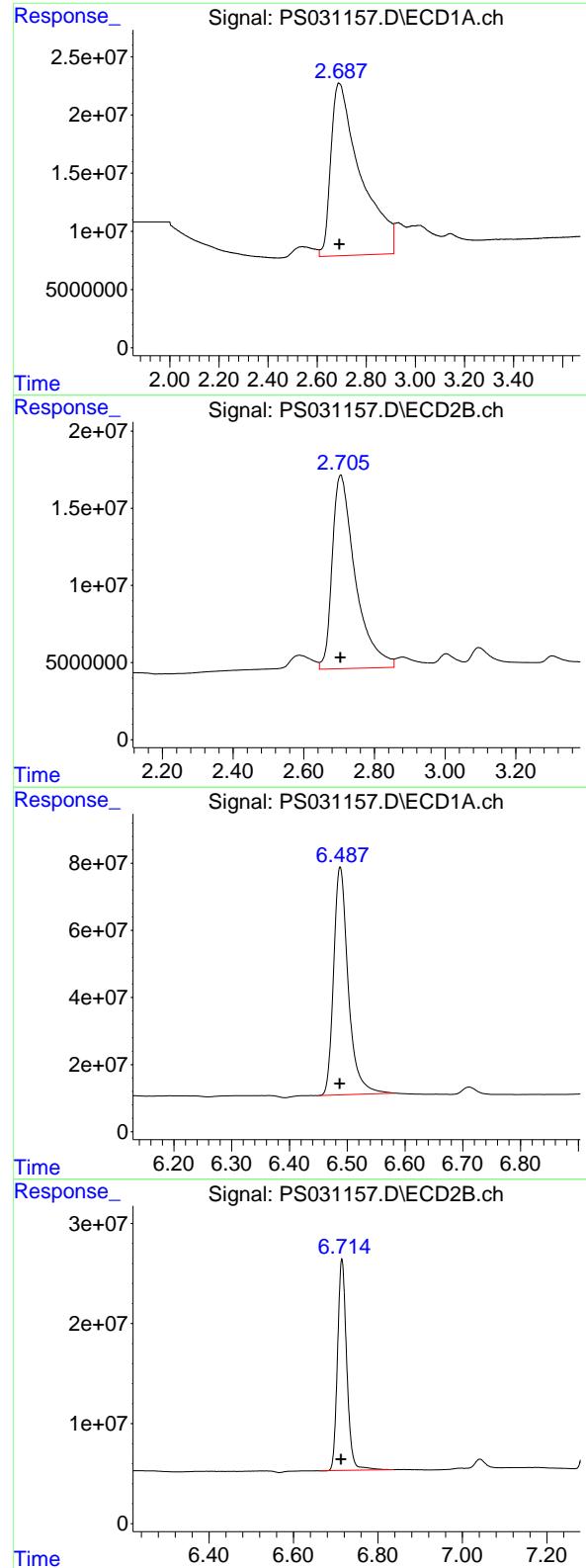
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072125\
 Data File : PS031157.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 21 Jul 2025 15:02
 Operator : AR\AJ
 Sample : HSTDICC200
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDICC200

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jul 22 03:09:27 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 02:56:38 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 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 0.25 μ m





#1 Dalapon

R.T.: 2.687 min
 Delta R.T.: -0.003 min
 Response: 1249018178
 Conc: 201.81 ng/ml

Instrument: ECD_S
 ClientSampleId: HSTDICC200

#1 Dalapon

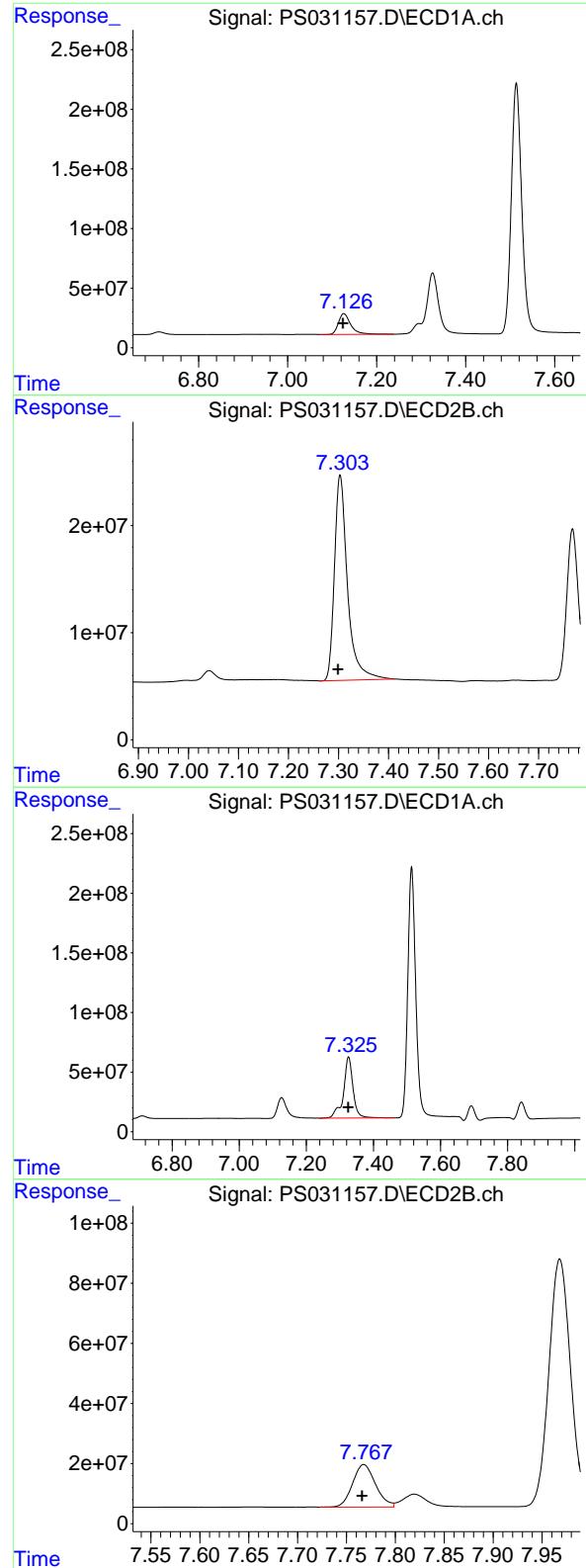
R.T.: 2.705 min
 Delta R.T.: 0.001 min
 Response: 569934475
 Conc: 204.58 ng/ml

#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.488 min
 Delta R.T.: 0.000 min
 Response: 1193926937
 Conc: 222.30 ng/ml

#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.715 min
 Delta R.T.: 0.002 min
 Response: 320502490
 Conc: 215.12 ng/ml



#3 4-Nitrophenol

R.T.: 7.126 min
 Delta R.T.: 0.002 min
 Response: 335551168
 Conc: 209.03 ng/ml

Instrument: ECD_S
 ClientSampleId: HSTDICC200

#3 4-Nitrophenol

R.T.: 7.303 min
 Delta R.T.: 0.004 min
 Response: 347810130
 Conc: 194.91 ng/ml

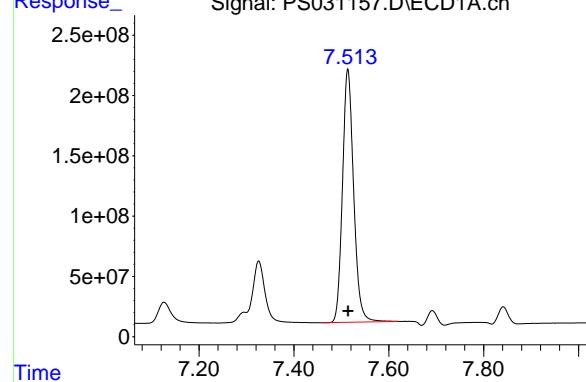
#4 2,4-DCAA

R.T.: 7.326 min
 Delta R.T.: 0.001 min
 Response: 1018219226
 Conc: 239.65 ng/ml

#4 2,4-DCAA

R.T.: 7.768 min
 Delta R.T.: 0.002 min
 Response: 229461022
 Conc: 232.16 ng/ml

#5 DICAMBA



R.T.: 7.514 min
Delta R.T.: 0.000 min
Response: 3423245167
Conc: 210.40 ng/ml

Instrument: ECD_S
ClientSampleId: HSTDICCC200

#5 DICAMBA

R.T.: 7.968 min
Delta R.T.: 0.000 min
Response: 1271207131
Conc: 198.10 ng/ml

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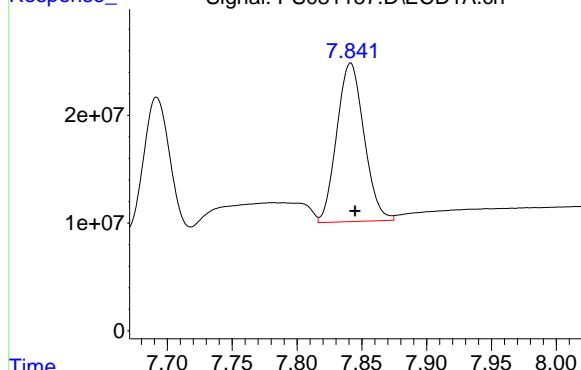
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17

#7 MCPA

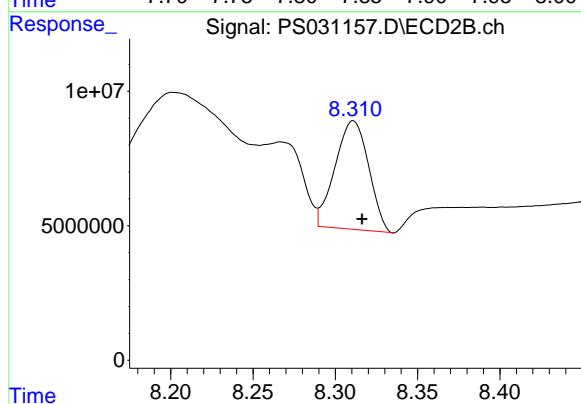
R.T.: 7.841 min
 Delta R.T.: -0.003 min
 Response: 215377008
 Conc: 17.13 ug/ml

Instrument: ECD_S
ClientSampleId: HSTDICC200



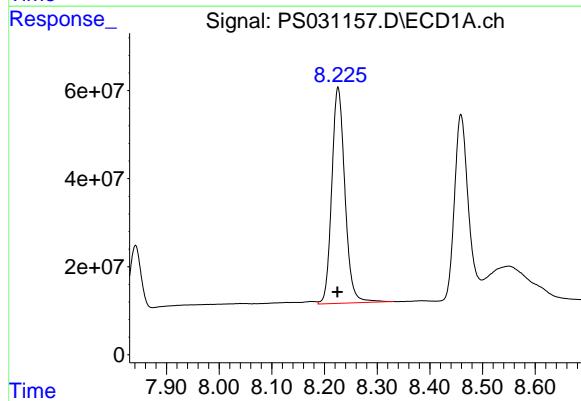
#7 MCPA

R.T.: 8.311 min
 Delta R.T.: -0.005 min
 Response: 57174138
 Conc: 18.10 ug/ml



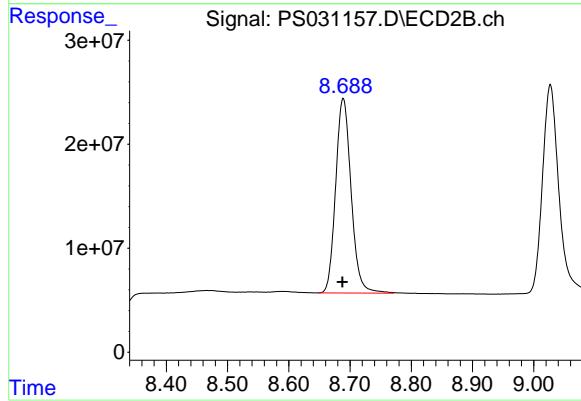
#8 DICHLORPROP

R.T.: 8.226 min
 Delta R.T.: 0.001 min
 Response: 851667977
 Conc: 231.20 ng/ml



#8 DICHLORPROP

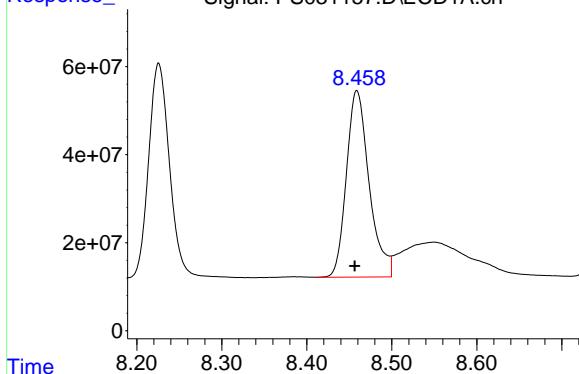
R.T.: 8.689 min
 Delta R.T.: 0.001 min
 Response: 328001670
 Conc: 222.62 ng/ml



#9 2,4-D

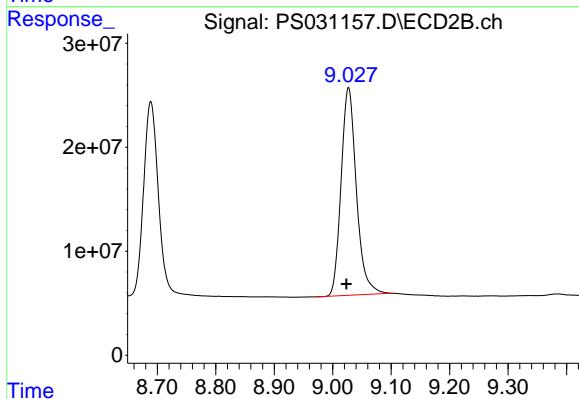
R.T.: 8.459 min
 Delta R.T.: 0.003 min
 Response: 788445719
 Conc: 215.75 ng/ml

Instrument: ECD_S
 ClientSampleId: HSTDICC200



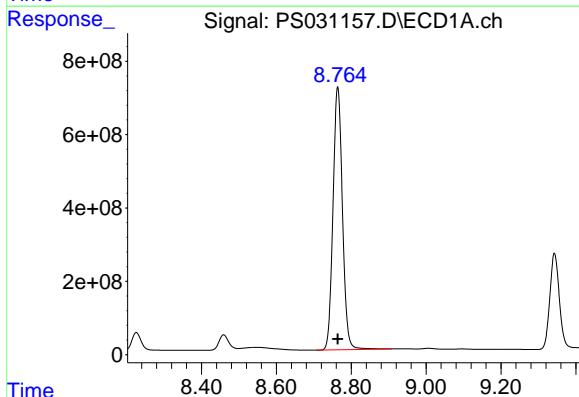
#9 2,4-D

R.T.: 9.027 min
 Delta R.T.: 0.003 min
 Response: 362888581
 Conc: 219.11 ng/ml



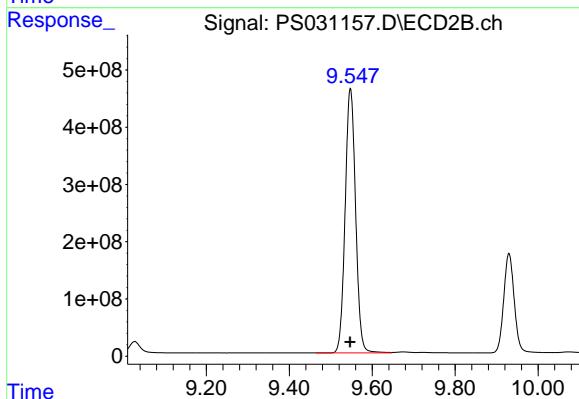
#10 Pentachlorophenol

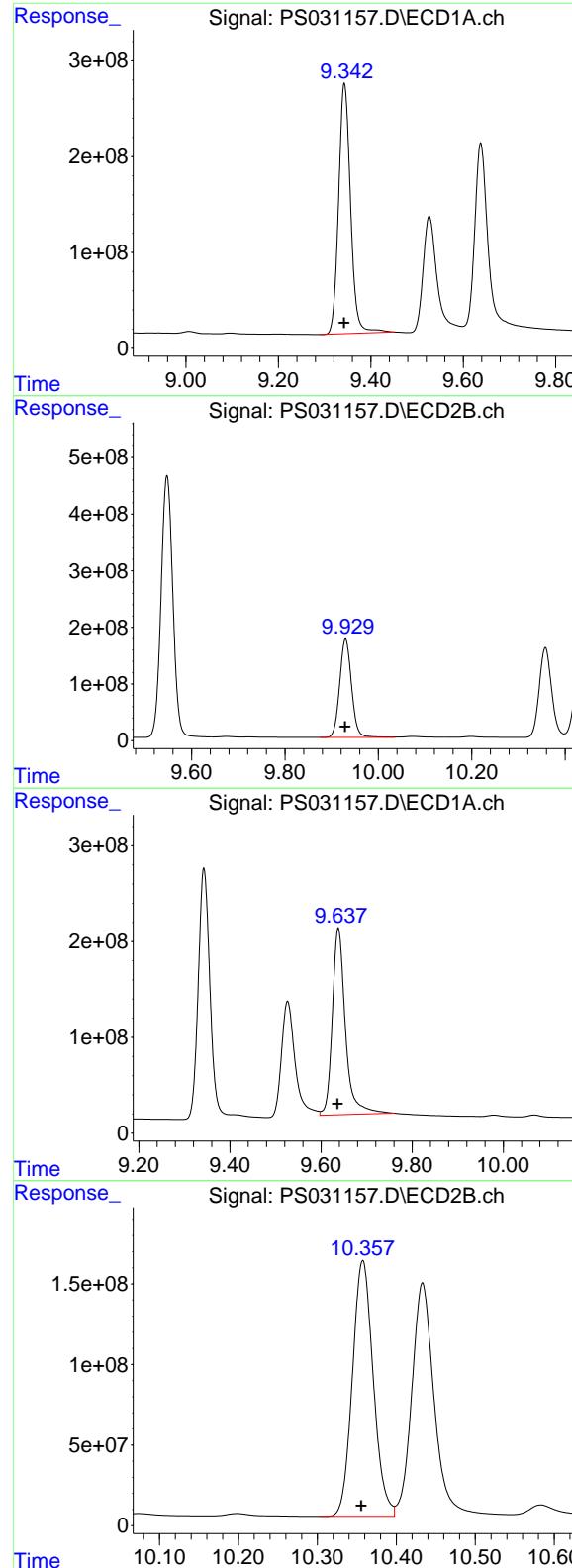
R.T.: 8.764 min
 Delta R.T.: 0.000 min
 Response: 12562110249
 Conc: 219.21 ng/ml



#10 Pentachlorophenol

R.T.: 9.547 min
 Delta R.T.: 0.000 min
 Response: 8086509060
 Conc: 202.36 ng/ml





#11 2,4,5-TP (SILVEX)

R.T.: 9.343 min
 Delta R.T.: 0.001 min
 Response: 4672594463
 Conc: 215.94 ng/ml

Instrument: ECD_S
 ClientSampleId: HSTDICC200

#11 2,4,5-TP (SILVEX)

R.T.: 9.930 min
 Delta R.T.: 0.001 min
 Response: 3066097967
 Conc: 206.60 ng/ml

#12 2,4,5-T

R.T.: 9.638 min
 Delta R.T.: 0.002 min
 Response: 3901247922
 Conc: 199.98 ng/ml

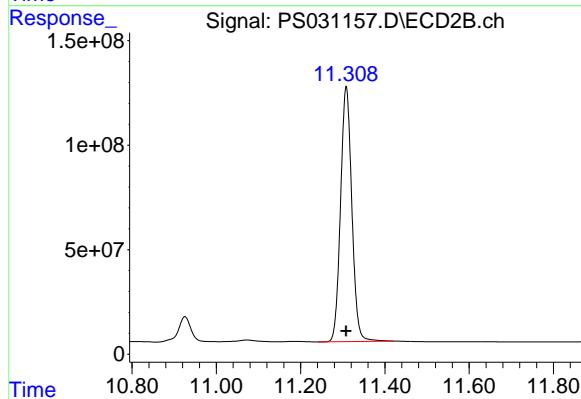
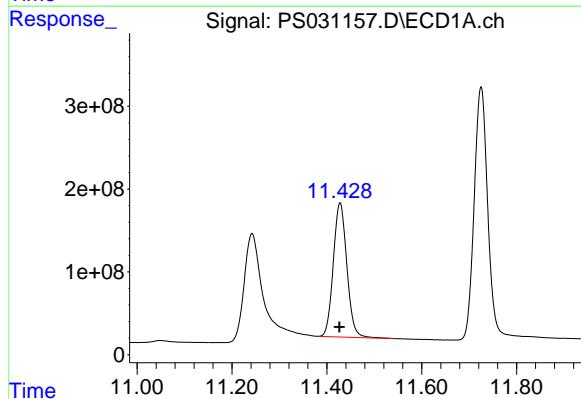
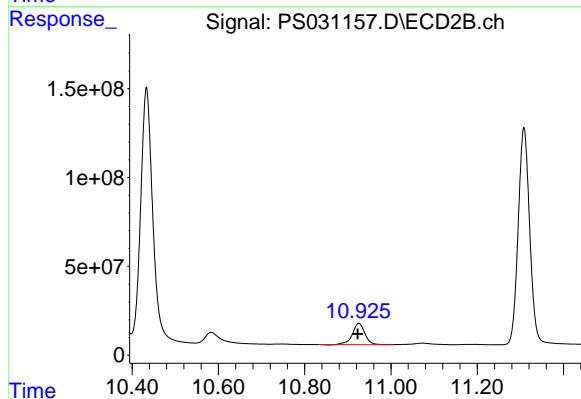
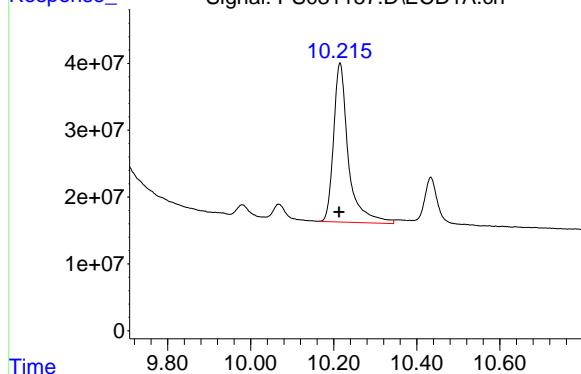
#12 2,4,5-T

R.T.: 10.358 min
 Delta R.T.: 0.002 min
 Response: 2914739433
 Conc: 205.89 ng/ml

#13 2,4-DB

R.T.: 10.215 min
 Delta R.T.: 0.002 min
 Response: 587521205
 Conc: 198.31 ng/ml

Instrument: ECD_S
 ClientSampleId: HSTDICC200



#13 2,4-DB

R.T.: 10.925 min
 Delta R.T.: 0.003 min
 Response: 240715400
 Conc: 208.02 ng/ml

#14 DINOSEB

R.T.: 11.428 min
 Delta R.T.: 0.001 min
 Response: 3209965894
 Conc: 208.20 ng/ml

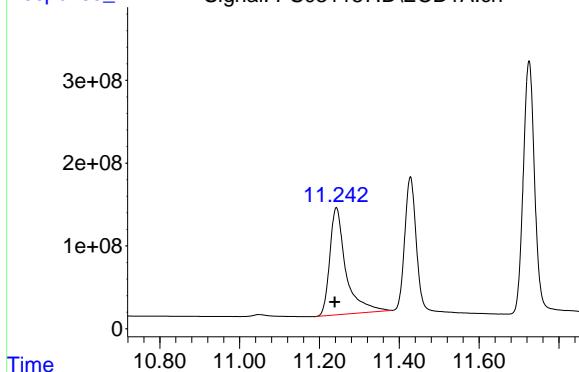
#14 DINOSEB

R.T.: 11.308 min
 Delta R.T.: 0.000 min
 Response: 2260524674
 Conc: 201.01 ng/ml

#15 Picloram

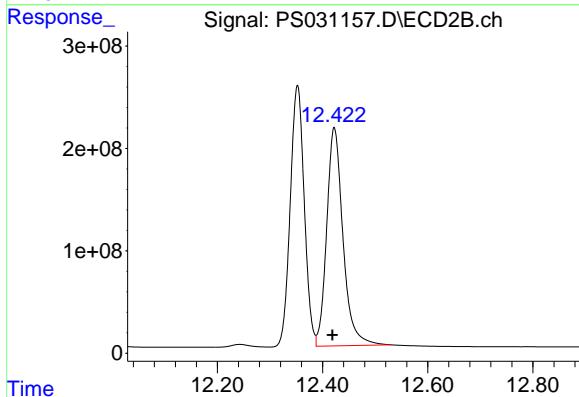
R.T.: 11.242 min
 Delta R.T.: 0.004 min
 Response: 3638645085
 Conc: 180.74 ng/ml

Instrument: ECD_S
ClientSampleId: HSTDICC200



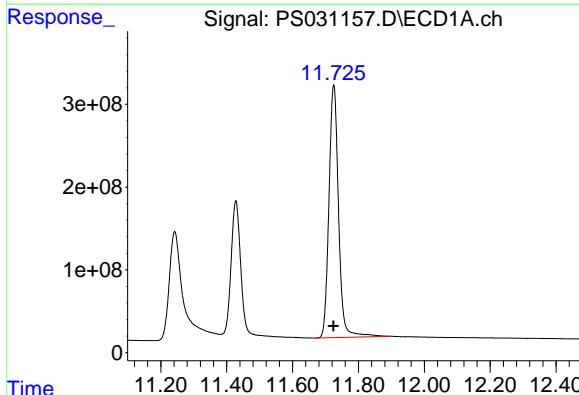
#15 Picloram

R.T.: 12.422 min
 Delta R.T.: 0.004 min
 Response: 4580348024
 Conc: 180.37 ng/ml



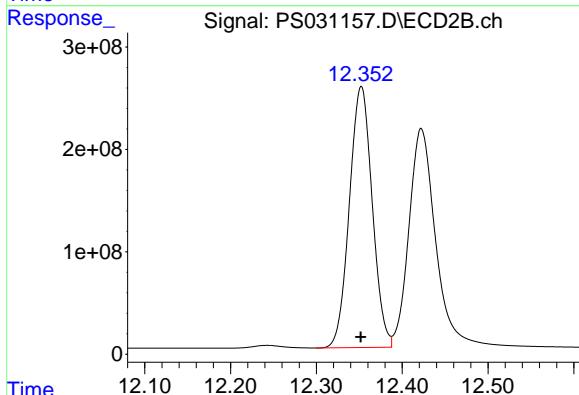
#16 DCPA

R.T.: 11.725 min
 Delta R.T.: 0.000 min
 Response: 6177113741
 Conc: 218.10 ng/ml



#16 DCPA

R.T.: 12.352 min
 Delta R.T.: 0.000 min
 Response: 4718414572
 Conc: 203.74 ng/ml



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072125\
 Data File : PS031158.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 21 Jul 2025 15:26
 Operator : AR\AJ
 Sample : HSTDICC500
 Misc :
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDICC500

Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 07/22/2025
 Supervised By :mohammad ahmed 07/23/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jul 22 03:09:42 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 02:56:38 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 7.325 7.767 2201.7E6 519.9E6 518.195m 526.012

Target Compounds

1) T	Dalapon	2.690	2.705	2959.3E6	1321.5E6	478.152	474.374
2) T	3,5-DICHL...	6.487	6.714	2659.6E6	740.5E6	495.188	497.017
3) T	4-Nitroph...	7.125	7.301	767.9E6	829.3E6	478.348	464.714
5) T	DICAMBA	7.514	7.969	7996.5E6	3086.5E6	491.494	480.989
6) T	MCPP	7.694	8.066	467.8E6	100.3E6	45.447	46.925
7) T	MCPA	7.843	8.314	579.7E6	149.5E6	46.099	47.317
8) T	DICHLORPROP	8.226	8.689	1838.1E6	729.4E6	498.986	495.087
9) T	2,4-D	8.458	9.026	1795.7E6	819.0E6	491.384	494.516
10) T	Pentachlo...	8.763	9.548	29107.7E6	19707.8E6	507.927	493.167
11) T	2,4,5-TP ...	9.343	9.930	10820.5E6	7341.1E6	500.052	494.651
12) T	2,4,5-T	9.637	10.357	9577.2E6	6973.3E6	490.924	492.588
13) T	2,4-DB	10.214	10.925	1431.5E6	570.7E6	483.190	493.144
14) T	DINOSEB	11.428	11.309	7542.8E6	5427.1E6	489.222	482.587
15) T	Picloram	11.240	12.420	9521.9E6	12061.4E6	472.975	474.969
16) T	DCPA	11.726	12.353	14463.8E6	11492.2E6	510.682	496.241

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072125\
 Data File : PS031158.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 21 Jul 2025 15:26
 Operator : AR\AJ
 Sample : HSTDICC500
 Misc :
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDICC500

Manual Integrations
APPROVED

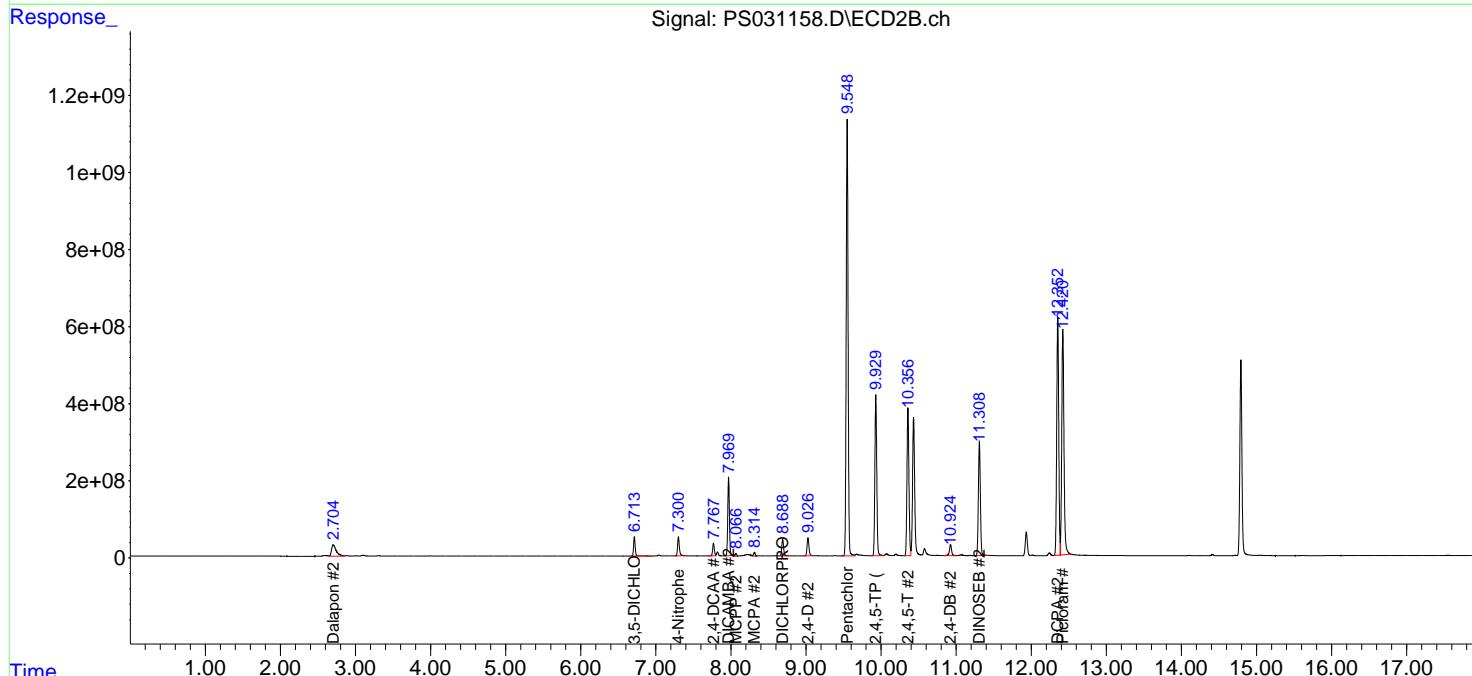
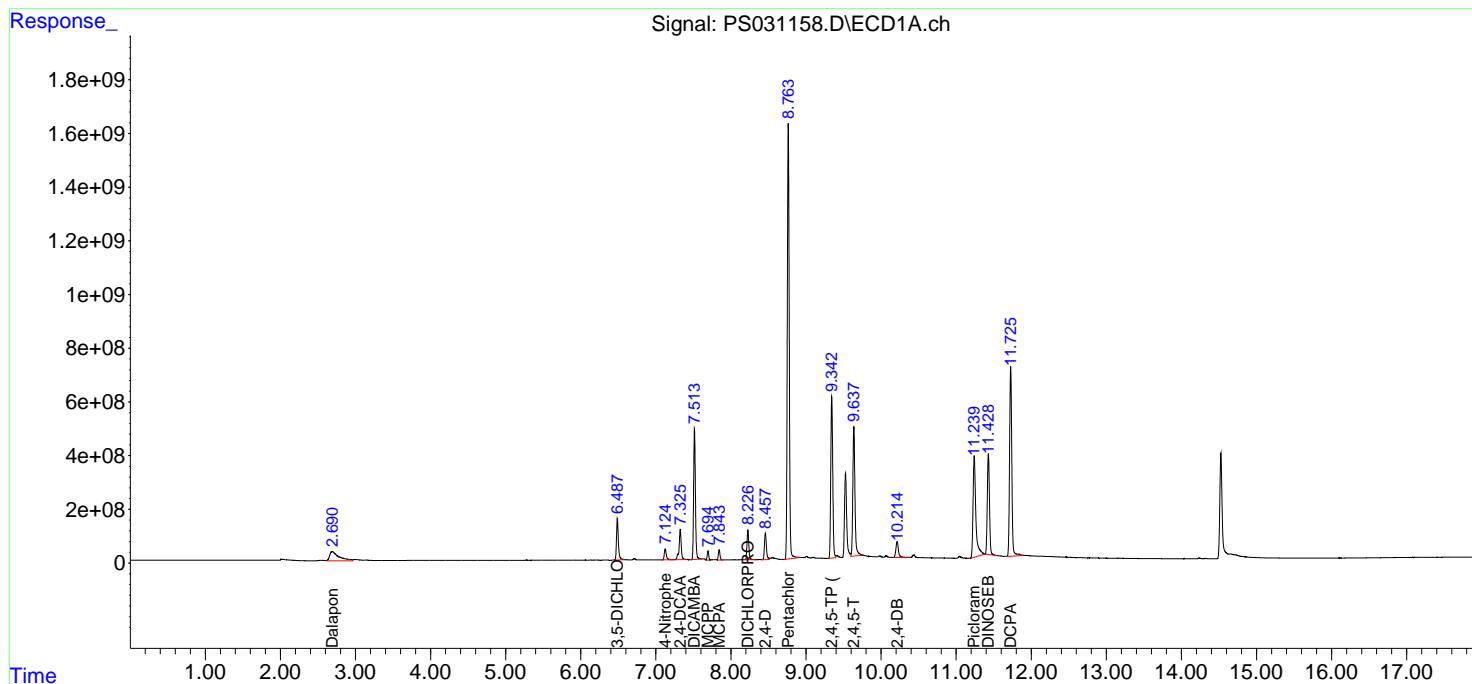
Reviewed By :Abdul Mirza 07/22/2025
 Supervised By :mohammad ahmed 07/23/2025

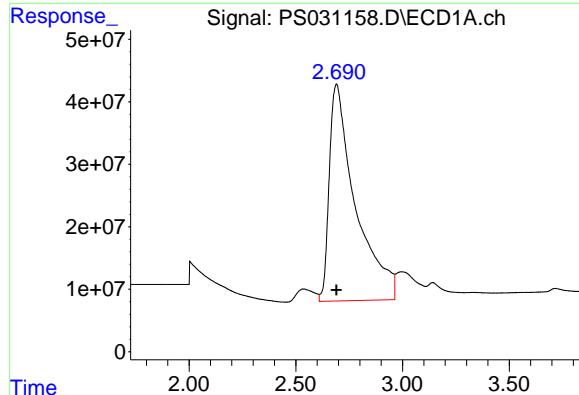
Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jul 22 03:09:42 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 02:56:38 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l

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 0.25 μ m





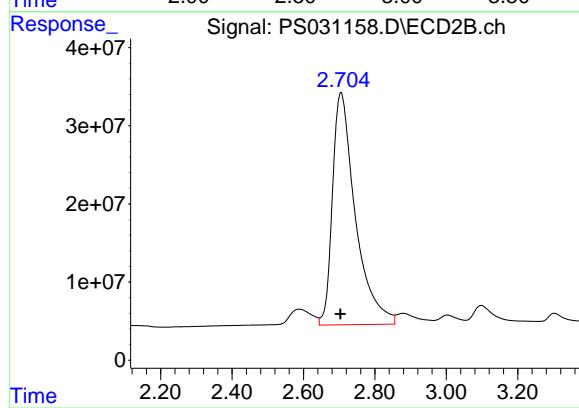
#1 Dalapon

R.T.: 2.690 min
Delta R.T.: 0.000 min
Response: 2959298028
Conc: 478.15 ng/ml

Instrument: ECD_S
ClientSampleId: HSTDICC500

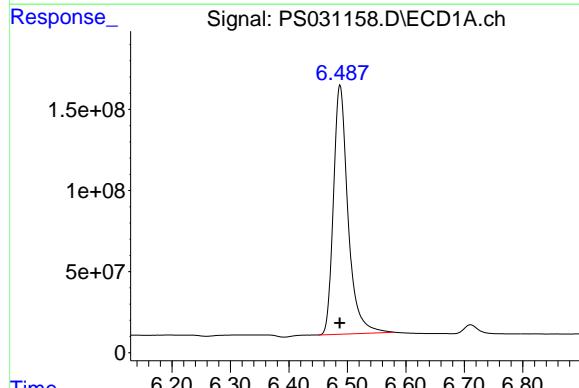
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 07/22/2025
Supervised By :mohammad ahmed 07/23/2025



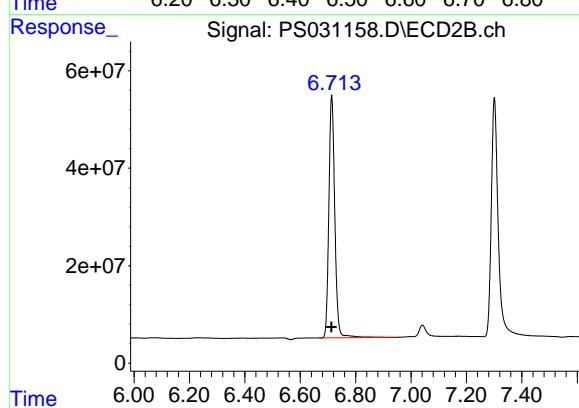
#1 Dalapon

R.T.: 2.705 min
Delta R.T.: 0.001 min
Response: 1321530235
Conc: 474.37 ng/ml



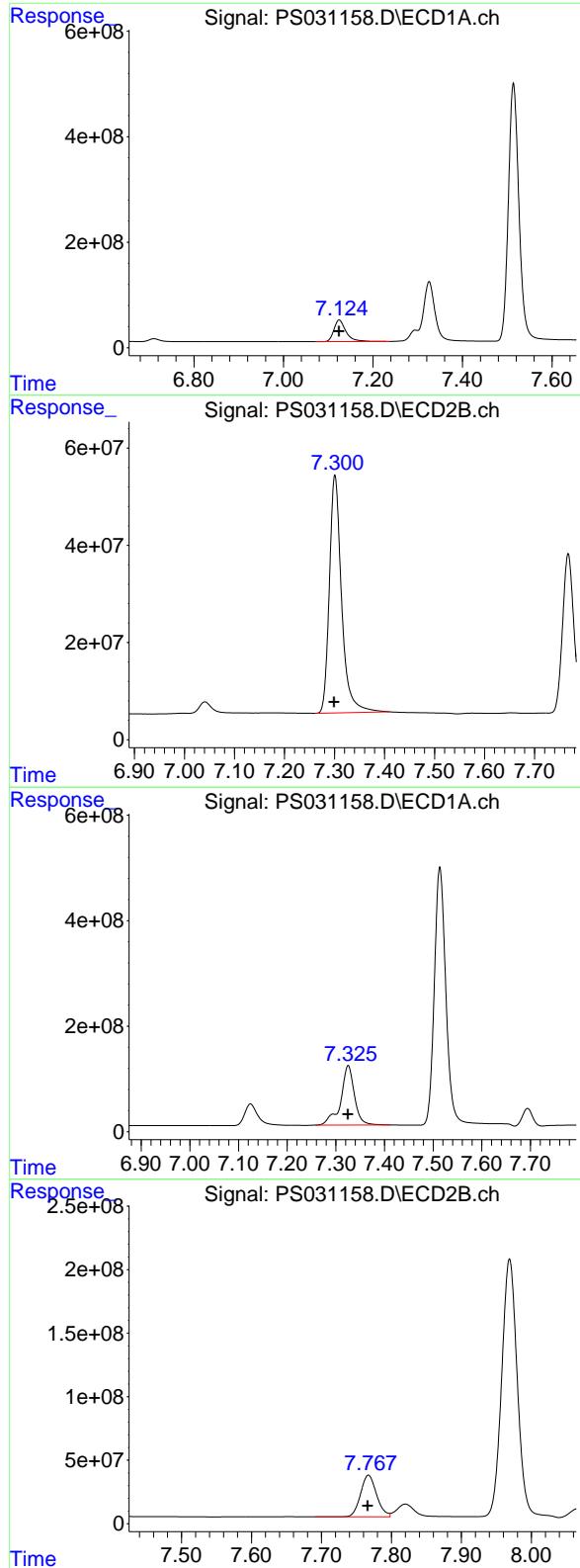
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.487 min
Delta R.T.: 0.000 min
Response: 2659579107
Conc: 495.19 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.714 min
Delta R.T.: 0.000 min
Response: 740511149
Conc: 497.02 ng/ml



#3 4-Nitrophenol

R.T.: 7.125 min
 Delta R.T.: 0.000 min
 Response: 767894643
 Conc: 478.35 ng/ml

Instrument: ECD_S
ClientSampleId: HSTDICC500

Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 07/22/2025
 Supervised By :mohammad ahmed 07/23/2025

#3 4-Nitrophenol

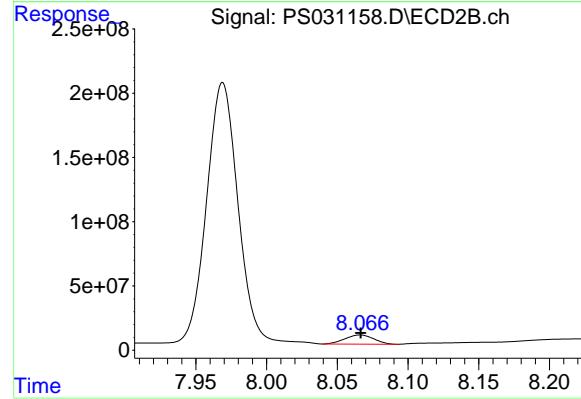
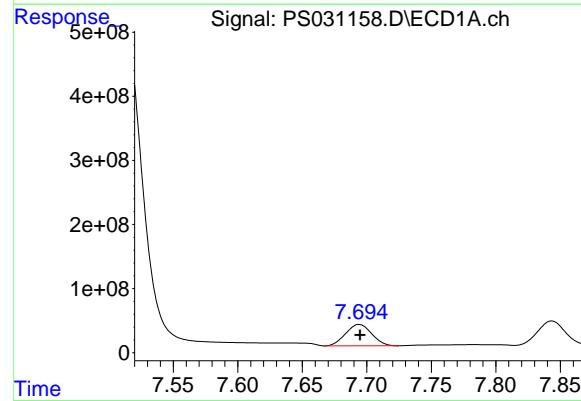
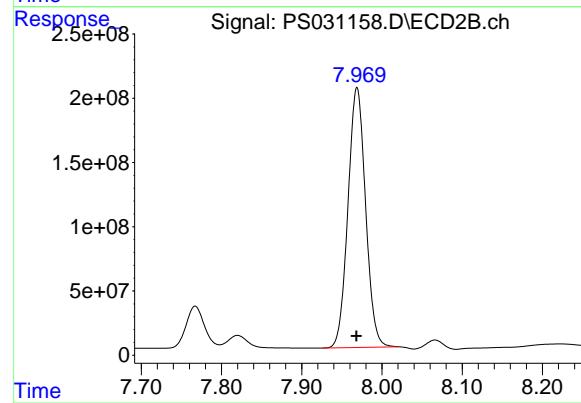
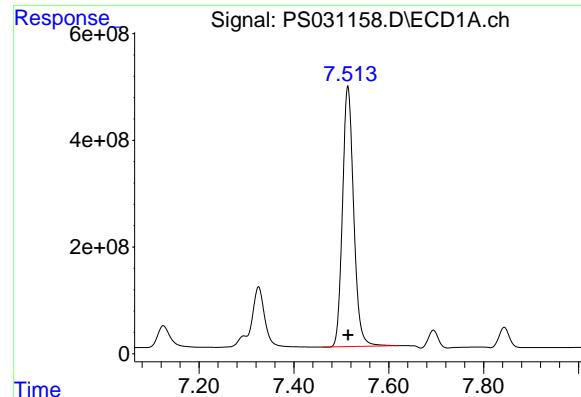
R.T.: 7.301 min
 Delta R.T.: 0.002 min
 Response: 829273311
 Conc: 464.71 ng/ml

#4 2,4-DCAA

R.T.: 7.325 min
 Delta R.T.: 0.000 min
 Response: 2201667574
 Conc: 518.20 ng/ml

#4 2,4-DCAA

R.T.: 7.767 min
 Delta R.T.: 0.001 min
 Response: 519906660
 Conc: 526.01 ng/ml



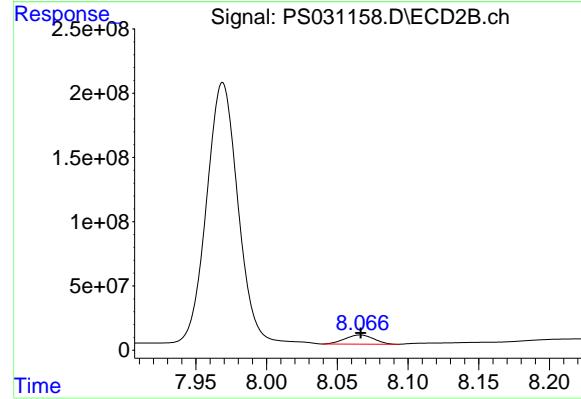
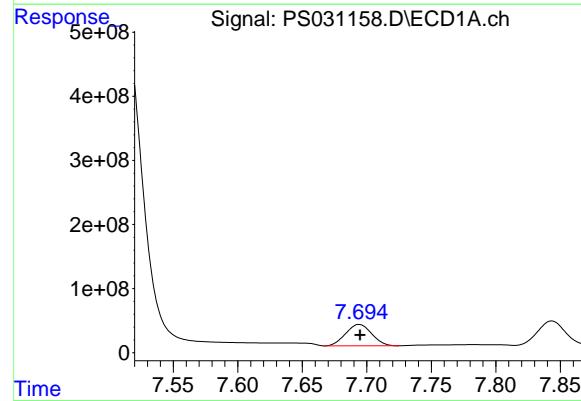
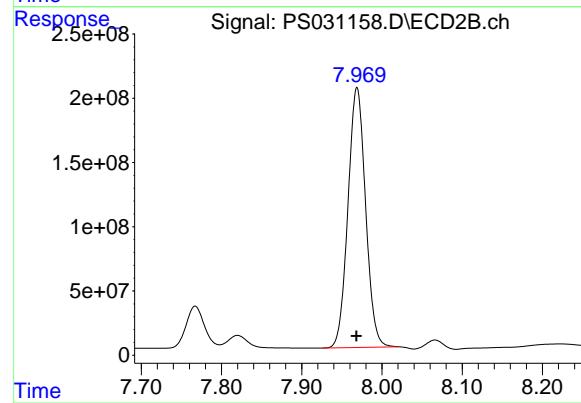
#5 DICAMBA

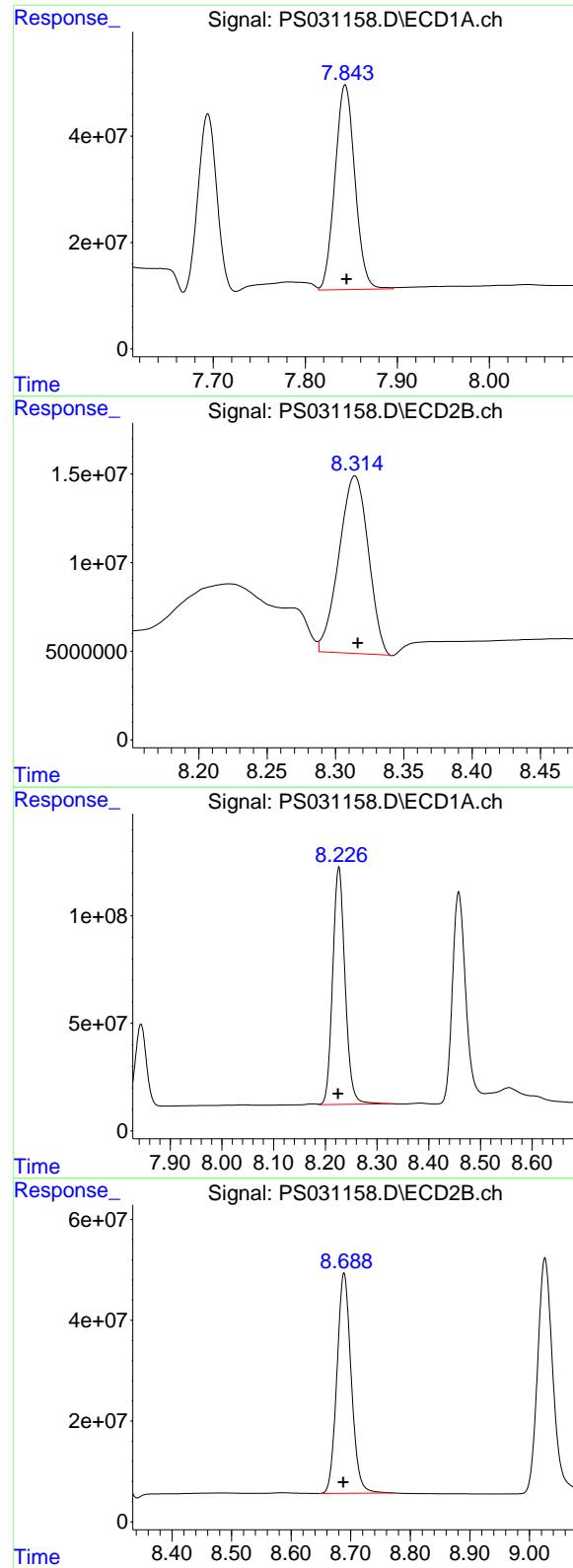
R.T.: 7.514 min
Delta R.T.: 0.000 min
Response: 7996510974
Conc: 491.49 ng/ml

Instrument: ECD_S
ClientSampleId: HSTDICC500

Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 07/22/2025
Supervised By :mohammad ahmed 07/23/2025





#7 MCPA

R.T.: 7.843 min
 Delta R.T.: -0.001 min
 Response: 579732469
 Conc: 46.10 ug/ml

Instrument: ECD_S
 ClientSampleId: HSTDICC500

Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 07/22/2025
 Supervised By :mohammad ahmed 07/23/2025

#7 MCPA

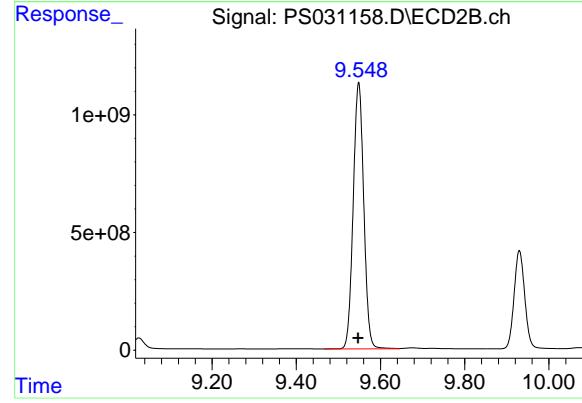
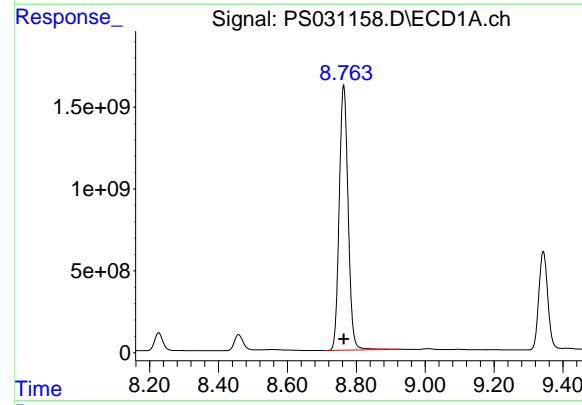
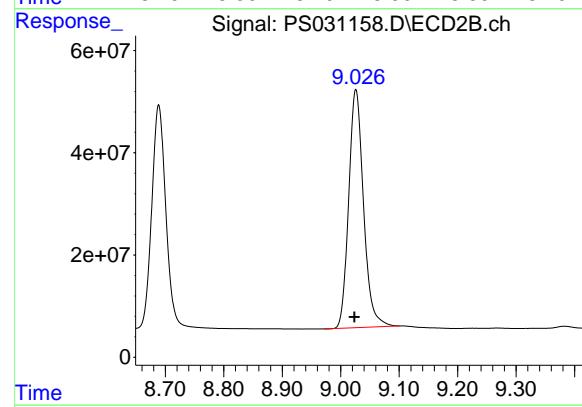
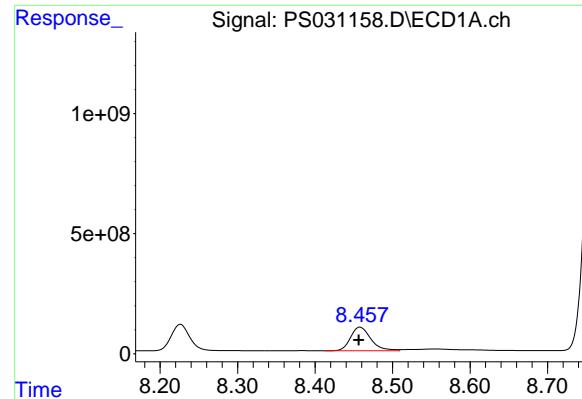
R.T.: 8.314 min
 Delta R.T.: -0.002 min
 Response: 149500104
 Conc: 47.32 ug/ml

#8 DICHLORPROP

R.T.: 8.226 min
 Delta R.T.: 0.002 min
 Response: 1838072799
 Conc: 498.99 ng/ml

#8 DICHLORPROP

R.T.: 8.689 min
 Delta R.T.: 0.001 min
 Response: 729443662
 Conc: 495.09 ng/ml



#9 2,4-D

R.T.: 8.458 min
Delta R.T.: 0.001 min
Response: 1795744990
Conc: 491.38 ng/ml

Instrument: ECD_S
ClientSampleId: HSTDICC500

Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 07/22/2025
Supervised By :mohammad ahmed 07/23/2025

#9 2,4-D

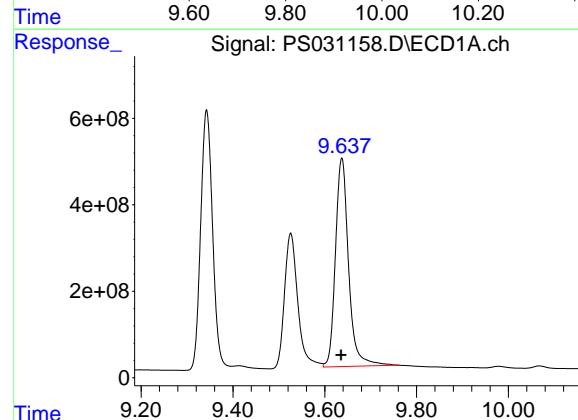
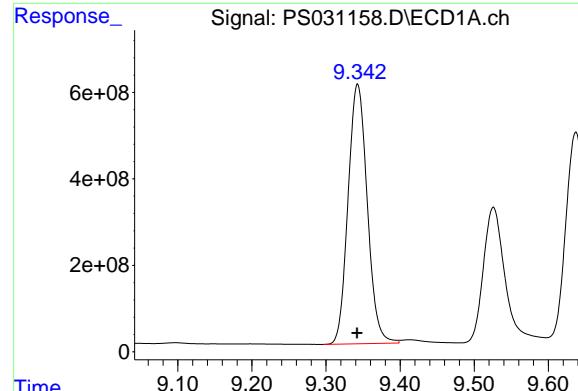
R.T.: 9.026 min
Delta R.T.: 0.002 min
Response: 819019953
Conc: 494.52 ng/ml

#10 Pentachlorophenol

R.T.: 8.763 min
Delta R.T.: 0.000 min
Response: 29107710379
Conc: 507.93 ng/ml

#10 Pentachlorophenol

R.T.: 9.548 min
Delta R.T.: 0.001 min
Response: 19707796449
Conc: 493.17 ng/ml



#11 2,4,5-TP (SILVEX)

R.T.: 9.343 min
 Delta R.T.: 0.000 min
 Response: 10820483706
 Conc: 500.05 ng/ml

Instrument: ECD_S
ClientSampleId: HSTDICC500

Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 07/22/2025
 Supervised By :mohammad ahmed 07/23/2025

#11 2,4,5-TP (SILVEX)

R.T.: 9.930 min
 Delta R.T.: 0.001 min
 Response: 7341058970
 Conc: 494.65 ng/ml

#12 2,4,5-T

R.T.: 9.637 min
 Delta R.T.: 0.001 min
 Response: 9577192088
 Conc: 490.92 ng/ml

#12 2,4,5-T

R.T.: 10.357 min
 Delta R.T.: 0.001 min
 Response: 6973310939
 Conc: 492.59 ng/ml

#13 2,4-DB

R.T.: 10.214 min
 Delta R.T.: 0.002 min
 Response: 1431511568
 Conc: 483.19 ng/ml

Instrument: ECD_S
ClientSampleId: HSTDICC500

Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 07/22/2025
 Supervised By :mohammad ahmed 07/23/2025

#13 2,4-DB

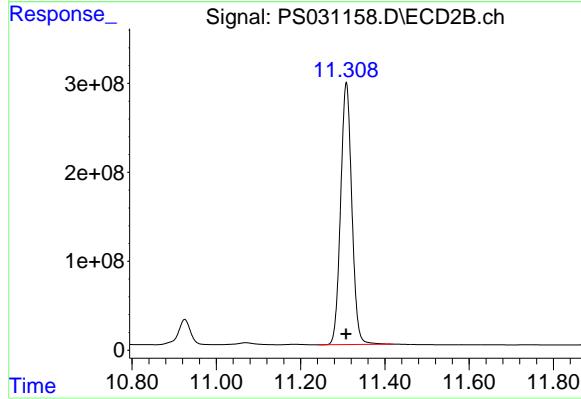
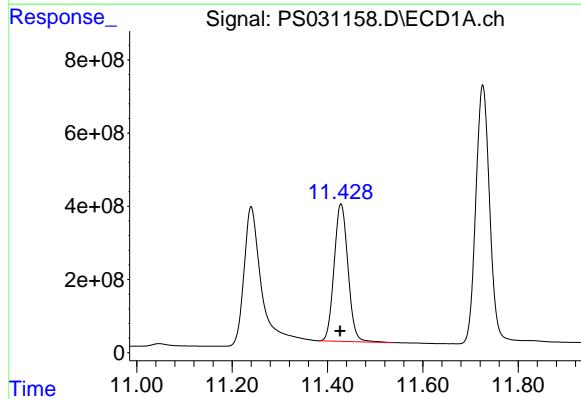
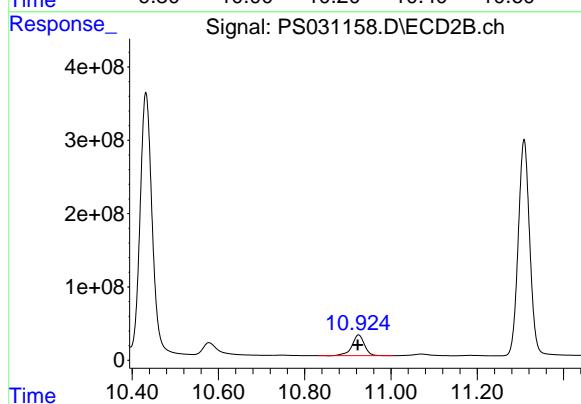
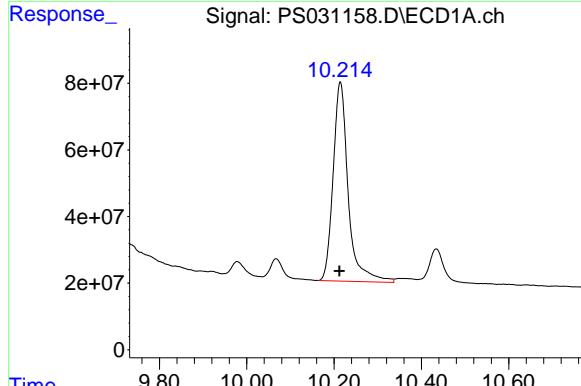
R.T.: 10.925 min
 Delta R.T.: 0.002 min
 Response: 570663468
 Conc: 493.14 ng/ml

#14 DINOSEB

R.T.: 11.428 min
 Delta R.T.: 0.002 min
 Response: 7542802456
 Conc: 489.22 ng/ml

#14 DINOSEB

R.T.: 11.309 min
 Delta R.T.: 0.000 min
 Response: 5427075463
 Conc: 482.59 ng/ml



#15 Picloram

R.T.: 11.240 min

Delta R.T.: 0.001 min

Response: 9521922595

Conc: 472.97 ng/ml

Instrument:

ECD_S

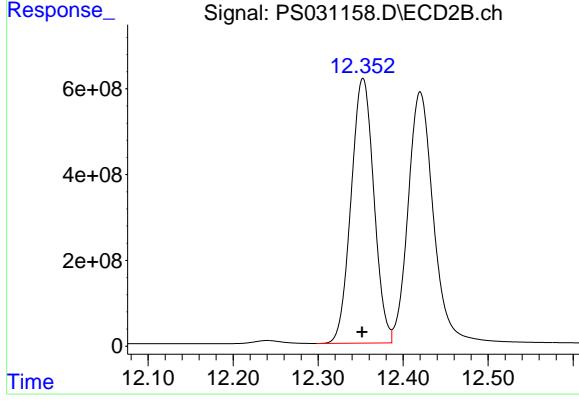
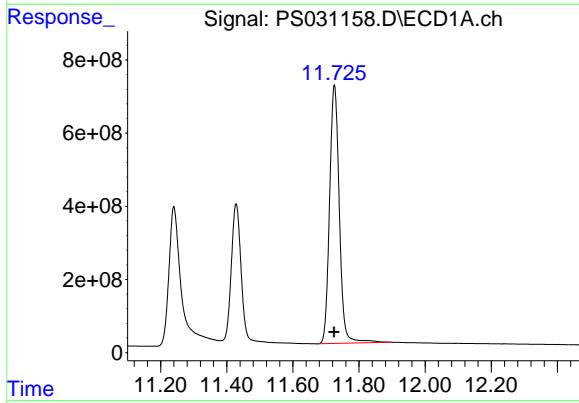
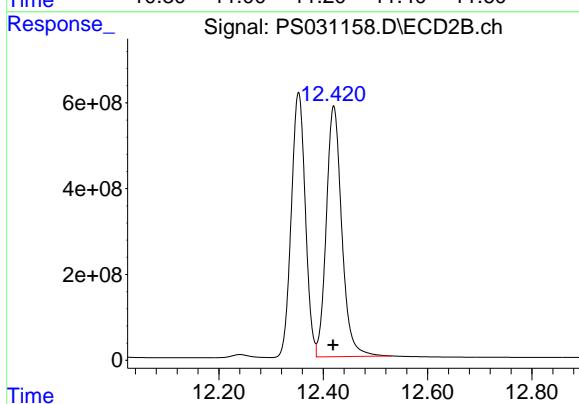
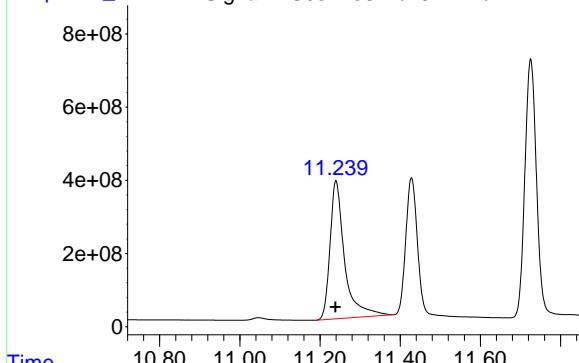
ClientSampleId :

HSTDICC500

Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 07/22/2025

Supervised By :mohammad ahmed 07/23/2025



#15 Picloram

R.T.: 12.420 min

Delta R.T.: 0.002 min

Response: 12061381092

Conc: 474.97 ng/ml

#16 DCPA

R.T.: 11.726 min

Delta R.T.: 0.001 min

Response: 14463775237

Conc: 510.68 ng/ml

#16 DCPA

R.T.: 12.353 min

Delta R.T.: 0.001 min

Response: 11492194583

Conc: 496.24 ng/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072125\
 Data File : PS031159.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 21 Jul 2025 15:51
 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: Jul 22 03:09:56 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 02:56:38 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

4) S 2,4-DCAA 7.325 7.766 3186.5E6 741.3E6 750.000 750.000

Target Compounds

1) T	Dalapon	2.690	2.703	4224.0E6	1901.3E6	682.500	682.500
2) T	3,5-DICHL...	6.487	6.713	3746.2E6	1039.2E6	697.500	697.500
3) T	4-Nitroph...	7.124	7.299	1095.6E6	1217.9E6	682.500	682.500
5) T	DICAMBA	7.514	7.968	11470.2E6	4523.9E6	705.000	705.000
6) T	MCPP	7.695	8.067	725.7E6	150.8E6	70.500	70.500
7) T	MCPA	7.845	8.316	877.2E6	220.4E6	69.750	69.750
8) T	DICHLORPROP	8.224	8.688	2596.9E6	1038.7E6	705.000	705.000
9) T	2,4-D	8.456	9.024	2576.4E6	1167.6E6	705.000	705.000
10) T	Pentachlo...	8.764	9.547	40831.1E6	28472.7E6	712.500	712.500
11) T	2,4,5-TP ...	9.342	9.929	15417.6E6	10574.1E6	712.500	712.500
12) T	2,4,5-T	9.636	10.356	13899.8E6	10086.5E6	712.500	712.500
13) T	2,4-DB	10.213	10.923	2110.9E6	824.5E6	712.500	712.500
14) T	DINOSEB	11.427	11.308	10869.7E6	7928.3E6	705.000	705.000
15) T	Picloram	11.239	12.419	14344.0E6	18093.3E6	712.500	712.500
16) T	DCPA	11.724	12.352	20392.2E6	16674.1E6	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\PS072125\
 Data File : PS031159.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 21 Jul 2025 15:51
 Operator : AR\AJ
 Sample : HSTDICC750
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

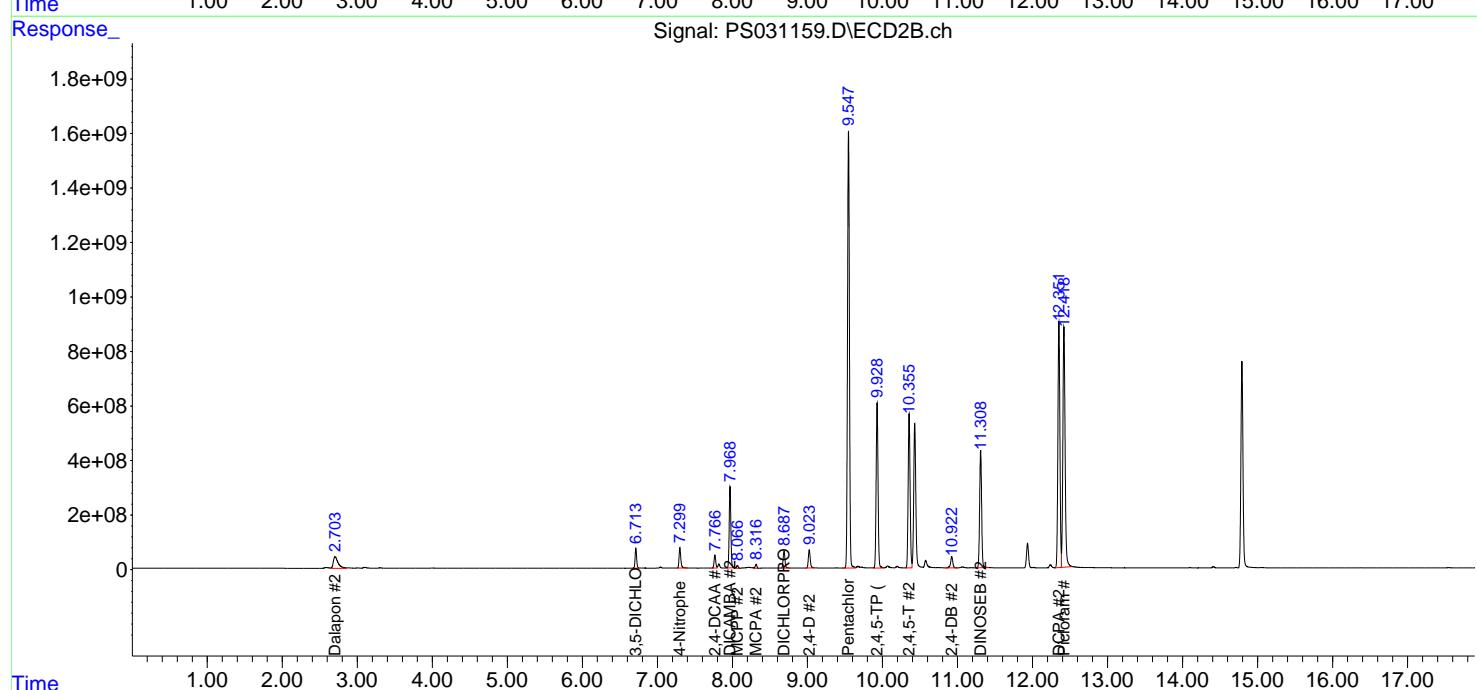
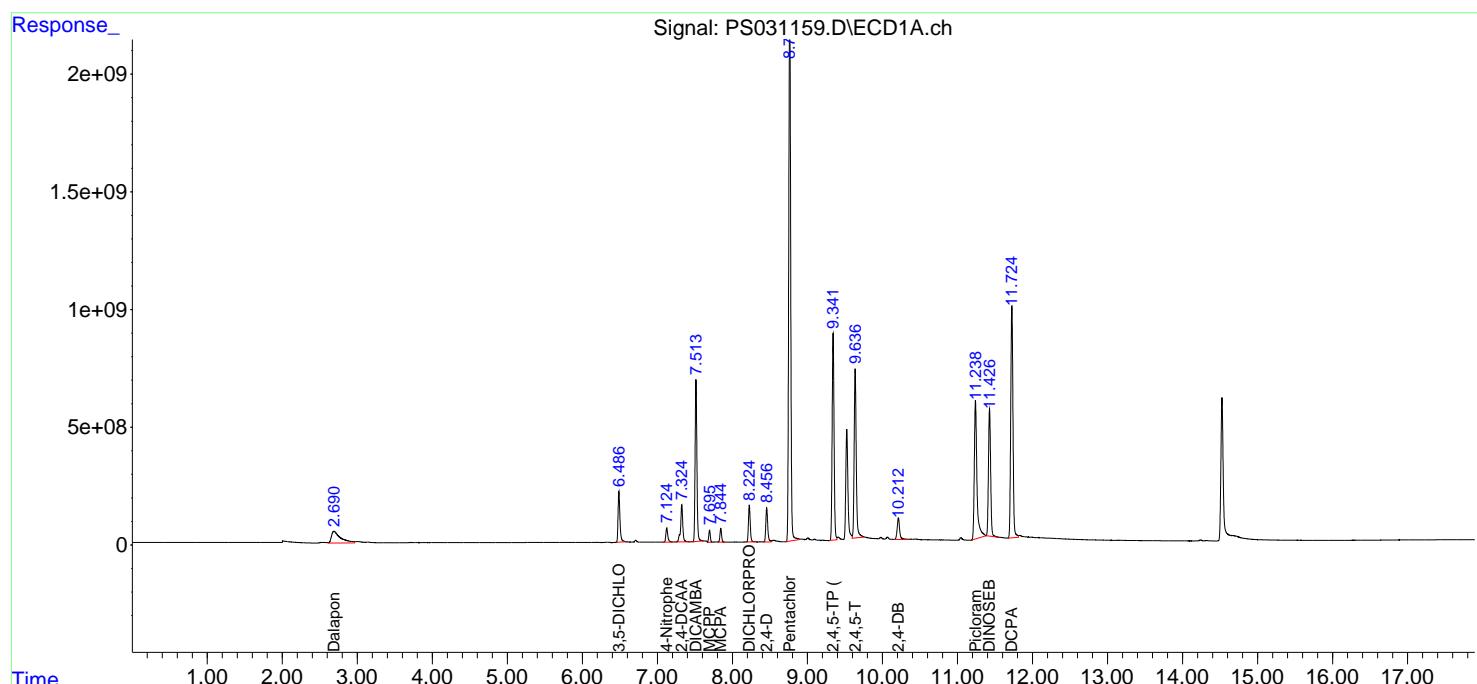
Instrument :
ECD_S
ClientSampleId :
HSTDICC750

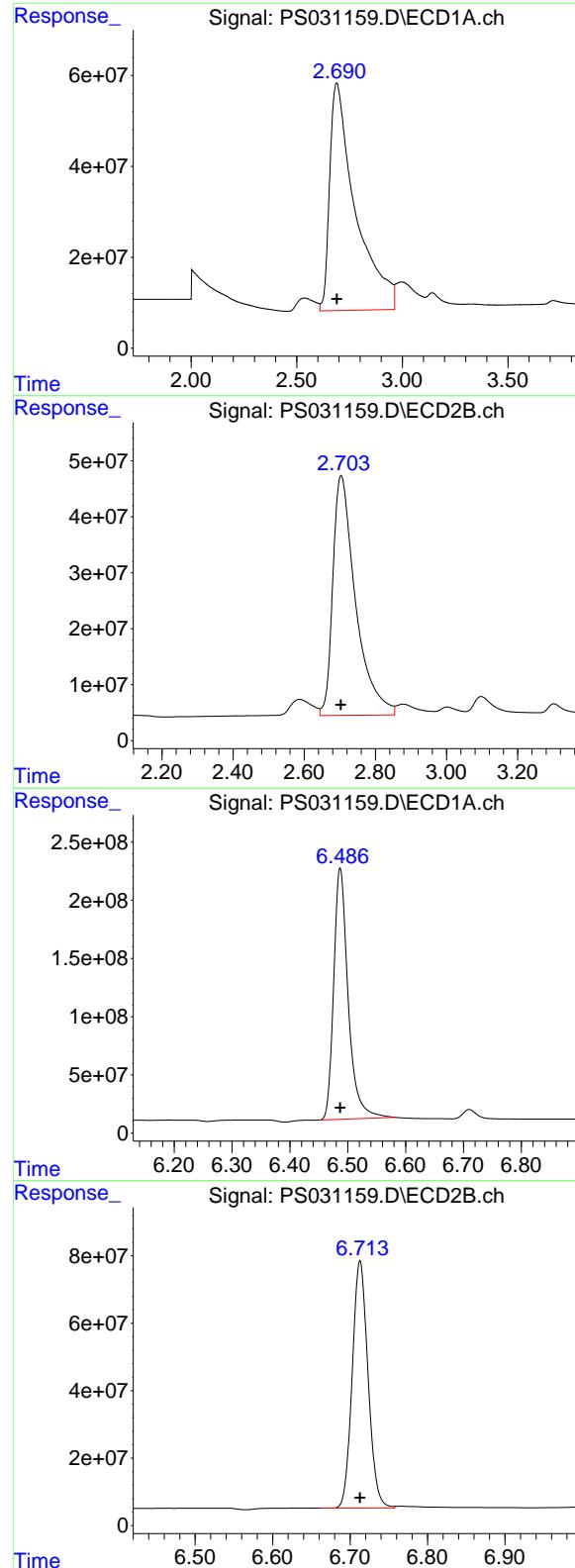
Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jul 22 03:09:56 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 02:56:38 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l

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 0.25 μ m





#1 Dalapon

R.T.: 2.690 min
 Delta R.T.: 0.000 min
 Response: 4224012852
 Conc: 682.50 ng/ml

Instrument: ECD_S
 ClientSampleId: HSTDICC750

#1 Dalapon

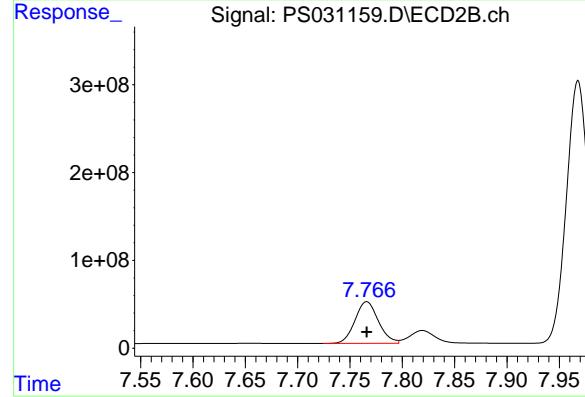
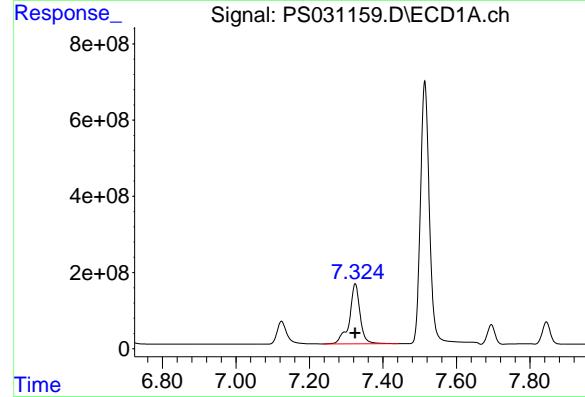
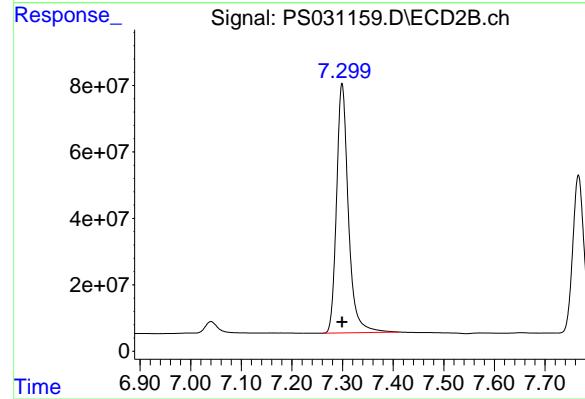
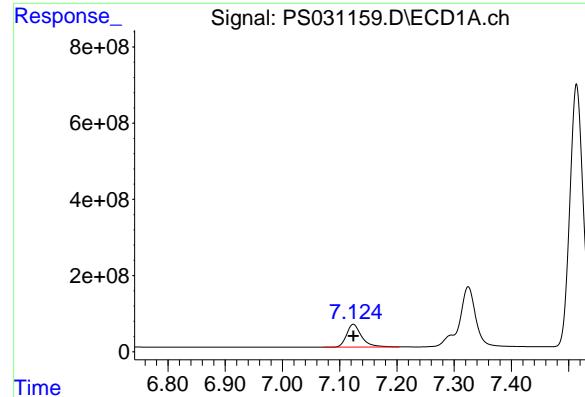
R.T.: 2.703 min
 Delta R.T.: 0.000 min
 Response: 1901336500
 Conc: 682.50 ng/ml

#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.487 min
 Delta R.T.: 0.000 min
 Response: 3746167556
 Conc: 697.50 ng/ml

#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.713 min
 Delta R.T.: 0.000 min
 Response: 1039212665
 Conc: 697.50 ng/ml



#3 4-Nitrophenol

R.T.: 7.124 min
 Delta R.T.: 0.000 min
 Response: 1095621662
 Conc: 682.50 ng/ml

Instrument: ECD_S
 ClientSampleId: HSTDICC750

#3 4-Nitrophenol

R.T.: 7.299 min
 Delta R.T.: 0.000 min
 Response: 1217907727
 Conc: 682.50 ng/ml

#4 2,4-DCAA

R.T.: 7.325 min
 Delta R.T.: 0.000 min
 Response: 3186540835
 Conc: 750.00 ng/ml

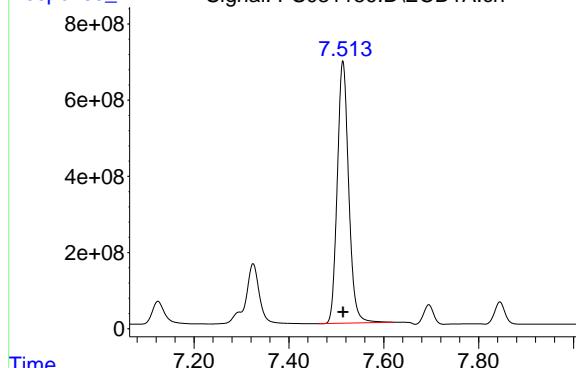
#4 2,4-DCAA

R.T.: 7.766 min
 Delta R.T.: 0.000 min
 Response: 741295289
 Conc: 750.00 ng/ml

#5 DICAMBA

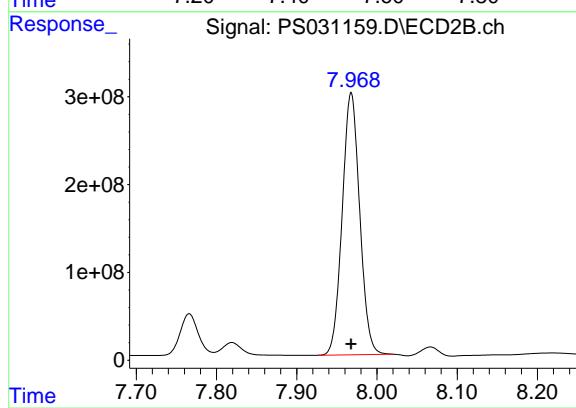
R.T.: 7.514 min
 Delta R.T.: 0.000 min
 Response: 11470202403
 Conc: 705.00 ng/ml

Instrument: ECD_S
ClientSampleId: HSTDICC750



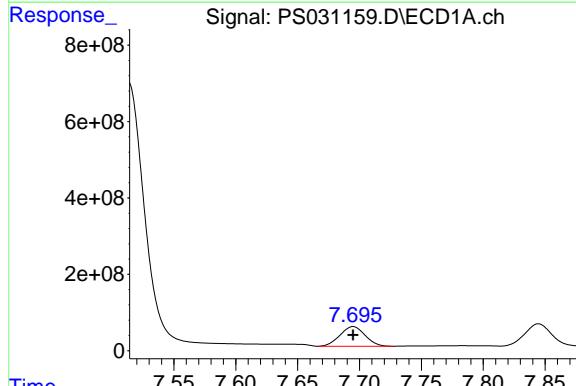
#5 DICAMBA

R.T.: 7.968 min
 Delta R.T.: 0.000 min
 Response: 4523946759
 Conc: 705.00 ng/ml



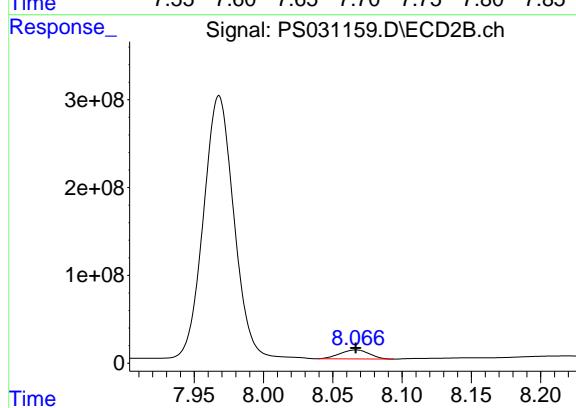
#6 MCPP

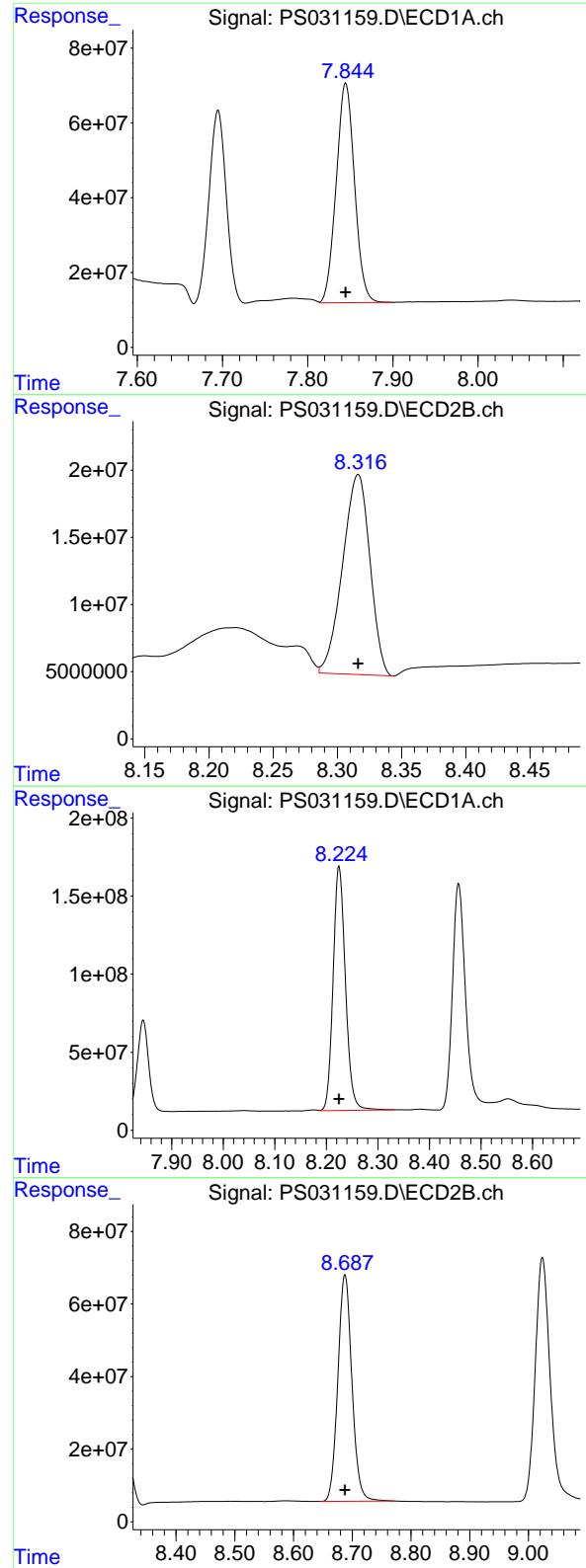
R.T.: 7.695 min
 Delta R.T.: 0.000 min
 Response: 725712614
 Conc: 70.50 ug/ml



#6 MCPP

R.T.: 8.067 min
 Delta R.T.: 0.000 min
 Response: 150759642
 Conc: 70.50 ug/ml





#7 MCPA

R.T.: 7.845 min
 Delta R.T.: 0.000 min
 Response: 877165270
 Conc: 69.75 ug/ml

Instrument: ECD_S
 ClientSampleId: HSTDICC750

#7 MCPA

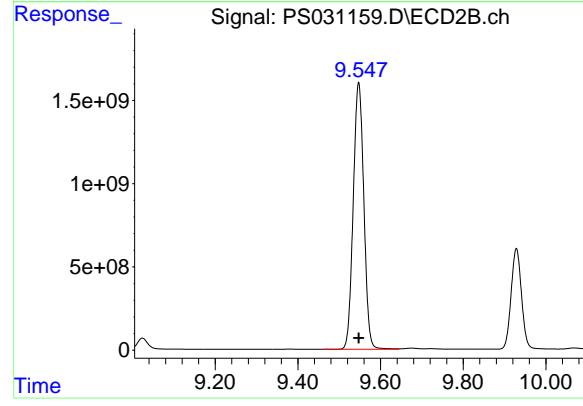
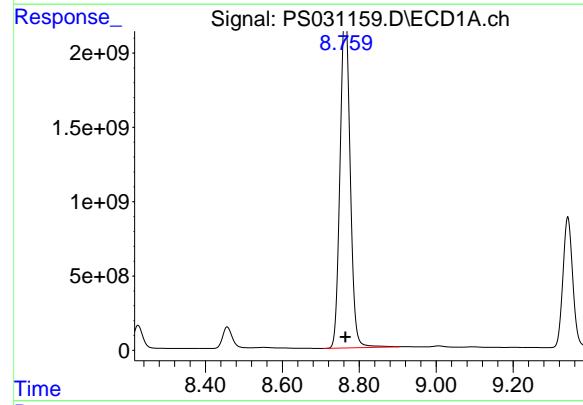
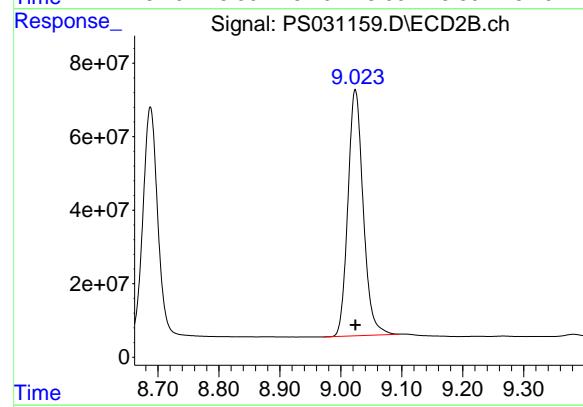
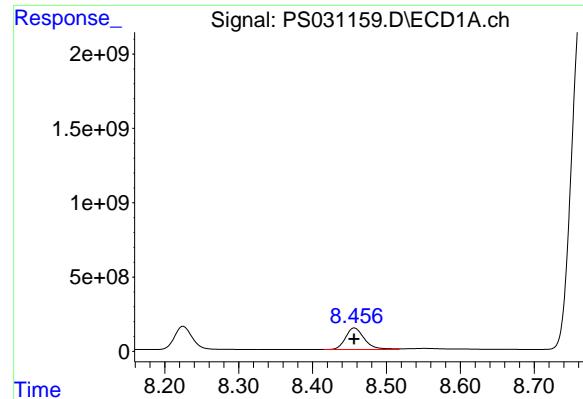
R.T.: 8.316 min
 Delta R.T.: 0.000 min
 Response: 220378065
 Conc: 69.75 ug/ml

#8 DICHLORPROP

R.T.: 8.224 min
 Delta R.T.: 0.000 min
 Response: 2596948193
 Conc: 705.00 ng/ml

#8 DICHLORPROP

R.T.: 8.688 min
 Delta R.T.: 0.000 min
 Response: 1038723007
 Conc: 705.00 ng/ml



#9 2,4-D

R.T.: 8.456 min
 Delta R.T.: 0.000 min
 Response: 2576397088
 Conc: 705.00 ng/ml

Instrument: ECD_S
 ClientSampleId: HSTDICC750

#9 2,4-D

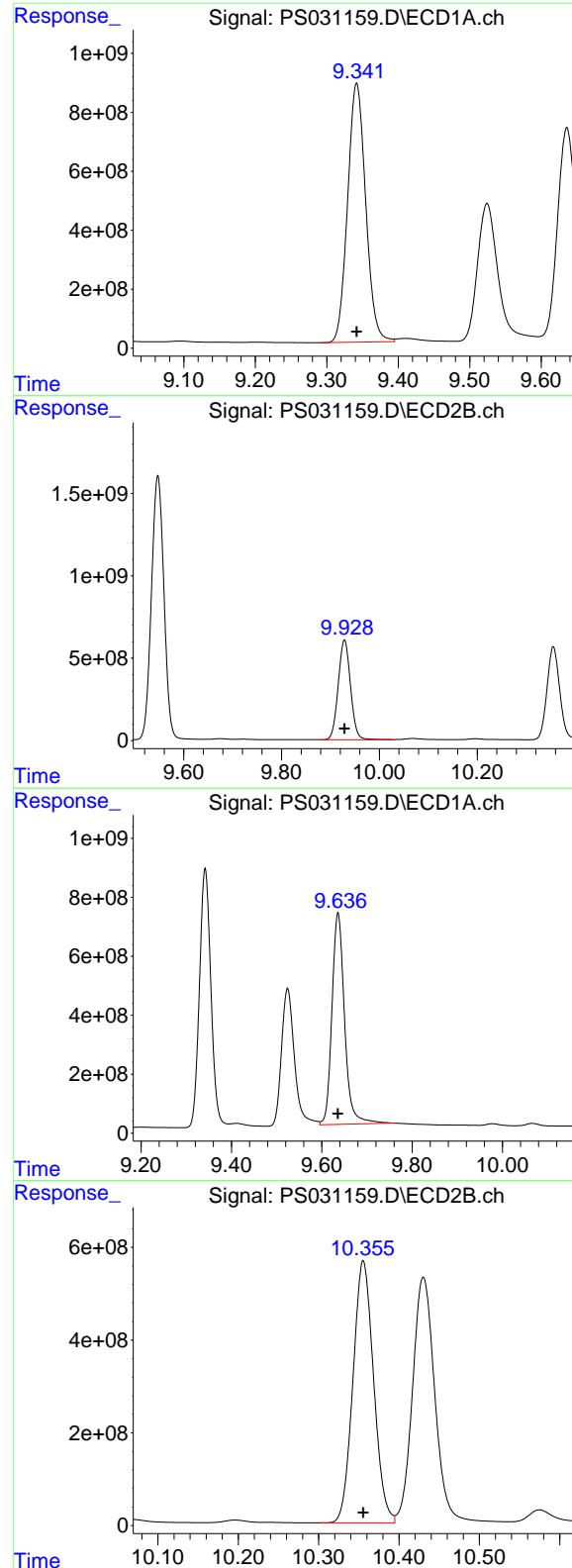
R.T.: 9.024 min
 Delta R.T.: 0.000 min
 Response: 1167624034
 Conc: 705.00 ng/ml

#10 Pentachlorophenol

R.T.: 8.764 min
 Delta R.T.: 0.000 min
 Response: 40831115392
 Conc: 712.50 ng/ml

#10 Pentachlorophenol

R.T.: 9.547 min
 Delta R.T.: 0.000 min
 Response: 28472689879
 Conc: 712.50 ng/ml



#11 2,4,5-TP (SILVEX)

R.T.: 9.342 min
 Delta R.T.: 0.000 min
 Response: 15417581775
 Conc: 712.50 ng/ml

Instrument: ECD_S
 ClientSampleId: HSTDICC750

#11 2,4,5-TP (SILVEX)

R.T.: 9.929 min
 Delta R.T.: 0.000 min
 Response: 10574141453
 Conc: 712.50 ng/ml

#12 2,4,5-T

R.T.: 9.636 min
 Delta R.T.: 0.000 min
 Response: 13899798654
 Conc: 712.50 ng/ml

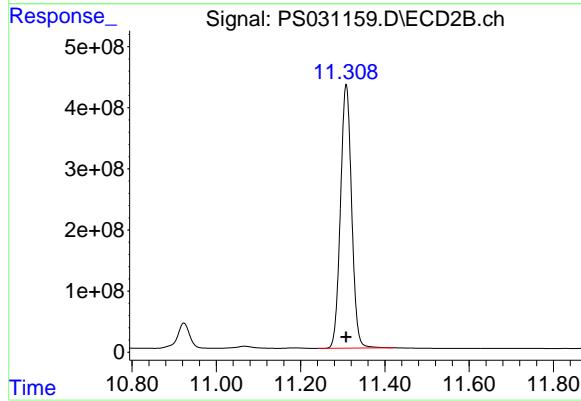
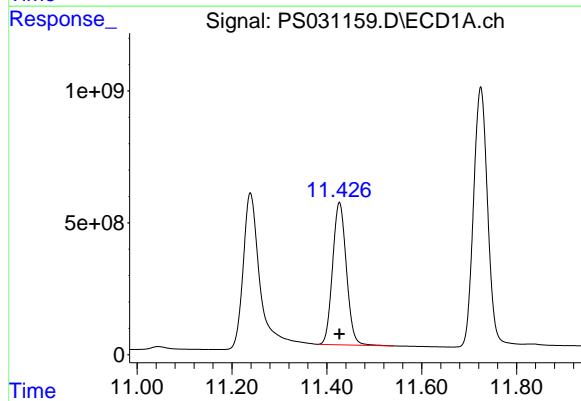
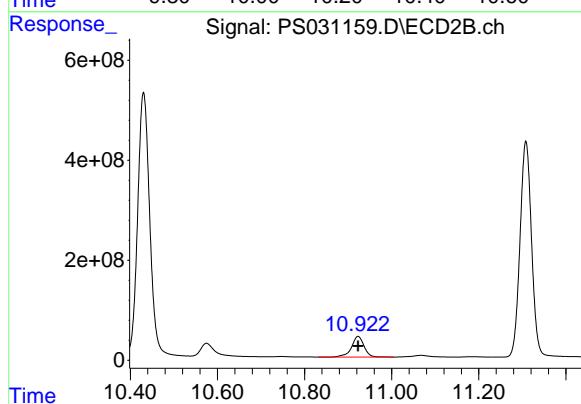
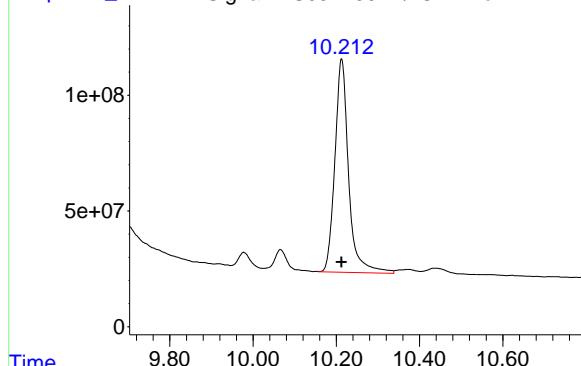
#12 2,4,5-T

R.T.: 10.356 min
 Delta R.T.: 0.000 min
 Response: 10086489003
 Conc: 712.50 ng/ml

#13 2,4-DB

R.T.: 10.213 min
 Delta R.T.: 0.000 min
 Response: 2110870159
 Conc: 712.50 ng/ml

Instrument: ECD_S
 ClientSampleId: HSTDICC750



#13 2,4-DB

R.T.: 10.923 min
 Delta R.T.: 0.000 min
 Response: 824500710
 Conc: 712.50 ng/ml

#14 DINOSEB

R.T.: 11.427 min
 Delta R.T.: 0.000 min
 Response: 10869651077
 Conc: 705.00 ng/ml

#14 DINOSEB

R.T.: 11.308 min
 Delta R.T.: 0.000 min
 Response: 7928284747
 Conc: 705.00 ng/ml

#15 Picloram

R.T.: 11.239 min

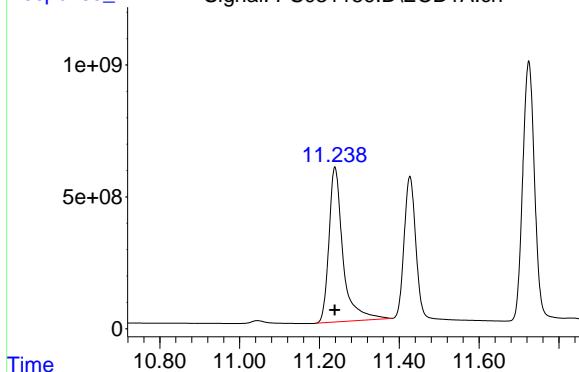
Delta R.T.: 0.000 min

Instrument: ECD_S

Response: 14344036300

Conc: 712.50 ng/ml

ClientSampleId: HSTDICC750



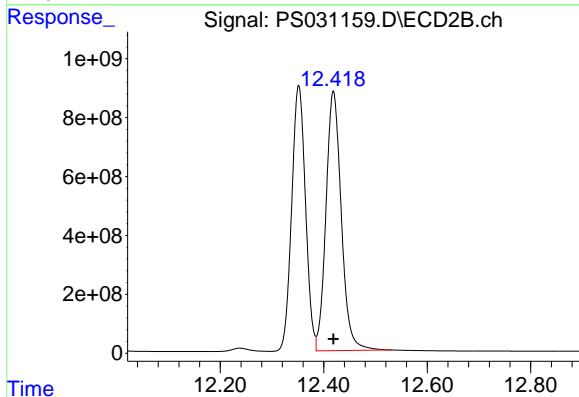
#15 Picloram

R.T.: 12.419 min

Delta R.T.: 0.000 min

Response: 18093254692

Conc: 712.50 ng/ml



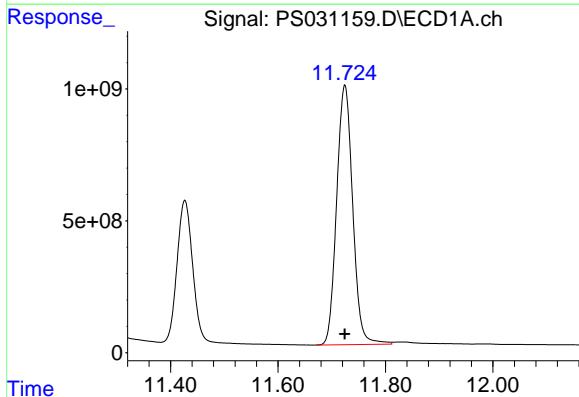
#16 DCPA

R.T.: 11.724 min

Delta R.T.: 0.000 min

Response: 20392160883

Conc: 720.00 ng/ml



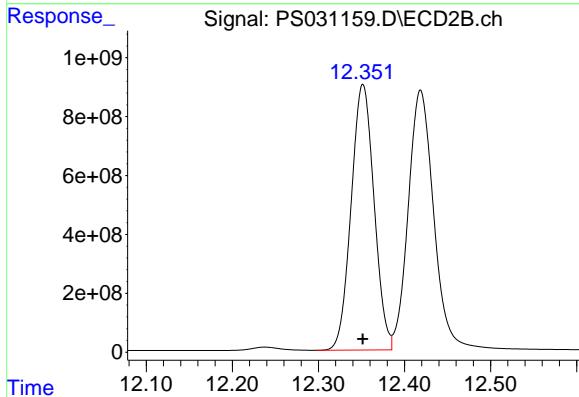
#16 DCPA

R.T.: 12.352 min

Delta R.T.: 0.000 min

Response: 16674128017

Conc: 720.00 ng/ml



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072125\
 Data File : PS031160.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 21 Jul 2025 16:15
 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: Jul 22 03:10:09 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 02:56:38 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 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 0.25 μ m

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

4) S 2,4-DCAA 7.325 7.767 4081.1E6 963.1E6 960.548 974.410

Target Compounds

1) T	Dalapon	2.689	2.704	5453.5E6	2469.7E6	881.153	886.533
2) T	3,5-DICHL...	6.488	6.713	4802.5E6	1352.4E6	894.170	907.714
3) T	4-Nitroph...	7.124	7.299	1421.4E6	1607.0E6	885.429	900.562
5) T	DICAMBA	7.514	7.969	14833.0E6	5935.2E6	911.687	924.924
6) T	MCPP	7.697	8.069	988.3E6	202.3E6	96.010	94.579
7) T	MCPA	7.847	8.319	1186.7E6	292.4E6	94.362	92.559
8) T	DICHLORPROP	8.226	8.688	3335.1E6	1341.1E6	905.388	910.253
9) T	2,4-D	8.458	9.025	3339.3E6	1508.0E6	913.771	910.492
10) T	Pentachlo...	8.766	9.548	47049.8E6	36703.3E6	821.015	918.463
11) T	2,4,5-TP ...	9.343	9.929	19814.3E6	13630.7E6	915.689	918.454
12) T	2,4,5-T	9.637	10.356	18055.2E6	13055.2E6	925.505	922.208
13) T	2,4-DB	10.214	10.924	2771.7E6	1069.0E6	935.560	923.814
14) T	DINOSEB	11.428	11.308	14020.1E6	10337.9E6	909.338	919.272
15) T	Picloram	11.239	12.419	19111.4E6	23828.6E6	949.306	938.353
16) T	DCPA	11.725	12.353	25980.1E6	21487.8E6	917.296	927.856

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072125\
 Data File : PS031160.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 21 Jul 2025 16:15
 Operator : AR\AJ
 Sample : HSTDICC1000
 Misc :
 ALS Vial : 6 Sample Multiplier: 1

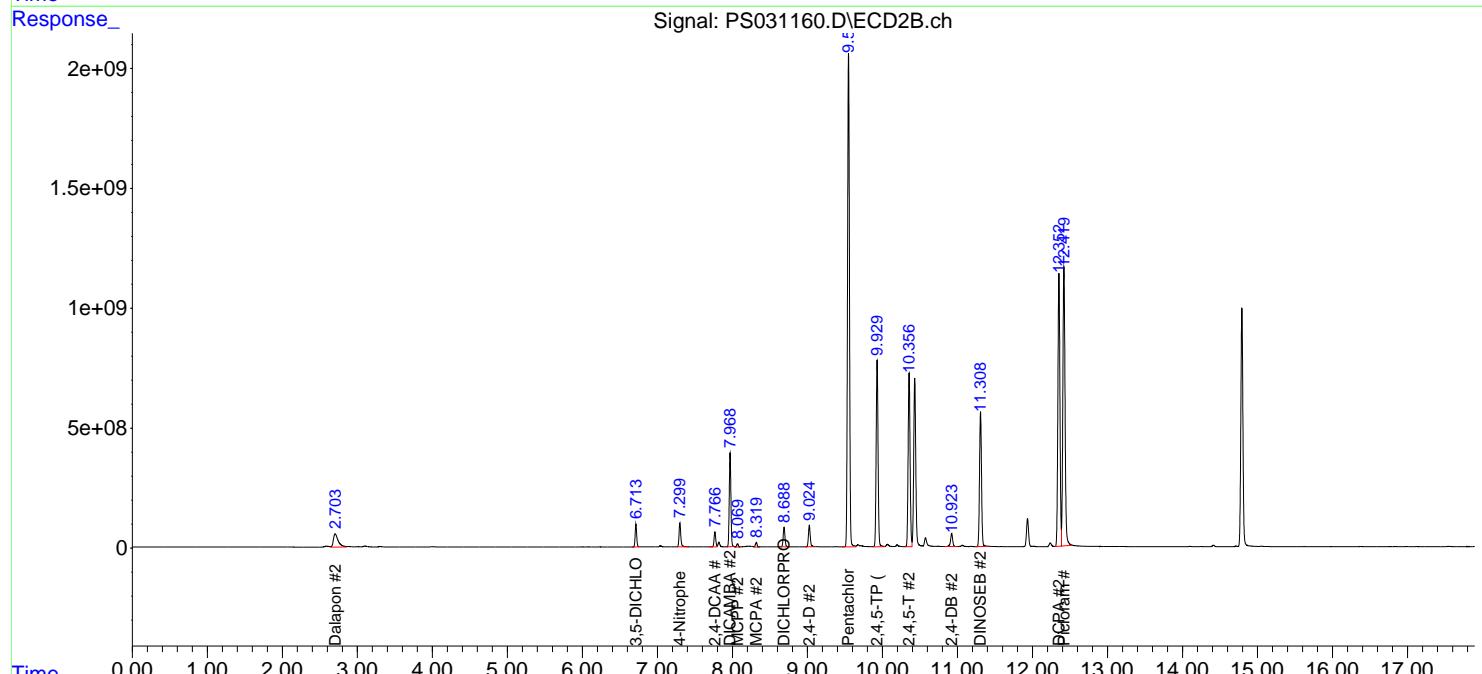
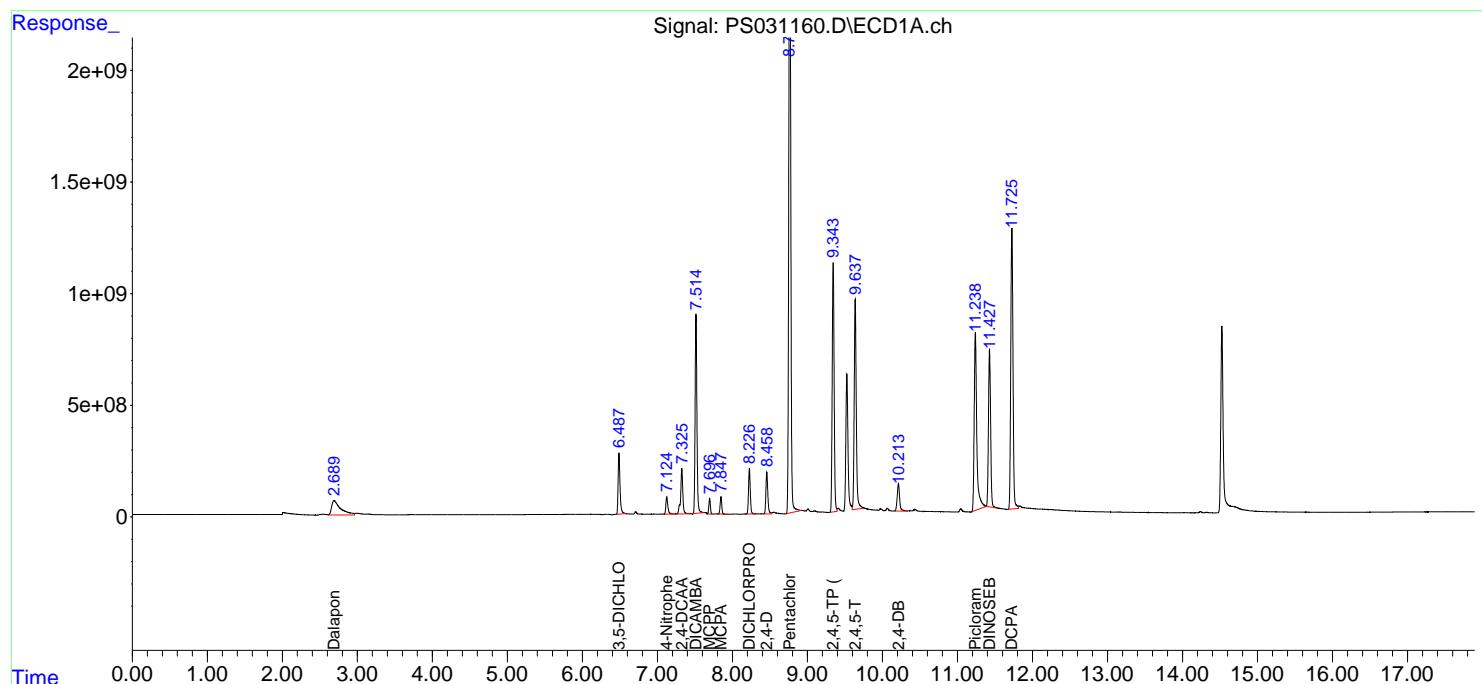
Instrument :
ECD_S
ClientSampleId :
HSTDICC1000

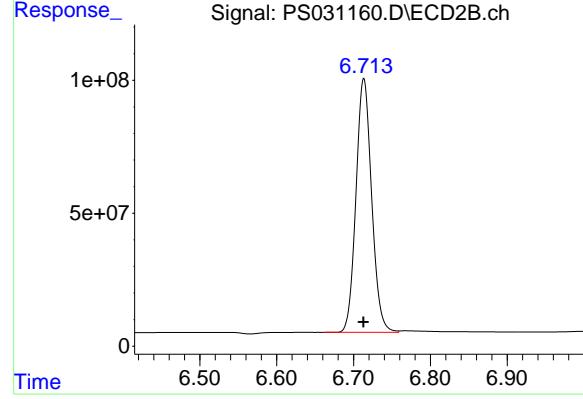
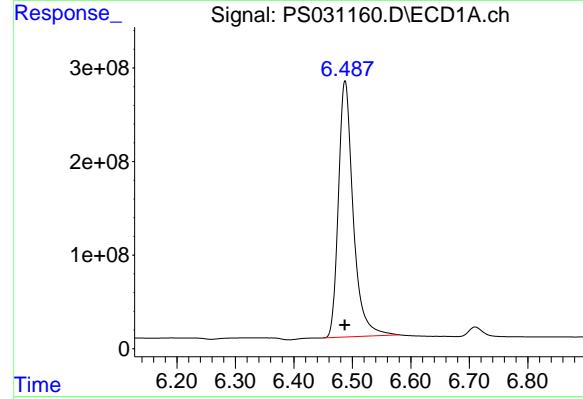
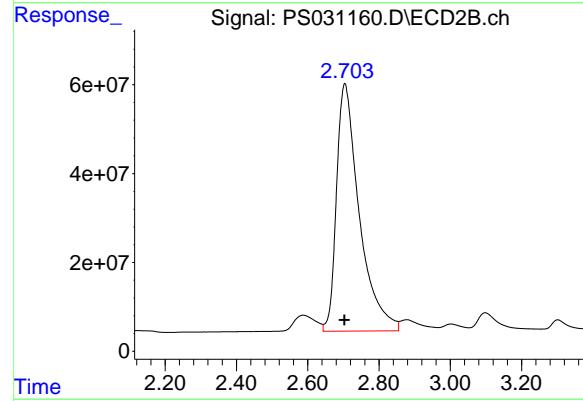
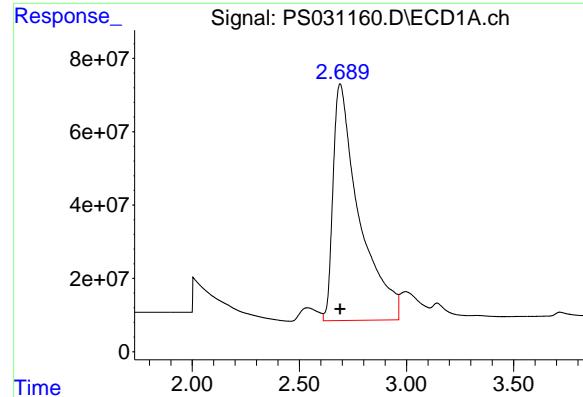
Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jul 22 03:10:09 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 02:56:38 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l

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 0.25 μ m





#1 Dalapon

R.T.: 2.689 min
Delta R.T.: 0.000 min
Response: 5453482387
Conc: 881.15 ng/ml

Instrument : ECD_S
ClientSampleId : HSTDICC1000

#1 Dalapon

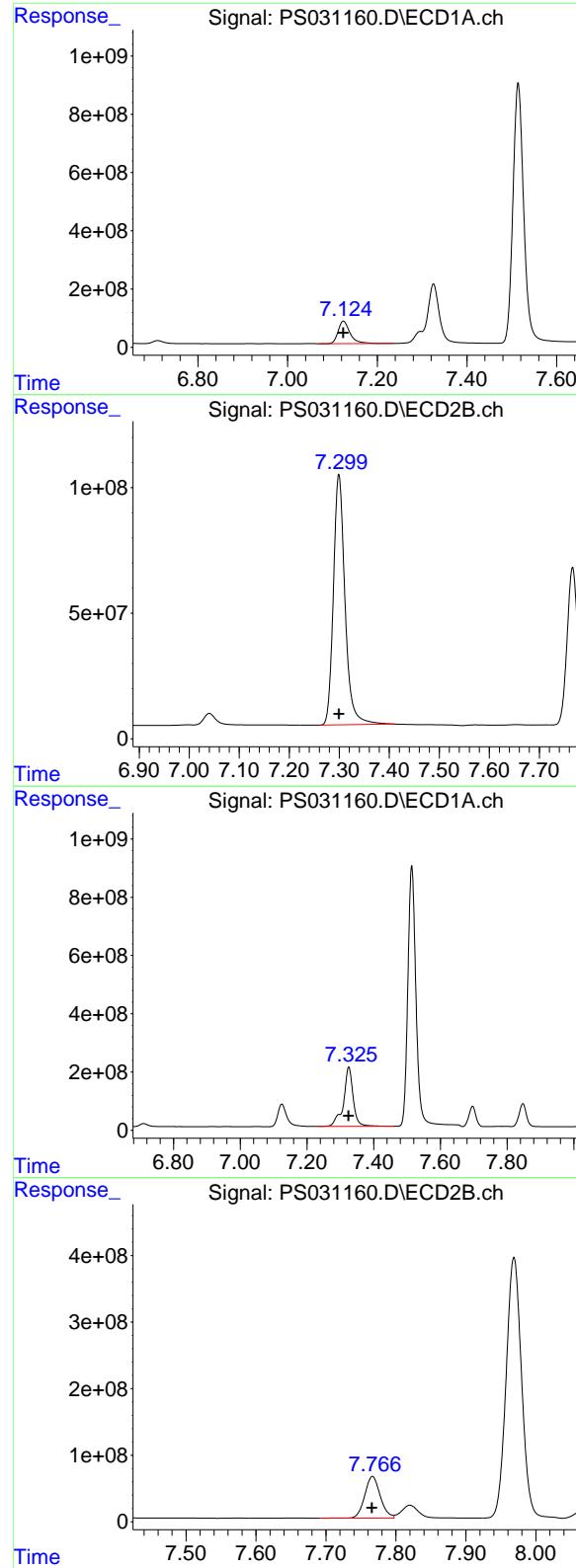
R.T.: 2.704 min
Delta R.T.: 0.000 min
Response: 2469740297
Conc: 886.53 ng/ml

#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.488 min
Delta R.T.: 0.000 min
Response: 4802454215
Conc: 894.17 ng/ml

#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.713 min
Delta R.T.: 0.000 min
Response: 1352413139
Conc: 907.71 ng/ml



#3 4-Nitrophenol

R.T.: 7.124 min
 Delta R.T.: 0.000 min
 Response: 1421384436
 Conc: 885.43 ng/ml

Instrument: ECD_S
ClientSampleId: HSTDICC1000

#3 4-Nitrophenol

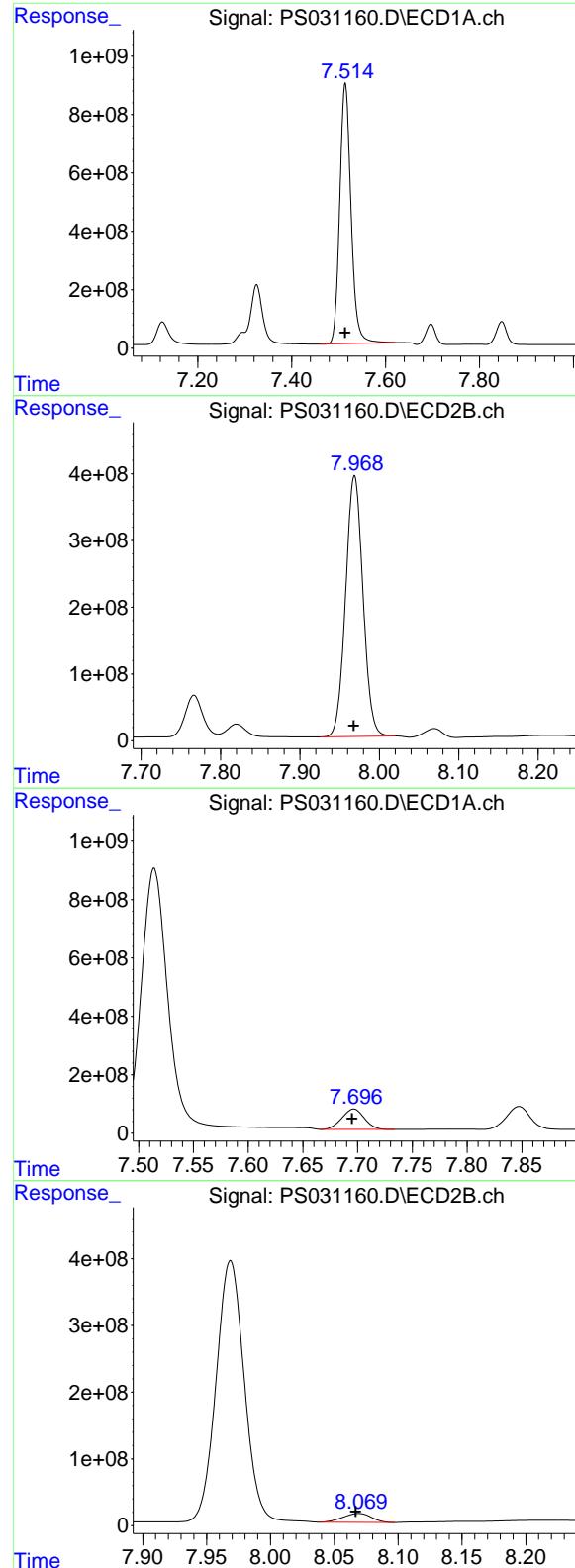
R.T.: 7.299 min
 Delta R.T.: 0.000 min
 Response: 1607035149
 Conc: 900.56 ng/ml

#4 2,4-DCAA

R.T.: 7.325 min
 Delta R.T.: 0.000 min
 Response: 4081100306
 Conc: 960.55 ng/ml

#4 2,4-DCAA

R.T.: 7.767 min
 Delta R.T.: 0.000 min
 Response: 963100505
 Conc: 974.41 ng/ml



#5 DICAMBA

R.T.: 7.514 min
Delta R.T.: 0.000 min
Response: 14832958607
Conc: 911.69 ng/ml

Instrument: ECD_S
ClientSampleId: HSTDICCC1000

#5 DICAMBA

R.T.: 7.969 min
Delta R.T.: 0.000 min
Response: 5935186825
Conc: 924.92 ng/ml

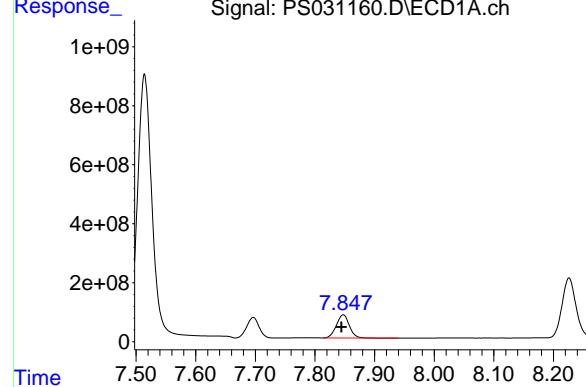
#6 MCPP

R.T.: 7.697 min
Delta R.T.: 0.002 min
Response: 988309419
Conc: 96.01 ug/ml

#6 MCPP

R.T.: 8.069 min
Delta R.T.: 0.003 min
Response: 202250812
Conc: 94.58 ug/ml

#7 MCPA



R.T.: 7.847 min
Delta R.T.: 0.003 min
Response: 1186681895
Conc: 94.36 ug/ml

Instrument: ECD_S
ClientSampleId: HSTDICC1000

#7 MCPA

R.T.: 8.319 min
Delta R.T.: 0.003 min
Response: 292445492
Conc: 92.56 ug/ml

#8 DICHLORPROP

R.T.: 8.226 min
Delta R.T.: 0.002 min
Response: 3335100839
Conc: 905.39 ng/ml

#8 DICHLORPROP

R.T.: 8.688 min
Delta R.T.: 0.000 min
Response: 1341135683
Conc: 910.25 ng/ml

#7 MCPA

R.T.: 7.847 min
Delta R.T.: 0.003 min
Response: 1186681895
Conc: 94.36 ug/ml

Instrument: ECD_S
ClientSampleId: HSTDICC1000

#7 MCPA

R.T.: 8.319 min
Delta R.T.: 0.003 min
Response: 292445492
Conc: 92.56 ug/ml

#8 DICHLORPROP

R.T.: 8.226 min
Delta R.T.: 0.002 min
Response: 3335100839
Conc: 905.39 ng/ml

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R.T.: 8.688 min
Delta R.T.: 0.000 min
Response: 1341135683
Conc: 910.25 ng/ml

#7 MCPA

R.T.: 7.847 min
Delta R.T.: 0.003 min
Response: 1186681895
Conc: 94.36 ug/ml

Instrument: ECD_S
ClientSampleId: HSTDICC1000

#7 MCPA

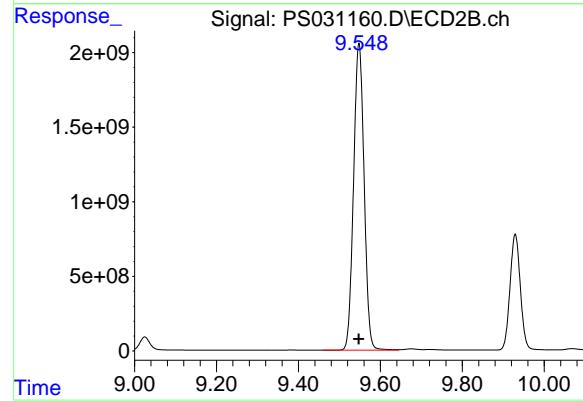
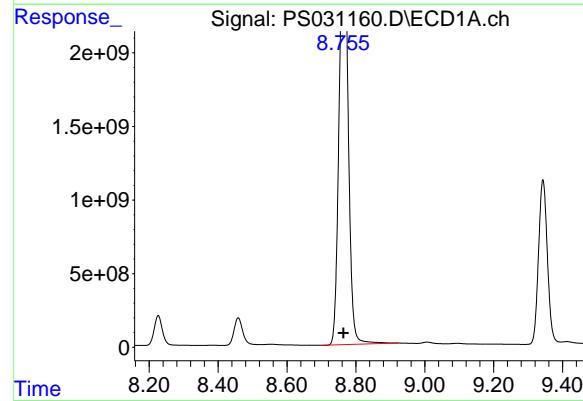
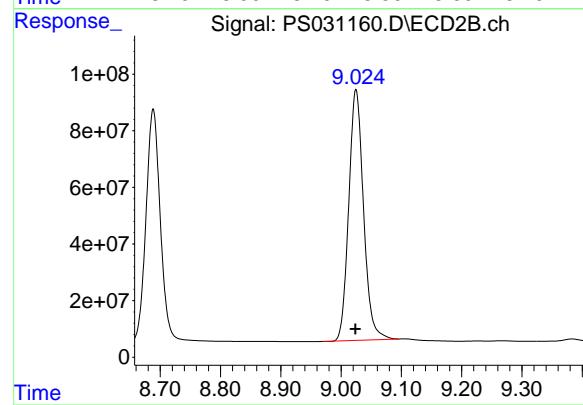
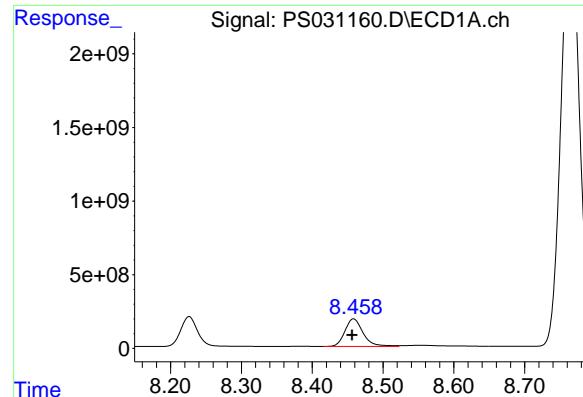
R.T.: 8.319 min
Delta R.T.: 0.003 min
Response: 292445492
Conc: 92.56 ug/ml

#8 DICHLORPROP

R.T.: 8.226 min
Delta R.T.: 0.002 min
Response: 3335100839
Conc: 905.39 ng/ml

#8 DICHLORPROP

R.T.: 8.688 min
Delta R.T.: 0.000 min
Response: 1341135683
Conc: 910.25 ng/ml



#9 2,4-D

R.T.: 8.458 min
Delta R.T.: 0.002 min
Response: 3339344621
Conc: 913.77 ng/ml

Instrument: ECD_S
ClientSampleId: HSTDICC1000

#9 2,4-D

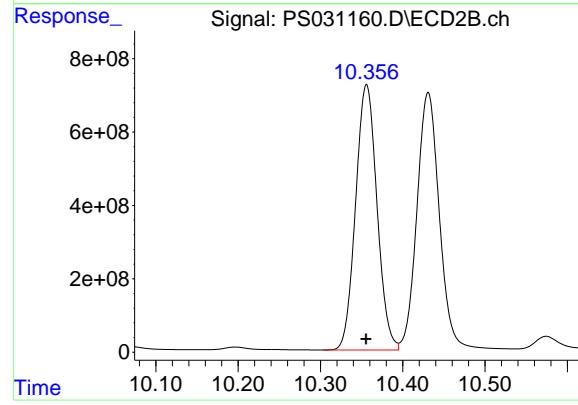
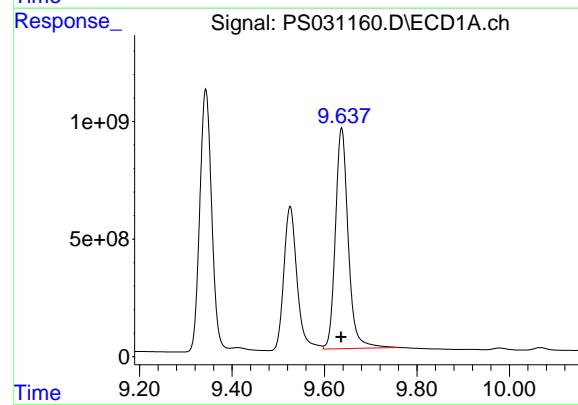
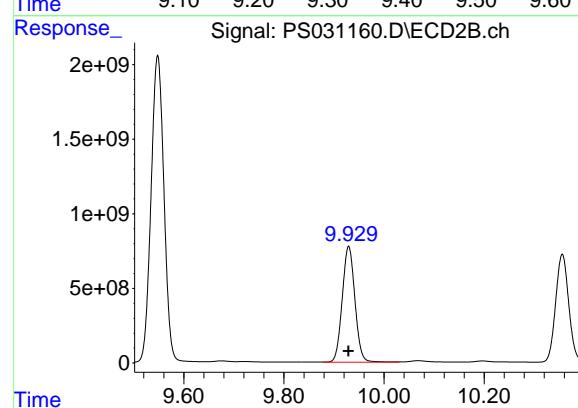
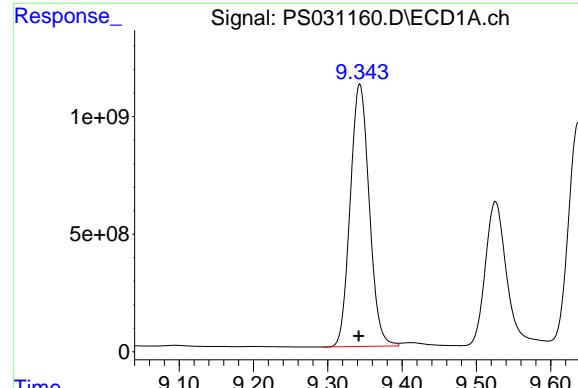
R.T.: 9.025 min
Delta R.T.: 0.001 min
Response: 1507960462
Conc: 910.49 ng/ml

#10 Pentachlorophenol

R.T.: 8.766 min
Delta R.T.: 0.002 min
Response: 47049761792
Conc: 821.01 ng/ml

#10 Pentachlorophenol

R.T.: 9.548 min
Delta R.T.: 0.000 min
Response: 36703311197
Conc: 918.46 ng/ml



#11 2,4,5-TP (SILVEX)

R.T.: 9.343 min
Delta R.T.: 0.001 min
Instrument: ECD_S
Response: 19814320460
Conc: 915.69 ng/ml
ClientSampleId: HSTDICC1000

#11 2,4,5-TP (SILVEX)

R.T.: 9.929 min
Delta R.T.: 0.000 min
Response: 13630690259
Conc: 918.45 ng/ml

#12 2,4,5-T

R.T.: 9.637 min
Delta R.T.: 0.001 min
Response: 18055208033
Conc: 925.51 ng/ml

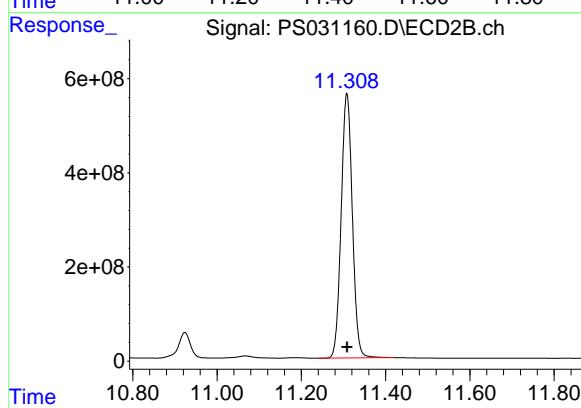
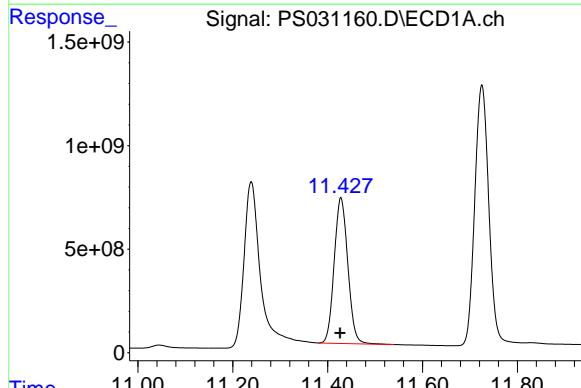
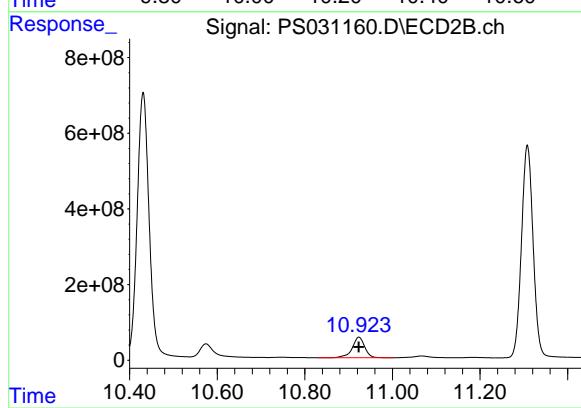
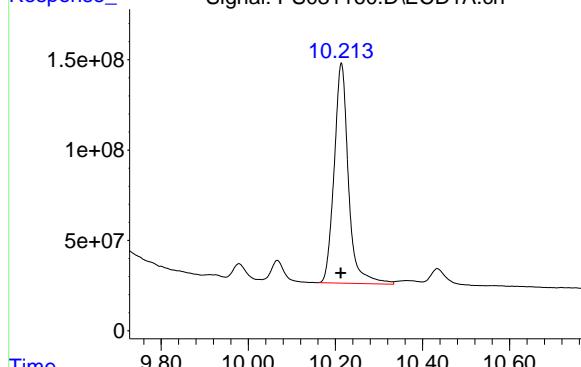
#12 2,4,5-T

R.T.: 10.356 min
Delta R.T.: 0.000 min
Response: 13055215548
Conc: 922.21 ng/ml

#13 2,4-DB

R.T.: 10.214 min
 Delta R.T.: 0.001 min
 Response: 2771712245
 Conc: 935.56 ng/ml

Instrument: ECD_S
ClientSampleId: HSTDICC1000



#13 2,4-DB

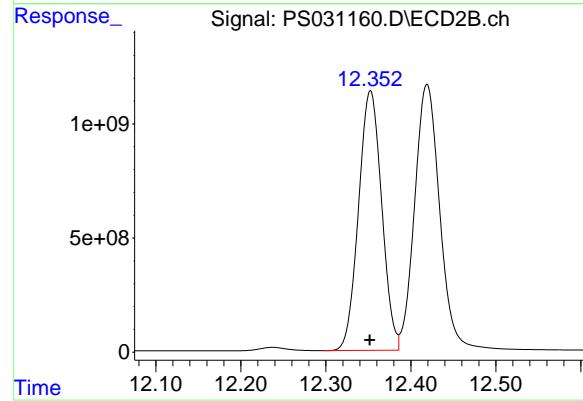
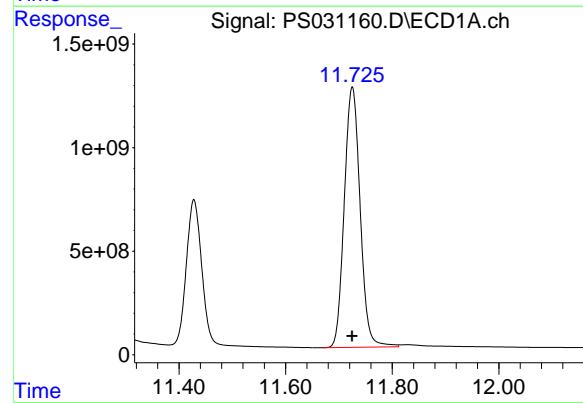
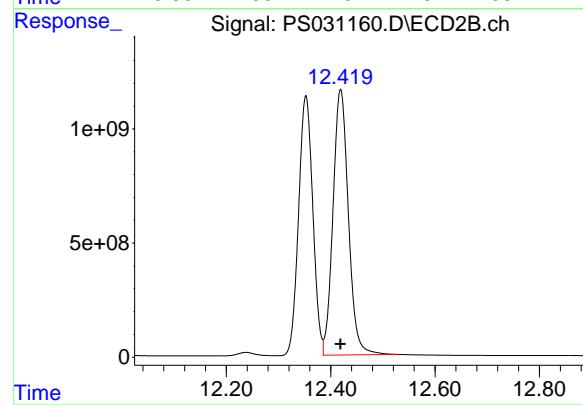
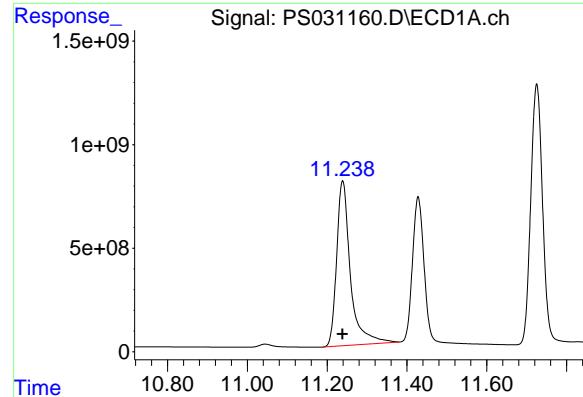
R.T.: 10.924 min
 Delta R.T.: 0.000 min
 Response: 1069032150
 Conc: 923.81 ng/ml

#14 DINOSEB

R.T.: 11.428 min
 Delta R.T.: 0.001 min
 Response: 14020122881
 Conc: 909.34 ng/ml

#14 DINOSEB

R.T.: 11.308 min
 Delta R.T.: 0.000 min
 Response: 10337937996
 Conc: 919.27 ng/ml



#15 Picloram

R.T.: 11.239 min
 Delta R.T.: 0.000 min
 Response: 19111405619
 Conc: 949.31 ng/ml

Instrument: ECD_S
 ClientSampleId: HSTDICC1000

#15 Picloram

R.T.: 12.419 min
 Delta R.T.: 0.000 min
 Response: 23828587760
 Conc: 938.35 ng/ml

#16 DCPA

R.T.: 11.725 min
 Delta R.T.: 0.000 min
 Response: 25980070197
 Conc: 917.30 ng/ml

#16 DCPA

R.T.: 12.353 min
 Delta R.T.: 0.000 min
 Response: 21487768861
 Conc: 927.86 ng/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072125\
 Data File : PS031161.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 21 Jul 2025 16:39
 Operator : AR\AJ
 Sample : HSTDICC1500
 Misc :
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jul 22 03:10:23 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 02:56:38 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 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 0.25 μ m

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

4) S 2,4-DCAA 7.325 7.766 5875.5E6 1404.3E6 1382.891 1420.834

Target Compounds

1) T	Dalapon	2.690	2.704	7938.8E6	3614.4E6	1282.720	1297.406
2) T	3,5-DICHL...	6.487	6.713	6892.0E6	2008.4E6	1283.221	1348.011
3) T	4-Nitroph...	7.124	7.299	2109.3E6	2405.8E6	1313.968	1348.194
5) T	DICAMBA	7.514	7.968	21449.9E6	8752.1E6	1318.388	1363.903
6) T	MCPP	7.700	8.072	1564.7E6	297.8E6	152.005	139.276
7) T	MCPA	7.851	8.323	1839.8E6	444.0E6	146.296	140.535
8) T	DICHLORPROP	8.226	8.688	4846.5E6	1942.3E6	1315.694	1318.255
9) T	2,4-D	8.457	9.024	4868.8E6	2197.2E6	1332.281	1326.671
10) T	Pentachlo...	8.770	9.550	55402.7E6	46681.0E6	966.773	1168.145
11) T	2,4,5-TP ...	9.342	9.929	28356.6E6	19507.8E6	1310.459	1314.463
12) T	2,4,5-T	9.636	10.356	26262.2E6	18777.4E6	1346.194	1326.415
13) T	2,4-DB	10.212	10.924	4222.7E6	1570.0E6	1425.313	1356.718
14) T	DINOSEB	11.427	11.308	20292.3E6	15081.1E6	1316.146	1341.040
15) T	Picloram	11.238	12.419	29336.1E6	34911.0E6	1457.188	1374.771
16) T	DCPA	11.725	12.353	37119.0E6	30414.9E6	1310.584	1313.335

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072125\
 Data File : PS031161.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 21 Jul 2025 16:39
 Operator : AR\AJ
 Sample : HSTDICC1500
 Misc :
 ALS Vial : 7 Sample Multiplier: 1

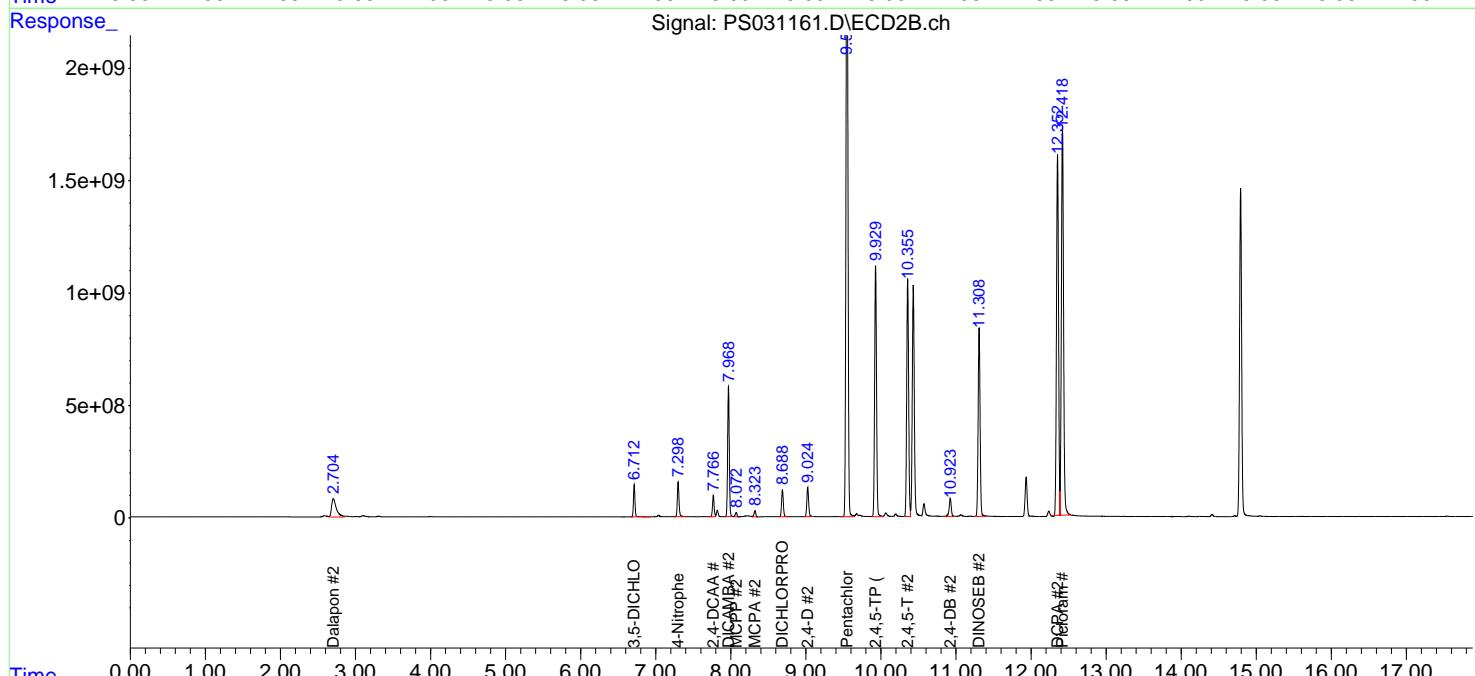
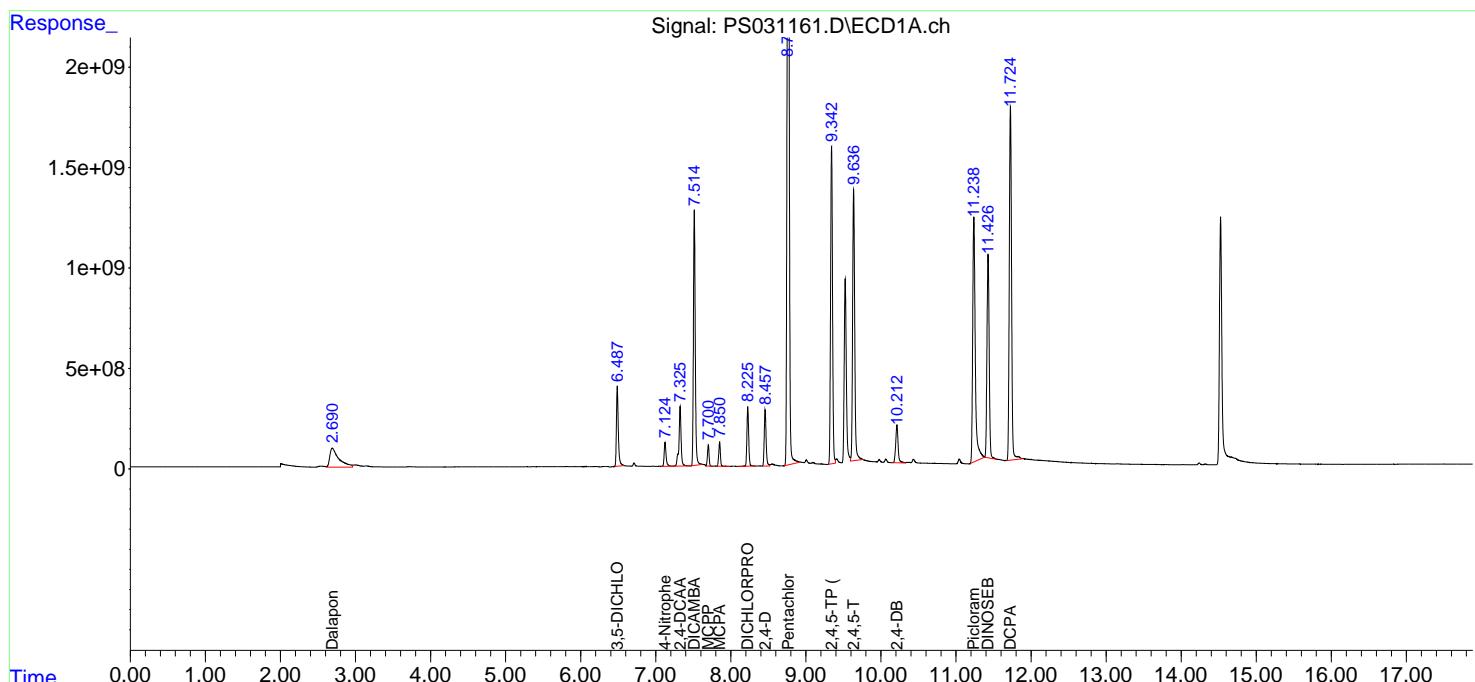
Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

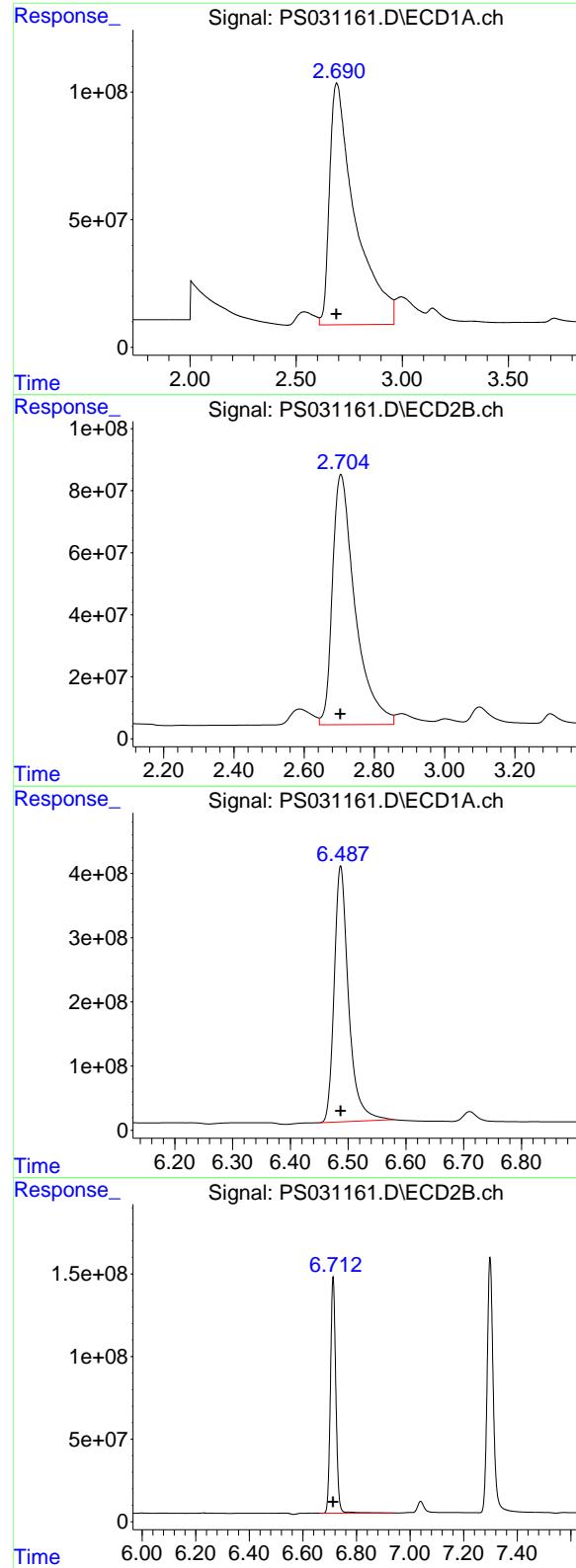
Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jul 22 03:10:23 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 02:56:38 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l

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 0.25 μ m





#1 Dalapon

R.T.: 2.690 min
 Delta R.T.: 0.000 min
 Response: 7938789953
 Conc: 1282.72 ng/ml

Instrument: ECD_S
 ClientSampleId: HSTDICC1500

#1 Dalapon

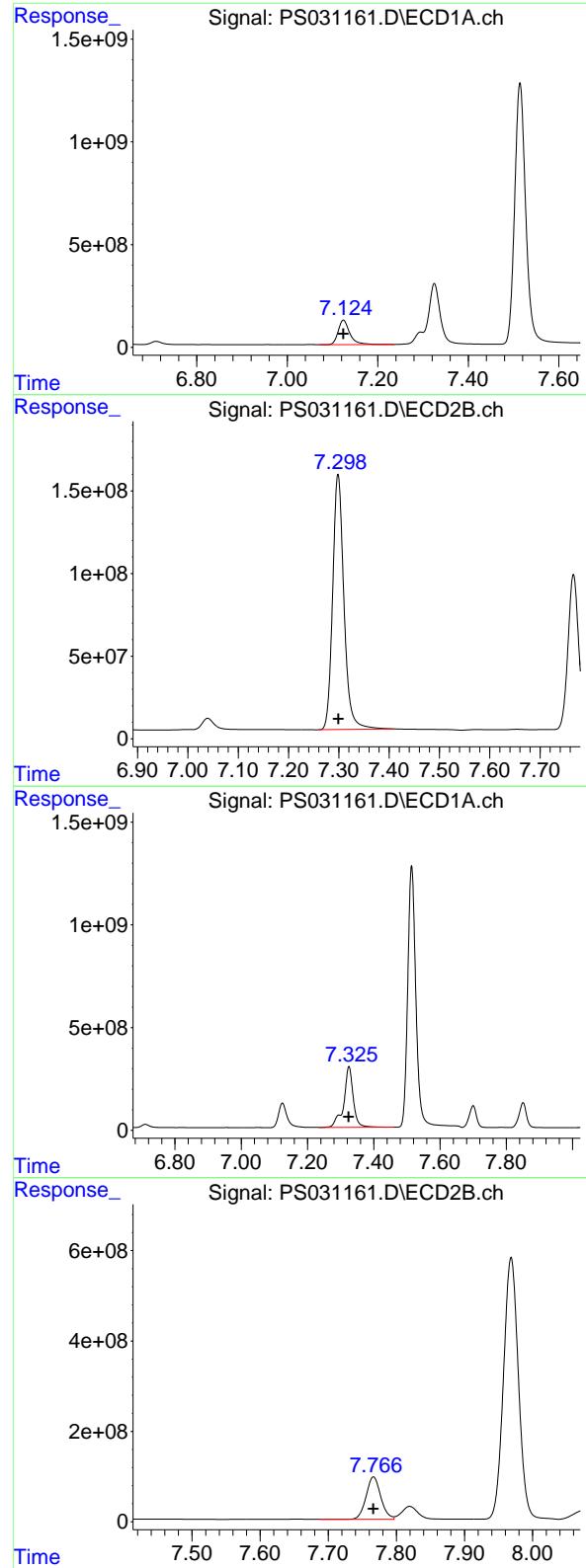
R.T.: 2.704 min
 Delta R.T.: 0.000 min
 Response: 3614366802
 Conc: 1297.41 ng/ml

#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.487 min
 Delta R.T.: 0.000 min
 Response: 6891984644
 Conc: 1283.22 ng/ml

#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.713 min
 Delta R.T.: 0.000 min
 Response: 2008416196
 Conc: 1348.01 ng/ml



#3 4-Nitrophenol

R.T.: 7.124 min
 Delta R.T.: 0.000 min
 Response: 2109320808
 Conc: 1313.97 ng/ml

Instrument: ECD_S
 ClientSampleId: HSTDICC1500

#3 4-Nitrophenol

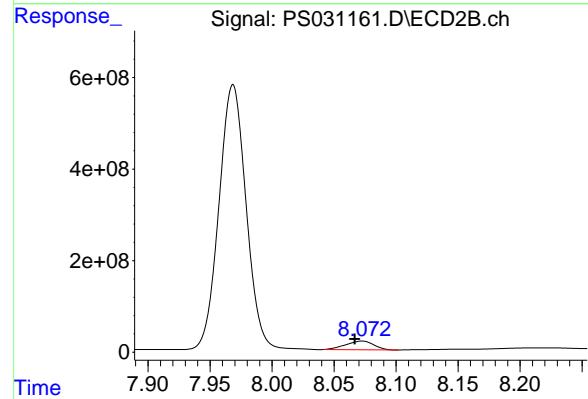
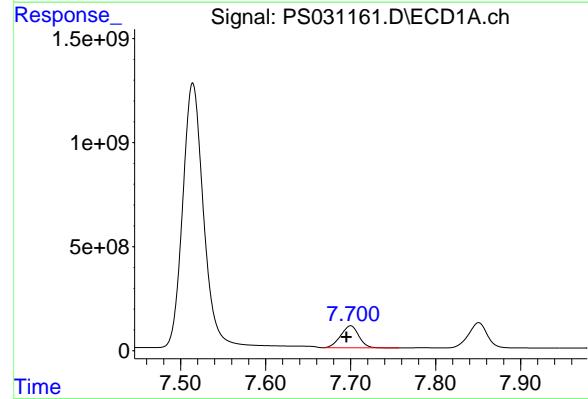
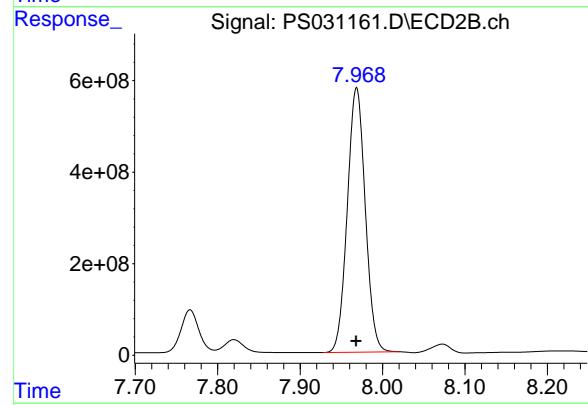
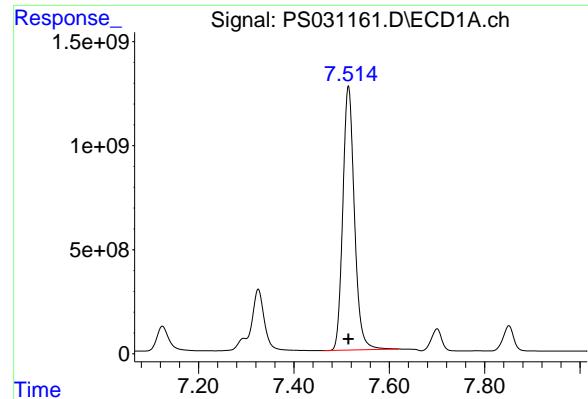
R.T.: 7.299 min
 Delta R.T.: 0.000 min
 Response: 2405825772
 Conc: 1348.19 ng/ml

#4 2,4-DCAA

R.T.: 7.325 min
 Delta R.T.: 0.000 min
 Response: 5875520295
 Conc: 1382.89 ng/ml

#4 2,4-DCAA

R.T.: 7.766 min
 Delta R.T.: 0.000 min
 Response: 1404343492
 Conc: 1420.83 ng/ml



#5 DICAMBA

R.T.: 7.514 min
 Delta R.T.: 0.000 min **Instrument:**
 Response: 21449889213 ECD_S
 Conc: 1318.39 ng/ml **ClientSampleId:**
 HSTDICC1500

#5 DICAMBA

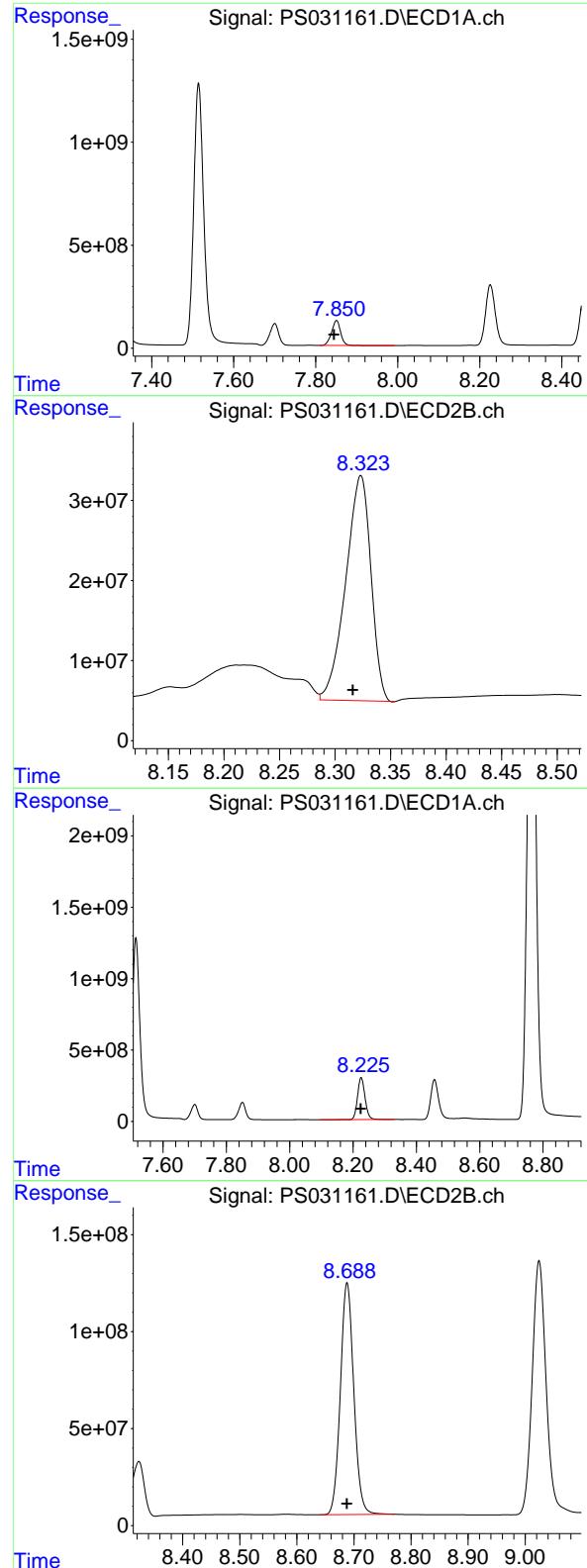
R.T.: 7.968 min
 Delta R.T.: 0.000 min
 Response: 8752090275
 Conc: 1363.90 ng/ml

#6 MCPP

R.T.: 7.700 min
 Delta R.T.: 0.005 min
 Response: 1564708528
 Conc: 152.01 ug/ml

#6 MCPP

R.T.: 8.072 min
 Delta R.T.: 0.006 min
 Response: 297833100
 Conc: 139.28 ug/ml



#7 MCPA

R.T.: 7.851 min
 Delta R.T.: 0.006 min
 Response: 1839792358
 Conc: 146.30 ug/ml

Instrument: ECD_S
 ClientSampleId: HSTDICC1500

#7 MCPA

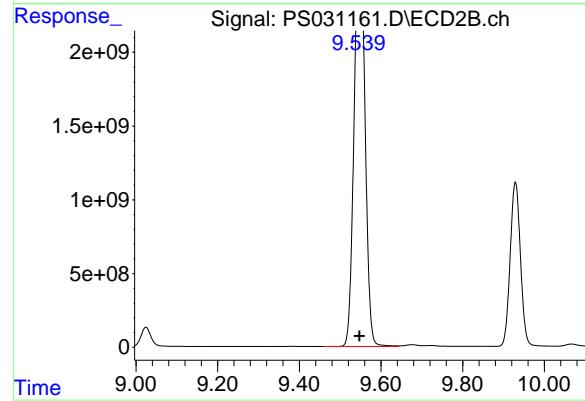
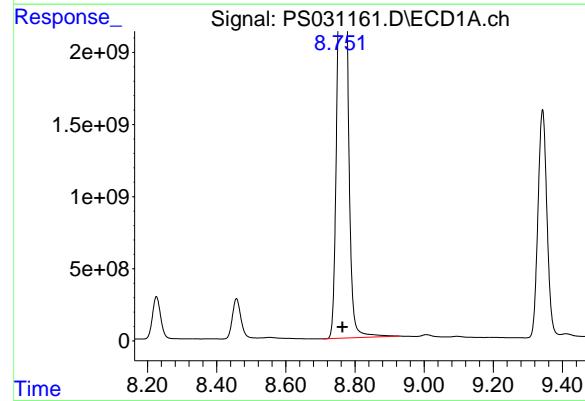
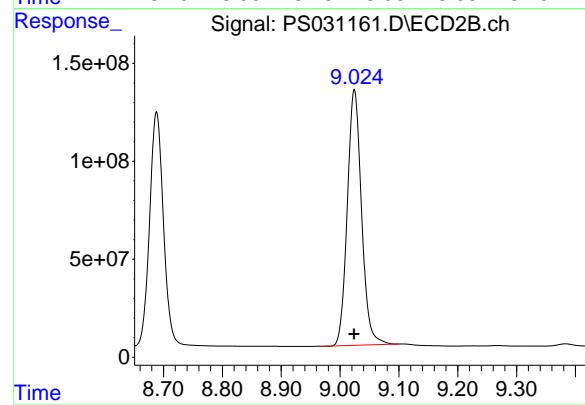
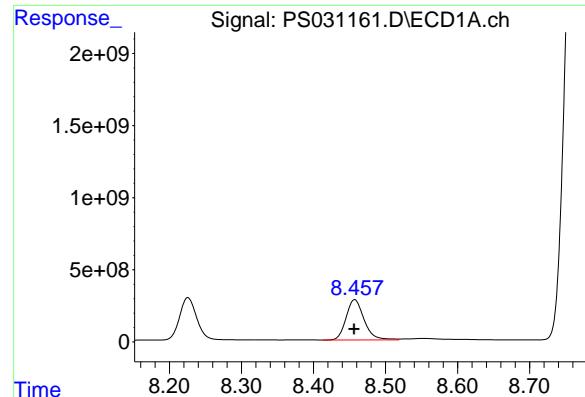
R.T.: 8.323 min
 Delta R.T.: 0.007 min
 Response: 444027593
 Conc: 140.54 ug/ml

#8 DICHLOPROP

R.T.: 8.226 min
 Delta R.T.: 0.001 min
 Response: 4846509261
 Conc: 1315.69 ng/ml

#8 DICHLOPROP

R.T.: 8.688 min
 Delta R.T.: 0.000 min
 Response: 1942272785
 Conc: 1318.26 ng/ml



#9 2,4-D

R.T.: 8.457 min
 Delta R.T.: 0.000 min
 Response: 4868771437
 Conc: 1332.28 ng/ml

Instrument: ECD_S
 ClientSampleId: HSTDICC1500

#9 2,4-D

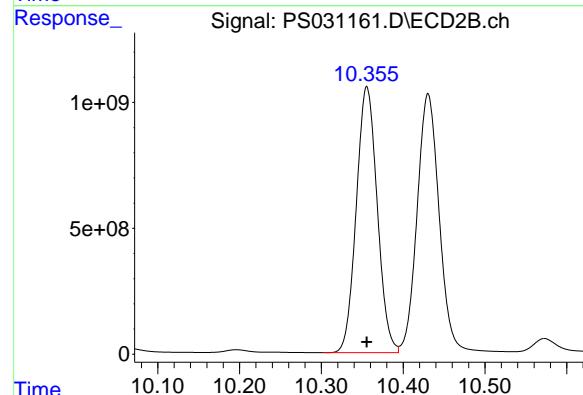
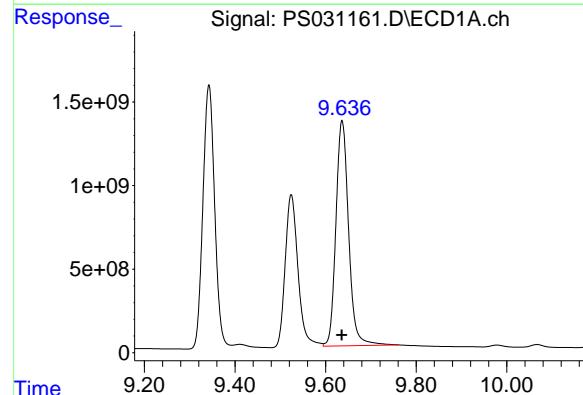
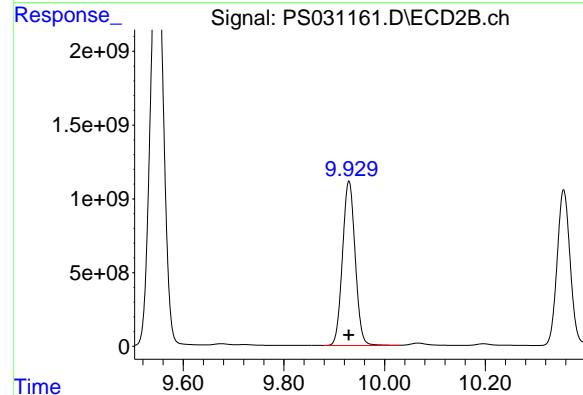
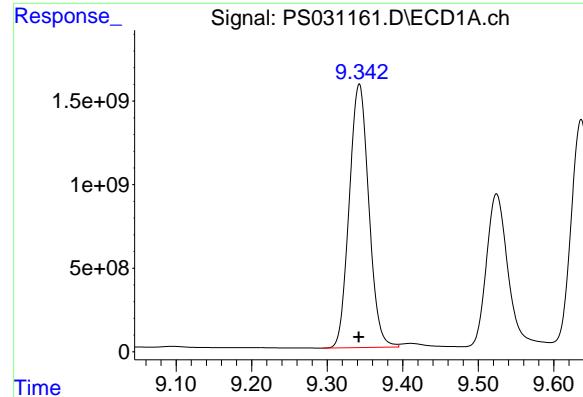
R.T.: 9.024 min
 Delta R.T.: 0.000 min
 Response: 2197237652
 Conc: 1326.67 ng/ml

#10 Pentachlorophenol

R.T.: 8.770 min
 Delta R.T.: 0.006 min
 Response: 55402717037
 Conc: 966.77 ng/ml

#10 Pentachlorophenol

R.T.: 9.550 min
 Delta R.T.: 0.002 min
 Response: 46681007267
 Conc: 1168.14 ng/ml



#11 2,4,5-TP (SILVEX)

R.T.: 9.342 min
 Delta R.T.: 0.000 min
 Response: 28356634711
 Conc: 1310.46 ng/ml

Instrument: ECD_S
 ClientSampleId: HSTDICC1500

#11 2,4,5-TP (SILVEX)

R.T.: 9.929 min
 Delta R.T.: 0.000 min
 Response: 19507811794
 Conc: 1314.46 ng/ml

#12 2,4,5-T

R.T.: 9.636 min
 Delta R.T.: 0.000 min
 Response: 26262207350
 Conc: 1346.19 ng/ml

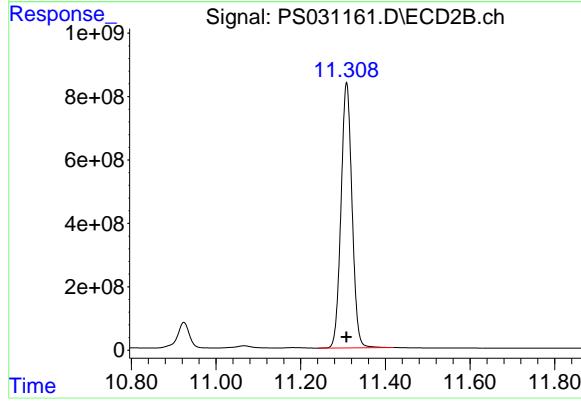
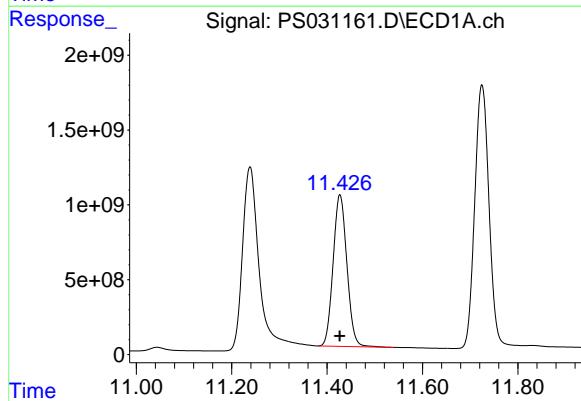
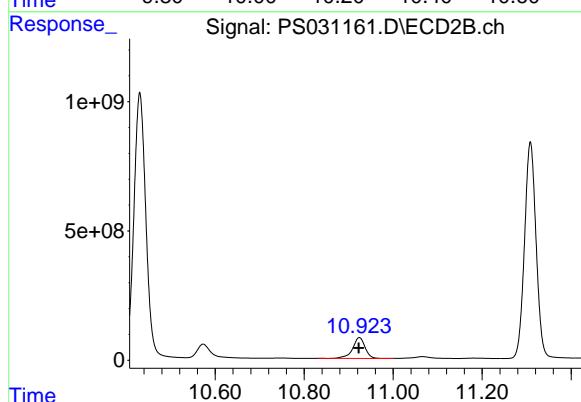
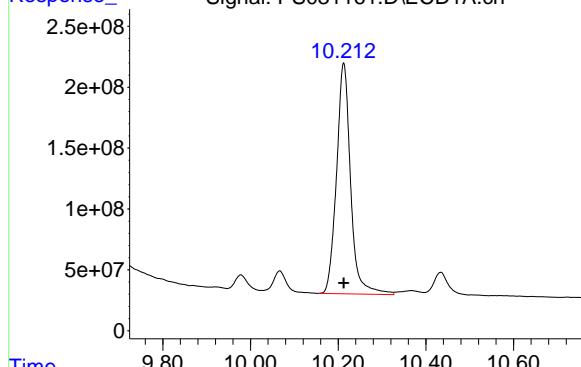
#12 2,4,5-T

R.T.: 10.356 min
 Delta R.T.: 0.000 min
 Response: 18777365882
 Conc: 1326.42 ng/ml

#13 2,4-DB

R.T.: 10.212 min
 Delta R.T.: 0.000 min
 Response: 4222668340
 Conc: 1425.31 ng/ml

Instrument: ECD_S
 ClientSampleId: HSTDICC1500



#13 2,4-DB

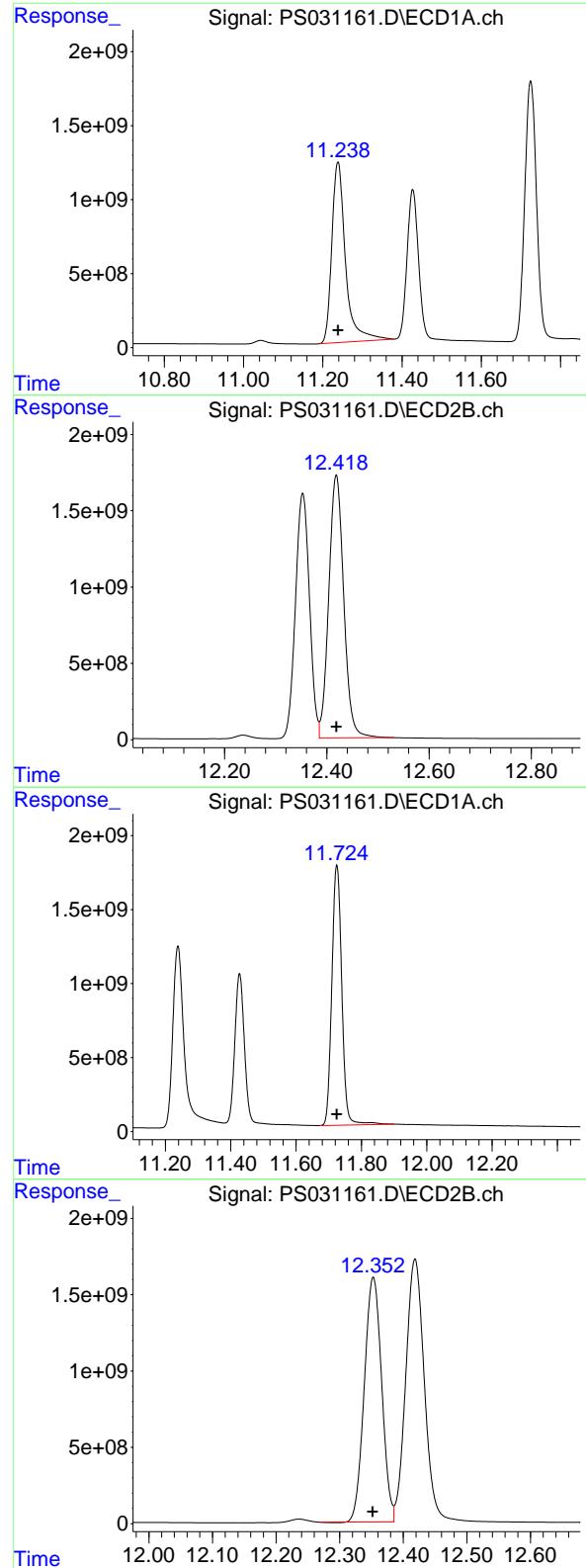
R.T.: 10.924 min
 Delta R.T.: 0.001 min
 Response: 1569985429
 Conc: 1356.72 ng/ml

#14 DINOSEB

R.T.: 11.427 min
 Delta R.T.: 0.000 min
 Response: 20292267926
 Conc: 1316.15 ng/ml

#14 DINOSEB

R.T.: 11.308 min
 Delta R.T.: 0.000 min
 Response: 15081056737
 Conc: 1341.04 ng/ml



#15 Picloram

R.T.: 11.238 min
 Delta R.T.: 0.000 min
Instrument:
 Response: 29336086675 ECD_S
 Conc: 1457.19 ng/ml
ClientSampleId:
 HSTDICC1500

#15 Picloram

R.T.: 12.419 min
 Delta R.T.: 0.000 min
 Response: 34910992404
 Conc: 1374.77 ng/ml

#16 DCPA

R.T.: 11.725 min
 Delta R.T.: 0.000 min
 Response: 37118952405
 Conc: 1310.58 ng/ml

#16 DCPA

R.T.: 12.353 min
 Delta R.T.: 0.001 min
 Response: 30414883255
 Conc: 1313.34 ng/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072125\
 Data File : PS031162.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 21 Jul 2025 17:03
 Operator : AR\AJ
 Sample : HSTDICV750
 Misc :
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
ICVPS072125

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jul 22 03:21:50 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 03:18:42 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 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 0.25 μ m

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

4) S 2,4-DCAA 7.325 7.766 3151.9E6 737.7E6 724.866 726.846

Target Compounds

1) T	Dalapon	2.689	2.704	4173.3E6	1879.7E6	665.294	662.611
2) T	3,5-DICHL...	6.487	6.713	3720.4E6	1048.9E6	673.648	681.176
3) T	4-Nitroph...	7.124	7.299	1093.9E6	1208.1E6	663.431	667.683
5) T	DICAMBA	7.514	7.968	11383.7E6	4491.4E6	690.051	695.985
6) T	MCPP	7.695	8.067	717.7E6	149.1E6	71.694	71.777
7) T	MCPA	7.845	8.316	870.1E6	218.8E6	69.526	69.334
8) T	DICHLORPROP	8.225	8.688	2575.1E6	1032.5E6	673.767	681.551
9) T	2,4-D	8.457	9.024	2569.4E6	1160.9E6	687.928	683.569
10) T	Pentachlo...	8.764	9.547	40612.6E6	28167.9E6	743.526	720.754
11) T	2,4,5-TP ...	9.342	9.929	15374.0E6	10489.0E6	700.294	704.236
12) T	2,4,5-T	9.636	10.356	13928.3E6	10005.6E6	713.254	703.659
13) T	2,4-DB	10.213	10.924	2126.9E6	808.9E6	711.349	691.028
14) T	DINOSEB	11.428	11.308	10850.3E6	7842.7E6	696.895	693.919
15) T	Picloram	11.238	12.419	14555.0E6	17953.2E6	727.512	721.155
16) T	DCPA	11.724	12.352	20286.6E6	16452.0E6	707.009	714.185

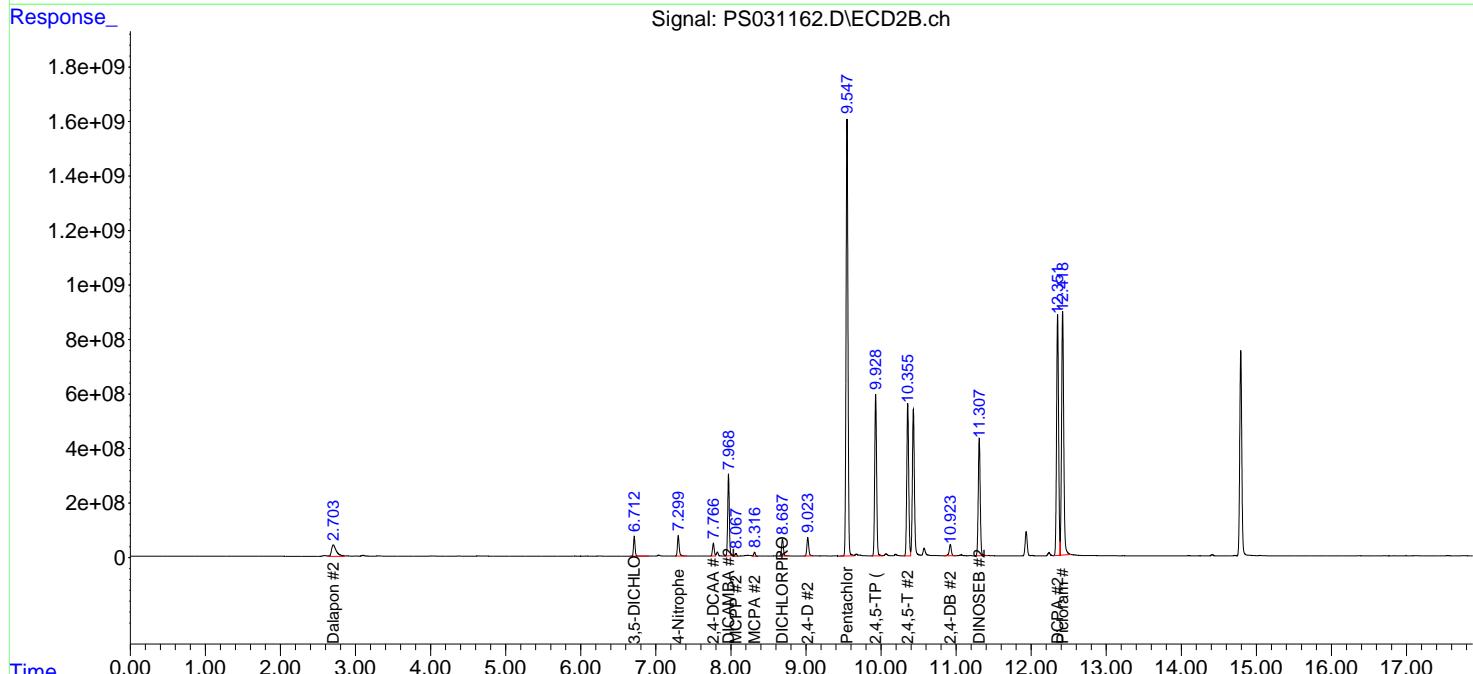
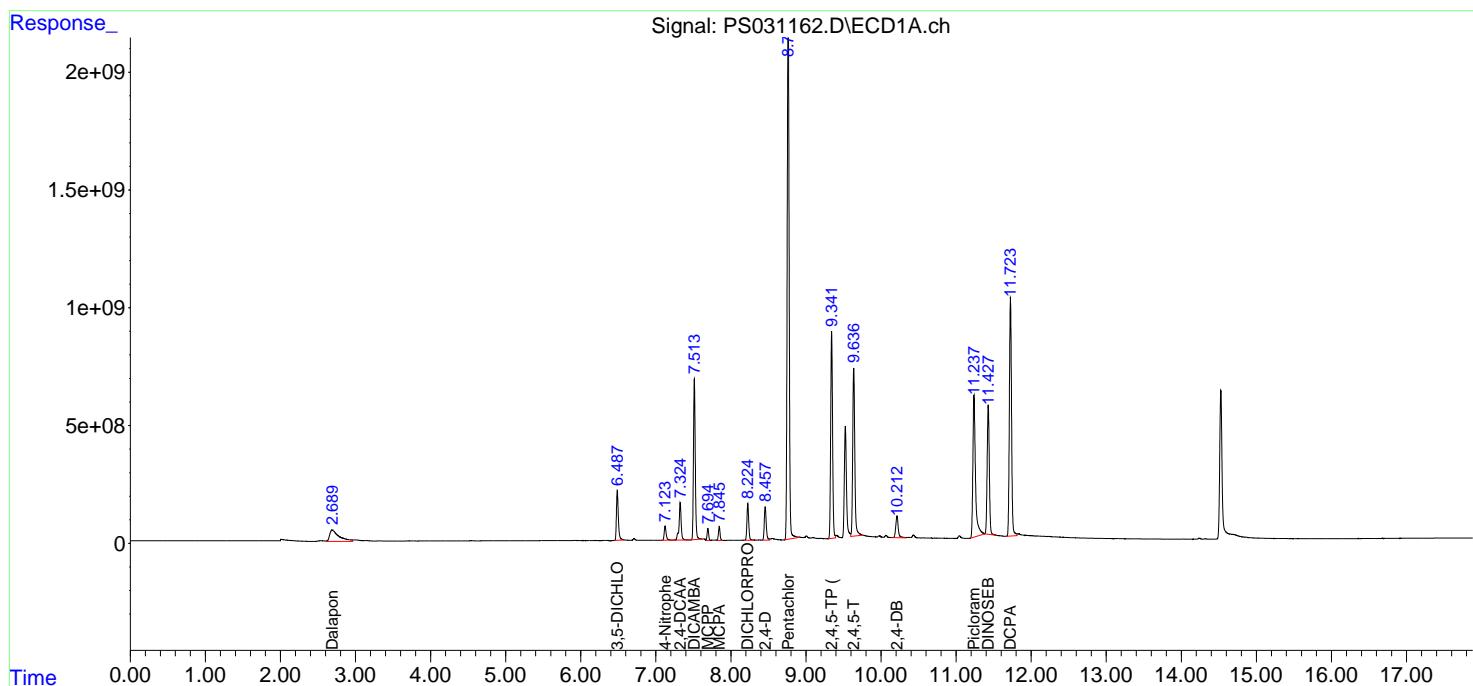
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

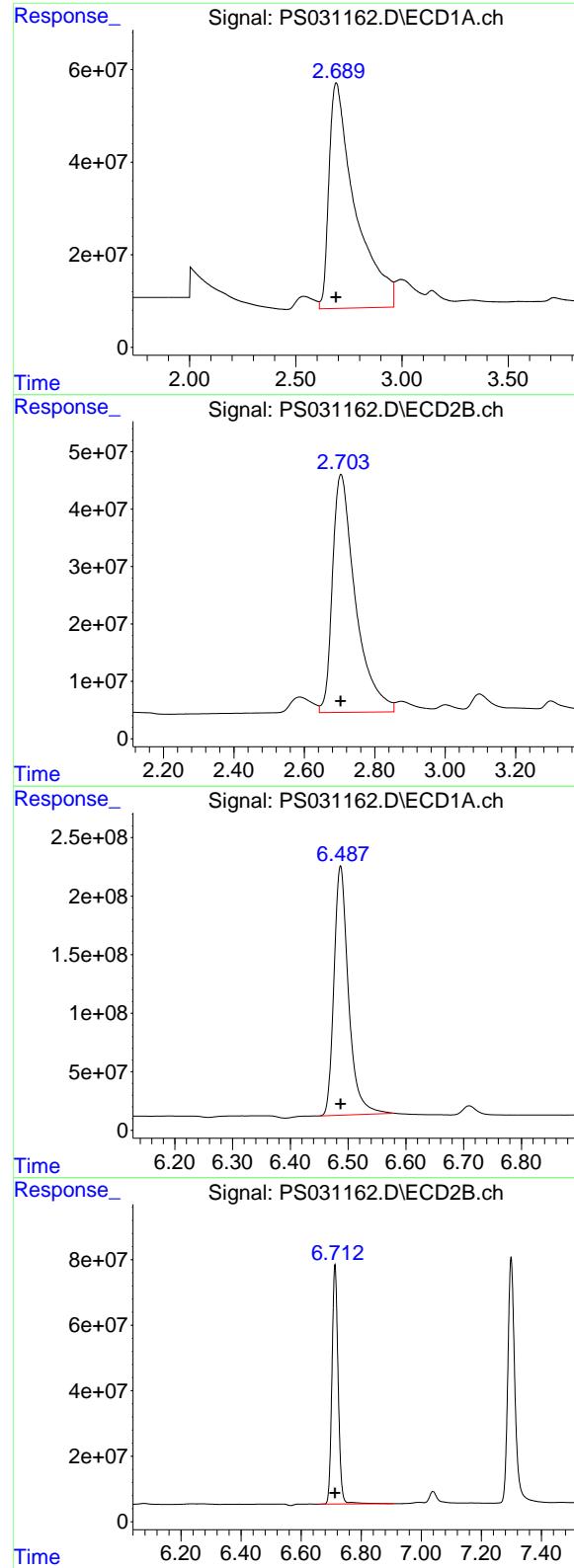
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072125\
 Data File : PS031162.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 21 Jul 2025 17:03
 Operator : AR\AJ
 Sample : HSTDICV750
 Misc :
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 ICVPS072125

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jul 22 03:21:50 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 03:18:42 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 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 0.25 μ m





#1 Dalapon

R.T.: 2.689 min
 Delta R.T.: 0.000 min
 Response: 4173322568
 Conc: 665.29 ng/ml

Instrument: ECD_S
 ClientSampleId: ICVPS072125

#1 Dalapon

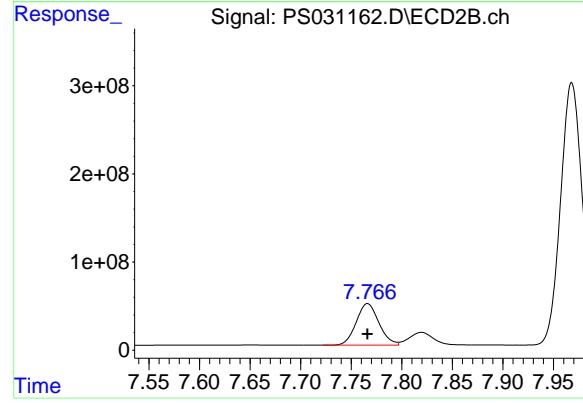
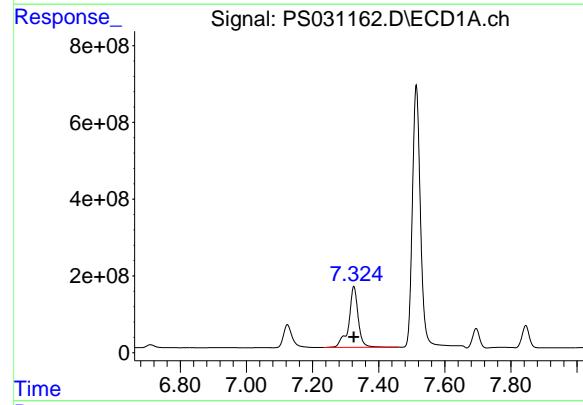
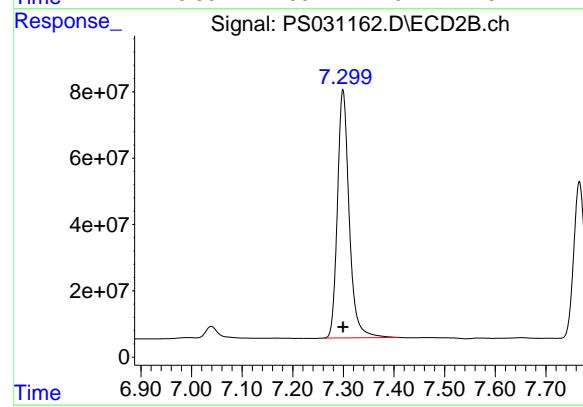
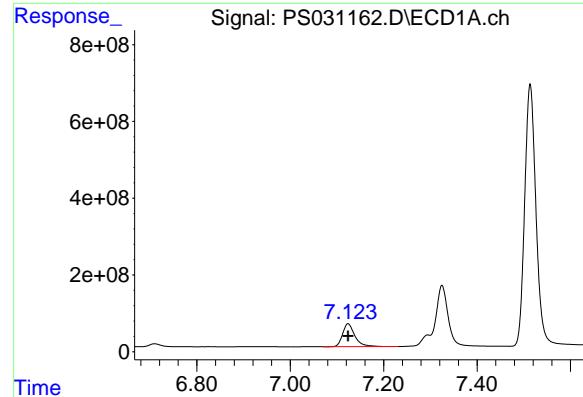
R.T.: 2.704 min
 Delta R.T.: 0.000 min
 Response: 1879654846
 Conc: 662.61 ng/ml

#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.487 min
 Delta R.T.: 0.000 min
 Response: 3720387717
 Conc: 673.65 ng/ml

#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.713 min
 Delta R.T.: 0.000 min
 Response: 1048938565
 Conc: 681.18 ng/ml



#3 4-Nitrophenol

R.T.: 7.124 min
Delta R.T.: 0.000 min
Response: 1093855791
Conc: 663.43 ng/ml

Instrument: ECD_S
ClientSampleId: ICVPS072125

#3 4-Nitrophenol

R.T.: 7.299 min
Delta R.T.: 0.000 min
Response: 1208050076
Conc: 667.68 ng/ml

#4 2,4-DCAA

R.T.: 7.325 min
Delta R.T.: 0.000 min
Response: 3151901376
Conc: 724.87 ng/ml

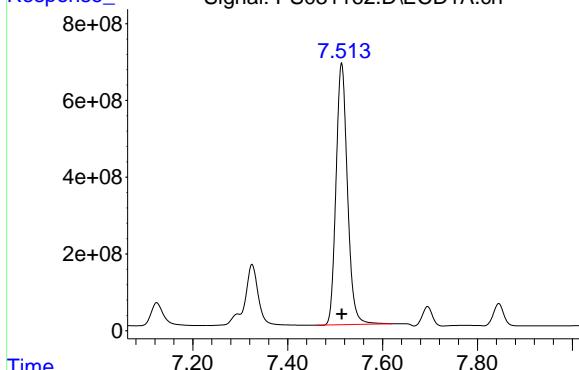
#4 2,4-DCAA

R.T.: 7.766 min
Delta R.T.: 0.000 min
Response: 737725513
Conc: 726.85 ng/ml

#5 DICAMBA

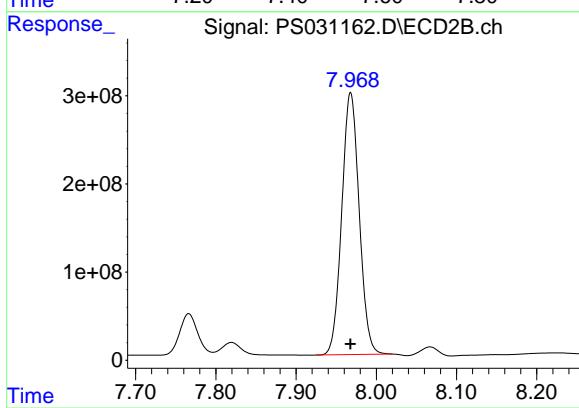
R.T.: 7.514 min
 Delta R.T.: 0.000 min
 Response: 11383740526
 Conc: 690.05 ng/ml

Instrument: ECD_S
ClientSampleId: ICVPS072125



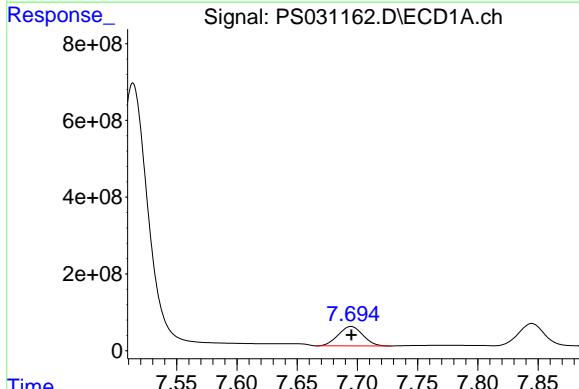
#5 DICAMBA

R.T.: 7.968 min
 Delta R.T.: 0.000 min
 Response: 4491448492
 Conc: 695.98 ng/ml



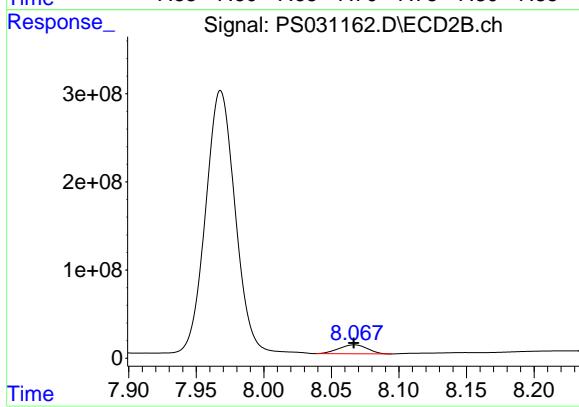
#6 MCPP

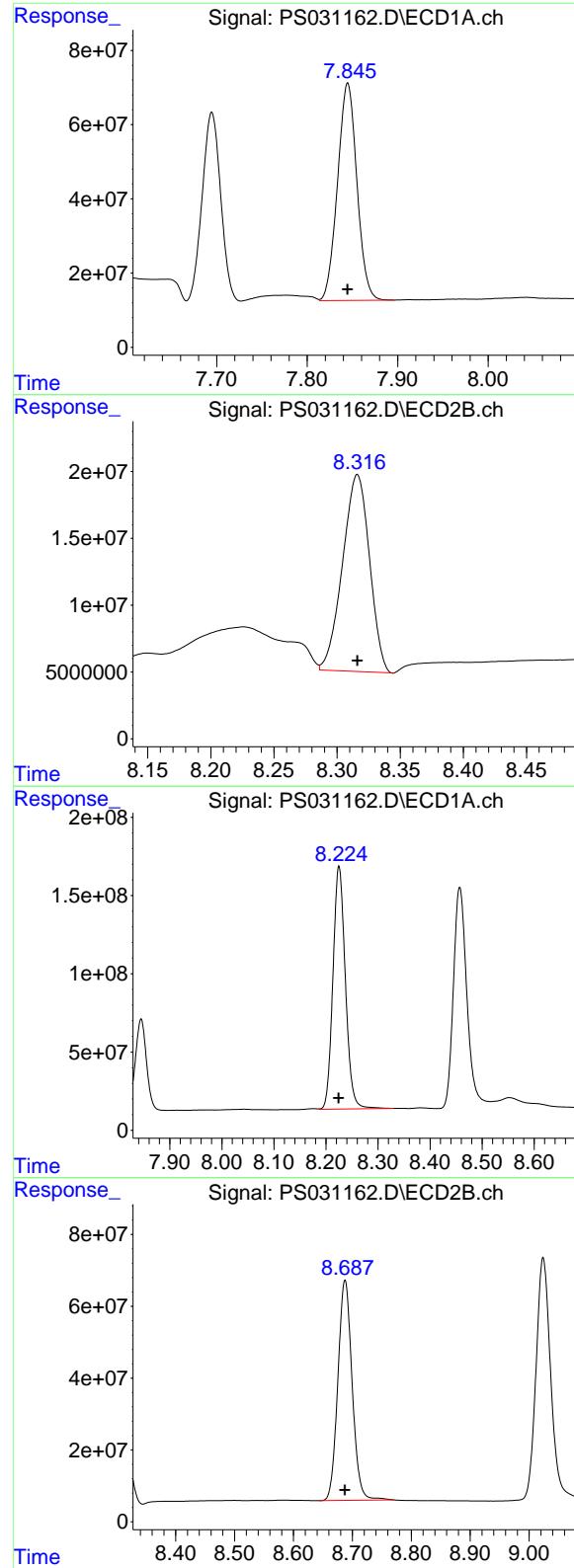
R.T.: 7.695 min
 Delta R.T.: 0.000 min
 Response: 717663366
 Conc: 71.69 ug/ml



#6 MCPP

R.T.: 8.067 min
 Delta R.T.: 0.000 min
 Response: 149138351
 Conc: 71.78 ug/ml





#7 MCPA

R.T.: 7.845 min
Delta R.T.: 0.000 min
Response: 870067277
Conc: 69.53 ug/ml

Instrument: ECD_S
ClientSampleId: ICPVPS072125

#7 MCPA

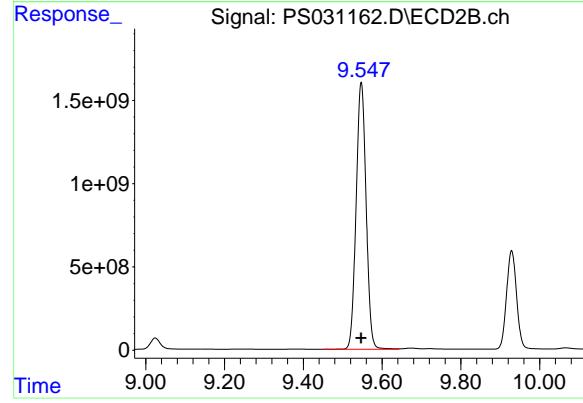
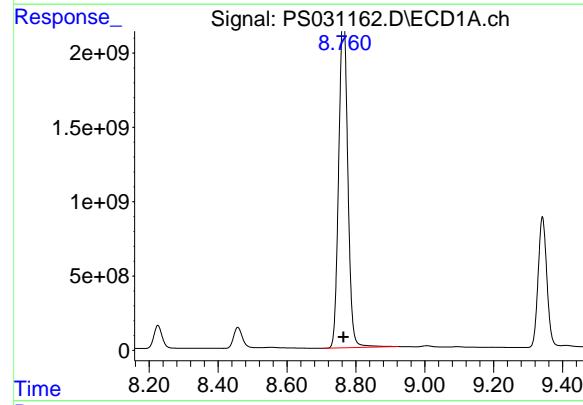
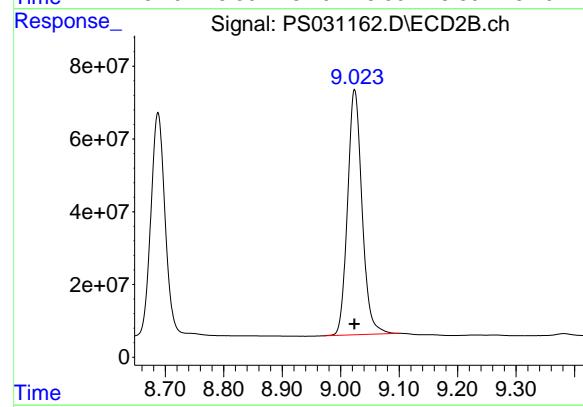
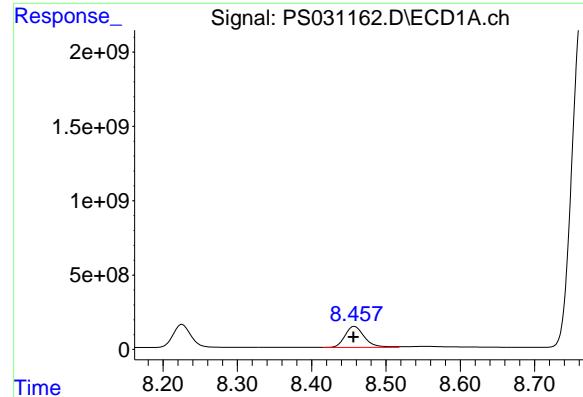
R.T.: 8.316 min
Delta R.T.: 0.000 min
Response: 218764232
Conc: 69.33 ug/ml

#8 DICHLORPROP

R.T.: 8.225 min
Delta R.T.: 0.000 min
Response: 2575108856
Conc: 673.77 ng/ml

#8 DICHLORPROP

R.T.: 8.688 min
Delta R.T.: 0.000 min
Response: 1032455050
Conc: 681.55 ng/ml



#9 2,4-D

R.T.: 8.457 min
 Delta R.T.: 0.000 min
 Response: 2569354129
 Conc: 687.93 ng/ml

Instrument: ECD_S
ClientSampleId: ICVPS072125

#9 2,4-D

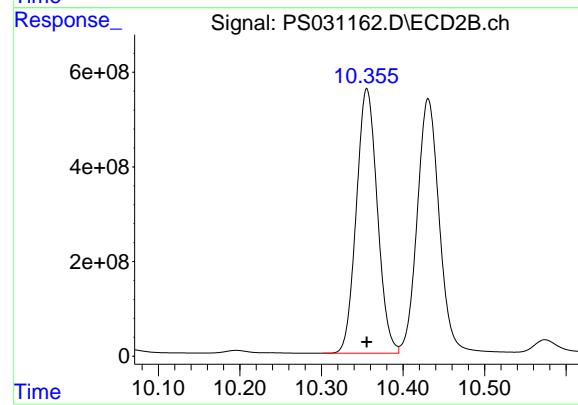
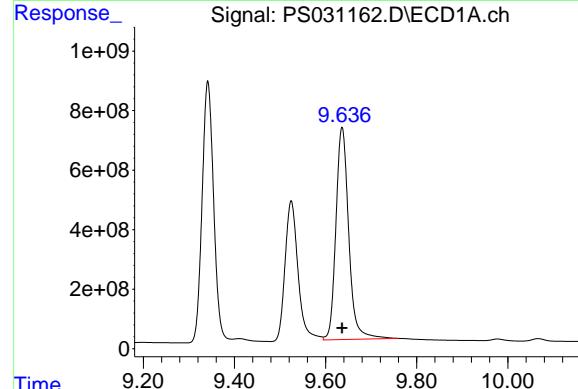
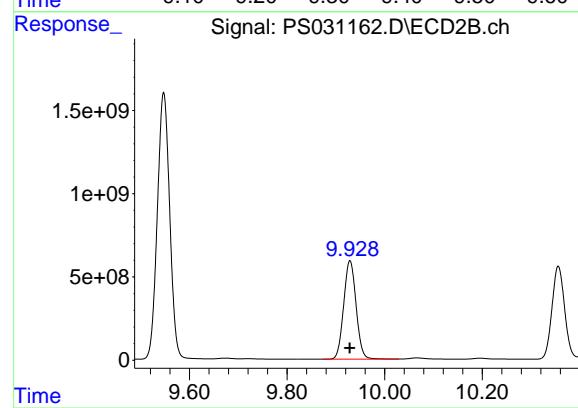
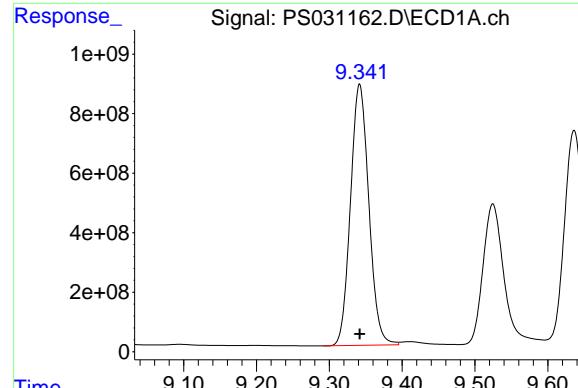
R.T.: 9.024 min
 Delta R.T.: 0.000 min
 Response: 1160917687
 Conc: 683.57 ng/ml

#10 Pentachlorophenol

R.T.: 8.764 min
 Delta R.T.: 0.000 min
 Response: 40612569802
 Conc: 743.53 ng/ml

#10 Pentachlorophenol

R.T.: 9.547 min
 Delta R.T.: 0.000 min
 Response: 28167947869
 Conc: 720.75 ng/ml



#11 2,4,5-TP (SILVEX)

R.T.: 9.342 min
 Delta R.T.: 0.000 min
 Response: 15373956822
 Conc: 700.29 ng/ml

Instrument: ECD_S
ClientSampleId: ICVPS072125

#11 2,4,5-TP (SILVEX)

R.T.: 9.929 min
 Delta R.T.: 0.000 min
 Response: 10489015418
 Conc: 704.24 ng/ml

#12 2,4,5-T

R.T.: 9.636 min
 Delta R.T.: 0.000 min
 Response: 13928273611
 Conc: 713.25 ng/ml

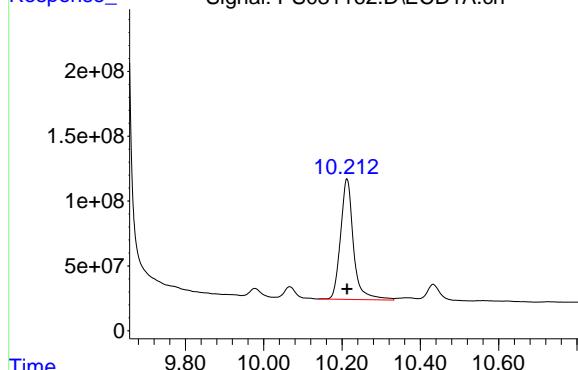
#12 2,4,5-T

R.T.: 10.356 min
 Delta R.T.: 0.000 min
 Response: 10005648557
 Conc: 703.66 ng/ml

#13 2,4-DB

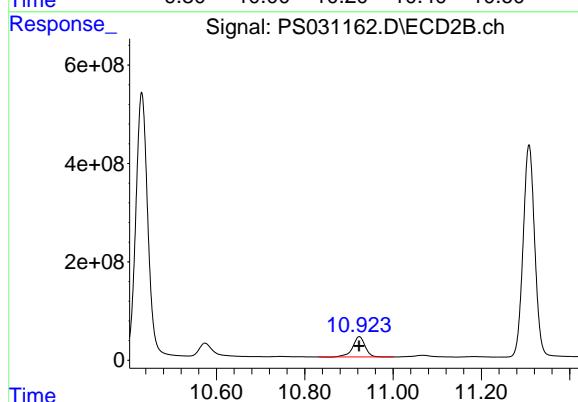
R.T.: 10.213 min
 Delta R.T.: 0.000 min
 Response: 2126850488
 Conc: 711.35 ng/ml

Instrument: ECD_S
ClientSampleId: ICVPS072125



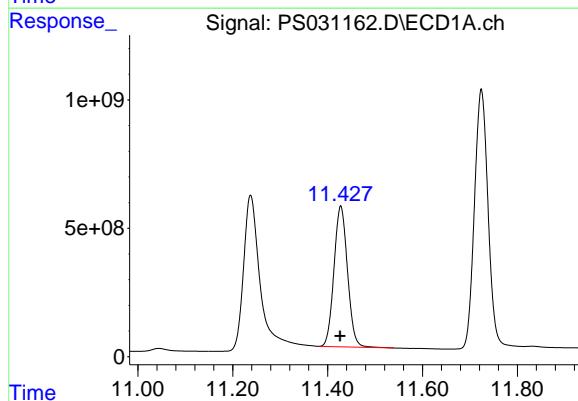
#13 2,4-DB

R.T.: 10.924 min
 Delta R.T.: 0.000 min
 Response: 808856260
 Conc: 691.03 ng/ml



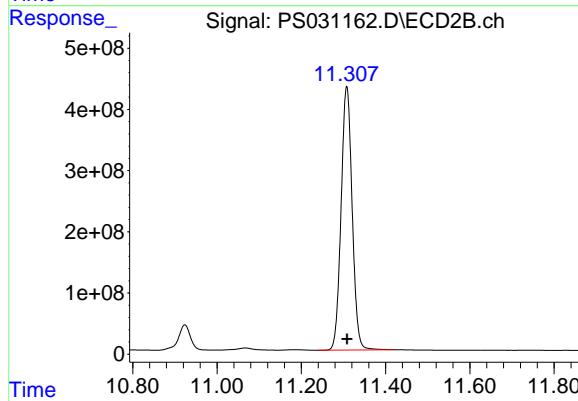
#14 DINOSEB

R.T.: 11.428 min
 Delta R.T.: 0.001 min
 Response: 10850293217
 Conc: 696.89 ng/ml



#14 DINOSEB

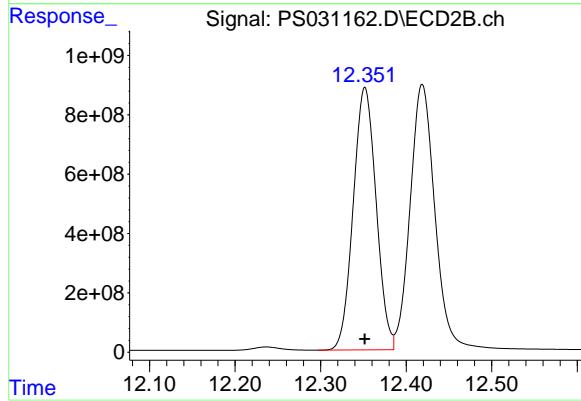
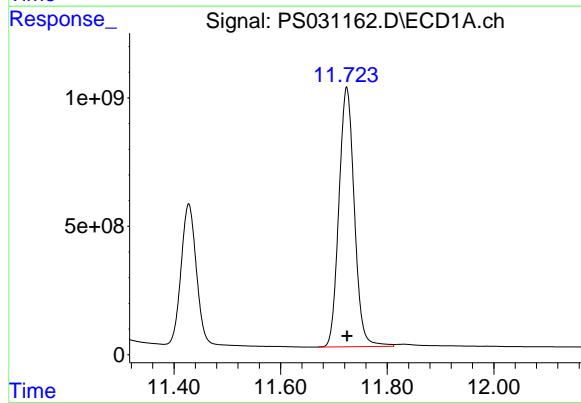
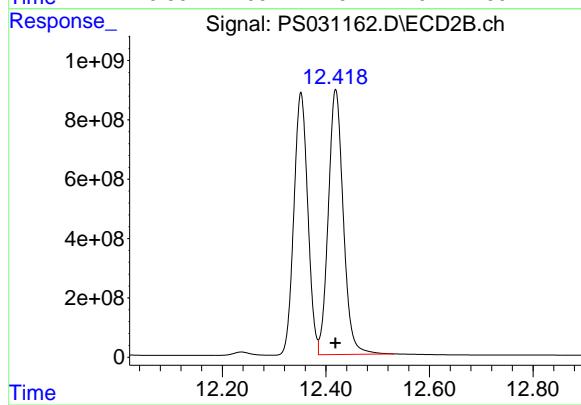
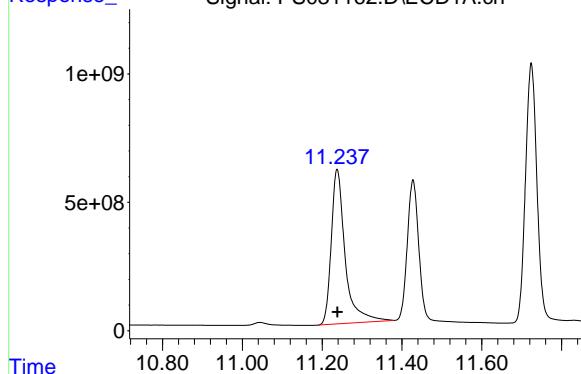
R.T.: 11.308 min
 Delta R.T.: 0.000 min
 Response: 7842727860
 Conc: 693.92 ng/ml



#15 Picloram

R.T.: 11.238 min
 Delta R.T.: 0.000 min
 Response: 14555030992
 Conc: 727.51 ng/ml

Instrument: ECD_S
ClientSampleId: ICVPS072125



#15 Picloram

R.T.: 12.419 min
 Delta R.T.: 0.000 min
 Response: 17953179799
 Conc: 721.15 ng/ml

#16 DCPA

R.T.: 11.724 min
 Delta R.T.: 0.000 min
 Response: 20286550952
 Conc: 707.01 ng/ml

#16 DCPA

R.T.: 12.352 min
 Delta R.T.: 0.000 min
 Response: 16451986600
 Conc: 714.18 ng/ml



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

CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance

Contract: TETR16

Lab Code: ACE

SDG NO.: Q2667

Continuing Calib Date: 07/24/2025

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

07/21/2025

Continuing Calib Time: 18:39

Initial Calibration Time(s): 15:02

16:39

GC Column: RTX-CLP

ID: 0.32 (mm)

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



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Fax : 908 789 8922

CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance

Contract: TETR16

Lab Code: ACE

SDG NO.: Q2667

Continuing Calib Date: 07/24/2025

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

07/21/2025

Continuing Calib Time: 18:39

Initial Calibration Time(s): 15:02

16:39

GC Column: RTX-CLP2

ID: 0.32 (mm)

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



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CALIBRATION VERIFICATION SUMMARY

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

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

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



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CALIBRATION VERIFICATION SUMMARY

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

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

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072425\
 Data File : PS031233.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 24 Jul 2025 18:39
 Operator : AR\AJ
 Sample : HSTDCCC750
 Misc :
 ALS Vial : 35 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDCCC750

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
 Supervised By :mohammad ahmed 07/26/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jul 25 02:14:21 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 03:18:42 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 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 0.25 μ m

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

System Monitoring Compounds

4) S 2,4-DCAA 7.319 7.764 2897.4E6 704.2E6 666.345 693.771

Target Compounds

1) T	Dalapon	2.687	2.704	3646.8E6	1685.9E6	581.355	594.302
2) T	3,5-DICHL...	6.482	6.711	3487.2E6	965.5E6	631.428	626.964
3) T	4-Nitroph...	7.119	7.298	1161.6E6	1119.3E6	704.548	618.645
5) T	DICAMBA	7.509	7.966	9918.8E6	4200.1E6	601.248	650.842
6) T	MCPP	7.690	8.065	639.6E6	128.0E6	63.900	61.597
7) T	MCPA	7.840	8.313	831.6E6	199.2E6	66.456	63.134
8) T	DICHLORPROP	8.219	8.685	2628.7E6	1015.3E6	687.792	670.244
9) T	2,4-D	8.451	9.021	2723.9E6	1183.1E6	729.306	696.612
10) T	Pentachlo...	8.755	9.545	41625.2E6	26526.7E6	762.065m	678.760
11) T	2,4,5-TP ...	9.335	9.926	15136.6E6	10005.9E6	689.481	671.801
12) T	2,4,5-T	9.629	10.352	14005.9E6	9234.0E6	717.231	649.390
13) T	2,4-DB	10.207	10.920	2059.8E6	764.1E6	688.914	652.753
14) T	DINOSEB	11.419	11.305	10002.0E6	6972.8E6	642.408m	616.949
15) T	Picloram	11.229	12.415	16290.4E6	17205.5E6	814.254m	691.121
16) T	DCPA	11.716	12.348	19417.2E6	15457.3E6	676.712	671.006m

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072425\
 Data File : PS031233.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 24 Jul 2025 18:39
 Operator : AR\AJ
 Sample : HSTDCCC750
 Misc :
 ALS Vial : 35 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDCCC750

Manual Integrations
APPROVED

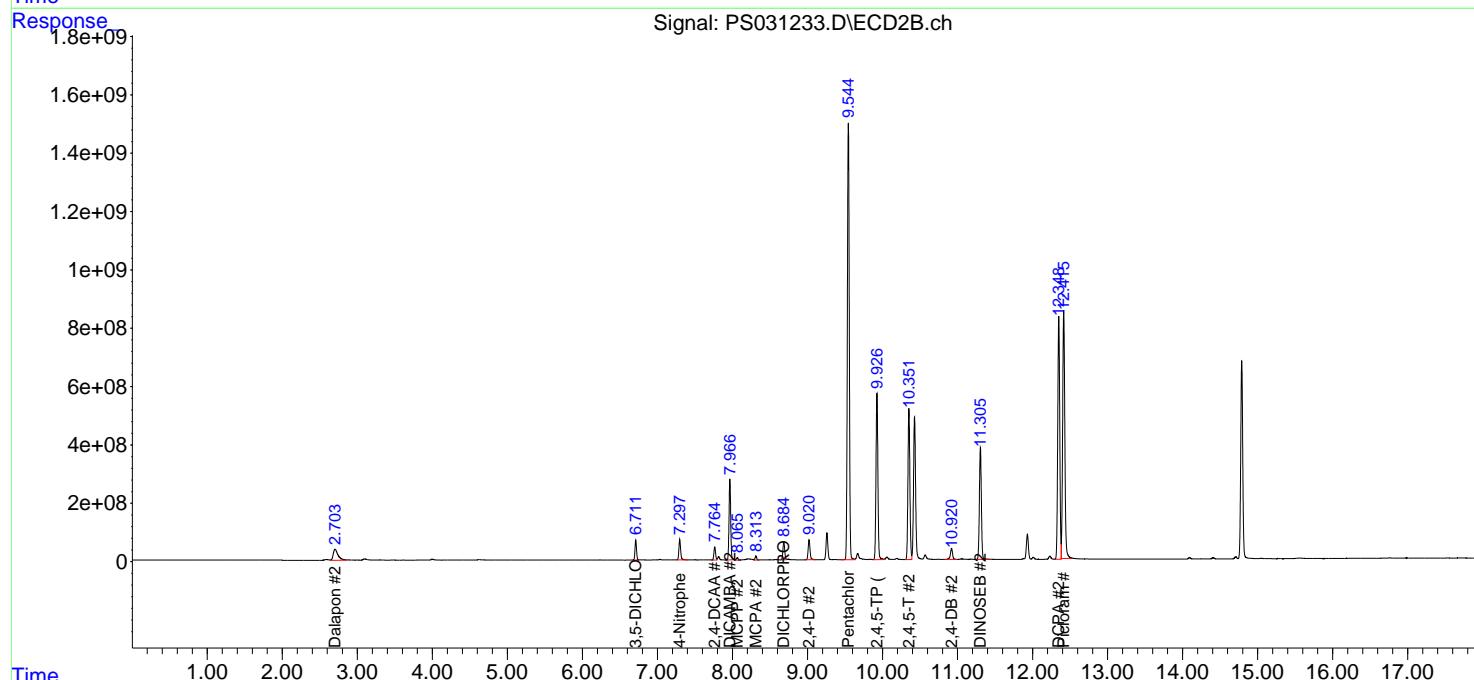
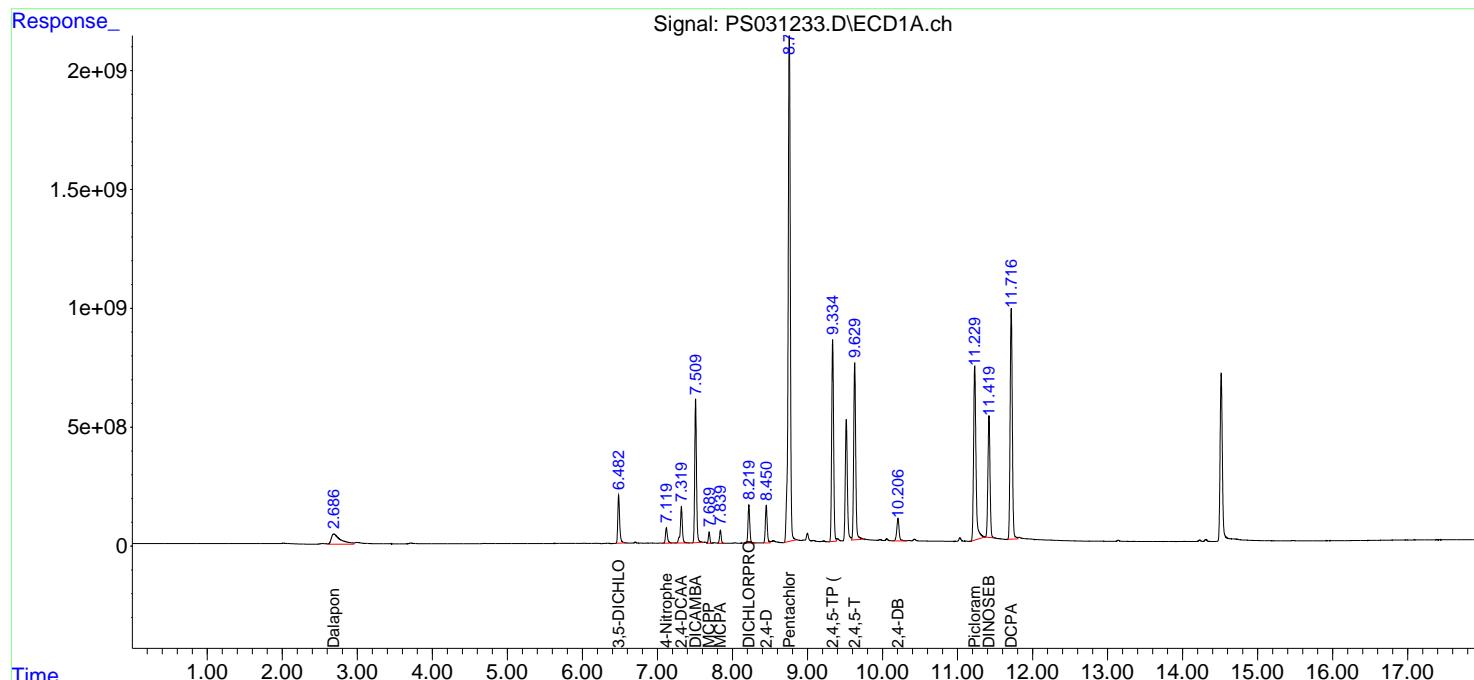
Reviewed By :Yogesh Patel 07/25/2025
 Supervised By :mohammad ahmed 07/26/2025

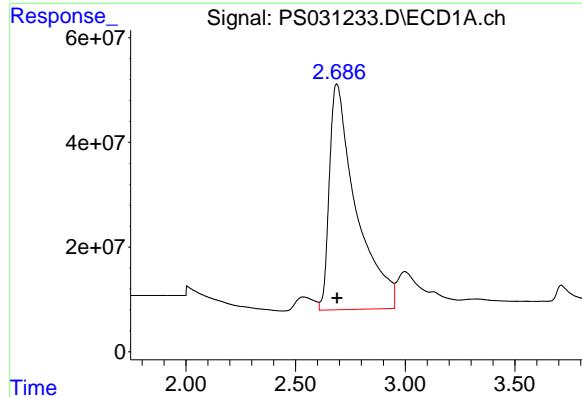
Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jul 25 02:14:21 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 03:18:42 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l

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 0.25 μ m





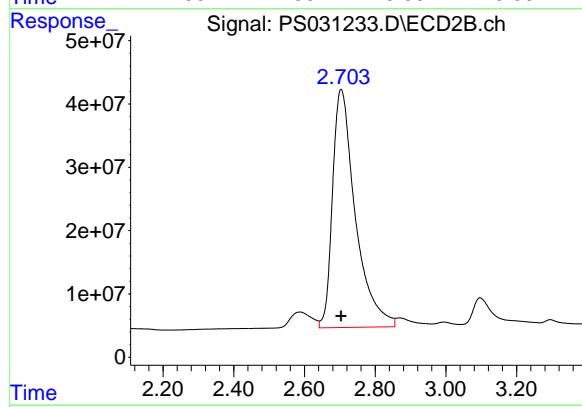
#1 Dalapon

R.T.: 2.687 min
Delta R.T.: -0.003 min
Response: 3646786474
Conc: 581.36 ng/ml

Instrument: ECD_S
ClientSampleId: HSTDCCC750

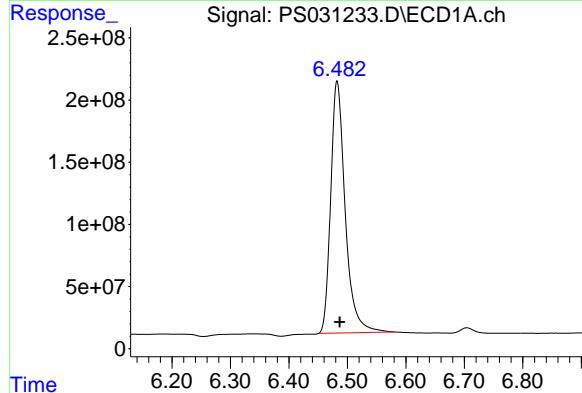
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



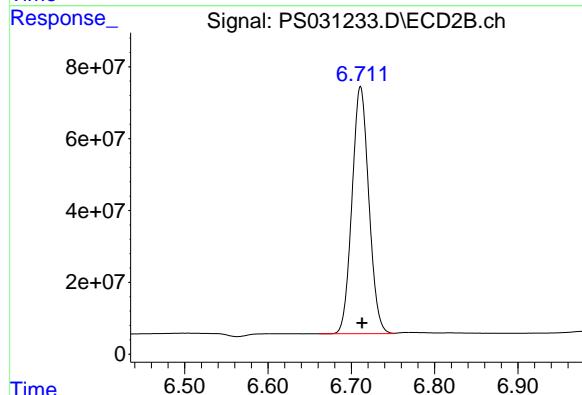
#1 Dalapon

R.T.: 2.704 min
Delta R.T.: 0.000 min
Response: 1685879056
Conc: 594.30 ng/ml



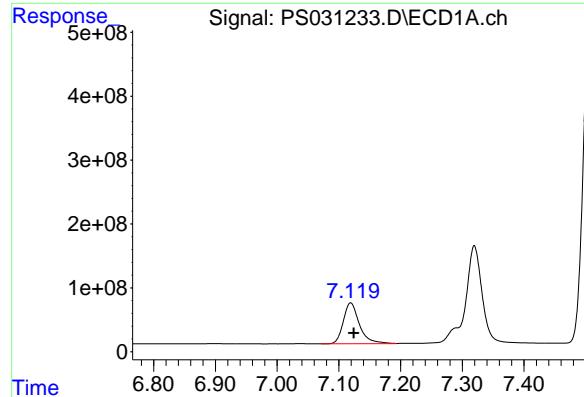
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.482 min
Delta R.T.: -0.004 min
Response: 3487217484
Conc: 631.43 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.711 min
Delta R.T.: -0.002 min
Response: 965457798
Conc: 626.96 ng/ml



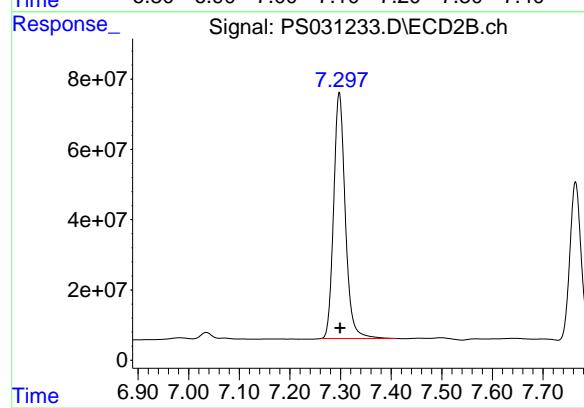
#3 4-Nitrophenol

R.T.: 7.119 min
Delta R.T.: -0.005 min
Response: 1161648350
Conc: 704.55 ng/ml

Instrument:
ECD_S
ClientSampleId:
HSTDCCC750

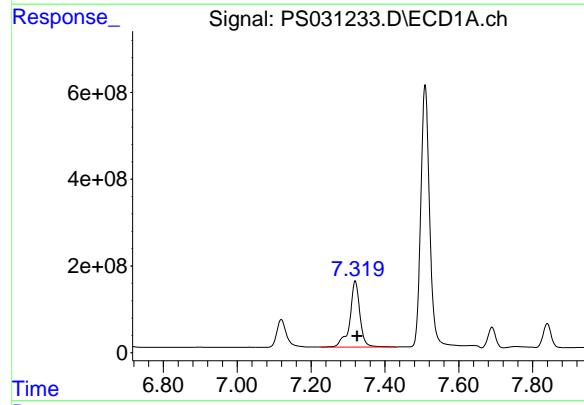
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



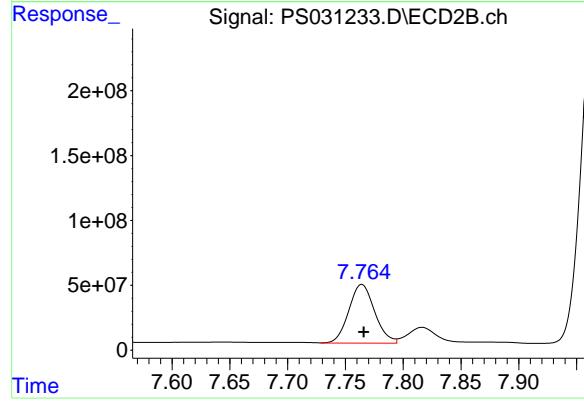
#3 4-Nitrophenol

R.T.: 7.298 min
Delta R.T.: -0.002 min
Response: 1119324899
Conc: 618.64 ng/ml



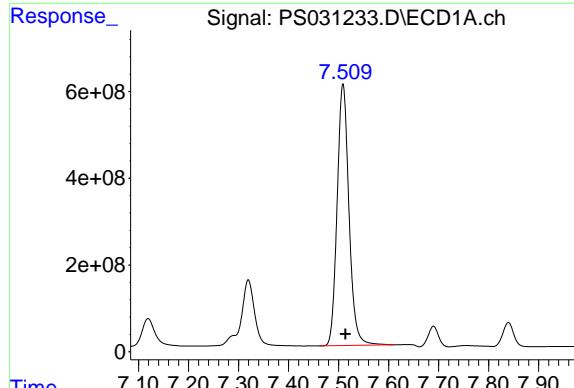
#4 2,4-DCAA

R.T.: 7.319 min
Delta R.T.: -0.005 min
Response: 2897435123
Conc: 666.34 ng/ml



#4 2,4-DCAA

R.T.: 7.764 min
Delta R.T.: -0.002 min
Response: 704155508
Conc: 693.77 ng/ml



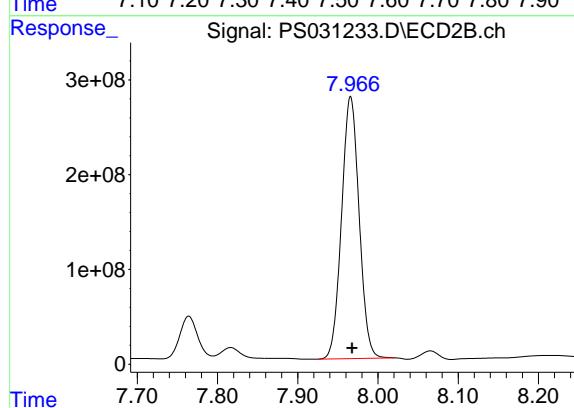
#5 DICAMBA

R.T.: 7.509 min
Delta R.T.: -0.005 min
Response: 9918771681
Conc: 601.25 ng/ml

Instrument: ECD_S
ClientSampleId: HSTDCCC750

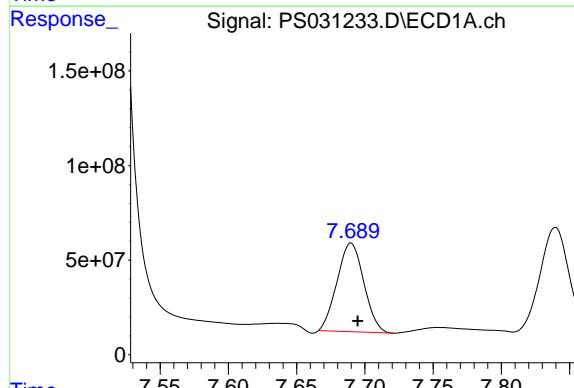
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



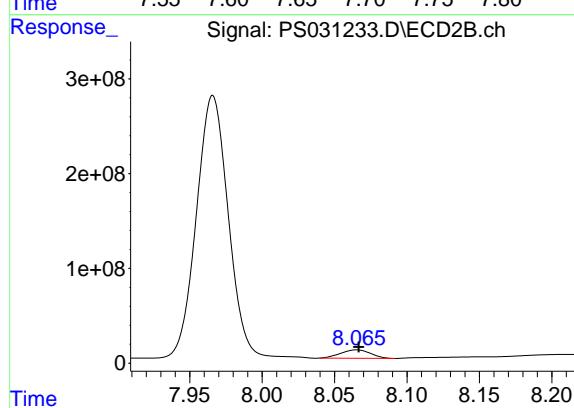
#5 DICAMBA

R.T.: 7.966 min
Delta R.T.: -0.002 min
Response: 4200124781
Conc: 650.84 ng/ml



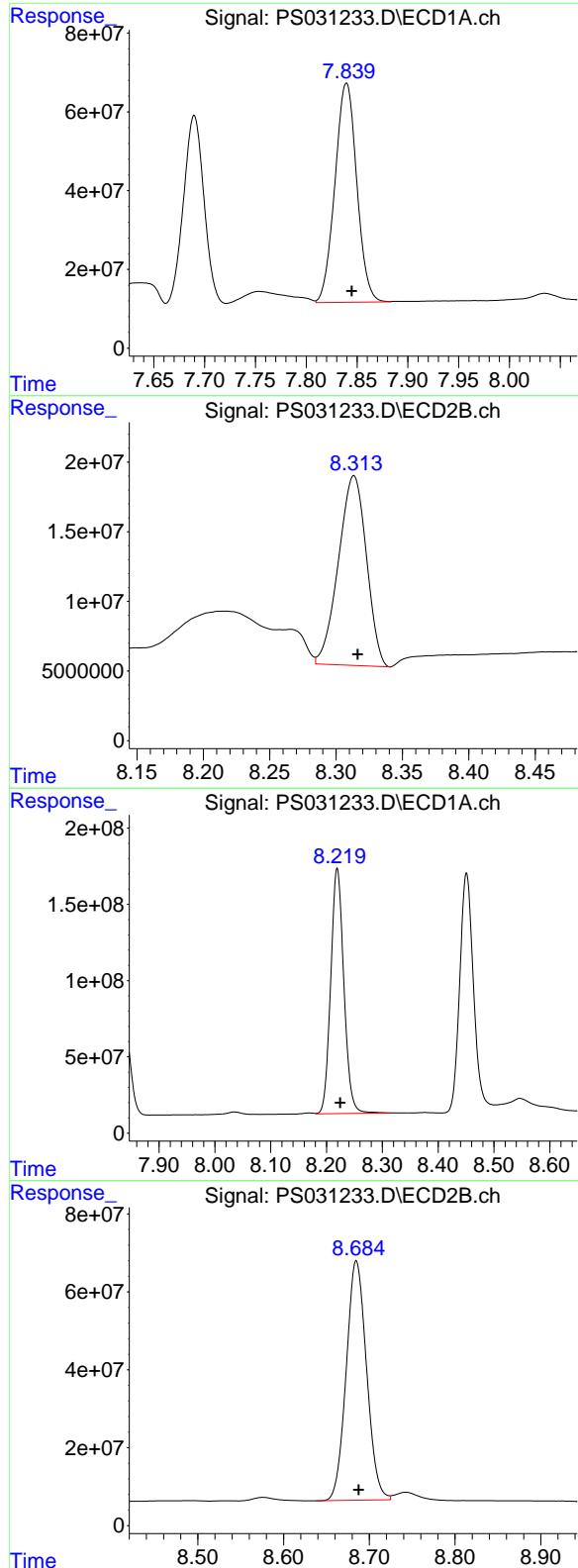
#6 MCPP

R.T.: 7.690 min
Delta R.T.: -0.005 min
Response: 639646471
Conc: 63.90 ug/ml



#6 MCPP

R.T.: 8.065 min
Delta R.T.: -0.001 min
Response: 127986691
Conc: 61.60 ug/ml



#7 MCPA

R.T.: 7.840 min
 Delta R.T.: -0.005 min
 Response: 831645162
 Conc: 66.46 ug/ml

Instrument: ECD_S
 ClientSampleId: HSTDCCC750

Manual Integrations
APPROVED

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 Supervised By :mohammad ahmed 07/26/2025

#7 MCPA

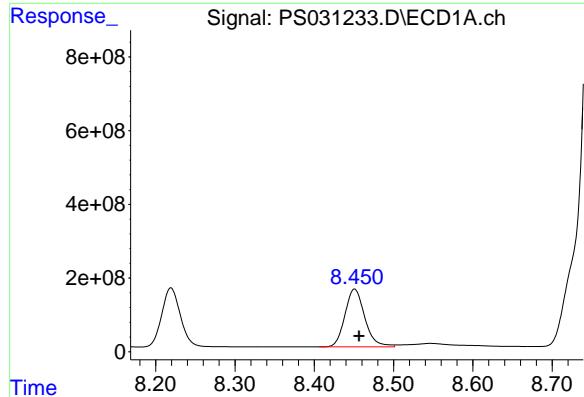
R.T.: 8.313 min
 Delta R.T.: -0.003 min
 Response: 199200038
 Conc: 63.13 ug/ml

#8 DICHLOPROP

R.T.: 8.219 min
 Delta R.T.: -0.005 min
 Response: 2628708493
 Conc: 687.79 ng/ml

#8 DICHLOPROP

R.T.: 8.685 min
 Delta R.T.: -0.003 min
 Response: 1015326356
 Conc: 670.24 ng/ml



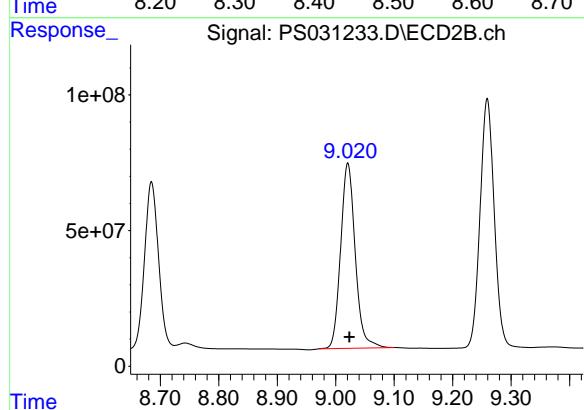
#9 2,4-D

R.T.: 8.451 min
Delta R.T.: -0.006 min
Response: 2723897944
Conc: 729.31 ng/ml

Instrument: ECD_S
ClientSampleId: HSTDCCC750

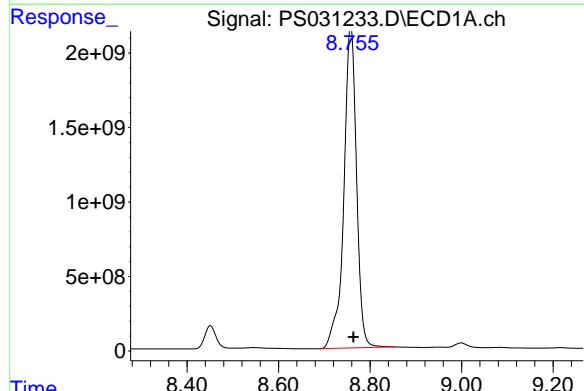
Manual Integrations
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Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



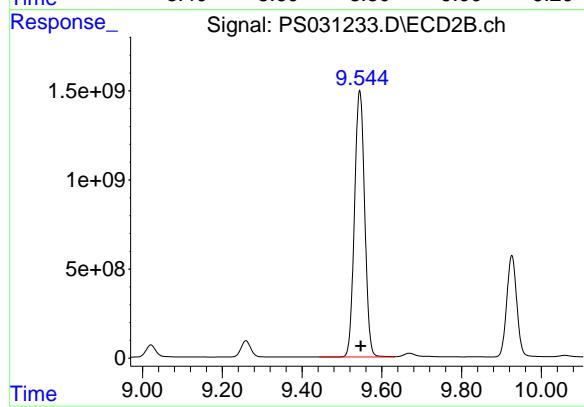
#9 2,4-D

R.T.: 9.021 min
Delta R.T.: -0.003 min
Response: 1183069685
Conc: 696.61 ng/ml



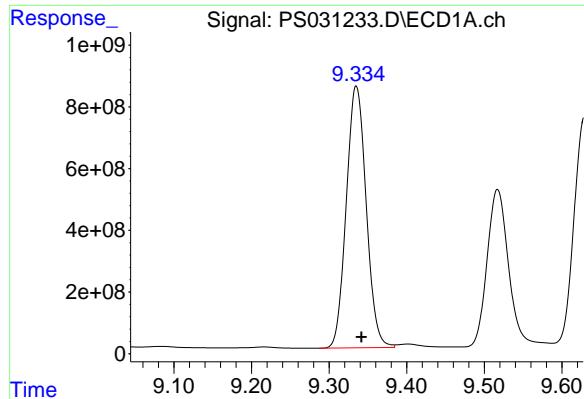
#10 Pentachlorophenol

R.T.: 8.755 min
Delta R.T.: -0.008 min
Response: 41625198173
Conc: 762.07 ng/ml



#10 Pentachlorophenol

R.T.: 9.545 min
Delta R.T.: -0.003 min
Response: 26526744051
Conc: 678.76 ng/ml



#11 2,4,5-TP (SILVEX)

R.T.: 9.335 min

Delta R.T.: -0.007 min

Response: 15136567168

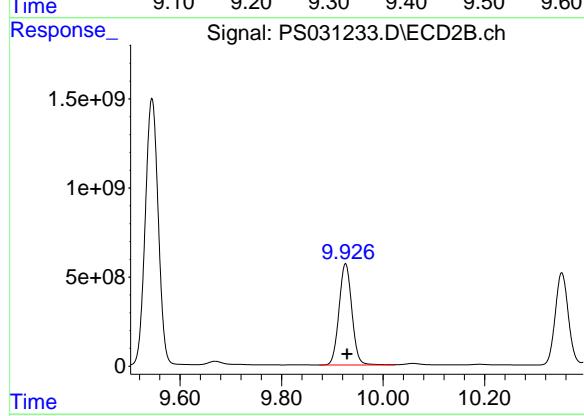
Conc: 689.48 ng/ml

Instrument:

ECD_S

ClientSampleId :

HSTDCCC750



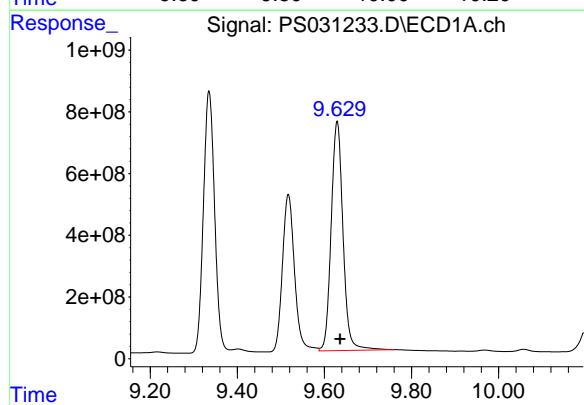
#11 2,4,5-TP (SILVEX)

R.T.: 9.926 min

Delta R.T.: -0.003 min

Response: 10005926582

Conc: 671.80 ng/ml



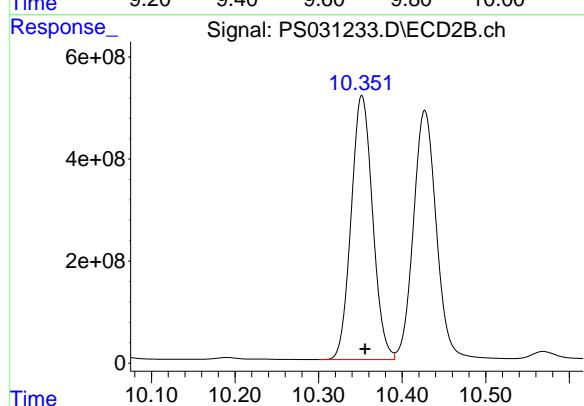
#12 2,4,5-T

R.T.: 9.629 min

Delta R.T.: -0.007 min

Response: 14005933448

Conc: 717.23 ng/ml



#12 2,4,5-T

R.T.: 10.352 min

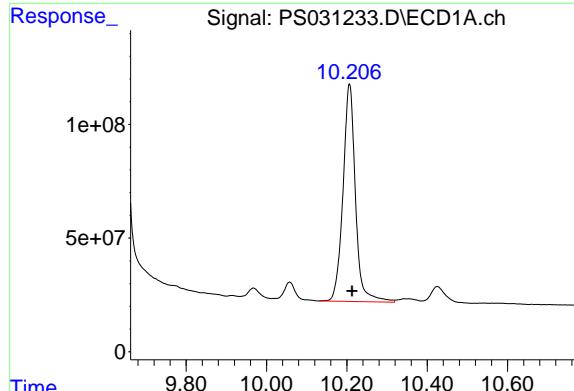
Delta R.T.: -0.004 min

Response: 9233980783

Conc: 649.39 ng/ml

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



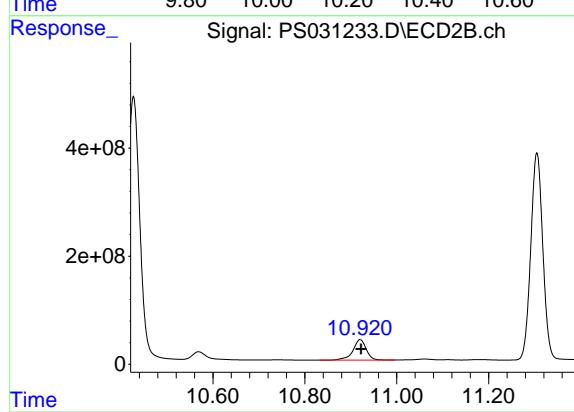
#13 2,4-DB

R.T.: 10.207 min
Delta R.T.: -0.006 min
Response: 2059772066
Conc: 688.91 ng/ml

Instrument: ECD_S
ClientSampleId: HSTDCCC750

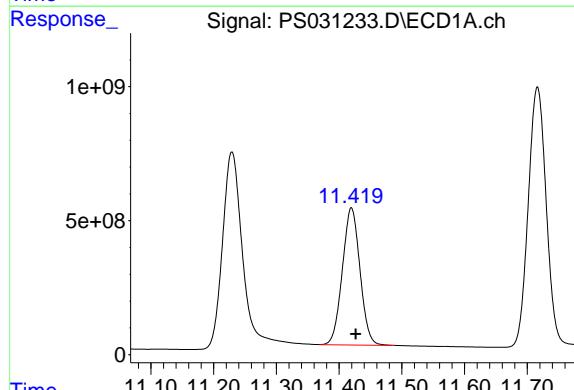
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



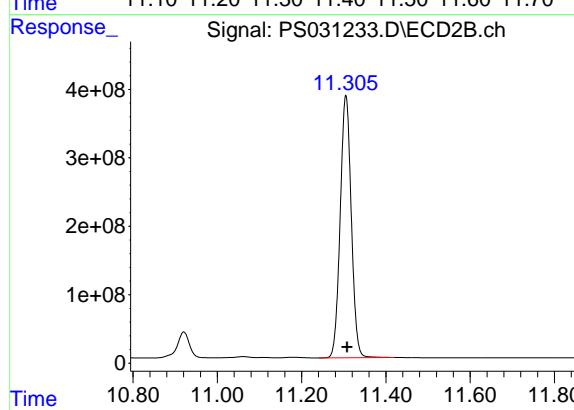
#13 2,4-DB

R.T.: 10.920 min
Delta R.T.: -0.002 min
Response: 764054036
Conc: 652.75 ng/ml



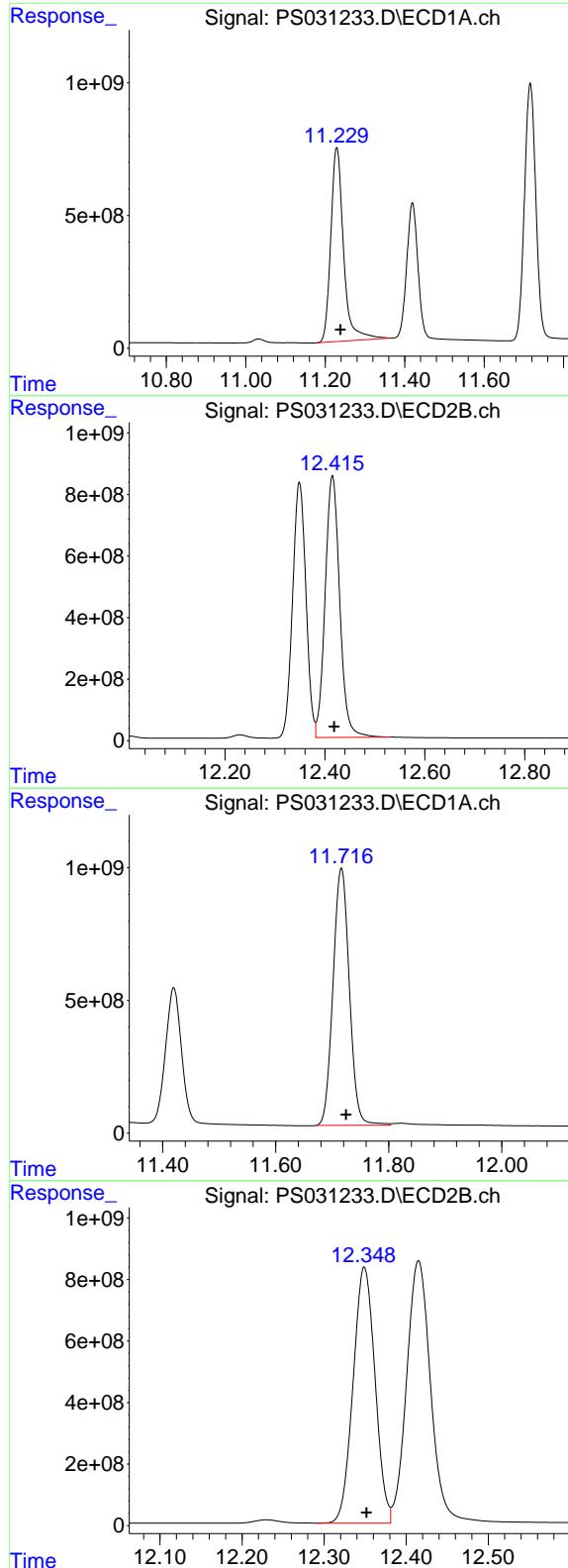
#14 DINOSEB

R.T.: 11.419 min
Delta R.T.: -0.008 min
Response: 10001961874
Conc: 642.41 ng/ml



#14 DINOSEB

R.T.: 11.305 min
Delta R.T.: -0.003 min
Response: 6972808210
Conc: 616.95 ng/ml



#15 Picloram

R.T.: 11.229 min
 Delta R.T.: -0.010 min
 Response: 16290439586
 Conc: 814.25 ng/ml

Instrument: ECD_S
 ClientSampleId: HSTDCCC750

Manual Integrations
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Reviewed By :Yogesh Patel 07/25/2025
 Supervised By :mohammad ahmed 07/26/2025

#15 Picloram

R.T.: 12.415 min
 Delta R.T.: -0.004 min
 Response: 17205474787
 Conc: 691.12 ng/ml

#16 DCPA

R.T.: 11.716 min
 Delta R.T.: -0.008 min
 Response: 19417209517
 Conc: 676.71 ng/ml

#16 DCPA

R.T.: 12.348 min
 Delta R.T.: -0.003 min
 Response: 15457311166
 Conc: 671.01 ng/ml



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

CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance

Contract: TETR16

Lab Code: ACE

SDG NO.: Q2667

Continuing Calib Date: 07/24/2025

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

07/21/2025

Continuing Calib Time: 23:29

Initial Calibration Time(s): 15:02

16:39

GC Column: RTX-CLP

ID: 0.32 (mm)

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



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Fax : 908 789 8922

CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance

Contract: TETR16

Lab Code: ACE

SDG NO.: Q2667

Continuing Calib Date: 07/24/2025

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

07/21/2025

Continuing Calib Time: 23:29

Initial Calibration Time(s): 15:02

16:39

GC Column: RTX-CLP2

ID: 0.32 (mm)

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



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CALIBRATION VERIFICATION SUMMARY

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

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

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



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

CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance

Contract: TETR16

Lab Code: ACE

SDG NO.: Q2667

GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 07/21/2025 07/21/2025

Client Sample No.: CCAL02

Date Analyzed: 07/24/2025

Lab Sample No.: HSTDCCC750

Data File : PS031243.D

Time Analyzed: 23:29

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072425\
 Data File : PS031243.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 24 Jul 2025 23:29
 Operator : AR\AJ
 Sample : HSTDCCC750
 Misc :
 ALS Vial : 35 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDCCC750

Manual Integrations
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Reviewed By :Yogesh Patel 07/25/2025
 Supervised By :mohammad ahmed 07/26/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jul 25 03:48:03 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 03:18:42 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 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 0.25 μ m

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

System Monitoring Compounds

4) S 2,4-DCAA 7.320 7.764 2909.5E6 699.2E6 669.117 688.879

Target Compounds

1) T	Dalapon	2.686	2.705	3590.9E6	1712.8E6	572.445	603.780
2) T	3,5-DICHL...	6.483	6.712	3507.8E6	958.1E6	635.156	622.190
3) T	4-Nitroph...	7.119	7.298	1152.9E6	1104.9E6	699.230	610.691
5) T	DICAMBA	7.508	7.966	9955.8E6	4165.2E6	603.490	645.427
6) T	MCPP	7.689	8.065	642.7E6	129.5E6	64.202	62.324
7) T	MCPA	7.840	8.313	830.7E6	199.6E6	66.382	63.271
8) T	DICHLORPROP	8.219	8.686	2628.5E6	1023.6E6	687.728	675.681
9) T	2,4-D	8.451	9.022	2718.6E6	1180.5E6	727.898	695.083
10) T	Pentachlo...	8.754	9.545	41806.4E6	26487.2E6	765.384m	677.748
11) T	2,4,5-TP ...	9.335	9.926	15058.6E6	9925.5E6	685.931	666.399
12) T	2,4,5-T	9.628	10.353	13914.5E6	9159.7E6	712.549	644.166
13) T	2,4-DB	10.205	10.920	2019.5E6	768.8E6	675.453	656.812
14) T	DINOSEB	11.418	11.305	9801.3E6	6793.7E6	629.520m	601.099
15) T	Picloram	11.228	12.415	15650.3E6	16761.7E6	782.260m	673.296
16) T	DCPA	11.716	12.348	19471.9E6	15465.9E6	678.618	671.379m

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072425\
 Data File : PS031243.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 24 Jul 2025 23:29
 Operator : AR\AJ
 Sample : HSTDCCC750
 Misc :
 ALS Vial : 35 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDCCC750

Manual Integrations
APPROVED

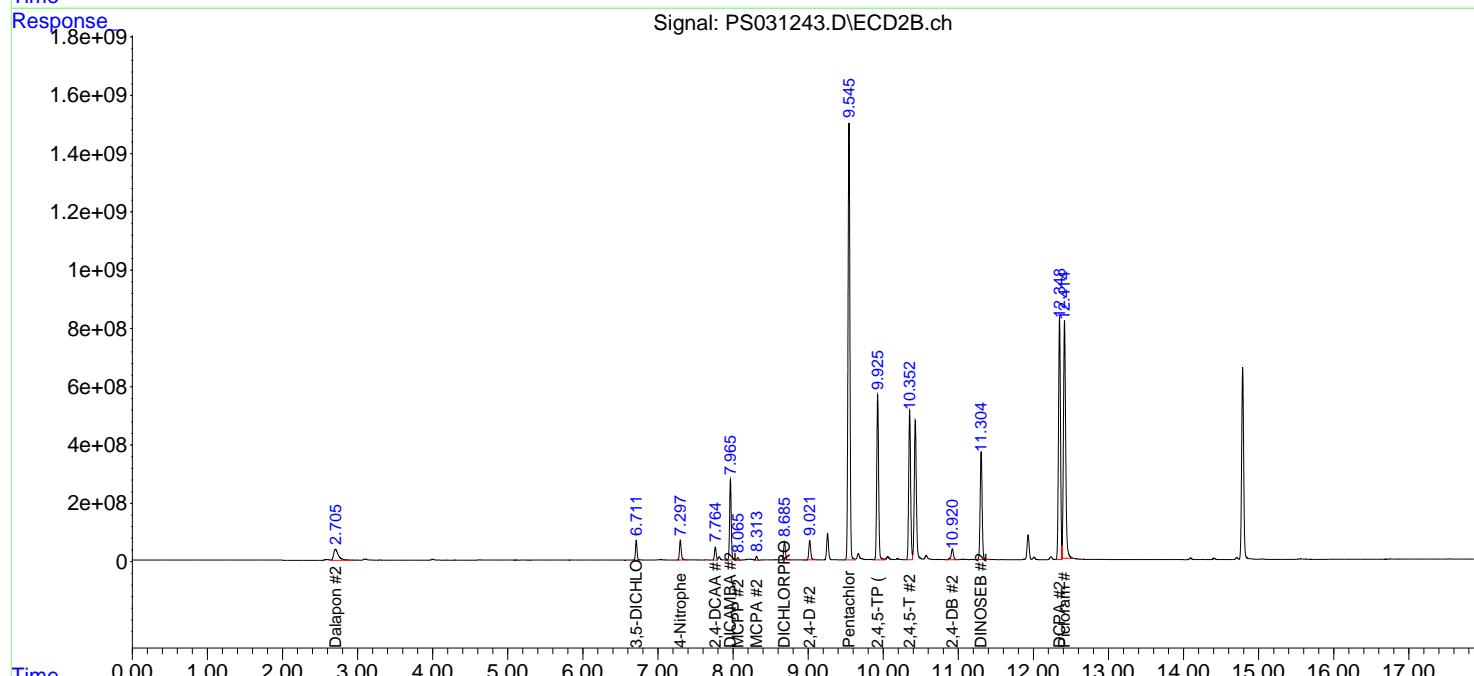
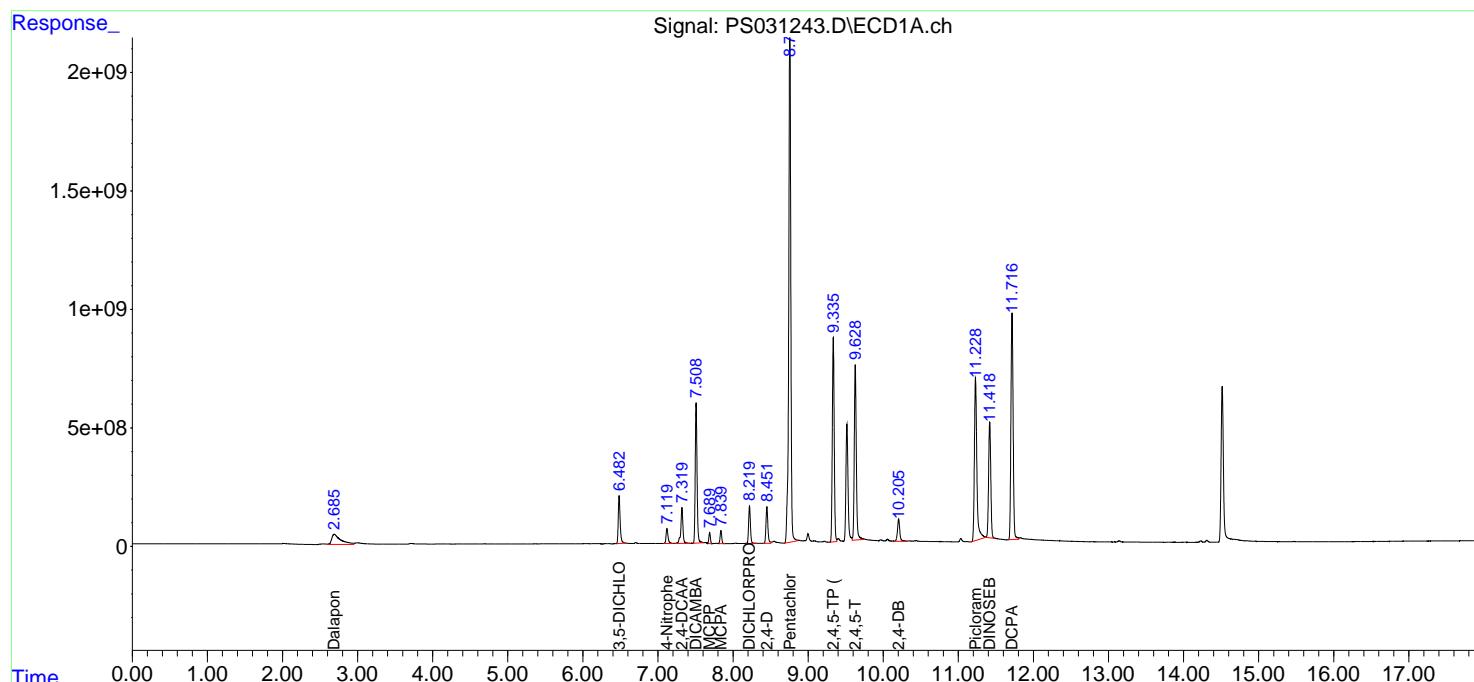
Reviewed By :Yogesh Patel 07/25/2025
 Supervised By :mohammad ahmed 07/26/2025

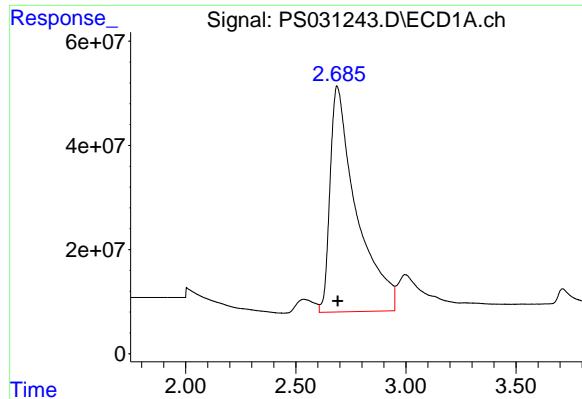
Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jul 25 03:48:03 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 03:18:42 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l

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 0.25 μ m





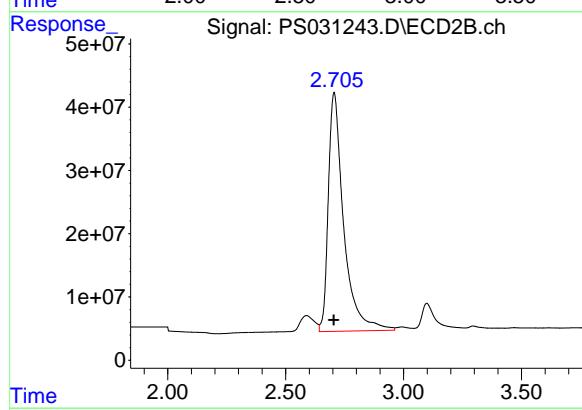
#1 Dalapon

R.T.: 2.686 min
Delta R.T.: -0.004 min
Response: 3590892898
Conc: 572.45 ng/ml

Instrument: ECD_S
ClientSampleId: HSTDCCC750

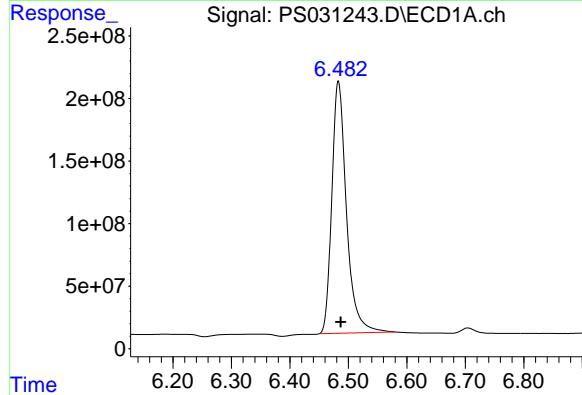
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



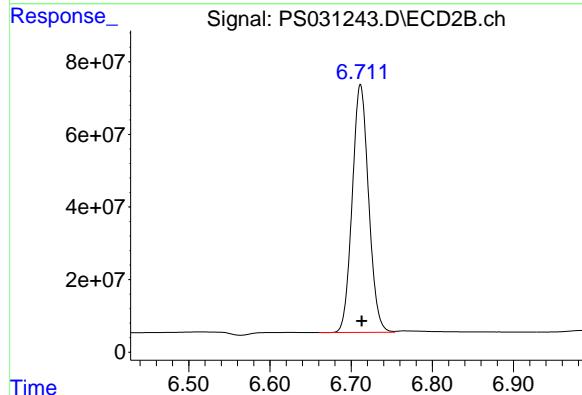
#1 Dalapon

R.T.: 2.705 min
Delta R.T.: 0.002 min
Response: 1712766026
Conc: 603.78 ng/ml



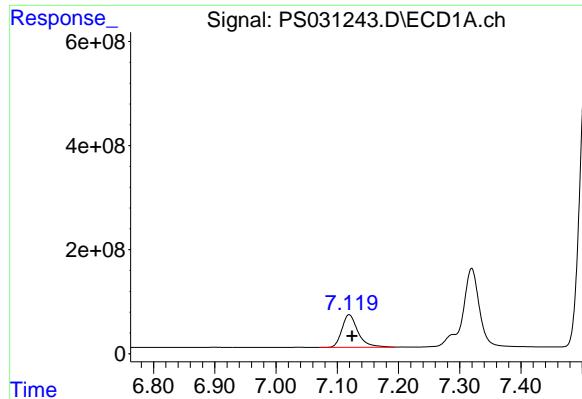
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.483 min
Delta R.T.: -0.004 min
Response: 3507807605
Conc: 635.16 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.712 min
Delta R.T.: -0.001 min
Response: 958106162
Conc: 622.19 ng/ml



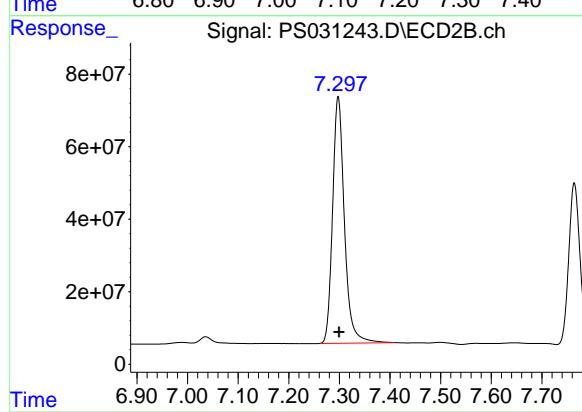
#3 4-Nitrophenol

R.T.: 7.119 min
Delta R.T.: -0.005 min
Response: 1152879871
Conc: 699.23 ng/ml

Instrument:
ECD_S
ClientSampleId:
HSTDCCC750

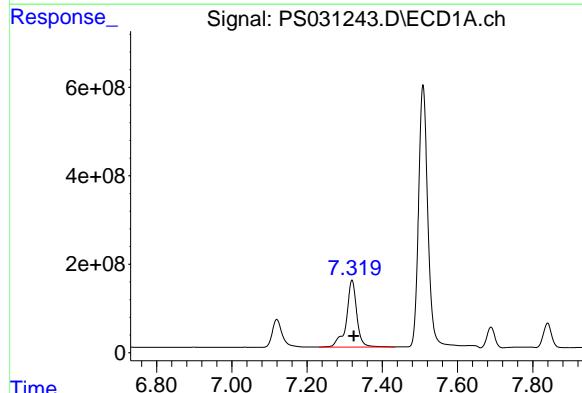
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



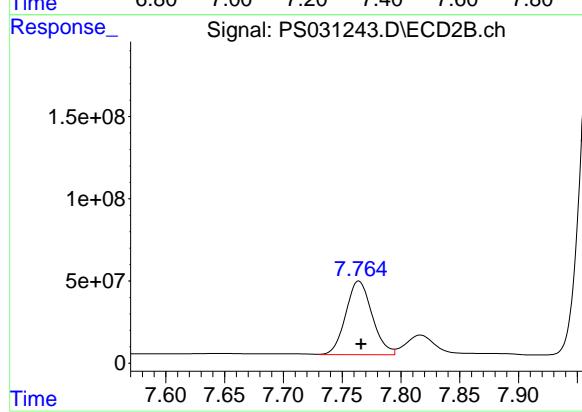
#3 4-Nitrophenol

R.T.: 7.298 min
Delta R.T.: -0.001 min
Response: 1104933236
Conc: 610.69 ng/ml



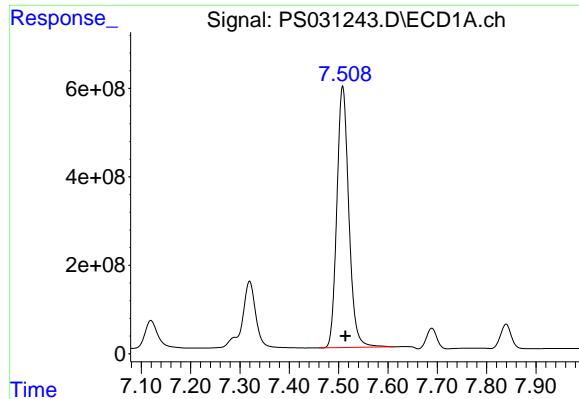
#4 2,4-DCAA

R.T.: 7.320 min
Delta R.T.: -0.005 min
Response: 2909491460
Conc: 669.12 ng/ml



#4 2,4-DCAA

R.T.: 7.764 min
Delta R.T.: -0.002 min
Response: 699190254
Conc: 688.88 ng/ml



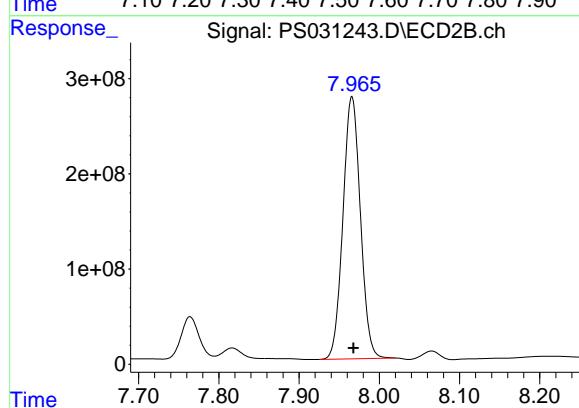
#5 DICAMBA

R.T.: 7.508 min
Delta R.T.: -0.006 min
Response: 9955761097
Conc: 603.49 ng/ml

Instrument:
ECD_S
ClientSampleId:
HSTDCCC750

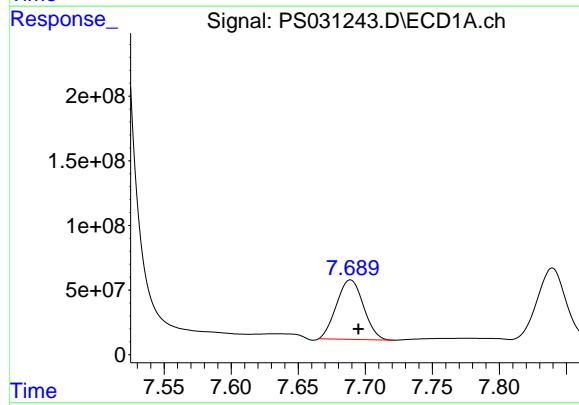
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



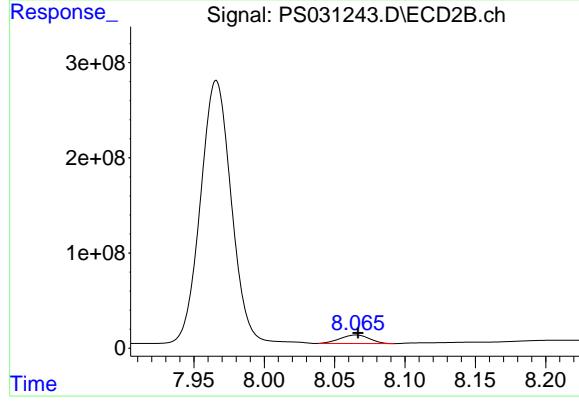
#5 DICAMBA

R.T.: 7.966 min
Delta R.T.: -0.002 min
Response: 4165177294
Conc: 645.43 ng/ml



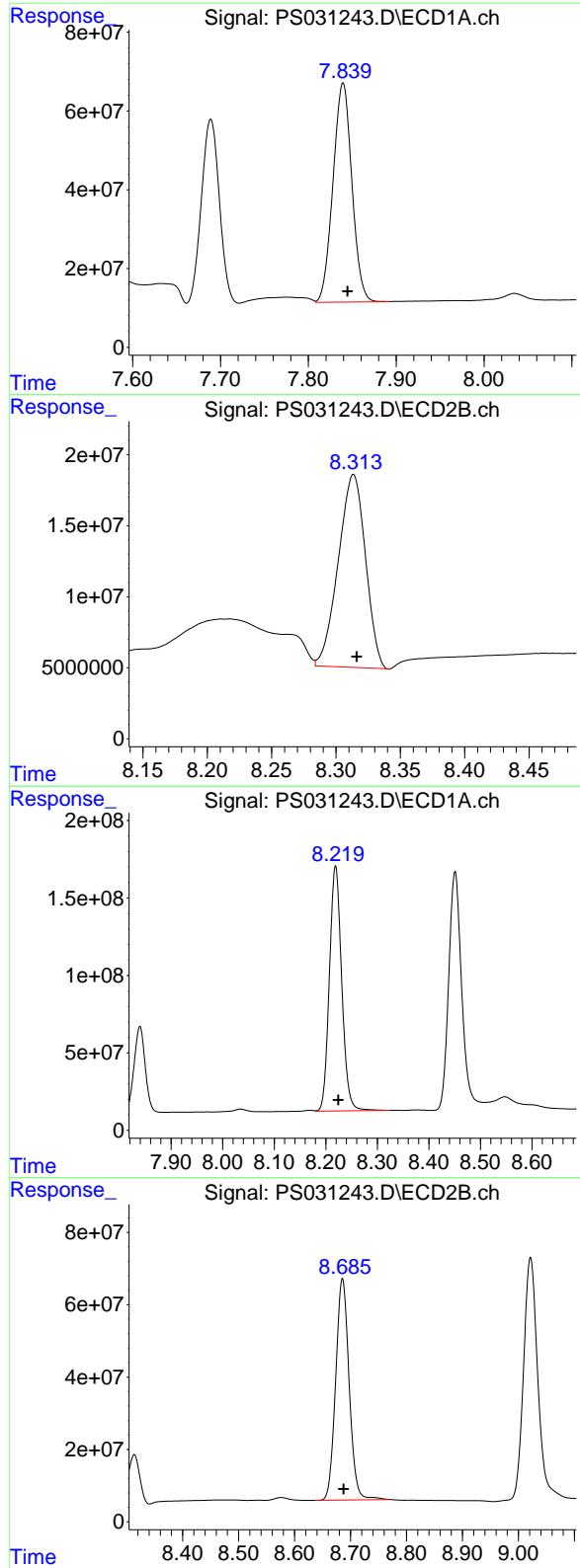
#6 MCPP

R.T.: 7.689 min
Delta R.T.: -0.006 min
Response: 642666704
Conc: 64.20 ug/ml



#6 MCPP

R.T.: 8.065 min
Delta R.T.: -0.002 min
Response: 129498194
Conc: 62.32 ug/ml



#7 MCPA

R.T.: 7.840 min
 Delta R.T.: -0.005 min
 Response: 830716877
 Conc: 66.38 ug/ml

Instrument:
 ECD_S
 ClientSampleId:
 HSTDCCC750

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
 Supervised By :mohammad ahmed 07/26/2025

#7 MCPA

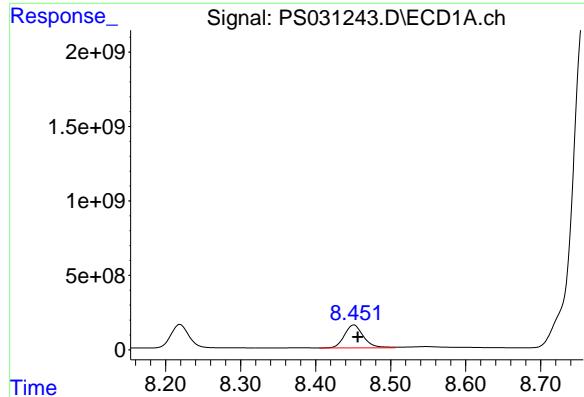
R.T.: 8.313 min
 Delta R.T.: -0.003 min
 Response: 199634103
 Conc: 63.27 ug/ml

#8 DICHLOPROP

R.T.: 8.219 min
 Delta R.T.: -0.006 min
 Response: 2628467440
 Conc: 687.73 ng/ml

#8 DICHLOPROP

R.T.: 8.686 min
 Delta R.T.: -0.002 min
 Response: 1023561858
 Conc: 675.68 ng/ml



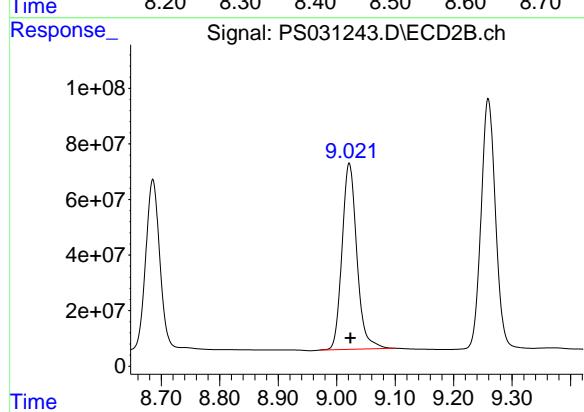
#9 2,4-D

R.T.: 8.451 min
Delta R.T.: -0.005 min
Response: 2718637678
Conc: 727.90 ng/ml

Instrument:
ECD_S
ClientSampleId:
HSTDCCC750

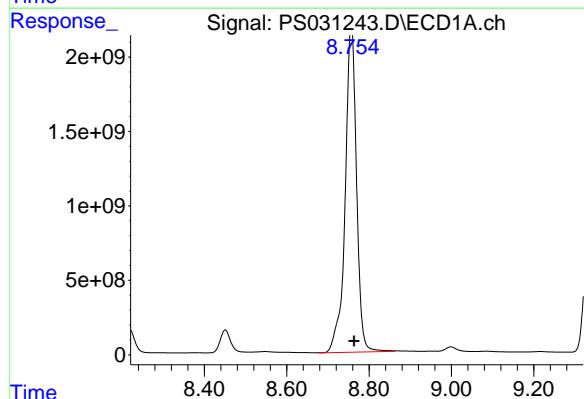
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



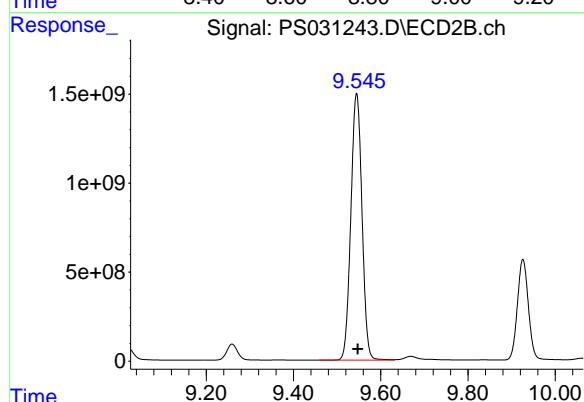
#9 2,4-D

R.T.: 9.022 min
Delta R.T.: -0.002 min
Response: 1180472427
Conc: 695.08 ng/ml



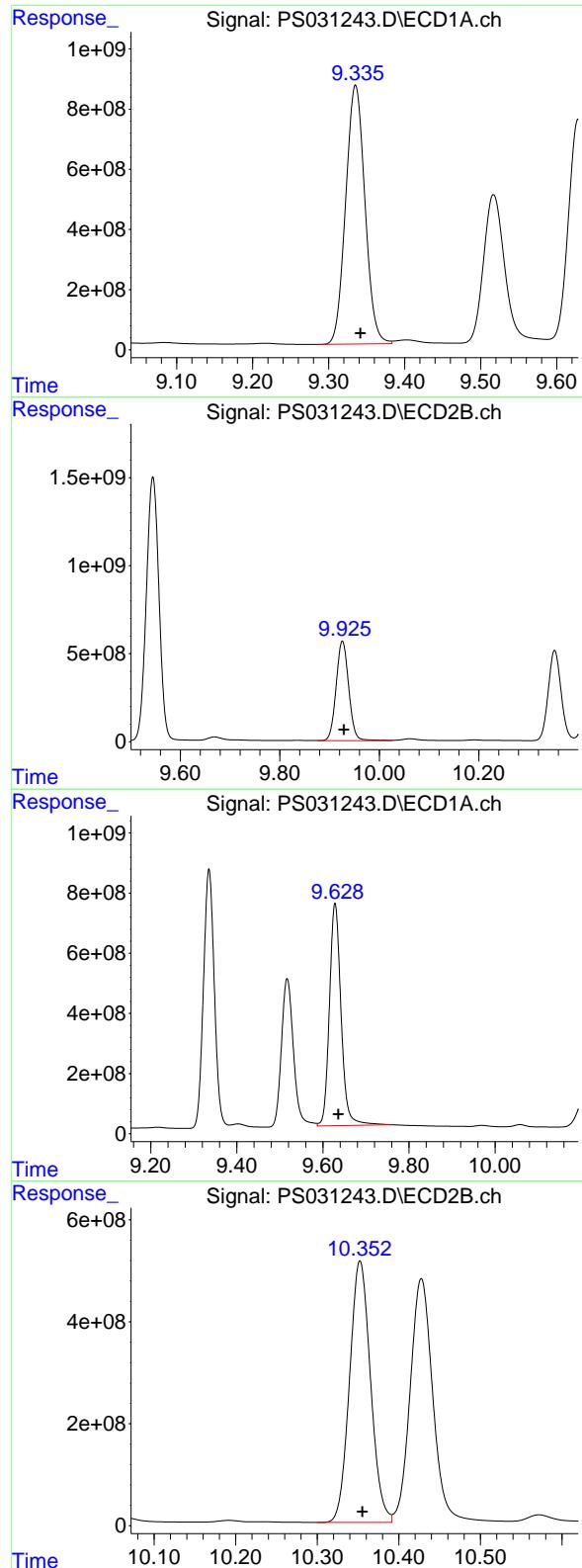
#10 Pentachlorophenol

R.T.: 8.754 min
Delta R.T.: -0.010 min
Response: 41806440092
Conc: 765.38 ng/ml



#10 Pentachlorophenol

R.T.: 9.545 min
Delta R.T.: -0.002 min
Response: 26487198066
Conc: 677.75 ng/ml



#11 2,4,5-TP (SILVEX)

R.T.: 9.335 min

Delta R.T.: -0.007 min

Response: 15058624825

Conc: 685.93 ng/ml

Instrument:

ECD_S

ClientSampleId :

HSTDCCC750

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025

Supervised By :mohammad ahmed 07/26/2025

#11 2,4,5-TP (SILVEX)

R.T.: 9.926 min

Delta R.T.: -0.003 min

Response: 9925460417

Conc: 666.40 ng/ml

#12 2,4,5-T

R.T.: 9.628 min

Delta R.T.: -0.008 min

Response: 13914521193

Conc: 712.55 ng/ml

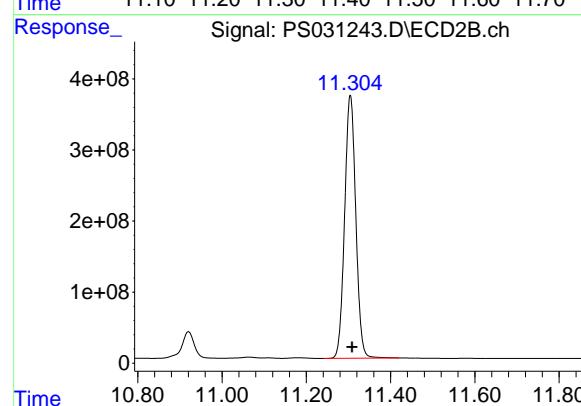
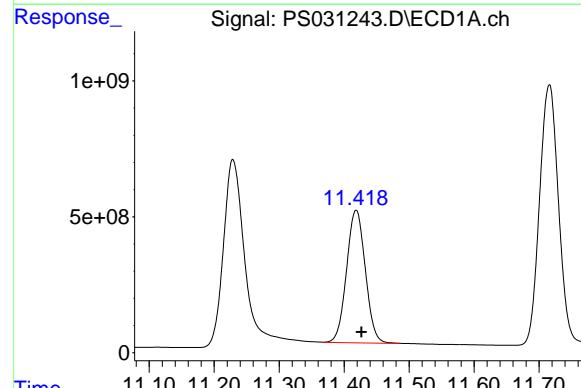
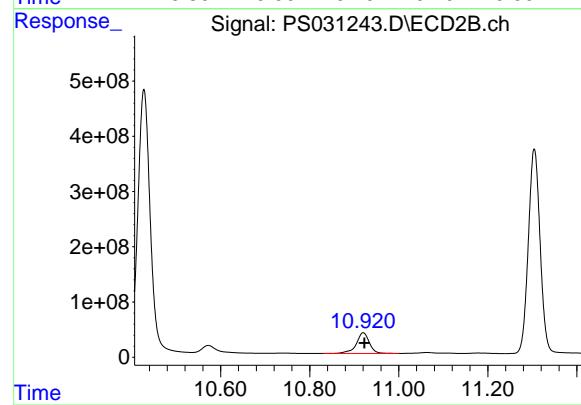
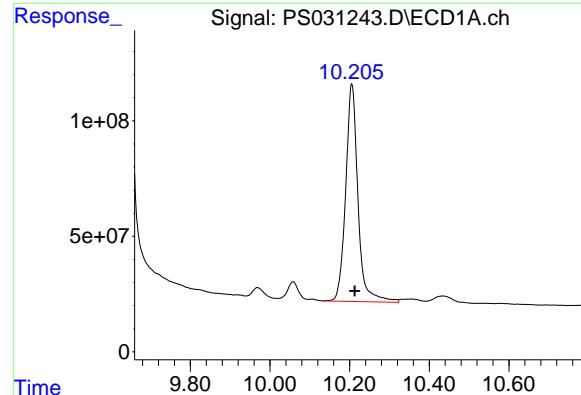
#12 2,4,5-T

R.T.: 10.353 min

Delta R.T.: -0.003 min

Response: 9159692401

Conc: 644.17 ng/ml



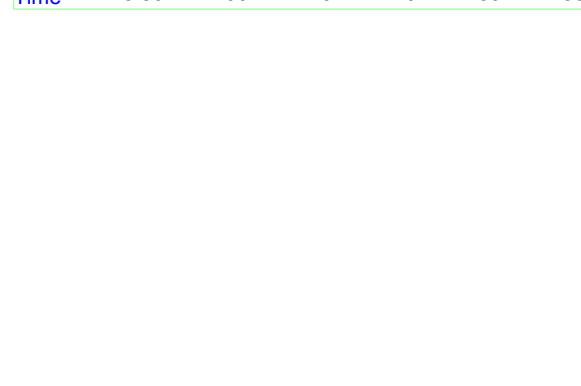
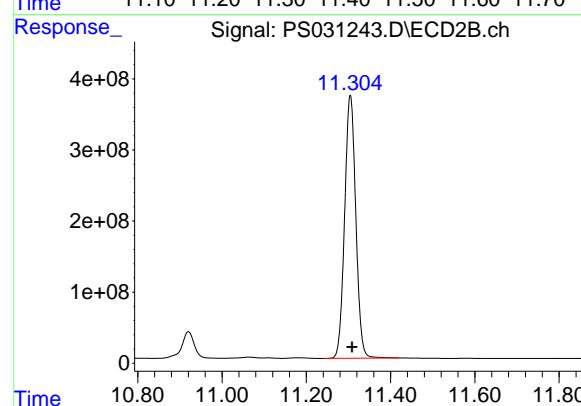
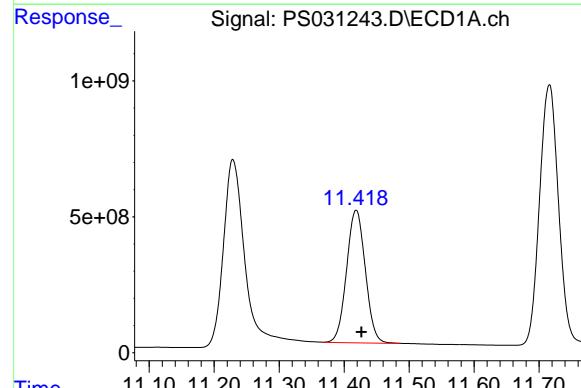
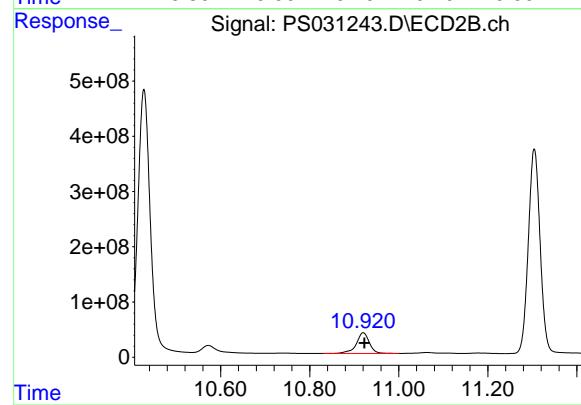
#13 2,4-DB

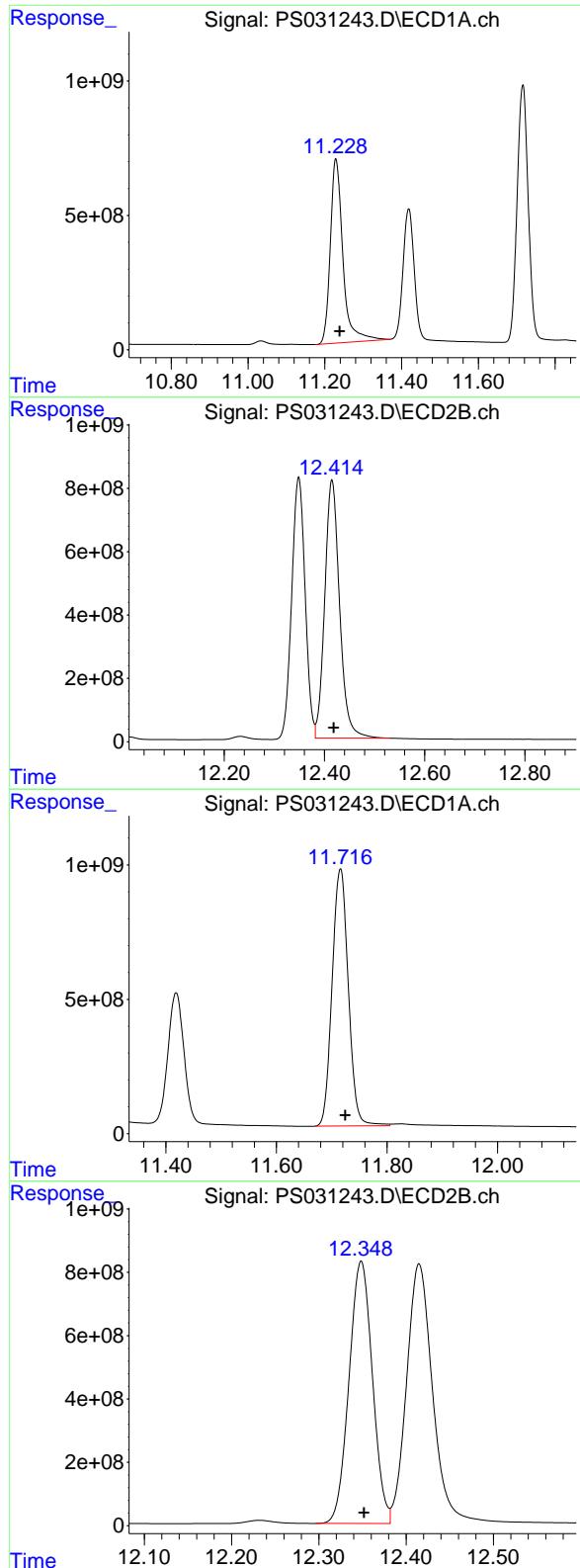
R.T.: 10.205 min
Delta R.T.: -0.007 min
Response: 2019527006
Conc: 675.45 ng/ml

Instrument: ECD_S
ClientSampleId: HSTDCCC750

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025





#15 Picloram

R.T.: 11.228 min
 Delta R.T.: -0.011 min
 Response: 15650340861
 Conc: 782.26 ng/ml

Instrument: ECD_S
 ClientSampleId: HSTDCCC750

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
 Supervised By :mohammad ahmed 07/26/2025

#15 Picloram

R.T.: 12.415 min
 Delta R.T.: -0.004 min
 Response: 16761719896
 Conc: 673.30 ng/ml

#16 DCPA

R.T.: 11.716 min
 Delta R.T.: -0.008 min
 Response: 19471902543
 Conc: 678.62 ng/ml

#16 DCPA

R.T.: 12.348 min
 Delta R.T.: -0.003 min
 Response: 15465916997
 Conc: 671.38 ng/ml



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

CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance

Contract: TETR16

Lab Code: ACE

SDG NO.: Q2667

Continuing Calib Date: 07/25/2025

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

07/21/2025

Continuing Calib Time: 03:54

Initial Calibration Time(s): 15:02

16:39

GC Column: RTX-CLP

ID: 0.32 (mm)

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



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Fax : 908 789 8922

CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance

Contract: TETR16

Lab Code: ACE

SDG NO.: Q2667

Continuing Calib Date: 07/25/2025

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

07/21/2025

Continuing Calib Time: 03:54

Initial Calibration Time(s): 15:02

16:39

GC Column: RTX-CLP2

ID: 0.32 (mm)

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



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CALIBRATION VERIFICATION SUMMARY

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

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

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



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

CALIBRATION VERIFICATION SUMMARY

Lab Name: Alliance

Contract: TETR16

Lab Code: ACE

SDG NO.: Q2667

GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 07/21/2025 07/21/2025

Client Sample No.: CCAL03

Date Analyzed: 07/25/2025

Lab Sample No.: HSTDCCC750

Data File : PS031252.D

Time Analyzed: 03:54

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072425\
 Data File : PS031252.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 25 Jul 2025 03:54
 Operator : AR\AJ
 Sample : HSTDCCC750
 Misc :
 ALS Vial : 35 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDCCC750

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
 Supervised By :mohammad ahmed 07/26/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jul 25 04:32:30 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 03:18:42 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 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 0.25 μ m

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

System Monitoring Compounds

4) S 2,4-DCAA 7.321 7.766 2705.1E6 692.2E6 622.123 682.020

Target Compounds

1) T	Dalapon	2.690	2.707	3384.1E6	1668.4E6	539.473	588.156
2) T	3,5-DICHL...	6.483	6.713	3267.1E6	938.9E6	591.576	609.690
3) T	4-Nitroph...	7.120	7.300	1045.9E6	1090.4E6	634.327	602.653
5) T	DICAMBA	7.510	7.968	9468.9E6	4107.4E6	573.981	636.477
6) T	MCPP	7.691	8.067	627.6E6	122.7E6	62.693	59.051
7) T	MCPA	7.841	8.315	789.2E6	184.1E6	63.066	58.361
8) T	DICHLORPROP	8.220	8.687	2498.8E6	1001.0E6	653.808	660.761
9) T	2,4-D	8.452	9.024	2545.8E6	1152.9E6	681.609	678.873
10) T	Pentachlo...	8.757	9.546	39621.7E6	25586.3E6	725.385m	654.696
11) T	2,4,5-TP ...	9.336	9.928	14267.1E6	9734.9E6	649.878	653.605
12) T	2,4,5-T	9.630	10.355	12963.3E6	8952.0E6	663.836	629.561
13) T	2,4-DB	10.207	10.923	1860.4E6	747.7E6	622.229	638.760
14) T	DINOSEB	11.419	11.307	9358.3E6	6851.1E6	601.064m	606.181
15) T	Picloram	11.231	12.418	14293.3E6	16005.9E6	714.432m	642.935
16) T	DCPA	11.718	12.349	18018.9E6	14845.2E6	627.980	644.436m

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072425\
 Data File : PS031252.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 25 Jul 2025 03:54
 Operator : AR\AJ
 Sample : HSTDCCC750
 Misc :
 ALS Vial : 35 Sample Multiplier: 1

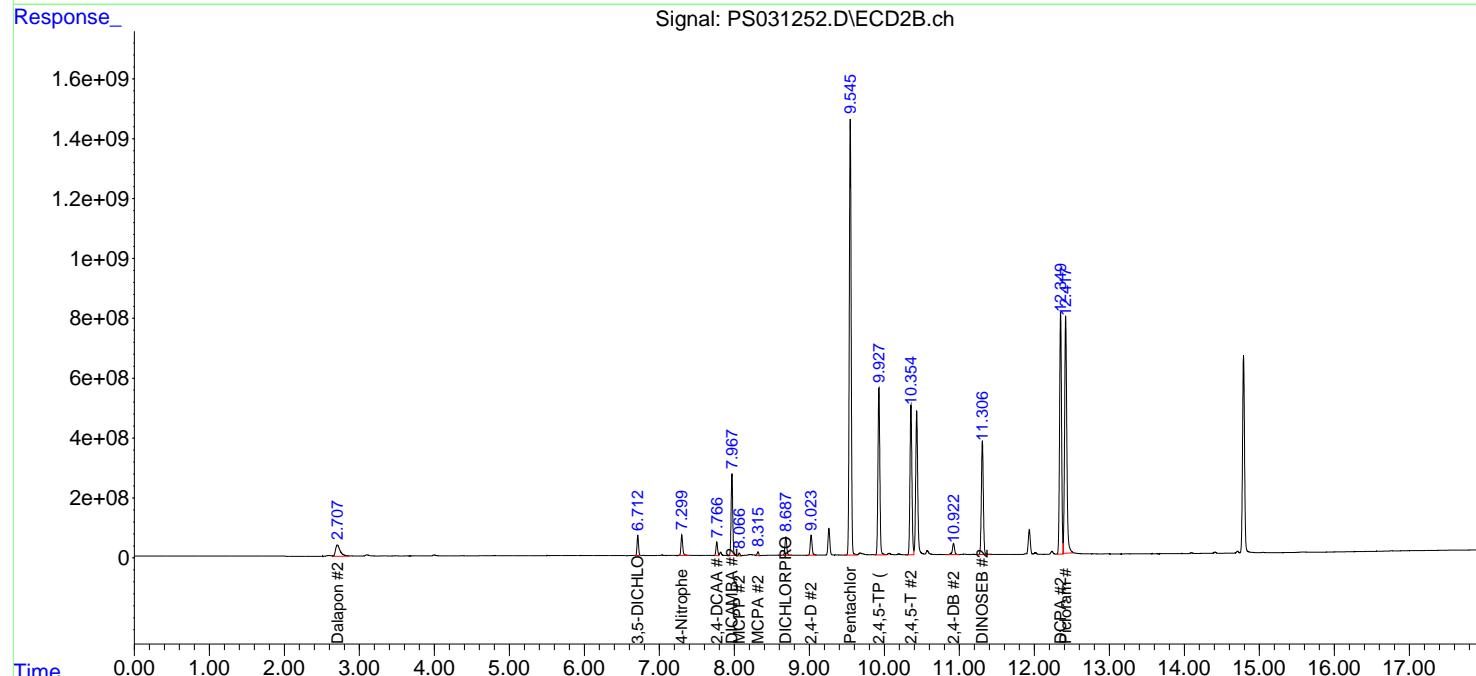
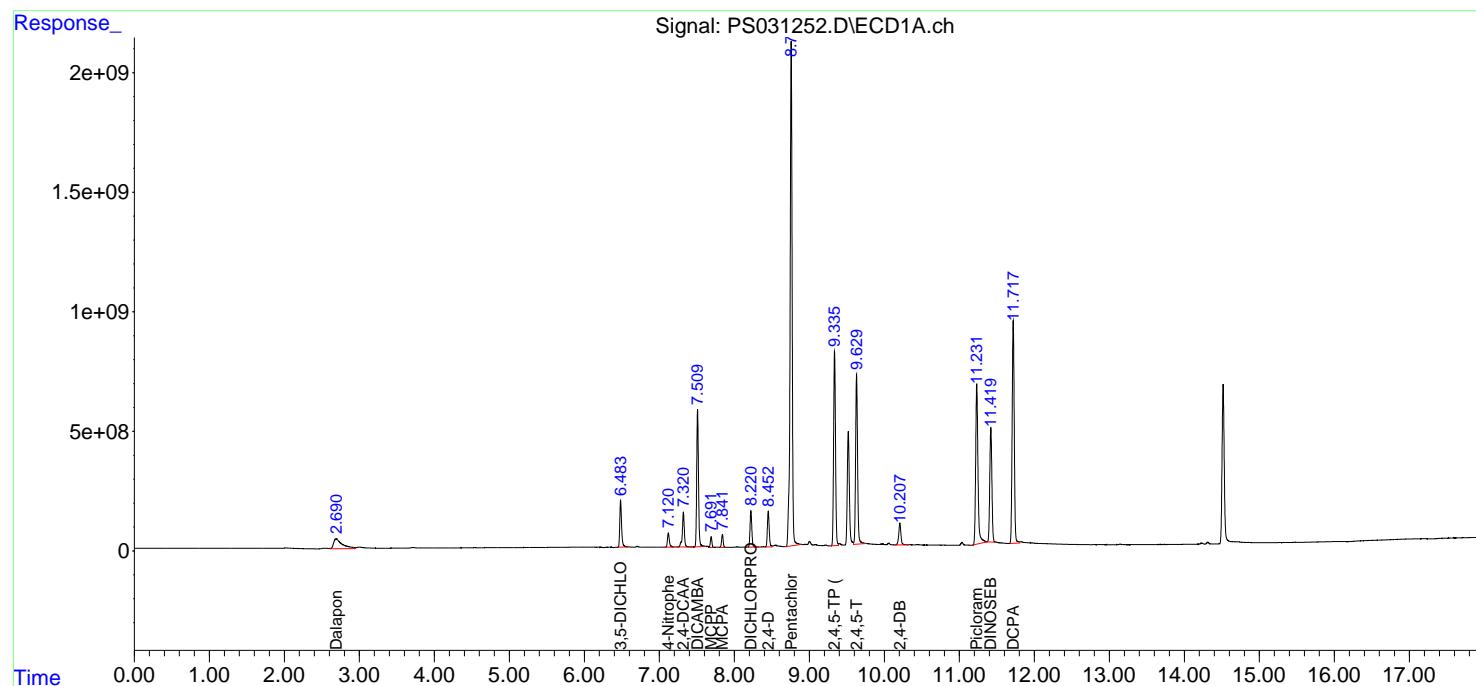
Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jul 25 04:32:30 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 03:18:42 2025
 Response via : Initial Calibration
 Integrator: ChemStation

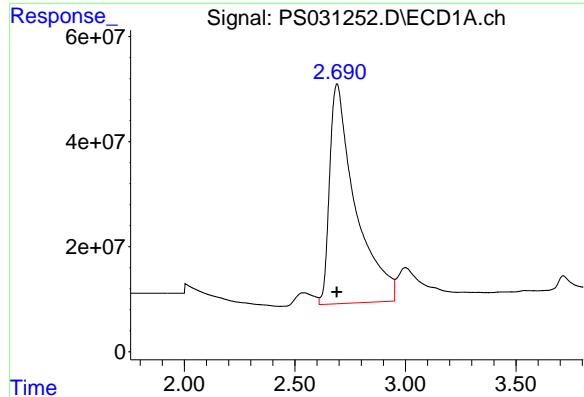
Volume Inj. : 1 μ l
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25 μ m

Instrument :
 ECD_S
 ClientSampleId :
 HSTDCCC750

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 07/25/2025
 Supervised By :mohammad ahmed 07/26/2025





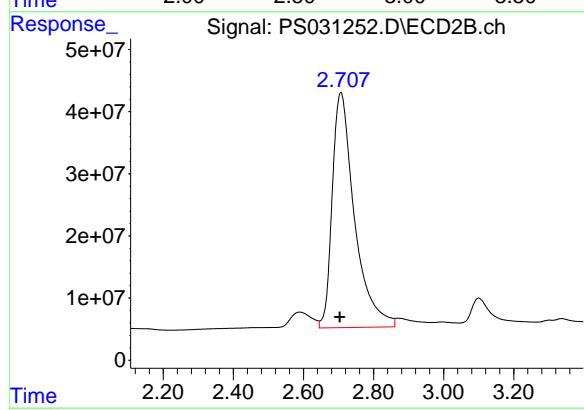
#1 Dalapon

R.T.: 2.690 min
Delta R.T.: 0.000 min
Response: 3384059763
Conc: 539.47 ng/ml

Instrument: ECD_S
ClientSampleId: HSTDCCC750

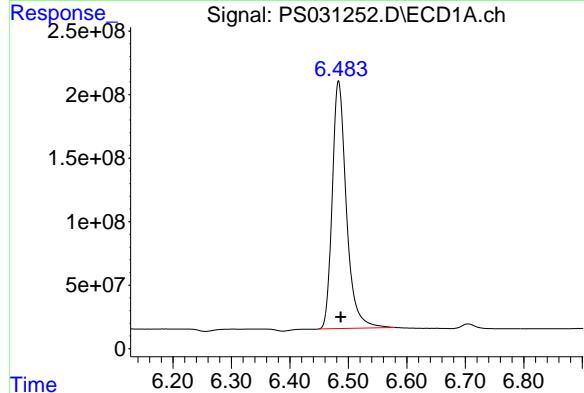
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



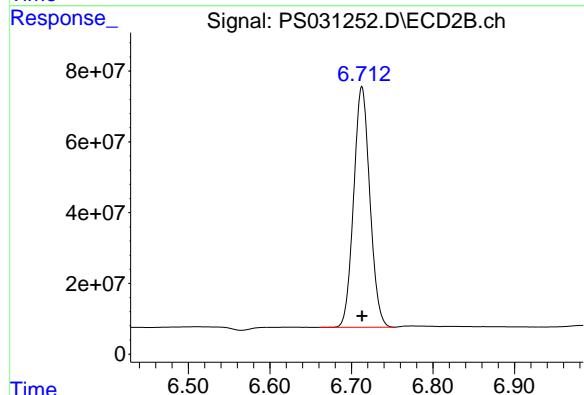
#1 Dalapon

R.T.: 2.707 min
Delta R.T.: 0.003 min
Response: 1668444503
Conc: 588.16 ng/ml



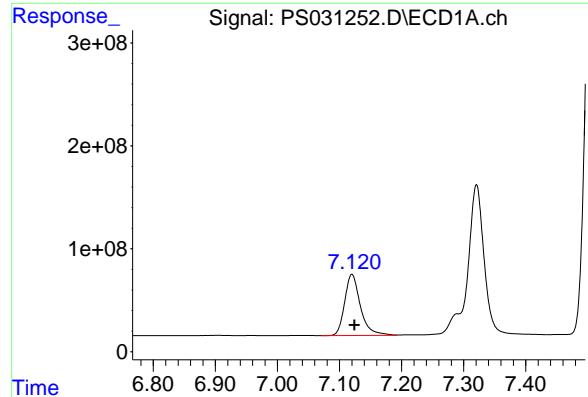
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.483 min
Delta R.T.: -0.004 min
Response: 3267128769
Conc: 591.58 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.713 min
Delta R.T.: 0.000 min
Response: 938858956
Conc: 609.69 ng/ml



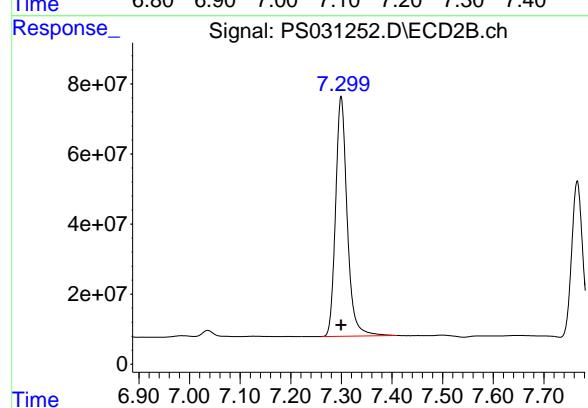
#3 4-Nitrophenol

R.T.: 7.120 min
Delta R.T.: -0.004 min
Response: 1045868687
Conc: 634.33 ng/ml

Instrument:
ECD_S
ClientSampleId :
HSTDCCC750

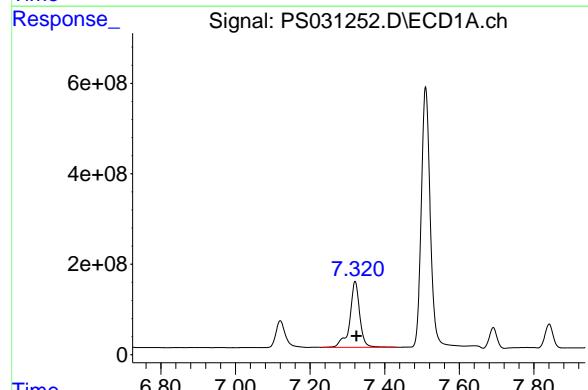
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



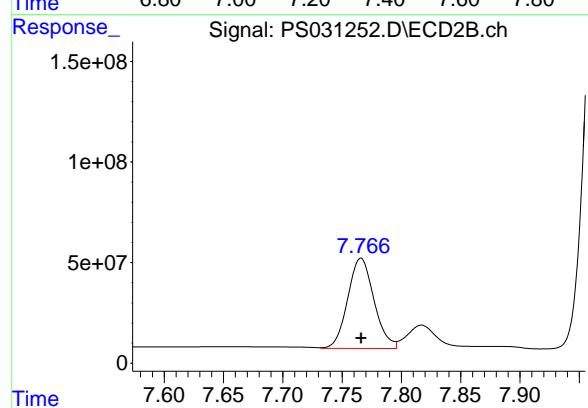
#3 4-Nitrophenol

R.T.: 7.300 min
Delta R.T.: 0.000 min
Response: 1090390696
Conc: 602.65 ng/ml



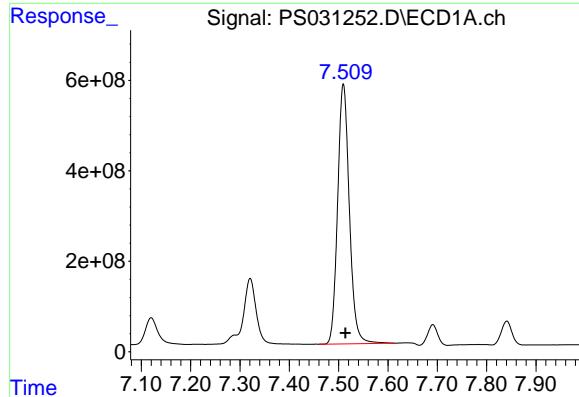
#4 2,4-DCAA

R.T.: 7.321 min
Delta R.T.: -0.004 min
Response: 2705146543
Conc: 622.12 ng/ml



#4 2,4-DCAA

R.T.: 7.766 min
Delta R.T.: 0.000 min
Response: 692228900
Conc: 682.02 ng/ml



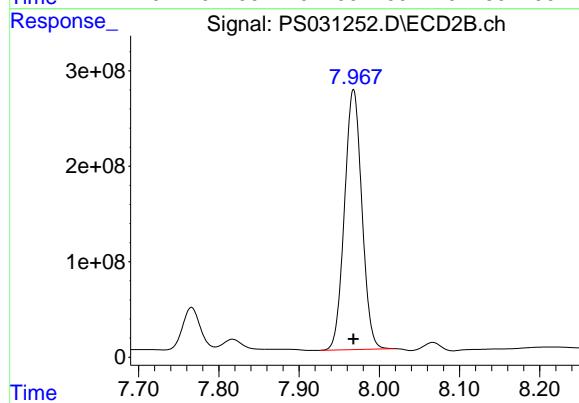
#5 DICAMBA

R.T.: 7.510 min
Delta R.T.: -0.004 min
Response: 9468945924
Conc: 573.98 ng/ml

Instrument: ECD_S
ClientSampleId: HSTDCCC750

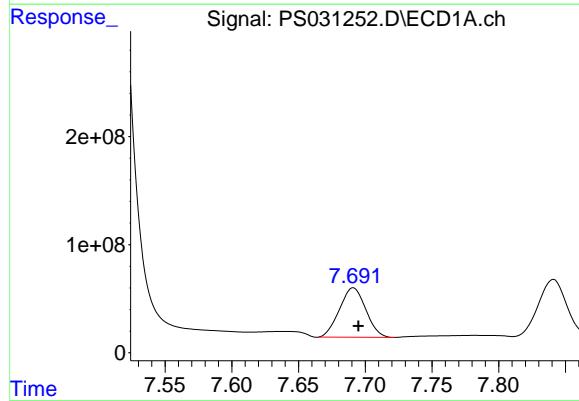
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



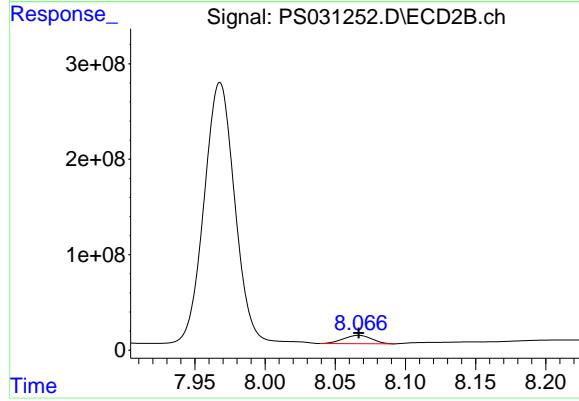
#5 DICAMBA

R.T.: 7.968 min
Delta R.T.: 0.000 min
Response: 4107418629
Conc: 636.48 ng/ml



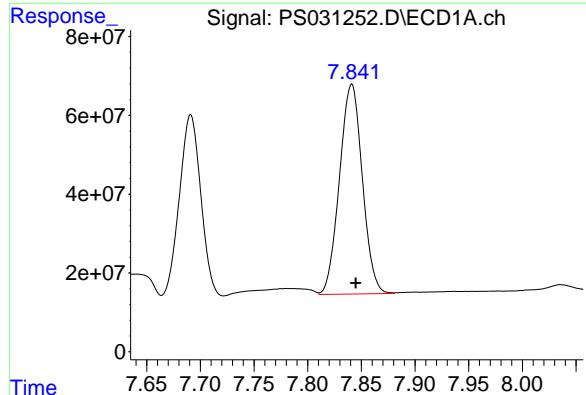
#6 MCPP

R.T.: 7.691 min
Delta R.T.: -0.004 min
Response: 627561683
Conc: 62.69 ug/ml



#6 MCPP

R.T.: 8.067 min
Delta R.T.: 0.000 min
Response: 122696627
Conc: 59.05 ug/ml



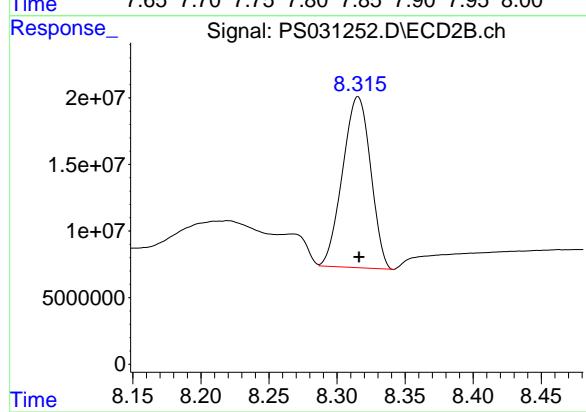
#7 MCPA

R.T.: 7.841 min
Delta R.T.: -0.004 min
Response: 789227130
Conc: 63.07 ug/ml

Instrument: ECD_S
ClientSampleId: HSTDCCC750

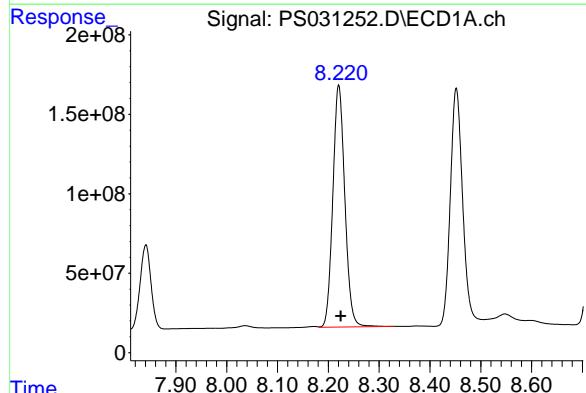
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



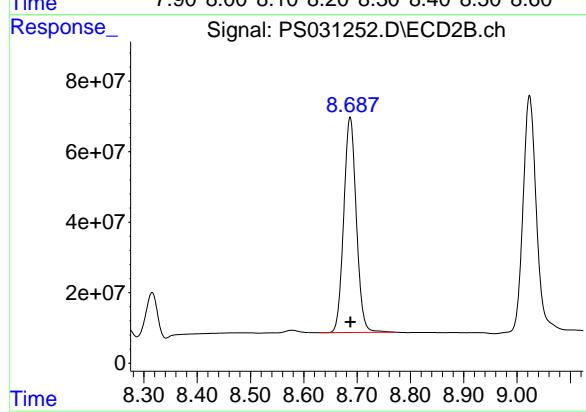
#7 MCPA

R.T.: 8.315 min
Delta R.T.: 0.000 min
Response: 184140366
Conc: 58.36 ug/ml



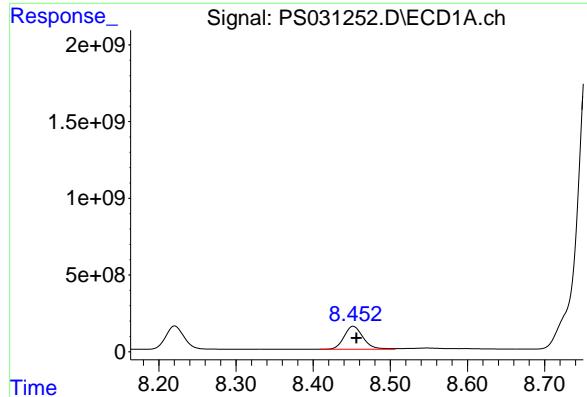
#8 DICHLOPROP

R.T.: 8.220 min
Delta R.T.: -0.004 min
Response: 2498825889
Conc: 653.81 ng/ml



#8 DICHLOPROP

R.T.: 8.687 min
Delta R.T.: 0.000 min
Response: 1000960062
Conc: 660.76 ng/ml



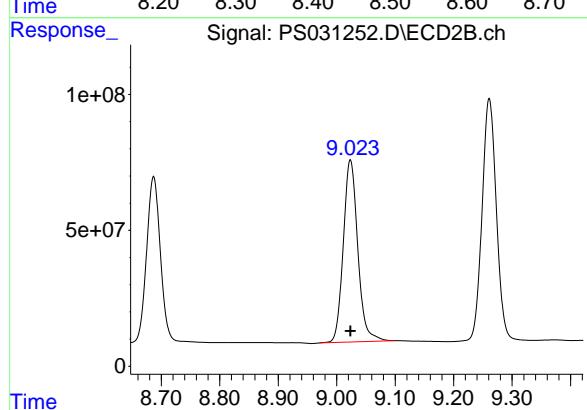
#9 2,4-D

R.T.: 8.452 min
Delta R.T.: -0.004 min
Response: 2545753041
Conc: 681.61 ng/ml

Instrument:
ECD_S
ClientSampleId :
HSTDCCC750

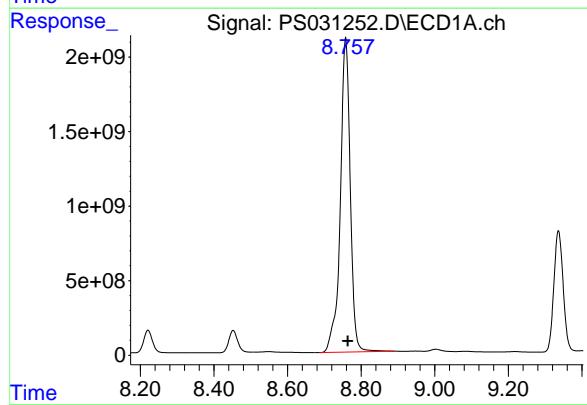
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



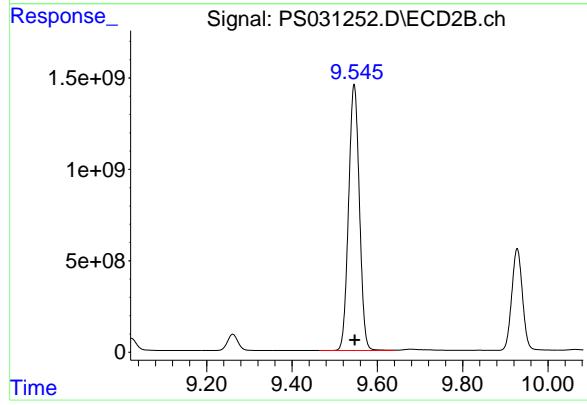
#9 2,4-D

R.T.: 9.024 min
Delta R.T.: 0.000 min
Response: 1152943327
Conc: 678.87 ng/ml



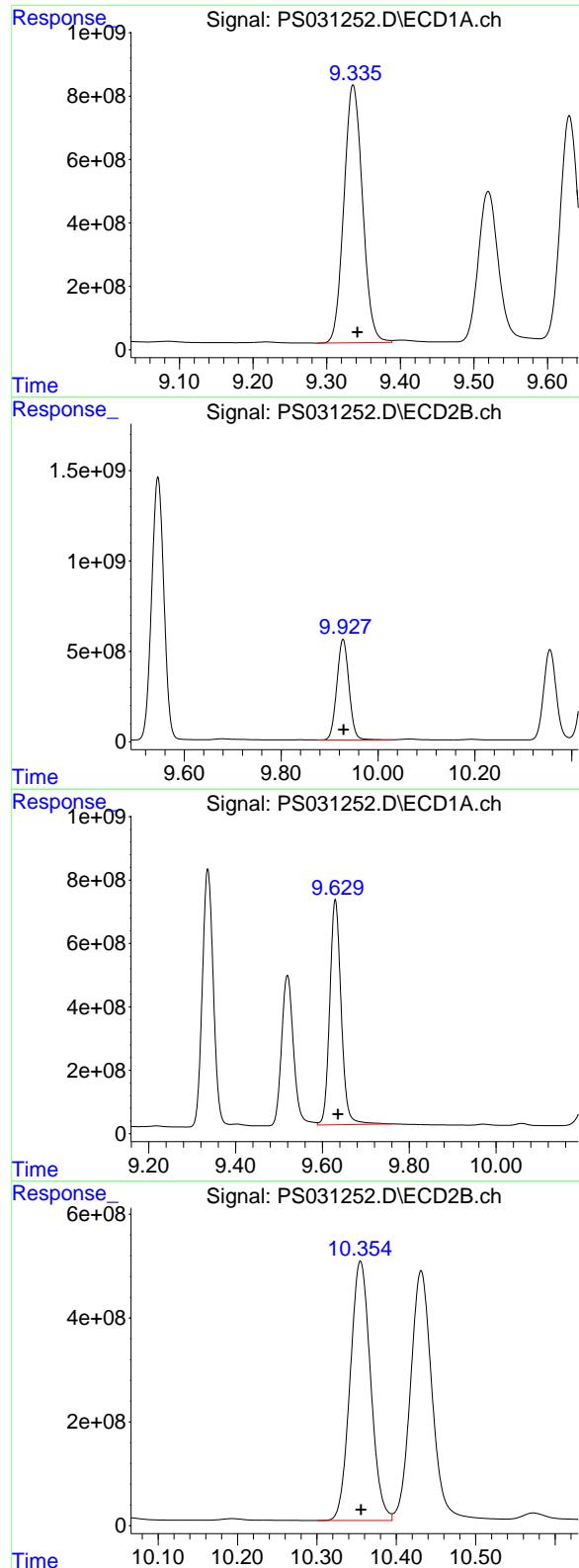
#10 Pentachlorophenol

R.T.: 8.757 min
Delta R.T.: -0.006 min
Response: 39621651455
Conc: 725.38 ng/ml



#10 Pentachlorophenol

R.T.: 9.546 min
Delta R.T.: -0.001 min
Response: 25586301952
Conc: 654.70 ng/ml



#11 2,4,5-TP (SILVEX)

R.T.: 9.336 min

Delta R.T.: -0.006 min

Response: 14267140180

Conc: 649.88 ng/ml

Instrument:

ECD_S

ClientSampleId :

HSTDCCC750

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025

Supervised By :mohammad ahmed 07/26/2025

#11 2,4,5-TP (SILVEX)

R.T.: 9.928 min

Delta R.T.: 0.000 min

Response: 9734911327

Conc: 653.60 ng/ml

#12 2,4,5-T

R.T.: 9.630 min

Delta R.T.: -0.006 min

Response: 12963262992

Conc: 663.84 ng/ml

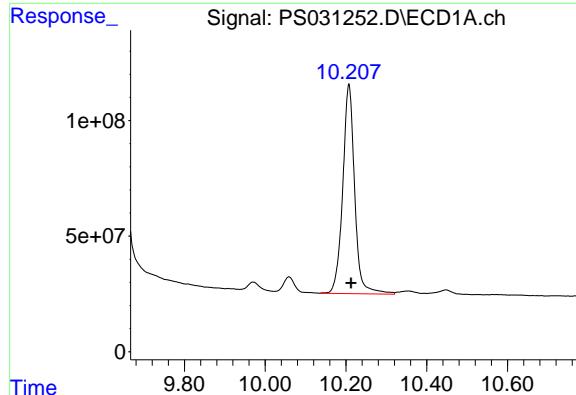
#12 2,4,5-T

R.T.: 10.355 min

Delta R.T.: 0.000 min

Response: 8952017974

Conc: 629.56 ng/ml



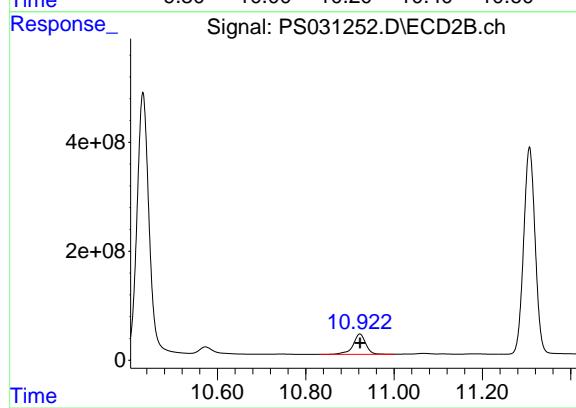
#13 2,4-DB

R.T.: 10.207 min
Delta R.T.: -0.005 min
Response: 1860390993
Conc: 622.23 ng/ml

Instrument: ECD_S
ClientSampleId: HSTDCCC750

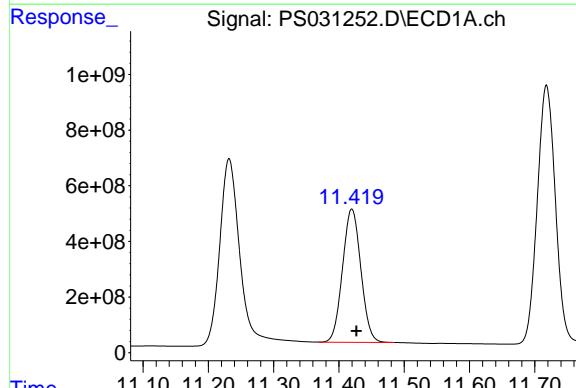
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



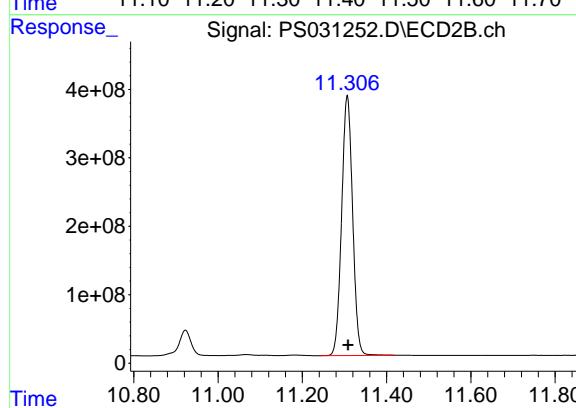
#13 2,4-DB

R.T.: 10.923 min
Delta R.T.: 0.000 min
Response: 747675377
Conc: 638.76 ng/ml



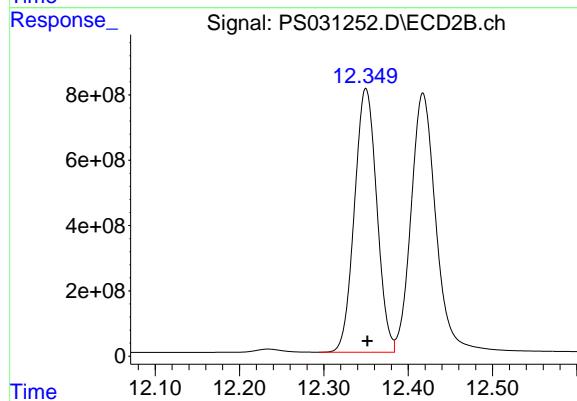
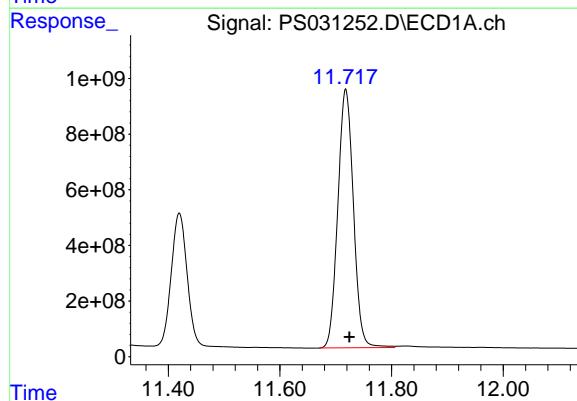
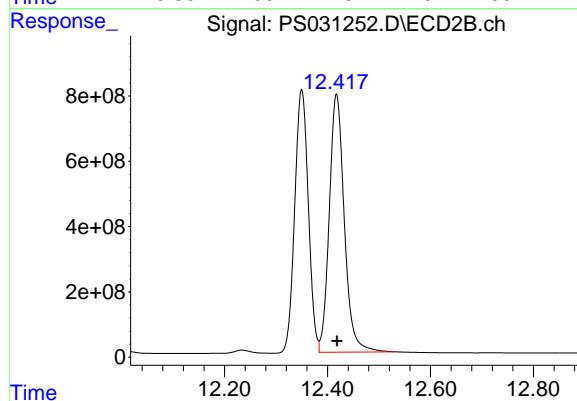
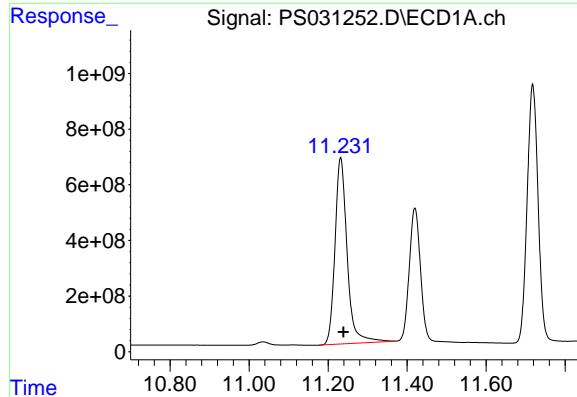
#14 DINOSEB

R.T.: 11.419 min
Delta R.T.: -0.007 min
Response: 9358252886
Conc: 601.06 ng/ml



#14 DINOSEB

R.T.: 11.307 min
Delta R.T.: -0.002 min
Response: 6851109102
Conc: 606.18 ng/ml



#15 Picloram

R.T.: 11.231 min
Delta R.T.: -0.007 min
Response: 14293334169
Conc: 714.43 ng/ml

Instrument: ECD_S
ClientSampleId: HSTDCCC750

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025

#15 Picloram

R.T.: 12.418 min
Delta R.T.: -0.001 min
Response: 16005879584
Conc: 642.93 ng/ml

#16 DCPA

R.T.: 11.718 min
Delta R.T.: -0.007 min
Response: 18018942520
Conc: 627.98 ng/ml

#16 DCPA

R.T.: 12.349 min
Delta R.T.: -0.002 min
Response: 14845246407
Conc: 644.44 ng/ml

Analytical Sequence

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

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

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

Analytical Sequence

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

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

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

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

P001-CONCRETE001-01MS

Lab Name: Alliance
Lab Code: ACE
Lab Sample ID: Q2641-02MS
Instrument ID (1): ECD_S

Contract: TETR16
SDG NO.: Q2667
Date(s) Analyzed: 07/24/2025 07/24/2025
Instrument ID (2): ECD_S

GC Column: (1): RTX-CLP ID: 0.32 (mm) **GC Column:(2):** RTX-CLP2 ID: 0.32 (mm)

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

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

P001-CONCRETE001-01MSD

Lab Name: Alliance
Lab Code: ACE
Lab Sample ID: Q2641-02MSD
Instrument ID (1): ECD_S

Contract: TETR16
SDG NO.: Q2667
Date(s) Analyzed: 07/24/2025 07/24/2025
Instrument ID (2): ECD_S

GC Column: (1): RTX-CLP ID: 0.32 (mm) **GC Column:(2):** RTX-CLP2 ID: 0.32 (mm)

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

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

PB169001BS

Lab Name: Alliance
Lab Code: ACE
Lab Sample ID: PB169001BS
Instrument ID (1): ECD_S

Contract: TETR16
SDG NO.: Q2667
Date(s) Analyzed: 07/24/2025 07/24/2025
Instrument ID (2): ECD_S

GC Column: (1): RTX-CLP ID: 0.32 (mm) **GC Column:(2):** RTX-CLP2 ID: 0.32 (mm)

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



QC SAMPLE

DATA



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

Report of Analysis

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

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

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

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072425\
 Data File : PS031236.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 24 Jul 2025 19:52
 Operator : AR\AJ
 Sample : PB169001BL
 Misc :
 ALS Vial : 15 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
PB169001BL

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jul 25 03:44:19 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 03:18:42 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 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 0.25 μ m

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

4) S	2,4-DCAA	7.320	7.764	1769.9E6	479.9E6	407.037	472.801
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Target Compounds

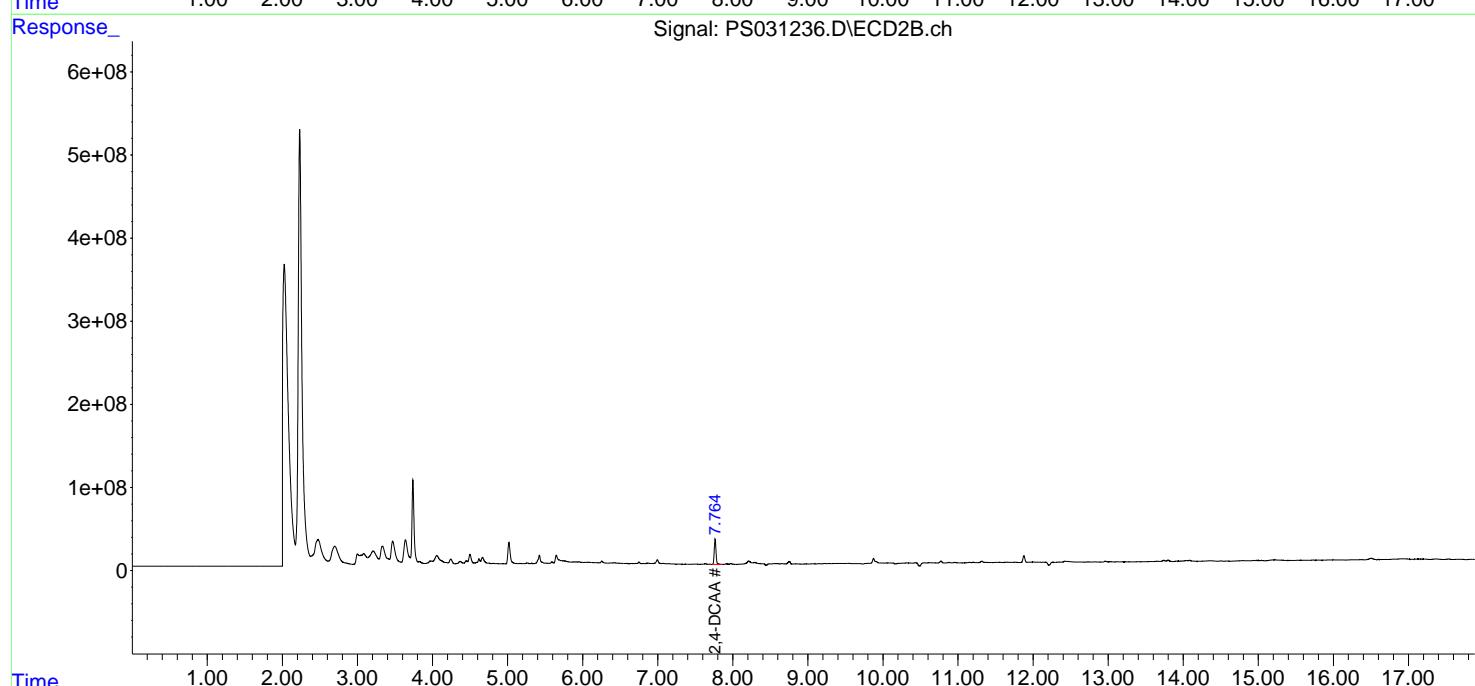
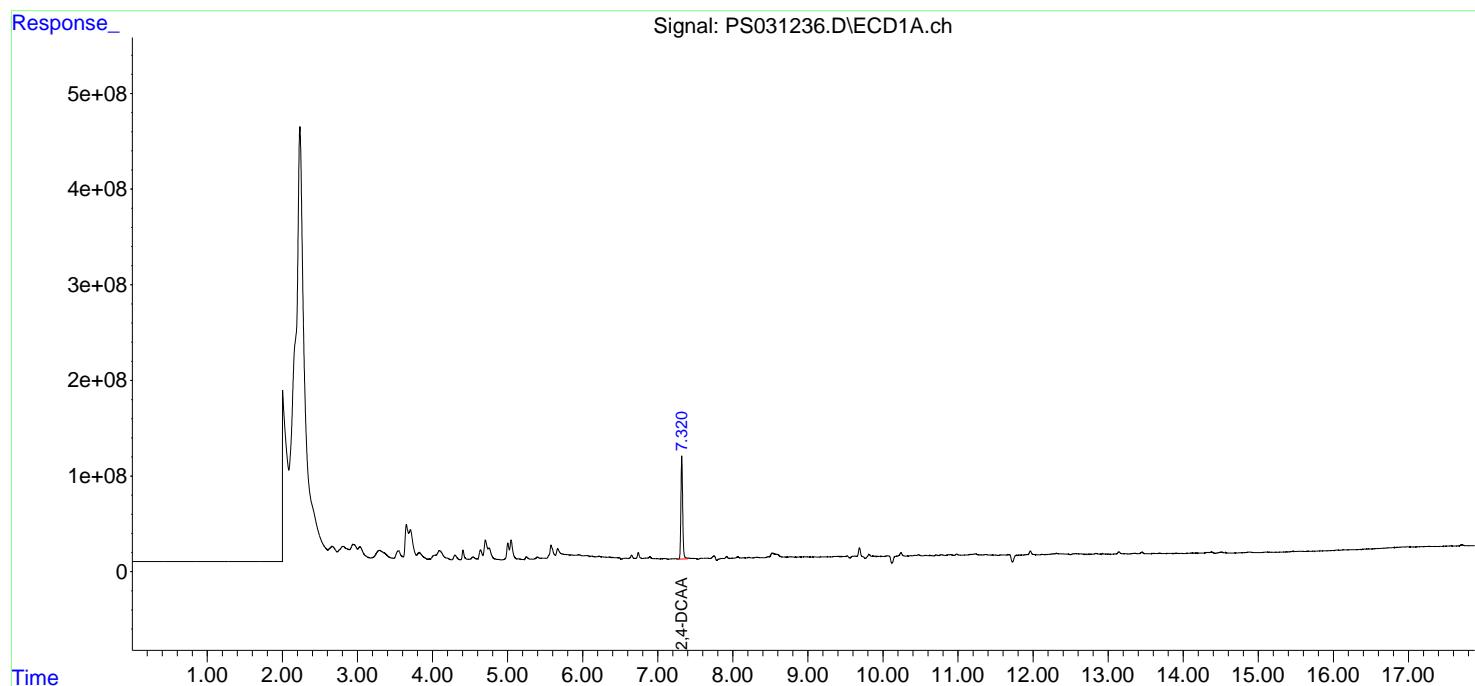
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072425\
 Data File : PS031236.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 24 Jul 2025 19:52
 Operator : AR\AJ
 Sample : PB169001BL
 Misc :
 ALS Vial : 15 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 PB169001BL

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jul 25 03:44:19 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 03:18:42 2025
 Response via : Initial Calibration
 Integrator: ChemStation

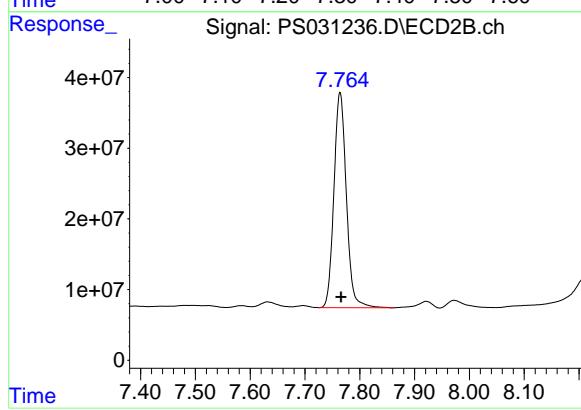
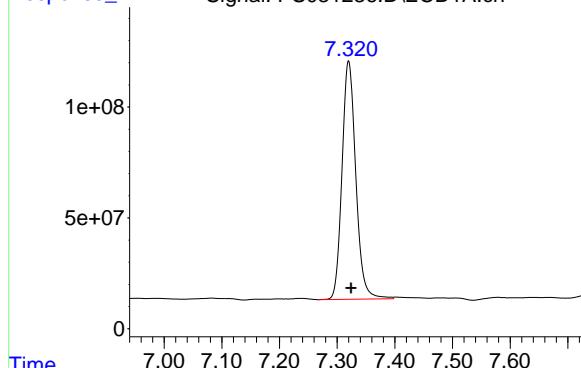
Volume Inj. : 1 μ l
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25 μ m



#4 2,4-DCAA

R.T.: 7.320 min
Delta R.T.: -0.005 min
Response: 1769898327
Conc: 407.04 ng/ml

Instrument: ECD_S
ClientSampleId: PB169001BL



#4 2,4-DCAA

R.T.: 7.764 min
Delta R.T.: -0.002 min
Response: 479878037
Conc: 472.80 ng/ml

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Fax : 908 789 8922

Report of Analysis

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

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

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

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072125\
 Data File : PS031156.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 21 Jul 2025 14:38
 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: Jul 22 03:21:39 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 03:18:42 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 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 0.25 μ m

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

4) S 2,4-DCAA 7.325 7.766 1726.8E6 511.1E6 397.121 503.568 #

Target Compounds

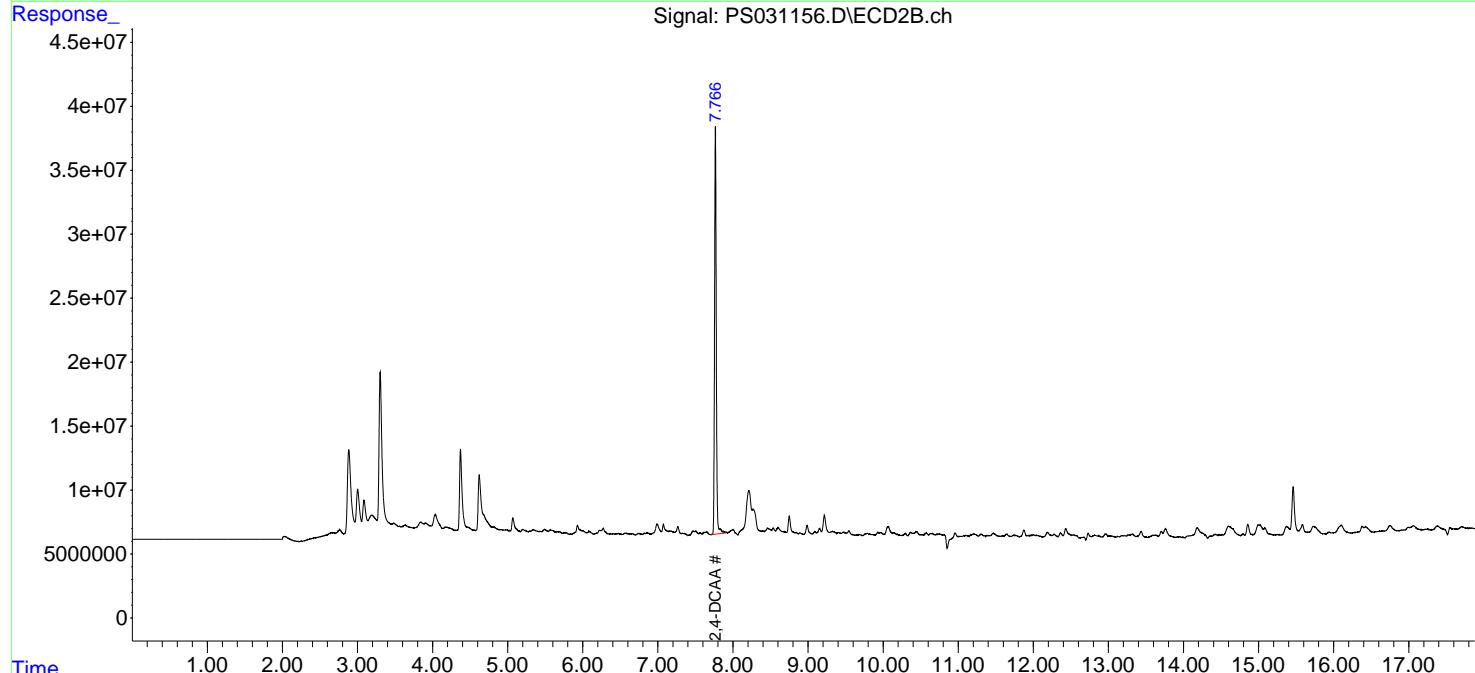
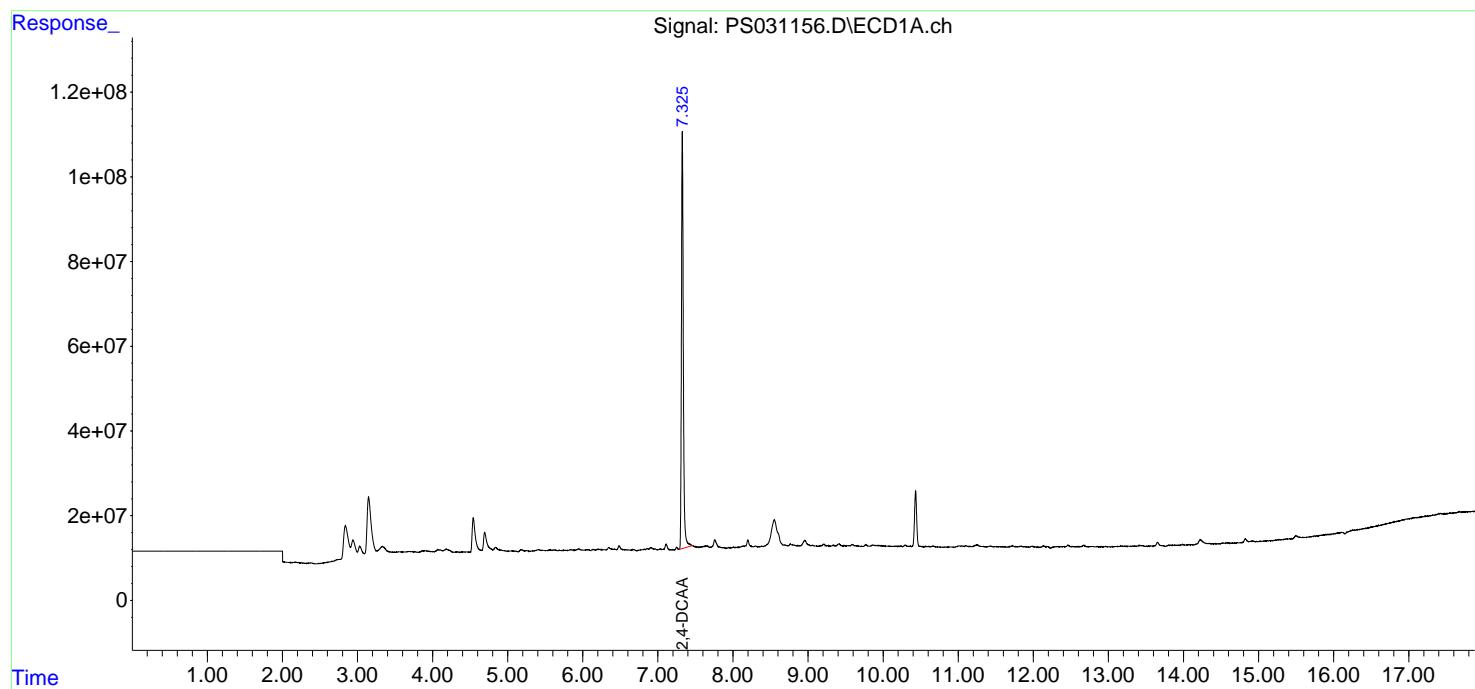
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072125\
 Data File : PS031156.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 21 Jul 2025 14:38
 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: Jul 22 03:21:39 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 03:18:42 2025
 Response via : Initial Calibration
 Integrator: ChemStation

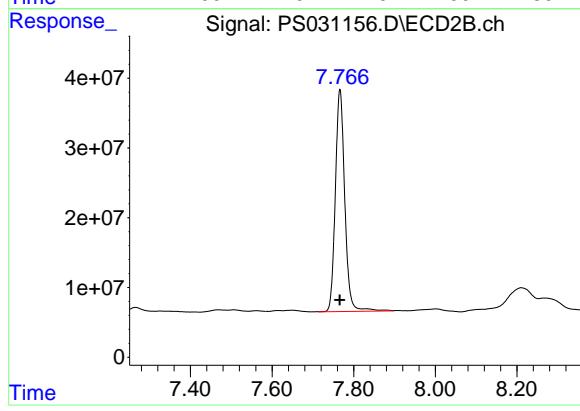
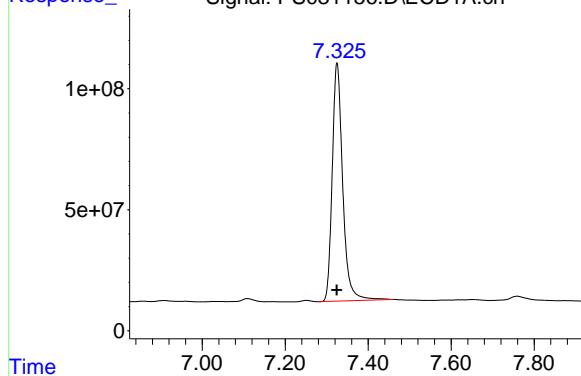
Volume Inj. : 1 μ l
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25 μ m



#4 2,4-DCAA

R.T.: 7.325 min
Delta R.T.: 0.000 min
Response: 1726782024
Conc: 397.12 ng/ml

Instrument: ECD_S
ClientSampleId: I.BLK



#4 2,4-DCAA

R.T.: 7.766 min
Delta R.T.: 0.000 min
Response: 511105861
Conc: 503.57 ng/ml

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Report of Analysis

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

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

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

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072425\
 Data File : PS031232.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 24 Jul 2025 17:27
 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: Jul 25 02:07:57 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 03:18:42 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 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 0.25 μ m

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

4) S	2,4-DCAA	7.320	7.764	1792.3E6	498.2E6	412.184	490.830
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Target Compounds

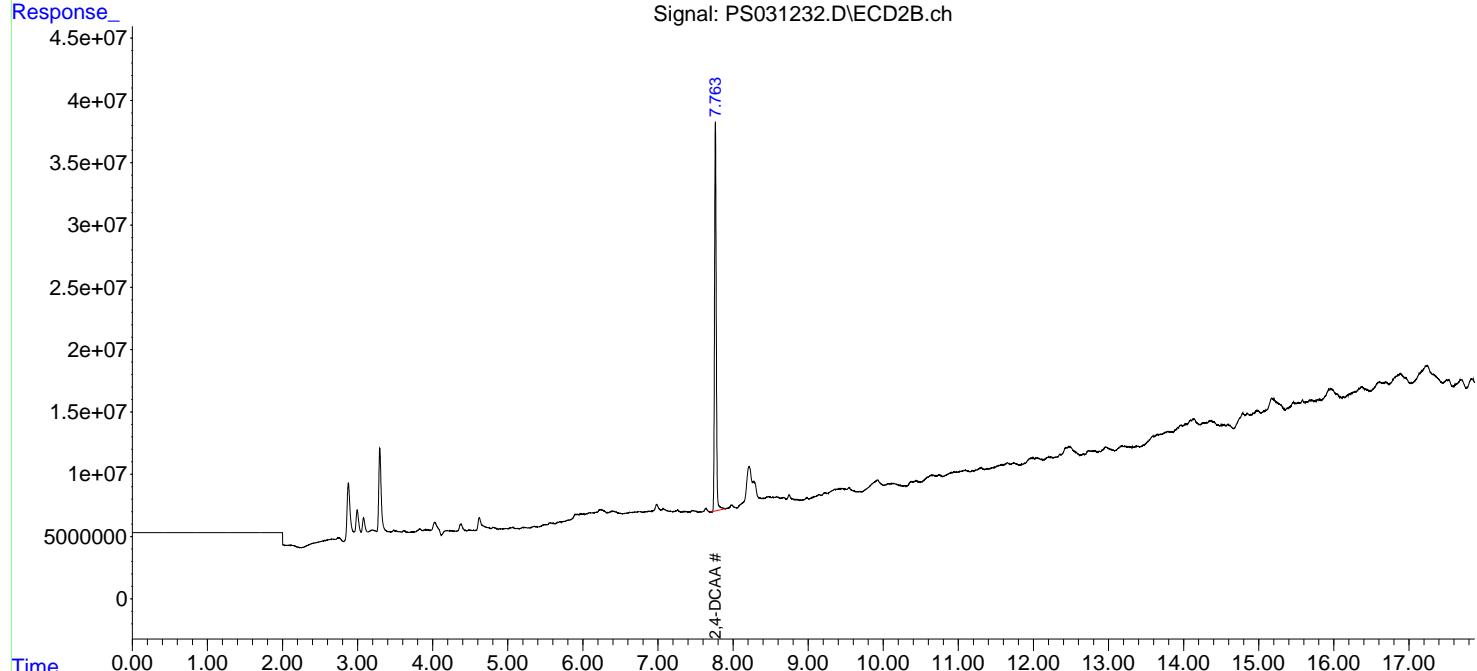
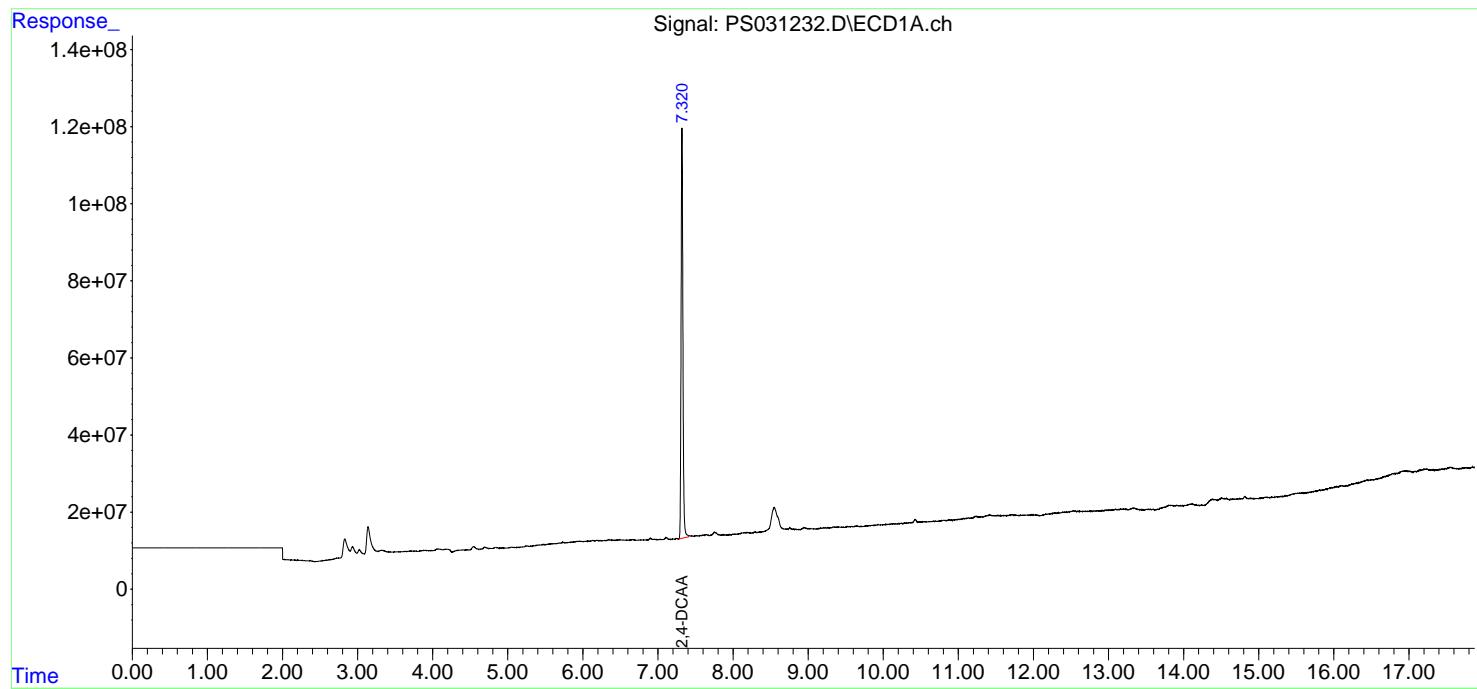
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

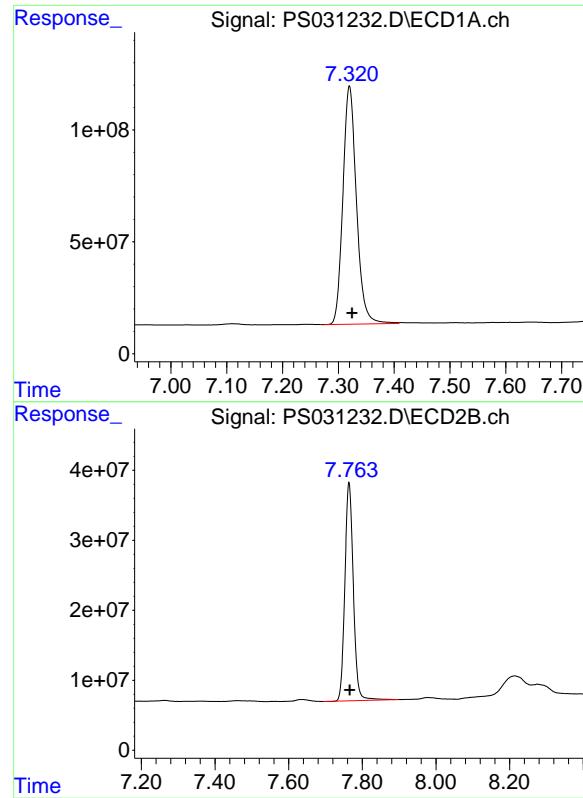
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072425\
 Data File : PS031232.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 24 Jul 2025 17:27
 Operator : AR\AJ
 Sample : I.BLK
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 I.BLK

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jul 25 02:07:57 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 03:18:42 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 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 0.25 μ m





#4 2,4-DCAA

R.T.: 7.320 min
Delta R.T.: -0.005 min
Response: 1792280651
Conc: 412.18 ng/ml

Instrument: ECD_S
ClientSampleId: I.BLK

#4 2,4-DCAA

R.T.: 7.764 min
Delta R.T.: -0.002 min
Response: 498176470
Conc: 490.83 ng/ml



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Report of Analysis

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

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

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

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072425\
 Data File : PS031242.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 24 Jul 2025 22:17
 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: Jul 25 03:46:49 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 03:18:42 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 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 0.25 μ m

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

4) S	2,4-DCAA	7.320	7.764	1834.3E6	505.9E6	421.850	498.392
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Target Compounds

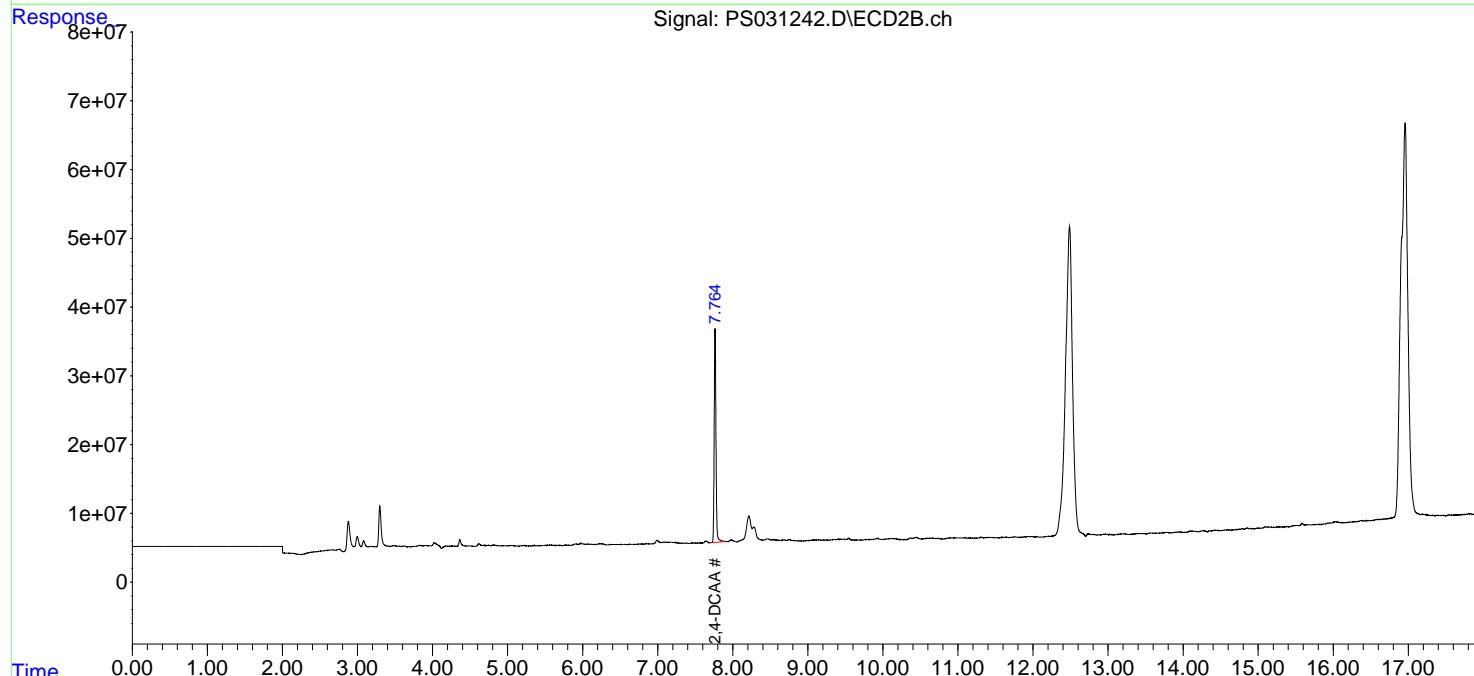
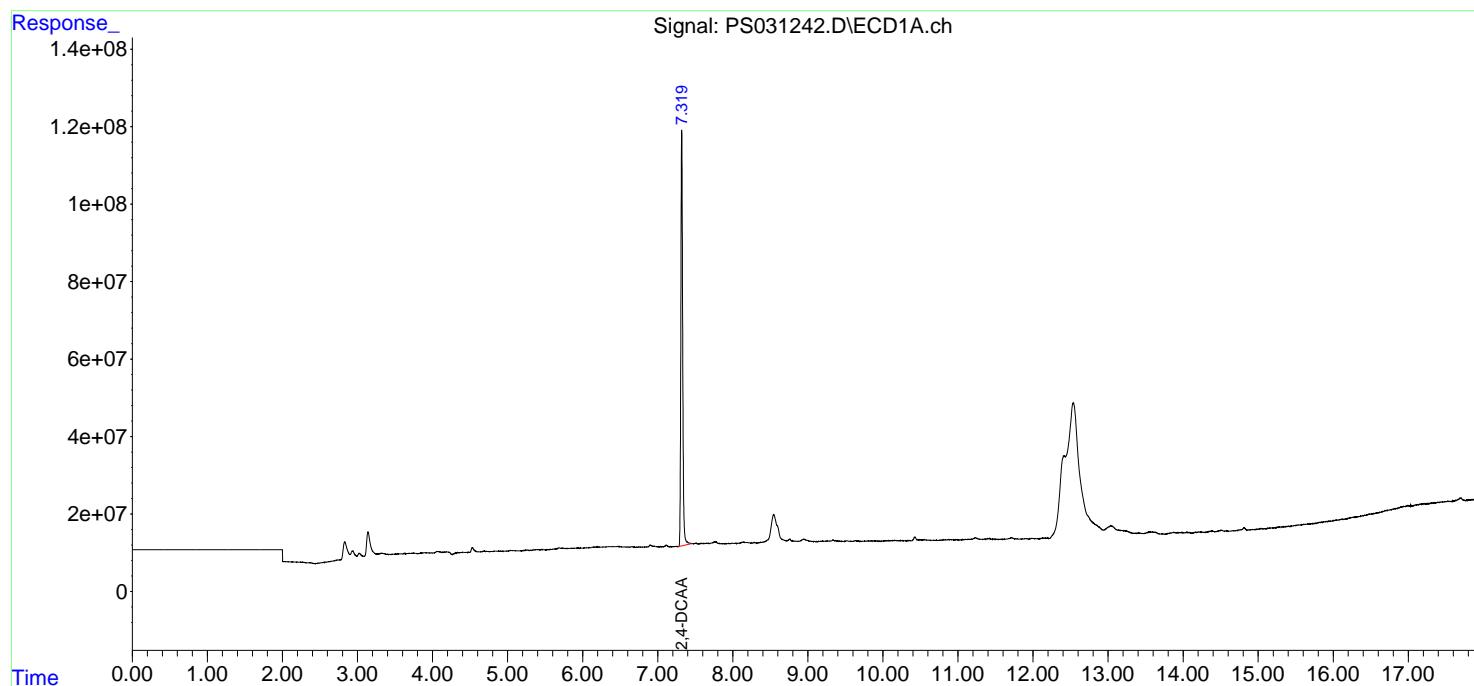
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072425\
 Data File : PS031242.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 24 Jul 2025 22:17
 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: Jul 25 03:46:49 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 03:18:42 2025
 Response via : Initial Calibration
 Integrator: ChemStation

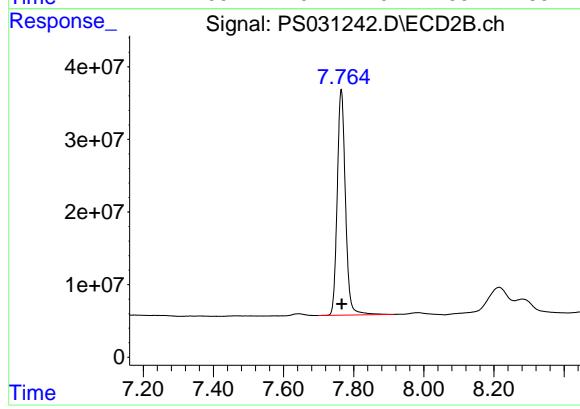
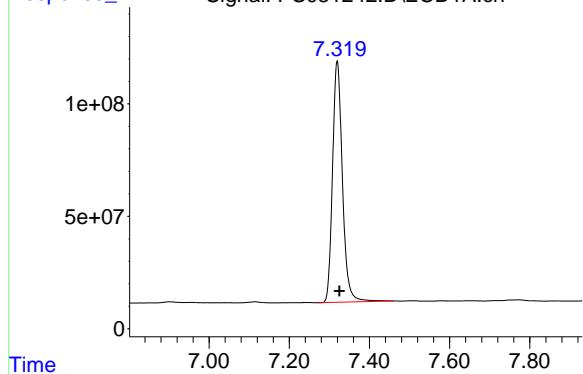
Volume Inj. : 1 μ l
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25 μ m



#4 2,4-DCAA

R.T.: 7.320 min
Delta R.T.: -0.005 min
Response: 1834308835
Conc: 421.85 ng/ml

Instrument: ECD_S
ClientSampleId: I.BLK



#4 2,4-DCAA

R.T.: 7.764 min
Delta R.T.: -0.002 min
Response: 505852351
Conc: 498.39 ng/ml

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Report of Analysis

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

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

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

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072425\
 Data File : PS031251.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 25 Jul 2025 02:42
 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: Jul 25 03:51:29 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 03:18:42 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 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 0.25 μ m

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

4) S 2,4-DCAA 7.321 7.766 1626.4E6 477.5E6 374.030 470.446 #

Target Compounds

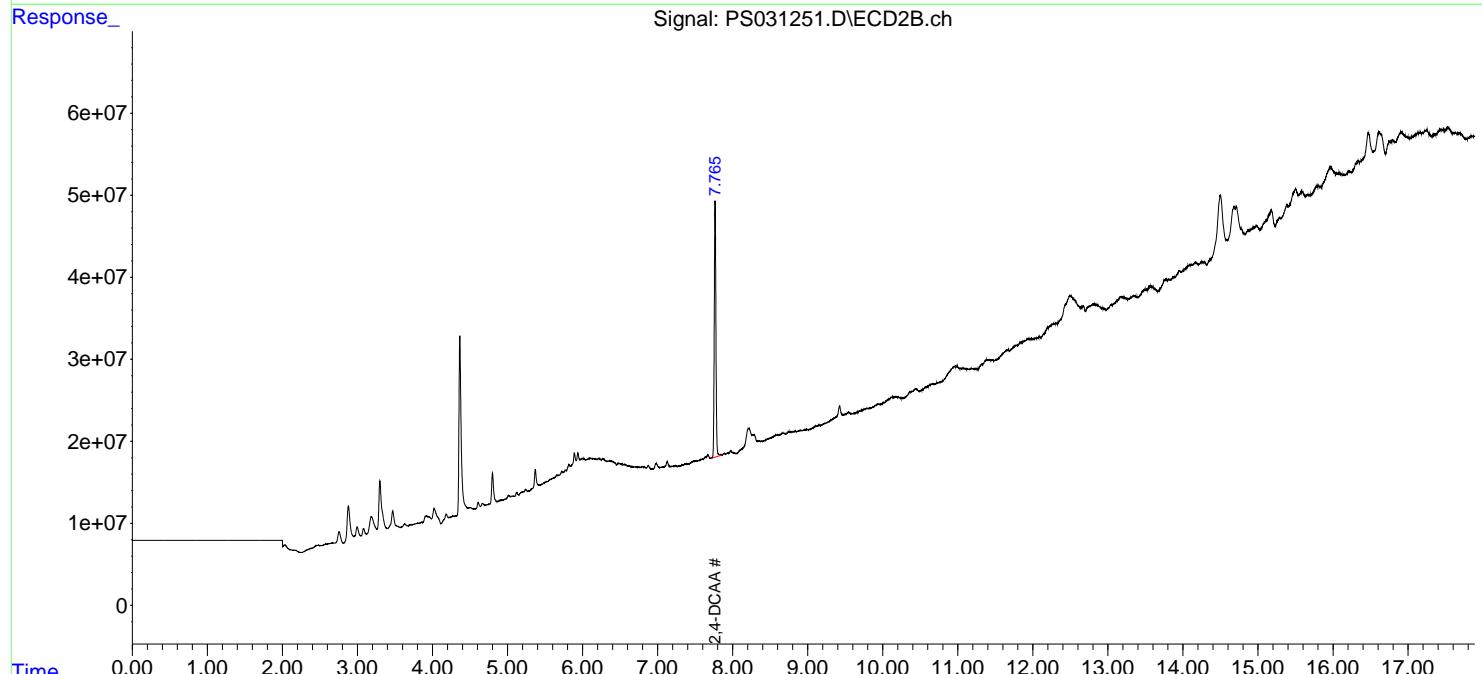
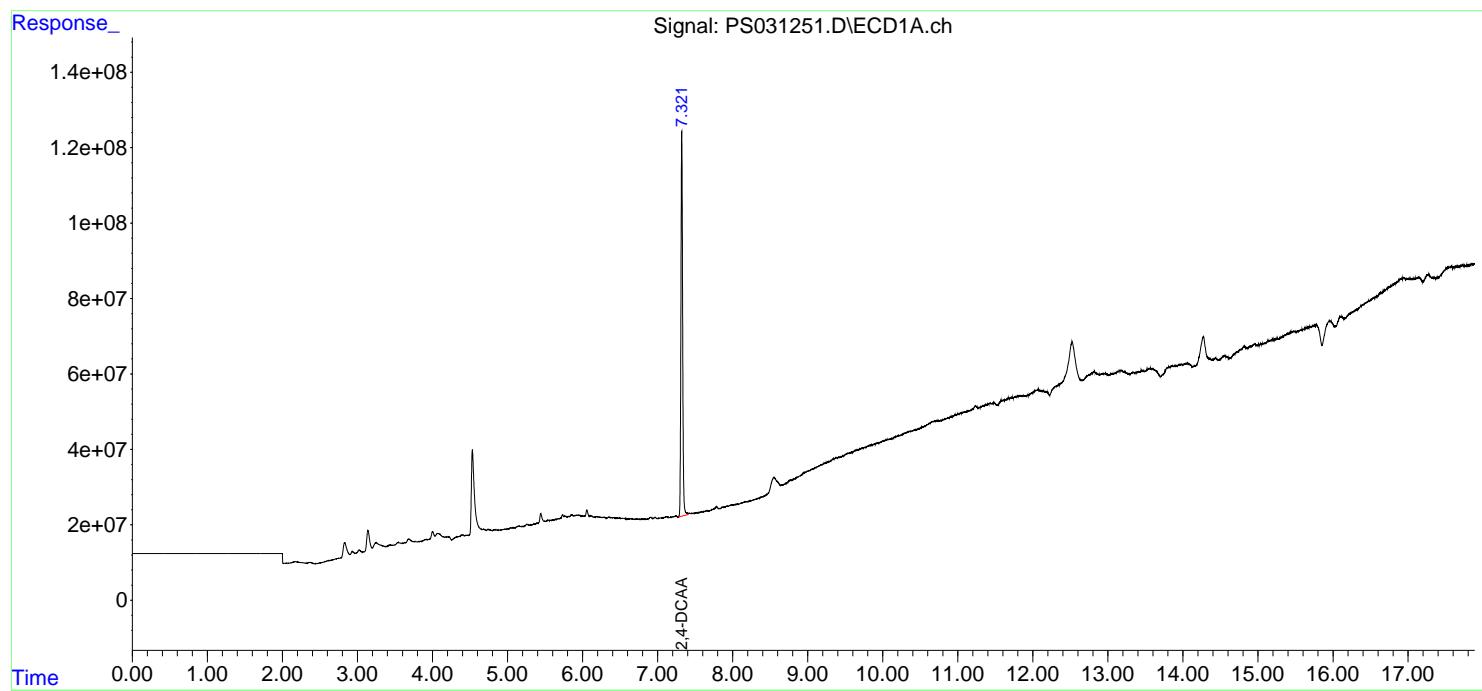
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072425\
 Data File : PS031251.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 25 Jul 2025 02:42
 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: Jul 25 03:51:29 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 03:18:42 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 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 0.25 μ m



#4 2,4-DCAA

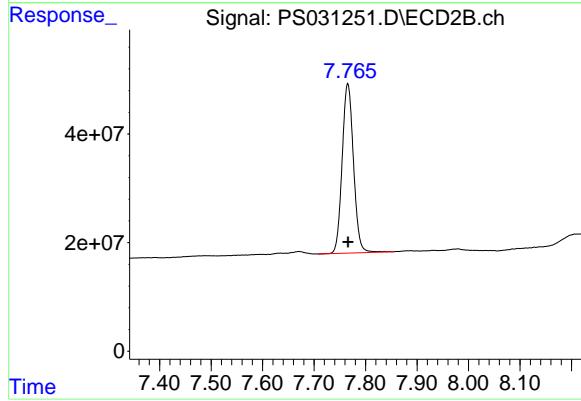
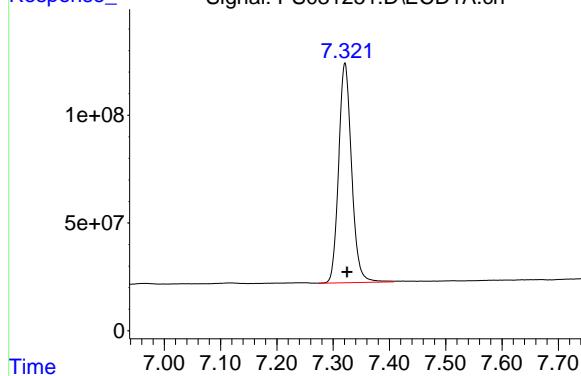
R.T.: 7.321 min
Delta R.T.: -0.004 min
Response: 1626377205
Conc: 374.03 ng/ml

Instrument:

ECD_S

ClientSampleId:

I.BLK



#4 2,4-DCAA

R.T.: 7.766 min
Delta R.T.: 0.000 min
Response: 477487920
Conc: 470.45 ng/ml

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Report of Analysis

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

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

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

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072425\
 Data File : PS031237.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 24 Jul 2025 20:16
 Operator : AR\AJ
 Sample : PB169001BS
 Misc :
 ALS Vial : 16 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 PB169001BS

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
 Supervised By :mohammad ahmed 07/26/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jul 25 03:44:44 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 03:18:42 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 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 0.25 μ m

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

System Monitoring Compounds

4) S 2,4-DCAA 7.320 7.764 2121.5E6 508.8E6 487.902 501.299

Target Compounds

1) T	Dalapon	2.686	2.704	1300.3E6	2886.7E6	207.289m	1017.600m#
2) T	3,5-DICHL...	6.484	6.711	2802.4E6	743.0E6	507.436	482.528
3) T	4-Nitroph...	7.120	7.297	804.0E6	751.3E6	487.603	415.214
5) T	DICAMBA	7.508	7.966	7809.3E6	3109.6E6	473.377	481.854
6) T	MCPP	7.689	8.065	456.0E6	90752125	45.551	43.677
7) T	MCPA	7.839	8.312	601.5E6	134.5E6	48.069	42.627
8) T	DICHLORPROP	8.219	8.685	1990.0E6	727.3E6	520.683	480.100
9) T	2,4-D	8.451	9.021	2223.0E6	926.8E6	595.191	545.708m
10) T	Pentachlo...	8.757	9.545	32147.0E6	20997.3E6	588.540	537.273
11) T	2,4,5-TP ...	9.335	9.926	12279.8E6	7936.6E6	559.353	532.865
12) T	2,4,5-T	9.628	10.353	10468.9E6	7013.5E6	536.103	493.233
13) T	2,4-DB	10.206	10.920	1568.7E6	579.1E6	524.686	494.707m
14) T	DINOSEB	11.418	11.305	6756.6E6	4565.9E6	433.963m	403.990
15) T	Picloram	11.229	12.415	9502.8E6	9927.6E6	474.983m	398.777
16) T	DCPA	11.713	12.348	11529.1E6	11386.4E6	401.804	494.287

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072425\
 Data File : PS031237.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 24 Jul 2025 20:16
 Operator : AR\AJ
 Sample : PB169001BS
 Misc :
 ALS Vial : 16 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 PB169001BS

Manual Integrations
APPROVED

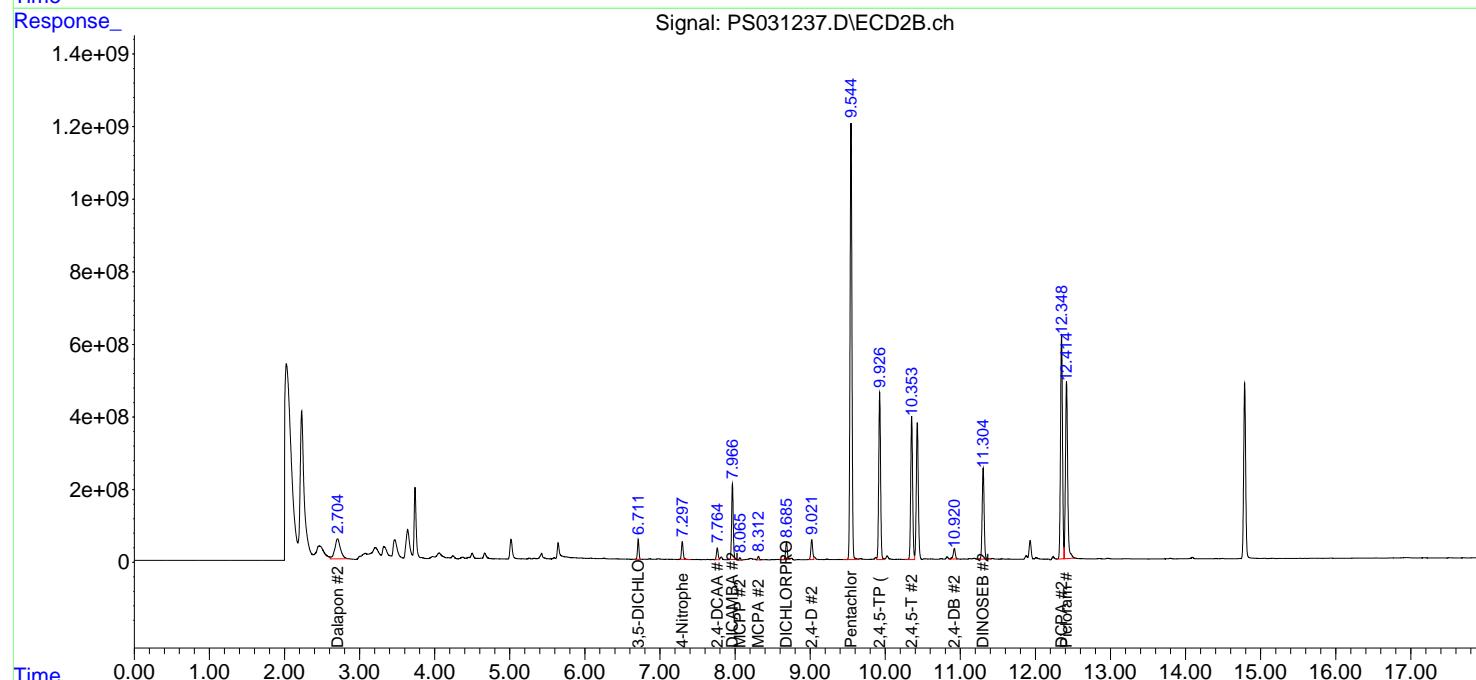
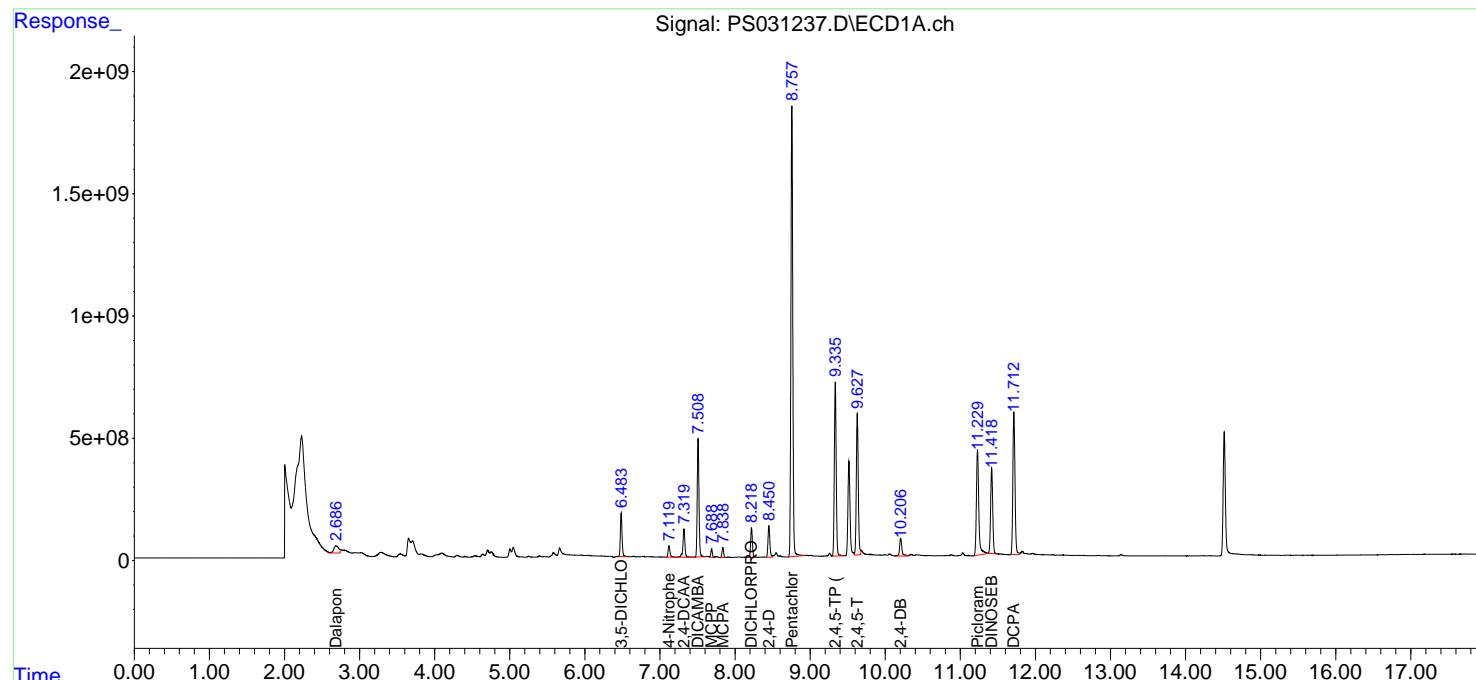
Reviewed By :Yogesh Patel 07/25/2025
 Supervised By :mohammad ahmed 07/26/2025

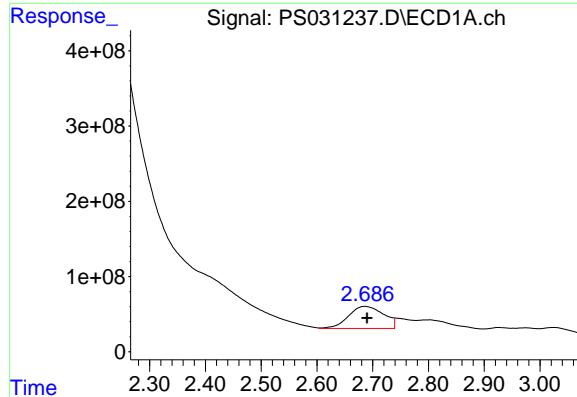
Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jul 25 03:44:44 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 03:18:42 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l

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 0.25 μ m





#1 Dalapon

R.T.: 2.686 min

Delta R.T.: -0.004 min

Response: 1300303286

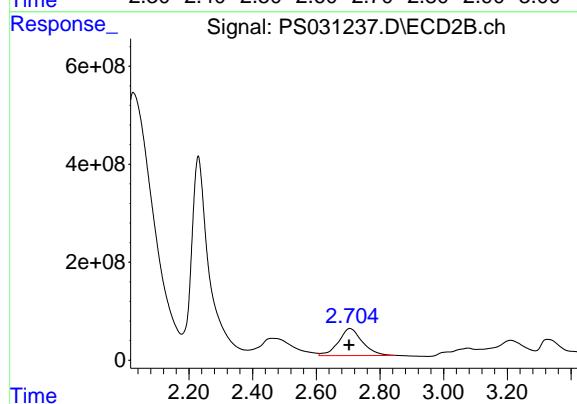
Conc: 207.29 ng/ml

Instrument:

ECD_S

ClientSampleId :

PB169001BS



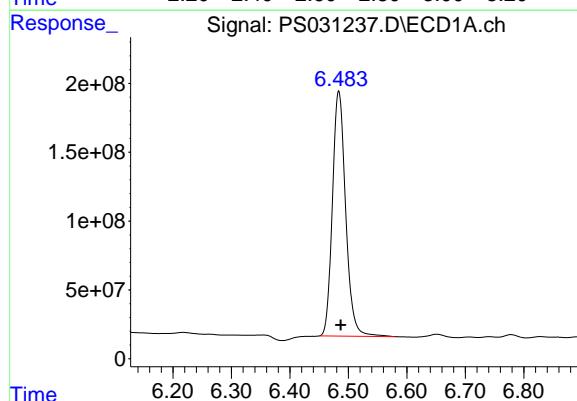
#1 Dalapon

R.T.: 2.704 min

Delta R.T.: 0.000 min

Response: 2886667245

Conc: 1017.60 ng/ml



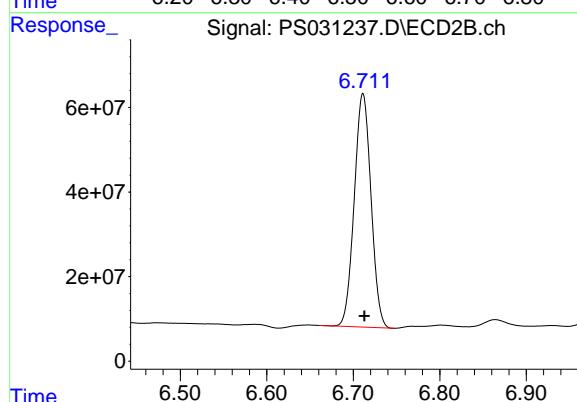
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.484 min

Delta R.T.: -0.003 min

Response: 2802444308

Conc: 507.44 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.711 min

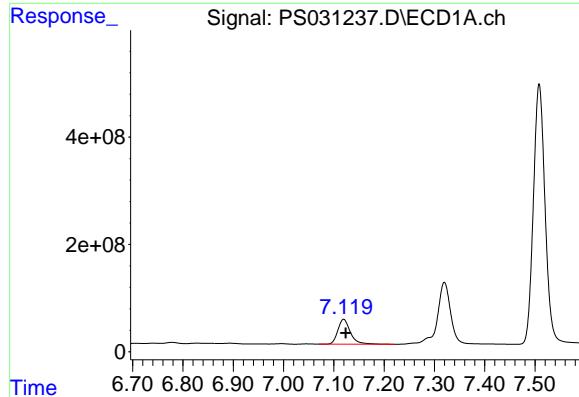
Delta R.T.: -0.002 min

Response: 743041442

Conc: 482.53 ng/ml

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



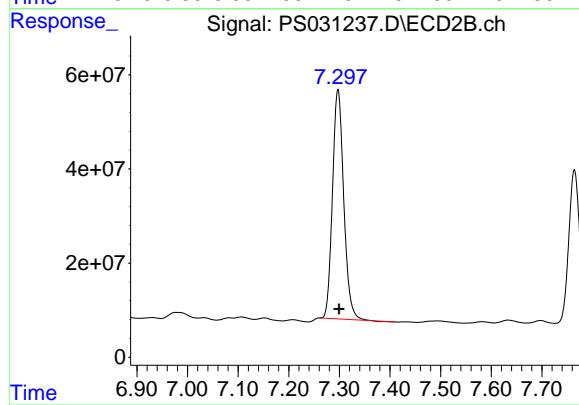
#3 4-Nitrophenol

R.T.: 7.120 min
Delta R.T.: -0.004 min
Response: 803952465
Conc: 487.60 ng/ml

Instrument:
ECD_S
ClientSampleId :
PB169001BS

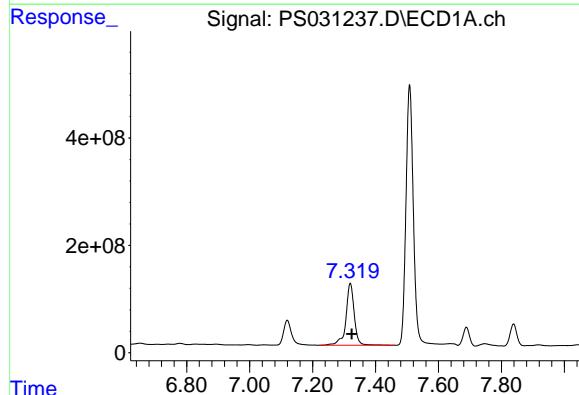
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



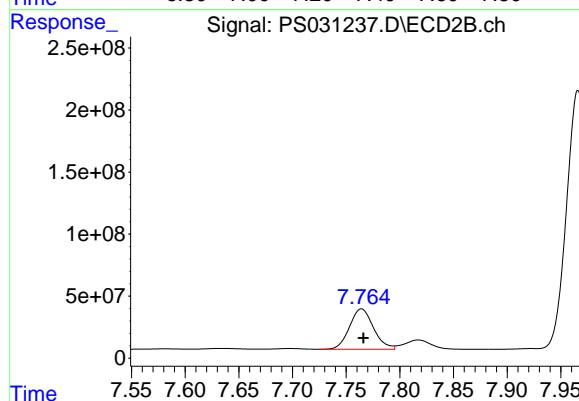
#3 4-Nitrophenol

R.T.: 7.297 min
Delta R.T.: -0.002 min
Response: 751254044
Conc: 415.21 ng/ml



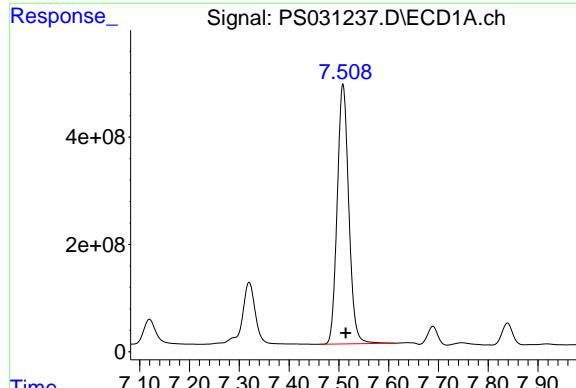
#4 2,4-DCAA

R.T.: 7.320 min
Delta R.T.: -0.005 min
Response: 2121523156
Conc: 487.90 ng/ml



#4 2,4-DCAA

R.T.: 7.764 min
Delta R.T.: -0.002 min
Response: 508802939
Conc: 501.30 ng/ml



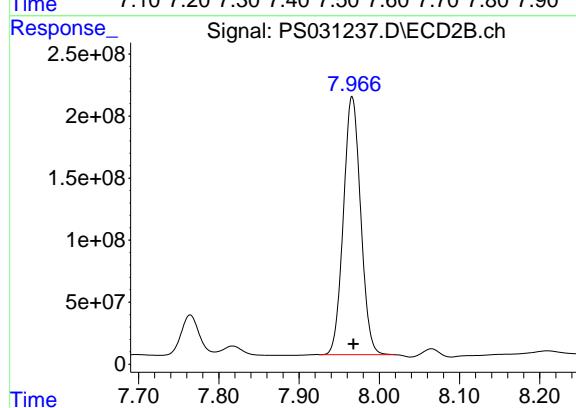
#5 DICAMBA

R.T.: 7.508 min
Delta R.T.: -0.006 min
Response: 7809288099
Conc: 473.38 ng/ml

Instrument: ECD_S
ClientSampleId: PB169001BS

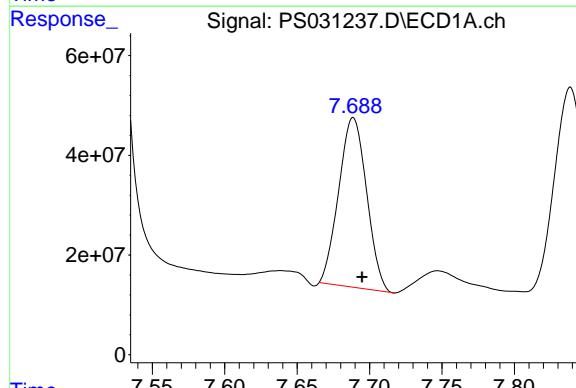
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



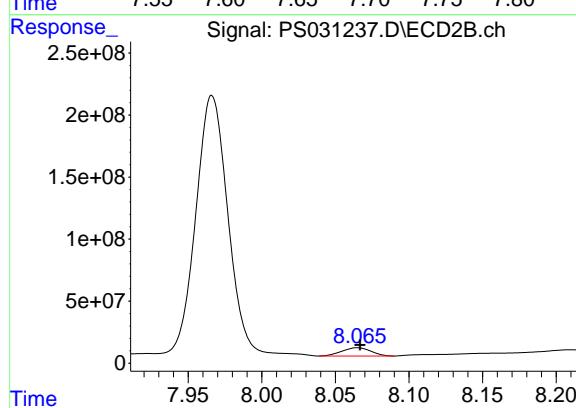
#5 DICAMBA

R.T.: 7.966 min
Delta R.T.: -0.002 min
Response: 3109581210
Conc: 481.85 ng/ml



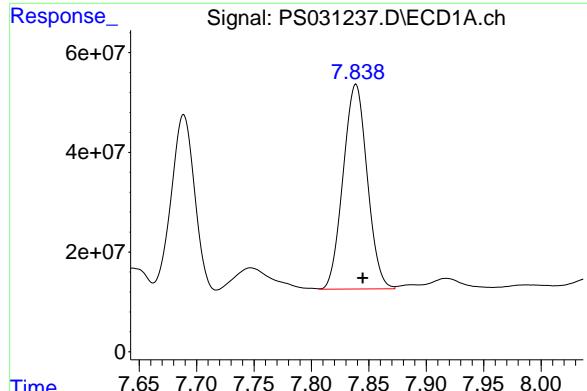
#6 MCPP

R.T.: 7.689 min
Delta R.T.: -0.006 min
Response: 455963569
Conc: 45.55 ug/ml



#6 MCPP

R.T.: 8.065 min
Delta R.T.: -0.002 min
Response: 90752125
Conc: 43.68 ug/ml



#7 MCPA

R.T.: 7.839 min

Delta R.T.: -0.006 min

Response: 601545214

Conc: 48.07 ug/ml

Instrument:

ECD_S

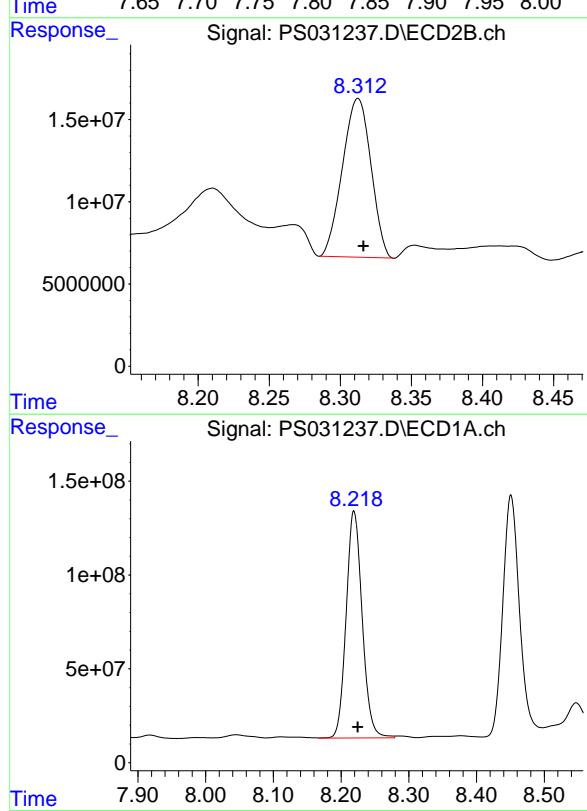
ClientSampleId :

PB169001BS

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025

Supervised By :mohammad ahmed 07/26/2025



#7 MCPA

R.T.: 8.312 min

Delta R.T.: -0.004 min

Response: 134495863

Conc: 42.63 ug/ml

#8 DICHLOPROP

R.T.: 8.219 min

Delta R.T.: -0.005 min

Response: 1990025430

Conc: 520.68 ng/ml

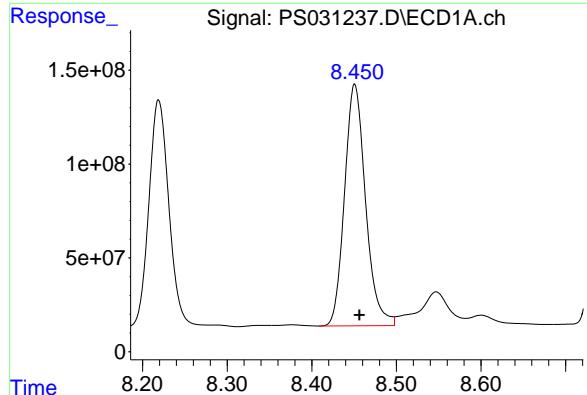
#8 DICHLOPROP

R.T.: 8.685 min

Delta R.T.: -0.002 min

Response: 727283920

Conc: 480.10 ng/ml



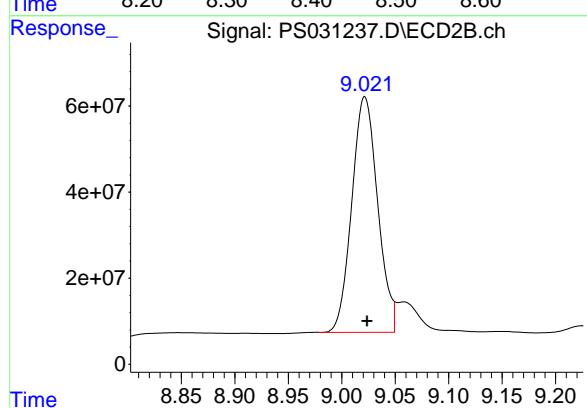
#9 2,4-D

R.T.: 8.451 min
Delta R.T.: -0.006 min
Response: 2222988684
Conc: 595.19 ng/ml

Instrument: ECD_S
ClientSampleId: PB169001BS

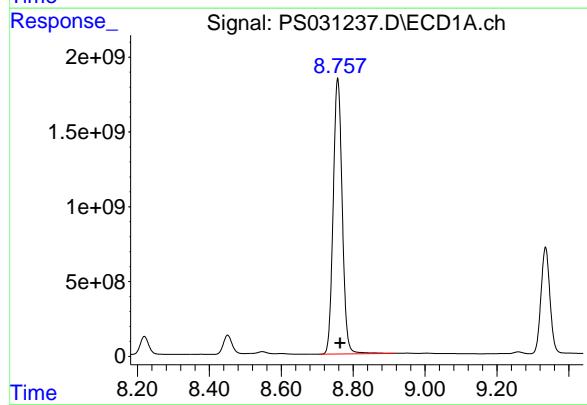
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



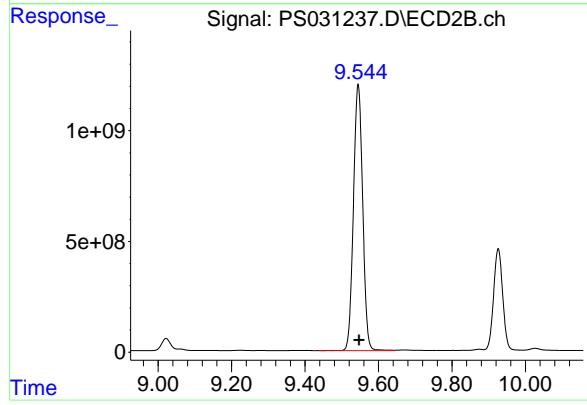
#9 2,4-D

R.T.: 9.021 min
Delta R.T.: -0.003 min
Response: 926787033
Conc: 545.71 ng/ml



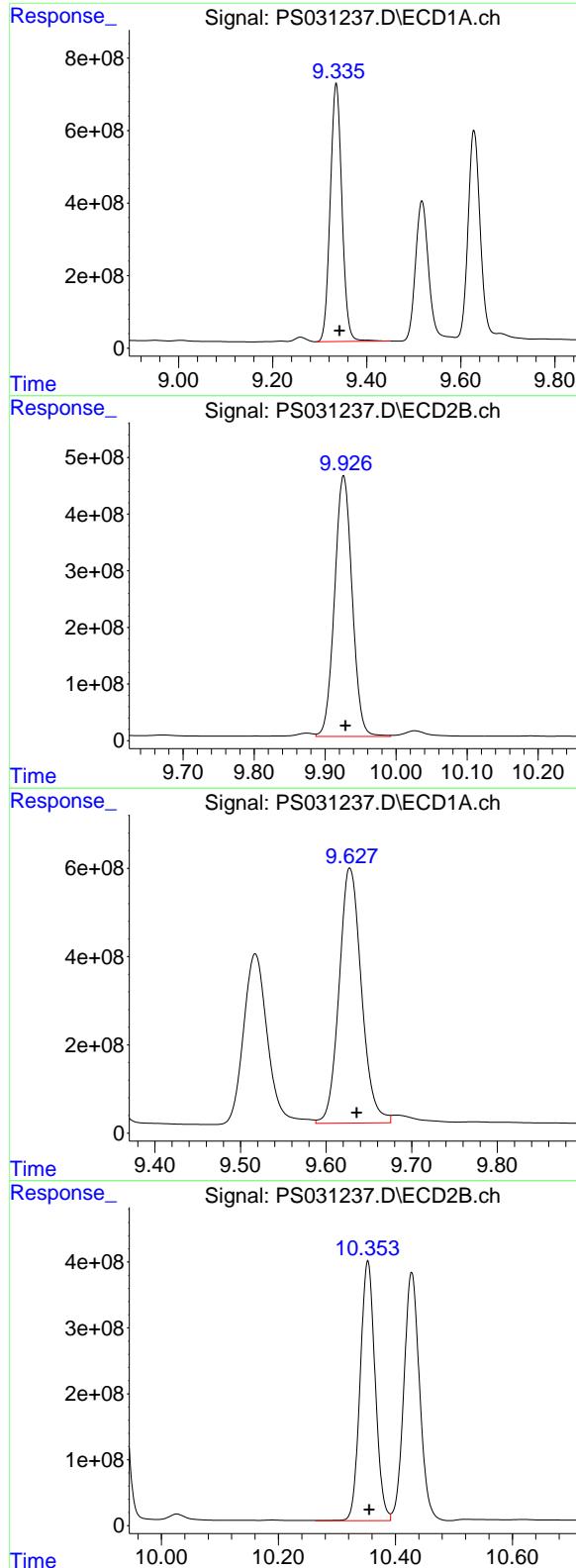
#10 Pentachlorophenol

R.T.: 8.757 min
Delta R.T.: -0.007 min
Response: 32146957323
Conc: 588.54 ng/ml



#10 Pentachlorophenol

R.T.: 9.545 min
Delta R.T.: -0.002 min
Response: 20997265798
Conc: 537.27 ng/ml



#11 2,4,5-TP (SILVEX)

R.T.: 9.335 min

Delta R.T.: -0.007 min

Response: 12279800677

Conc: 559.35 ng/ml

Instrument:

ECD_S

ClientSampleId :

PB169001BS

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025

Supervised By :mohammad ahmed 07/26/2025

#11 2,4,5-TP (SILVEX)

R.T.: 9.926 min

Delta R.T.: -0.003 min

Response: 7936581553

Conc: 532.86 ng/ml

#12 2,4,5-T

R.T.: 9.628 min

Delta R.T.: -0.008 min

Response: 10468914403

Conc: 536.10 ng/ml

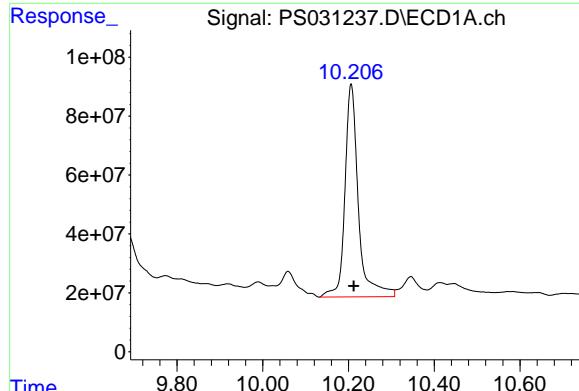
#12 2,4,5-T

R.T.: 10.353 min

Delta R.T.: -0.003 min

Response: 7013501928

Conc: 493.23 ng/ml



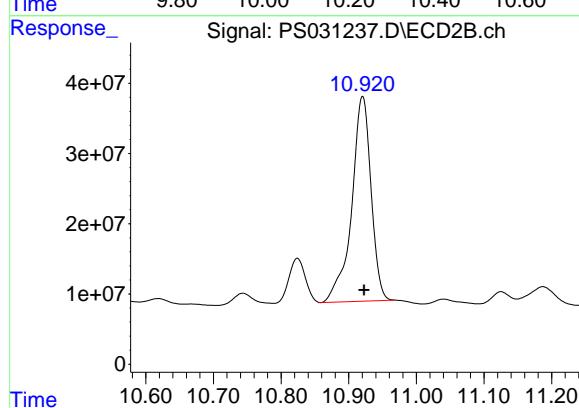
#13 2,4-DB

R.T.: 10.206 min
Delta R.T.: -0.006 min
Response: 1568749061
Conc: 524.69 ng/ml

Instrument: ECD_S
ClientSampleId: PB169001BS

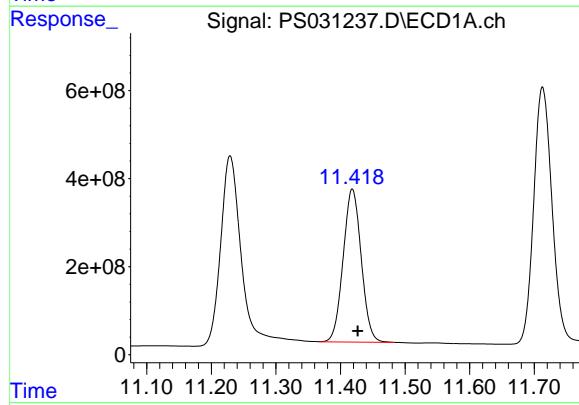
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



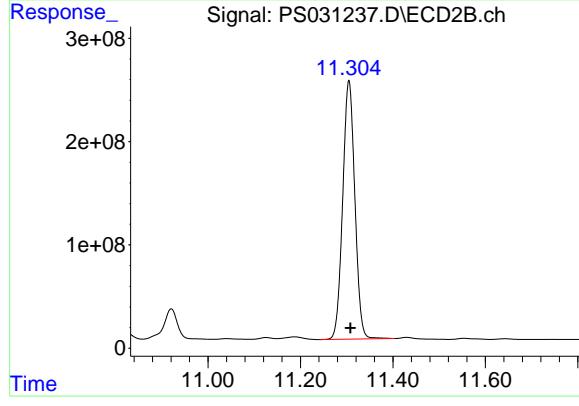
#13 2,4-DB

R.T.: 10.920 min
Delta R.T.: -0.003 min
Response: 579059841
Conc: 494.71 ng/ml



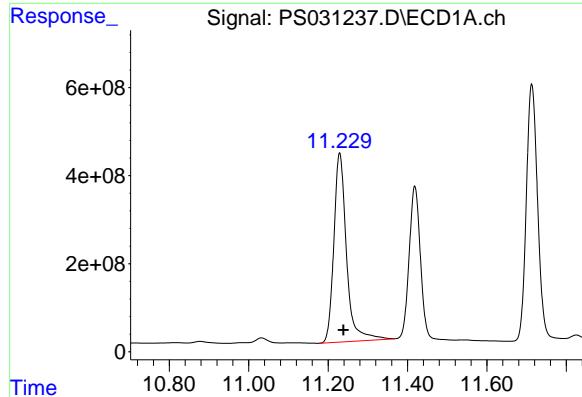
#14 DINOSEB

R.T.: 11.418 min
Delta R.T.: -0.009 min
Response: 6756587961
Conc: 433.96 ng/ml



#14 DINOSEB

R.T.: 11.305 min
Delta R.T.: -0.003 min
Response: 4565923814
Conc: 403.99 ng/ml



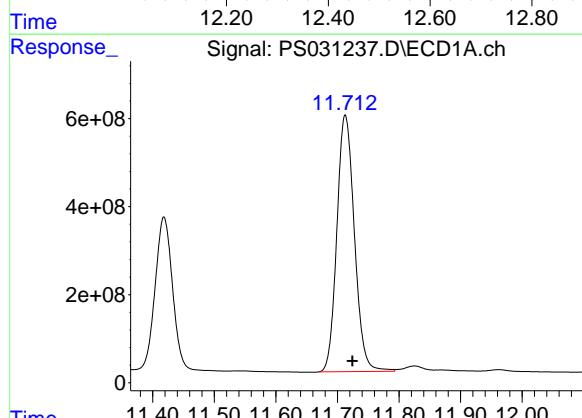
#15 Picloram

R.T.: 11.229 min
 Delta R.T.: -0.010 min
 Response: 9502781108
 Conc: 474.98 ng/ml

Instrument: ECD_S
 ClientSampleId: PB169001BS

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
 Supervised By :mohammad ahmed 07/26/2025



#16 DCPA

R.T.: 11.713 min
 Delta R.T.: -0.012 min
 Response: 11529143776
 Conc: 401.80 ng/ml

#16 DCPA

R.T.: 12.348 min
 Delta R.T.: -0.003 min
 Response: 11386408332
 Conc: 494.29 ng/ml



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

Report of Analysis

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

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

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

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072425\
 Data File : PS031234.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 24 Jul 2025 19:04
 Operator : AR\AJ
 Sample : Q2641-02MS
 Misc :
 ALS Vial : 13 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 P001-CONCRETE001-01MS

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
 Supervised By :mohammad ahmed 07/26/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jul 25 03:43:18 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 03:18:42 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 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 0.25 μ m

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

System Monitoring Compounds

4) S 2,4-DCAA 7.320 7.764 1963.7E6 506.9E6 451.601 499.405

Target Compounds

1) T	Dalapon	2.688	2.703	1333.9E6	1571.4E6	212.638m	553.950m#
2) T	3,5-DICHL...	6.483	6.712	3774.5E6	1077.7E6	683.453	699.882
3) T	4-Nitroph...	7.119	7.297	1187.3E6	1170.2E6	720.128	646.764
5) T	DICAMBA	7.509	7.967	11641.9E6	4766.2E6	705.698	738.553
6) T	MCPP	7.690	8.066	527.1E6	103.8E6	52.654	49.950
7) T	MCPA	7.839	8.302	801.2E6	948.9E6	64.026	300.750m#
8) T	DICHLORPROP	8.220	8.685	2710.9E6	1057.3E6	709.287	697.963
9) T	2,4-D	8.451	9.022	2999.1E6	1463.7E6	802.981	861.865
10) T	Pentachlo...	8.757	9.545	43108.9E6	29856.6E6	789.228	763.964
11) T	2,4,5-TP ...	9.336	9.926	17061.4E6	11429.8E6	777.160	767.401m
12) T	2,4,5-T	9.629	10.353	15007.0E6	10621.2E6	768.497	746.949
13) T	2,4-DB	10.206	10.918	2291.1E6	1301.9E6	766.275	1112.263m#
14) T	DINOSEB	11.418	11.305	10564.4E6	7270.1E6	678.534m	643.254
15) T	Picloram	11.229	12.414	17696.5E6	19451.7E6	884.535m	781.349
16) T	DCPA	11.714	12.349	18645.8E6	17877.9E6	649.827	776.086m

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072425\
 Data File : PS031234.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 24 Jul 2025 19:04
 Operator : AR\AJ
 Sample : Q2641-02MS
 Misc :
 ALS Vial : 13 Sample Multiplier: 1

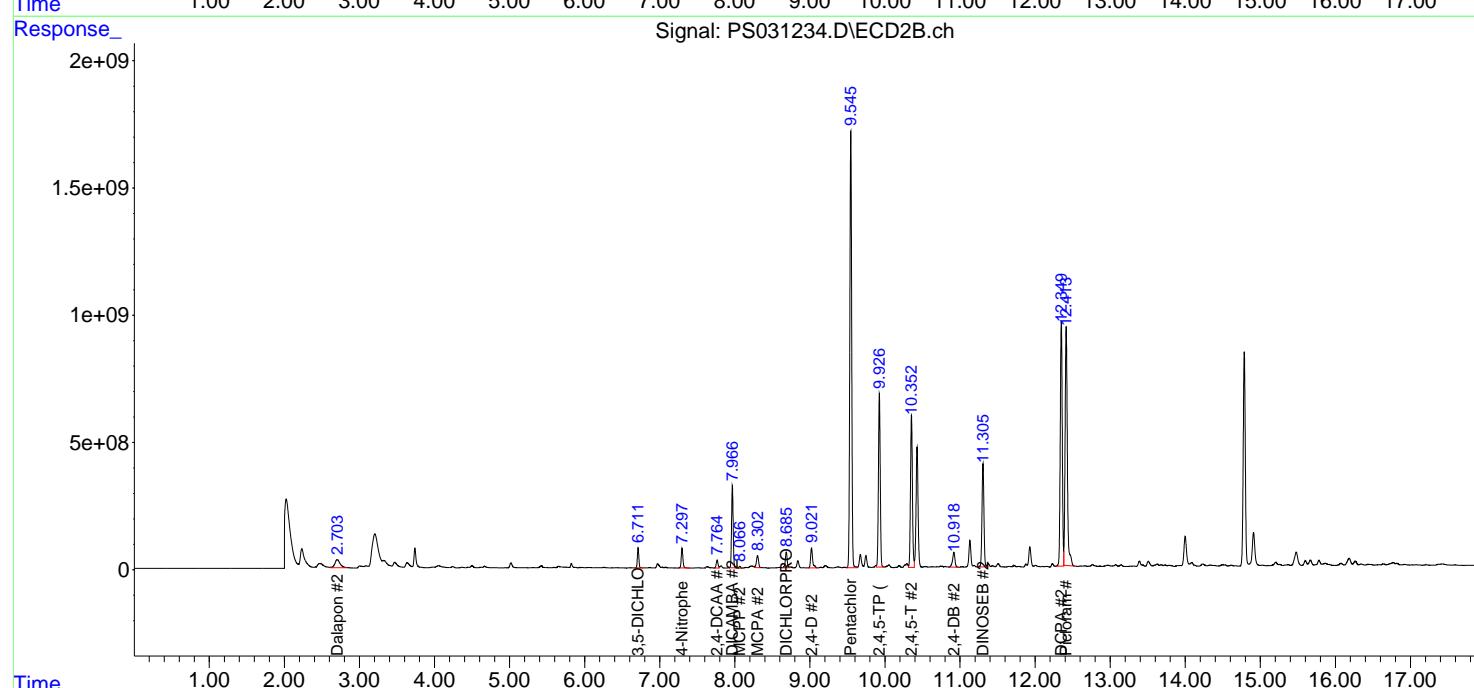
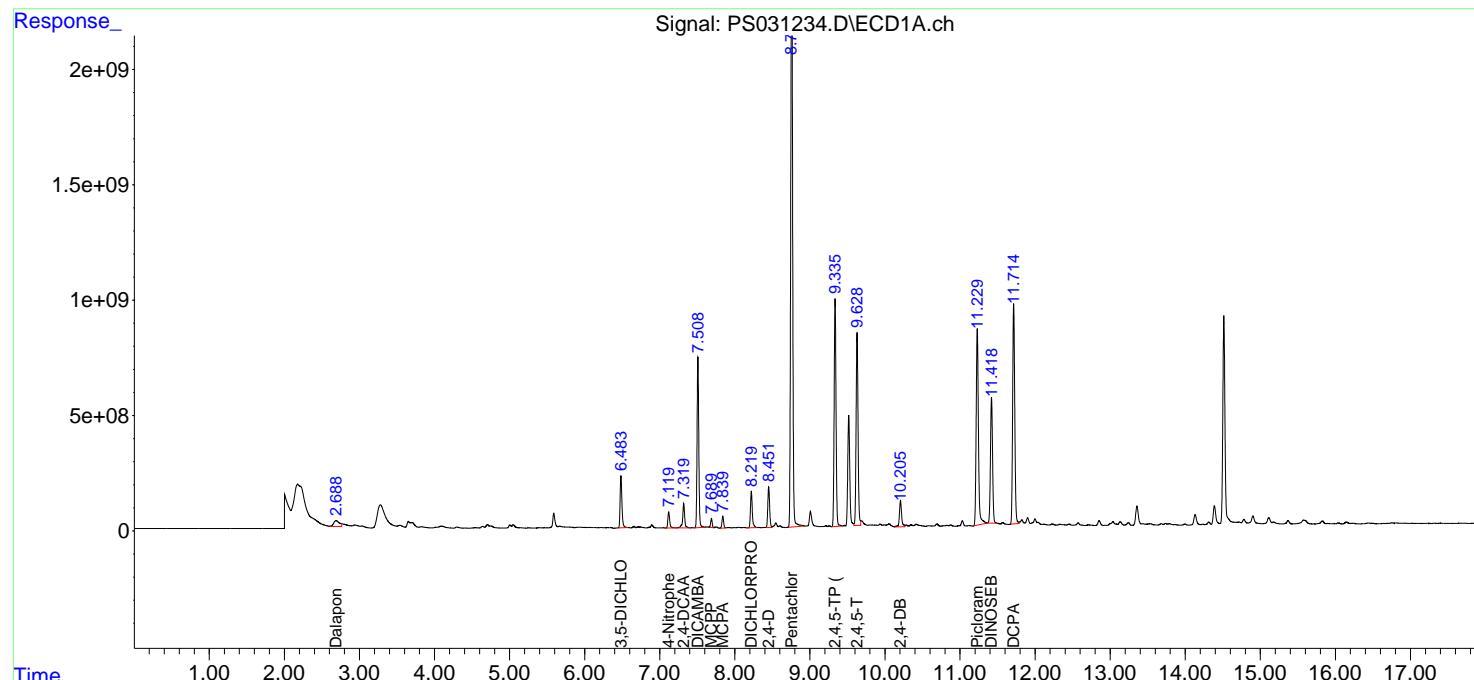
Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jul 25 03:43:18 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 03:18:42 2025
 Response via : Initial Calibration
 Integrator: ChemStation

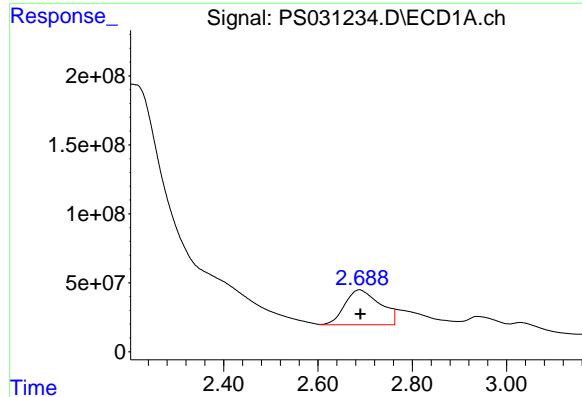
Volume Inj. : 1 μ l
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25 μ m

Instrument :
 ECD_S
 ClientSampleId :
 P001-CONCRETE001-01MS

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 07/25/2025
 Supervised By :mohammad ahmed 07/26/2025





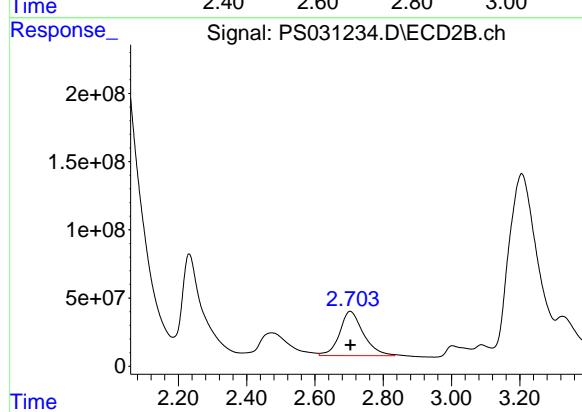
#1 Dalapon

R.T.: 2.688 min
Delta R.T.: -0.002 min
Response: 1333858475
Conc: 212.64 ng/ml

Instrument: ECD_S
ClientSampleId: P001-CONCRETE001-01MS

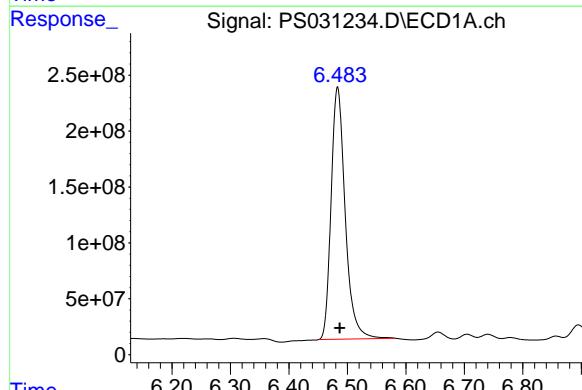
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



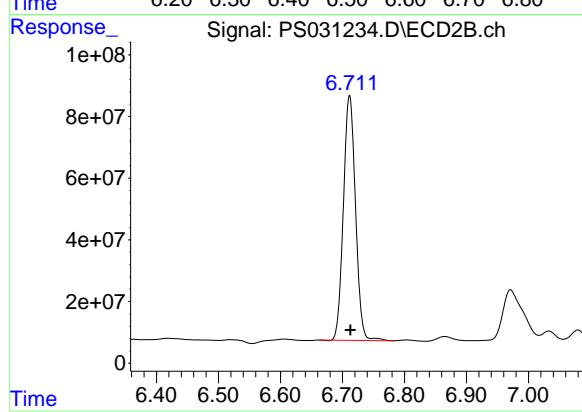
#1 Dalapon

R.T.: 2.703 min
Delta R.T.: 0.000 min
Response: 1571412425
Conc: 553.95 ng/ml



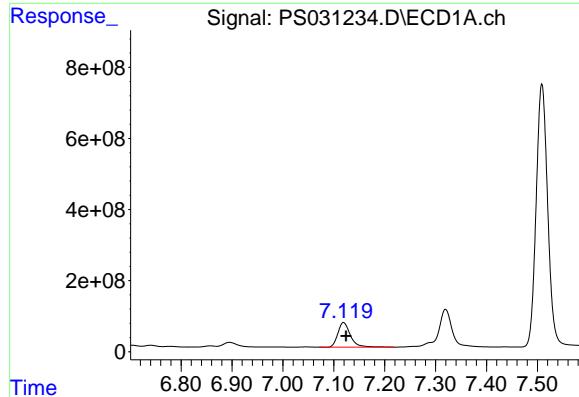
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.483 min
Delta R.T.: -0.004 min
Response: 3774539724
Conc: 683.45 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.712 min
Delta R.T.: -0.001 min
Response: 1077744340
Conc: 699.88 ng/ml



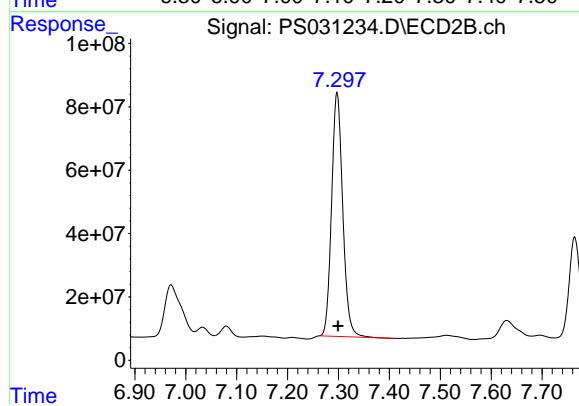
#3 4-Nitrophenol

R.T.: 7.119 min
Delta R.T.: -0.005 min
Response: 1187336484
Conc: 720.13 ng/ml

Instrument: ECD_S
ClientSampleId: P001-CONCRETE001-01MS

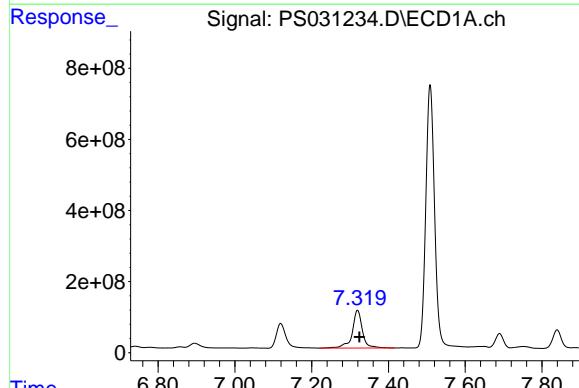
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



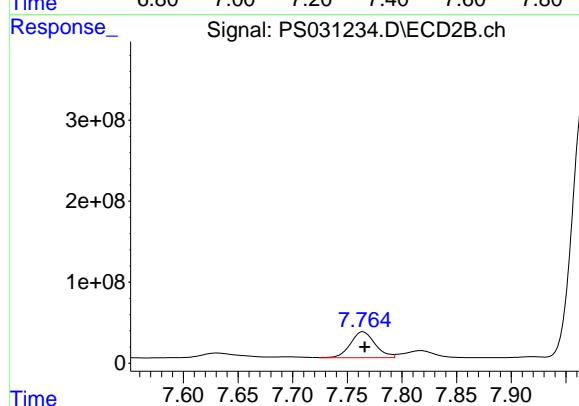
#3 4-Nitrophenol

R.T.: 7.297 min
Delta R.T.: -0.002 min
Response: 1170201134
Conc: 646.76 ng/ml



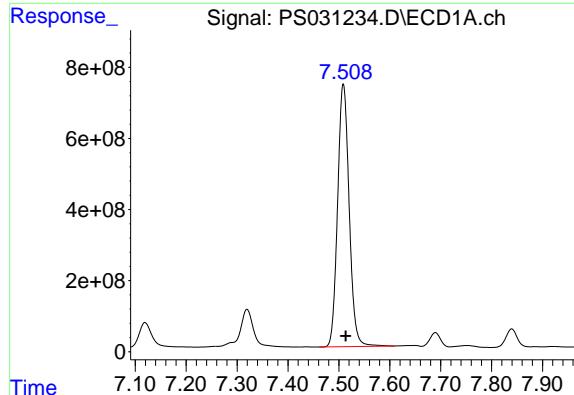
#4 2,4-DCAA

R.T.: 7.320 min
Delta R.T.: -0.005 min
Response: 1963674820
Conc: 451.60 ng/ml



#4 2,4-DCAA

R.T.: 7.764 min
Delta R.T.: -0.002 min
Response: 506880630
Conc: 499.41 ng/ml



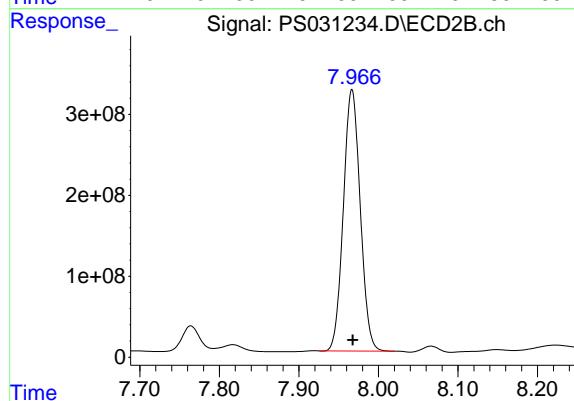
#5 DICAMBA

R.T.: 7.509 min
Delta R.T.: -0.005 min
Response: 11641882754
Conc: 705.70 ng/ml

Instrument: ECD_S
ClientSampleId: P001-CONCRETE001-01MS

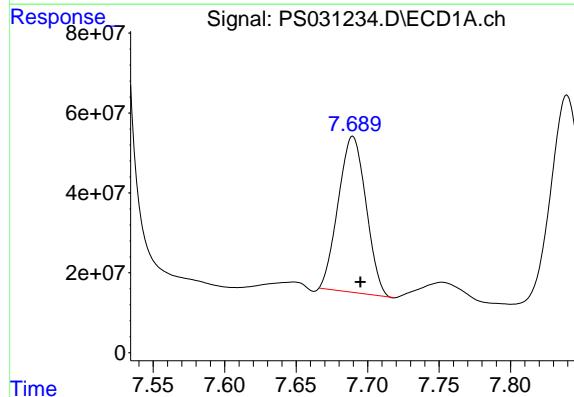
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



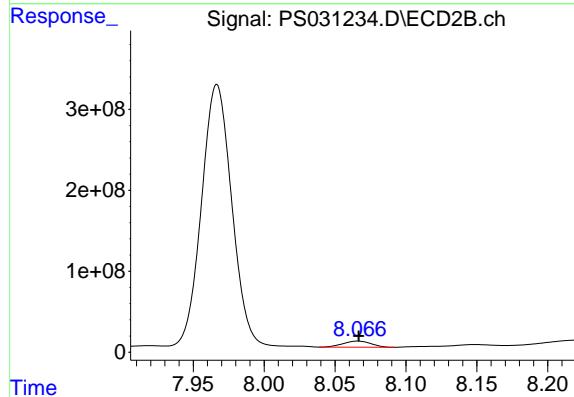
#5 DICAMBA

R.T.: 7.967 min
Delta R.T.: -0.001 min
Response: 4766154449
Conc: 738.55 ng/ml



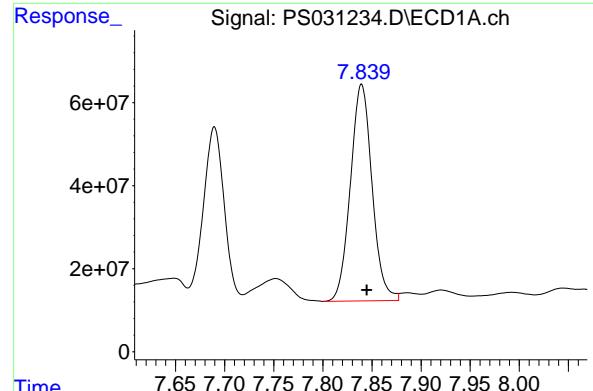
#6 MCPP

R.T.: 7.690 min
Delta R.T.: -0.005 min
Response: 527072125
Conc: 52.65 ug/ml



#6 MCPP

R.T.: 8.066 min
Delta R.T.: 0.000 min
Response: 103787451
Conc: 49.95 ug/ml



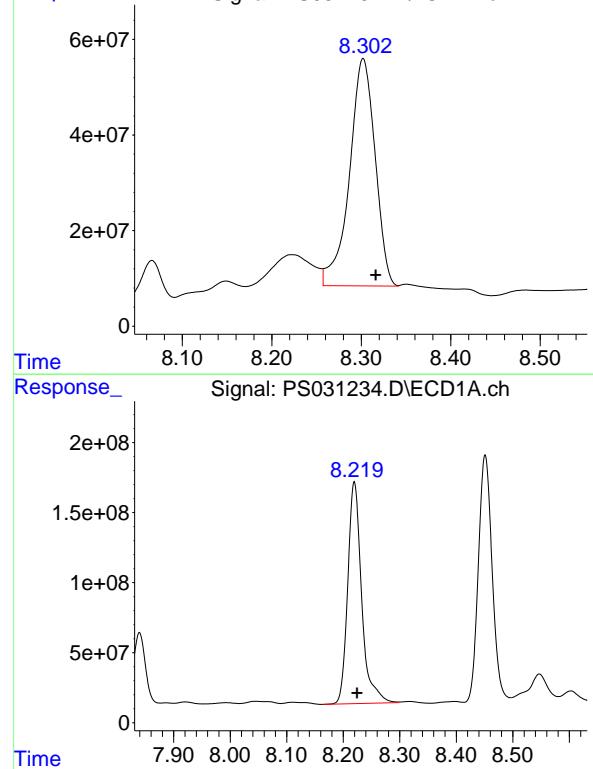
#7 MCPA

R.T.: 7.839 min
Delta R.T.: -0.005 min
Response: 801229884
Conc: 64.03 ug/ml

Instrument: ECD_S
ClientSampleId: P001-CONCRETE001-01MS

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



#7 MCPA

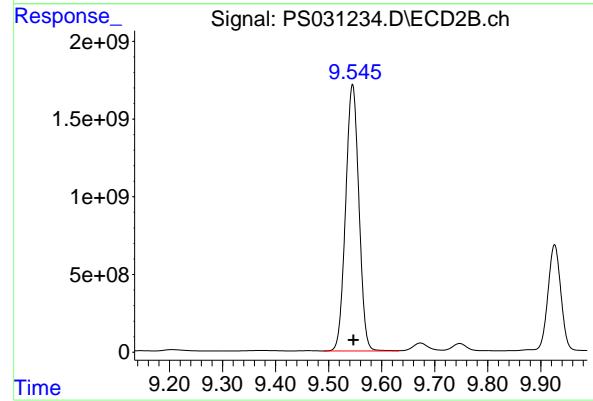
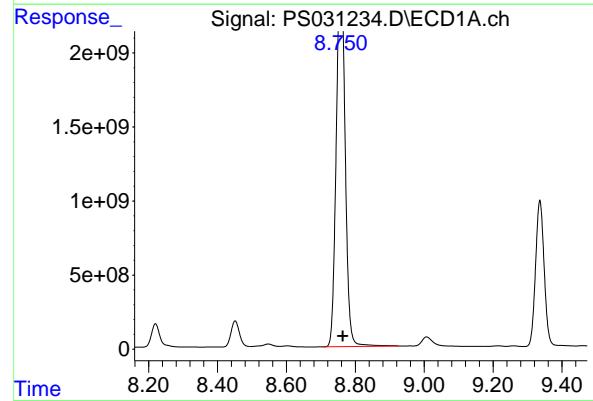
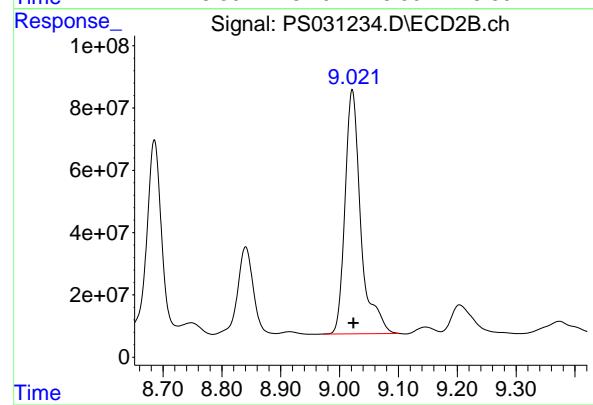
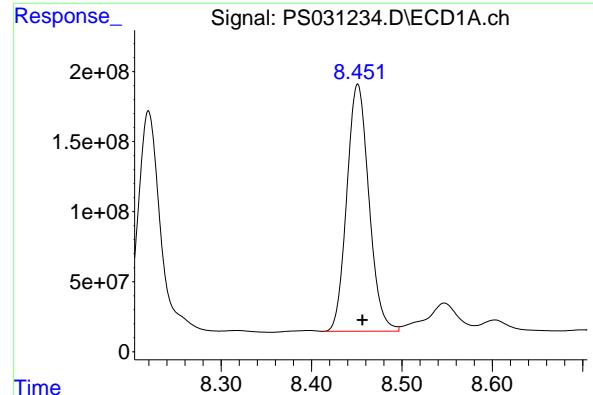
R.T.: 8.302 min
Delta R.T.: -0.014 min
Response: 948929928
Conc: 300.75 ug/ml

#8 DICHLOPROP

R.T.: 8.220 min
Delta R.T.: -0.005 min
Response: 2710862587
Conc: 709.29 ng/ml

#8 DICHLOPROP

R.T.: 8.685 min
Delta R.T.: -0.002 min
Response: 1057316903
Conc: 697.96 ng/ml



#9 2,4-D

R.T.: 8.451 min
Delta R.T.: -0.005 min
Response: 2999067571
Conc: 802.98 ng/ml

Instrument: ECD_S
ClientSampleId: P001-CONCRETE001-01MS

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025

#9 2,4-D

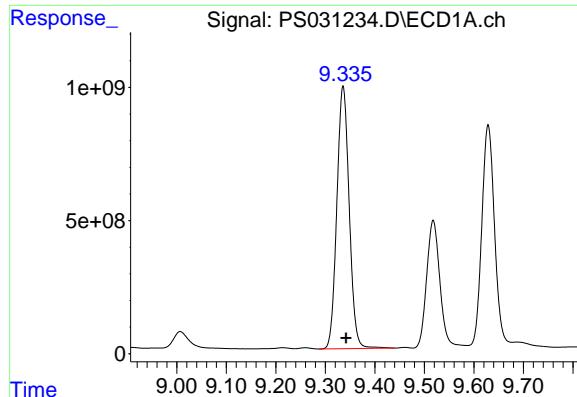
R.T.: 9.022 min
Delta R.T.: -0.002 min
Response: 1463722333
Conc: 861.87 ng/ml

#10 Pentachlorophenol

R.T.: 8.757 min
Delta R.T.: -0.007 min
Response: 43108866964
Conc: 789.23 ng/ml

#10 Pentachlorophenol

R.T.: 9.545 min
Delta R.T.: -0.002 min
Response: 29856613069
Conc: 763.96 ng/ml



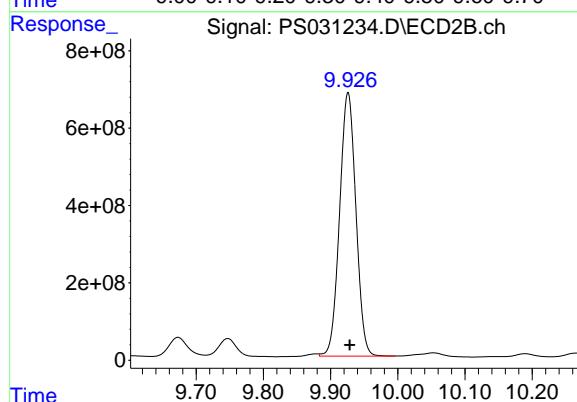
#11 2,4,5-TP (SILVEX)

R.T.: 9.336 min
Delta R.T.: -0.006 min
Response: 17061435494
Conc: 777.16 ng/ml

Instrument: ECD_S
ClientSampleId: P001-CONCRETE001-01MS

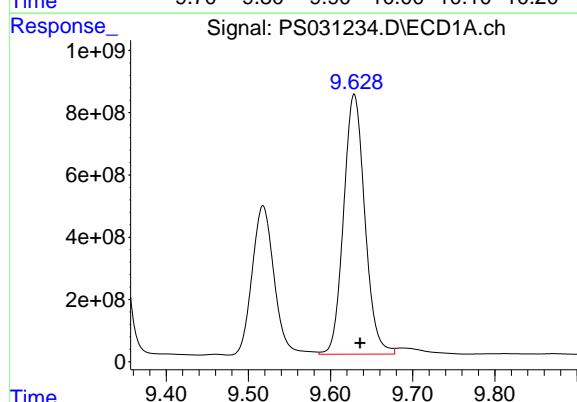
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



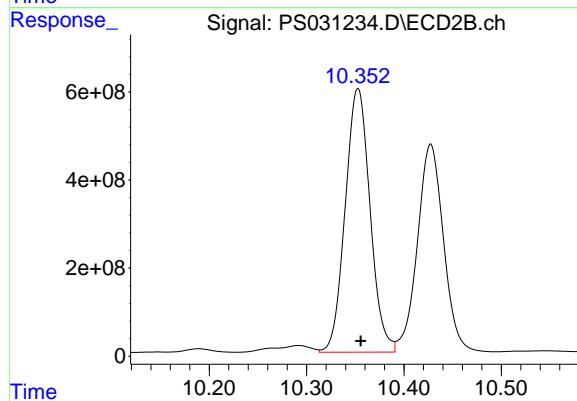
#11 2,4,5-TP (SILVEX)

R.T.: 9.926 min
Delta R.T.: -0.003 min
Response: 11429816040
Conc: 767.40 ng/ml



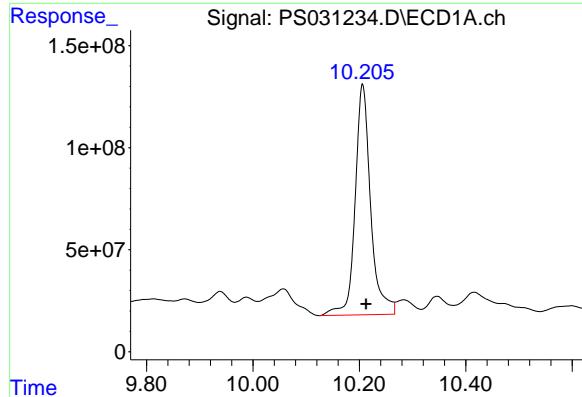
#12 2,4,5-T

R.T.: 9.629 min
Delta R.T.: -0.007 min
Response: 15007049651
Conc: 768.50 ng/ml



#12 2,4,5-T

R.T.: 10.353 min
Delta R.T.: -0.003 min
Response: 10621216820
Conc: 746.95 ng/ml



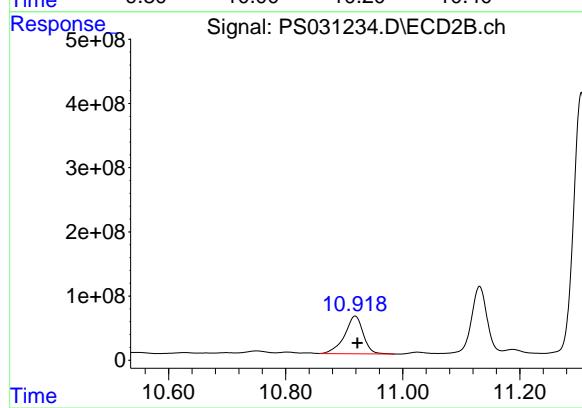
#13 2,4-DB

R.T.: 10.206 min
Delta R.T.: -0.006 min
Response: 2291073353
Conc: 766.28 ng/ml

Instrument: ECD_S
ClientSampleId: P001-CONCRETE001-01MS

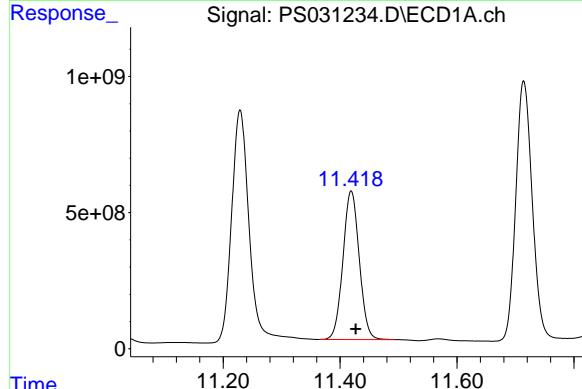
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



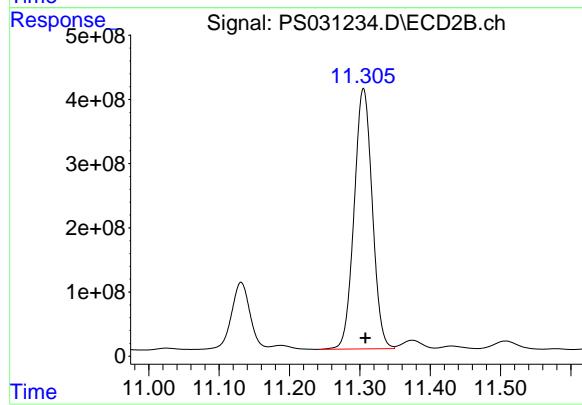
#13 2,4-DB

R.T.: 10.918 min
Delta R.T.: -0.004 min
Response: 1301916579
Conc: 1112.26 ng/ml



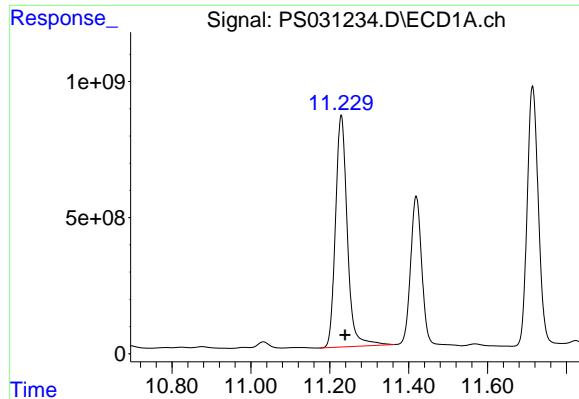
#14 DINOSEB

R.T.: 11.418 min
Delta R.T.: -0.008 min
Response: 10564423157
Conc: 678.53 ng/ml



#14 DINOSEB

R.T.: 11.305 min
Delta R.T.: -0.003 min
Response: 7270112770
Conc: 643.25 ng/ml



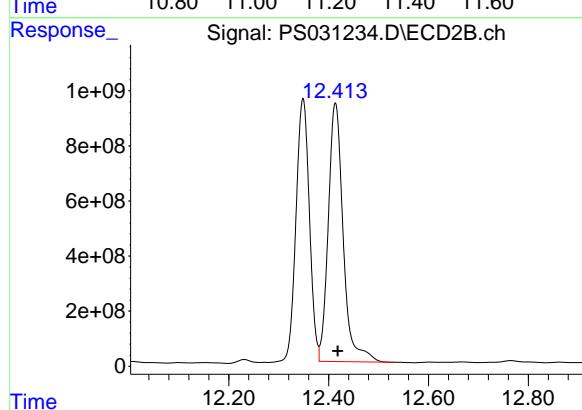
#15 Picloram

R.T.: 11.229 min
 Delta R.T.: -0.010 min
 Response: 17696517170
 Conc: 884.53 ng/ml

Instrument: ECD_S
 ClientSampleId: P001-CONCRETE001-01MS

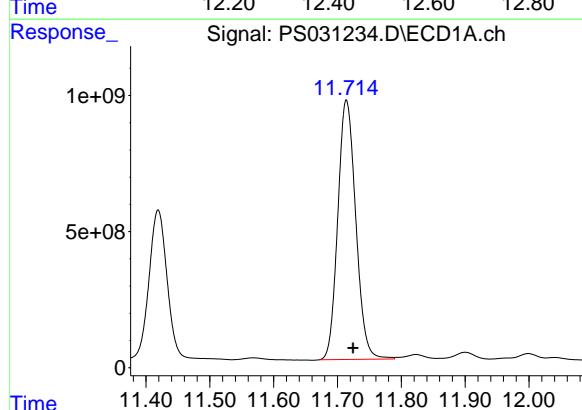
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
 Supervised By :mohammad ahmed 07/26/2025



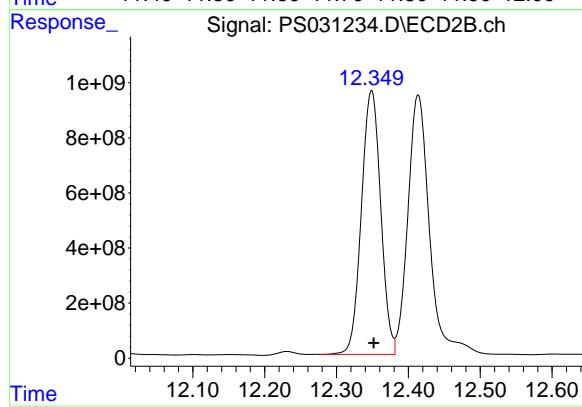
#15 Picloram

R.T.: 12.414 min
 Delta R.T.: -0.005 min
 Response: 19451717745
 Conc: 781.35 ng/ml



#16 DCPA

R.T.: 11.714 min
 Delta R.T.: -0.010 min
 Response: 18645788547
 Conc: 649.83 ng/ml



#16 DCPA

R.T.: 12.349 min
 Delta R.T.: -0.003 min
 Response: 17877937051
 Conc: 776.09 ng/ml



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

Report of Analysis

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

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

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

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072425\
 Data File : PS031235.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 24 Jul 2025 19:28
 Operator : AR\AJ
 Sample : Q2641-02MSD
 Misc :
 ALS Vial : 14 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 P001-CONCRETE001-01MSD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
 Supervised By :mohammad ahmed 07/26/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jul 25 03:43:50 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 03:18:42 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 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 0.25 μ m

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

System Monitoring Compounds

4) S 2,4-DCAA 7.319 7.764 1819.5E6 469.6E6 418.436 462.681

Target Compounds

1) T	Dalapon	2.688	2.703	1265.5E6	1324.3E6	201.746m	466.832m#
2) T	3,5-DICHL...	6.483	6.711	3576.2E6	1020.1E6	647.538	662.430
3) T	4-Nitroph...	7.119	7.297	1123.9E6	1117.7E6	681.649	617.766
5) T	DICAMBA	7.509	7.966	11042.2E6	4495.5E6	669.344	696.610
6) T	MCPP	7.689	8.065	477.0E6	93967699	47.651	45.224
7) T	MCPA	7.839	8.302	734.1E6	811.0E6	58.658	257.034m#
8) T	DICHLORPROP	8.219	8.685	2527.0E6	976.3E6	661.169	644.472
9) T	2,4-D	8.451	9.022	2847.7E6	1374.5E6	762.450	809.339
10) T	Pentachlo...	8.760	9.545	41978.8E6	28362.4E6	768.538	725.729
11) T	2,4,5-TP ...	9.336	9.926	16205.4E6	10825.5E6	738.168	726.825m
12) T	2,4,5-T	9.630	10.353	14305.5E6	10120.0E6	732.573	711.704
13) T	2,4-DB	10.206	10.919	2275.5E6	1219.8E6	761.081	1042.144m#
14) T	DINOSEB	11.419	11.305	10036.8E6	6882.5E6	644.648m	608.956
15) T	Picloram	11.229	12.414	16773.8E6	18153.3E6	838.413m	729.193
16) T	DCPA	11.714	12.349	16732.4E6	16985.3E6	583.144	737.337m#

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS072425\
 Data File : PS031235.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 24 Jul 2025 19:28
 Operator : AR\AJ
 Sample : Q2641-02MSD
 Misc :
 ALS Vial : 14 Sample Multiplier: 1

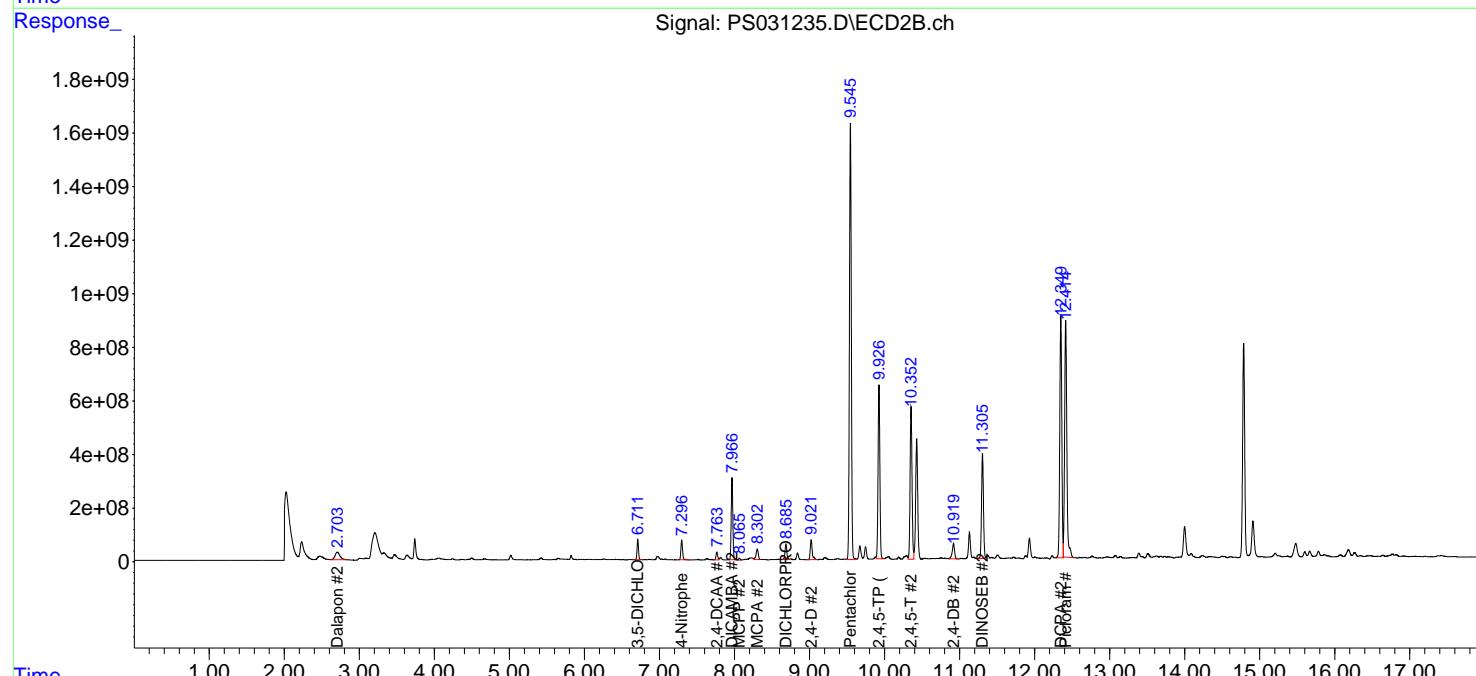
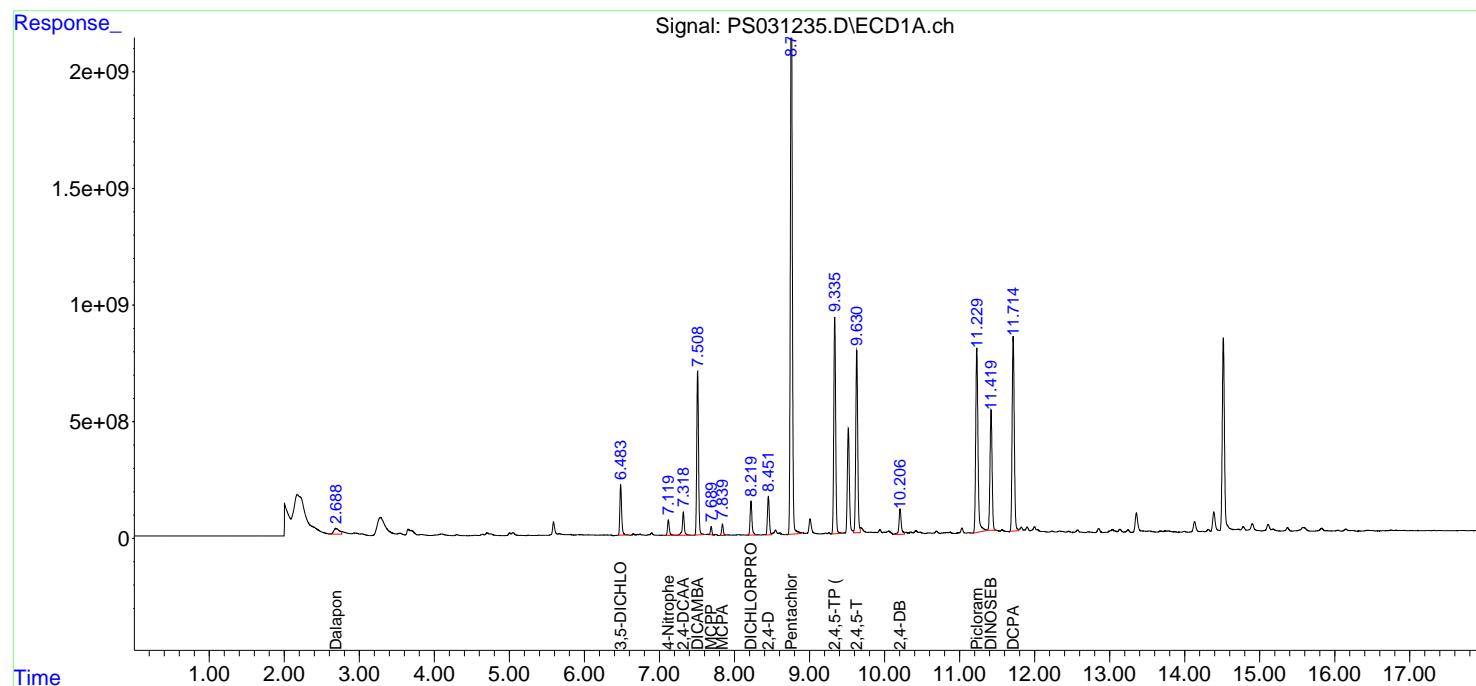
Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Jul 25 03:43:50 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS072125.M
 Quant Title : 8080.M
 QLast Update : Tue Jul 22 03:18:42 2025
 Response via : Initial Calibration
 Integrator: ChemStation

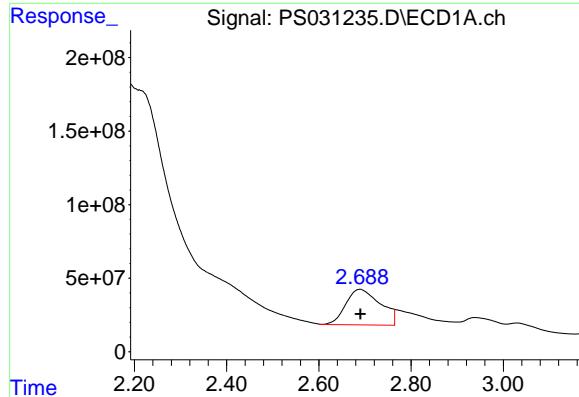
Volume Inj. : 1 μ l
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25 μ m

Instrument :
 ECD_S
 ClientSampleId :
 P001-CONCRETE001-01MSD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 07/25/2025
 Supervised By :mohammad ahmed 07/26/2025





#1 Dalapon

R.T.: 2.688 min

Delta R.T.: -0.002 min

Response: 1265530648

Conc: 201.75 ng/ml

Instrument:

ECD_S

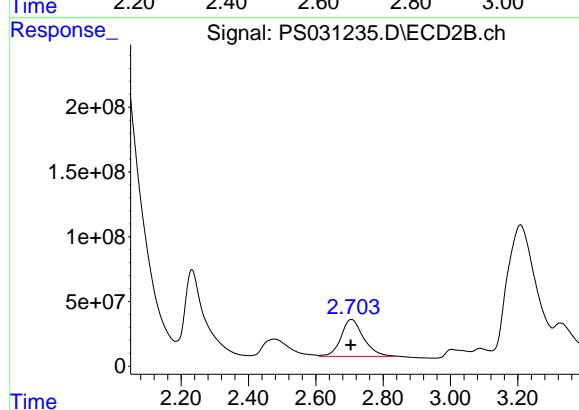
ClientSampleId :

P001-CONCRETE001-01MSD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025

Supervised By :mohammad ahmed 07/26/2025



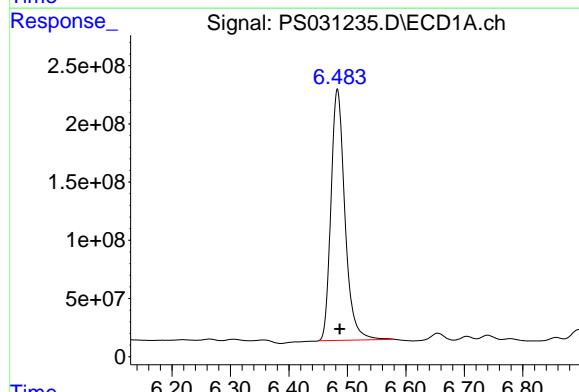
#1 Dalapon

R.T.: 2.703 min

Delta R.T.: 0.000 min

Response: 1324281413

Conc: 466.83 ng/ml



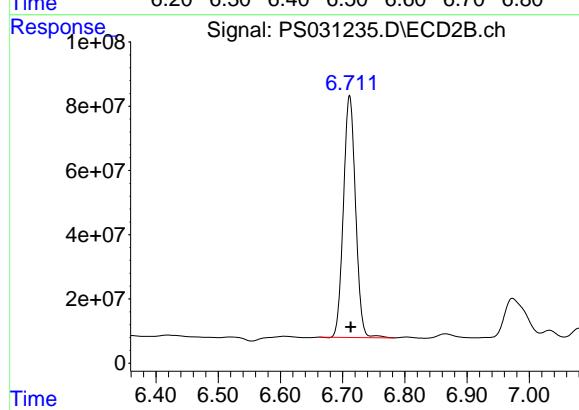
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.483 min

Delta R.T.: -0.004 min

Response: 3576192430

Conc: 647.54 ng/ml



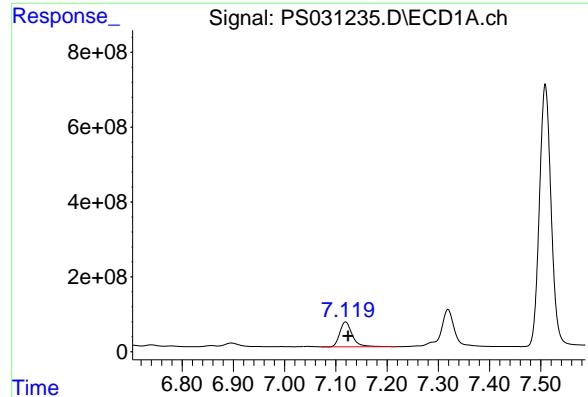
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.711 min

Delta R.T.: -0.002 min

Response: 1020072771

Conc: 662.43 ng/ml



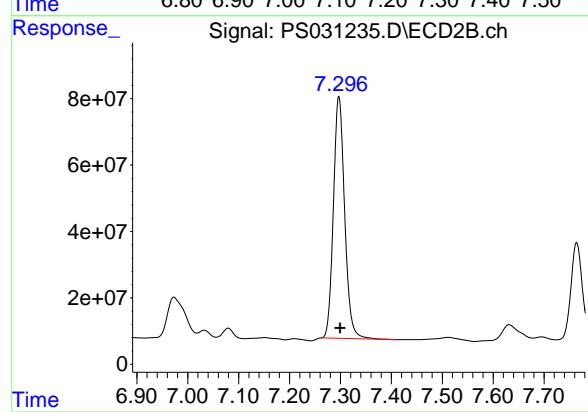
#3 4-Nitrophenol

R.T.: 7.119 min
Delta R.T.: -0.005 min
Response: 1123892523
Conc: 681.65 ng/ml

Instrument: ECD_S
ClientSampleId: P001-CONCRETE001-01MSD

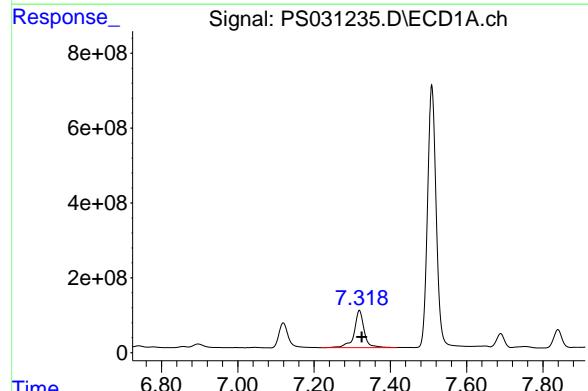
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



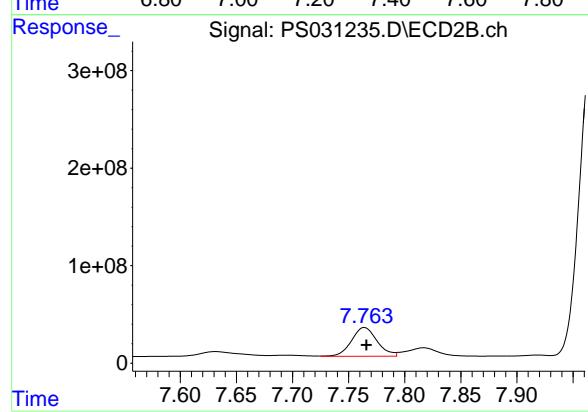
#3 4-Nitrophenol

R.T.: 7.297 min
Delta R.T.: -0.002 min
Response: 1117734117
Conc: 617.77 ng/ml



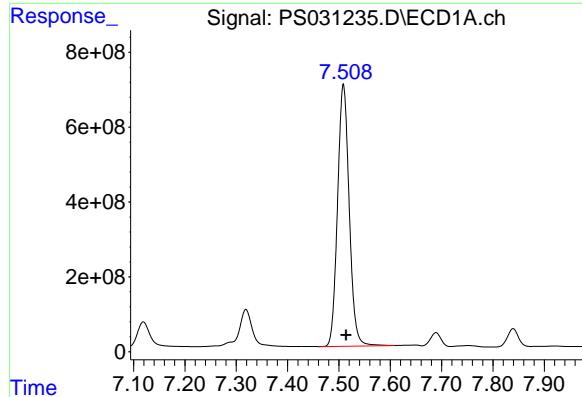
#4 2,4-DCAA

R.T.: 7.319 min
Delta R.T.: -0.006 min
Response: 1819464383
Conc: 418.44 ng/ml



#4 2,4-DCAA

R.T.: 7.764 min
Delta R.T.: -0.002 min
Response: 469606977
Conc: 462.68 ng/ml



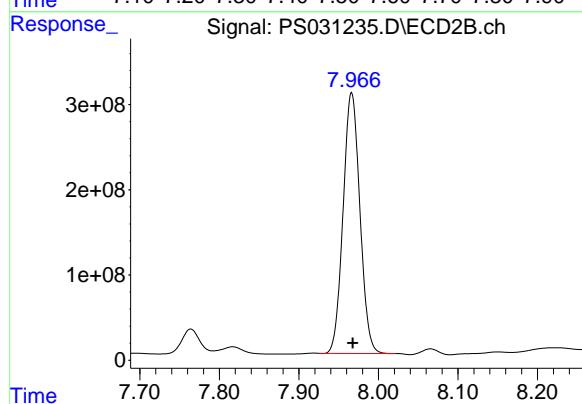
#5 DICAMBA

R.T.: 7.509 min
Delta R.T.: -0.005 min
Response: 11042152188
Conc: 669.34 ng/ml

Instrument: ECD_S
ClientSampleId: P001-CONCRETE001-01MSD

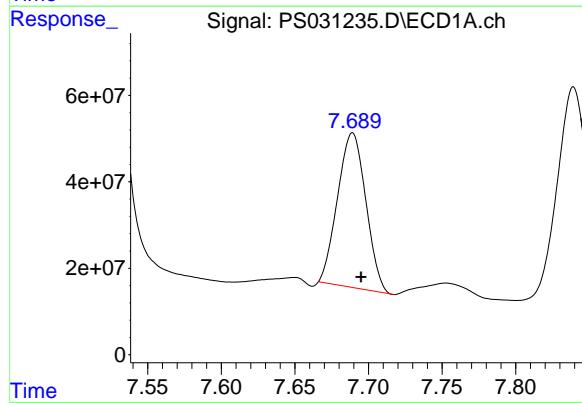
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



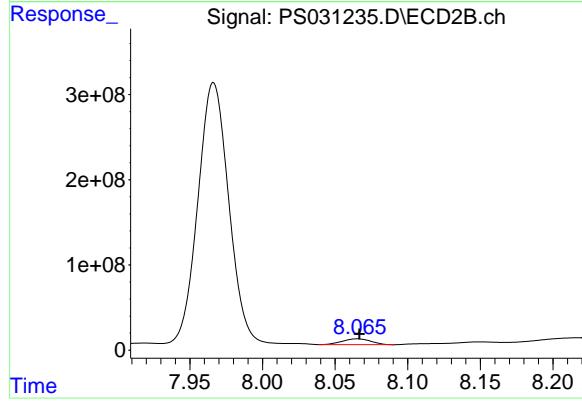
#5 DICAMBA

R.T.: 7.966 min
Delta R.T.: -0.002 min
Response: 4495484023
Conc: 696.61 ng/ml



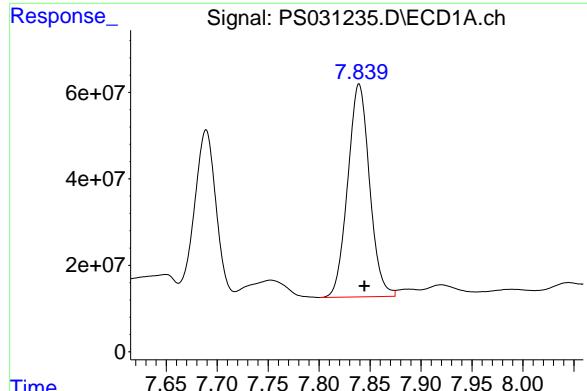
#6 MCPP

R.T.: 7.689 min
Delta R.T.: -0.006 min
Response: 476991807
Conc: 47.65 ug/ml



#6 MCPP

R.T.: 8.065 min
Delta R.T.: -0.001 min
Response: 93967699
Conc: 45.22 ug/ml



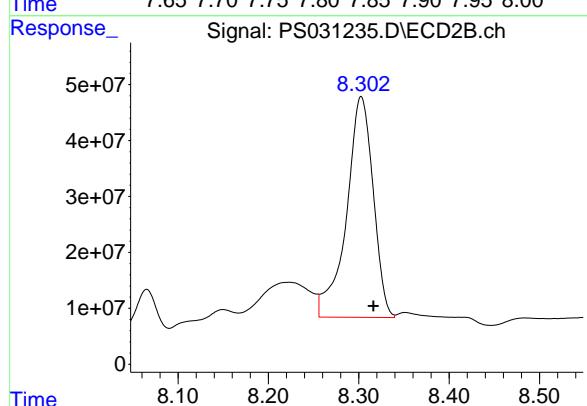
#7 MCPA

R.T.: 7.839 min
Delta R.T.: -0.005 min
Response: 734064049
Conc: 58.66 ug/ml

Instrument: ECD_S
ClientSampleId: P001-CONCRETE001-01MSD

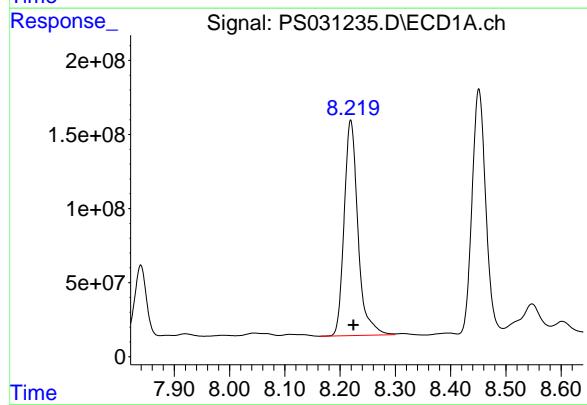
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



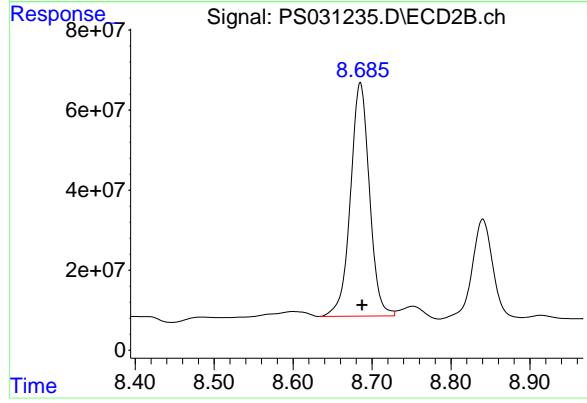
#7 MCPA

R.T.: 8.302 min
Delta R.T.: -0.014 min
Response: 810997561
Conc: 257.03 ug/ml



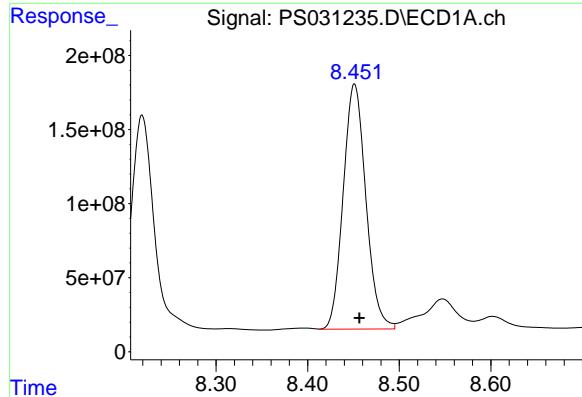
#8 DICHLOPROP

R.T.: 8.219 min
Delta R.T.: -0.005 min
Response: 2526958414
Conc: 661.17 ng/ml



#8 DICHLOPROP

R.T.: 8.685 min
Delta R.T.: -0.002 min
Response: 976285764
Conc: 644.47 ng/ml



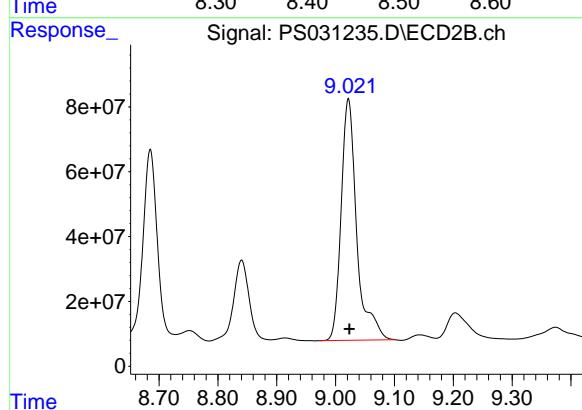
#9 2,4-D

R.T.: 8.451 min
Delta R.T.: -0.005 min
Response: 2847685564
Conc: 762.45 ng/ml

Instrument: ECD_S
ClientSampleId: P001-CONCRETE001-01MSD

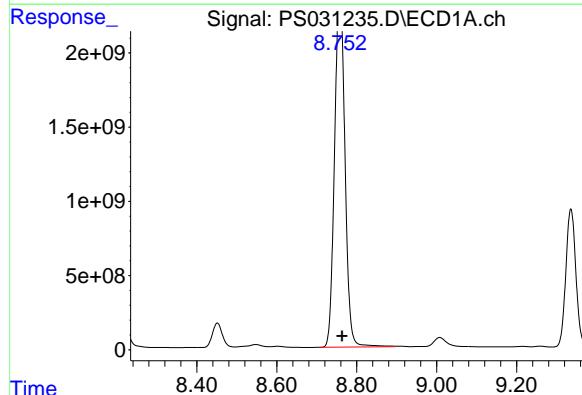
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



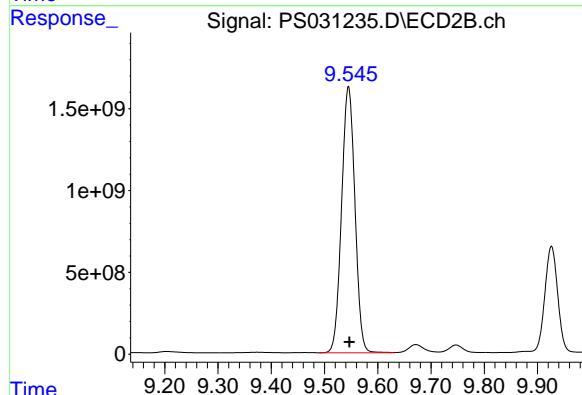
#9 2,4-D

R.T.: 9.022 min
Delta R.T.: -0.002 min
Response: 1374516773
Conc: 809.34 ng/ml



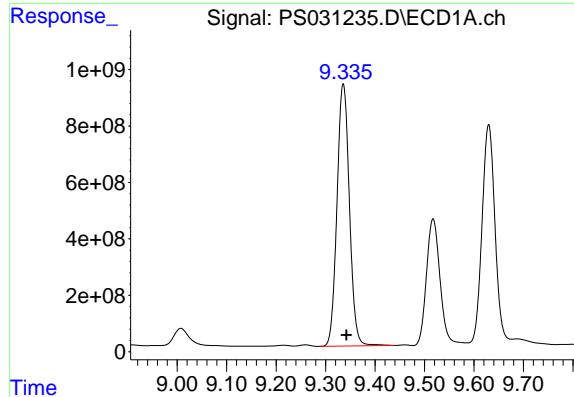
#10 Pentachlorophenol

R.T.: 8.760 min
Delta R.T.: -0.003 min
Response: 41978757651
Conc: 768.54 ng/ml



#10 Pentachlorophenol

R.T.: 9.545 min
Delta R.T.: -0.002 min
Response: 28362380678
Conc: 725.73 ng/ml



#11 2,4,5-TP (SILVEX)

R.T.: 9.336 min

Delta R.T.: -0.006 min

Response: 16205413370

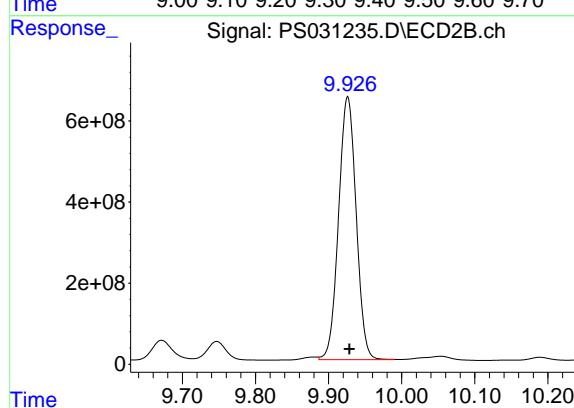
Conc: 738.17 ng/ml

Instrument:

ECD_S

ClientSampleId :

P001-CONCRETE001-01MSD



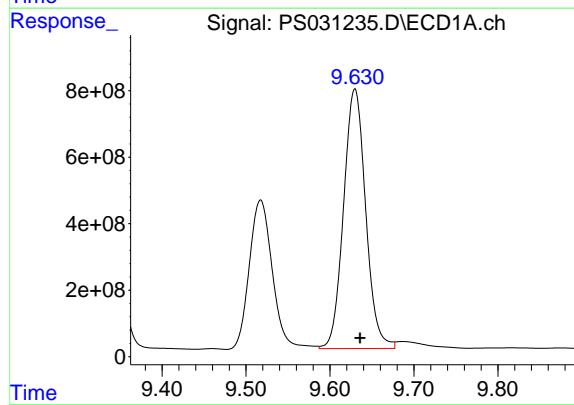
#11 2,4,5-TP (SILVEX)

R.T.: 9.926 min

Delta R.T.: -0.003 min

Response: 10825462426

Conc: 726.82 ng/ml



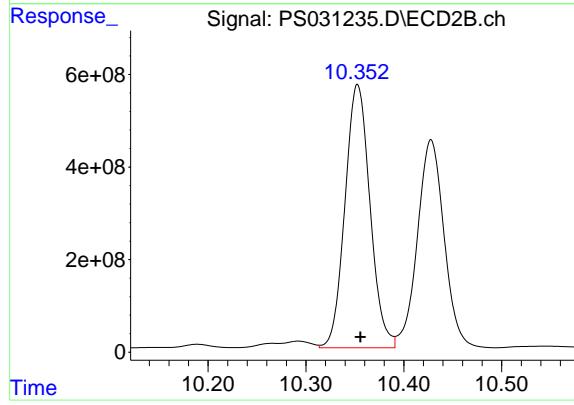
#12 2,4,5-T

R.T.: 9.630 min

Delta R.T.: -0.006 min

Response: 14305527342

Conc: 732.57 ng/ml



#12 2,4,5-T

R.T.: 10.353 min

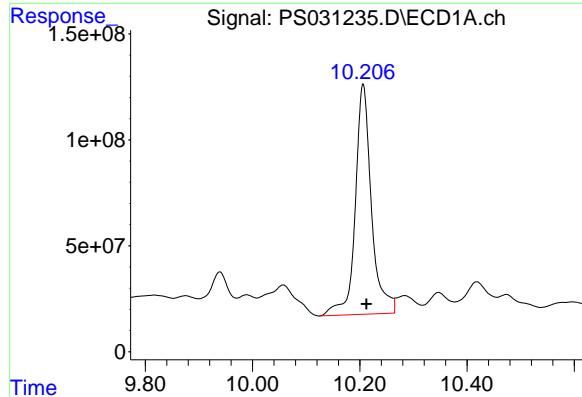
Delta R.T.: -0.003 min

Response: 10120043555

Conc: 711.70 ng/ml

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



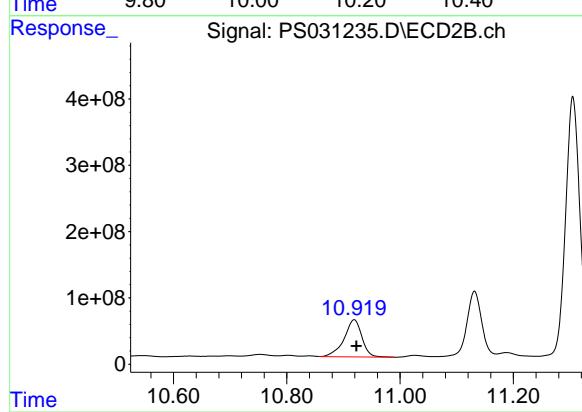
#13 2,4-DB

R.T.: 10.206 min
Delta R.T.: -0.006 min
Response: 2275544898
Conc: 761.08 ng/ml

Instrument: ECD_S
ClientSampleId: P001-CONCRETE001-01MSD

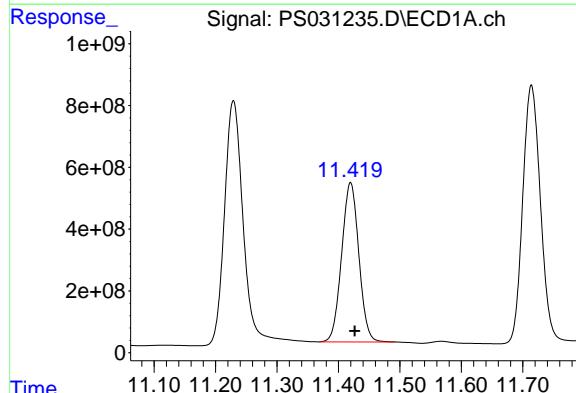
Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025
Supervised By :mohammad ahmed 07/26/2025



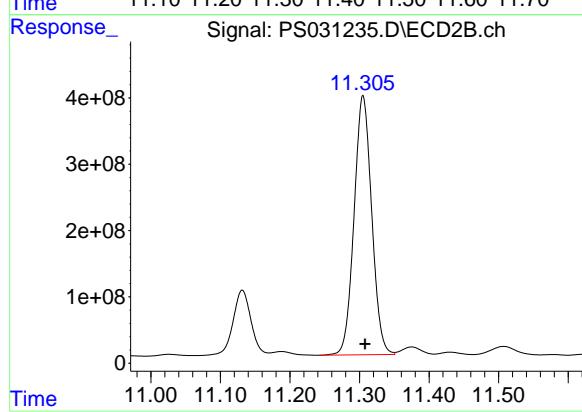
#13 2,4-DB

R.T.: 10.919 min
Delta R.T.: -0.004 min
Response: 1219840983
Conc: 1042.14 ng/ml



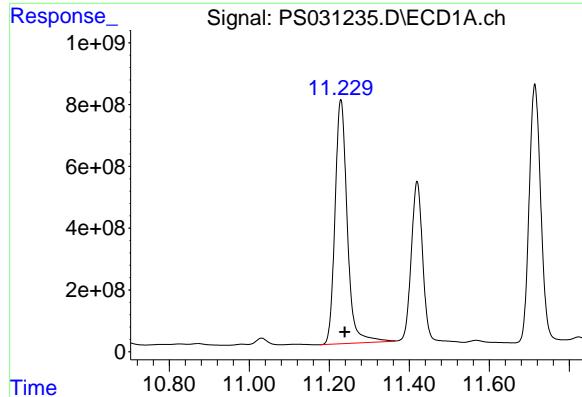
#14 DINOSEB

R.T.: 11.419 min
Delta R.T.: -0.007 min
Response: 10036842350
Conc: 644.65 ng/ml



#14 DINOSEB

R.T.: 11.305 min
Delta R.T.: -0.003 min
Response: 6882471471
Conc: 608.96 ng/ml



#15 Picloram

R.T.: 11.229 min

Delta R.T.: -0.010 min

Response: 16773782923

Conc: 838.41 ng/ml

Instrument:

ECD_S

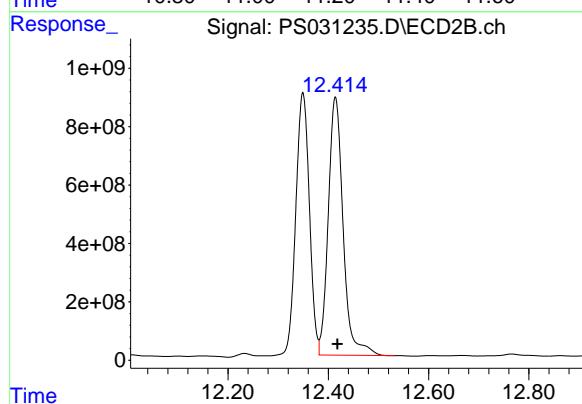
ClientSampleId :

P001-CONCRETE001-01MSD

Manual Integrations
APPROVED

Reviewed By :Yogesh Patel 07/25/2025

Supervised By :mohammad ahmed 07/26/2025



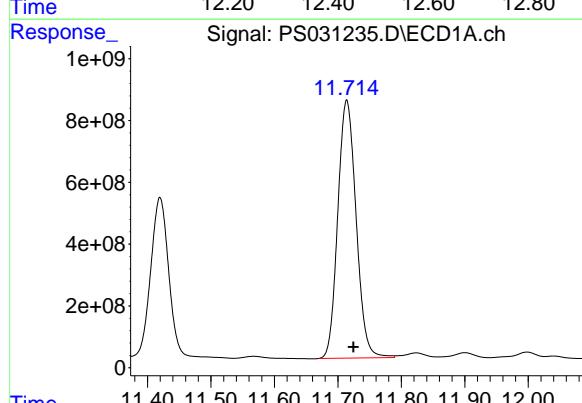
#15 Picloram

R.T.: 12.414 min

Delta R.T.: -0.004 min

Response: 18153285721

Conc: 729.19 ng/ml



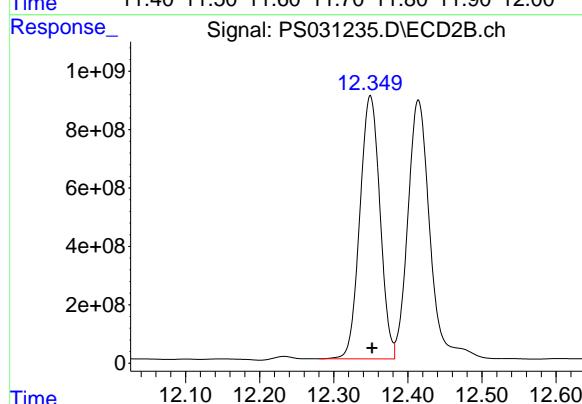
#16 DCPA

R.T.: 11.714 min

Delta R.T.: -0.010 min

Response: 16732439756

Conc: 583.14 ng/ml



#16 DCPA

R.T.: 12.349 min

Delta R.T.: -0.003 min

Response: 16985320276

Conc: 737.34 ng/ml



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

Manual Integration Report

Sequence:	ps072125	Instrument	ECD_s
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
HSTDICC500	PS031158.D	2,4-DCAA	Abdul	7/22/2025 7:56:52 AM	mohammad	7/23/2025 1:33:13	Peak Integrated by Software

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Manual Integration Report

Sequence:	ps072425	Instrument	ECD_s
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
HSTDCCC750	PS031222.D	2,4-D	yogesh	7/25/2025 8:14:31 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
HSTDCCC750	PS031222.D	2,4-DB	yogesh	7/25/2025 8:14:31 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
HSTDCCC750	PS031222.D	2,4-DCAA	yogesh	7/25/2025 8:14:31 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
HSTDCCC750	PS031233.D	DCPA #2	yogesh	7/25/2025 8:14:42 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
HSTDCCC750	PS031233.D	DINOSEB	yogesh	7/25/2025 8:14:42 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
HSTDCCC750	PS031233.D	Pentachlorophenol	yogesh	7/25/2025 8:14:42 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
HSTDCCC750	PS031233.D	Picloram	yogesh	7/25/2025 8:14:42 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
Q2641-02MS	PS031234.D	2,4,5-TP (SILVEX) #2	yogesh	7/25/2025 8:14:46 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
Q2641-02MS	PS031234.D	2,4-DB #2	yogesh	7/25/2025 8:14:46 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
Q2641-02MS	PS031234.D	Dalapon	yogesh	7/25/2025 8:14:46 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
Q2641-02MS	PS031234.D	Dalapon #2	yogesh	7/25/2025 8:14:46 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
Q2641-02MS	PS031234.D	DCPA #2	yogesh	7/25/2025 8:14:46 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
Q2641-02MS	PS031234.D	DINOSEB	yogesh	7/25/2025 8:14:46 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software

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Manual Integration Report

Sequence:	ps072425	Instrument	ECD_s
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q2641-02MS	PS031234.D	MCPA #2	yogesh	7/25/2025 8:14:46 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
Q2641-02MS	PS031234.D	Picloram	yogesh	7/25/2025 8:14:46 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
Q2641-02MSD	PS031235.D	2,4,5-TP (SILVEX) #2	yogesh	7/25/2025 8:14:48 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
Q2641-02MSD	PS031235.D	2,4-DB #2	yogesh	7/25/2025 8:14:48 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
Q2641-02MSD	PS031235.D	Dalapon	yogesh	7/25/2025 8:14:48 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
Q2641-02MSD	PS031235.D	Dalapon #2	yogesh	7/25/2025 8:14:48 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
Q2641-02MSD	PS031235.D	DCPA #2	yogesh	7/25/2025 8:14:48 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
Q2641-02MSD	PS031235.D	DINOSEB	yogesh	7/25/2025 8:14:48 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
Q2641-02MSD	PS031235.D	MCPA #2	yogesh	7/25/2025 8:14:48 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
Q2641-02MSD	PS031235.D	Picloram	yogesh	7/25/2025 8:14:48 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
PB169001BS	PS031237.D	2,4-D #2	yogesh	7/25/2025 8:14:50 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
PB169001BS	PS031237.D	2,4-DB #2	yogesh	7/25/2025 8:14:50 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
PB169001BS	PS031237.D	Dalapon	yogesh	7/25/2025 8:14:50 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software

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Manual Integration Report

Sequence:	ps072425	Instrument	ECD_s
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
PB169001BS	PS031237.D	Dalapon #2	yogesh	7/25/2025 8:14:50 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
PB169001BS	PS031237.D	DINOSEB	yogesh	7/25/2025 8:14:50 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
PB169001BS	PS031237.D	Picloram	yogesh	7/25/2025 8:14:50 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
HSTDCCC750	PS031243.D	DCPA #2	yogesh	7/25/2025 8:14:52 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
HSTDCCC750	PS031243.D	DINOSEB	yogesh	7/25/2025 8:14:52 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
HSTDCCC750	PS031243.D	Pentachlorophenol	yogesh	7/25/2025 8:14:52 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
HSTDCCC750	PS031243.D	Picloram	yogesh	7/25/2025 8:14:52 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
HSTDCCC750	PS031252.D	DCPA #2	yogesh	7/25/2025 8:14:58 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
HSTDCCC750	PS031252.D	DINOSEB	yogesh	7/25/2025 8:14:58 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
HSTDCCC750	PS031252.D	Pentachlorophenol	yogesh	7/25/2025 8:14:58 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
HSTDCCC750	PS031252.D	Picloram	yogesh	7/25/2025 8:14:58 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
HSTDCCC750	PS031260.D	2,4,5-TP (SILVEX) #2	yogesh	7/25/2025 9:35:16 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
HSTDCCC750	PS031260.D	2,4-D	yogesh	7/25/2025 9:35:16 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software

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Manual Integration Report

Sequence:	ps072425	Instrument	ECD_s
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
HSTDCCC750	PS031260.D	3,5-DICHLOROBENZOIC ACID	yogesh	7/25/2025 9:35:16 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
HSTDCCC750	PS031260.D	Dalapon #2	yogesh	7/25/2025 9:35:16 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
HSTDCCC750	PS031260.D	DICHLORPROP	yogesh	7/25/2025 9:35:16 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
HSTDCCC750	PS031260.D	DICHLORPROP #2	yogesh	7/25/2025 9:35:16 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software
HSTDCCC750	PS031260.D	MCPP #2	yogesh	7/25/2025 9:35:16 AM	mohammad	7/26/2025 3:49:45	Peak Integrated by Software

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Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QCBatch ID # PS072125

Review By	Abdul	Review On	7/22/2025 7:57:36 AM
Supervise By	mohammad	Supervise On	7/23/2025 1:33:13 AM
SubDirectory	PS072125	HP Acquire Method	HP Processing Method ps072125 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24553,PP24554,PP24556,PP24557,PP24558,PP24559,PP24560		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24559 PP24562		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	HEXANE	PS031155.D	21 Jul 2025 14:14	AR\AJ	Ok
2	I.BLK	PS031156.D	21 Jul 2025 14:38	AR\AJ	Ok
3	HSTDIICC200	PS031157.D	21 Jul 2025 15:02	AR\AJ	Ok
4	HSTDIICC500	PS031158.D	21 Jul 2025 15:26	AR\AJ	Ok,M
5	HSTDIICC750	PS031159.D	21 Jul 2025 15:51	AR\AJ	Ok
6	HSTDIICC1000	PS031160.D	21 Jul 2025 16:15	AR\AJ	Ok
7	HSTDIICC1500	PS031161.D	21 Jul 2025 16:39	AR\AJ	Ok
8	HSTDICV750	PS031162.D	21 Jul 2025 17:03	AR\AJ	Ok
9	I.BLK	PS031163.D	21 Jul 2025 17:27	AR\AJ	Ok
10	HSTDCCC750	PS031164.D	21 Jul 2025 17:51	AR\AJ	Ok
11	Q2529-10	PS031165.D	21 Jul 2025 18:15	AR\AJ	Not Ok
12	Q2529-10MS	PS031166.D	21 Jul 2025 18:40	AR\AJ	Not Ok
13	Q2529-10MSD	PS031167.D	21 Jul 2025 19:04	AR\AJ	Not Ok
14	PB168886BS	PS031168.D	21 Jul 2025 19:28	AR\AJ	Ok
15	I.BLK	PS031169.D	21 Jul 2025 19:52	AR\AJ	Ok
16	HSTDCCC750	PS031170.D	21 Jul 2025 20:16	AR\AJ	Ok

M : Manual Integration

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QCBatch ID # PS072425

Review By	yogesh	Review On	7/25/2025 8:15:19 AM
Supervise By	mohammad	Supervise On	7/26/2025 3:49:45 AM
SubDirectory	PS072425	HP Acquire Method	HP Processing Method ps072125 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24553,PP24554,PP24556,PP24557,PP24558,PP24559,PP24560		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24559 PP24562		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	HEXANE	PS031220.D	24 Jul 2025 10:10	AR\AJ	Ok
2	I.BLK	PS031221.D	24 Jul 2025 10:35	AR\AJ	Ok
3	HSTDCCC750	PS031222.D	24 Jul 2025 12:03	AR\AJ	Ok,M
4	Q2638-11	PS031223.D	24 Jul 2025 13:44	AR\AJ	Ok
5	Q2638-11MS	PS031224.D	24 Jul 2025 14:08	AR\AJ	Ok,M
6	Q2638-11MSD	PS031225.D	24 Jul 2025 14:38	AR\AJ	Ok,M
7	Q2558-01MS	PS031226.D	24 Jul 2025 15:02	AR\AJ	Ok,M
8	Q2558-01MSD	PS031227.D	24 Jul 2025 15:26	AR\AJ	Ok,M
9	Q2638-13	PS031228.D	24 Jul 2025 15:50	AR\AJ	Ok,M
10	Q2638-05	PS031229.D	24 Jul 2025 16:14	AR\AJ	Ok
11	Q2638-07	PS031230.D	24 Jul 2025 16:39	AR\AJ	Ok
12	Q2641-02	PS031231.D	24 Jul 2025 17:03	AR\AJ	Ok
13	I.BLK	PS031232.D	24 Jul 2025 17:27	AR\AJ	Ok
14	HSTDCCC750	PS031233.D	24 Jul 2025 18:39	AR\AJ	Ok,M
15	Q2641-02MS	PS031234.D	24 Jul 2025 19:04	AR\AJ	Ok,M
16	Q2641-02MSD	PS031235.D	24 Jul 2025 19:28	AR\AJ	Ok,M
17	PB169001BL	PS031236.D	24 Jul 2025 19:52	AR\AJ	Ok
18	PB169001BS	PS031237.D	24 Jul 2025 20:16	AR\AJ	Ok,M
19	PB168919TB	PS031238.D	24 Jul 2025 20:40	AR\AJ	Ok
20	PB168926TB	PS031239.D	24 Jul 2025 21:04	AR\AJ	Ok
21	PB168953TB	PS031240.D	24 Jul 2025 21:29	AR\AJ	Ok

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QCBatch ID # PS072425

Review By	yogesh	Review On	7/25/2025 8:15:19 AM
Supervise By	mohammad	Supervise On	7/26/2025 3:49:45 AM
SubDirectory	PS072425	HP Acquire Method	HP Processing Method ps072125 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24553,PP24554,PP24556,PP24557,PP24558,PP24559,PP24560		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24559 PP24562		

22	PB168969TB	PS031241.D	24 Jul 2025 21:53	AR\AJ	Ok
23	I.BLK	PS031242.D	24 Jul 2025 22:17	AR\AJ	Ok
24	HSTDCCC750	PS031243.D	24 Jul 2025 23:29	AR\AJ	Ok,M
25	Q2481-12	PS031244.D	24 Jul 2025 23:53	AR\AJ	Not Ok
26	Q2481-15	PS031245.D	25 Jul 2025 00:17	AR\AJ	Ok,M
27	Q2667-01	PS031246.D	25 Jul 2025 00:41	AR\AJ	Ok
28	Q2667-02	PS031247.D	25 Jul 2025 01:05	AR\AJ	Ok
29	Q2481-19	PS031248.D	25 Jul 2025 01:29	AR\AJ	Ok
30	Q2481-21	PS031249.D	25 Jul 2025 01:53	AR\AJ	Ok
31	Q2446-03	PS031250.D	25 Jul 2025 02:18	AR\AJ	Not Ok
32	I.BLK	PS031251.D	25 Jul 2025 02:42	AR\AJ	Ok
33	HSTDCCC750	PS031252.D	25 Jul 2025 03:54	AR\AJ	Ok,M
34	Q2481-13	PS031253.D	25 Jul 2025 04:18	AR\AJ	Ok
35	Q2481-14	PS031254.D	25 Jul 2025 04:43	AR\AJ	Ok
36	Q2481-16	PS031255.D	25 Jul 2025 05:07	AR\AJ	Ok
37	Q2481-17	PS031256.D	25 Jul 2025 05:31	AR\AJ	Ok
38	Q2481-18	PS031257.D	25 Jul 2025 05:55	AR\AJ	Not Ok
39	Q2481-20	PS031258.D	25 Jul 2025 06:19	AR\AJ	Ok
40	I.BLK	PS031259.D	25 Jul 2025 06:43	AR\AJ	Ok
41	HSTDCCC750	PS031260.D	25 Jul 2025 07:07	AR\AJ	Ok,M

M : Manual Integration

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QCBatch ID # PS072125

Review By	Abdul	Review On	7/22/2025 7:57:36 AM
Supervise By	mohammad	Supervise On	7/23/2025 1:33:13 AM
SubDirectory	PS072125	HP Acquire Method	HP Processing Method ps072125 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24553,PP24554,PP24556,PP24557,PP24558,PP24559,PP24560		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24559 PP24562		

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	HEXANE	HEXANE	PS031155.D	21 Jul 2025 14:14		AR\AJ	Ok
2	I.BLK	I.BLK	PS031156.D	21 Jul 2025 14:38		AR\AJ	Ok
3	HSTDICC200	HSTDICC200	PS031157.D	21 Jul 2025 15:02		AR\AJ	Ok
4	HSTDICC500	HSTDICC500	PS031158.D	21 Jul 2025 15:26		AR\AJ	Ok,M
5	HSTDICC750	HSTDICC750	PS031159.D	21 Jul 2025 15:51		AR\AJ	Ok
6	HSTDICC1000	HSTDICC1000	PS031160.D	21 Jul 2025 16:15		AR\AJ	Ok
7	HSTDICC1500	HSTDICC1500	PS031161.D	21 Jul 2025 16:39		AR\AJ	Ok
8	HSTDICV750	ICVPS072125	PS031162.D	21 Jul 2025 17:03		AR\AJ	Ok
9	I.BLK	I.BLK	PS031163.D	21 Jul 2025 17:27		AR\AJ	Ok
10	HSTDCCC750	HSTDCCC750	PS031164.D	21 Jul 2025 17:51		AR\AJ	Ok
11	Q2529-10	TP-30	PS031165.D	21 Jul 2025 18:15	already analyzed	AR\AJ	Not Ok
12	Q2529-10MS	TP-30MS	PS031166.D	21 Jul 2025 18:40	some compound recovery fail ,already analyzed	AR\AJ	Not Ok
13	Q2529-10MSD	TP-30MSD	PS031167.D	21 Jul 2025 19:04	some compound recovery fail , RPD fail,already analyzed	AR\AJ	Not Ok
14	PB168886BS	PB168886BS	PS031168.D	21 Jul 2025 19:28		AR\AJ	Ok
15	I.BLK	I.BLK	PS031169.D	21 Jul 2025 19:52		AR\AJ	Ok
16	HSTDCCC750	HSTDCCC750	PS031170.D	21 Jul 2025 20:16		AR\AJ	Ok

M : Manual Integration

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QCBatch ID # PS072425

Review By	yogesh	Review On	7/25/2025 8:15:19 AM
Supervise By	mohammad	Supervise On	7/26/2025 3:49:45 AM
SubDirectory	PS072425	HP Acquire Method	HP Processing Method ps072125 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24553,PP24554,PP24556,PP24557,PP24558,PP24559,PP24560		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24559 PP24562		

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	HEXANE	HEXANE	PS031220.D	24 Jul 2025 10:10		AR\AJ	Ok
2	I.BLK	I.BLK	PS031221.D	24 Jul 2025 10:35		AR\AJ	Ok
3	HSTDCCC750	HSTDCCC750	PS031222.D	24 Jul 2025 12:03		AR\AJ	Ok,M
4	Q2638-11	OU4-TS-36-071725	PS031223.D	24 Jul 2025 13:44		AR\AJ	Ok
5	Q2638-11MS	OU4-TS-36-071725MS	PS031224.D	24 Jul 2025 14:08		AR\AJ	Ok,M
6	Q2638-11MSD	OU4-TS-36-071725MSD	PS031225.D	24 Jul 2025 14:38		AR\AJ	Ok,M
7	Q2558-01MS	OU4-TS-Denali-070925	PS031226.D	24 Jul 2025 15:02		AR\AJ	Ok,M
8	Q2558-01MSD	OU4-TS-Denali-070925	PS031227.D	24 Jul 2025 15:26		AR\AJ	Ok,M
9	Q2638-13	OU4-TS-37-071725	PS031228.D	24 Jul 2025 15:50		AR\AJ	Ok,M
10	Q2638-05	OU4-TS-33-071725	PS031229.D	24 Jul 2025 16:14		AR\AJ	Ok
11	Q2638-07	OU4-TS-34-071725	PS031230.D	24 Jul 2025 16:39		AR\AJ	Ok
12	Q2641-02	P001-CONCRETE001-	PS031231.D	24 Jul 2025 17:03		AR\AJ	Ok
13	I.BLK	I.BLK	PS031232.D	24 Jul 2025 17:27		AR\AJ	Ok
14	HSTDCCC750	HSTDCCC750	PS031233.D	24 Jul 2025 18:39		AR\AJ	Ok,M
15	Q2641-02MS	P001-CONCRETE001-	PS031234.D	24 Jul 2025 19:04		AR\AJ	Ok,M
16	Q2641-02MSD	P001-CONCRETE001-	PS031235.D	24 Jul 2025 19:28		AR\AJ	Ok,M
17	PB169001BL	PB169001BL	PS031236.D	24 Jul 2025 19:52		AR\AJ	Ok
18	PB169001BS	PB169001BS	PS031237.D	24 Jul 2025 20:16		AR\AJ	Ok,M

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QCBatch ID # PS072425

Review By	yogesh	Review On	7/25/2025 8:15:19 AM
Supervise By	mohammad	Supervise On	7/26/2025 3:49:45 AM
SubDirectory	PS072425	HP Acquire Method	HP Processing Method ps072125 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24553,PP24554,PP24556,PP24557,PP24558,PP24559,PP24560		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24559 PP24562		

19	PB168919TB	PB168919TB	PS031238.D	24 Jul 2025 20:40		AR\AJ	Ok
20	PB168926TB	PB168926TB	PS031239.D	24 Jul 2025 21:04		AR\AJ	Ok
21	PB168953TB	PB168953TB	PS031240.D	24 Jul 2025 21:29		AR\AJ	Ok
22	PB168969TB	PB168969TB	PS031241.D	24 Jul 2025 21:53		AR\AJ	Ok
23	I.BLK	I.BLK	PS031242.D	24 Jul 2025 22:17		AR\AJ	Ok
24	HSTDCCC750	HSTDCCC750	PS031243.D	24 Jul 2025 23:29		AR\AJ	Ok,M
25	Q2481-12	CC0627-AL	PS031244.D	24 Jul 2025 23:53	bad injection	AR\AJ	Not Ok
26	Q2481-15	CC0627-AOXL	PS031245.D	25 Jul 2025 00:17		AR\AJ	Ok,M
27	Q2667-01	C0AP2	PS031246.D	25 Jul 2025 00:41		AR\AJ	Ok
28	Q2667-02	C0AP3	PS031247.D	25 Jul 2025 01:05		AR\AJ	Ok
29	Q2481-19	CC0627-CLOXAL	PS031248.D	25 Jul 2025 01:29	f falg,	AR\AJ	Ok
30	Q2481-21	CC0627-SFBL	PS031249.D	25 Jul 2025 01:53		AR\AJ	Ok
31	Q2446-03	MR-BUR-LNG-13	PS031250.D	25 Jul 2025 02:18	bad injection, TYPO	AR\AJ	Not Ok
32	I.BLK	I.BLK	PS031251.D	25 Jul 2025 02:42		AR\AJ	Ok
33	HSTDCCC750	HSTDCCC750	PS031252.D	25 Jul 2025 03:54		AR\AJ	Ok,M
34	Q2481-13	CC0627-CLOXPL	PS031253.D	25 Jul 2025 04:18	Surrogate fail in 1st col.END CCC FAIL	AR\AJ	Ok
35	Q2481-14	CC0625-OXBL	PS031254.D	25 Jul 2025 04:43	Surrogate fail, END CCC FAIL, F flag	AR\AJ	Ok
36	Q2481-16	CC0625-NL	PS031255.D	25 Jul 2025 05:07	Surrogate fail, END CCC FAIL, F flag	AR\AJ	Ok

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QCBatch ID # PS072425

Review By	yogesh	Review On	7/25/2025 8:15:19 AM
Supervise By	mohammad	Supervise On	7/26/2025 3:49:45 AM
SubDirectory	PS072425	HP Acquire Method	HP Processing Method ps072125 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	PP24562		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

37	Q2481-17	CC0267-OXPL	PS031256.D	25 Jul 2025 05:31	Surrogate fail, END CCC FAIL, F flag	AR\AJ	Ok
38	Q2481-18	CC0627-OXL	PS031257.D	25 Jul 2025 05:55	bad injection, surrogate not detected	AR\AJ	Not Ok
39	Q2481-20	CC0627-BL	PS031258.D	25 Jul 2025 06:19	Surrogate fail 2nd col, END CCC FAIL, F flag	AR\AJ	Ok
40	I.BLK	I.BLK	PS031259.D	25 Jul 2025 06:43	Surrogate low in both column, bad injection	AR\AJ	Ok
41	HSTDCCC750	HSTDCCC750	PS031260.D	25 Jul 2025 07:07	most of compounds are fail	AR\AJ	Ok,M

M : Manual Integration

SOP ID : M1311-TCLP-16
SDG No : N/A
Weigh By : JP
Balance ID : WC SC-7
pH Meter ID : WC PH METER-1
Extraction By : JP
Filter By : JP
Pipette ID : WC
Tumbler ID : T-1 / T-2
TCLP Filter ID : 115525

Start Prep Date : 07/22/2025 **Time :** 15:00
End Prep Date : 07/23/2025 **Time :** 08:20
Combination Ratio : 20
ZHE Cleaning Batch : N/A *TS*
Initial Room Temperature: 23 °C
Final Room Temperature: 22 °C
TCLP Technician Signature : *TS*
Supervisor By : *12*

Standard Name	MLS USED	STD REF. # FROM LOG
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. q2672-04 is used for MS-MSD.

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
07/23/25 11:00	<i>TS</i> 1EP Room	<i>SP29</i> <i>BS</i> <i>1EX1</i>
Preparation Group	Analysis Group	
		<i>1N91 D19</i>

TCLP EXTRACTION LOGPAGE

PB168953

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	Pre. Pos
PB168953TB	LEB953	11	N/A	2000	N/A	N/A	N/A	4.94	1.0	T-2
Q2655-02	SOIL	01	100.02	2000	N/A	N/A	N/A	3.5	1.5	T-1
Q2660-02	MOO-25-0205	02	100.02	2000	N/A	N/A	N/A	4.0	1.0	T-1
Q2660-04	MOO-25-0218	03	100.03	2000	N/A	N/A	N/A	7.2	1.5	T-1
Q2667-01	COAP2	04	100.01	2000	N/A	N/A	N/A	6.0	1.0	T-1
Q2667-02	COAP3	05	100.02	2000	N/A	N/A	N/A	5.0	1.5	T-1
Q2668-04	TP-2	06	100.03	2000	N/A	N/A	N/A	5.8	1.0	T-1
Q2668-08	TP-3	07	100.02	2000	N/A	N/A	N/A	7.2	1.5	T-1
Q2668-12	TP-1	08	100.03	2000	N/A	N/A	N/A	6.2	1.0	T-1
Q2672-02	AUD-25-0123-0127	09	100.02	2000	N/A	N/A	N/A	7.2	1.5	T-1
Q2672-04	AUD-25-0128-0132	10	100.03	2000	N/A	N/A	N/A	7.0	1.5	T-1

SampleID	ClientID	Sample Weight (g)	Filter Weight (g)	Filtrate (mL)	Filter + Solid (After 100°C)	% solids	% Dry Solids
PB168953TB	LEB953	N/A	N/A	N/A	N/A	N/A	N/A
Q2655-02	SOIL	N/A	N/A	N/A	N/A	100	N/A
Q2660-02	MOO-25-0205	N/A	N/A	N/A	N/A	100	N/A
Q2660-04	MOO-25-0218	N/A	N/A	N/A	N/A	100	N/A
Q2667-01	C0AP2	N/A	N/A	N/A	N/A	100	N/A
Q2667-02	C0AP3	N/A	N/A	N/A	N/A	100	N/A
Q2668-04	TP-2	N/A	N/A	N/A	N/A	100	N/A
Q2668-08	TP-3	N/A	N/A	N/A	N/A	100	N/A
Q2668-12	TP-1	N/A	N/A	N/A	N/A	100	N/A
Q2672-02	AUD-25-0123-0127	N/A	N/A	N/A	N/A	100	N/A
Q2672-04	AUD-25-0128-0132	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
PB168953TB	LEB953	N/A	N/A	N/A	N/A	#1	4.94
Q2655-02	SOIL	5.01	96.5	7.0	N/A	#1	4.94
Q2660-02	MOO-25-0205	5.02	96.5	6.2	2.0	#1	4.94
Q2660-04	MOO-25-0218	5.03	96.5	9.2	3.5	#1	4.94
Q2667-01	C0AP2	5.02	96.5	8.6	3.5	#1	4.94
Q2667-02	C0AP3	5.02	96.5	6.4	2.5	#1	4.94
Q2668-04	TP-2	5.03	96.5	8.4	3.5	#1	4.94
Q2668-08	TP-3	5.02	96.5	9.7	4.0	#1	4.94
Q2668-12	TP-1	5.01	96.5	8.4	3.5	#1	4.94
Q2672-02	AUD-25-0123-0127	5.02	96.5	9.7	4.0	#1	4.94
Q2672-04	AUD-25-0128-0132	5.03	96.5	9.4	4.0	#1	4.94

WORKLIST(Hardcopy Internal Chain)

WorkList Name :	tclp q2658	WorkList ID :	190873	Department :	TCLP Extraction	Date :	07-22-2025 12:29:57
Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date Method
Q2655-02	SOIL	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	D41	07/21/2025 1311
Q2660-02	MOO-25-0205	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	D31	07/21/2025 1311
Q2660-04	MOO-25-0218	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	D31	07/21/2025 1311
Q2667-01	C0AP2	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	D31	07/21/2025 1311
Q2667-02	C0AP3	Solid	TCLP Extraction	Cool 4 deg C	ROYF02	D31	07/21/2025 1311
Q2668-04	TP-2	Solid	TCLP Extraction	Cool 4 deg C	ROYF02	D31	07/21/2025 1311
Q2668-08	TP-3	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	D31	07/21/2025 1311
Q2668-12	TP-1	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	D31	07/21/2025 1311
Q2672-02	AUD-25-0123-0127	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	D31	07/21/2025 1311
Q2672-04	AUD-25-0128-0132	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	D31	07/22/2025 1311

Date/Time

07/22/2025 16:35

Raw Sample Received by:

SP Sm

Raw Sample Relinquished by:

SP Sm

Date/Time

07/21/2025 13:30

Raw Sample Received by:

SP Sm

Raw Sample Relinquished by:

SP Sm

SOP ID:	M8151A-Herbicide-23		
Clean Up SOP #:	N/A	Extraction Start Date :	07/23/2025
Matrix :	Water	Extraction Start Time :	11:45
Weigh By:	N/A	Extraction End Date :	07/24/2025
Balance check:	N/A	Extraction End Time :	12:10
Balance ID:	N/A	Concentration By:	EH
pH Strip Lot#:	E3880	Hood ID:	4,5,7
Supervisor By :	RUPESH		
Extraction Method:	<input checked="" type="checkbox"/> Separatory Funnel <input type="checkbox"/> Continous Liquid/Liquid <input type="checkbox"/> Sonication <input type="checkbox"/> Waste Dilution <input type="checkbox"/> 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	EP2621
NAOH 6N	N/A	EP2606
12N H2SO4	N/A	EP2605
NAACL	N/A	M4459
ISO OCTANE	N/A	E3554
Diazomethane	N/A	EP2618
Hexane	N/A	E3956
METHANOL	N/A	V14622
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

pH Adjusted with 6N NaOH>12 prior to Hydrolysis, PH adjusted with cold 12N H2SO4<2 after Hydrolysis,
Derivatization procedure is completed and samples are ready to Analyze, 40ml Vial Lot # 03-40BTS721.Q2481 all
samples used Limited volume as samples are not regular environmental samples its chemical treated samples.

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
7/24/25	RS (Ex-G-Lab)	R. Pobst/PCB Lab
12:15	Preparation Group	Analysis Group

Analytical Method: M8151A-Herbicide-23

Concentration Date: 07/24/2025

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB168919TB	PB168919TB	TCLP Herbicide	100	6	RUPESH	ritesh	10			SEP-1
PB168926TB	PB168926TB	TCLP Herbicide	100	6	RUPESH	ritesh	10			2
PB168953TB	PB168953TB	TCLP Herbicide	100	6	RUPESH	ritesh	10			3
PB168969TB	PB168969TB	TCLP Herbicide	100	6	RUPESH	ritesh	10			4
PB169001BL	HBLK001	TCLP Herbicide	1000	6	RUPESH	ritesh	10			5
PB169001BS	HLCS001	TCLP Herbicide	1000	6	RUPESH	ritesh	10			6
Q2481-12	CC0627-AL	TCLP Herbicide	10	6	RUPESH	ritesh	10	A	Chemical Treated	7
Q2481-13	CC0627-CLOXPL	TCLP Herbicide	10	6	RUPESH	ritesh	10	A	Chemical Treated	8
Q2481-14	CC0625-OXBL	TCLP Herbicide	10	6	RUPESH	ritesh	10	A	Chemical Treated	9
Q2481-15	CC0627-AOXL	TCLP Herbicide	10	6	RUPESH	ritesh	10	A	Chemical Treated	10
Q2481-16	CC0625-NL	TCLP Herbicide	10	6	RUPESH	ritesh	10	A	Chemical Treated	11
Q2481-17	CC0267-OXPL	TCLP Herbicide	10	6	RUPESH	ritesh	10	A	Chemical Treated	12
Q2481-18	CC0627-OXL	TCLP Herbicide	10	6	RUPESH	ritesh	10	A	Chemical Treated	13
Q2481-19	CC0627-CLOXAL	TCLP Herbicide	10	6	RUPESH	ritesh	10	A	Chemical Treated	14
Q2481-20	CC0627-BL	TCLP Herbicide	10	6	RUPESH	ritesh	10	A	Chemical Treated	15
Q2481-21	CC0627-SFBL	TCLP Herbicide	10	6	RUPESH	ritesh	10	A	Chemical Treated	16
Q2641-02	P001-CONCRETE001-01	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		SEP-1
Q2641-02MS	P001-CONCRETE001-01MS	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		2
Q2641-02MS	P001-CONCRETE001-01MSD	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		3
Q2646-03	FRAC TANK	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		4
Q2667-01	COAP2	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		5
Q2667-02	COAP3	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		6

* Extracts relinquished on the same date as received.

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
PB168969TB	LEB969	N/A	N/A	N/A	N/A	N/A	N/A	4.94	N/A	N/A
Q2481-12	CC0627-AL	N/A	N/A	N/A	N/A	N/A	N/A	1.5	N/A	N/A
Q2481-13	CC0627-CLOXPL	N/A	N/A	N/A	N/A	N/A	N/A	5.0	N/A	N/A
Q2481-14	CC0625-OXBL	N/A	N/A	N/A	N/A	N/A	N/A	14.0	N/A	N/A
Q2481-15	CC0627-AOXL	N/A	N/A	N/A	N/A	N/A	N/A	1.5	N/A	N/A
Q2481-16	CC0625-NL	N/A	N/A	N/A	N/A	N/A	N/A	10.0	N/A	N/A
Q2481-17	CC0267-OXPL	N/A	N/A	N/A	N/A	N/A	N/A	6.0	N/A	N/A
Q2481-18	CC0627-OXL	N/A	N/A	N/A	N/A	N/A	N/A	6.0	N/A	N/A
Q2481-19	CC0627-CLOXAL	N/A	N/A	N/A	N/A	N/A	N/A	5.0	N/A	N/A
Q2481-20	CC0627-BL	N/A	N/A	N/A	N/A	N/A	N/A	14.0	N/A	N/A
Q2481-21	CC0627-SFBL	N/A	N/A	N/A	N/A	N/A	N/A	14.0	N/A	N/A

07/23/25
11:00

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
PB168953TB	LEB953	11	N/A	2000	N/A	N/A	N/A	4.94	1.0	T-2
Q2655-02	SOIL	01	100.02	2000	N/A	N/A	N/A	3.5	1.5	T-1
Q2660-02	MOO-25-0205	02	100.02	2000	N/A	N/A	N/A	4.0	1.0	T-1
Q2660-04	MOO-25-0218	03	100.03	2000	N/A	N/A	N/A	7.2	1.5	T-1
Q2667-01	C0AP2	04	100.01	2000	N/A	N/A	N/A	6.0	1.0	T-1
Q2667-02	C0AP3	05	100.02	2000	N/A	N/A	N/A	5.0	1.5	T-1
Q2668-04	TP-2	06	100.03	2000	N/A	N/A	N/A	5.8	1.0	T-1
Q2668-08	TP-3	07	100.02	2000	N/A	N/A	N/A	7.2	1.5	T-1
Q2668-12	TP-1	08	100.03	2000	N/A	N/A	N/A	6.2	1.0	T-1
Q2672-02	AUD-25-0123-0127	09	100.02	2000	N/A	N/A	N/A	7.2	1.5	T-1
Q2672-04	AUD-25-0128-0132	10	100.03	2000	N/A	N/A	N/A	7.0	1.5	T-1

04/13/15
11:00

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
PB168926TB	LEB926	N/A	N/A	N/A	N/A	N/A	N/A	4.93	1.5	N/A
Q2646-03	FRAC TANK	N/A	N/A	N/A	N/A	N/A	N/A	4.5	1.0	N/A

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04/21/25
11:30

Sample ID	ClientID	TCLP Vessel ID	Sample Wt (g)	Volume Extraction Fluid #1 (mL)	Multi phasic	Phase Miscible	Phases Combined	Final Leachate PH	Metals Leachate Adj. PH	Prep Pos
PB168919TB	LEB919	10	N/A	2000	N/A	N/A	N/A	4.93	1.0	T-1
Q2622-04	2819	01	100.01	2000	N/A	N/A	N/A	3.5	1.0	T-1
Q2641-02	P001-CONCRETE001-01	02	100.02	2000	N/A	N/A	N/A	11.5	1.5	T-1
Q2645-03	RW5B-CARBON-20250716	03	100.03	2000	N/A	N/A	N/A	3.0	1.5	T-1
Q2649-04	WC-1	04	100.02	2000	N/A	N/A	N/A	5.5	1.0	T-1
Q2649-08	WC-2	05	100.03	2000	N/A	N/A	N/A	7.2	1.5	T-1
Q2649-12	WC-3	06	100.04	2000	N/A	N/A	N/A	7.0	1.0	T-1
Q2649-16	WC-4	07	100.02	2000	N/A	N/A	N/A	3.5	1.5	T-1
Q2649-20	WC-5	08	100.02	2000	N/A	N/A	N/A	3.5	1.0	T-1
Q2649-24	WC-6	09	100.03	2000	N/A	N/A	N/A	4.0	1.5	T-1

07/24/15
11:30

Prep Standard - Chemical Standard Summary

Order ID : Q2667

Test : TCLP Herbicide

Prepbatch ID : PB169001,

Sequence ID/Qc Batch ID: PS072425,

Standard ID :

EP2605,EP2606,EP2621,PP24553,PP24554,PP24556,PP24557,PP24558,PP24559,PP24560,PP24561,PP24562,PP24654,PP24737,

Chemical ID :

E3551,E3657,E3881,E3933,E3940,E3952,E3956,M4459,M6041,M6157,P11183,P12620,P12630,P12689,P12710,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 H ₂ SO ₄ solution	EP2605	04/21/2025	10/21/2025	RUPESHKUMA R 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	RUPESHKUMA R 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

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>
601	Acidified Sodium Sulphate 2	EP2621	06/03/2025	08/14/2025	RUPESHKUMA R SHAH	Extraction_SC ALE_2	None	Riteshkumar Patel 06/03/2025

FROM 100.00000ml of E3881 + 150.00000ml of M6157 + 3000.00000ml of E3551 = Final Quantity: 3000.000 gram

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1321	2/200 PPM Herb Mega Mix	PP24553	05/12/2025	11/05/2025	Abdul Mirza	None	None	Yogesh Patel 05/22/2025

FROM 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>
1851	2/200 PPM Herb Mega Mix 2nd Source	PP24554	05/12/2025	08/12/2025	Abdul Mirza	None	None	Yogesh Patel 05/22/2025

FROM 0.50000ml of P13971 + 1.00000ml of P12710 + 48.50000ml of E3933 = Final Quantity: 50.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
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

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1455	500 PPB Herb MIX STD	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

<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

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>
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

<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

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	PP24561	05/12/2025	08/12/2025	Abdul Mirza	None	None	Yogesh Patel 05/22/2025

FROM 0.50000ml of E3933 + 0.50000ml of PP24554 = 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	PP24562	05/12/2025	08/12/2025	Abdul Mirza	None	None	Yogesh Patel 05/22/2025

FROM 0.25000ml of E3933 + 0.75000ml of PP24561 = Final Quantity: 1.000 ml

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1848	5000/500000 PPB Herbicide Spike (Free Acid)	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
FROM	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							

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1	313201	12/04/2025	01/03/2024 / Rajesh	07/20/2023 / Rajesh	E3551
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
PCI Scientific Supply, Inc.	PC04977-3 / Ether, Anhydrous, Glass Distilled, HRGC/HPLC, 4L	242789	06/30/2025	02/14/2025 / Rajesh	01/06/2025 / Rajesh	E3881
Seidler Chemical	BA-9262-03 / Hexane, Ultra-Resi (cs/4x4L)	25C0362005	11/05/2025	05/05/2025 / RUPESH	04/23/2025 / RUPESH	E3933
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H1462005	12/11/2025	06/11/2025 / Rajesh	06/04/2025 / Rajesh	E3940
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
Seidler Chemical	BA-3624-05 / Sodium Chloride, Crystal (cs/4x2.5kg)	0000237721	04/13/2026	10/03/2022 / Ankita	10/30/2019 / AMANDEEP	M4459
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
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
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
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
Restek	32059 / Herbicide Mix#3 (Methyl Ester), 20000 ug/ml	A0199844	11/12/2025	05/12/2025 / Abdul	07/24/2023 / Abdul	P12689
Agilent Technologies	HBM-8151M / Chlorinated Herbicide Mixtures, Methyl Esters	0006752480	08/12/2025	05/12/2025 / Abdul	08/09/2023 / Abdul	P12710
Agilent Technologies	HBM-8151M / Chlorinated Herbicide Mixtures, Methyl Esters	0006752480	08/12/2025	05/12/2025 / Abdul	08/09/2023 / Abdul	P12710
Agilent Technologies	HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids	0006810955	12/18/2025	06/18/2025 / Abdul	09/24/2024 / Abdul	P13543
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
Agilent Technologies	HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids	0006810955	12/18/2025	06/18/2025 / Abdul	09/24/2024 / Abdul	P13544
Agilent Technologies	HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids	0006810955	12/18/2025	06/18/2025 / Abdul	09/24/2024 / Abdul	P13545
Agilent Technologies	HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids	0006810955	12/18/2025	06/18/2025 / Abdul	09/24/2024 / Abdul	P13545
Agilent Technologies	HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids	0006810955	12/18/2025	06/18/2025 / Abdul	09/24/2024 / Abdul	P13546
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
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
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
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
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
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 / Iwona	07/03/2024 / Iwona	W3112

Sodium Chloride, Crystal
BAKER ANALYZED® A.C.S. Reagent



from M4452 to M4459

Received on : 10/30/2019

Received by : AK

Material No.: 3624-05
Batch No.: 0000237721
Manufactured Date: 2019/04/15
Retest Date: 2026/04/13
Revision No: 1

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

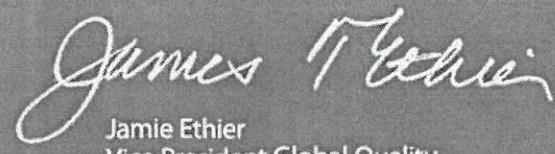
Test	Specification	Result
Assay (NaCl) (by Ag titrn)	>= 99.0 %	100.3
pH of 5% Solution at 25°C	5.0 – 9.0	6.0
ACS - Insoluble Matter	<= 0.005 %	< 0.001
Iodide (I)	<= 0.002 %	< 0.002
Bromide (Br)	<= 0.01 %	< 0.01
Chlorate and Nitrate (as NO ₃)	<= 0.003 %	< 0.001
ACS - Phosphate (PO ₄)	<= 5 ppm	< 5
Sulfate (SO ₄)	<= 0.004 %	< 0.004
Barium (Ba)	Passes Test	PT
ACS - Heavy Metals (as Pb)	<= 5 ppm	< 5
Iron (Fe)	<= 2 ppm	< 2
Calcium (Ca)	<= 0.002 %	< 0.001
Magnesium (Mg)	<= 0.001 %	< 0.001
Potassium (K)	<= 0.005 %	0.002

For Laboratory, Research or Manufacturing Use

Meets Reagent Specifications for testing USP/NF monographs

Country of Origin: US

Packaging Site: Paris Mfg Ctr & DC



Jamie Ethier
Vice President Global Quality

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

Avantor Performance Materials, LLC

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



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

MIRADOR 201, COL. MIRADOR
MONTERREY, N.L. MEXICO
CP 64070
TEL +52 81 13 52 57 57
www.pqm.com.mx

CERTIFICATE OF ANALYSIS

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

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

QC: PhC Irma Belmares

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

Recd. by R3 on 7/29/23 [E 3551]

RC-02-01, Ed. 3



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:
Pellets

Manufacture Date: 12/14/2022
Expiration Date: 12/31/2025
Storage: Room Temperature

TEST	SPECIFICATION	ANALYSIS	DISPOSITION
Calcium	<= 0.005 %	<0.005 %	PASS
Chloride	<= 0.005 %	0.002 %	PASS
Heavy Metals	<= 0.002 %	<0.002 %	PASS
Iron	<= 0.001 %	<0.001 %	PASS
Magnesium	<= 0.002 %	<0.002 %	PASS
Mercury	<= 0.1 ppm	<0.1 ppm	PASS
Nickel	<= 0.001 %	<0.001 %	PASS
Nitrogen Compounds	<= 0.001 %	<0.001 %	PASS
Phosphate	<= 0.001 %	<0.001 %	PASS
Potassium	<= 0.02 %	<0.02 %	PASS
Purity	>= 97.0 %	99.2 %	PASS
Sodium Carbonate	<= 1.0 %	0.5 %	PASS
Sulfate	<= 0.003 %	<0.003 %	PASS

Internal ID #: 710

Signature

Additional Information

We certify that this batch conforms to the specifications listed.

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

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

Product meets analytical specifications of the grades listed.

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

Certificate of Analysis

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

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

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

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

Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear, colorless liquid free of suspended matter
ASSAY	%	>= 99.5	99.97
COLOR	APHA	<= 10	5
EVAPORATION RESIDUE	ppm	<= 3	0.2
GC-ECD ANALYSIS	pg/ml	<= 10	<1
OPTICAL ABS AT 218 NM	ABSORBANCE UNITS	<= 1.00	0.19
OPTICAL ABS AT 250 NM	ABSORBANCE UNITS	<= 0.08	0.05
OPTICAL ABS AT 270 NM	ABSORBANCE UNITS	<= 0.02	0.01
OPTICAL ABS AT 300 NM	ABSORBANCE UNITS	<= 0.01	0.002
OPTICAL ABS AT 350 NM	ABSORBANCE UNITS	<= 0.01	<0.001
PEROXIDE	ppm	<= 5	<1
PRESERVATIVE - ETHANOL	%	Inclusive Between 1.5 - 2.5	1.8
WATER (H ₂ O)	%	<= 0.08	0.003

Kalyan Paruchuri - Quality Control Supervisor - Bridgewater

E 3881

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

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)	>= 99.5 %	100.0 %
Assay (as n-Hexane) (by GC, corrected for water)	>= 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)	<= 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

A handwritten signature in black ink that reads "Jamie 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

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
Titrable Acid (μeq/g)	<= 0.3	0.2
Titrable 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 HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	1

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

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

Recd by RP on 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

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

E3952

Received on 7/1/25

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



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) (byGC, corrected for water)	>= 99.5 %	100.0 %
Assay (as n-Hexane) (by GC, corrected for water)	>= 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)	<= 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

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

M 6041-#b
M



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



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

A handwritten signature in black ink that reads "James T. Ethier". Below the signature, the name "Jamie Ethier" is printed in a smaller, standard font, followed by the title "Vice President Global Quality".

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



M6157
B

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

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



Material No.: 9673-33
Batch No.: 24I1262013

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

A handwritten signature in black ink that reads "Jamie Croak".

Jamie Croak
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1246 of 272
Q2667-TCLP Herbicide

Revised

Column:

30m x 0.25mm x 0.25 μ m
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:

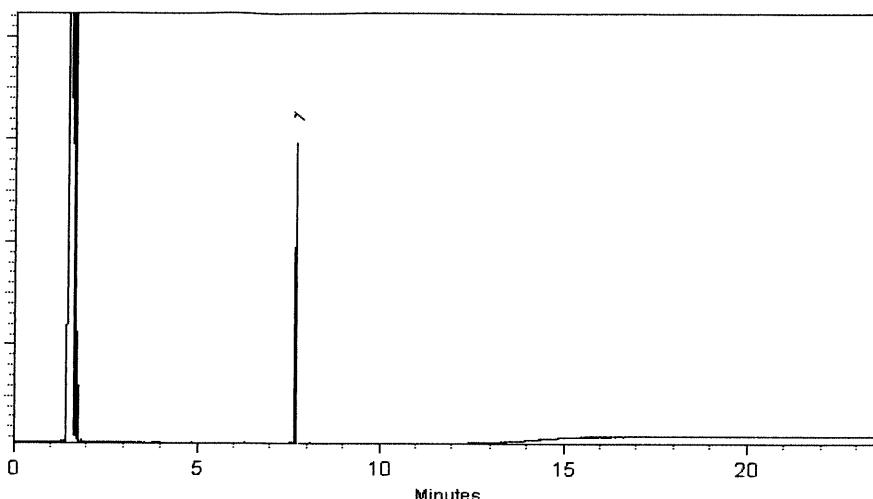
250°C

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 McGinn - Operations Tech I

Date Mixed: 28-May-2021 Balance: B345965662

Marilina Cowan - Operations Tech I

Date Passed: 02-Jun-2021

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

P 11177
P 11170
P 11186
AP
11/02/21

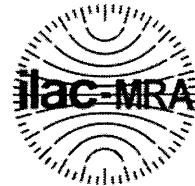
RESTEK® CERTIFIED REFERENCE MATERIAL

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
200 μ g/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

C E R T I F I E D V A L U E S

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

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

P11177
↓
P11186
AK
v102121



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. : 32062

Lot No.: A0155055

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

Herbicide Mix #4/ME (Methyl Ester) 200 μ g/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 → P12620
P12620
Dawn
1/15/2023

C E R T I F I E D V A L U E S

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 Purity 99%	200.0 μ g/mL (Lot 3903900)	+/- 1.4182 +/- 6.7507 +/- 6.7507	μ g/mL μ g/mL μ g/mL	Gravimetric Unstressed Stressed
2	4-Nitroanisole CAS # 100-17-4 Purity 99%	200.0 μ g/mL (Lot 24765/7)	+/- 1.4182 +/- 6.7507 +/- 6.7507	μ g/mL μ g/mL μ g/mL	Gravimetric Unstressed Stressed
3	Pentachloroanisole CAS # 1825-21-4 Purity 99%	200.0 μ g/mL (Lot 7921100)	+/- 1.4182 +/- 6.7507 +/- 6.7507	μ g/mL μ g/mL μ g/mL	Gravimetric Unstressed Stressed
4	Chloramben methyl ester CAS # 7286-84-2 Purity 98%	199.9 μ g/mL (Lot 6487100)	+/- 1.4176 +/- 6.7480 +/- 6.7480	μ g/mL μ g/mL μ g/mL	Gravimetric Unstressed Stressed
5	Bentazon methyl ester CAS # 61592-45-8 Purity 99%	200.0 μ g/mL (Lot 817100)	+/- 1.4182 +/- 6.7507 +/- 6.7507	μ g/mL μ g/mL μ g/mL	Gravimetric Unstressed Stressed
6	Picloram methyl ester CAS # 14143-55-6 Purity 98%	201.9 μ g/mL (Lot 386-21B)	+/- 1.4315 +/- 6.8141 +/- 6.8141	μ g/mL μ g/mL μ g/mL	Gravimetric Unstressed Stressed
7	DCPA methyl ester (Chlorthal-dimethyl) CAS # 1861-32-1 Purity 99%	200.0 μ g/mL (Lot 8008700)	+/- 1.4182 +/- 6.7507 +/- 6.7507	μ g/mL μ g/mL μ g/mL	Gravimetric Unstressed 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)

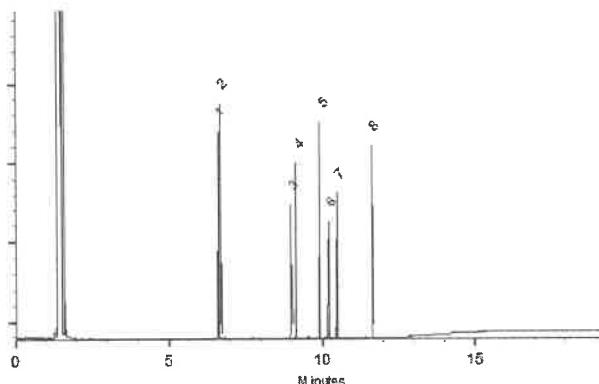
Carrier Gas:
hydrogen-constant pressure 10 psi.

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.

Date Mixed: 14-Nov-2019 Balance: 1128353505

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
P12630
P1261
7/15/2023
J. Davis

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 0.25 μ m
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:

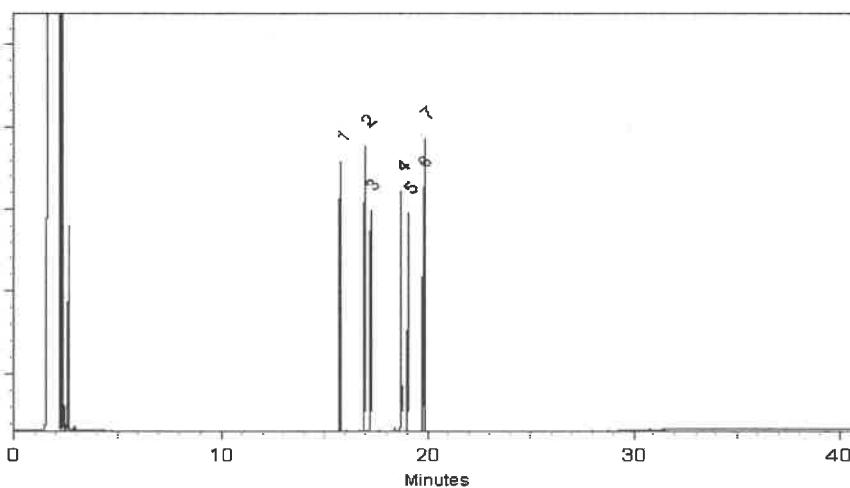
FID

Split Vent:

2 ml/min.

Inj. Vol

1 μ l



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
Penelope Riglin - Operations Tech I

Date Mixed: 09-Dec-2022 Balance Serial #: 1128360905

Jennifer Pollino
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
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Tel: 1-814-353-1300
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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 → ↘ ↗
P 12689 ↘ ↗
D. Mauz 7/24/23

C E R T I F I E D V A L U E S

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 0.25 μ m
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:

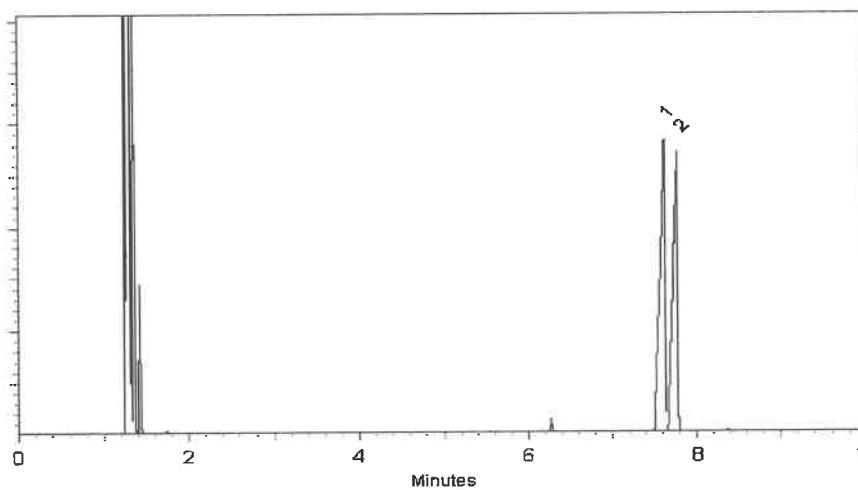
FID

Split Vent:

10 ml/min.

Inj. Vol

1 μ l



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



Trusted Answers

P12706
P12715
J. Hause
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:**

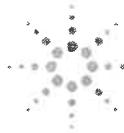
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and 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.



Agilent

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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
P12715
J. Davis
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 **Lot Number:** 0006810955
Product Number: HBM-8151A-1 **Lot Issue Date:** 20-Aug-2024
Storage Conditions: Store at Room Temperature (15° to 30°C). **Expiration Date:** 30-Sep-2026

Component Name	Concentration	Uncertainty	CAS#	Analyte Lot
acifluorfen	100.2	± 0.5 µg/mL	050594-66-6	NT20257
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.

Page: 1 of 2

CSD-QA-015.2

ISO 17025
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9/25/2024



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ISO 17034

Reference Material Certificate
Product Information Sheet

Product Name:	Chlorinated Herbicides Standard	Lot Number:	0006810955
Product Number:	HBM-8151A-1	Lot Issue Date:	20-Aug-2024
Storage Conditions:	Store at Room Temperature (15° to 30°C).	Expiration Date:	30-Sep-2026

Component Name	Concentration	Uncertainty	CAS#	Analyte Lot
acifluorfen	100.2	± 0.5 µg/mL	050594-66-6	NT20257
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.

Page: 1 of 2

CSD-QA-015.2

ISO 17025
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ISO 17034

Reference Material Certificate

Product Information Sheet

Product Name:	Clorinated Herbicides Standard	Lot Number:	0006810955
Product Number:	HBM-8151A-1	Lot Issue Date:	20-Aug-2024
Storage Conditions:	Store at Room Temperature (15° to 30°C).	Expiration Date:	30-Sep-2026

Component Name	Concentration	Uncertainty	CAS#	Analyte Lot
acifluorfen	100.2	± 0.5 µg/mL	050594-66-6	NT20257
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.

Page: 1 of 2

CSD-QA-015.2

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9/25/2024



Trusted Answers

ISO 17034

Reference Material Certificate
Product Information Sheet

Product Name:	Chlorinated Herbicides Standard	Lot Number:	0006810955
Product Number:	HBM-8151A-1	Lot Issue Date:	20-Aug-2024
Storage Conditions:	Store at Room Temperature (15° to 30°C).	Expiration Date:	30-Sep-2026

Component Name	Concentration	Uncertainty	CAS#	Analyte Lot
acifluorfen	100.2	± 0.5 µg/mL	050594-66-6	NT20257
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.

Page: 1 of 2

CSD-QA-015.2

ISO 17025
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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



21a
ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01



21a
ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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
200 μ g/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

C E R T I F I E D V A L U E S

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 μ g/mL	+/- 3.4272

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

Solvent: Hexane

CAS # 110-54-3

Purity 99%

13968
13977
10
4/16/2025
J. Auf
4/16/2025

Quality Confirmation Test

Column:

30m x 0.25mm x 0.25 μ m
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:

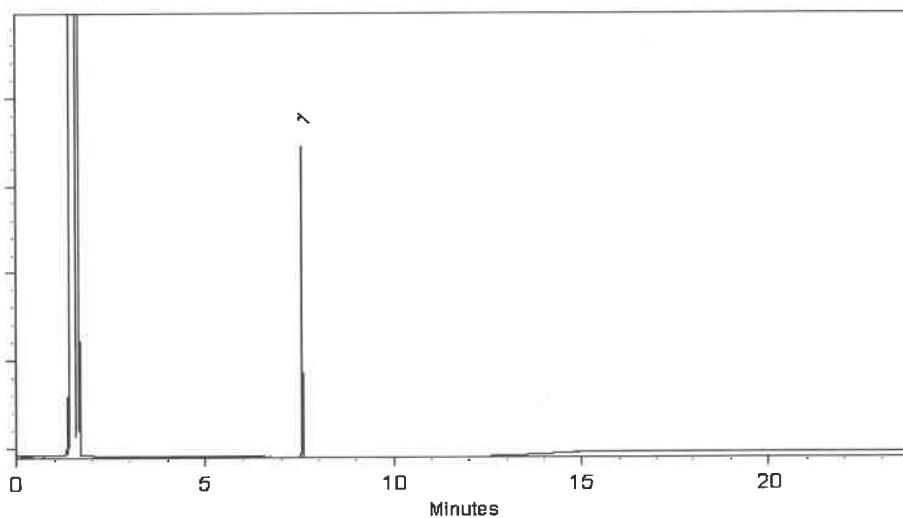
FID

Split Vent:

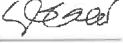
10 ml/min.

Inj. Vol

1 μ l



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

CERTIFIED REFERENCE MATERIAL



21a
ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01



21a
ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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
200 μ g/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

C E R T I F I E D V A L U E S

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 μ g/mL	+/- 3.4272

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

Solvent: Hexane

CAS # 110-54-3

Purity 99%

13968
13977
10
4/16/2025
J. Ault

Quality Confirmation Test

Column:

30m x 0.25mm x 0.25 μ m
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:

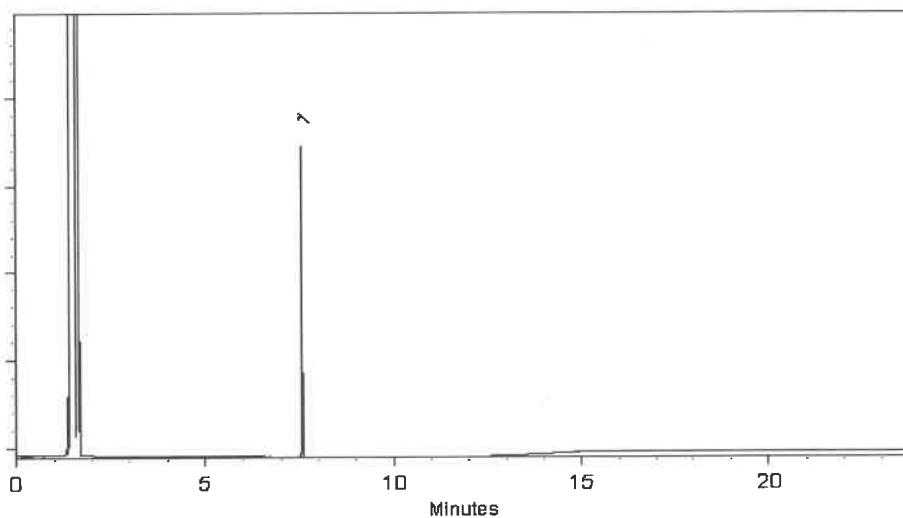
FID

Split Vent:

10 ml/min.

Inj. Vol

1 μ l



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
Ethan Winiarski - Operations Tech I

Date Mixed: 20-Jan-2025 Balance Serial #: B345965662

Brittany Federinko
Brittany Federinko - Operations Tech I

Date Passed: 22-Jan-2025

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



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Catalog No. : 32050

Lot No.: A0221255

Description : 2,4-Dichlorophenylacetic Acid Methyl Ester Standard

515 Surrogate (ester) 2, 4-dichlorophenyl Acetic Acid Methyl Ester
200 μ g/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

C E R T I F I E D V A L U E S

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 μ g/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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Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL



Certificate of Analysis

chromatographic plus

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Catalog No. : 32050

Lot No.: A0221255

Description : 2,4-Dichlorophenylacetic Acid Methyl Ester Standard

515 Surrogate (ester) 2, 4-dichlorophenyl Acetic Acid Methyl Ester
200 μ g/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

C E R T I F I E D V A L U E S

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 μ g/mL	+/- 3.4272

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

Solvent: Hexane

CAS # 110-54-3

Purity 99%



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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. :	<u>32050</u>	Lot No.:	<u>A0221255</u>
Description :	2,4-Dichlorophenylacetic Acid Methyl Ester Standard		
	515 Surrogate (ester) 2, 4-dichlorophenyl Acetic Acid Methyl Ester		
	200 μ g/mL, Hexane, 1mL/ampul		
Container Size :	<u>2 mL</u>	Pkg Amt:	<u>> 1 mL</u>
Expiration Date :	<u>October 31, 2031</u>	Storage:	<u>10°C or colder</u>
Handling:	<u>This product is photosensitive.</u>		
		Ship:	<u>Ambient</u>

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 μ g/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

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 1000 μ g/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
S6 on 8/16/19
P8888
P 8886

C E R T I F I E D V A L U E S

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

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

Column:30m x 0.25mm x 0.25 μ m

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:

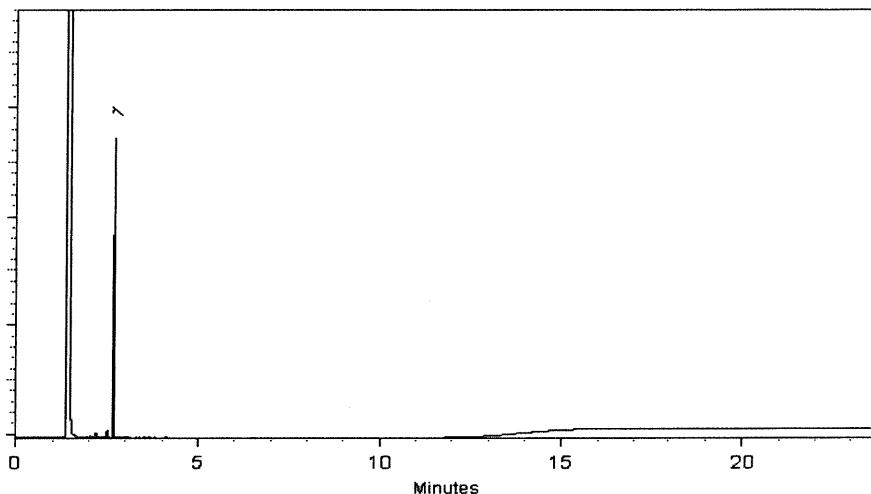
250°C

Det. Temp:

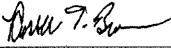
330°C

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


Fang-Yun Lo - QC Analyst

Date Passed: 15-Apr-2019

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



SHIPPING DOCUMENTS

USEPA CLP COC (LAB COPY)

DateShipped: 7/21/2025

CarrierName: FedEx

AirbillNo: 882939154385

CHAIN OF CUSTODY RECORD

No: 3-072125-112325-0020

Lab: Alliance Technical Group

Lab Contact: Yazmeen Gomez

Lab Phone: 908-728-3147

Special Instructions:	Shipment for Case Complete? Y Samples Transferred From Chain of Custody #
Analysis Key: TCLP HERB (so)=TCLP Herbicides (so)	

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Shipping	John Cuz / START	7/21/25 14:00	<i>[Signature]</i>	7-22-25 1018	3.7°C JL GUN #1
					custody seals intact
					Temp DTG present

Laboratory Certification

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