



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

## Cover Page

**Order ID :** Q1352

**Project ID :** Ft Meade Tipton Airfield Parcel RI - PO 0111169

**Client :** Weston Solutions

**Lab Sample Number**

Q1352-01  
Q1352-02

**Client Sample Number**

TAP-IDW-SOIL-021025  
TAP-IDW-SOIL-021025

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

Signature : \_\_\_\_\_

Date: 2/20/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



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## CASE NARRATIVE

**Weston Solutions**

**Project Name: Ft Meade Tipton Airfield Parcel RI - PO 0111169**

**Project # N/A**

**Chemtech Project # Q1352**

**Test Name: TCLP Herbicide**

### **A. Number of Samples and Date of Receipt:**

2 Solid samples were received on 02/11/2025.

### **B. Parameters**

According to the Chain of Custody document, the following analyses were requested: Cyanide, Ignitability, PCB, pH, Sulfide, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP METALS, TCLP Pesticide, TCLP VOA and TCLP ZHE Extraction. 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 #: 11324The 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 met the acceptable criteria.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds .

The MSD recoveries met the acceptable requirements .

The RPD met criteria .

The Blank Spike met requirements for all samples .

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

The Initial Calibration met the requirements .

The Continuous Calibration met the requirements .

### **E. Additional Comments:**

The not QT review data is reported in the Miscellaneous.



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## F. Calculation for water sample

$$\text{ug/l} = \frac{(Ax) (Vt) (\text{MW})}{(\text{ICF}) (\text{Vi}) (\text{Vs})} \times \text{DF}$$

Where:

Ax = Area for the parameter to be measured.

ICF = average calibration factor for the calibration standards.

Vt = Volume of total extract in uL (Take into account dilutions)

Is = Amount of standard injected in nanograms (ng)

Vi = Volume of extract injected.

Vs = Volume of Aqueous extracted (mL).

MW = molecular weight of the compound

## F. Manual Integration Comments:

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

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

Signature\_\_\_\_\_

**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
<b>U</b>	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.
<b>ND</b>	Indicates the analyte was analyzed for, but not detected
<b>J</b>	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>B</b>	Indicates the analyte was found in the blank as well as the sample report as "12 B".
<b>E</b>	Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.
<b>D</b>	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
<b>P</b>	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".
<b>N</b>	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.
<b>A</b>	This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.
<b>Q</b>	Indicates the LCS did not meet the control limits requirements



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**GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY**

CHEMTECH PROJECT NUMBER: Q1352

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 recoveries met the requirements for all compounds .		
	The MSD recoveries met the acceptable requirements .		
	The Blank Spike met requirements for all samples .		
	The RPD met criteria .		
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:		
9. Analysis Holding Time Met			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable range.		



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**GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)**

NA      NO      YES

ADDITIONAL COMMENTS:

The not QT review data is reported in the Miscellaneous.

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QA REVIEW

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Date

## APPENDIX A

### QA REVIEW GENERAL DOCUMENTATION

**Project #:** Q1352

**Completed**

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**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 ✓

## LAB CHRONICLE

<b>OrderID:</b>	Q1352	<b>OrderDate:</b>	2/11/2025 11:32:00 AM					
<b>Client:</b>	Weston Solutions	<b>Project:</b>	Ft Meade Tipton Airfield Parcel RI - PO 0111169					
<b>Contact:</b>	Nathan Fretz	<b>Location:</b>	N51					
<hr/>								
LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
<b>Q1352-01</b>	<b>TAP-IDW-SOIL-02102</b>	<b>SOIL</b>			<b>02/10/25</b>			<b>02/11/25</b>
		<b>5</b>		PCB	8082A	02/12/25	02/12/25	
<b>Q1352-02</b>	<b>TAP-IDW-SOIL-02102</b>	<b>TCLP</b>			<b>02/10/25</b>			<b>02/11/25</b>
		<b>5</b>		TCLP Herbicide	8151A	02/13/25	02/13/25	



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**Hit Summary Sheet**  
**SW-846**

SDG No.: Q1352

Order ID: Q1352

Client: Weston Solutions

Project ID: Ft Meade Tipton Airfield Parcel RI - P

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

Client ID :

Total Concentration: **0.000**



QC

SUMMARY

### Surrogate Summary

**SDG No.:** Q1352

**Client:** Weston Solutions

**Analytical Method:** 8151A

Lab Sample ID	Client ID	Parameter	Limits						
			Column	Spike	Result	Rec	Qual	Low	High
I.BLK-PS029117.D	PIBLK-PS029117.D	2,4-DCAA	1	500	477	95		32	138
		2,4-DCAA	2	500	487	97		32	138
I.BLK-PS029159.D	PIBLK-PS029159.D	2,4-DCAA	1	500	510	102		32	138
		2,4-DCAA	2	500	498	100		32	138
PB166713BL	PB166713BL	2,4-DCAA	1	500	458	92		32	138
		2,4-DCAA	2	500	429	86		32	138
PB166713BS	PB166713BS	2,4-DCAA	1	500	516	103		32	138
		2,4-DCAA	2	500	483	97		32	138
PB166700TB	PB166700TB	2,4-DCAA	1	500	504	101		32	138
		2,4-DCAA	2	500	375	75		32	138
Q1352-02	TAP-IDW-SOIL-021025	2,4-DCAA	1	500	521	104		32	138
		2,4-DCAA	2	500	372	74		32	138
I.BLK-PS029166.D	PIBLK-PS029166.D	2,4-DCAA	1	500	503	101		32	138
		2,4-DCAA	2	500	496	99		32	138
Q1356-04MS	CARBON-WATERMS	2,4-DCAA	1	500	497	99		32	138
		2,4-DCAA	2	500	470	94		32	138
Q1356-04MSD	CARBON-WATERMSD	2,4-DCAA	1	500	485	97		32	138
		2,4-DCAA	2	500	469	94		32	138
I.BLK-PS029178.D	PIBLK-PS029178.D	2,4-DCAA	1	500	502	100		32	138
		2,4-DCAA	2	500	499	100		32	138



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### Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1352

Client: Weston Solutions

Analytical Method: 8151A DataFile : PS029171.D

Lab Sample ID:	Parameter	Spike	Sample			Rec	Rec Qual	RPD	RPD Qual	Limits	
			Result	Result	Units					Low	High
Client Sample ID:	CARBON-WATERMS										
Q1356-04MS	2,4-D	50	0	48.2	ug/L	96				45	152
	2,4,5-TP(Silvex)	50	0	48.2	ug/L	96				51	134



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### Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1352

Client: Weston Solutions

Analytical Method: 8151A DataFile : PS029172.D

Lab Sample ID:	Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	RPD
<b>Client Sample ID: CARBON-WATERMSD</b>												
Q1356-04MSD	2,4-D	50	0	48.1	ug/L	96	0			45	152	20
	2,4,5-TP(Silvex)	50	0	48.2	ug/L	96	0			51	134	20

**Laboratory Control Sample/Laboratory Control Sample Duplicate Summary**

**SW-846**

**SDG No.:** Q1352

**Client:** Weston Solutions

**Analytical Method:** 8151A

**Datafile :** PS029162.D

<b>Lab Sample ID</b>	<b>Parameter</b>	<b>Spike</b>	<b>Result</b>	<b>Units</b>	<b>Rec</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD</b>	<b>Limits</b>		
									<b>Qual</b>	<b>Low</b>	<b>High</b>
PB166713BS	2,4-D	5	4.90	ug/L	98					45	152
	2,4,5-TP(Silvex)	5	5.00	ug/L	100					51	134



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4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB166713BL

Lab Name: CHEMTECH

Contract: WEST04

Lab Code: CHEM

Case No.: Q1352

SAS No.: Q1352 SDG NO.: Q1352

Lab Sample ID: PB166713BL

Lab File ID: PS029161.D

Matrix: (soil/water) water

Extraction: (Type) SEPF

Sulfur Cleanup: (Y/N) N

Date Extracted: 02/13/2025

Date Analyzed (1): 02/13/2025

Date Analyzed (2): 02/13/2025

Time Analyzed (1): 19:24

Time Analyzed (2): 19:24

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
PB166713BS	PB166713BS	PS029162.D	02/13/2025	02/13/2025
PB166700TB	PB166700TB	PS029163.D	02/13/2025	02/13/2025
TAP-IDW-SOIL-021025	Q1352-02	PS029165.D	02/13/2025	02/13/2025
CARBON-WATERMS	Q1356-04MS	PS029171.D	02/13/2025	02/13/2025
CARBON-WATERMSD	Q1356-04MSD	PS029172.D	02/14/2025	02/14/2025

COMMENTS:



# SAMPLE

# DATA



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## Report of Analysis

Client:	Weston Solutions			Date Collected:	
Project:	Ft Meade Tipton Airfield Parcel RI - PO 0111169			Date Received:	02/13/25
Client Sample ID:	PB166700TB			SDG No.:	Q1352
Lab Sample ID:	PB166700TB			Matrix:	TCLP
Analytical Method:	SW8151A			% Solid:	0 Decanted:
Sample Wt/Vol:	100	Units:	mL	Final Vol:	10000 uL
Soil Aliquot Vol:			uL	Test:	TCLP Herbicide
Extraction Type:				Injection Volume :	
GPC Factor :	1.0	PH :			
Prep Method :	8151A				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS029163.D	1	02/13/25 10:15	02/13/25 20:12	PB166713

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
94-75-7	2,4-D	15.0	U	4.90	15.0	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	15.0	U	4.50	15.0	20.0	ug/L
<b>SURROGATES</b>							
19719-28-9	2,4-DCAA	504		32 - 138		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\PS021325\  
Data File : PS029163.D  
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
Acq On : 13 Feb 2025 20:12  
Operator : AR\AJ  
Sample : PB166700TB  
Misc :  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
ECD\_S  
ClientSampleId :  
PB166700TB

Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Feb 14 01:23:10 2025  
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021225.M  
Quant Title : 8080.M  
QLast Update : Wed Feb 12 09:17:13 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 7.189 7.663 1393.9E6 397.1E6 504.329 375.177 #

Target Compounds

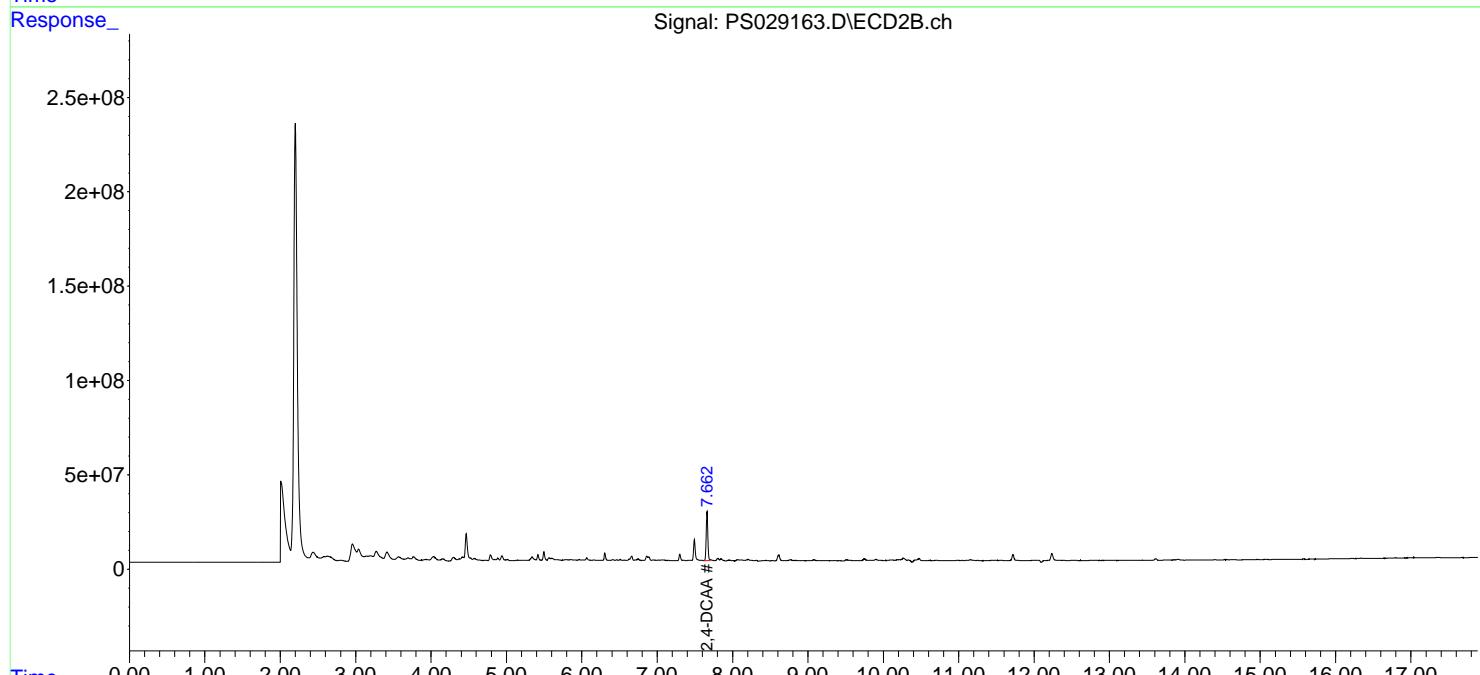
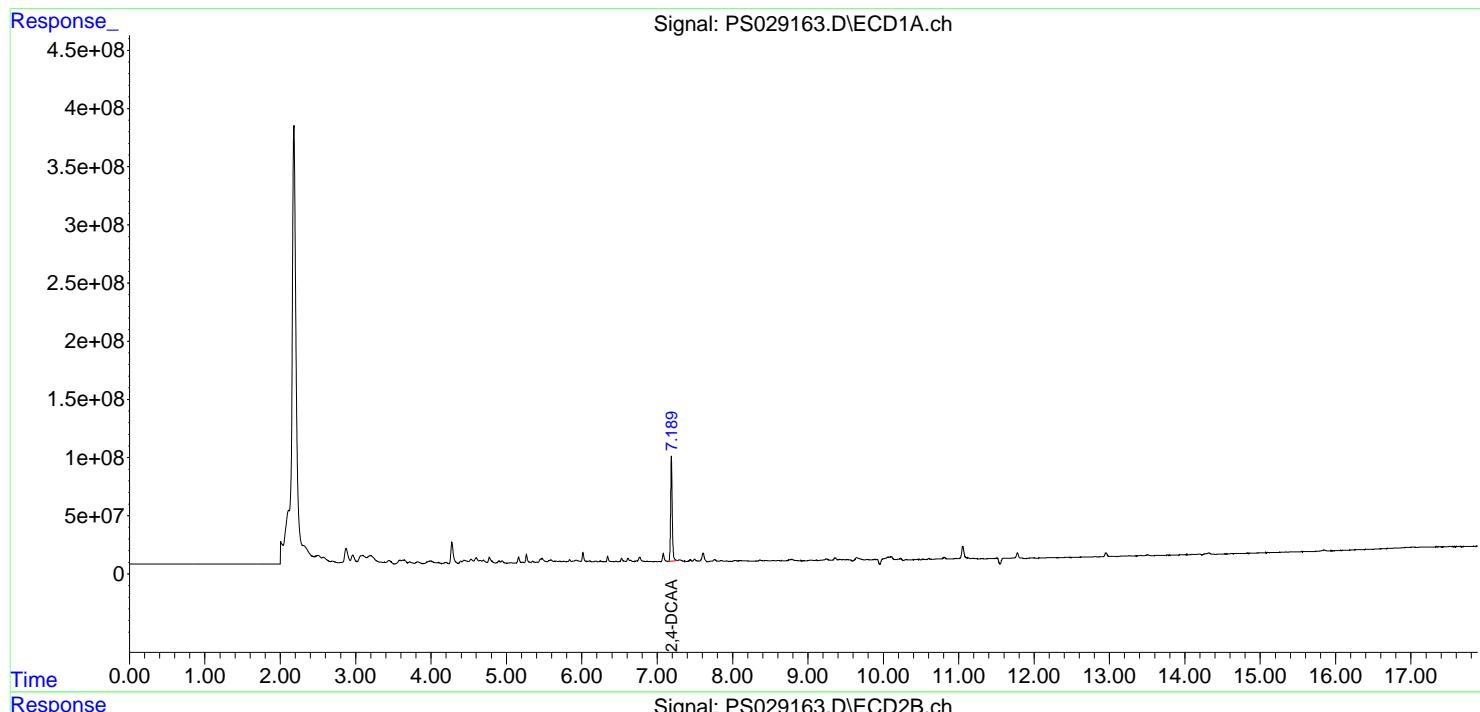
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

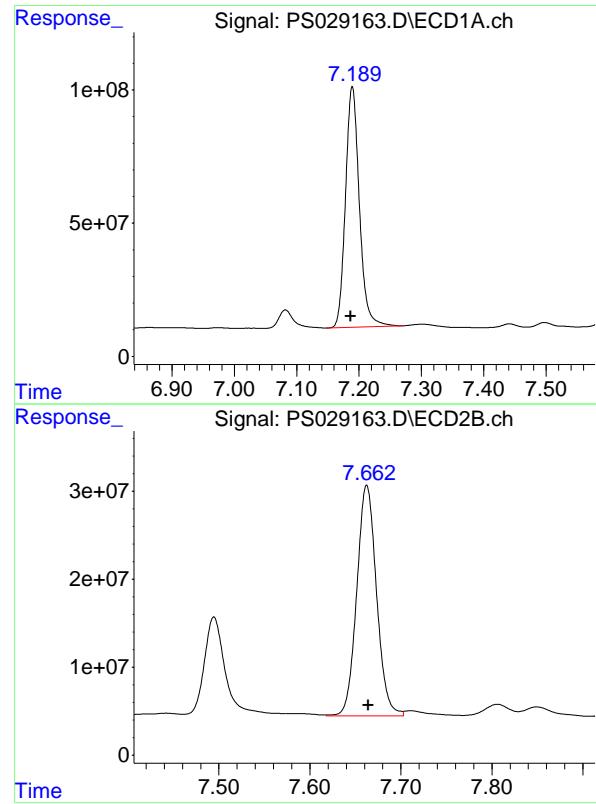
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021325\  
 Data File : PS029163.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 13 Feb 2025 20:12  
 Operator : AR\AJ  
 Sample : PB166700TB  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

**Instrument :**  
 ECD\_S  
**ClientSampleId :**  
 PB166700TB

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 14 01:23:10 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021225.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 09:17:13 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1  $\mu$ 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 $\mu$ m





#4 2,4-DCAA

R.T.: 7.189 min  
Delta R.T.: 0.003 min  
Instrument: ECD\_S  
Response: 1393894000  
Conc: 504.33 ng/ml  
ClientSampleId: PB166700TB

#4 2,4-DCAA

R.T.: 7.663 min  
Delta R.T.: -0.002 min  
Instrument: ECD\_S  
Response: 397122474  
Conc: 375.18 ng/ml



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## Report of Analysis

Client:	Weston Solutions	Date Collected:	02/10/25
Project:	Ft Meade Tipton Airfield Parcel RI - PO 0111169	Date Received:	02/11/25
Client Sample ID:	TAP-IDW-SOIL-021025	SDG No.:	Q1352
Lab Sample ID:	Q1352-02	Matrix:	TCLP
Analytical Method:	SW8151A	% Solid:	0 Decanted:
Sample Wt/Vol:	100 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
PS029165.D	1	02/13/25 10:15	02/13/25 21:00	PB166713

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
94-75-7	2,4-D	15.0	U	4.90	15.0	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	15.0	U	4.50	15.0	20.0	ug/L
<b>SURROGATES</b>							
19719-28-9	2,4-DCAA	521		32 - 138		104%	SPK: 500

### Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021325\  
Data File : PS029165.D  
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
Acq On : 13 Feb 2025 21:00  
Operator : AR\AJ  
Sample : Q1352-02  
Misc :  
ALS Vial : 13 Sample Multiplier: 1

Instrument :  
ECD\_S  
ClientSampleId :  
TAP-IDW-SOIL-021025

Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Feb 14 01:23:57 2025  
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021225.M  
Quant Title : 8080.M  
QLast Update : Wed Feb 12 09:17:13 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	7.189	7.662	1439.3E6	394.1E6	520.776	372.337	#
------	----------	-------	-------	----------	---------	---------	---------	---

Target Compounds

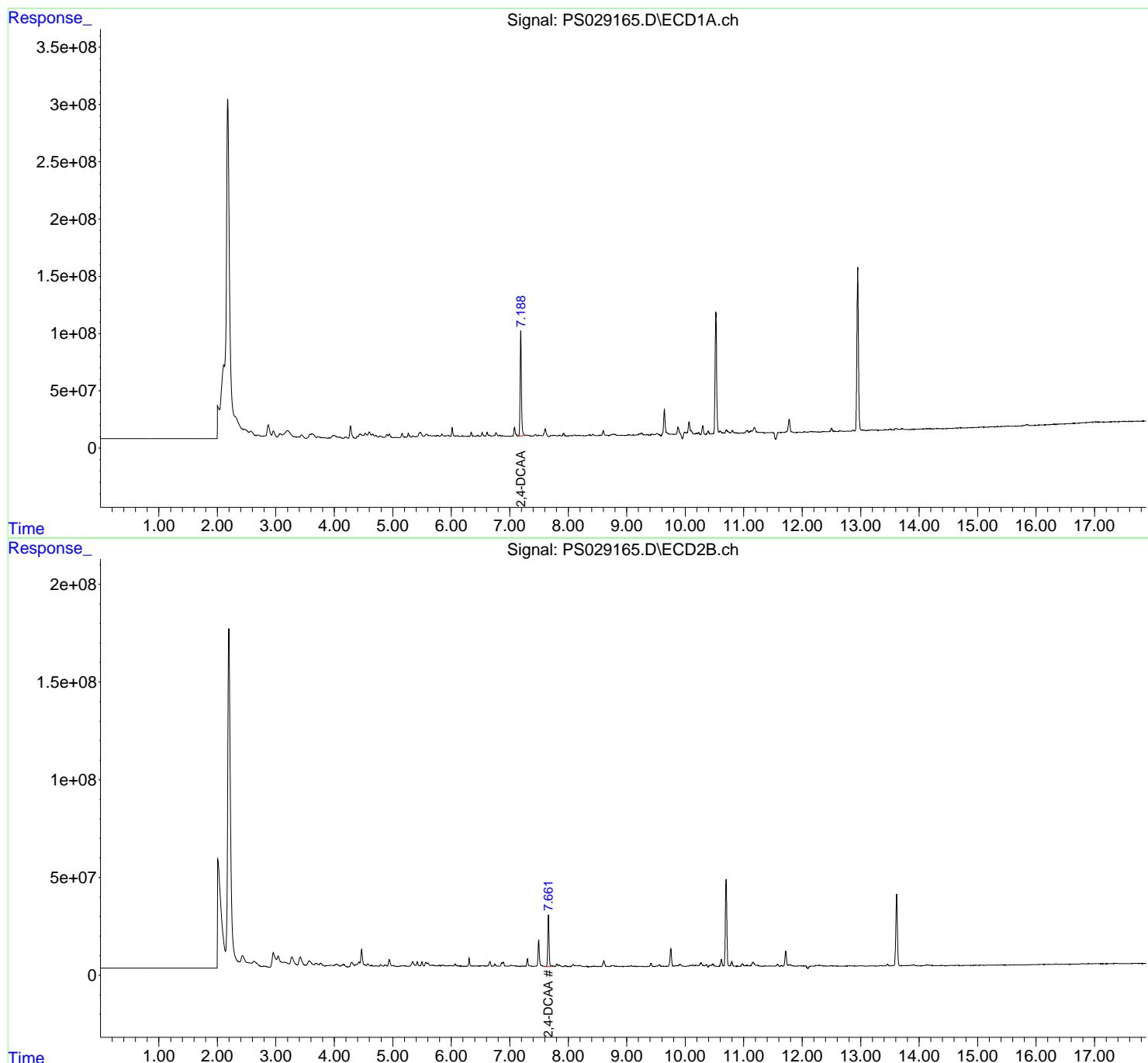
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

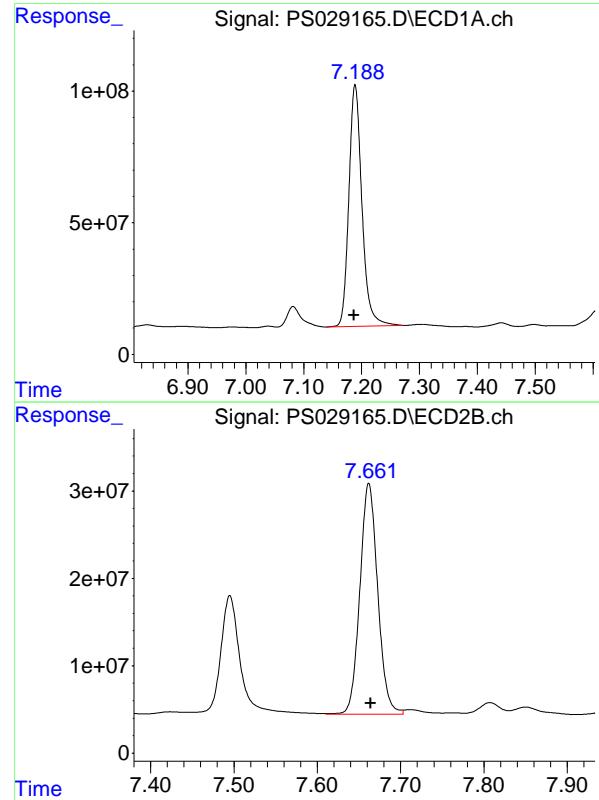
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021325\  
 Data File : PS029165.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 13 Feb 2025 21:00  
 Operator : AR\AJ  
 Sample : Q1352-02  
 Misc :  
 ALS Vial : 13 Sample Multiplier: 1

**Instrument:**  
 ECD\_S  
**ClientSampleId :**  
 TAP-IDW-SOIL-021025

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 14 01:23:57 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021225.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 09:17:13 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1  $\mu$ 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 $\mu$ m





#4 2,4-DCAA

R.T.: 7.189 min  
Delta R.T.: 0.002 min  
Instrument:  
Response: 1439349813 ECD\_S  
Conc: 520.78 ng/ml ClientSampleId :  
TAP-IDW-SOIL-021025

#4 2,4-DCAA

R.T.: 7.662 min  
Delta R.T.: -0.002 min  
Response: 394117359  
Conc: 372.34 ng/ml



# CALIBRATION

# SUMMARY



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

## RETENTION TIMES OF INITIAL CALIBRATION

<b>Contract:</b>	<b>WEST04</b>						
<b>Lab Code:</b>	<b>CHEM</b>	<b>Case No.:</b>	<b>Q1352</b>	<b>SAS No.:</b>	<b>Q1352</b>	<b>SDG NO.:</b>	<b>Q1352</b>
<b>Instrument ID:</b>	<b>ECD_S</b>	<b>Calibration Date(s):</b>		<b>02/11/2025</b>		<b>02/11/2025</b>	
		<b>Calibration Times:</b>		<b>17:56</b>		<b>19:32</b>	

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

<b>LAB FILE ID:</b>	RT 200 =	<u>PS029118.D</u>	RT 500 =	<u>PS029119.D</u>
	RT 750 =	<u>PS029120.D</u>	RT 1000 =	<u>PS029121.D</u>
			RT 1500 =	<u>PS029122.D</u>



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### RETENTION TIMES OF INITIAL CALIBRATION

<b>Contract:</b>	<u>WEST04</u>			
<b>Lab Code:</b>	<u>CHEM</u>	<b>Case No.:</b> <u>Q1352</u>	<b>SAS No.:</b> <u>Q1352</u>	<b>SDG NO.:</b> <u>Q1352</u>
<b>Instrument ID:</b>	<u>ECD_S</u>	<b>Calibration Date(s):</b> <u>02/11/2025</u>	<b>Calibration Times:</b> <u>02/11/2025</u>	<u>17:56</u>
<b>GC Column:</b>	<u>RTX-CLP2</u>	<b>ID:</b> <u>0.32</u> (mm)		

<b>LAB FILE ID:</b>	RT 200 = <u>PS029118.D</u>	RT 500 = <u>PS029119.D</u>
RT 750 = <u>PS029120.D</u>	RT 1000 = <u>PS029121.D</u>	RT 1500 = <u>PS029122.D</u>

COMPOUND	RT 200	RT 500	RT 750	RT 1000	RT 1500	MEAN RT	RT WINDOW	
							FROM	TO
2,4,5-TP(Silvex)	9.80	9.80	9.80	9.80	9.80	9.80	9.70	9.90
2,4-D	8.90	8.90	8.90	8.90	8.90	8.90	8.80	9.00
2,4-DCAA	7.67	7.67	7.66	7.66	7.66	7.66	7.56	7.76



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### CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract:	<b>WEST04</b>						
Lab Code:	<u>CHEM</u>	Case No.:	<u>Q1352</u>	SAS No.:	<u>Q1352</u>	SDG NO.:	<u>Q1352</u>
Instrument ID:	<u>ECD_S</u>		Calibration Date(s):		<u>02/11/2025</u>	<u>02/11/2025</u>	
			Calibration Times:		<u>17:56</u>	<u>19:32</u>	
GC Column:	<u>RTX-CLP</u>		ID:	<u>0.32</u> (mm)			

LAB FILE ID:		CF 200 =	<u>PS029118.D</u>	CF 500 =	<u>PS029119.D</u>		
CF 750 =	<u>PS029120.D</u>	CF 1000 =	<u>PS029121.D</u>	CF 1500 =	<u>PS029122.D</u>		
COMPOUND	CF 200	CF 500	CF 750	CF 1000	CF 1500	CF	% RSD
2,4,5-TP(Silvex)	23549600000	19203700000	18837600000	18189200000	17171500000	19390300000	13
2,4-D	4145320000	3324850000	3237670000	3127190000	2985430000	3364090000	14
2,4-DCAA	3443860000	2743930000	2645570000	2552190000	2433720000	2763860000	14



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Fax : 908 789 8922

### CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract:	<b>WEST04</b>						
Lab Code:	<u>CHEM</u>	Case No.:	<u>Q1352</u>	SAS No.:	<u>Q1352</u>	SDG NO.:	<u>Q1352</u>
Instrument ID:	<u>ECD_S</u>		Calibration Date(s):		<u>02/11/2025</u>	<u>02/11/2025</u>	
			Calibration Times:		<u>17:56</u>	<u>19:32</u>	
GC Column:	<u>RTX-CLP2</u>		ID:	<u>0.32</u> (mm)			

LAB FILE ID:		CF 200 =	<u>PS029118.D</u>	CF 500 =	<u>PS029119.D</u>		
CF 750 =	<u>PS029120.D</u>	CF 1000 =	<u>PS029121.D</u>	CF 1500 =	<u>PS029122.D</u>		
COMPOUND	CF 200	CF 500	CF 750	CF 1000	CF 1500	CF	% RSD
2,4,5-TP(Silvex)	11056300000	9541830000	9635560000	9448160000	9159180000	9768210000	8
2,4-D	1655040000	1386360000	1398110000	1372120000	1351500000	1432630000	9
2,4-DCAA	1265650000	1023410000	1020630000	1000720000	982068000	1058500000	11

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021125\  
 Data File : PS029118.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 11 Feb 2025 17:56  
 Operator : AR\AJ  
 Sample : HSTDICC200  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

**Instrument :**  
**ECD\_S**  
**ClientSampleId :**  
**HSTDICC200**

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 12 01:06:16 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021125.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 01:05:26 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	7.187	7.665	688.8E6	253.1E6	260.349	248.013
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#### Target Compounds

1)	T	Dalapon	2.607	2.656	637.7E6	376.8E6	207.145	198.486
2)	T	3,5-DICHL...	6.365	6.633	904.5E6	327.5E6	237.115	219.637
3)	T	4-Nitroph...	6.985	7.195	357.2E6	181.0E6	217.559	216.114
5)	T	DICAMBA	7.371	7.861	2662.7E6	1134.9E6	226.207	208.306
6)	T	MCPP	7.549	7.962	122.9E6	46510552	17.524	18.760
7)	T	MCPA	7.697	8.202	177.9E6	66885235	18.485	19.096
8)	T	DICHLORPROP	8.073	8.573	735.9E6	308.2E6	242.594	230.623
9)	T	2,4-D	8.303	8.898	779.3E6	311.1E6	240.704	222.548
10)	T	Pentachlo...	8.598	9.419	11502.2E6	5239.6E6	238.382	219.299
11)	T	2,4,5-TP ...	9.173	9.797	4474.4E6	2100.7E6	237.526	218.016
12)	T	2,4,5-T	9.464	10.214	4468.3E6	1998.9E6	236.559	219.930
13)	T	2,4-DB	10.034	10.778	879.5E6	203.4E6	249.293	219.614
14)	T	DINOSEB	11.235	11.155	3250.2E6	1139.8E6	234.520	213.961
15)	T	Picloram	11.047	12.235	7142.6E6	2733.0E6	229.648	198.993
16)	T	DCPA	11.530	12.192	6856.2E6	2641.9E6	242.903	216.565

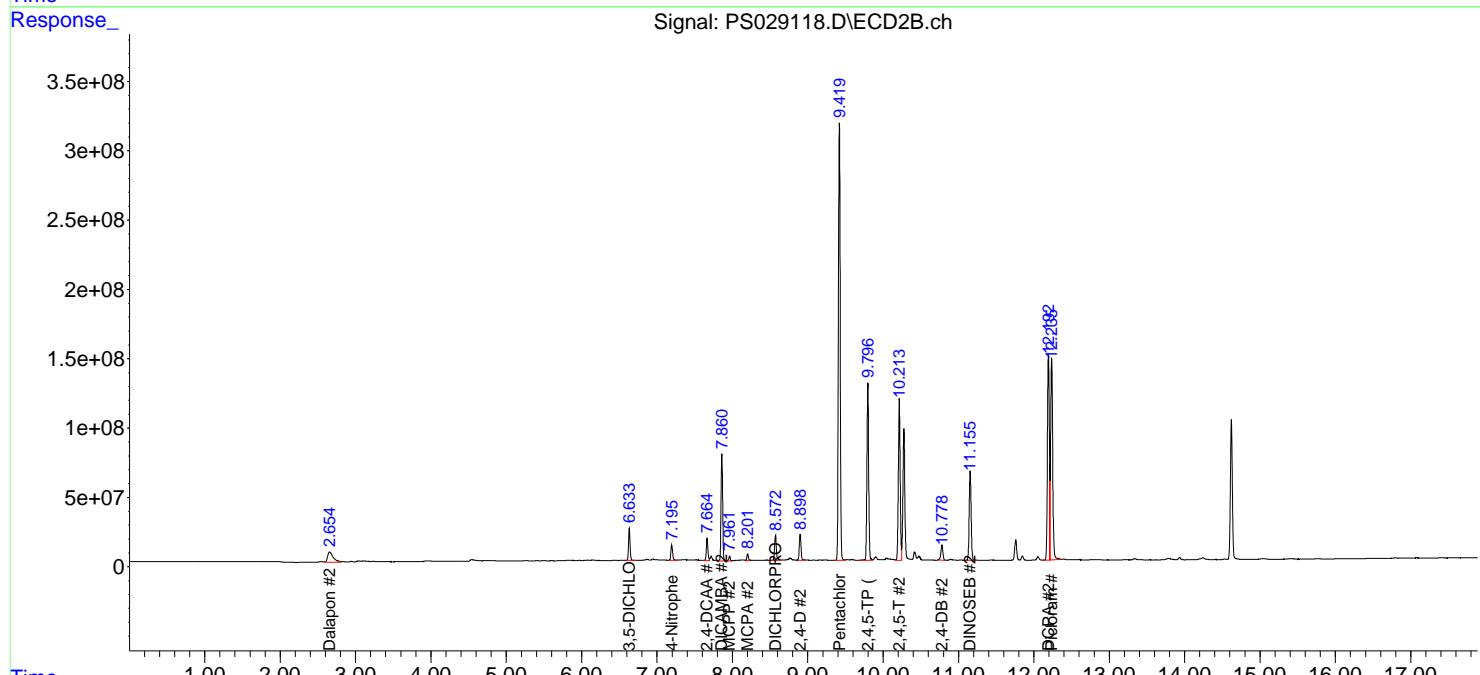
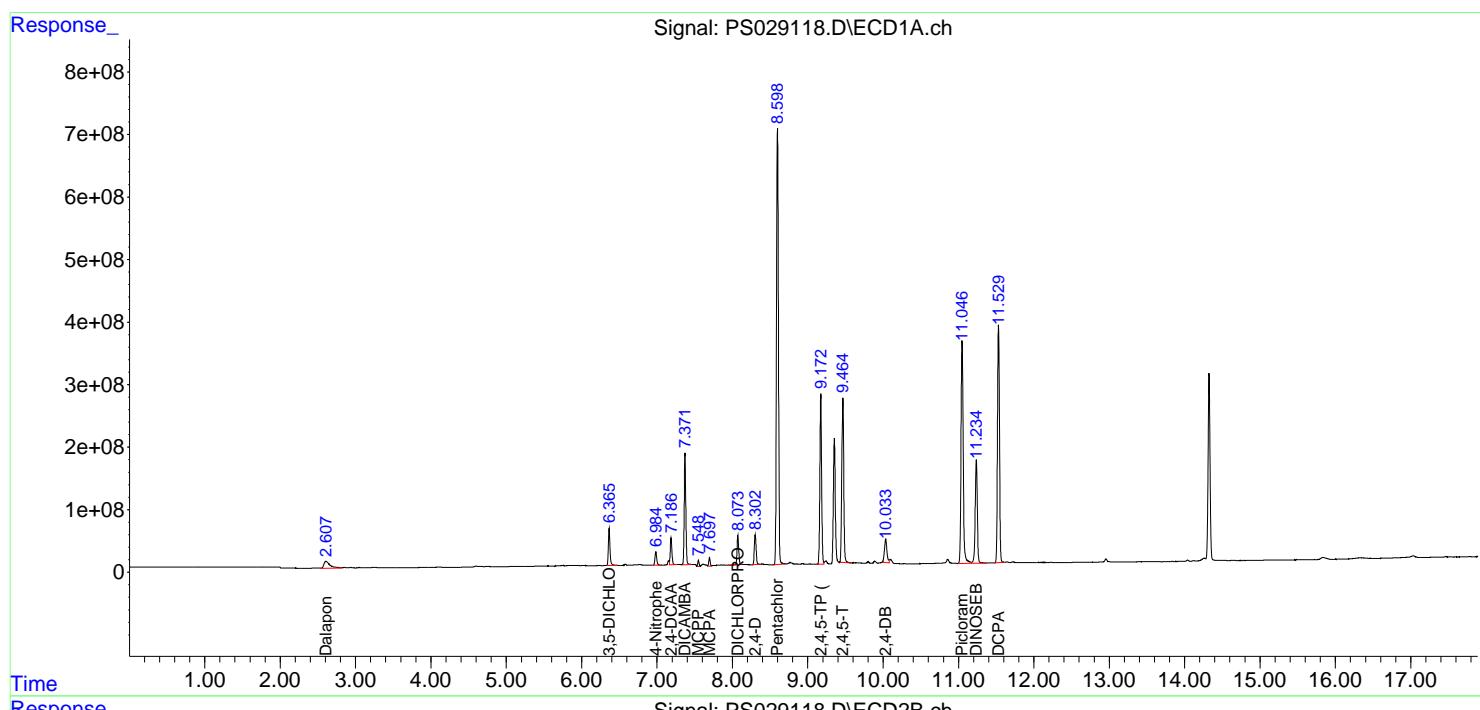
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

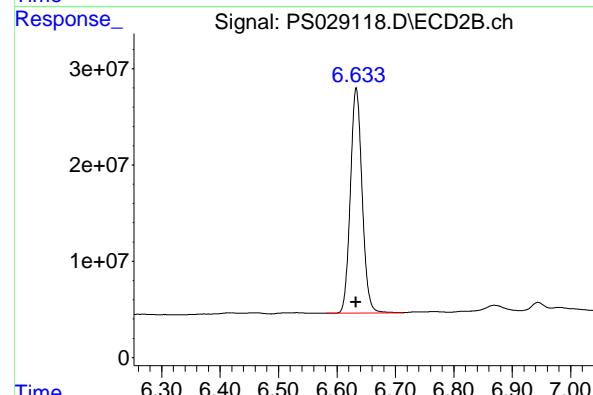
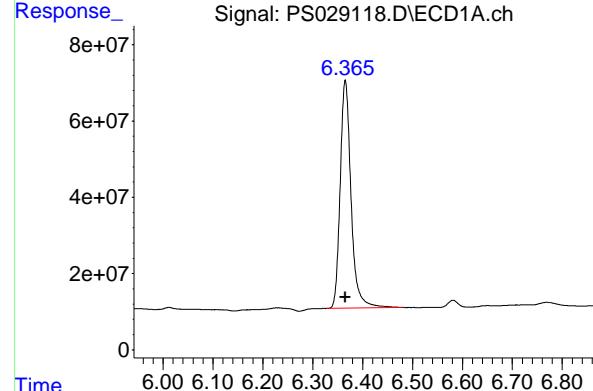
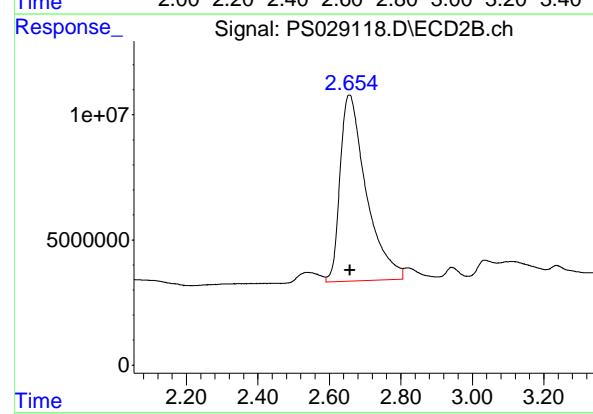
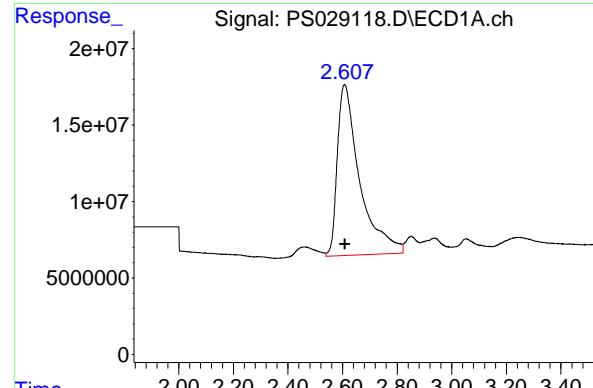
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021125\  
 Data File : PS029118.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 11 Feb 2025 17:56  
 Operator : AR\AJ  
 Sample : HSTDICC200  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

**Instrument :**  
 ECD\_S  
**ClientSampleId :**  
 HSTDICC200

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 12 01:06:16 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021125.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 01:05:26 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1  $\mu$ 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 $\mu$ m





#1 Dalapon

R.T.: 2.607 min  
 Delta R.T.: -0.002 min  
 Response: 637650735 ECD\_S  
 Conc: 207.14 ng/ml ClientSampleId : HSTDICC200

#1 Dalapon

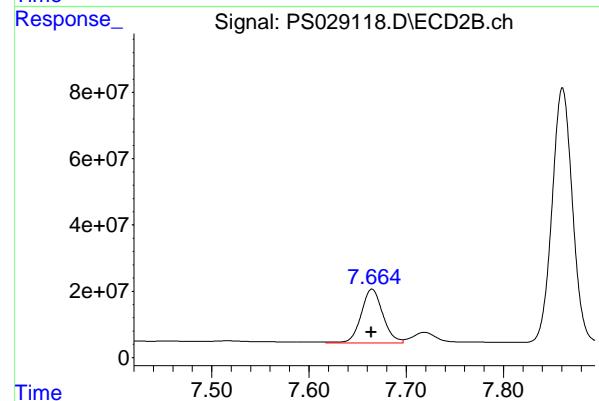
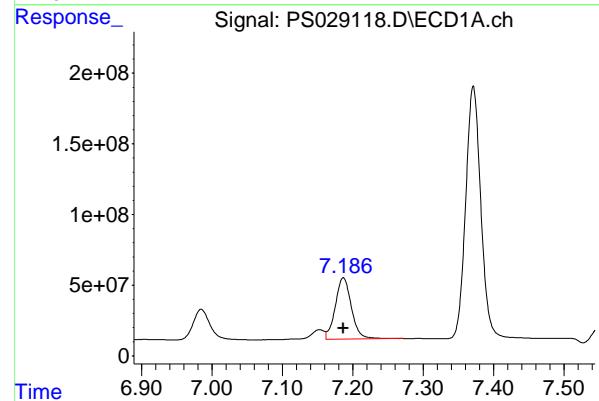
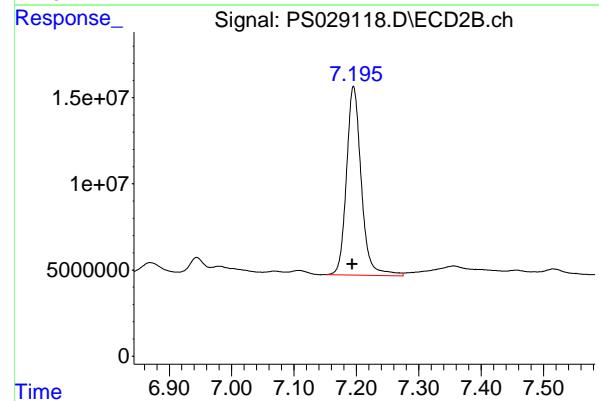
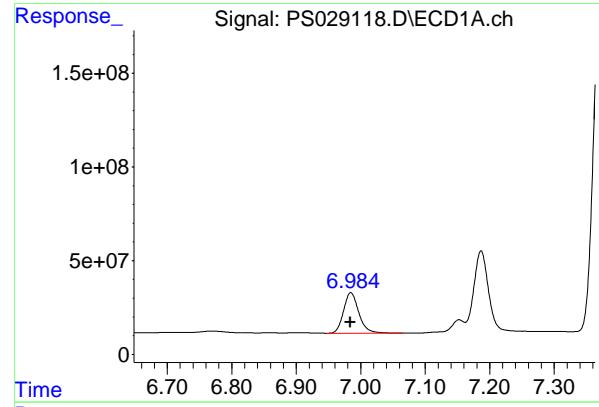
R.T.: 2.656 min  
 Delta R.T.: -0.002 min  
 Response: 376788257  
 Conc: 198.49 ng/ml

#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.365 min  
 Delta R.T.: 0.000 min  
 Response: 904549428  
 Conc: 237.11 ng/ml

#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.633 min  
 Delta R.T.: 0.000 min  
 Response: 327466277  
 Conc: 219.64 ng/ml



#3 4-Nitrophenol

R.T.: 6.985 min  
 Delta R.T.: 0.000 min  
 Response: 357182308 ECD\_S  
 Conc: 217.56 ng/ml ClientSampleId : HSTDICC200

#3 4-Nitrophenol

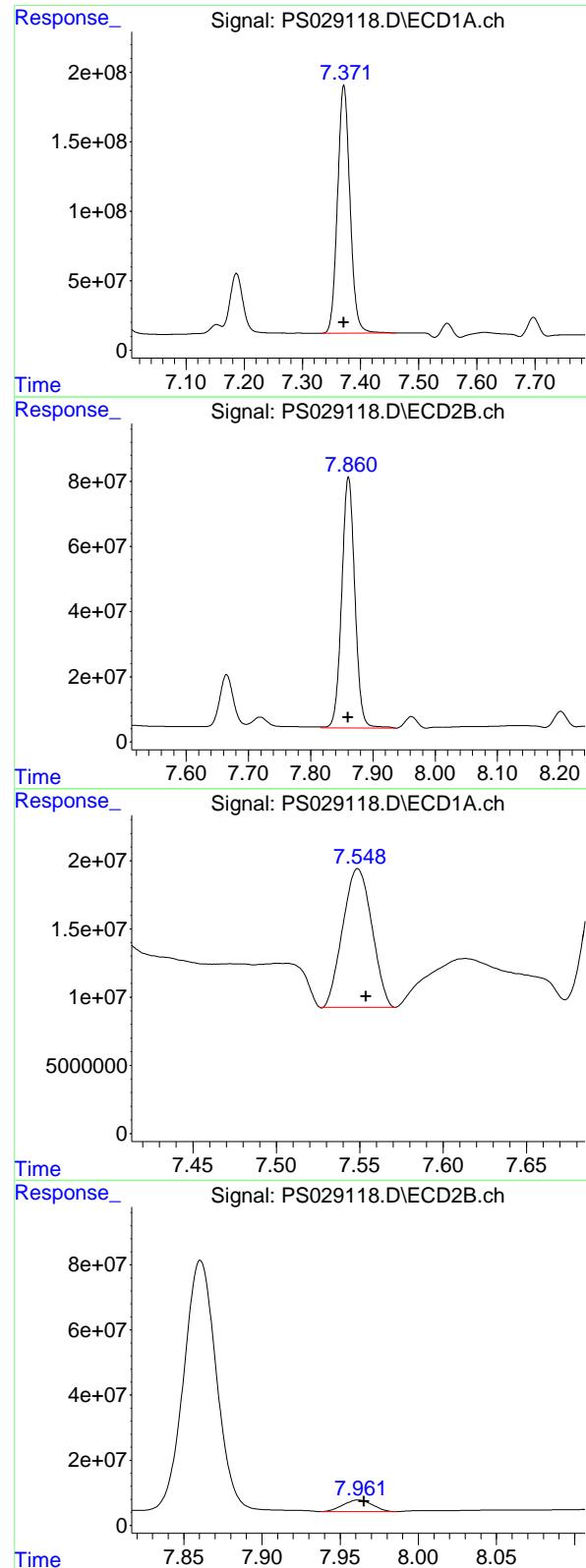
R.T.: 7.195 min  
 Delta R.T.: 0.002 min  
 Response: 181013413  
 Conc: 216.11 ng/ml

#4 2,4-DCAA

R.T.: 7.187 min  
 Delta R.T.: 0.000 min  
 Response: 688772452  
 Conc: 260.35 ng/ml

#4 2,4-DCAA

R.T.: 7.665 min  
 Delta R.T.: 0.000 min  
 Response: 253129847  
 Conc: 248.01 ng/ml



## #5 DICAMBA

R.T.: 7.371 min  
 Delta R.T.: 0.000 min  
 Response: 2662695192 ECD\_S  
 Conc: 226.21 ng/ml ClientSampleId : HSTDICC200

## #5 DICAMBA

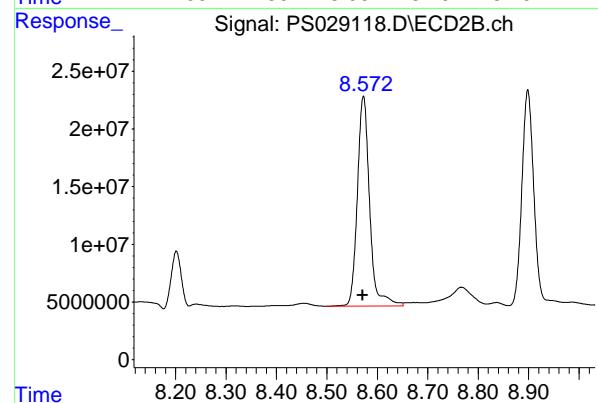
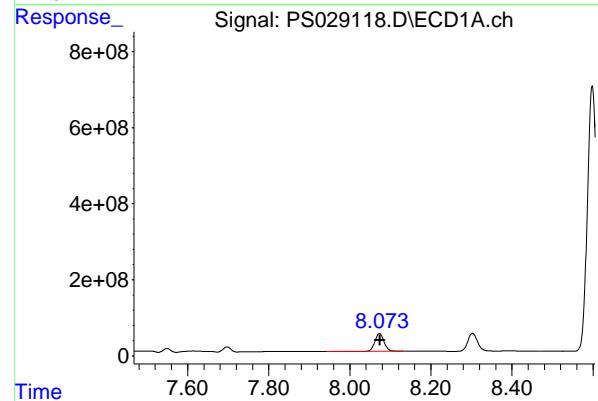
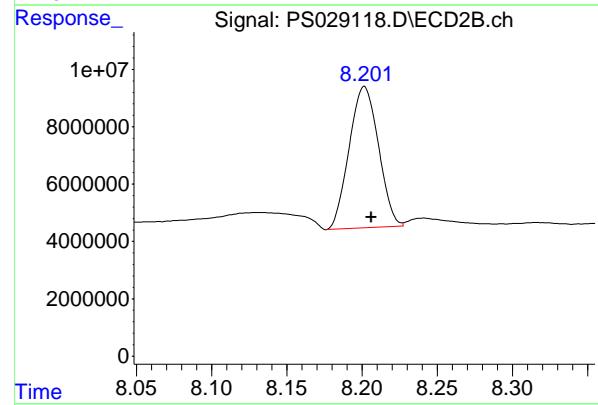
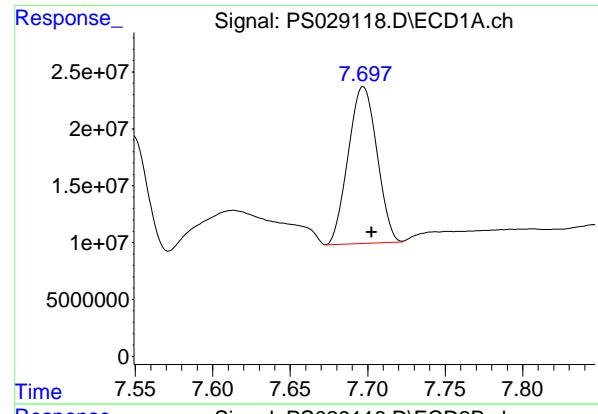
R.T.: 7.861 min  
 Delta R.T.: 0.000 min  
 Response: 1134893663  
 Conc: 208.31 ng/ml

## #6 MCPP

R.T.: 7.549 min  
 Delta R.T.: -0.005 min  
 Response: 122908885  
 Conc: 17.52 ug/ml

## #6 MCPP

R.T.: 7.962 min  
 Delta R.T.: -0.003 min  
 Response: 46510552  
 Conc: 18.76 ug/ml



## #7 MCPA

R.T.: 7.697 min  
 Delta R.T.: -0.005 min  
 Response: 177894242 ECD\_S  
 Conc: 18.48 ug/ml ClientSampleId : HSTDICC200

## #7 MCPA

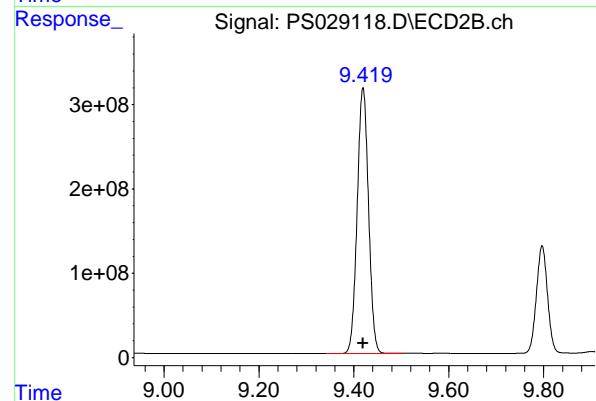
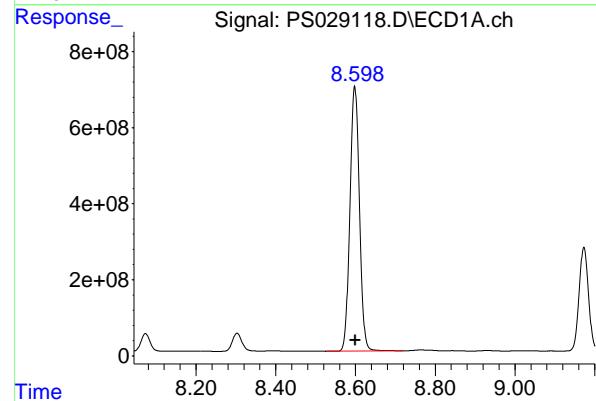
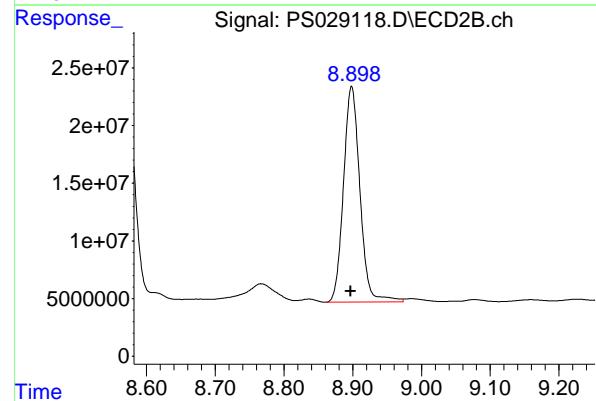
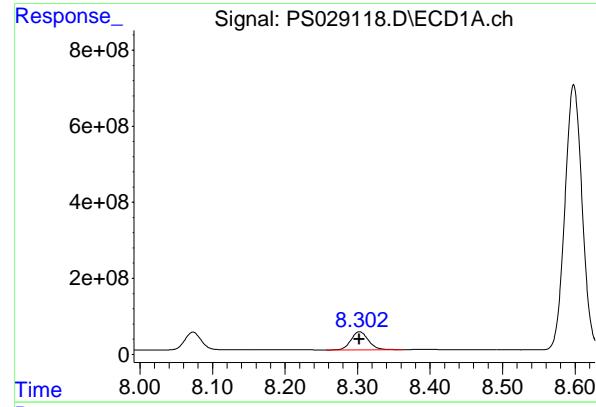
R.T.: 8.202 min  
 Delta R.T.: -0.005 min  
 Response: 66885235  
 Conc: 19.10 ug/ml

## #8 DICHLORPROP

R.T.: 8.073 min  
 Delta R.T.: 0.000 min  
 Response: 735875842  
 Conc: 242.59 ng/ml

## #8 DICHLORPROP

R.T.: 8.573 min  
 Delta R.T.: 0.002 min  
 Response: 308241788  
 Conc: 230.62 ng/ml



#9 2,4-D

R.T.: 8.303 min  
 Delta R.T.: 0.000 min  
 Response: 779319602  
 Conc: 240.70 ng/ml  
**Instrument:** ECD\_S  
**ClientSampleId:** HSTDICC200

#9 2,4-D

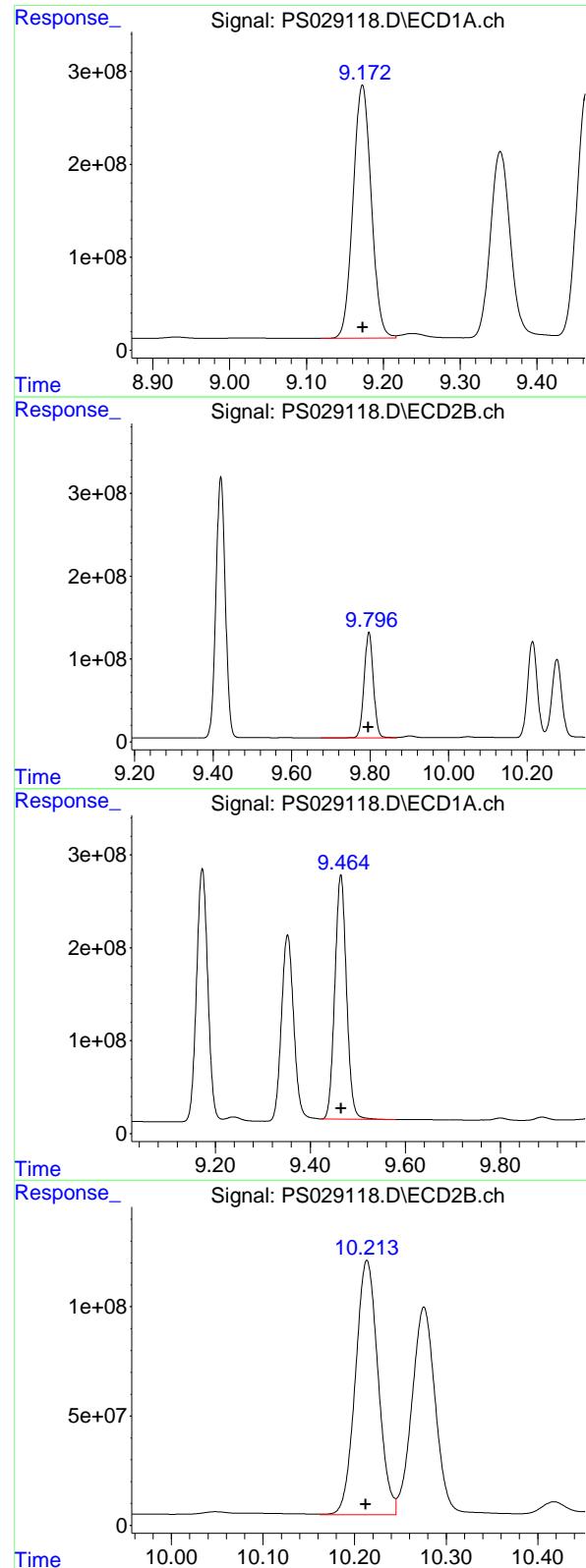
R.T.: 8.898 min  
 Delta R.T.: 0.001 min  
 Response: 311147200  
 Conc: 222.55 ng/ml

#10 Pentachlorophenol

R.T.: 8.598 min  
 Delta R.T.: 0.000 min  
 Response: 11502237353  
 Conc: 238.38 ng/ml

#10 Pentachlorophenol

R.T.: 9.419 min  
 Delta R.T.: 0.000 min  
 Response: 5239609410  
 Conc: 219.30 ng/ml



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

R.T.: 9.173 min  
 Delta R.T.: 0.000 min  
 Response: 4474427760 ECD\_S  
 Conc: 237.53 ng/ml ClientSampleId : HSTDICC200

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

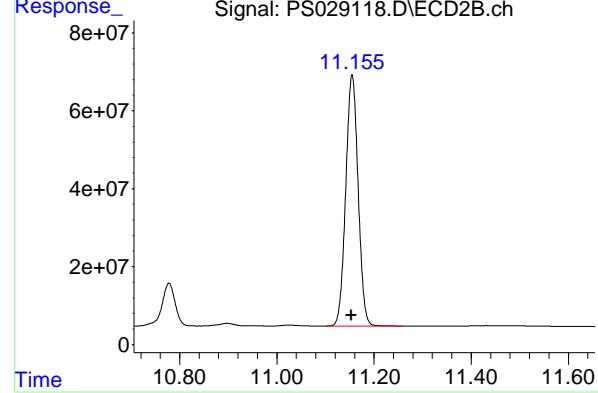
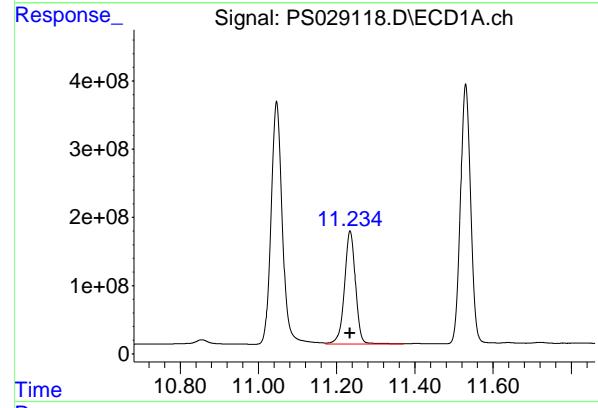
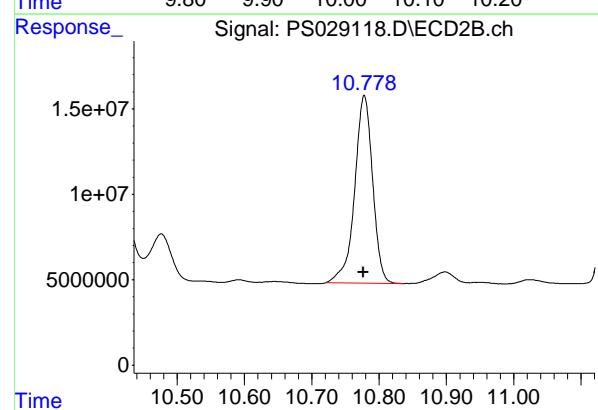
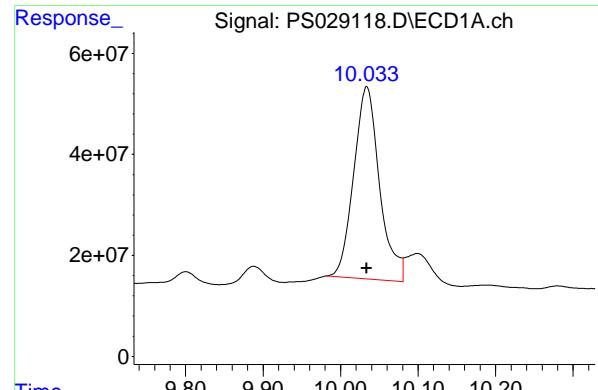
R.T.: 9.797 min  
 Delta R.T.: 0.000 min  
 Response: 2100701647  
 Conc: 218.02 ng/ml

#12 2,4,5-T

R.T.: 9.464 min  
 Delta R.T.: 0.000 min  
 Response: 4468314015  
 Conc: 236.56 ng/ml

#12 2,4,5-T

R.T.: 10.214 min  
 Delta R.T.: 0.002 min  
 Response: 1998922197  
 Conc: 219.93 ng/ml



#13 2,4-DB

R.T.: 10.034 min  
 Delta R.T.: 0.000 min  
 Response: 879451434 ECD\_S  
 Conc: 249.29 ng/ml ClientSampleId : HSTDICC200

#13 2,4-DB

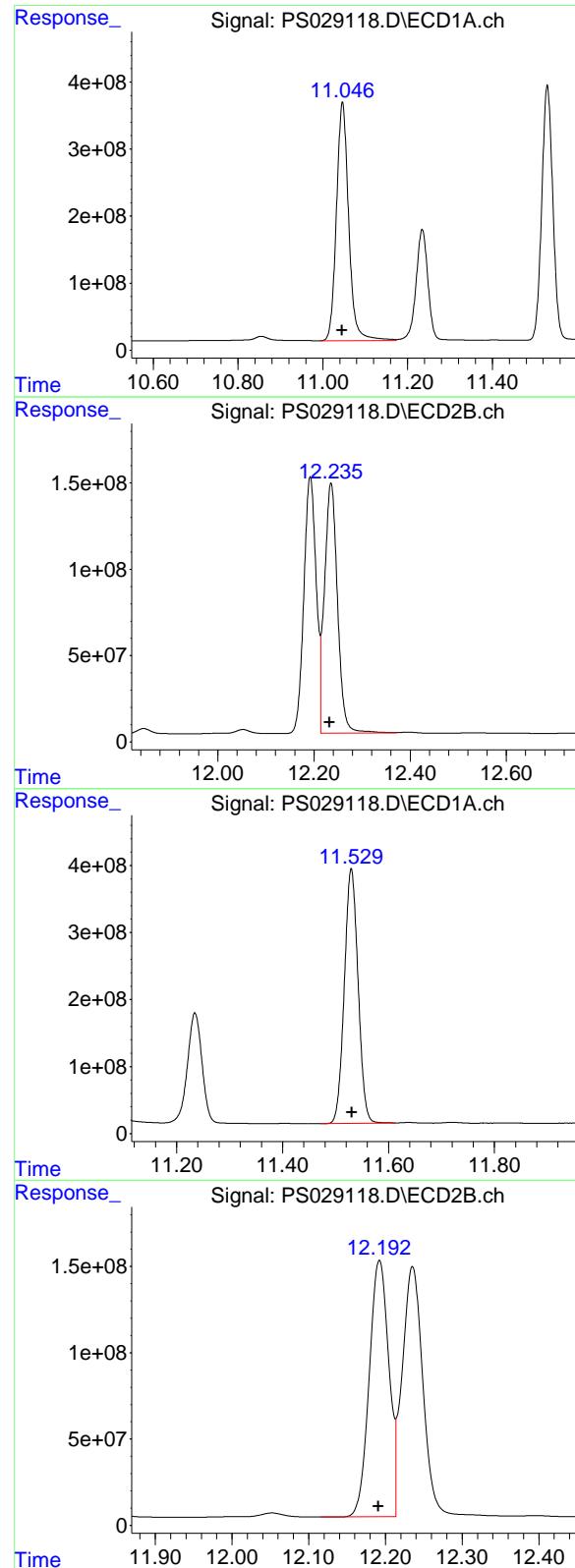
R.T.: 10.778 min  
 Delta R.T.: 0.002 min  
 Response: 203411949  
 Conc: 219.61 ng/ml

#14 DINOSEB

R.T.: 11.235 min  
 Delta R.T.: 0.000 min  
 Response: 3250227540  
 Conc: 234.52 ng/ml

#14 DINOSEB

R.T.: 11.155 min  
 Delta R.T.: 0.001 min  
 Response: 1139846209  
 Conc: 213.96 ng/ml



#15 Picloram

R.T.: 11.047 min  
 Delta R.T.: 0.001 min  
 Instrument: ECD\_S  
 Response: 7142583315  
 Conc: 229.65 ng/ml  
 ClientSampleId: HSTDICC200

#15 Picloram

R.T.: 12.235 min  
 Delta R.T.: 0.003 min  
 Response: 2733024404  
 Conc: 198.99 ng/ml

#16 DCPA

R.T.: 11.530 min  
 Delta R.T.: -0.001 min  
 Response: 6856212465  
 Conc: 242.90 ng/ml

#16 DCPA

R.T.: 12.192 min  
 Delta R.T.: 0.001 min  
 Response: 2641896133  
 Conc: 216.56 ng/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021125\  
 Data File : PS029119.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 11 Feb 2025 18:20  
 Operator : AR\AJ  
 Sample : HSTDICC500  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

**Instrument :**  
**ECD\_S**  
**ClientSampleId :**  
**HSTDICC500**

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 12 01:06:32 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021125.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 01:05:26 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 7.186 7.665 1372.0E6 511.7E6 518.589 501.361

#### Target Compounds

1) T	Dalapon	2.612	2.658	1375.2E6	834.9E6	446.728	439.824
2) T	3,5-DICHL...	6.365	6.633	1826.2E6	696.2E6	478.717	466.962
3) T	4-Nitroph...	6.984	7.195	747.4E6	374.2E6	455.240	446.751
5) T	DICAMBA	7.371	7.861	5527.7E6	2505.2E6	469.598	459.827
6) T	MCPP	7.551	7.964	308.0E6	111.0E6	43.918	44.784
7) T	MCPA	7.700	8.204	424.6E6	156.0E6	44.116	44.542
8) T	DICHLORPROP	8.073	8.571	1460.7E6	617.2E6	481.545	461.750
9) T	2,4-D	8.302	8.898	1562.7E6	651.6E6	482.655	466.049
10) T	Pentachlo...	8.599	9.420	23486.5E6	11393.6E6	486.753	476.868
11) T	2,4,5-TP ...	9.173	9.797	9121.8E6	4532.4E6	484.231	470.379
12) T	2,4,5-T	9.464	10.213	9063.2E6	4313.5E6	479.819	474.594
13) T	2,4-DB	10.034	10.777	1714.1E6	432.8E6	485.885	467.292
14) T	DINOSEB	11.235	11.155	6544.5E6	2424.8E6	472.219	455.158
15) T	Picloram	11.045	12.235	14933.1E6	6288.3E6	480.129	457.855
16) T	DCPA	11.530	12.192	13864.8E6	5819.5E6	491.206	477.045

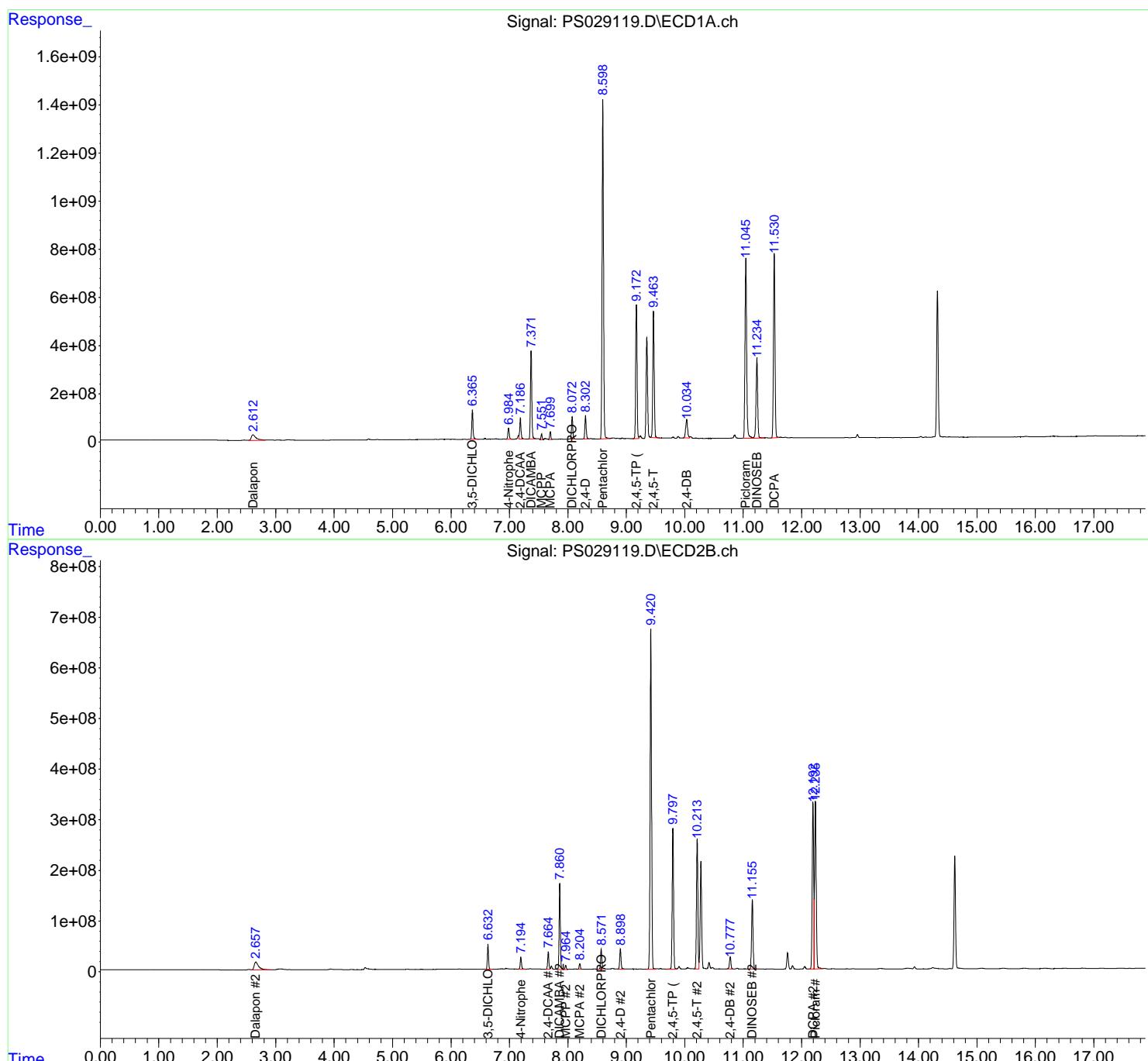
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

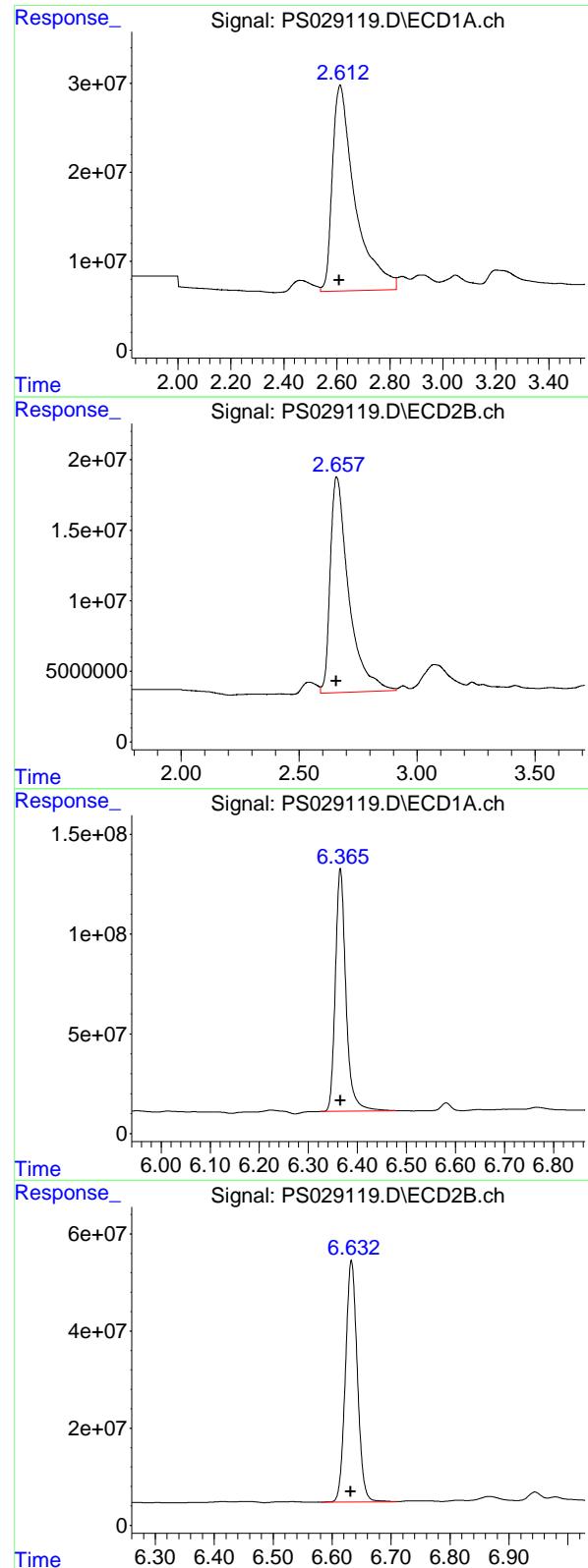
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021125\  
 Data File : PS029119.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 11 Feb 2025 18:20  
 Operator : AR\AJ  
 Sample : HSTDICC500  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

**Instrument :**  
 ECD\_S  
**ClientSampleId :**  
 HSTDICC500

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 12 01:06:32 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021125.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 01:05:26 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1  $\mu$ 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 $\mu$ m





#1 Dalapon

R.T.: 2.612 min  
 Delta R.T.: 0.003 min  
 Response: 1375155157 ECD\_S  
 Conc: 446.73 ng/ml ClientSampleId : HSTDICC500

#1 Dalapon

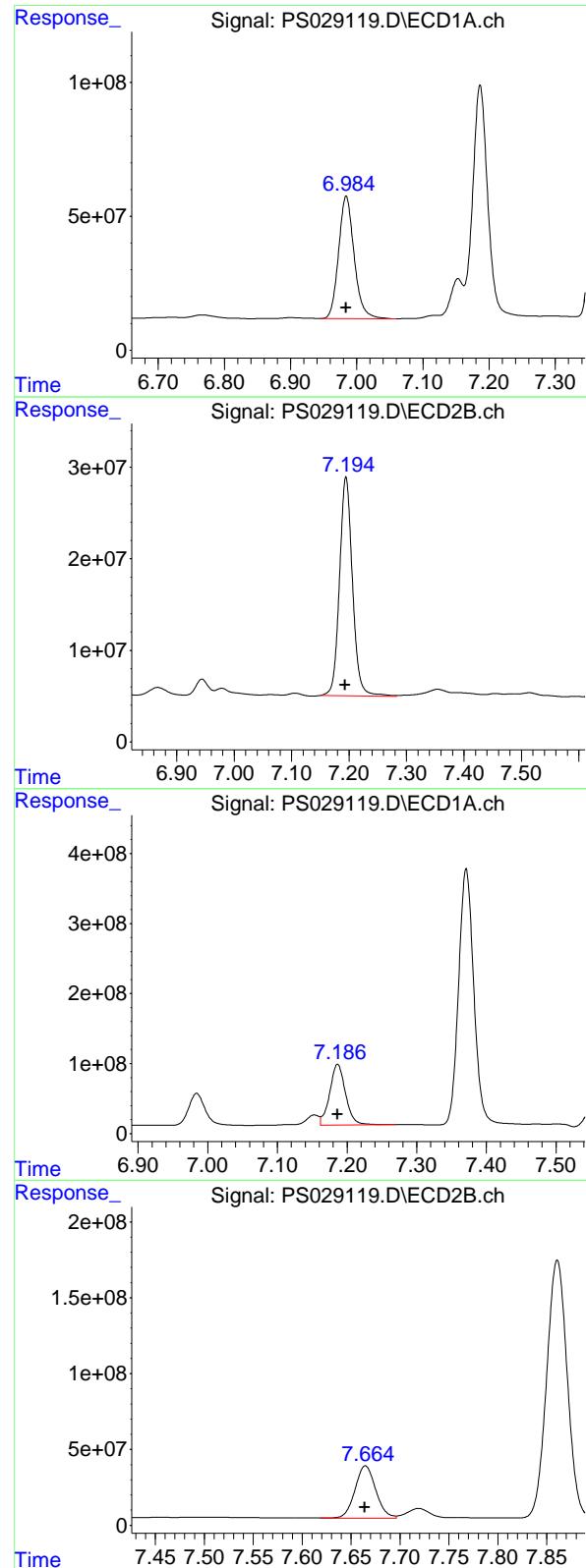
R.T.: 2.658 min  
 Delta R.T.: 0.000 min  
 Response: 834924593  
 Conc: 439.82 ng/ml

#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.365 min  
 Delta R.T.: 0.000 min  
 Response: 1826218970  
 Conc: 478.72 ng/ml

#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.633 min  
 Delta R.T.: 0.000 min  
 Response: 696214724  
 Conc: 466.96 ng/ml



## #3 4-Nitrophenol

R.T.: 6.984 min  
 Delta R.T.: 0.000 min  
 Response: 747399716  
 Conc: 455.24 ng/ml

Instrument: ECD\_S  
 ClientSampleId: HSTDICC500

## #3 4-Nitrophenol

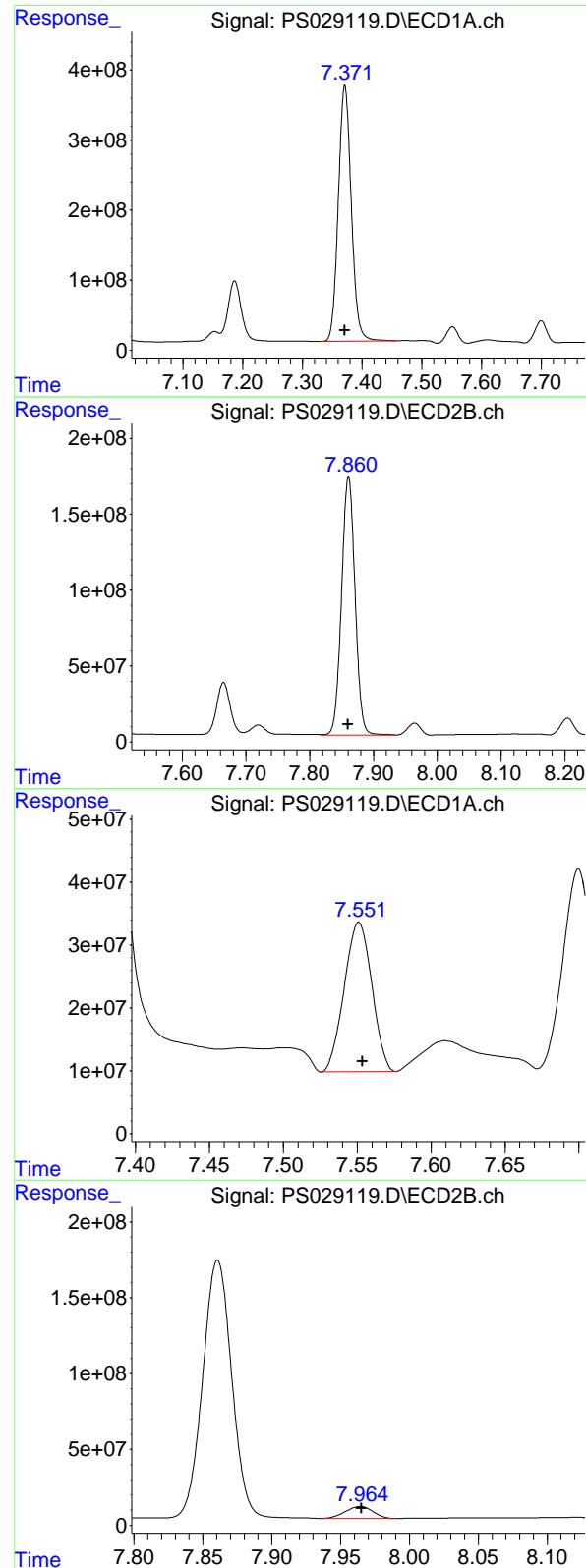
R.T.: 7.195 min  
 Delta R.T.: 0.001 min  
 Response: 374190008  
 Conc: 446.75 ng/ml

## #4 2,4-DCAA

R.T.: 7.186 min  
 Delta R.T.: 0.000 min  
 Response: 1371966447  
 Conc: 518.59 ng/ml

## #4 2,4-DCAA

R.T.: 7.665 min  
 Delta R.T.: 0.000 min  
 Response: 511705240  
 Conc: 501.36 ng/ml



## #5 DICAMBA

R.T.: 7.371 min  
 Delta R.T.: 0.000 min  
 Instrument: ECD\_S  
 Response: 5527656721 ClientSampleId :  
 Conc: 469.60 ng/ml HSTDICC500

## #5 DICAMBA

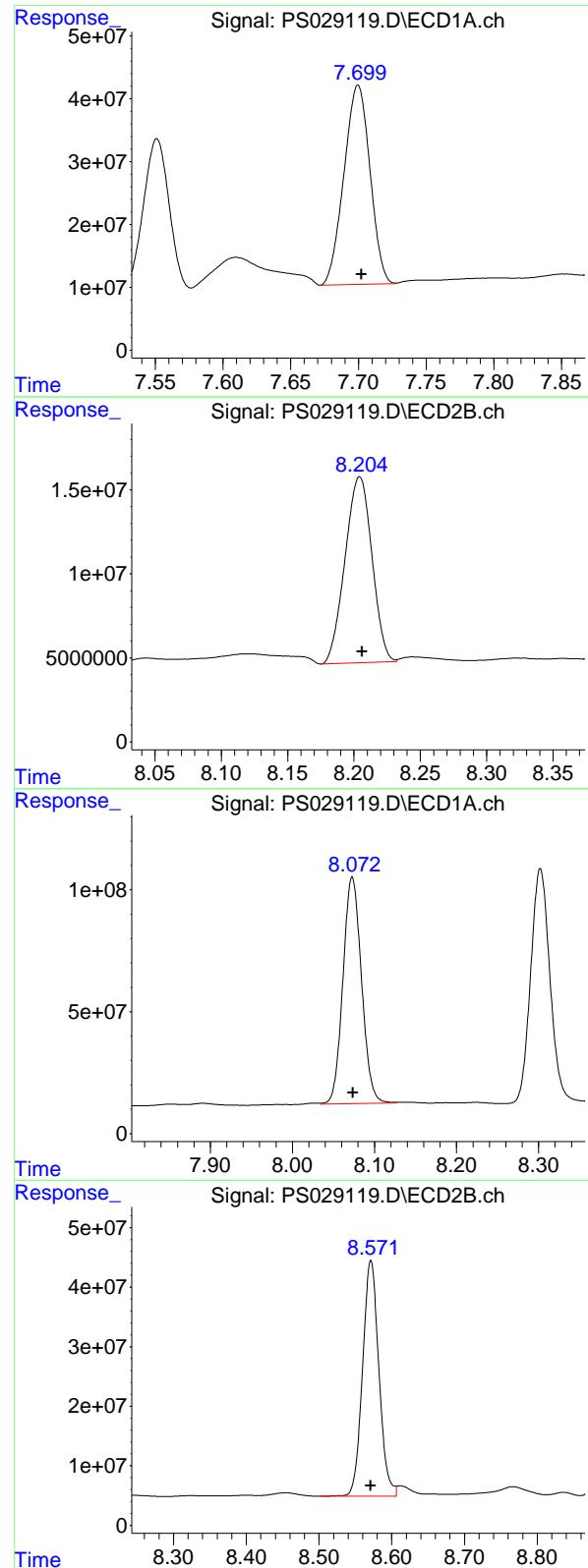
R.T.: 7.861 min  
 Delta R.T.: 0.001 min  
 Response: 2505225166 Conc: 459.83 ng/ml

## #6 MCPP

R.T.: 7.551 min  
 Delta R.T.: -0.002 min  
 Response: 308032669 Conc: 43.92 ug/ml

## #6 MCPP

R.T.: 7.964 min  
 Delta R.T.: 0.000 min  
 Response: 111030711 Conc: 44.78 ug/ml



#7 MCPA

R.T.: 7.700 min  
 Delta R.T.: -0.003 min  
 Response: 424572680 ECD\_S  
 Conc: 44.12 ug/ml ClientSampleId : HSTDICC500

#7 MCPA

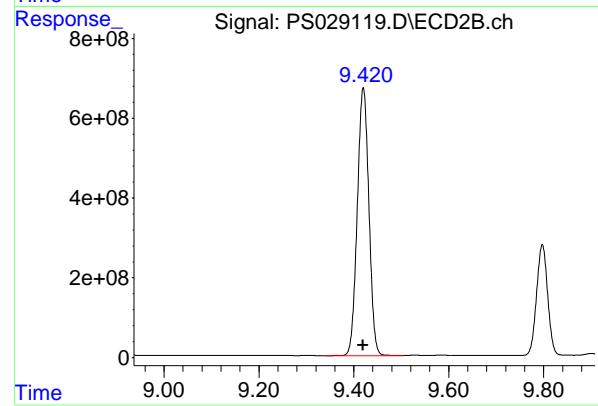
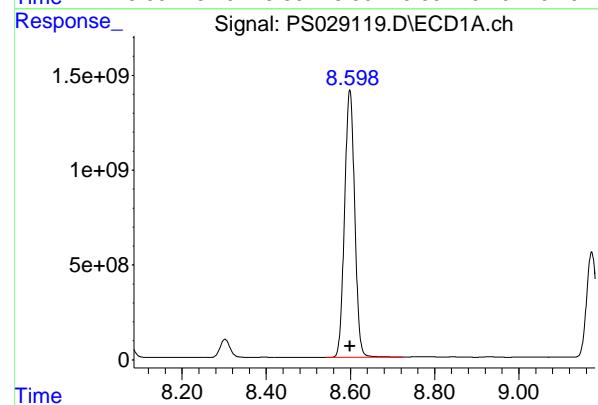
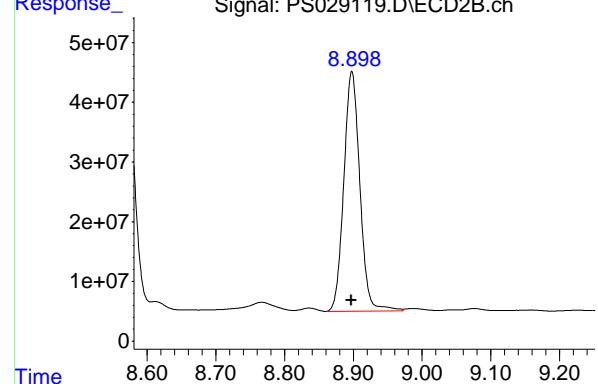
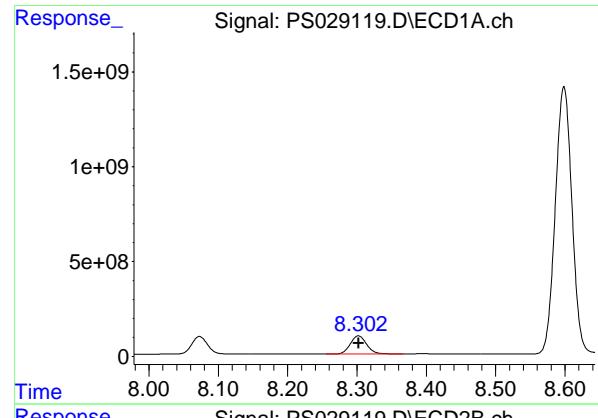
R.T.: 8.204 min  
 Delta R.T.: -0.002 min  
 Response: 156013459  
 Conc: 44.54 ug/ml

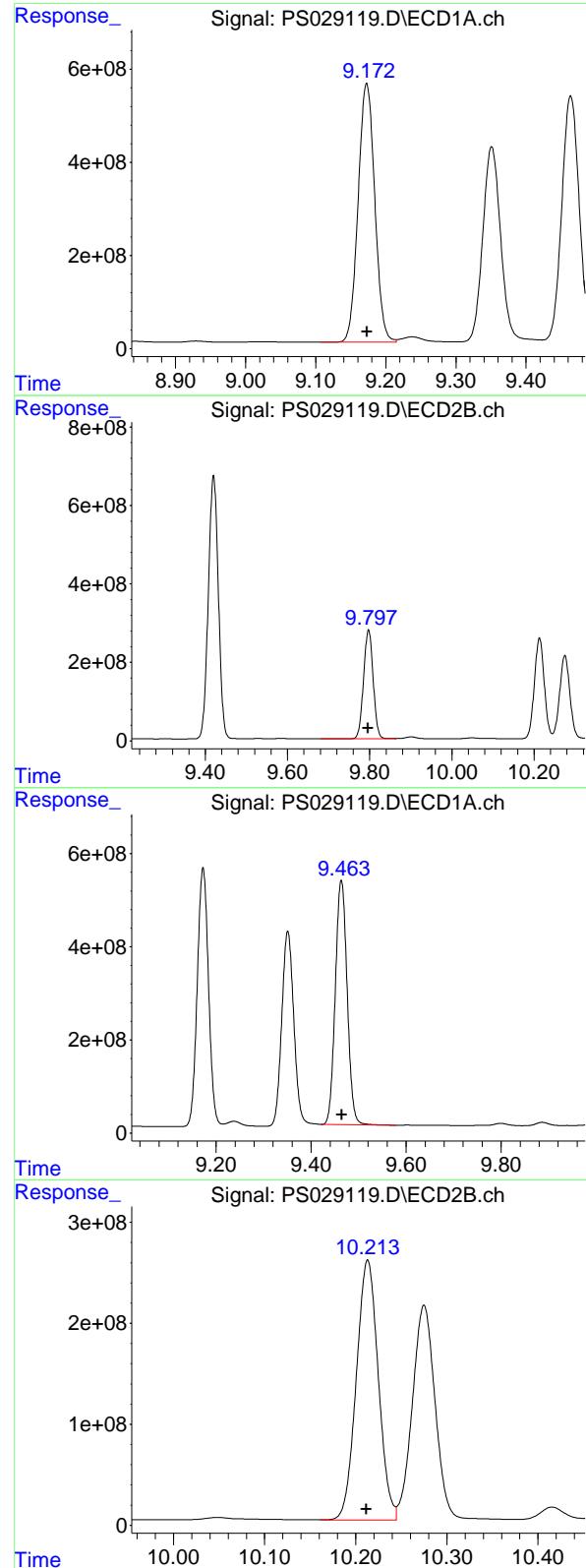
#8 DICHLORPROP

R.T.: 8.073 min  
 Delta R.T.: 0.000 min  
 Response: 1460704483  
 Conc: 481.55 ng/ml

#8 DICHLORPROP

R.T.: 8.571 min  
 Delta R.T.: 0.000 min  
 Response: 617157025  
 Conc: 461.75 ng/ml





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

R.T.: 9.173 min  
 Delta R.T.: 0.000 min  
 Response: 9121776882 ECD\_S  
 Conc: 484.23 ng/ml ClientSampleId : HSTDICC500

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

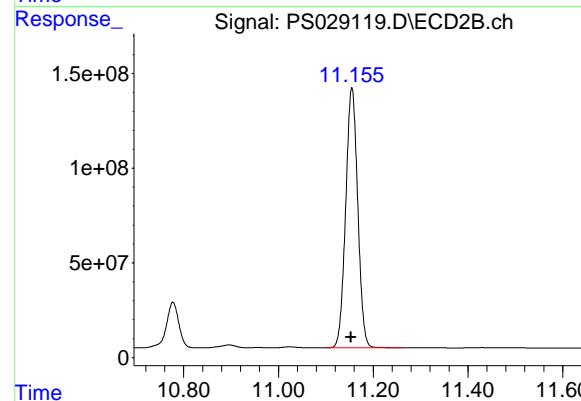
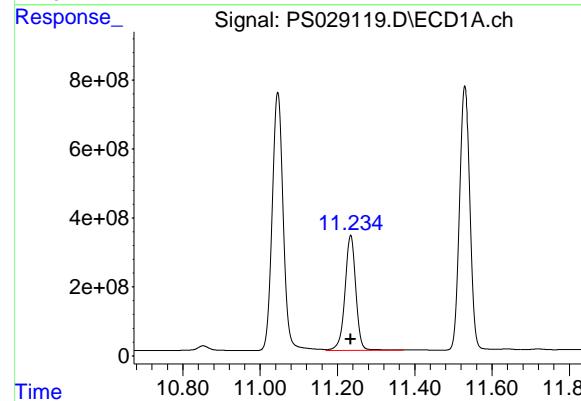
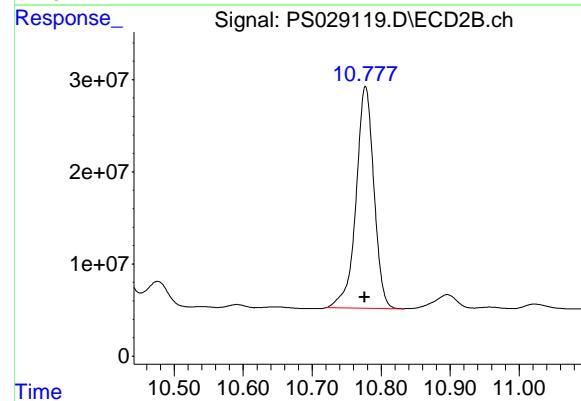
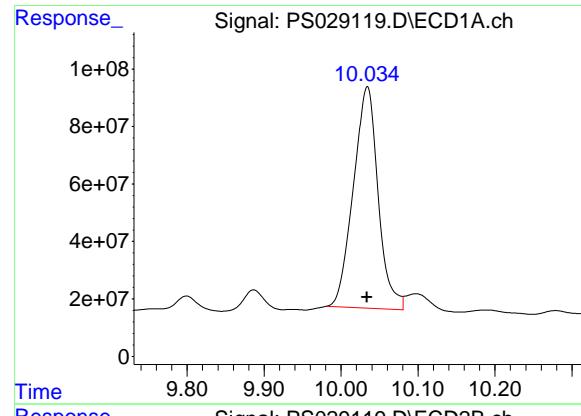
R.T.: 9.797 min  
 Delta R.T.: 0.001 min  
 Response: 4532368047  
 Conc: 470.38 ng/ml

#12 2,4,5-T

R.T.: 9.464 min  
 Delta R.T.: 0.000 min  
 Response: 9063209027  
 Conc: 479.82 ng/ml

#12 2,4,5-T

R.T.: 10.213 min  
 Delta R.T.: 0.001 min  
 Response: 4313531507  
 Conc: 474.59 ng/ml



#13 2,4-DB

R.T.: 10.034 min  
 Delta R.T.: 0.000 min  
 Response: 1714093659 ECD\_S  
 Conc: 485.88 ng/ml ClientSampleId : HSTDICC500

#13 2,4-DB

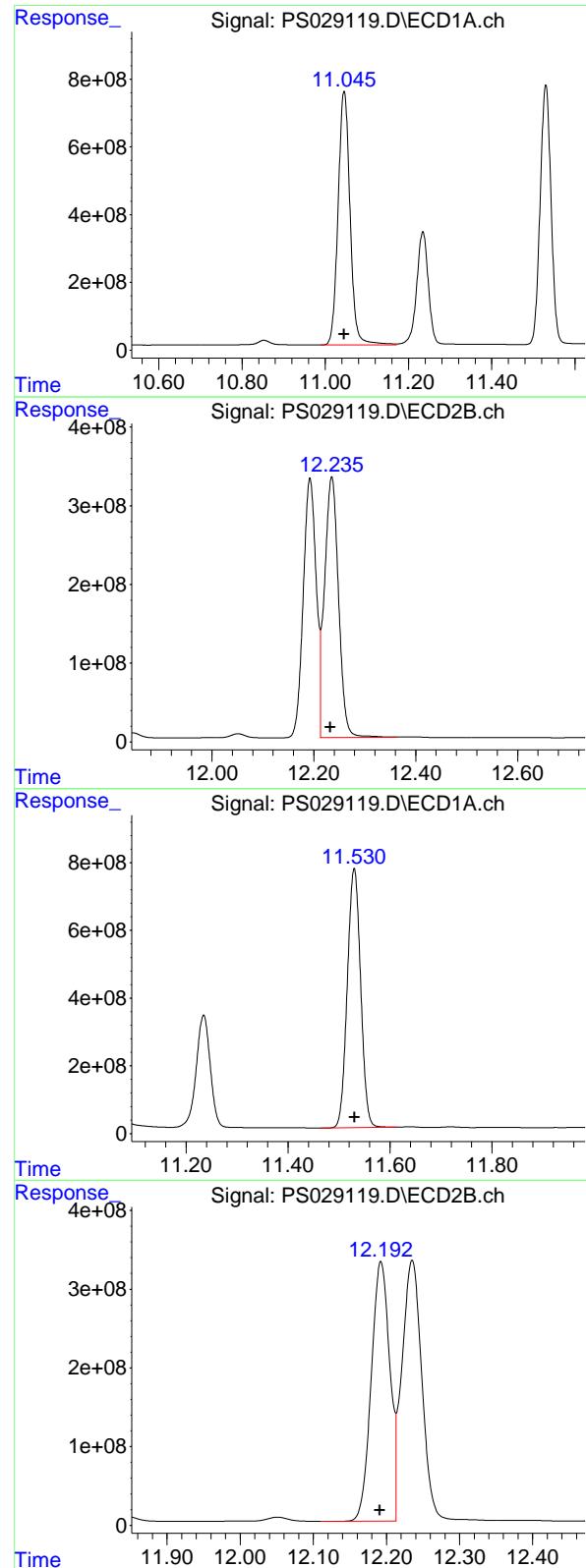
R.T.: 10.777 min  
 Delta R.T.: 0.000 min  
 Response: 432817435  
 Conc: 467.29 ng/ml

#14 DINOSEB

R.T.: 11.235 min  
 Delta R.T.: 0.000 min  
 Response: 6544515995  
 Conc: 472.22 ng/ml

#14 DINOSEB

R.T.: 11.155 min  
 Delta R.T.: 0.001 min  
 Response: 2424786850  
 Conc: 455.16 ng/ml



#15 Picloram

R.T.: 11.045 min  
 Delta R.T.: 0.000 min  
 Instrument: ECD\_S  
 Response: 14933088839  
 Conc: 480.13 ng/ml  
 ClientSampleId: HSTDICC500

#15 Picloram

R.T.: 12.235 min  
 Delta R.T.: 0.003 min  
 Response: 6288304849  
 Conc: 457.85 ng/ml

#16 DCPA

R.T.: 11.530 min  
 Delta R.T.: 0.000 min  
 Response: 13864835014  
 Conc: 491.21 ng/ml

#16 DCPA

R.T.: 12.192 min  
 Delta R.T.: 0.002 min  
 Response: 5819525703  
 Conc: 477.04 ng/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021125\  
 Data File : PS029120.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 11 Feb 2025 18:44  
 Operator : AR\AJ  
 Sample : HSTDICC750  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

**Instrument :**  
**ECD\_S**  
**ClientSampleId :**  
**HSTDICC750**

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 12 01:06:48 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021125.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 01:05:26 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 7.187 7.664 1984.2E6 765.5E6 750.000 750.000

#### Target Compounds

1) T	Dalapon	2.609	2.658	2100.9E6	1295.6E6	682.500	682.500
2) T	3,5-DICHL...	6.365	6.632	2660.8E6	1039.9E6	697.500	697.500
3) T	4-Nitroph...	6.984	7.193	1120.5E6	571.6E6	682.500	682.500
5) T	DICAMBA	7.371	7.860	8298.6E6	3841.0E6	705.000	705.000
6) T	MCPP	7.554	7.965	494.5E6	174.8E6	70.500	70.500
7) T	MCPA	7.702	8.206	671.3E6	244.3E6	69.750	69.750
8) T	DICHLORPROP	8.074	8.571	2138.5E6	942.3E6	705.000	705.000
9) T	2,4-D	8.302	8.897	2282.6E6	985.7E6	705.000	705.000
10) T	Pentachlo...	8.599	9.419	34379.1E6	17023.4E6	712.500	712.500
11) T	2,4,5-TP ...	9.173	9.796	13421.8E6	6865.3E6	712.500	712.500
12) T	2,4,5-T	9.465	10.212	13458.3E6	6475.8E6	712.500	712.500
13) T	2,4-DB	10.034	10.776	2513.5E6	659.9E6	712.500	712.500
14) T	DINOSEB	11.235	11.154	9770.7E6	3755.8E6	705.000	705.000
15) T	Picloram	11.046	12.233	22160.4E6	9785.7E6	712.500	712.500
16) T	DCPA	11.531	12.191	20322.8E6	8783.4E6	720.000	720.000

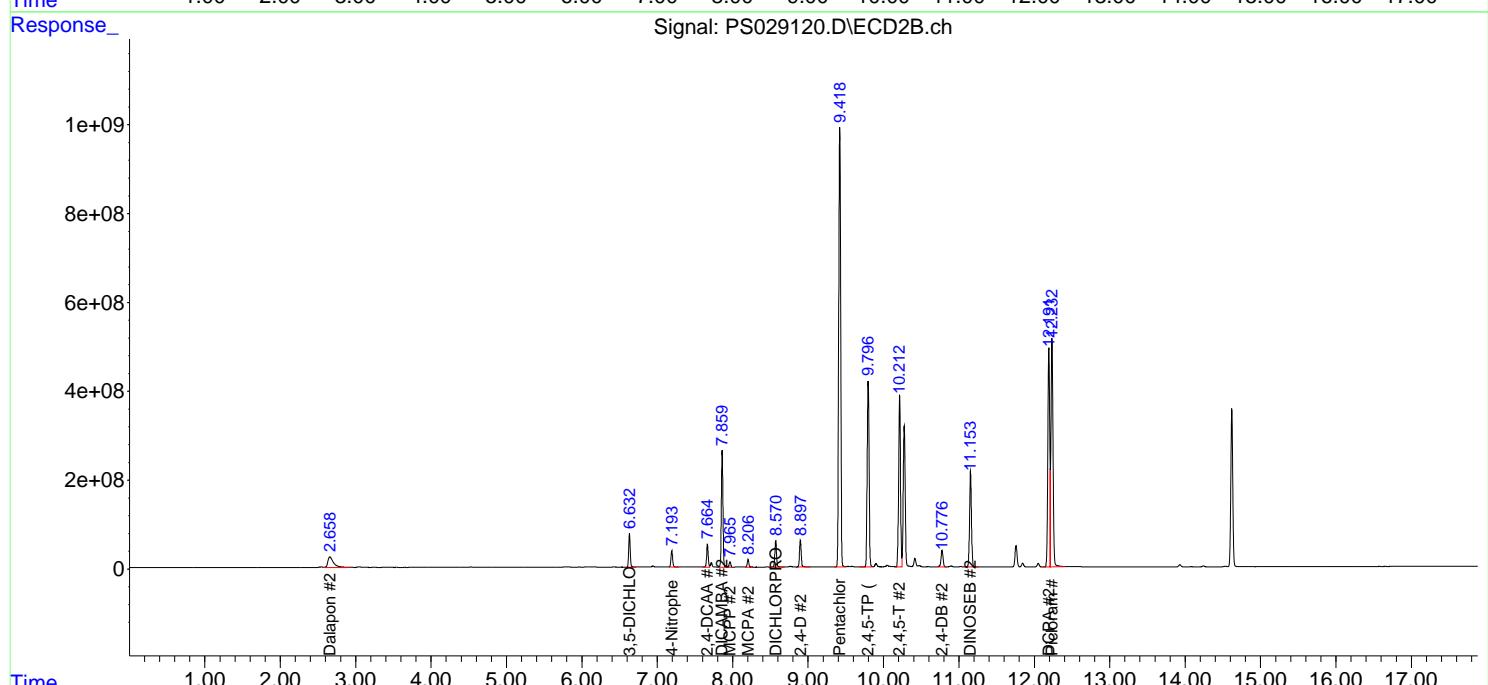
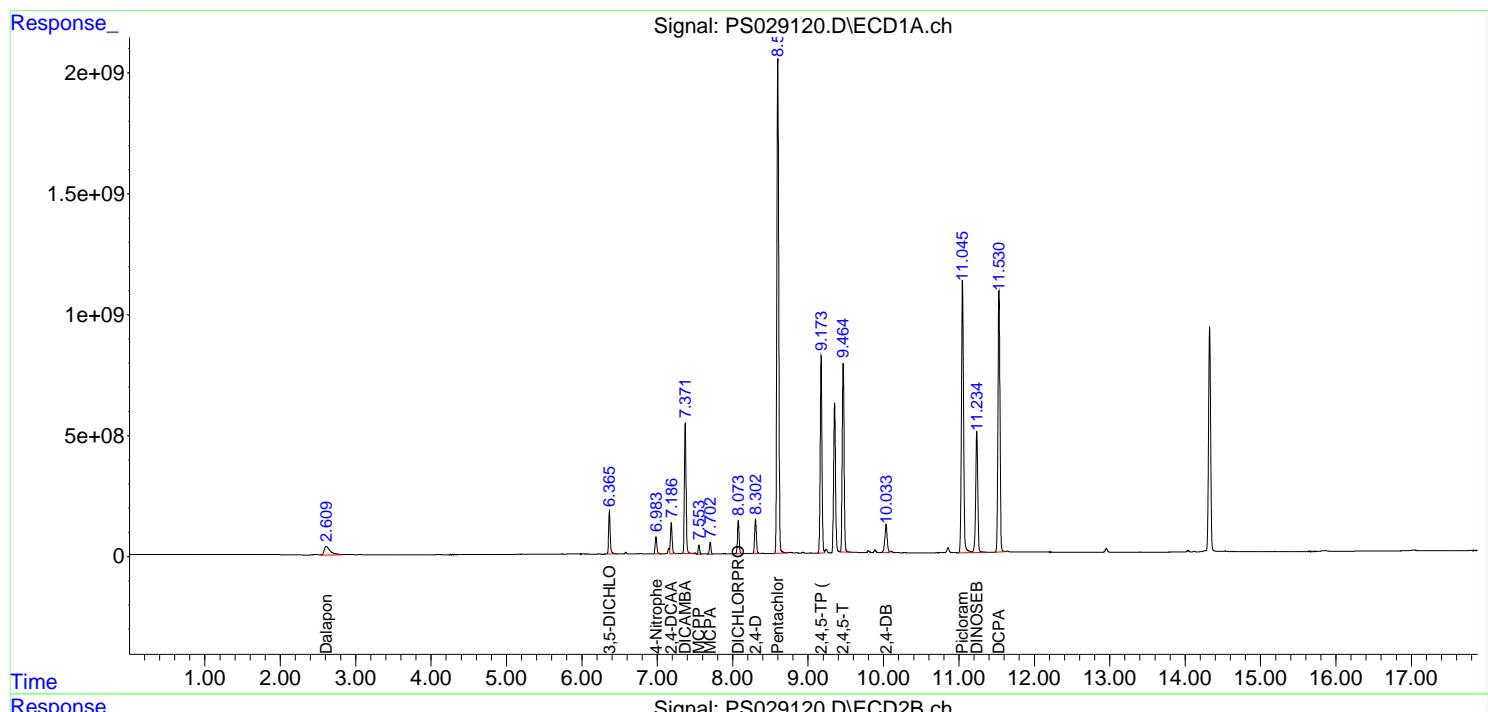
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

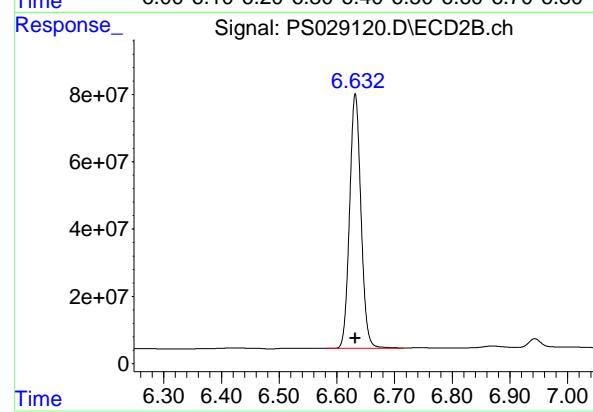
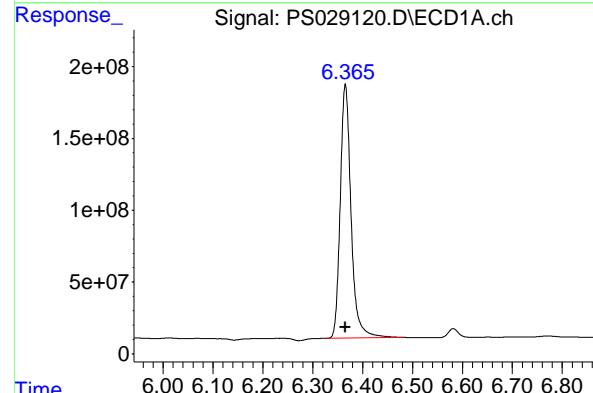
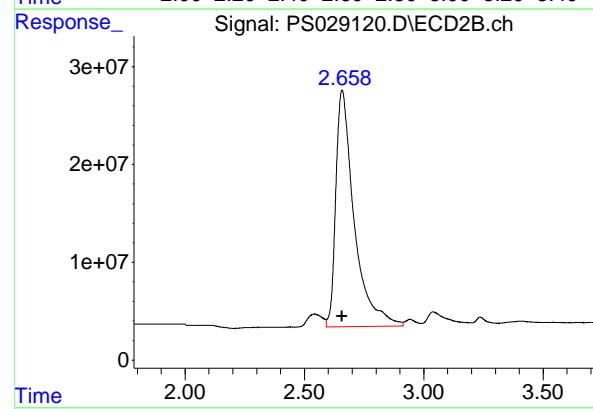
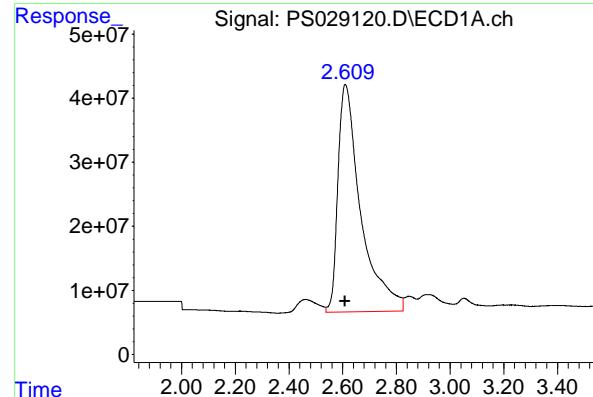
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021125\  
 Data File : PS029120.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 11 Feb 2025 18:44  
 Operator : AR\AJ  
 Sample : HSTDICC750  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

**Instrument :**  
 ECD\_S  
**ClientSampleId :**  
 HSTDICC750

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 12 01:06:48 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021125.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 01:05:26 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1  $\mu$ 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 $\mu$ m





#1 Dalapon

R.T.: 2.609 min  
 Delta R.T.: 0.000 min  
 Response: 2100928662 ECD\_S  
 Conc: 682.50 ng/ml ClientSampleId : HSTDICC750

#1 Dalapon

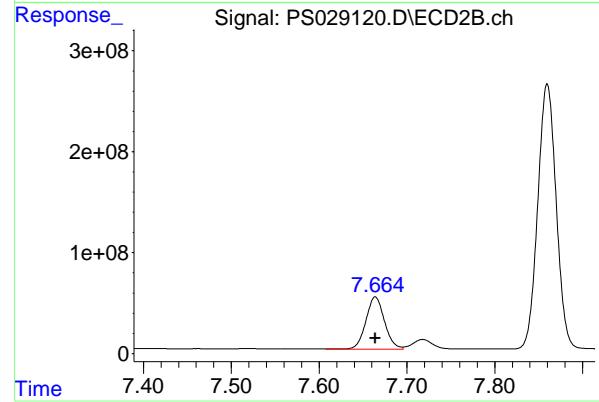
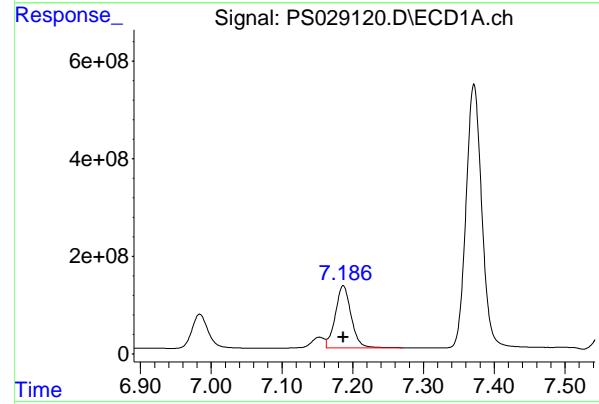
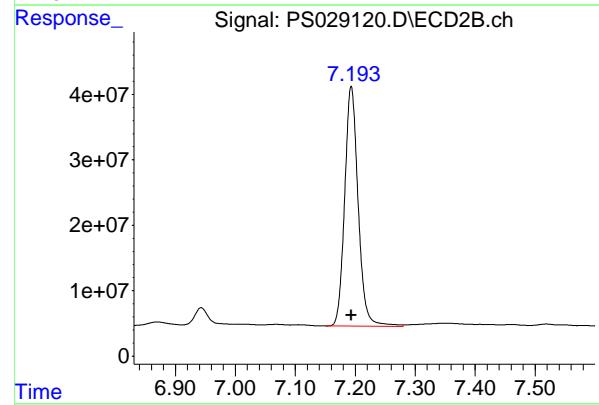
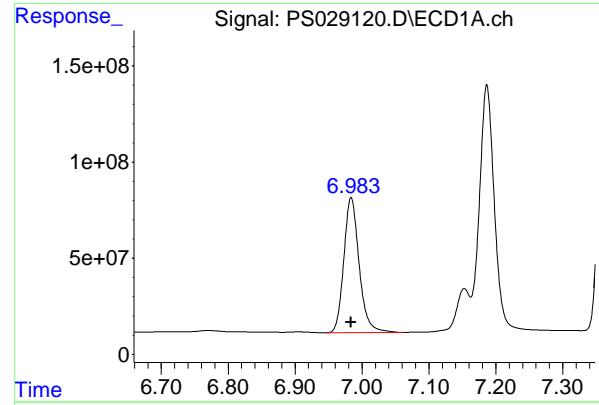
R.T.: 2.658 min  
 Delta R.T.: 0.000 min  
 Response: 1295599938  
 Conc: 682.50 ng/ml

#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.365 min  
 Delta R.T.: 0.000 min  
 Response: 2660836452  
 Conc: 697.50 ng/ml

#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.632 min  
 Delta R.T.: 0.000 min  
 Response: 1039934165  
 Conc: 697.50 ng/ml



## #3 4-Nitrophenol

R.T.: 6.984 min  
 Delta R.T.: 0.000 min  
 Instrument: ECD\_S  
 Response: 1120508681  
 Conc: 682.50 ng/ml  
 ClientSampleId: HSTDICC750

## #3 4-Nitrophenol

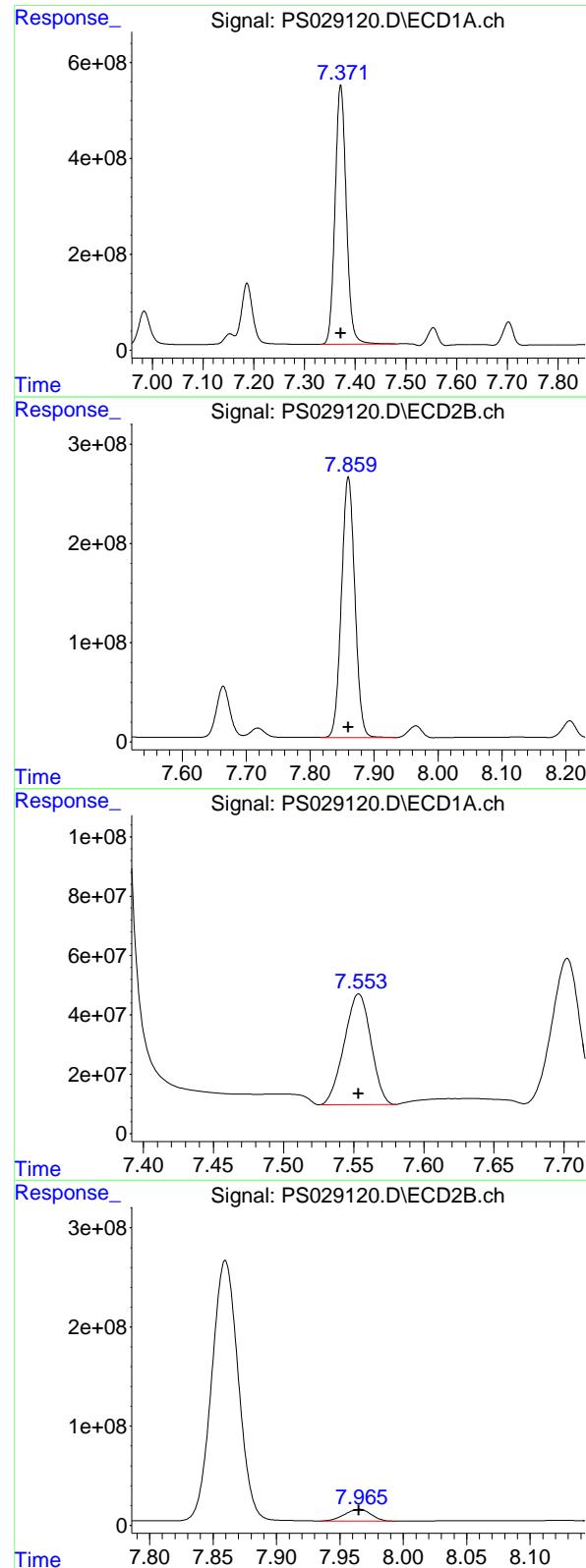
R.T.: 7.193 min  
 Delta R.T.: 0.000 min  
 Response: 571649163  
 Conc: 682.50 ng/ml

## #4 2,4-DCAA

R.T.: 7.187 min  
 Delta R.T.: 0.000 min  
 Response: 1984180316  
 Conc: 750.00 ng/ml

## #4 2,4-DCAA

R.T.: 7.664 min  
 Delta R.T.: 0.000 min  
 Response: 765473573  
 Conc: 750.00 ng/ml



## #5 DICAMBA

R.T.: 7.371 min  
 Delta R.T.: 0.000 min  
 Instrument: ECD\_S  
 Response: 8298590006 ClientSampleId :  
 Conc: 705.00 ng/ml HSTDICC750

## #5 DICAMBA

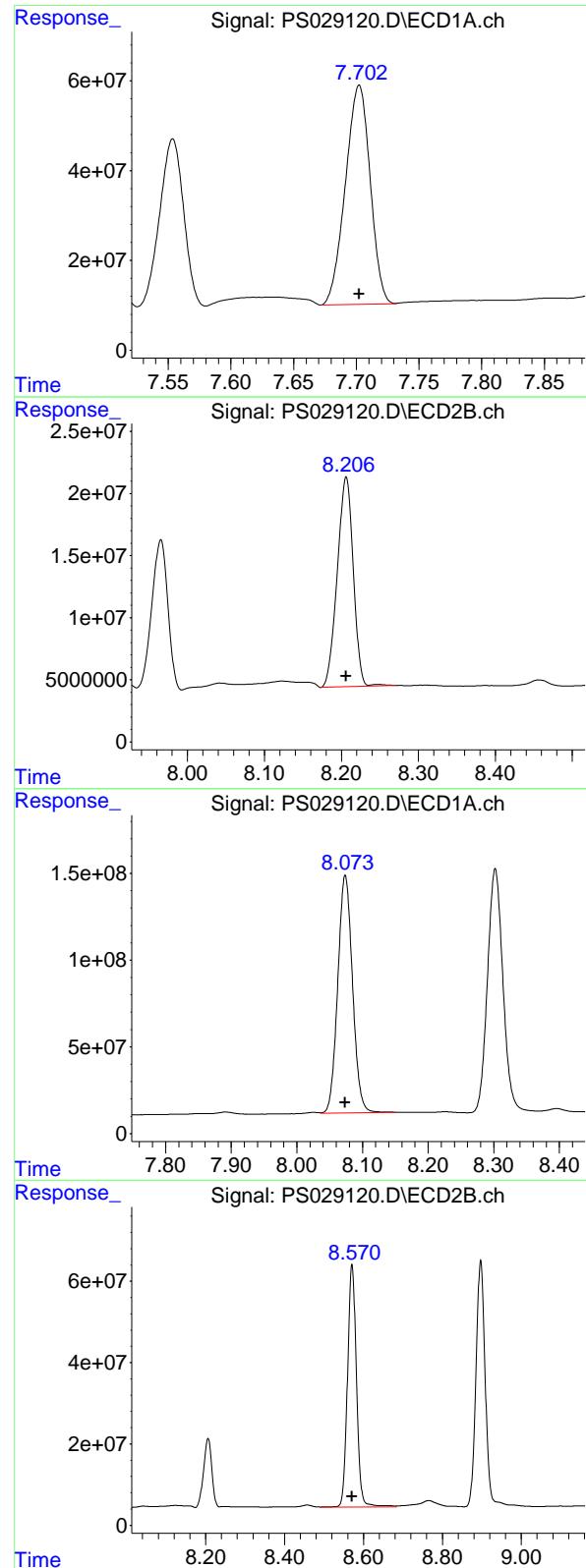
R.T.: 7.860 min  
 Delta R.T.: 0.000 min  
 Response: 3840976225  
 Conc: 705.00 ng/ml

## #6 MCPP

R.T.: 7.554 min  
 Delta R.T.: 0.000 min  
 Response: 494469876  
 Conc: 70.50 ug/ml

## #6 MCPP

R.T.: 7.965 min  
 Delta R.T.: 0.000 min  
 Response: 174786272  
 Conc: 70.50 ug/ml



#7 MCPA

R.T.: 7.702 min  
 Delta R.T.: 0.000 min  
 Response: 671269570 ECD\_S  
 Conc: 69.75 ug/ml ClientSampleId : HSTDICC750

#7 MCPA

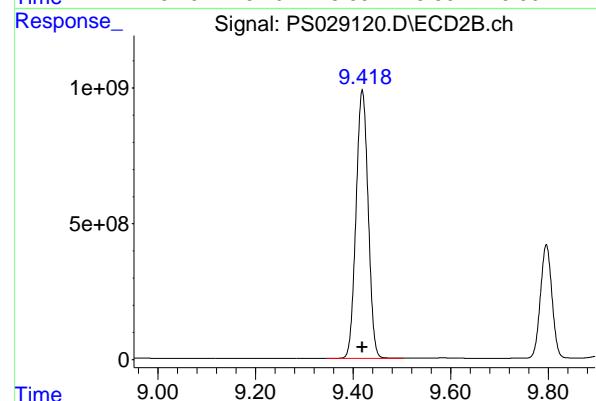
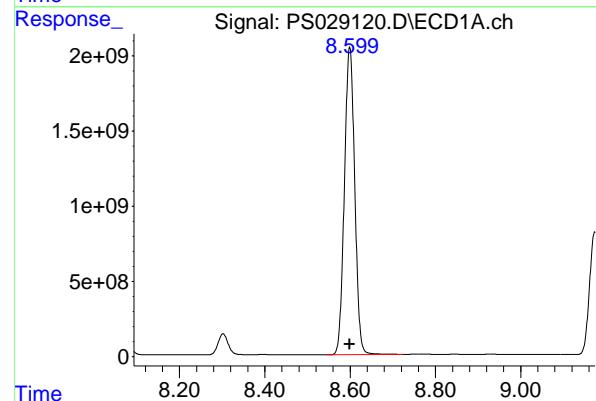
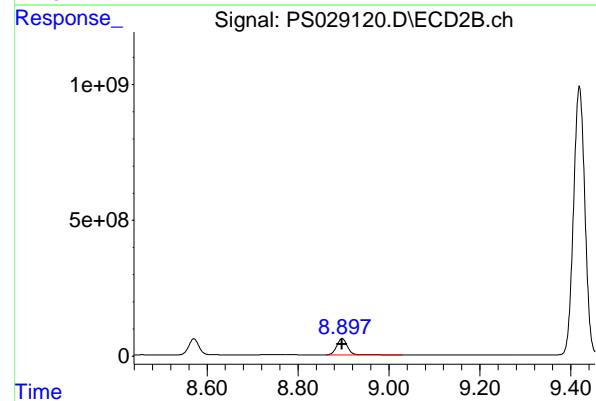
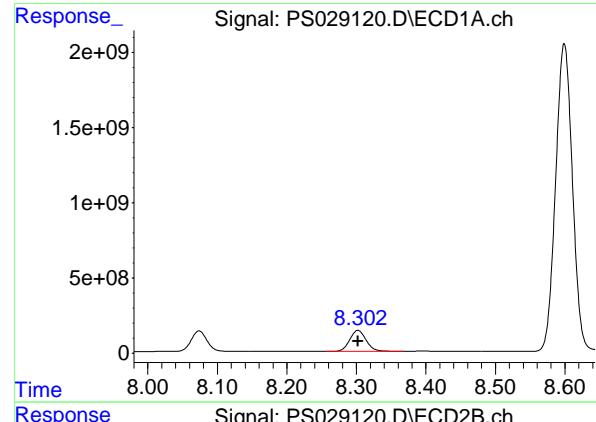
R.T.: 8.206 min  
 Delta R.T.: 0.000 min  
 Response: 244307275  
 Conc: 69.75 ug/ml

#8 DICHLORPROP

R.T.: 8.074 min  
 Delta R.T.: 0.000 min  
 Response: 2138525812  
 Conc: 705.00 ng/ml

#8 DICHLORPROP

R.T.: 8.571 min  
 Delta R.T.: 0.000 min  
 Response: 942274828  
 Conc: 705.00 ng/ml



#9 2,4-D

R.T.: 8.302 min  
 Delta R.T.: 0.000 min  
 Instrument: ECD\_S  
 Response: 2282559851  
 Conc: 705.00 ng/ml  
 ClientSampleId: HSTDICC750

#9 2,4-D

R.T.: 8.897 min  
 Delta R.T.: 0.000 min  
 Response: 985670401  
 Conc: 705.00 ng/ml

#10 Pentachlorophenol

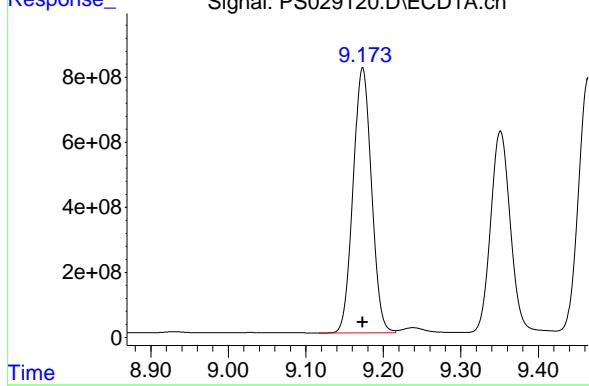
R.T.: 8.599 min  
 Delta R.T.: 0.000 min  
 Response: 34379104848  
 Conc: 712.50 ng/ml

#10 Pentachlorophenol

R.T.: 9.419 min  
 Delta R.T.: 0.000 min  
 Response: 17023417630  
 Conc: 712.50 ng/ml

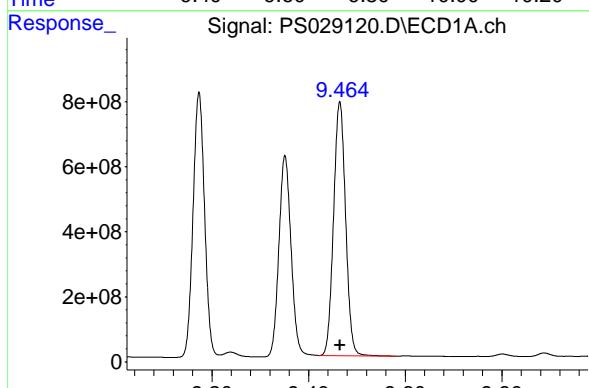
#11 2,4,5-TP (SILVEX)

R.T.: 9.173 min  
 Delta R.T.: 0.000 min  
 Response: 13421822495 ECD\_S  
 Conc: 712.50 ng/ml ClientSampleId :  
 HSTDICC750



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

R.T.: 9.796 min  
 Delta R.T.: 0.000 min  
 Response: 6865336451  
 Conc: 712.50 ng/ml

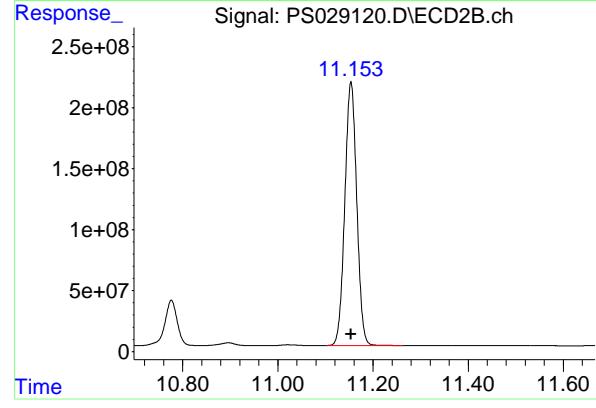
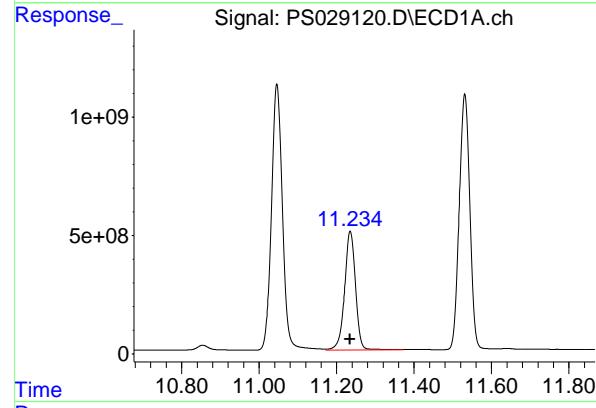
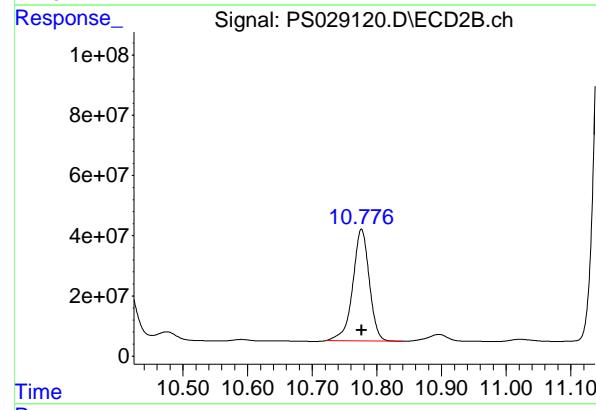
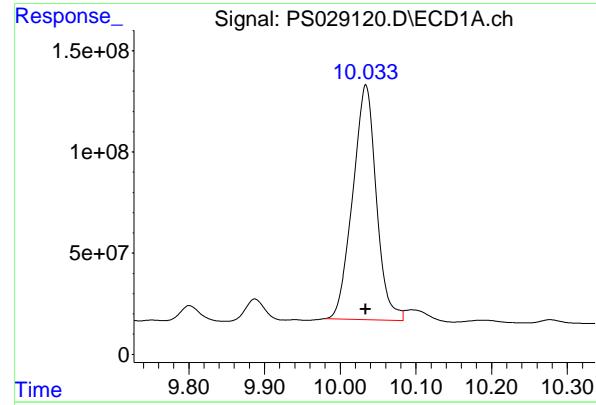


#12 2,4,5-T

R.T.: 9.465 min  
 Delta R.T.: 0.000 min  
 Response: 13458262231  
 Conc: 712.50 ng/ml

#12 2,4,5-T

R.T.: 10.212 min  
 Delta R.T.: 0.000 min  
 Response: 6475828205  
 Conc: 712.50 ng/ml



#13 2,4-DB

R.T.: 10.034 min  
 Delta R.T.: 0.000 min  
 Response: 2513541184 ECD\_S  
 Conc: 712.50 ng/ml ClientSampleId : HSTDICC750

#13 2,4-DB

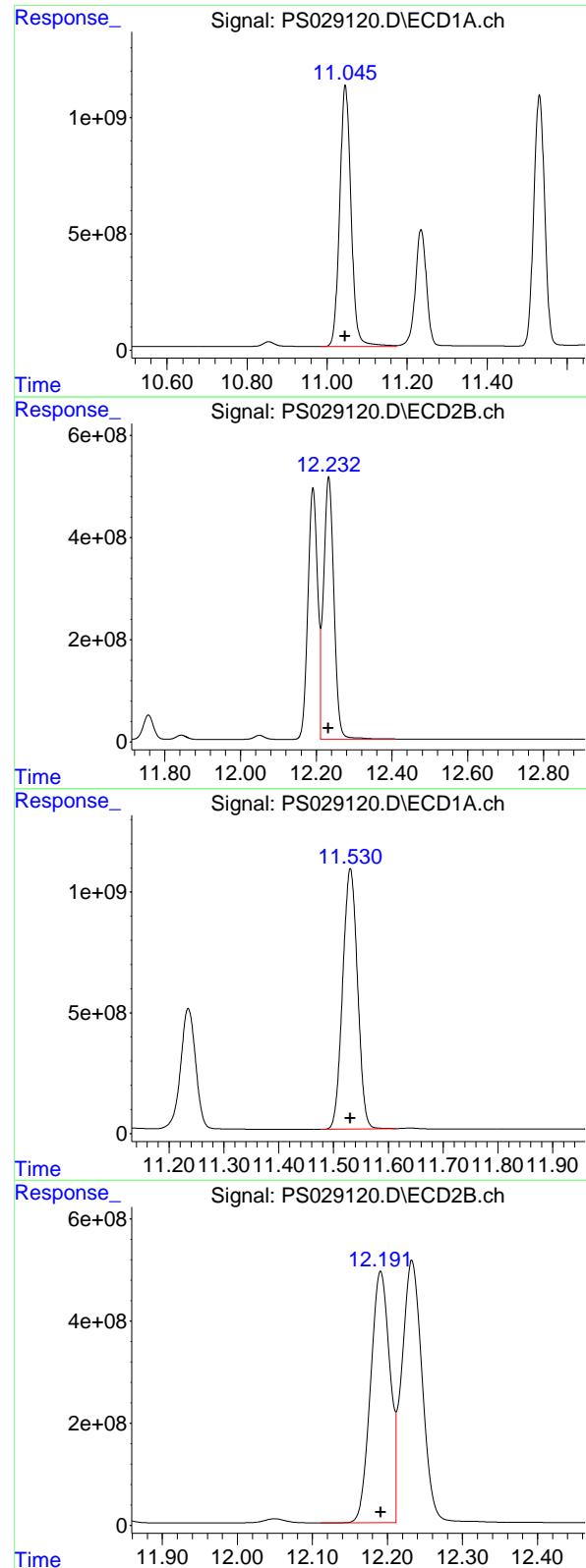
R.T.: 10.776 min  
 Delta R.T.: 0.000 min  
 Response: 659935029  
 Conc: 712.50 ng/ml

#14 DINOSEB

R.T.: 11.235 min  
 Delta R.T.: 0.000 min  
 Response: 9770652242  
 Conc: 705.00 ng/ml

#14 DINOSEB

R.T.: 11.154 min  
 Delta R.T.: 0.000 min  
 Response: 3755780044  
 Conc: 705.00 ng/ml



#15 Picloram

R.T.: 11.046 min  
 Delta R.T.: 0.000 min  
 Instrument: ECD\_S  
 Response: 22160371182  
 Conc: 712.50 ng/ml  
 ClientSampleId : HSTDICC750

#15 Picloram

R.T.: 12.233 min  
 Delta R.T.: 0.000 min  
 Response: 9785677407  
 Conc: 712.50 ng/ml

#16 DCPA

R.T.: 11.531 min  
 Delta R.T.: 0.000 min  
 Response: 20322797189  
 Conc: 720.00 ng/ml

#16 DCPA

R.T.: 12.191 min  
 Delta R.T.: 0.000 min  
 Response: 8783362829  
 Conc: 720.00 ng/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021125\  
 Data File : PS029121.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 11 Feb 2025 19:08  
 Operator : AR\AJ  
 Sample : HSTDICC1000  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

**Instrument :**  
**ECD\_S**  
**ClientSampleId :**  
**HSTDICC1000**

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 12 01:07:03 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021125.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 01:05:26 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 7.187 7.664 2552.2E6 1000.7E6 964.704 980.487

#### Target Compounds

1) T	Dalapon	2.609	2.658	2820.2E6	1666.5E6	916.168	877.864
2) T	3,5-DICHL...	6.366	6.632	3426.4E6	1362.1E6	898.183	913.605
3) T	4-Nitroph...	6.984	7.193	1494.6E6	765.4E6	910.358	913.784
5) T	DICAMBA	7.372	7.860	10791.4E6	5108.5E6	916.774	937.656
6) T	MCPP	7.556	7.967	675.3E6	234.5E6	96.287	94.603
7) T	MCPA	7.705	8.208	903.6E6	326.3E6	93.896	93.152
8) T	DICHLORPROP	8.074	8.571	2755.8E6	1233.0E6	908.478	922.524
9) T	2,4-D	8.302	8.896	2939.6E6	1289.8E6	907.923	922.525
10) T	Pentachlo...	8.603	9.418	41298.0E6	22026.8E6	855.892	921.913
11) T	2,4,5-TP ...	9.174	9.796	17279.7E6	8975.8E6	917.298	931.524
12) T	2,4,5-T	9.464	10.212	17266.8E6	8487.5E6	914.131	933.835
13) T	2,4-DB	10.034	10.775	3257.9E6	875.1E6	923.500	944.812
14) T	DINOSEB	11.236	11.153	13037.5E6	5137.6E6	940.722	964.379
15) T	Picloram	11.045	12.233	28871.9E6	13108.1E6	928.288	954.410
16) T	DCPA	11.531	12.191	25893.5E6	11510.5E6	917.360	943.554

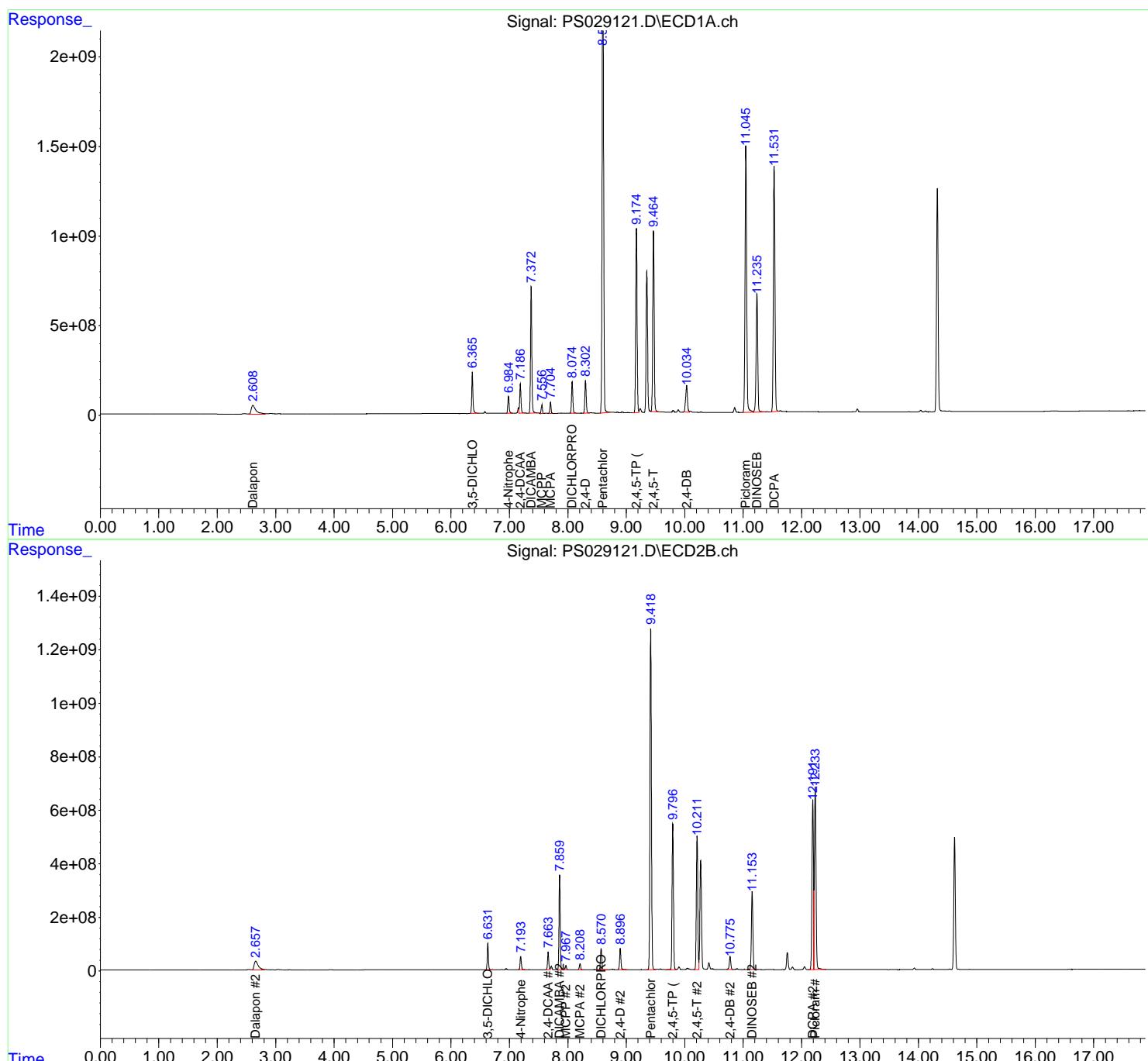
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

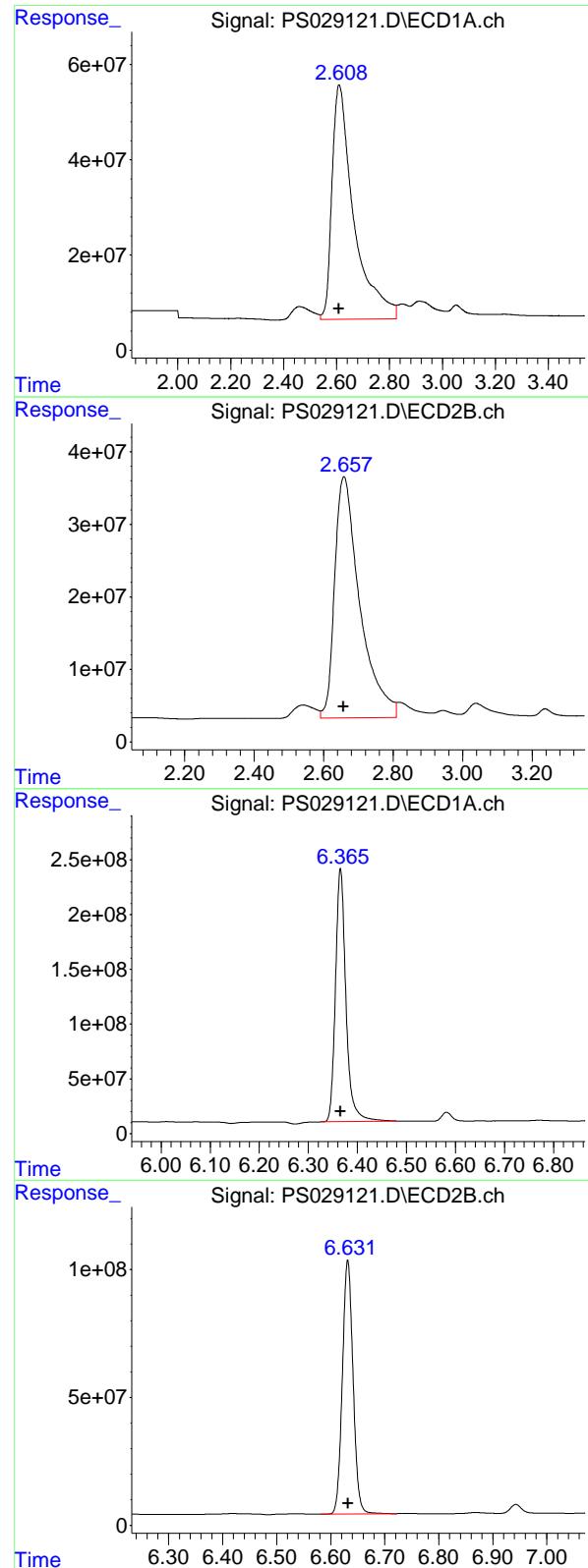
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021125\  
 Data File : PS029121.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 11 Feb 2025 19:08  
 Operator : AR\AJ  
 Sample : HSTDICC1000  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

**Instrument :**  
**ECD\_S**  
**ClientSampleId :**  
**HSTDICC1000**

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 12 01:07:03 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021125.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 01:05:26 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1  $\mu$ 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 $\mu$ m





## #1 Dalapon

R.T.: 2.609 min  
 Delta R.T.: 0.000 min  
 Response: 2820223770 ECD\_S  
 Conc: 916.17 ng/ml ClientSampleId : HSTDICC1000

## #1 Dalapon

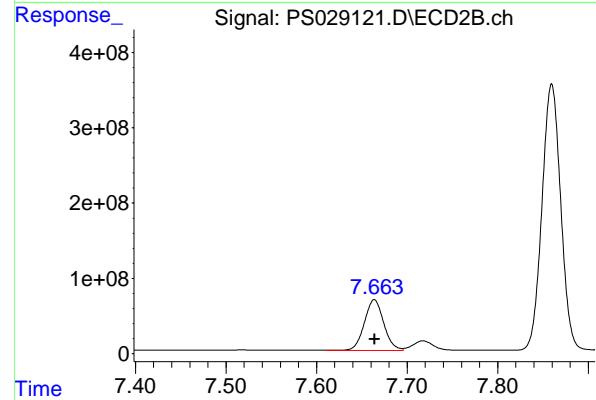
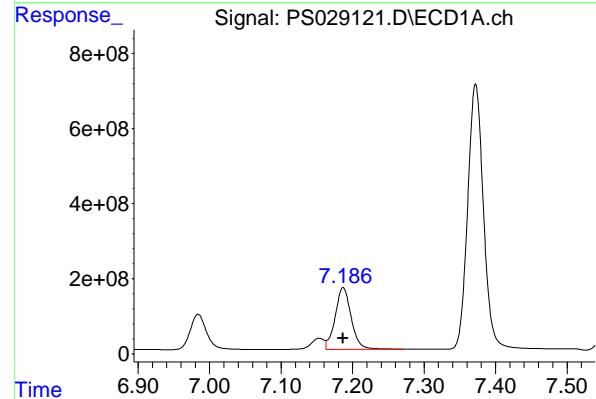
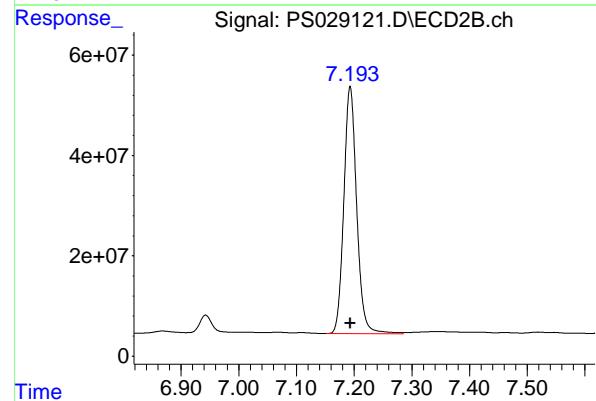
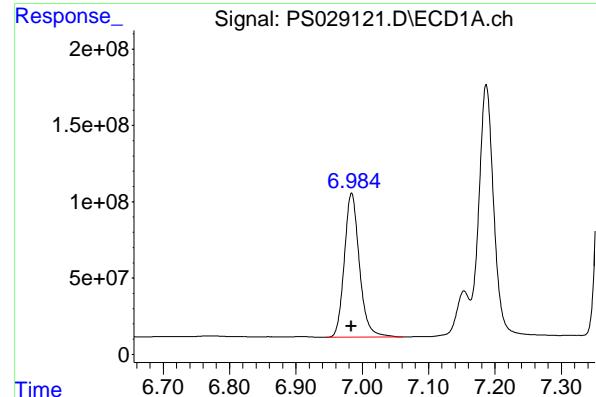
R.T.: 2.658 min  
 Delta R.T.: 0.000 min  
 Response: 1666462122  
 Conc: 877.86 ng/ml

## #2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.366 min  
 Delta R.T.: 0.000 min  
 Response: 3426404871  
 Conc: 898.18 ng/ml

## #2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.632 min  
 Delta R.T.: 0.000 min  
 Response: 1362134985  
 Conc: 913.61 ng/ml



#3 4-Nitrophenol

R.T.: 6.984 min  
 Delta R.T.: 0.000 min  
 Response: 1494599018 ECD\_S  
 Conc: 910.36 ng/ml ClientSampleId : HSTDICC1000

#3 4-Nitrophenol

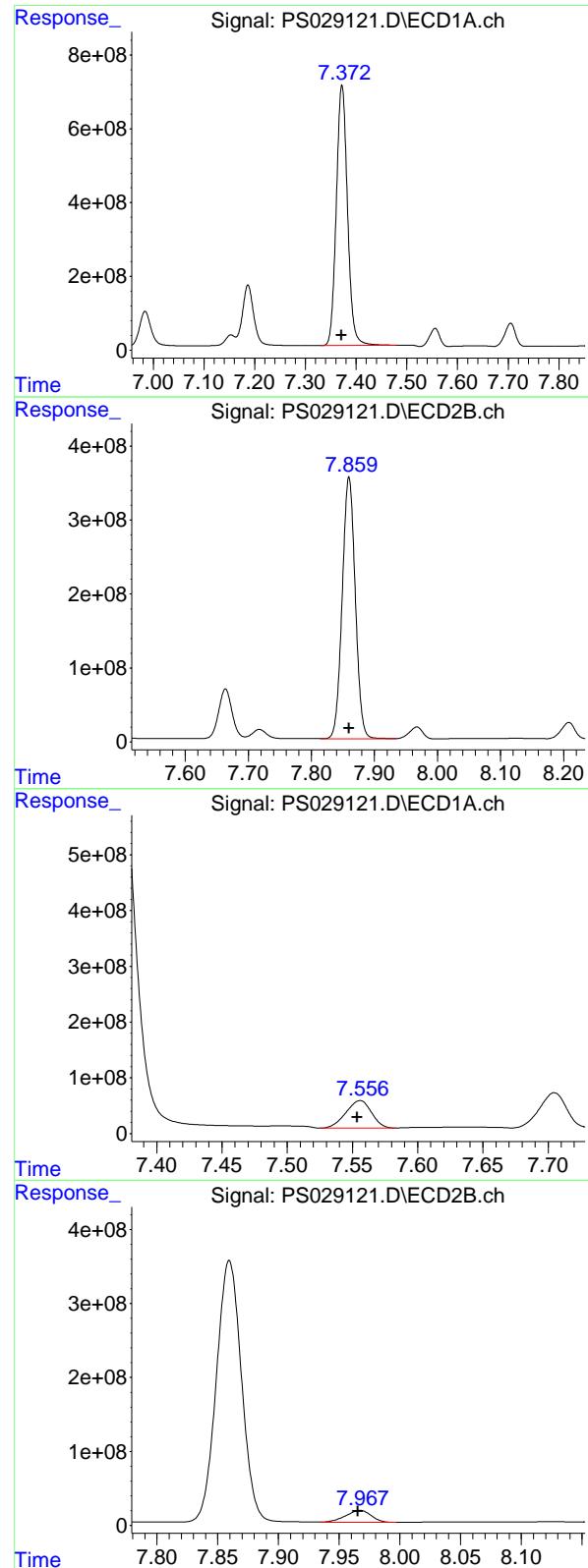
R.T.: 7.193 min  
 Delta R.T.: 0.000 min  
 Response: 765368287  
 Conc: 913.78 ng/ml

#4 2,4-DCAA

R.T.: 7.187 min  
 Delta R.T.: 0.000 min  
 Response: 2552194601  
 Conc: 964.70 ng/ml

#4 2,4-DCAA

R.T.: 7.664 min  
 Delta R.T.: 0.000 min  
 Response: 1000716211  
 Conc: 980.49 ng/ml



#5 DICAMBA

R.T.: 7.372 min  
 Delta R.T.: 0.000 min  
 Instrument: ECD\_S  
 Response: 10791390872  
 Conc: 916.77 ng/ml  
 ClientSampleId : HSTDICC1000

#5 DICAMBA

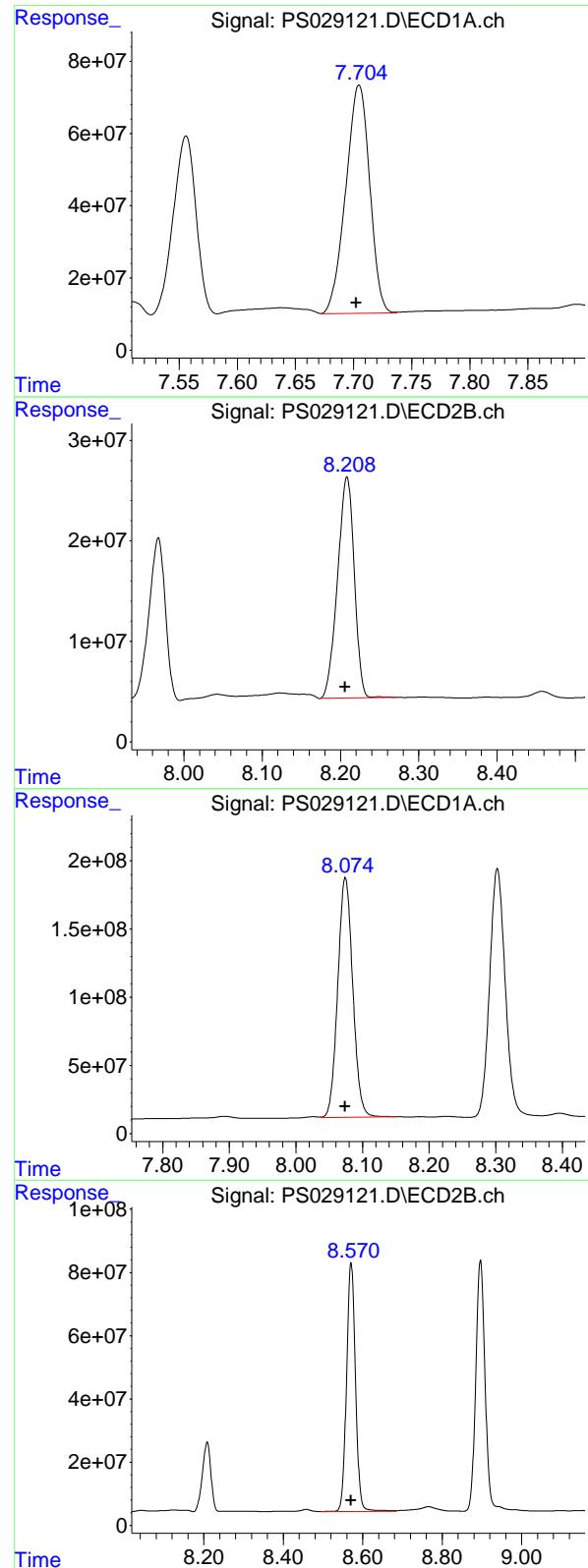
R.T.: 7.860 min  
 Delta R.T.: 0.000 min  
 Response: 5108531118  
 Conc: 937.66 ng/ml

#6 MCPP

R.T.: 7.556 min  
 Delta R.T.: 0.002 min  
 Response: 675335618  
 Conc: 96.29 ug/ml

#6 MCPP

R.T.: 7.967 min  
 Delta R.T.: 0.002 min  
 Response: 234542360  
 Conc: 94.60 ug/ml



## #7 MCPA

R.T.: 7.705 min  
 Delta R.T.: 0.002 min  
 Response: 903645136 ECD\_S  
 Conc: 93.90 ug/ml ClientSampleId : HSTDICC1000

## #7 MCPA

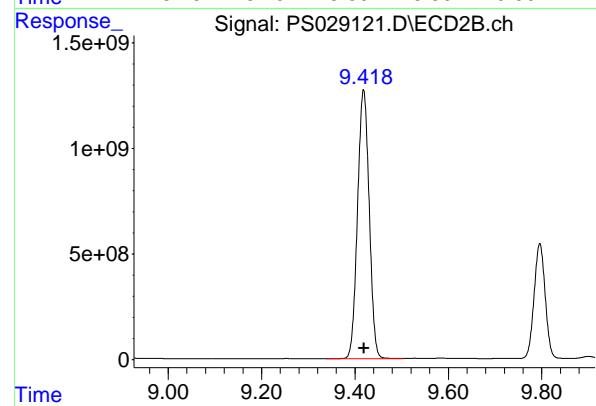
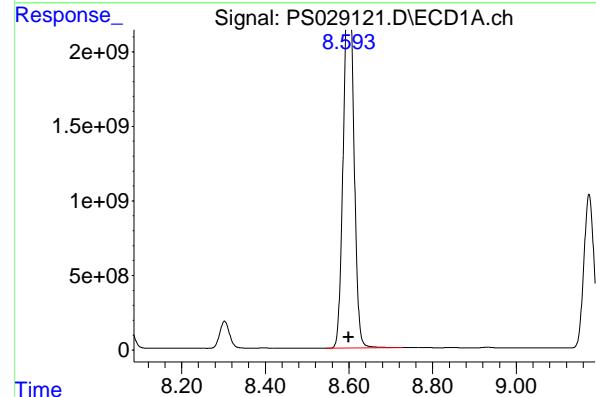
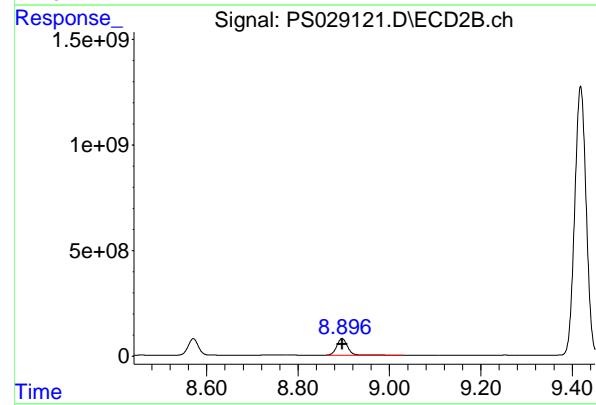
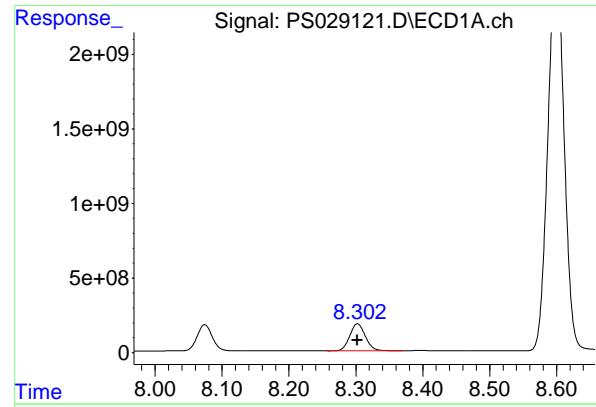
R.T.: 8.208 min  
 Delta R.T.: 0.002 min  
 Response: 326275250  
 Conc: 93.15 ug/ml

## #8 DICHLORPROP

R.T.: 8.074 min  
 Delta R.T.: 0.000 min  
 Response: 2755751028  
 Conc: 908.48 ng/ml

## #8 DICHLORPROP

R.T.: 8.571 min  
 Delta R.T.: 0.000 min  
 Response: 1233009152  
 Conc: 922.52 ng/ml



#9 2,4-D

R.T.: 8.302 min  
 Delta R.T.: 0.000 min  
 Instrument: ECD\_S  
 Response: 2939559059  
 Conc: 907.92 ng/ml  
 ClientSampleId: HSTDICC1000

#9 2,4-D

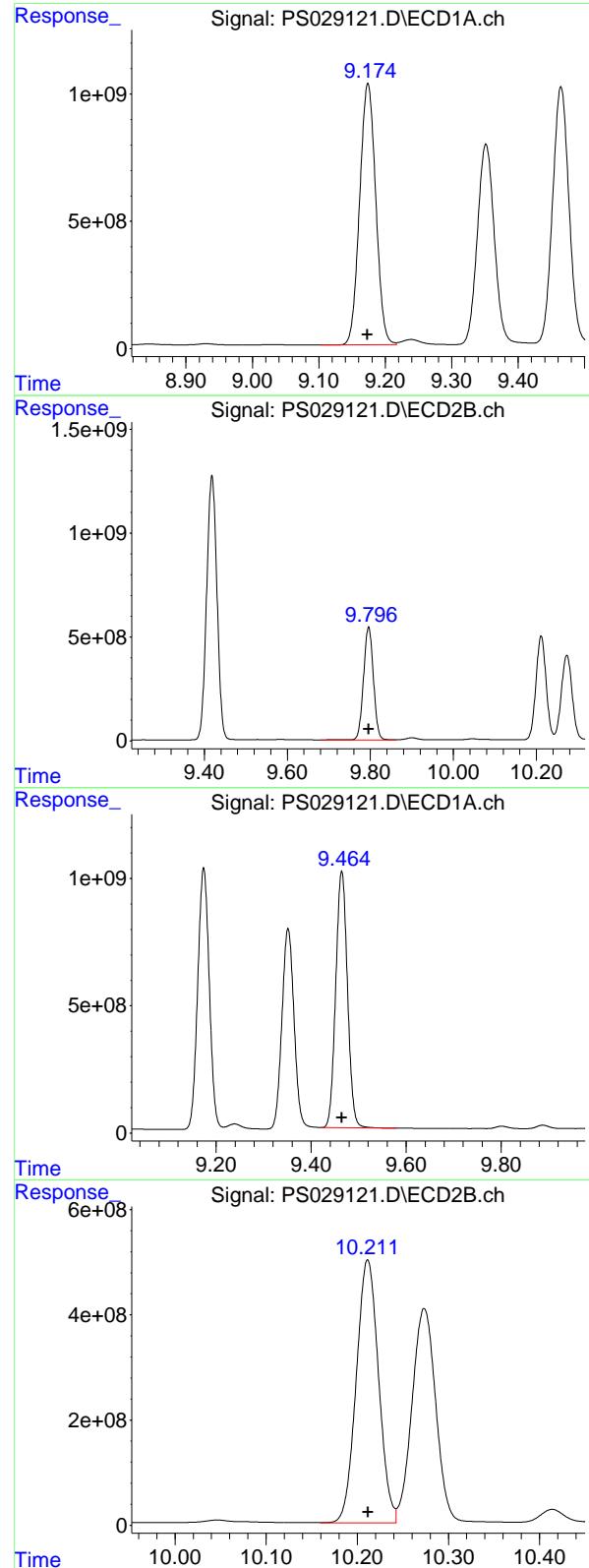
R.T.: 8.896 min  
 Delta R.T.: 0.000 min  
 Response: 1289795811  
 Conc: 922.53 ng/ml

#10 Pentachlorophenol

R.T.: 8.603 min  
 Delta R.T.: 0.004 min  
 Response: 41297978401  
 Conc: 855.89 ng/ml

#10 Pentachlorophenol

R.T.: 9.418 min  
 Delta R.T.: 0.000 min  
 Response: 22026809215  
 Conc: 921.91 ng/ml



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

R.T.: 9.174 min  
 Delta R.T.: 0.000 min  
 Response: 17279738389 ECD\_S  
 Conc: 917.30 ng/ml ClientSampleId : HSTDICC1000

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

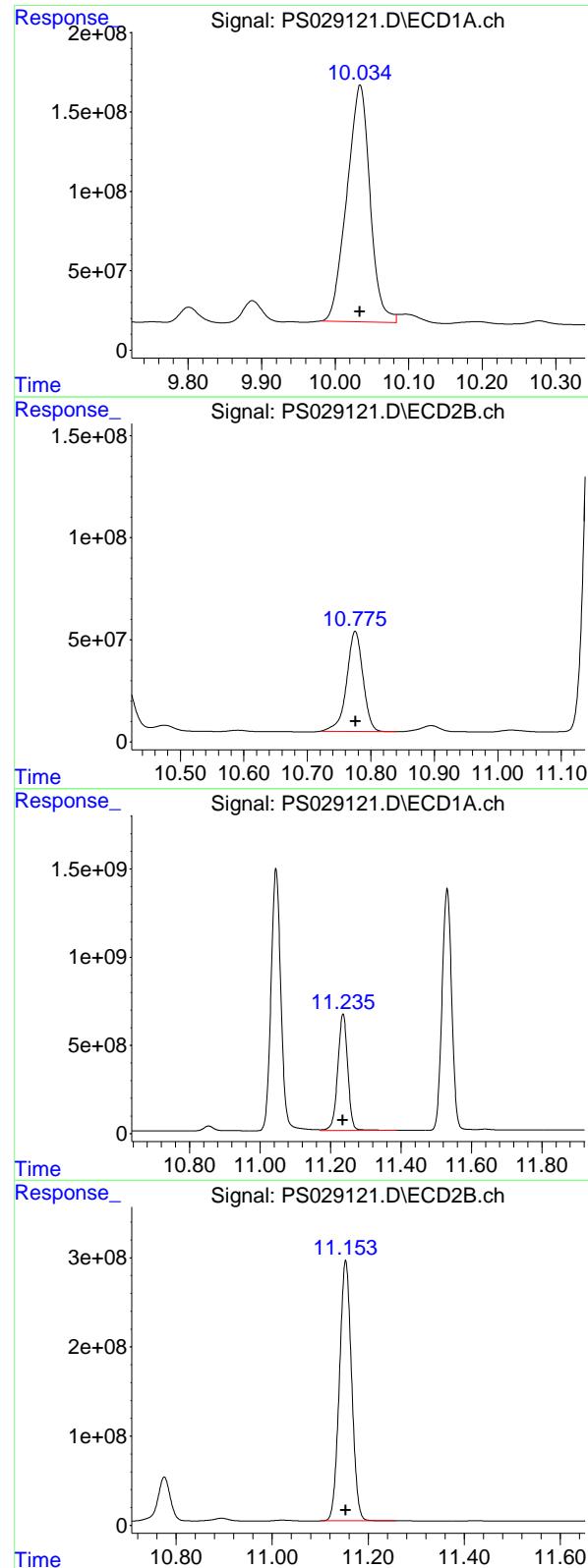
R.T.: 9.796 min  
 Delta R.T.: 0.000 min  
 Response: 8975754270  
 Conc: 931.52 ng/ml

#12 2,4,5-T

R.T.: 9.464 min  
 Delta R.T.: 0.000 min  
 Response: 17266824720  
 Conc: 914.13 ng/ml

#12 2,4,5-T

R.T.: 10.212 min  
 Delta R.T.: 0.000 min  
 Response: 8487513285  
 Conc: 933.83 ng/ml



#13 2,4-DB

R.T.: 10.034 min  
 Delta R.T.: 0.000 min  
 Response: 3257902642 ECD\_S  
 Conc: 923.50 ng/ml ClientSampleId : HSTDICC1000

#13 2,4-DB

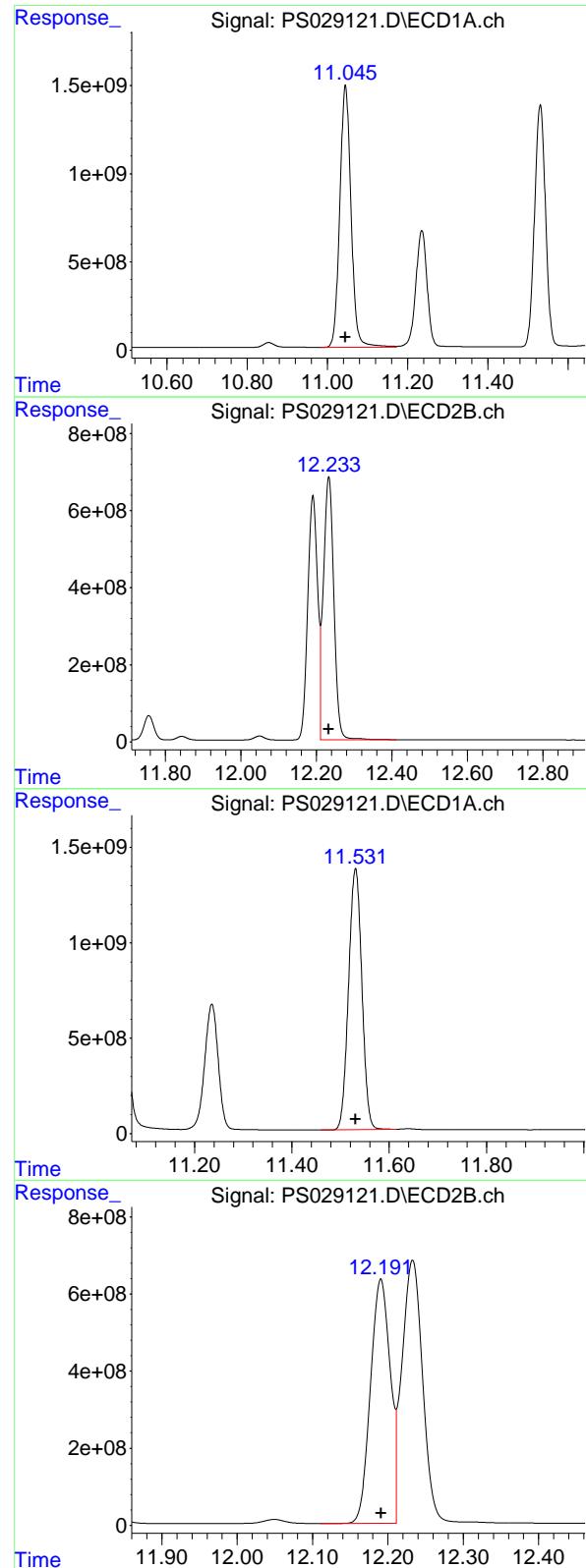
R.T.: 10.775 min  
 Delta R.T.: 0.000 min  
 Response: 875108266  
 Conc: 944.81 ng/ml

#14 DINOSEB

R.T.: 11.236 min  
 Delta R.T.: 0.000 min  
 Response: 13037547371  
 Conc: 940.72 ng/ml

#14 DINOSEB

R.T.: 11.153 min  
 Delta R.T.: 0.000 min  
 Response: 5137582192  
 Conc: 964.38 ng/ml



#15 Picloram

R.T.: 11.045 min  
 Delta R.T.: 0.000 min  
 Instrument: ECD\_S  
 Response: 28871878420  
 Conc: 928.29 ng/ml  
 ClientSampleId: HSTDICC1000

#15 Picloram

R.T.: 12.233 min  
 Delta R.T.: 0.000 min  
 Response: 13108136881  
 Conc: 954.41 ng/ml

#16 DCPA

R.T.: 11.531 min  
 Delta R.T.: 0.000 min  
 Response: 25893513431  
 Conc: 917.36 ng/ml

#16 DCPA

R.T.: 12.191 min  
 Delta R.T.: 0.000 min  
 Response: 11510526504  
 Conc: 943.55 ng/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021125\  
 Data File : PS029122.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 11 Feb 2025 19:32  
 Operator : AR\AJ  
 Sample : HSTDICC1500  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

**Instrument :**  
**ECD\_S**  
**ClientSampleId :**  
**HSTDICC1500**

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 12 01:07:18 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021125.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 01:05:26 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 7.186 7.664 3650.6E6 1473.1E6 1379.883 1443.324

#### Target Compounds

1) T	Dalapon	2.610	2.657	4247.8E6	2500.2E6	1379.916	1317.063
2) T	3,5-DICHL...	6.365	6.632	4909.3E6	2003.1E6	1286.903	1343.512
3) T	4-Nitroph...	6.983	7.193	2233.1E6	1147.8E6	1360.194	1370.368
5) T	DICAMBA	7.371	7.860	15558.3E6	7590.4E6	1321.743	1393.193
6) T	MCPP	7.558	7.971	1036.7E6	356.1E6	147.804	143.622
7) T	MCPA	7.709	8.213	1370.6E6	492.4E6	142.418	140.582
8) T	DICHLORPROP	8.074	8.571	3959.5E6	1811.1E6	1305.322	1355.070
9) T	2,4-D	8.302	8.896	4209.5E6	1905.6E6	1300.149	1362.993
10) T	Pentachlo...	8.607	9.419	48540.5E6	31287.5E6	1005.992	1309.511 #
11) T	2,4,5-TP ...	9.173	9.796	24469.4E6	13051.8E6	1298.963	1354.549
12) T	2,4,5-T	9.464	10.212	24490.1E6	12378.3E6	1296.543	1361.920
13) T	2,4-DB	10.033	10.776	4826.5E6	1312.1E6	1368.136	1416.614
14) T	DINOSEB	11.235	11.155	19121.4E6	7837.4E6	1379.702	1471.169
15) T	Picloram	11.045	12.234	41664.0E6	19364.5E6	1339.581	1409.937
16) T	DCPA	11.530	12.192	36271.3E6	16705.5E6	1285.026	1369.399

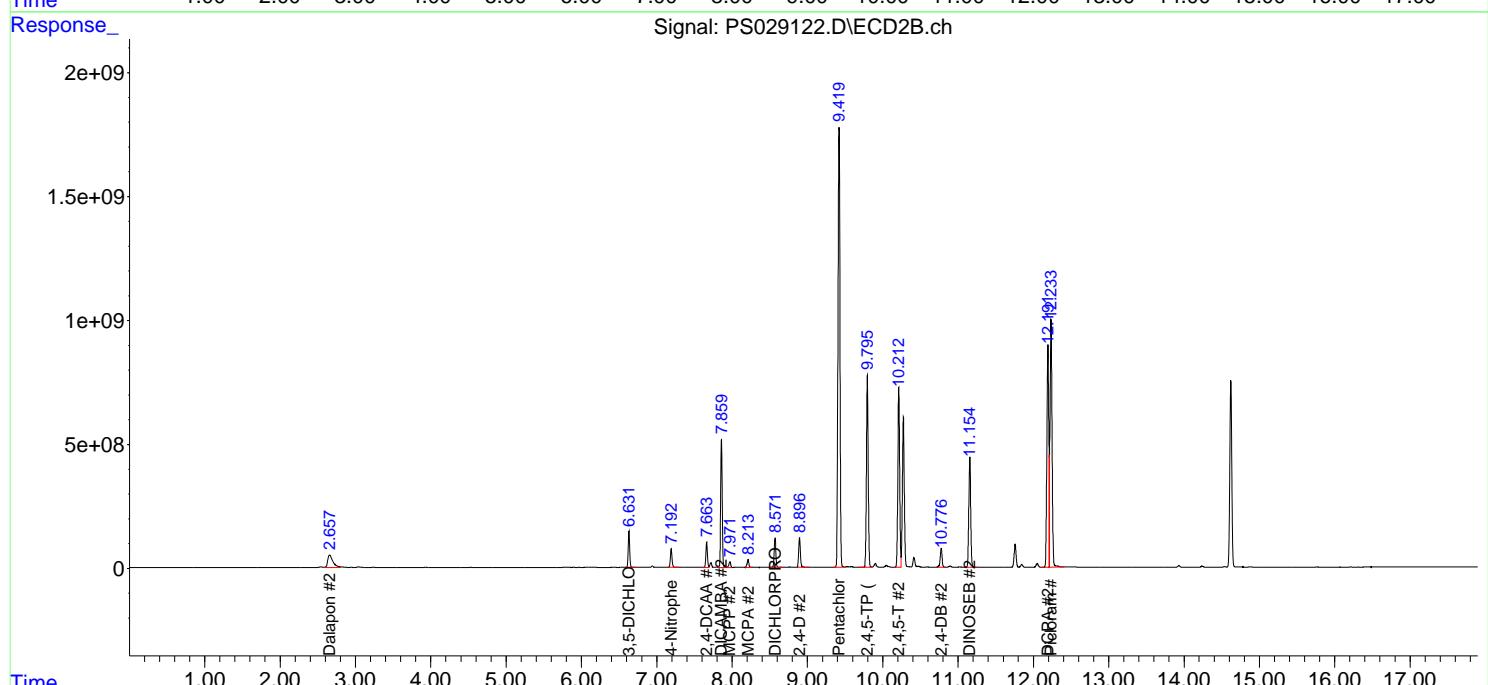
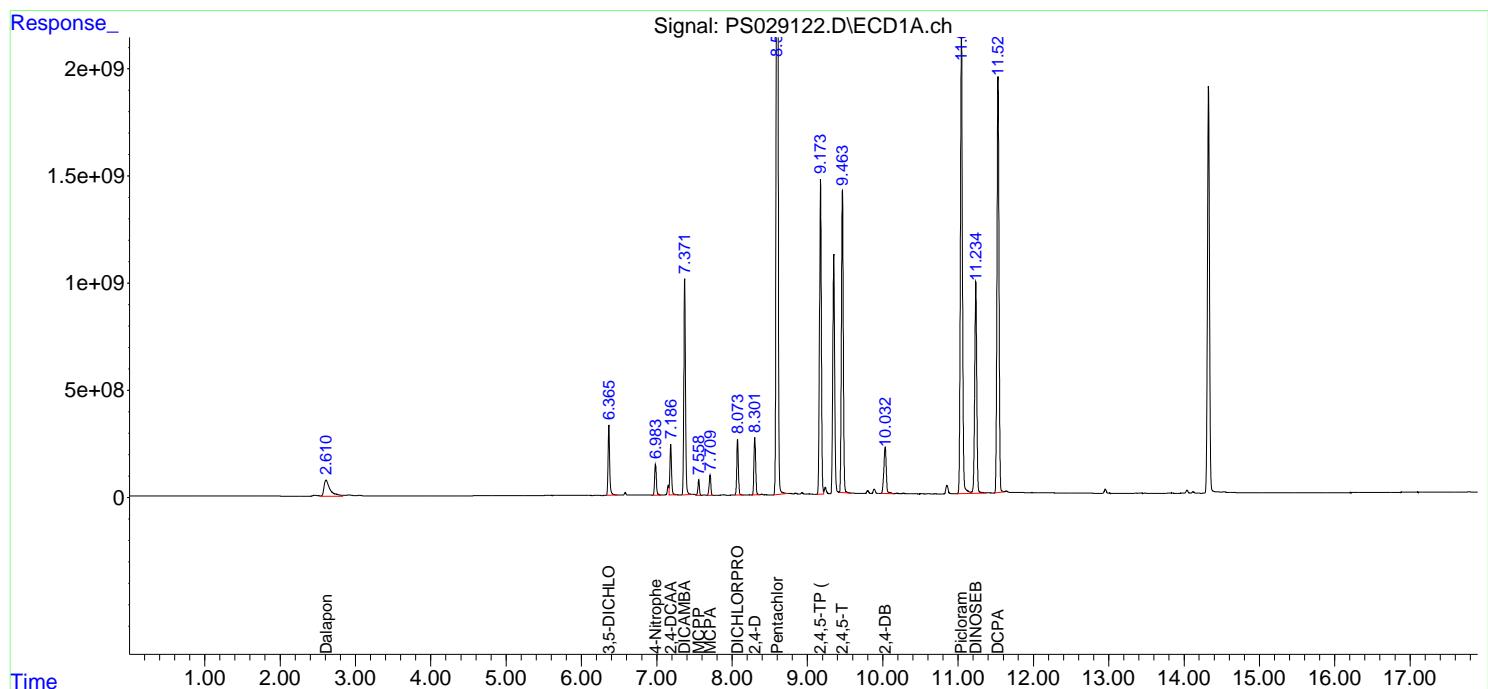
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

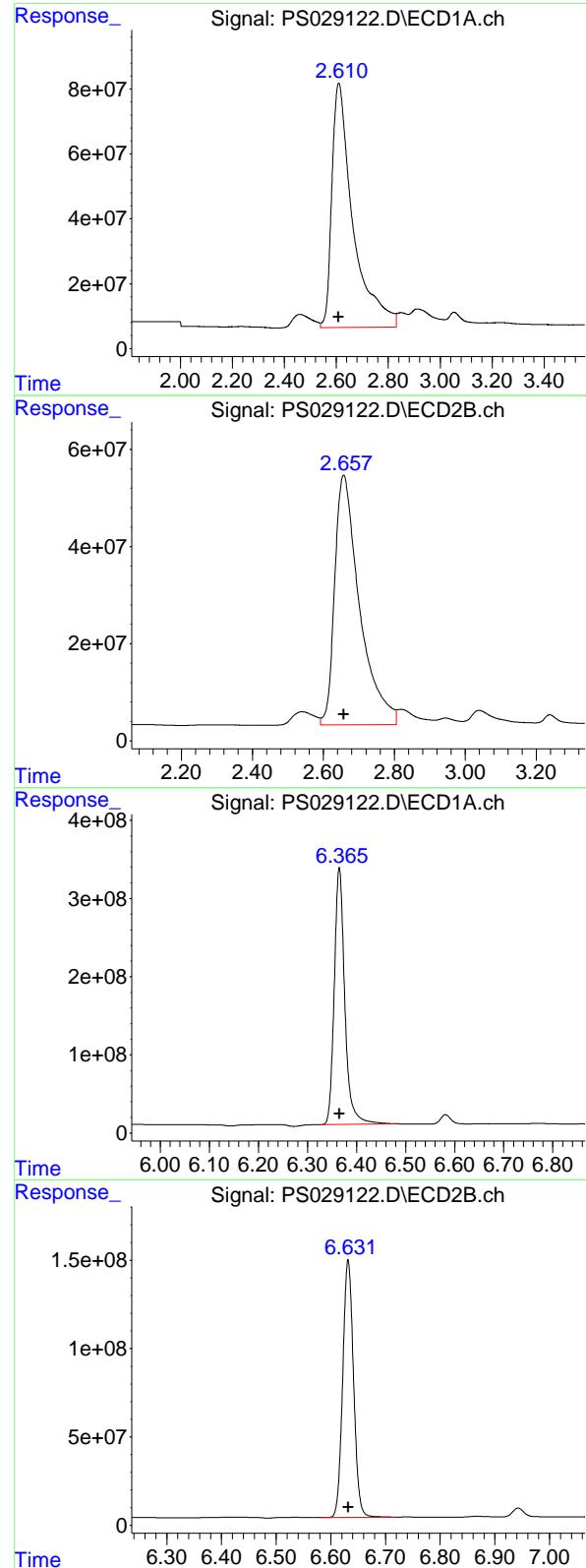
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021125\  
 Data File : PS029122.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 11 Feb 2025 19:32  
 Operator : AR\AJ  
 Sample : HSTDICC1500  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

**Instrument :**  
**ECD\_S**  
**ClientSampleId :**  
**HSTDICC1500**

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 12 01:07:18 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021125.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 01:05:26 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1  $\mu$ 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 $\mu$ m





#1 Dalapon

R.T.: 2.610 min  
 Delta R.T.: 0.000 min  
 Instrument: ECD\_S  
 Response: 4247771653  
 Conc: 1379.92 ng/ml  
 ClientSampleId : HSTDICC1500

#1 Dalapon

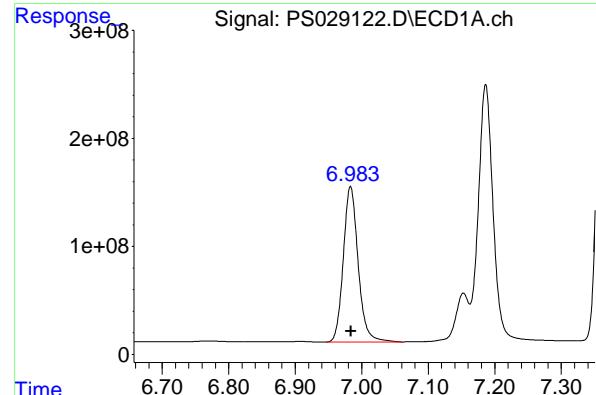
R.T.: 2.657 min  
 Delta R.T.: 0.000 min  
 Response: 2500199770  
 Conc: 1317.06 ng/ml

#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.365 min  
 Delta R.T.: 0.000 min  
 Response: 4909303861  
 Conc: 1286.90 ng/ml

#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.632 min  
 Delta R.T.: 0.000 min  
 Response: 2003102924  
 Conc: 1343.51 ng/ml



## #3 4-Nitrophenol

R.T.: 6.983 min  
 Delta R.T.: 0.000 min  
 Instrument: ECD\_S  
 Response: 2233127821  
 Conc: 1360.19 ng/ml  
 ClientSampleId : HSTDICC1500

## #3 4-Nitrophenol

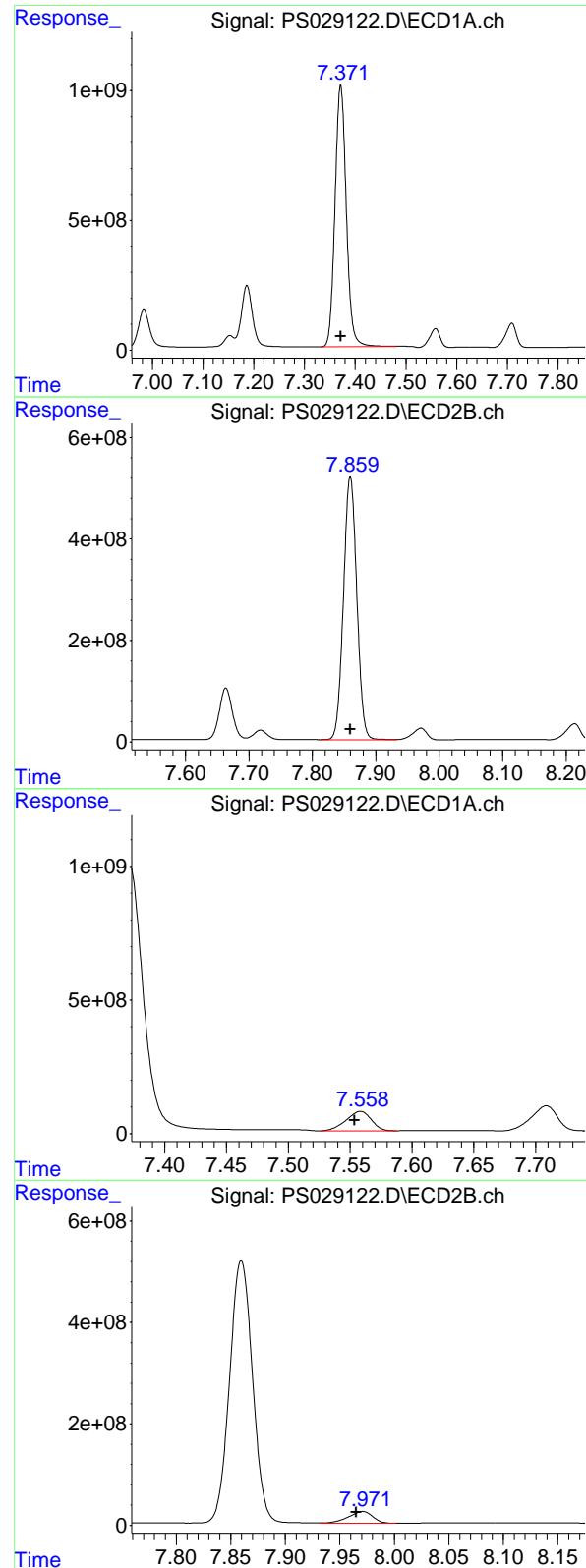
R.T.: 7.193 min  
 Delta R.T.: 0.000 min  
 Response: 1147794138  
 Conc: 1370.37 ng/ml

## #4 2,4-DCAA

R.T.: 7.186 min  
 Delta R.T.: 0.000 min  
 Response: 3650583384  
 Conc: 1379.88 ng/ml

## #4 2,4-DCAA

R.T.: 7.664 min  
 Delta R.T.: 0.000 min  
 Response: 1473101855  
 Conc: 1443.32 ng/ml



#5 DICAMBA

R.T.: 7.371 min  
 Delta R.T.: 0.000 min  
 Instrument: ECD\_S  
 Response: 15558302759  
 Conc: 1321.74 ng/ml  
 ClientSampleId: HSTDICC1500

#5 DICAMBA

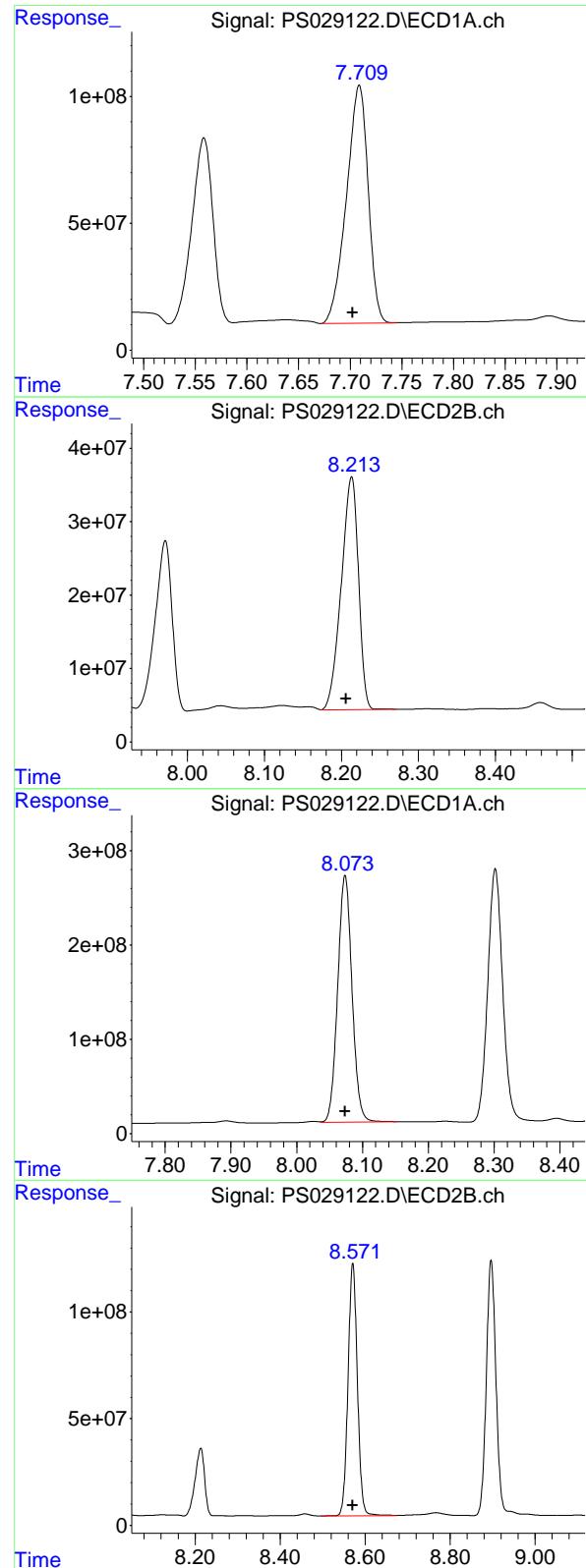
R.T.: 7.860 min  
 Delta R.T.: 0.000 min  
 Response: 7590384192  
 Conc: 1393.19 ng/ml

#6 MCPP

R.T.: 7.558 min  
 Delta R.T.: 0.005 min  
 Response: 1036659344  
 Conc: 147.80 ug/ml

#6 MCPP

R.T.: 7.971 min  
 Delta R.T.: 0.006 min  
 Response: 356073874  
 Conc: 143.62 ug/ml



## #7 MCPA

R.T.: 7.709 min  
 Delta R.T.: 0.006 min  
 Response: 1370625968 ECD\_S  
 Conc: 142.42 ug/ml ClientSampleId : HSTDICC1500

## #7 MCPA

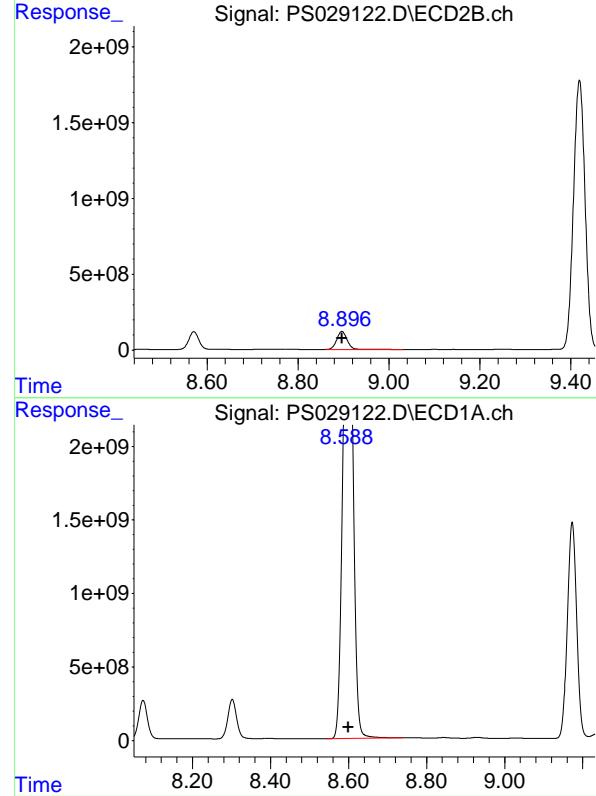
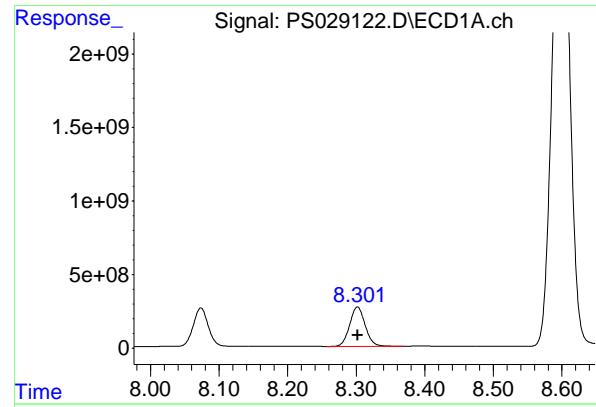
R.T.: 8.213 min  
 Delta R.T.: 0.007 min  
 Response: 492405080  
 Conc: 140.58 ug/ml

## #8 DICHLORPROP

R.T.: 8.074 min  
 Delta R.T.: 0.000 min  
 Response: 3959523762  
 Conc: 1305.32 ng/ml

## #8 DICHLORPROP

R.T.: 8.571 min  
 Delta R.T.: 0.000 min  
 Response: 1811132901  
 Conc: 1355.07 ng/ml



#9 2,4-D

R.T.: 8.302 min  
 Delta R.T.: 0.000 min  
 Response: 4209457561 ECD\_S  
 Conc: 1300.15 ng/ml  
 ClientSampleId : HSTDICC1500

#9 2,4-D

R.T.: 8.896 min  
 Delta R.T.: 0.000 min  
 Response: 1905620216  
 Conc: 1362.99 ng/ml

#10 Pentachlorophenol

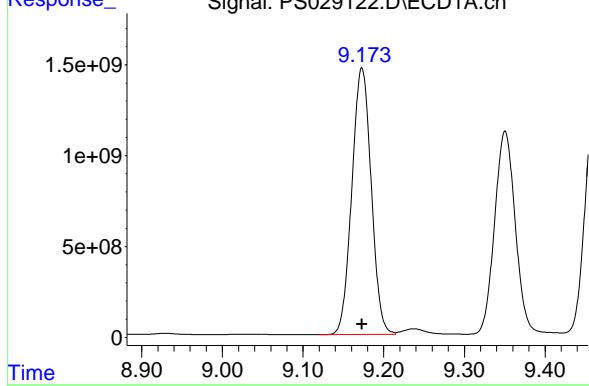
R.T.: 8.607 min  
 Delta R.T.: 0.008 min  
 Response: 48540511016  
 Conc: 1005.99 ng/ml

#10 Pentachlorophenol

R.T.: 9.419 min  
 Delta R.T.: 0.000 min  
 Response: 31287516997  
 Conc: 1309.51 ng/ml

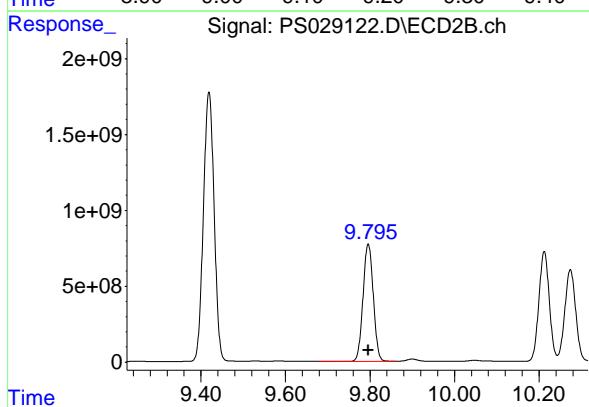
#11 2,4,5-TP (SILVEX)

R.T.: 9.173 min  
 Delta R.T.: 0.000 min  
 Instrument: ECD\_S  
 Response: 24469400587  
 Conc: 1298.96 ng/ml  
 ClientSampleId: HSTDICC1500



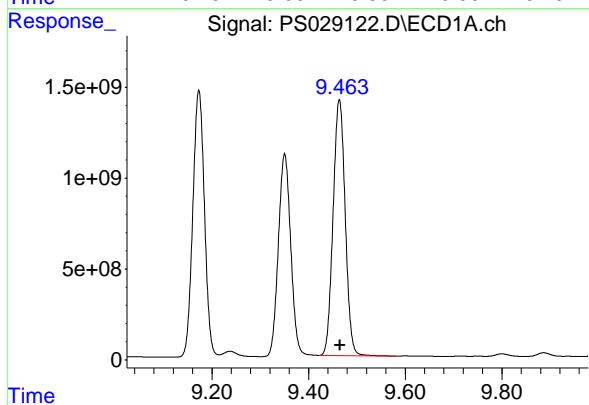
#11 2,4,5-TP (SILVEX)

R.T.: 9.796 min  
 Delta R.T.: 0.000 min  
 Response: 13051833854  
 Conc: 1354.55 ng/ml



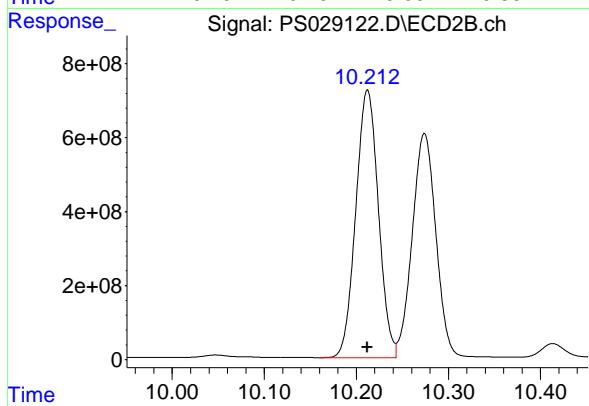
#12 2,4,5-T

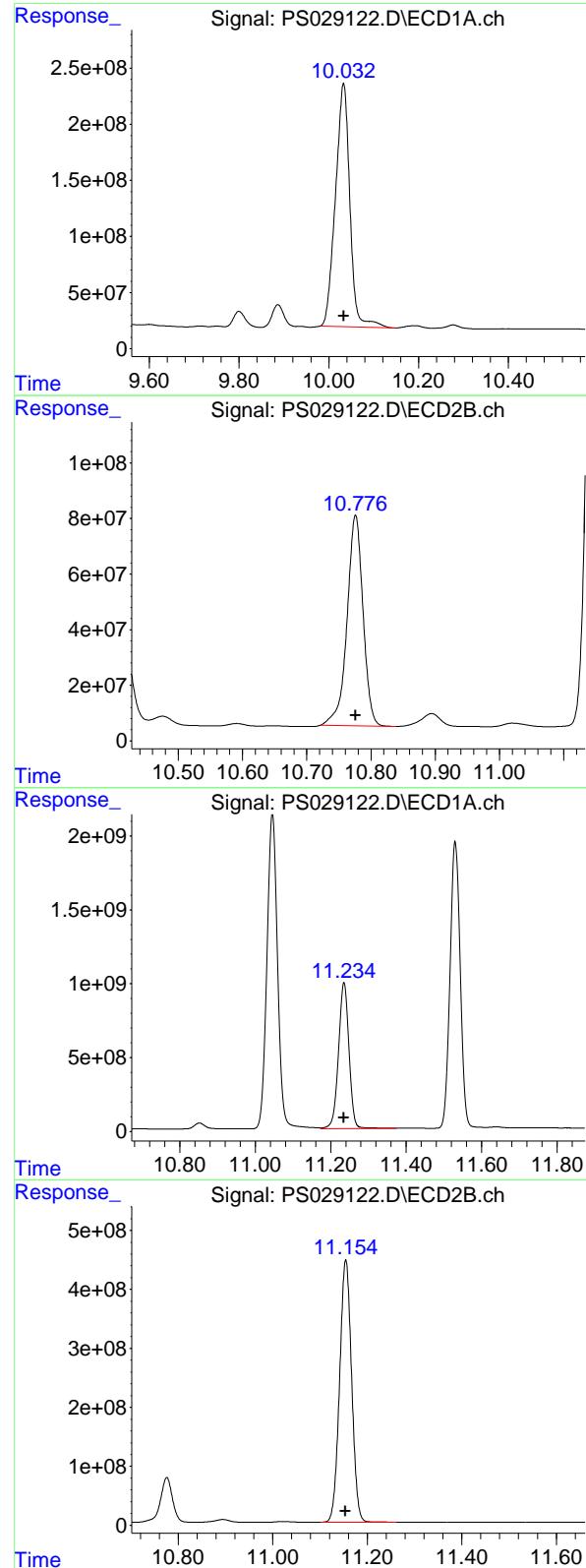
R.T.: 9.464 min  
 Delta R.T.: 0.000 min  
 Response: 24490125947  
 Conc: 1296.54 ng/ml



#12 2,4,5-T

R.T.: 10.212 min  
 Delta R.T.: 0.000 min  
 Response: 12378325781  
 Conc: 1361.92 ng/ml





#13 2,4-DB

R.T.: 10.033 min  
 Delta R.T.: -0.001 min  
 Instrument: ECD\_S  
 Response: 4826479216  
 Conc: 1368.14 ng/ml  
 ClientSampleId: HSTDICC1500

#13 2,4-DB

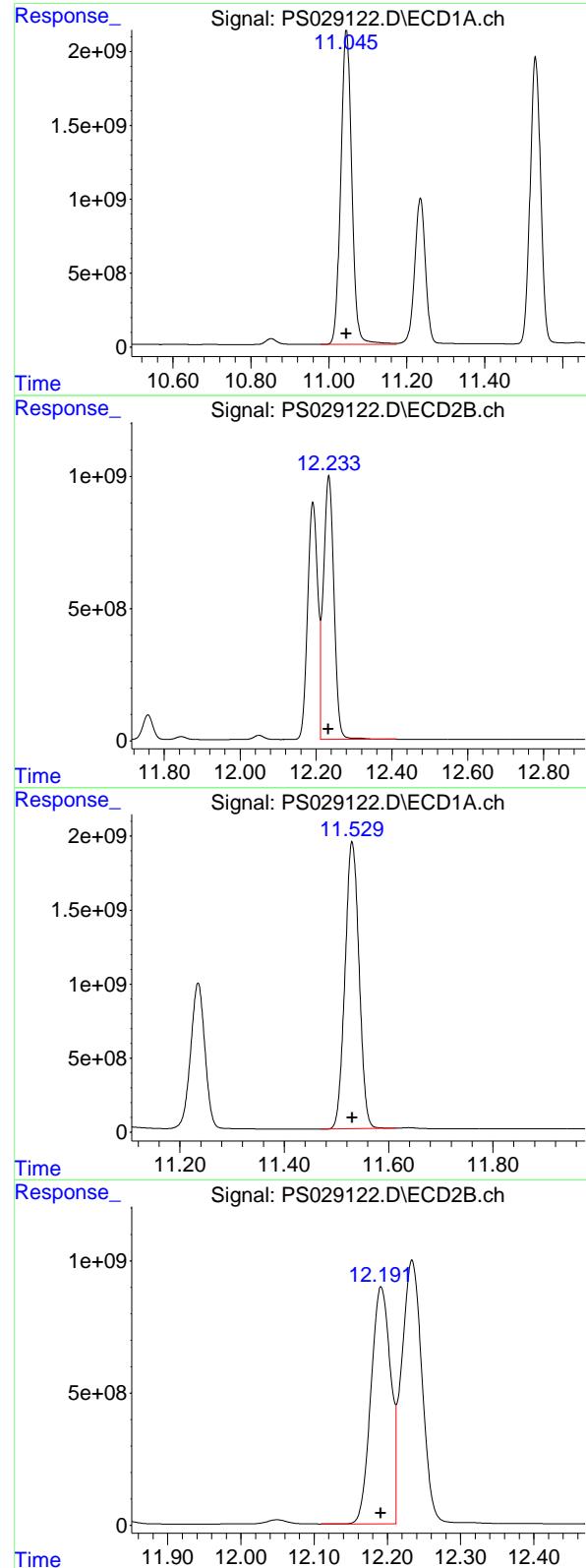
R.T.: 10.776 min  
 Delta R.T.: 0.000 min  
 Response: 1312102726  
 Conc: 1416.61 ng/ml

#14 DINOSEB

R.T.: 11.235 min  
 Delta R.T.: 0.000 min  
 Response: 19121397131  
 Conc: 1379.70 ng/ml

#14 DINOSEB

R.T.: 11.155 min  
 Delta R.T.: 0.000 min  
 Response: 7837429028  
 Conc: 1471.17 ng/ml



#15 Picloram

R.T.: 11.045 min  
 Delta R.T.: 0.000 min  
 Instrument: ECD\_S  
 Response: 41664016241  
 Conc: 1339.58 ng/ml  
 ClientSampleId : HSTDICC1500

#15 Picloram

R.T.: 12.234 min  
 Delta R.T.: 0.001 min  
 Response: 19364475386  
 Conc: 1409.94 ng/ml

#16 DCPA

R.T.: 11.530 min  
 Delta R.T.: 0.000 min  
 Response: 36271282523  
 Conc: 1285.03 ng/ml

#16 DCPA

R.T.: 12.192 min  
 Delta R.T.: 0.000 min  
 Response: 16705456536  
 Conc: 1369.40 ng/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021125\  
 Data File : PS029123.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 11 Feb 2025 19:56  
 Operator : AR\AJ  
 Sample : HSTDICV750  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

**Instrument :**  
**ECD\_S**  
**ClientSampleId :**  
**ICVPS021125**

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 12 10:12:12 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021125.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 10:01:00 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 7.187 7.664 1952.5E6 747.6E6 706.441 706.285

#### Target Compounds

1) T	Dalapon	2.608	2.657	2077.0E6	1235.7E6	656.634	652.652
2) T	3,5-DICHL...	6.366	6.632	2607.0E6	1018.7E6	658.028	665.849
3) T	4-Nitroph...	6.984	7.194	1114.3E6	569.0E6	653.492	656.019
5) T	DICAMBA	7.372	7.860	8129.6E6	3767.0E6	675.110	681.621
6) T	MCPP	7.554	7.965	482.6E6	171.3E6	69.655	69.418
7) T	MCPA	7.702	8.207	653.8E6	240.3E6	68.305	68.690
8) T	DICHLORPROP	8.074	8.571	2098.8E6	925.6E6	664.378	672.173
9) T	2,4-D	8.303	8.897	2241.0E6	970.1E6	666.144	677.115
10) T	Pentachlo...	8.600	9.419	33808.8E6	16650.6E6	716.988	690.333
11) T	2,4,5-TP ...	9.174	9.796	13195.1E6	6719.3E6	680.497	687.878
12) T	2,4,5-T	9.465	10.212	13210.9E6	6365.5E6	682.043	687.255
13) T	2,4-DB	10.034	10.777	2479.1E6	647.5E6	667.079	681.600
14) T	DINOSEB	11.235	11.155	9995.2E6	3857.6E6	689.296	699.513
15) T	Picloram	11.046	12.234	21907.4E6	9634.4E6	685.624	700.742
16) T	DCPA	11.531	12.192	19970.7E6	8596.7E6	688.734	696.946

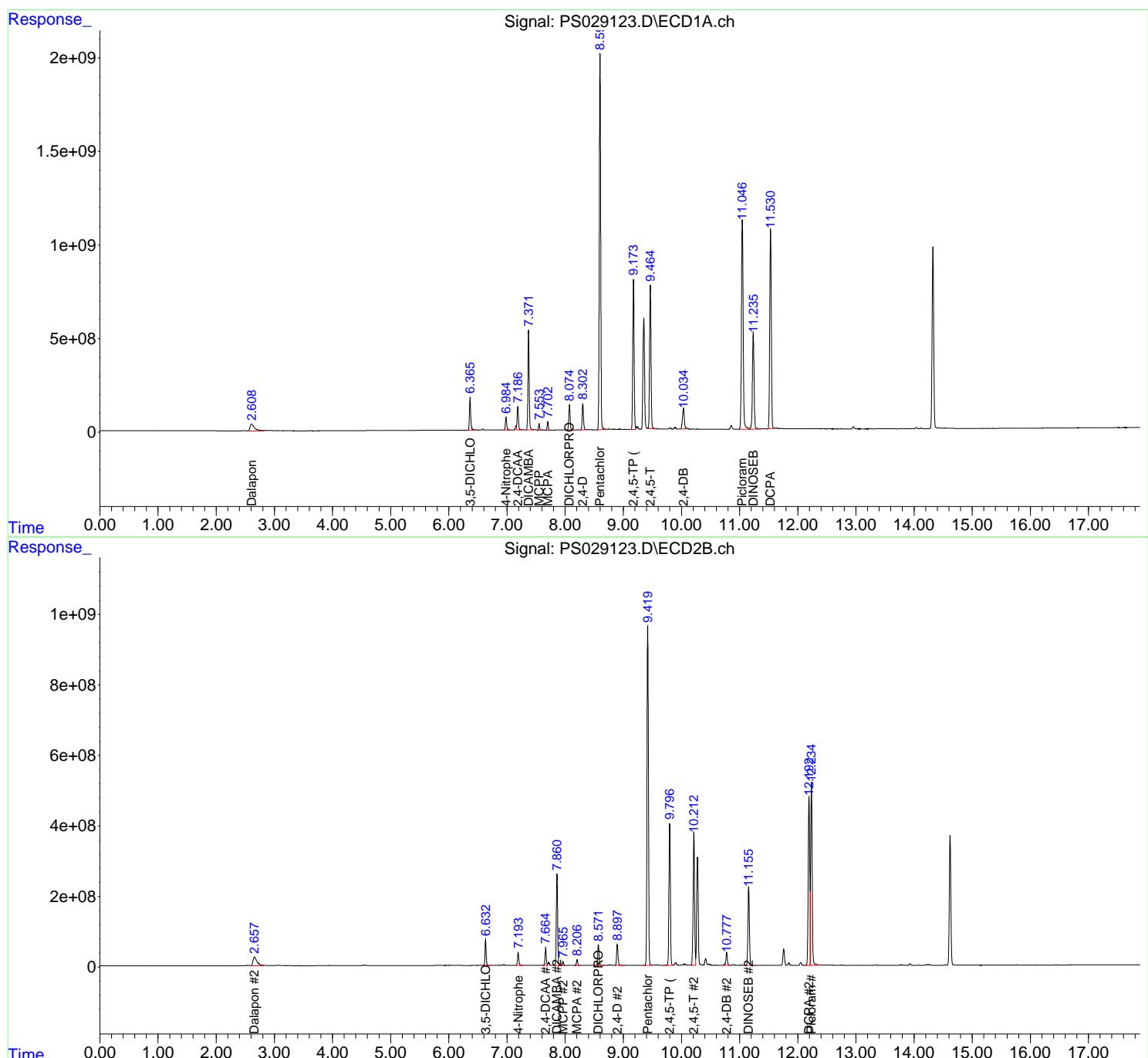
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

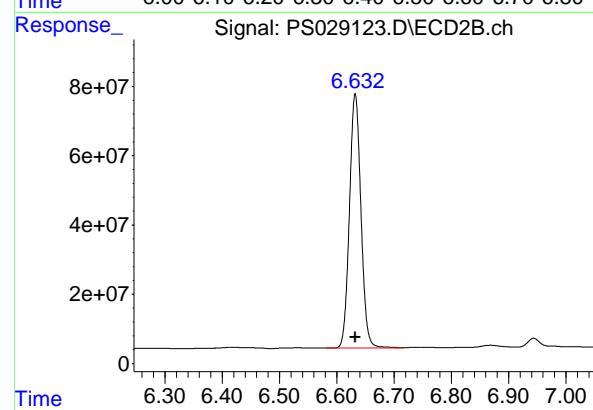
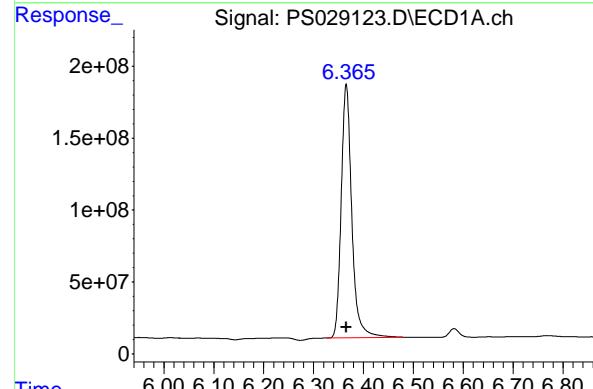
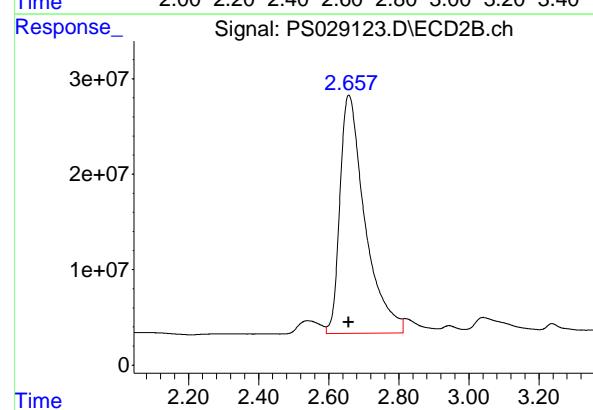
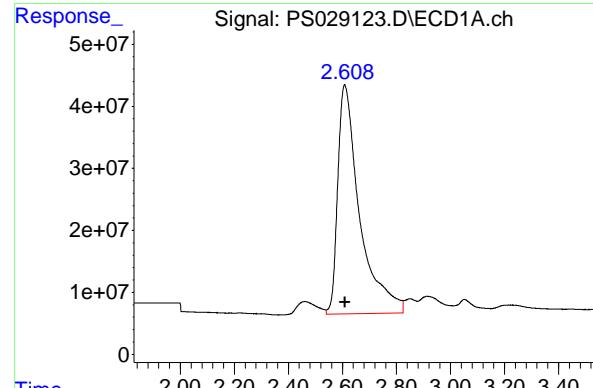
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021125\  
 Data File : PS029123.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 11 Feb 2025 19:56  
 Operator : AR\AJ  
 Sample : HSTDICV750  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

**Instrument :**  
 ECD\_S  
**ClientSampleId :**  
 ICPVPS021125

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 12 10:12:12 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021125.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 10:01:00 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1  $\mu$ 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 $\mu$ m





#1 Dalapon

R.T.: 2.608 min  
 Delta R.T.: 0.000 min  
 Response: 2076965721 ECD\_S  
 Conc: 656.63 ng/ml ClientSampleId :  
 ICVPS021125

#1 Dalapon

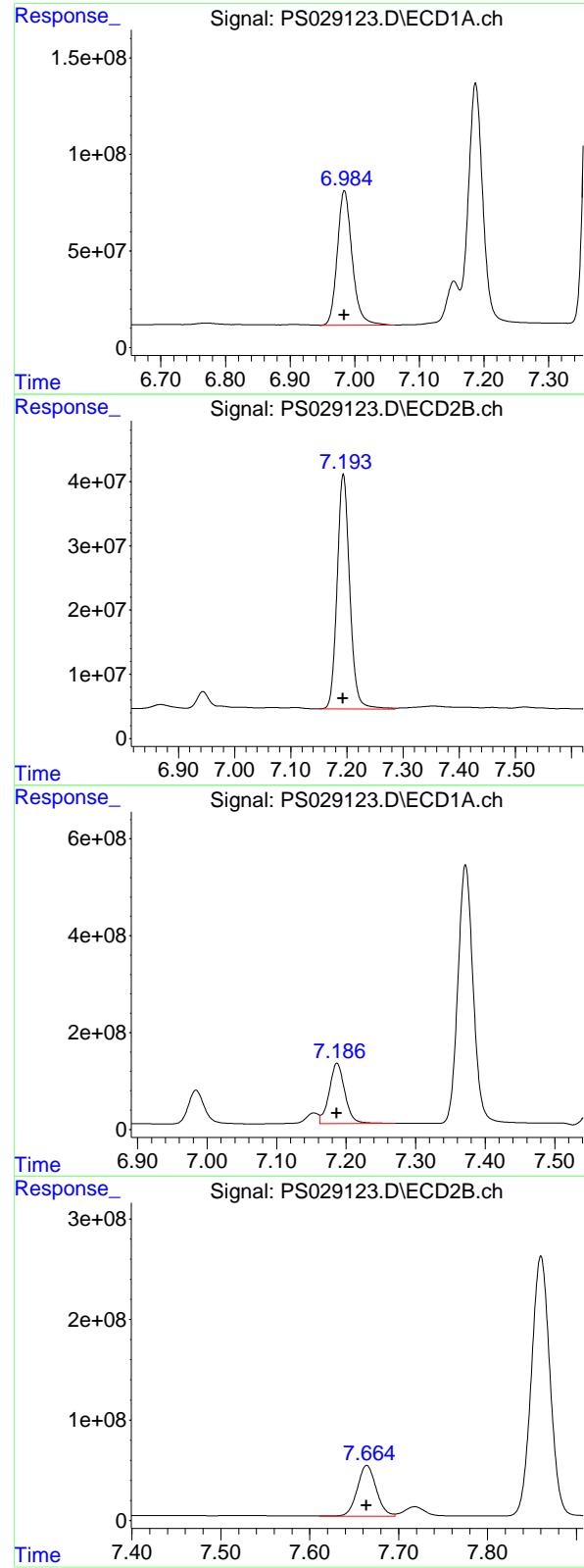
R.T.: 2.657 min  
 Delta R.T.: 0.000 min  
 Response: 1235666025  
 Conc: 652.65 ng/ml

#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.366 min  
 Delta R.T.: 0.000 min  
 Response: 2606956369  
 Conc: 658.03 ng/ml

#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.632 min  
 Delta R.T.: 0.000 min  
 Response: 1018659474  
 Conc: 665.85 ng/ml



## #3 4-Nitrophenol

R.T.: 6.984 min  
 Delta R.T.: 0.000 min  
 Response: 1114250330 ECD\_S  
 Conc: 653.49 ng/ml ClientSampleId :  
 ICPVPS021125

## #3 4-Nitrophenol

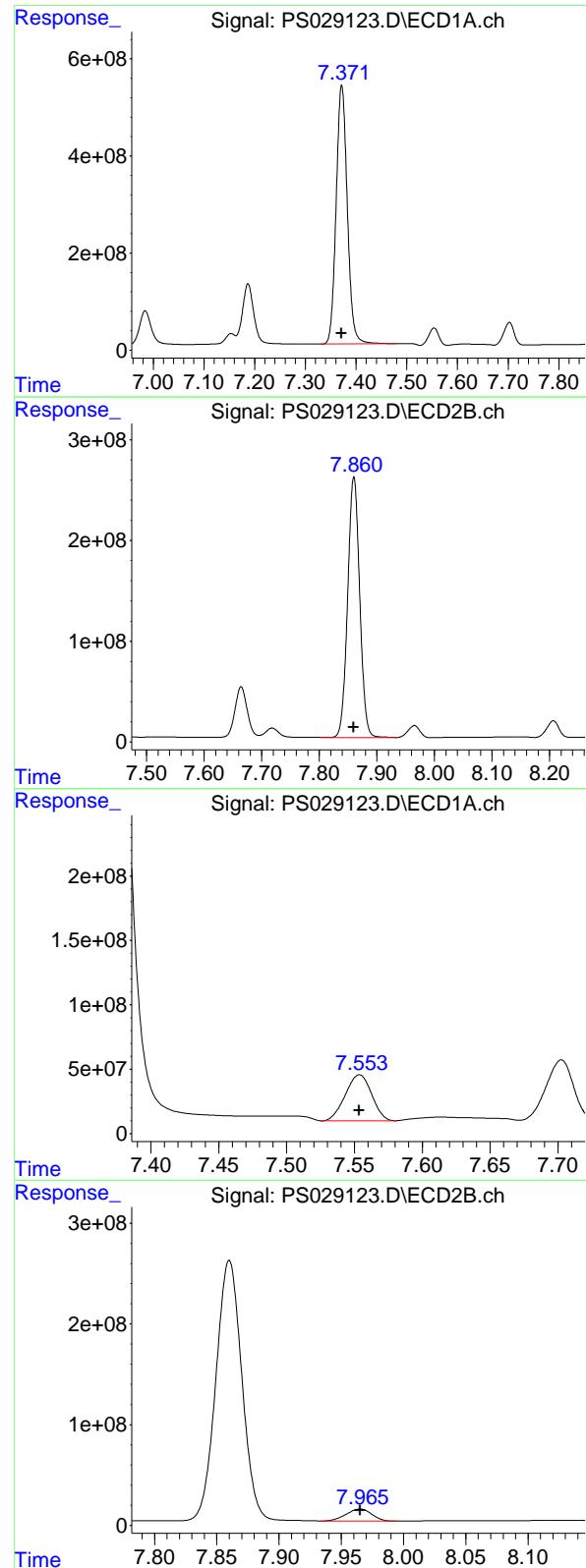
R.T.: 7.194 min  
 Delta R.T.: 0.000 min  
 Response: 568965033  
 Conc: 656.02 ng/ml

## #4 2,4-DCAA

R.T.: 7.187 min  
 Delta R.T.: 0.000 min  
 Response: 1952502596  
 Conc: 706.44 ng/ml

## #4 2,4-DCAA

R.T.: 7.664 min  
 Delta R.T.: 0.000 min  
 Response: 747599704  
 Conc: 706.29 ng/ml



#5 DICAMBA

R.T.: 7.372 min  
 Delta R.T.: 0.000 min  
 Response: 8129643046 ECD\_S  
 Conc: 675.11 ng/ml ClientSampleId :  
 ICPVPS021125

#5 DICAMBA

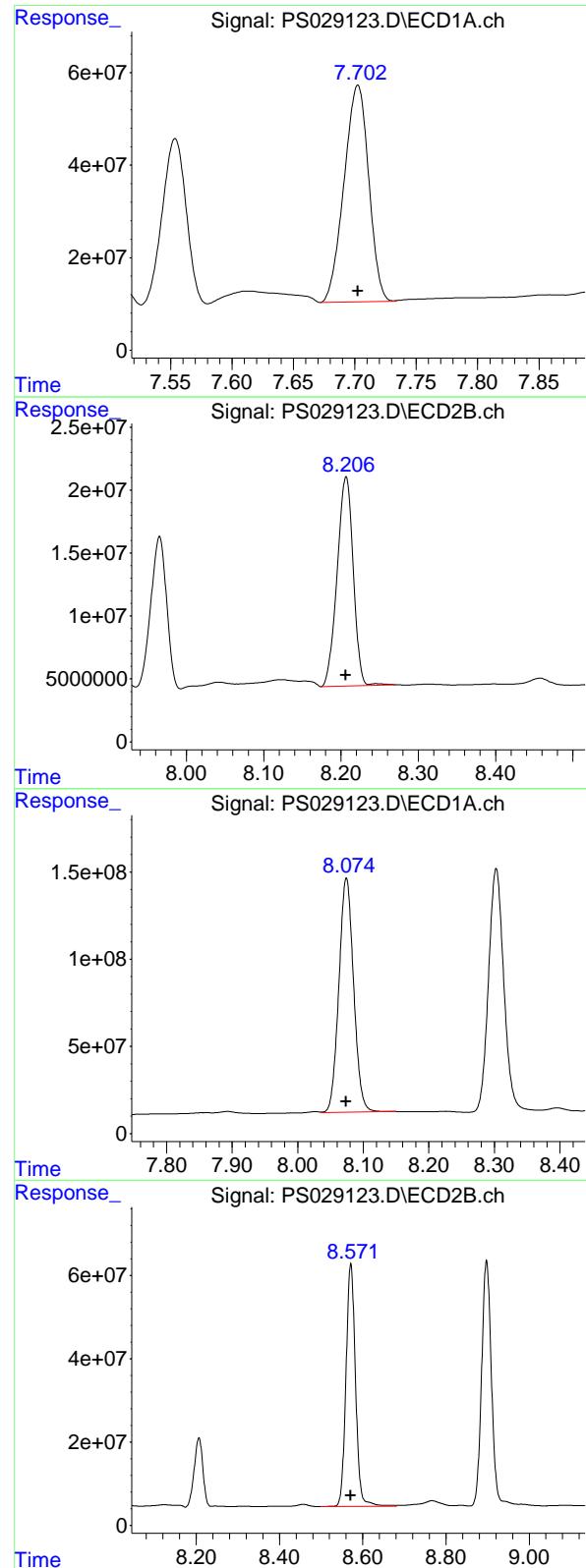
R.T.: 7.860 min  
 Delta R.T.: 0.000 min  
 Response: 3767047532  
 Conc: 681.62 ng/ml

#6 MCPP

R.T.: 7.554 min  
 Delta R.T.: 0.000 min  
 Response: 482595548  
 Conc: 69.65 ug/ml

#6 MCPP

R.T.: 7.965 min  
 Delta R.T.: 0.000 min  
 Response: 171267864  
 Conc: 69.42 ug/ml



#7 MCPA

R.T.: 7.702 min  
 Delta R.T.: 0.000 min  
 Response: 653825993  
 Conc: 68.31 ug/ml

Instrument: ECD\_S  
 ClientSampleId : ICVPS021125

#7 MCPA

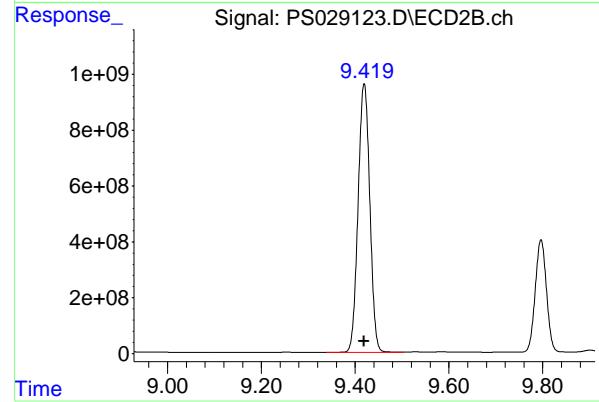
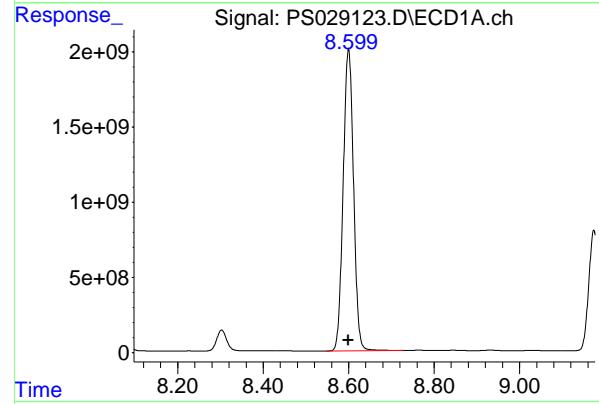
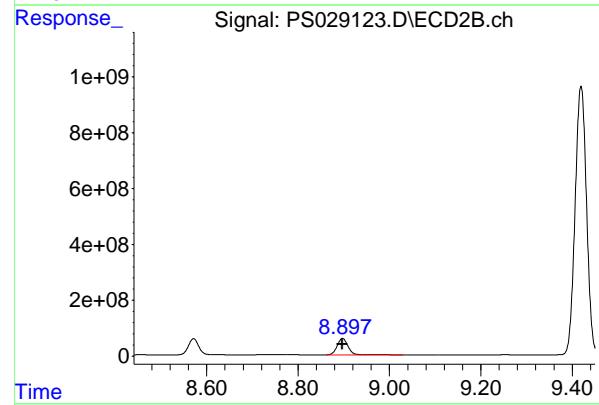
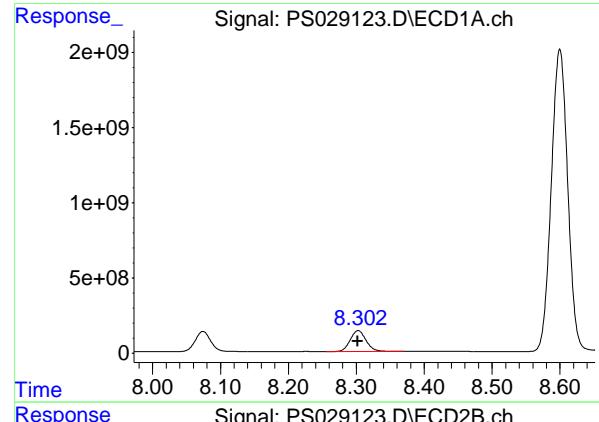
R.T.: 8.207 min  
 Delta R.T.: 0.000 min  
 Response: 240301892  
 Conc: 68.69 ug/ml

#8 DICHLORPROP

R.T.: 8.074 min  
 Delta R.T.: 0.000 min  
 Response: 2098811761  
 Conc: 664.38 ng/ml

#8 DICHLORPROP

R.T.: 8.571 min  
 Delta R.T.: 0.000 min  
 Response: 925641710  
 Conc: 672.17 ng/ml



#9 2,4-D

R.T.: 8.303 min  
 Delta R.T.: 0.000 min  
 Response: 2240967920 ECD\_S  
 Conc: 666.14 ng/ml ClientSampleId :  
 ICVPS021125

#9 2,4-D

R.T.: 8.897 min  
 Delta R.T.: 0.000 min  
 Response: 970053996  
 Conc: 677.12 ng/ml

#10 Pentachlorophenol

R.T.: 8.600 min  
 Delta R.T.: 0.000 min  
 Response: 33808822983  
 Conc: 716.99 ng/ml

#10 Pentachlorophenol

R.T.: 9.419 min  
 Delta R.T.: 0.000 min  
 Response: 16650586451  
 Conc: 690.33 ng/ml

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

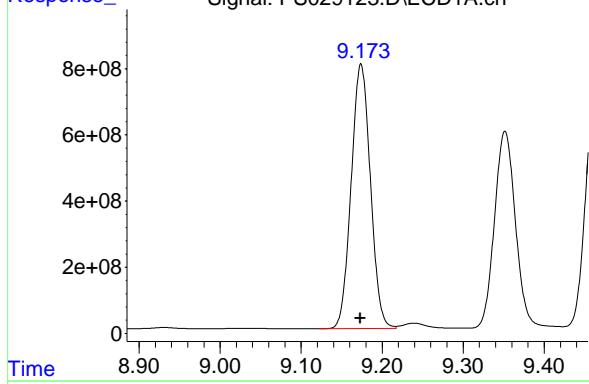
R.T.: 9.174 min

Delta R.T.: 0.000 min

Instrument: ECD\_S

Response: 13195079014 ClientSampleId :

Conc: 680.50 ng/ml ICPVPS021125



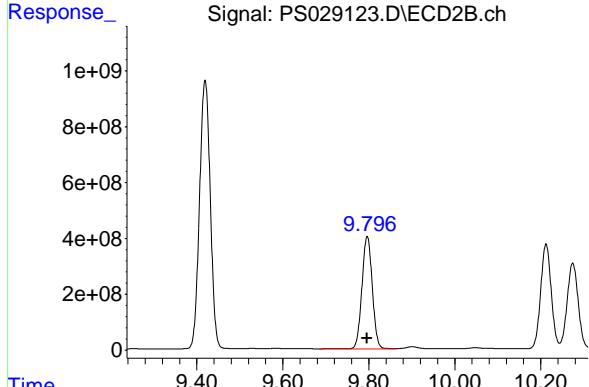
#11 2,4,5-TP (SILVEX)

R.T.: 9.796 min

Delta R.T.: 0.000 min

Response: 6719335105

Conc: 687.88 ng/ml



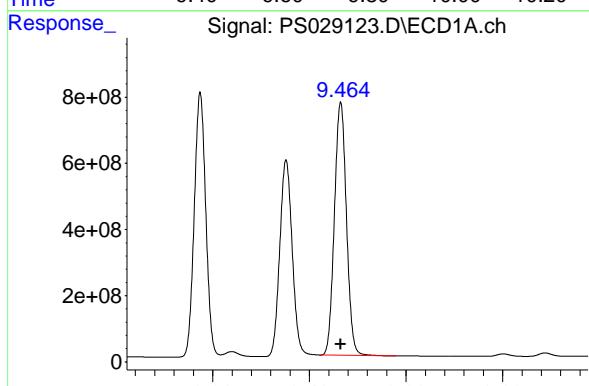
#12 2,4,5-T

R.T.: 9.465 min

Delta R.T.: 0.000 min

Response: 13210937006

Conc: 682.04 ng/ml



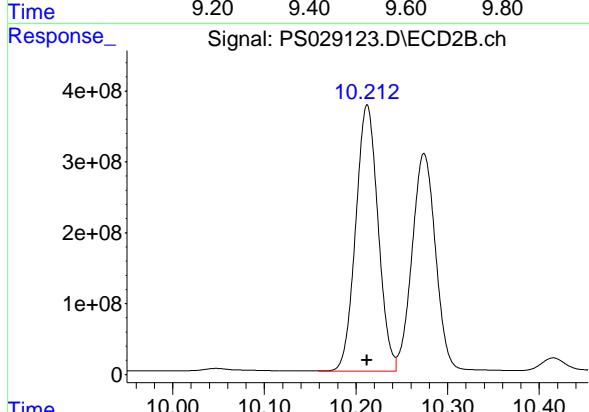
#12 2,4,5-T

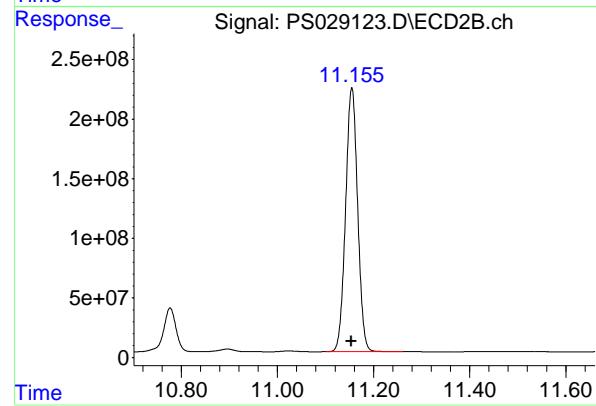
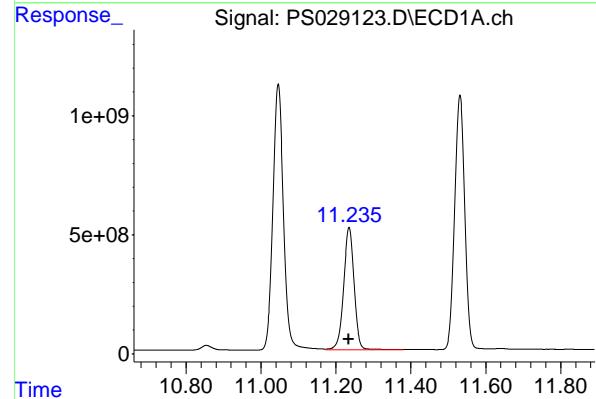
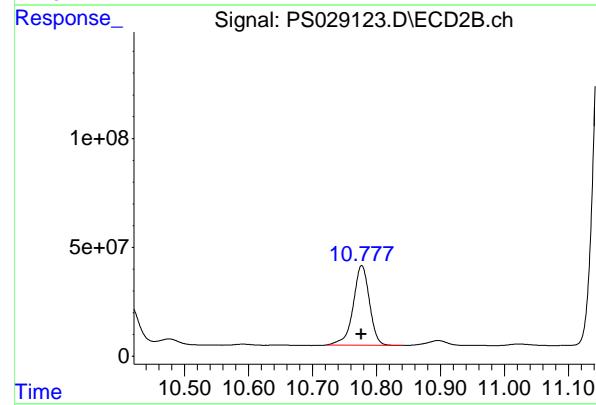
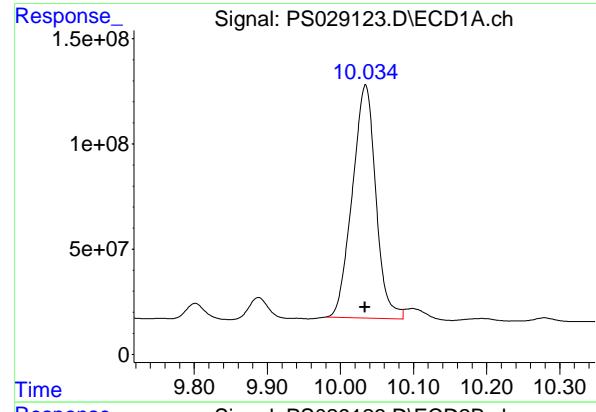
R.T.: 10.212 min

Delta R.T.: 0.000 min

Response: 6365547077

Conc: 687.25 ng/ml





#13 2,4-DB

R.T.: 10.034 min  
Delta R.T.: 0.000 min  
Instrument: ECD\_S  
Response: 2479062005  
Conc: 667.08 ng/ml  
ClientSampleId : ICVPS021125

#13 2,4-DB

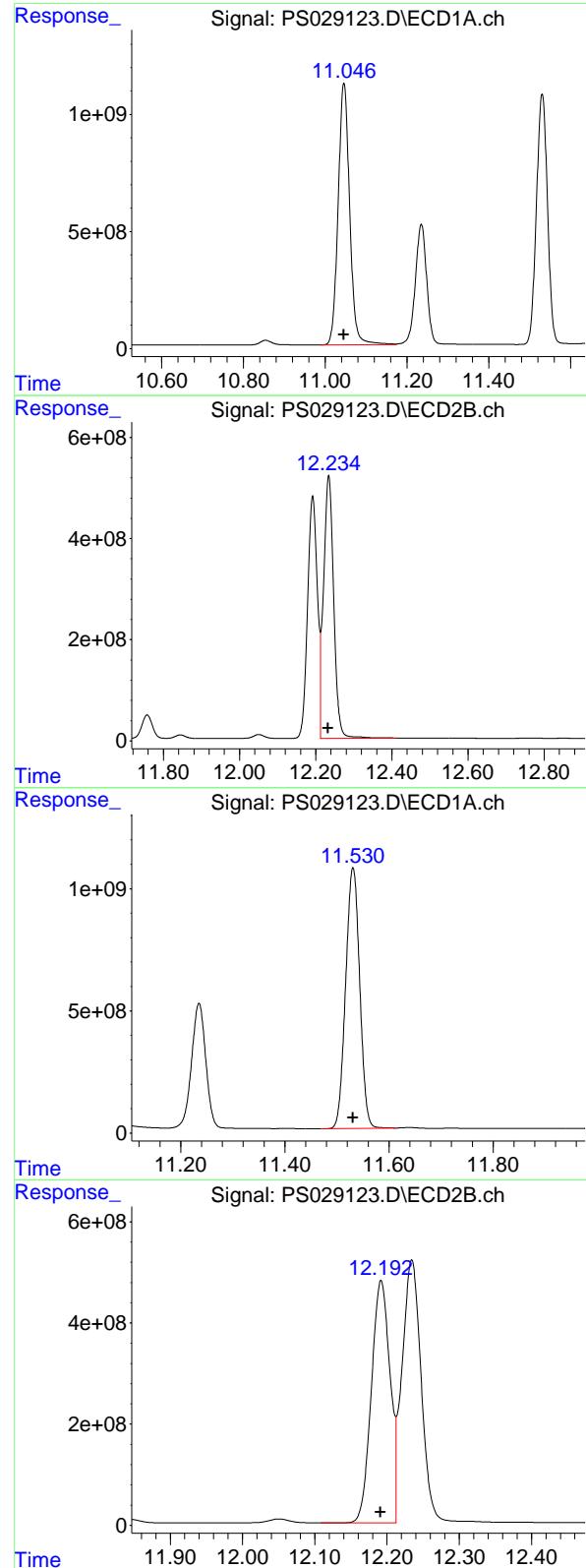
R.T.: 10.777 min  
Delta R.T.: 0.000 min  
Response: 647512809  
Conc: 681.60 ng/ml

#14 DINOSEB

R.T.: 11.235 min  
Delta R.T.: 0.000 min  
Response: 9995213041  
Conc: 689.30 ng/ml

#14 DINOSEB

R.T.: 11.155 min  
Delta R.T.: 0.001 min  
Response: 3857600553  
Conc: 699.51 ng/ml



#15 Picloram

R.T.: 11.046 min  
 Delta R.T.: 0.000 min  
 Instrument: ECD\_S  
 Response: 21907355326  
 Conc: 685.62 ng/ml  
 ClientSampleId : ICVPS021125

#15 Picloram

R.T.: 12.234 min  
 Delta R.T.: 0.002 min  
 Response: 9634402201  
 Conc: 700.74 ng/ml

#16 DCPA

R.T.: 11.531 min  
 Delta R.T.: 0.000 min  
 Response: 19970729614  
 Conc: 688.73 ng/ml

#16 DCPA

R.T.: 12.192 min  
 Delta R.T.: 0.000 min  
 Response: 8596708255  
 Conc: 696.95 ng/ml



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

### CALIBRATION VERIFICATION SUMMARY

Contract: WEST04

Lab Code: CHEM Case No.: Q1352 SAS No.: Q1352 SDG NO.: Q1352

Continuing Calib Date: 02/13/2025 Initial Calibration Date(s): 02/11/2025 02/11/2025

Continuing Calib Time: 18:36 Initial Calibration Time(s): 17:56 19:32

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	TO	DIFF RT
2,4-DCAA	7.19	7.19	7.09	7.29	0.00
2,4-D	8.31	8.30	8.20	8.40	-0.01
2,4,5-TP(Silvex)	9.18	9.17	9.07	9.27	-0.01



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Fax : 908 789 8922

### CALIBRATION VERIFICATION SUMMARY

Contract: WEST04

Lab Code: CHEM Case No.: Q1352 SAS No.: Q1352 SDG NO.: Q1352

Continuing Calib Date: 02/13/2025 Initial Calibration Date(s): 02/11/2025 02/11/2025

Continuing Calib Time: 18:36 Initial Calibration Time(s): 17:56 19:32

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
2,4-DCAA	7.66	7.66	7.56	7.76	0.00
2,4-D	8.90	8.90	8.80	9.00	0.00
2,4,5-TP(Silvex)	9.79	9.80	9.70	9.90	0.01



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### CALIBRATION VERIFICATION SUMMARY

Contract: WEST04

Lab Code: CHEM Case No.: Q1352 SAS No.: Q1352 SDG NO.: Q1352

GC Column: RTX-CLP ID: 0.32 (mm) Initi. Calib. Date(s): 02/11/2025 02/11/2025

Client Sample No.: CCAL01 Date Analyzed: 02/13/2025

Lab Sample No.: HSTDCCC750 Data File : PS029160.D Time Analyzed: 18:36

COMPOUND	RT	RT WINDOW FROM		TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	9.175	9.073		9.273	729.100	712.500	2.3
2,4-D	8.305	8.202		8.402	711.710	705.000	1.0
2,4-DCAA	7.189	7.087		7.287	750.850	750.000	0.1



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

### CALIBRATION VERIFICATION SUMMARY

Contract: WEST04

Lab Code: CHEM Case No.: Q1352 SAS No.: Q1352 SDG NO.: Q1352

GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 02/11/2025 02/11/2025

Client Sample No.: CCAL01 Date Analyzed: 02/13/2025

Lab Sample No.: HSTDCCC750 Data File : PS029160.D Time Analyzed: 18:36

COMPOUND	RT	RT WINDOW FROM		TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	9.793	9.696		9.896	718.930	712.500	0.9
2,4-D	8.895	8.797		8.997	694.290	705.000	-1.5
2,4-DCAA	7.663	7.564		7.764	727.200	750.000	-3.0

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021325\  
 Data File : PS029160.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 13 Feb 2025 18:36  
 Operator : AR\AJ  
 Sample : HSTDCCC750  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

**Instrument :**  
**ECD\_S**  
**ClientSampleId :**  
**HSTDCCC750**

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 14 01:21:35 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021225.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 09:17:13 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	7.189	7.663	2075.2E6	769.7E6	750.845	727.202
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#### Target Compounds

1) T	Dalapon	2.612	2.658	2133.9E6	1244.2E6	674.643	657.160
2) T	3,5-DICHL...	6.367	6.631	2778.1E6	1057.3E6	701.229	691.122
3) T	4-Nitroph...	6.987	7.192	1220.6E6	607.9E6	715.879	700.862
5) T	DICAMBA	7.374	7.857	8743.7E6	3933.9E6	726.106	711.821
6) T	MCPP	7.556	7.963	516.0E6	181.9E6	74.481	73.708
7) T	MCPA	7.705	8.204	697.9E6	251.4E6	72.909	71.853
8) T	DICHLORPROP	8.076	8.568	2245.8E6	960.6E6	710.913	697.532
9) T	2,4-D	8.305	8.895	2394.3E6	994.7E6	711.712	694.292
10) T	Pentachlo...	8.601	9.416	36297.4E6	17416.3E6	769.764	722.080
11) T	2,4,5-TP ...	9.175	9.793	14137.5E6	7022.6E6	729.100	718.929
12) T	2,4,5-T	9.466	10.209	14132.3E6	6624.5E6	729.612	715.212
13) T	2,4-DB	10.036	10.773	2635.2E6	663.7E6	709.099	698.615
14) T	DINOSEB	11.237	11.150	11526.3E6	4449.5E6	794.884	806.847
15) T	Picloram	11.048	12.230	22675.2E6	9528.9E6	709.655	693.067
16) T	DCPA	11.533	12.187	21381.7E6	8976.7E6	737.394	727.751

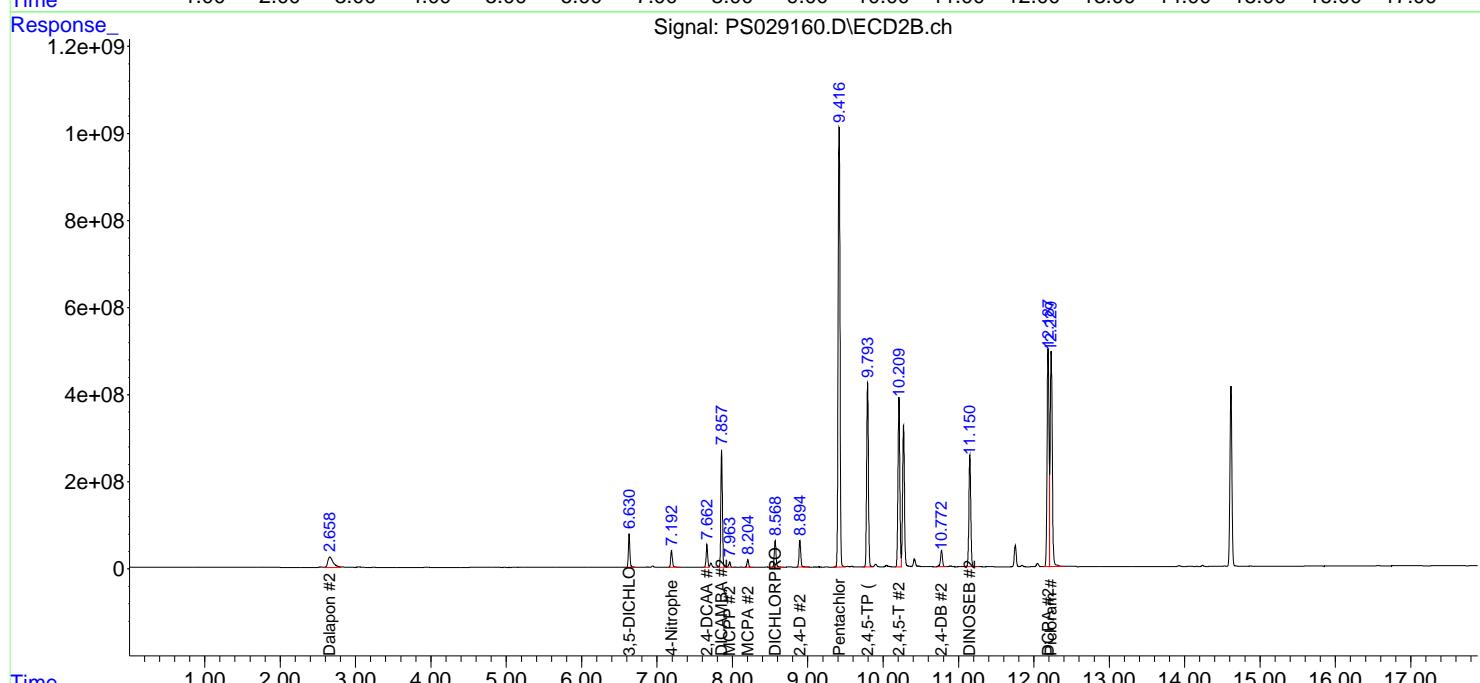
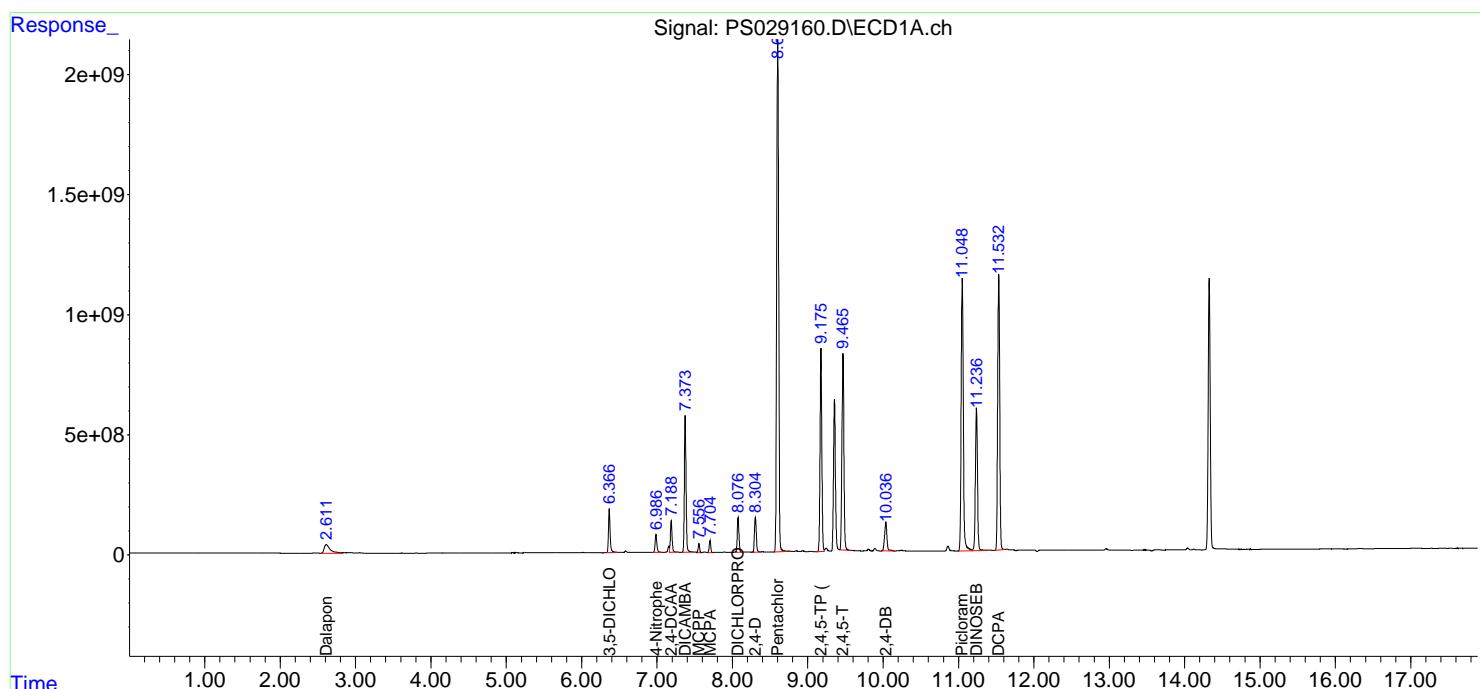
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

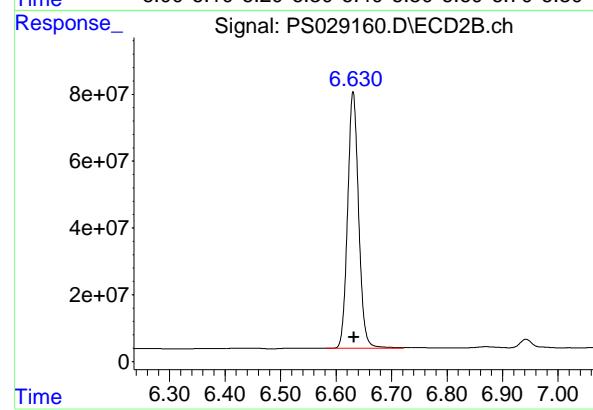
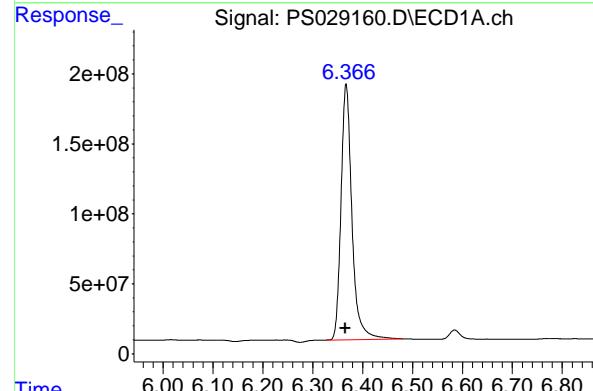
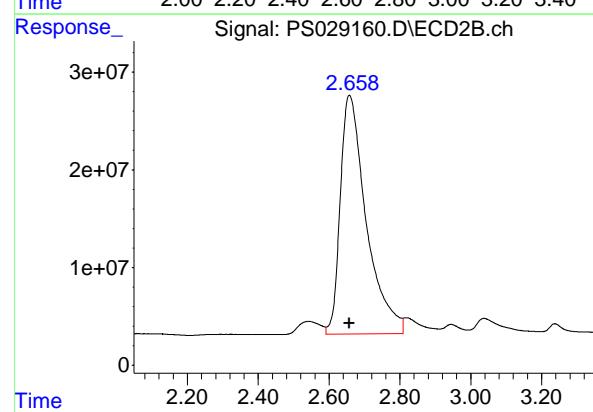
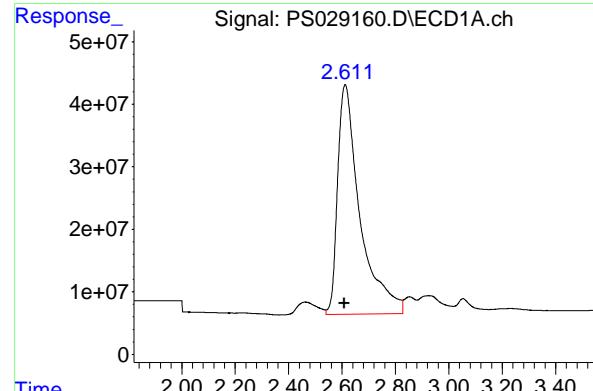
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021325\  
 Data File : PS029160.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 13 Feb 2025 18:36  
 Operator : AR\AJ  
 Sample : HSTDCCC750  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDCCC750

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 14 01:21:35 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021225.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 09:17:13 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1  $\mu$ 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 $\mu$ m





#1 Dalapon

R.T.: 2.612 min  
 Delta R.T.: 0.003 min  
 Response: 2133929977 ECD\_S  
 Conc: 674.64 ng/ml ClientSampleId : HSTDCCC750

#1 Dalapon

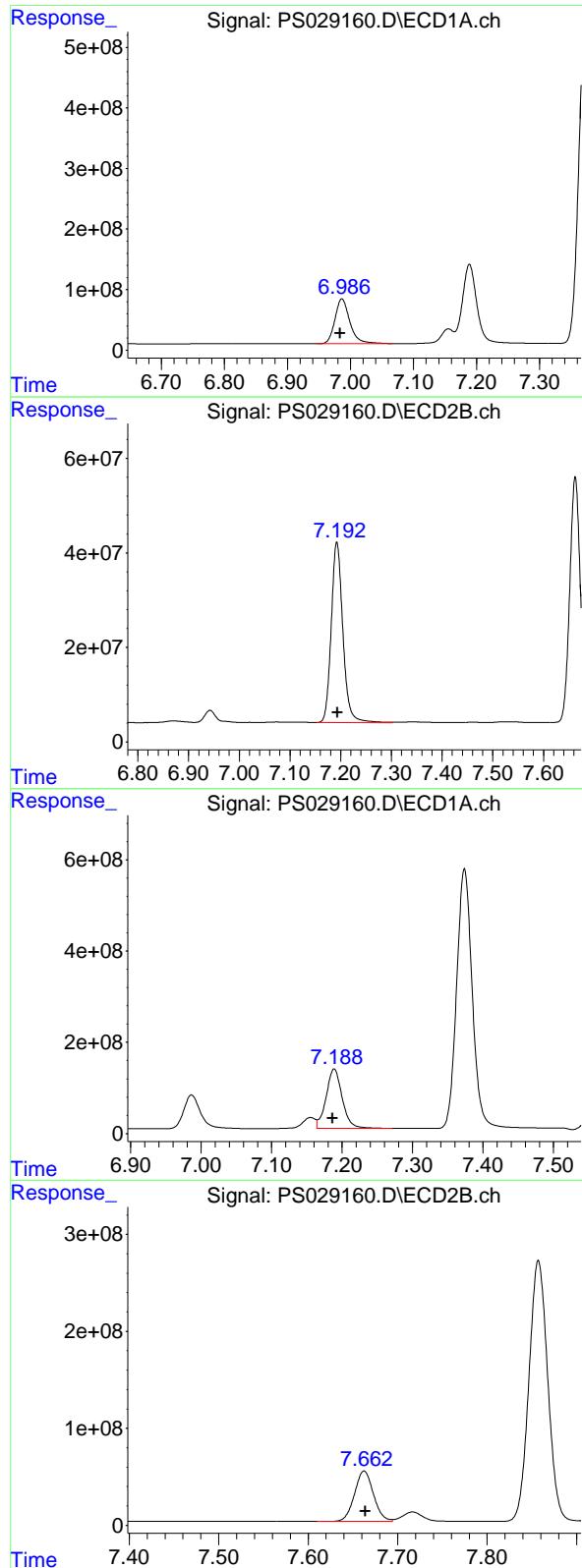
R.T.: 2.658 min  
 Delta R.T.: 0.000 min  
 Response: 1244201683  
 Conc: 657.16 ng/ml

#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.367 min  
 Delta R.T.: 0.002 min  
 Response: 2778110403  
 Conc: 701.23 ng/ml

#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.631 min  
 Delta R.T.: -0.001 min  
 Response: 1057323493  
 Conc: 691.12 ng/ml



## #3 4-Nitrophenol

R.T.: 6.987 min  
 Delta R.T.: 0.003 min  
 Response: 1220624235 ECD\_S  
 Conc: 715.88 ng/ml ClientSampleId : HSTDCCC750

## #3 4-Nitrophenol

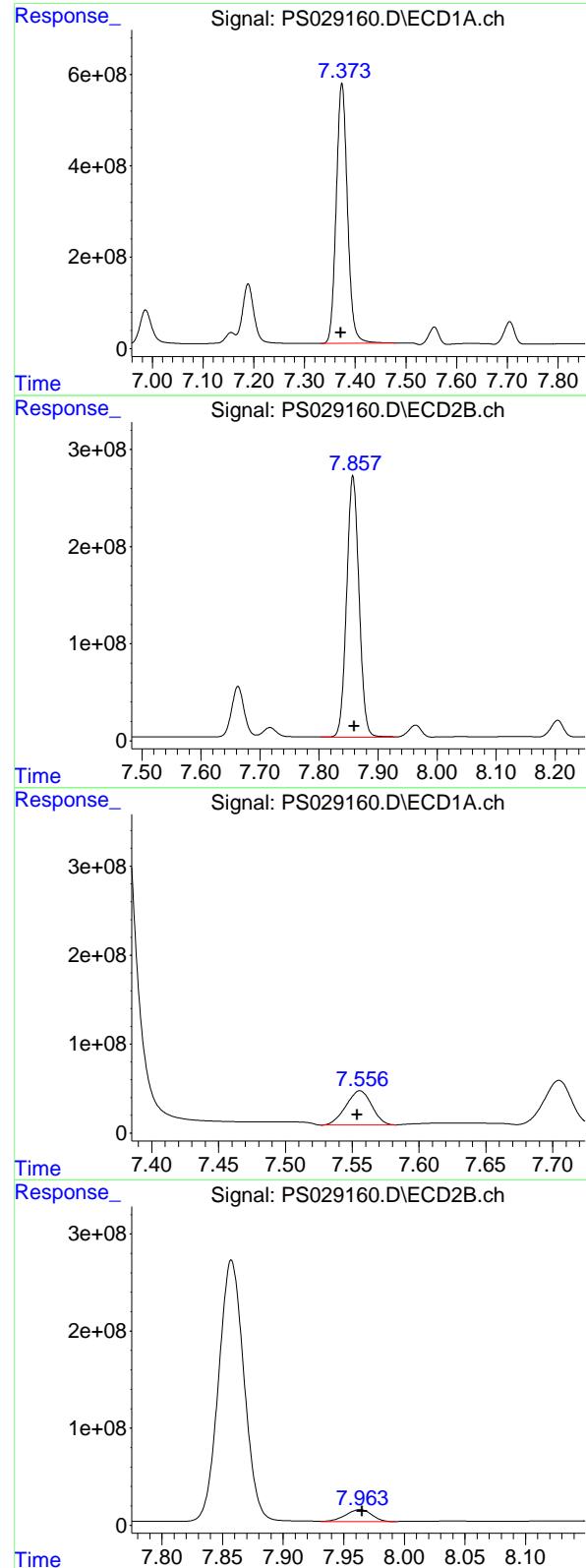
R.T.: 7.192 min  
 Delta R.T.: 0.000 min  
 Response: 607856767  
 Conc: 700.86 ng/ml

## #4 2,4-DCAA

R.T.: 7.189 min  
 Delta R.T.: 0.002 min  
 Response: 2075228455  
 Conc: 750.85 ng/ml

## #4 2,4-DCAA

R.T.: 7.663 min  
 Delta R.T.: -0.001 min  
 Response: 769740244  
 Conc: 727.20 ng/ml



## #5 DICAMBA

R.T.: 7.374 min  
 Delta R.T.: 0.002 min  
 Response: 8743733401 ECD\_S  
 Conc: 726.11 ng/ml ClientSampleId : HSTDCCC750

## #5 DICAMBA

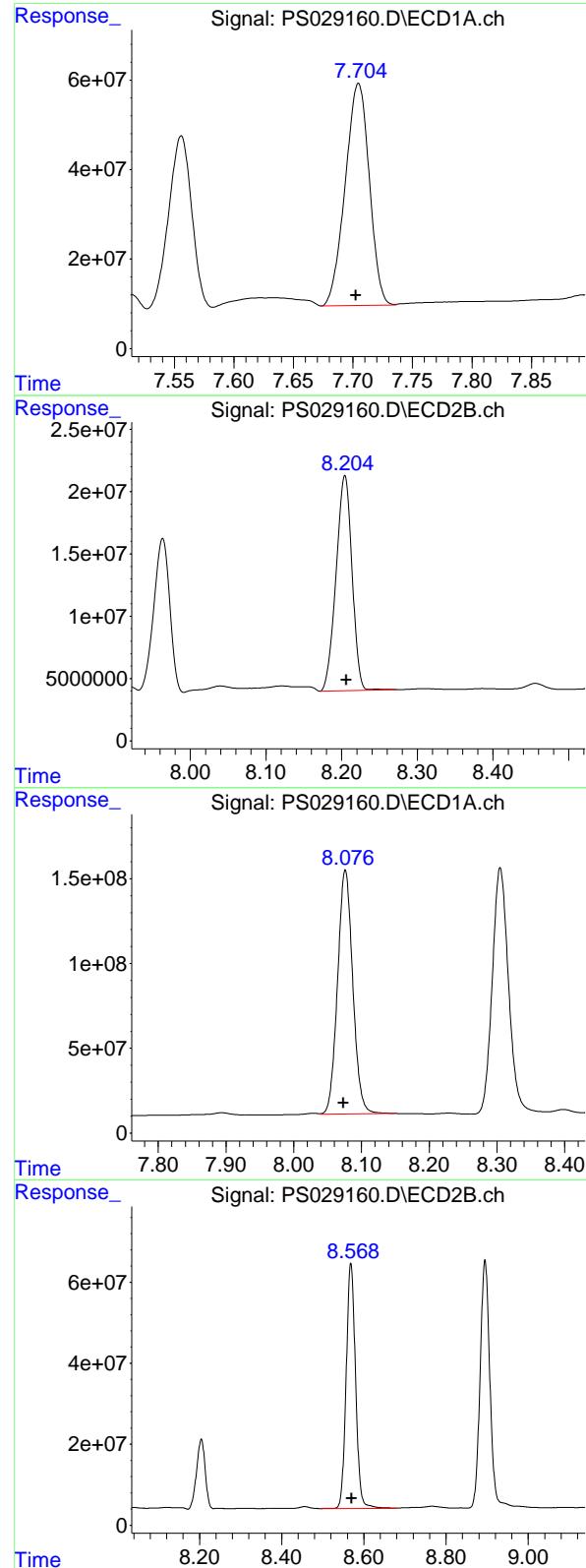
R.T.: 7.857 min  
 Delta R.T.: -0.002 min  
 Response: 3933946551  
 Conc: 711.82 ng/ml

## #6 MCPP

R.T.: 7.556 min  
 Delta R.T.: 0.002 min  
 Response: 516036915  
 Conc: 74.48 ug/ml

## #6 MCPP

R.T.: 7.963 min  
 Delta R.T.: -0.002 min  
 Response: 181853654  
 Conc: 73.71 ug/ml



## #7 MCPA

R.T.: 7.705 min  
 Delta R.T.: 0.002 min  
 Response: 697893442  
 Conc: 72.91 ug/ml

Instrument: ECD\_S  
 ClientSampleId: HSTDCCC750

## #7 MCPA

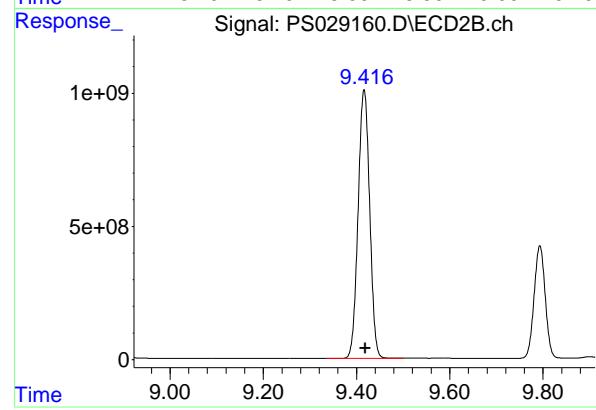
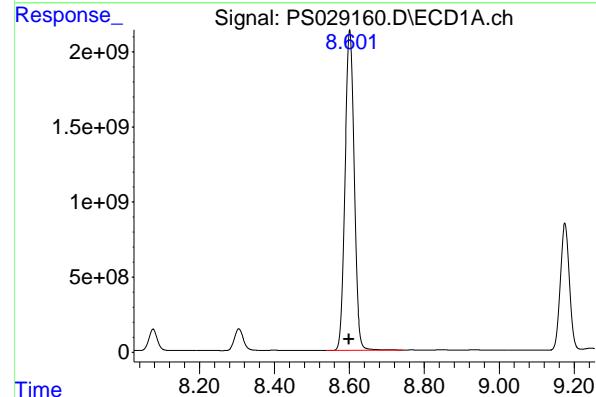
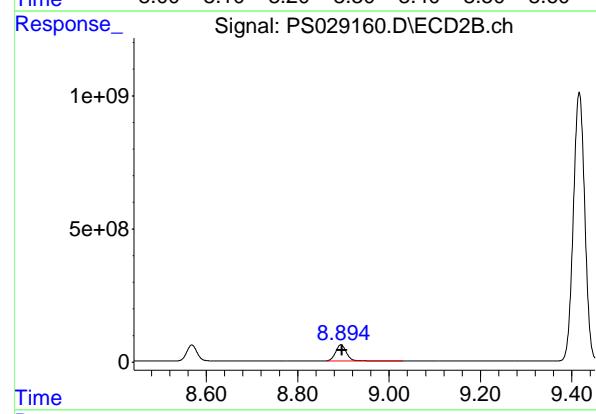
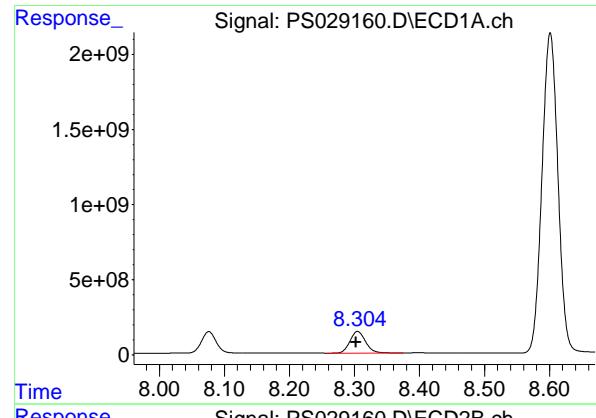
R.T.: 8.204 min  
 Delta R.T.: -0.002 min  
 Response: 251367715  
 Conc: 71.85 ug/ml

## #8 DICHLORPROP

R.T.: 8.076 min  
 Delta R.T.: 0.002 min  
 Response: 2245818849  
 Conc: 710.91 ng/ml

## #8 DICHLORPROP

R.T.: 8.568 min  
 Delta R.T.: -0.003 min  
 Response: 960564008  
 Conc: 697.53 ng/ml



#9 2,4-D

R.T.: 8.305 min  
 Delta R.T.: 0.003 min  
 Response: 2394264618 ECD\_S  
 Conc: 711.71 ng/ml ClientSampleId : HSTDCCC750

#9 2,4-D

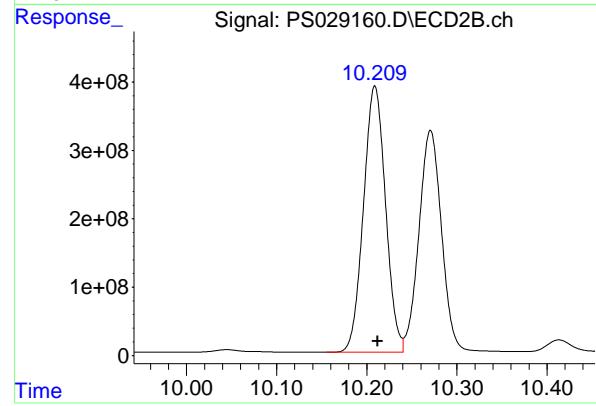
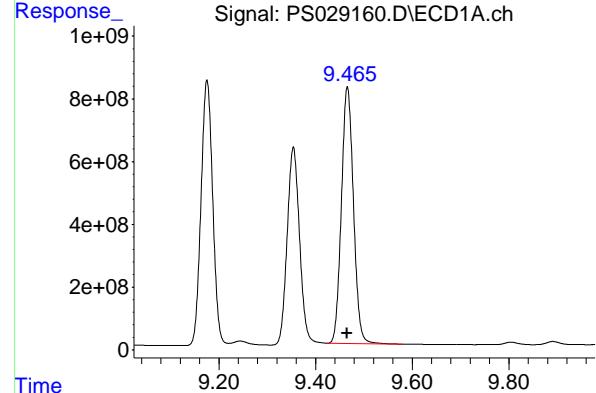
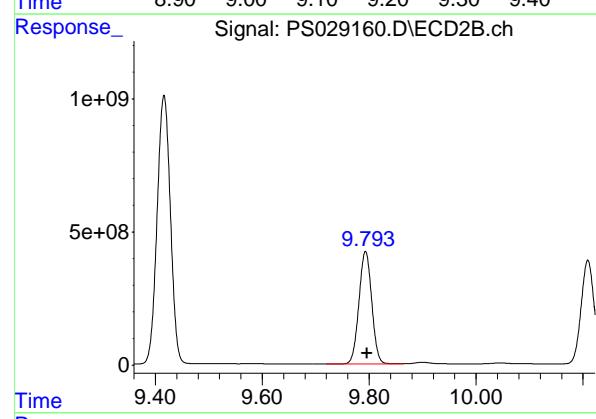
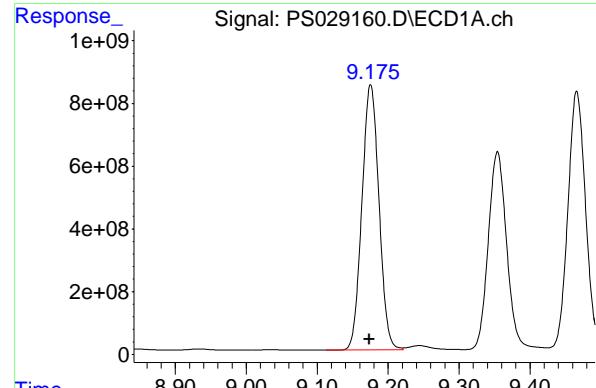
R.T.: 8.895 min  
 Delta R.T.: -0.002 min  
 Response: 994661609  
 Conc: 694.29 ng/ml

#10 Pentachlorophenol

R.T.: 8.601 min  
 Delta R.T.: 0.002 min  
 Response: 36297434683  
 Conc: 769.76 ng/ml

#10 Pentachlorophenol

R.T.: 9.416 min  
 Delta R.T.: -0.003 min  
 Response: 17416307624  
 Conc: 722.08 ng/ml



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

R.T.: 9.175 min  
 Delta R.T.: 0.002 min  
 Instrument: ECD\_S  
 Response: 14137494512  
 Conc: 729.10 ng/ml  
 ClientSampleId: HSTDCCC750

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

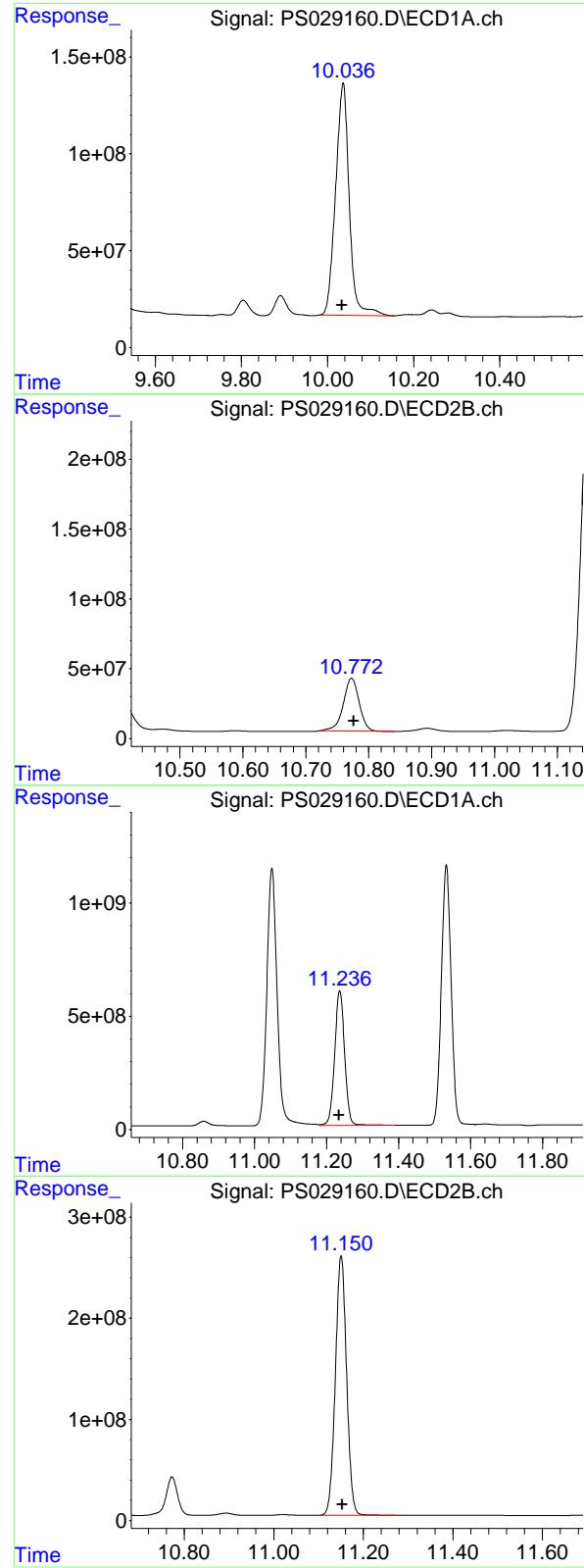
R.T.: 9.793 min  
 Delta R.T.: -0.003 min  
 Response: 7022646245  
 Conc: 718.93 ng/ml

#12 2,4,5-T

R.T.: 9.466 min  
 Delta R.T.: 0.001 min  
 Response: 14132337494  
 Conc: 729.61 ng/ml

#12 2,4,5-T

R.T.: 10.209 min  
 Delta R.T.: -0.003 min  
 Response: 6624496108  
 Conc: 715.21 ng/ml



#13 2,4-DB

R.T.: 10.036 min  
 Delta R.T.: 0.002 min  
 Response: 2635218338 ECD\_S  
 Conc: 709.10 ng/ml ClientSampleId : HSTDCCC750

#13 2,4-DB

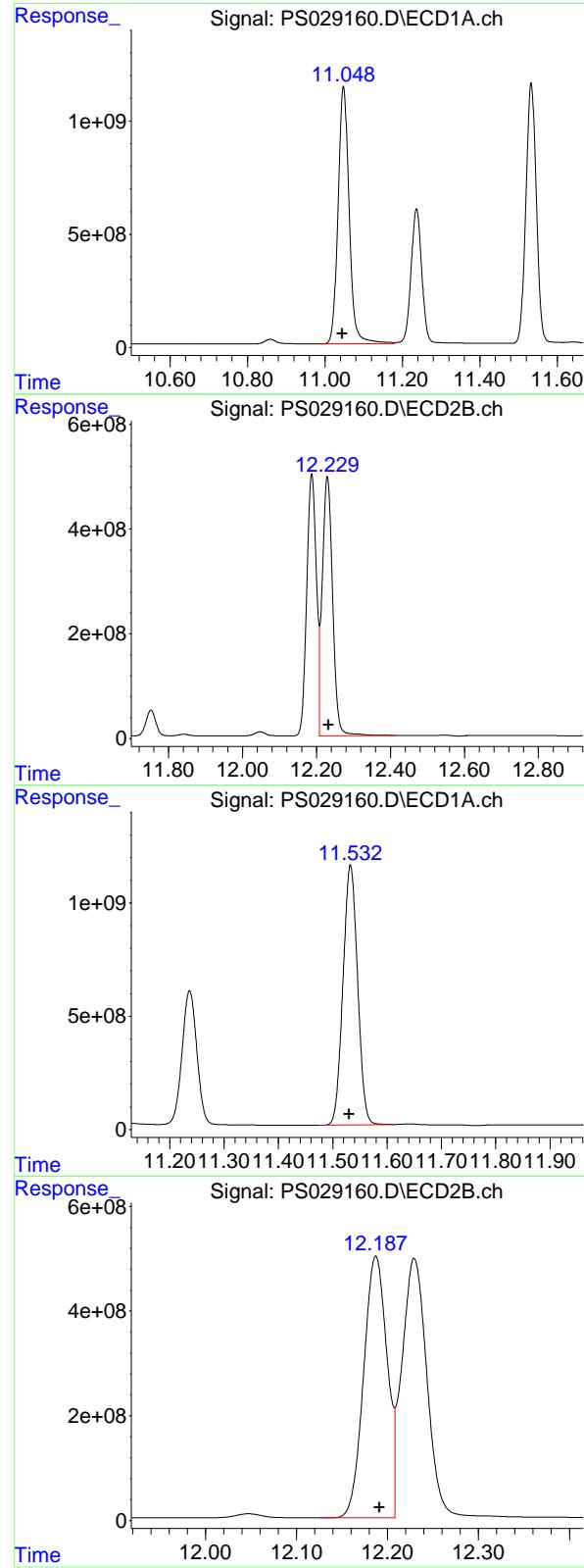
R.T.: 10.773 min  
 Delta R.T.: -0.003 min  
 Response: 663677256  
 Conc: 698.62 ng/ml

#14 DINOSEB

R.T.: 11.237 min  
 Delta R.T.: 0.002 min  
 Response: 11526306380  
 Conc: 794.88 ng/ml

#14 DINOSEB

R.T.: 11.150 min  
 Delta R.T.: -0.003 min  
 Response: 4449513690  
 Conc: 806.85 ng/ml



## #15 Picloram

R.T.: 11.048 min  
 Delta R.T.: 0.003 min  
 Instrument: ECD\_S  
 Response: 22675218890  
 Conc: 709.66 ng/ml  
 ClientSampleId : HSTDCCC750

## #15 Picloram

R.T.: 12.230 min  
 Delta R.T.: -0.003 min  
 Response: 9528887742  
 Conc: 693.07 ng/ml

## #16 DCPA

R.T.: 11.533 min  
 Delta R.T.: 0.002 min  
 Response: 21381696388  
 Conc: 737.39 ng/ml

## #16 DCPA

R.T.: 12.187 min  
 Delta R.T.: -0.004 min  
 Response: 8976683186  
 Conc: 727.75 ng/ml



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

### CALIBRATION VERIFICATION SUMMARY

Contract: WEST04

Lab Code: CHEM Case No.: Q1352 SAS No.: Q1352 SDG NO.: Q1352

Continuing Calib Date: 02/13/2025 Initial Calibration Date(s): 02/11/2025 02/11/2025

Continuing Calib Time: 21:48 Initial Calibration Time(s): 17:56 19:32

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
2,4-DCAA	7.19	7.19	7.09	7.29	0.00
2,4-D	8.30	8.30	8.20	8.40	0.00
2,4,5-TP(Silvex)	9.17	9.17	9.07	9.27	0.00



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### CALIBRATION VERIFICATION SUMMARY

Contract: WEST04

Lab Code: CHEM Case No.: Q1352 SAS No.: Q1352 SDG NO.: Q1352

Continuing Calib Date: 02/13/2025 Initial Calibration Date(s): 02/11/2025 02/11/2025

Continuing Calib Time: 21:48 Initial Calibration Time(s): 17:56 19:32

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
2,4-DCAA	7.66	7.66	7.56	7.76	0.00
2,4-D	8.89	8.90	8.80	9.00	0.01
2,4,5-TP(Silvex)	9.79	9.80	9.70	9.90	0.01



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### CALIBRATION VERIFICATION SUMMARY

Contract: WEST04

Lab Code: CHEM Case No.: Q1352 SAS No.: Q1352 SDG NO.: Q1352

GC Column: RTX-CLP ID: 0.32 (mm) Initi. Calib. Date(s): 02/11/2025 02/11/2025

Client Sample No.: CCAL02 Date Analyzed: 02/13/2025

Lab Sample No.: HSTDCCC750 Data File : PS029167.D Time Analyzed: 21:48

COMPOUND	RT	RT WINDOW FROM		TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	9.174	9.073		9.273	712.400	712.500	0.0
2,4-D	8.304	8.202		8.402	690.020	705.000	-2.1
2,4-DCAA	7.188	7.087		7.287	733.660	750.000	-2.2



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### CALIBRATION VERIFICATION SUMMARY

Contract: WEST04

Lab Code: CHEM Case No.: Q1352 SAS No.: Q1352 SDG NO.: Q1352

GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 02/11/2025 02/11/2025

Client Sample No.: CCAL02 Date Analyzed: 02/13/2025

Lab Sample No.: HSTDCCC750 Data File : PS029167.D Time Analyzed: 21:48

COMPOUND	RT	RT WINDOW FROM		TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	9.793	9.696		9.896	706.270	712.500	-0.9
2,4-D	8.894	8.797		8.997	677.350	705.000	-3.9
2,4-DCAA	7.662	7.564		7.764	712.360	750.000	-5.0

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021325\  
 Data File : PS029167.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 13 Feb 2025 21:48  
 Operator : AR\AJ  
 Sample : HSTDCCC750  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

**Instrument :**  
**ECD\_S**  
**ClientSampleId :**  
**HSTDCCC750**

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 14 01:24:41 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021225.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 09:17:13 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	7.188	7.662	2027.7E6	754.0E6	733.657	712.357
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#### Target Compounds

1) T	Dalapon	2.612	2.659	2028.3E6	1247.3E6	641.245	658.795
2) T	3,5-DICHL...	6.367	6.631	2713.2E6	1041.8E6	684.857	680.967
3) T	4-Nitroph...	6.986	7.192	1187.9E6	589.7E6	696.701	679.961
5) T	DICAMBA	7.372	7.857	8529.0E6	3866.1E6	708.275	699.542
6) T	MCPP	7.555	7.963	506.5E6	179.2E6	73.104	72.618
7) T	MCPA	7.704	8.204	686.3E6	248.2E6	71.702	70.949
8) T	DICHLORPROP	8.075	8.568	2195.9E6	944.2E6	695.106	685.656
9) T	2,4-D	8.304	8.894	2321.3E6	970.4E6	690.020	677.354
10) T	Pentachlo...	8.600	9.416	35543.0E6	17157.0E6	753.764	711.330
11) T	2,4,5-TP ...	9.174	9.793	13813.7E6	6899.0E6	712.402	706.267
12) T	2,4,5-T	9.465	10.209	13729.1E6	6465.3E6	708.794	698.029
13) T	2,4-DB	10.034	10.773	2522.1E6	649.3E6	678.650	683.490
14) T	DINOSEB	11.235	11.150	11065.6E6	4266.1E6	763.115	773.581
15) T	Picloram	11.047	12.231	21809.6E6	9095.4E6	682.563	661.541
16) T	DCPA	11.530	12.188	20967.3E6	8866.2E6	723.104	718.796

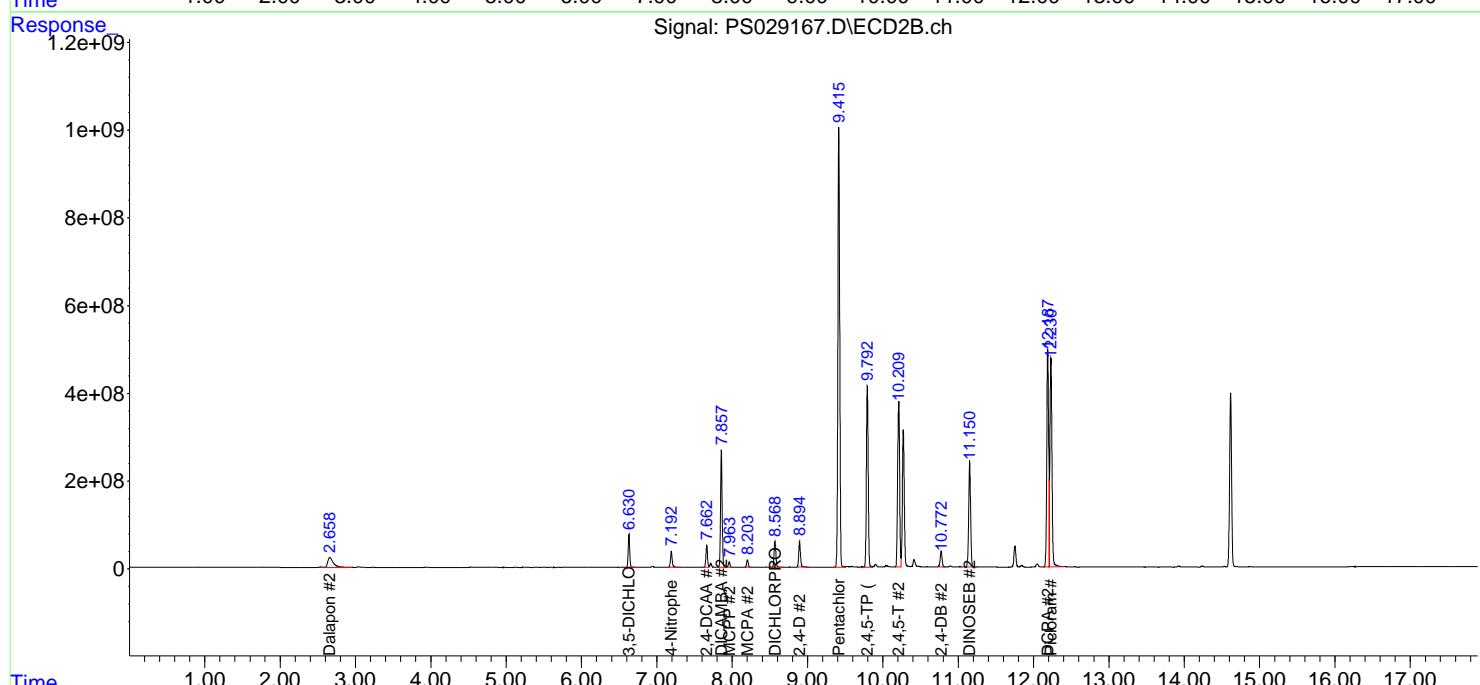
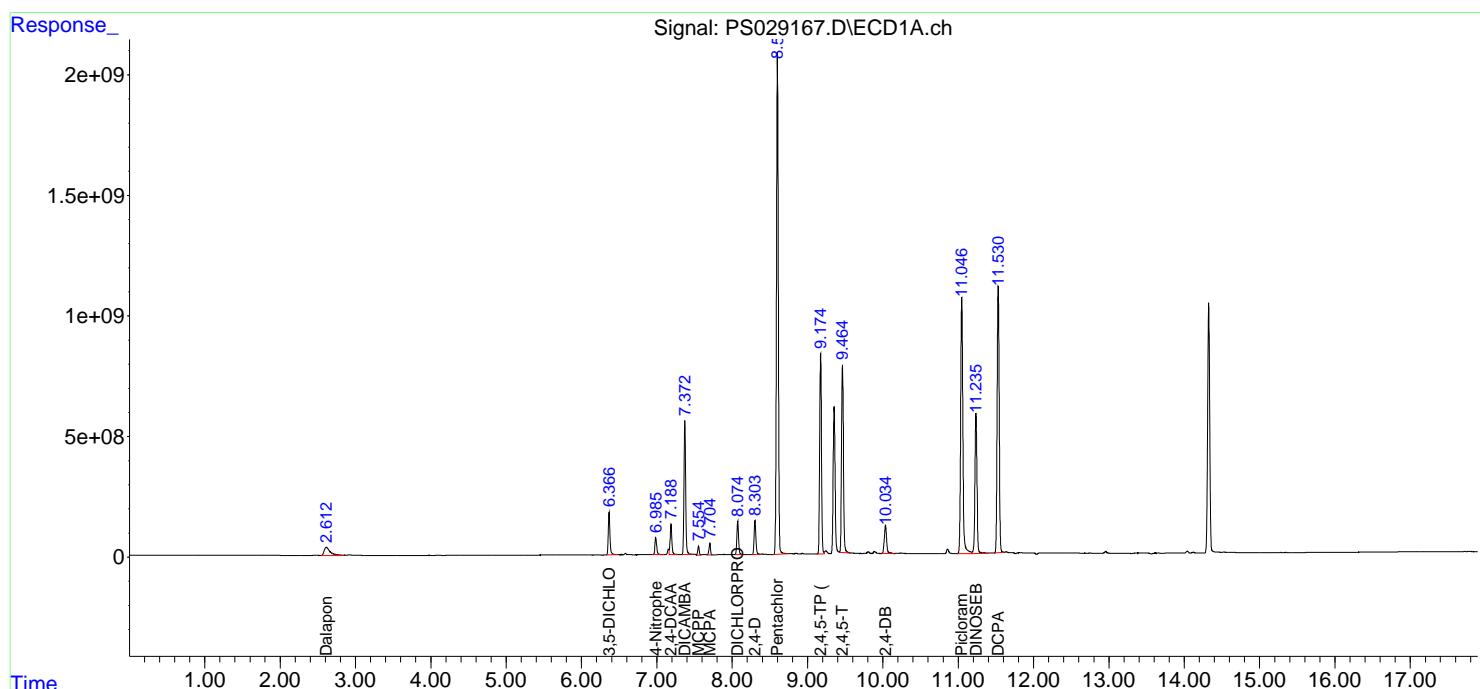
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

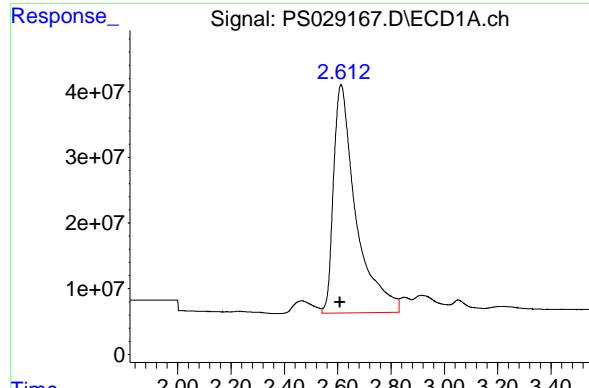
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021325\  
 Data File : PS029167.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 13 Feb 2025 21:48  
 Operator : AR\AJ  
 Sample : HSTDCCC750  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDCCC750

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 14 01:24:41 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021225.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 09:17:13 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

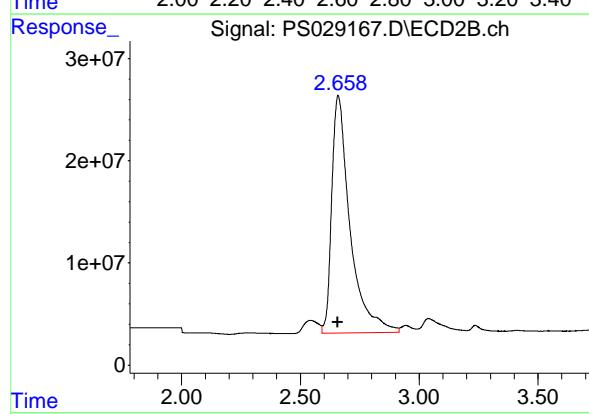
Volume Inj. : 1  $\mu$ l  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25 $\mu$ m





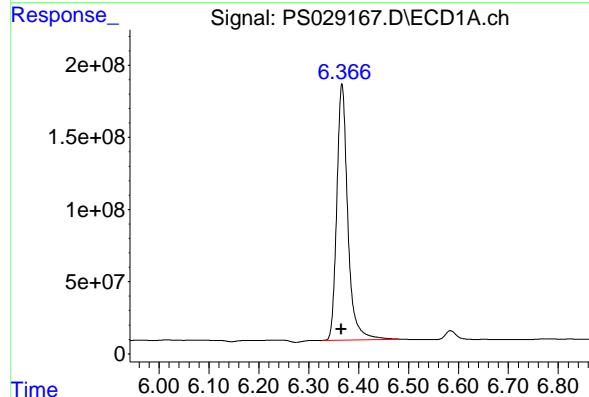
#1 Dalapon

R.T.: 2.612 min  
 Delta R.T.: 0.003 min  
 Response: 2028289649 ECD\_S  
 Conc: 641.25 ng/ml ClientSampleId : HSTDCCC750



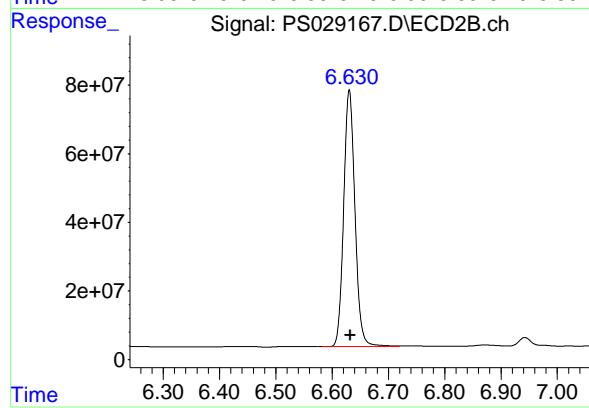
#1 Dalapon

R.T.: 2.659 min  
 Delta R.T.: 0.000 min  
 Response: 1247297297  
 Conc: 658.80 ng/ml



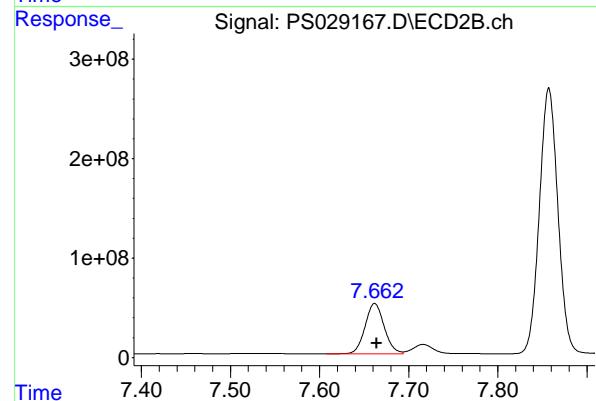
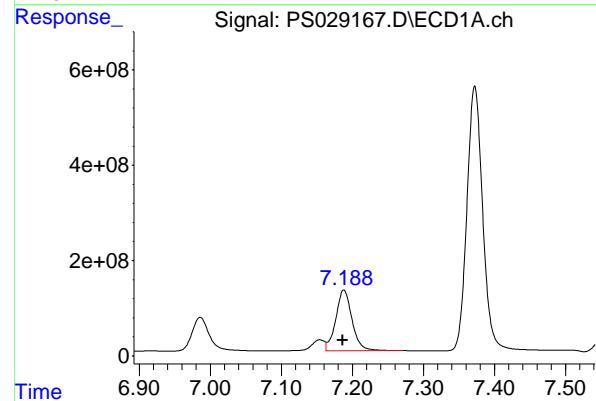
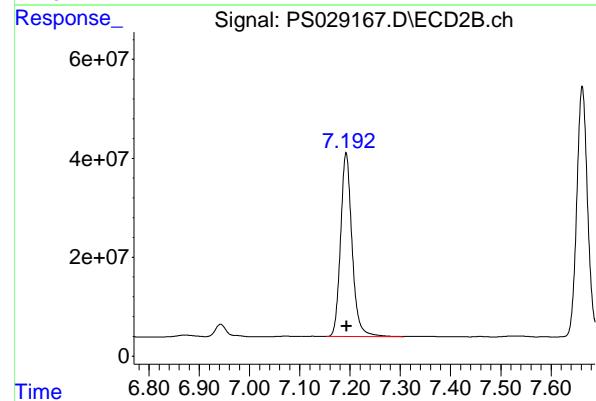
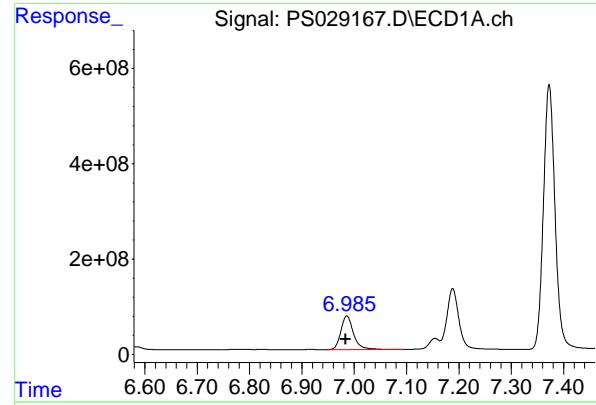
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.367 min  
 Delta R.T.: 0.001 min  
 Response: 2713245700  
 Conc: 684.86 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.631 min  
 Delta R.T.: -0.001 min  
 Response: 1041788144  
 Conc: 680.97 ng/ml



## #3 4-Nitrophenol

R.T.: 6.986 min  
 Delta R.T.: 0.002 min  
 Response: 1187924466 ECD\_S  
 Conc: 696.70 ng/ml ClientSampleId : HSTDCCC750

## #3 4-Nitrophenol

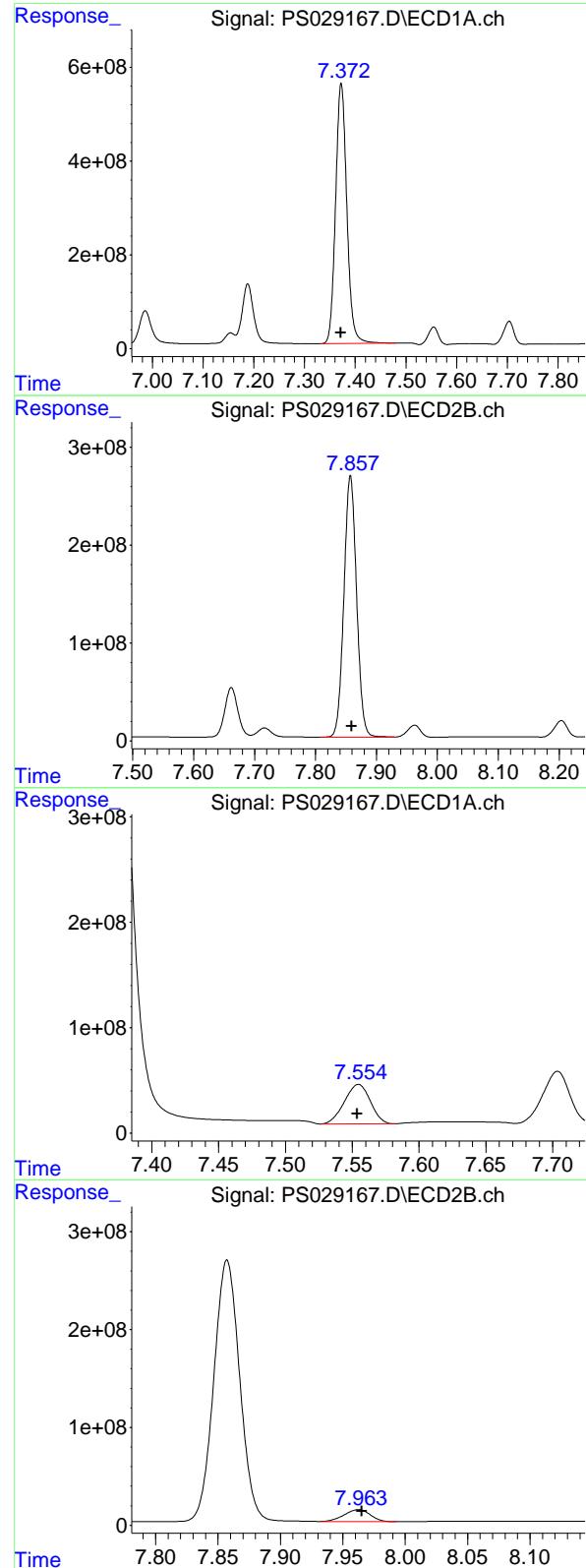
R.T.: 7.192 min  
 Delta R.T.: -0.001 min  
 Response: 589729171  
 Conc: 679.96 ng/ml

## #4 2,4-DCAA

R.T.: 7.188 min  
 Delta R.T.: 0.002 min  
 Response: 2027721982  
 Conc: 733.66 ng/ml

## #4 2,4-DCAA

R.T.: 7.662 min  
 Delta R.T.: -0.002 min  
 Response: 754026252  
 Conc: 712.36 ng/ml



## #5 DICAMBA

R.T.: 7.372 min  
 Delta R.T.: 0.001 min  
 Instrument: ECD\_S  
 Response: 8529008774  
 Conc: 708.27 ng/ml  
 ClientSampleId: HSTDCCC750

## #5 DICAMBA

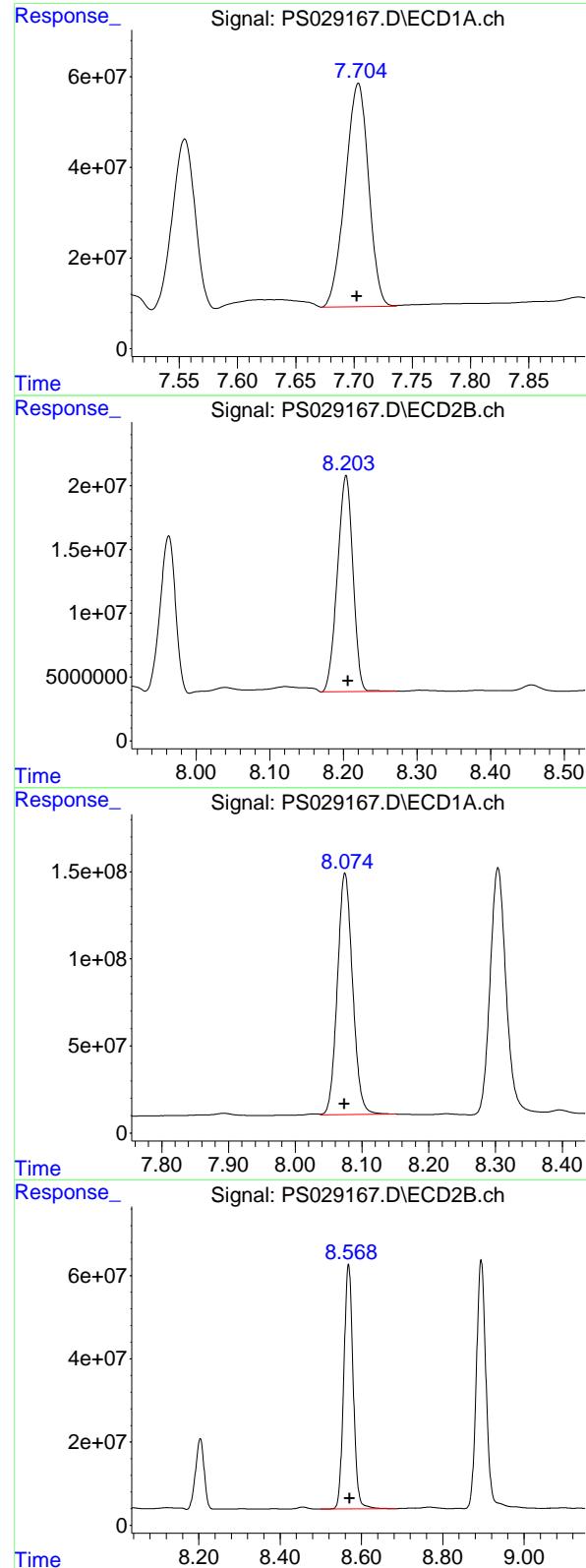
R.T.: 7.857 min  
 Delta R.T.: -0.002 min  
 Response: 3866088966  
 Conc: 699.54 ng/ml

## #6 MCPP

R.T.: 7.555 min  
 Delta R.T.: 0.000 min  
 Response: 506491421  
 Conc: 73.10 ug/ml

## #6 MCPP

R.T.: 7.963 min  
 Delta R.T.: -0.003 min  
 Response: 179162908  
 Conc: 72.62 ug/ml



## #7 MCPA

R.T.: 7.704 min  
 Delta R.T.: 0.001 min  
 Response: 686342337  
 Conc: 71.70 ug/ml

Instrument: ECD\_S  
 ClientSampleId: HSTDCCC750

## #7 MCPA

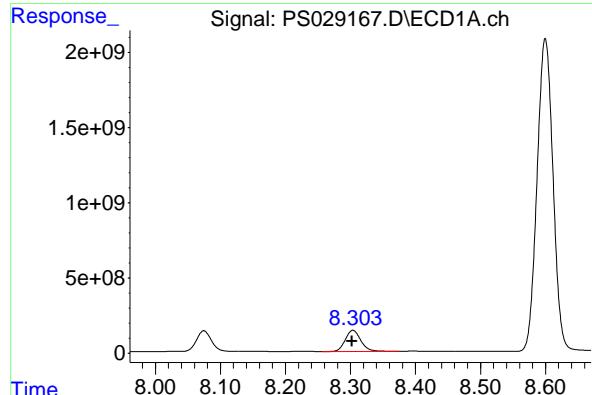
R.T.: 8.204 min  
 Delta R.T.: -0.003 min  
 Response: 248207506  
 Conc: 70.95 ug/ml

## #8 DICHLORPROP

R.T.: 8.075 min  
 Delta R.T.: 0.000 min  
 Response: 2195883429  
 Conc: 695.11 ng/ml

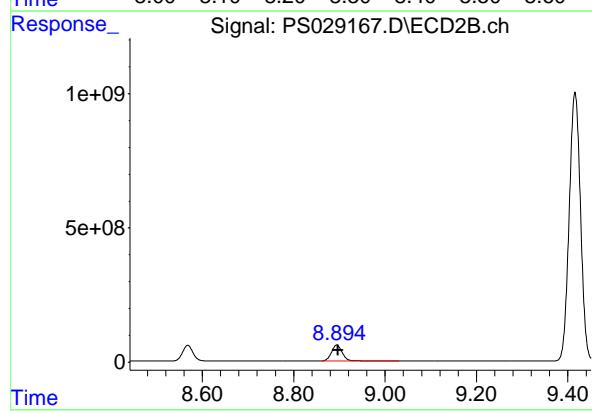
## #8 DICHLORPROP

R.T.: 8.568 min  
 Delta R.T.: -0.003 min  
 Response: 944209069  
 Conc: 685.66 ng/ml



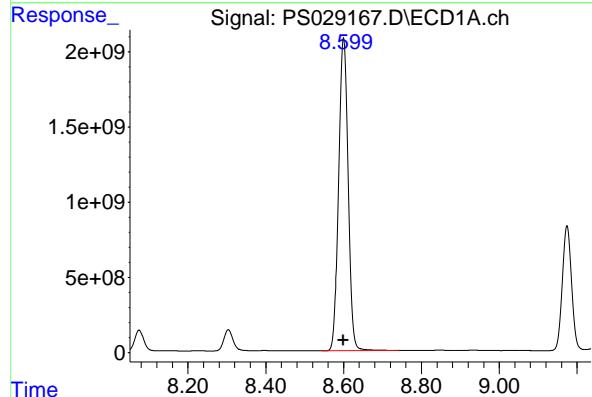
#9 2,4-D

R.T.: 8.304 min  
 Delta R.T.: 0.001 min  
 Response: 2321290285 ECD\_S  
 Conc: 690.02 ng/ml ClientSampleId : HSTDCCC750



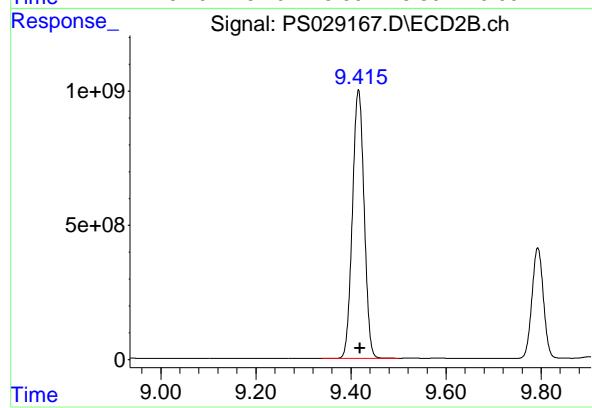
#9 2,4-D

R.T.: 8.894 min  
 Delta R.T.: -0.003 min  
 Response: 970396161  
 Conc: 677.35 ng/ml



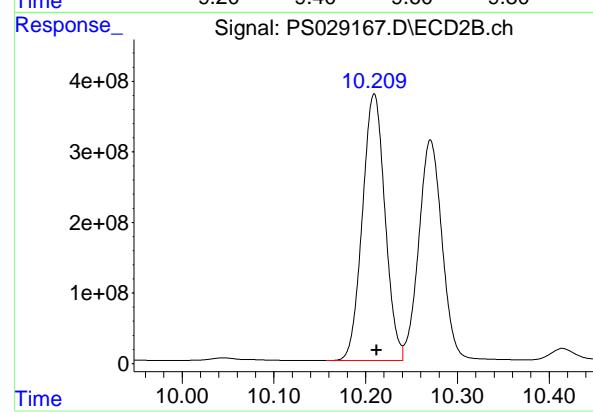
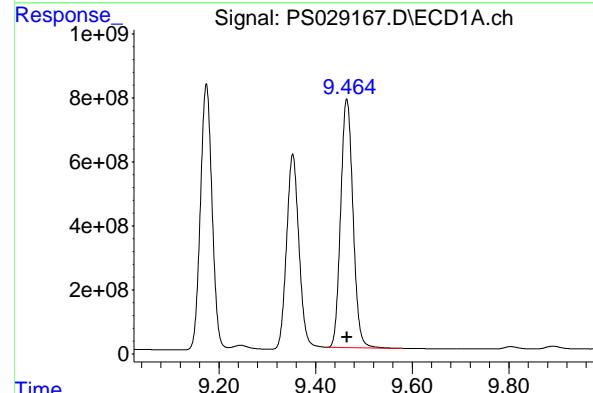
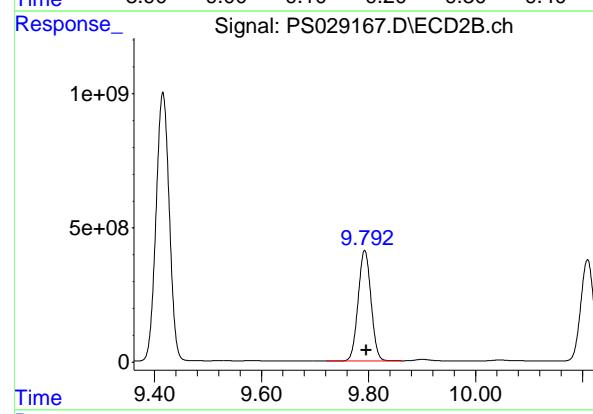
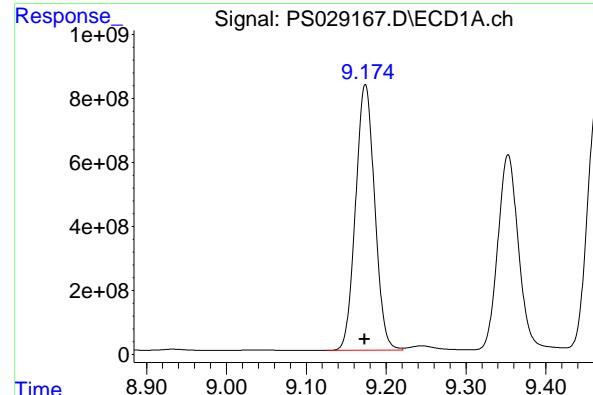
#10 Pentachlorophenol

R.T.: 8.600 min  
 Delta R.T.: 0.000 min  
 Response: 35542977190  
 Conc: 753.76 ng/ml



#10 Pentachlorophenol

R.T.: 9.416 min  
 Delta R.T.: -0.003 min  
 Response: 17157004145  
 Conc: 711.33 ng/ml



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

R.T.: 9.174 min  
Delta R.T.: 0.000 min  
Instrument: ECD\_S  
Response: 13813727386  
Conc: 712.40 ng/ml  
ClientSampleId : HSTDCCC750

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

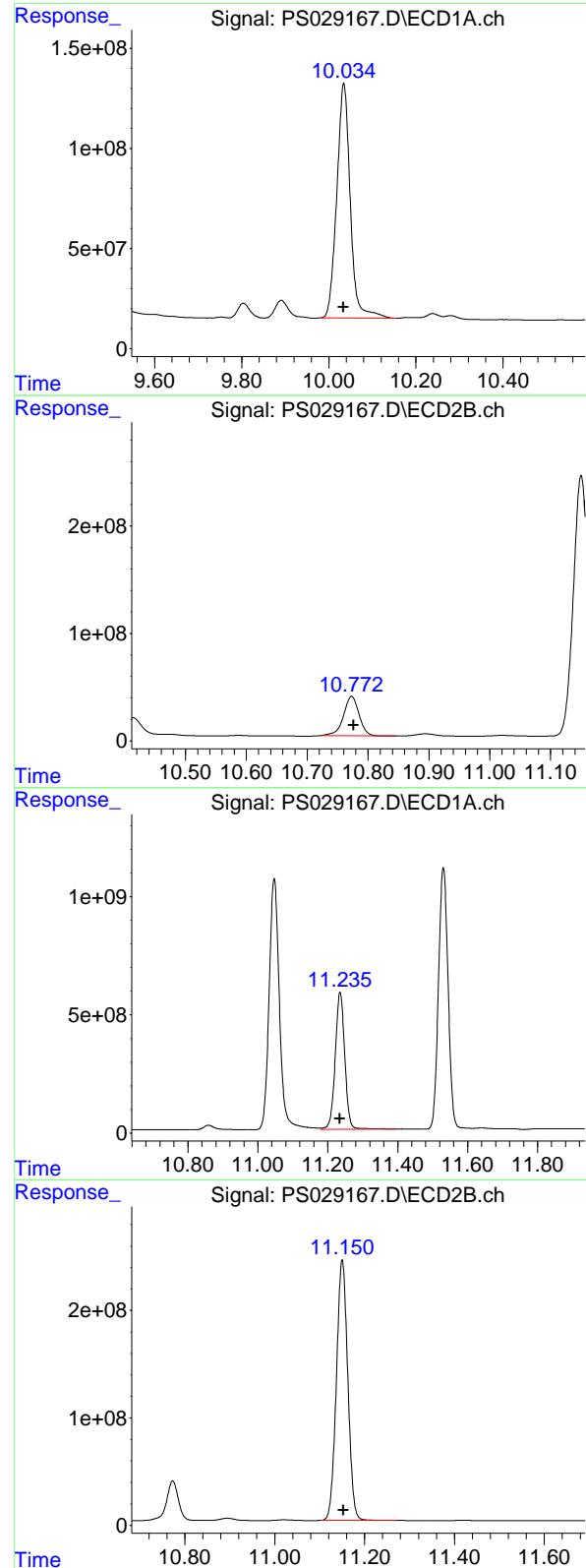
R.T.: 9.793 min  
Delta R.T.: -0.003 min  
Response: 6898960721  
Conc: 706.27 ng/ml

#12 2,4,5-T

R.T.: 9.465 min  
Delta R.T.: 0.000 min  
Response: 13729101226  
Conc: 708.79 ng/ml

#12 2,4,5-T

R.T.: 10.209 min  
Delta R.T.: -0.003 min  
Response: 6465337542  
Conc: 698.03 ng/ml



#13 2,4-DB

R.T.: 10.034 min  
 Delta R.T.: 0.000 min  
 Response: 2522062147 ECD\_S  
 Conc: 678.65 ng/ml ClientSampleId : HSTDCCC750

#13 2,4-DB

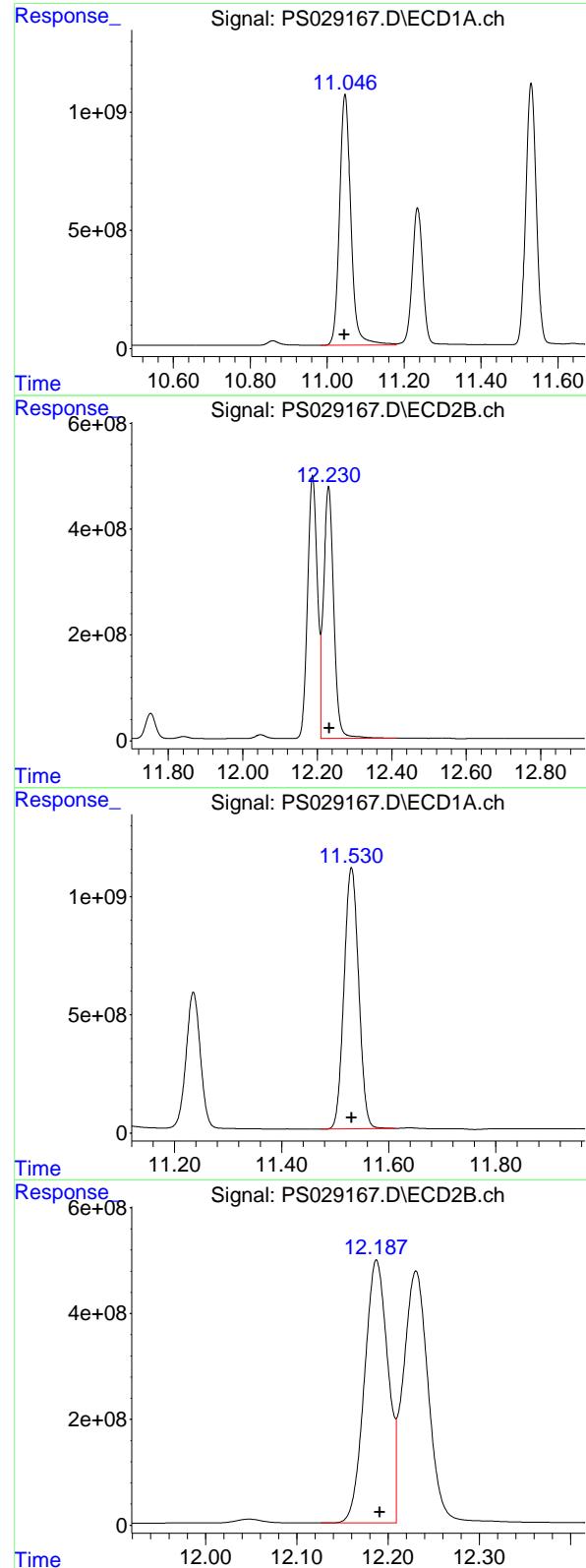
R.T.: 10.773 min  
 Delta R.T.: -0.003 min  
 Response: 649308697  
 Conc: 683.49 ng/ml

#14 DINOSEB

R.T.: 11.235 min  
 Delta R.T.: 0.000 min  
 Response: 11065635404  
 Conc: 763.12 ng/ml

#14 DINOSEB

R.T.: 11.150 min  
 Delta R.T.: -0.003 min  
 Response: 4266061356  
 Conc: 773.58 ng/ml



#15 Picloram

R.T.: 11.047 min  
 Delta R.T.: 0.001 min  
 Instrument: ECD\_S  
 Response: 21809574722  
 Conc: 682.56 ng/ml  
 ClientSampleId : HSTDCCC750

#15 Picloram

R.T.: 12.231 min  
 Delta R.T.: -0.002 min  
 Response: 9095432967  
 Conc: 661.54 ng/ml

#16 DCPA

R.T.: 11.530 min  
 Delta R.T.: 0.000 min  
 Response: 20967328450  
 Conc: 723.10 ng/ml

#16 DCPA

R.T.: 12.188 min  
 Delta R.T.: -0.003 min  
 Response: 8866221329  
 Conc: 718.80 ng/ml



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

### CALIBRATION VERIFICATION SUMMARY

Contract: WEST04

Lab Code: CHEM Case No.: Q1352 SAS No.: Q1352 SDG NO.: Q1352

Continuing Calib Date: 02/14/2025 Initial Calibration Date(s): 02/11/2025 02/11/2025

Continuing Calib Time: 03:00 Initial Calibration Time(s): 17:56 19:32

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
2,4-DCAA	7.19	7.19	7.09	7.29	0.00
2,4-D	8.30	8.30	8.20	8.40	0.00
2,4,5-TP(Silvex)	9.17	9.17	9.07	9.27	0.00



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Fax : 908 789 8922

### CALIBRATION VERIFICATION SUMMARY

Contract: WEST04

Lab Code: CHEM Case No.: Q1352 SAS No.: Q1352 SDG NO.: Q1352

Continuing Calib Date: 02/14/2025 Initial Calibration Date(s): 02/11/2025 02/11/2025

Continuing Calib Time: 03:00 Initial Calibration Time(s): 17:56 19:32

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
2,4-DCAA	7.66	7.66	7.56	7.76	0.00
2,4-D	8.89	8.90	8.80	9.00	0.01
2,4,5-TP(Silvex)	9.79	9.80	9.70	9.90	0.01



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

### CALIBRATION VERIFICATION SUMMARY

Contract: WEST04

Lab Code: CHEM Case No.: Q1352 SAS No.: Q1352 SDG NO.: Q1352

GC Column: RTX-CLP ID: 0.32 (mm) Initi. Calib. Date(s): 02/11/2025 02/11/2025

Client Sample No.: CCAL03 Date Analyzed: 02/14/2025

Lab Sample No.: HSTDCCC750 Data File : PS029179.D Time Analyzed: 03:00

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-TP(Silvex)	9.173	9.073	9.273	706.420	712.500	-0.9
2,4-D	8.303	8.202	8.402	683.610	705.000	-3.0
2,4-DCAA	7.187	7.087	7.287	723.550	750.000	-3.5



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### CALIBRATION VERIFICATION SUMMARY

Contract: WEST04

Lab Code: CHEM Case No.: Q1352 SAS No.: Q1352 SDG NO.: Q1352

GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 02/11/2025 02/11/2025

Client Sample No.: CCAL03 Date Analyzed: 02/14/2025

Lab Sample No.: HSTDCCC750 Data File : PS029179.D Time Analyzed: 03:00

COMPOUND	RT	RT WINDOW FROM		TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	9.792	9.696		9.896	707.760	712.500	-0.7
2,4-D	8.894	8.797		8.997	677.370	705.000	-3.9
2,4-DCAA	7.662	7.564		7.764	712.640	750.000	-5.0

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021325\  
 Data File : PS029179.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 14 Feb 2025 03:00  
 Operator : AR\AJ  
 Sample : HSTDCCC750  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

**Instrument :**  
**ECD\_S**  
**ClientSampleId :**  
**HSTDCCC750**

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 14 04:00:27 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021225.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 09:17:13 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 7.187 7.662 1999.8E6 754.3E6 723.550 712.639

#### Target Compounds

1) T	Dalapon	2.610	2.656	2021.9E6	1196.4E6	639.238	631.927
2) T	3,5-DICHL...	6.366	6.630	2684.8E6	1041.1E6	677.685	680.536
3) T	4-Nitroph...	6.985	7.192	1179.6E6	590.5E6	691.795	680.895
5) T	DICAMBA	7.372	7.857	8452.4E6	3870.8E6	701.914	700.387
6) T	MCPP	7.554	7.962	501.4E6	179.5E6	72.364	72.744
7) T	MCPA	7.702	8.203	682.3E6	248.1E6	71.279	70.912
8) T	DICHLORPROP	8.074	8.567	2174.4E6	942.7E6	688.320	684.578
9) T	2,4-D	8.303	8.894	2299.7E6	970.4E6	683.609	677.373
10) T	Pentachlo...	8.598	9.415	35258.8E6	17167.1E6	747.738	711.750
11) T	2,4,5-TP ...	9.173	9.792	13697.8E6	6913.5E6	706.423	707.758
12) T	2,4,5-T	9.464	10.207	13633.5E6	6493.2E6	703.860	701.034
13) T	2,4-DB	10.033	10.772	2486.2E6	648.0E6	668.990	682.143
14) T	DINOSEB	11.234	11.149	11142.6E6	4348.7E6	768.426	788.575
15) T	Picloram	11.045	12.229	21519.3E6	9024.2E6	673.480	656.358
16) T	DCPA	11.530	12.185	20808.1E6	8910.8E6	717.613	722.406

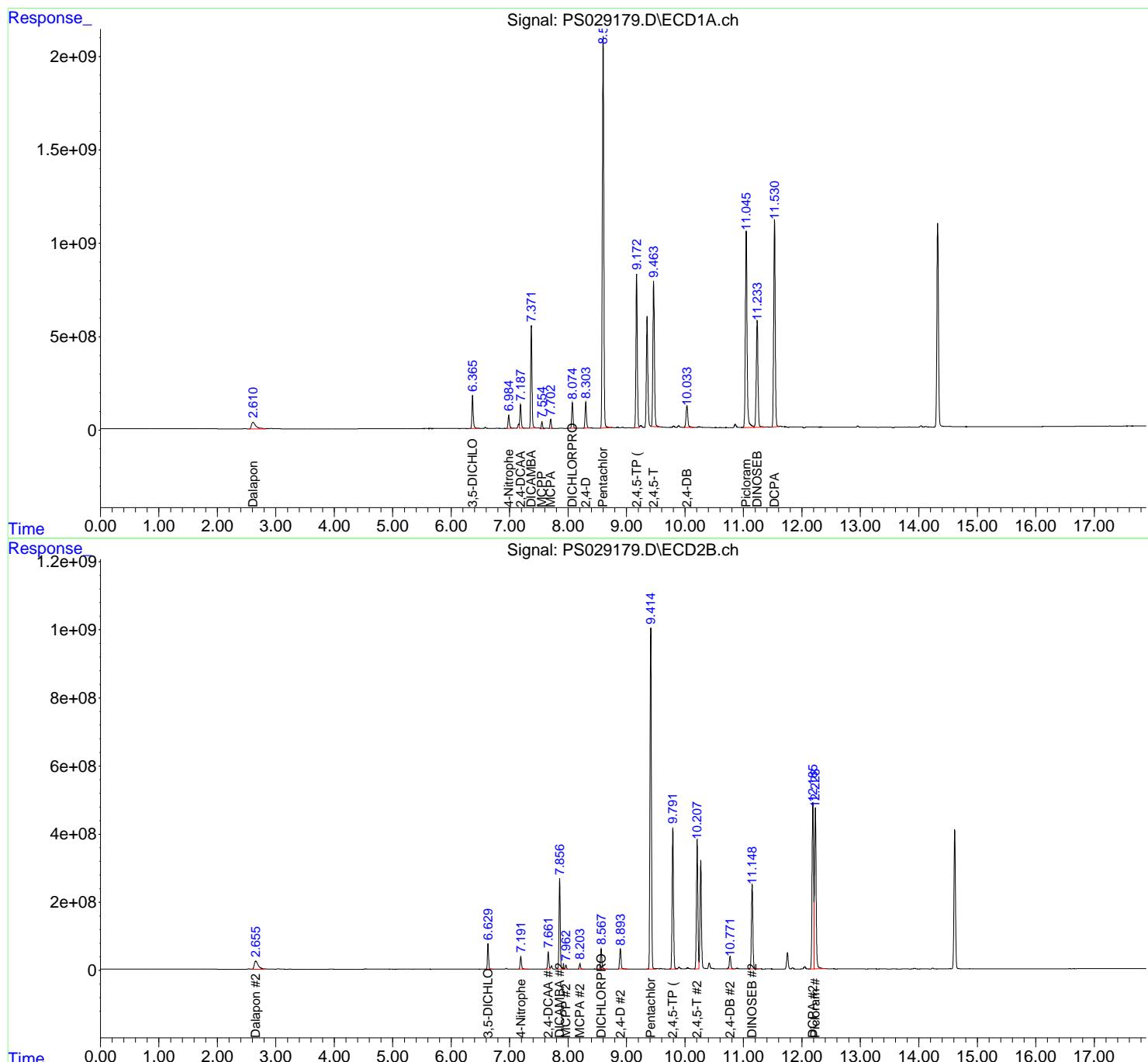
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

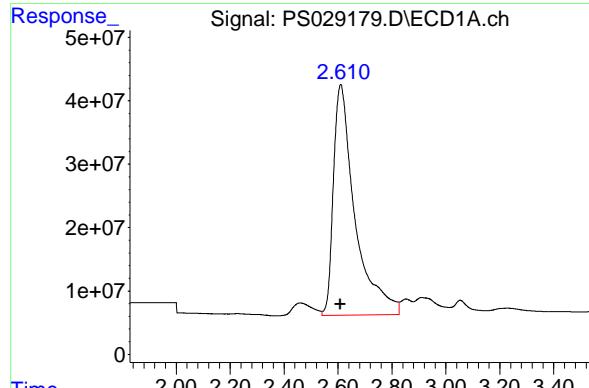
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021325\  
 Data File : PS029179.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 14 Feb 2025 03:00  
 Operator : AR\AJ  
 Sample : HSTDCCC750  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 ECD\_S  
 ClientSampleId :  
 HSTDCCC750

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 14 04:00:27 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021225.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 09:17:13 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

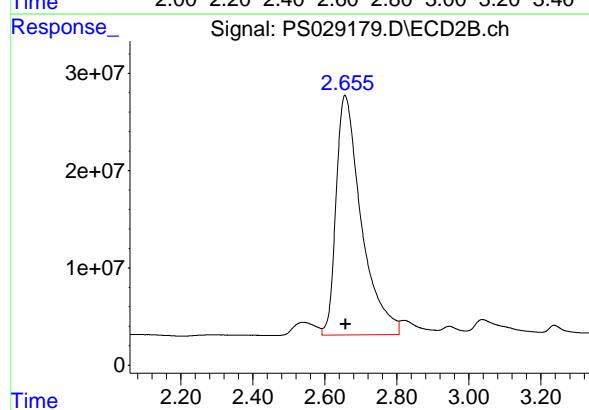
Volume Inj. : 1  $\mu$ l  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25 $\mu$ m





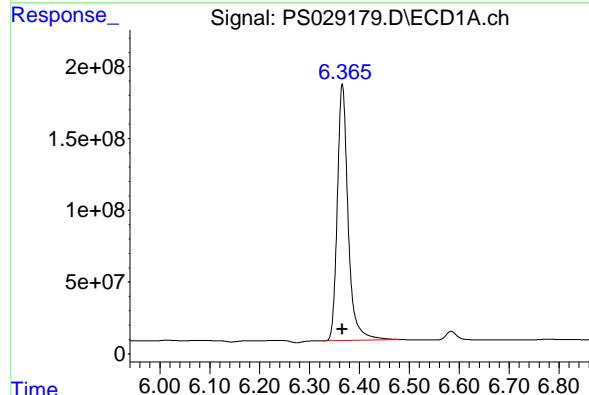
#1 Dalapon

R.T.: 2.610 min  
 Delta R.T.: 0.001 min  
 Instrument: ECD\_S  
 Response: 2021941768 ClientSampleId :  
 Conc: 639.24 ng/ml HSTDCCC750



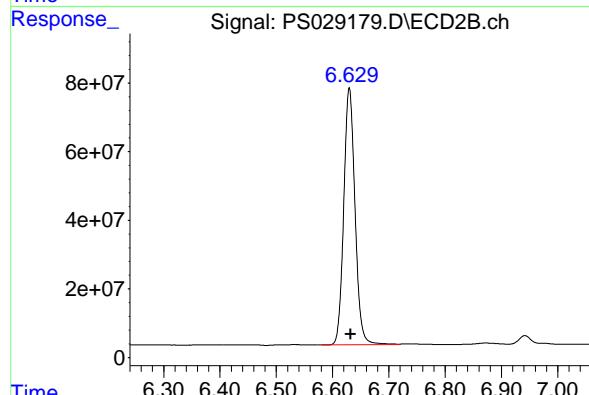
#1 Dalapon

R.T.: 2.656 min  
 Delta R.T.: -0.002 min  
 Response: 1196427514  
 Conc: 631.93 ng/ml



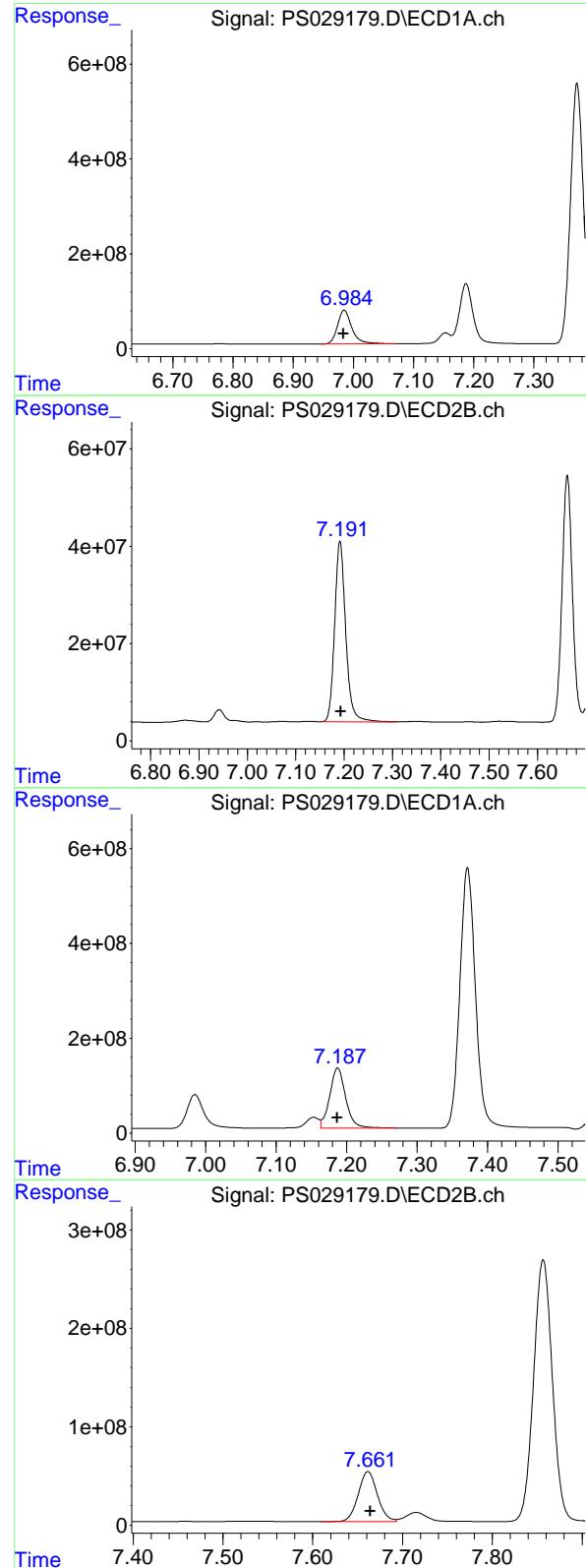
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.366 min  
 Delta R.T.: 0.000 min  
 Response: 2684834495  
 Conc: 677.69 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.630 min  
 Delta R.T.: -0.002 min  
 Response: 1041129154  
 Conc: 680.54 ng/ml



## #3 4-Nitrophenol

R.T.: 6.985 min  
 Delta R.T.: 0.000 min  
 Response: 1179560454 ECD\_S  
 Conc: 691.80 ng/ml ClientSampleId : HSTDCCC750

## #3 4-Nitrophenol

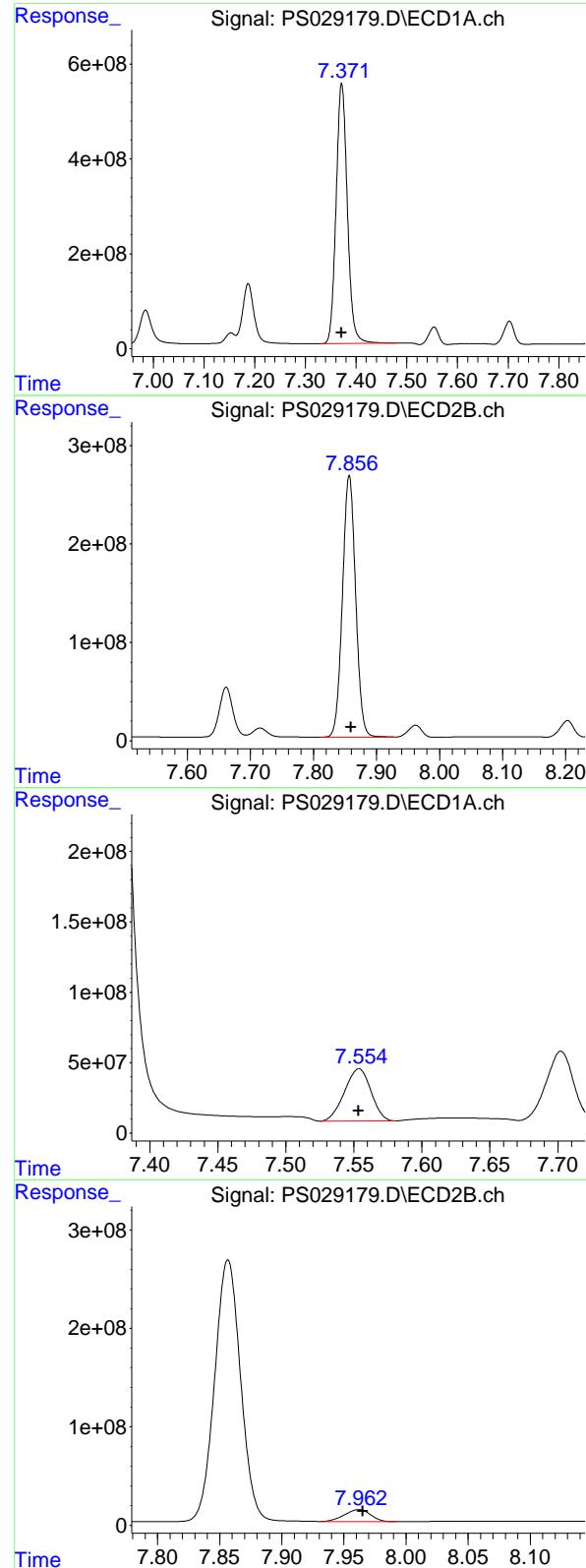
R.T.: 7.192 min  
 Delta R.T.: -0.002 min  
 Response: 590539586  
 Conc: 680.90 ng/ml

## #4 2,4-DCAA

R.T.: 7.187 min  
 Delta R.T.: 0.000 min  
 Response: 1999789573  
 Conc: 723.55 ng/ml

## #4 2,4-DCAA

R.T.: 7.662 min  
 Delta R.T.: -0.003 min  
 Response: 754324593  
 Conc: 712.64 ng/ml



## #5 DICAMBA

R.T.: 7.372 min  
 Delta R.T.: 0.000 min  
 Instrument: ECD\_S  
 Response: 8452413064  
 Conc: 701.91 ng/ml  
 ClientSampleId: HSTDCCC750

## #5 DICAMBA

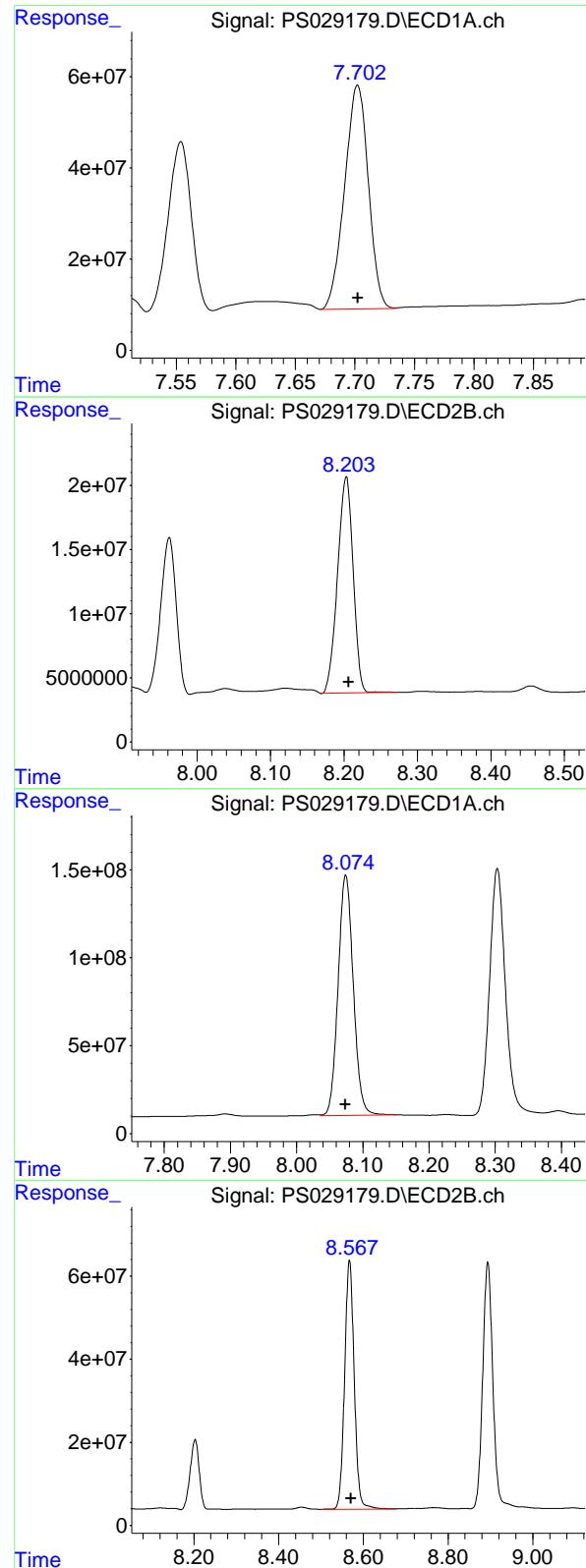
R.T.: 7.857 min  
 Delta R.T.: -0.003 min  
 Response: 3870755897  
 Conc: 700.39 ng/ml

## #6 MCPP

R.T.: 7.554 min  
 Delta R.T.: 0.000 min  
 Response: 501369704  
 Conc: 72.36 ug/ml

## #6 MCPP

R.T.: 7.962 min  
 Delta R.T.: -0.003 min  
 Response: 179475613  
 Conc: 72.74 ug/ml



## #7 MCPA

R.T.: 7.702 min  
 Delta R.T.: 0.000 min  
 Response: 682292966 ECD\_S  
 Conc: 71.28 ug/ml ClientSampleId : HSTDCCC750

## #7 MCPA

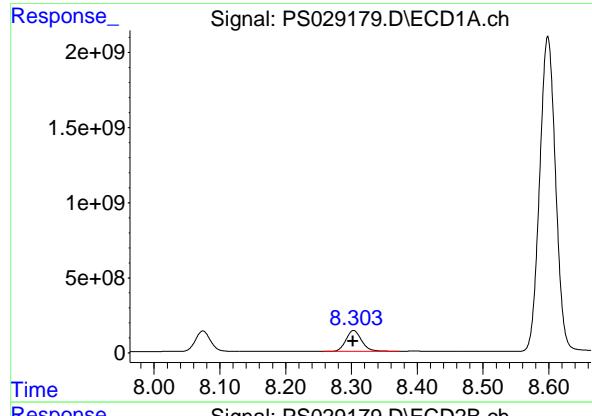
R.T.: 8.203 min  
 Delta R.T.: -0.003 min  
 Response: 248077616  
 Conc: 70.91 ug/ml

## #8 DICHLORPROP

R.T.: 8.074 min  
 Delta R.T.: 0.000 min  
 Response: 2174443833  
 Conc: 688.32 ng/ml

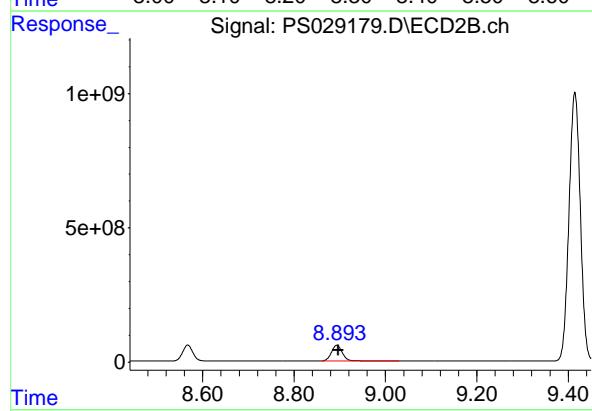
## #8 DICHLORPROP

R.T.: 8.567 min  
 Delta R.T.: -0.004 min  
 Response: 942725447  
 Conc: 684.58 ng/ml



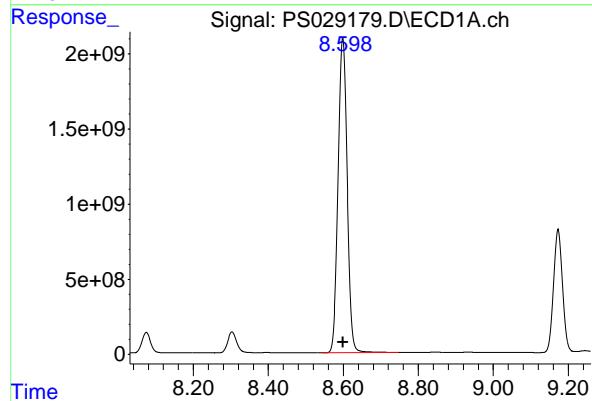
#9 2,4-D

R.T.: 8.303 min  
 Delta R.T.: 0.000 min  
 Response: 2299722285 ECD\_S  
 Conc: 683.61 ng/ml ClientSampleId : HSTDCCC750



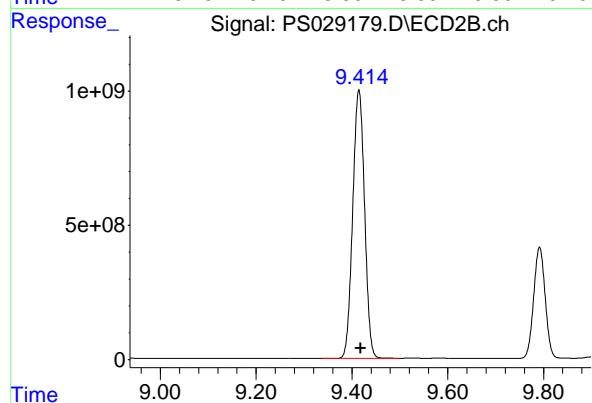
#9 2,4-D

R.T.: 8.894 min  
 Delta R.T.: -0.003 min  
 Response: 970423611  
 Conc: 677.37 ng/ml



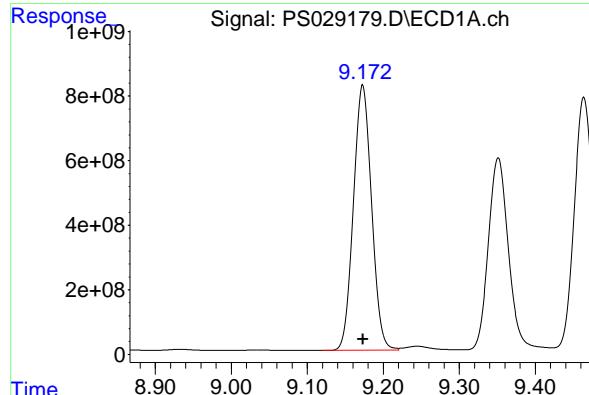
#10 Pentachlorophenol

R.T.: 8.598 min  
 Delta R.T.: 0.000 min  
 Response: 35258808477  
 Conc: 747.74 ng/ml



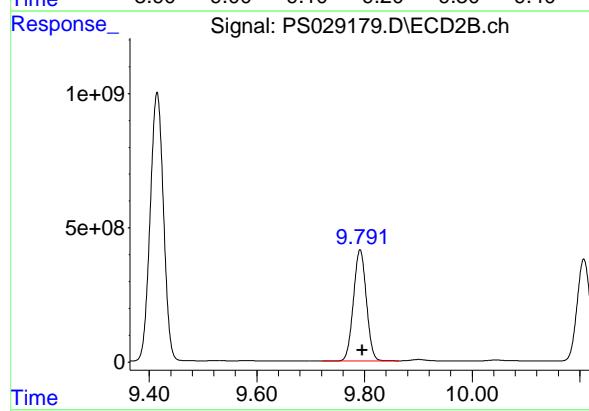
#10 Pentachlorophenol

R.T.: 9.415 min  
 Delta R.T.: -0.004 min  
 Response: 17167137425  
 Conc: 711.75 ng/ml



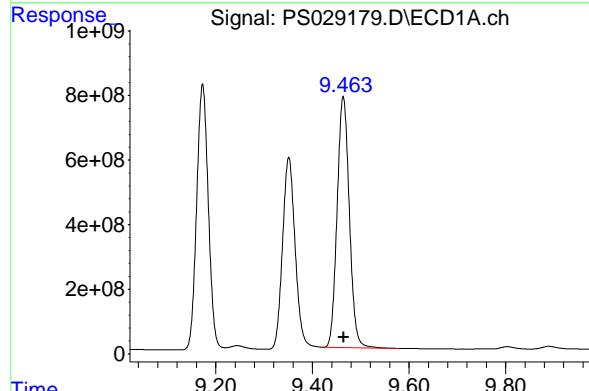
#11 2,4,5-TP (SILVEX)

R.T.: 9.173 min  
 Delta R.T.: 0.000 min  
 Response: 13697786957 ECD\_S  
 Conc: 706.42 ng/ml Client SampleId : HSTDCCC750



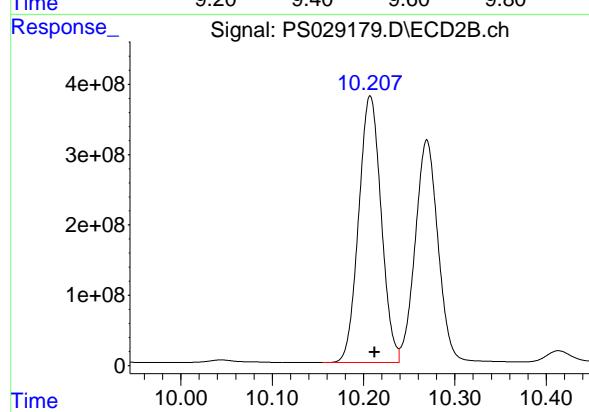
#11 2,4,5-TP (SILVEX)

R.T.: 9.792 min  
 Delta R.T.: -0.004 min  
 Response: 6913529864  
 Conc: 707.76 ng/ml



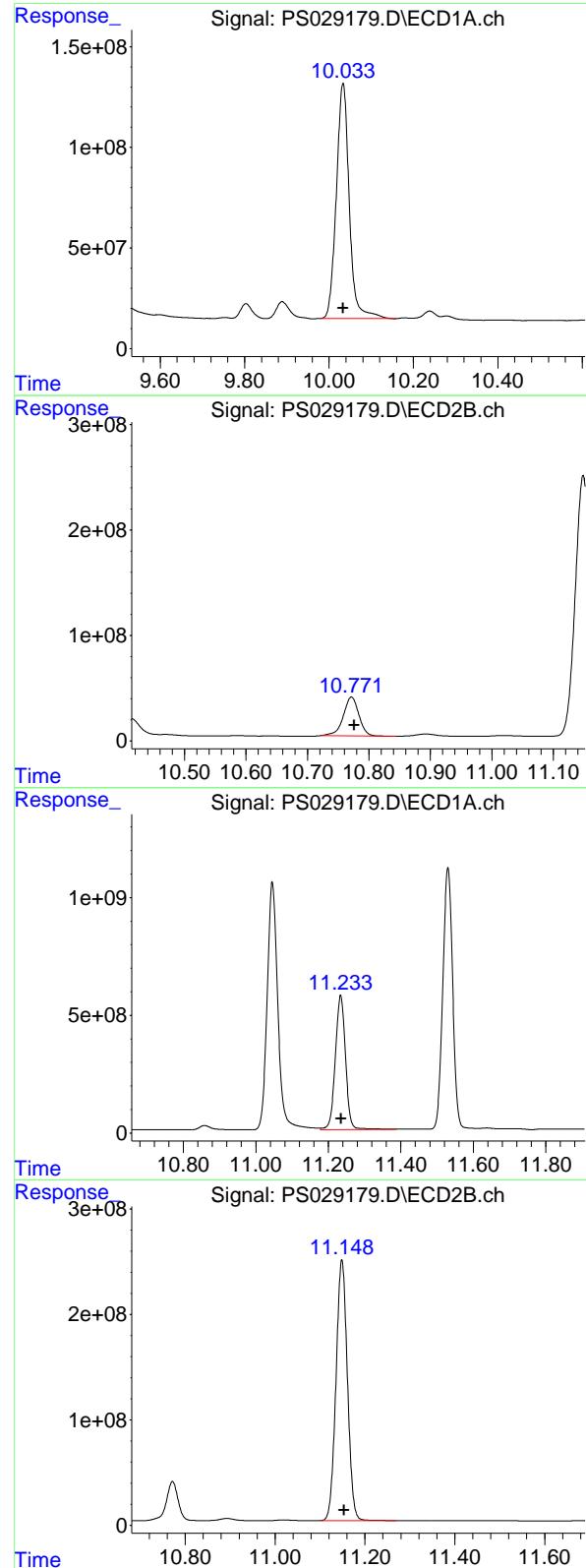
#12 2,4,5-T

R.T.: 9.464 min  
 Delta R.T.: 0.000 min  
 Response: 13633531749  
 Conc: 703.86 ng/ml



#12 2,4,5-T

R.T.: 10.207 min  
 Delta R.T.: -0.005 min  
 Response: 6493178900  
 Conc: 701.03 ng/ml



#13 2,4-DB

R.T.: 10.033 min  
 Delta R.T.: 0.000 min  
 Response: 2486162075 ECD\_S  
 Conc: 668.99 ng/ml ClientSampleId : HSTDCCC750

#13 2,4-DB

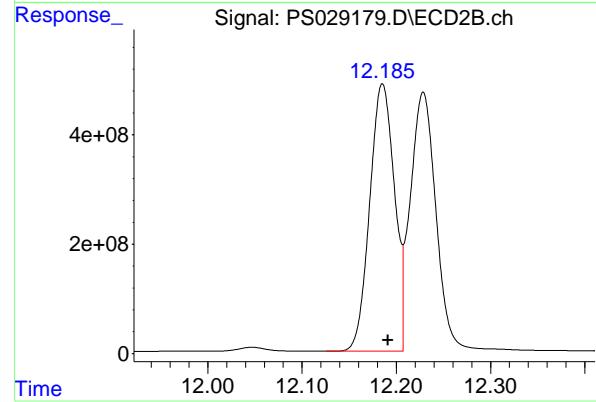
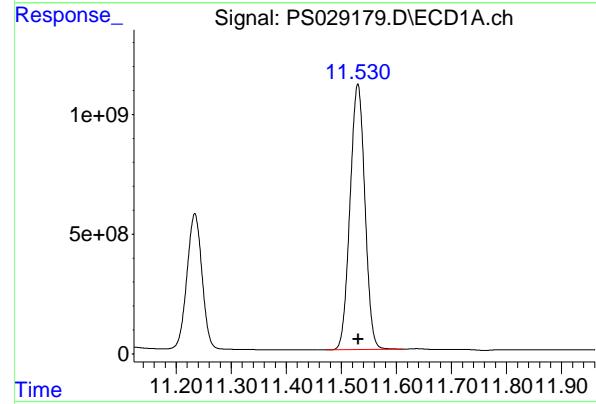
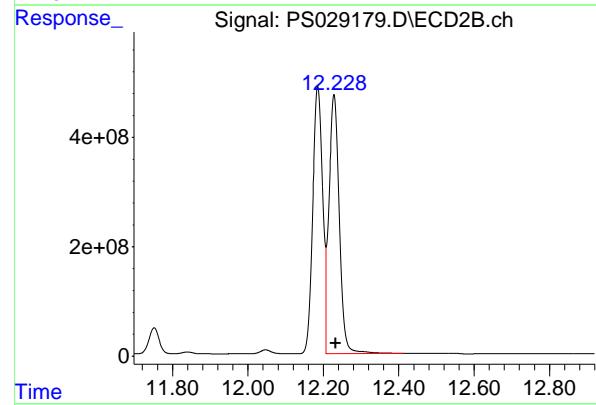
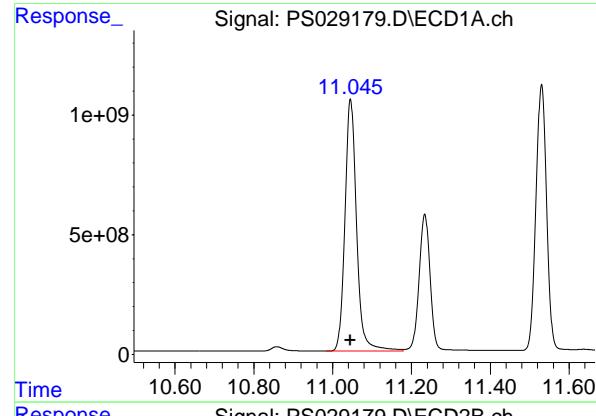
R.T.: 10.772 min  
 Delta R.T.: -0.004 min  
 Response: 648028621  
 Conc: 682.14 ng/ml

#14 DINOSEB

R.T.: 11.234 min  
 Delta R.T.: 0.000 min  
 Response: 11142647115  
 Conc: 768.43 ng/ml

#14 DINOSEB

R.T.: 11.149 min  
 Delta R.T.: -0.005 min  
 Response: 4348746677  
 Conc: 788.57 ng/ml



## #15 Picloram

R.T.: 11.045 min  
 Delta R.T.: 0.000 min  
 Instrument: ECD\_S  
 Response: 21519329993  
 Conc: 673.48 ng/ml  
 ClientSampleId: HSTDCCC750

## #15 Picloram

R.T.: 12.229 min  
 Delta R.T.: -0.004 min  
 Response: 9024176076  
 Conc: 656.36 ng/ml

## #16 DCPA

R.T.: 11.530 min  
 Delta R.T.: 0.000 min  
 Response: 20808118129  
 Conc: 717.61 ng/ml

## #16 DCPA

R.T.: 12.185 min  
 Delta R.T.: -0.006 min  
 Response: 8910759552  
 Conc: 722.41 ng/ml

## Analytical Sequence

<b>Client:</b> Weston Solutions	<b>SDG No.:</b> Q1352		
<b>Project:</b> Ft Meade Tipton Airfield Parcel RI - PO 0111	<b>Instrument ID:</b> ECD_S		
<b>GC Column:</b> RTX-CLP	<b>ID:</b> 0.32 (mm)	<b>Inst. Calib. Date(s):</b> 02/11/2025	<b>02/11/2025</b>

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

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DATAFILE	DCAA RT #	RT #
I.BLK	L.BLK	02/11/2025	17:32	PS029117.D	7.19	0.00
HSTDICC200	HSTDICC200	02/11/2025	17:56	PS029118.D	7.19	0.00
HSTDICC500	HSTDICC500	02/11/2025	18:20	PS029119.D	7.19	0.00
HSTDICC750	HSTDICC750	02/11/2025	18:44	PS029120.D	7.19	0.00
HSTDICC1000	HSTDICC1000	02/11/2025	19:08	PS029121.D	7.19	0.00
HSTDICC1500	HSTDICC1500	02/11/2025	19:32	PS029122.D	7.19	0.00
I.BLK	L.BLK	02/13/2025	18:12	PS029159.D	7.19	0.00
HSTDCCC750	HSTDCCC750	02/13/2025	18:36	PS029160.D	7.19	0.00
PB166713BL	PB166713BL	02/13/2025	19:24	PS029161.D	7.19	0.00
PB166713BS	PB166713BS	02/13/2025	19:48	PS029162.D	7.19	0.00
PB166700TB	PB166700TB	02/13/2025	20:12	PS029163.D	7.19	0.00
TAP-IDW-SOIL-021025	Q1352-02	02/13/2025	21:00	PS029165.D	7.19	0.00
I.BLK	L.BLK	02/13/2025	21:24	PS029166.D	7.19	0.00
HSTDCCC750	HSTDCCC750	02/13/2025	21:48	PS029167.D	7.19	0.00
CARBON-WATERMS	Q1356-04MS	02/13/2025	23:48	PS029171.D	7.19	0.00
CARBON-WATERMSD	Q1356-04MSD	02/14/2025	00:12	PS029172.D	7.19	0.00
I.BLK	L.BLK	02/14/2025	02:36	PS029178.D	7.19	0.00
HSTDCCC750	HSTDCCC750	02/14/2025	03:00	PS029179.D	7.19	0.00

## Analytical Sequence

<b>Client:</b> Weston Solutions	<b>SDG No.:</b> Q1352		
<b>Project:</b> Ft Meade Tipton Airfield Parcel RI - PO 0111	<b>Instrument ID:</b> ECD_S		
<b>GC Column:</b> RTX-CLP2	<b>ID:</b> 0.32 (mm)	<b>Inst. Calib. Date(s):</b> 02/11/2025	<b>02/11/2025</b>

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

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DATAFILE	DCAA RT #	RT #
I.BLK	L.BLK	02/11/2025	17:32	PS029117.D	7.66	0.00
HSTDICC200	HSTDICC200	02/11/2025	17:56	PS029118.D	7.67	0.00
HSTDICC500	HSTDICC500	02/11/2025	18:20	PS029119.D	7.67	0.00
HSTDICC750	HSTDICC750	02/11/2025	18:44	PS029120.D	7.66	0.00
HSTDICC1000	HSTDICC1000	02/11/2025	19:08	PS029121.D	7.66	0.00
HSTDICC1500	HSTDICC1500	02/11/2025	19:32	PS029122.D	7.66	0.00
I.BLK	L.BLK	02/13/2025	18:12	PS029159.D	7.66	0.00
HSTDCCC750	HSTDCCC750	02/13/2025	18:36	PS029160.D	7.66	0.00
PB166713BL	PB166713BL	02/13/2025	19:24	PS029161.D	7.66	0.00
PB166713BS	PB166713BS	02/13/2025	19:48	PS029162.D	7.66	0.00
PB166700TB	PB166700TB	02/13/2025	20:12	PS029163.D	7.66	0.00
TAP-IDW-SOIL-021025	Q1352-02	02/13/2025	21:00	PS029165.D	7.66	0.00
I.BLK	L.BLK	02/13/2025	21:24	PS029166.D	7.66	0.00
HSTDCCC750	HSTDCCC750	02/13/2025	21:48	PS029167.D	7.66	0.00
CARBON-WATERMS	Q1356-04MS	02/13/2025	23:48	PS029171.D	7.66	0.00
CARBON-WATERMSD	Q1356-04MSD	02/14/2025	00:12	PS029172.D	7.66	0.00
I.BLK	L.BLK	02/14/2025	02:36	PS029178.D	7.66	0.00
HSTDCCC750	HSTDCCC750	02/14/2025	03:00	PS029179.D	7.66	0.00



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Fax : 908 789 8922

### COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

CARBON-WATERMIS

Contract:	WEST04					
Lab Code:	<u>CHEM</u>	Case No.:	<u>Q1352</u>			
Lab Sample ID:	<u>Q1356-04MS</u>	Date(s) Analyzed:	<u>02/13/2025</u>			
Instrument ID (1):	<u>ECD_S</u>	Instrument ID (2):	<u>ECD_S</u>			
GC Column: (1):	<u>RTX-CLP</u>	ID: 0.32 (mm)	GC Column:(2): <u>RTX-CLP2</u> ID: 0.32 (mm)			
ANALYTE	COL	RT	RT WINDOW FROM	TO	CONCENTRATION	%RPD
2,4-D	1	8.30	8.25	8.35	48.2	2.5
	2	8.90	8.85	8.95	47.0	
2,4,5-TP(Silvex)	1	9.17	9.12	9.22	48.2	2.7
	2	9.79	9.74	9.84	46.9	



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### COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

CARBON-WATERMSD

Contract:	WEST04					
Lab Code:	<u>CHEM</u>	Case No.:	<u>Q1352</u>			
Lab Sample ID:	<u>Q1356-04MSD</u>	Date(s) Analyzed:	<u>02/14/2025</u>			
Instrument ID (1):	<u>ECD_S</u>	Instrument ID (2):	<u>ECD_S</u>			
GC Column: (1):	<u>RTX-CLP</u>	ID: 0.32 (mm)	GC Column:(2): <u>RTX-CLP2</u> ID: 0.32 (mm)			
ANALYTE	COL	RT	RT WINDOW FROM	TO	CONCENTRATION	%RPD
2,4-D	1	8.30	8.25	8.35	48.1	2.3
	2	8.89	8.84	8.94	47.0	
2,4,5-TP(Silvex)	1	9.17	9.12	9.22	48.2	2.7
	2	9.79	9.74	9.84	46.9	



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### COMPOUND DETECTION SUMMARY

#### CLIENT SAMPLE NO.

PB166713BS

Contract:	WEST04					
Lab Code:	<u>CHEM</u>	Case No.:	<u>Q1352</u>			
Lab Sample ID:	<u>PB166713BS</u>	Date(s) Analyzed:	<u>02/13/2025</u>			
Instrument ID (1):	<u>ECD_S</u>	Instrument ID (2):	<u>ECD_S</u>			
GC Column: (1):	<u>RTX-CLP</u>	ID: 0.32 (mm)	GC Column:(2): <u>RTX-CLP2</u> ID: 0.32 (mm)			
ANALYTE	COL	RT	RT WINDOW FROM	TO	CONCENTRATION	%RPD
2,4-D	1	8.31	8.26	8.36	4.90	6.3
	2	8.90	8.85	8.95	4.60	
2,4,5-TP(Silvex)	1	9.18	9.13	9.23	5.00	6.2
	2	9.79	9.74	9.84	4.70	



# QC SAMPLE

# DATA



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## Report of Analysis

Client:	Weston Solutions			Date Collected:	
Project:	Ft Meade Tipton Airfield Parcel RI - PO 0111169			Date Received:	
Client Sample ID:	PB166713BL			SDG No.:	Q1352
Lab Sample ID:	PB166713BL			Matrix:	TCLP
Analytical Method:	SW8151A			% Solid:	0 Decanted:
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	10000 uL
Soil Aliquot Vol:			uL	Test:	TCLP Herbicide
Extraction Type:				Injection Volume :	
GPC Factor :	1.0	PH :			
Prep Method :	SW3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS029161.D	1	02/13/25 10:15	02/13/25 19:24	PB166713

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
94-75-7	2,4-D	1.50	U	0.49	1.50	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	1.50	U	0.45	1.50	2.00	ug/L
<b>SURROGATES</b>							
19719-28-9	2,4-DCAA	458		32 - 138		92%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021325\  
Data File : PS029161.D  
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
Acq On : 13 Feb 2025 19:24  
Operator : AR\AJ  
Sample : PB166713BL  
Misc :  
ALS Vial : 9 Sample Multiplier: 1

Instrument :  
ECD\_S  
ClientSampleId :  
PB166713BL

Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Feb 14 01:22:22 2025  
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021225.M  
Quant Title : 8080.M  
QLast Update : Wed Feb 12 09:17:13 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 7.189 7.663 1266.2E6 454.1E6 458.116 428.962

Target Compounds

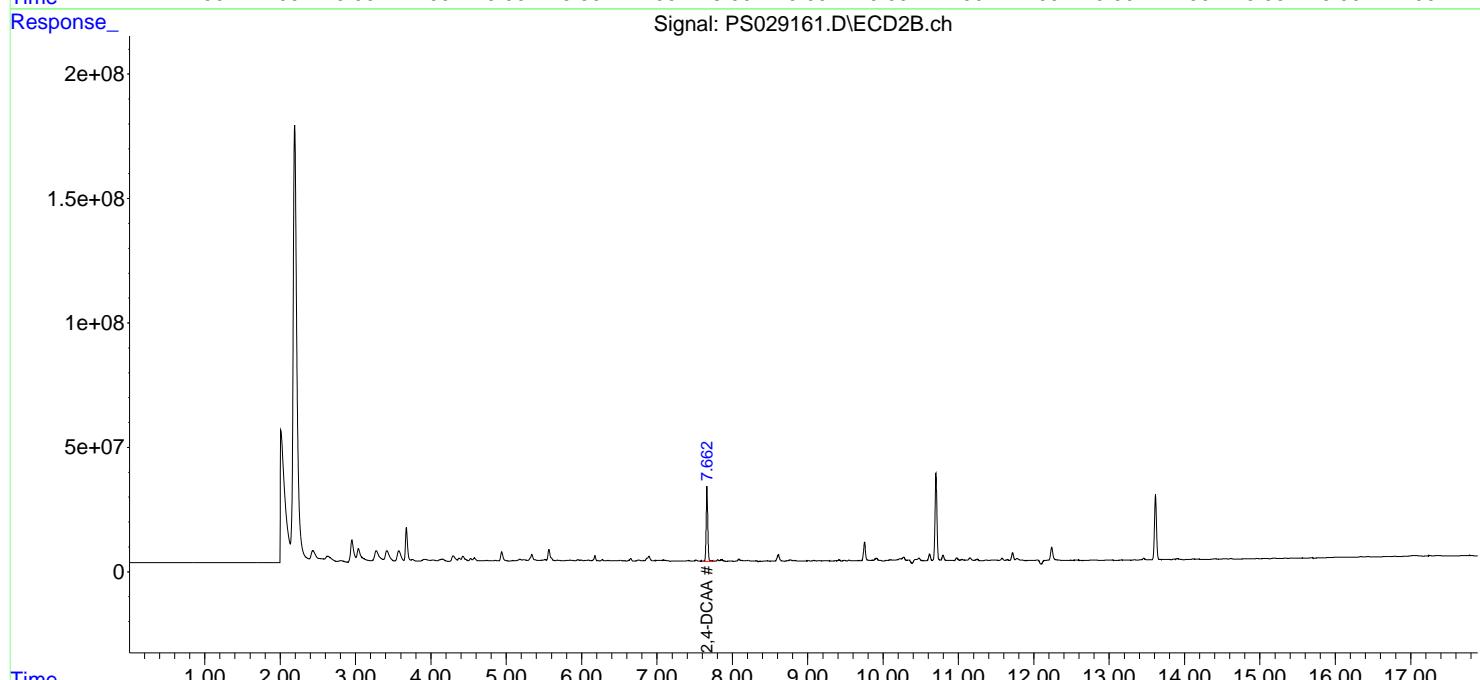
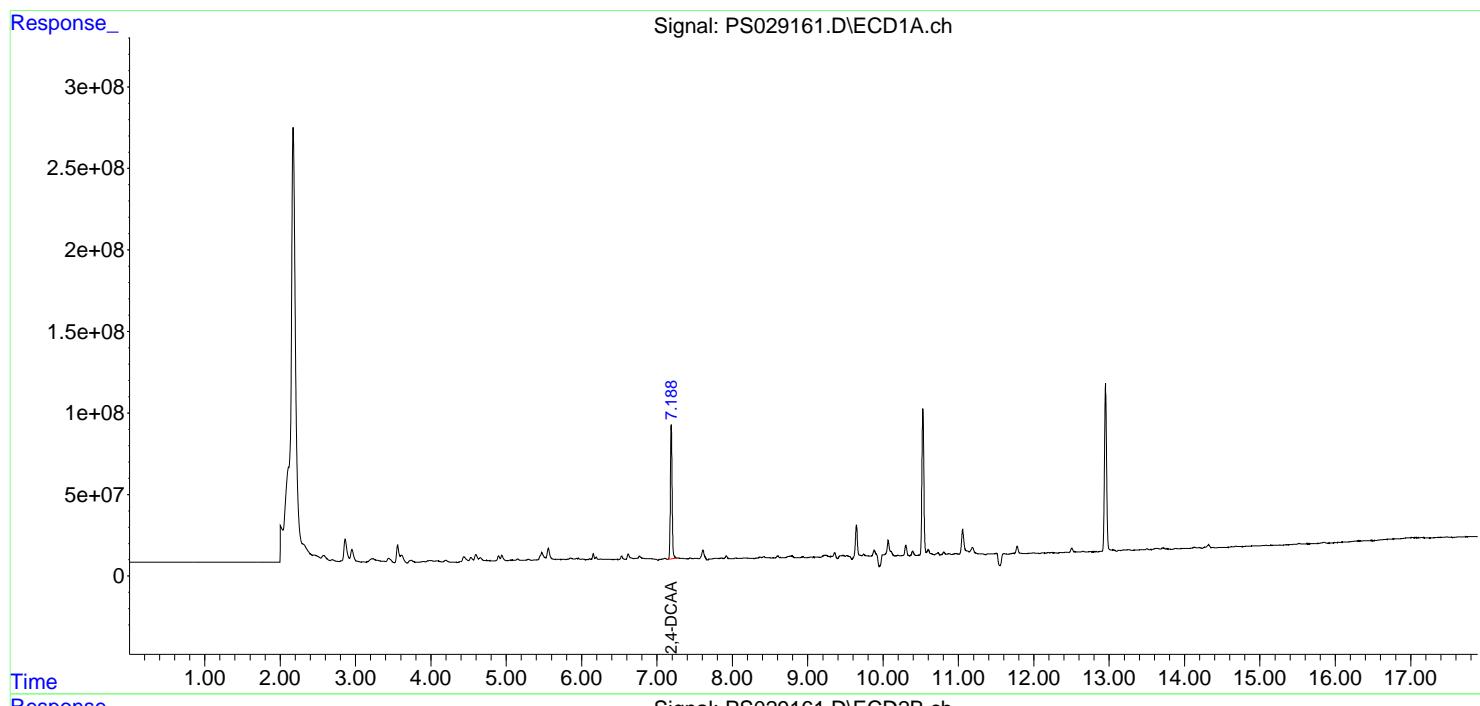
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

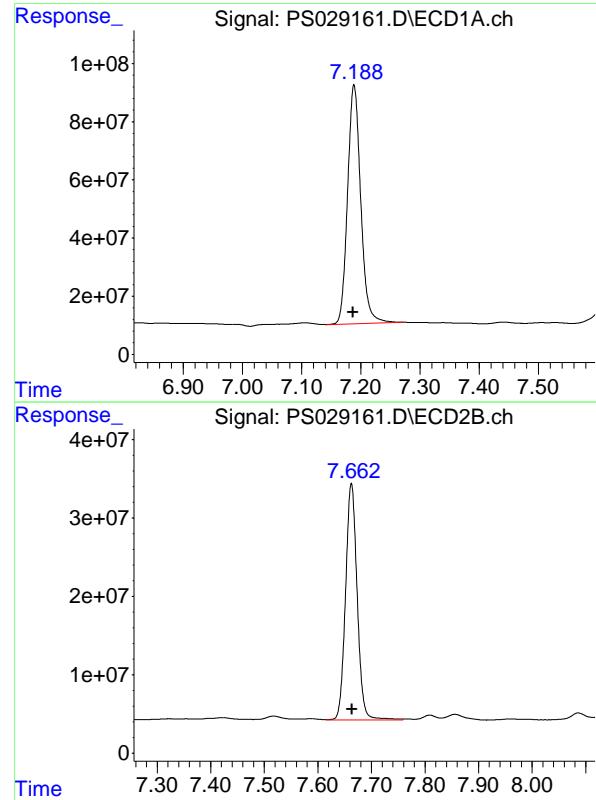
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021325\  
 Data File : PS029161.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 13 Feb 2025 19:24  
 Operator : AR\AJ  
 Sample : PB166713BL  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

**Instrument :**  
**ECD\_S**  
**ClientSampleId :**  
**PB166713BL**

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 14 01:22:22 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021225.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 09:17:13 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1  $\mu$ 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 $\mu$ m





#4 2,4-DCAA

R.T.: 7.189 min  
Delta R.T.: 0.002 min  
Instrument: ECD\_S  
Response: 1266166722  
Conc: 458.12 ng/ml  
ClientSampleId: PB166713BL

#4 2,4-DCAA

R.T.: 7.663 min  
Delta R.T.: -0.001 min  
Instrument: ECD\_S  
Response: 454054619  
Conc: 428.96 ng/ml



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## Report of Analysis

Client:	Weston Solutions	Date Collected:	02/11/25
Project:	Ft Meade Tipton Airfield Parcel RI - PO 0111169	Date Received:	02/11/25
Client Sample ID:	PIBLK-PS029117.D	SDG No.:	Q1352
Lab Sample ID:	I.BLK-PS029117.D	Matrix:	TCLP
Analytical Method:	SW8151A	% 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
PS029117.D	1		02/11/25	ps021125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
94-75-7	2,4-D	1.50	U	0.49	1.50	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	1.50	U	0.45	1.50	2.00	ug/L
<b>SURROGATES</b>							
19719-28-9	2,4-DCAA	487		32 - 138		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\PS021125\  
Data File : PS029117.D  
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
Acq On : 11 Feb 2025 17:32  
Operator : AR\AJ  
Sample : I.BLK  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
ECD\_S  
ClientSampleId :  
I.BLK

Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Feb 12 03:22:00 2025  
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021125.M  
Quant Title : 8080.M  
QLast Update : Wed Feb 12 01:14:16 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 7.186 7.664 1319.2E6 515.2E6 477.292 486.690

Target Compounds

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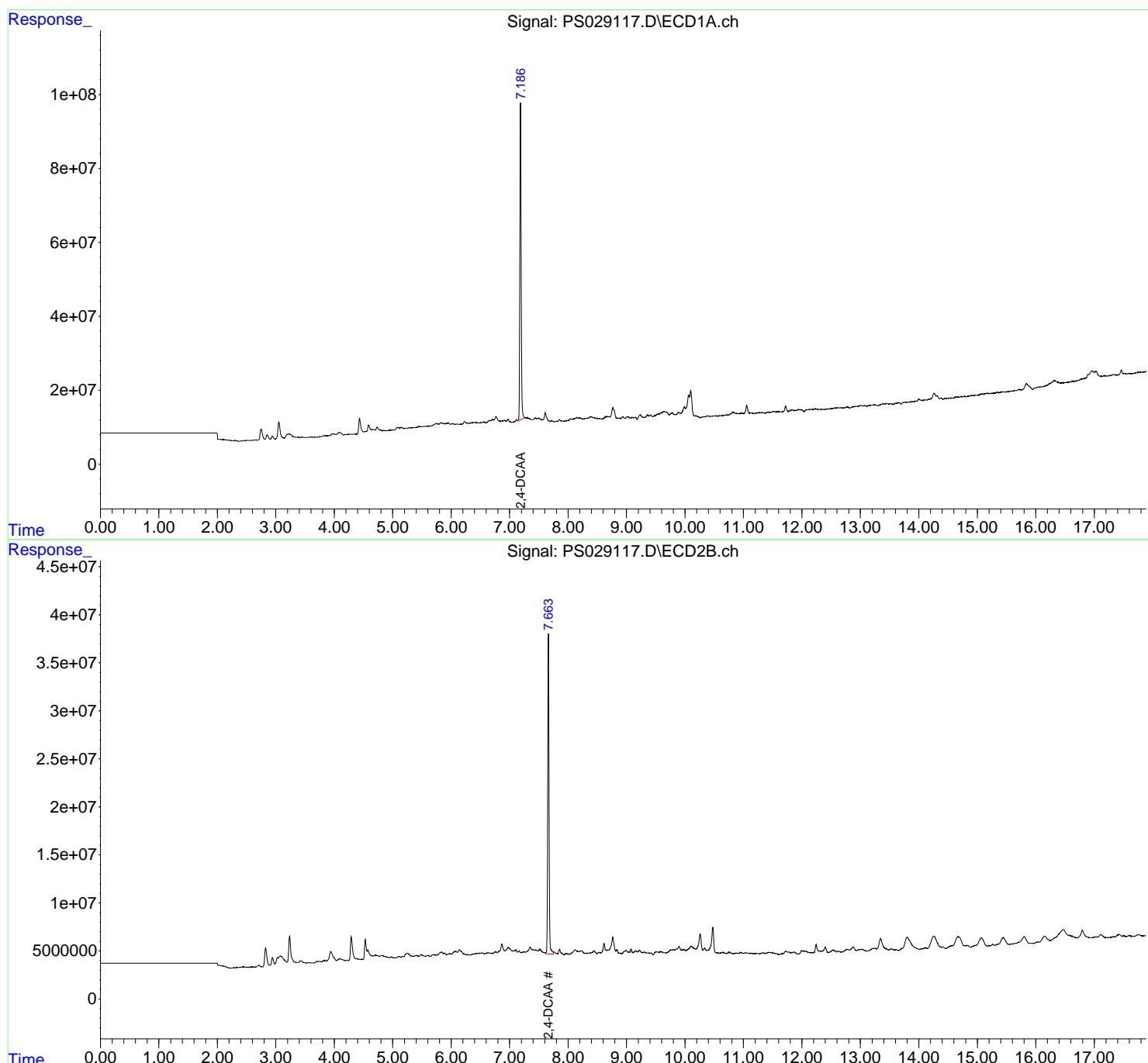
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

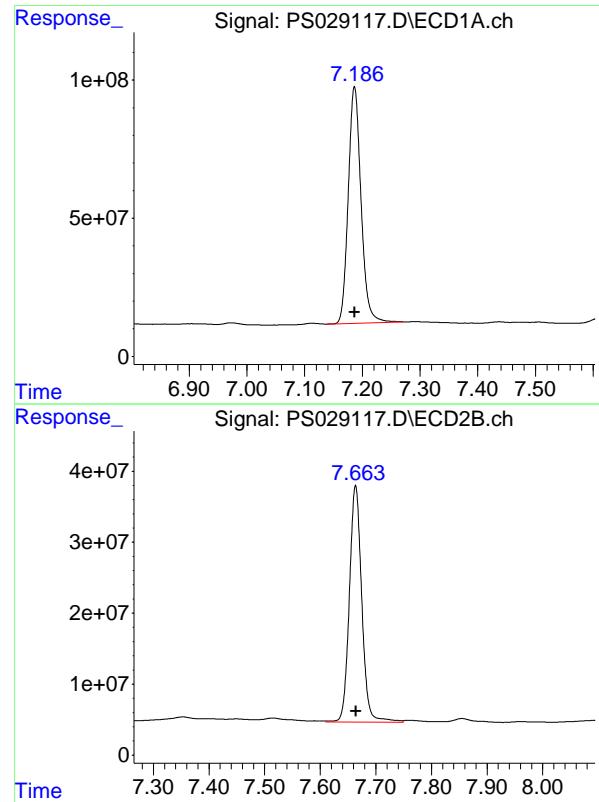
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021125\  
 Data File : PS029117.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 11 Feb 2025 17:32  
 Operator : AR\AJ  
 Sample : I.BLK  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

**Instrument :**  
 ECD\_S  
**ClientSampleId :**  
 I.BLK

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 12 03:22:00 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021125.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 01:14:16 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1  $\mu$ 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 $\mu$ m





#4 2,4-DCAA

R.T.: 7.186 min  
Delta R.T.: 0.000 min  
Instrument: ECD\_S  
Response: 1319166438  
Conc: 477.29 ng/ml  
ClientSampleId: I.BLK

#4 2,4-DCAA

R.T.: 7.664 min  
Delta R.T.: 0.000 min  
Response: 515158711  
Conc: 486.69 ng/ml



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Fax : 908 789 8922

## Report of Analysis

Client:	Weston Solutions	Date Collected:	02/13/25
Project:	Ft Meade Tipton Airfield Parcel RI - PO 0111169	Date Received:	02/13/25
Client Sample ID:	PIBLK-PS029159.D	SDG No.:	Q1352
Lab Sample ID:	I.BLK-PS029159.D	Matrix:	TCLP
Analytical Method:	SW8151A	% 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
PS029159.D	1		02/13/25	ps021325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
94-75-7	2,4-D	1.50	U	0.49	1.50	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	1.50	U	0.45	1.50	2.00	ug/L
<b>SURROGATES</b>							
19719-28-9	2,4-DCAA	510		32 - 138		102%	SPK: 500

### Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021325\  
Data File : PS029159.D  
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
Acq On : 13 Feb 2025 18:12  
Operator : AR\AJ  
Sample : I.BLK  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
ECD\_S  
ClientSampleId :  
I.BLK

Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Feb 14 01:21:13 2025  
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021225.M  
Quant Title : 8080.M  
QLast Update : Wed Feb 12 09:17:13 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 7.189 7.662 1408.6E6 527.2E6 509.658 498.041

Target Compounds

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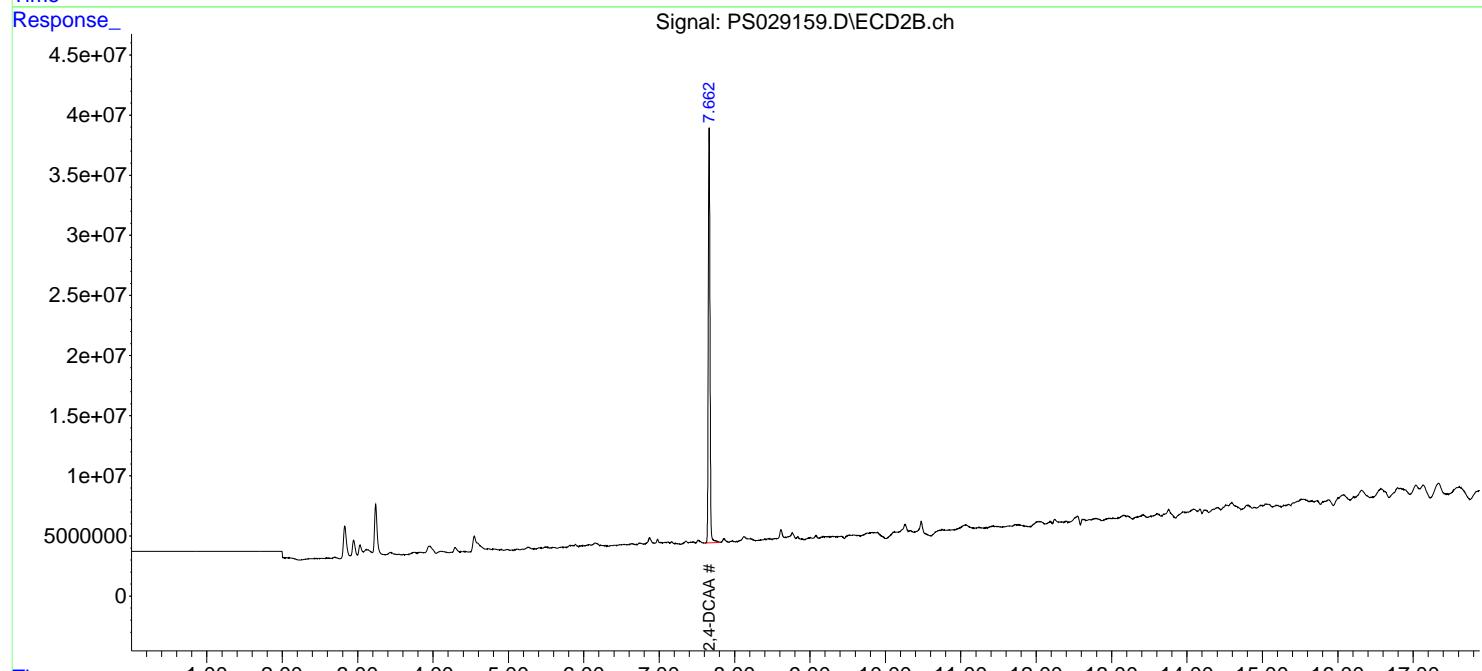
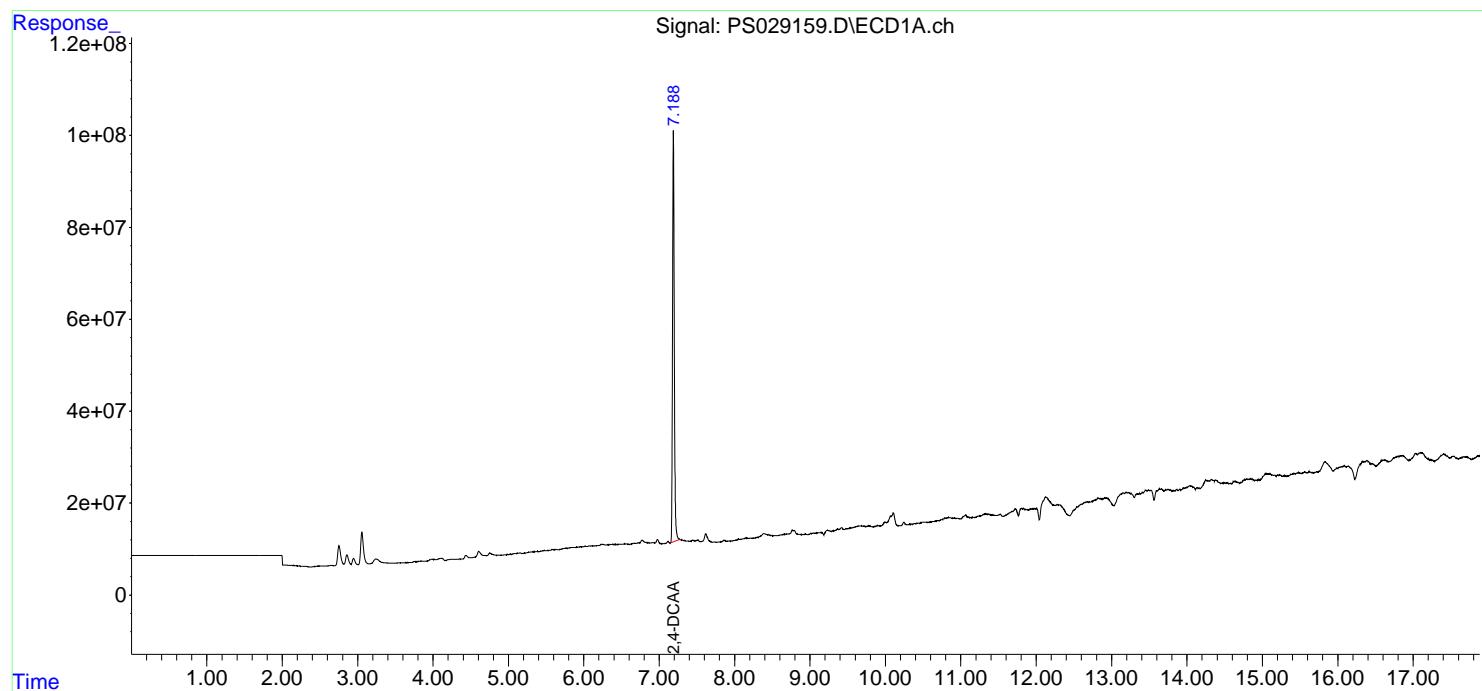
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

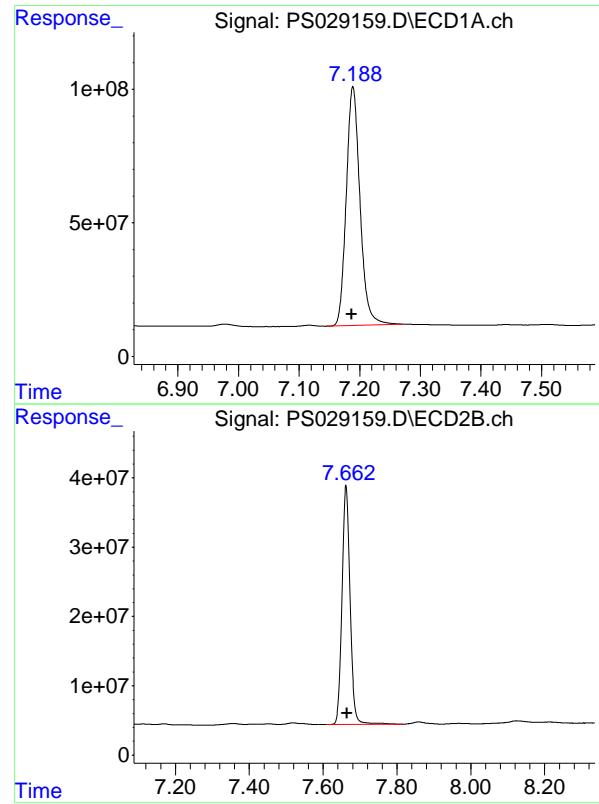
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021325\  
 Data File : PS029159.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 13 Feb 2025 18:12  
 Operator : AR\AJ  
 Sample : I.BLK  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

**Instrument :**  
 ECD\_S  
**ClientSampleId :**  
 I.BLK

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 14 01:21:13 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021225.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 09:17:13 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1  $\mu$ 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 $\mu$ m





#4 2,4-DCAA

R.T.: 7.189 min  
Delta R.T.: 0.002 min  
Instrument: ECD\_S  
Response: 1408621509  
Conc: 509.66 ng/ml  
ClientSampleId: I.BLK

#4 2,4-DCAA

R.T.: 7.662 min  
Delta R.T.: -0.002 min  
Instrument: ECD\_S  
Response: 527174160  
Conc: 498.04 ng/ml



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## Report of Analysis

Client:	Weston Solutions	Date Collected:	02/13/25
Project:	Ft Meade Tipton Airfield Parcel RI - PO 0111169	Date Received:	02/13/25
Client Sample ID:	PIBLK-PS029166.D	SDG No.:	Q1352
Lab Sample ID:	I.BLK-PS029166.D	Matrix:	TCLP
Analytical Method:	SW8151A	% 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
PS029166.D	1		02/13/25	ps021325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
94-75-7	2,4-D	1.50	U	0.49	1.50	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	1.50	U	0.45	1.50	2.00	ug/L
<b>SURROGATES</b>							
19719-28-9	2,4-DCAA	503		32 - 138		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\PS021325\  
Data File : PS029166.D  
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
Acq On : 13 Feb 2025 21:24  
Operator : AR\AJ  
Sample : I.BLK  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
ECD\_S  
ClientSampleId :  
I.BLK

Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Feb 14 01:24:21 2025  
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021225.M  
Quant Title : 8080.M  
QLast Update : Wed Feb 12 09:17:13 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	7.189	7.662	1389.2E6	525.0E6	502.644	495.967
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Target Compounds

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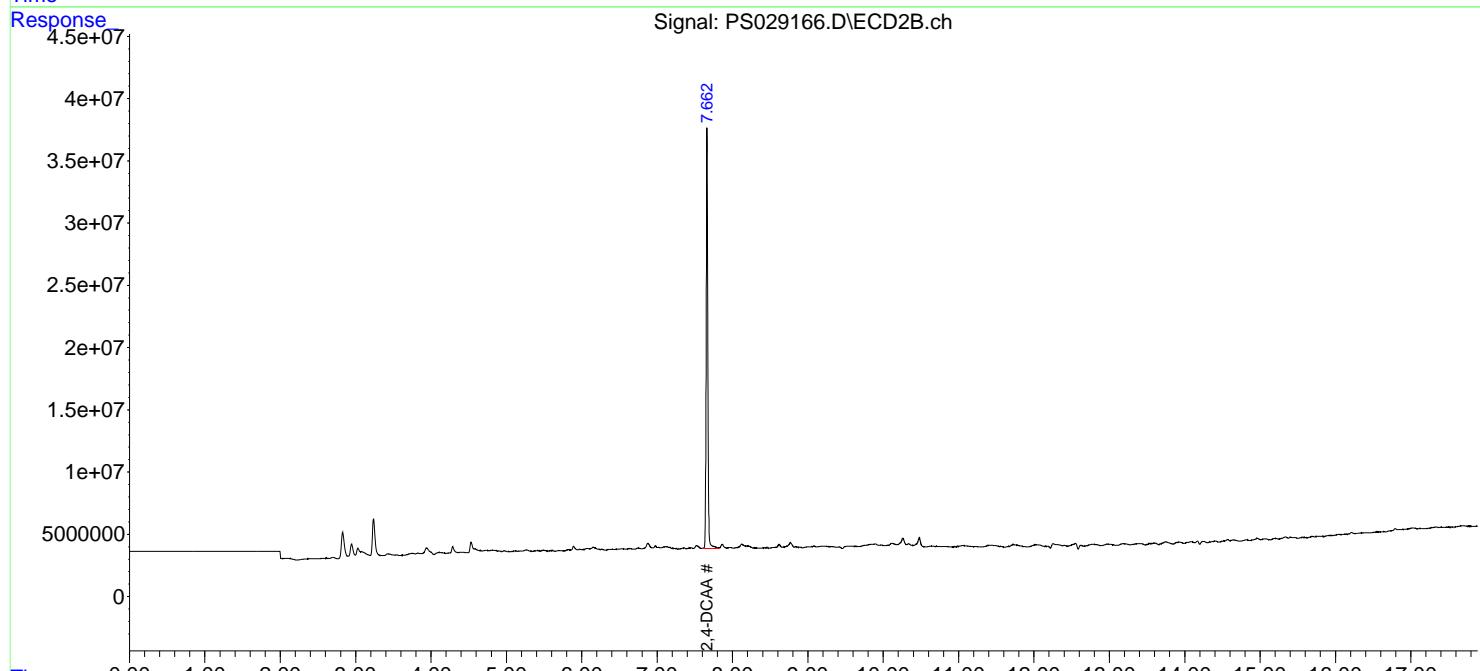
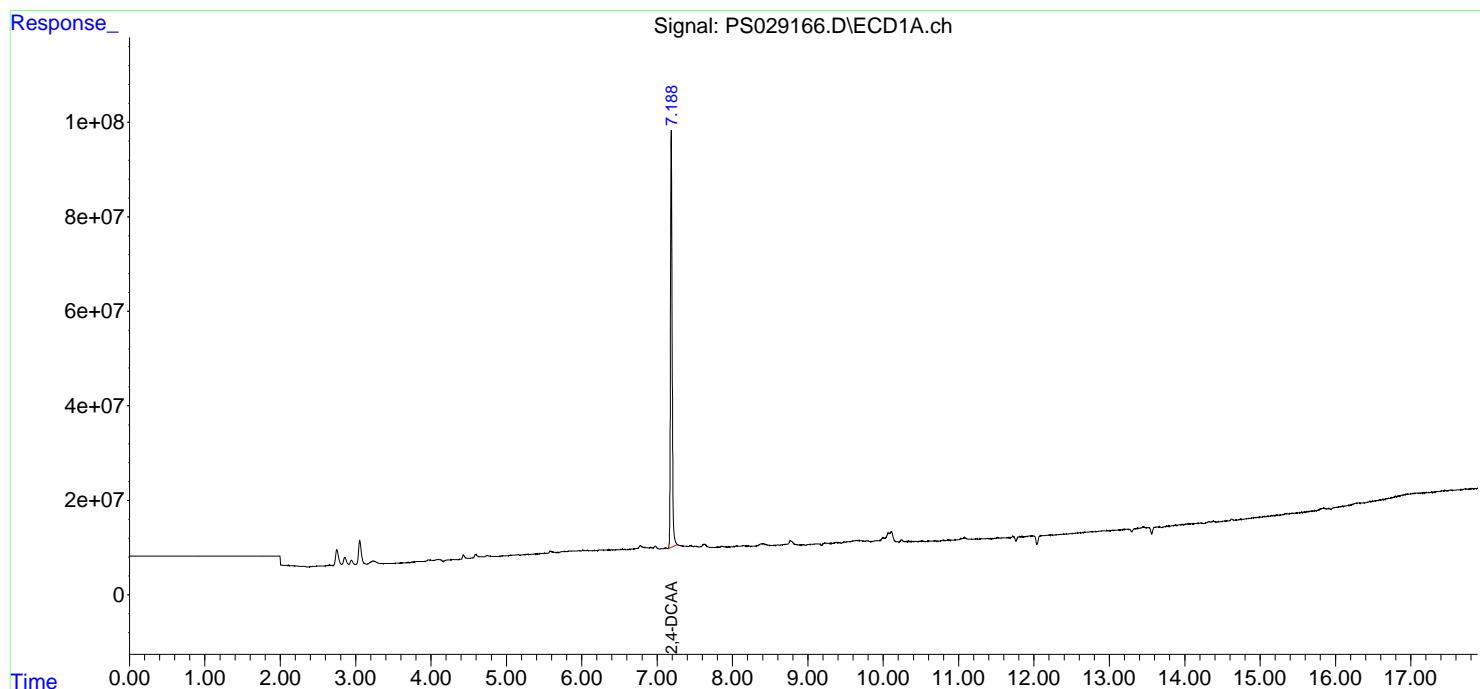
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

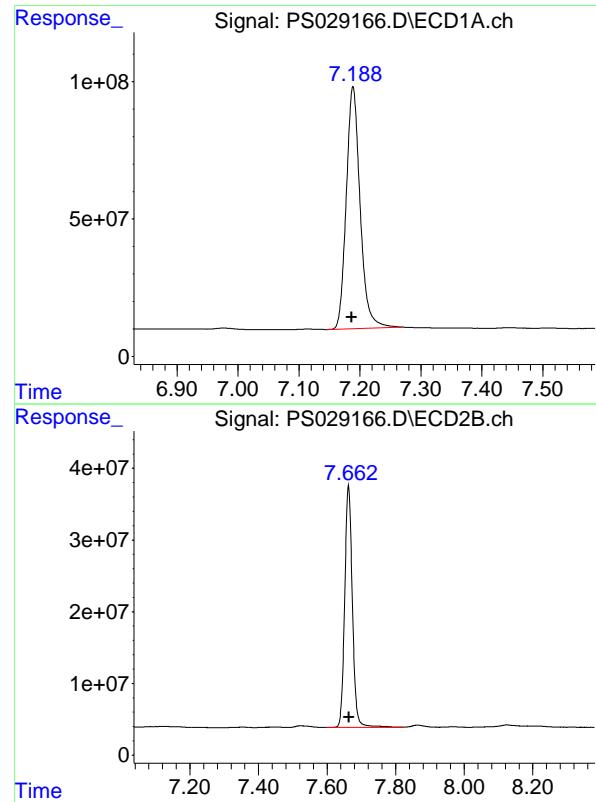
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021325\  
 Data File : PS029166.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 13 Feb 2025 21:24  
 Operator : AR\AJ  
 Sample : I.BLK  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

**Instrument :**  
 ECD\_S  
**ClientSampleId :**  
 I.BLK

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 14 01:24:21 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021225.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 09:17:13 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1  $\mu$ 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 $\mu$ m





#4 2,4-DCAA

R.T.: 7.189 min  
Delta R.T.: 0.002 min  
Instrument: ECD\_S  
Response: 1389235433  
Conc: 502.64 ng/ml  
ClientSampleId: I.BLK

#4 2,4-DCAA

R.T.: 7.662 min  
Delta R.T.: -0.002 min  
Instrument: ECD\_S  
Response: 524978146  
Conc: 495.97 ng/ml



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Fax : 908 789 8922

## Report of Analysis

Client:	Weston Solutions	Date Collected:	02/14/25
Project:	Ft Meade Tipton Airfield Parcel RI - PO 0111169	Date Received:	02/14/25
Client Sample ID:	PIBLK-PS029178.D	SDG No.:	Q1352
Lab Sample ID:	I.BLK-PS029178.D	Matrix:	TCLP
Analytical Method:	SW8151A	% 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
PS029178.D	1		02/14/25	ps021325

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
94-75-7	2,4-D	1.50	U	0.49	1.50	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	1.50	U	0.45	1.50	2.00	ug/L
<b>SURROGATES</b>							
19719-28-9	2,4-DCAA	502		32 - 138		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\PS021325\  
Data File : PS029178.D  
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
Acq On : 14 Feb 2025 02:36  
Operator : AR\AJ  
Sample : I.BLK  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
ECD\_S  
ClientSampleId :  
I.BLK

Integration File signal 1: autoint1.e  
Integration File signal 2: autoint2.e  
Quant Time: Feb 14 04:00:05 2025  
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021225.M  
Quant Title : 8080.M  
QLast Update : Wed Feb 12 09:17:13 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	7.187	7.661	1386.7E6	528.4E6	501.738	499.165
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Target Compounds

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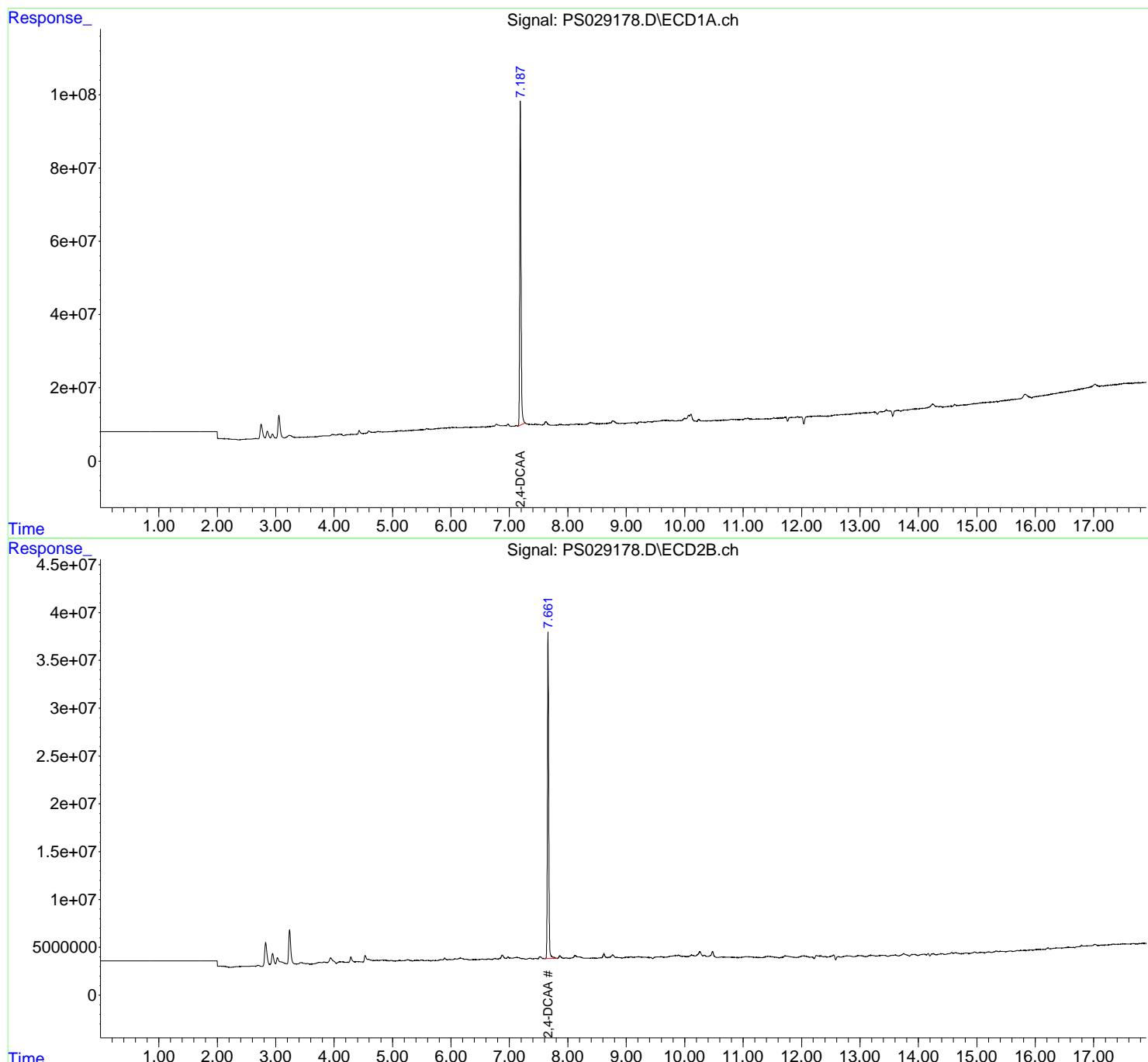
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

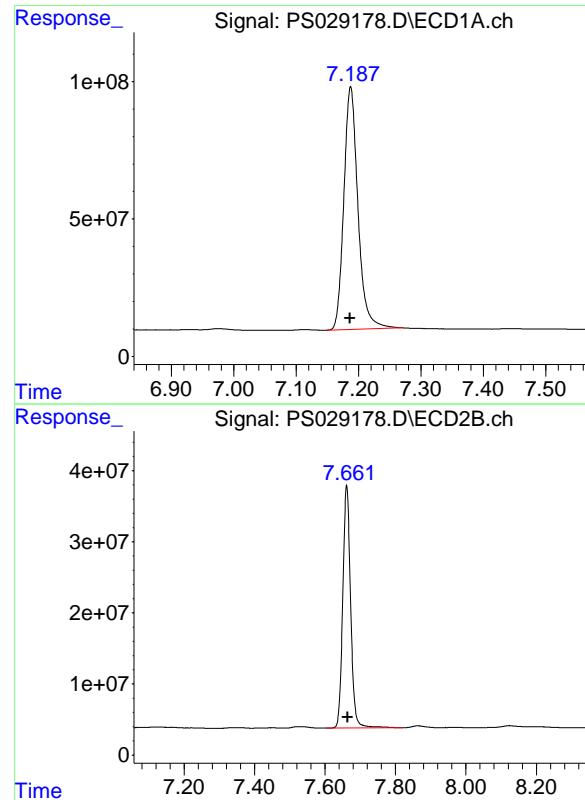
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021325\  
 Data File : PS029178.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 14 Feb 2025 02:36  
 Operator : AR\AJ  
 Sample : I.BLK  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

**Instrument :**  
 ECD\_S  
**ClientSampleId :**  
 I.BLK

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 14 04:00:05 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021225.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 09:17:13 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1  $\mu$ 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 $\mu$ m





#4 2,4-DCAA

R.T.: 7.187 min  
Delta R.T.: 0.000 min  
Instrument: ECD\_S  
Response: 1386732967  
Conc: 501.74 ng/ml  
ClientSampleId: I.BLK

#4 2,4-DCAA

R.T.: 7.661 min  
Delta R.T.: -0.003 min  
Instrument: ECD\_S  
Response: 528363323  
Conc: 499.16 ng/ml



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Fax : 908 789 8922

## Report of Analysis

Client:	Weston Solutions	Date Collected:	
Project:	Ft Meade Tipton Airfield Parcel RI - PO 0111169	Date Received:	
Client Sample ID:	PB166713BS	SDG No.:	Q1352
Lab Sample ID:	PB166713BS	Matrix:	TCLP
Analytical Method:	SW8151A	% 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
PS029162.D	1	02/13/25 10:15	02/13/25 19:48	PB166713

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
94-75-7	2,4-D	4.90		0.49	1.50	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	5.00		0.45	1.50	2.00	ug/L
<b>SURROGATES</b>							
19719-28-9	2,4-DCAA	516		32 - 138		103%	SPK: 500

Comments:

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

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021325\  
 Data File : PS029162.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 13 Feb 2025 19:48  
 Operator : AR\AJ  
 Sample : PB166713BS  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

**Instrument :**  
**ECD\_S**  
**ClientSampleId :**  
**PB166713BS**

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 14 01:22:47 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021225.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 09:17:13 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	7.189	7.663	1424.9E6	511.5E6	515.562	483.211
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#### Target Compounds

1) T	Dalapon	2.611	2.658	1433.2E6	844.0E6	453.098	445.779
2) T	3,5-DICHL...	6.367	6.631	1897.5E6	703.1E6	478.964	459.578
3) T	4-Nitroph...	6.987	7.193	812.7E6	399.8E6	476.633	461.015
5) T	DICAMBA	7.373	7.858	5875.8E6	2553.3E6	487.940	462.001
6) T	MCPP	7.554	7.961	322.5E6	116.7E6	46.543	47.301
7) T	MCPA	7.702	8.202	448.9E6	163.7E6	46.896	46.781
8) T	DICHLORPROP	8.076	8.569	1555.9E6	644.8E6	492.522	468.204
9) T	2,4-D	8.305	8.895	1638.8E6	662.1E6	487.157	462.127
10) T	Pentachlo...	8.601	9.416	24924.1E6	11617.2E6	528.568	481.647
11) T	2,4,5-TP ...	9.175	9.793	9683.5E6	4635.5E6	499.398	474.546
12) T	2,4,5-T	9.466	10.210	9621.4E6	4362.1E6	496.726	470.956
13) T	2,4-DB	10.036	10.774	1782.8E6	432.5E6	479.724	455.276
14) T	DINOSEB	11.236	11.151	7854.0E6	2910.7E6	541.629	527.801
15) T	Picloram	11.048	12.231	15153.5E6	6094.3E6	474.251	443.259
16) T	DCPA	11.532	12.187	14704.7E6	5909.2E6	507.122	479.067

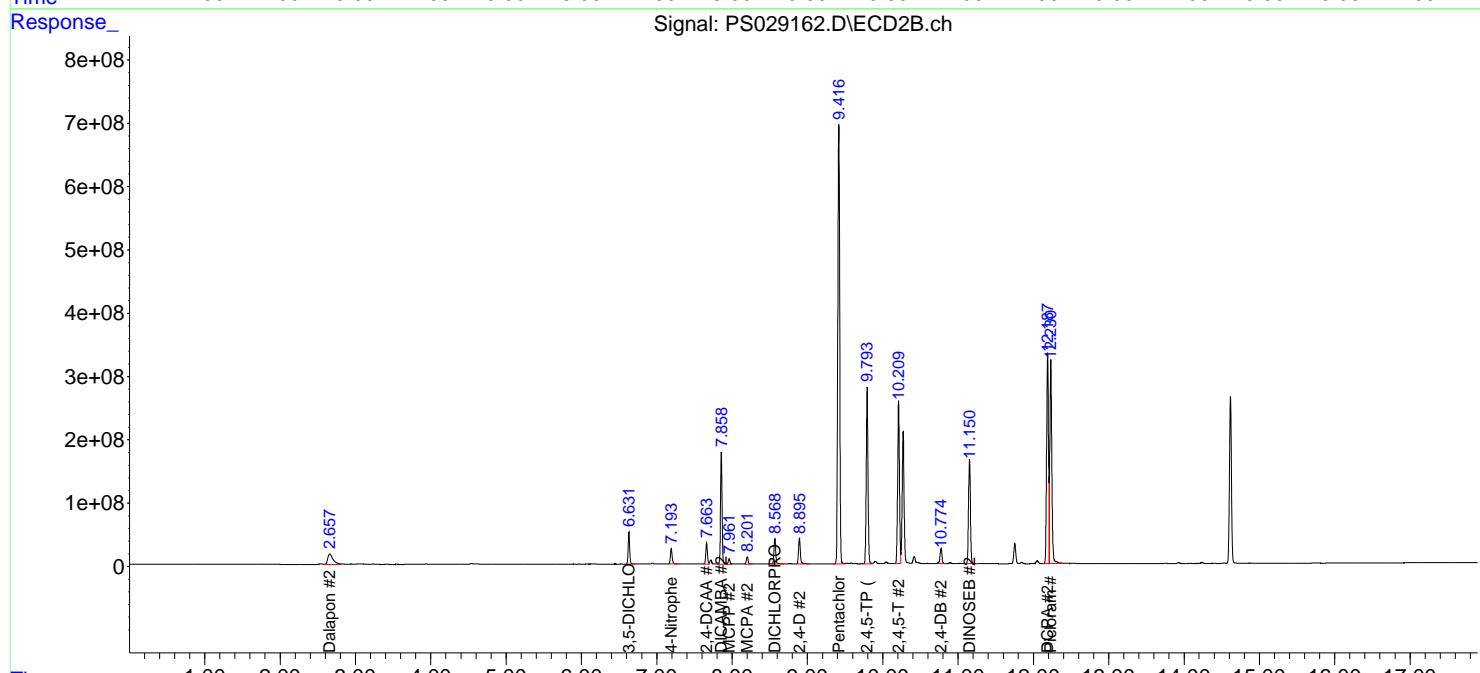
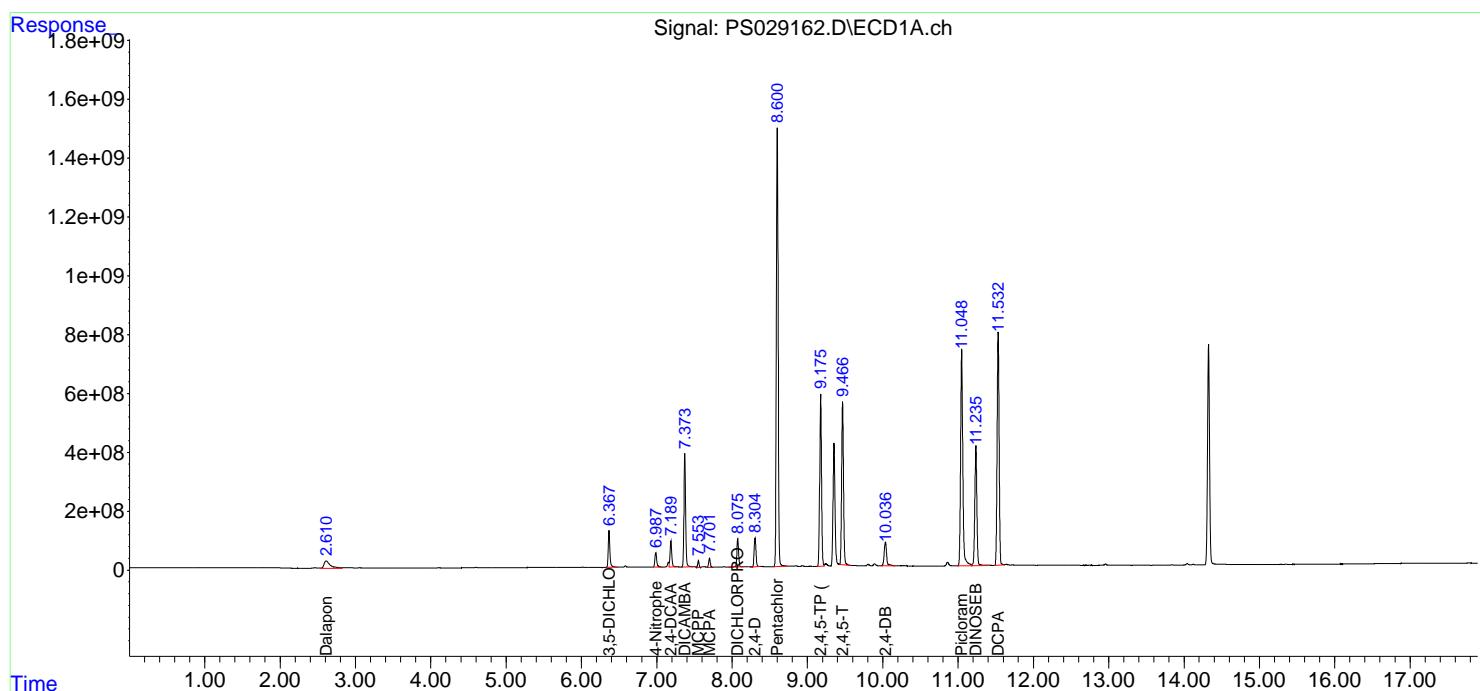
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

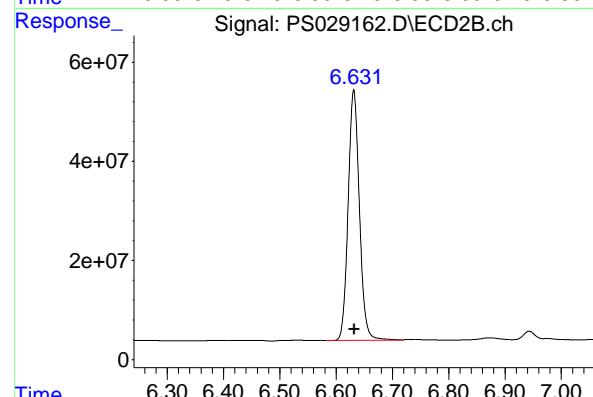
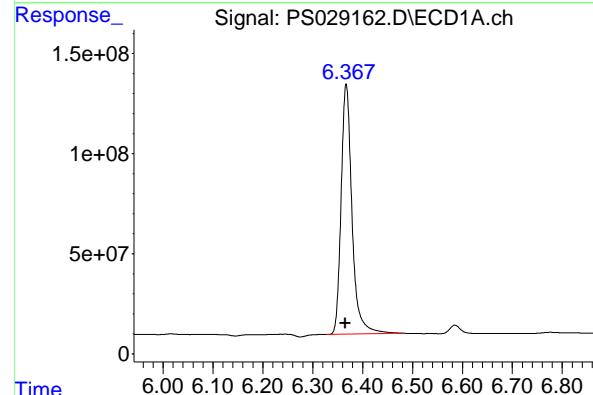
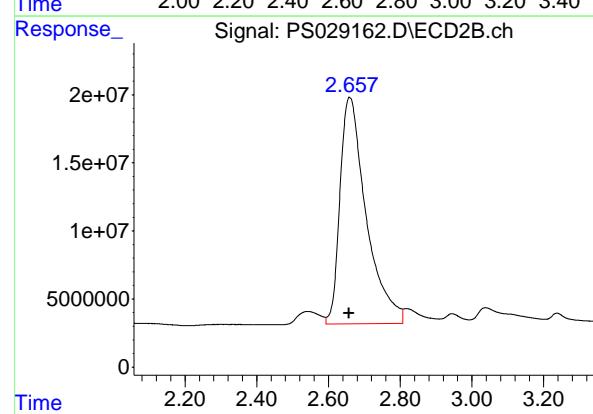
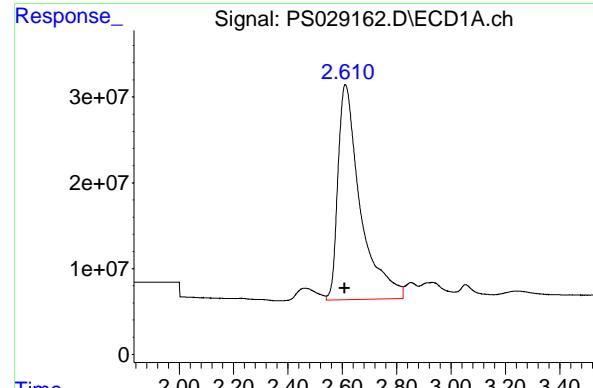
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021325\  
 Data File : PS029162.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 13 Feb 2025 19:48  
 Operator : AR\AJ  
 Sample : PB166713BS  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 ECD\_S  
 ClientSampleId :  
 PB166713BS

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 14 01:22:47 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021225.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 09:17:13 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1  $\mu$ 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 $\mu$ m





#1 Dalapon

R.T.: 2.611 min  
 Delta R.T.: 0.002 min  
 Response: 1433171314 ECD\_S  
 Conc: 453.10 ng/ml ClientSampleId : PB166713BS

#1 Dalapon

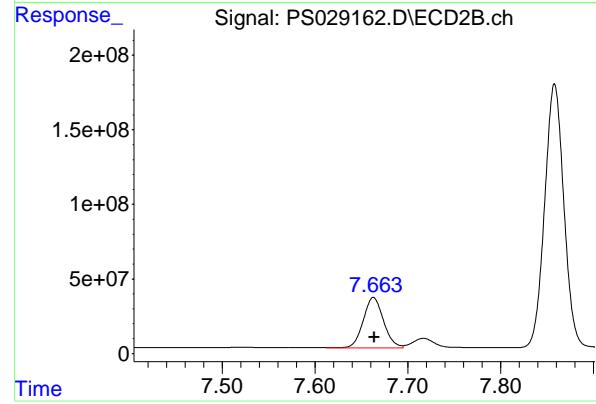
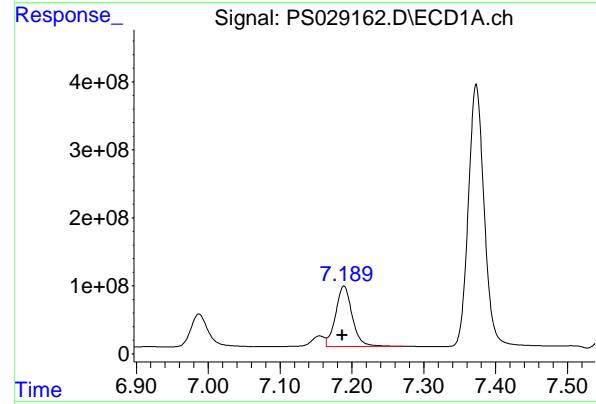
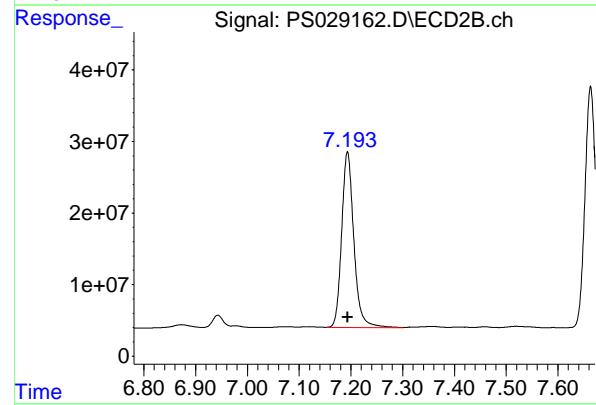
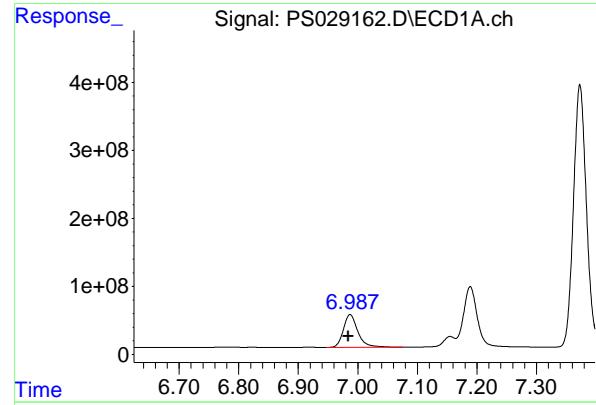
R.T.: 2.658 min  
 Delta R.T.: 0.000 min  
 Response: 843993140  
 Conc: 445.78 ng/ml

#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.367 min  
 Delta R.T.: 0.002 min  
 Response: 1897544579  
 Conc: 478.96 ng/ml

#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.631 min  
 Delta R.T.: 0.000 min  
 Response: 703092840  
 Conc: 459.58 ng/ml



## #3 4-Nitrophenol

R.T.: 6.987 min  
 Delta R.T.: 0.003 min  
 Response: 812693312  
 Conc: 476.63 ng/ml  
 Instrument: ECD\_S  
 ClientSampleId : PB166713BS

## #3 4-Nitrophenol

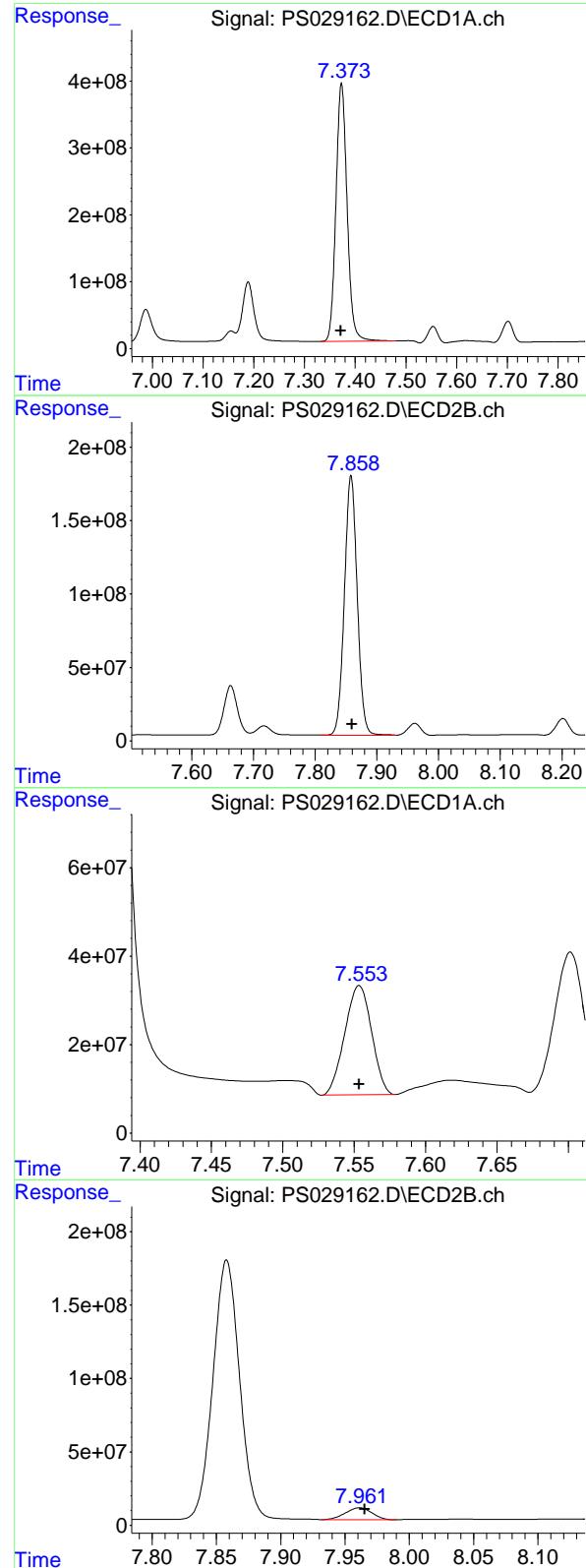
R.T.: 7.193 min  
 Delta R.T.: 0.000 min  
 Response: 399837740  
 Conc: 461.01 ng/ml

## #4 2,4-DCAA

R.T.: 7.189 min  
 Delta R.T.: 0.002 min  
 Response: 1424940344  
 Conc: 515.56 ng/ml

## #4 2,4-DCAA

R.T.: 7.663 min  
 Delta R.T.: -0.001 min  
 Response: 511476757  
 Conc: 483.21 ng/ml



#5 DICAMBA

R.T.: 7.373 min  
 Delta R.T.: 0.002 min  
 Response: 5875754127 ECD\_S  
 Conc: 487.94 ng/ml ClientSampleId : PB166713BS

#5 DICAMBA

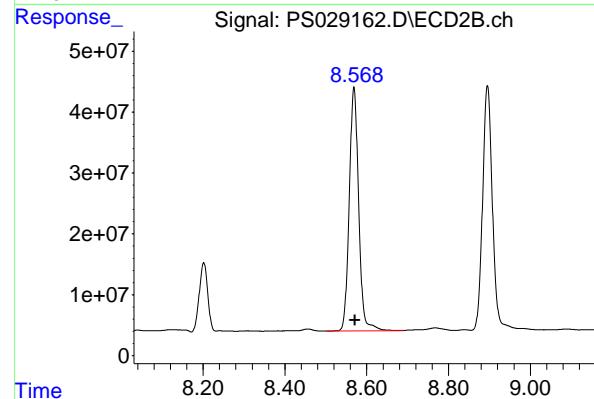
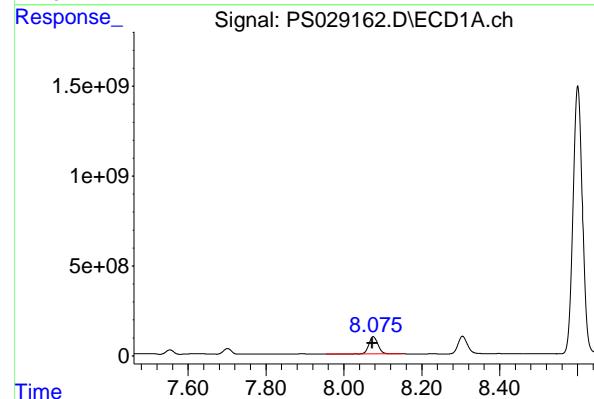
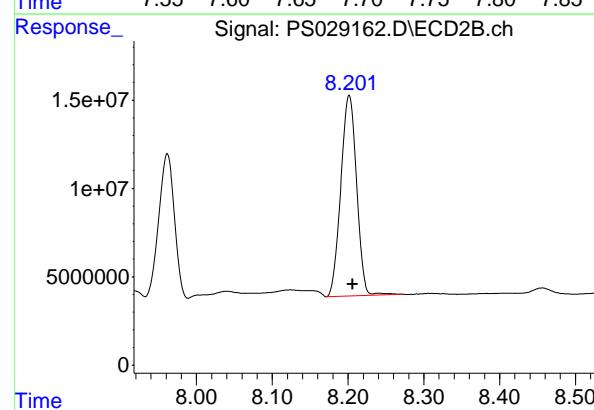
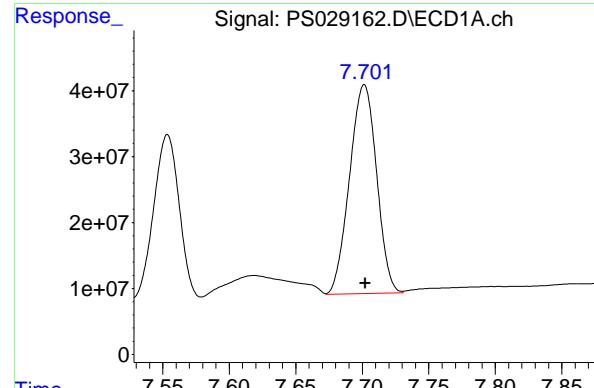
R.T.: 7.858 min  
 Delta R.T.: -0.002 min  
 Response: 2553295085  
 Conc: 462.00 ng/ml

#6 MCPP

R.T.: 7.554 min  
 Delta R.T.: 0.000 min  
 Response: 322466340  
 Conc: 46.54 ug/ml

#6 MCPP

R.T.: 7.961 min  
 Delta R.T.: -0.004 min  
 Response: 116701082  
 Conc: 47.30 ug/ml



## #7 MCPA

R.T.: 7.702 min  
 Delta R.T.: 0.000 min  
 Instrument: ECD\_S  
 Response: 448891677  
 Conc: 46.90 ug/ml  
 ClientSampleId: PB166713BS

## #7 MCPA

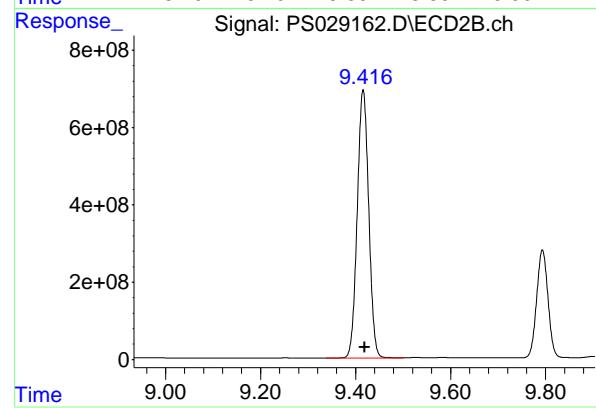
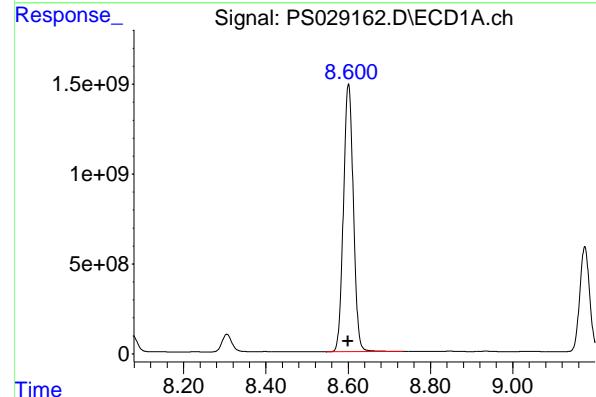
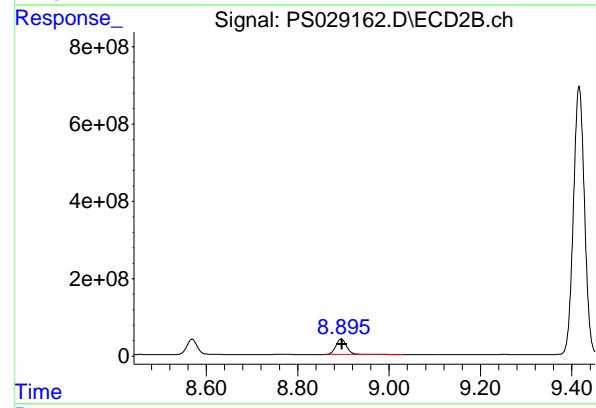
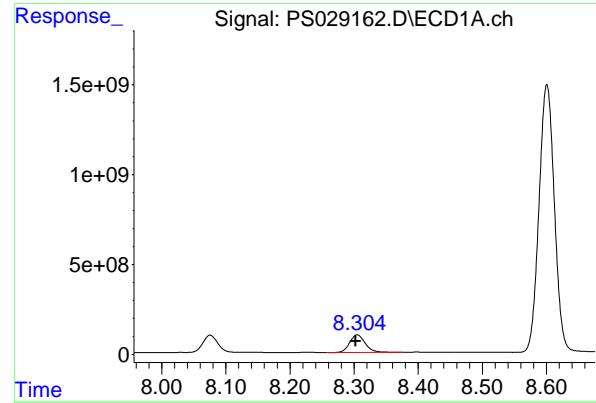
R.T.: 8.202 min  
 Delta R.T.: -0.005 min  
 Response: 163658717  
 Conc: 46.78 ug/ml

## #8 DICHLORPROP

R.T.: 8.076 min  
 Delta R.T.: 0.002 min  
 Response: 1555906564  
 Conc: 492.52 ng/ml

## #8 DICHLORPROP

R.T.: 8.569 min  
 Delta R.T.: -0.002 min  
 Response: 644758696  
 Conc: 468.20 ng/ml



#9 2,4-D

R.T.: 8.305 min  
 Delta R.T.: 0.003 min  
 Instrument: ECD\_S  
 Response: 1638842368  
 Conc: 487.16 ng/ml  
 ClientSampleId: PB166713BS

#9 2,4-D

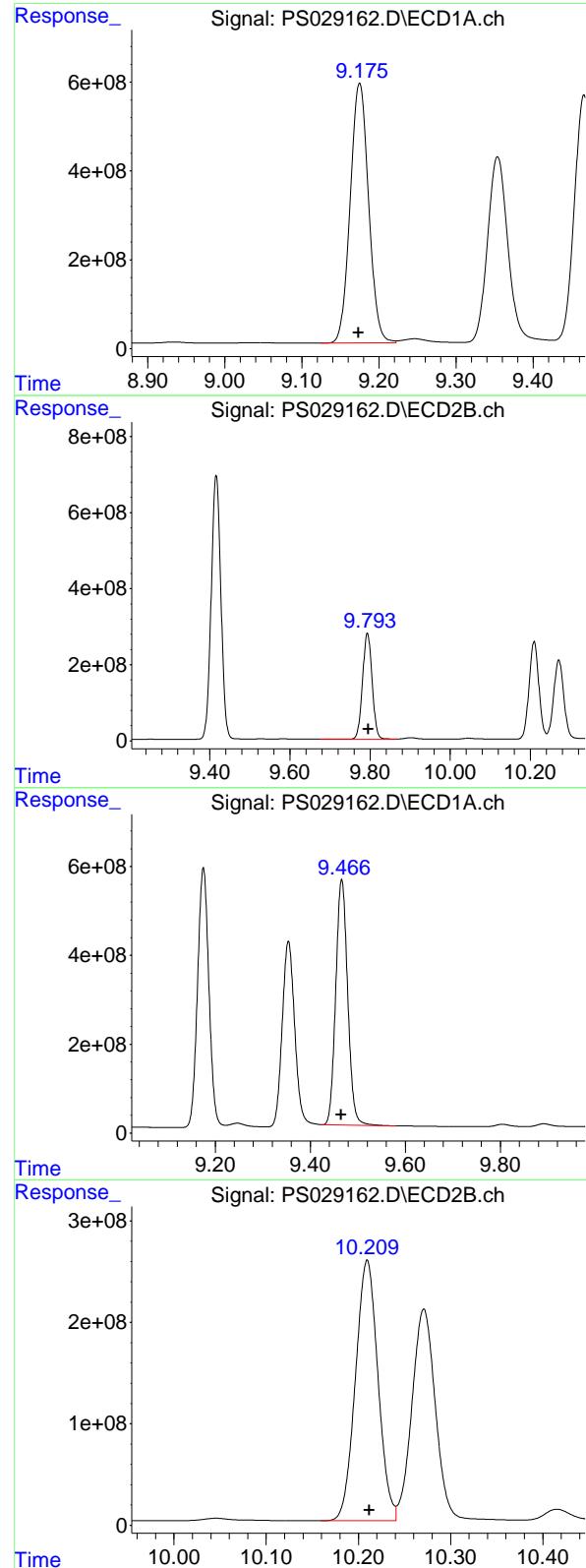
R.T.: 8.895 min  
 Delta R.T.: -0.002 min  
 Response: 662056207  
 Conc: 462.13 ng/ml

#10 Pentachlorophenol

R.T.: 8.601 min  
 Delta R.T.: 0.002 min  
 Response: 24924075603  
 Conc: 528.57 ng/ml

#10 Pentachlorophenol

R.T.: 9.416 min  
 Delta R.T.: -0.003 min  
 Response: 11617156647  
 Conc: 481.65 ng/ml



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

R.T.: 9.175 min  
 Delta R.T.: 0.002 min  
 Response: 9683500959  
 Conc: 499.40 ng/ml  
 Instrument: ECD\_S  
 ClientSampleId : PB166713BS

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

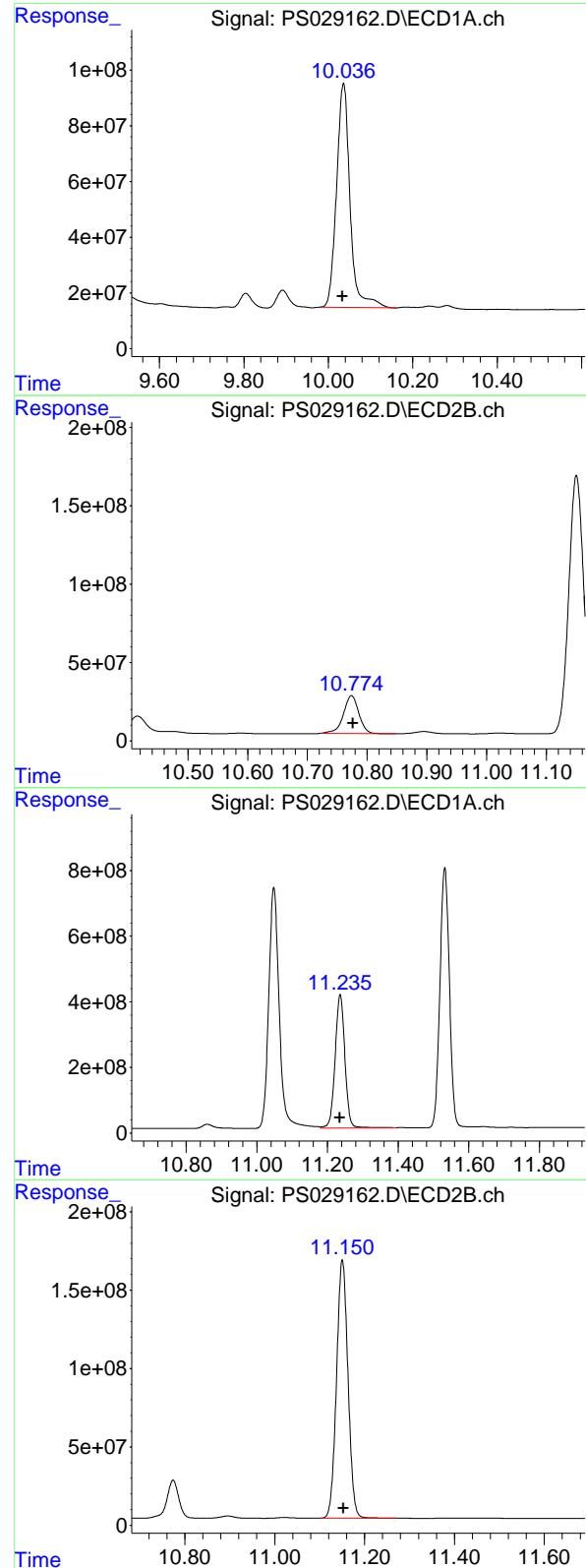
R.T.: 9.793 min  
 Delta R.T.: -0.003 min  
 Response: 4635466114  
 Conc: 474.55 ng/ml

#12 2,4,5-T

R.T.: 9.466 min  
 Delta R.T.: 0.002 min  
 Response: 9621410491  
 Conc: 496.73 ng/ml

#12 2,4,5-T

R.T.: 10.210 min  
 Delta R.T.: -0.003 min  
 Response: 4362128296  
 Conc: 470.96 ng/ml



#13 2,4-DB

R.T.: 10.036 min  
 Delta R.T.: 0.002 min  
 Response: 1782796219 ECD\_S  
 Conc: 479.72 ng/ml ClientSampleId : PB166713BS

#13 2,4-DB

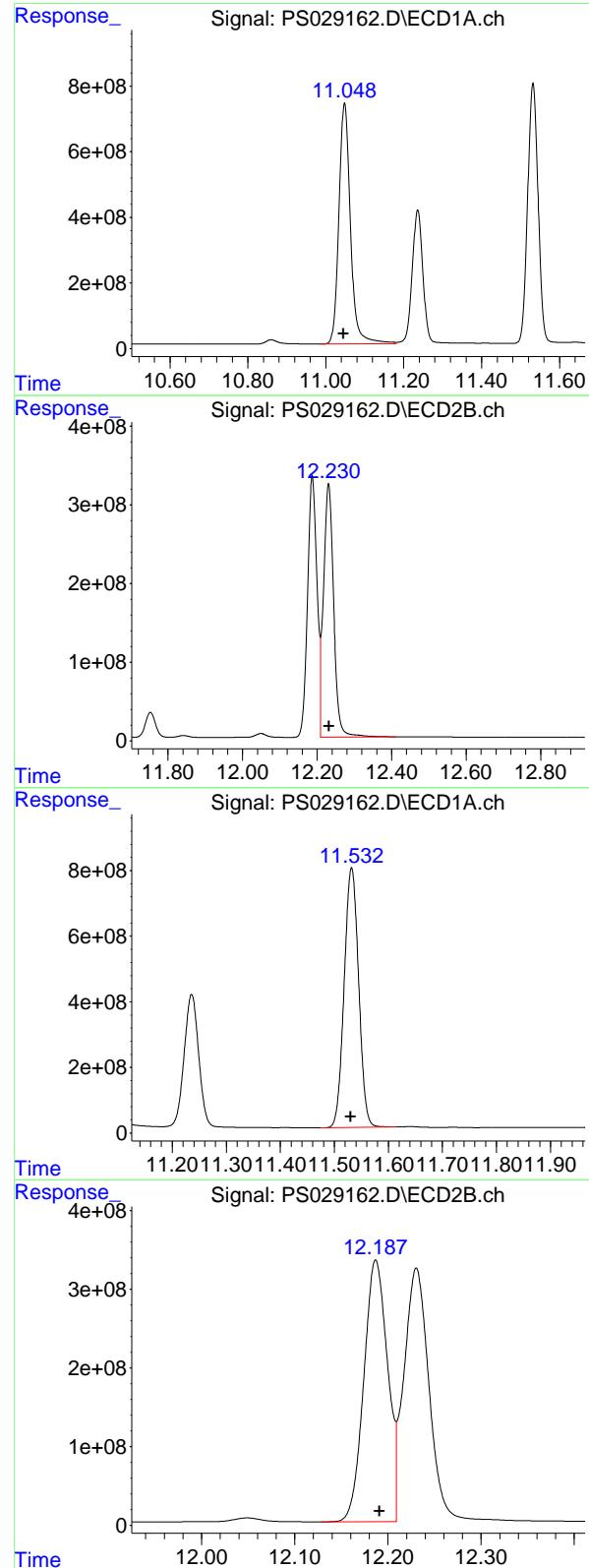
R.T.: 10.774 min  
 Delta R.T.: -0.002 min  
 Response: 432507097  
 Conc: 455.28 ng/ml

#14 DINOSEB

R.T.: 11.236 min  
 Delta R.T.: 0.001 min  
 Response: 7853952172  
 Conc: 541.63 ng/ml

#14 DINOSEB

R.T.: 11.151 min  
 Delta R.T.: -0.003 min  
 Response: 2910661866  
 Conc: 527.80 ng/ml



## #15 Picloram

R.T.: 11.048 min  
 Delta R.T.: 0.003 min  
 Instrument: ECD\_S  
 Response: 15153481884  
 Conc: 474.25 ng/ml  
 ClientSampleId : PB166713BS

## #15 Picloram

R.T.: 12.231 min  
 Delta R.T.: -0.002 min  
 Response: 6094305397  
 Conc: 443.26 ng/ml

## #16 DCPA

R.T.: 11.532 min  
 Delta R.T.: 0.001 min  
 Response: 14704665061  
 Conc: 507.12 ng/ml

## #16 DCPA

R.T.: 12.187 min  
 Delta R.T.: -0.004 min  
 Response: 5909207288  
 Conc: 479.07 ng/ml



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

## Report of Analysis

Client:	Weston Solutions	Date Collected:	02/11/25
Project:	Ft Meade Tipton Airfield Parcel RI - PO 0111169	Date Received:	02/11/25
Client Sample ID:	CARBON-WATERMS	SDG No.:	Q1352
Lab Sample ID:	Q1356-04MS	Matrix:	TCLP
Analytical Method:	SW8151A	% Solid:	0 Decanted:
Sample Wt/Vol:	100 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
PS029171.D	1	02/13/25 10:15	02/13/25 23:48	PB166713

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
94-75-7	2,4-D	48.2		4.90	15.0	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	48.2		4.50	15.0	20.0	ug/L
<b>SURROGATES</b>							
19719-28-9	2,4-DCAA	497		32 - 138		99%	SPK: 500

### Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021325\  
 Data File : PS029171.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 13 Feb 2025 23:48  
 Operator : AR\AJ  
 Sample : Q1356-04MS  
 Misc :  
 ALS Vial : 17 Sample Multiplier: 1

**Instrument :**  
**ECD\_S**  
**ClientSampleId :**  
**CARBON-WATERMS**

**Manual Integrations**  
**APPROVED**

Reviewed By :Abdul Mirza 02/14/2025  
 Supervised By :Ankita Jodhani 02/14/2025

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 14 01:26:35 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021225.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 09:17:13 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 7.187 7.662 1373.3E6 497.4E6 496.888m 469.871

**Target Compounds**

1) T	Dalapon	2.615	2.661	1519.2E6	968.4E6	480.282	511.493
2) T	3,5-DICHL...	6.366	6.630	1854.6E6	669.5E6	468.114	437.603
3) T	4-Nitroph...	6.986	7.192	704.3E6	358.7E6	413.053	413.632
5) T	DICAMBA	7.372	7.857	5195.9E6	2344.1E6	431.480	424.141
6) T	MCPP	7.552	7.961	291.7E6	107.4E6	42.103	43.543
7) T	MCPA	7.700	8.201	405.3E6	152.7E6	42.344	43.635
8) T	DICHLORPROP	8.074	8.568	1384.8E6	657.6E6	438.354	477.498
9) T	2,4-D	8.303	8.895	1622.6E6	673.8E6	482.344	470.321
10) T	Pentachlo...	8.599	9.415	23532.0E6	11027.0E6	499.045	457.178
11) T	2,4,5-TP ...	9.174	9.792	9337.3E6	4578.5E6	481.544	468.718m
12) T	2,4,5-T	9.464	10.209	8482.3E6	3956.5E6	437.919	427.160
13) T	2,4-DB	10.036	10.773	1371.8E6	436.2E6	369.135	459.196m
14) T	DINOSEB	11.234	11.150	6627.5E6	2342.6E6	457.050	424.793
15) T	Picloram	11.047	12.229	12155.3E6	4843.3E6	380.417	352.272
16) T	DCPA	11.527	12.187	9255.8E6	5437.8E6	319.206	440.846 #

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021325\  
 Data File : PS029171.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 13 Feb 2025 23:48  
 Operator : AR\AJ  
 Sample : Q1356-04MS  
 Misc :  
 ALS Vial : 17 Sample Multiplier: 1

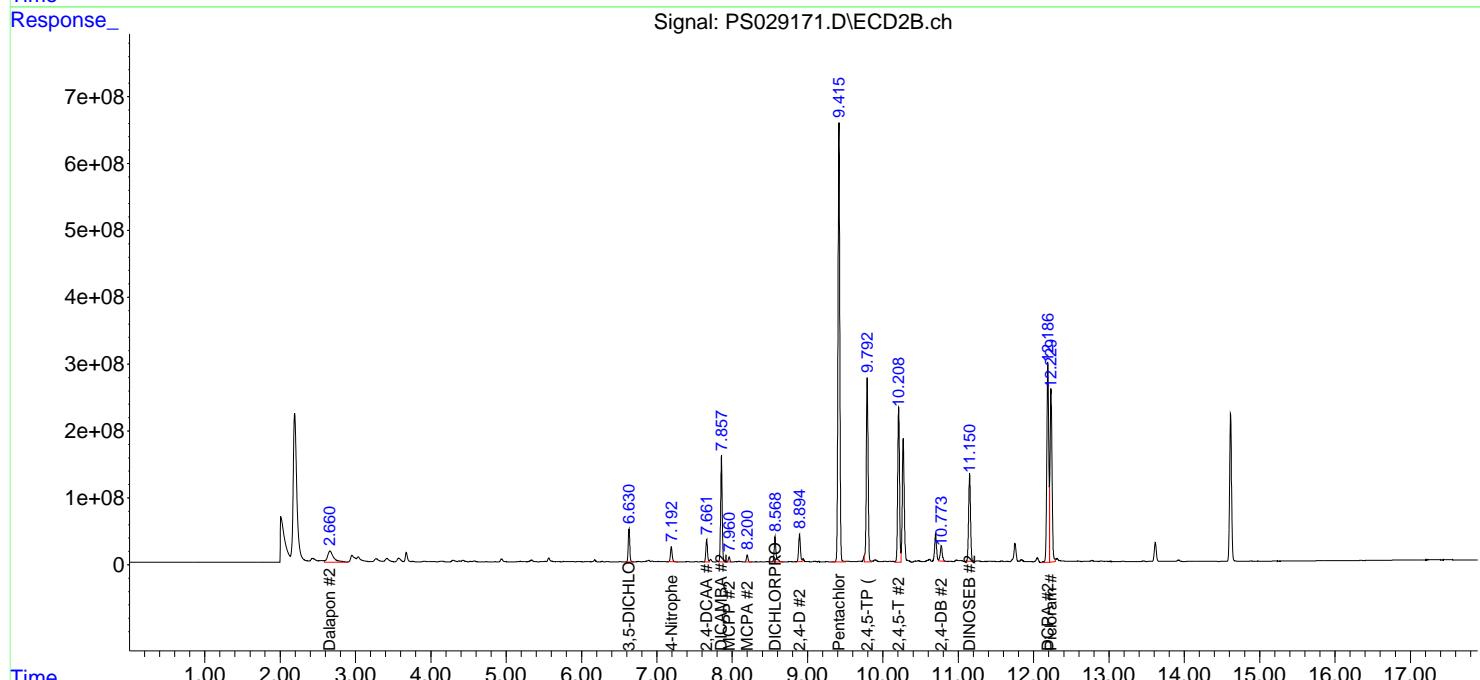
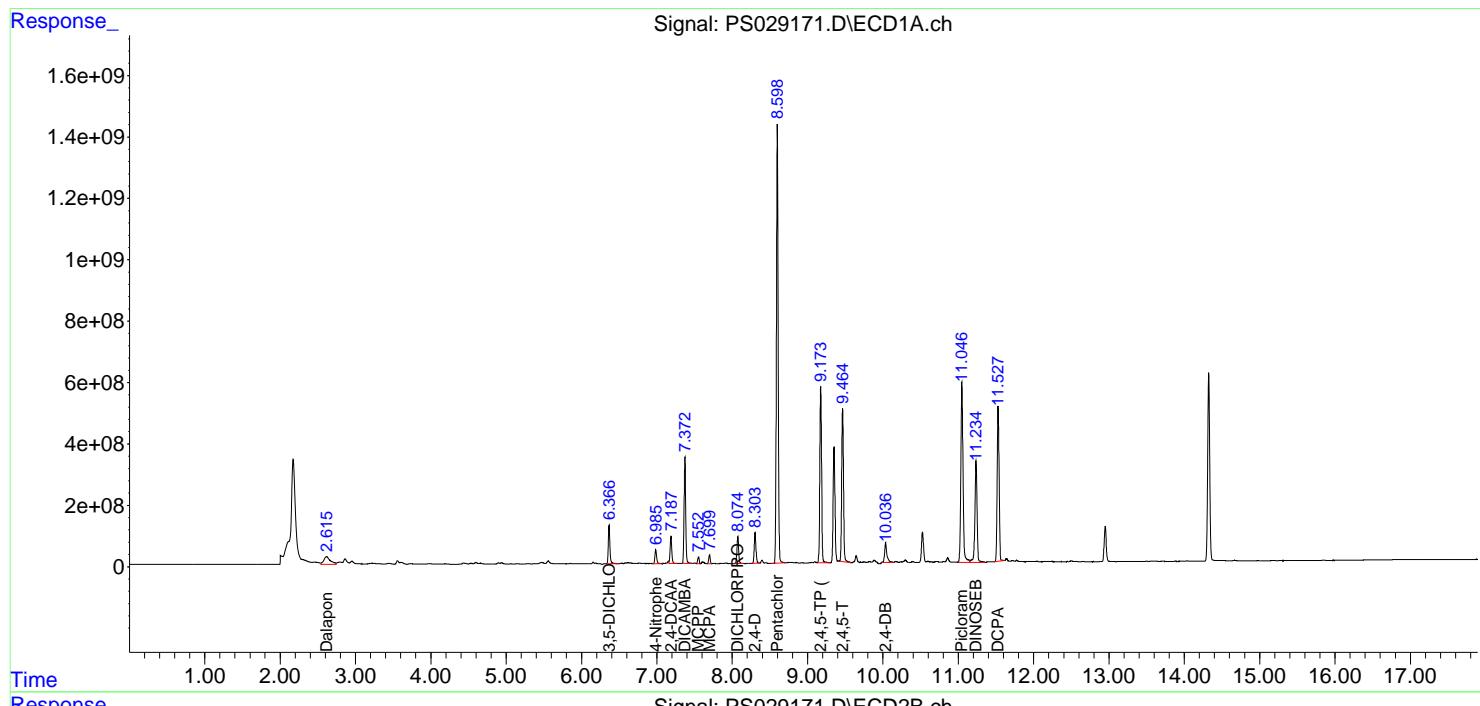
Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 14 01:26:35 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021225.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 09:17:13 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

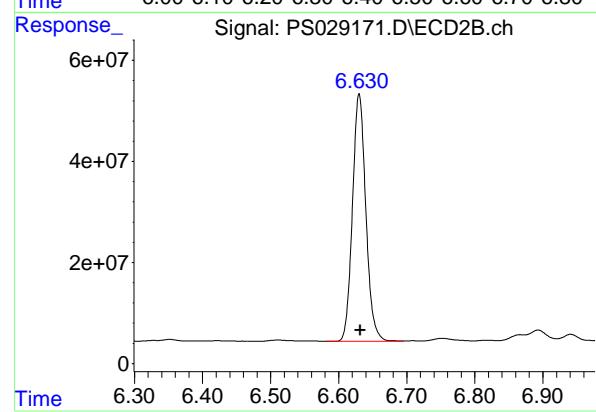
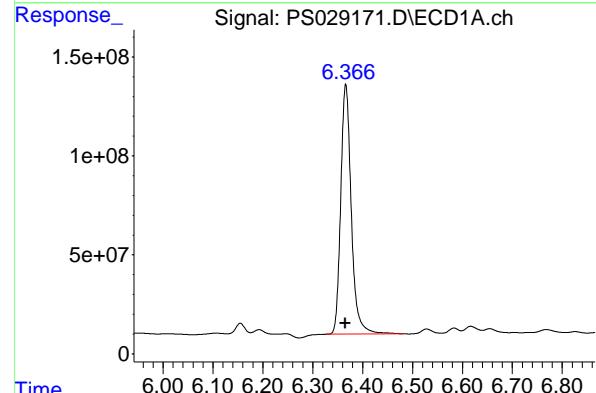
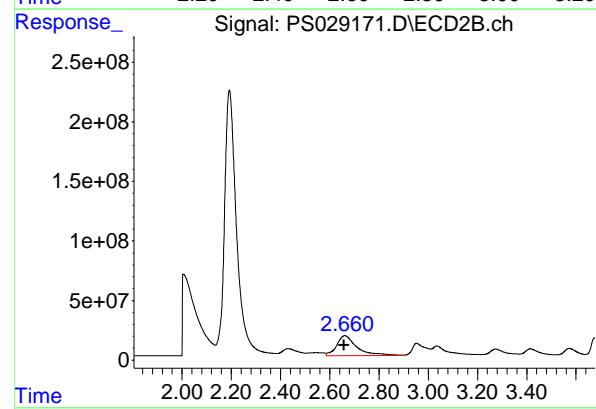
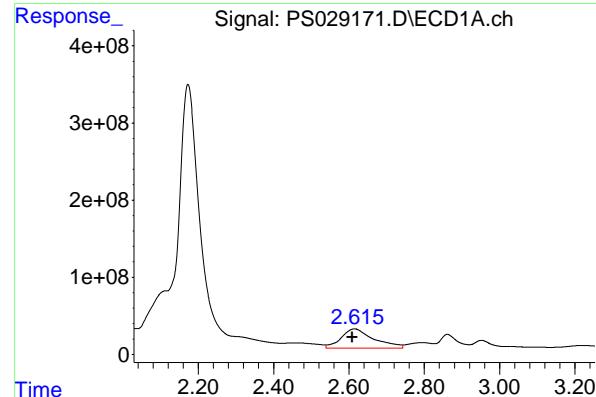
Volume Inj. : 1  $\mu$ l  
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2  
 Signal #1 Info : 30M x 0.32mm x0.5 Signal #2 Info : 30M x 0.32mm x 0.25 $\mu$ m

Instrument :  
 ECD\_S  
 ClientSampleId :  
 CARBON-WATERMS

**Manual Integrations**  
**APPROVED**

Reviewed By :Abdul Mirza 02/14/2025  
 Supervised By :Ankita Jodhani 02/14/2025





#1 Dalapon

R.T.: 2.615 min  
 Delta R.T.: 0.006 min  
 Response: 1519155351 ECD\_S  
 Conc: 480.28 ng/ml Client Sample Id : CARBON-WATERMS

**Manual Integrations**  
**APPROVED**

Reviewed By :Abdul Mirza 02/14/2025  
 Supervised By :Ankita Jodhani 02/14/2025

#1 Dalapon

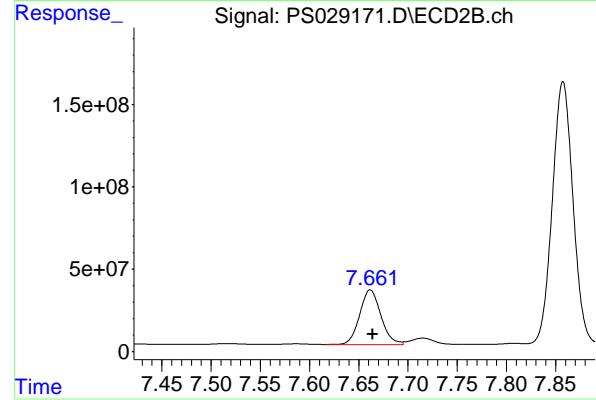
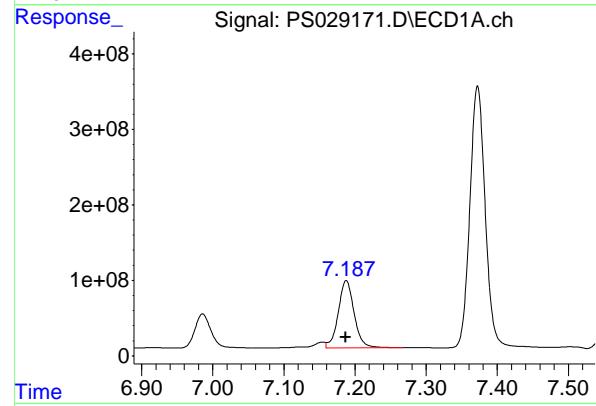
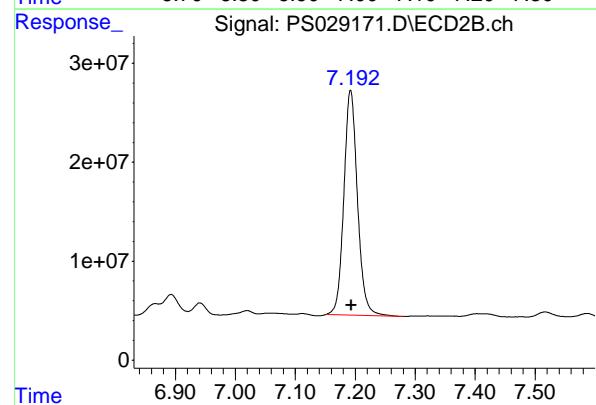
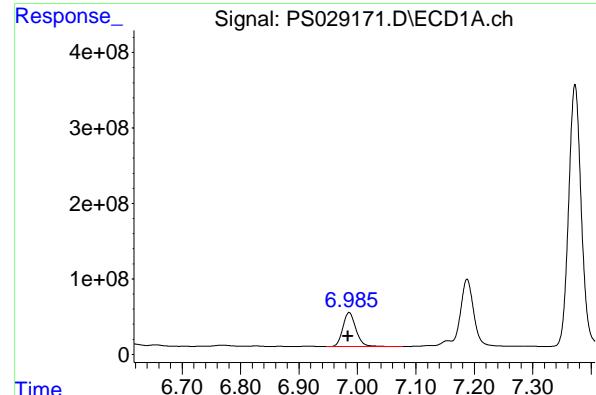
R.T.: 2.661 min  
 Delta R.T.: 0.003 min  
 Response: 968411072  
 Conc: 511.49 ng/ml

#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.366 min  
 Delta R.T.: 0.000 min  
 Response: 1854559247  
 Conc: 468.11 ng/ml

#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.630 min  
 Delta R.T.: -0.002 min  
 Response: 669473885  
 Conc: 437.60 ng/ml



## #3 4-Nitrophenol

R.T.: 6.986 min  
 Delta R.T.: 0.002 min  
 Response: 704285243  
 Conc: 413.05 ng/ml

Instrument: ECD\_S  
 ClientSampleId : CARBON-WATERMS

**Manual Integrations**  
**APPROVED**

Reviewed By :Abdul Mirza 02/14/2025  
 Supervised By :Ankita Jodhani 02/14/2025

## #3 4-Nitrophenol

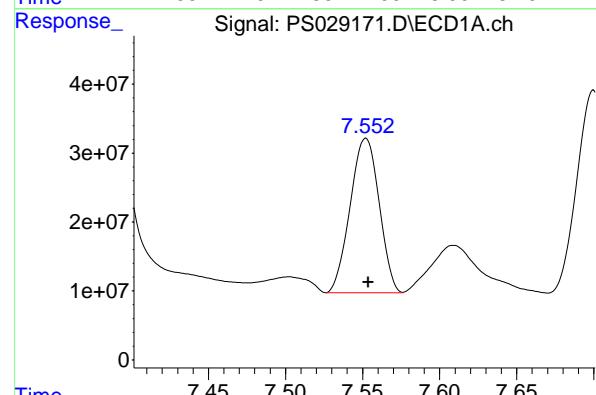
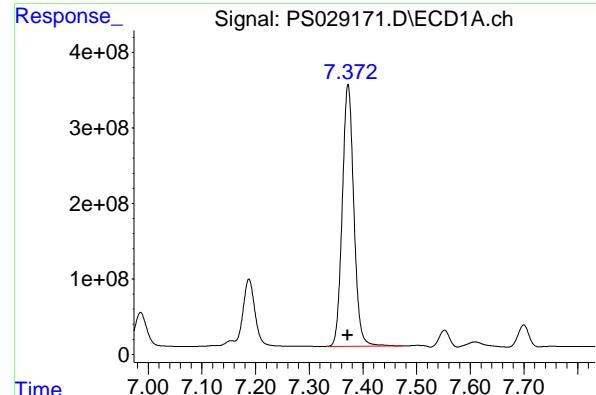
R.T.: 7.192 min  
 Delta R.T.: -0.001 min  
 Response: 358742203  
 Conc: 413.63 ng/ml

## #4 2,4-DCAA

R.T.: 7.187 min  
 Delta R.T.: 0.000 min  
 Response: 1373327804  
 Conc: 496.89 ng/ml

## #4 2,4-DCAA

R.T.: 7.662 min  
 Delta R.T.: -0.002 min  
 Response: 497356161  
 Conc: 469.87 ng/ml



#5 DICAMBA

R.T.: 7.372 min  
 Delta R.T.: 0.001 min  
 Response: 5195857205  
 Conc: 431.48 ng/ml

Instrument: ECD\_S  
 ClientSampleId : CARBON-WATERMS

**Manual Integrations**  
**APPROVED**

Reviewed By :Abdul Mirza 02/14/2025  
 Supervised By :Ankita Jodhani 02/14/2025

#5 DICAMBA

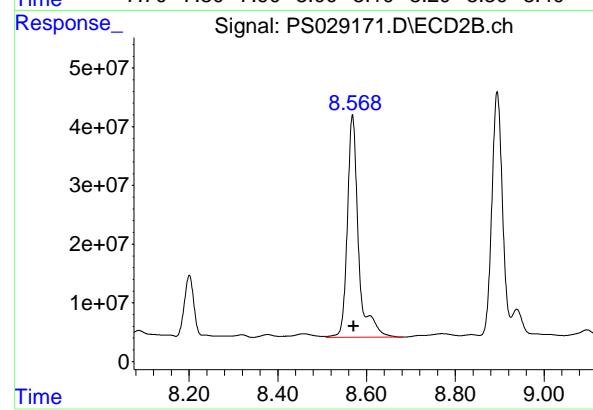
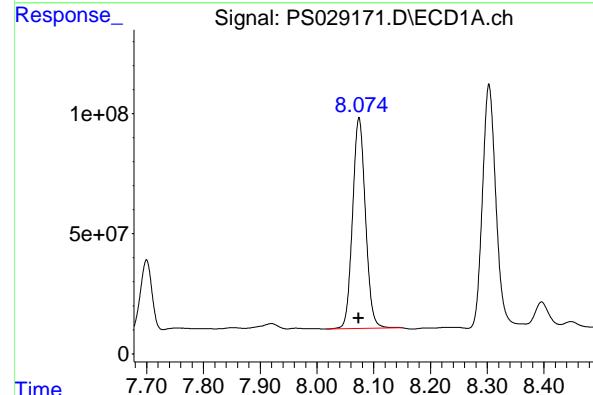
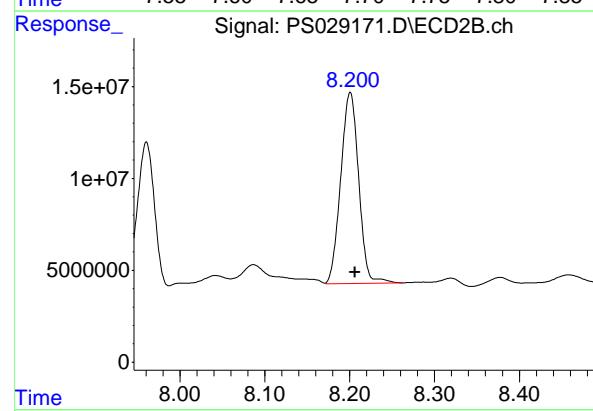
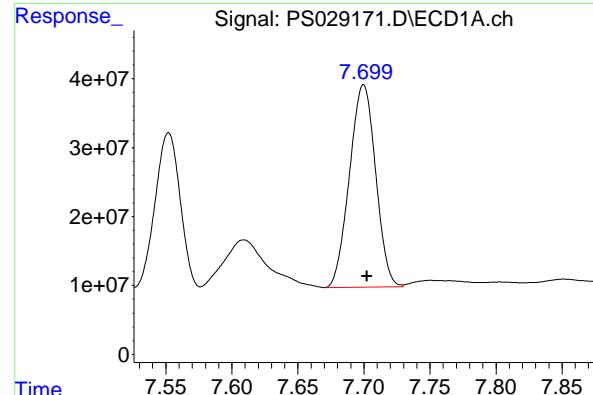
R.T.: 7.857 min  
 Delta R.T.: -0.002 min  
 Response: 2344054631  
 Conc: 424.14 ng/ml

#6 MCPP

R.T.: 7.552 min  
 Delta R.T.: -0.002 min  
 Response: 291707749  
 Conc: 42.10 ug/ml

#6 MCPP

R.T.: 7.961 min  
 Delta R.T.: -0.005 min  
 Response: 107430275  
 Conc: 43.54 ug/ml



## #7 MCPA

R.T.: 7.700 min  
 Delta R.T.: -0.003 min  
 Response: 405324286  
 Conc: 42.34 ug/ml

Instrument: ECD\_S  
 ClientSampleId : CARBON-WATERMS

**Manual Integrations**  
**APPROVED**

Reviewed By :Abdul Mirza 02/14/2025  
 Supervised By :Ankita Jodhani 02/14/2025

## #7 MCPA

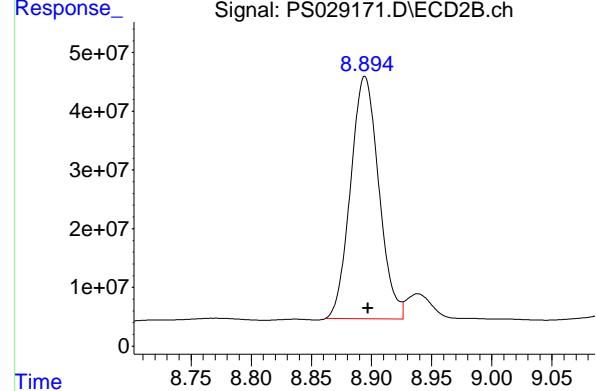
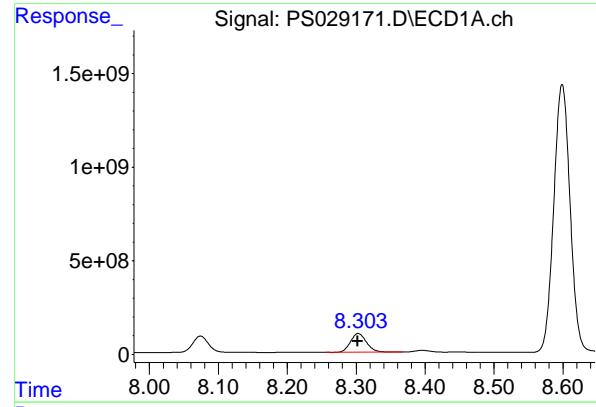
R.T.: 8.201 min  
 Delta R.T.: -0.005 min  
 Response: 152650707  
 Conc: 43.63 ug/ml

## #8 DICHLORPROP

R.T.: 8.074 min  
 Delta R.T.: 0.000 min  
 Response: 1384788368  
 Conc: 438.35 ng/ml

## #8 DICHLORPROP

R.T.: 8.568 min  
 Delta R.T.: -0.003 min  
 Response: 657557131  
 Conc: 477.50 ng/ml



#9 2,4-D

R.T.: 8.303 min  
 Delta R.T.: 0.000 min  
 Response: 1622648781 ECD\_S  
 Conc: 482.34 ng/ml Client Sample Id : CARBON-WATERMS

### Manual Integrations APPROVED

Reviewed By :Abdul Mirza 02/14/2025  
 Supervised By :Ankita Jodhani 02/14/2025

#9 2,4-D

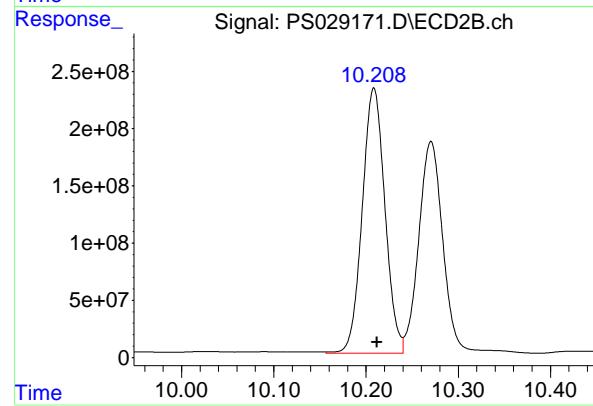
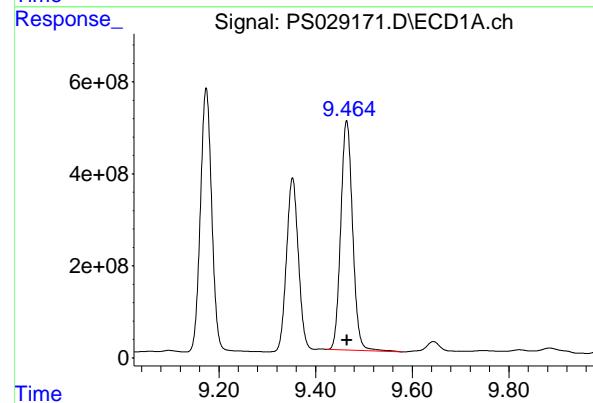
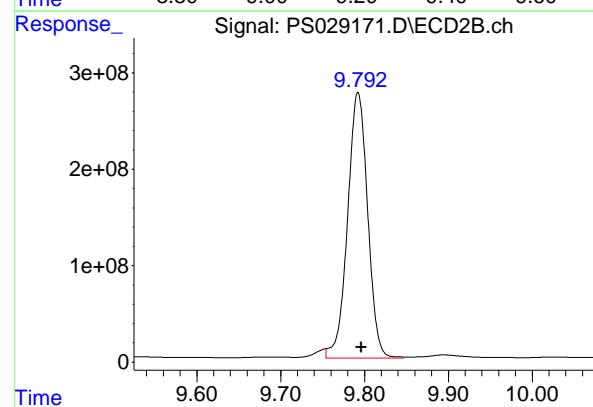
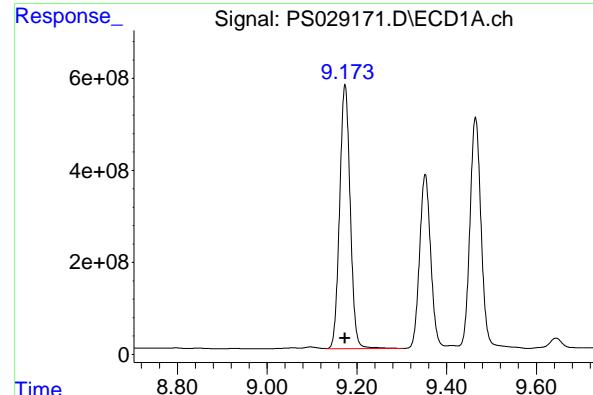
R.T.: 8.895 min  
 Delta R.T.: -0.002 min  
 Response: 673795012  
 Conc: 470.32 ng/ml

#10 Pentachlorophenol

R.T.: 8.599 min  
 Delta R.T.: 0.000 min  
 Response: 23531953629  
 Conc: 499.05 ng/ml

#10 Pentachlorophenol

R.T.: 9.415 min  
 Delta R.T.: -0.004 min  
 Response: 11026973221  
 Conc: 457.18 ng/ml



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

R.T.: 9.174 min  
 Delta R.T.: 0.000 min  
 Response: 9337298843  
 Conc: 481.54 ng/ml

### Manual Integrations APPROVED

Reviewed By :Abdul Mirza 02/14/2025  
 Supervised By :Ankita Jodhani 02/14/2025

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

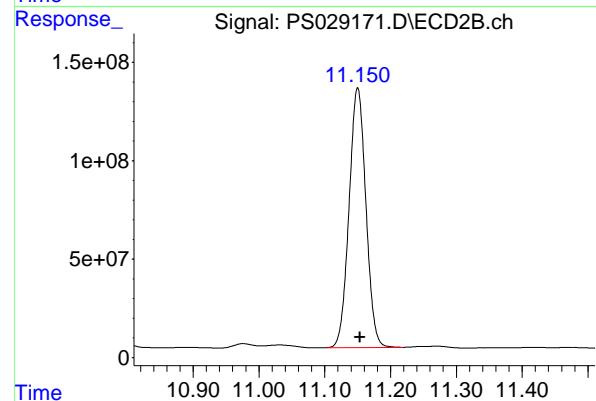
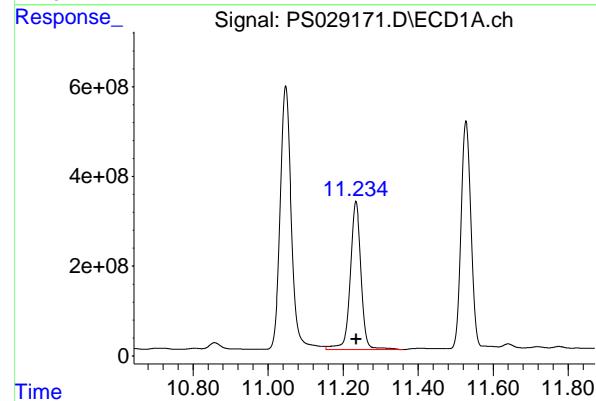
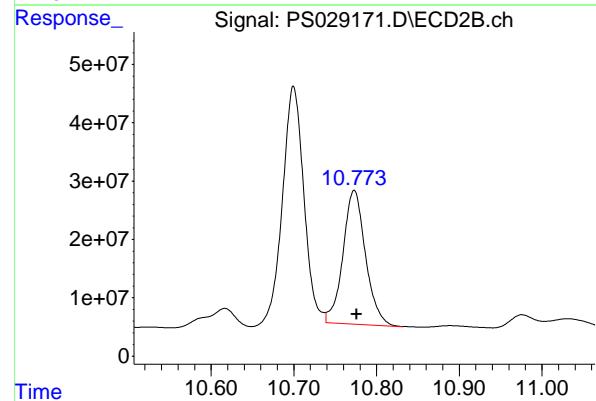
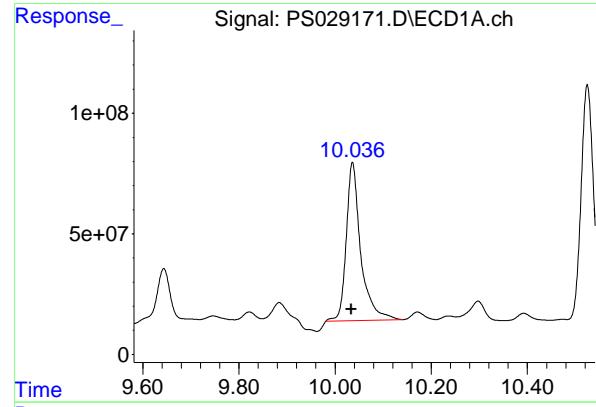
R.T.: 9.792 min  
 Delta R.T.: -0.004 min  
 Response: 4578534493  
 Conc: 468.72 ng/ml

#12 2,4,5-T

R.T.: 9.464 min  
 Delta R.T.: 0.000 min  
 Response: 8482348832  
 Conc: 437.92 ng/ml

#12 2,4,5-T

R.T.: 10.209 min  
 Delta R.T.: -0.004 min  
 Response: 3956477973  
 Conc: 427.16 ng/ml



#13 2,4-DB

R.T.: 10.036 min  
 Delta R.T.: 0.002 min  
 Response: 1371812892  
 Conc: 369.13 ng/ml

Instrument: ECD\_S  
 Client Sample Id: CARBON-WATERMS

**Manual Integrations APPROVED**

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 Supervised By :Ankita Jodhani 02/14/2025

#13 2,4-DB

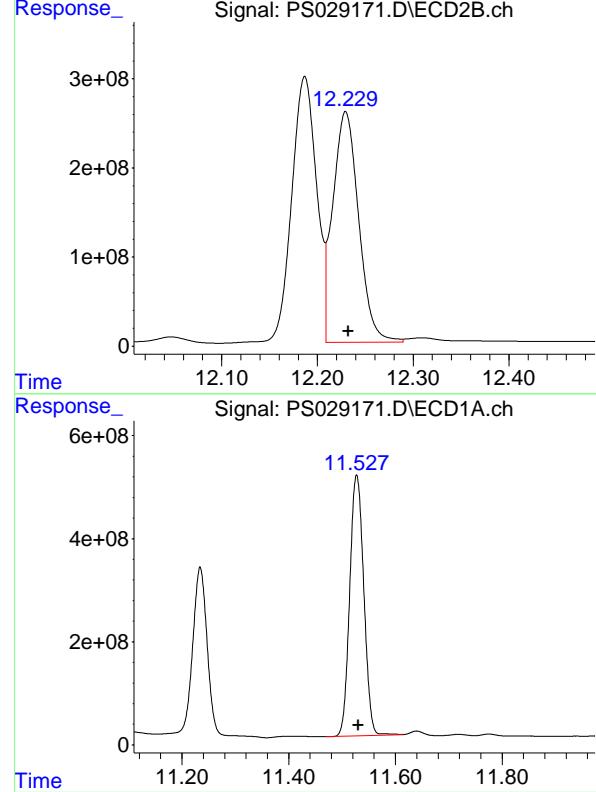
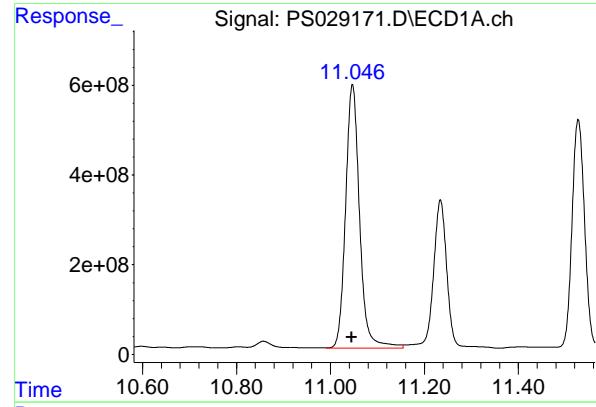
R.T.: 10.773 min  
 Delta R.T.: -0.004 min  
 Response: 436231268  
 Conc: 459.20 ng/ml

#14 DINOSEB

R.T.: 11.234 min  
 Delta R.T.: 0.000 min  
 Response: 6627507264  
 Conc: 457.05 ng/ml

#14 DINOSEB

R.T.: 11.150 min  
 Delta R.T.: -0.004 min  
 Response: 2342599601  
 Conc: 424.79 ng/ml



## #15 Picloram

R.T.: 11.047 min  
 Delta R.T.: 0.001 min  
 Instrument: ECD\_S  
 Response: 12155264016  
 Conc: 380.42 ng/ml  
 ClientSampleId : CARBON-WATERMS

**Manual Integrations**  
**APPROVED**

Reviewed By :Abdul Mirza 02/14/2025  
 Supervised By :Ankita Jodhani 02/14/2025

## #15 Picloram

R.T.: 12.229 min  
 Delta R.T.: -0.003 min  
 Response: 4843343909  
 Conc: 352.27 ng/ml

## #16 DCPA

R.T.: 11.527 min  
 Delta R.T.: -0.003 min  
 Response: 9255785711  
 Conc: 319.21 ng/ml

## #16 DCPA

R.T.: 12.187 min  
 Delta R.T.: -0.004 min  
 Response: 5437757347  
 Conc: 440.85 ng/ml



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

## Report of Analysis

Client:	Weston Solutions	Date Collected:	02/11/25
Project:	Ft Meade Tipton Airfield Parcel RI - PO 0111169	Date Received:	02/11/25
Client Sample ID:	CARBON-WATERMSD	SDG No.:	Q1352
Lab Sample ID:	Q1356-04MSD	Matrix:	TCLP
Analytical Method:	SW8151A	% Solid:	0 Decanted:
Sample Wt/Vol:	100 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
PS029172.D	1	02/13/25 10:15	02/14/25 00:12	PB166713

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
94-75-7	2,4-D	48.1		4.90	15.0	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	48.2		4.50	15.0	20.0	ug/L
<b>SURROGATES</b>							
19719-28-9	2,4-DCAA	485		32 - 138		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\PS021325\  
 Data File : PS029172.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 14 Feb 2025 00:12  
 Operator : AR\AJ  
 Sample : Q1356-04MSD  
 Misc :  
 ALS Vial : 18 Sample Multiplier: 1

**Instrument :**  
**ECD\_S**  
**ClientSampleId :**  
**CARBON-WATERMSD**

**Manual Integrations**  
**APPROVED**

Reviewed By :Abdul Mirza 02/14/2025  
 Supervised By :Ankita Jodhani 02/14/2025

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 14 01:26:58 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021225.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 09:17:13 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 7.187 7.661 1339.8E6 496.2E6 484.772m 468.741

**Target Compounds**

1) T	Dalapon	2.611	2.659	1551.6E6	989.0E6	490.527	522.363
2) T	3,5-DICHL...	6.366	6.630	1843.0E6	661.0E6	465.192	432.033
3) T	4-Nitroph...	6.985	7.192	700.6E6	356.5E6	410.920	411.082
5) T	DICAMBA	7.372	7.857	5138.4E6	2320.8E6	426.710	419.928
6) T	MCPP	7.551	7.960	287.0E6	106.2E6	41.428	43.042
7) T	MCPA	7.699	8.200	399.1E6	151.5E6	41.693	43.296
8) T	DICHLORPROP	8.075	8.568	1368.7E6	641.5E6	433.271	465.856
9) T	2,4-D	8.303	8.894	1618.4E6	673.3E6	481.076	469.976
10) T	Pentachlo...	8.599	9.414	23371.0E6	10912.5E6	495.633	452.433
11) T	2,4,5-TP ...	9.173	9.791	9337.4E6	4582.9E6	481.551	469.164m
12) T	2,4,5-T	9.464	10.208	8489.7E6	3949.2E6	438.298	426.372
13) T	2,4-DB	10.036	10.772	1377.6E6	466.0E6	370.692	490.502m#
14) T	DINOSEB	11.234	11.149	6638.9E6	2344.5E6	457.837	425.142
15) T	Picloram	11.046	12.228	12237.0E6	4881.6E6	382.977	355.058
16) T	DCPA	11.527	12.185	9174.7E6	5388.5E6	316.408	436.849 #

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021325\  
 Data File : PS029172.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 14 Feb 2025 00:12  
 Operator : AR\AJ  
 Sample : Q1356-04MSD  
 Misc :  
 ALS Vial : 18 Sample Multiplier: 1

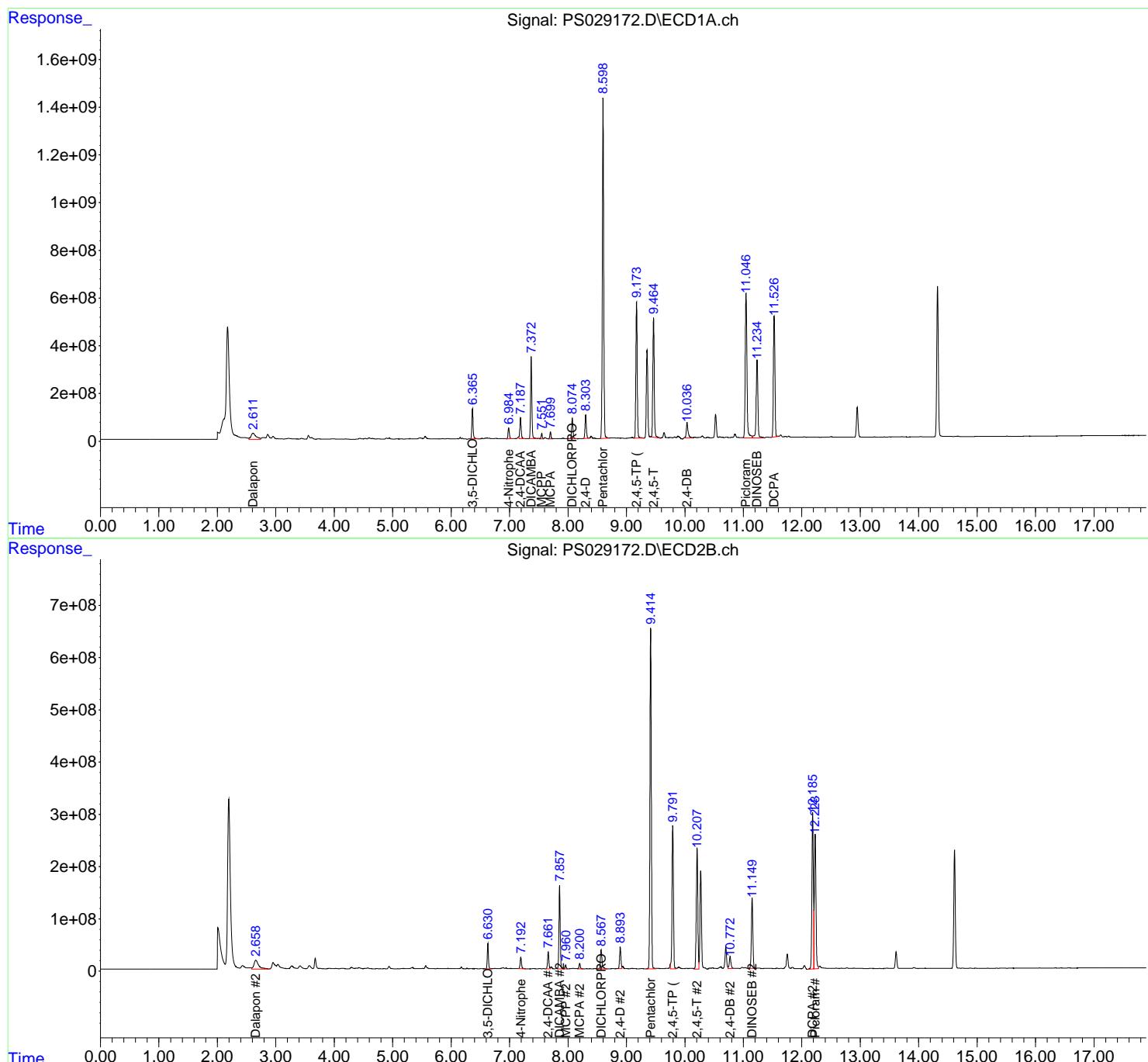
Instrument :  
 ECD\_S  
 ClientSampleId :  
 CARBON-WATERMSD

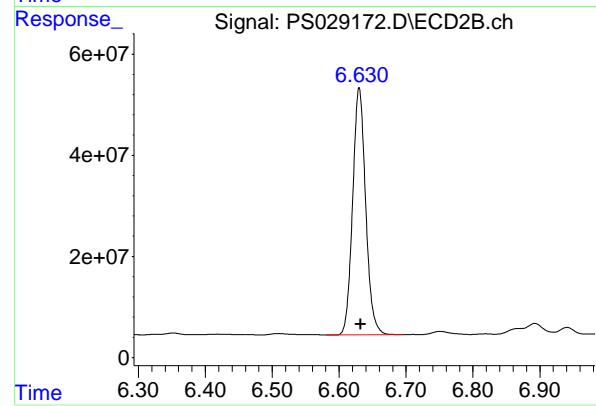
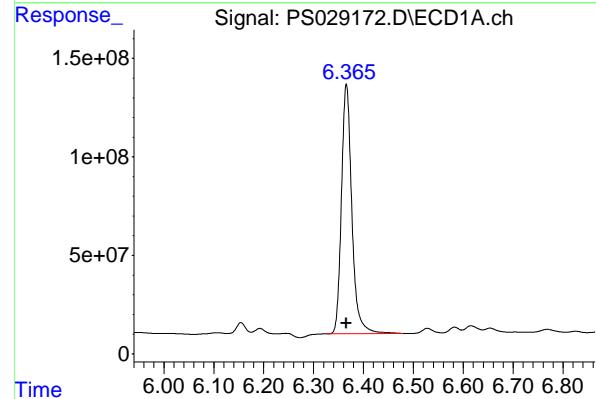
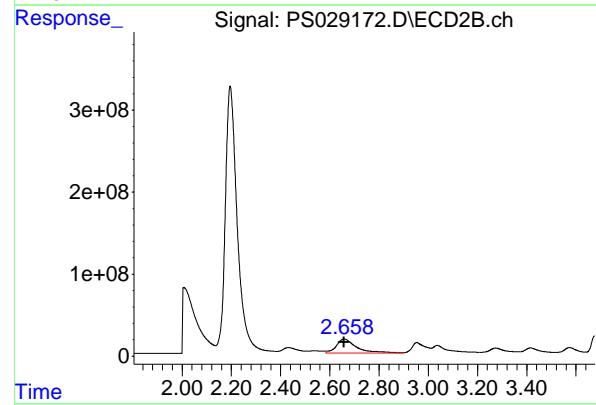
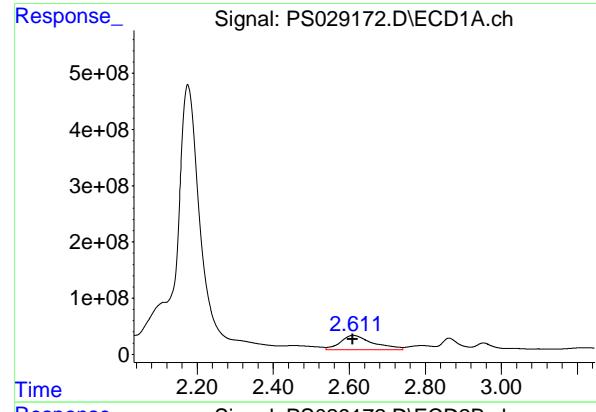
Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 14 01:26:58 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021225.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 09:17:13 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1  $\mu$ 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 $\mu$ m

### Manual Integrations APPROVED

Reviewed By :Abdul Mirza 02/14/2025  
 Supervised By :Ankita Jodhani 02/14/2025





#1 Dalapon

R.T.: 2.611 min  
 Delta R.T.: 0.002 min  
 Response: 1551561739 ECD\_S  
 Conc: 490.53 ng/ml Client Sample Id : CARBON-WATERMSD

**Manual Integrations**  
**APPROVED**

Reviewed By :Abdul Mirza 02/14/2025  
 Supervised By :Ankita Jodhani 02/14/2025

#1 Dalapon

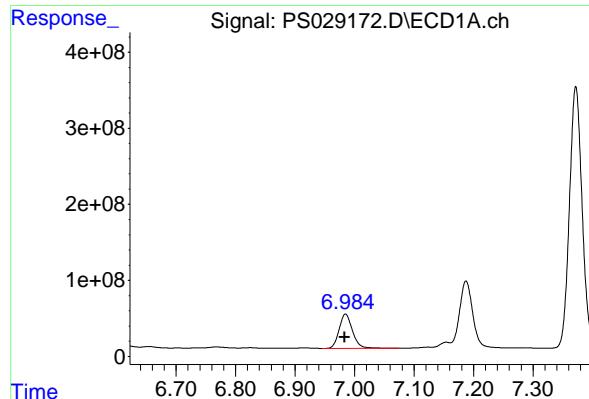
R.T.: 2.659 min  
 Delta R.T.: 0.000 min  
 Response: 988989507  
 Conc: 522.36 ng/ml

#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.366 min  
 Delta R.T.: 0.000 min  
 Response: 1842983961  
 Conc: 465.19 ng/ml

#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.630 min  
 Delta R.T.: -0.002 min  
 Response: 660952459  
 Conc: 432.03 ng/ml



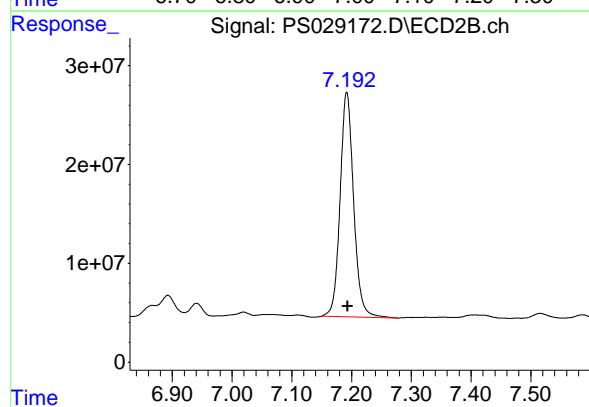
#3 4-Nitrophenol

R.T.: 6.985 min  
 Delta R.T.: 0.001 min  
 Response: 700647228  
 Conc: 410.92 ng/ml

Instrument: ECD\_S  
 ClientSampleId : CARBON-WATERMSD

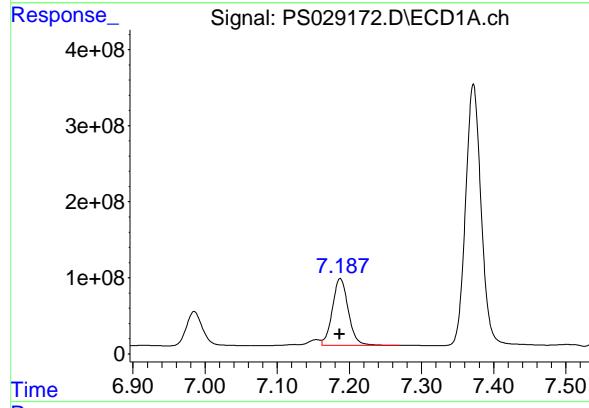
**Manual Integrations**  
**APPROVED**

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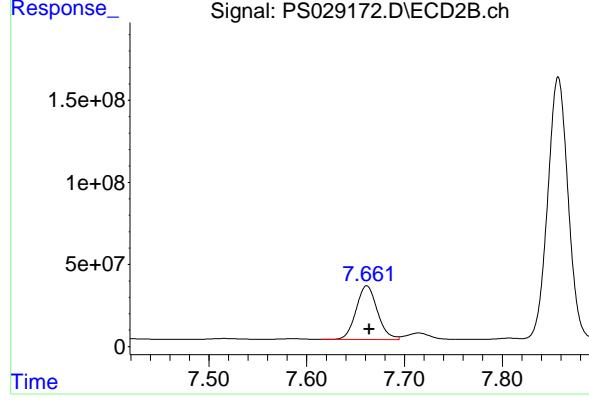
#3 4-Nitrophenol

R.T.: 7.192 min  
 Delta R.T.: -0.001 min  
 Response: 356531174  
 Conc: 411.08 ng/ml



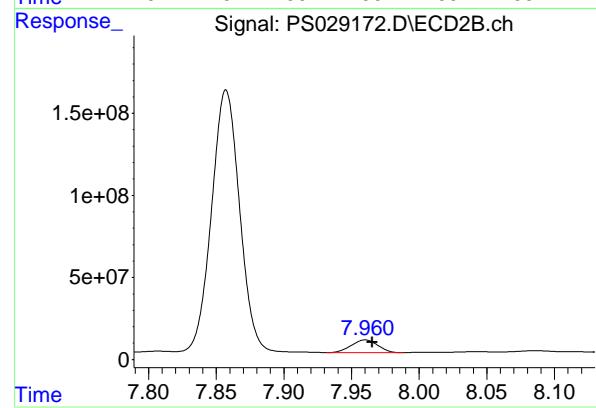
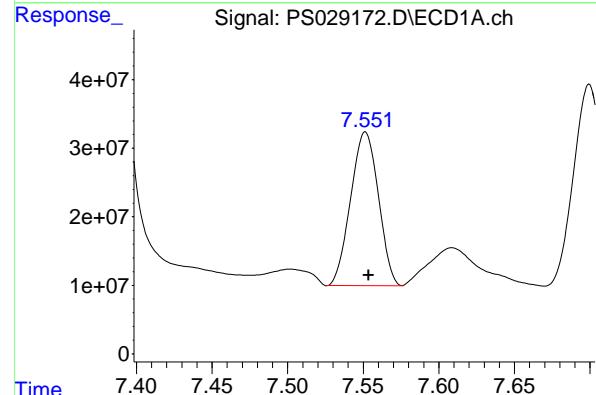
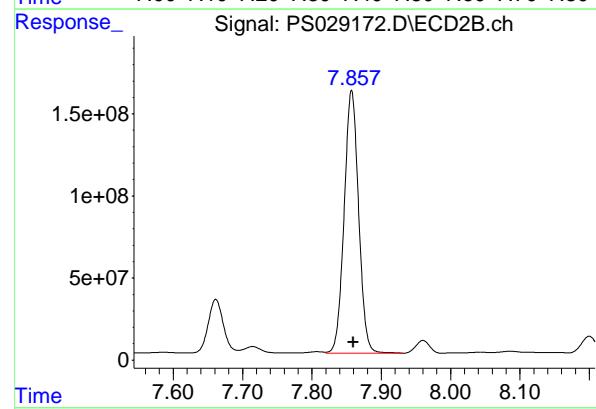
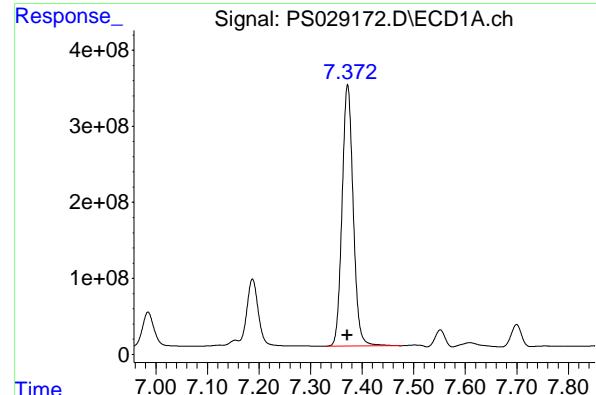
#4 2,4-DCAA

R.T.: 7.187 min  
 Delta R.T.: 0.000 min  
 Response: 1339840321  
 Conc: 484.77 ng/ml



#4 2,4-DCAA

R.T.: 7.661 min  
 Delta R.T.: -0.003 min  
 Response: 496159658  
 Conc: 468.74 ng/ml



#5 DICAMBA

R.T.: 7.372 min  
 Delta R.T.: 0.000 min  
 Response: 5138421683 ECD\_S  
 Conc: 426.71 ng/ml Client Sample Id : CARBON-WATERMSD

**Manual Integrations**  
**APPROVED**

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 Supervised By :Ankita Jodhani 02/14/2025

#5 DICAMBA

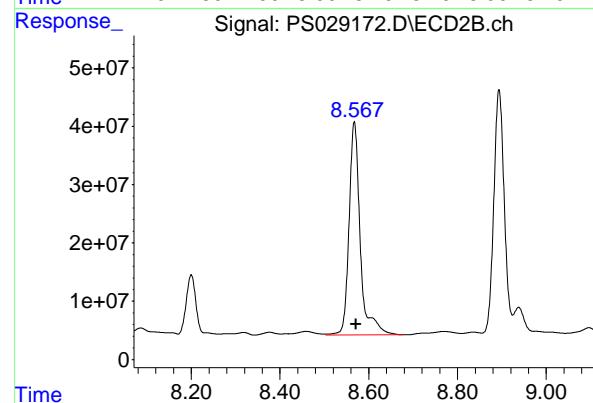
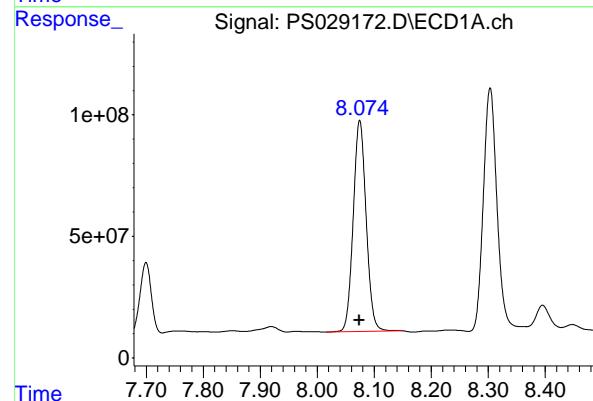
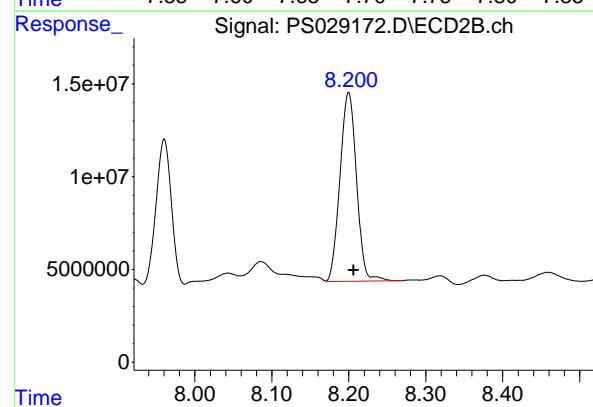
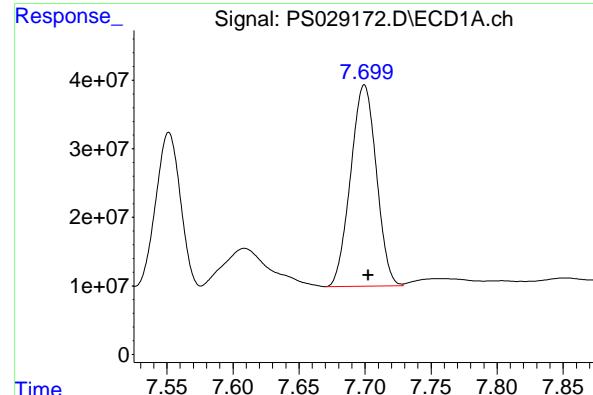
R.T.: 7.857 min  
 Delta R.T.: -0.002 min  
 Response: 2320772824  
 Conc: 419.93 ng/ml

#6 MCPP

R.T.: 7.551 min  
 Delta R.T.: -0.002 min  
 Response: 287028617  
 Conc: 41.43 ug/ml

#6 MCPP

R.T.: 7.960 min  
 Delta R.T.: -0.005 min  
 Response: 106193067  
 Conc: 43.04 ug/ml



## #7 MCPA

R.T.: 7.699 min  
 Delta R.T.: -0.003 min  
 Response: 399090910  
 Conc: 41.69 ug/ml

Instrument: ECD\_S  
 ClientSampleId : CARBON-WATERMSD

**Manual Integrations**  
**APPROVED**

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 Supervised By :Ankita Jodhani 02/14/2025

## #7 MCPA

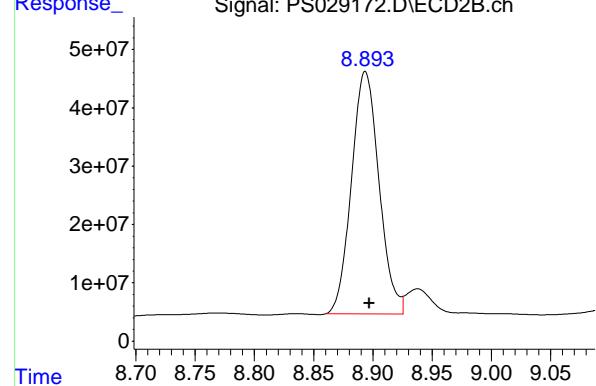
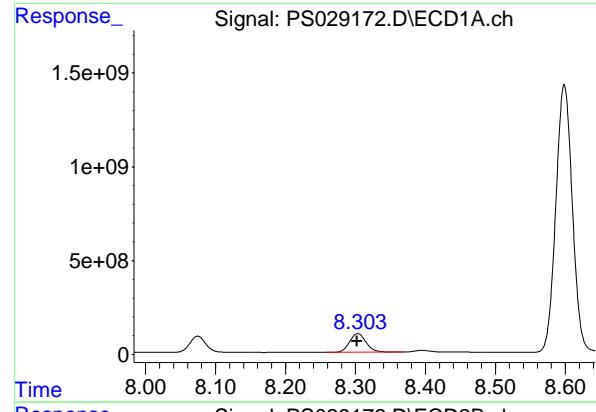
R.T.: 8.200 min  
 Delta R.T.: -0.006 min  
 Response: 151465006  
 Conc: 43.30 ug/ml

## #8 DICHLORPROP

R.T.: 8.075 min  
 Delta R.T.: 0.000 min  
 Response: 1368731139  
 Conc: 433.27 ng/ml

## #8 DICHLORPROP

R.T.: 8.568 min  
 Delta R.T.: -0.003 min  
 Response: 641525589  
 Conc: 465.86 ng/ml



#9 2,4-D

R.T.: 8.303 min  
 Delta R.T.: 0.001 min  
 Response: 1618383975  
 Conc: 481.08 ng/ml

Instrument: ECD\_S  
 ClientSampleId: CARBON-WATERMSD

**Manual Integrations**  
**APPROVED**

Reviewed By :Abdul Mirza 02/14/2025  
 Supervised By :Ankita Jodhani 02/14/2025

#9 2,4-D

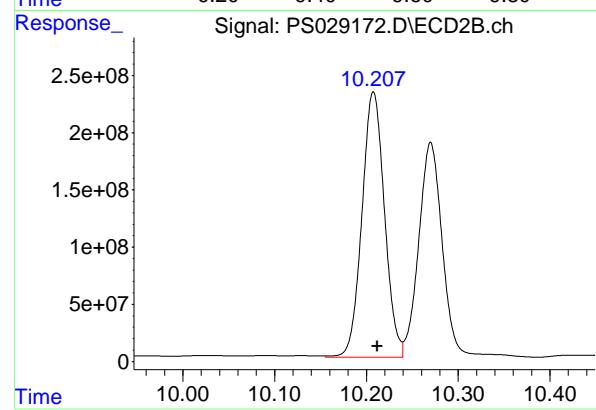
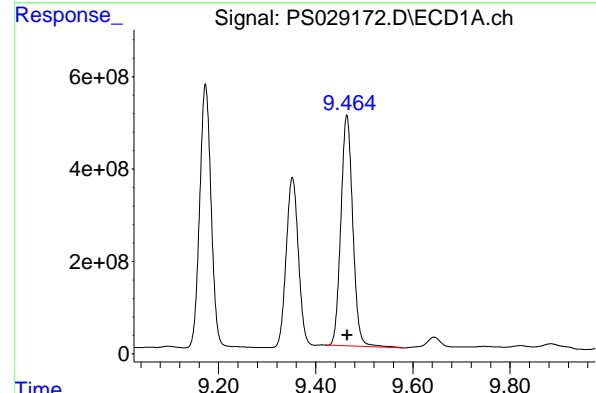
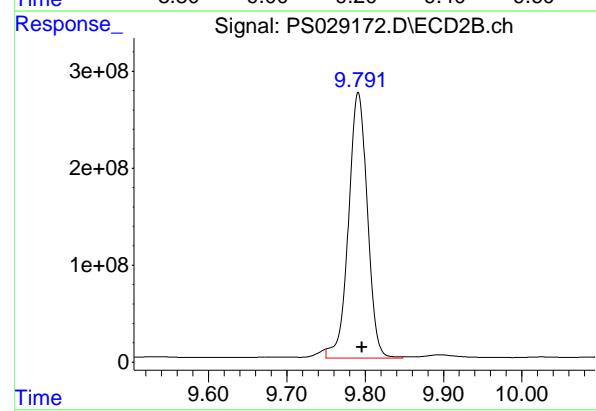
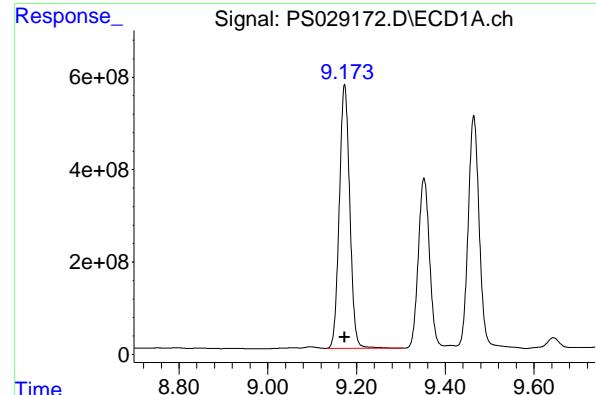
R.T.: 8.894 min  
 Delta R.T.: -0.003 min  
 Response: 673300762  
 Conc: 469.98 ng/ml

#10 Pentachlorophenol

R.T.: 8.599 min  
 Delta R.T.: 0.000 min  
 Response: 23371049991  
 Conc: 495.63 ng/ml

#10 Pentachlorophenol

R.T.: 9.414 min  
 Delta R.T.: -0.005 min  
 Response: 10912526099  
 Conc: 452.43 ng/ml



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

R.T.: 9.173 min

Delta R.T.: 0.000 min

Instrument: ECD\_S

Response: 9337446653

Conc: 481.55 ng/ml

ClientSampleId: CARBON-WATERMSD

### Manual Integrations APPROVED

Reviewed By :Abdul Mirza 02/14/2025  
Supervised By :Ankita Jodhani 02/14/2025

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

R.T.: 9.791 min

Delta R.T.: -0.005 min

Response: 4582889358

Conc: 469.16 ng/ml

#12 2,4,5-T

R.T.: 9.464 min

Delta R.T.: 0.000 min

Response: 8489680473

Conc: 438.30 ng/ml

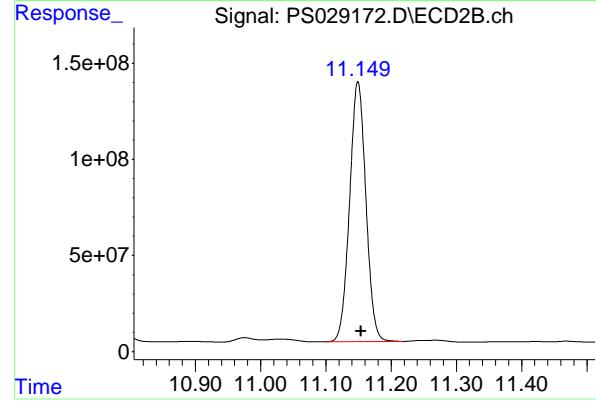
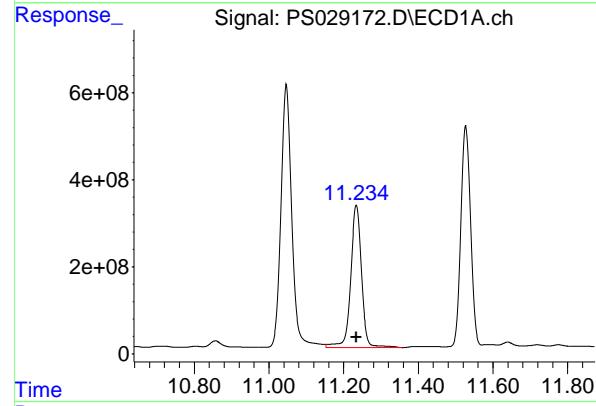
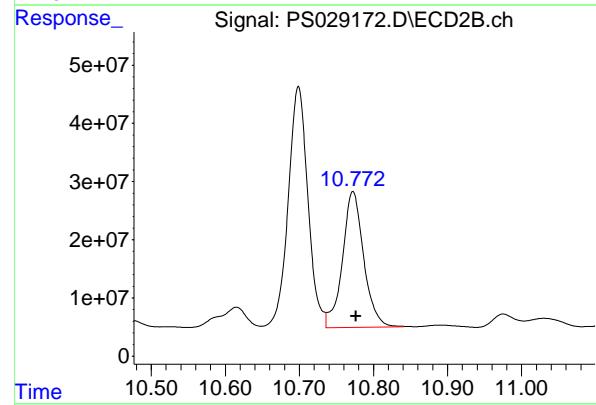
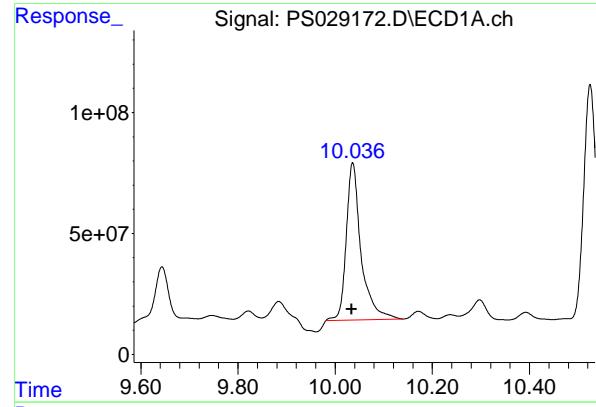
#12 2,4,5-T

R.T.: 10.208 min

Delta R.T.: -0.004 min

Response: 3949176970

Conc: 426.37 ng/ml



#13 2,4-DB

R.T.: 10.036 min  
 Delta R.T.: 0.002 min  
 Instrument: ECD\_S  
 Response: 1377599345  
 Conc: 370.69 ng/ml

**Manual Integrations**  
**APPROVED**

Reviewed By :Abdul Mirza 02/14/2025  
 Supervised By :Ankita Jodhani 02/14/2025

#13 2,4-DB

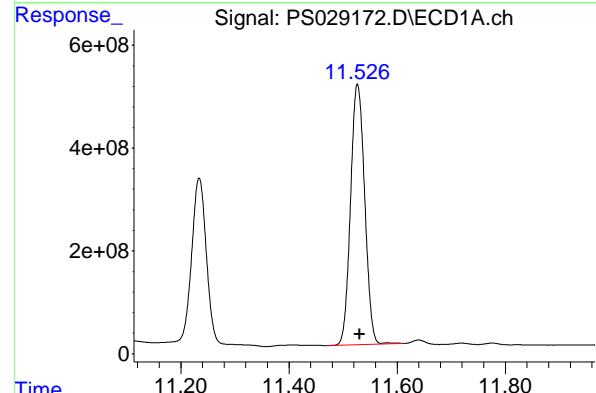
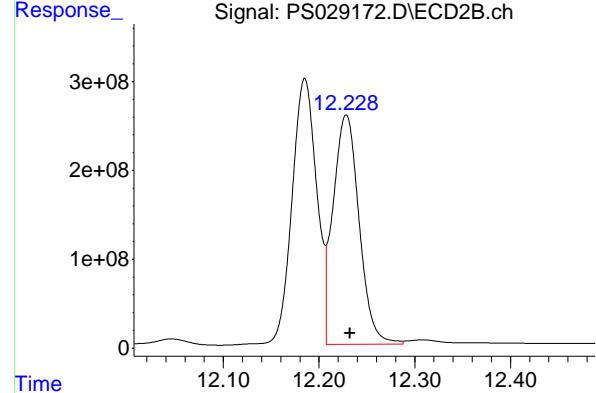
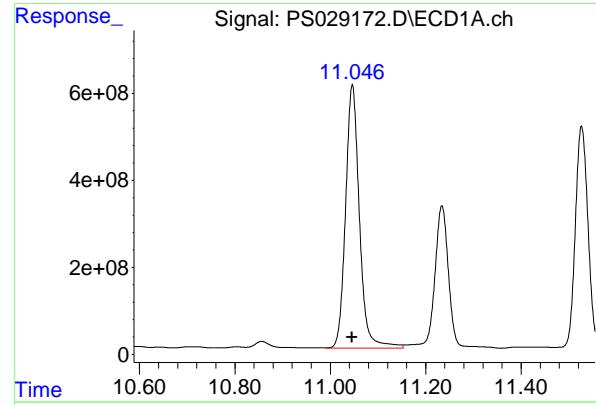
R.T.: 10.772 min  
 Delta R.T.: -0.004 min  
 Response: 465972326  
 Conc: 490.50 ng/ml

#14 DINOSEB

R.T.: 11.234 min  
 Delta R.T.: 0.000 min  
 Response: 6638913437  
 Conc: 457.84 ng/ml

#14 DINOSEB

R.T.: 11.149 min  
 Delta R.T.: -0.004 min  
 Response: 2344525158  
 Conc: 425.14 ng/ml



## #15 Picloram

R.T.: 11.046 min  
 Delta R.T.: 0.000 min  
 Instrument: ECD\_S  
 Response: 12237040857  
 Conc: 382.98 ng/ml  
 ClientSampleId : CARBON-WATERMSD

**Manual Integrations**  
**APPROVED**

Reviewed By :Abdul Mirza 02/14/2025  
 Supervised By :Ankita Jodhani 02/14/2025

## #15 Picloram

R.T.: 12.228 min  
 Delta R.T.: -0.004 min  
 Response: 4881642726  
 Conc: 355.06 ng/ml

## #16 DCPA

R.T.: 11.527 min  
 Delta R.T.: -0.004 min  
 Response: 9174665199  
 Conc: 316.41 ng/ml

## #16 DCPA

R.T.: 12.185 min  
 Delta R.T.: -0.006 min  
 Response: 5388459231  
 Conc: 436.85 ng/ml



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## Manual Integration Report

Sequence:	ps021125	Instrument	ECD_s
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason



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## Manual Integration Report

Sequence:	ps021325	Instrument	ECD_s
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q1356-04MS	PS029171.D	2,4,5-TP (SILVEX) #2	Abdul	2/14/2025 10:36:21 AM	Ankita	2/14/2025 1:50:10	Peak Integrated by Software
Q1356-04MS	PS029171.D	2,4-DB #2	Abdul	2/14/2025 10:36:21 AM	Ankita	2/14/2025 1:50:10	Peak Integrated by Software
Q1356-04MS	PS029171.D	2,4-DCAA	Abdul	2/14/2025 10:36:21 AM	Ankita	2/14/2025 1:50:10	Peak Integrated by Software
Q1356-04MSD	PS029172.D	2,4,5-TP (SILVEX) #2	Abdul	2/14/2025 10:36:24 AM	Ankita	2/14/2025 1:50:12	Peak Integrated by Software
Q1356-04MSD	PS029172.D	2,4-DB #2	Abdul	2/14/2025 10:36:24 AM	Ankita	2/14/2025 1:50:12	Peak Integrated by Software
Q1356-04MSD	PS029172.D	2,4-DCAA	Abdul	2/14/2025 10:36:24 AM	Ankita	2/14/2025 1:50:12	Peak Integrated by Software

Instrument ID: ECD\_S

**Daily Analysis Runlog For Sequence/QCBatch ID # PS021125**

Review By	Abdul	Review On	2/12/2025 1:30:07 PM
Supervise By	Ankita	Supervise On	2/12/2025 2:05:27 PM
SubDirectory	PS021125	HP Acquire Method	HP Processing Method ps021125 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24064,PP24065,PP24066,PP24067,PP24068		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24066 PP24069,PP24070		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	HEXANE	PS029116.D	11 Feb 2025 17:08	AR\AJ	Ok
2	I.BLK	PS029117.D	11 Feb 2025 17:32	AR\AJ	Ok
3	HSTDICC200	PS029118.D	11 Feb 2025 17:56	AR\AJ	Ok
4	HSTDICC500	PS029119.D	11 Feb 2025 18:20	AR\AJ	Ok
5	HSTDICC750	PS029120.D	11 Feb 2025 18:44	AR\AJ	Ok
6	HSTDICC1000	PS029121.D	11 Feb 2025 19:08	AR\AJ	Ok
7	HSTDICC1500	PS029122.D	11 Feb 2025 19:32	AR\AJ	Ok
8	HSTDICV750	PS029123.D	11 Feb 2025 19:56	AR\AJ	Ok
9	I.BLK	PS029124.D	11 Feb 2025 20:20	AR\AJ	Ok
10	HSTDCCC750	PS029125.D	11 Feb 2025 20:43	AR\AJ	Ok
11	PB166662BL	PS029126.D	11 Feb 2025 21:07	AR\AJ	Ok
12	PB166662BS	PS029127.D	11 Feb 2025 21:31	AR\AJ	Ok
13	Q1344-01	PS029128.D	11 Feb 2025 21:55	AR\AJ	Ok
14	Q1344-03	PS029129.D	11 Feb 2025 22:19	AR\AJ	Ok
15	I.BLK	PS029130.D	11 Feb 2025 22:43	AR\AJ	Ok
16	HSTDCCC750	PS029131.D	11 Feb 2025 23:07	AR\AJ	Ok
17	Q1343-01	PS029132.D	11 Feb 2025 23:31	AR\AJ	Ok
18	Q1343-05	PS029133.D	11 Feb 2025 23:55	AR\AJ	Ok
19	Q1343-09	PS029134.D	12 Feb 2025 00:19	AR\AJ	Ok
20	Q1343-13	PS029135.D	12 Feb 2025 00:43	AR\AJ	Ok
21	Q1343-13MS	PS029136.D	12 Feb 2025 01:07	AR\AJ	Ok,M



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Instrument ID: ECD\_S

**Daily Analysis Runlog For Sequence/QCBatch ID # PS021125**

Review By	Abdul	Review On	2/12/2025 1:30:07 PM
Supervise By	Ankita	Supervise On	2/12/2025 2:05:27 PM
SubDirectory	PS021125	HP Acquire Method	HP Processing Method ps021125 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24064,PP24065,PP24066,PP24067,PP24068		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24066 PP24069,PP24070		

22	Q1343-13MSD	PS029137.D	12 Feb 2025 01:31	AR\AJ	Ok,M
23	Q1343-17	PS029138.D	12 Feb 2025 01:55	AR\AJ	Ok
24	Q1346-01	PS029139.D	12 Feb 2025 02:19	AR\AJ	Ok
25	I.BLK	PS029140.D	12 Feb 2025 02:43	AR\AJ	Ok
26	HSTDCCC750	PS029141.D	12 Feb 2025 03:55	AR\AJ	Ok

M : Manual Integration



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Instrument ID: ECD\_S

**Daily Analysis Runlog For Sequence/QCBatch ID # PS021325**

Review By	Abdul	Review On	2/14/2025 1:50:53 PM
Supervise By	Ankita	Supervise On	2/14/2025 1:51:12 PM
SubDirectory	PS021325	HP Acquire Method	HP Processing Method ps021125 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24064,PP24065,PP24066,PP24067,PP24068		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24066 PP24069,PP24070		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	HEXANE	PS029151.D	13 Feb 2025 10:23	AR\AJ	Ok
2	I.BLK	PS029152.D	13 Feb 2025 10:47	AR\AJ	Ok
3	HSTDCCC750	PS029153.D	13 Feb 2025 12:16	AR\AJ	Ok
4	PB166710BL	PS029154.D	13 Feb 2025 16:12	AR\AJ	Ok
5	PB166710BS	PS029155.D	13 Feb 2025 16:36	AR\AJ	Ok
6	Q1353-01	PS029156.D	13 Feb 2025 17:00	AR\AJ	Ok,M
7	Q1353-01MS	PS029157.D	13 Feb 2025 17:24	AR\AJ	Ok,M
8	Q1353-01MSD	PS029158.D	13 Feb 2025 17:48	AR\AJ	Ok,M
9	I.BLK	PS029159.D	13 Feb 2025 18:12	AR\AJ	Ok
10	HSTDCCC750	PS029160.D	13 Feb 2025 18:36	AR\AJ	Ok
11	PB166713BL	PS029161.D	13 Feb 2025 19:24	AR\AJ	Ok
12	PB166713BS	PS029162.D	13 Feb 2025 19:48	AR\AJ	Ok
13	PB166700TB	PS029163.D	13 Feb 2025 20:12	AR\AJ	Ok
14	PB166702TB	PS029164.D	13 Feb 2025 20:36	AR\AJ	Ok,M
15	Q1352-02	PS029165.D	13 Feb 2025 21:00	AR\AJ	Ok
16	I.BLK	PS029166.D	13 Feb 2025 21:24	AR\AJ	Ok
17	HSTDCCC750	PS029167.D	13 Feb 2025 21:48	AR\AJ	Ok
18	Q1356-01	PS029168.D	13 Feb 2025 22:36	AR\AJ	Ok,M
19	Q1356-03	PS029169.D	13 Feb 2025 23:00	AR\AJ	Ok,M
20	Q1356-04	PS029170.D	13 Feb 2025 23:24	AR\AJ	Ok
21	Q1356-04MS	PS029171.D	13 Feb 2025 23:48	AR\AJ	Ok,M



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Instrument ID: ECD\_S

**Daily Analysis Runlog For Sequence/QCBatch ID # PS021325**

Review By	Abdul	Review On	2/14/2025 1:50:53 PM
Supervise By	Ankita	Supervise On	2/14/2025 1:51:12 PM
SubDirectory	PS021325	HP Acquire Method	HP Processing Method ps021125 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24064,PP24065,PP24066,PP24067,PP24068		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24066 PP24069,PP24070		

22	Q1356-04MSD	PS029172.D	14 Feb 2025 00:12	AR\AJ	Ok,M
23	Q1356-05	PS029173.D	14 Feb 2025 00:36	AR\AJ	Ok
24	Q1356-06	PS029174.D	14 Feb 2025 01:00	AR\AJ	Ok
25	Q1356-07	PS029175.D	14 Feb 2025 01:24	AR\AJ	Ok
26	Q1356-08	PS029176.D	14 Feb 2025 01:48	AR\AJ	Ok
27	Q1356-09	PS029177.D	14 Feb 2025 02:12	AR\AJ	Ok
28	I.BLK	PS029178.D	14 Feb 2025 02:36	AR\AJ	Ok
29	HSTDCCC750	PS029179.D	14 Feb 2025 03:00	AR\AJ	Ok

M : Manual Integration



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Instrument ID: ECD\_S

**Daily Analysis Runlog For Sequence/QCBatch ID # PS021125**

Review By	Abdul	Review On	2/12/2025 1:30:07 PM
Supervise By	Ankita	Supervise On	2/12/2025 2:05:27 PM
SubDirectory	PS021125	HP Acquire Method	HP Processing Method ps021125 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24064,PP24065,PP24066,PP24067,PP24068		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24066 PP24069,PP24070		

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	HEXANE	HEXANE	PS029116.D	11 Feb 2025 17:08		AR\AJ	Ok
2	I.BLK	I.BLK	PS029117.D	11 Feb 2025 17:32		AR\AJ	Ok
3	HSTDICC200	HSTDICC200	PS029118.D	11 Feb 2025 17:56		AR\AJ	Ok
4	HSTDICC500	HSTDICC500	PS029119.D	11 Feb 2025 18:20		AR\AJ	Ok
5	HSTDICC750	HSTDICC750	PS029120.D	11 Feb 2025 18:44	Method fail for comp 10	AR\AJ	Ok
6	HSTDICC1000	HSTDICC1000	PS029121.D	11 Feb 2025 19:08		AR\AJ	Ok
7	HSTDICC1500	HSTDICC1500	PS029122.D	11 Feb 2025 19:32		AR\AJ	Ok
8	HSTDICV750	ICVPS021125	PS029123.D	11 Feb 2025 19:56		AR\AJ	Ok
9	I.BLK	I.BLK	PS029124.D	11 Feb 2025 20:20		AR\AJ	Ok
10	HSTDCCC750	HSTDCCC750	PS029125.D	11 Feb 2025 20:43		AR\AJ	Ok
11	PB166662BL	PB166662BL	PS029126.D	11 Feb 2025 21:07		AR\AJ	Ok
12	PB166662BS	PB166662BS	PS029127.D	11 Feb 2025 21:31		AR\AJ	Ok
13	Q1344-01	SOIL-1	PS029128.D	11 Feb 2025 21:55		AR\AJ	Ok
14	Q1344-03	SOIL-2	PS029129.D	11 Feb 2025 22:19		AR\AJ	Ok
15	I.BLK	I.BLK	PS029130.D	11 Feb 2025 22:43		AR\AJ	Ok
16	HSTDCCC750	HSTDCCC750	PS029131.D	11 Feb 2025 23:07		AR\AJ	Ok
17	Q1343-01	WC-9	PS029132.D	11 Feb 2025 23:31		AR\AJ	Ok
18	Q1343-05	WC-10	PS029133.D	11 Feb 2025 23:55		AR\AJ	Ok

**Instrument ID:** ECD\_S

**Daily Analysis Runlog For Sequence/QCBatch ID # PS021125**

Review By	Abdul	Review On	2/12/2025 1:30:07 PM
Supervise By	Ankita	Supervise On	2/12/2025 2:05:27 PM
SubDirectory	PS021125	HP Acquire Method	HP Processing Method ps021125 8151
STD. NAME	<b>STD REF.#</b>		
Tune/Reschk Initial Calibration Stds	PP24064,PP24065,PP24066,PP24067,PP24068		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24066 PP24069,PP24070		

19	Q1343-09	WC-7	PS029134.D	12 Feb 2025 00:19		AR\AJ	Ok
20	Q1343-13	WC-13	PS029135.D	12 Feb 2025 00:43		AR\AJ	Ok
21	Q1343-13MS	WC-13MS	PS029136.D	12 Feb 2025 01:07	Recovery fail some comp	AR\AJ	Ok,M
22	Q1343-13MSD	WC-13MSD	PS029137.D	12 Feb 2025 01:31	Recovery fail some comp	AR\AJ	Ok,M
23	Q1343-17	WC-14	PS029138.D	12 Feb 2025 01:55		AR\AJ	Ok
24	Q1346-01	SOIL-COMP	PS029139.D	12 Feb 2025 02:19		AR\AJ	Ok
25	I.BLK	I.BLK	PS029140.D	12 Feb 2025 02:43		AR\AJ	Ok
26	HSTDCCC750	HSTDCCC750	PS029141.D	12 Feb 2025 03:55		AR\AJ	Ok

M : Manual Integration



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Instrument ID: ECD\_S

**Daily Analysis Runlog For Sequence/QCBatch ID # PS021325**

Review By	Abdul	Review On	2/14/2025 1:50:53 PM
Supervise By	Ankita	Supervise On	2/14/2025 1:51:12 PM
SubDirectory	PS021325	HP Acquire Method	HP Processing Method ps021125 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24064,PP24065,PP24066,PP24067,PP24068		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24066 PP24069,PP24070		

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	HEXANE	HEXANE	PS029151.D	13 Feb 2025 10:23		AR\AJ	Ok
2	I.BLK	I.BLK	PS029152.D	13 Feb 2025 10:47		AR\AJ	Ok
3	HSTDCCC750	HSTDCCC750	PS029153.D	13 Feb 2025 12:16		AR\AJ	Ok
4	PB166710BL	PB166710BL	PS029154.D	13 Feb 2025 16:12		AR\AJ	Ok
5	PB166710BS	PB166710BS	PS029155.D	13 Feb 2025 16:36		AR\AJ	Ok
6	Q1353-01	346	PS029156.D	13 Feb 2025 17:00		AR\AJ	Ok,M
7	Q1353-01MS	346MS	PS029157.D	13 Feb 2025 17:24	recovery fail for some comp	AR\AJ	Ok,M
8	Q1353-01MSD	346MSD	PS029158.D	13 Feb 2025 17:48	recovery fail for some comp , RPD fail for dalpon	AR\AJ	Ok,M
9	I.BLK	I.BLK	PS029159.D	13 Feb 2025 18:12		AR\AJ	Ok
10	HSTDCCC750	HSTDCCC750	PS029160.D	13 Feb 2025 18:36		AR\AJ	Ok
11	PB166713BL	PB166713BL	PS029161.D	13 Feb 2025 19:24		AR\AJ	Ok
12	PB166713BS	PB166713BS	PS029162.D	13 Feb 2025 19:48		AR\AJ	Ok
13	PB166700TB	PB166700TB	PS029163.D	13 Feb 2025 20:12		AR\AJ	Ok
14	PB166702TB	PB166702TB	PS029164.D	13 Feb 2025 20:36		AR\AJ	Ok,M
15	Q1352-02	TAP-IDW-SOIL-021025	PS029165.D	13 Feb 2025 21:00		AR\AJ	Ok
16	I.BLK	I.BLK	PS029166.D	13 Feb 2025 21:24		AR\AJ	Ok
17	HSTDCCC750	HSTDCCC750	PS029167.D	13 Feb 2025 21:48		AR\AJ	Ok

**Instrument ID:** ECD\_S

**Daily Analysis Runlog For Sequence/QCBatch ID # PS021325**

Review By	Abdul	Review On	2/14/2025 1:50:53 PM
Supervise By	Ankita	Supervise On	2/14/2025 1:51:12 PM
SubDirectory	PS021325	HP Acquire Method	HP Processing Method ps021125 8151
STD. NAME	<b>STD REF.#</b>		
Tune/Reschk Initial Calibration Stds	PP24064,PP24065,PP24066,PP24067,PP24068		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24066 PP24069,PP24070		

18	Q1356-01	CARBON-SOLID	PS029168.D	13 Feb 2025 22:36		AR\AJ	Ok,M
19	Q1356-03	SOIL-PILE	PS029169.D	13 Feb 2025 23:00		AR\AJ	Ok,M
20	Q1356-04	CARBON-WATER	PS029170.D	13 Feb 2025 23:24		AR\AJ	Ok
21	Q1356-04MS	CARBON-WATERMS	PS029171.D	13 Feb 2025 23:48		AR\AJ	Ok,M
22	Q1356-04MSD	CARBON-WATERMSD	PS029172.D	14 Feb 2025 00:12		AR\AJ	Ok,M
23	Q1356-05	CARBON-FB	PS029173.D	14 Feb 2025 00:36		AR\AJ	Ok
24	Q1356-06	WATER-A	PS029174.D	14 Feb 2025 01:00		AR\AJ	Ok
25	Q1356-07	WATER-B	PS029175.D	14 Feb 2025 01:24		AR\AJ	Ok
26	Q1356-08	WATER-FB	PS029176.D	14 Feb 2025 01:48		AR\AJ	Ok
27	Q1356-09	SOIL-FB	PS029177.D	14 Feb 2025 02:12		AR\AJ	Ok
28	I.BLK	I.BLK	PS029178.D	14 Feb 2025 02:36		AR\AJ	Ok
29	HSTDCCC750	HSTDCCC750	PS029179.D	14 Feb 2025 03:00		AR\AJ	Ok

M : Manual Integration



SOP ID : M1311-TCLP-15  
SDG No : N/A Start Prep Date : 02/12/2025 Time : 14:00  
Weigh By : JP End Prep Date : 02/13/2025 Time : 07:15  
Balance ID : WC SC-7 Combination Ratio : 20  
pH Meter ID : WC PH METER-1 ZHE Cleaning Batch : <sup>10</sup> N/A  
Extraction By : JP Initial Room Temperature: 23 °C  
Filter By : JP Final Room Temperature: 22 °C  
Pipette ID : WC TCLP Technician Signature : *JP*  
Tumbler ID : T-1 Supervisor By : *JR*  
TCLP Filter ID : 115525

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	WP110801
HCL-TCLP,1N	N/A	WP110803
HNO3-TCLP,1N	N/A	WP110804
pH Strips	N/A	W1931,W1934,W3171,W3172
pH Strips	W1941,W1942	W3166,W1938,W1939,W1940,
1 Liter Amber	N/A	90424-08
120ml Plastic bottle	N/A	405130101
1:1 HNO3	N/A	MP84041

## Extraction Conformance/Non-Conformance Comments:

Matrix spikes are added after filtration and before preservation. TUMBLER T-1 checked, 30 rpm. Partial size reduction in not required. p1356-03 is used for MS-MSD.

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
02/13/25 08:30	<i>JP</i> 120ml room	<i>SLAS</i> <i>L/Ext</i>
	Preparation Group	Analysis Group
		<i>10etnig</i>

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
PB166700TB	LEB700	06	N/A	2000	N/A	N/A	N/A	4.94	1.5	T-1
Q1288-08	HR-04-020425	01	100.02	2000	N/A	N/A	N/A	6.2	1.0	T-1
Q1352-02	TAP-IDW-SOIL-021025	02	100.03	2000	N/A	N/A	N/A	8.2	1.5	T-1
Q1353-02	346	03	100.02	2000	N/A	N/A	N/A	3.0	1.0	T-1
Q1356-01	CARBON-SOLID	04	100.03	2000	N/A	N/A	N/A	5.6	1.5	T-1
Q1356-03	SOIL-PILE	05	100.04	2000	N/A	N/A	N/A	6.0	1.0	T-1

SampleID	ClientID	Sample Weight (g)	Filter Weight (g)	Filtrate (mL)	Filter + Solid (After 100°C)	% solids	% Dry Solids
PB166700TB	LEB700	N/A	N/A	N/A	N/A	N/A	N/A
Q1288-08	HR-04-020425	N/A	N/A	N/A	N/A	100	N/A
Q1352-02	TAP-IDW-SOIL-021025	N/A	N/A	N/A	N/A	100	N/A
Q1353-02	346	N/A	N/A	N/A	N/A	100	N/A
Q1356-01	CARBON-SOLID	N/A	N/A	N/A	N/A	100	N/A
Q1356-03	SOIL-PILE	N/A	N/A	N/A	N/A	100	N/A



## TCLP Fluid Determination

PB166700

Hot Block ID : WC S-1 /WC S-2Thermometer 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
PB166700TB	LEB700	N/A	N/A	N/A	N/A	#1	4.94
Q1288-08	HR-04-020425	5.02	96.5	8.6	3.0	#1	4.94
Q1352-02	TAP-IDW-SOIL-021025	5.03	96.5	10.0	4.5	#1	4.94
Q1353-02	346	5.03	96.5	5.8	1.5	#1	4.94
Q1356-01	CARBON-SOLID	5.02	96.5	7.2	2.0	#1	4.94
Q1356-03	SOIL-PILE	5.02	96.5	8.6	3.0	#1	4.94

# WORKLIST(Hardcopy Internal Chain)

WorkList Name : tclp q1356

WorkList ID : 187672

Department : TCLP Extraction

Date : 02-12-2025 11:38:51

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1288-08	HR-04-020425	Solid	TCLP Extraction	Cool 4 deg C	PSEG05	D11	02/04/2025	1311
Q1352-02	TAP-IDW-SOIL-021025	Solid	TCLP Extraction	Cool 4 deg C	WEST04	N51	02/10/2025	1311
Q1353-02	346	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	N41	02/11/2025	1311
Q1356-01	CARBON-SOLID	Solid	TCLP Extraction	Cool 4 deg C	PSEG04	N51	02/11/2025	1311
Q1356-03	SOIL-PILE	Solid	TCLP Extraction	Cool 4 deg C	PSEG04	N51	02/11/2025	1311

Date/Time 02-12-25 12:30

Raw Sample Received by:

JB WOC  
RM Sm

Raw Sample Relinquished by:

Date/Time 02-12-25

Raw Sample Received by:

151.00

Raw Sample Relinquished by:

Rm Sm  
JB WOC

SOP ID:	M8151A-Herbicide-22		
Clean Up SOP #:	N/A	Extraction Start Date :	02/13/2025
Matrix :	Water	Extraction Start Time :	10:15
Weigh By:	EH	Extraction End Date :	02/13/2025
Balance check:	N/A	Extraction End Time :	16:55
Balance ID:	N/A	Concentration By:	EH
pH Strip Lot#:	E3574	Hood ID:	4,7
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	PP24079
Surrogate	1.0ML	5000 PPB	PP24078
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	E3370
Acidified Na2SO4	N/A	EP2576
NAOH 6N	N/A	EP2553
H2SO4 1:3	N/A	EP2564
NaCL	N/A	M4459
ISO OCTANE	N/A	E3554
Diazomethane	N/A	EP2575
Hexane	N/A	E3877
N/A	N/A	N/A

**Extraction Conformance/Non-Conformance Comments:**

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

KD Bath ID:	N/A	Envap ID:	NEVAP-02
KD Bath Temperature:	N/A	Envap Temperature:	40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
02/13/25 17:00	RJ (Spt 1ab) Preparation Group	PCB Lab Analysis Group

Analytical Method: M8151A-Herbicide-22

Concentration Date: 02/13/2025

Sample ID	Client Sample ID	Test	g / mL	pH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB166700TB	PB166700TB	TCLP Herbicide	100	6	RUPESH	ritesh	10			SEP-01
PB166702TB	PB166702TB	TCLP Herbicide	100	6	RUPESH	ritesh	10			2
PB166713BL	HBLK713	TCLP Herbicide	1000	6	RUPESH	ritesh	10			3
PB166713BS	HLCS713	TCLP Herbicide	1000	6	RUPESH	ritesh	10			4
Q1352-02	TAP-IDW-SOIL-021025	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		5
Q1356-01	CARBON-SOLID	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		6
Q1356-03	SOIL-PILE	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		7
Q1356-04	CARBON-WATER	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		8
Q1356-04MS	CARBON-WATERMS	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		9
Q1356-04MS D	CARBON-WATERMSD	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		10
Q1356-05	CARBON-FB	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		11
Q1356-06	WATER-A	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		12
Q1356-07	WATER-B	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		13
Q1356-08	WATER-FB	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		14
Q1356-09	SOIL-FB	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		15

\* Extracts relinquished on the same date as received.

2  
2/13/25

TCLP EXTRACTION LOGPAGE

PB166700

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
PB166700TB	LEB700	06	N/A	2000	N/A	N/A	N/A	4.94	1.5	T-1
Q1288-08	HR-04-020425	01	100.02	2000	N/A	N/A	N/A	6.2	1.0	T-1
Q1352-02	TAP-IDW-SOIL-021025	02	100.03	2000	N/A	N/A	N/A	8.2	1.5	T-1
Q1353-02	346	03	100.02	2000	N/A	N/A	N/A	3.0	1.0	T-1
Q1356-01	CARBON-SOLID	04	100.03	2000	N/A	N/A	N/A	5.6	1.5	T-1
Q1356-03	SOIL-PILE	05	100.04	2000	N/A	N/A	N/A	6.0	1.0	T-1

02/13/25  
08:30

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
PB166702TB	LEB702	N/A	N/A	N/A	N/A	N/A	N/A	4.94	1.0	N/A
Q1356-04	CARBON-WATER	N/A	N/A	N/A	N/A	N/A	N/A	7.0	1.0	N/A
Q1356-05	CARBON-FB	N/A	N/A	N/A	N/A	N/A	N/A	6.0	1.5	N/A
Q1356-06	WATER-A	N/A	N/A	N/A	N/A	N/A	N/A	6.6	1.0	N/A
Q1356-07	WATER-B	N/A	N/A	N/A	N/A	N/A	N/A	7.6	1.5	N/A
Q1356-08	WATER-FB	N/A	N/A	N/A	N/A	N/A	N/A	6.6	1.0	N/A
Q1356-09	SOIL-FB	N/A	N/A	N/A	N/A	N/A	N/A	6.2	1.5	N/A

02/13/25  
08:30



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## Prep Standard - Chemical Standard Summary

**Order ID :** Q1352

**Test :** TCLP Herbicide

**Prepbatch ID :** PB166713,

**Sequence ID/Qc Batch ID:** ps021325,

**Standard ID :**

EP2553,EP2564,EP2576,PP24061,PP24062,PP24064,PP24065,PP24066,PP24067,PP24068,PP24069,PP24070,PP24078,PP24079,

**Chemical ID :**

E3370,E3551,E3657,E3826,E3843,M4459,M5173,P10549,P11180,P11181,P12619,P12629,P12686,P12708,P12709,P13506,P13507,P13508,P13509,P13523,P13524,P13525,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>
3884	6 N NAOH	<a href="#">EP2553</a>	10/21/2024	04/21/2025	Rajesh Parikh	Extraction_SC ALE_2 (EX-SC-2)	None	RUPESHKUMAR SHAH 10/21/2024

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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1762	1:3 H2SO4 Soln	<a href="#">EP2564</a>	11/20/2024	05/20/2025	Rajesh Parikh	None	None	RUPESHKUMAR SHAH 11/20/2024

FROM 250.00000ml of M5173 + 750.00000ml of W3112 = 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	<a href="#">EP2576</a>	01/06/2025	06/02/2025	Rajesh Parikh	Extraction_SC_ALE_2	None	RUPESHKUMAR SHAH 01/06/2025

FROM 100.00000ml of E3370 + 150.00000ml of M5173 + 3000.00000ml of E3551 = Final Quantity: 3000.000 gram  
 (EX-SC-2)

<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	<a href="#">PP24061</a>	11/26/2024	05/09/2025	Ankita Jodhani	None	None	Yogesh Patel 11/27/2024

FROM 0.20000ml of P10549 + 1.00000ml of P11180 + 1.00000ml of P12619 + 1.00000ml of P12629 + 1.00000ml of P12686 + 95.80000ml of E3826 = Final Quantity: 100.000 ml

## 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	<a href="#">PP24062</a>	11/26/2024	05/09/2025	Ankita Jodhani	None	None	Yogesh Patel 11/27/2024

FROM 1.00000ml of P11181 + 1.00000ml of P12708 + 1.00000ml of P12709 + 97.00000ml of E3826 = 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>
1452	1500 PPB HERB MIX STD	<a href="#">PP24064</a>	11/26/2024	05/09/2025	Ankita Jodhani	None	None	Yogesh Patel 11/27/2024

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

## Pest/Pcb STANDARD PREPARATION LOG

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

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

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

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



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## Pest/Pcb STANDARD PREPARATION LOG

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

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

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

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

### Pest/Pcb STANDARD PREPARATION LOG

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

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

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

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



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## Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
60	5000 PPB Herbicide Surg Spike (Free Acid)	<a href="#">PP24078</a>	12/10/2024	06/05/2025	Abdul Mirza	None	None	Ankita Jodhani 12/17/2024

FROM 1.25000ml of P13506 + 1.25000ml of P13507 + 1.25000ml of P13508 + 1.25000ml of P13509 + 195.00000ml of E3843 = Final  
Quantity: 200.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1848	5000/500000 PPB Herbicide Spike (Free Acid)	<a href="#">PP24079</a>	12/11/2024	06/05/2025	Abdul Mirza	None	None	Ankita Jodhani 12/17/2024

FROM 0.50000ml of P13525 + 1.00000ml of P13523 + 1.00000ml of P13524 + 47.50000ml of E3843 = Final Quantity: 50.000 ml

### CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9244-03 / Ether, Anhydrous, Purified (cs/4x4L)	0000288039	07/17/2025	08/01/2022 / Rajesh	07/13/2022 / Rajesh	E3370
PCI Scientific Supply, Inc.	PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1	313201	07/01/2025	01/03/2024 / Rajesh	07/20/2023 / Rajesh	E3551
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
Seidler Chemical	BA-9262-03 / Hexane, Ultra-Resi (cs/4x4L)	24G1962003	05/09/2025	11/09/2024 / Rajesh	11/07/2024 / Rajesh	E3826
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H2762008	06/05/2025	12/05/2024 / Rajesh	12/05/2024 / Rajesh	E3843
Seidler Chemical	BA-3624-05 / Sodium Chloride, Crystal (cs/4x2.5kg)	0000237721	04/13/2026	10/03/2022 / Ankita	10/30/2019 / AMANDEEP	M4459

### CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L)	0000281827	06/02/2025	06/01/2022 /	04/05/2022 / william	M5173
Restek	32254 / Dalapon Methyl Ester, 1000 ug/ml	A0170243	05/26/2025	11/26/2024 / Ankita	04/06/2021 / dhaval	P10549
Restek	32050 / Herbicide, 8000 series, 515 Surrogate [ester] 2,4-dichlorophenyl acetic acid methyl ester, 1mL, 200ug/mL, Hexane	A0172864	05/26/2025	11/26/2024 / Ankita	11/01/2021 / Abdul	P11180
Restek	32050 / Herbicide, 8000 series, 515 Surrogate [ester] 2,4-dichlorophenyl acetic acid methyl ester, 1mL, 200ug/mL, Hexane	A0172864	05/26/2025	11/26/2024 / Ankita	11/01/2021 / Abdul	P11181
Restek	32062 / Herbicide Mix, 500/8000, Standard #4 [methyl ester] 200ug/mL, hexane, 1mL/ampul	A0155055	05/26/2025	11/26/2024 / Ankita	07/03/2023 / Abdul	P12619
Restek	32055 / Herbicide Mix, 500/8000, Standard #1 [methyl ester] 200ug/mL, hexane, 1mL/ampul	A192429	05/26/2025	11/26/2024 / Ankita	07/03/2023 / Abdul	P12629

### CHEMICAL RECEIPT LOG BOOK

<b>Supplier</b>	<b>ItemCode / ItemName</b>	<b>Lot #</b>	<b>Expiration Date</b>	<b>Date Opened / Opened By</b>	<b>Received Date / Received By</b>	<b>Chemtech Lot #</b>
Restek	32059 / Herbicide Mix#3 (Methyl Ester), 20000 ug/ml	A0199844	05/26/2025	11/26/2024 / Ankita	07/24/2023 / Abdul	P12686
Agilent Technologies	HBM-8151M / Chlorinated Herbicide Mixtures, Methyl Esters	0006752480	05/26/2025	11/26/2024 / Ankita	08/09/2023 / Abdul	P12708
Agilent Technologies	HBM-8151M / Chlorinated Herbicide Mixtures, Methyl Esters	0006752480	05/26/2025	11/26/2024 / Ankita	08/09/2023 / Abdul	P12708
Agilent Technologies	HBM-8151M / Chlorinated Herbicide Mixtures, Methyl Esters	0006752480	05/26/2025	11/26/2024 / Ankita	08/09/2023 / Abdul	P12709
Agilent Technologies	HBM-8151M / Chlorinated Herbicide Mixtures, Methyl Esters	0006752480	05/26/2025	11/26/2024 / Ankita	08/09/2023 / Abdul	P12709
Restek	32049 / Herbicide, 8000 series, 515 Surrogate [free acid] 2,4-dichlorophenyl acetic acid, 1mL, 200ug/mL, MeOH	A0212676	06/10/2025	12/10/2024 / Abdul	08/16/2024 / yogesh	P13506

### CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32049 / Herbicide, 8000 series, 515 Surrogate [free acid] 2,4-dichlorophenyl acetic acid, 1mL, 200ug/mL, MeOH	A0212676	06/10/2025	12/10/2024 / Abdul	08/16/2024 / yogesh	P13507
Restek	32049 / Herbicide, 8000 series, 515 Surrogate [free acid] 2,4-dichlorophenyl acetic acid, 1mL, 200ug/mL, MeOH	A0212676	06/10/2025	12/10/2024 / Abdul	08/16/2024 / yogesh	P13508
Restek	32049 / Herbicide, 8000 series, 515 Surrogate [free acid] 2,4-dichlorophenyl acetic acid, 1mL, 200ug/mL, MeOH	A0212676	06/10/2025	12/10/2024 / Abdul	08/16/2024 / yogesh	P13509
Agilent Technologies	HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids	0006810955	06/11/2025	12/11/2024 / Abdul	09/03/2024 / Abdul	P13523
Agilent Technologies	HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids	0006810955	06/11/2025	12/11/2024 / Abdul	09/03/2024 / Abdul	P13523
Agilent Technologies	HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids	0006810955	06/11/2025	12/11/2024 / Abdul	09/03/2024 / Abdul	P13524



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### 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	06/11/2025	12/11/2024 / Abdul	09/03/2024 / Abdul	P13524

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	06/11/2025	12/11/2024 / Abdul	09/03/2024 / Abdul	P13525

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	06/11/2025	12/11/2024 / Abdul	09/03/2024 / Abdul	P13525

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,

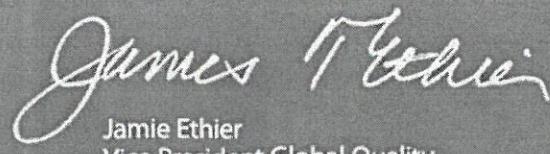
Test	Specification	Result
Assay (NaCl) (by Ag titrn)	>= 99.0 %	100.3
pH of 5% Solution at 25°C	5.0 – 9.0	6.0
ACS - Insoluble Matter	<= 0.005 %	< 0.001
Iodide (I)	<= 0.002 %	< 0.002
Bromide (Br)	<= 0.01 %	< 0.01
Chlorate and Nitrate (as NO <sub>3</sub> )	<= 0.003 %	< 0.001
ACS - Phosphate (PO <sub>4</sub> )	<= 5 ppm	< 5
Sulfate (SO <sub>4</sub> )	<= 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

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



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

## Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

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

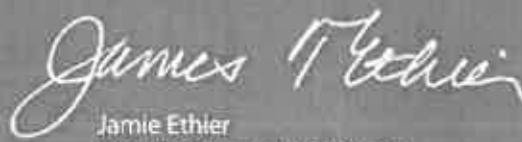
For Laboratory, Research or Manufacturing Use

Meets Reagent Specifications for testing USP/NF monographs

Country of Origin: US

Recd. by RP on 9/13/22

E 3370

  
Jamie Ethier  
Vice President Global Quality

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

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



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 <sub>2</sub> SO <sub>4</sub>		
SPECIFICATION NUMBER :	6399	RELEASE DATE:	ABR/21/2023		
LOT NUMBER :	313201				
TEST	SPECIFICATIONS	LOT VALUES			
Assay (Na <sub>2</sub> SO <sub>4</sub> )	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 <sub>4</sub> )	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

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



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

## Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	3
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	1
ECD-Sensitive Impurities (as Ethylene Dibromide) – Single Impurity Peak (ng/mL)	≤ 5	1
Assay (Total Saturated C <sub>6</sub> Isomers) (by GC, corrected for water)	≥ 99.5 %	99.7 %
Assay (as n-Hexane) (by GC, corrected for water)	≥ 95 %	98 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.1 ppm
Substances Darkened by H <sub>2</sub> SO <sub>4</sub>	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: USA  
Packaging Site: Phillipsburg Mfg Ctr & DC

E 3826

Rec'd by RP on 11/7/24

Jamie Croak  
Director Quality Operations, Bioscience Production

Acetone  
BAKER RESI-ANALYZED® Reagent  
For Organic Residue Analysis



Material No.: 9254-03  
Batch No.: 24H2762008  
Manufactured Date: 2024-04-18  
Expiration Date: 2027-04-18  
Revision No.: 0

## Certificate of Analysis

Test	Specification	Result
Assay ((CH <sub>3</sub> ) <sub>2</sub> CO) (by GC, corrected for water)	>= 99.4 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.0 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titrable Acid (μeq/g)	<= 0.3	0.2
Titrable Base (μeq/g)	<= 0.6	<0.1
Water (H <sub>2</sub> O)	<= 0.5 %	<0.1 %
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 12/5/24

E 3843

A handwritten signature of Jamie Croak.  
Jamie Croak  
Director Quality Operations, Bioscience Production

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



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

## Certificate of Analysis

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

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

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

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

For Laboratory, Research or Manufacturing Use

Product Information (not specifications):

Appearance (clear, fuming liquid)

Meets ACS Specifications

Country of Origin: US

Packaging Site: Phillipsburg Mfg Ctr & DC



Jamie Ethier  
Vice President Global Quality

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

**Column:**

30m x 0.25mm x 0.25 $\mu$ 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:**

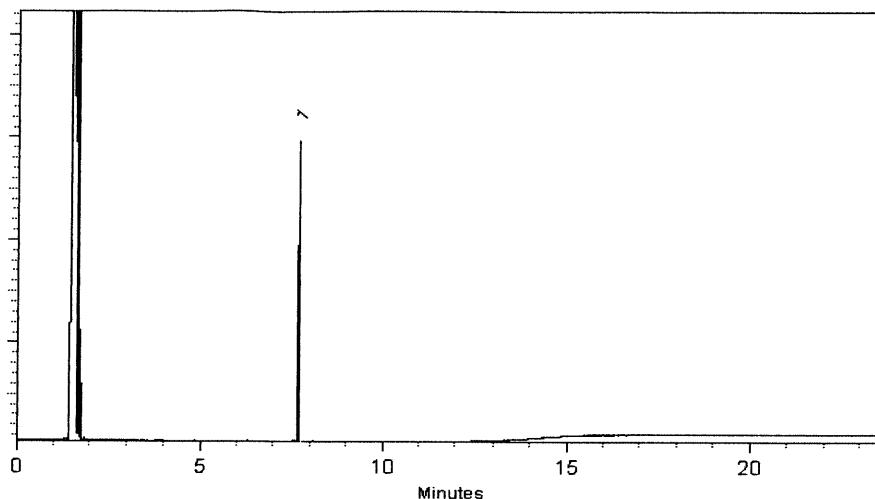
250°C

**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

Marlina 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](http://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 $\mu$ 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 (Lot CSC42194-01) Purity 99%	202.0 $\mu$ g/mL	+/- 1.4323 $\mu$ g/mL	+/- 6.8182 $\mu$ g/mL	Gravimetric Unstressed Stressed

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

P11177  
 ↓  
 P11186  
 AK  
 01/02/21

**Column:**

30m x 0.25mm x 0.25 $\mu$ 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:**

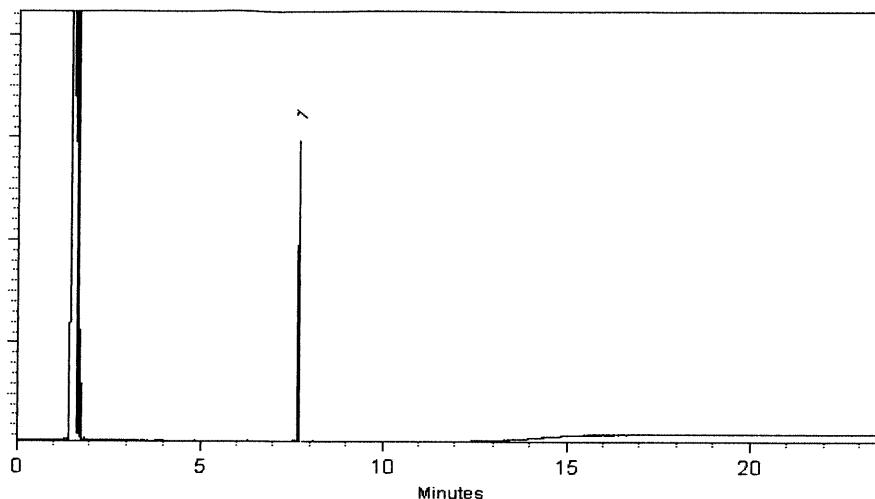
250°C

**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

Marlina Cowan - Operations Tech I

Date Passed: 02-Jun-2021

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

10/11/22  
P 11170  
P 11186  
AP  
11/02/21

# RESTEK® CERTIFIED REFERENCE MATERIAL

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## Certificate of Analysis



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**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 $\mu$ 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 (Lot CSC42194-01) Purity 99%	202.0 $\mu$ g/mL	+/- 1.4323 $\mu$ g/mL	+/- 6.8182 $\mu$ g/mL	Gravimetric Unstressed Stressed

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

P11177  
 ↓  
 P11186  
 AK  
 01/02/21



# CERTIFIED REFERENCE MATERIAL

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

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## 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 $\mu$ 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  
J. Dan  
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 <b>CAS #</b> 2905-67-1 <b>Purity</b> 99%	200.0 $\mu$ g/mL (Lot 3903900)	+/- 1.4182 +/- 6.7507 +/- 6.7507	$\mu$ g/mL $\mu$ g/mL $\mu$ g/mL	Gravimetric Unstressed Stressed
2	4-Nitroanisole <b>CAS #</b> 100-17-4 <b>Purity</b> 99%	200.0 $\mu$ g/mL (Lot 24765/7)	+/- 1.4182 +/- 6.7507 +/- 6.7507	$\mu$ g/mL $\mu$ g/mL $\mu$ g/mL	Gravimetric Unstressed Stressed
3	Pentachloroanisole <b>CAS #</b> 1825-21-4 <b>Purity</b> 99%	200.0 $\mu$ g/mL (Lot 7921100)	+/- 1.4182 +/- 6.7507 +/- 6.7507	$\mu$ g/mL $\mu$ g/mL $\mu$ g/mL	Gravimetric Unstressed Stressed
4	Chloramben methyl ester <b>CAS #</b> 7286-84-2 <b>Purity</b> 98%	199.9 $\mu$ g/mL (Lot 6487100)	+/- 1.4176 +/- 6.7480 +/- 6.7480	$\mu$ g/mL $\mu$ g/mL $\mu$ g/mL	Gravimetric Unstressed Stressed
5	Bentazon methyl ester <b>CAS #</b> 61592-45-8 <b>Purity</b> 99%	200.0 $\mu$ g/mL (Lot 817100)	+/- 1.4182 +/- 6.7507 +/- 6.7507	$\mu$ g/mL $\mu$ g/mL $\mu$ g/mL	Gravimetric Unstressed Stressed
6	Picloram methyl ester <b>CAS #</b> 14143-55-6 <b>Purity</b> 98%	201.9 $\mu$ g/mL (Lot 386-21B)	+/- 1.4315 +/- 6.8141 +/- 6.8141	$\mu$ g/mL $\mu$ g/mL $\mu$ g/mL	Gravimetric Unstressed Stressed
7	DCPA methyl ester (Chlorthal-dimethyl) <b>CAS #</b> 1861-32-1 <b>Purity</b> 99%	200.0 $\mu$ g/mL (Lot 8008700)	+/- 1.4182 +/- 6.7507 +/- 6.7507	$\mu$ g/mL $\mu$ g/mL $\mu$ 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)

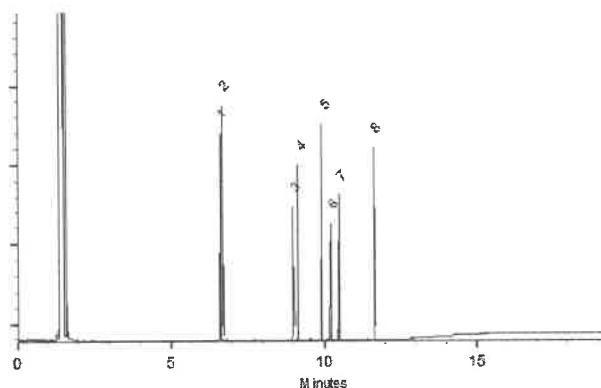
**Carrier Gas:**  
 hydrogen-constant pressure 10 psi.

**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.

*Michael Maye*

Date Mixed: 14-Nov-2019 Balance: 1128353505

*Justine Albertson*  
 Justine Albertson - Operations Tech-ARM QC

Date Passed: 18-Nov-2019

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



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

[www.restek.com](http://www.restek.com)

## CERTIFIED REFERENCE MATERIAL

### Certificate of Analysis *chromatographic plus*



#### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

**Catalog No. :** 32055

**Lot No.:** A0192429

**Description :** Herbicide Mix #1/ME (Methyl Ester)

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

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** December 31, 2029

**Storage:** 10°C or colder

**Handling:** This product is photosensitive.

**Ship:** Ambient

P12626  
P12630  
P1261  
7/15/2023  
J. Davis

#### 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	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 $\mu$ 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:**

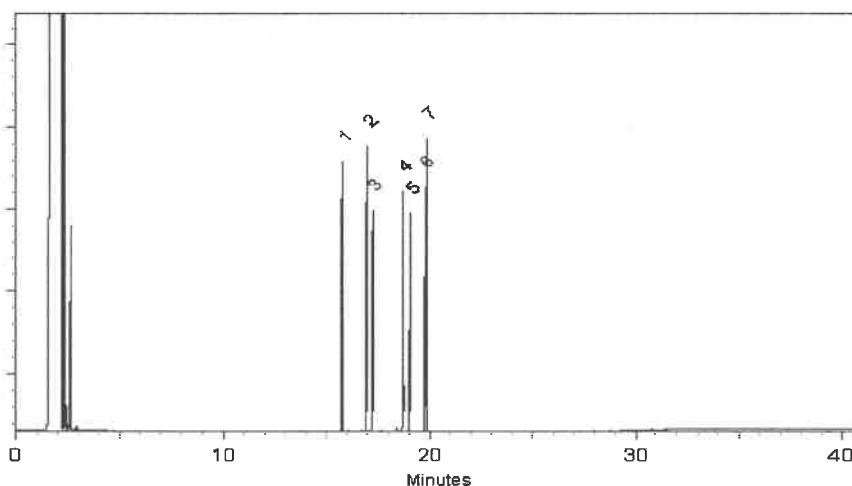
FID

**Split Vent:**

2 ml/min.

**Inj. Vol**

1 $\mu$ 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  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

www.restek.com

## CERTIFIED REFERENCE MATERIAL

### Certificate of Analysis *chromatographic plus*



#### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

**Catalog No. :** 32059

**Lot No.:** A0199844

**Description :** Herbicide Mix #3/ME (Methyl Ester)

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

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** July 31, 2030

**Storage:** 10°C or colder

**Handling:** This product is photosensitive.

**Ship:** Ambient

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D. Rauh 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 $\mu$ 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:**

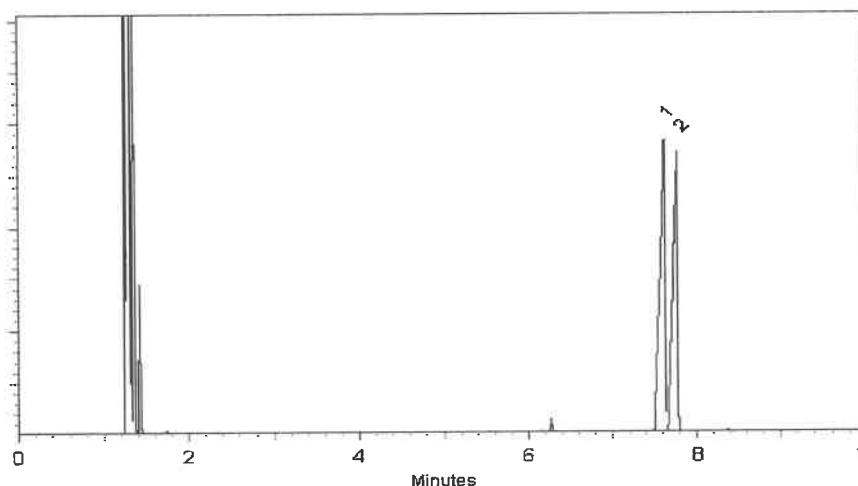
FID

**Split Vent:**

10 ml/min.

**Inj. Vol**

1 $\mu$ 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  
10  
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:**

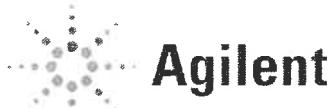
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and 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.



Trusted Answers

**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](http://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

Monica Bourgeois  
QMS Representative

P12706 / 10  
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/](http://www.agilent.com/quality/)  
CSD-QA-015.2

ISO 17025  
Cert No. AT-1937



Trusted Answers

P12706  
P12715  
10  
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:**

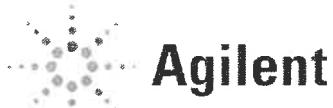
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and 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.



Trusted Answers

**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](http://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

Monica Bourgeois  
QMS Representative

P12706 / 10  
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/](http://www.agilent.com/quality/)  
CSD-QA-015.2

ISO 17025  
Cert No. AT-1937



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[www.restek.com](http://www.restek.com)

## CERTIFIED REFERENCE MATERIAL



ILAC-MRA  
ACCREDITED  
ISO 17034 Accredited  
Reference Material Producer  
Certificate #3222.01



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

P13497 } Y.P.  
↓                    }  
P13515            } 08/16/24

### 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-dichlorophenylacetic acid	19719-28-9	STBK3827	99%	200.0 $\mu$ g/mL	+/- 2.7154

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

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

### Specific Reference Material Notes:

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

# Quality Confirmation Test

**Column:**

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

**Flow Rate:**

1.0 ml/min.

**Mobile Phase A:**

0.14% H<sub>3</sub>PO<sub>4</sub> in water

**Mobile Phase B:**

acetonitrile

**Mobile Phase Composition:**

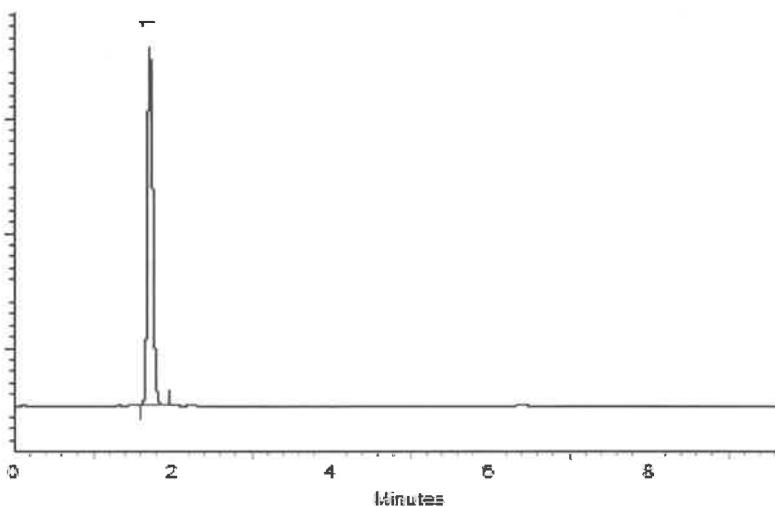
90% B Isocratic

**Det. Type:**

Wavelength: 220 & 254 nm

**Inj. Vol**

5µl



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

*Ethan Winiarski*  
Ethan Winiarski - Operations Tech I

Date Mixed: 11-Jun-2024 Balance Serial #: B345965662

*Jennifer Pollino*  
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-Jun-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

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



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## CERTIFIED REFERENCE MATERIAL



ILAC-MRA  
ACCREDITED  
ISO 17034 Accredited  
Reference Material Producer  
Certificate #3222.01



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

P13497 } Y.P.  
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P13515            } 08/16/24

### 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-dichlorophenylacetic acid	19719-28-9	STBK3827	99%	200.0 $\mu$ g/mL	+/- 2.7154

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

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

### Specific Reference Material Notes:

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

# Quality Confirmation Test

**Column:**

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

**Flow Rate:**

1.0 ml/min.

**Mobile Phase A:**

0.14% H<sub>3</sub>PO<sub>4</sub> in water

**Mobile Phase B:**

acetonitrile

**Mobile Phase Composition:**

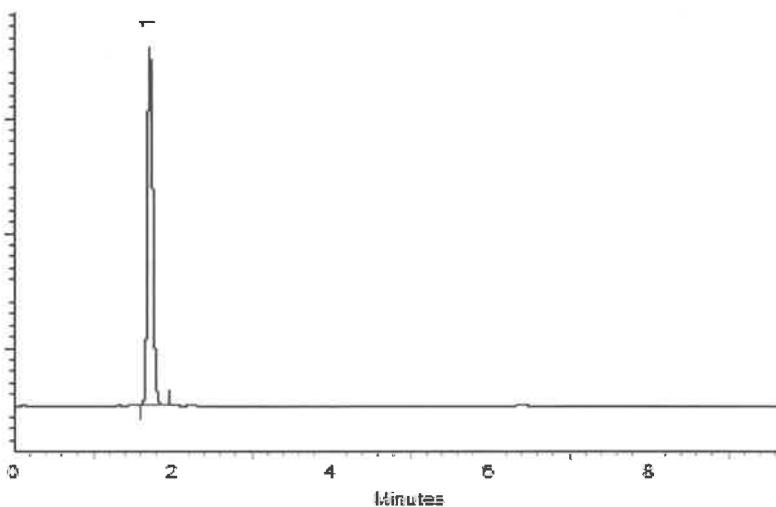
90% B Isocratic

**Det. Type:**

Wavelength: 220 & 254 nm

**Inj. Vol**

5µl



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

*Ethan Winiarski*  
Ethan Winiarski - Operations Tech I

Date Mixed: 11-Jun-2024 Balance Serial #: B345965662

*Jennifer Pollino*  
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-Jun-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

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



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Fax: 1-814-353-1309  
[www.restek.com](http://www.restek.com)

## CERTIFIED REFERENCE MATERIAL



ILAC-MRA  
ACCREDITED  
ISO 17034 Accredited  
Reference Material Producer  
Certificate #3222.01



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

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### 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-dichlorophenylacetic acid	19719-28-9	STBK3827	99%	200.0 $\mu$ g/mL	+/- 2.7154

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

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

### Specific Reference Material Notes:

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

# Quality Confirmation Test

**Column:**

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

**Flow Rate:**

1.0 ml/min.

**Mobile Phase A:**

0.14% H<sub>3</sub>PO<sub>4</sub> in water

**Mobile Phase B:**

acetonitrile

**Mobile Phase Composition:**

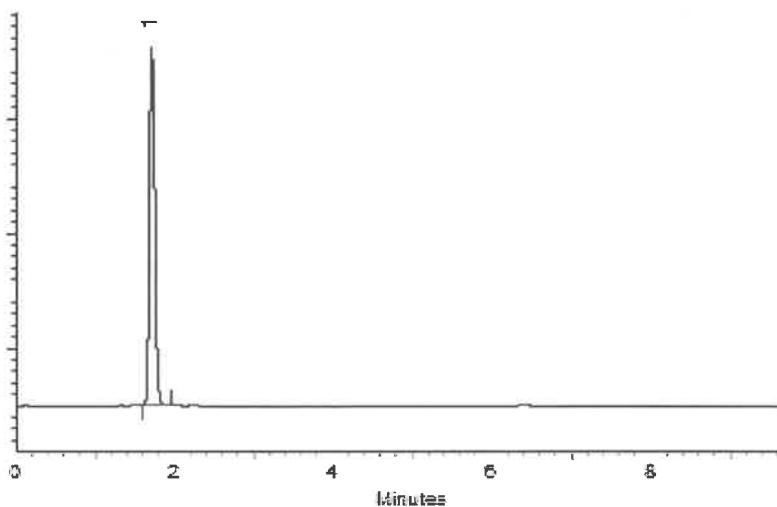
90% B Isocratic

**Det. Type:**

Wavelength: 220 & 254 nm

**Inj. Vol**

5µl



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

*Ethan Winiarski*  
Ethan Winiarski - Operations Tech I

Date Mixed: 11-Jun-2024 Balance Serial #: B345965662

*Jennifer Pollino*  
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-Jun-2024

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

## General Certified Reference Material Notes

### Expiration Notes:

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

### Purity Notes:

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

### Certified Uncertainty Value Notes:

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

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

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

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

### Manufacturing Notes:

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

### Handling Notes:

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



110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309  
[www.restek.com](http://www.restek.com)

## CERTIFIED REFERENCE MATERIAL



ILAC-MRA  
ACCREDITED  
ISO 17034 Accredited  
Reference Material Producer  
Certificate #3222.01



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

P13497 } Y.P.  
↓                    }  
P13515            } 08/16/24

### 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-dichlorophenylacetic acid	19719-28-9	STBK3827	99%	200.0 $\mu$ g/mL	+/- 2.7154

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

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

### Specific Reference Material Notes:

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

# Quality Confirmation Test

**Column:**

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

**Flow Rate:**

1.0 ml/min.

**Mobile Phase A:**

0.14% H<sub>3</sub>PO<sub>4</sub> in water

**Mobile Phase B:**

acetonitrile

**Mobile Phase Composition:**

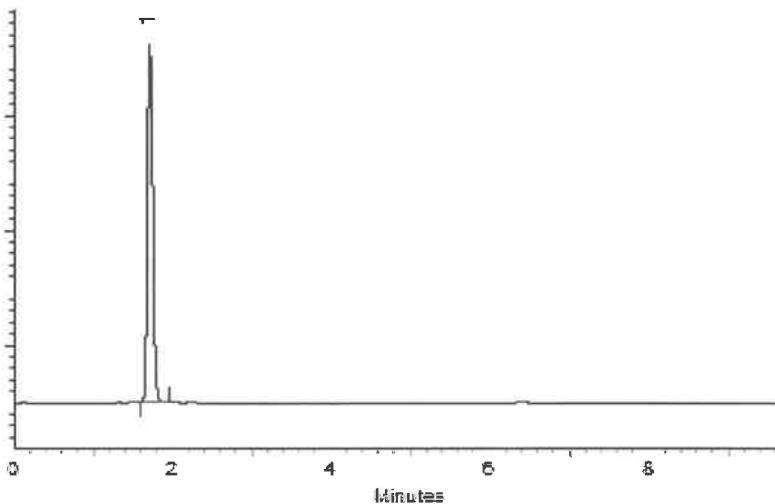
90% B Isocratic

**Det. Type:**

Wavelength: 220 & 254 nm

**Inj. Vol**

5µl



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

*Ethan Winiarski*  
Ethan Winiarski - Operations Tech I

Date Mixed: 11-Jun-2024 Balance Serial #: B345965662

*Jennifer Pollino*  
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-Jun-2024

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

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

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- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



Trusted Answers

ISO 17034

18

## Reference Material Certificate

### Product Information Sheet

<b>Product Name:</b>	Chlorinated Herbicides Standard	<b>Lot Number:</b>	0006810955
<b>Product Number:</b>	HBM-8151A-1	<b>Lot Issue Date:</b>	20-Aug-2024
<b>Storage Conditions:</b>	Store at Room Temperature (15° to 30°C).	<b>Expiration Date:</b>	30-Sep-2026

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

**Matrix:** methanol (methyl alcohol)

#### Description:

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

#### Traceability:

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

#### Homogeneity:

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

P13520  
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P13536

Page: 1 of 2

CSD-QA-015.2

ISO 17025  
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Trusted Answers

ISO 17034

18

## Reference Material Certificate

### Product Information Sheet

<b>Product Name:</b>	Chlorinated Herbicides Standard	<b>Lot Number:</b>	0006810955
<b>Product Number:</b>	HBM-8151A-1	<b>Lot Issue Date:</b>	20-Aug-2024
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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

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P13520  
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P13536

Page: 1 of 2

CSD-QA-015.2

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Cert No. AT-1937

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Trusted Answers

ISO 17034

18

## Reference Material Certificate

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P13536

Page: 1 of 2

CSD-QA-015.2

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9/4/2021



# SHIPPING DOCUMENTS



Weston COC ID
Weston_20250210_1440

## Chain of Custody Record/Lab Work Request

Page 1 of 1

Client:	Weston Solutions, Inc.		
Project Manager:	David Sembrot		
Street Address:	1400 Weston Way	City:	West Chester
Phone:	610-314-5456	ST, ZIP:	PA, 19038
e-mail:	david.sembrot@westonsolutions.com		
Sampled By:	Cheyenne Harrington		

Lab Use Only	
Temperature of cooler when received (°C)	
COC Tape was present and unbroken on outer package?	Y N
Samples received in good condition?	Y N
Labels indicate property preserved?	Y N
Received within holding times?	Y N
Discrepancies between sample labels and COC record?	Y N

Project Name:	Fort Meade RI			Project POC:	Nathan Fretz					
PO Number:	0111169			Phone:	484-524-5665					
W.O. #:				POC e-mail:	nathan.fretz@westonsolutions.com					
Lab:	CHEMTECH			Lab POC:	Jordan Hedvat					
TAT (days):	21			Lab Phone:	908-728-3144					
Lab Address:	284 Sheffield Street Mountainside, NJ 07092									
Analyses Requested:		TCLP VOCs by EPA 8260D (1311)	TCLP SVOCs by EPA 8270E (1311)	TCLP Metals by EPA 6010D/7470A	TCLP Pesticides by EPA 8081B	Total Cyanide by EPA 9034	PCB by EPA 8082A	Ignitability by EPA 1030	pH by EPA 9045D	
Container Type:		Encore	Glass	Glass	Glass	Glass	Glass	Glass	Glass	
Container Size:		25g	8 oz	8 oz	8 oz	8 oz	8 oz	8 oz	8 oz	
Preservative:		Ice to 0-6	Ice to 0-6	Ice to 0-6	Ice to 0-6	Ice to 0-6	Ice to 0-6	Ice to 0-6	Ice to 0-6	

#	Sample ID	G/C	Matrix	# Cont	MS/MSD	Date Collected	Time Collected	Special Instructions/Comments									
1	170 SOIL-IDW-021025 TAP-IDW-SOIL-021025	c	DS	f6	no	2/10/2025	13:40	X	X	X	X	X	X	X	X	X	X
2						11/11/2025											
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	

FedEx Shipping Airbill Number:	7719 9675 4644	Cooler Number:	1	of	1
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Relinquished By	Date	Time	Received By	Date	Time	Additional Comments		
1) <i>J. Fretz</i>	10 Feb 25	1800	yg	3.1	2/11/2025		QSM 6.0 Compliant	
2.)					9:10			Deliverable Requirements: DoD Level IV report, EnviroData EDD, and ERIS-compatible EDD
3.)								

Matrix Codes
SS - Soil
SE - Sediment
SO - Solid
SL - Sludge
GW - Groundwater
W - Water
SB - Soil Boring
A - Air
DS - Drum Solids
DL - Drum Liquids
L - EP/TCLP Leachate
WI - Wipe
X - Other
F - Fish

**Laboratory Certification**

<b>Certified By</b>	<b>License No.</b>
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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021325\  
 Data File : PS029171.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 13 Feb 2025 23:48  
 Operator : AR\AJ  
 Sample : Q1356-04MS  
 Misc :  
 ALS Vial : 17 Sample Multiplier: 1

**Instrument :**  
**ECD\_S**  
**ClientSampleId :**  
**CARBON-WATERMS**

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 14 01:26:35 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021225.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 09:17:13 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1  $\mu$ 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 $\mu$ m

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

**System Monitoring Compounds**

4)	S	2,4-DCAA	7.188	7.662	1474.7E6	497.4E6	533.555	469.871
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**Target Compounds**

1)	T	Dalapon	2.615	2.661	1519.2E6	968.4E6	480.282	511.493
2)	T	3,5-DICHL...	6.366	6.630	1854.6E6	669.5E6	468.114	437.603
3)	T	4-Nitroph...	6.986	7.192	704.3E6	358.7E6	413.053	413.632
5)	T	DICAMBA	7.372	7.857	5195.9E6	2344.1E6	431.480	424.141
6)	T	MCPP	7.552	7.961	291.7E6	107.4E6	42.103	43.543
7)	T	MCPA	7.700	8.201	405.3E6	152.7E6	42.344	43.635
8)	T	DICHLORPROP	8.074	8.568	1384.8E6	657.6E6	438.354	477.498
9)	T	2,4-D	8.303	8.895	1622.6E6	673.8E6	482.344	470.321
10)	T	Pentachlo...	8.599	9.415	23532.0E6	11027.0E6	499.045	457.178
11)	T	2,4,5-TP ...	9.174	9.792	9337.3E6	4691.8E6	481.544	480.311
12)	T	2,4,5-T	9.464	10.209	8482.3E6	3956.5E6	437.919	427.160
13)	T	2,4-DB	10.036	10.773	1371.8E6	169.4E6	369.135	178.279 #
14)	T	DINOSEB	11.234	11.150	6627.5E6	2342.6E6	457.050	424.793
15)	T	Picloram	11.047	12.229	12155.3E6	4843.3E6	380.417	352.272
16)	T	DCPA	11.527	12.187	9255.8E6	5437.8E6	319.206	440.846 #

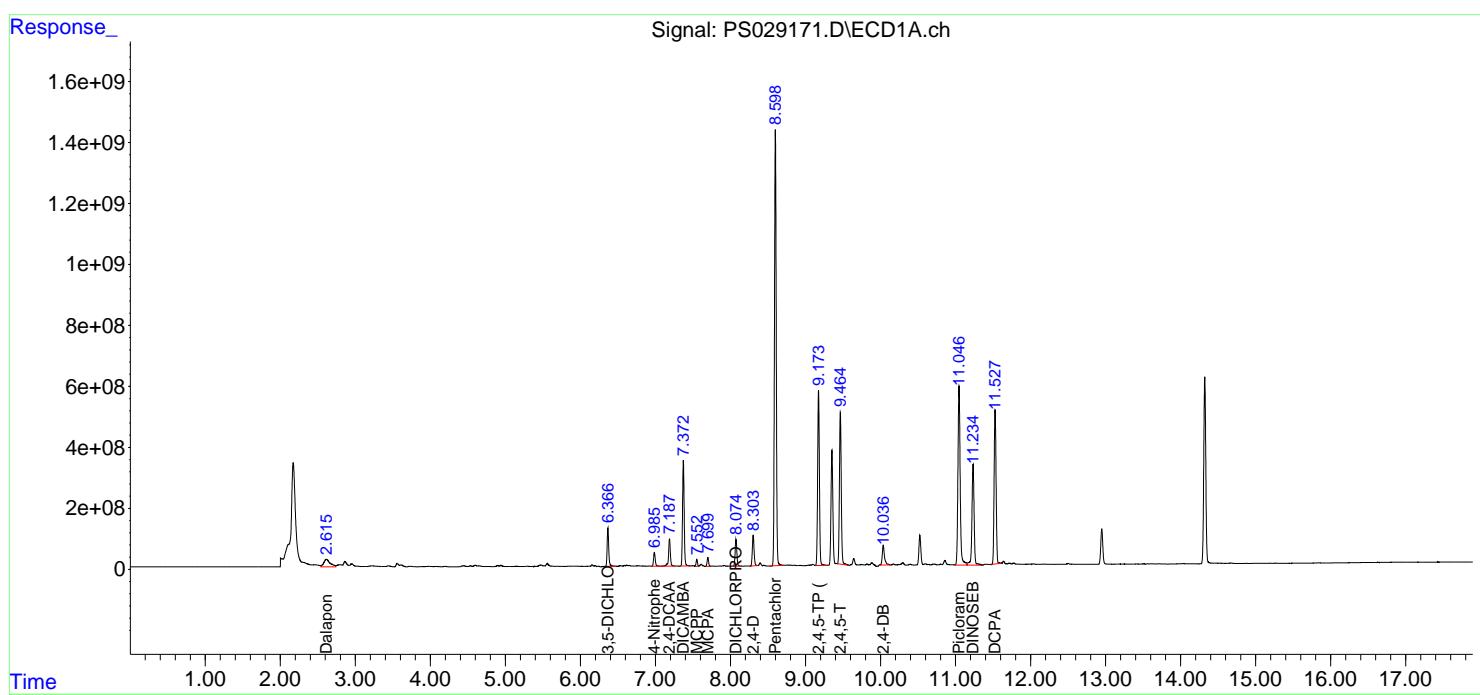
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

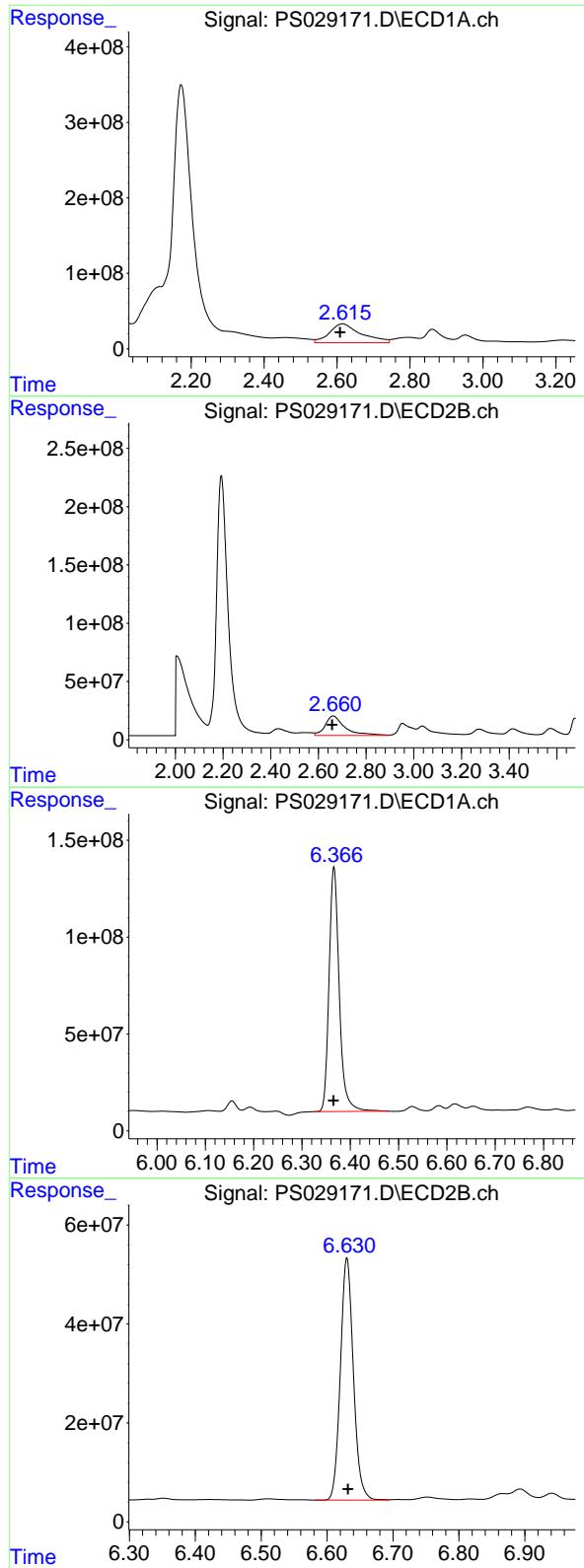
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021325\  
 Data File : PS029171.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 13 Feb 2025 23:48  
 Operator : AR\AJ  
 Sample : Q1356-04MS  
 Misc :  
 ALS Vial : 17 Sample Multiplier: 1

**Instrument :**  
**ECD\_S**  
**ClientSampleId :**  
**CARBON-WATERMS**

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 14 01:26:35 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021225.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 09:17:13 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1  $\mu$ 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 $\mu$ m





#1 Dalapon

R.T.: 2.615 min  
Delta R.T.: 0.006 min  
Response: 1519155351  
Conc: 480.28 ng/ml

Instrument: ECD\_S  
ClientSampleId: CARBON-WATERMS

#1 Dalapon

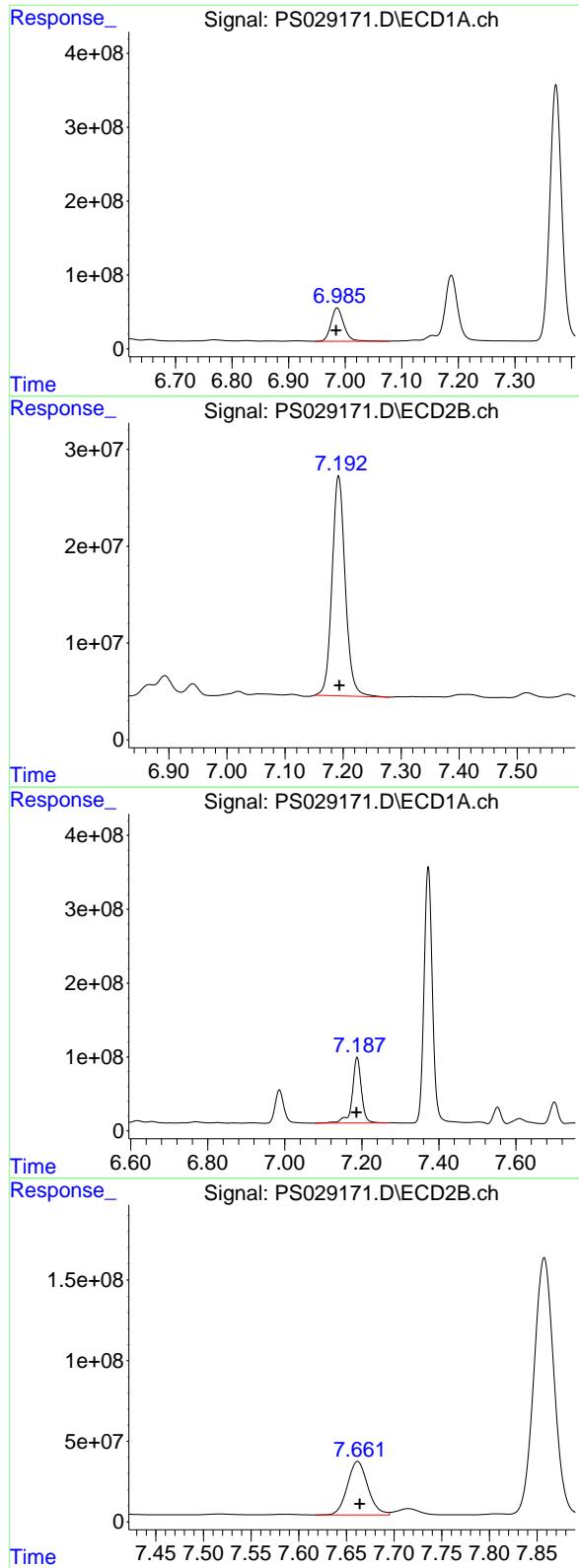
R.T.: 2.661 min  
Delta R.T.: 0.003 min  
Response: 968411072  
Conc: 511.49 ng/ml

#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.366 min  
Delta R.T.: 0.000 min  
Response: 1854559247  
Conc: 468.11 ng/ml

#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.630 min  
Delta R.T.: -0.002 min  
Response: 669473885  
Conc: 437.60 ng/ml



#3 4-Nitrophenol

R.T.: 6.986 min  
 Delta R.T.: 0.002 min  
 Response: 704285243  
 Conc: 413.05 ng/ml

Instrument: ECD\_S  
 ClientSampleId: CARBON-WATERMS

#3 4-Nitrophenol

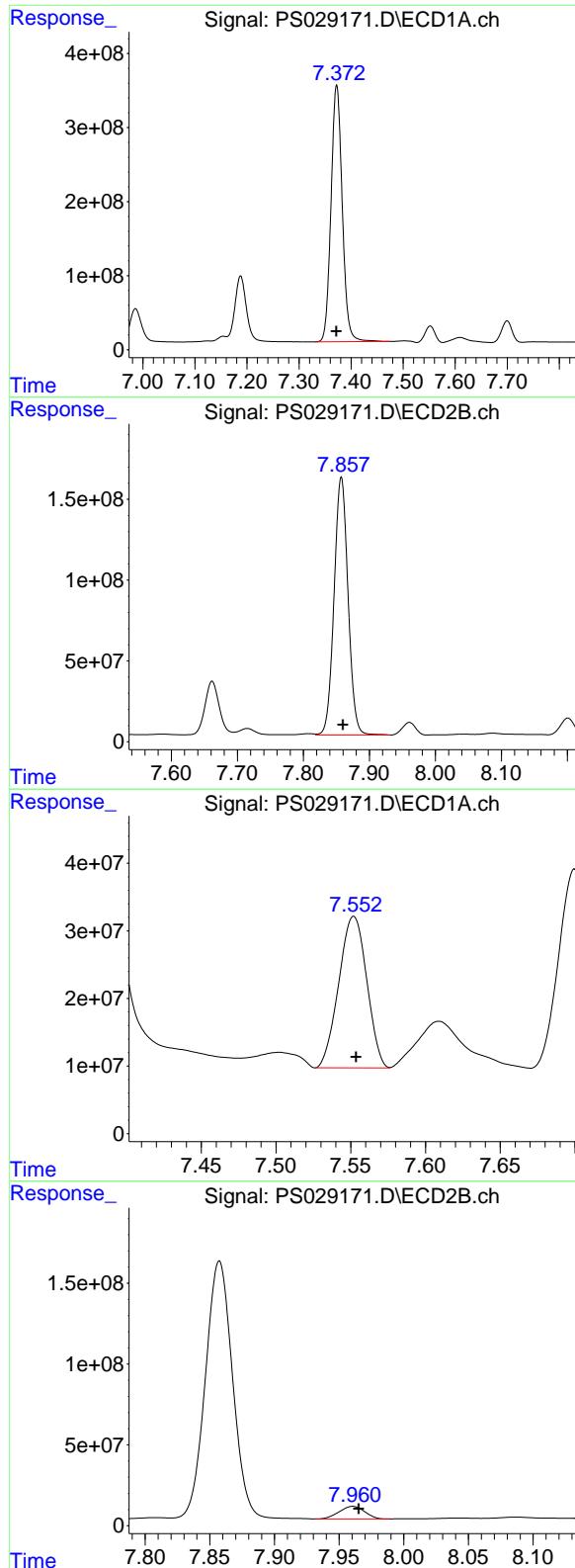
R.T.: 7.192 min  
 Delta R.T.: -0.001 min  
 Response: 358742203  
 Conc: 413.63 ng/ml

#4 2,4-DCAA

R.T.: 7.188 min  
 Delta R.T.: 0.001 min  
 Response: 1474670352  
 Conc: 533.56 ng/ml

#4 2,4-DCAA

R.T.: 7.662 min  
 Delta R.T.: -0.002 min  
 Response: 497356161  
 Conc: 469.87 ng/ml



#5 DICAMBA

R.T.: 7.372 min  
Delta R.T.: 0.001 min  
Response: 5195857205  
Conc: 431.48 ng/ml

Instrument: ECD\_S  
ClientSampleId: CARBON-WATERMS

#5 DICAMBA

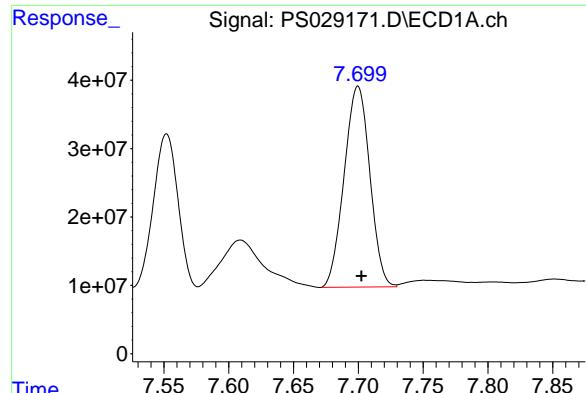
R.T.: 7.857 min  
Delta R.T.: -0.002 min  
Response: 2344054631  
Conc: 424.14 ng/ml

#6 MCPP

R.T.: 7.552 min  
Delta R.T.: -0.002 min  
Response: 291707749  
Conc: 42.10 ug/ml

#6 MCPP

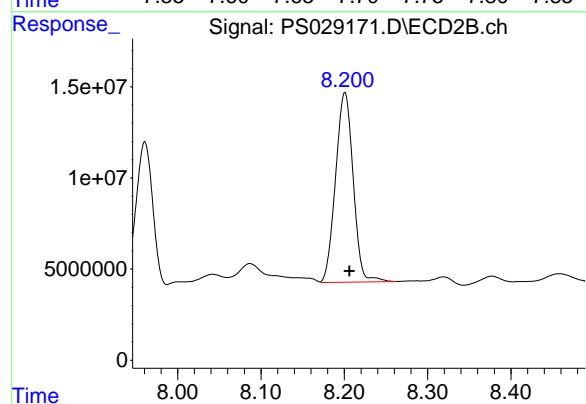
R.T.: 7.961 min  
Delta R.T.: -0.005 min  
Response: 107430275  
Conc: 43.54 ug/ml



#7 MCPA

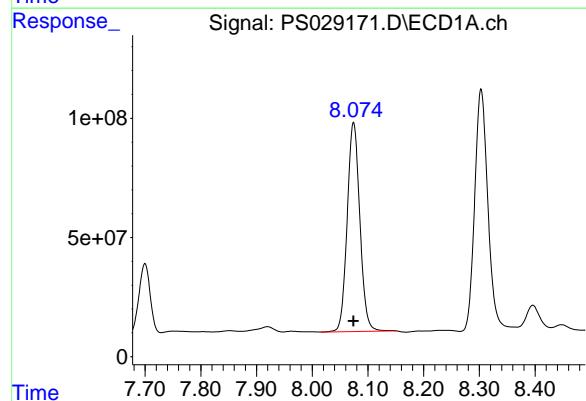
R.T.: 7.700 min  
Delta R.T.: -0.003 min  
Response: 405324286  
Conc: 42.34 ug/ml

Instrument: ECD\_S  
ClientSampleId: CARBON-WATERMS



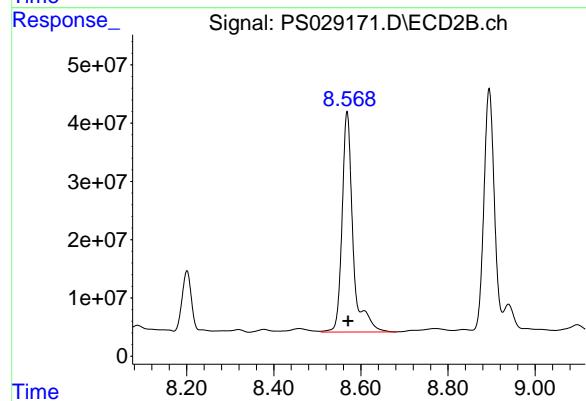
#7 MCPA

R.T.: 8.201 min  
Delta R.T.: -0.005 min  
Response: 152650707  
Conc: 43.63 ug/ml



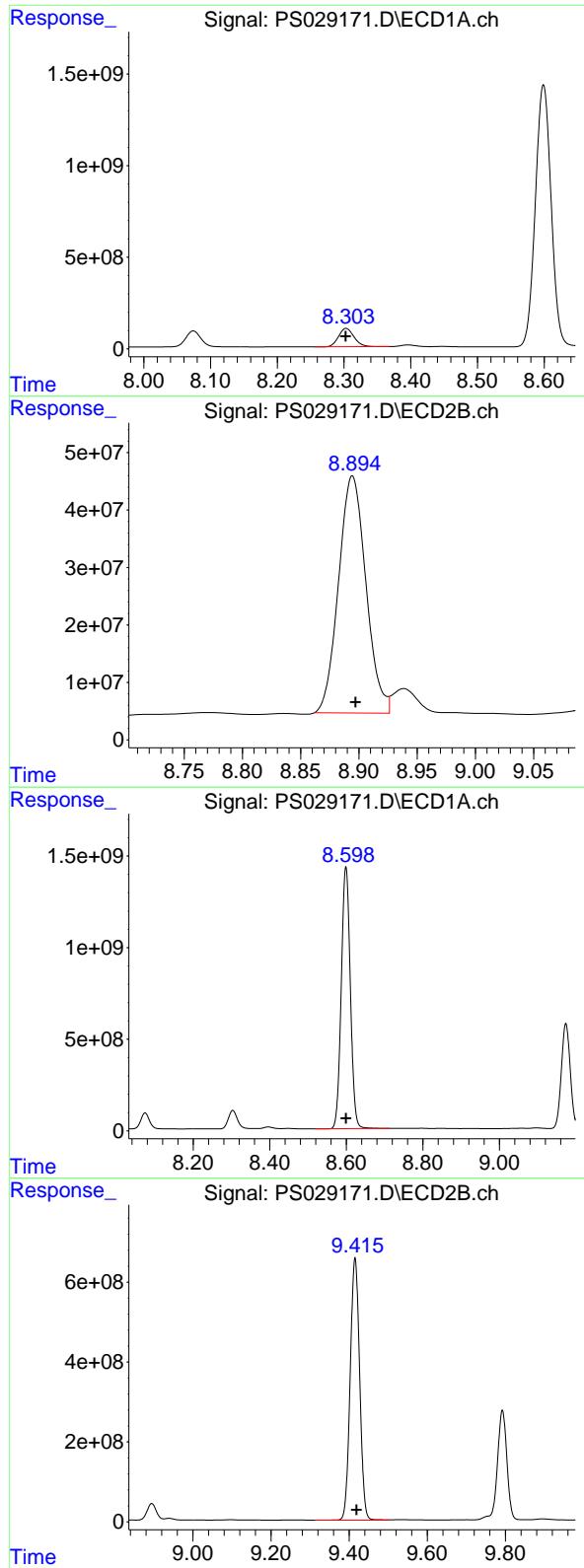
#8 DICHLOPROP

R.T.: 8.074 min  
Delta R.T.: 0.000 min  
Response: 1384788368  
Conc: 438.35 ng/ml



#8 DICHLOPROP

R.T.: 8.568 min  
Delta R.T.: -0.003 min  
Response: 657557131  
Conc: 477.50 ng/ml



#9 2,4-D

R.T.: 8.303 min  
 Delta R.T.: 0.000 min  
 Response: 1622648781  
 Conc: 482.34 ng/ml

Instrument : ECD\_S  
 ClientSampleId : CARBON-WATERMS

#9 2,4-D

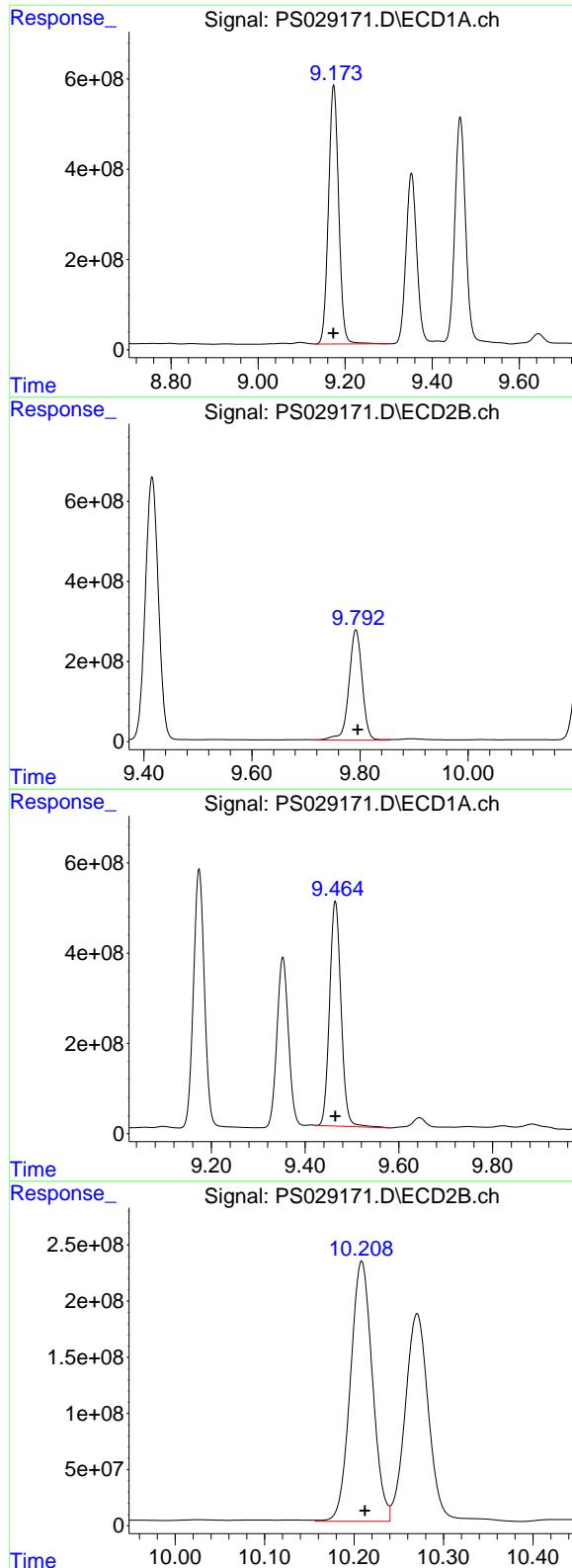
R.T.: 8.895 min  
 Delta R.T.: -0.002 min  
 Response: 673795012  
 Conc: 470.32 ng/ml

#10 Pentachlorophenol

R.T.: 8.599 min  
 Delta R.T.: 0.000 min  
 Response: 23531953629  
 Conc: 499.05 ng/ml

#10 Pentachlorophenol

R.T.: 9.415 min  
 Delta R.T.: -0.004 min  
 Response: 11026973221  
 Conc: 457.18 ng/ml



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

R.T.: 9.174 min  
 Delta R.T.: 0.000 min  
 Response: 9337298843  
 Conc: 481.54 ng/ml

**Instrument:** ECD\_S  
**ClientSampleId:** CARBON-WATERMS

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

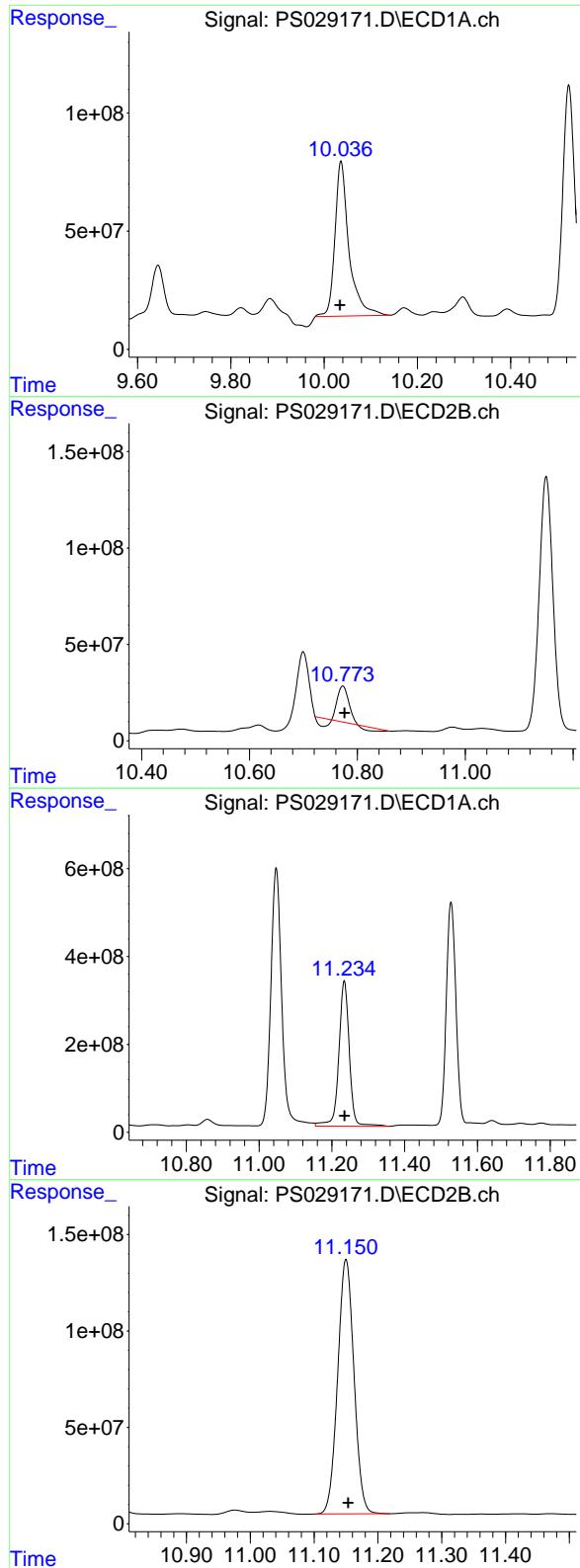
R.T.: 9.792 min  
 Delta R.T.: -0.004 min  
 Response: 4691784148  
 Conc: 480.31 ng/ml

#12 2,4,5-T

R.T.: 9.464 min  
 Delta R.T.: 0.000 min  
 Response: 8482348832  
 Conc: 437.92 ng/ml

#12 2,4,5-T

R.T.: 10.209 min  
 Delta R.T.: -0.004 min  
 Response: 3956477973  
 Conc: 427.16 ng/ml



#13 2,4-DB

R.T.: 10.036 min  
 Delta R.T.: 0.002 min  
 Response: 1371812892  
 Conc: 369.13 ng/ml

Instrument: ECD\_S  
 ClientSampleId: CARBON-WATERMS

#13 2,4-DB

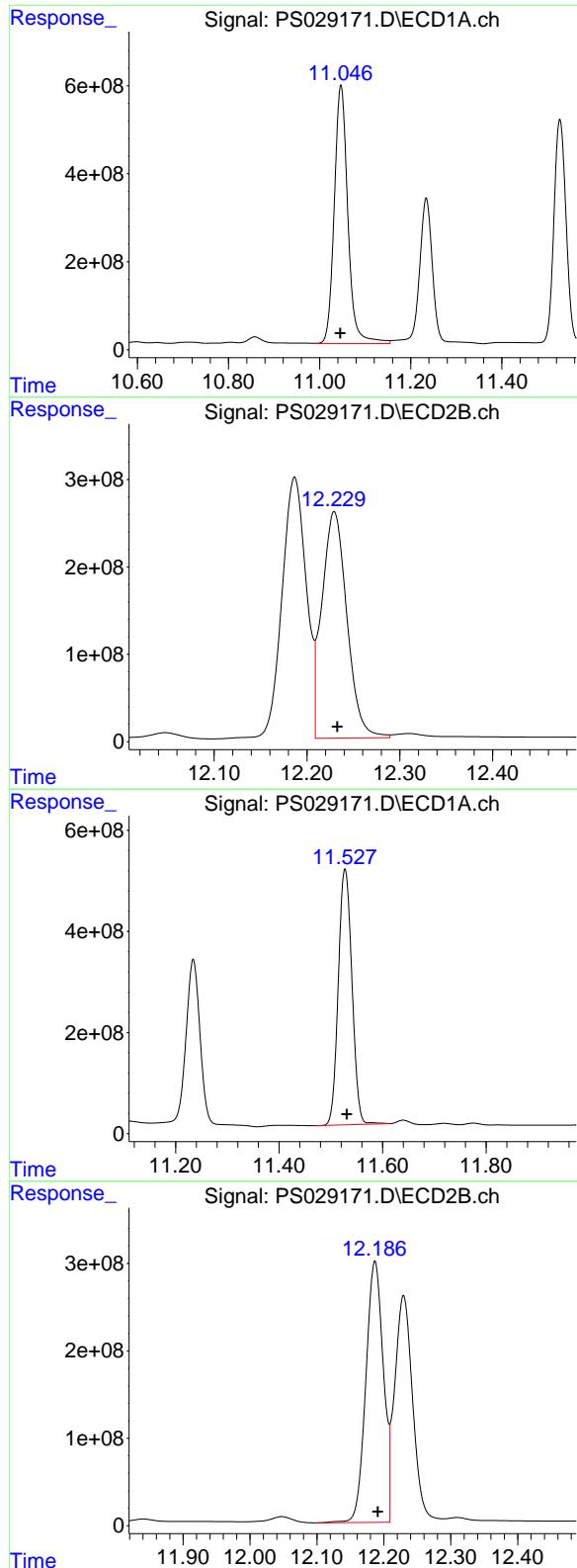
R.T.: 10.773 min  
 Delta R.T.: -0.003 min  
 Response: 169363487  
 Conc: 178.28 ng/ml

#14 DINOSEB

R.T.: 11.234 min  
 Delta R.T.: 0.000 min  
 Response: 6627507264  
 Conc: 457.05 ng/ml

#14 DINOSEB

R.T.: 11.150 min  
 Delta R.T.: -0.004 min  
 Response: 2342599601  
 Conc: 424.79 ng/ml



#15 Picloram

R.T.: 11.047 min  
 Delta R.T.: 0.001 min  
 Response: 12155264016  
 Conc: 380.42 ng/ml

Instrument: ECD\_S  
 ClientSampleId : CARBON-WATERMS

#15 Picloram

R.T.: 12.229 min  
 Delta R.T.: -0.003 min  
 Response: 4843343909  
 Conc: 352.27 ng/ml

#16 DCPA

R.T.: 11.527 min  
 Delta R.T.: -0.003 min  
 Response: 9255785711  
 Conc: 319.21 ng/ml

#16 DCPA

R.T.: 12.187 min  
 Delta R.T.: -0.004 min  
 Response: 5437757347  
 Conc: 440.85 ng/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021325\  
 Data File : PS029172.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 14 Feb 2025 00:12  
 Operator : AR\AJ  
 Sample : Q1356-04MSD  
 Misc :  
 ALS Vial : 18 Sample Multiplier: 1

**Instrument :**  
**ECD\_S**  
**ClientSampleId :**  
**CARBON-WATERMSD**

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 14 01:26:58 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021225.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 09:17:13 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1  $\mu$ 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 $\mu$ 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 7.187 7.661 1473.1E6 496.2E6 532.992 468.741

#### Target Compounds

1) T	Dalapon	2.611	2.659	1551.6E6	989.0E6	490.527	522.363
2) T	3,5-DICHL...	6.366	6.630	1843.0E6	661.0E6	465.192	432.033
3) T	4-Nitroph...	6.985	7.192	700.6E6	356.5E6	410.920	411.082
5) T	DICAMBA	7.372	7.857	5138.4E6	2320.8E6	426.710	419.928
6) T	MCPP	7.551	7.960	287.0E6	106.2E6	41.428	43.042
7) T	MCPA	7.699	8.200	399.1E6	151.5E6	41.693	43.296
8) T	DICHLORPROP	8.075	8.568	1368.7E6	641.5E6	433.271	465.856
9) T	2,4-D	8.303	8.894	1618.4E6	673.3E6	481.076	469.976
10) T	Pentachlo...	8.599	9.414	23371.0E6	10912.5E6	495.633	452.433
11) T	2,4,5-TP ...	9.173	9.791	9337.4E6	4665.6E6	481.551	477.632
12) T	2,4,5-T	9.464	10.208	8489.7E6	3949.2E6	438.298	426.372
13) T	2,4-DB	10.036	10.772	1377.6E6	143.3E6	370.692	150.852 #
14) T	DINOSEB	11.234	11.149	6638.9E6	2344.5E6	457.837	425.142
15) T	Picloram	11.046	12.228	12237.0E6	4881.6E6	382.977	355.058
16) T	DCPA	11.527	12.185	9174.7E6	5388.5E6	316.408	436.849 #

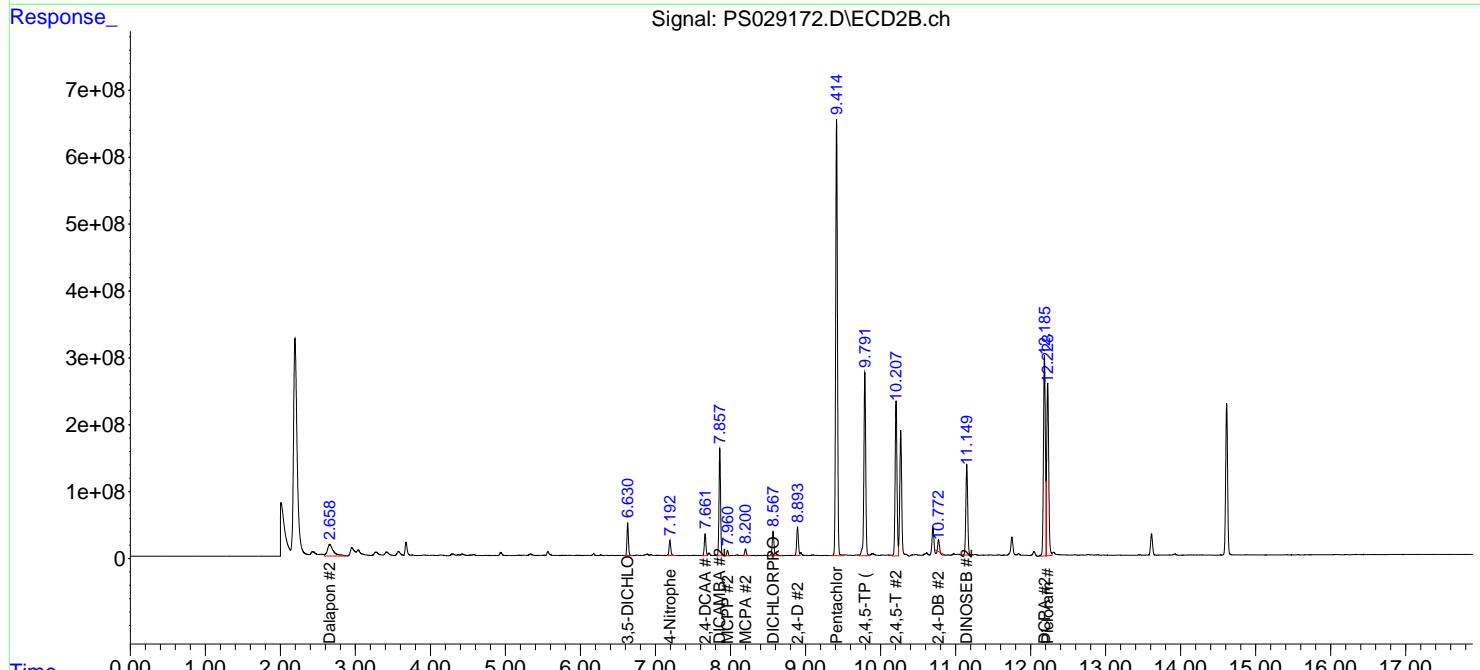
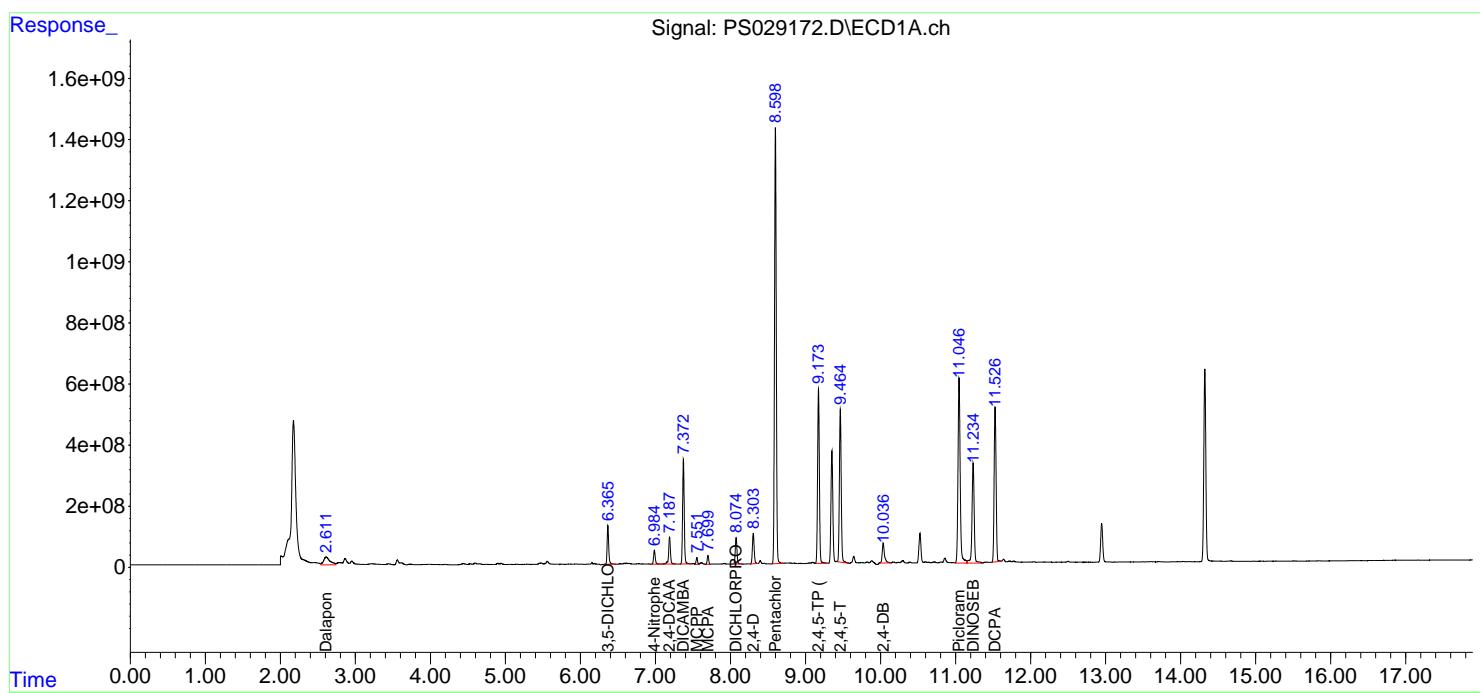
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

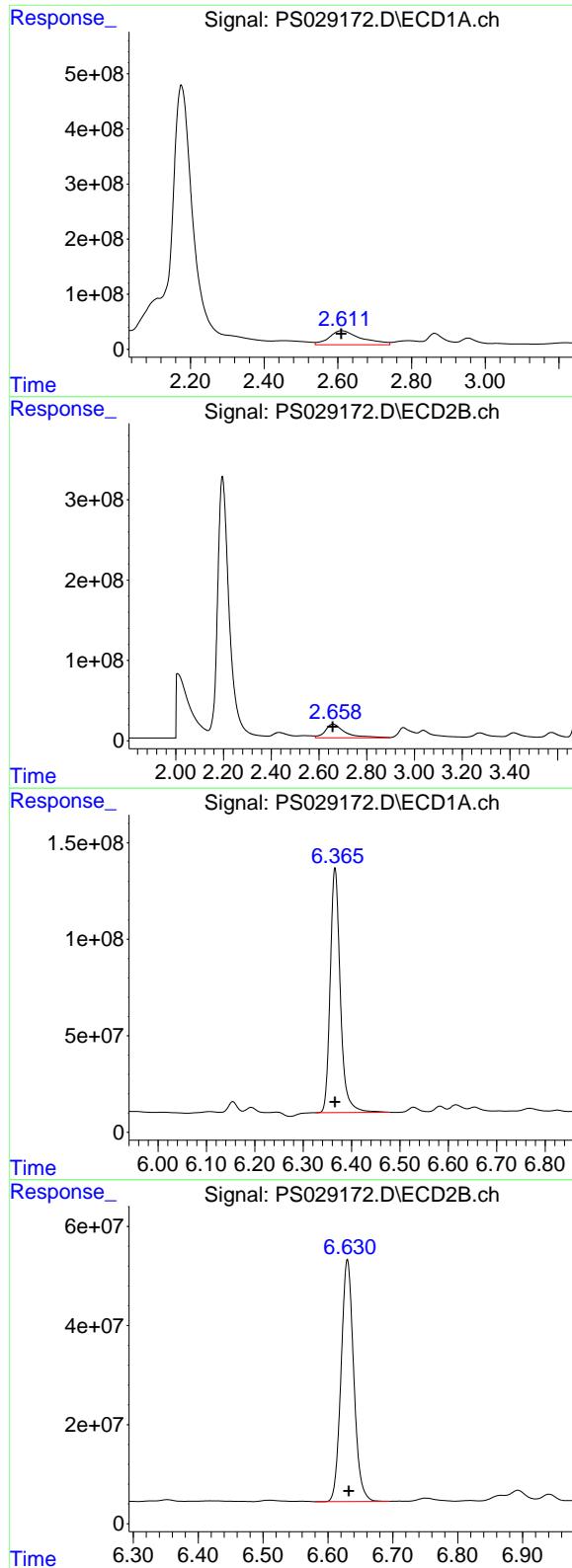
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Data\PS021325\  
 Data File : PS029172.D  
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch  
 Acq On : 14 Feb 2025 00:12  
 Operator : AR\AJ  
 Sample : Q1356-04MSD  
 Misc :  
 ALS Vial : 18 Sample Multiplier: 1

**Instrument :**  
**ECD\_S**  
**ClientSampleId :**  
**CARBON-WATERMSD**

Integration File signal 1: autoint1.e  
 Integration File signal 2: autoint2.e  
 Quant Time: Feb 14 01:26:58 2025  
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD\_S\Method\PS021225.M  
 Quant Title : 8080.M  
 QLast Update : Wed Feb 12 09:17:13 2025  
 Response via : Initial Calibration  
 Integrator: ChemStation

Volume Inj. : 1  $\mu$ 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 $\mu$ m





#1 Dalapon

R.T.: 2.611 min  
 Delta R.T.: 0.002 min  
 Response: 1551561739  
 Conc: 490.53 ng/ml

Instrument: ECD\_S  
 ClientSampleId: CARBON-WATERMSD

#1 Dalapon

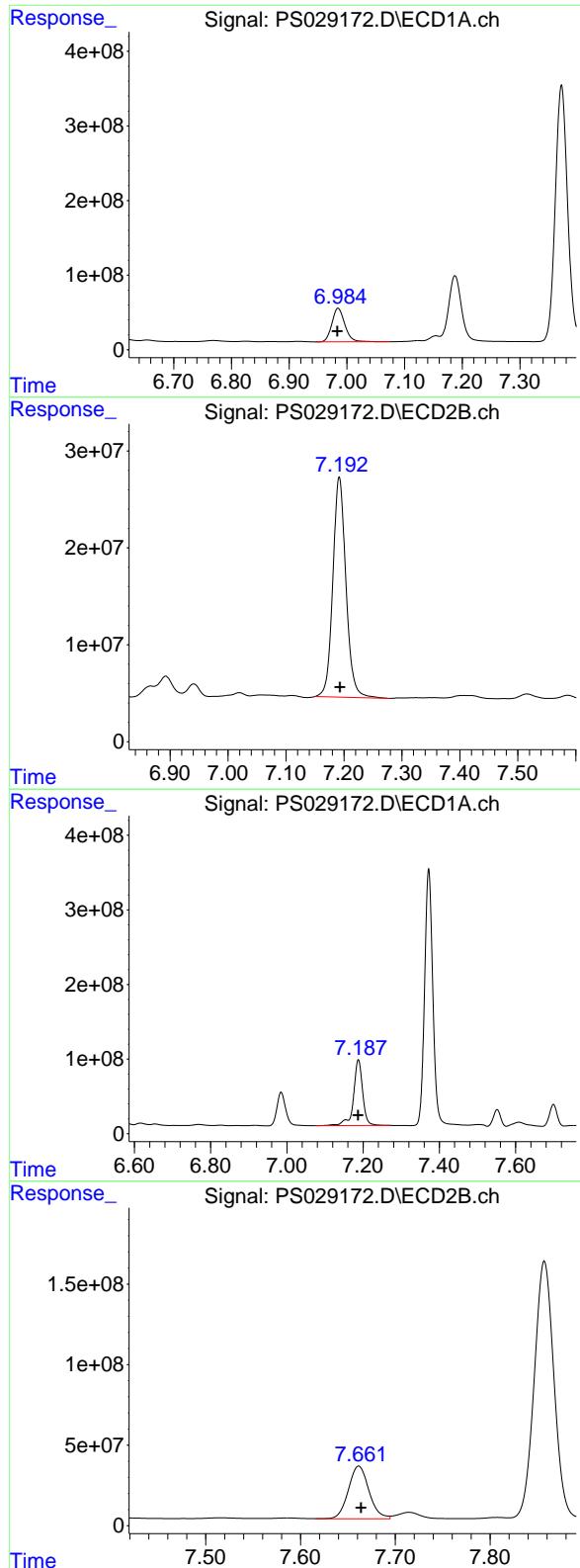
R.T.: 2.659 min  
 Delta R.T.: 0.000 min  
 Response: 988989507  
 Conc: 522.36 ng/ml

#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.366 min  
 Delta R.T.: 0.000 min  
 Response: 1842983961  
 Conc: 465.19 ng/ml

#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.630 min  
 Delta R.T.: -0.002 min  
 Response: 660952459  
 Conc: 432.03 ng/ml



#3 4-Nitrophenol

R.T.: 6.985 min  
Delta R.T.: 0.001 min  
Response: 700647228  
Conc: 410.92 ng/ml

Instrument: ECD\_S  
ClientSampleId : CARBON-WATERMSD

#3 4-Nitrophenol

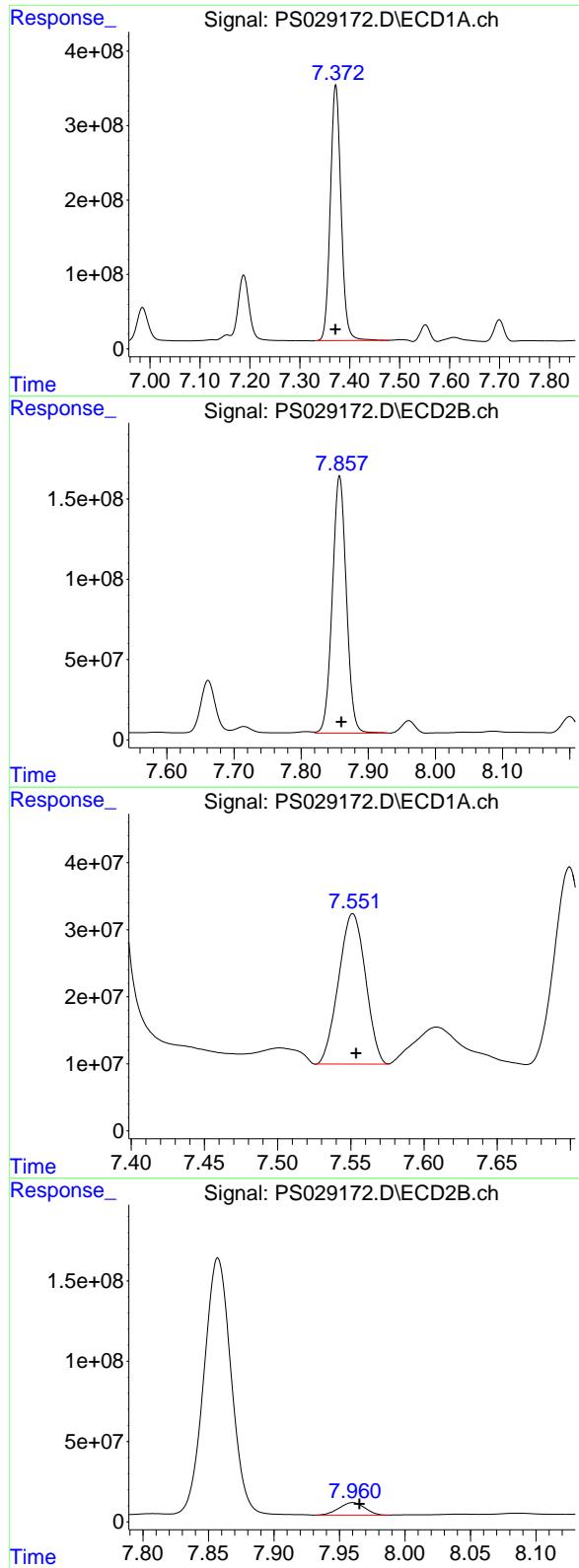
R.T.: 7.192 min  
Delta R.T.: -0.001 min  
Response: 356531174  
Conc: 411.08 ng/ml

#4 2,4-DCAA

R.T.: 7.187 min  
Delta R.T.: 0.000 min  
Response: 1473114714  
Conc: 532.99 ng/ml

#4 2,4-DCAA

R.T.: 7.661 min  
Delta R.T.: -0.003 min  
Response: 496159658  
Conc: 468.74 ng/ml



#5 DICAMBA

R.T.: 7.372 min  
Delta R.T.: 0.000 min  
Response: 5138421683  
Conc: 426.71 ng/ml

Instrument: ECD\_S  
ClientSampleId: CARBON-WATERMSD

#5 DICAMBA

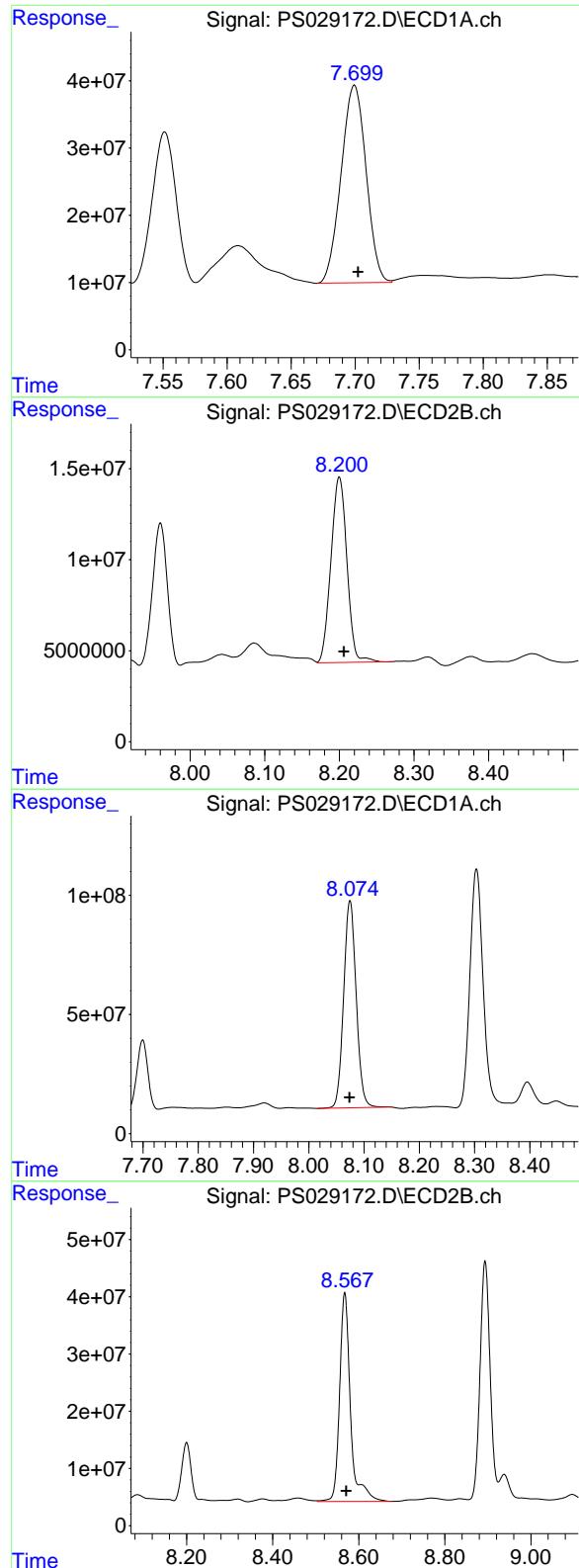
R.T.: 7.857 min  
Delta R.T.: -0.002 min  
Response: 2320772824  
Conc: 419.93 ng/ml

#6 MCPP

R.T.: 7.551 min  
Delta R.T.: -0.002 min  
Response: 287028617  
Conc: 41.43 ug/ml

#6 MCPP

R.T.: 7.960 min  
Delta R.T.: -0.005 min  
Response: 106193067  
Conc: 43.04 ug/ml



#7 MCPA

R.T.: 7.699 min  
 Delta R.T.: -0.003 min  
 Response: 399090910  
 Conc: 41.69 ug/ml

Instrument: ECD\_S  
 ClientSampleId : CARBON-WATERMSD

#7 MCPA

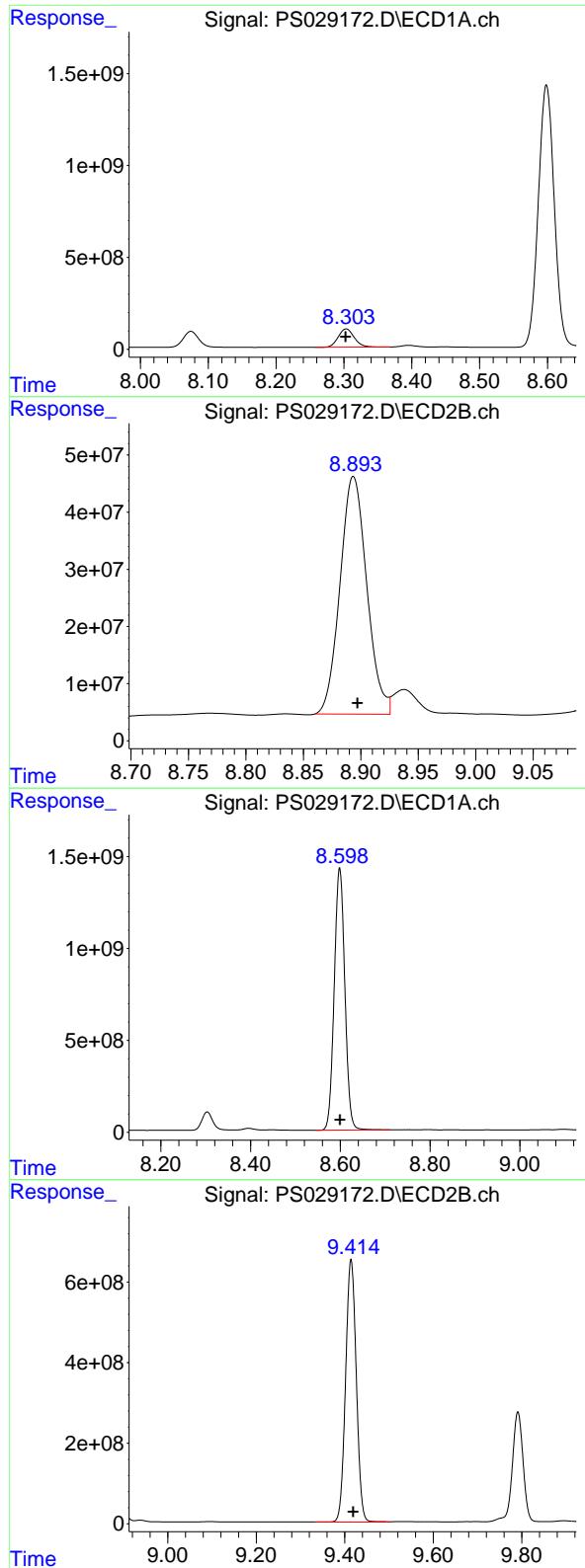
R.T.: 8.200 min  
 Delta R.T.: -0.006 min  
 Response: 151465006  
 Conc: 43.30 ug/ml

#8 DICHLORPROP

R.T.: 8.075 min  
 Delta R.T.: 0.000 min  
 Response: 1368731139  
 Conc: 433.27 ng/ml

#8 DICHLORPROP

R.T.: 8.568 min  
 Delta R.T.: -0.003 min  
 Response: 641525589  
 Conc: 465.86 ng/ml



#9 2,4-D

R.T.: 8.303 min  
Delta R.T.: 0.001 min  
Response: 1618383975  
Conc: 481.08 ng/ml

Instrument : ECD\_S  
ClientSampleId : CARBON-WATERMSD

#9 2,4-D

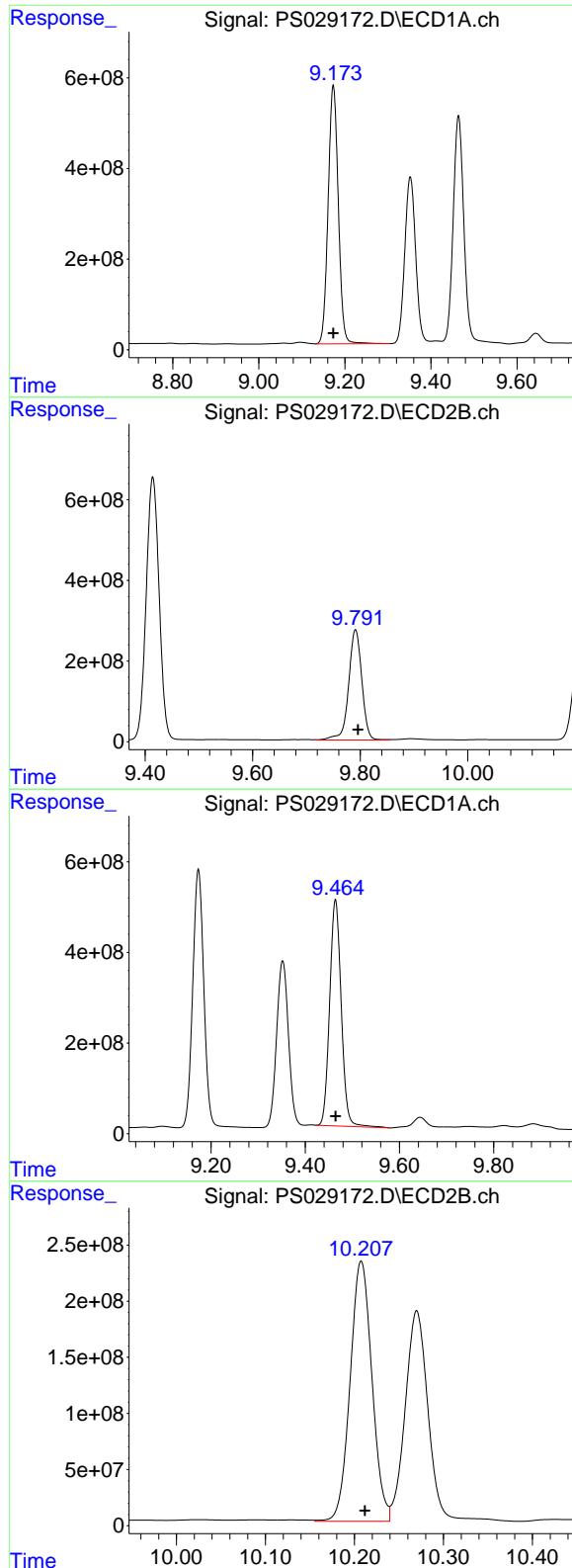
R.T.: 8.894 min  
Delta R.T.: -0.003 min  
Response: 673300762  
Conc: 469.98 ng/ml

#10 Pentachlorophenol

R.T.: 8.599 min  
Delta R.T.: 0.000 min  
Response: 23371049991  
Conc: 495.63 ng/ml

#10 Pentachlorophenol

R.T.: 9.414 min  
Delta R.T.: -0.005 min  
Response: 10912526099  
Conc: 452.43 ng/ml



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

R.T.: 9.173 min  
 Delta R.T.: 0.000 min  
 Response: 9337446653  
 Conc: 481.55 ng/ml

Instrument: ECD\_S  
 ClientSampleId: CARBON-WATERMSD

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

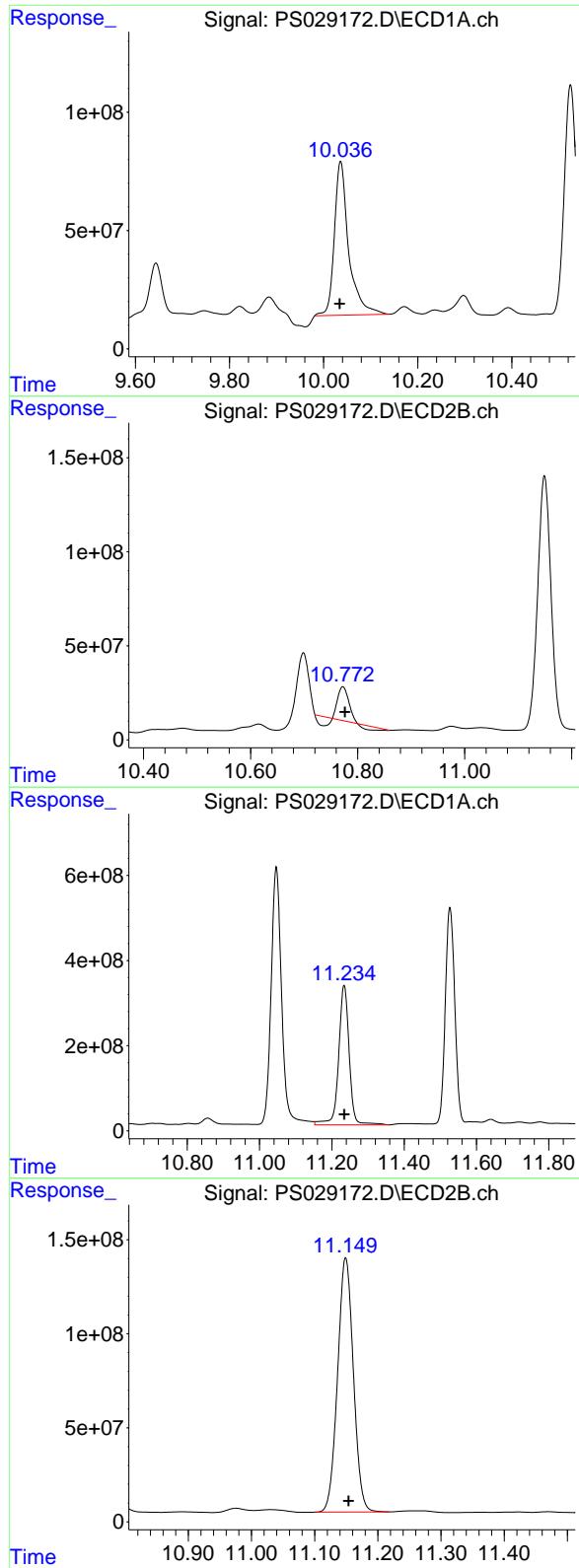
R.T.: 9.791 min  
 Delta R.T.: -0.005 min  
 Response: 4665610513  
 Conc: 477.63 ng/ml

#12 2,4,5-T

R.T.: 9.464 min  
 Delta R.T.: 0.000 min  
 Response: 8489680473  
 Conc: 438.30 ng/ml

#12 2,4,5-T

R.T.: 10.208 min  
 Delta R.T.: -0.004 min  
 Response: 3949176970  
 Conc: 426.37 ng/ml



#13 2,4-DB

R.T.: 10.036 min  
 Delta R.T.: 0.002 min  
 Response: 1377599345  
 Conc: 370.69 ng/ml

Instrument : ECD\_S  
 ClientSampleId : CARBON-WATERMSD

#13 2,4-DB

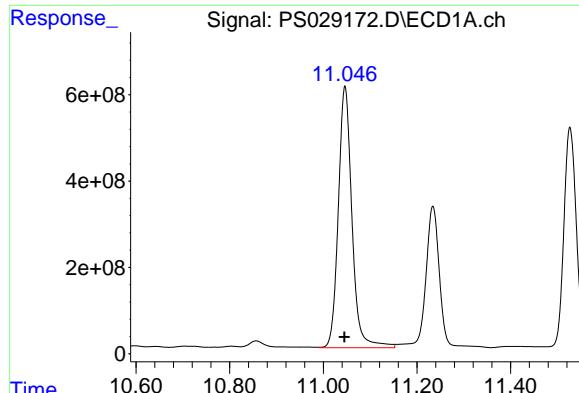
R.T.: 10.772 min  
 Delta R.T.: -0.004 min  
 Response: 143308133  
 Conc: 150.85 ng/ml

#14 DINOSEB

R.T.: 11.234 min  
 Delta R.T.: 0.000 min  
 Response: 6638913437  
 Conc: 457.84 ng/ml

#14 DINOSEB

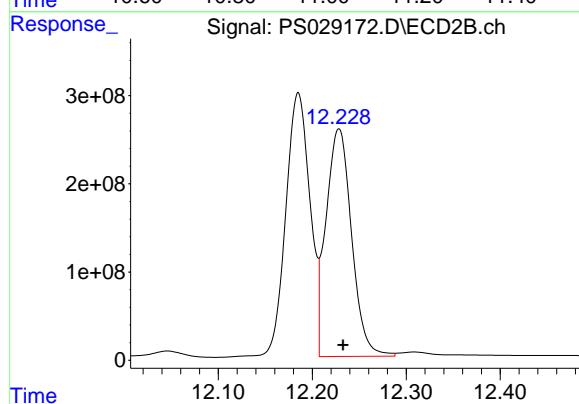
R.T.: 11.149 min  
 Delta R.T.: -0.004 min  
 Response: 2344525158  
 Conc: 425.14 ng/ml



#15 Picloram

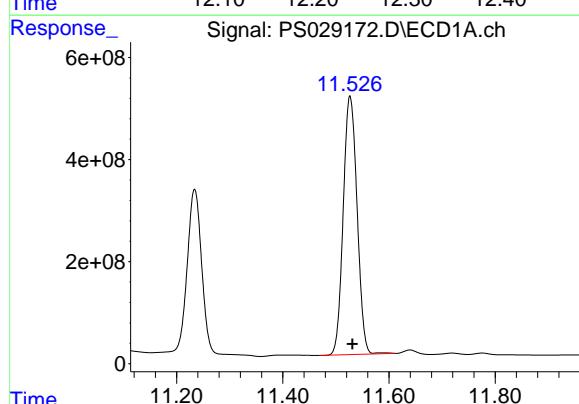
R.T.: 11.046 min  
 Delta R.T.: 0.000 min  
 Response: 12237040857  
 Conc: 382.98 ng/ml

Instrument : ECD\_S  
 ClientSampleId : CARBON-WATERMSD



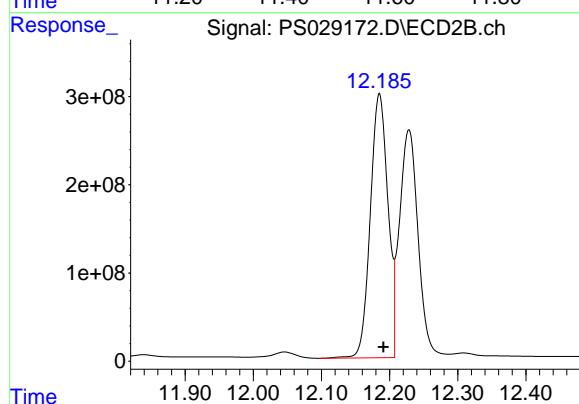
#15 Picloram

R.T.: 12.228 min  
 Delta R.T.: -0.004 min  
 Response: 4881642726  
 Conc: 355.06 ng/ml



#16 DCPA

R.T.: 11.527 min  
 Delta R.T.: -0.004 min  
 Response: 9174665199  
 Conc: 316.41 ng/ml



#16 DCPA

R.T.: 12.185 min  
 Delta R.T.: -0.006 min  
 Response: 5388459231  
 Conc: 436.85 ng/ml