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

DATA PACKAGE

GC SEMI-VOLATILES

PROJECT NAME : NYCDDC SANTWOBR BROOKLYN BRIDGE BBMCR

RU2 ENGINEERING, LLC

2 Melinda Drive

Monroe Township, NJ - 08831

Phone No: 732-261-2236

ORDER ID : Q1216

ATTENTION : Rutu Manani

Laboratory Certification ID # 20012

Table Of Contents for Q1216

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Cover Page

Order ID : Q1216

Project ID : NYCDDC SANTWOBR Brooklyn Bridge BBMCR

Client : RU2 Engineering, LLC

Lab Sample Number	Client Sample Number
Q1216-01	JPP-18.1-012825
Q1216-02	JPP-18.1-012825
Q1216-03	JPP-18.1-012825
Q1216-04	JPP-18.1-012825
Q1216-05	JPP-21.1-012825
Q1216-06	JPP-21.1-012825
Q1216-07	JPP-21.1-012825
Q1216-08	JPP-21.1-012825
Q1216-09	JPP-21.2-012825
Q1216-10	JPP-21.2-012825
Q1216-11	JPP-21.2-012825
Q1216-12	JPP-21.2-012825
Q1216-13	JPP-26.1-012825
Q1216-14	JPP-26.1-012825
Q1216-15	JPP-26.1-012825
Q1216-16	JPP-26.1-012825
Q1216-17	JPP-26.2-012825
Q1216-18	JPP-26.2-012825
Q1216-19	JPP-26.2-012825
Q1216-20	JPP-26.2-012825

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: 2/6/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

RU2 Engineering, LLC
Project Name: NYCDDC SANTWOBR Brooklyn Bridge BBMCR
Project # N/A
Chemtech Project # Q1216
Test Name: TCLP Herbicide

A. Number of Samples and Date of Receipt:
20 Solid samples were received on 01/29/2025.

B. Parameters
According to the Chain of Custody document, the following analyses were requested: Corrosivity, Diesel Range Organics, Gasoline Range Organics, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, Paint Filter, PCB, Pesticide-TCL, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL and VOCMS Group1. 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:

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_____

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DATA REPORTING QUALIFIERS- ORGANIC

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

Value	If the result is a value greater than or equal to the detection limit, report the value
U	Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. "10 U". This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
ND	Indicates the analyte was analyzed for, but not detected
J	Indicates an estimated value. This flag is used: (1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.) (2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This is flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.
B	Indicates the analyte was found in the blank as well as the sample report as "12 B".
E	Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
P	This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a "P".
N	This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.
A	This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.
Q	Indicates the LCS did not meet the control limits requirements

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GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: Q1216 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:			✓

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GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)

		NA	NO	YES
9.	Analysis Holding Time Met			✓

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

ADDITIONAL COMMENTS:

_____ _____

QA REVIEW Date

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1216

	Completed
For thorough review, the report must have the following:	
GENERAL:	
Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)	✓
Check chain-of-custody for proper relinquish/return of samples	✓
Is the chain of custody signed and complete	✓
Check internal chain-of-custody for proper relinquish/return of samples /sample extracts	✓
Collect information for each project id from server. Were all requirements followed	✓
COVER PAGE:	
Do numbers of samples correspond to the number of samples in the Chain of Custody on login page	✓
Do lab numbers and client Ids on cover page agree with the Chain of Custody	✓
CHAIN OF CUSTODY:	
Do requested analyses on Chain of Custody agree with form I results	✓
Do requested analyses on Chain of Custody agree with the log-in page	✓
Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody	✓
Were the samples received within hold time	✓
Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle	✓
ANALYTICAL:	
Was method requirement followed?	✓
Was client requirement followed?	✓
Does the case narrative summarize all QC failure?	✓
All runlogs and manual integration are reviewed for requirements	✓
All manual calculations and /or hand notations verified	✓

QA Review Signature: SOHIL JODHANI **Date:** 02/06/2025

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LAB CHRONICLE

OrderID:	Q1216	**OrderDate:**	1/29/2025 11:54:00 AM
Client:	RU2 Engineering, LLC	**Project:**	NYCDDC SANTWOBR Brooklyn Bridge BBMCR
Contact:	Rutu Manani	**Location:**	E11,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1216-01	**JPP-18.1-012825**	**SOIL**			**01/28/25**			**01/29/25**
			Diesel Range Organics	8015D		01/30/25	01/30/25	
			Gasoline Range Organics	8015D			01/30/25	
Q1216-03	**JPP-18.1-012825**	**SOIL**			**01/28/25**			**01/29/25**
			PCB	8082A		01/30/25	01/30/25	
			Pesticide-TCL	8081B		01/30/25	01/30/25	
Q1216-04	**JPP-18.1-012825**	**TCLP**			**01/28/25**			**01/29/25**
			TCLP Herbicide	8151A		01/31/25	02/01/25	
			TCLP Pesticide	8081B		01/31/25	02/03/25	
Q1216-05	**JPP-21.1-012825**	**SOIL**			**01/28/25**			**01/29/25**
			Diesel Range Organics	8015D		01/30/25	01/30/25	
			Gasoline Range Organics	8015D			01/30/25	
Q1216-07	**JPP-21.1-012825**	**SOIL**			**01/28/25**			**01/29/25**
			PCB	8082A		01/30/25	01/30/25	
			Pesticide-TCL	8081B		01/30/25	01/30/25	
Q1216-08	**JPP-21.1-012825**	**TCLP**			**01/28/25**			**01/29/25**
			TCLP Herbicide	8151A		01/31/25	02/01/25	
			TCLP Pesticide	8081B		01/31/25	02/03/25	
Q1216-09	**JPP-21.2-012825**	**SOIL**			**01/28/25**			**01/29/25**
			Diesel Range Organics	8015D		01/30/25	01/30/25	
			Gasoline Range Organics	8015D			01/30/25	
Q1216-11	**JPP-21.2-012825**	**SOIL**			**01/28/25**			**01/29/25**
			PCB	8082A		01/30/25	01/30/25	
			Pesticide-TCL	8081B		01/30/25	01/30/25	
Q1216-12	**JPP-21.2-012825**	**TCLP**			**01/28/25**			**01/29/25**

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LAB CHRONICLE

			TCLP Herbicide	8151A		01/31/25	02/01/25	
			TCLP Pesticide	8081B		01/31/25	02/03/25	
Q1216-13	**JPP-26.1-012825**	**SOIL**			**01/28/25**			**01/29/25**
			Diesel Range Organics	8015D		01/30/25	01/30/25	
			Gasoline Range Organics	8015D			01/30/25	
Q1216-15	**JPP-26.1-012825**	**SOIL**			**01/28/25**			**01/29/25**
			PCB	8082A		01/30/25	01/30/25	
			Pesticide-TCL	8081B		01/30/25	02/03/25	
Q1216-16	**JPP-26.1-012825**	**TCLP**			**01/28/25**			**01/29/25**
			TCLP Herbicide	8151A		01/31/25	02/01/25	
			TCLP Pesticide	8081B		01/31/25	02/03/25	
Q1216-17	**JPP-26.2-012825**	**SOIL**			**01/28/25**			**01/29/25**
			Diesel Range Organics	8015D		01/30/25	01/30/25	
			Gasoline Range Organics	8015D			01/30/25	
Q1216-19	**JPP-26.2-012825**	**SOIL**			**01/28/25**			**01/29/25**
			PCB	8082A		01/30/25	01/30/25	
			Pesticide-TCL	8081B		01/30/25	01/30/25	
Q1216-20	**JPP-26.2-012825**	**TCLP**			**01/28/25**			**01/29/25**
			TCLP Herbicide	8151A		01/31/25	02/01/25	
			TCLP Pesticide	8081B		01/31/25	02/03/25	

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Hit Summary Sheet
SW-846

SDG No.: Q1216 **Order ID:** Q1216

Client: RU2 Engineering, LLC **Project ID:** NYCDDC SANTWOBR Brooklyn Bri

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units

Client ID :

Total Concentration: **0.000**

QC SUMMARY

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Surrogate Summary

SDG No.: Q1216

Client: RU2 Engineering, LLC

Analytical Method: 8151A

Lab Sample ID	Client ID	Parameter	Column	Spike	Result	Rec	Qual	Limits Low	Limits High
I.BLK-PS028900.D	PIBLK-PS028900.D	2,4-DCAA	1	500	474	95		39	175
		2,4-DCAA	2	500	492	98		39	175
I.BLK-PS029019.D	PIBLK-PS029019.D	2,4-DCAA	1	500	581	116		39	175
		2,4-DCAA	2	500	551	110		39	175
PB166428BL	PB166428BL	2,4-DCAA	1	500	477	95		39	175
		2,4-DCAA	2	500	427	85		39	175
PB166428BS	PB166428BS	2,4-DCAA	1	500	543	109		39	175
		2,4-DCAA	2	500	489	98		39	175
PB166356TB	PB166356TB	2,4-DCAA	1	500	467	93		39	175
		2,4-DCAA	2	500	326	65		39	175
Q1215-04MS	JPP-29.1-012825MS	2,4-DCAA	1	500	591	118		39	175
		2,4-DCAA	2	500	363	73		39	175
Q1215-04MSD	JPP-29.1-012825MSD	2,4-DCAA	1	500	592	118		39	175
		2,4-DCAA	2	500	364	73		39	175
Q1216-04	JPP-18.1-012825	2,4-DCAA	1	500	558	112		39	175
		2,4-DCAA	2	500	351	70		39	175
Q1216-08	JPP-21.1-012825	2,4-DCAA	1	500	503	101		39	175
		2,4-DCAA	2	500	356	71		39	175
I.BLK-PS029031.D	PIBLK-PS029031.D	2,4-DCAA	1	500	584	117		39	175
		2,4-DCAA	2	500	554	111		39	175
Q1216-12	JPP-21.2-012825	2,4-DCAA	1	500	531	106		39	175
		2,4-DCAA	2	500	348	70		39	175
Q1216-16	JPP-26.1-012825	2,4-DCAA	1	500	522	104		39	175
		2,4-DCAA	2	500	344	69		39	175
Q1216-20	JPP-26.2-012825	2,4-DCAA	1	500	533	107		39	175
		2,4-DCAA	2	500	352	70		39	175
I.BLK-PS029043.D	PIBLK-PS029043.D	2,4-DCAA	1	500	572	114		39	175
		2,4-DCAA	2	500	551	110		39	175

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1216

Client: RU2 Engineering, LLC

Analytical Method: 8151A **DataFile :** PS029026.D

Lab Sample ID:	Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	RPD
Client Sample ID:	**JPP-29.1-012825MS**											
Q1215-04MS	2,4-D	50	0	52.4	ug/L	105				65	135	
	2,4,5-TP(Silvex)	50	0	63.5	ug/L	127				62	139	

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1216

Client: RU2 Engineering, LLC

Analytical Method: 8151A **DataFile :** PS029027.D

Lab Sample ID:	Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	Limits RPD
Client Sample ID:	**JPP-29.1-012825MSD**											
Q1215-04MSD	2,4-D	50	0	52.5	ug/L	105		0		65	135	20
	2,4,5-TP(Silvex)	50	0	63.8	ug/L	128		1		62	139	20

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1216

Client: RU2 Engineering, LLC

Analytical Method: 8151A **Datafile :** PS029023.D

Lab Sample ID	Parameter	Spike	Result	Units	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	RPD
PB166428BS	2,4-D	5	5.20	ug/L	104				83	130	
	2,4,5-TP(Silvex)	5	5.30	ug/L	106				78	127	

Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB166428BL

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1216 SAS No.: Q1216 SDG NO.: Q1216

Lab Sample ID: PB166428BL Lab File ID: PS029022.D

Matrix: (soil/water) water Extraction: (Type) SEPF

Sulfur Cleanup: (Y/N) N Date Extracted: 01/31/2025

Date Analyzed (1): 01/31/2025 Date Analyzed (2): 01/31/2025

Time Analyzed (1): 22:44 Time Analyzed (2): 22:44

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
PB166428BS	PB166428BS	PS029023.D	01/31/2025	01/31/2025
PB166356TB	PB166356TB	PS029024.D	01/31/2025	01/31/2025
JPP-29.1-012825MS	Q1215-04MS	PS029026.D	02/01/2025	02/01/2025
JPP-29.1-012825MSD	Q1215-04MSD	PS029027.D	02/01/2025	02/01/2025
JPP-18.1-012825	Q1216-04	PS029029.D	02/01/2025	02/01/2025
JPP-21.1-012825	Q1216-08	PS029030.D	02/01/2025	02/01/2025
JPP-21.2-012825	Q1216-12	PS029033.D	02/01/2025	02/01/2025
JPP-26.1-012825	Q1216-16	PS029034.D	02/01/2025	02/01/2025
JPP-26.2-012825	Q1216-20	PS029035.D	02/01/2025	02/01/2025

COMMENTS:

SAMPLE DATA

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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/31/25
Client Sample ID:	PB166356TB	SDG No.:	Q1216
Lab Sample ID:	PB166356TB	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
PS029024.D	1	01/31/25 10:55	01/31/25 23:32	PB166428

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	20.0	U	4.90	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	20.0	U	4.50	20.0	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	467		39 - 175	93%	SPK: 500

Comments:

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

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS013125\
Data File : PS029024.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 31 Jan 2025 23:32
Operator : AR\AJ
Sample : PB166356TB
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
PB166356TB

Manual Integrations APPROVED

Reviewed By :Abdul Mirza 02/03/2025
Supervised By :Ankita Jodhani 02/03/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 01 00:29:32 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 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	7.195	7.673	1300.8E6	363.3E6	467.229m	325.599	#
	Target Compounds							

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS013125\
Data File : PS029024.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 31 Jan 2025 23:32
Operator : AR\AJ
Sample : PB166356TB
Misc :
ALS Vial : 17 Sample Multiplier: 1

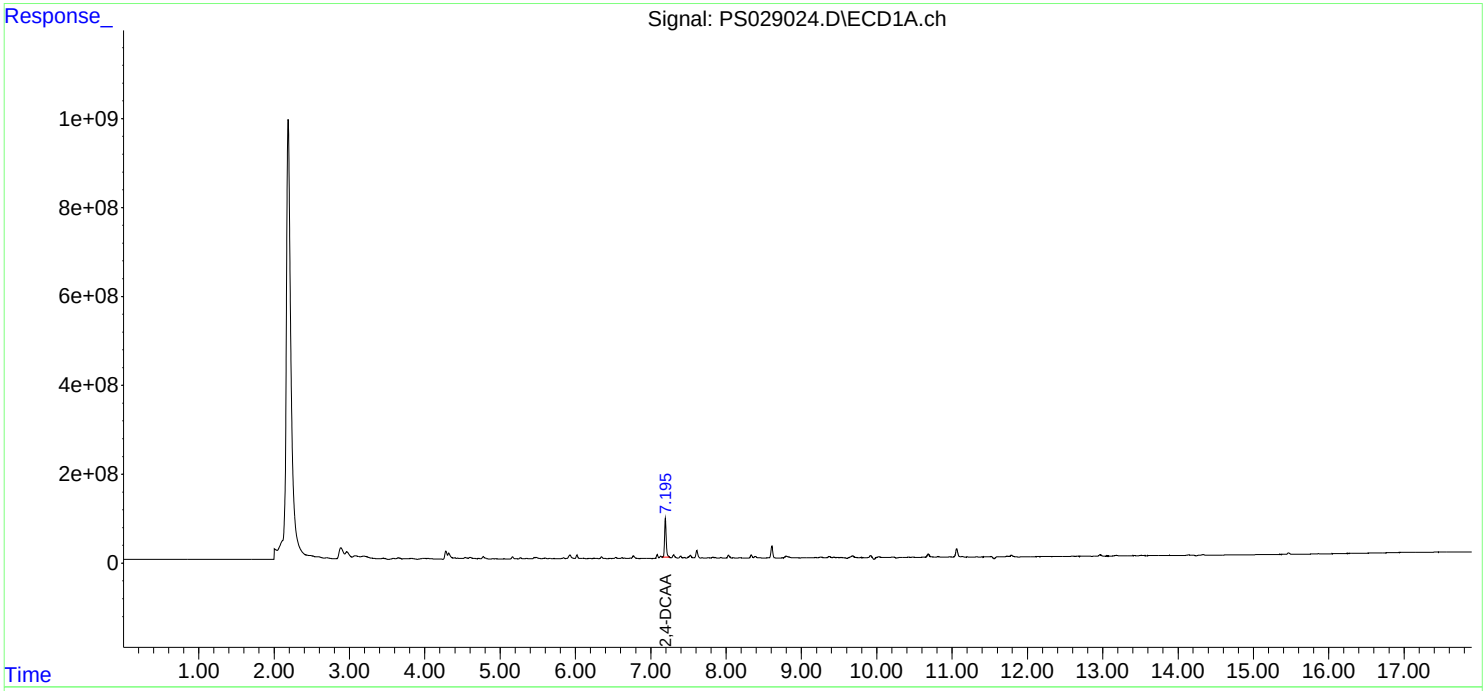
Instrument :
ECD_S
ClientSampleId :
PB166356TB

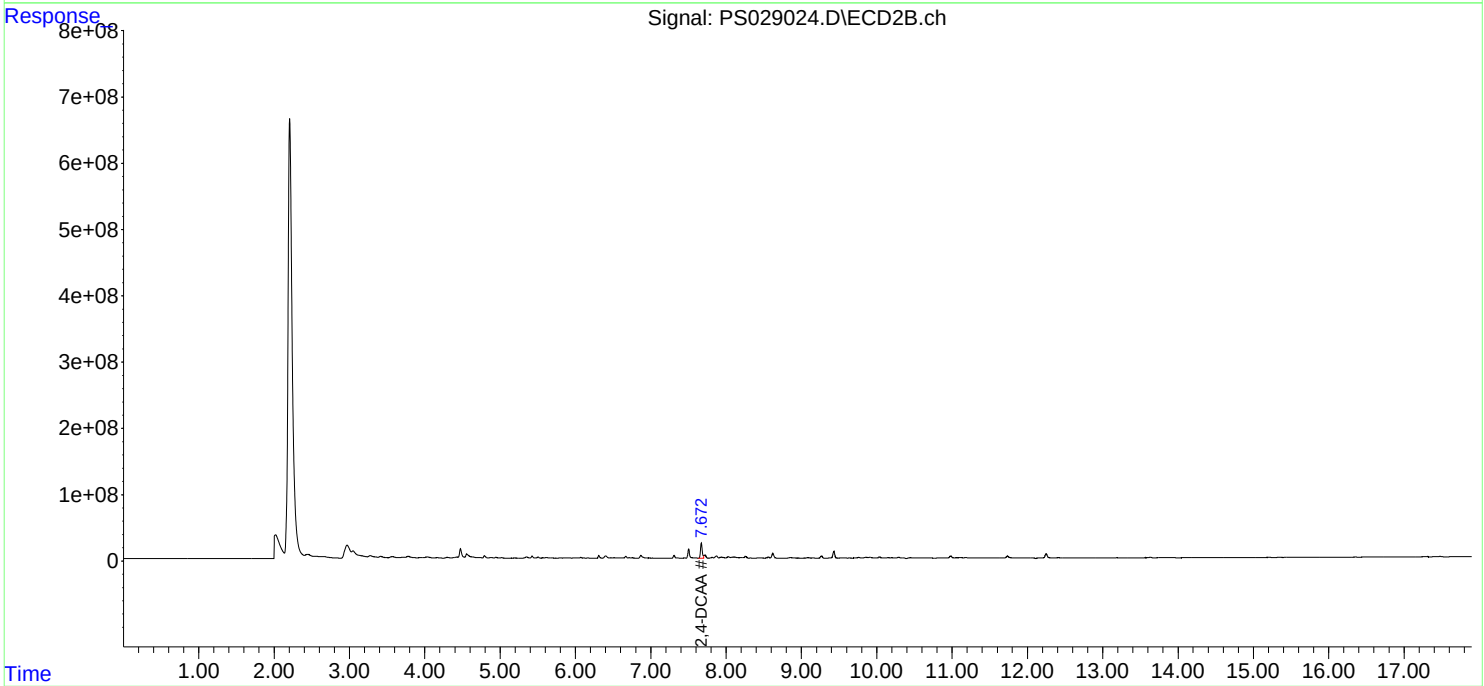
Manual Integrations APPROVED

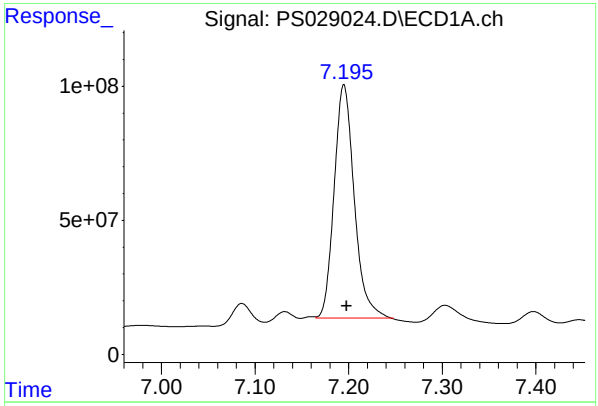
Reviewed By :Abdul Mirza 02/03/2025
Supervised By :Ankita Jodhani 02/03/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 01 00:29:32 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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







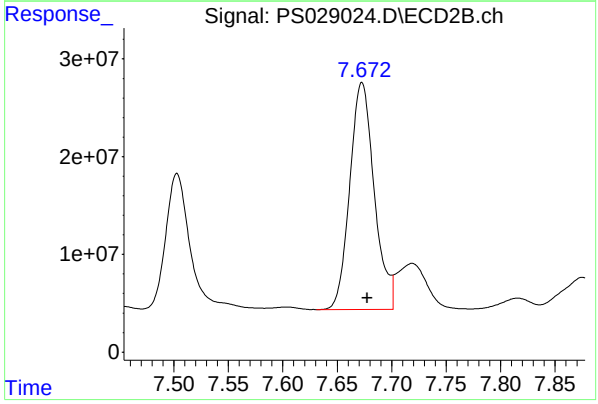
#4 2,4-DCAA

R.T.: 7.195 min
Delta R.T.: -0.003 min
Response: 1300771244
Conc: 467.23 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB166356TB

Manual Integrations APPROVED

Reviewed By :Abdul Mirza 02/03/2025
Supervised By :Ankita Jodhani 02/03/2025



#4 2,4-DCAA

R.T.: 7.673 min
Delta R.T.: -0.005 min
Response: 363307470
Conc: 325.60 ng/ml

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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/29/25
Client Sample ID:	JPP-18.1-012825	SDG No.:	Q1216
Lab Sample ID:	Q1216-04	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
PS029029.D	1	01/31/25 10:55	02/01/25 01:32	PB166428

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	20.0	U	4.90	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	20.0	U	4.50	20.0	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	558		39 - 175	112%	SPK: 500

Comments:

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

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS013125\
Data File : PS029029.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 01 Feb 2025 01:32
Operator : AR\AJ
Sample : Q1216-04
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
JPP-18.1-012825

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 01 05:17:52 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 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	7.195	7.672	1554.1E6	391.9E6	558.227	351.214	#
	Target Compounds							

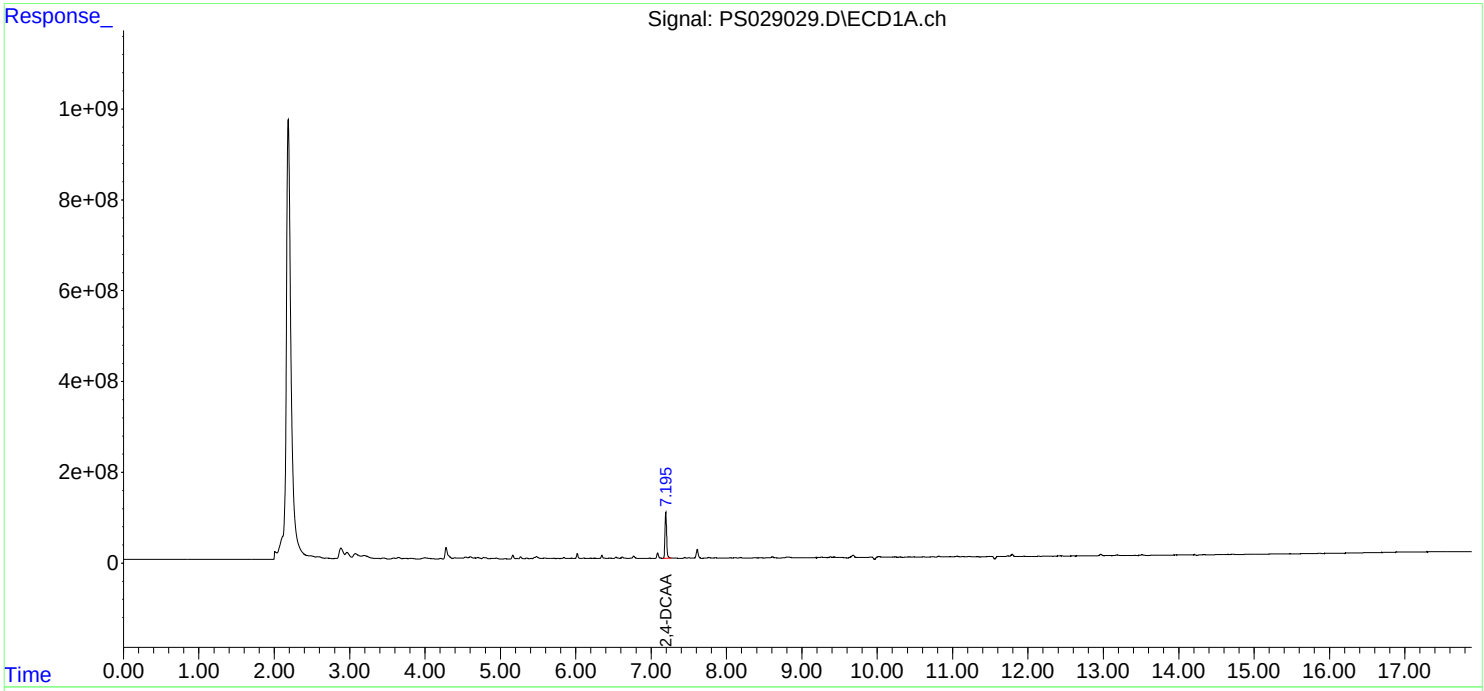
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

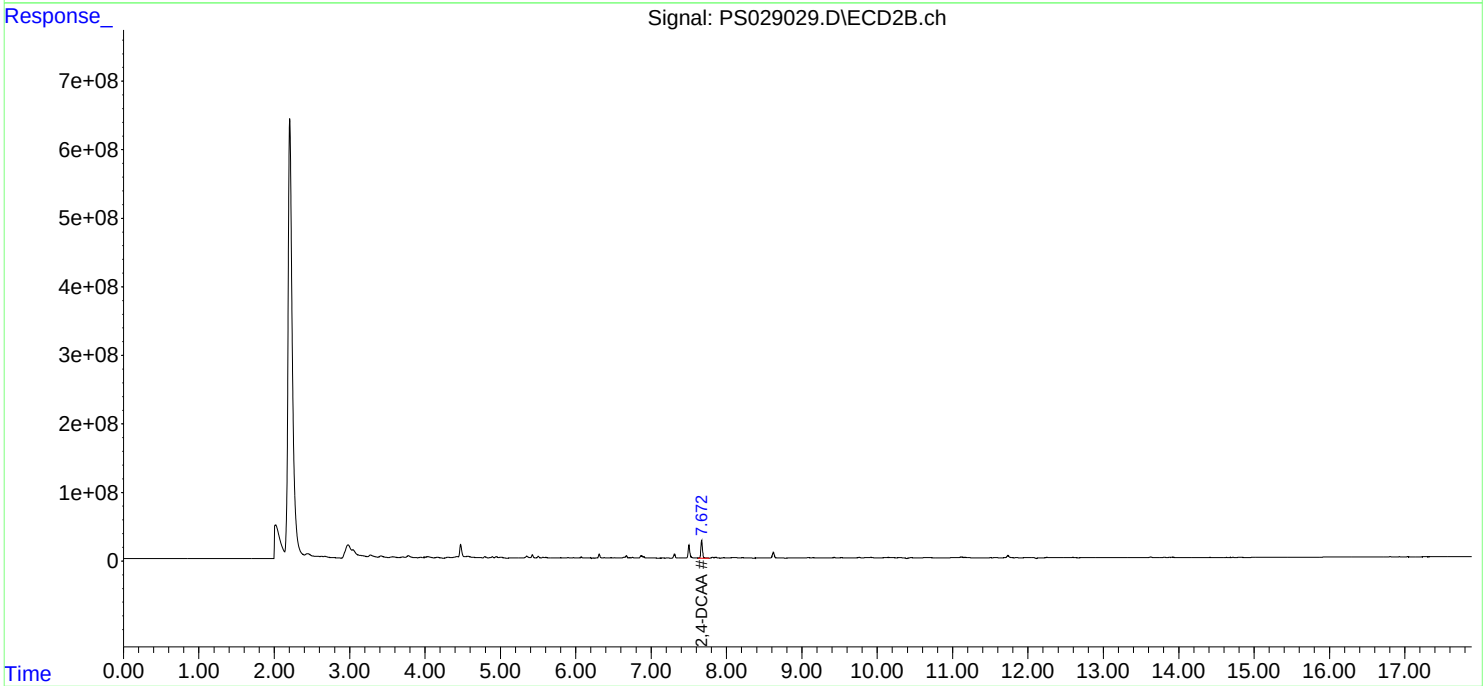
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS013125\
Data File : PS029029.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 01 Feb 2025 01:32
Operator : AR\AJ
Sample : Q1216-04
Misc :
ALS Vial : 22 Sample Multiplier: 1

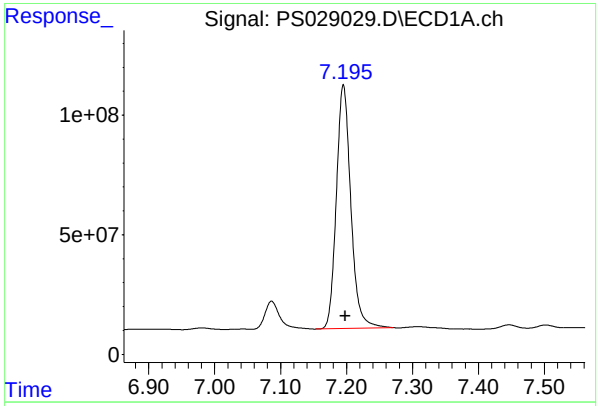
Instrument :
ECD_S
ClientSampleId :
JPP-18.1-012825

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 01 05:17:52 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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



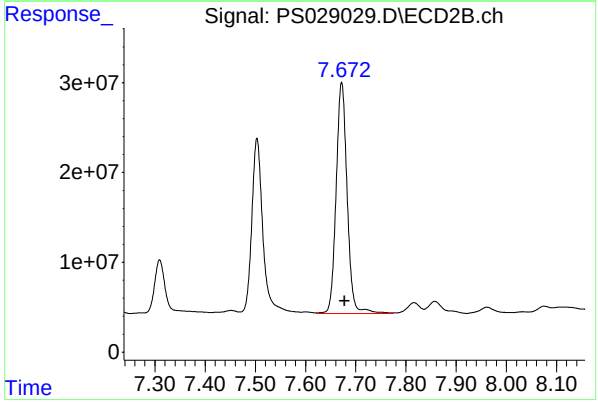




#4 2,4-DCAA

R.T.: 7.195 min
Delta R.T.: -0.002 min
Response: 1554109809
Conc: 558.23 ng/ml

Instrument :
ECD_S
ClientSampleId :
JPP-18.1-012825



#4 2,4-DCAA

R.T.: 7.672 min
Delta R.T.: -0.006 min
Response: 391888998
Conc: 351.21 ng/ml

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Fax : 908 789 8922

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/29/25
Client Sample ID:	JPP-21.1-012825	SDG No.:	Q1216
Lab Sample ID:	Q1216-08	Matrix:	TCLP
Analytical Method:	SW8151A	% Solid:	0 Decanted:
Sample Wt/Vol:	100 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Herbicide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		
Prep Method :	8151A		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS029030.D	1	01/31/25 10:55	02/01/25 01:56	PB166428

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	20.0	U	4.90	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	20.0	U	4.50	20.0	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	503		39 - 175	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\PS013125\
Data File : PS029030.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 01 Feb 2025 01:56
Operator : AR\AJ
Sample : Q1216-08
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
JPP-21.1-012825

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 01 05:18:04 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 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	7.194	7.670	1399.4E6	397.3E6	502.642	356.092	#
	Target Compounds							

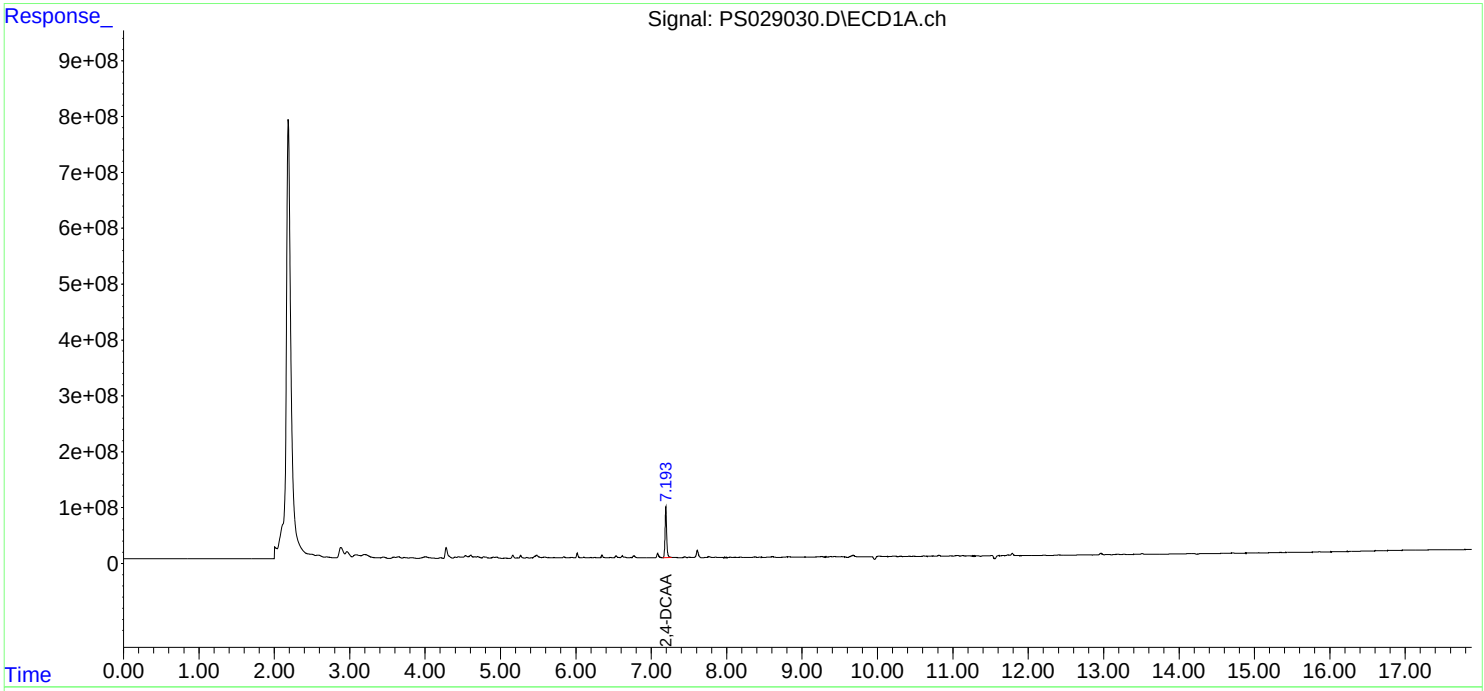
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

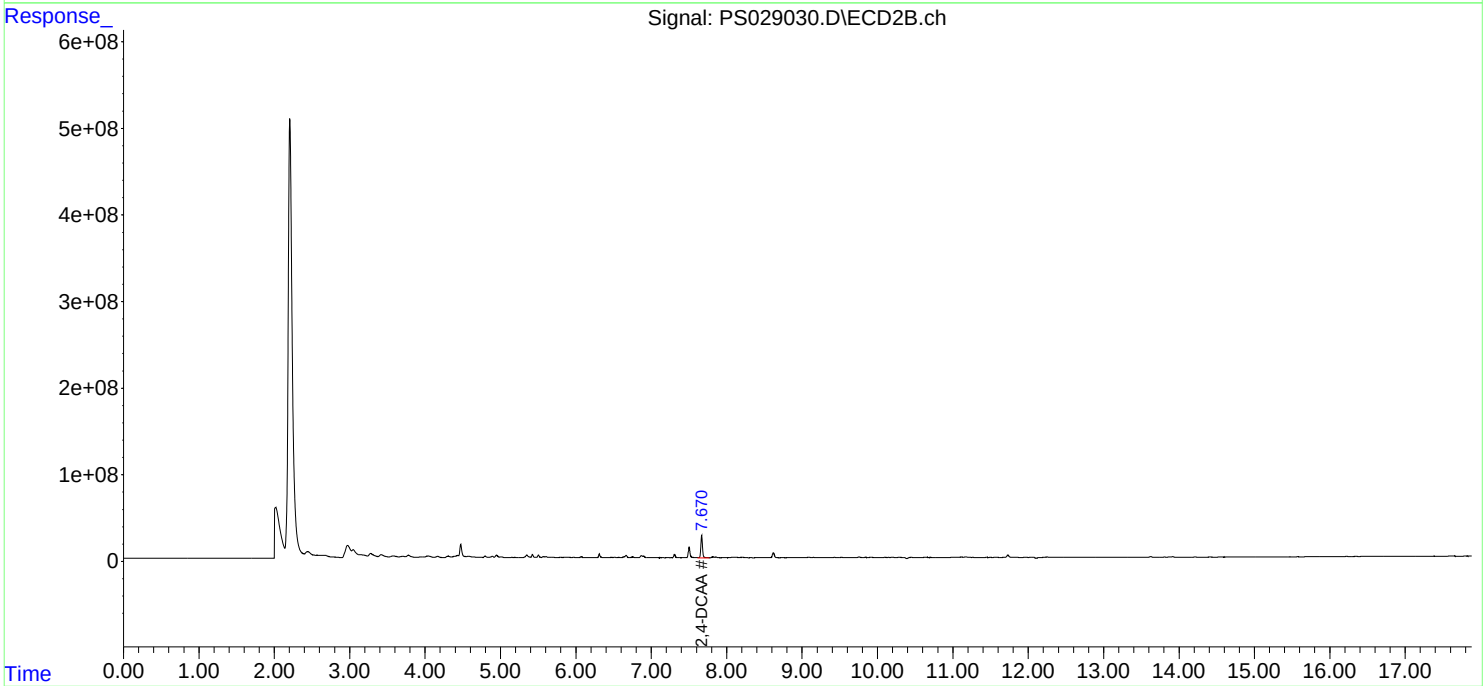
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS013125\
Data File : PS029030.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 01 Feb 2025 01:56
Operator : AR\AJ
Sample : Q1216-08
Misc :
ALS Vial : 23 Sample Multiplier: 1

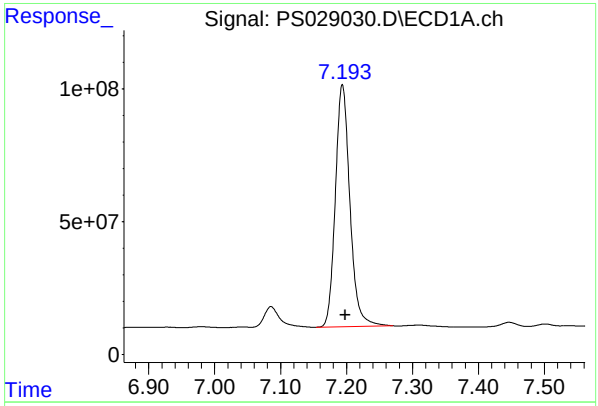
Instrument :
ECD_S
ClientSampleId :
JPP-21.1-012825

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 01 05:18:04 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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



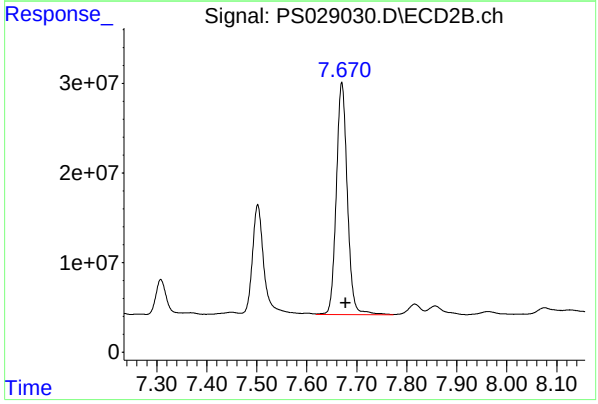




#4 2,4-DCAA

R.T.: 7.194 min
Delta R.T.: -0.004 min
Response: 1399362235
Conc: 502.64 ng/ml

Instrument :
ECD_S
ClientSampleId :
JPP-21.1-012825



#4 2,4-DCAA

R.T.: 7.670 min
Delta R.T.: -0.007 min
Response: 397331708
Conc: 356.09 ng/ml

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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/29/25
Client Sample ID:	JPP-21.2-012825	SDG No.:	Q1216
Lab Sample ID:	Q1216-12	Matrix:	TCLP
Analytical Method:	SW8151A	% Solid:	0 Decanted:
Sample Wt/Vol:	100 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Herbicide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		
Prep Method :	8151A		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS029033.D	1	01/31/25 10:55	02/01/25 03:56	PB166428

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	20.0	U	4.90	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	20.0	U	4.50	20.0	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	531		39 - 175	106%	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\PS013125\
Data File : PS029033.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 01 Feb 2025 03:56
Operator : AR\AJ
Sample : Q1216-12
Misc :
ALS Vial : 24 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
JPP-21.2-012825

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 03 00:57:24 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 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	7.195	7.672	1479.5E6	388.0E6	531.417	347.692	#
	Target Compounds							

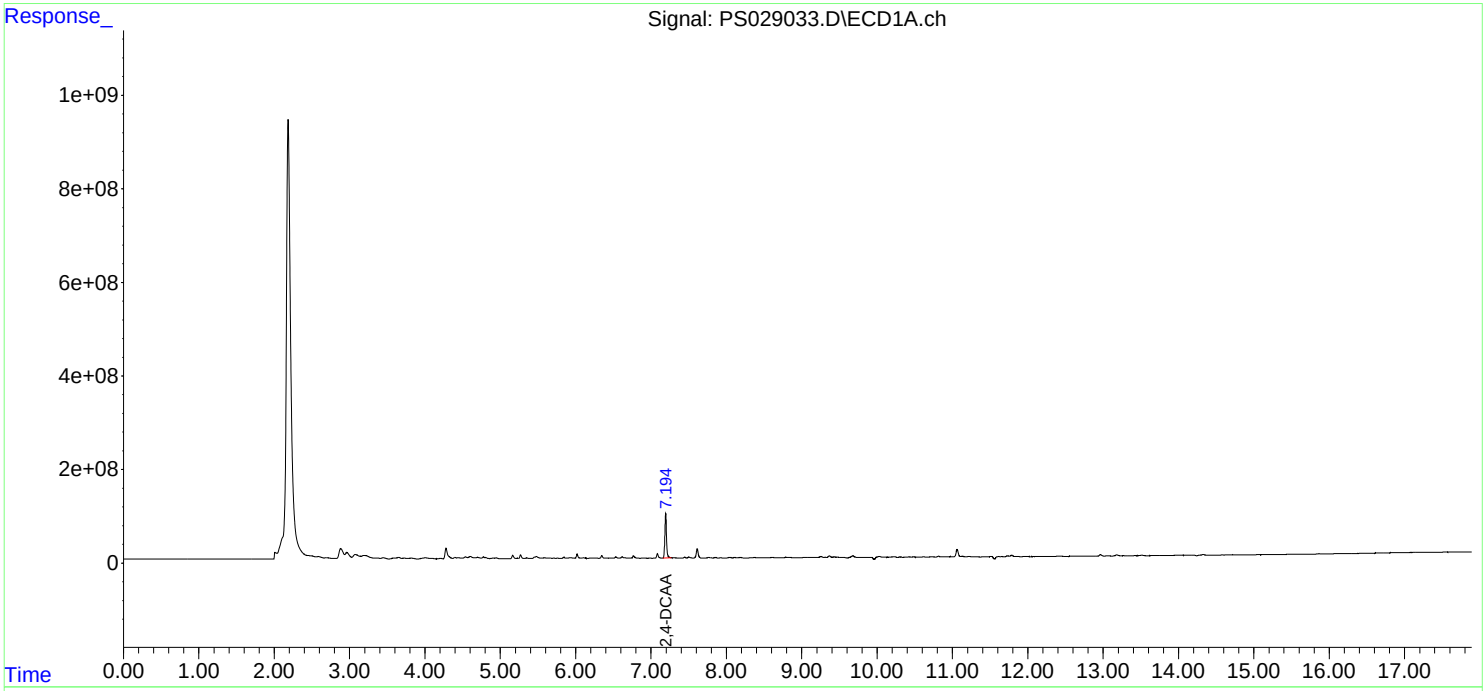
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

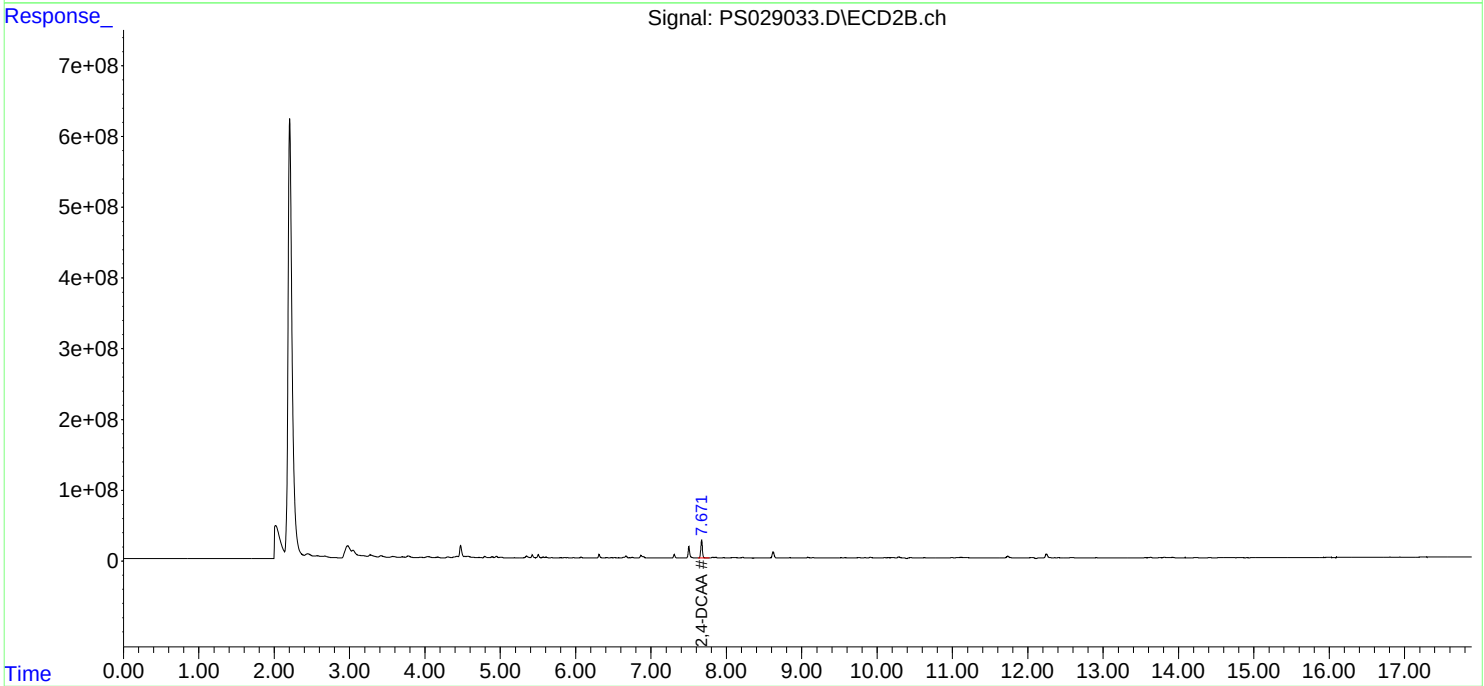
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS013125\
Data File : PS029033.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 01 Feb 2025 03:56
Operator : AR\AJ
Sample : Q1216-12
Misc :
ALS Vial : 24 Sample Multiplier: 1

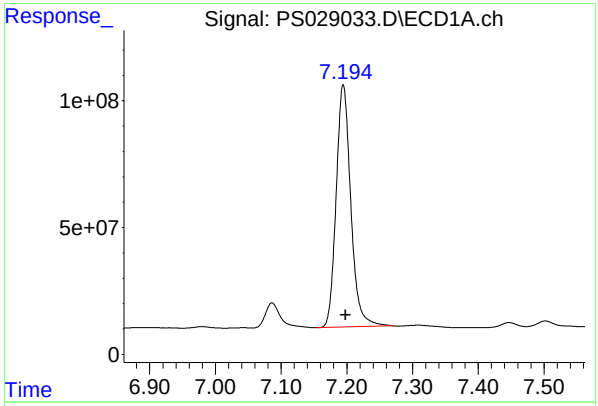
Instrument :
ECD_S
ClientSampleId :
JPP-21.2-012825

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 03 00:57:24 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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



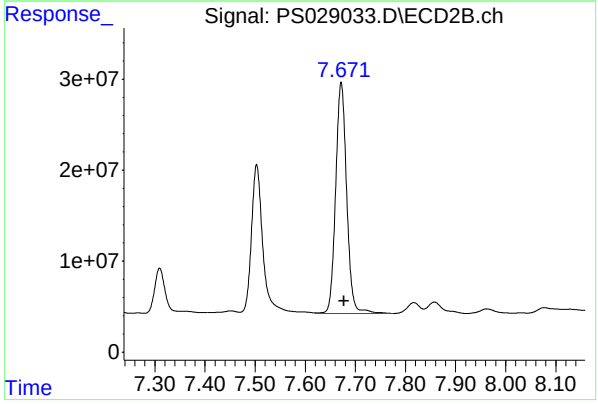




#4 2,4-DCAA

R.T.: 7.195 min
Delta R.T.: -0.003 min
Response: 1479472858
Conc: 531.42 ng/ml

Instrument :
ECD_S
ClientSampleId :
JPP-21.2-012825



#4 2,4-DCAA

R.T.: 7.672 min
Delta R.T.: -0.006 min
Response: 387958817
Conc: 347.69 ng/ml

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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/29/25
Client Sample ID:	JPP-26.1-012825	SDG No.:	Q1216
Lab Sample ID:	Q1216-16	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
PS029034.D	1	01/31/25 10:55	02/01/25 04:20	PB166428

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	20.0	U	4.90	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	20.0	U	4.50	20.0	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	522		39 - 175	104%	SPK: 500

Comments:

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

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS013125\
Data File : PS029034.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 01 Feb 2025 04:20
Operator : AR\AJ
Sample : Q1216-16
Misc :
ALS Vial : 25 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
JPP-26.1-012825

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 03 00:59:50 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 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	7.194	7.671	1452.9E6	383.9E6	521.872	344.010	#
	Target Compounds							

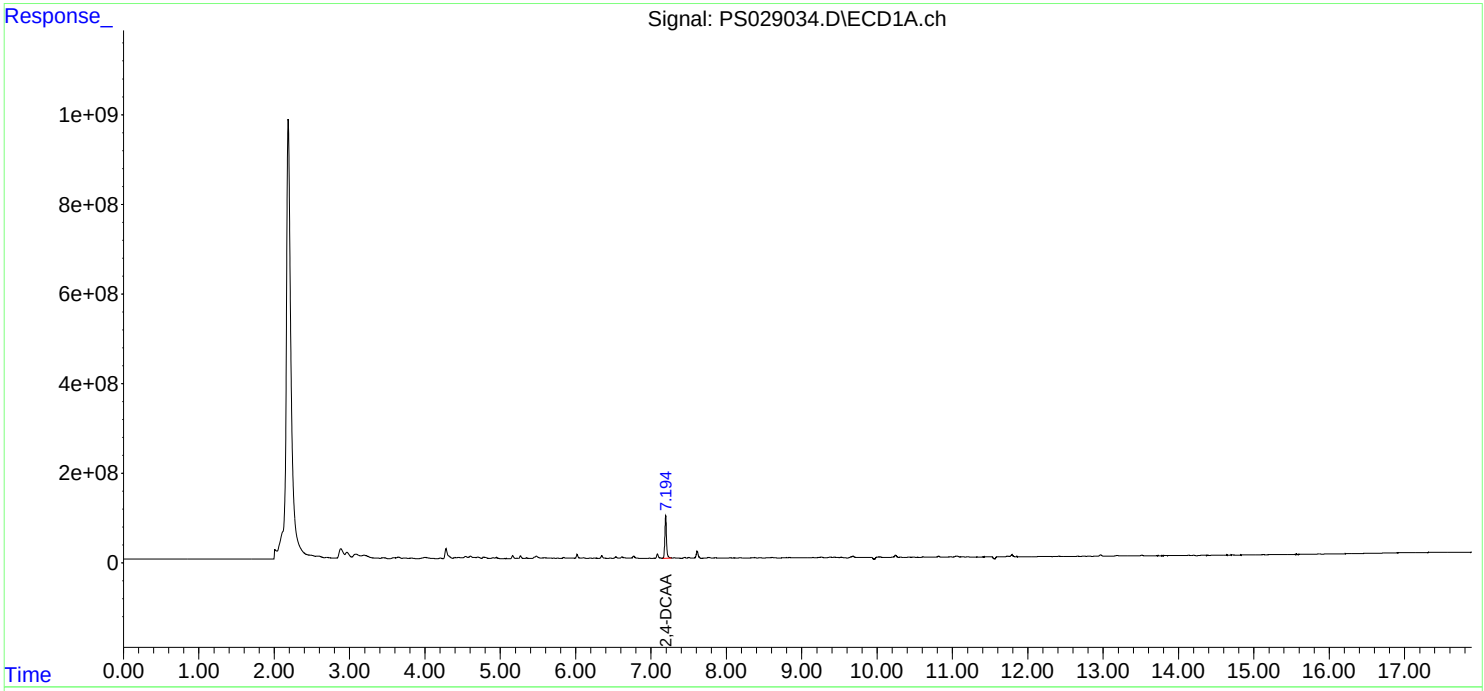
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

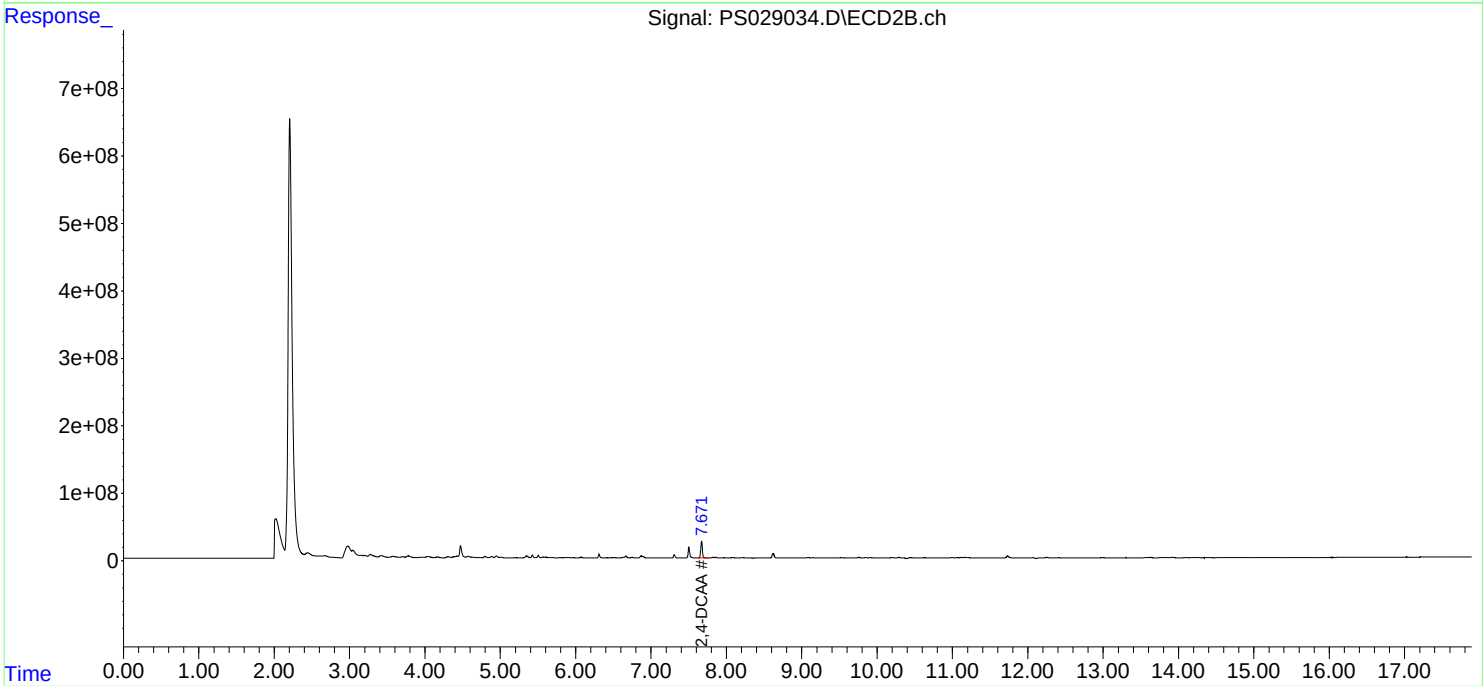
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS013125\
Data File : PS029034.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 01 Feb 2025 04:20
Operator : AR\AJ
Sample : Q1216-16
Misc :
ALS Vial : 25 Sample Multiplier: 1

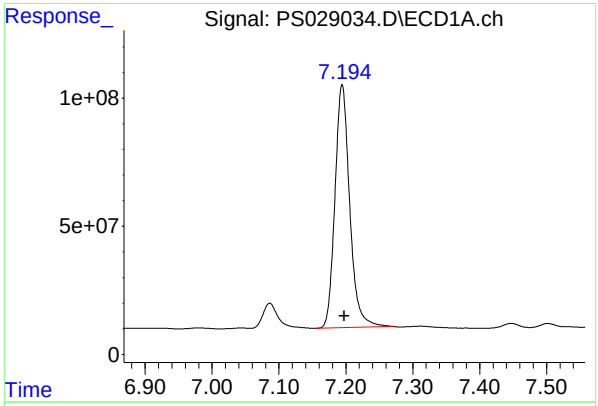
Instrument :
ECD_S
ClientSampleId :
JPP-26.1-012825

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 03 00:59:50 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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



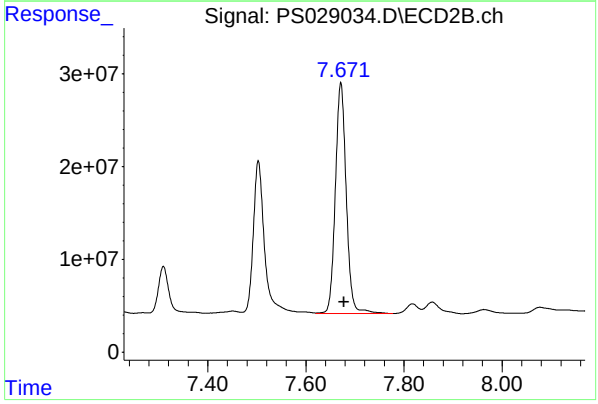




#4 2,4-DCAA

R.T.: 7.194 min
Delta R.T.: -0.003 min
Response: 1452899053
Conc: 521.87 ng/ml

Instrument :
ECD_S
ClientSampleId :
JPP-26.1-012825



#4 2,4-DCAA

R.T.: 7.671 min
Delta R.T.: -0.006 min
Response: 383850516
Conc: 344.01 ng/ml

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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/29/25
Client Sample ID:	JPP-26.2-012825	SDG No.:	Q1216
Lab Sample ID:	Q1216-20	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
PS029035.D	1	01/31/25 10:55	02/01/25 04:44	PB166428

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	20.0	U	4.90	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	20.0	U	4.50	20.0	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	533		39 - 175	107%	SPK: 500

Comments:

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

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS013125\
Data File : PS029035.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 01 Feb 2025 04:44
Operator : AR\AJ
Sample : Q1216-20
Misc :
ALS Vial : 26 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
JPP-26.2-012825

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 03 01:00:02 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 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	7.195	7.671	1482.8E6	392.5E6	532.625	351.740	#
	Target Compounds							

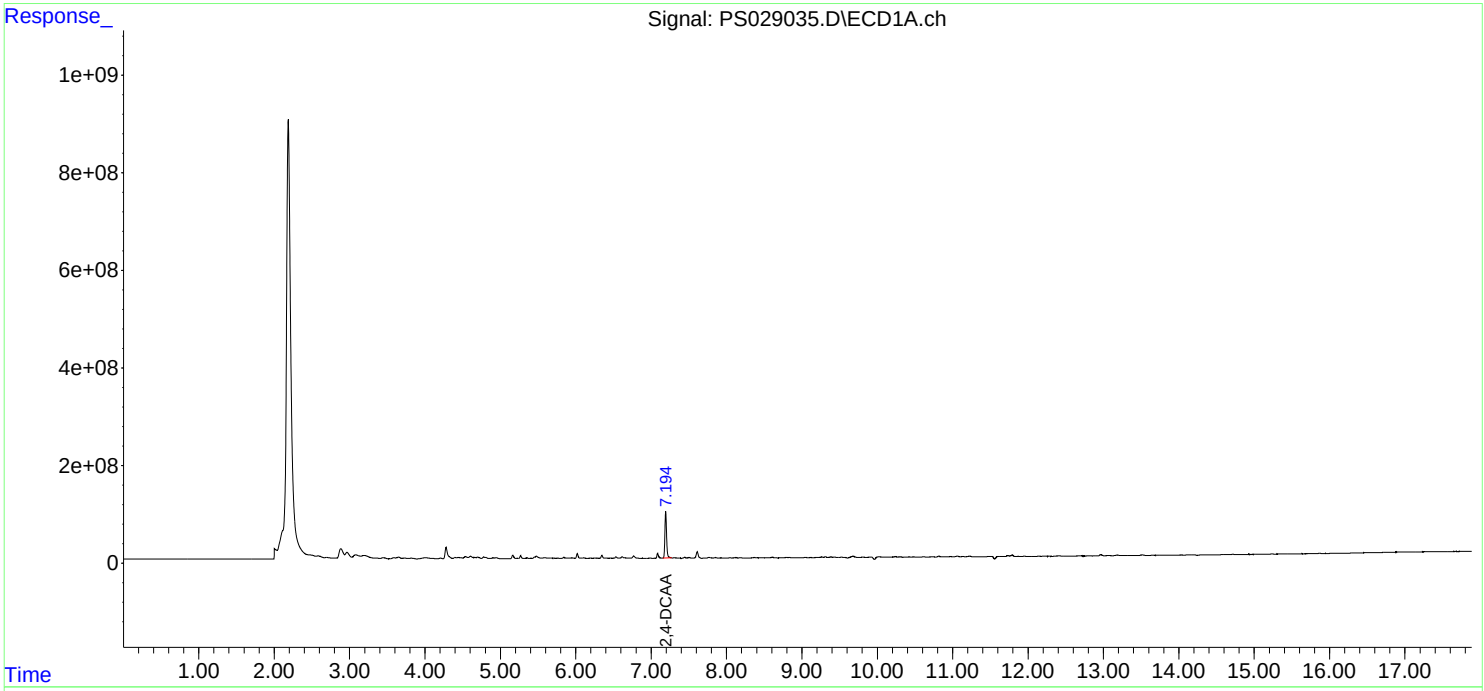
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

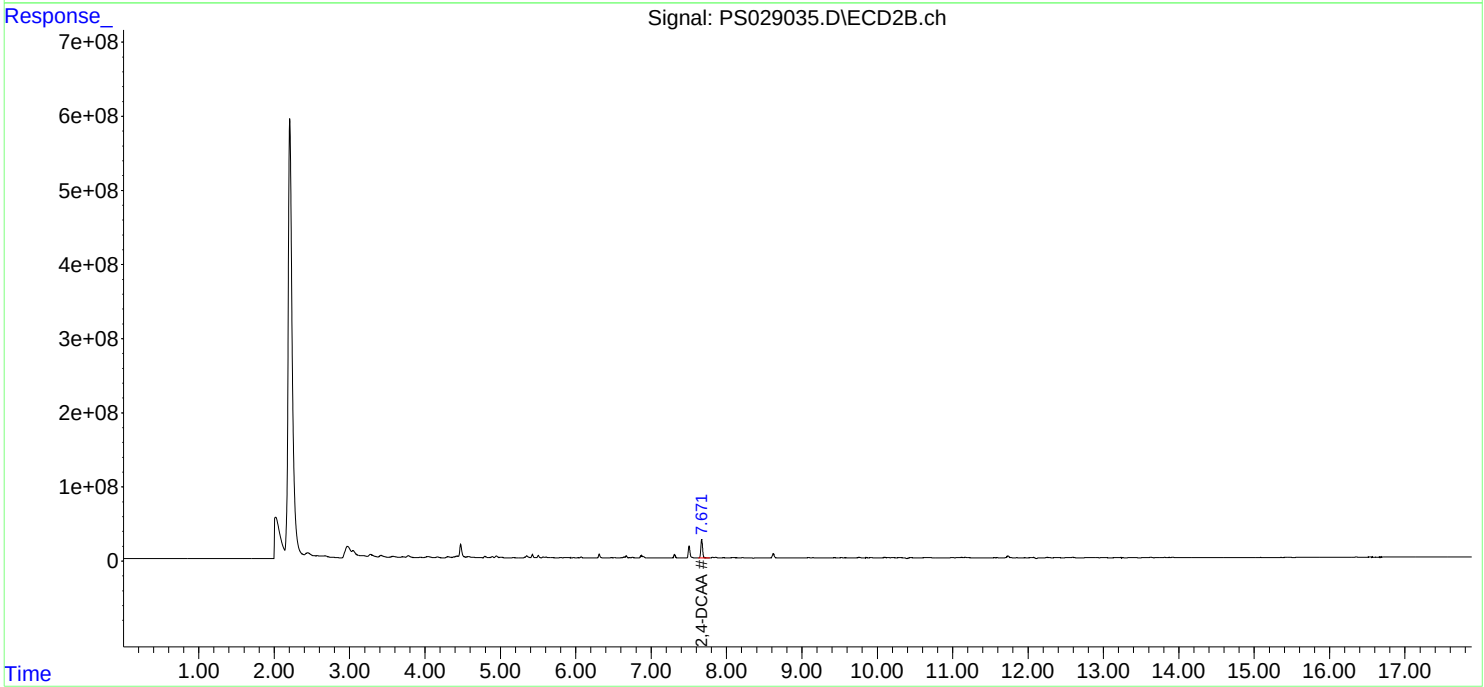
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS013125\
Data File : PS029035.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 01 Feb 2025 04:44
Operator : AR\AJ
Sample : Q1216-20
Misc :
ALS Vial : 26 Sample Multiplier: 1

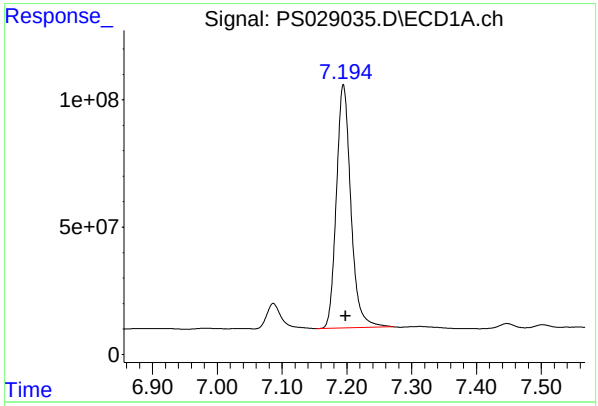
Instrument :
ECD_S
ClientSampleId :
JPP-26.2-012825

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 03 01:00:02 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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



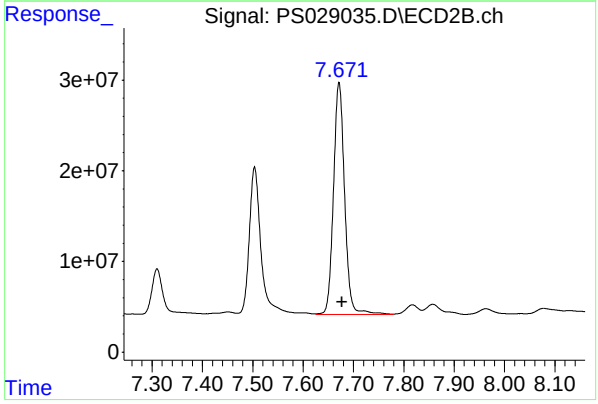




#4 2,4-DCAA

R.T.: 7.195 min
Delta R.T.: -0.003 min
Response: 1482835222
Conc: 532.63 ng/ml

Instrument :
ECD_S
ClientSampleId :
JPP-26.2-012825



#4 2,4-DCAA

R.T.: 7.671 min
Delta R.T.: -0.006 min
Response: 392475981
Conc: 351.74 ng/ml

CALIBRATION SUMMARY

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

RETENTION TIMES OF INITIAL CALIBRATION

Contract: RUTW01

Lab Code: CHEM **Case No.:** Q1216 **SAS No.:** Q1216 **SDG NO.:** Q1216

Instrument ID: ECD_S **Calibration Date(s):** 01/14/2025 01/14/2025

Calibration Times: 10:31 12:07

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

LAB FILE ID: RT 200 = PS028901.D RT 500 = PS028902.D

RT 750 = PS028903.D RT 1000 = PS028904.D RT 1500 = PS028905.D

COMPOUND	RT 200	RT 500	RT 750	RT 1000	RT 1500	MEAN RT	RT WINDOW FROM	RT WINDOW TO
2,4,5-TP(Silvex)	9.19	9.19	9.19	9.19	9.19	9.19	9.09	9.29
2,4-D	8.32	8.32	8.32	8.32	8.32	8.32	8.22	8.42
2,4-DCAA	7.20	7.20	7.20	7.20	7.20	7.20	7.10	7.30

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RETENTION TIMES OF INITIAL CALIBRATION

Contract: RUTW01

Lab Code: CHEM **Case No.:** Q1216 **SAS No.:** Q1216 **SDG NO.:** Q1216

Instrument ID: ECD_S **Calibration Date(s):** 01/14/2025 01/14/2025

Calibration Times: 10:31 12:07

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

LAB FILE ID: RT 200 = PS028901.D RT 500 = PS028902.D

RT 750 = PS028903.D RT 1000 = PS028904.D RT 1500 = PS028905.D

COMPOUND	RT 200	RT 500	RT 750	RT 1000	RT 1500	MEAN RT	RT WINDOW FROM	RT WINDOW TO
2,4,5-TP(Silvex)	9.81	9.81	9.81	9.81	9.81	9.81	9.71	9.91
2,4-D	8.92	8.91	8.91	8.91	8.91	8.91	8.81	9.01
2,4-DCAA	7.68	7.68	7.68	7.68	7.68	7.68	7.58	7.78

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

CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: RUTW01

Lab Code: CHEM **Case No.:** Q1216 **SAS No.:** Q1216 **SDG NO.:** Q1216

Instrument ID: ECD_S **Calibration Date(s):** 01/14/2025 01/14/2025

Calibration Times: 10:31 12:07

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

LAB FILE ID: CF 200 = PS028901.D CF 500 = PS028902.D

CF 750 = PS028903.D CF 1000 = PS028904.D CF 1500 = PS028905.D

COMPOUND	CF 200	CF 500	CF 750	CF 1000	CF 1500	CF	% RSD
2,4,5-TP(Silvex)	21246200000	19217800000	18444300000	17622300000	16707400000	18647600000	9
2,4-D	3794730000	3389210000	3238030000	3095840000	2967500000	3297060000	10
2,4-DCAA	3179220000	2766210000	2659700000	2530920000	2413760000	2709960000	11

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Fax : 908 789 8922

CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: RUTW01

Lab Code: CHEM **Case No.:** Q1216 **SAS No.:** Q1216 **SDG NO.:** Q1216

Instrument ID: ECD_S **Calibration Date(s):** 01/14/2025 01/14/2025

Calibration Times: 10:31 12:07

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

LAB FILE ID: **CF 200 =** PS028901.D **CF 500 =** PS028902.D

CF 750 = PS028903.D **CF 1000 =** PS028904.D **CF 1500 =** PS028905.D

COMPOUND	CF 200	CF 500	CF 750	CF 1000	CF 1500	CF	% RSD
2,4,5-TP(Silvex)	9615710000	9419870000	9409010000	9233020000	9015720000	9338670000	2
2,4-D	1602310000	1486700000	1468930000	1440130000	1429250000	1485460000	5
2,4-DCAA	1189550000	1103610000	1095350000	1074740000	1070080000	1106670000	4

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS011425\
Data File : PS028901.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Jan 2025 10:31
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: Jan 14 11:39:27 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 11:39:19 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	7.198	7.679	635.8E6	237.9E6	217.795	208.246
		Target Compounds						
1)	T	Dalapon	2.617	2.667	556.0E6	386.3E6	184.941	186.638
2)	T	3,5-DICHL...	6.375	6.644	837.5E6	324.0E6	201.140	192.113
3)	T	4-Nitroph...	6.997	7.209	352.0E6	174.3E6	192.726	190.729
5)	T	DICAMBA	7.383	7.875	2411.2E6	1035.2E6	197.792	185.939
6)	T	MCPP	7.561	7.975	110.1E6	54294236	16.847	18.257
7)	T	MCPA	7.709	8.216	180.7E6	79751056	18.378	18.719
8)	T	DICHLORPROP	8.087	8.587	684.7E6	277.9E6	206.038	193.740
9)	T	2,4-D	8.318	8.915	713.4E6	301.2E6	202.882	196.165
10)	T	Pentachlo...	8.613	9.438	10288.3E6	4528.0E6	203.718	192.995
11)	T	2,4,5-TP ...	9.189	9.814	4036.8E6	1827.0E6	203.413	192.064
12)	T	2,4,5-T	9.482	10.231	4028.8E6	1754.4E6	202.825	192.500
13)	T	2,4-DB	10.053	10.796	727.5E6	194.8E6	199.797	193.297
14)	T	DINOSEB	11.255	11.173	3520.9E6	1259.6E6	203.928	192.833
15)	T	Picloram	11.067	12.257	6433.5E6	2426.6E6	198.927	182.722
16)	T	DCPA	11.550	12.211	6140.1E6	2196.1E6	206.127	192.334

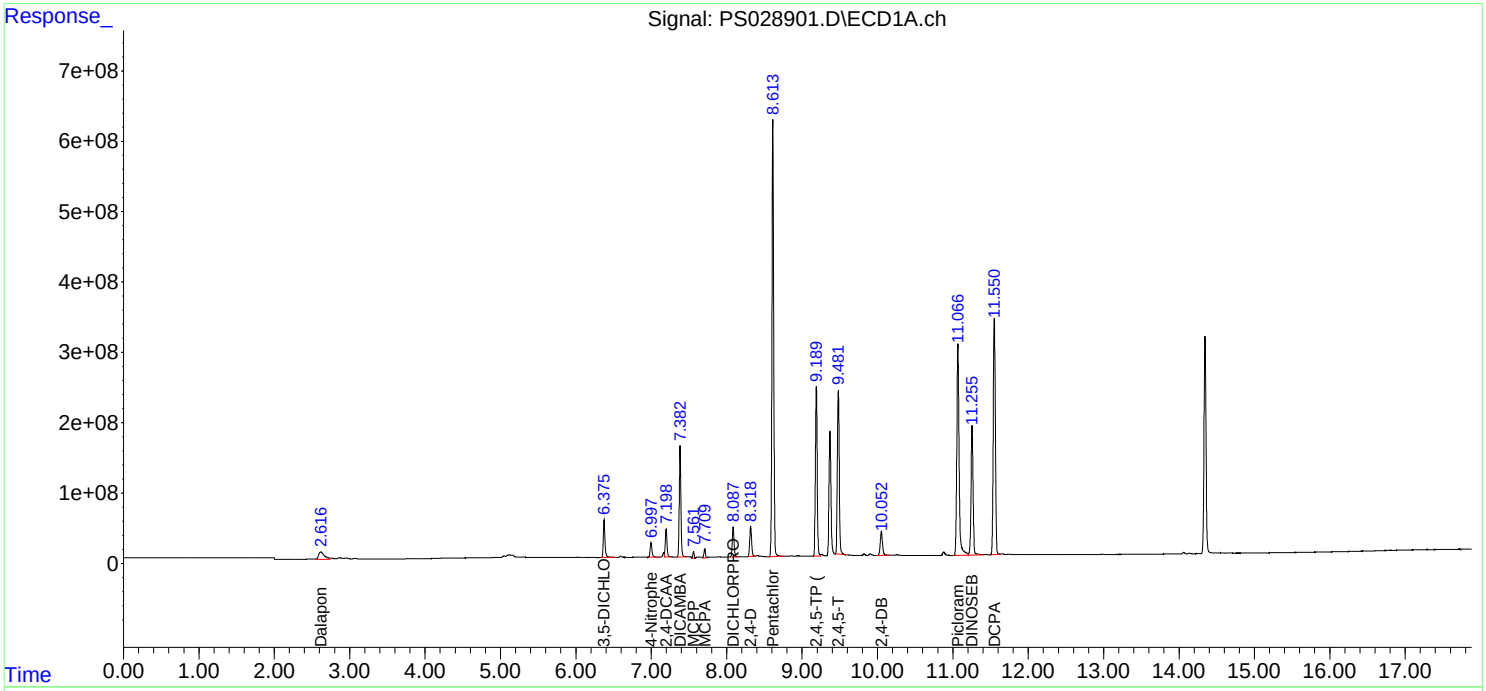
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

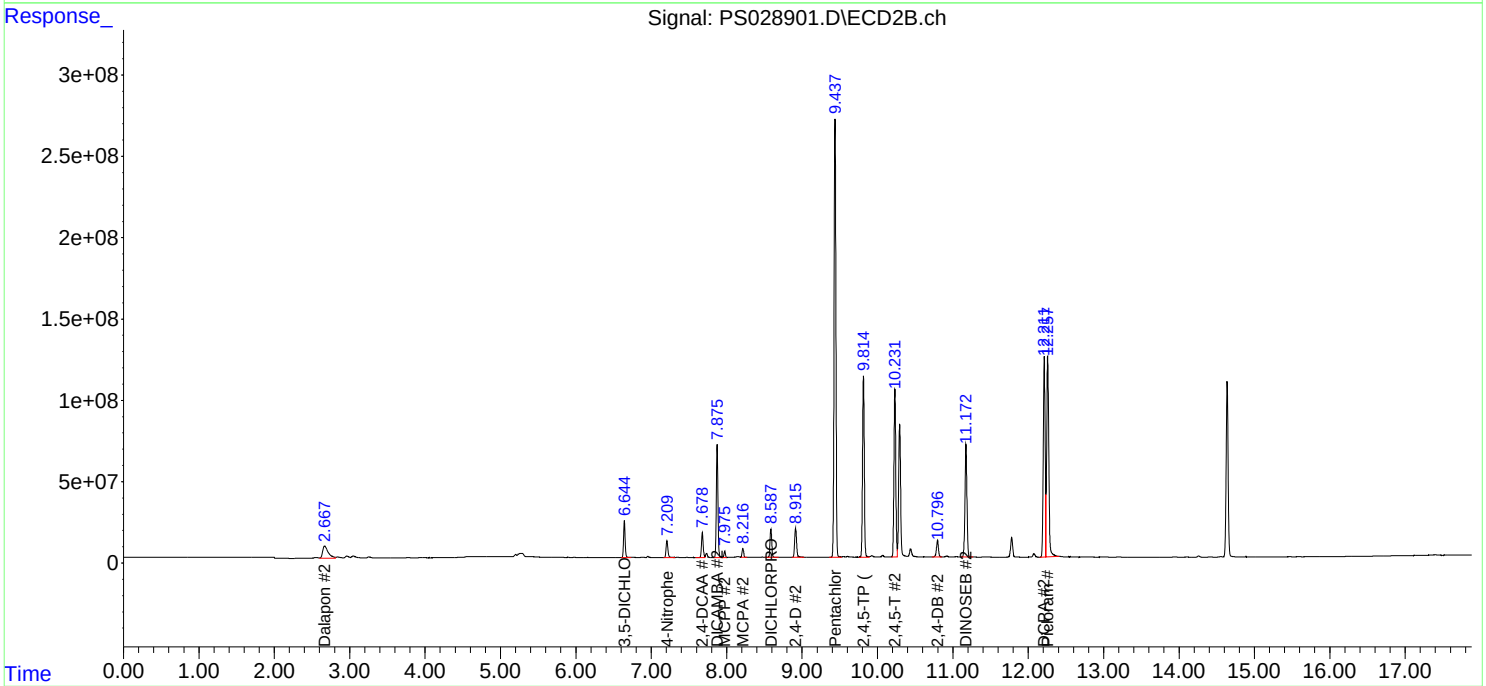
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS011425\
Data File : PS028901.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Jan 2025 10:31
Operator : AR\AJ
Sample : HSTDICC200
Misc :
ALS Vial : 3 Sample Multiplier: 1

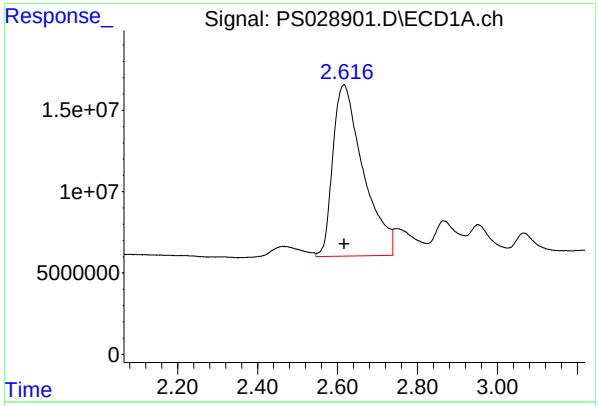
Instrument :
ECD_S
ClientSampleId :
HSTDICC200

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 14 11:39:27 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 11:39:19 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



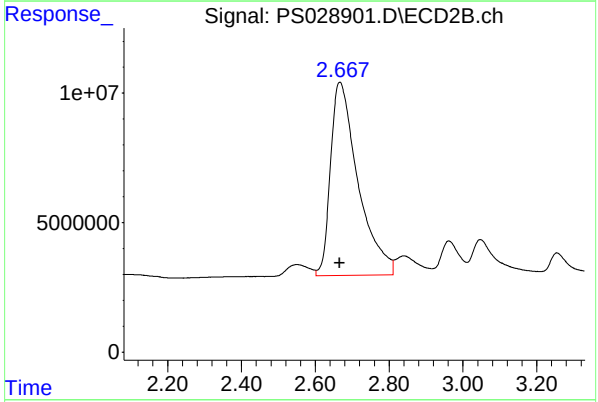




#1 Dalapon

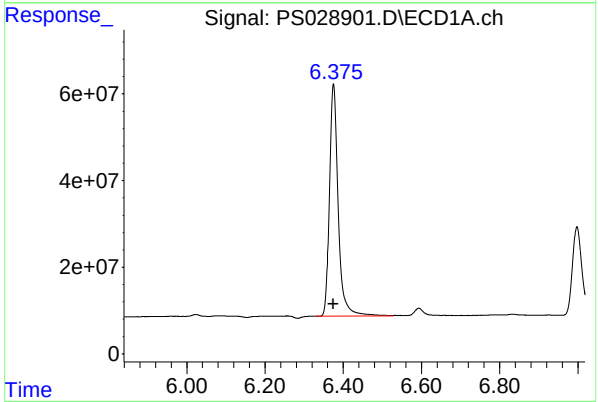
R.T.: 2.617 min
Delta R.T.: 0.000 mi
Response: 555991432
Conc: 184.94 ng/m

Instrument :
ECD_S
ClientSampleId :
HSTDICC200



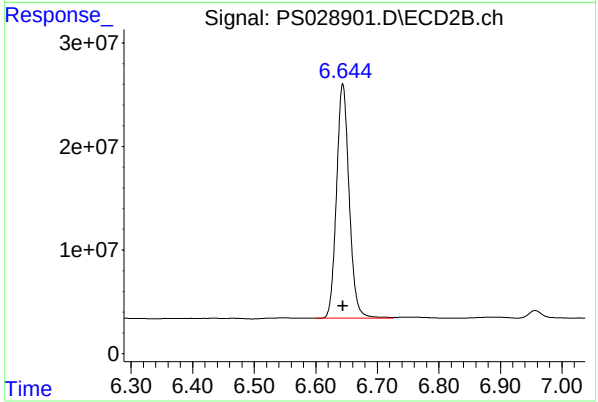
#1 Dalapon

R.T.: 2.667 min
Delta R.T.: 0.000 min
Response: 386313856
Conc: 186.64 ng/ml



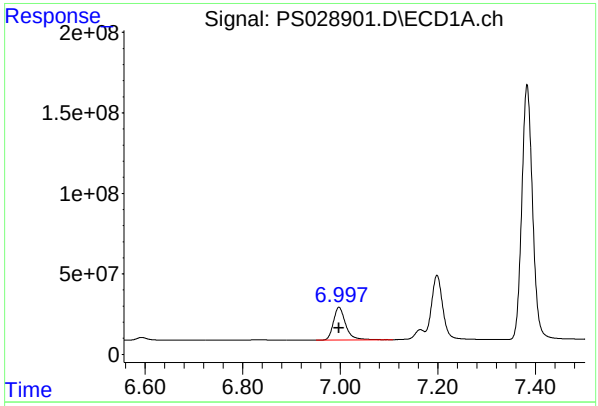
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.375 min
Delta R.T.: 0.000 min
Response: 837542116
Conc: 201.14 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

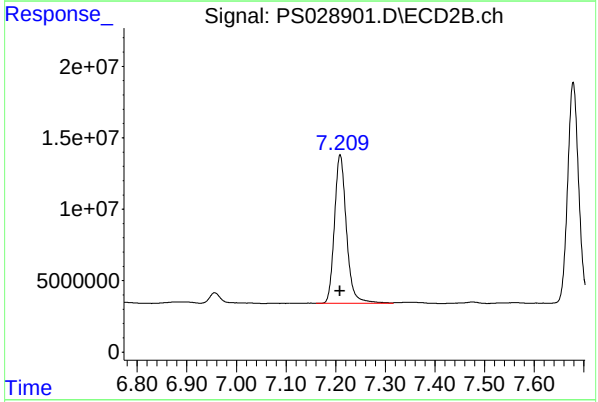
R.T.: 6.644 min
Delta R.T.: 0.000 min
Response: 323964765
Conc: 192.11 ng/ml



#3 4-Nitrophenol

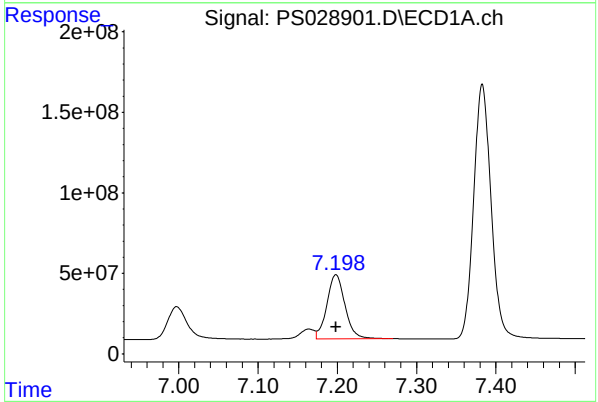
R.T.: 6.997 min
Delta R.T.: 0.000 min
Response: 352019894
Conc: 192.73 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC200



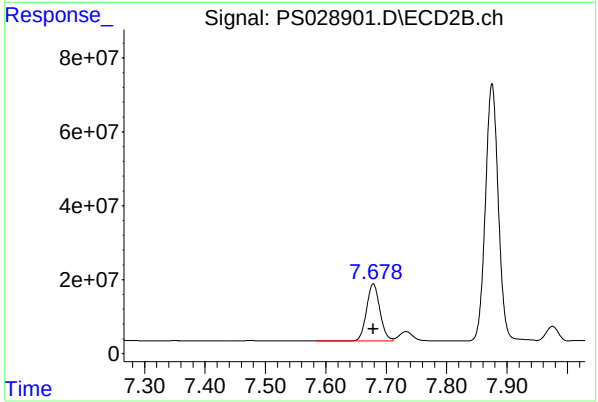
#3 4-Nitrophenol

R.T.: 7.209 min
Delta R.T.: 0.000 min
Response: 174316954
Conc: 190.73 ng/ml



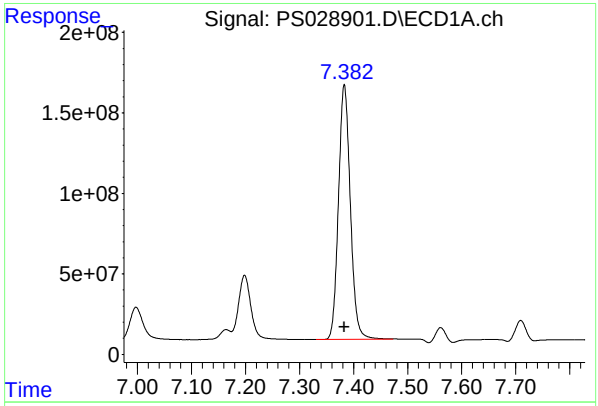
#4 2,4-DCAA

R.T.: 7.198 min
Delta R.T.: 0.000 min
Response: 635843662
Conc: 217.79 ng/ml



#4 2,4-DCAA

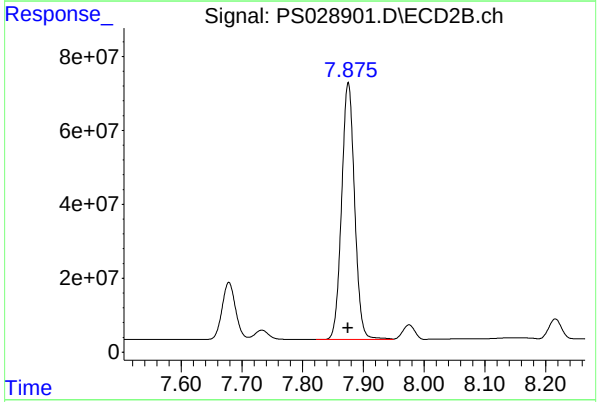
R.T.: 7.679 min
Delta R.T.: 0.000 min
Response: 237909654
Conc: 208.25 ng/ml



#5 DICAMBA

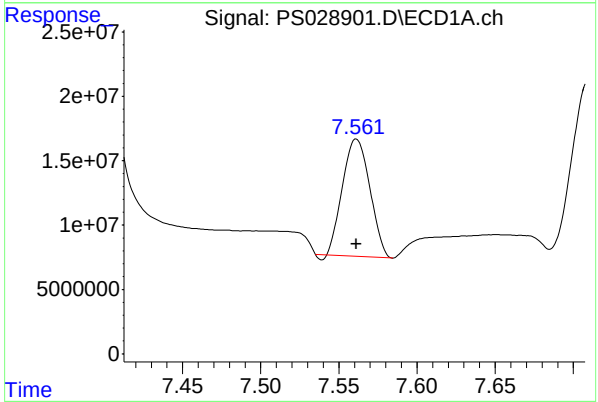
R.T.: 7.383 min
Delta R.T.: 0.000 min
Response: 2411181004
Conc: 197.79 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC200



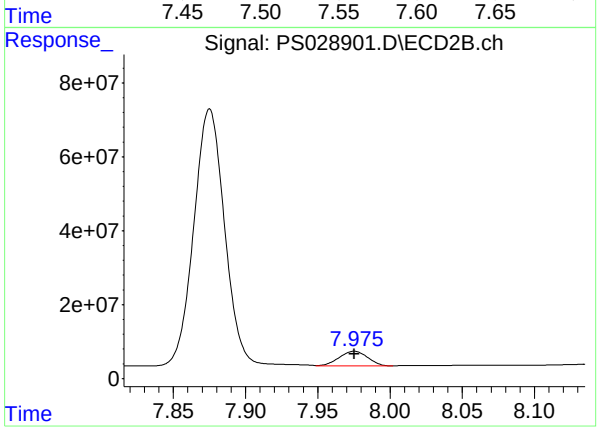
#5 DICAMBA

R.T.: 7.875 min
Delta R.T.: 0.000 min
Response: 1035181205
Conc: 185.94 ng/ml



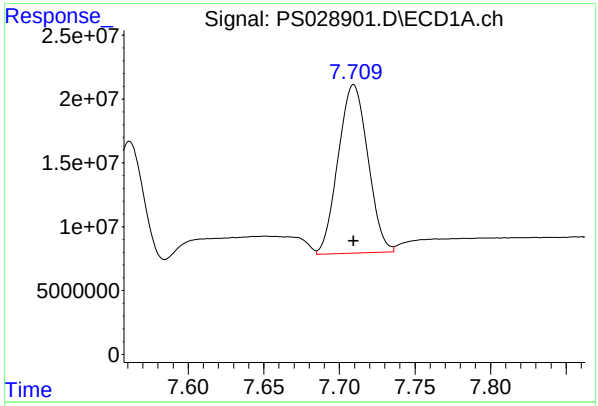
#6 MCPP

R.T.: 7.561 min
Delta R.T.: 0.000 min
Response: 110118735
Conc: 16.85 ug/ml



#6 MCPP

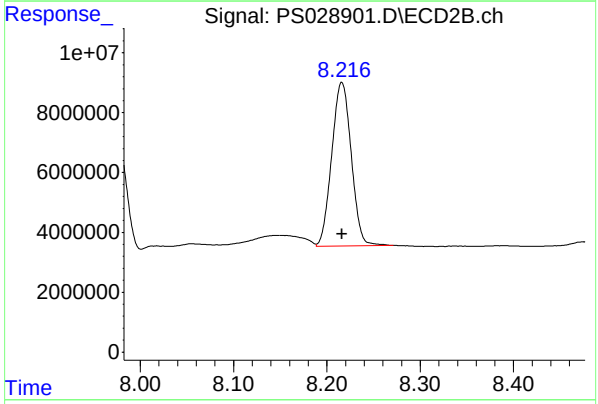
R.T.: 7.975 min
Delta R.T.: 0.000 min
Response: 54294236
Conc: 18.26 ug/ml



#7 MCPA

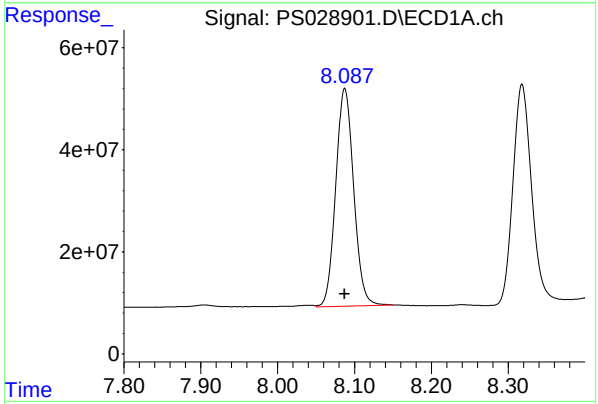
R.T.: 7.709 min
Delta R.T.: 0.000 min
Response: 180716111
Conc: 18.38 ug/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC200



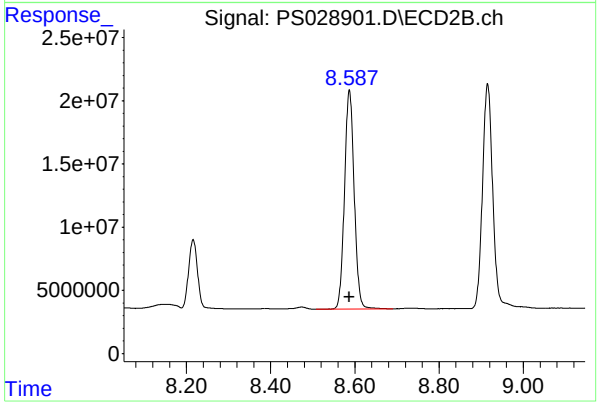
#7 MCPA

R.T.: 8.216 min
Delta R.T.: 0.000 min
Response: 79751056
Conc: 18.72 ug/ml



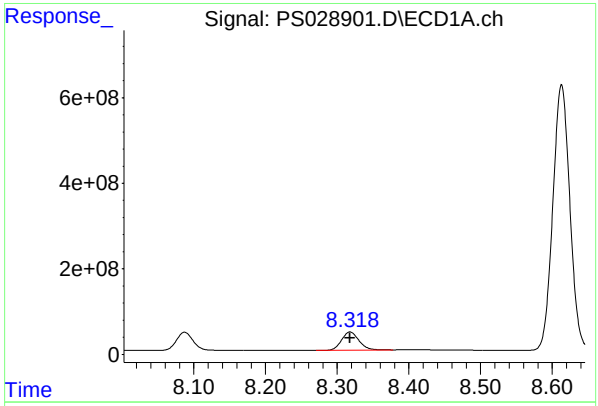
#8 DICHLORPROP

R.T.: 8.087 min
Delta R.T.: 0.000 min
Response: 684683212
Conc: 206.04 ng/ml



#8 DICHLORPROP

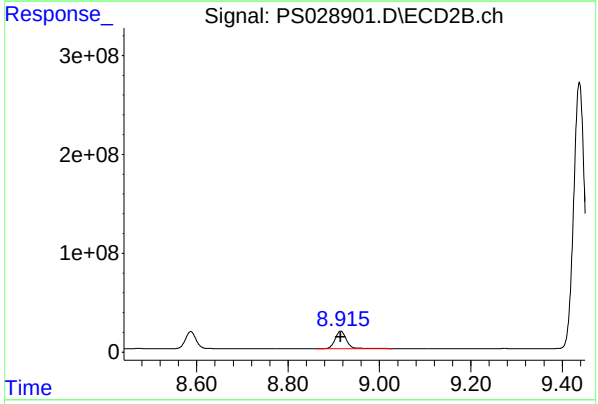
R.T.: 8.587 min
Delta R.T.: 0.000 min
Response: 277889937
Conc: 193.74 ng/ml



#9 2,4-D

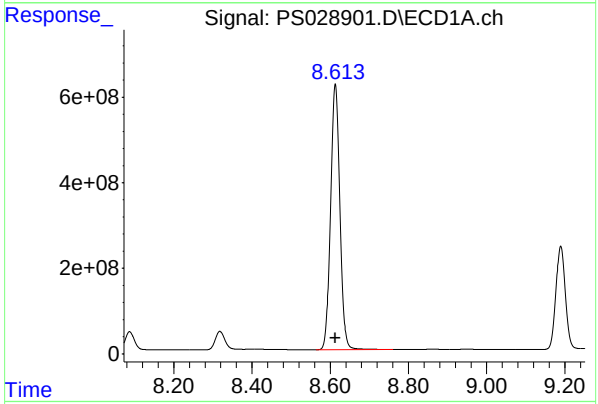
R.T.: 8.318 min
Delta R.T.: 0.000 min
Response: 713408528
Conc: 202.88 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC200



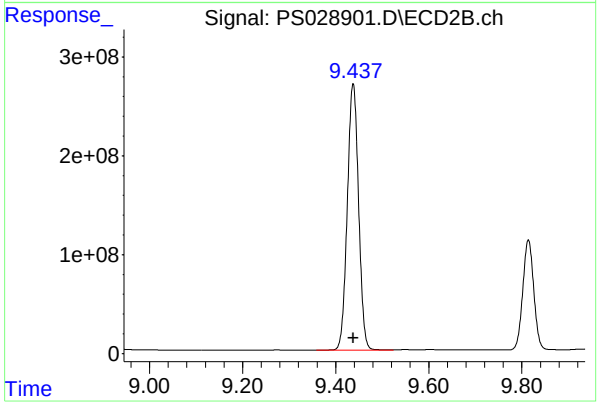
#9 2,4-D

R.T.: 8.915 min
Delta R.T.: 0.000 min
Response: 301234806
Conc: 196.16 ng/ml



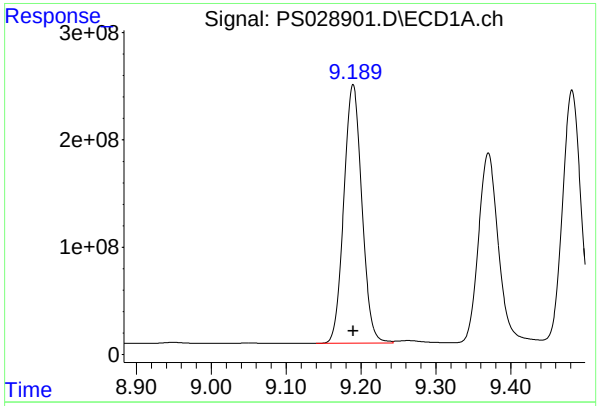
#10 Pentachlorophenol

R.T.: 8.613 min
Delta R.T.: 0.000 min
Response: 10288346428
Conc: 203.72 ng/ml



#10 Pentachlorophenol

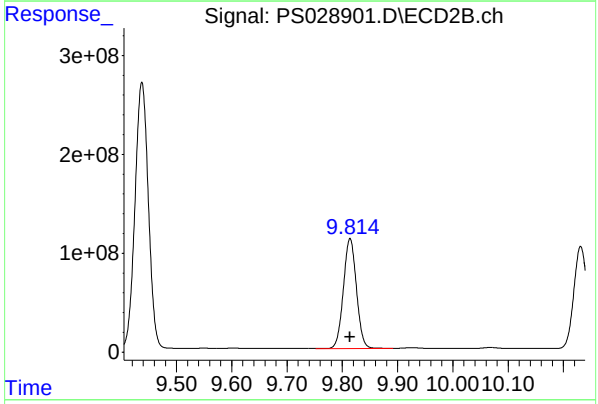
R.T.: 9.438 min
Delta R.T.: 0.000 min
Response: 4528045122
Conc: 193.00 ng/ml



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

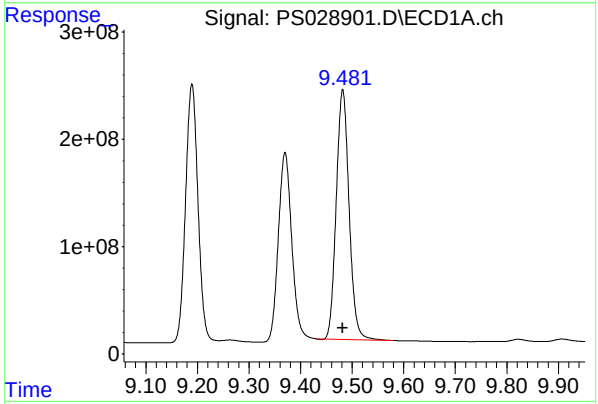
R.T.: 9.189 min
Delta R.T.: 0.000 min
Response: 4036785566
Conc: 203.41 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC200



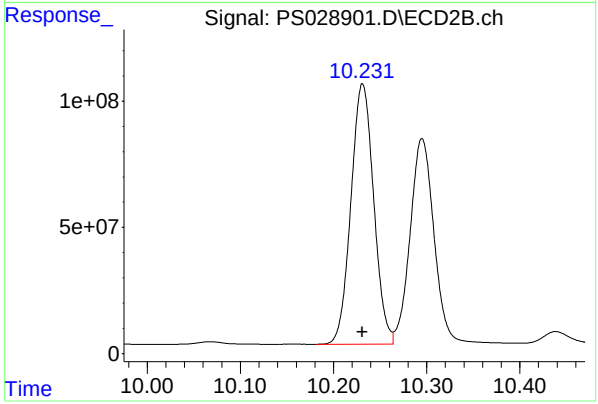
#11 2,4,5-TP (SILVEX)

R.T.: 9.814 min
Delta R.T.: 0.000 min
Response: 1826984311
Conc: 192.06 ng/ml



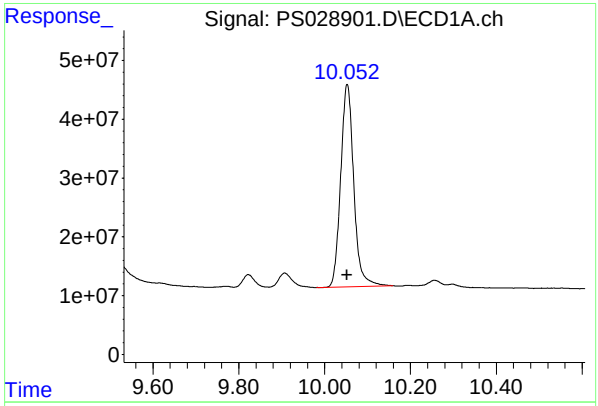
#12 2,4,5-T

R.T.: 9.482 min
Delta R.T.: 0.000 min
Response: 4028786566
Conc: 202.83 ng/ml



#12 2,4,5-T

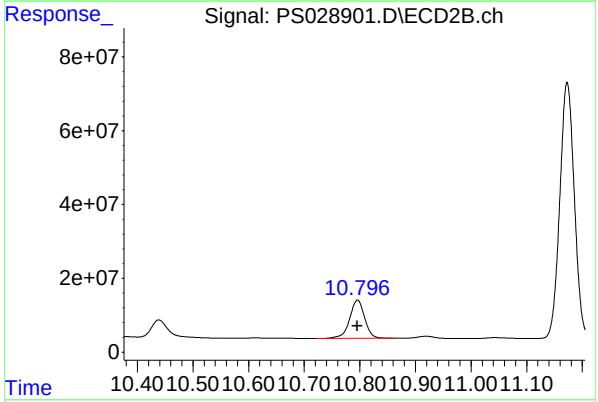
R.T.: 10.231 min
Delta R.T.: 0.000 min
Response: 1754365931
Conc: 192.50 ng/ml



#13 2,4-DB

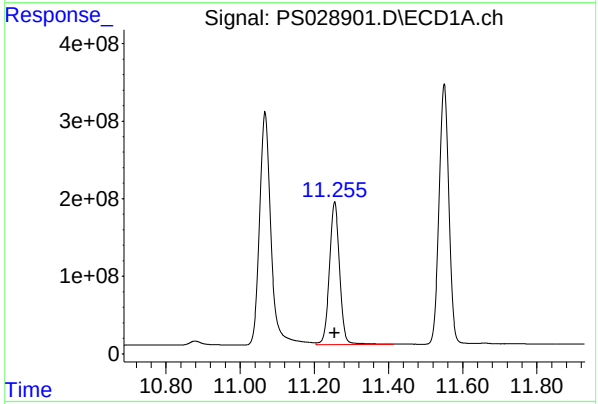
R.T.: 10.053 min
Delta R.T.: 0.000 min
Response: 727478115
Conc: 199.80 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC200



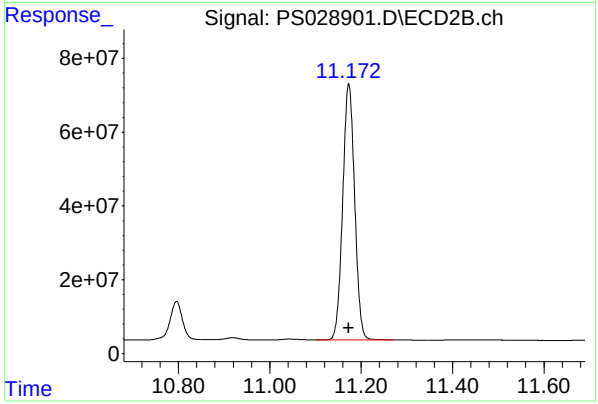
#13 2,4-DB

R.T.: 10.796 min
Delta R.T.: 0.000 min
Response: 194762268
Conc: 193.30 ng/ml



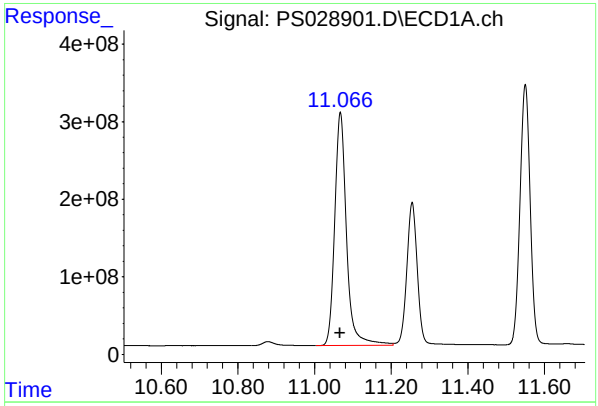
#14 DINOSEB

R.T.: 11.255 min
Delta R.T.: 0.000 min
Response: 3520935983
Conc: 203.93 ng/ml



#14 DINOSEB

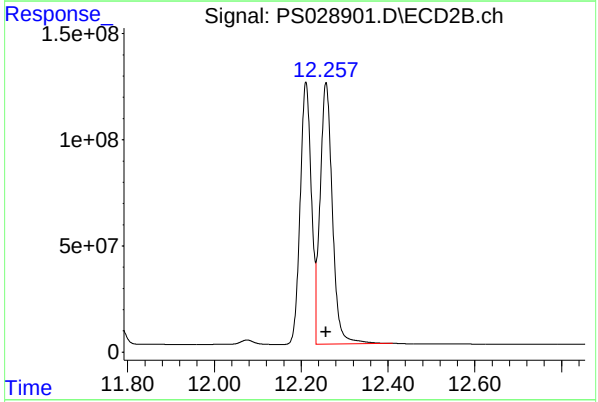
R.T.: 11.173 min
Delta R.T.: 0.000 min
Response: 1259565479
Conc: 192.83 ng/ml



#15 Picloram

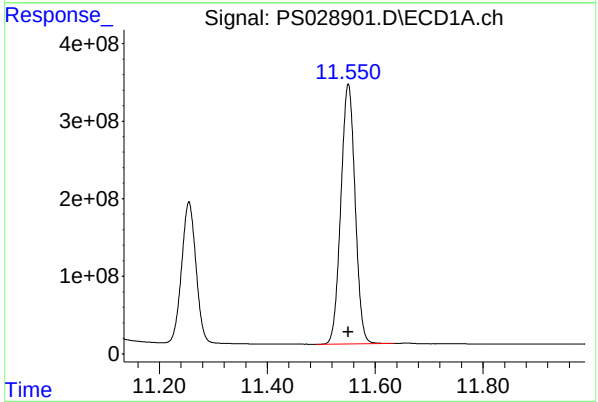
R.T.: 11.067 min
Delta R.T.: 0.000 min
Response: 6433530937
Conc: 198.93 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC200



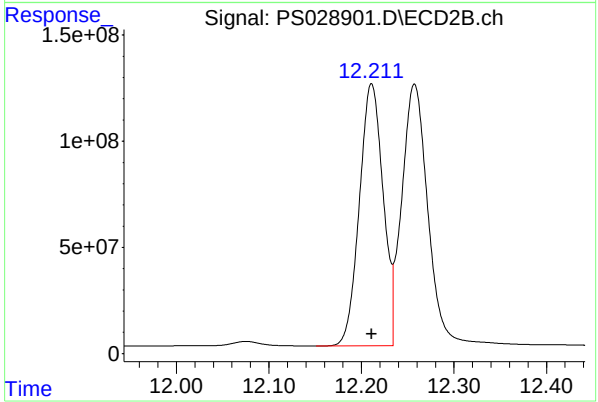
#15 Picloram

R.T.: 12.257 min
Delta R.T.: 0.000 min
Response: 2426591167
Conc: 182.72 ng/ml



#16 DCPA

R.T.: 11.550 min
Delta R.T.: 0.000 min
Response: 6140119080
Conc: 206.13 ng/ml



#16 DCPA

R.T.: 12.211 min
Delta R.T.: 0.000 min
Response: 2196117913
Conc: 192.33 ng/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS011425\
Data File : PS028902.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Jan 2025 10:55
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: Jan 14 11:42:16 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 11:42:04 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 0.25µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
	System Monitoring Compounds						
4) S	2,4-DCAA	7.198	7.678	1383.1E6	551.8E6	482.190	488.540
	Target Compounds						
1) T	Dalapon	2.616	2.669	1356.2E6	921.3E6	452.399	448.343
2) T	3,5-DICHL...	6.375	6.643	1853.9E6	763.6E6	451.633	456.823
3) T	4-Nitroph...	6.996	7.207	802.6E6	399.5E6	444.483	442.929
5) T	DICAMBA	7.383	7.874	5578.8E6	2603.0E6	461.683	468.364
6) T	MCPP	7.563	7.977	325.0E6	141.9E6	48.778	47.471
7) T	MCPA	7.712	8.218	456.4E6	195.8E6	46.443	46.130
8) T	DICHLORPROP	8.087	8.586	1480.7E6	653.3E6	453.438	460.215
9) T	2,4-D	8.316	8.913	1592.9E6	698.8E6	458.530	459.912
10) T	Pentachlo...	8.613	9.436	23342.5E6	11116.8E6	466.389	474.216
11) T	2,4,5-TP ...	9.188	9.813	9128.5E6	4474.4E6	464.881	471.911
12) T	2,4,5-T	9.479	10.230	9171.2E6	4277.0E6	466.059	471.184
13) T	2,4-DB	10.049	10.794	1686.6E6	467.9E6	467.082	467.889
14) T	DINOSEB	11.253	11.172	7785.5E6	3019.8E6	457.109	464.855
15) T	Picloram	11.064	12.255	15027.1E6	6370.9E6	468.044	478.143
16) T	DCPA	11.548	12.210	13845.9E6	5457.5E6	469.769	478.637

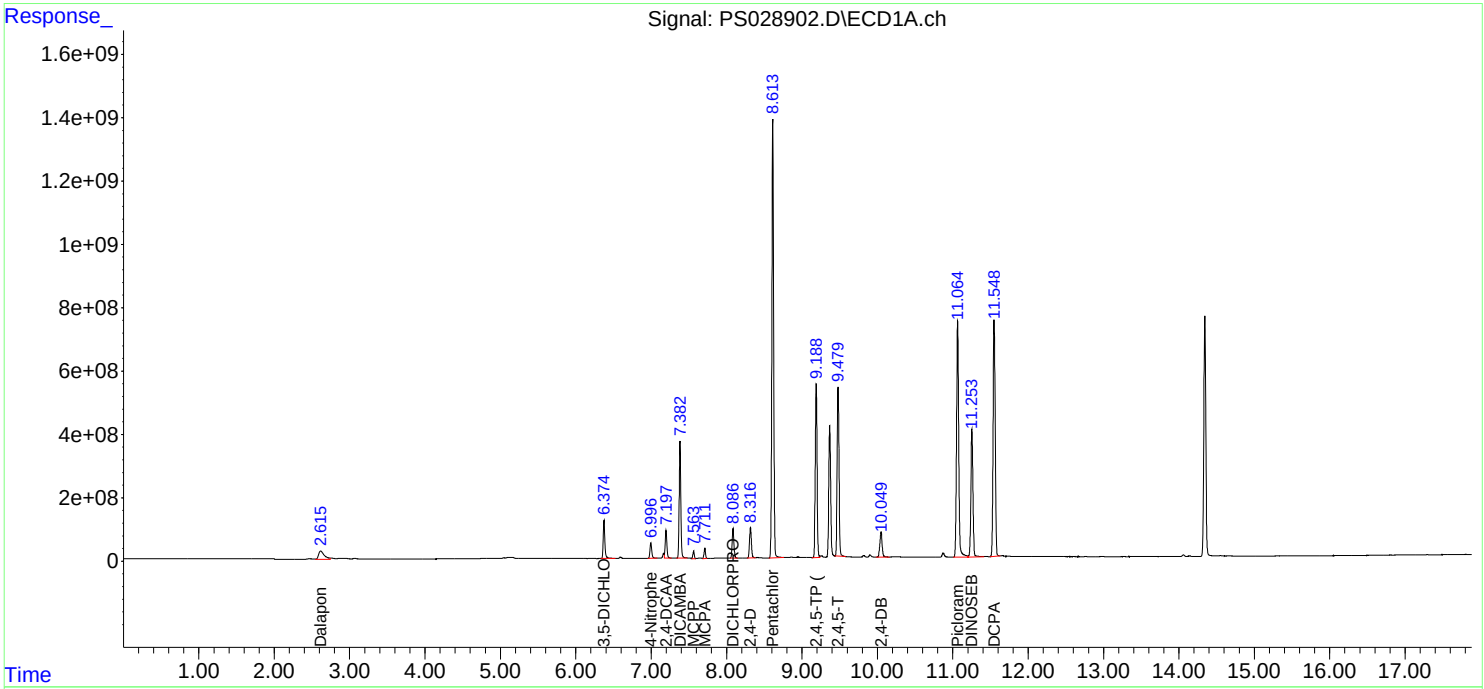
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

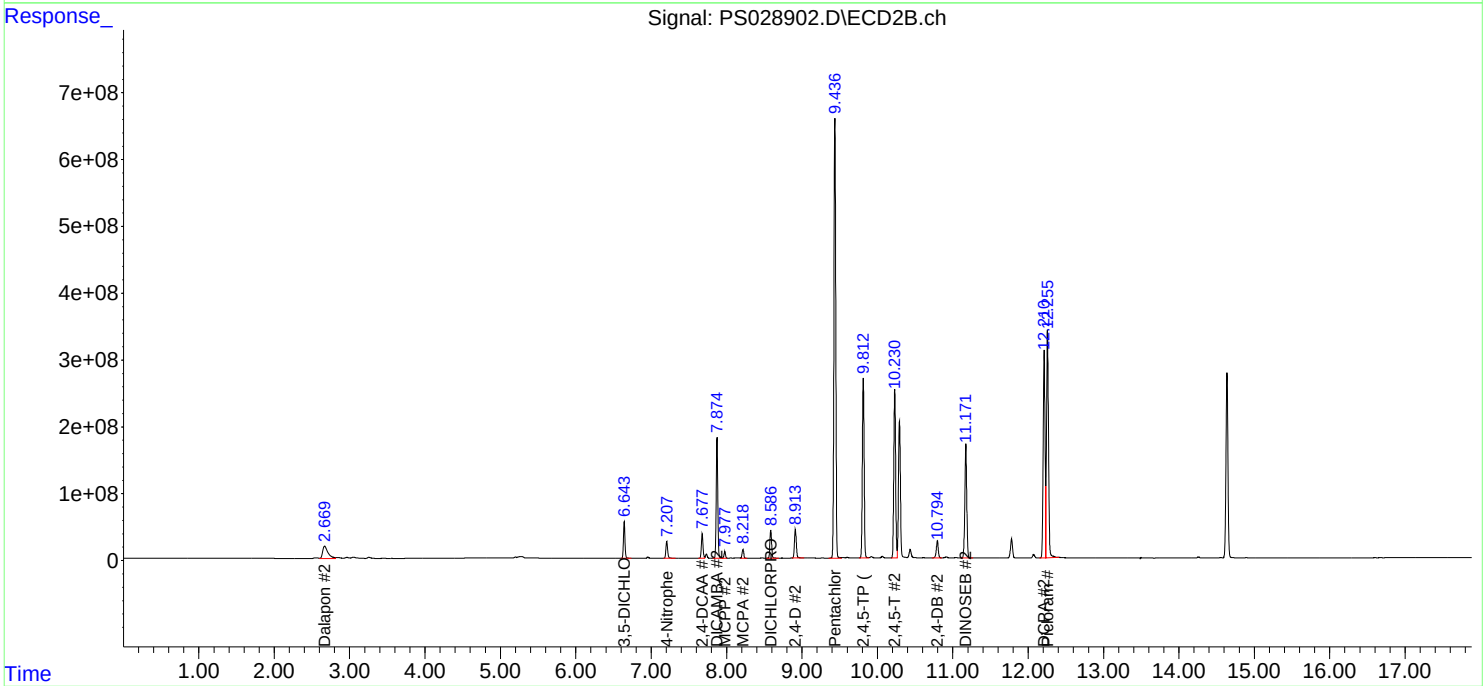
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS011425\
Data File : PS028902.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Jan 2025 10:55
Operator : AR\AJ
Sample : HSTDICC500
Misc :
ALS Vial : 4 Sample Multiplier: 1

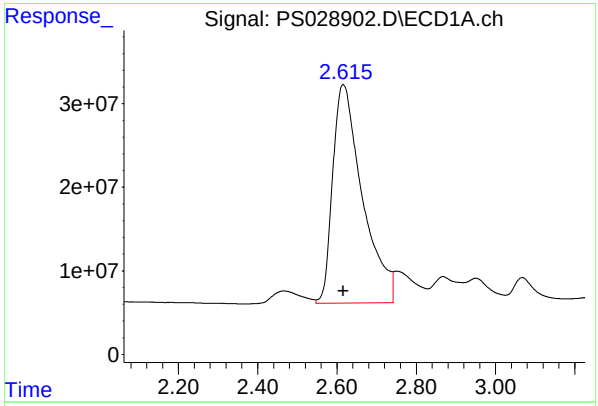
Instrument :
ECD_S
ClientSampleId :
HSTDICC500

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 14 11:42:16 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 11:42:04 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



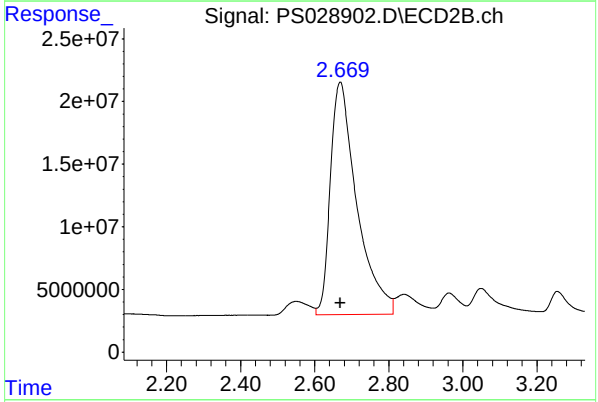




#1 Dalapon

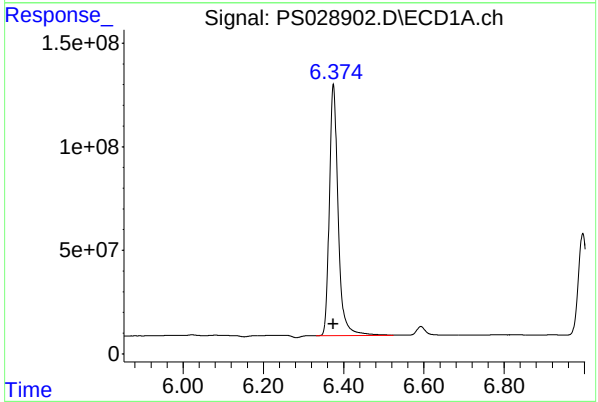
R.T.: 2.616 min
Delta R.T.: 0.000 min
Response: 1356183583
Conc: 452.40 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC500



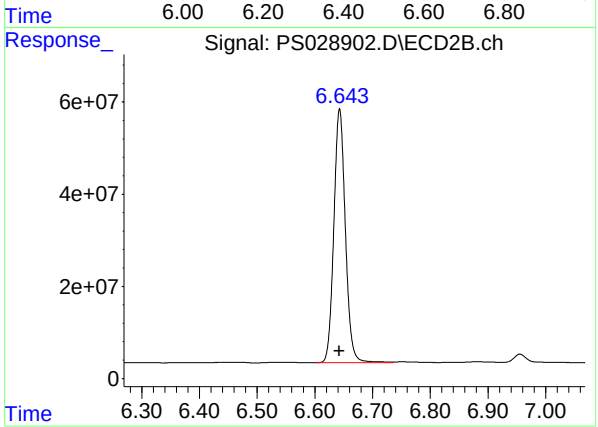
#1 Dalapon

R.T.: 2.669 min
Delta R.T.: 0.000 min
Response: 921269038
Conc: 448.34 ng/ml



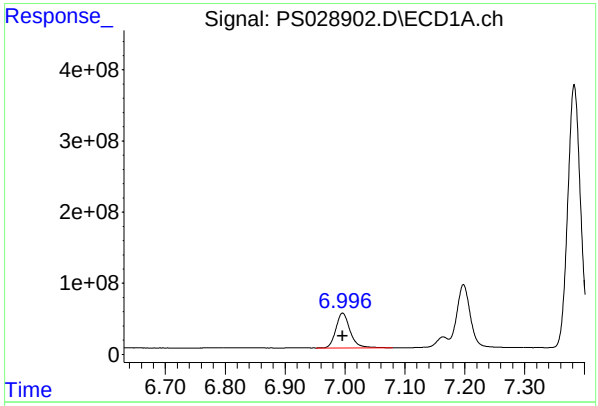
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.375 min
Delta R.T.: 0.000 min
Response: 1853941228
Conc: 451.63 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

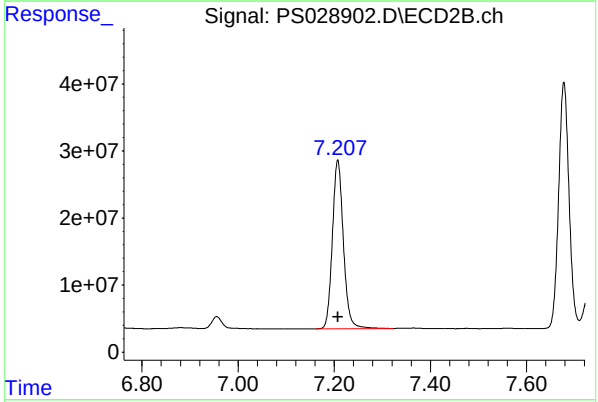
R.T.: 6.643 min
Delta R.T.: 0.000 min
Response: 763637203
Conc: 456.82 ng/ml



#3 4-Nitrophenol

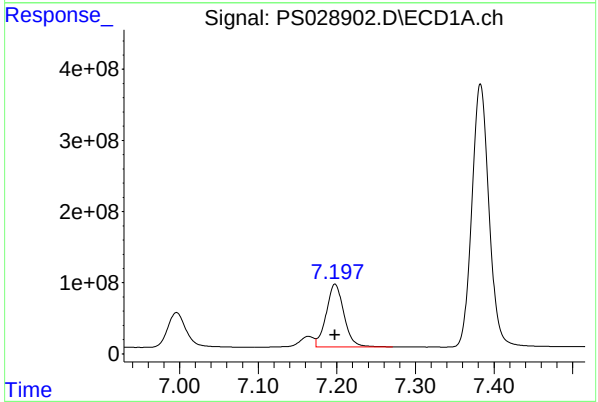
R.T.: 6.996 min
Delta R.T.: 0.000 min
Response: 802588060
Conc: 444.48 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC500



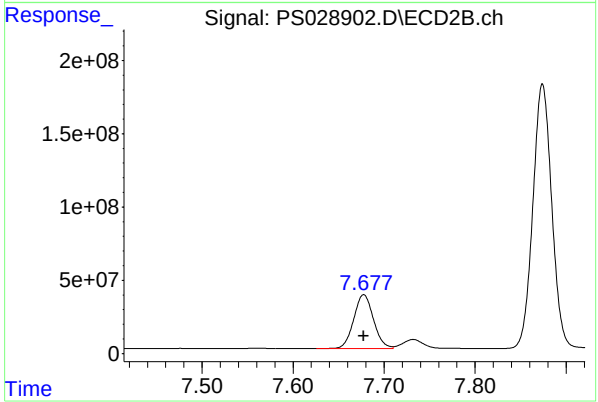
#3 4-Nitrophenol

R.T.: 7.207 min
Delta R.T.: 0.000 min
Response: 399515001
Conc: 442.93 ng/ml



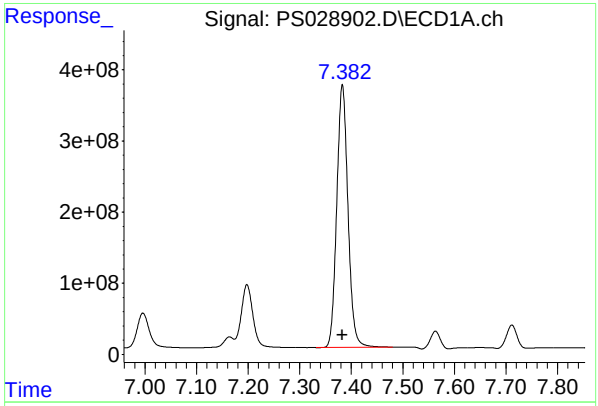
#4 2,4-DCAA

R.T.: 7.198 min
Delta R.T.: 0.000 min
Response: 1383102910
Conc: 482.19 ng/ml



#4 2,4-DCAA

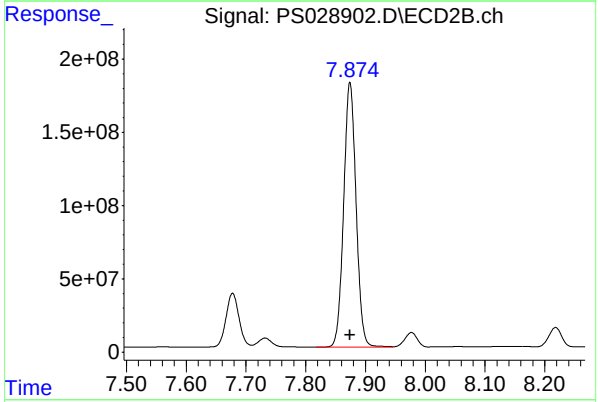
R.T.: 7.678 min
Delta R.T.: 0.000 min
Response: 551807225
Conc: 488.54 ng/ml



#5 DICAMBA

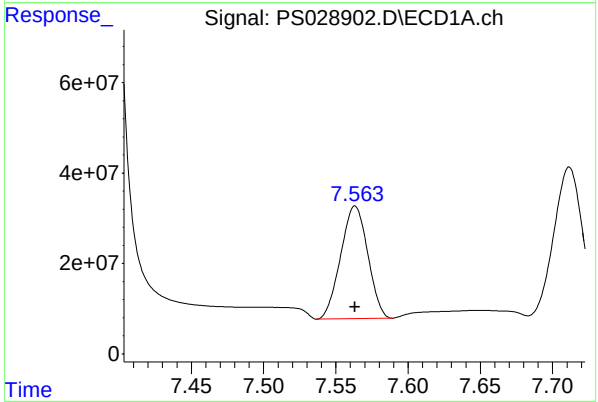
R.T.: 7.383 min
Delta R.T.: 0.000 min
Response: 5578793060
Conc: 461.68 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC500



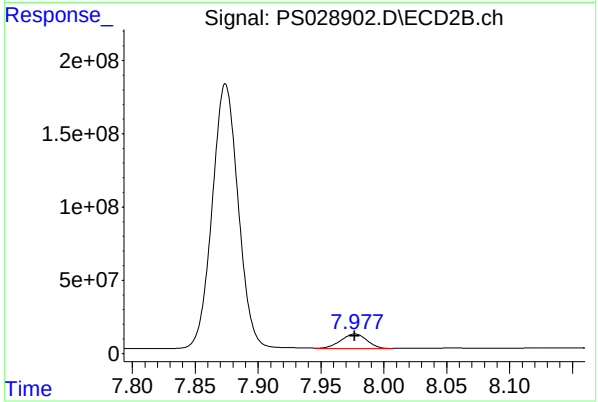
#5 DICAMBA

R.T.: 7.874 min
Delta R.T.: 0.000 min
Response: 2603003047
Conc: 468.36 ng/ml



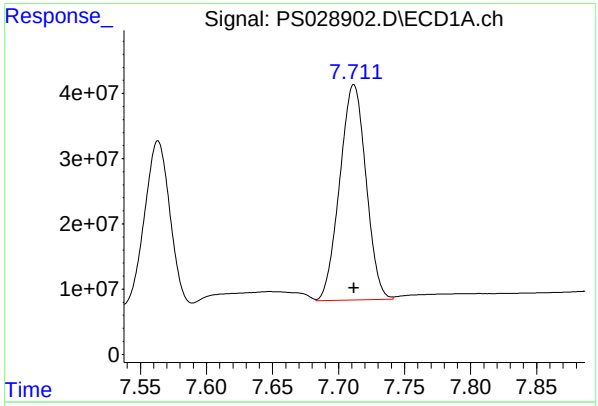
#6 MCPP

R.T.: 7.563 min
Delta R.T.: 0.000 min
Response: 324983021
Conc: 48.78 ug/ml



#6 MCPP

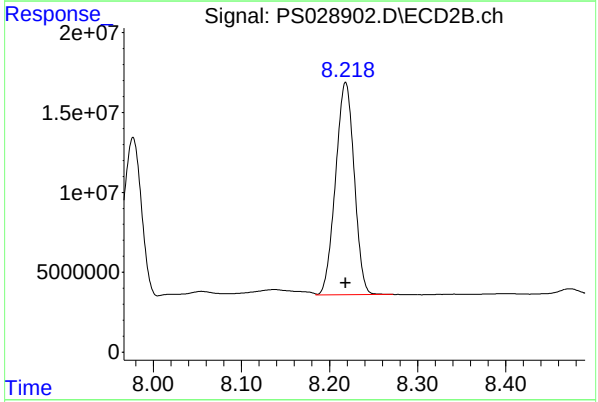
R.T.: 7.977 min
Delta R.T.: 0.000 min
Response: 141886506
Conc: 47.47 ug/ml



#7 MCPA

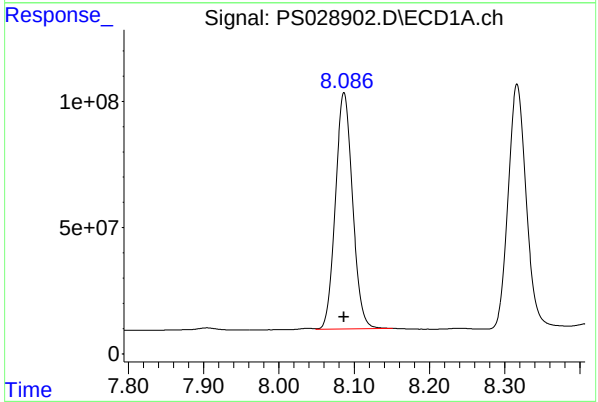
R.T.: 7.712 min
Delta R.T.: 0.000 min
Response: 456415243
Conc: 46.44 ug/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC500



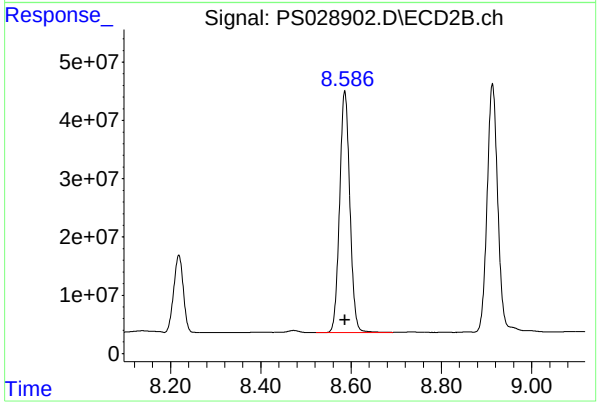
#7 MCPA

R.T.: 8.218 min
Delta R.T.: 0.000 min
Response: 195751789
Conc: 46.13 ug/ml



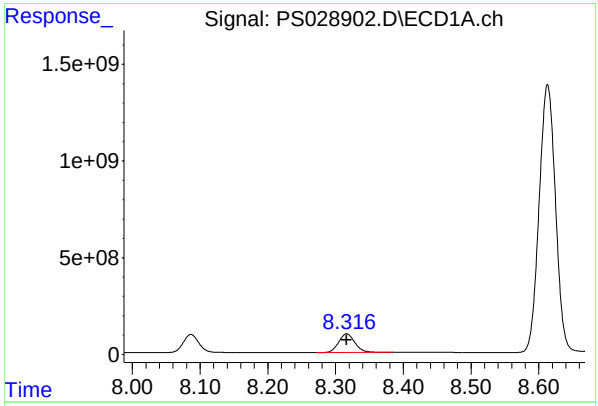
#8 DICHLORPROP

R.T.: 8.087 min
Delta R.T.: 0.000 min
Response: 1480729748
Conc: 453.44 ng/ml



#8 DICHLORPROP

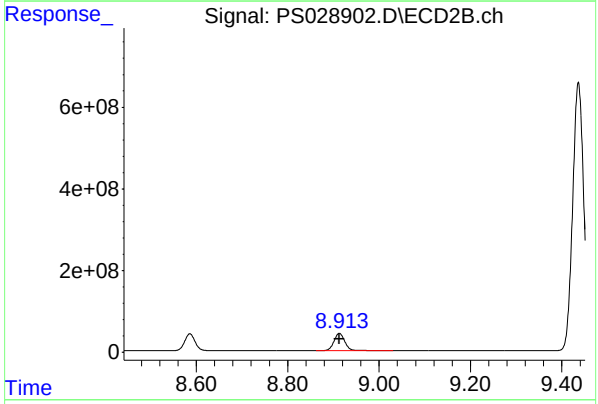
R.T.: 8.586 min
Delta R.T.: 0.000 min
Response: 653308254
Conc: 460.22 ng/ml



#9 2,4-D

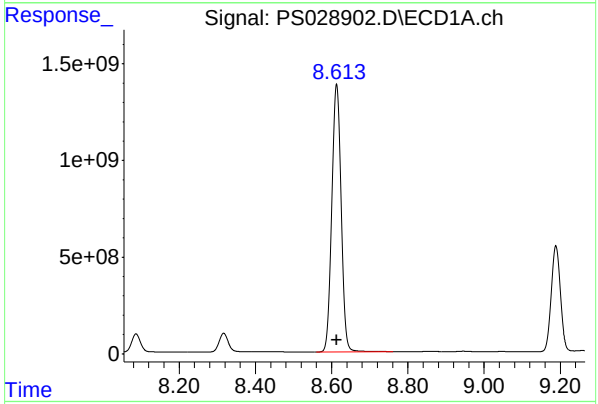
R.T.: 8.316 min
Delta R.T.: 0.000 min
Response: 1592927104
Conc: 458.53 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC500



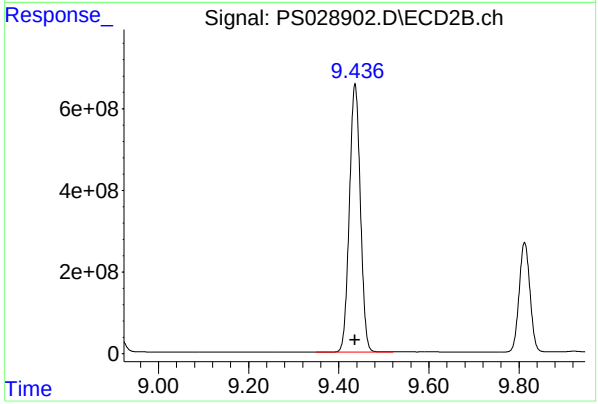
#9 2,4-D

R.T.: 8.913 min
Delta R.T.: 0.000 min
Response: 698750865
Conc: 459.91 ng/ml



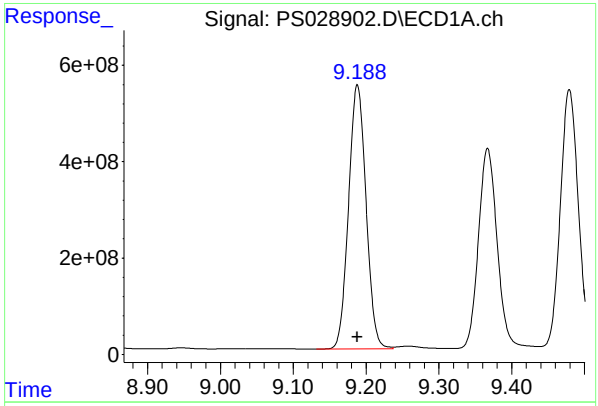
#10 Pentachlorophenol

R.T.: 8.613 min
Delta R.T.: 0.000 min
Response: 23342479435
Conc: 466.39 ng/ml



#10 Pentachlorophenol

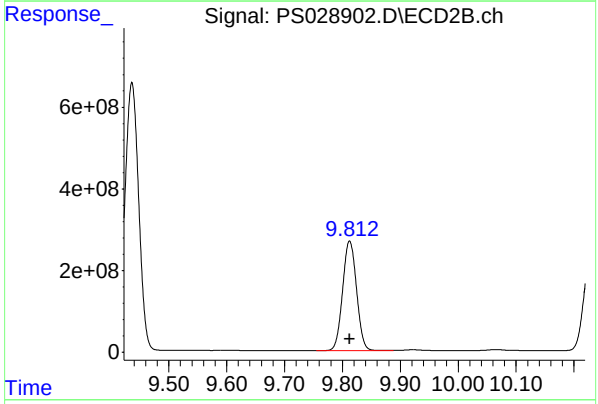
R.T.: 9.436 min
Delta R.T.: 0.000 min
Response: 11116848551
Conc: 474.22 ng/ml



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

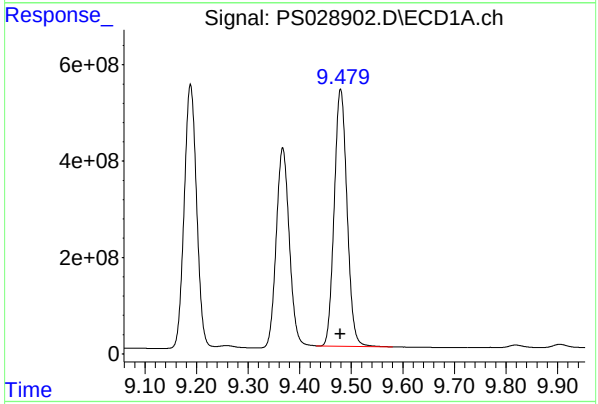
R.T.: 9.188 min
Delta R.T.: 0.000 min
Response: 9128474142
Conc: 464.88 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC500



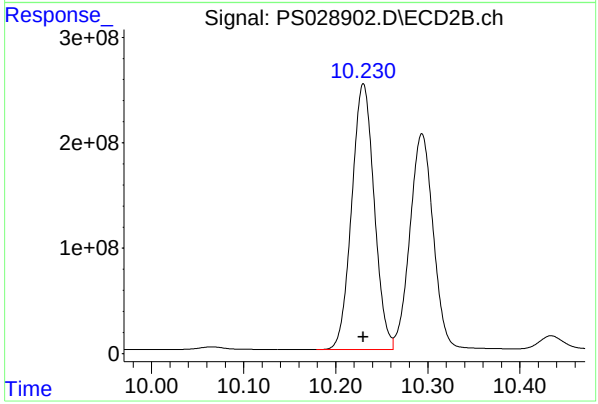
#11 2,4,5-TP (SILVEX)

R.T.: 9.813 min
Delta R.T.: 0.000 min
Response: 4474439764
Conc: 471.91 ng/ml



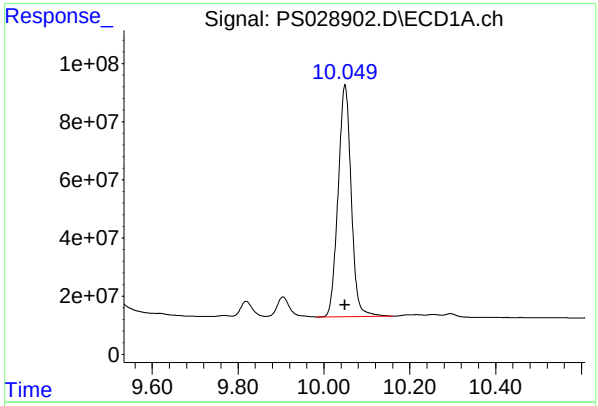
#12 2,4,5-T

R.T.: 9.479 min
Delta R.T.: 0.000 min
Response: 9171175170
Conc: 466.06 ng/ml



#12 2,4,5-T

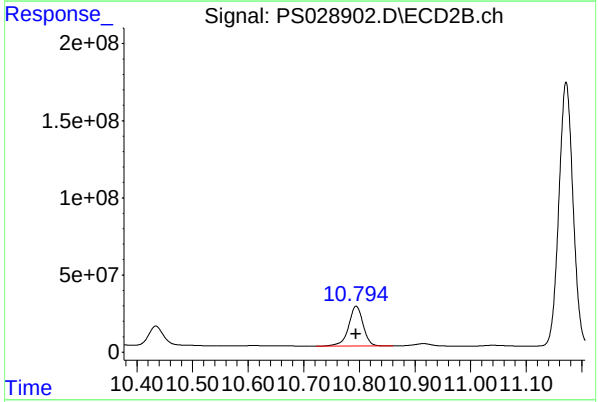
R.T.: 10.230 min
Delta R.T.: 0.000 min
Response: 4276992400
Conc: 471.18 ng/ml



#13 2,4-DB

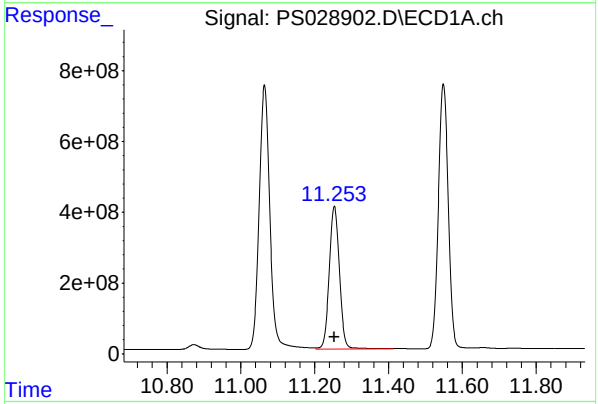
R.T.: 10.049 min
Delta R.T.: 0.000 min
Response: 1686623050
Conc: 467.08 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC500



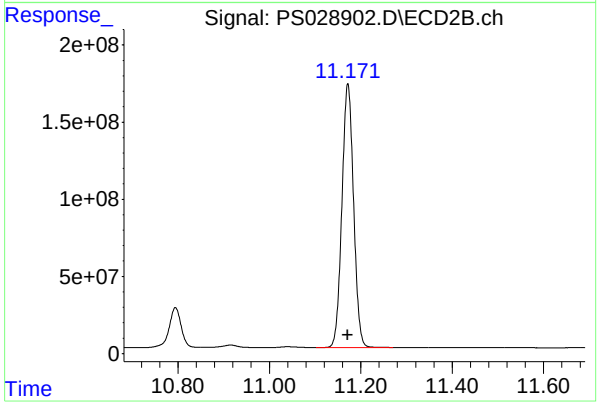
#13 2,4-DB

R.T.: 10.794 min
Delta R.T.: 0.000 min
Response: 467932817
Conc: 467.89 ng/ml



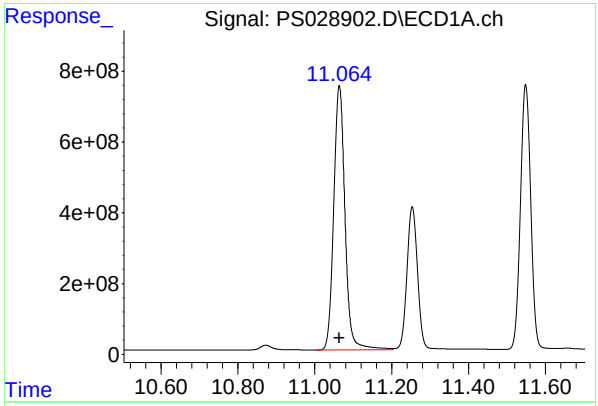
#14 DINOSEB

R.T.: 11.253 min
Delta R.T.: 0.000 min
Response: 7785456867
Conc: 457.11 ng/ml



#14 DINOSEB

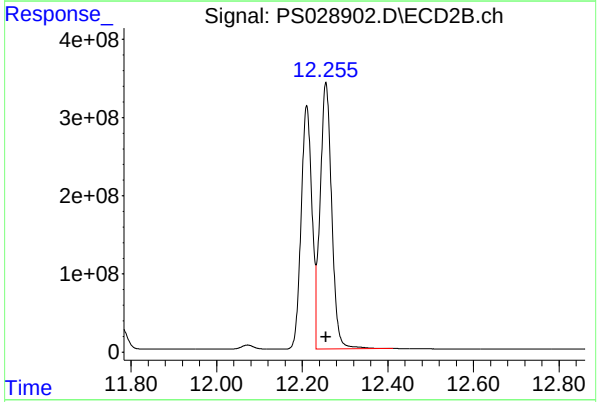
R.T.: 11.172 min
Delta R.T.: 0.000 min
Response: 3019847995
Conc: 464.85 ng/ml



#15 Picloram

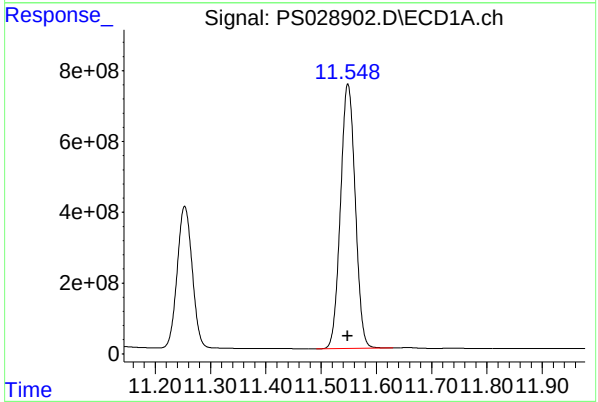
R.T.: 11.064 min
Delta R.T.: 0.000 min
Response: 15027107162
Conc: 468.04 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC500



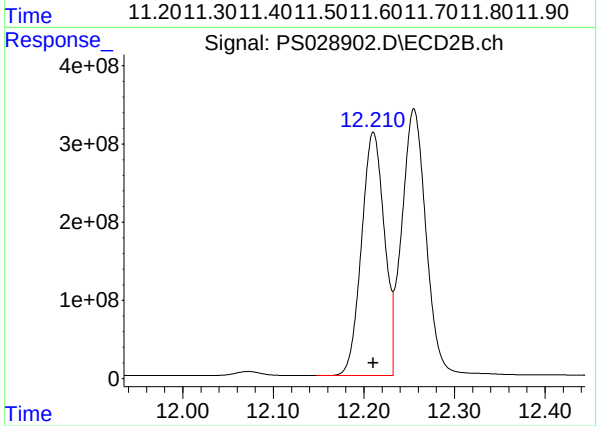
#15 Picloram

R.T.: 12.255 min
Delta R.T.: 0.000 min
Response: 6370927225
Conc: 478.14 ng/ml



#16 DCPA

R.T.: 11.548 min
Delta R.T.: 0.000 min
Response: 13845934631
Conc: 469.77 ng/ml



#16 DCPA

R.T.: 12.210 min
Delta R.T.: 0.000 min
Response: 5457469625
Conc: 478.64 ng/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS011425\
Data File : PS028903.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Jan 2025 11:19
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: Jan 14 11:36:53 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 11:36:29 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 0.25µm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
		System Monitoring Compounds						
4)	S	2,4-DCAA	7.197	7.677	1994.8E6	821.5E6	750.000	750.000
		Target Compounds						
1)	T	Dalapon	2.615	2.668	2018.7E6	1376.7E6	682.500	682.500
2)	T	3,5-DICHL...	6.374	6.643	2668.0E6	1137.6E6	697.500	697.500
3)	T	4-Nitroph...	6.995	7.207	1173.1E6	593.9E6	682.500	682.500
5)	T	DICAMBA	7.383	7.874	8146.7E6	3968.0E6	705.000	705.000
6)	T	MCPP	7.565	7.979	508.7E6	215.7E6	70.500	70.500
7)	T	MCPA	7.714	8.220	694.1E6	295.2E6	69.750	69.750
8)	T	DICHLORPROP	8.087	8.586	2118.0E6	980.3E6	705.000	705.000
9)	T	2,4-D	8.316	8.913	2282.8E6	1035.6E6	705.000	705.000
10)	T	Pentachlo...	8.613	9.436	33385.4E6	16453.1E6	712.500	712.500
11)	T	2,4,5-TP ...	9.189	9.813	13141.6E6	6703.9E6	712.500	712.500
12)	T	2,4,5-T	9.479	10.230	13197.3E6	6408.0E6	712.500	712.500
13)	T	2,4-DB	10.050	10.794	2460.5E6	705.4E6	712.500	712.500
14)	T	DINOSEB	11.253	11.172	11140.9E6	4486.6E6	705.000	705.000
15)	T	Picloram	11.064	12.255	21960.5E6	9824.6E6	712.500	712.500
16)	T	DCPA	11.549	12.210	19869.3E6	8206.9E6	720.000	720.000

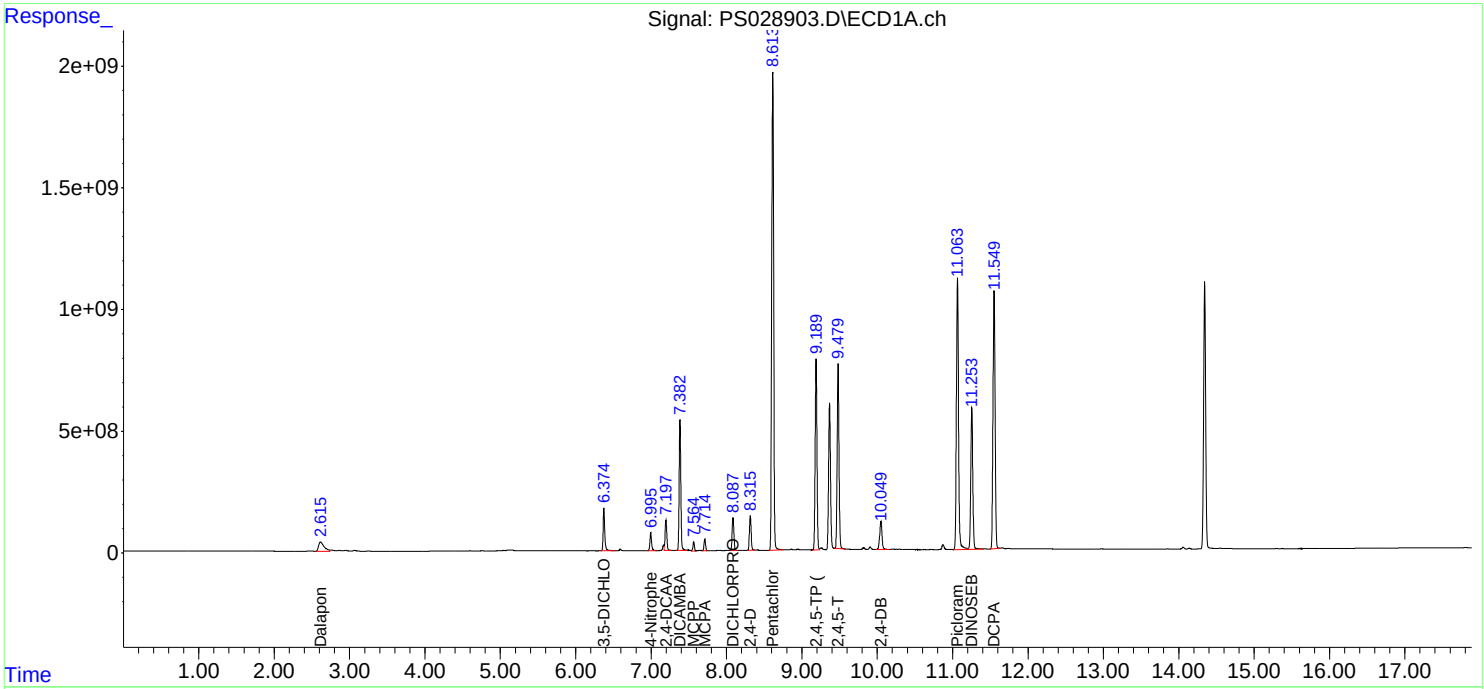
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

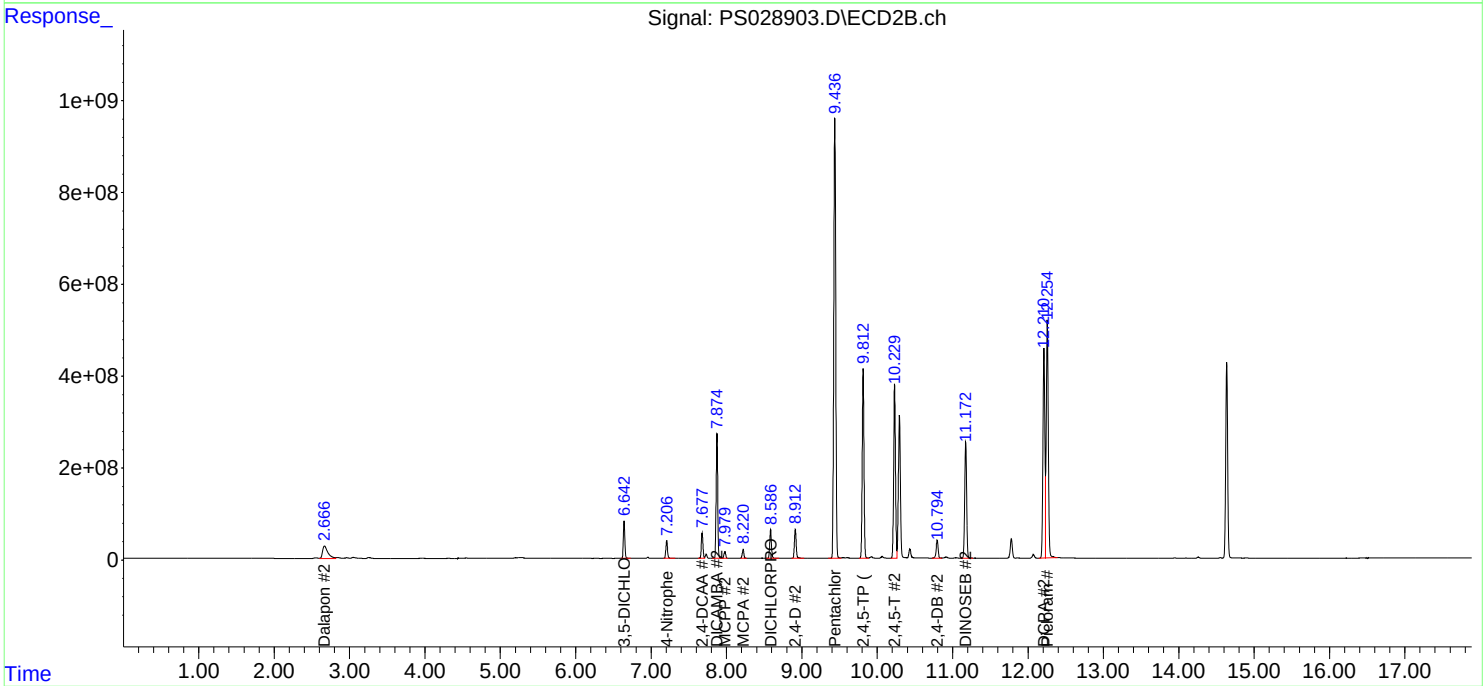
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS011425\
Data File : PS028903.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Jan 2025 11:19
Operator : AR\AJ
Sample : HSTDICC750
Misc :
ALS Vial : 5 Sample Multiplier: 1

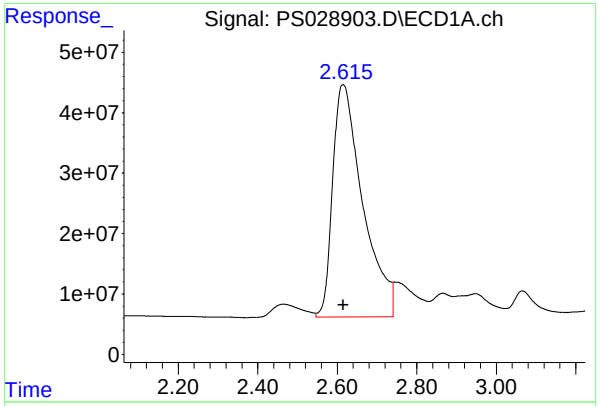
Instrument :
ECD_S
ClientSampleId :
HSTDICC750

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 14 11:36:53 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 11:36:29 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



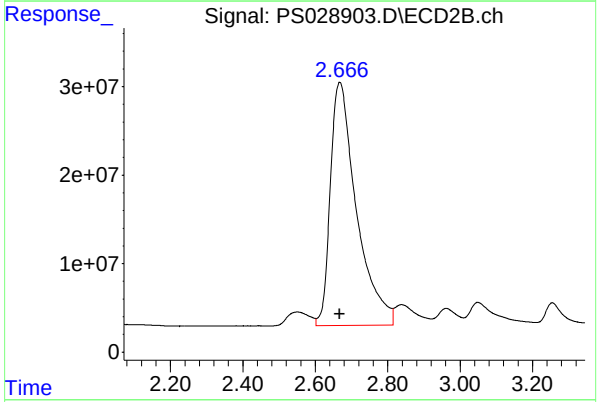




#1 Dalapon

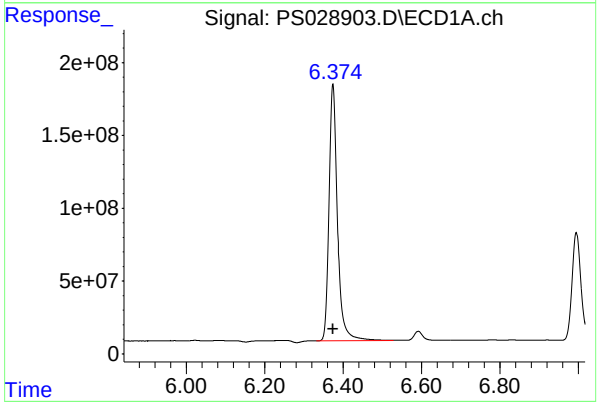
R.T.: 2.615 min
Delta R.T.: 0.000 min
Response: 2018665694
Conc: 682.50 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC750



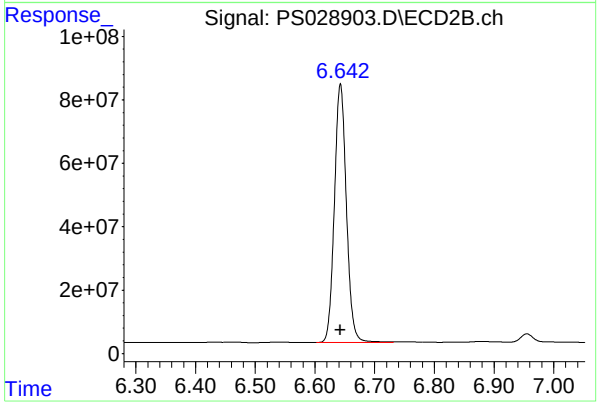
#1 Dalapon

R.T.: 2.668 min
Delta R.T.: 0.000 min
Response: 1376681116
Conc: 682.50 ng/ml



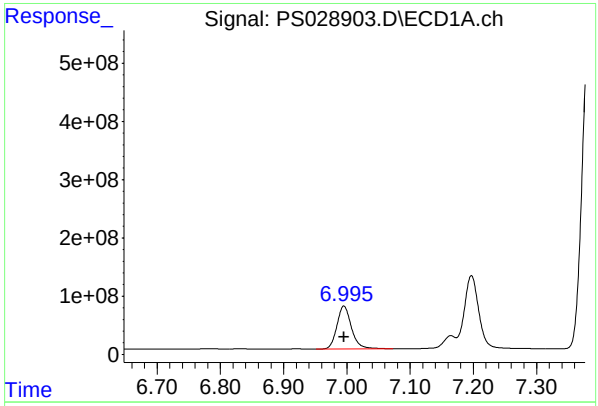
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.374 min
Delta R.T.: 0.000 min
Response: 2667965312
Conc: 697.50 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

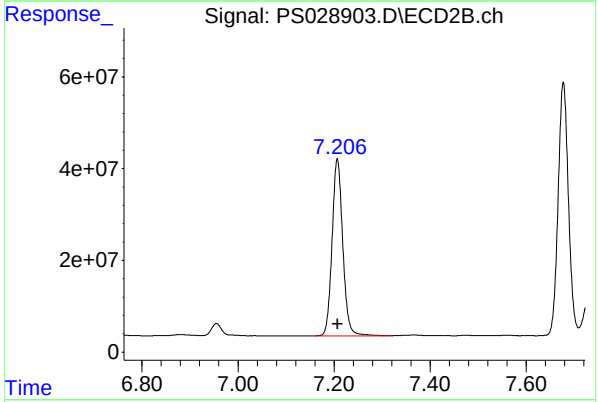
R.T.: 6.643 min
Delta R.T.: 0.000 min
Response: 1137550883
Conc: 697.50 ng/ml



#3 4-Nitrophenol

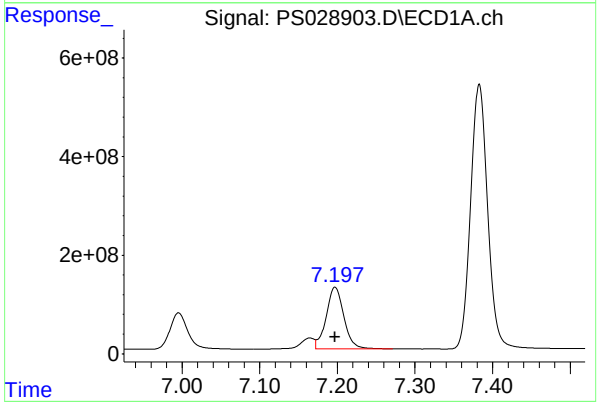
R.T.: 6.995 min
Delta R.T.: 0.000 min
Response: 1173142744
Conc: 682.50 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC750



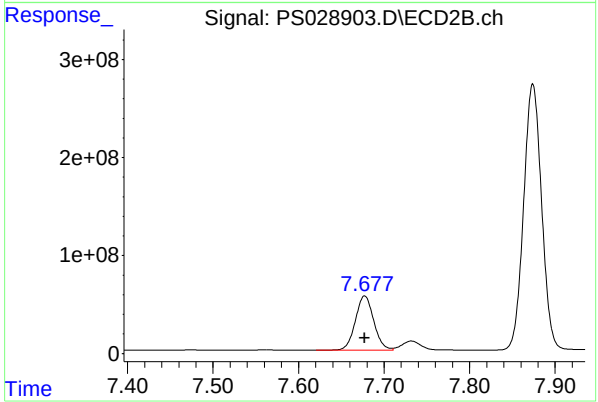
#3 4-Nitrophenol

R.T.: 7.207 min
Delta R.T.: 0.000 min
Response: 593851919
Conc: 682.50 ng/ml



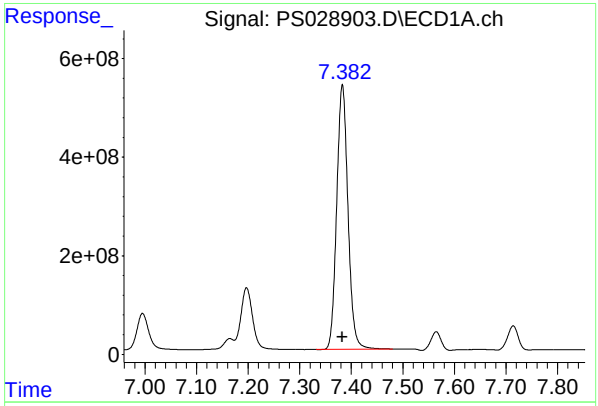
#4 2,4-DCAA

R.T.: 7.197 min
Delta R.T.: 0.000 min
Response: 1994777262
Conc: 750.00 ng/ml



#4 2,4-DCAA

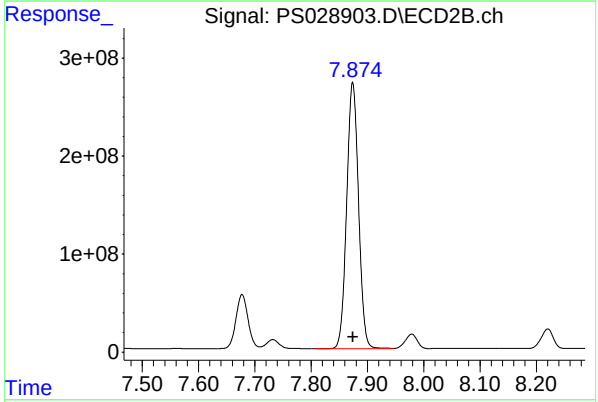
R.T.: 7.677 min
Delta R.T.: 0.000 min
Response: 821510640
Conc: 750.00 ng/ml



#5 DICAMBA

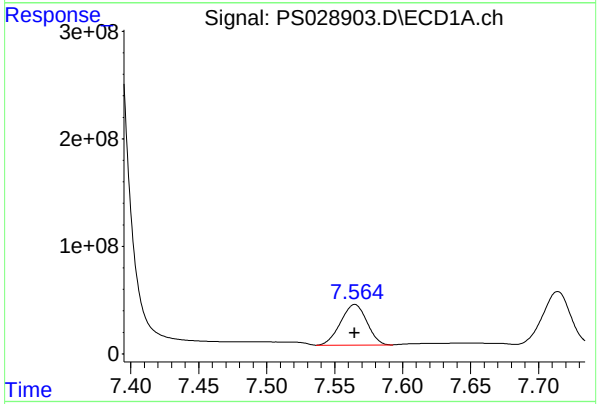
R.T.: 7.383 min
Delta R.T.: 0.000 min
Response: 8146681260
Conc: 705.00 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC750



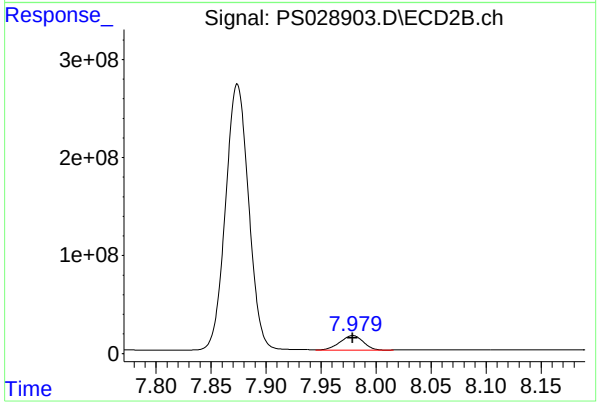
#5 DICAMBA

R.T.: 7.874 min
Delta R.T.: 0.000 min
Response: 3967991703
Conc: 705.00 ng/ml



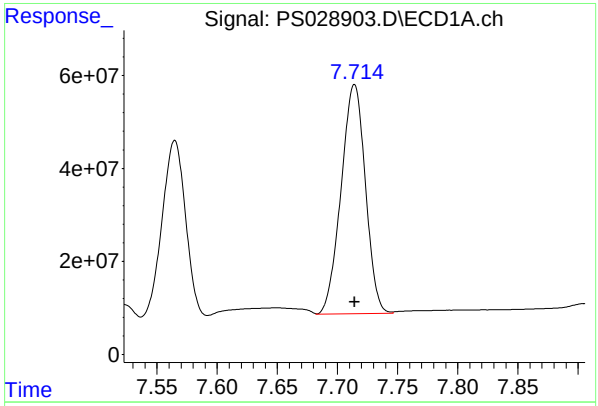
#6 MCPP

R.T.: 7.565 min
Delta R.T.: 0.000 min
Response: 508706510
Conc: 70.50 ug/ml



#6 MCPP

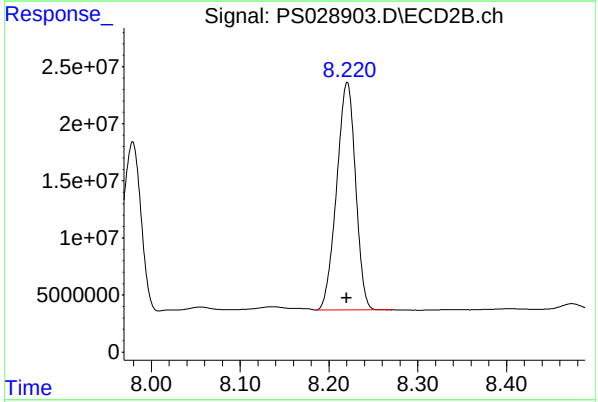
R.T.: 7.979 min
Delta R.T.: 0.000 min
Response: 215723572
Conc: 70.50 ug/ml



#7 MCPA

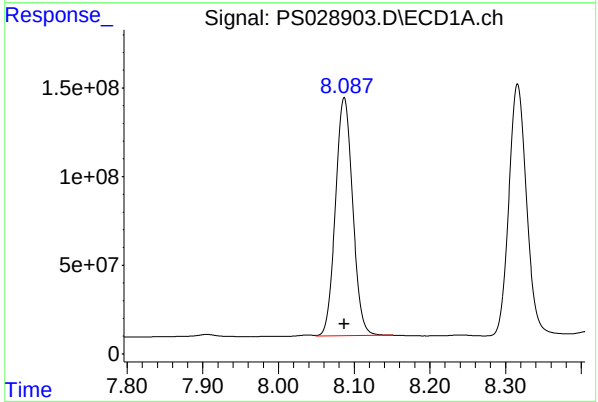
R.T.: 7.714 min
Delta R.T.: 0.000 min
Response: 694066365
Conc: 69.75 ug/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC750



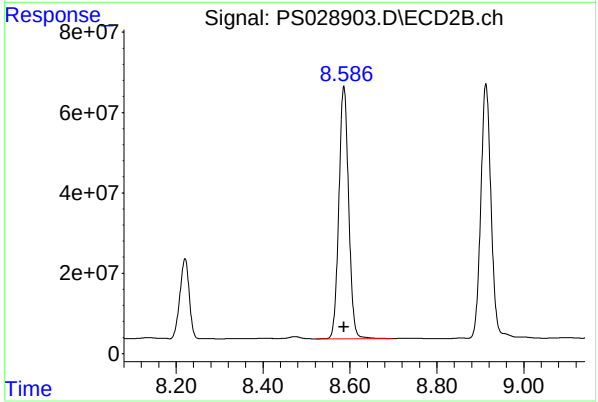
#7 MCPA

R.T.: 8.220 min
Delta R.T.: 0.000 min
Response: 295249035
Conc: 69.75 ug/ml



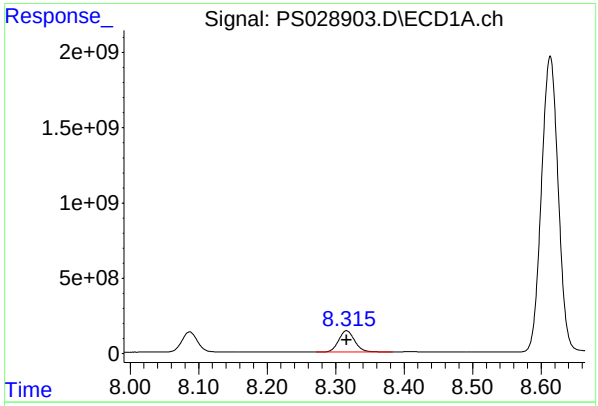
#8 DICHLORPROP

R.T.: 8.087 min
Delta R.T.: 0.000 min
Response: 2118008436
Conc: 705.00 ng/ml



#8 DICHLORPROP

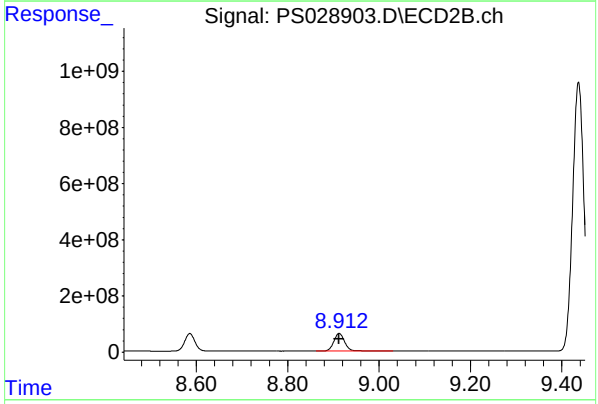
R.T.: 8.586 min
Delta R.T.: 0.000 min
Response: 980342169
Conc: 705.00 ng/ml



#9 2,4-D

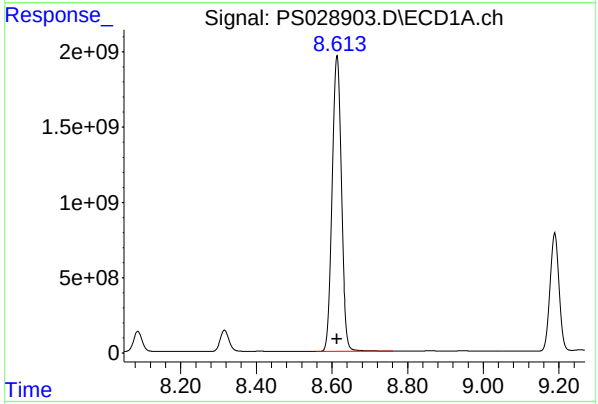
R.T.: 8.316 min
Delta R.T.: 0.000 min
Response: 2282808841
Conc: 705.00 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC750



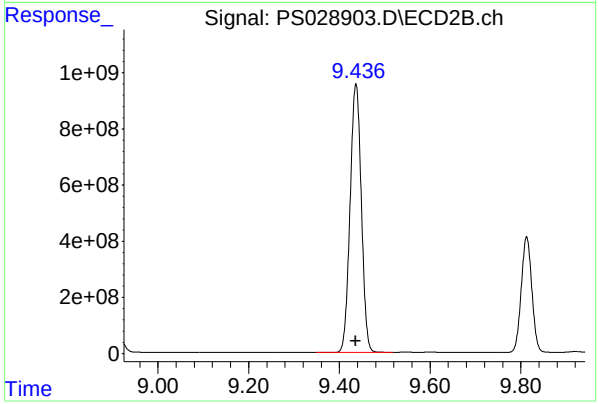
#9 2,4-D

R.T.: 8.913 min
Delta R.T.: 0.000 min
Response: 1035595119
Conc: 705.00 ng/ml



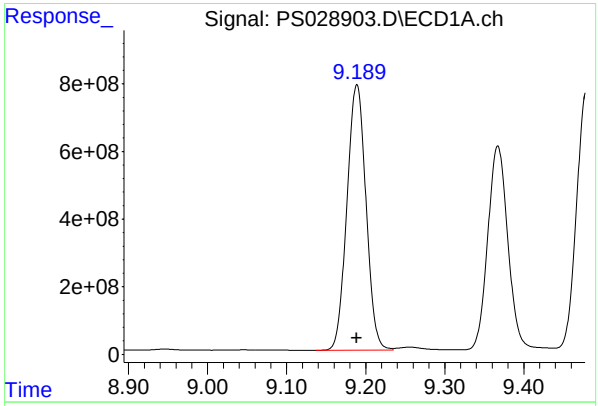
#10 Pentachlorophenol

R.T.: 8.613 min
Delta R.T.: 0.000 min
Response: 33385448783
Conc: 712.50 ng/ml



#10 Pentachlorophenol

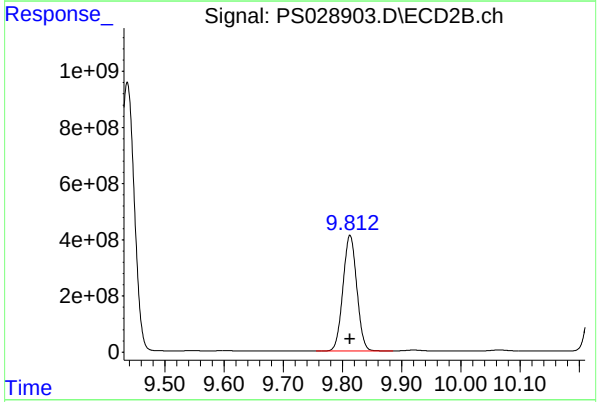
R.T.: 9.436 min
Delta R.T.: 0.000 min
Response: 16453088564
Conc: 712.50 ng/ml



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

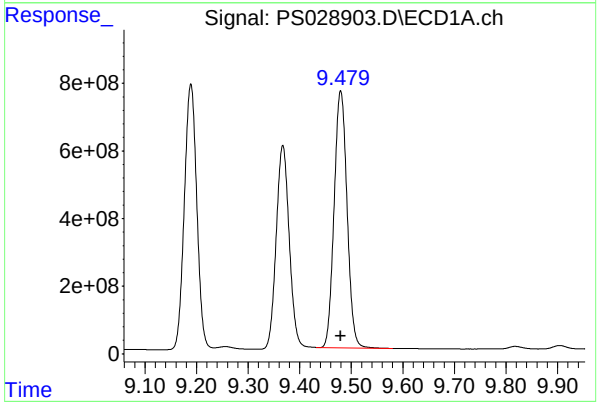
R.T.: 9.189 min
Delta R.T.: 0.000 min
Response: 13141574024
Conc: 712.50 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC750



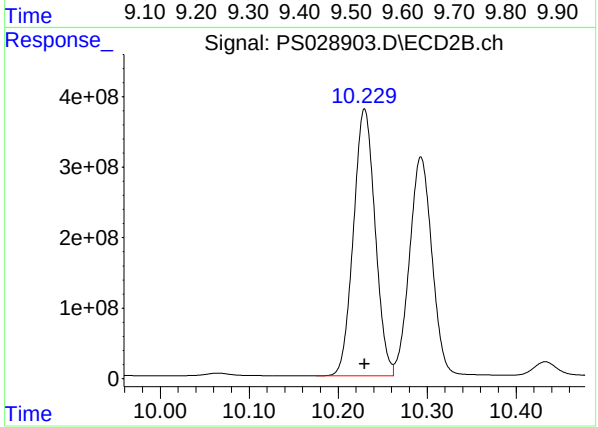
#11 2,4,5-TP (SILVEX)

R.T.: 9.813 min
Delta R.T.: 0.000 min
Response: 6703920625
Conc: 712.50 ng/ml



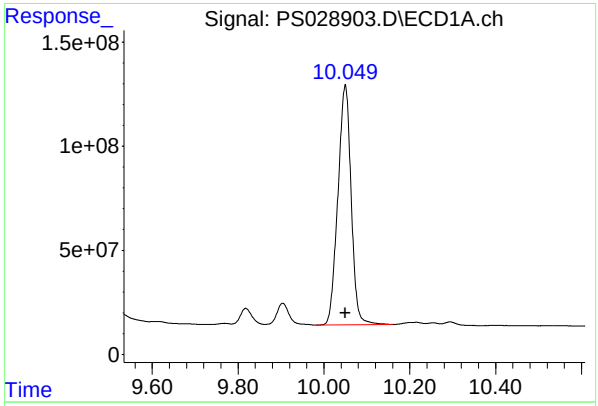
#12 2,4,5-T

R.T.: 9.479 min
Delta R.T.: 0.000 min
Response: 13197337017
Conc: 712.50 ng/ml



#12 2,4,5-T

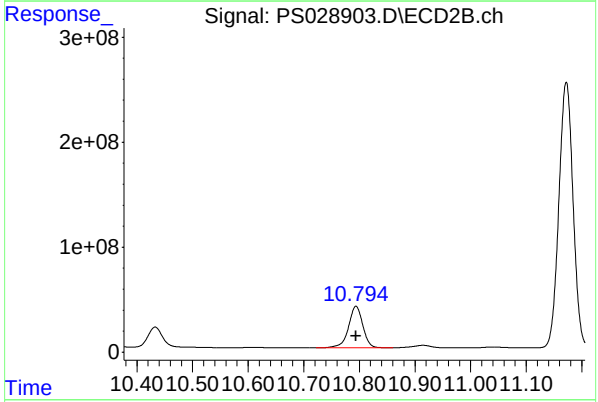
R.T.: 10.230 min
Delta R.T.: 0.000 min
Response: 6407989455
Conc: 712.50 ng/ml



#13 2,4-DB

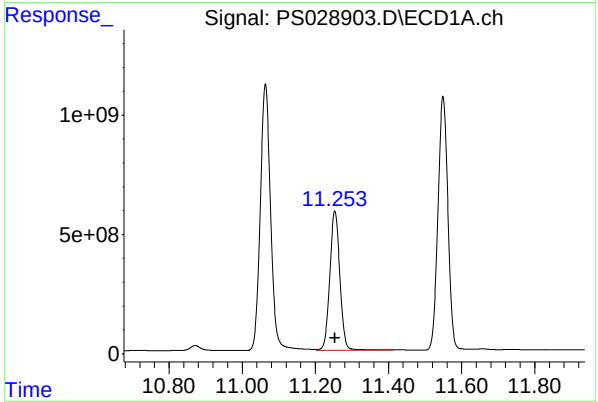
R.T.: 10.050 min
Delta R.T.: 0.000 min
Response: 2460493983
Conc: 712.50 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC750



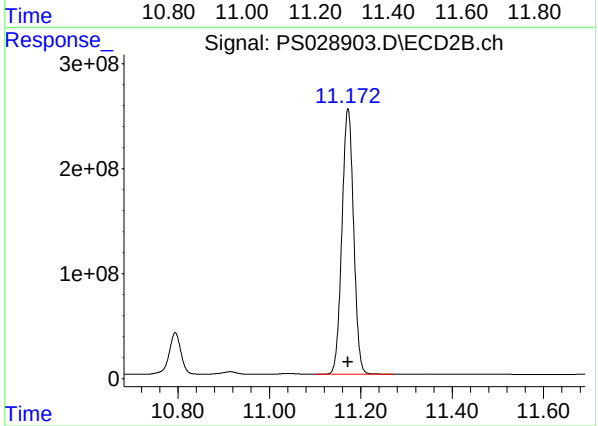
#13 2,4-DB

R.T.: 10.794 min
Delta R.T.: 0.000 min
Response: 705441852
Conc: 712.50 ng/ml



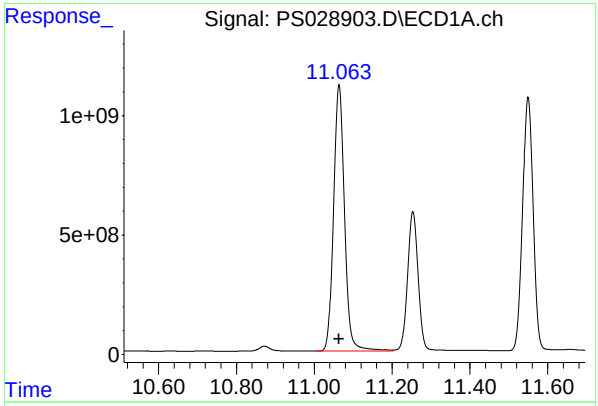
#14 DINOSEB

R.T.: 11.253 min
Delta R.T.: 0.000 min
Response: 11140909547
Conc: 705.00 ng/ml



#14 DINOSEB

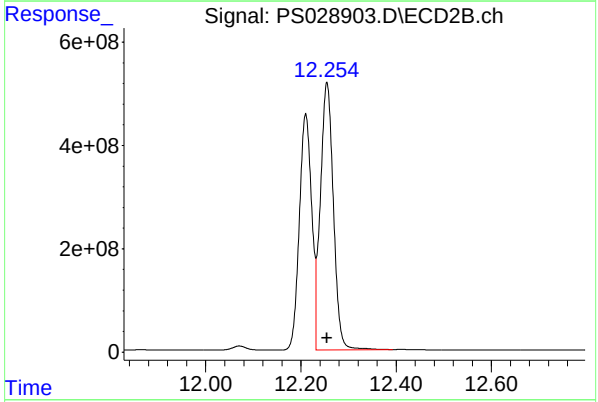
R.T.: 11.172 min
Delta R.T.: 0.000 min
Response: 4486583360
Conc: 705.00 ng/ml



#15 Picloram

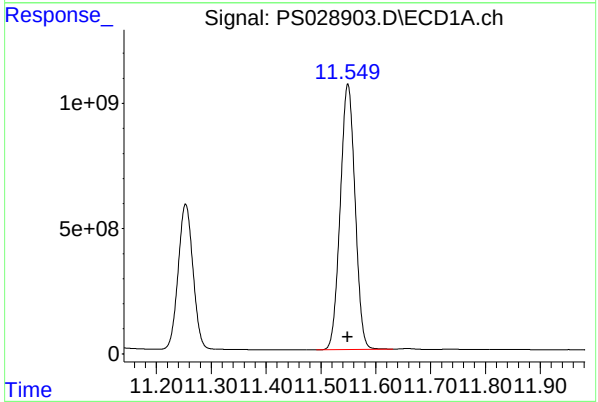
R.T.: 11.064 min
Delta R.T.: 0.000 min
Response: 21960519904
Conc: 712.50 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC750



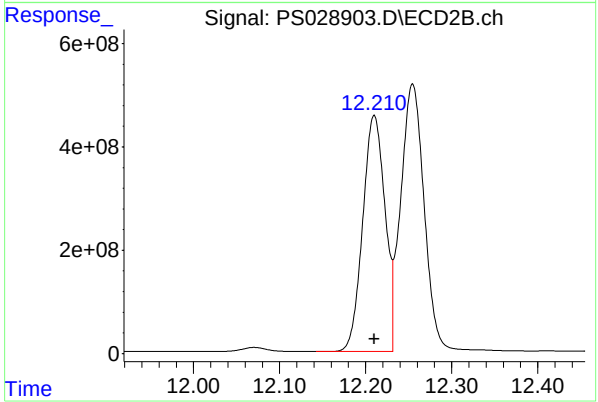
#15 Picloram

R.T.: 12.255 min
Delta R.T.: 0.000 min
Response: 9824620857
Conc: 712.50 ng/ml



#16 DCPA

R.T.: 11.549 min
Delta R.T.: 0.000 min
Response: 19869334736
Conc: 720.00 ng/ml



#16 DCPA

R.T.: 12.210 min
Delta R.T.: 0.000 min
Response: 8206878898
Conc: 720.00 ng/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS011425\
Data File : PS028904.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Jan 2025 11:43
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: Jan 14 12:11:09 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:11:00 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	7.198	7.678	2530.9E6	1074.7E6	909.092	963.192
		Target Compounds						
1)	T	Dalapon	2.615	2.667	2669.7E6	1816.5E6	895.337	890.355
2)	T	3,5-DICHL...	6.375	6.643	3415.4E6	1483.9E6	854.524	897.916
3)	T	4-Nitroph...	6.996	7.207	1520.9E6	776.4E6	858.259	872.537
5)	T	DICAMBA	7.384	7.875	10523.3E6	5267.0E6	887.185	945.768
6)	T	MCPP	7.567	7.981	684.1E6	288.1E6	100.360	95.785
7)	T	MCPA	7.717	8.223	922.8E6	396.1E6	93.671	93.262
8)	T	DICHLORPROP	8.088	8.586	2704.9E6	1281.9E6	853.679	911.969
9)	T	2,4-D	8.317	8.914	2910.1E6	1353.7E6	861.114	902.769
10)	T	Pentachlo...	8.614	9.437	40660.1E6	21219.5E6	842.923	915.975
11)	T	2,4,5-TP ...	9.189	9.813	16741.1E6	8771.4E6	875.003	931.202
12)	T	2,4,5-T	9.480	10.230	16865.6E6	8364.4E6	878.556	928.451
13)	T	2,4-DB	10.051	10.795	3188.7E6	933.6E6	898.882	937.587
14)	T	DINOSEB	11.255	11.172	14187.7E6	5809.5E6	857.405	905.282
15)	T	Picloram	11.064	12.256	28395.6E6	13020.4E6	899.958	970.250
16)	T	DCPA	11.550	12.211	25250.3E6	10755.0E6	880.382	947.380

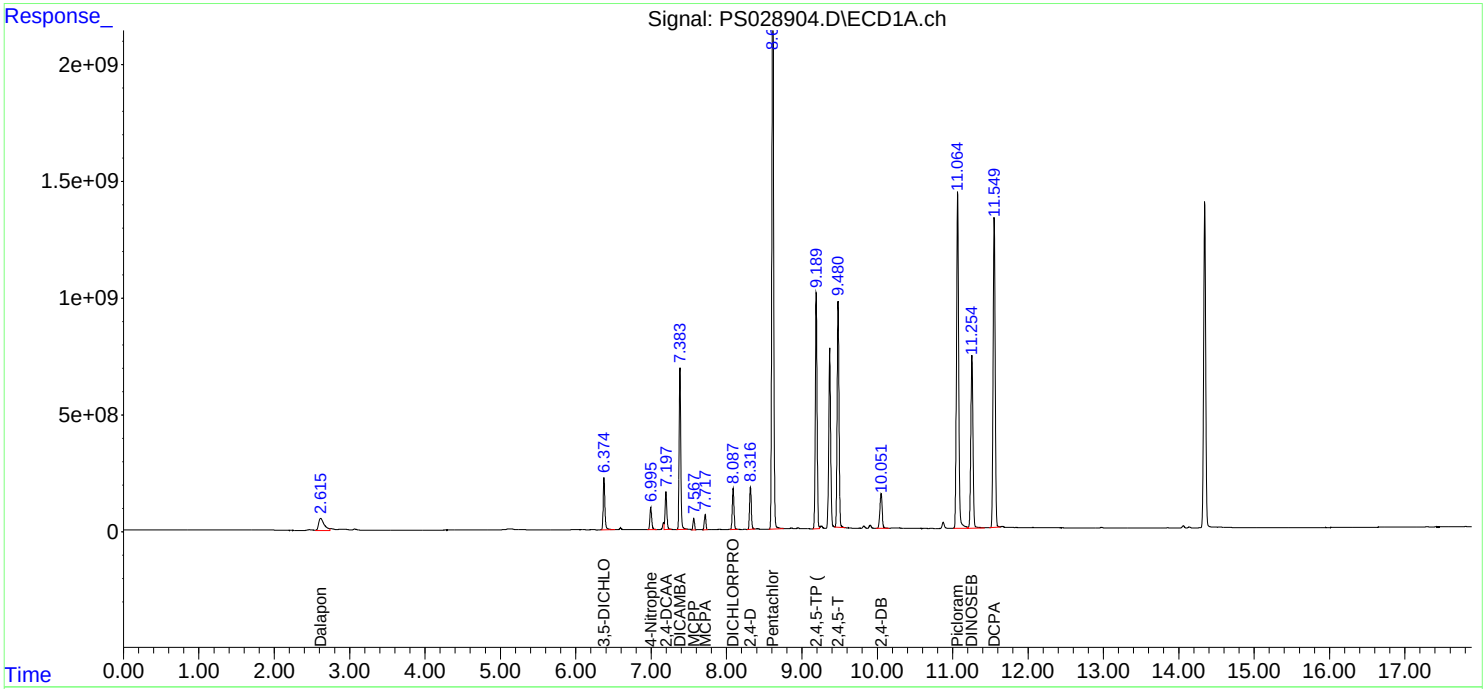
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

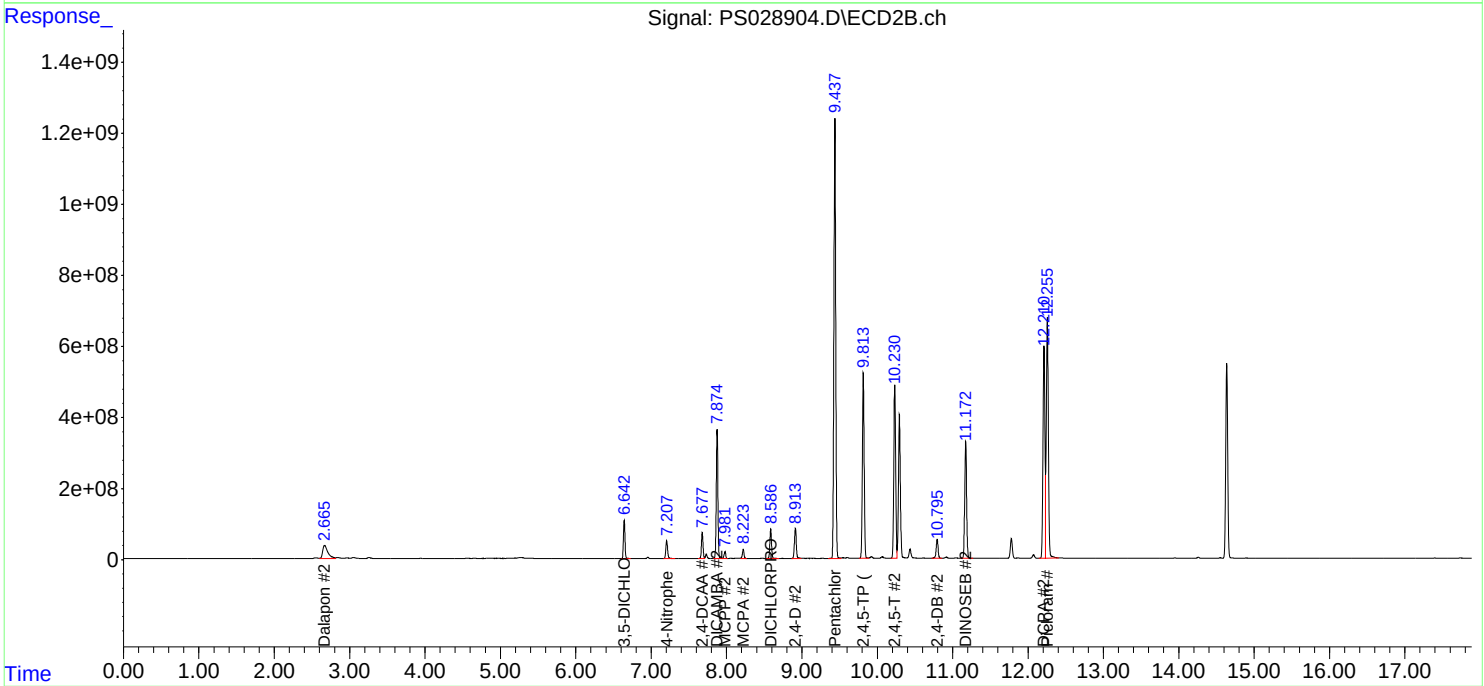
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS011425\
Data File : PS028904.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Jan 2025 11:43
Operator : AR\AJ
Sample : HSTDICC1000
Misc :
ALS Vial : 6 Sample Multiplier: 1

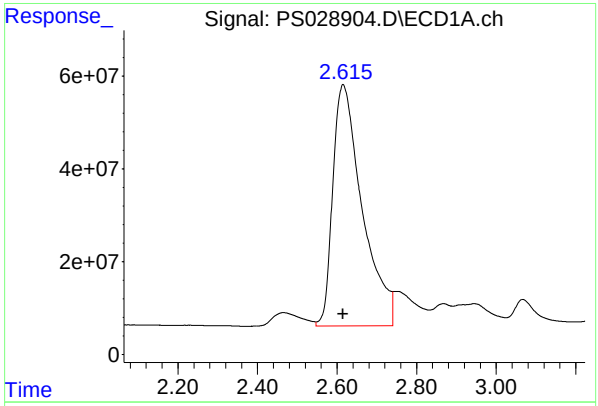
Instrument :
ECD_S
ClientSampleId :
HSTDICC1000

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 14 12:11:09 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:11:00 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



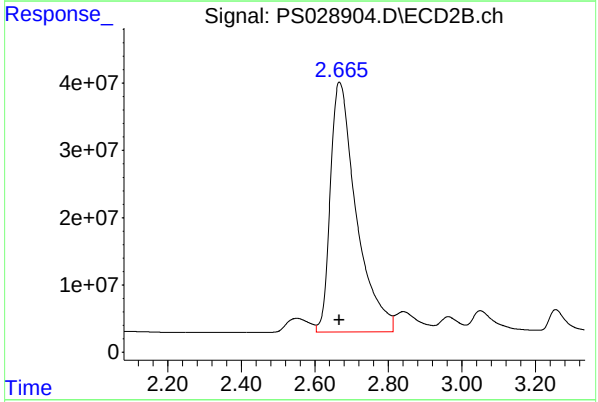




#1 Dalapon

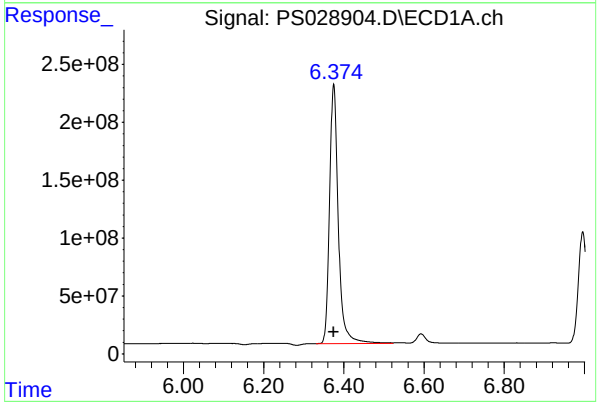
R.T.: 2.615 min
Delta R.T.: 0.000 min
Response: 2669664670
Conc: 895.34 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000



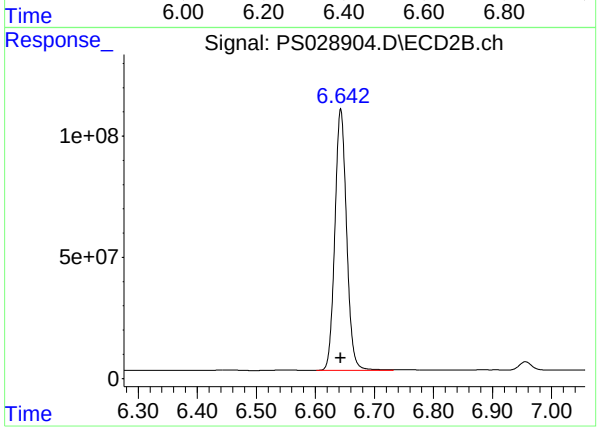
#1 Dalapon

R.T.: 2.667 min
Delta R.T.: 0.000 min
Response: 1816455493
Conc: 890.35 ng/ml



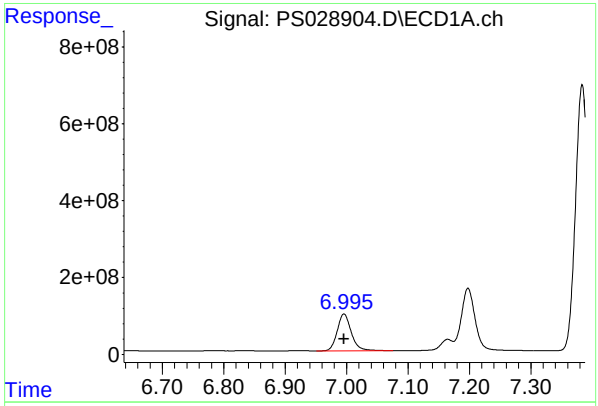
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.375 min
Delta R.T.: 0.000 min
Response: 3415406968
Conc: 854.52 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

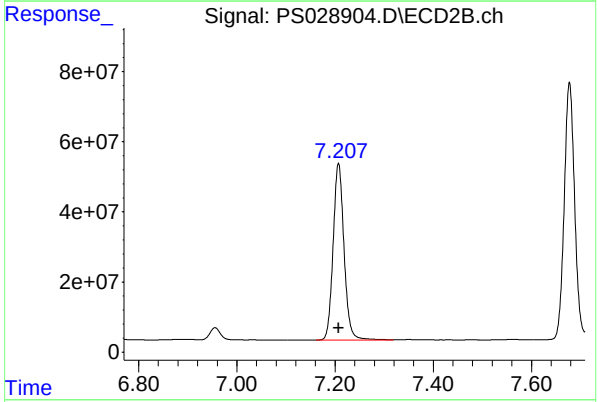
R.T.: 6.643 min
Delta R.T.: 0.000 min
Response: 1483913982
Conc: 897.92 ng/ml



#3 4-Nitrophenol

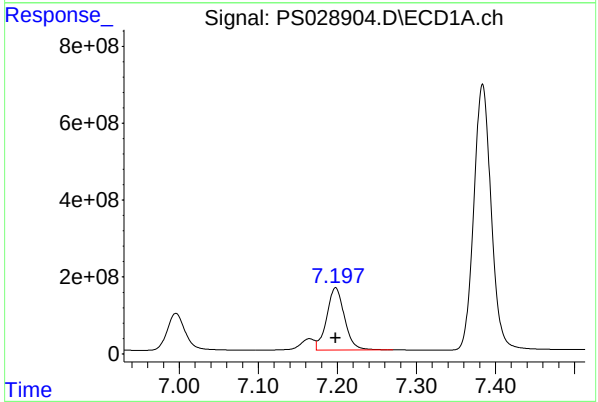
R.T.: 6.996 min
Delta R.T.: 0.000 min
Response: 1520903644
Conc: 858.26 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000



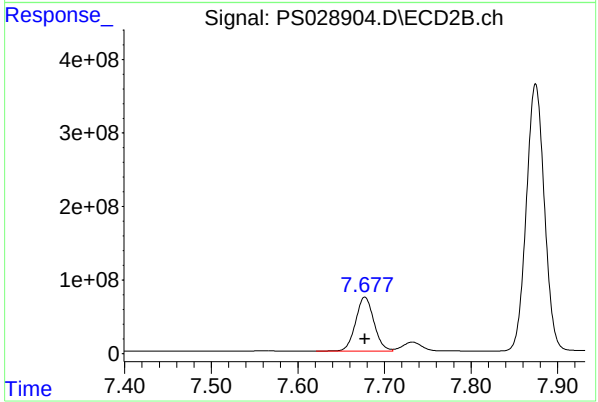
#3 4-Nitrophenol

R.T.: 7.207 min
Delta R.T.: 0.000 min
Response: 776361144
Conc: 872.54 ng/ml



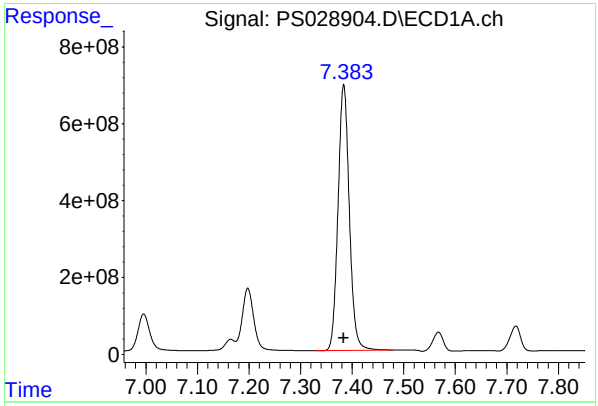
#4 2,4-DCAA

R.T.: 7.198 min
Delta R.T.: 0.000 min
Response: 2530922607
Conc: 909.09 ng/ml



#4 2,4-DCAA

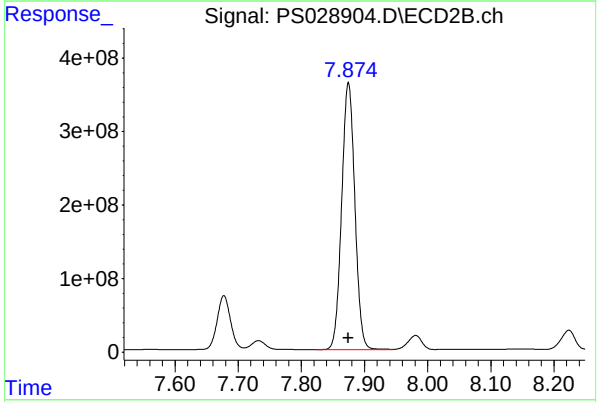
R.T.: 7.678 min
Delta R.T.: 0.000 min
Response: 1074742027
Conc: 963.19 ng/ml



#5 DICAMBA

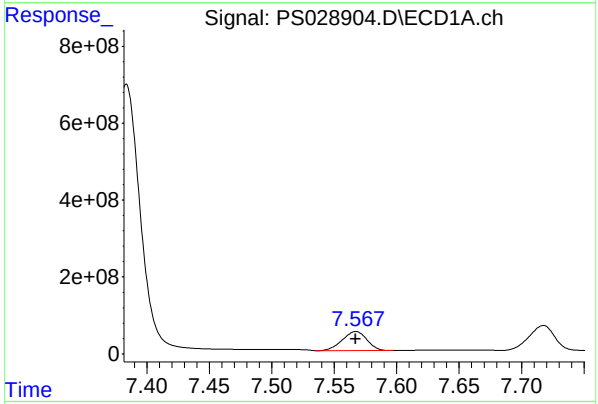
R.T.: 7.384 min
Delta R.T.: 0.000 min
Response: 10523289784
Conc: 887.18 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000



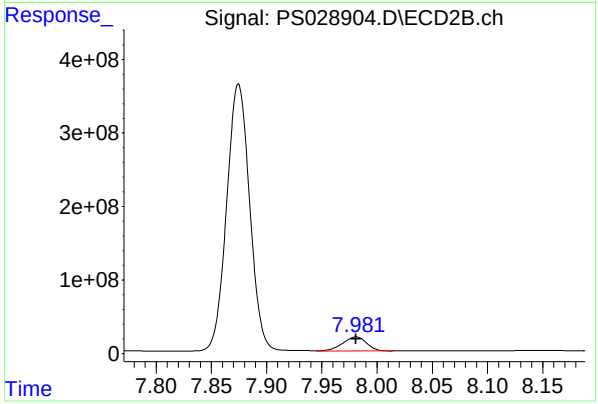
#5 DICAMBA

R.T.: 7.875 min
Delta R.T.: 0.000 min
Response: 5267015305
Conc: 945.77 ng/ml



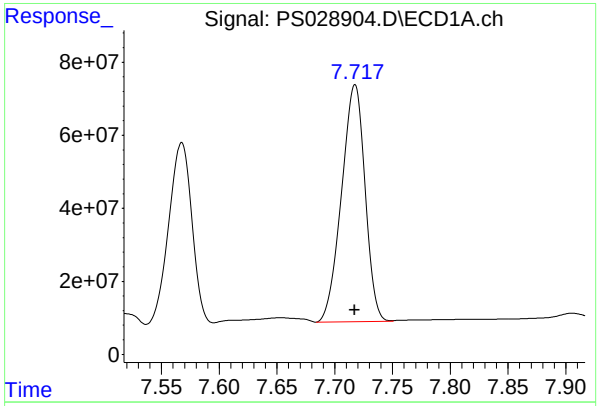
#6 MCPP

R.T.: 7.567 min
Delta R.T.: 0.000 min
Response: 684083315
Conc: 100.36 ug/ml



#6 MCPP

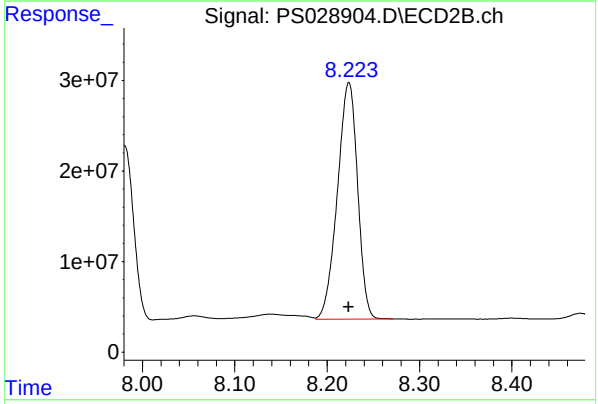
R.T.: 7.981 min
Delta R.T.: 0.000 min
Response: 288116567
Conc: 95.78 ug/ml



#7 MCPA

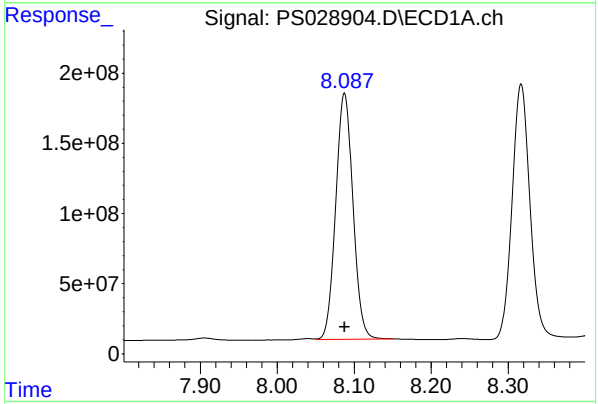
R.T.: 7.717 min
Delta R.T.: 0.000 min
Response: 922758739
Conc: 93.67 ug/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000



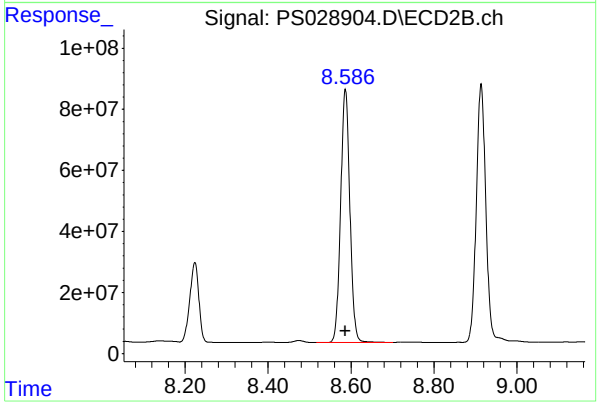
#7 MCPA

R.T.: 8.223 min
Delta R.T.: 0.000 min
Response: 396124832
Conc: 93.26 ug/ml



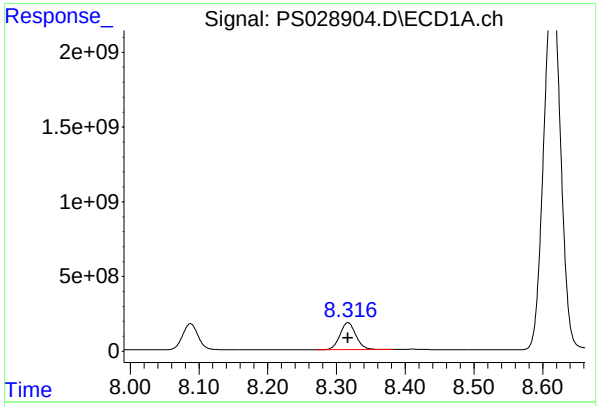
#8 DICHLORPROP

R.T.: 8.088 min
Delta R.T.: 0.000 min
Response: 2704941406
Conc: 853.68 ng/ml



#8 DICHLORPROP

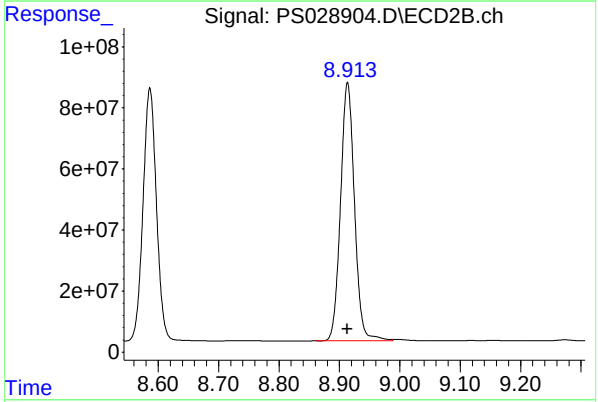
R.T.: 8.586 min
Delta R.T.: 0.000 min
Response: 1281862566
Conc: 911.97 ng/ml



#9 2,4-D

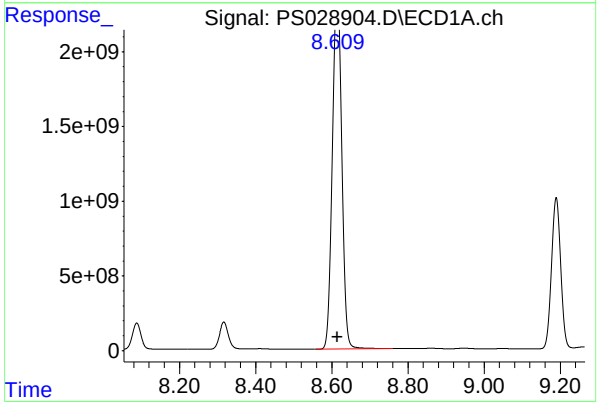
R.T.: 8.317 min
Delta R.T.: 0.000 min
Response: 2910090795
Conc: 861.11 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000



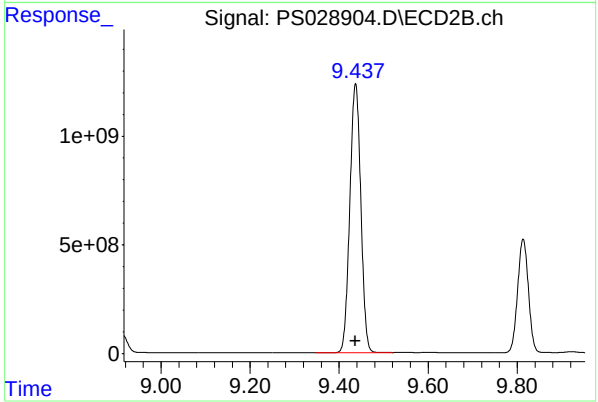
#9 2,4-D

R.T.: 8.914 min
Delta R.T.: 0.000 min
Response: 1353717959
Conc: 902.77 ng/ml



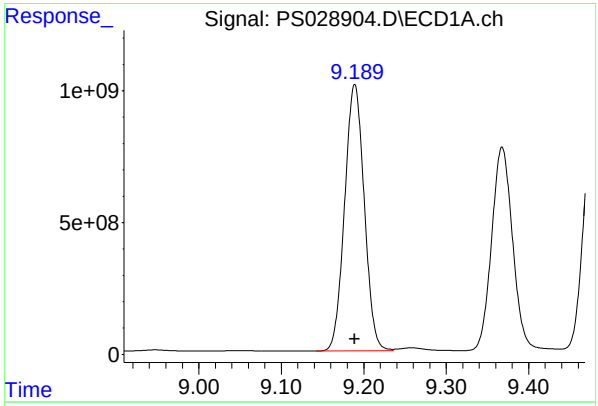
#10 Pentachlorophenol

R.T.: 8.614 min
Delta R.T.: 0.000 min
Response: 40660110132
Conc: 842.92 ng/ml



#10 Pentachlorophenol

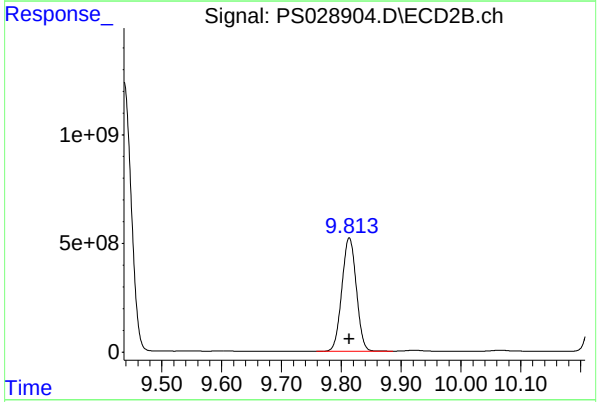
R.T.: 9.437 min
Delta R.T.: 0.000 min
Response: 21219501611
Conc: 915.98 ng/ml



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

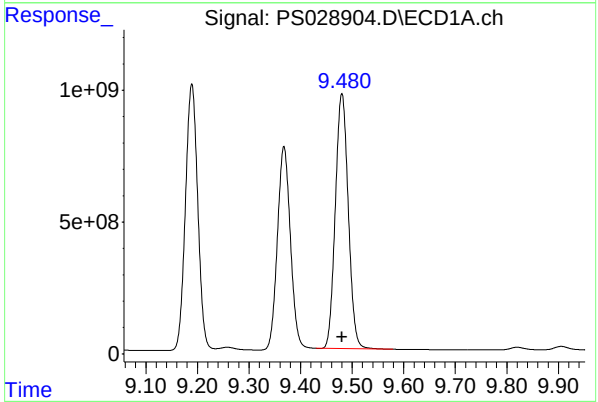
R.T.: 9.189 min
Delta R.T.: 0.000 min
Response: 16741146063
Conc: 875.00 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000



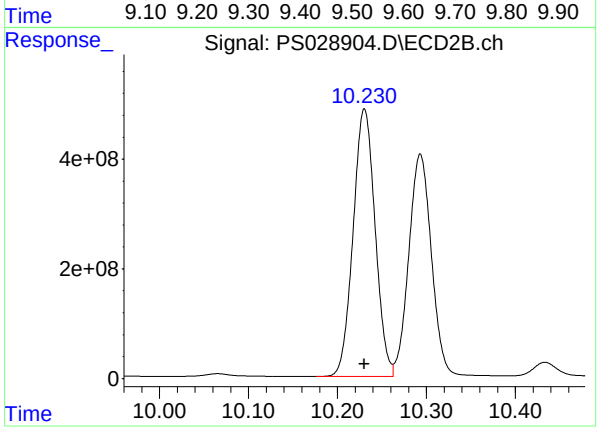
#11 2,4,5-TP (SILVEX)

R.T.: 9.813 min
Delta R.T.: 0.000 min
Response: 8771366125
Conc: 931.20 ng/ml



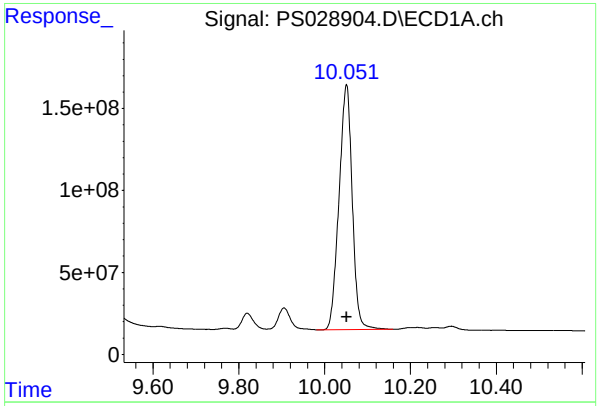
#12 2,4,5-T

R.T.: 9.480 min
Delta R.T.: 0.000 min
Response: 16865581213
Conc: 878.56 ng/ml



#12 2,4,5-T

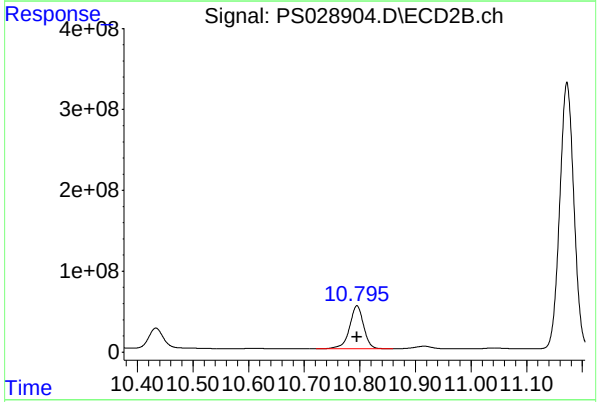
R.T.: 10.230 min
Delta R.T.: 0.000 min
Response: 8364414839
Conc: 928.45 ng/ml



#13 2,4-DB

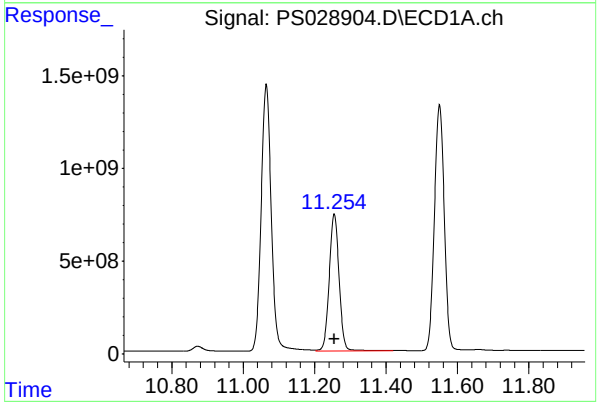
R.T.: 10.051 min
Delta R.T.: 0.000 min
Response: 3188652966
Conc: 898.88 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000



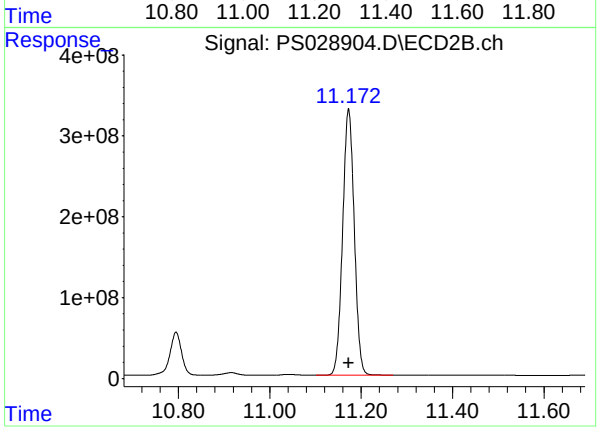
#13 2,4-DB

R.T.: 10.795 min
Delta R.T.: 0.000 min
Response: 933607896
Conc: 937.59 ng/ml



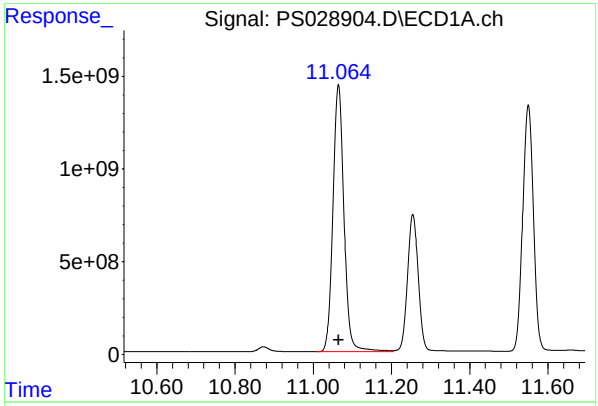
#14 DINOSEB

R.T.: 11.255 min
Delta R.T.: 0.000 min
Response: 14187746813
Conc: 857.41 ng/ml



#14 DINOSEB

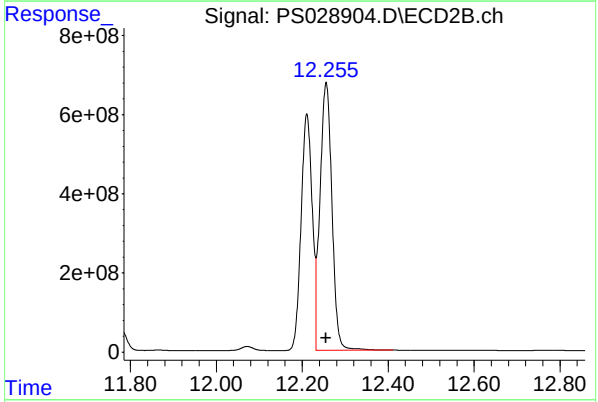
R.T.: 11.172 min
Delta R.T.: 0.000 min
Response: 5809479977
Conc: 905.28 ng/ml



#15 Picloram

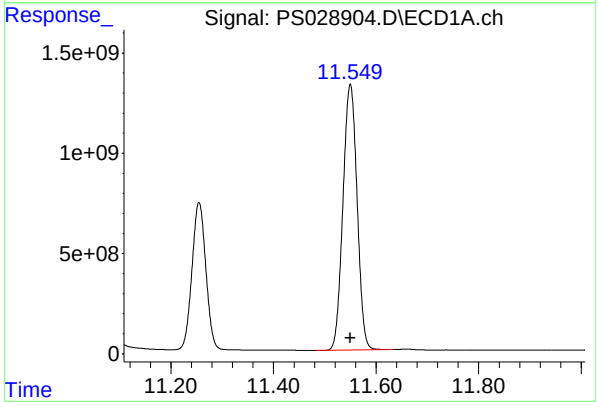
R.T.: 11.064 min
Delta R.T.: 0.000 min
Response: 28395601774
Conc: 899.96 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000



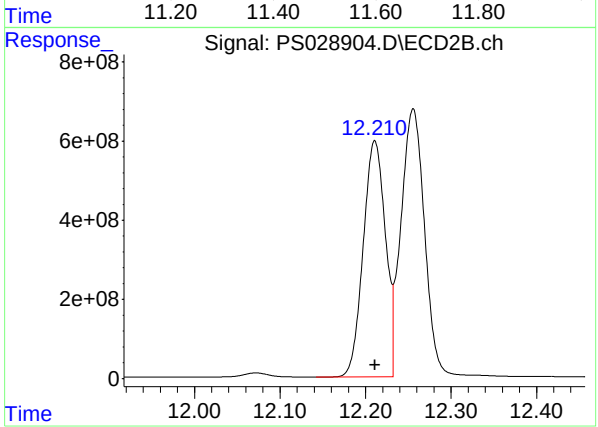
#15 Picloram

R.T.: 12.256 min
Delta R.T.: 0.000 min
Response: 13020427725
Conc: 970.25 ng/ml



#16 DCPA

R.T.: 11.550 min
Delta R.T.: 0.000 min
Response: 25250250867
Conc: 880.38 ng/ml



#16 DCPA

R.T.: 12.211 min
Delta R.T.: 0.000 min
Response: 10754991695
Conc: 947.38 ng/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS011425\
Data File : PS028905.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Jan 2025 12:07
Operator : AR\AJ
Sample : HSTDICC1500
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

Manual Integrations APPROVED

Reviewed By :Abdul Mirza 01/14/2025
Supervised By :Ankita Jodhani 01/15/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 14 12:24:39 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:24:29 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	7.198	7.678	3620.6E6	1605.1E6	1336.050	1450.411
	Target Compounds						
1) T	Dalapon	2.615	2.668	4104.6E6	2732.3E6	1373.858m	1344.349
2) T	3,5-DICHL...	6.375	6.643	4927.4E6	2207.8E6	1262.171	1347.366
3) T	4-Nitroph...	6.996	7.207	2257.5E6	1158.9E6	1291.156	1314.550
5) T	DICAMBA	7.384	7.875	15288.4E6	7923.7E6	1311.442	1420.235
6) T	MCPP	7.571	7.984	1068.2E6	439.2E6	153.296	144.975
7) T	MCPA	7.722	8.228	1403.3E6	594.6E6	141.855	139.892
8) T	DICHLORPROP	8.088	8.586	3907.5E6	1911.2E6	1264.916	1369.450
9) T	2,4-D	8.317	8.913	4184.2E6	2015.2E6	1269.064	1356.640
10) T	Pentachlo...	8.619	9.436	48590.7E6	30432.8E6	1070.058	1334.532
11) T	2,4,5-TP ...	9.190	9.813	23808.0E6	12847.4E6	1276.732	1375.721
12) T	2,4,5-T	9.480	10.230	23961.1E6	12280.1E6	1279.940	1375.041
13) T	2,4-DB	10.050	10.794	4659.8E6	1410.4E6	1334.470	1418.157
14) T	DINOSEB	11.255	11.172	20299.9E6	8571.4E6	1259.511	1349.897
15) T	Picloram	11.064	12.255	40951.2E6	19407.1E6	1321.466	1441.886
16) T	DCPA	11.550	12.210	35612.9E6	15746.0E6	1276.857	1397.307

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS011425\
Data File : PS028905.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Jan 2025 12:07
Operator : AR\AJ
Sample : HSTDICC1500
Misc :
ALS Vial : 7 Sample Multiplier: 1

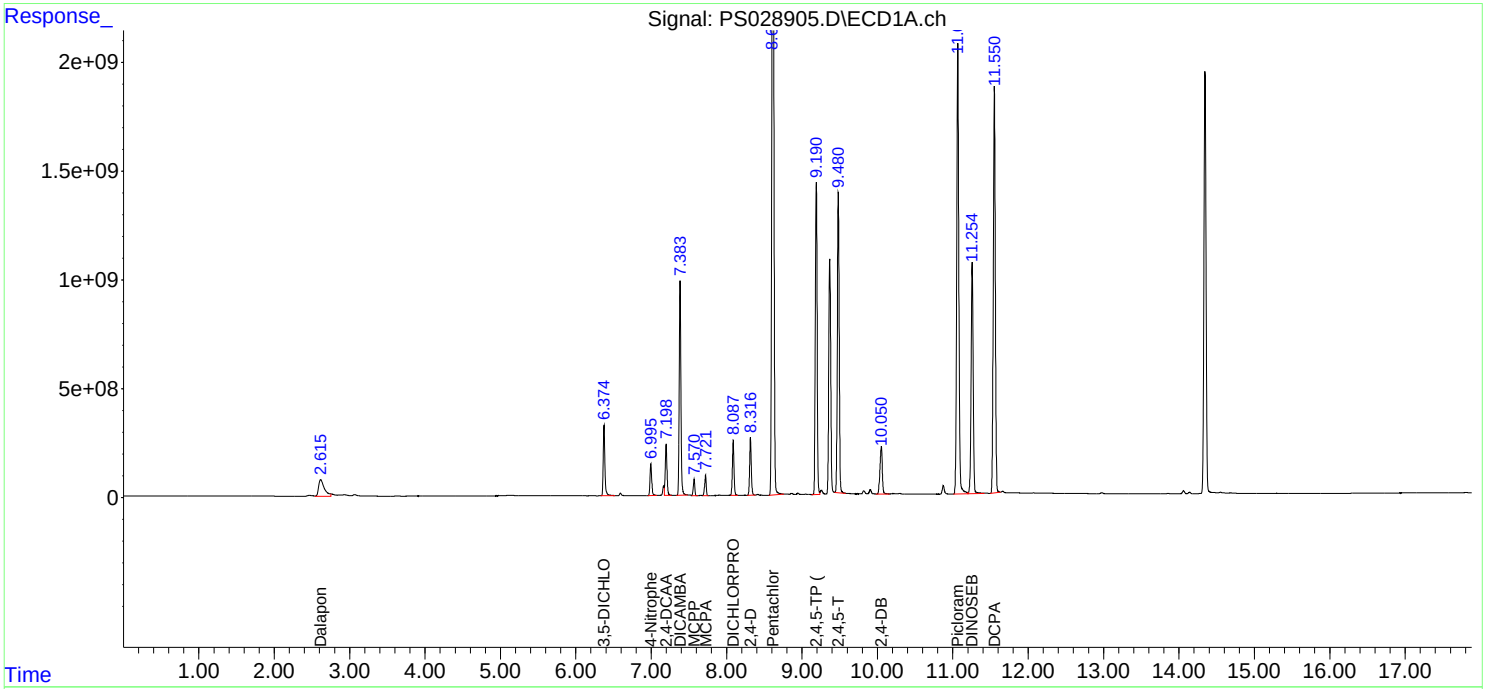
Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

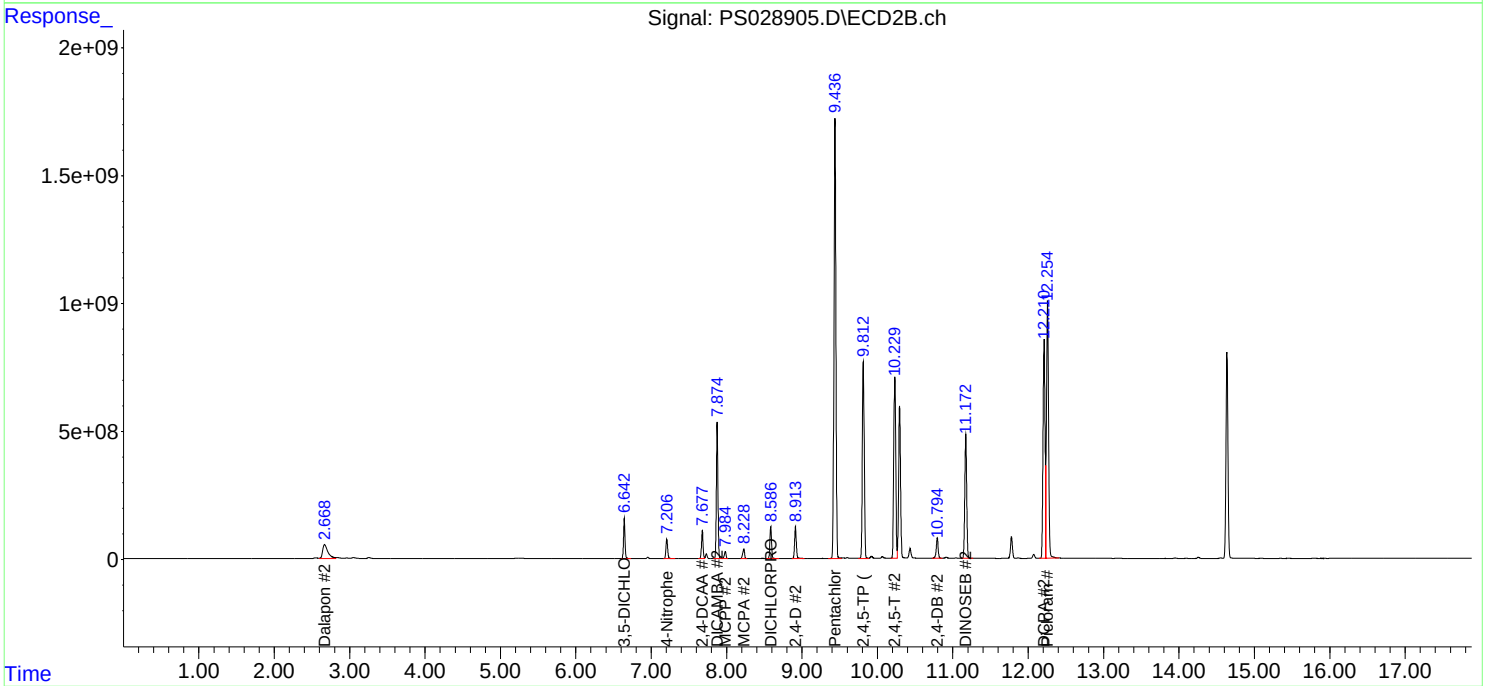
Manual Integrations APPROVED

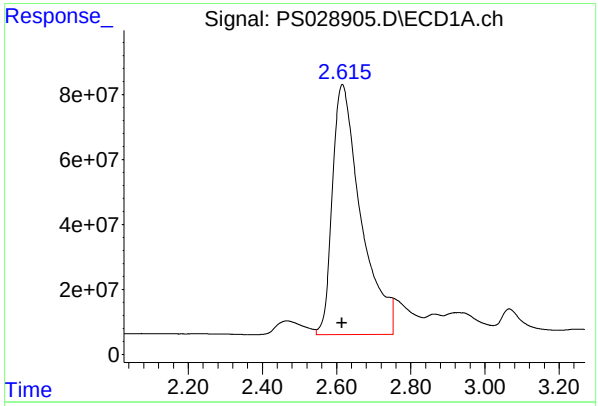
Reviewed By :Abdul Mirza 01/14/2025
Supervised By :Ankita Jodhani 01/15/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 14 12:24:39 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:24:29 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







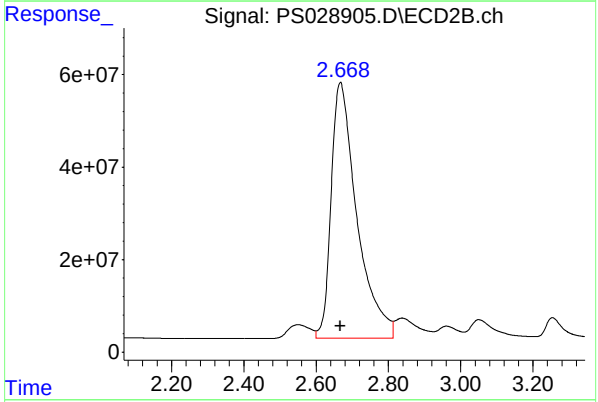
#1 Dalapon

R.T.: 2.615 min
Delta R.T.: 0.000 min
Response: 4104630171
Conc: 1373.86 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

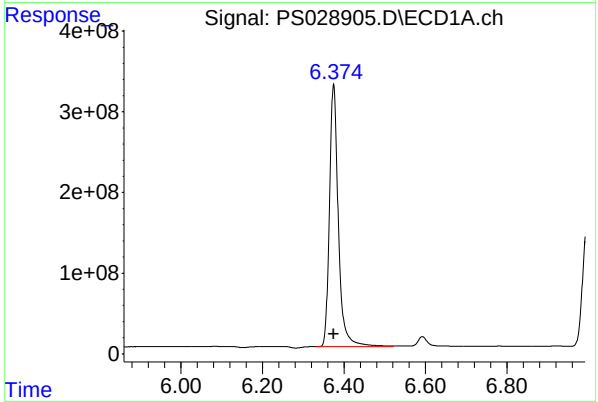
Manual Integrations APPROVED

Reviewed By :Abdul Mirza 01/14/2025
Supervised By :Ankita Jodhani 01/15/2025



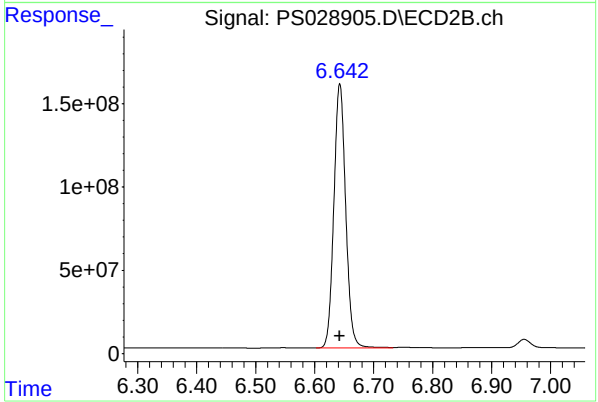
#1 Dalapon

R.T.: 2.668 min
Delta R.T.: 0.000 min
Response: 2732337433
Conc: 1344.35 ng/ml



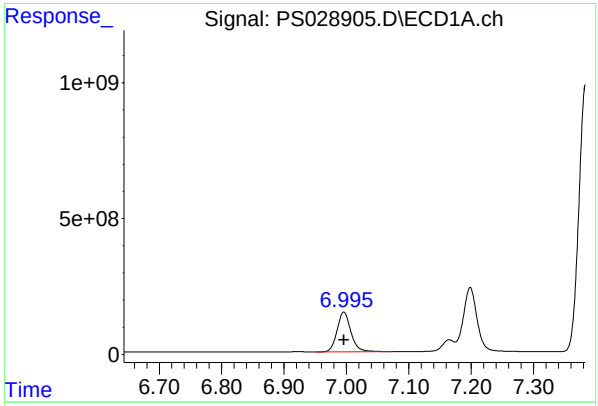
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.375 min
Delta R.T.: 0.000 min
Response: 4927415110
Conc: 1262.17 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.643 min
Delta R.T.: 0.000 min
Response: 2207837002
Conc: 1347.37 ng/ml



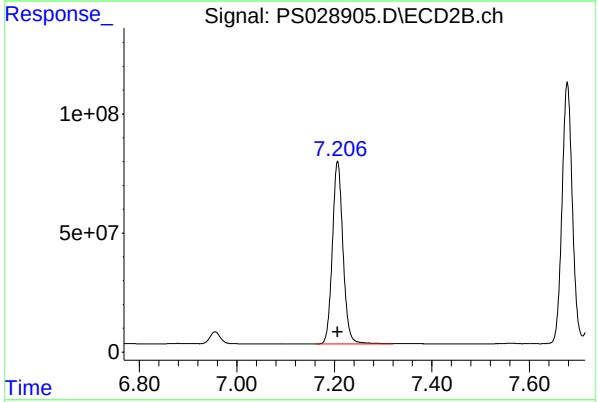
#3 4-Nitrophenol

R.T.: 6.996 min
Delta R.T.: 0.000 min
Response: 2257498653
Conc: 1291.16 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

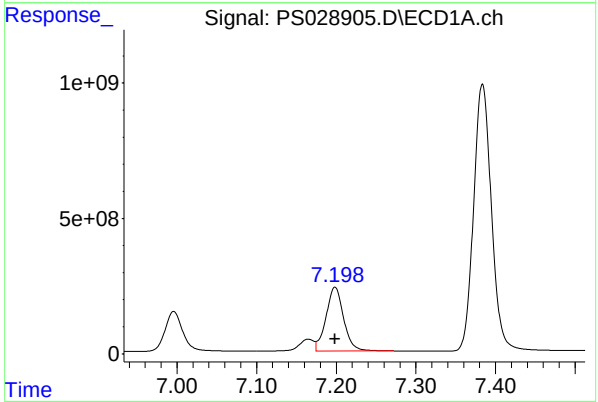
Manual Integrations APPROVED

Reviewed By :Abdul Mirza 01/14/2025
Supervised By :Ankita Jodhani 01/15/2025



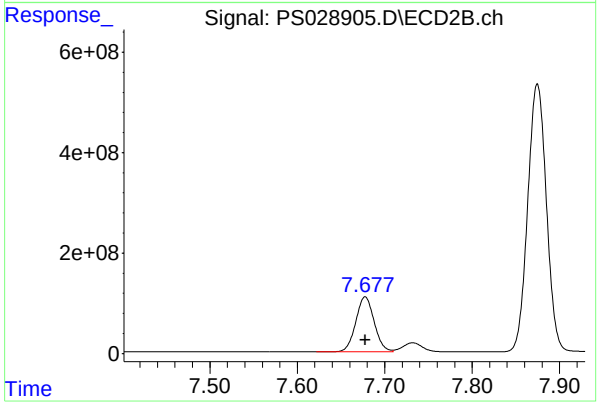
#3 4-Nitrophenol

R.T.: 7.207 min
Delta R.T.: 0.000 min
Response: 1158944307
Conc: 1314.55 ng/ml



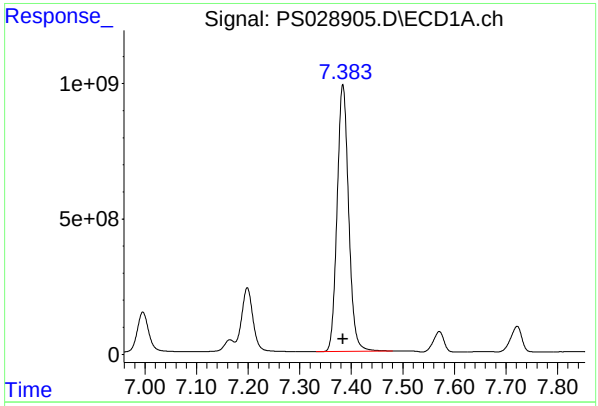
#4 2,4-DCAA

R.T.: 7.198 min
Delta R.T.: 0.000 min
Response: 3620644236
Conc: 1336.05 ng/ml



#4 2,4-DCAA

R.T.: 7.678 min
Delta R.T.: 0.000 min
Response: 1605121752
Conc: 1450.41 ng/ml



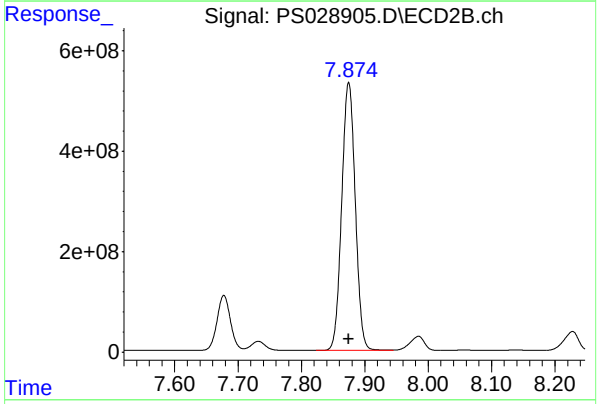
#5 DICAMBA

R.T.: 7.384 min
Delta R.T.: 0.000 mi
Response: 15288428327
Conc: 1311.44 ng/m

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

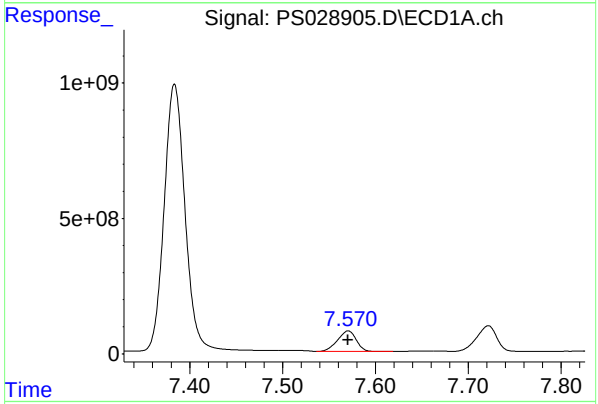
Manual Integrations APPROVED

Reviewed By :Abdul Mirza 01/14/2025
Supervised By :Ankita Jodhani 01/15/2025



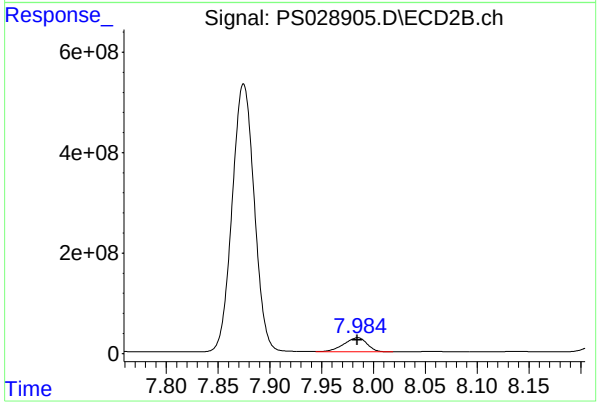
#5 DICAMBA

R.T.: 7.875 min
Delta R.T.: 0.000 min
Response: 7923720175
Conc: 1420.23 ng/ml



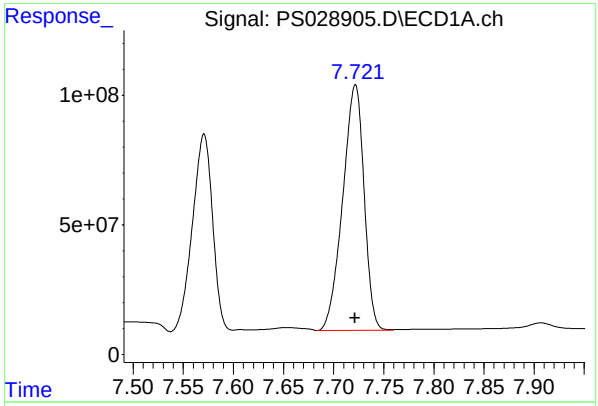
#6 MCPP

R.T.: 7.571 min
Delta R.T.: 0.000 min
Response: 1068198576
Conc: 153.30 ug/ml



#6 MCPP

R.T.: 7.984 min
Delta R.T.: 0.000 min
Response: 439172090
Conc: 144.97 ug/ml



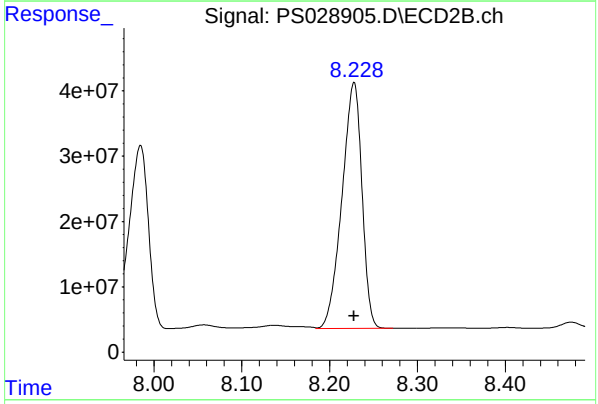
#7 MCPA

R.T.: 7.722 min
Delta R.T.: 0.000 min
Response: 1403348267
Conc: 141.86 ug/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

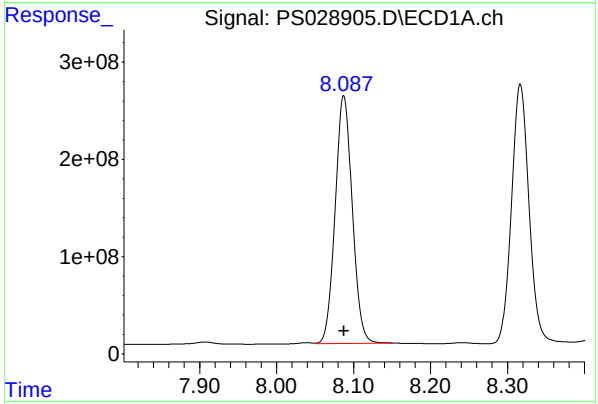
Manual Integrations APPROVED

Reviewed By :Abdul Mirza 01/14/2025
Supervised By :Ankita Jodhani 01/15/2025



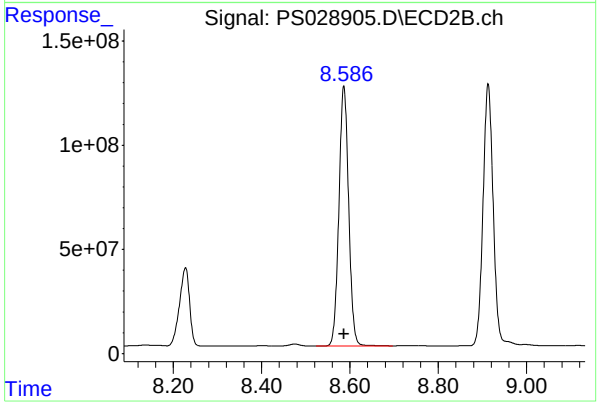
#7 MCPA

R.T.: 8.228 min
Delta R.T.: 0.000 min
Response: 594601475
Conc: 139.89 ug/ml



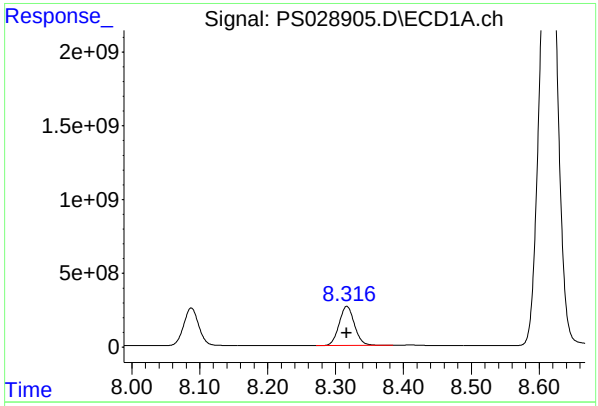
#8 DICHLORPROP

R.T.: 8.088 min
Delta R.T.: 0.000 min
Response: 3907459694
Conc: 1264.92 ng/ml



#8 DICHLORPROP

R.T.: 8.586 min
Delta R.T.: 0.000 min
Response: 1911156273
Conc: 1369.45 ng/ml



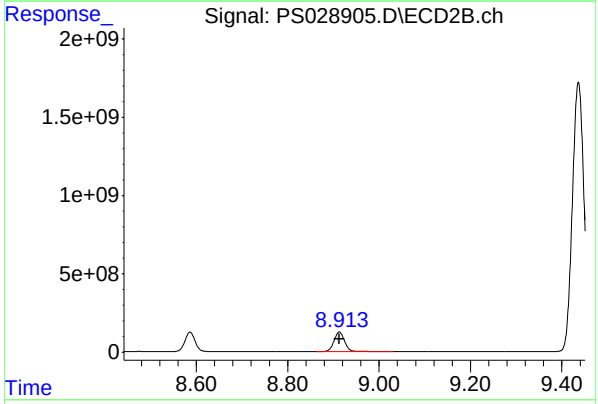
#9 2,4-D

R.T.: 8.317 min
Delta R.T.: 0.000 min
Response: 4184181925
Conc: 1269.06 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

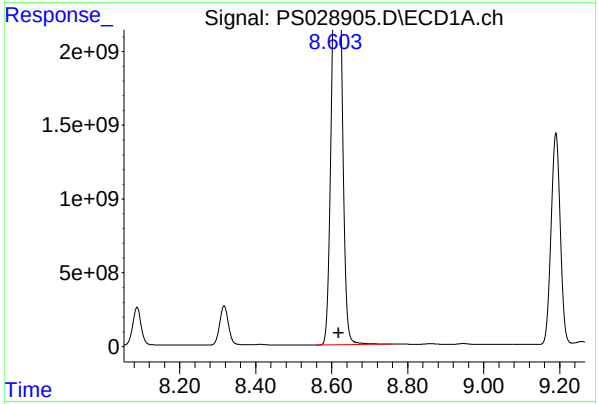
Manual Integrations APPROVED

Reviewed By :Abdul Mirza 01/14/2025
Supervised By :Ankita Jodhani 01/15/2025



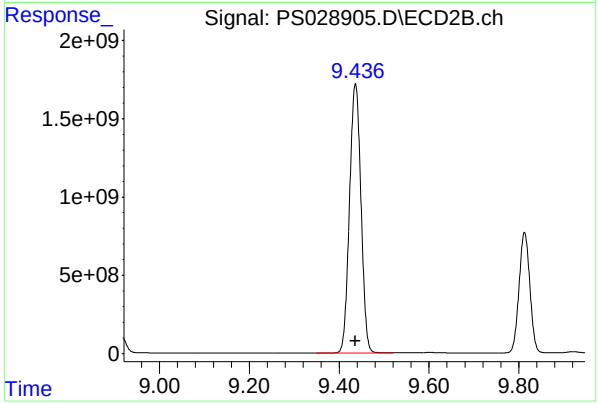
#9 2,4-D

R.T.: 8.913 min
Delta R.T.: 0.000 min
Response: 2015240589
Conc: 1356.64 ng/ml



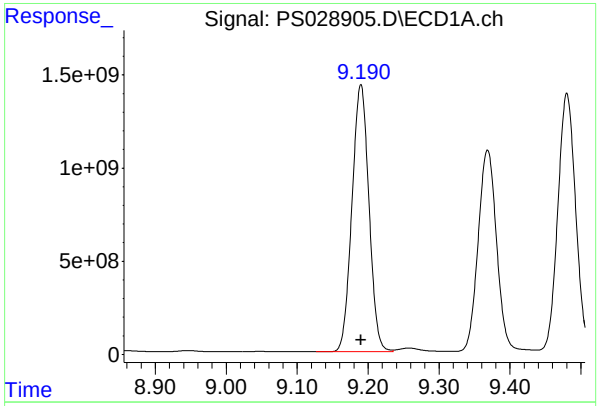
#10 Pentachlorophenol

R.T.: 8.619 min
Delta R.T.: 0.000 min
Response: 48590682069
Conc: 1070.06 ng/ml



#10 Pentachlorophenol

R.T.: 9.436 min
Delta R.T.: 0.000 min
Response: 30432768138
Conc: 1334.53 ng/ml



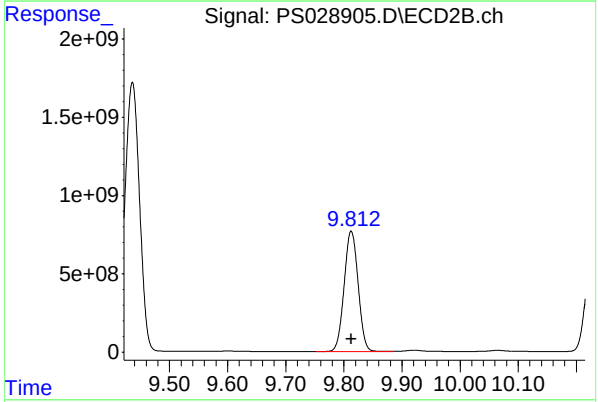
#11 2,4,5-TP (SILVEX)

R.T.: 9.190 min
Delta R.T.: 0.000 min
Response: 23807983939
Conc: 1276.73 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

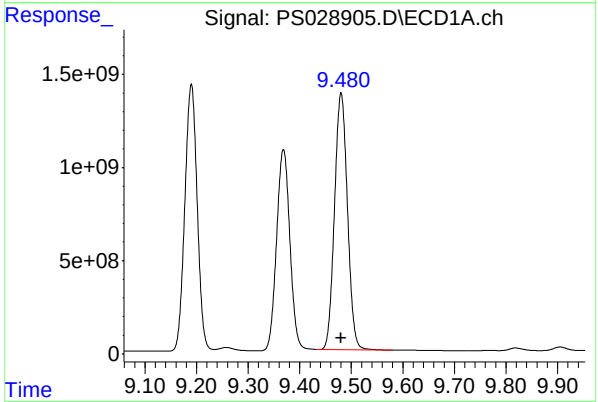
Manual Integrations APPROVED

Reviewed By :Abdul Mirza 01/14/2025
Supervised By :Ankita Jodhani 01/15/2025



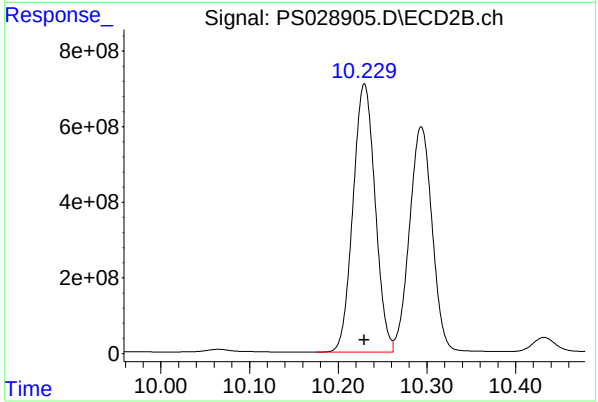
#11 2,4,5-TP (SILVEX)

R.T.: 9.813 min
Delta R.T.: 0.000 min
Response: 12847398816
Conc: 1375.72 ng/ml



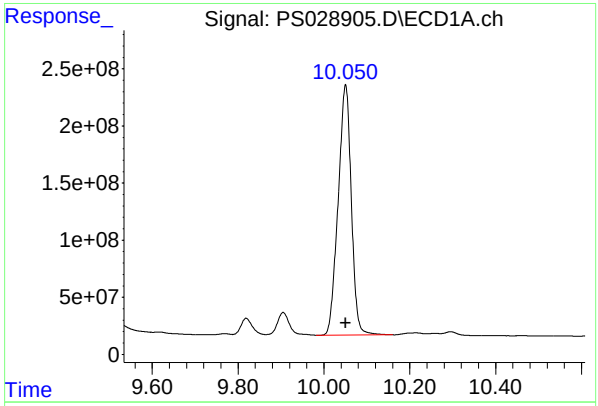
#12 2,4,5-T

R.T.: 9.480 min
Delta R.T.: 0.000 min
Response: 23961133423
Conc: 1279.94 ng/ml



#12 2,4,5-T

R.T.: 10.230 min
Delta R.T.: 0.000 min
Response: 12280117089
Conc: 1375.04 ng/ml



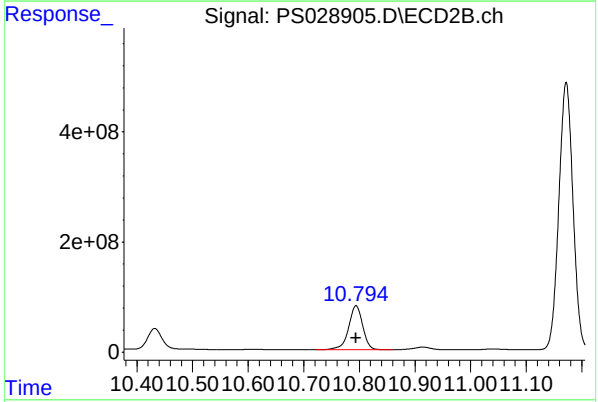
#13 2,4-DB

R.T.: 10.050 min
Delta R.T.: 0.000 min
Response: 4659827211
Conc: 1334.47 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

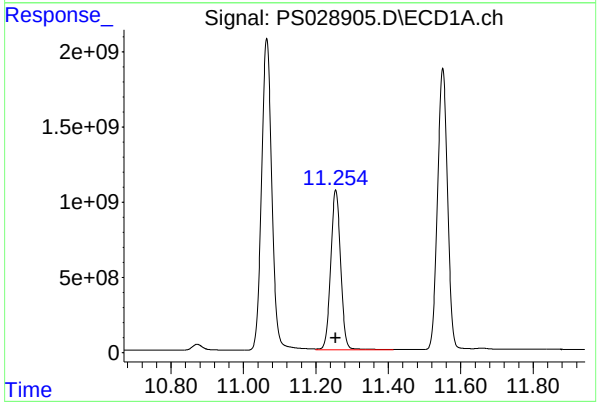
Manual Integrations APPROVED

Reviewed By :Abdul Mirza 01/14/2025
Supervised By :Ankita Jodhani 01/15/2025



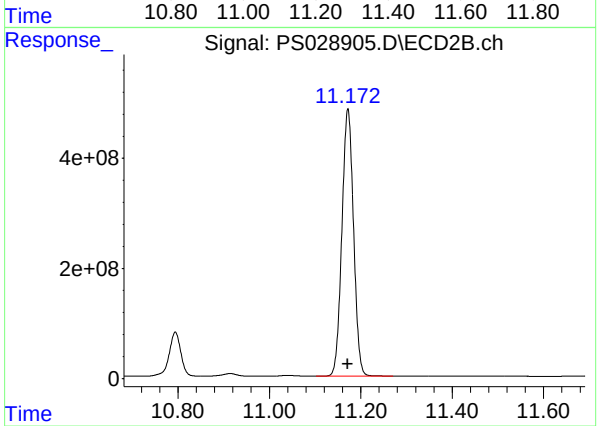
#13 2,4-DB

R.T.: 10.794 min
Delta R.T.: 0.000 min
Response: 1410444919
Conc: 1418.16 ng/ml



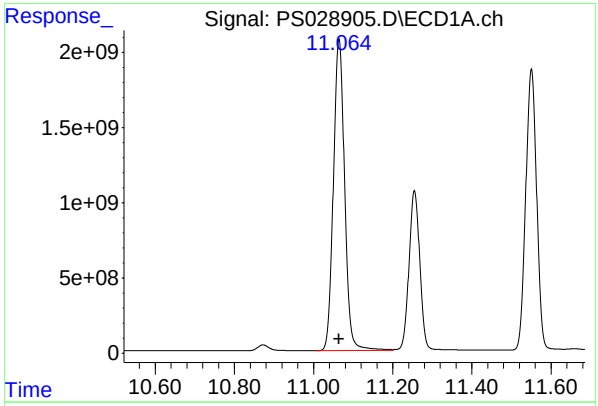
#14 DINOSEB

R.T.: 11.255 min
Delta R.T.: 0.000 min
Response: 20299877375
Conc: 1259.51 ng/ml



#14 DINOSEB

R.T.: 11.172 min
Delta R.T.: 0.000 min
Response: 8571373262
Conc: 1349.90 ng/ml



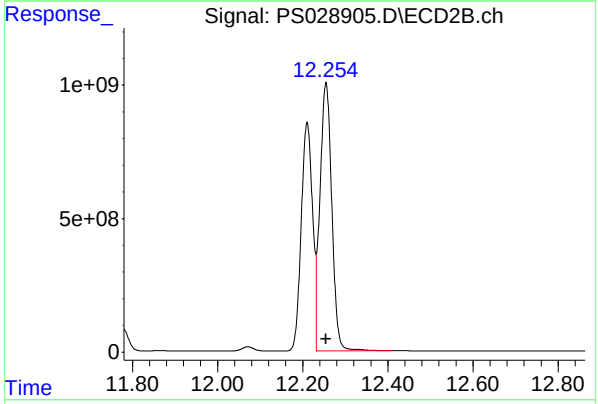
#15 Picloram

R.T.: 11.064 min
Delta R.T.: 0.000 min
Response: 40951242678
Conc: 1321.47 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

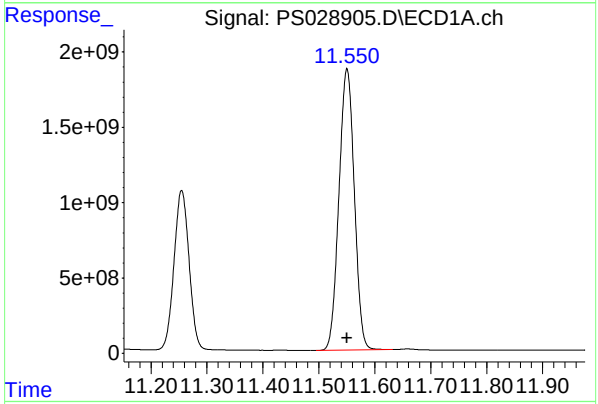
Manual Integrations APPROVED

Reviewed By :Abdul Mirza 01/14/2025
Supervised By :Ankita Jodhani 01/15/2025



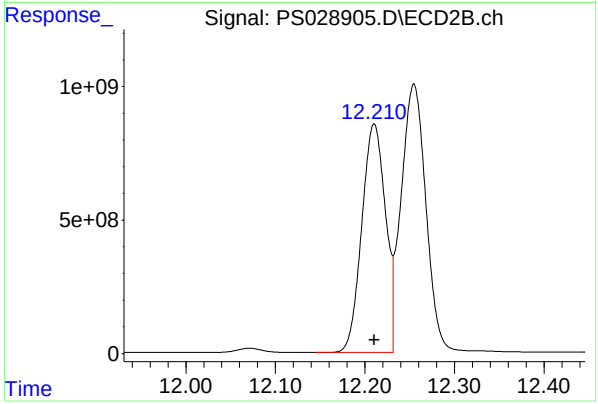
#15 Picloram

R.T.: 12.255 min
Delta R.T.: 0.000 min
Response: 19407128630
Conc: 1441.89 ng/ml



#16 DCPA

R.T.: 11.550 min
Delta R.T.: 0.000 min
Response: 35612880706
Conc: 1276.86 ng/ml



#16 DCPA

R.T.: 12.210 min
Delta R.T.: 0.000 min
Response: 15746015044
Conc: 1397.31 ng/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS011425\
Data File : PS028906.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Jan 2025 12:31
Operator : AR\AJ
Sample : HSTDICV750
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
ICVPS011425

Manual Integrations APPROVED

Reviewed By :Abdul Mirza 01/14/2025
Supervised By :Ankita Jodhani 01/15/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 14 12:50:06 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 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	7.198	7.677	1954.1E6	815.5E6	701.913m	730.872
	Target Compounds						
1) T	Dalapon	2.617	2.667	2021.2E6	1368.1E6	677.864m	670.594
2) T	3,5-DICHL...	6.375	6.643	2643.0E6	1126.0E6	661.269	681.365
3) T	4-Nitroph...	6.996	7.207	1153.1E6	589.2E6	650.699	662.186
5) T	DICAMBA	7.383	7.874	8094.6E6	3936.5E6	682.430	706.852
6) T	MCPP	7.565	7.979	500.5E6	215.1E6	73.421	71.515
7) T	MCPA	7.714	8.220	683.4E6	294.4E6	69.370	69.308
8) T	DICHLORPROP	8.087	8.586	2101.2E6	970.0E6	663.140	690.108
9) T	2,4-D	8.317	8.913	2261.2E6	1032.1E6	669.101	688.263
10) T	Pentachlo...	8.613	9.436	33194.1E6	16359.2E6	688.146	706.173
11) T	2,4,5-TP ...	9.189	9.813	13049.3E6	6664.0E6	682.045	707.481
12) T	2,4,5-T	9.480	10.230	13104.2E6	6350.6E6	682.619	704.921
13) T	2,4-DB	10.050	10.794	2422.6E6	699.4E6	682.922	702.401
14) T	DINOSEB	11.254	11.172	10976.0E6	4397.4E6	663.311	685.233
15) T	Picloram	11.064	12.255	21733.8E6	9689.5E6	688.822	722.034
16) T	DCPA	11.549	12.209	19741.5E6	8153.3E6	688.312	718.207

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

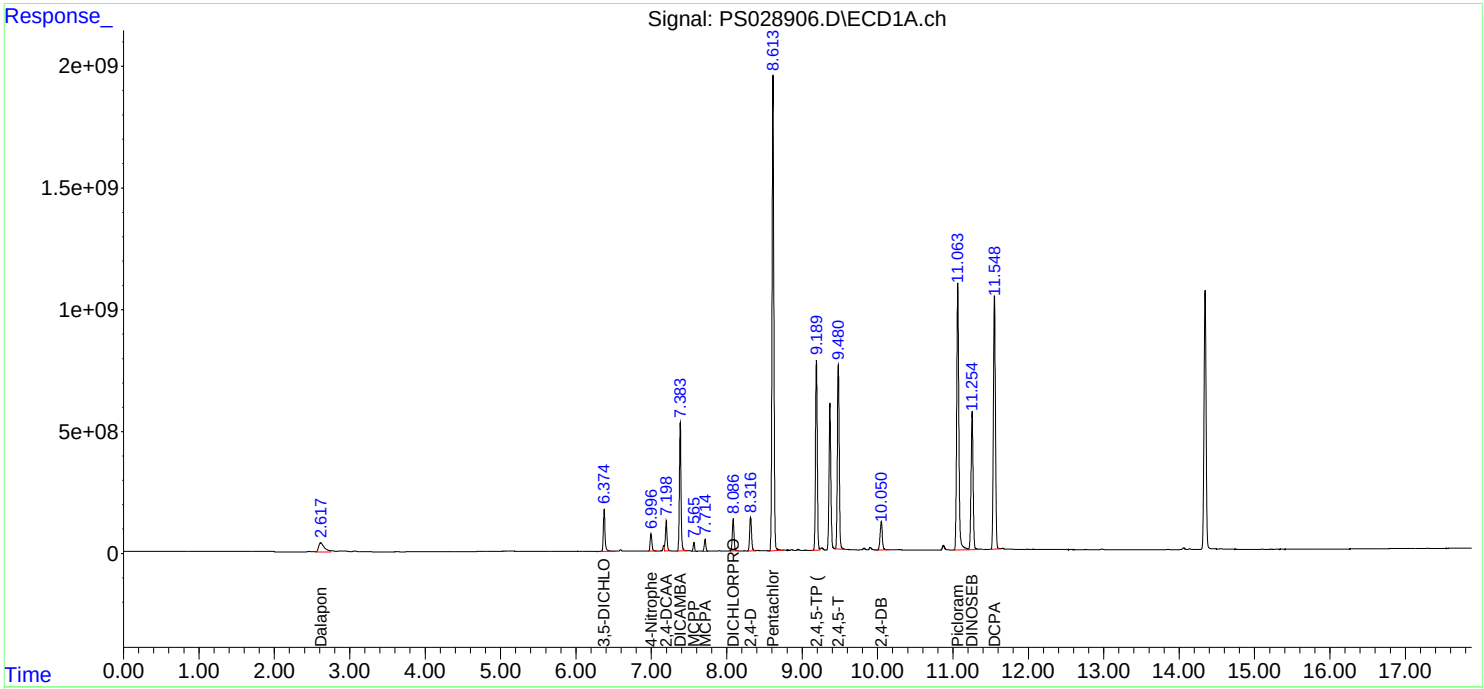
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS011425\
Data File : PS028906.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Jan 2025 12:31
Operator : AR\AJ
Sample : HSTDICV750
Misc :
ALS Vial : 8 Sample Multiplier: 1

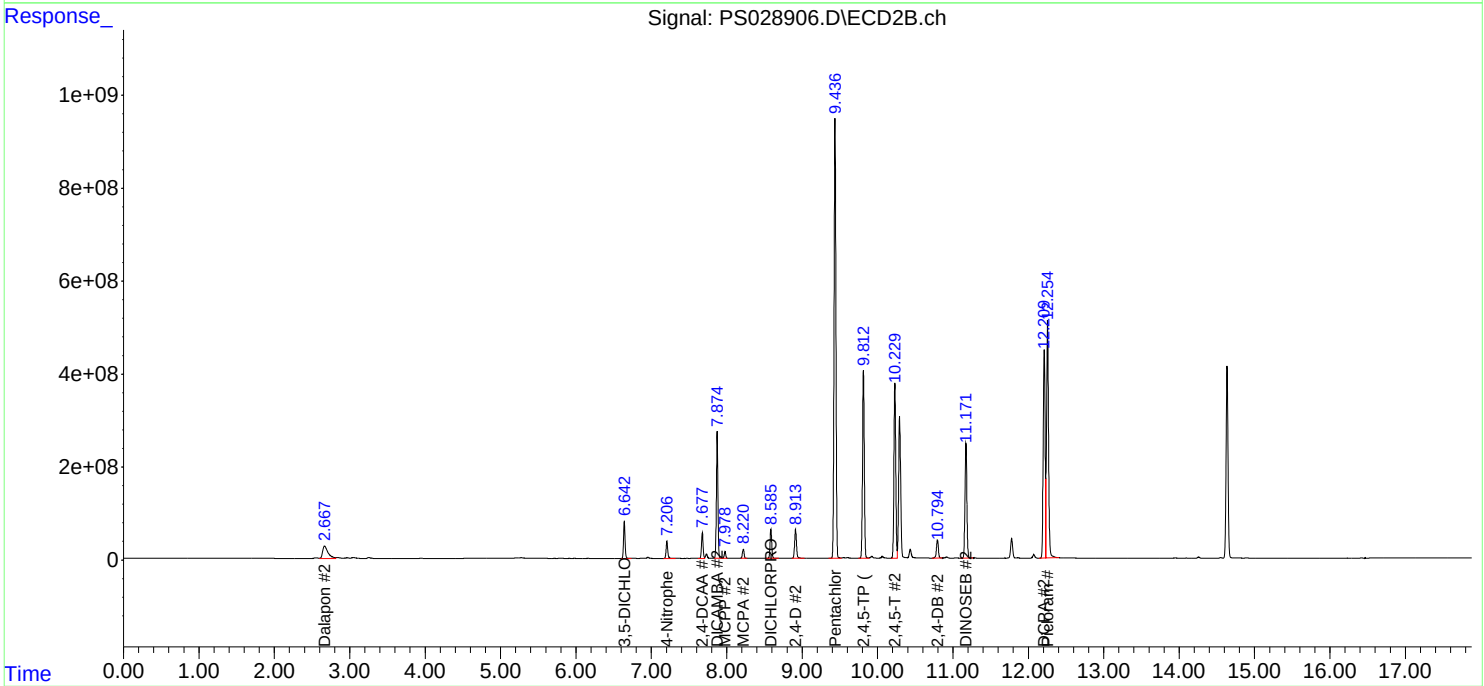
Instrument :
ECD_S
ClientSampleId :
ICVPS011425

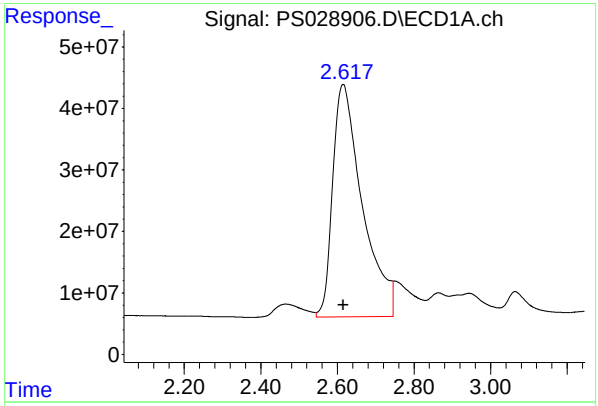
Manual Integrations APPROVED
Reviewed By :Abdul Mirza 01/14/2025
Supervised By :Ankita Jodhani 01/15/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 14 12:50:06 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 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







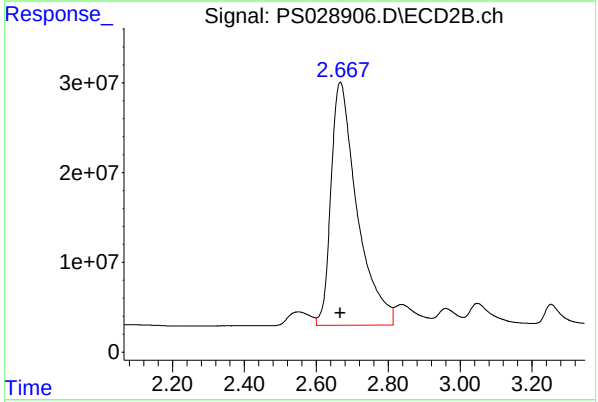
#1 Dalapon

R.T.: 2.617 min
Delta R.T.: 0.002 min
Response: 2021216536
Conc: 677.86 ng/ml

Instrument :
ECD_S
ClientSampleId :
ICVPS011425

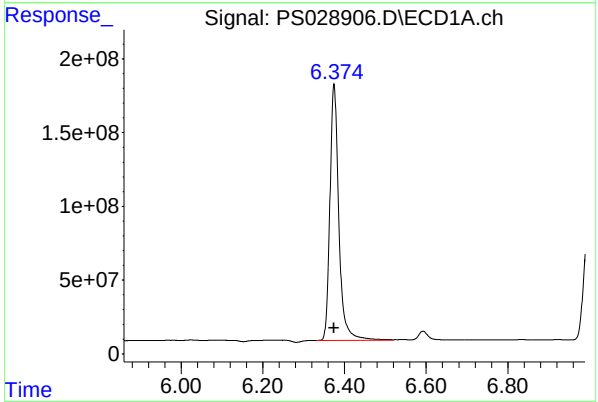
Manual Integrations APPROVED

Reviewed By :Abdul Mirza 01/14/2025
Supervised By :Ankita Jodhani 01/15/2025



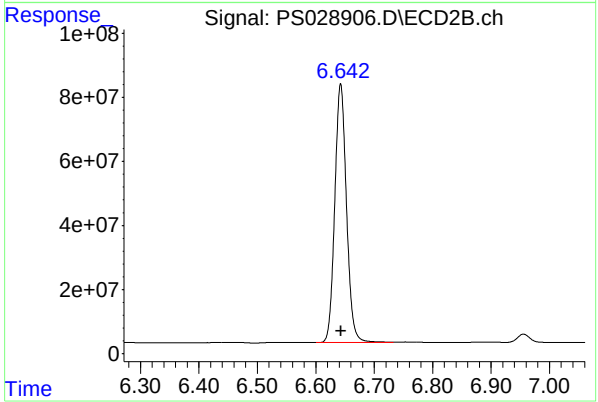
#1 Dalapon

R.T.: 2.667 min
Delta R.T.: 0.000 min
Response: 1368111425
Conc: 670.59 ng/ml



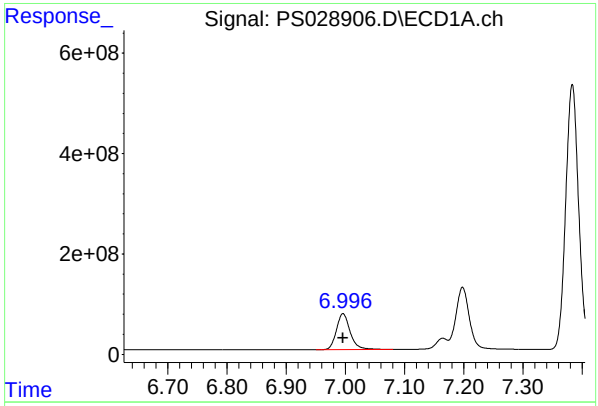
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.375 min
Delta R.T.: 0.000 min
Response: 2642993373
Conc: 661.27 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.643 min
Delta R.T.: 0.000 min
Response: 1126037759
Conc: 681.37 ng/ml



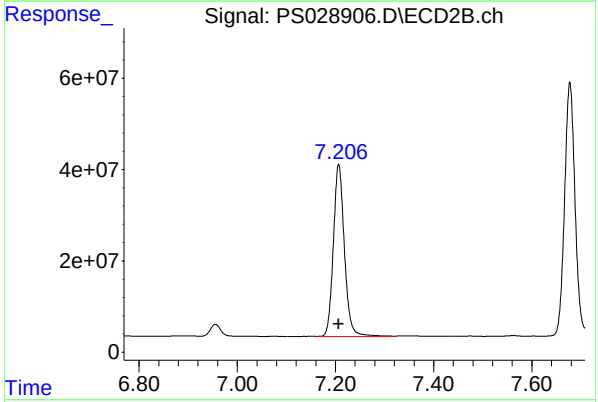
#3 4-Nitrophenol

R.T.: 6.996 min
Delta R.T.: 0.000 min
Response: 1153090162
Conc: 650.70 ng/ml

Instrument :
ECD_S
ClientSampleId :
ICVPS011425

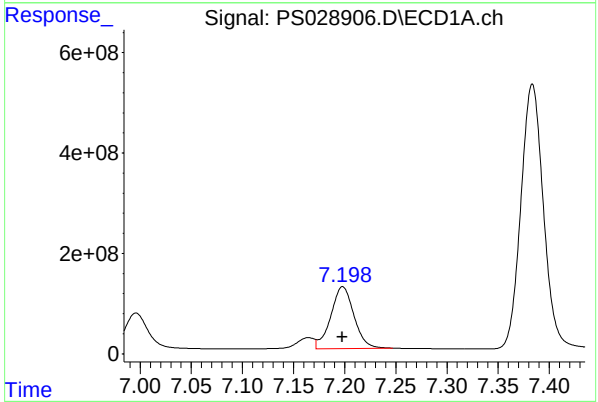
Manual Integrations APPROVED

Reviewed By :Abdul Mirza 01/14/2025
Supervised By :Ankita Jodhani 01/15/2025



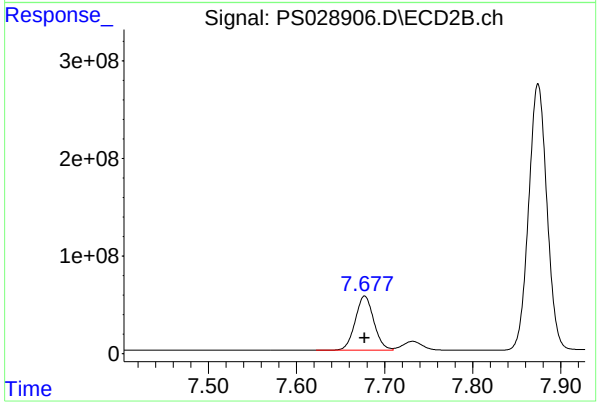
#3 4-Nitrophenol

R.T.: 7.207 min
Delta R.T.: 0.000 min
Response: 589196510
Conc: 662.19 ng/ml



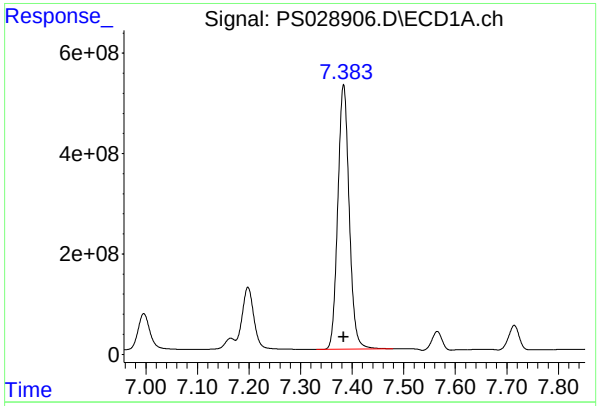
#4 2,4-DCAA

R.T.: 7.198 min
Delta R.T.: 0.000 min
Response: 1954135705
Conc: 701.91 ng/ml m



#4 2,4-DCAA

R.T.: 7.677 min
Delta R.T.: 0.000 min
Response: 815516416
Conc: 730.87 ng/ml



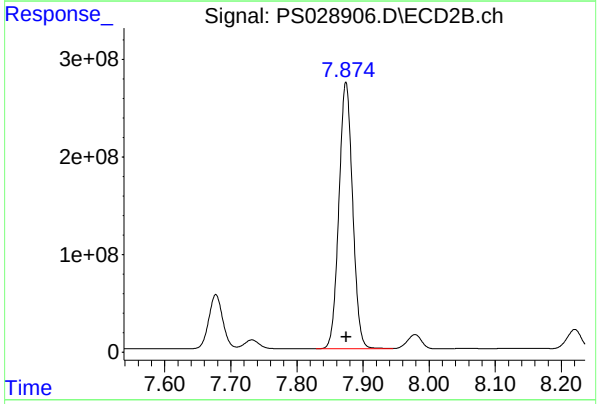
#5 DICAMBA

R.T.: 7.383 min
Delta R.T.: 0.000 min
Response: 8094599008
Conc: 682.43 ng/ml

Instrument :
ECD_S
ClientSampleId :
ICVPS011425

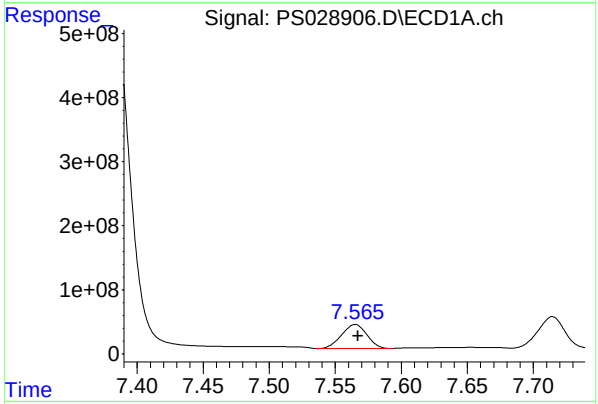
Manual Integrations APPROVED

Reviewed By :Abdul Mirza 01/14/2025
Supervised By :Ankita Jodhani 01/15/2025



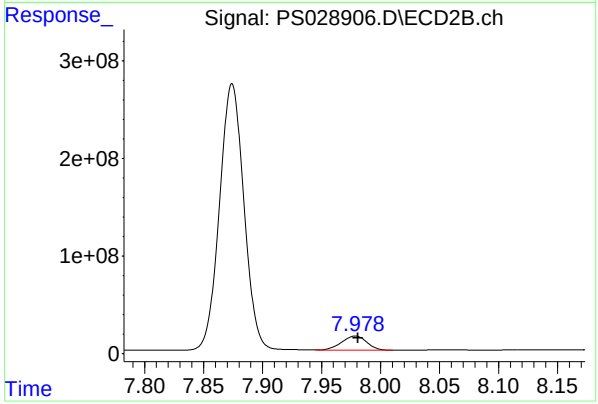
#5 DICAMBA

R.T.: 7.874 min
Delta R.T.: 0.000 min
Response: 3936487030
Conc: 706.85 ng/ml



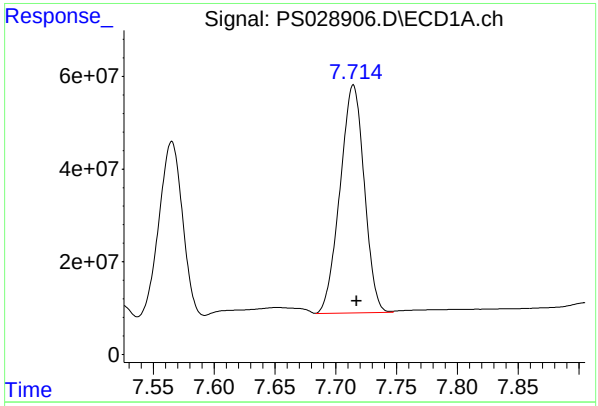
#6 MCPP

R.T.: 7.565 min
Delta R.T.: -0.002 min
Response: 500456855
Conc: 73.42 ug/ml



#6 MCPP

R.T.: 7.979 min
Delta R.T.: -0.002 min
Response: 215113889
Conc: 71.51 ug/ml



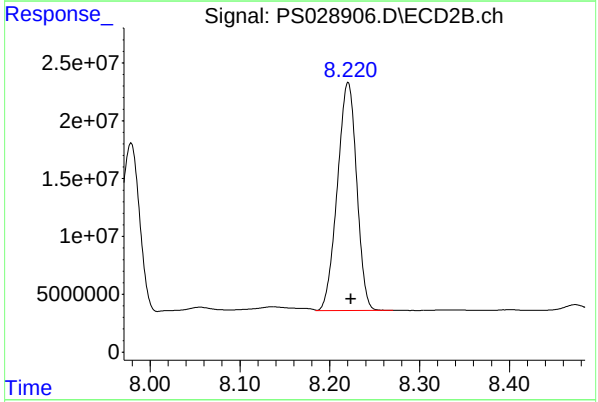
#7 MCPA

R.T.: 7.714 min
Delta R.T.: -0.003 min
Response: 683363222
Conc: 69.37 ug/ml

Instrument :
ECD_S
ClientSampleId :
ICVPS011425

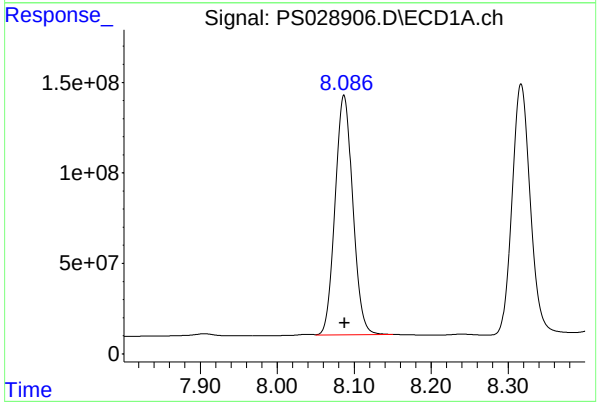
Manual Integrations APPROVED

Reviewed By :Abdul Mirza 01/14/2025
Supervised By :Ankita Jodhani 01/15/2025



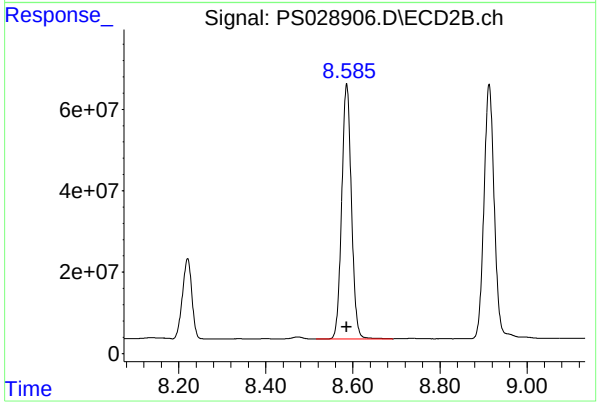
#7 MCPA

R.T.: 8.220 min
Delta R.T.: -0.003 min
Response: 294383936
Conc: 69.31 ug/ml



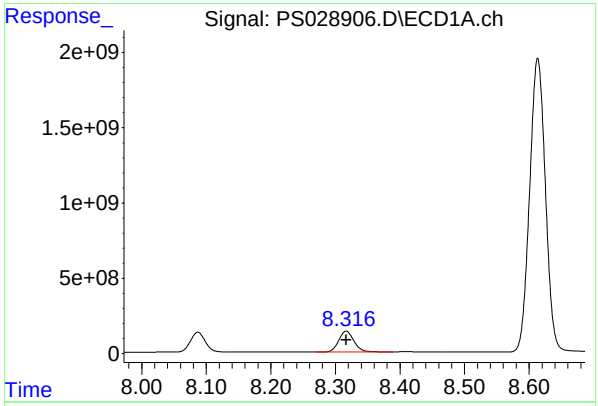
#8 DICHLORPROP

R.T.: 8.087 min
Delta R.T.: 0.000 min
Response: 2101207308
Conc: 663.14 ng/ml



#8 DICHLORPROP

R.T.: 8.586 min
Delta R.T.: 0.000 min
Response: 970014347
Conc: 690.11 ng/ml



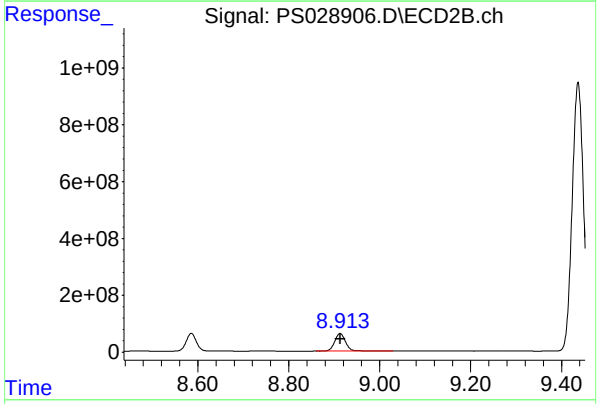
#9 2,4-D

R.T.: 8.317 min
Delta R.T.: 0.000 min
Response: 2261193949
Conc: 669.10 ng/ml

Instrument :
ECD_S
ClientSampleId :
ICVPS011425

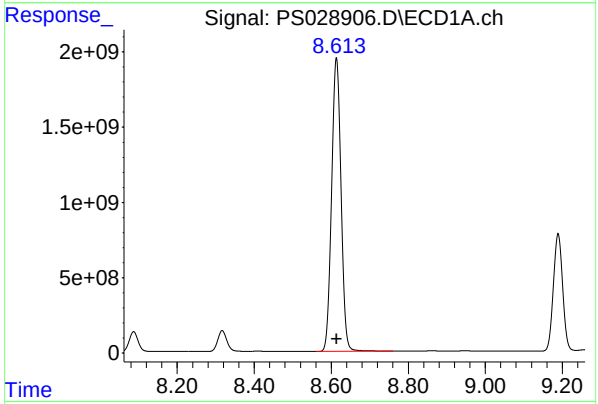
Manual Integrations APPROVED

Reviewed By :Abdul Mirza 01/14/2025
Supervised By :Ankita Jodhani 01/15/2025



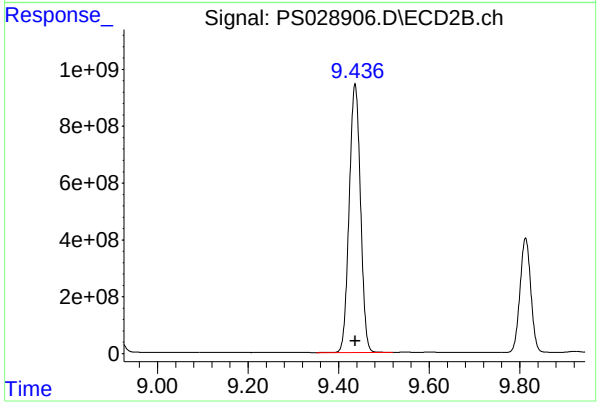
#9 2,4-D

R.T.: 8.913 min
Delta R.T.: 0.000 min
Response: 1032063315
Conc: 688.26 ng/ml



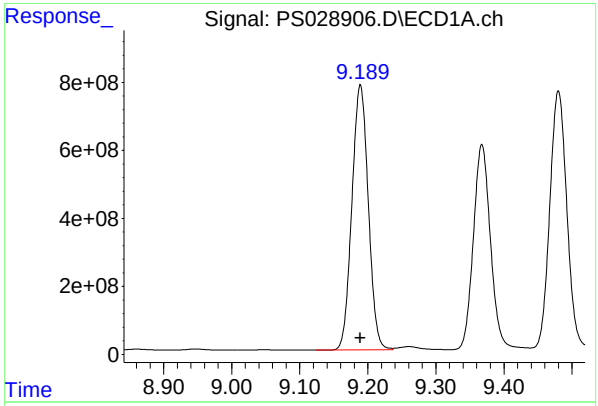
#10 Pentachlorophenol

R.T.: 8.613 min
Delta R.T.: 0.000 min
Response: 33194118867
Conc: 688.15 ng/ml



#10 Pentachlorophenol

R.T.: 9.436 min
Delta R.T.: 0.000 min
Response: 16359225437
Conc: 706.17 ng/ml



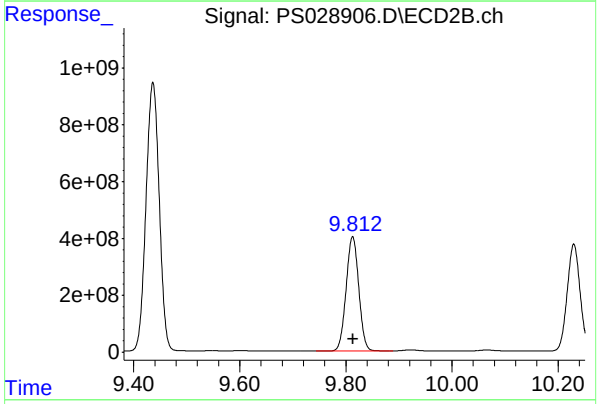
#11 2,4,5-TP (SILVEX)

R.T.: 9.189 min
Delta R.T.: 0.000 min
Response: 13049329632
Conc: 682.04 ng/ml

Instrument :
ECD_S
ClientSampleId :
ICVPS011425

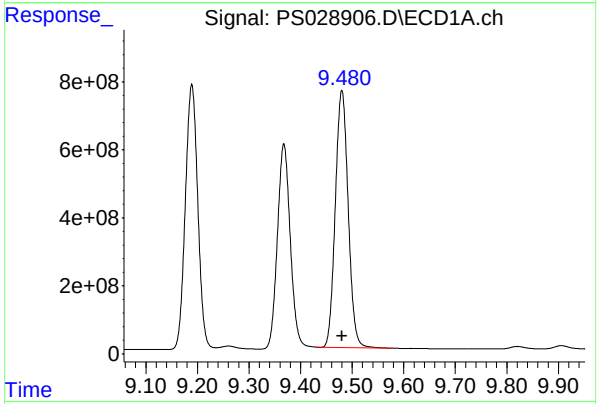
Manual Integrations APPROVED

Reviewed By :Abdul Mirza 01/14/2025
Supervised By :Ankita Jodhani 01/15/2025



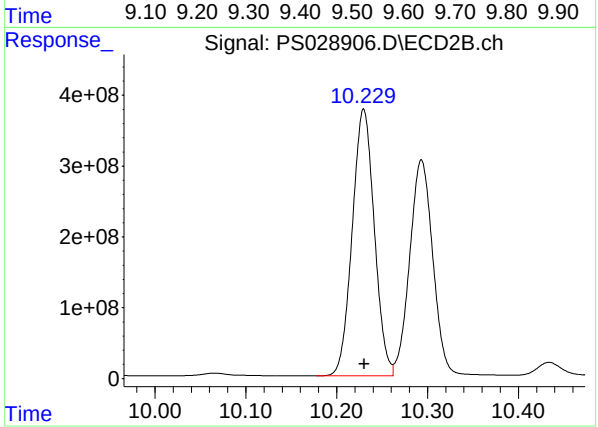
#11 2,4,5-TP (SILVEX)

R.T.: 9.813 min
Delta R.T.: 0.000 min
Response: 6664044603
Conc: 707.48 ng/ml



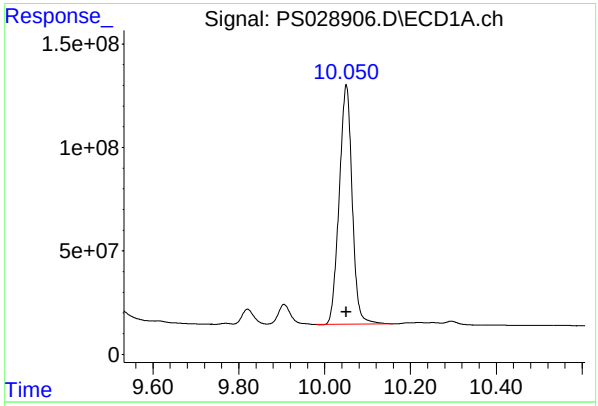
#12 2,4,5-T

R.T.: 9.480 min
Delta R.T.: 0.000 min
Response: 13104177427
Conc: 682.62 ng/ml



#12 2,4,5-T

R.T.: 10.230 min
Delta R.T.: 0.000 min
Response: 6350637897
Conc: 704.92 ng/ml



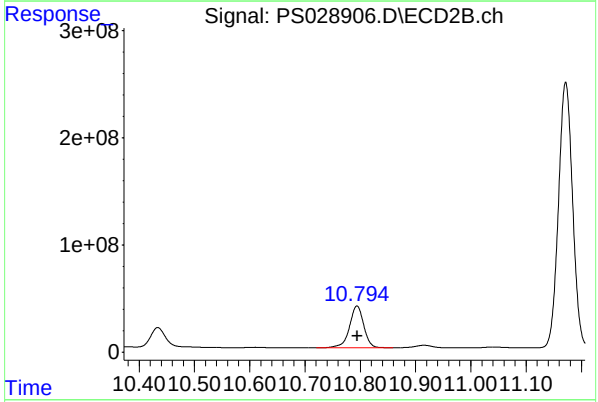
#13 2,4-DB

R.T.: 10.050 min
Delta R.T.: 0.000 min
Response: 2422567420
Conc: 682.92 ng/ml

Instrument :
ECD_S
ClientSampleId :
ICVPS011425

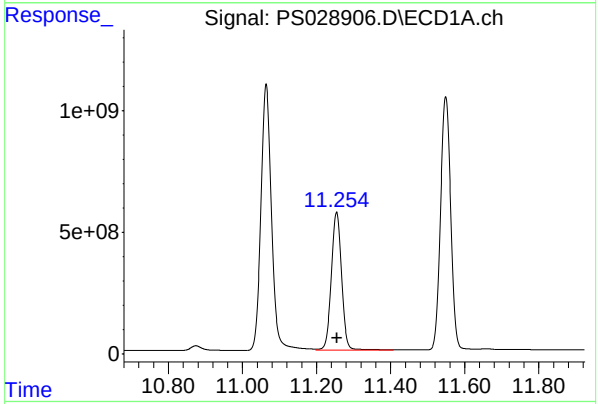
Manual Integrations APPROVED

Reviewed By :Abdul Mirza 01/14/2025
Supervised By :Ankita Jodhani 01/15/2025



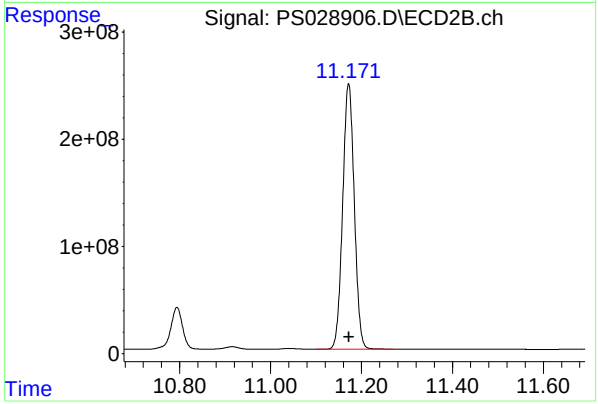
#13 2,4-DB

R.T.: 10.794 min
Delta R.T.: 0.000 min
Response: 699420411
Conc: 702.40 ng/ml



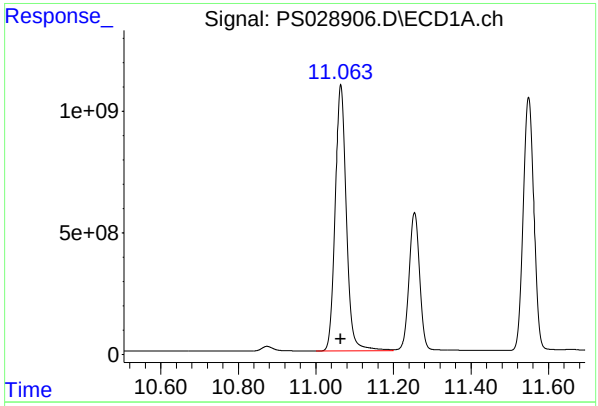
#14 DINOSEB

R.T.: 11.254 min
Delta R.T.: 0.000 min
Response: 10976006715
Conc: 663.31 ng/ml



#14 DINOSEB

R.T.: 11.172 min
Delta R.T.: 0.000 min
Response: 4397359740
Conc: 685.23 ng/ml



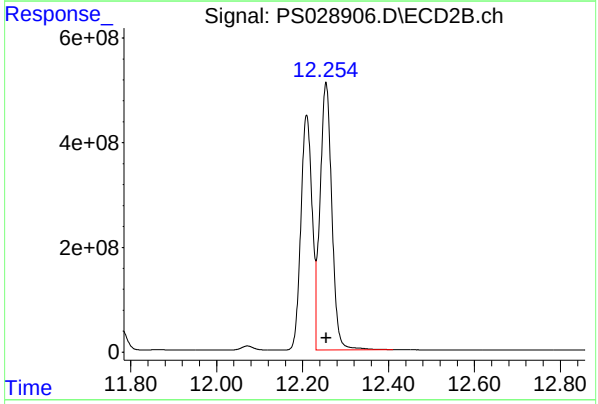
#15 Picloram

R.T.: 11.064 min
Delta R.T.: 0.000 min
Response: 21733814083
Conc: 688.82 ng/ml

Instrument :
ECD_S
ClientSampleId :
ICVPS011425

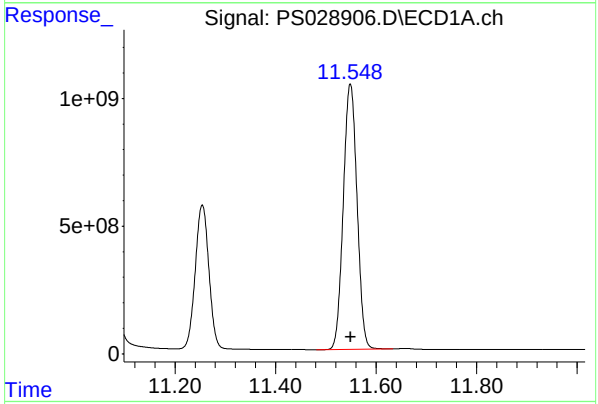
Manual Integrations APPROVED

Reviewed By :Abdul Mirza 01/14/2025
Supervised By :Ankita Jodhani 01/15/2025



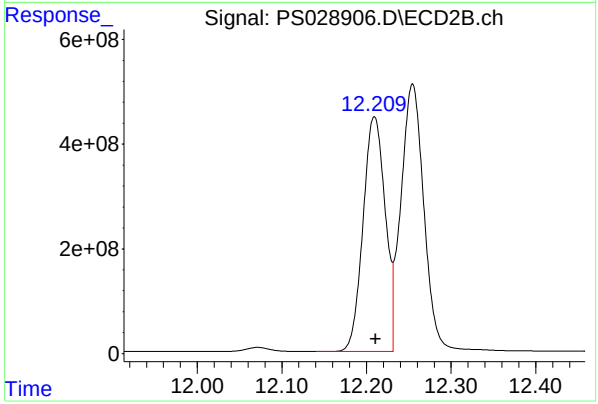
#15 Picloram

R.T.: 12.255 min
Delta R.T.: -0.001 min
Response: 9689461634
Conc: 722.03 ng/ml



#16 DCPA

R.T.: 11.549 min
Delta R.T.: 0.000 min
Response: 19741503590
Conc: 688.31 ng/ml



#16 DCPA

R.T.: 12.209 min
Delta R.T.: -0.001 min
Response: 8153339758
Conc: 718.21 ng/ml

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

CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM **Case No.:** Q1216 **SAS No.:** Q1216 **SDG NO.:** Q1216

Continuing Calib Date: 01/31/2025 **Initial Calibration Date(s):** 01/14/2025 01/14/2025

Continuing Calib Time: 21:08 **Initial Calibration Time(s):** 10:31 12:07

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	RT WINDOW TO	DIFF RT
2,4-DCAA	7.20	7.20	7.10	7.30	0.00
2,4-D	8.31	8.32	8.22	8.42	0.01
2,4,5-TP(Silvex)	9.18	9.19	9.09	9.29	0.01

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

CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM **Case No.:** Q1216 **SAS No.:** Q1216 **SDG NO.:** Q1216

Continuing Calib Date: 01/31/2025 **Initial Calibration Date(s):** 01/14/2025 01/14/2025

Continuing Calib Time: 21:08 **Initial Calibration Time(s):** 10:31 12:07

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	RT WINDOW TO	DIFF RT
2,4-DCAA	7.67	7.68	7.58	7.78	0.01
2,4-D	8.91	8.91	8.81	9.01	0.00
2,4,5-TP(Silvex)	9.81	9.81	9.71	9.91	0.00

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

CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM **Case No.:** Q1216 **SAS No.:** Q1216 **SDG NO.:** Q1216

GC Column: RTX-CLP **ID:** 0.32 **(mm)** **Initi. Calib. Date(s):** 01/14/2025 01/14/2025

Client Sample No.: CCAL01 **Date Analyzed:** 01/31/2025

Lab Sample No.: HSTDCCC750 **Data File :** PS029020.D **Time Analyzed:** 21:08

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	9.184	9.089	9.289	724.050	712.500	1.6
2,4-D	8.312	8.216	8.416	712.460	705.000	1.1
2,4-DCAA	7.195	7.097	7.297	747.480	750.000	-0.3

Alliance TECHNICAL GROUP

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

CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM **Case No.:** Q1216 **SAS No.:** Q1216 **SDG NO.:** Q1216

GC Column: RTX-CLP2 **ID:** 0.32 **(mm)** **Initi. Calib. Date(s):** 01/14/2025 01/14/2025

Client Sample No.: CCAL01 **Date Analyzed:** 01/31/2025

Lab Sample No.: HSTDCCC750 **Data File :** PS029020.D **Time Analyzed:** 21:08

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	9.806	9.713	9.913	721.210	712.500	1.2
2,4-D	8.907	8.813	9.013	668.490	705.000	-5.2
2,4-DCAA	7.672	7.577	7.777	698.680	750.000	-6.8

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS013125\
Data File : PS029020.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 31 Jan 2025 21:08
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 01 00:28:33 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 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	7.195	7.672	2081.0E6	779.6E6	747.480	698.678
		Target Compounds						
1)	T	Dalapon	2.612	2.663	2282.5E6	1333.8E6	765.482	653.783
2)	T	3,5-DICHL...	6.372	6.638	2834.6E6	1073.6E6	709.210	649.655
3)	T	4-Nitroph...	6.993	7.201	1233.8E6	603.7E6	696.220	678.539
5)	T	DICAMBA	7.380	7.869	8680.3E6	3912.4E6	731.809	702.521
6)	T	MCPP	7.562	7.974	521.3E6	188.3E6	76.479	62.596
7)	T	MCPA	7.711	8.215	721.1E6	259.1E6	73.204	61.008
8)	T	DICHLORPROP	8.083	8.580	2237.8E6	962.3E6	706.252	684.624
9)	T	2,4-D	8.312	8.907	2407.7E6	1002.4E6	712.463	668.488
10)	T	Pentachlo...	8.609	9.430	35447.7E6	16862.6E6	734.864	727.903
11)	T	2,4,5-TP ...	9.184	9.806	13853.0E6	6793.3E6	724.051	721.206
12)	T	2,4,5-T	9.475	10.222	13945.4E6	6418.3E6	726.437	712.435
13)	T	2,4-DB	10.045	10.787	2570.9E6	673.9E6	724.731	676.751
14)	T	DINOSEB	11.248	11.165	11369.5E6	4360.9E6	687.091	679.558
15)	T	Picloram	11.058	12.246	22122.5E6	9524.7E6	701.139	709.760
16)	T	DCPA	11.544	12.203	20758.3E6	8559.3E6	723.763	753.971

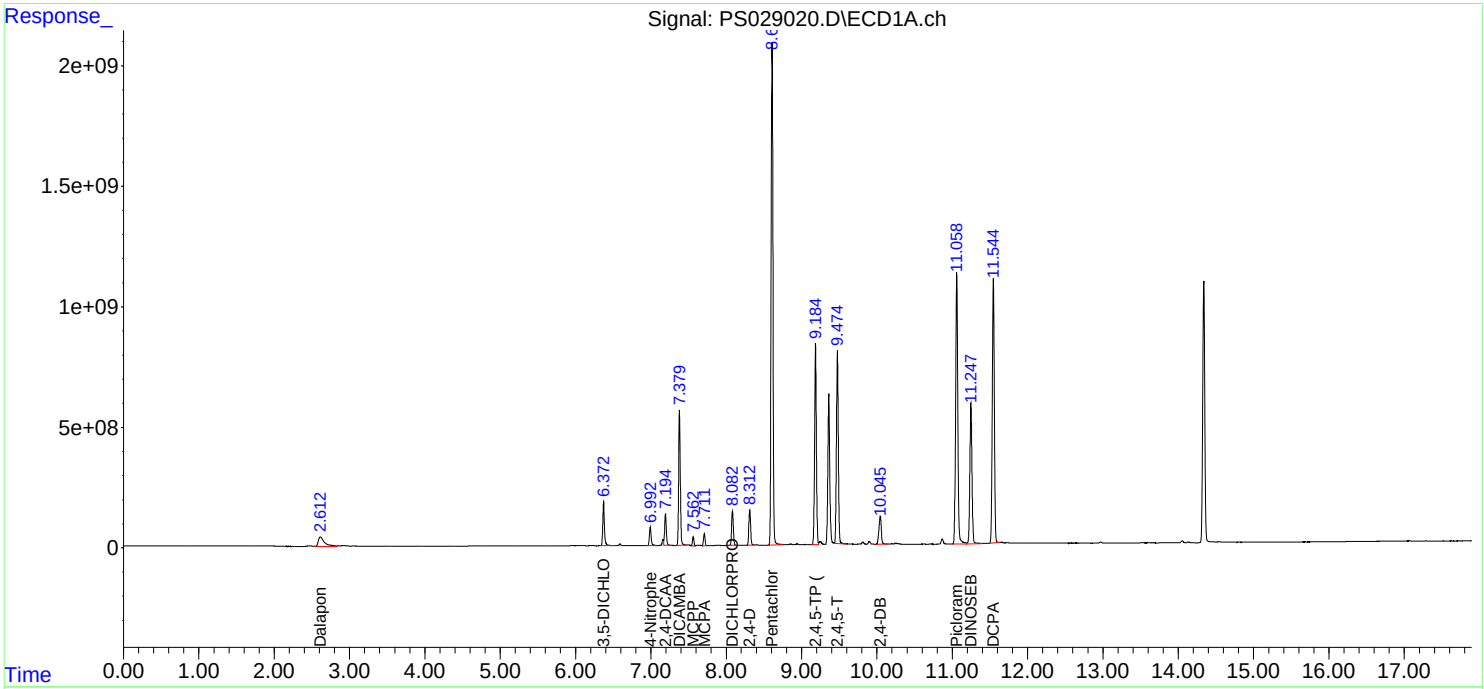
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

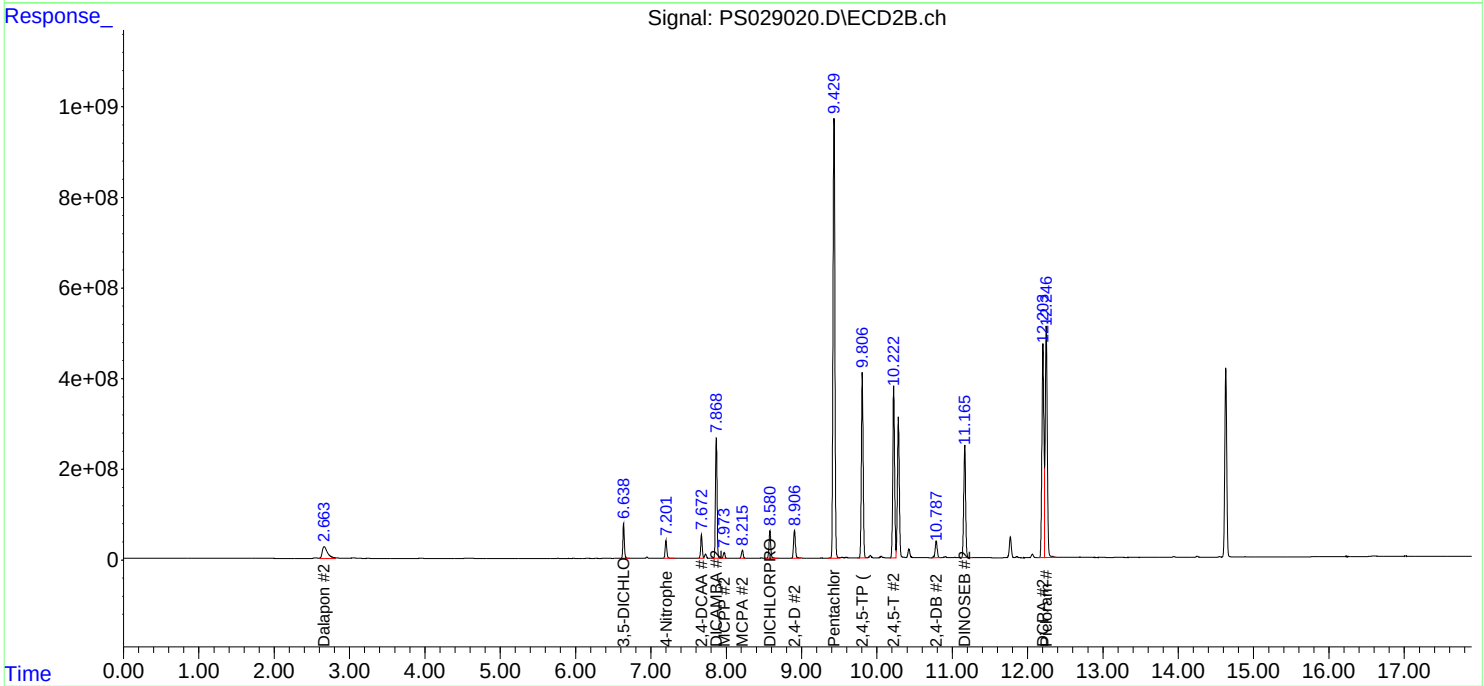
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS013125\
Data File : PS029020.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 31 Jan 2025 21:08
Operator : AR\AJ
Sample : HSTDCCC750
Misc :
ALS Vial : 3 Sample Multiplier: 1

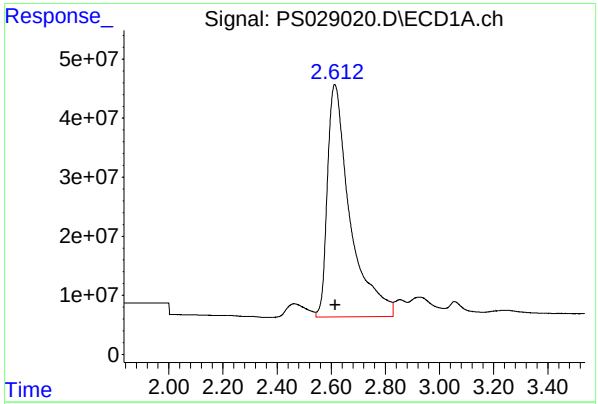
Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 01 00:28:33 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 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



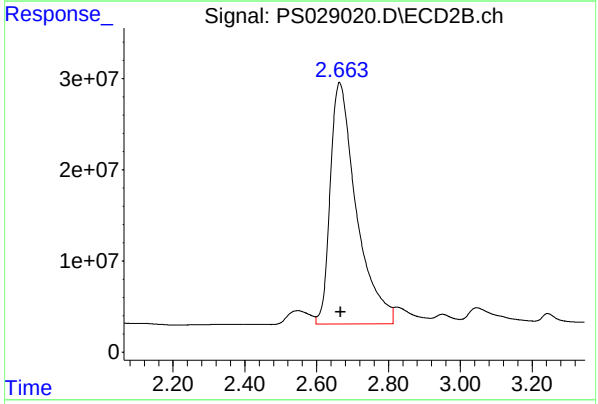




#1 Dalapon

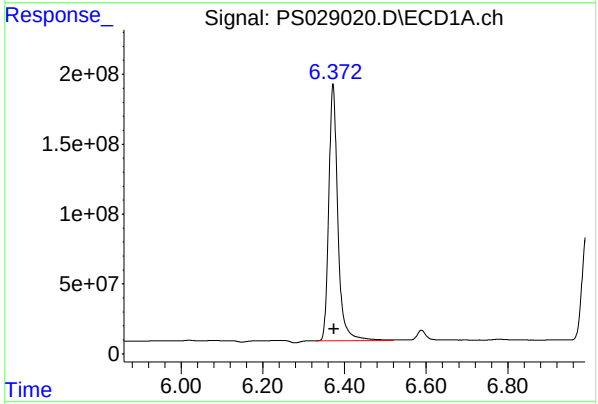
R.T.: 2.612 min
Delta R.T.: -0.003 min
Response: 2282469866
Conc: 765.48 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



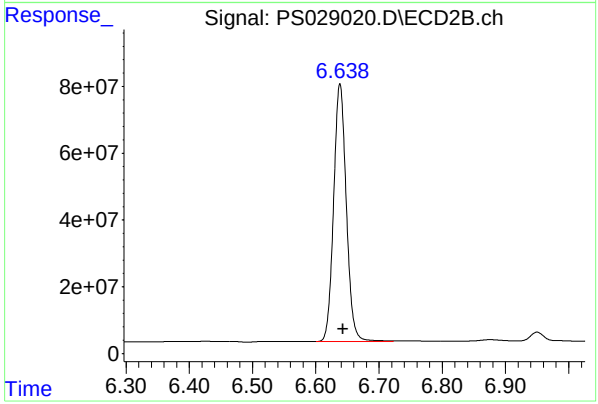
#1 Dalapon

R.T.: 2.663 min
Delta R.T.: -0.004 min
Response: 1333814708
Conc: 653.78 ng/ml



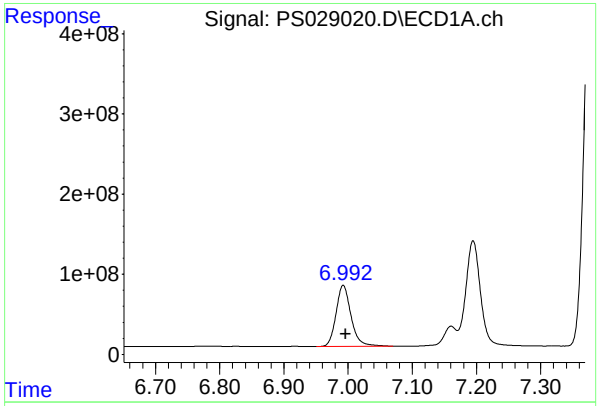
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.372 min
Delta R.T.: -0.003 min
Response: 2834605216
Conc: 709.21 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

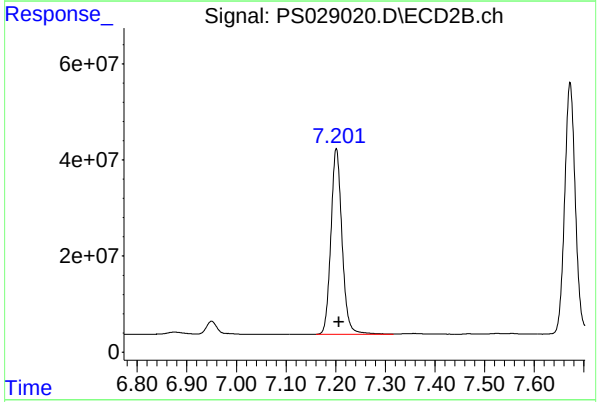
R.T.: 6.638 min
Delta R.T.: -0.005 min
Response: 1073633635
Conc: 649.66 ng/ml



#3 4-Nitrophenol

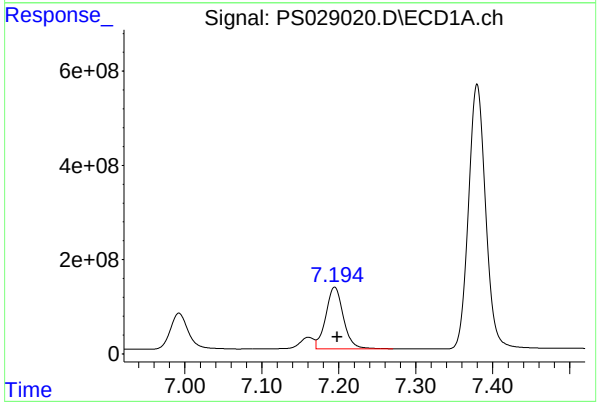
R.T.: 6.993 min
Delta R.T.: -0.003 min
Response: 1233757323
Conc: 696.22 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



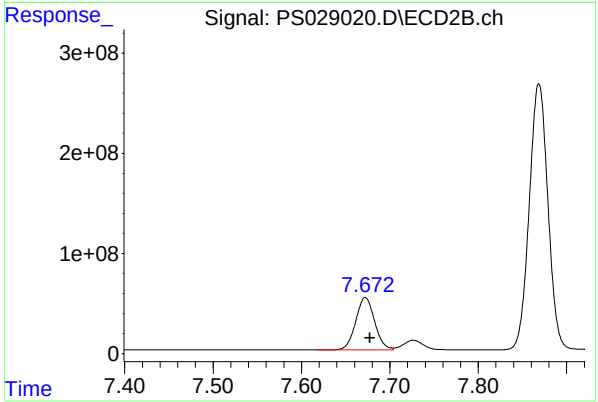
#3 4-Nitrophenol

R.T.: 7.201 min
Delta R.T.: -0.006 min
Response: 603746447
Conc: 678.54 ng/ml



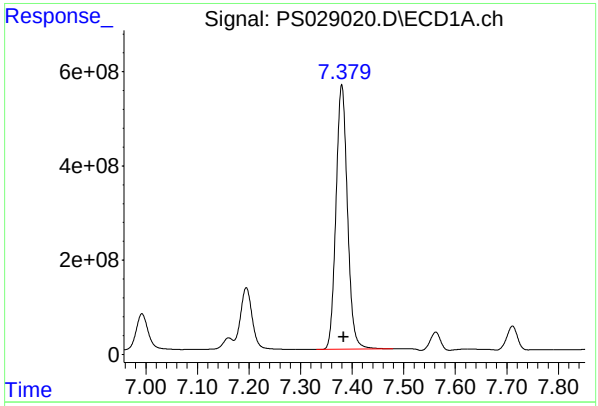
#4 2,4-DCAA

R.T.: 7.195 min
Delta R.T.: -0.003 min
Response: 2080993583
Conc: 747.48 ng/ml



#4 2,4-DCAA

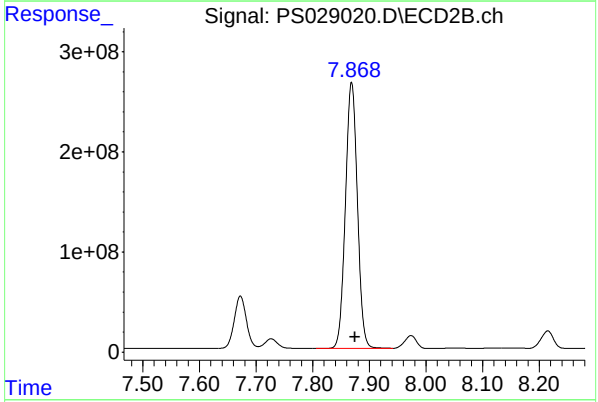
R.T.: 7.672 min
Delta R.T.: -0.005 min
Response: 779594332
Conc: 698.68 ng/ml



#5 DICAMBA

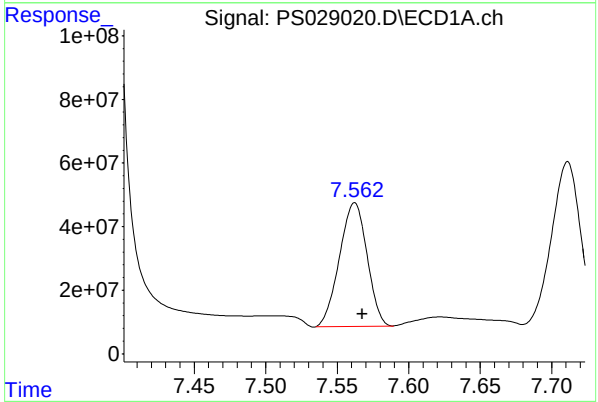
R.T.: 7.380 min
Delta R.T.: -0.004 min
Response: 8680310553
Conc: 731.81 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



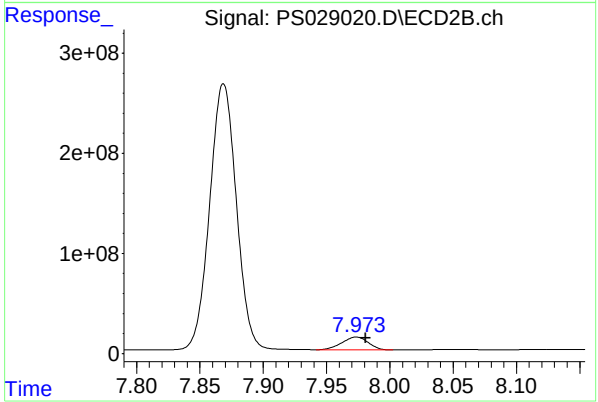
#5 DICAMBA

R.T.: 7.869 min
Delta R.T.: -0.006 min
Response: 3912364875
Conc: 702.52 ng/ml



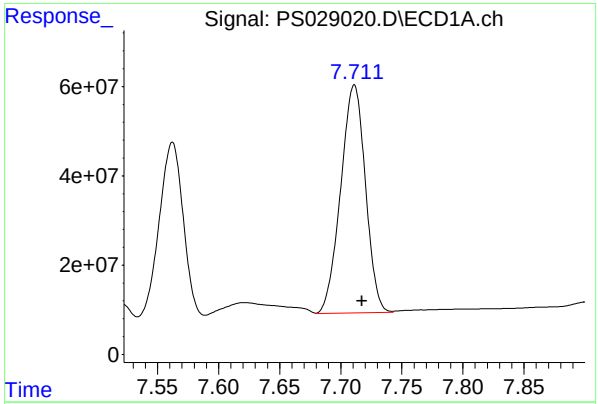
#6 MCPP

R.T.: 7.562 min
Delta R.T.: -0.005 min
Response: 521304586
Conc: 76.48 ug/ml



#6 MCPP

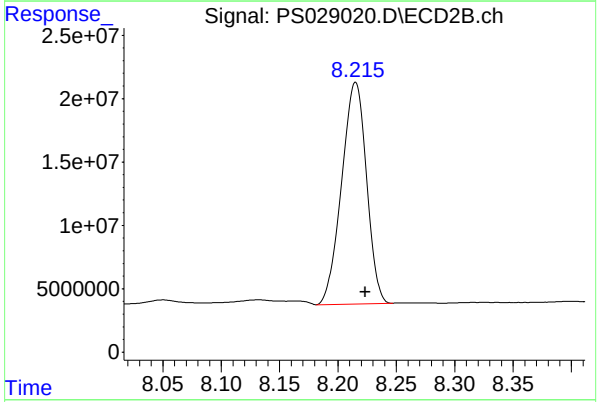
R.T.: 7.974 min
Delta R.T.: -0.007 min
Response: 188286750
Conc: 62.60 ug/ml



#7 MCPA

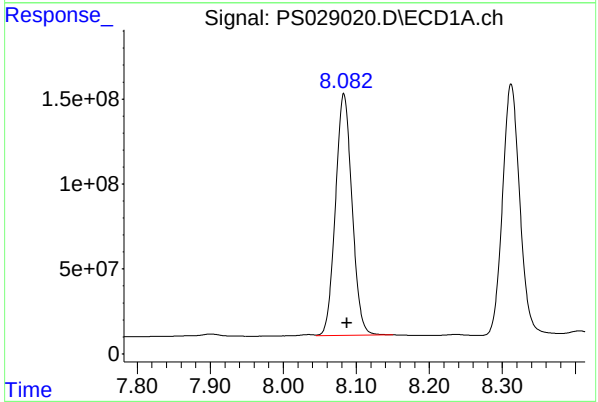
R.T.: 7.711 min
Delta R.T.: -0.006 min
Response: 721131901
Conc: 73.20 ug/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



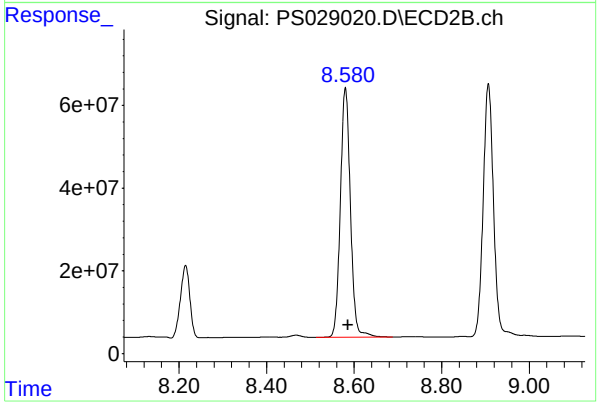
#7 MCPA

R.T.: 8.215 min
Delta R.T.: -0.008 min
Response: 259128912
Conc: 61.01 ug/ml



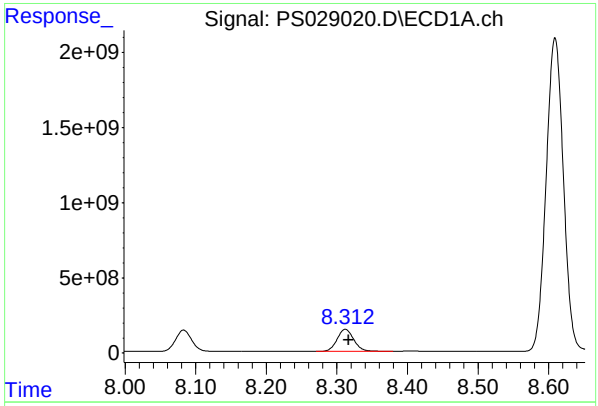
#8 DICHLORPROP

R.T.: 8.083 min
Delta R.T.: -0.005 min
Response: 2237809634
Conc: 706.25 ng/ml



#8 DICHLORPROP

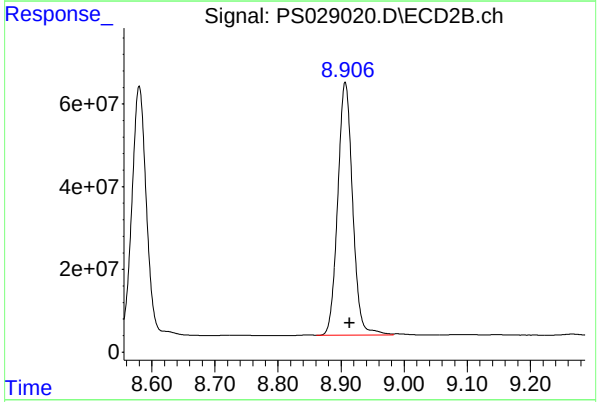
R.T.: 8.580 min
Delta R.T.: -0.006 min
Response: 962306536
Conc: 684.62 ng/ml



#9 2,4-D

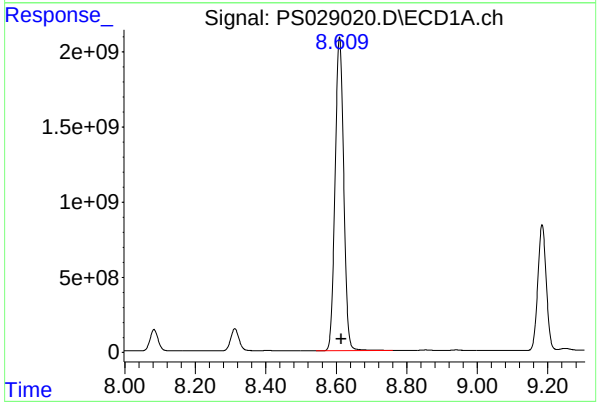
R.T.: 8.312 min
Delta R.T.: -0.005 min
Response: 2407732515
Conc: 712.46 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



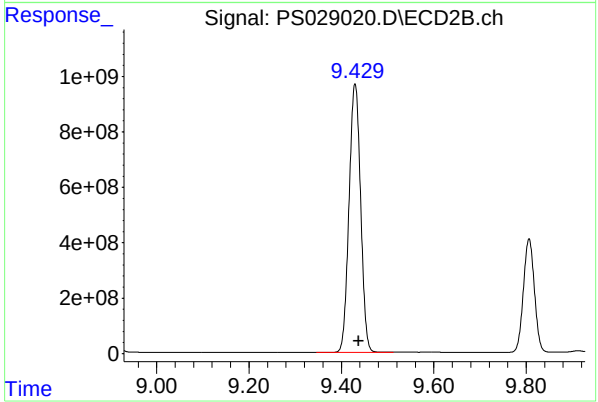
#9 2,4-D

R.T.: 8.907 min
Delta R.T.: -0.007 min
Response: 1002410054
Conc: 668.49 ng/ml



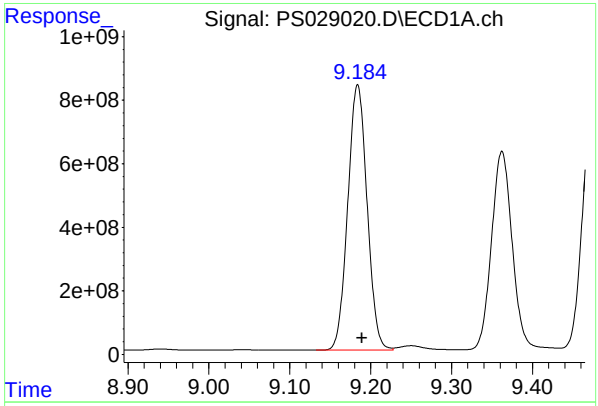
#10 Pentachlorophenol

R.T.: 8.609 min
Delta R.T.: -0.005 min
Response: 35447650131
Conc: 734.86 ng/ml



#10 Pentachlorophenol

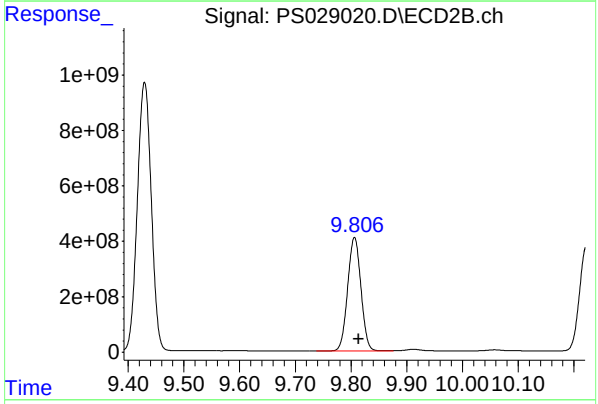
R.T.: 9.430 min
Delta R.T.: -0.007 min
Response: 16862605372
Conc: 727.90 ng/ml



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

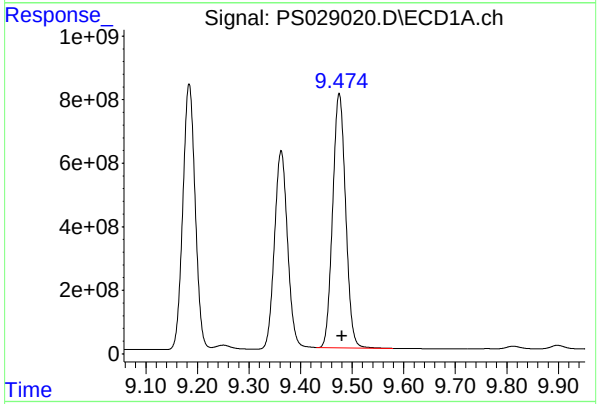
R.T.: 9.184 min
Delta R.T.: -0.005 min
Response: 13853031912
Conc: 724.05 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



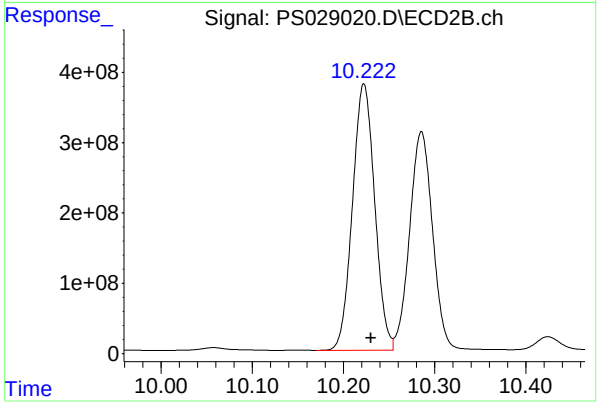
#11 2,4,5-TP (SILVEX)

R.T.: 9.806 min
Delta R.T.: -0.007 min
Response: 6793328111
Conc: 721.21 ng/ml



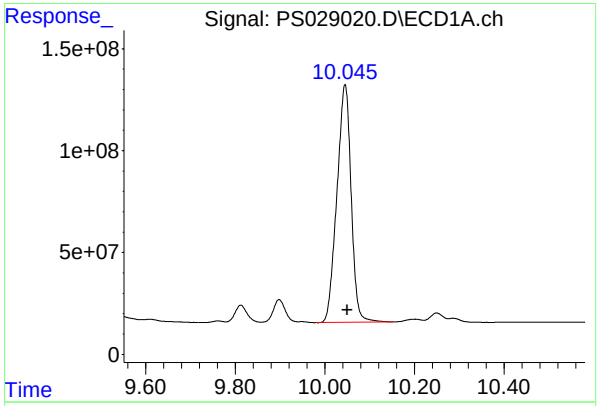
#12 2,4,5-T

R.T.: 9.475 min
Delta R.T.: -0.005 min
Response: 13945351192
Conc: 726.44 ng/ml



#12 2,4,5-T

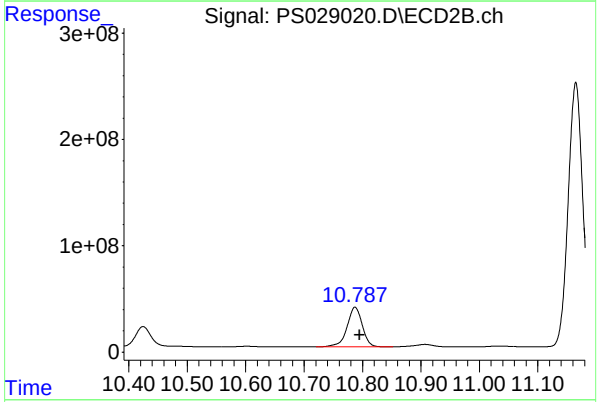
R.T.: 10.222 min
Delta R.T.: -0.008 min
Response: 6418333975
Conc: 712.44 ng/ml



#13 2,4-DB

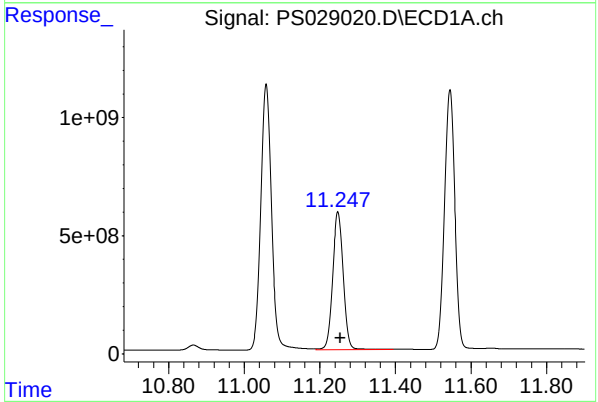
R.T.: 10.045 min
Delta R.T.: -0.006 min
Response: 2570879027
Conc: 724.73 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



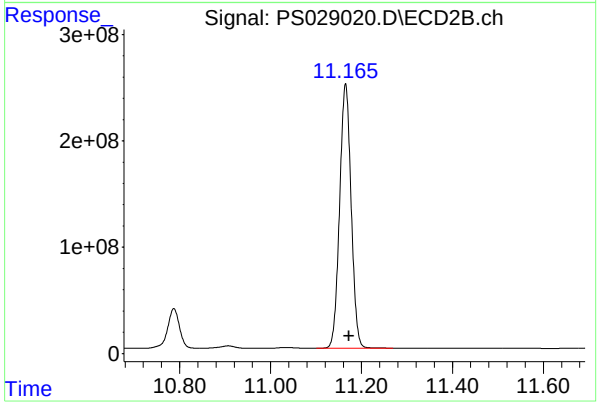
#13 2,4-DB

R.T.: 10.787 min
Delta R.T.: -0.008 min
Response: 673878869
Conc: 676.75 ng/ml



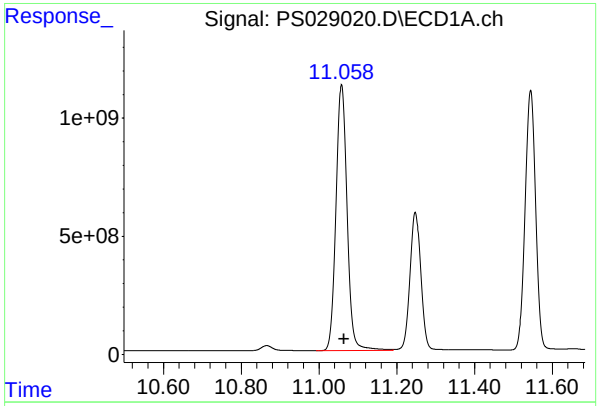
#14 DINOSEB

R.T.: 11.248 min
Delta R.T.: -0.007 min
Response: 11369511004
Conc: 687.09 ng/ml



#14 DINOSEB

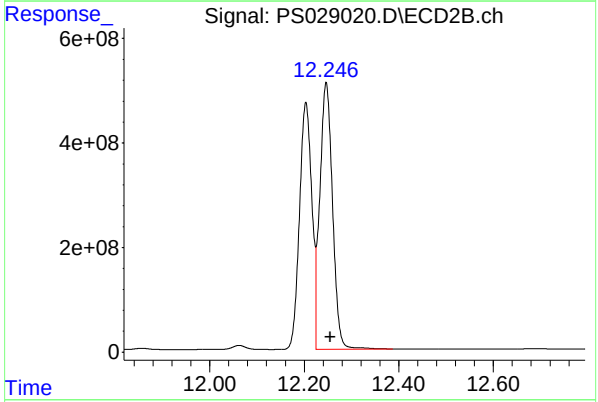
R.T.: 11.165 min
Delta R.T.: -0.007 min
Response: 4360937218
Conc: 679.56 ng/ml



#15 Picloram

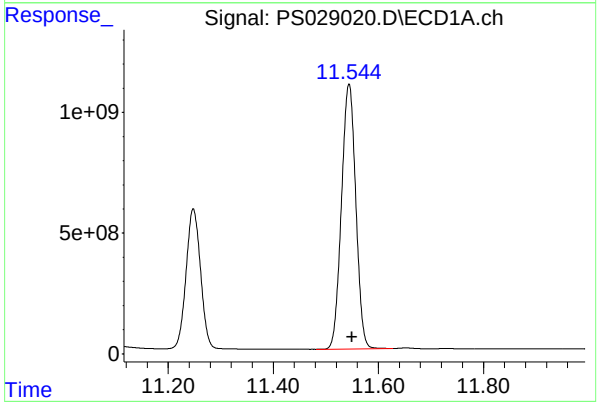
R.T.: 11.058 min
Delta R.T.: -0.007 min
Response: 22122456719
Conc: 701.14 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



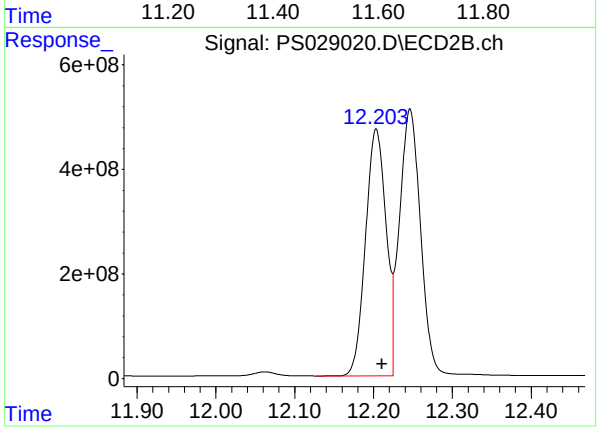
#15 Picloram

R.T.: 12.246 min
Delta R.T.: -0.009 min
Response: 9524741349
Conc: 709.76 ng/ml



#16 DCPA

R.T.: 11.544 min
Delta R.T.: -0.006 min
Response: 20758268721
Conc: 723.76 ng/ml



#16 DCPA

R.T.: 12.203 min
Delta R.T.: -0.007 min
Response: 8559346718
Conc: 753.97 ng/ml

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

CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM **Case No.:** Q1216 **SAS No.:** Q1216 **SDG NO.:** Q1216

Continuing Calib Date: 02/01/2025 **Initial Calibration Date(s):** 01/14/2025 01/14/2025

Continuing Calib Time: 02:44 **Initial Calibration Time(s):** 10:31 12:07

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	RT WINDOW TO	DIFF RT
2,4-DCAA	7.19	7.20	7.10	7.30	0.01
2,4-D	8.31	8.32	8.22	8.42	0.01
2,4,5-TP(Silvex)	9.18	9.19	9.09	9.29	0.01

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

CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM **Case No.:** Q1216 **SAS No.:** Q1216 **SDG NO.:** Q1216

Continuing Calib Date: 02/01/2025 **Initial Calibration Date(s):** 01/14/2025 01/14/2025

Continuing Calib Time: 02:44 **Initial Calibration Time(s):** 10:31 12:07

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	RT WINDOW TO	DIFF RT
2,4-DCAA	7.67	7.68	7.58	7.78	0.01
2,4-D	8.91	8.91	8.81	9.01	0.01
2,4,5-TP(Silvex)	9.81	9.81	9.71	9.91	0.00

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

CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM **Case No.:** Q1216 **SAS No.:** Q1216 **SDG NO.:** Q1216

GC Column: RTX-CLP **ID:** 0.32 **(mm)** **Initi. Calib. Date(s):** 01/14/2025 01/14/2025

Client Sample No.: CCAL02 **Date Analyzed:** 02/01/2025

Lab Sample No.: HSTDCCC750 **Data File :** PS029032.D **Time Analyzed:** 02:44

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	9.184	9.089	9.289	733.590	712.500	3.0
2,4-D	8.311	8.216	8.416	716.460	705.000	1.6
2,4-DCAA	7.194	7.097	7.297	756.460	750.000	0.9

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

CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM **Case No.:** Q1216 **SAS No.:** Q1216 **SDG NO.:** Q1216

GC Column: RTX-CLP2 **ID:** 0.32 **(mm)** **Initi. Calib. Date(s):** 01/14/2025 01/14/2025

Client Sample No.: CCAL02 **Date Analyzed:** 02/01/2025

Lab Sample No.: HSTDCCC750 **Data File :** PS029032.D **Time Analyzed:** 02:44

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	9.805	9.713	9.913	726.680	712.500	2.0
2,4-D	8.905	8.813	9.013	678.220	705.000	-3.8
2,4-DCAA	7.671	7.577	7.777	701.780	750.000	-6.4

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS013125\
Data File : PS029032.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 01 Feb 2025 02:44
Operator : AR\AJ
Sample : HSTDCCC750
Misc :
ALS Vial : 34 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 01 05:18:26 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 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	7.194	7.671	2106.0E6	783.1E6	756.464	701.777
	Target Compounds						
1) T	Dalapon	2.614	2.665	2273.6E6	1396.4E6	762.511	684.446
2) T	3,5-DICHL...	6.372	6.638	2858.1E6	1081.3E6	715.099	654.277
3) T	4-Nitroph...	6.992	7.201	1229.6E6	600.7E6	693.856	675.091
5) T	DICAMBA	7.379	7.867	8767.1E6	3931.7E6	739.129	705.990
6) T	MCPP	7.561	7.972	522.3E6	192.1E6	76.625	63.858
7) T	MCPA	7.710	8.213	731.4E6	263.6E6	74.242	62.071
8) T	DICHLORPROP	8.082	8.578	2259.8E6	961.6E6	713.177	684.136
9) T	2,4-D	8.311	8.905	2421.2E6	1017.0E6	716.456	678.215
10) T	Pentachlo...	8.608	9.428	35970.4E6	16993.6E6	745.701	733.556
11) T	2,4,5-TP ...	9.184	9.805	14035.5E6	6844.9E6	733.588	726.677
12) T	2,4,5-T	9.475	10.221	14042.9E6	6437.0E6	731.520	714.503
13) T	2,4-DB	10.045	10.786	2565.6E6	682.6E6	723.232	685.463
14) T	DINOSEB	11.248	11.163	11164.1E6	4202.2E6	674.676	654.818
15) T	Picloram	11.058	12.245	22204.2E6	9481.7E6	703.731	706.549
16) T	DCPA	11.543	12.201	21133.4E6	8576.9E6	736.844	755.514

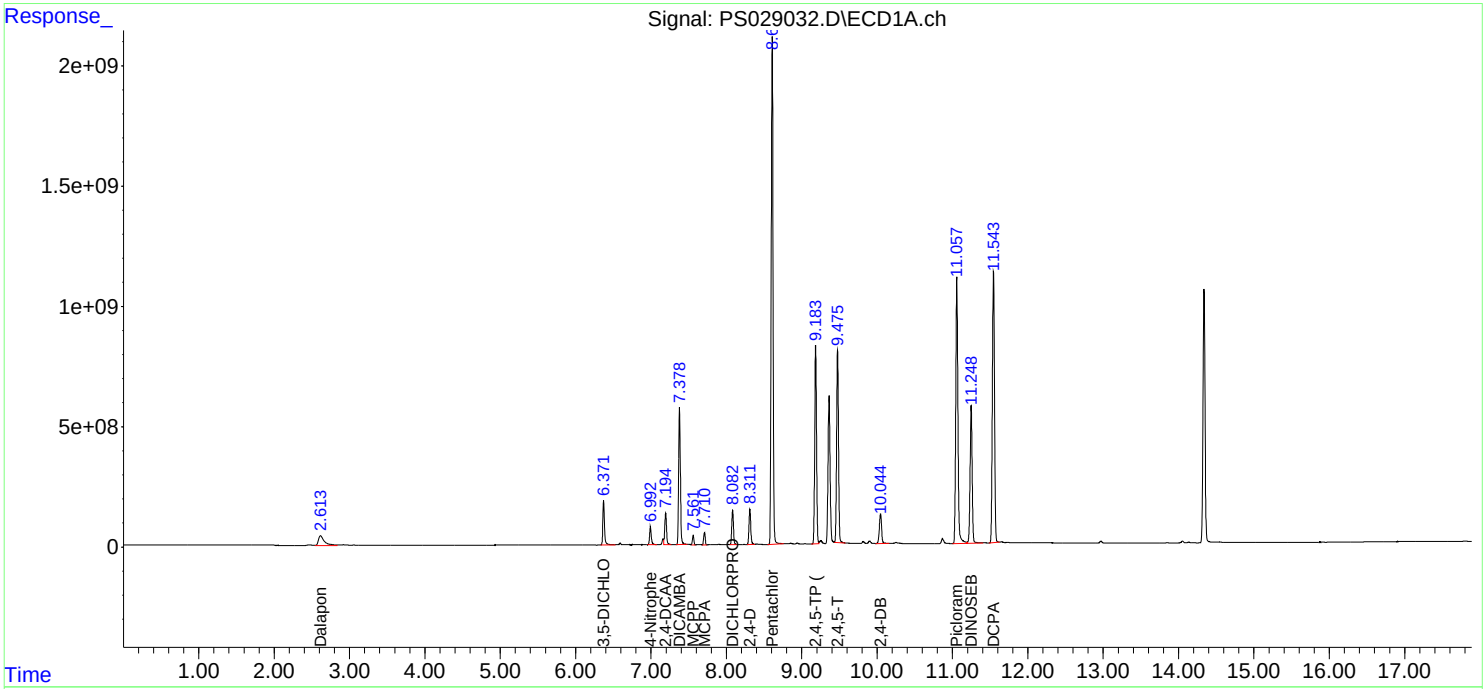
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

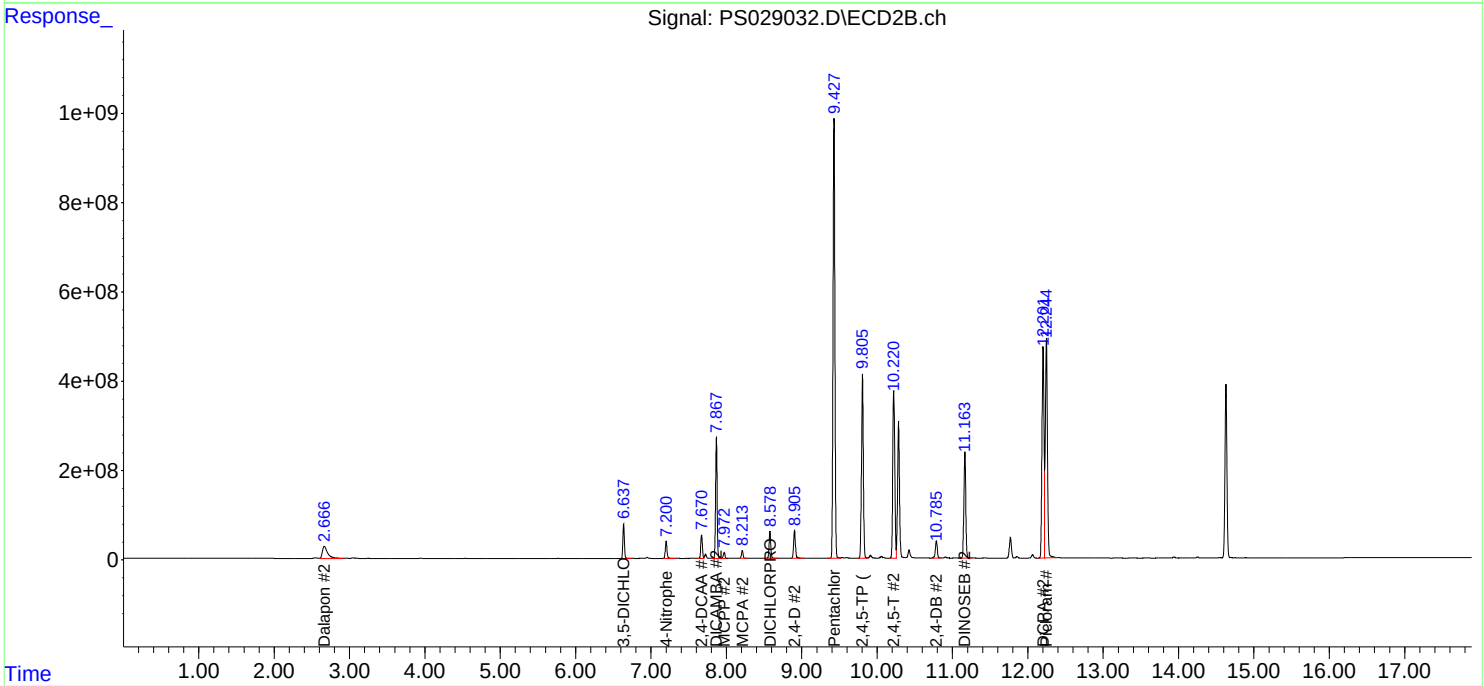
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS013125\
Data File : PS029032.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 01 Feb 2025 02:44
Operator : AR\AJ
Sample : HSTDCCC750
Misc :
ALS Vial : 34 Sample Multiplier: 1

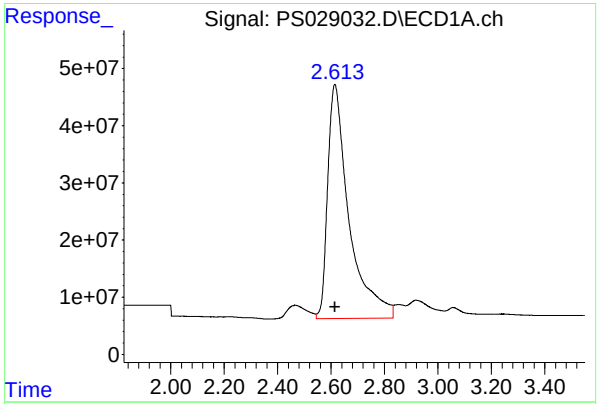
Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 01 05:18:26 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 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



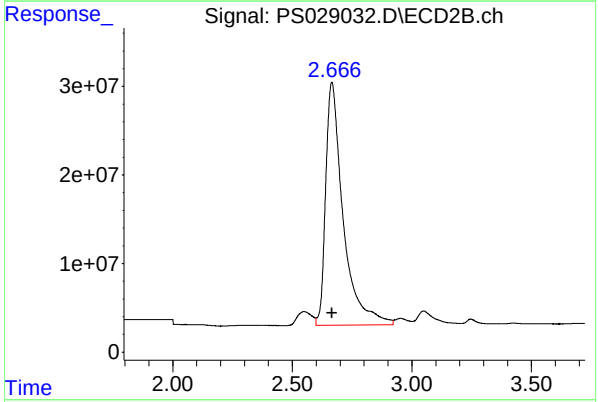




#1 Dalapon

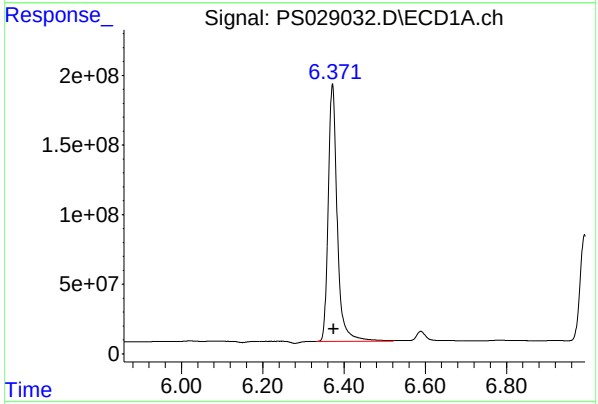
R.T.: 2.614 min
Delta R.T.: 0.000 min
Response: 2273611970
Conc: 762.51 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



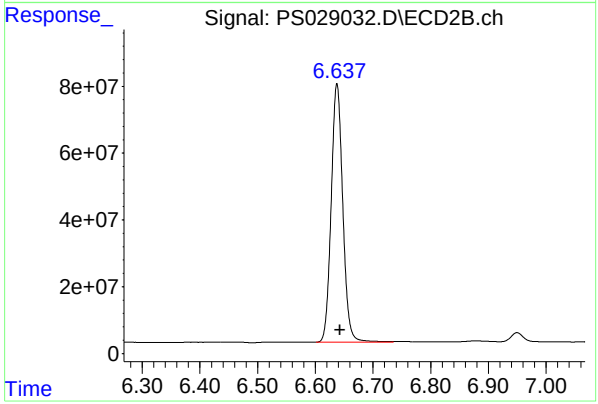
#1 Dalapon

R.T.: 2.665 min
Delta R.T.: -0.002 min
Response: 1396370843
Conc: 684.45 ng/ml



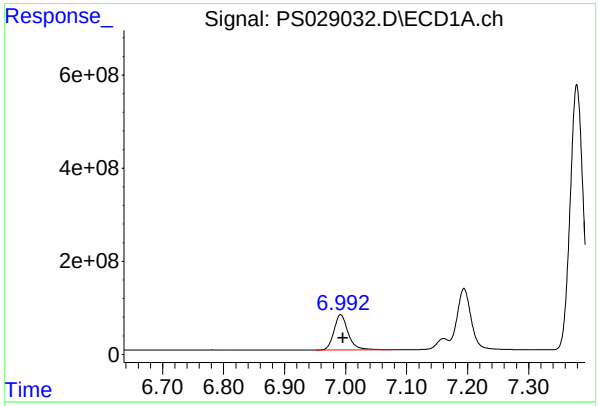
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.372 min
Delta R.T.: -0.003 min
Response: 2858144176
Conc: 715.10 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

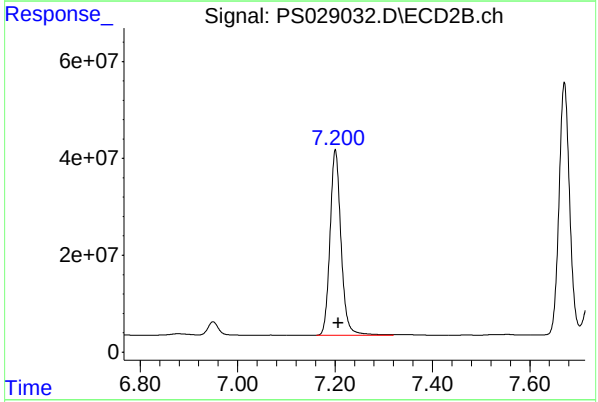
R.T.: 6.638 min
Delta R.T.: -0.005 min
Response: 1081272086
Conc: 654.28 ng/ml



#3 4-Nitrophenol

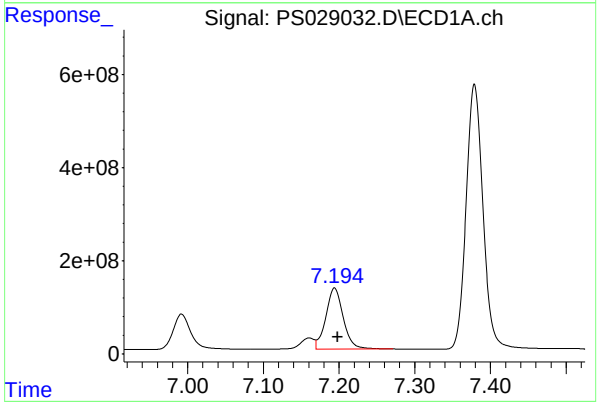
R.T.: 6.992 min
Delta R.T.: -0.004 min
Response: 1229567737
Conc: 693.86 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



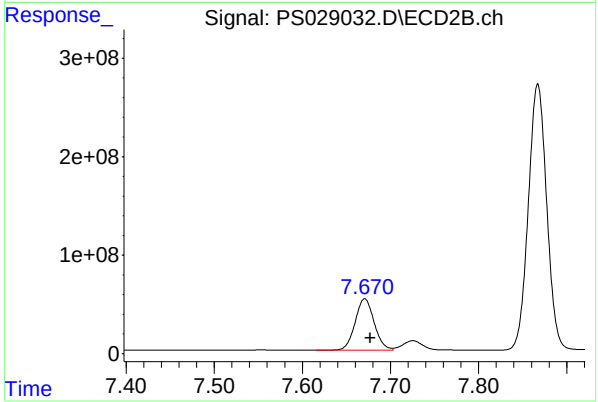
#3 4-Nitrophenol

R.T.: 7.201 min
Delta R.T.: -0.006 min
Response: 600678616
Conc: 675.09 ng/ml



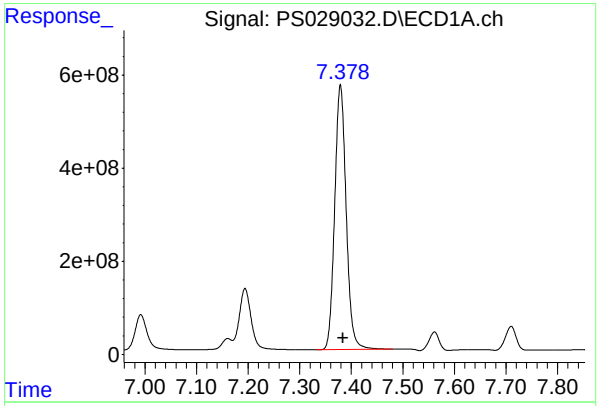
#4 2,4-DCAA

R.T.: 7.194 min
Delta R.T.: -0.004 min
Response: 2106004346
Conc: 756.46 ng/ml



#4 2,4-DCAA

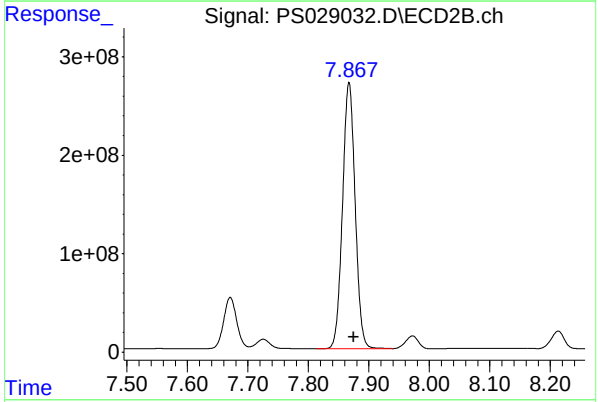
R.T.: 7.671 min
Delta R.T.: -0.007 min
Response: 783051783
Conc: 701.78 ng/ml



#5 DICAMBA

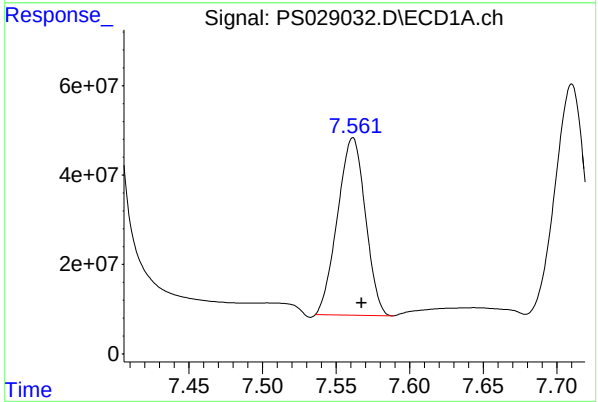
R.T.: 7.379 min
Delta R.T.: -0.005 min
Response: 8767137485
Conc: 739.13 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



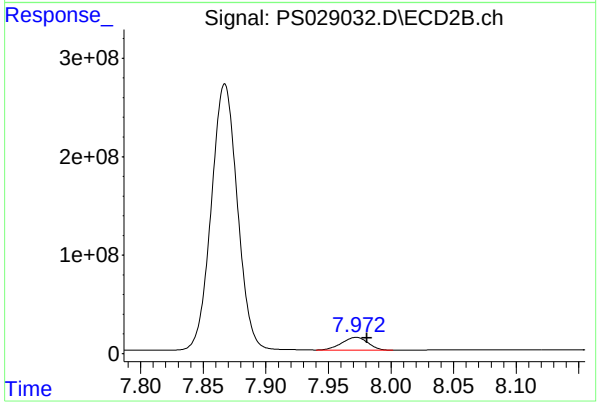
#5 DICAMBA

R.T.: 7.867 min
Delta R.T.: -0.007 min
Response: 3931683131
Conc: 705.99 ng/ml



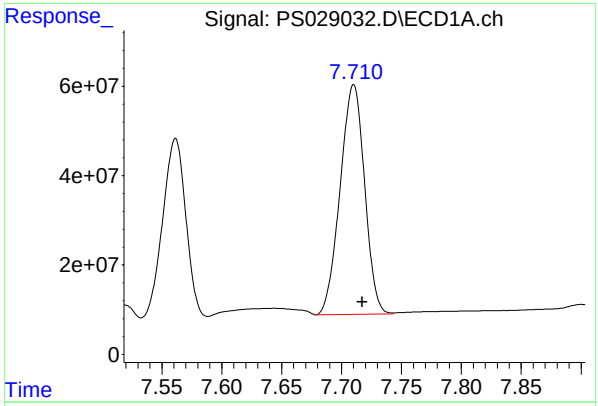
#6 MCPP

R.T.: 7.561 min
Delta R.T.: -0.006 min
Response: 522294007
Conc: 76.62 ug/ml



#6 MCPP

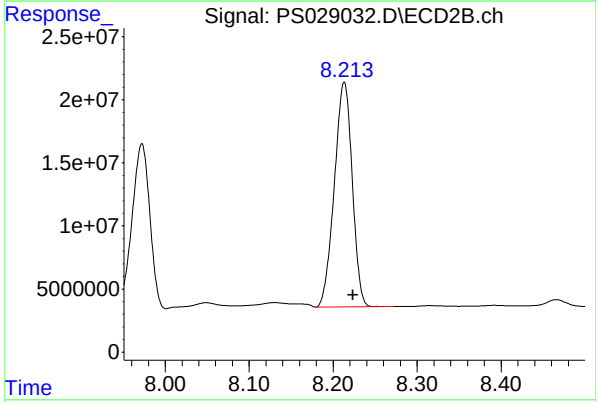
R.T.: 7.972 min
Delta R.T.: -0.009 min
Response: 192083579
Conc: 63.86 ug/ml



#7 MCPA

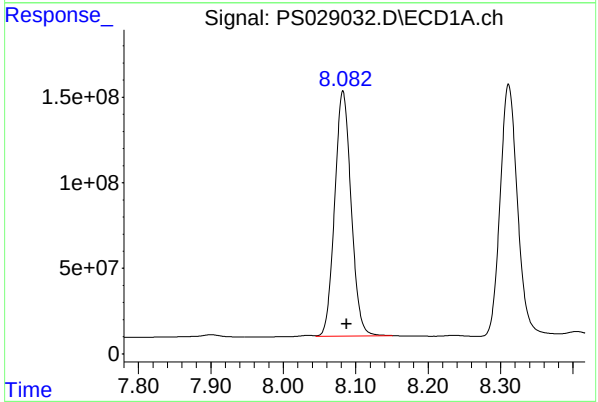
R.T.: 7.710 min
Delta R.T.: -0.007 min
Response: 731365719
Conc: 74.24 ug/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



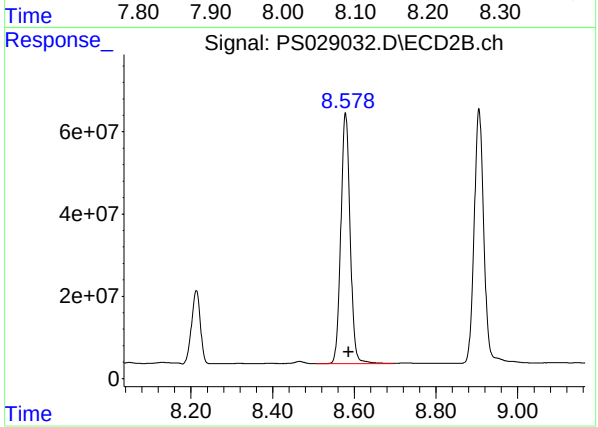
#7 MCPA

R.T.: 8.213 min
Delta R.T.: -0.010 min
Response: 263643812
Conc: 62.07 ug/ml



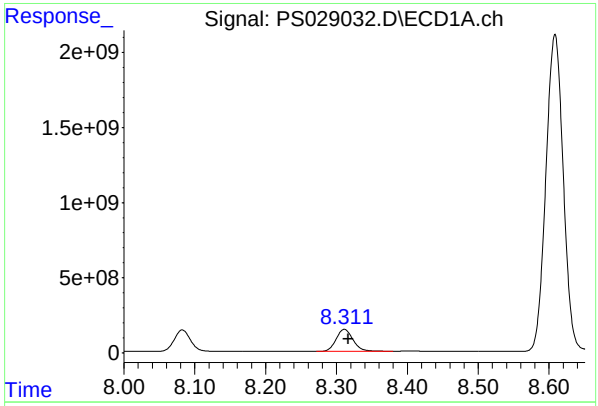
#8 DICHLORPROP

R.T.: 8.082 min
Delta R.T.: -0.005 min
Response: 2259753572
Conc: 713.18 ng/ml



#8 DICHLORPROP

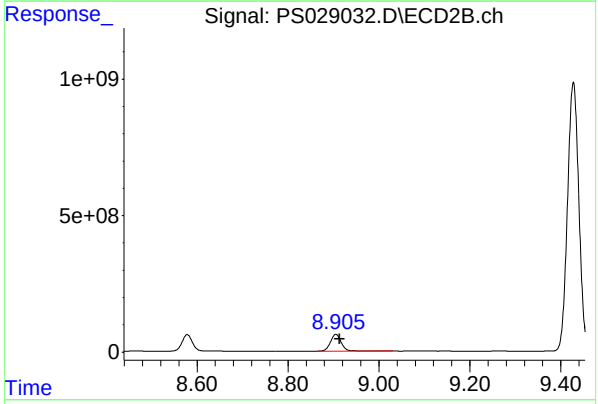
R.T.: 8.578 min
Delta R.T.: -0.008 min
Response: 961620325
Conc: 684.14 ng/ml



#9 2,4-D

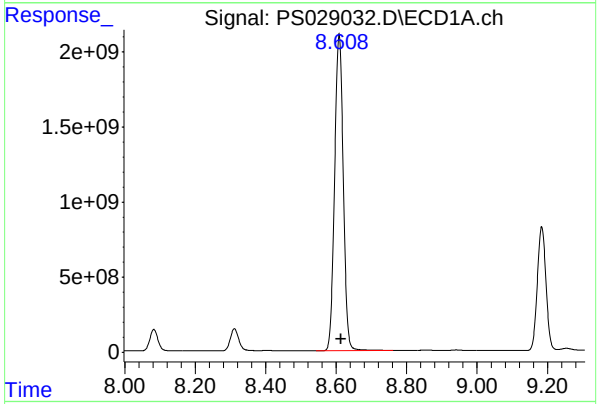
R.T.: 8.311 min
Delta R.T.: -0.006 min
Response: 2421226250
Conc: 716.46 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



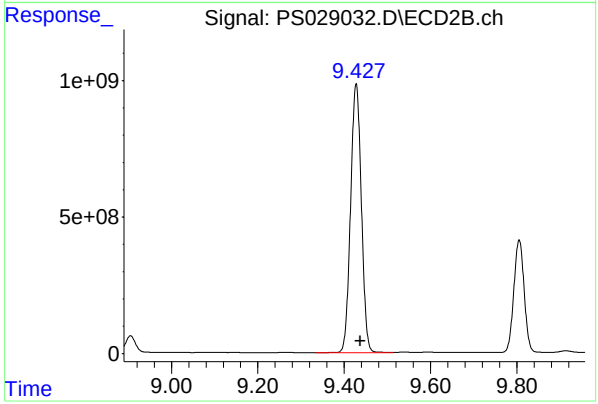
#9 2,4-D

R.T.: 8.905 min
Delta R.T.: -0.008 min
Response: 1016996216
Conc: 678.22 ng/ml



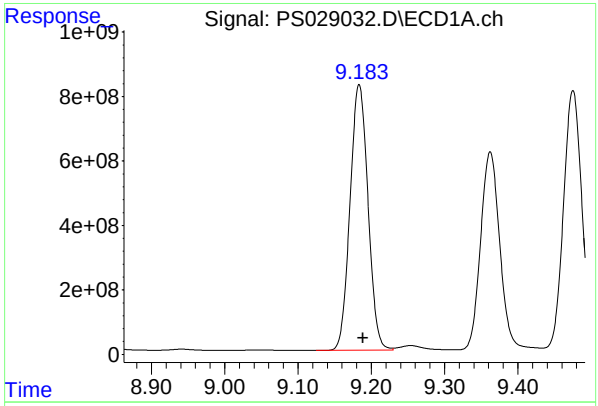
#10 Pentachlorophenol

R.T.: 8.608 min
Delta R.T.: -0.006 min
Response: 35970395423
Conc: 745.70 ng/ml



#10 Pentachlorophenol

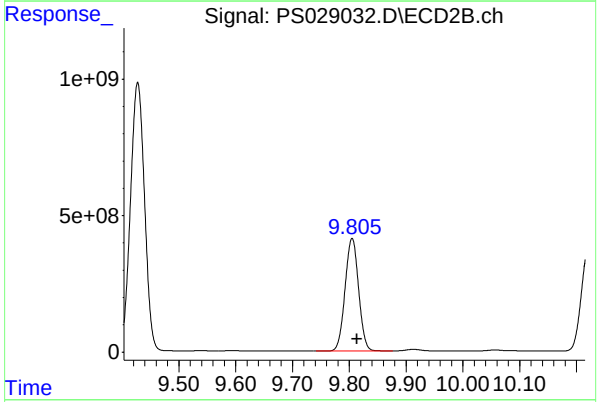
R.T.: 9.428 min
Delta R.T.: -0.009 min
Response: 16993568571
Conc: 733.56 ng/ml



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

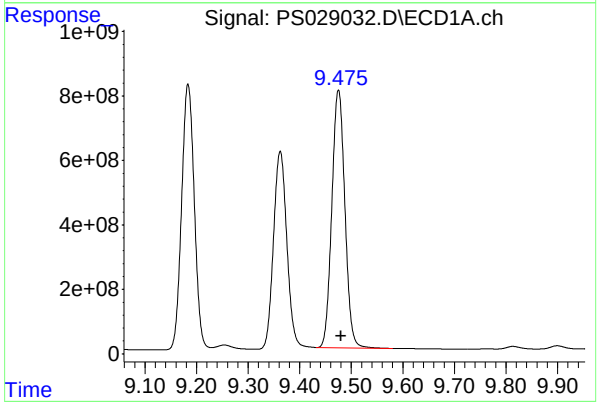
R.T.: 9.184 min
Delta R.T.: -0.006 min
Response: 14035494477
Conc: 733.59 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



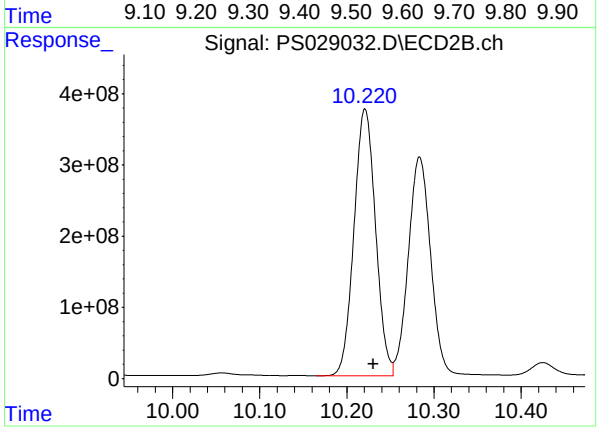
#11 2,4,5-TP (SILVEX)

R.T.: 9.805 min
Delta R.T.: -0.008 min
Response: 6844858189
Conc: 726.68 ng/ml



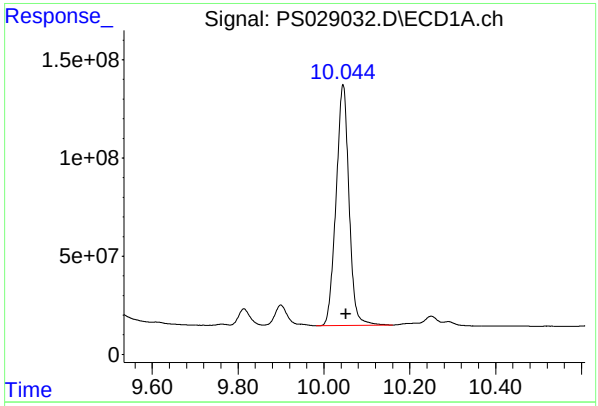
#12 2,4,5-T

R.T.: 9.475 min
Delta R.T.: -0.005 min
Response: 14042924863
Conc: 731.52 ng/ml



#12 2,4,5-T

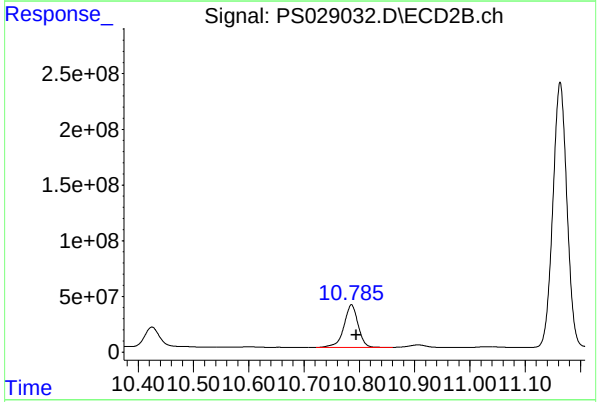
R.T.: 10.221 min
Delta R.T.: -0.010 min
Response: 6436956312
Conc: 714.50 ng/ml



#13 2,4-DB

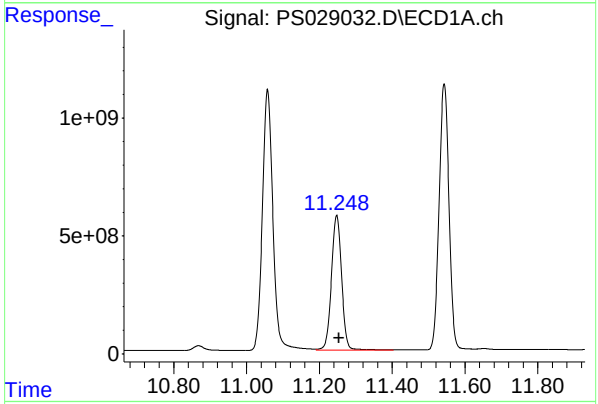
R.T.: 10.045 min
Delta R.T.: -0.006 min
Response: 2565559093
Conc: 723.23 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



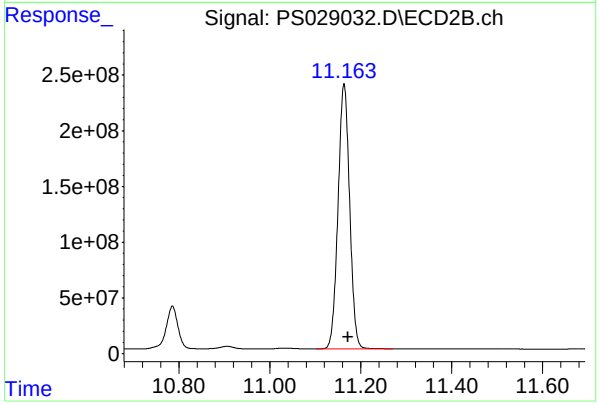
#13 2,4-DB

R.T.: 10.786 min
Delta R.T.: -0.009 min
Response: 682553951
Conc: 685.46 ng/ml



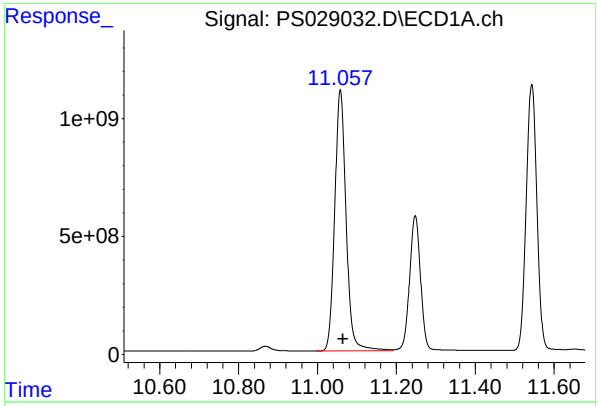
#14 DINOSEB

R.T.: 11.248 min
Delta R.T.: -0.007 min
Response: 11164079471
Conc: 674.68 ng/ml



#14 DINOSEB

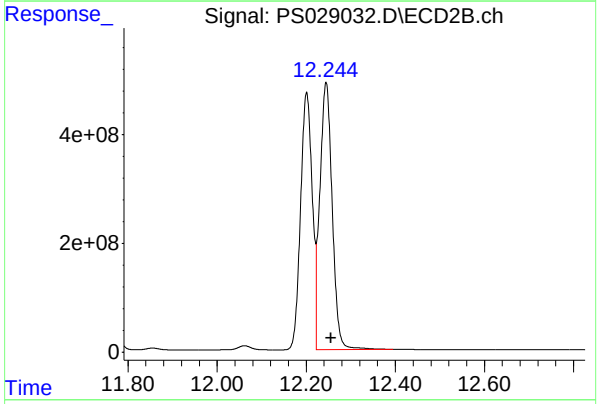
R.T.: 11.163 min
Delta R.T.: -0.009 min
Response: 4202175225
Conc: 654.82 ng/ml



#15 Picloram

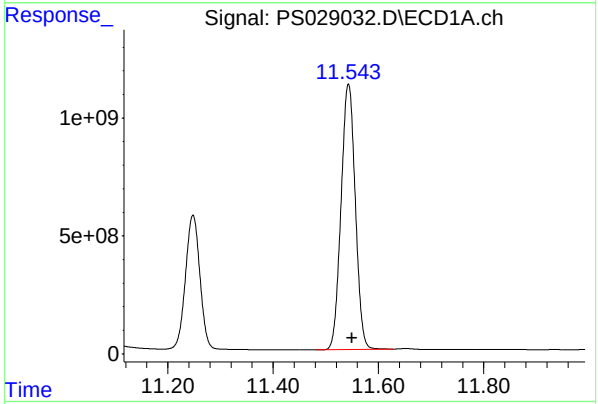
R.T.: 11.058 min
Delta R.T.: -0.007 min
Response: 22204237752
Conc: 703.73 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



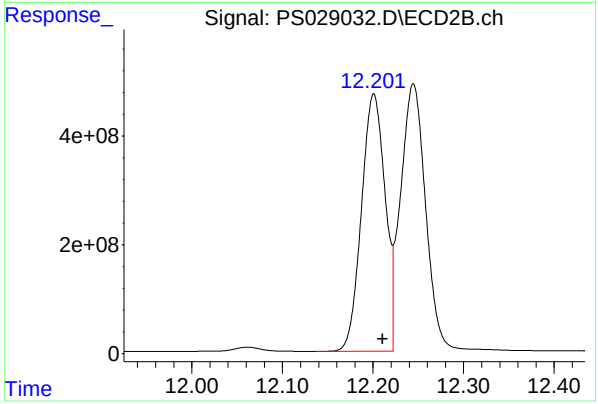
#15 Picloram

R.T.: 12.245 min
Delta R.T.: -0.011 min
Response: 9481651374
Conc: 706.55 ng/ml



#16 DCPA

R.T.: 11.543 min
Delta R.T.: -0.007 min
Response: 21133447030
Conc: 736.84 ng/ml



#16 DCPA

R.T.: 12.201 min
Delta R.T.: -0.010 min
Response: 8576858989
Conc: 755.51 ng/ml

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

CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM **Case No.:** Q1216 **SAS No.:** Q1216 **SDG NO.:** Q1216

Continuing Calib Date: 02/01/2025 **Initial Calibration Date(s):** 01/14/2025 01/14/2025

Continuing Calib Time: 08:44 **Initial Calibration Time(s):** 10:31 12:07

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	RT WINDOW TO	DIFF RT
2,4-DCAA	7.19	7.20	7.10	7.30	0.01
2,4-D	8.31	8.32	8.22	8.42	0.01
2,4,5-TP(Silvex)	9.18	9.19	9.09	9.29	0.01

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

CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM **Case No.:** Q1216 **SAS No.:** Q1216 **SDG NO.:** Q1216

Continuing Calib Date: 02/01/2025 **Initial Calibration Date(s):** 01/14/2025 01/14/2025

Continuing Calib Time: 08:44 **Initial Calibration Time(s):** 10:31 12:07

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	RT WINDOW TO	DIFF RT
2,4-DCAA	7.67	7.68	7.58	7.78	0.01
2,4-D	8.91	8.91	8.81	9.01	0.01
2,4,5-TP(Silvex)	9.80	9.81	9.71	9.91	0.01

Alliance TECHNICAL GROUP

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

CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM **Case No.:** Q1216 **SAS No.:** Q1216 **SDG NO.:** Q1216

GC Column: RTX-CLP **ID:** 0.32 **(mm)** **Initi. Calib. Date(s):** 01/14/2025 01/14/2025

Client Sample No.: CCAL03 **Date Analyzed:** 02/01/2025

Lab Sample No.: HSTDCCC750 **Data File :** PS029044.D **Time Analyzed:** 08:44

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	9.181	9.089	9.289	707.890	712.500	-0.6
2,4-D	8.310	8.216	8.416	689.110	705.000	-2.3
2,4-DCAA	7.192	7.097	7.297	732.720	750.000	-2.3

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

CALIBRATION VERIFICATION SUMMARY

Contract: RUTW01

Lab Code: CHEM **Case No.:** Q1216 **SAS No.:** Q1216 **SDG NO.:** Q1216

GC Column: RTX-CLP2 **ID:** 0.32 **(mm)** **Initi. Calib. Date(s):** 01/14/2025 01/14/2025

Client Sample No.: CCAL03 **Date Analyzed:** 02/01/2025

Lab Sample No.: HSTDCCC750 **Data File :** PS029044.D **Time Analyzed:** 08:44

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	9.803	9.713	9.913	711.120	712.500	-0.2
2,4-D	8.905	8.813	9.013	659.830	705.000	-6.4
2,4-DCAA	7.670	7.577	7.777	685.780	750.000	-8.6

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS013125\
Data File : PS029044.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 01 Feb 2025 08:44
Operator : AR\AJ
Sample : HSTDCCC750
Misc :
ALS Vial : 34 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 03 01:01:39 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 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	7.192	7.670	2039.9E6	765.2E6	732.718	685.778
	Target Compounds						
1) T	Dalapon	2.610	2.662	2190.1E6	1354.2E6	734.490	663.762
2) T	3,5-DICHL...	6.370	6.637	2775.9E6	1059.1E6	694.517	640.841
3) T	4-Nitroph...	6.990	7.199	1194.1E6	582.3E6	673.841	654.440
5) T	DICAMBA	7.377	7.866	8479.0E6	3851.2E6	714.838	691.537
6) T	MCPP	7.559	7.971	491.4E6	188.8E6	72.099	62.751
7) T	MCPA	7.708	8.212	711.7E6	259.9E6	72.250	61.186
8) T	DICHLORPROP	8.081	8.577	2186.2E6	949.1E6	689.955	675.204
9) T	2,4-D	8.310	8.905	2328.8E6	989.4E6	689.111	659.833
10) T	Pentachlo...	8.606	9.426	34801.5E6	16647.6E6	721.469	718.622
11) T	2,4,5-TP ...	9.181	9.803	13543.7E6	6698.4E6	707.886	711.123
12) T	2,4,5-T	9.473	10.219	13524.2E6	6288.6E6	704.498	698.034
13) T	2,4-DB	10.042	10.784	2428.7E6	663.4E6	684.660	666.244
14) T	DINOSEB	11.244	11.162	10874.4E6	4148.7E6	657.172	646.480
15) T	Picloram	11.056	12.243	20526.7E6	8746.5E6	650.564	651.769
16) T	DCPA	11.539	12.199	20499.8E6	8438.9E6	714.751	743.359

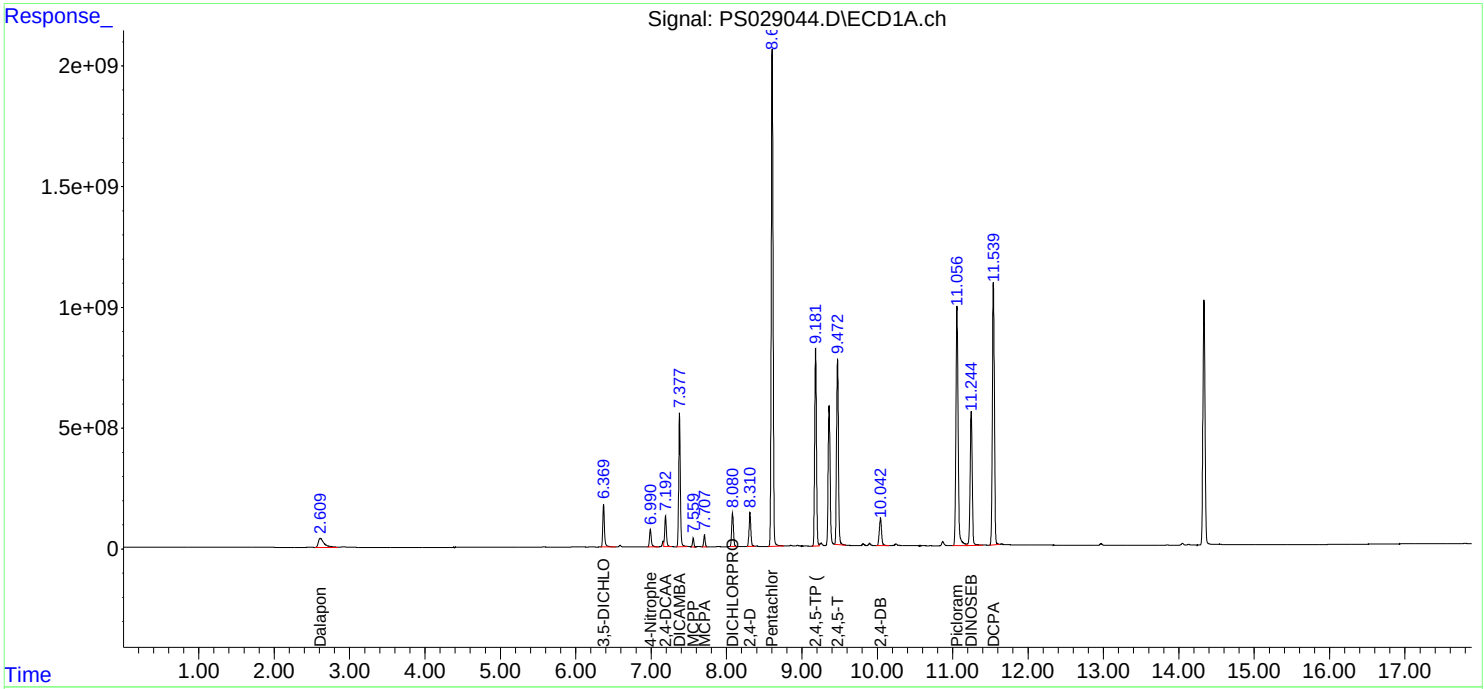
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

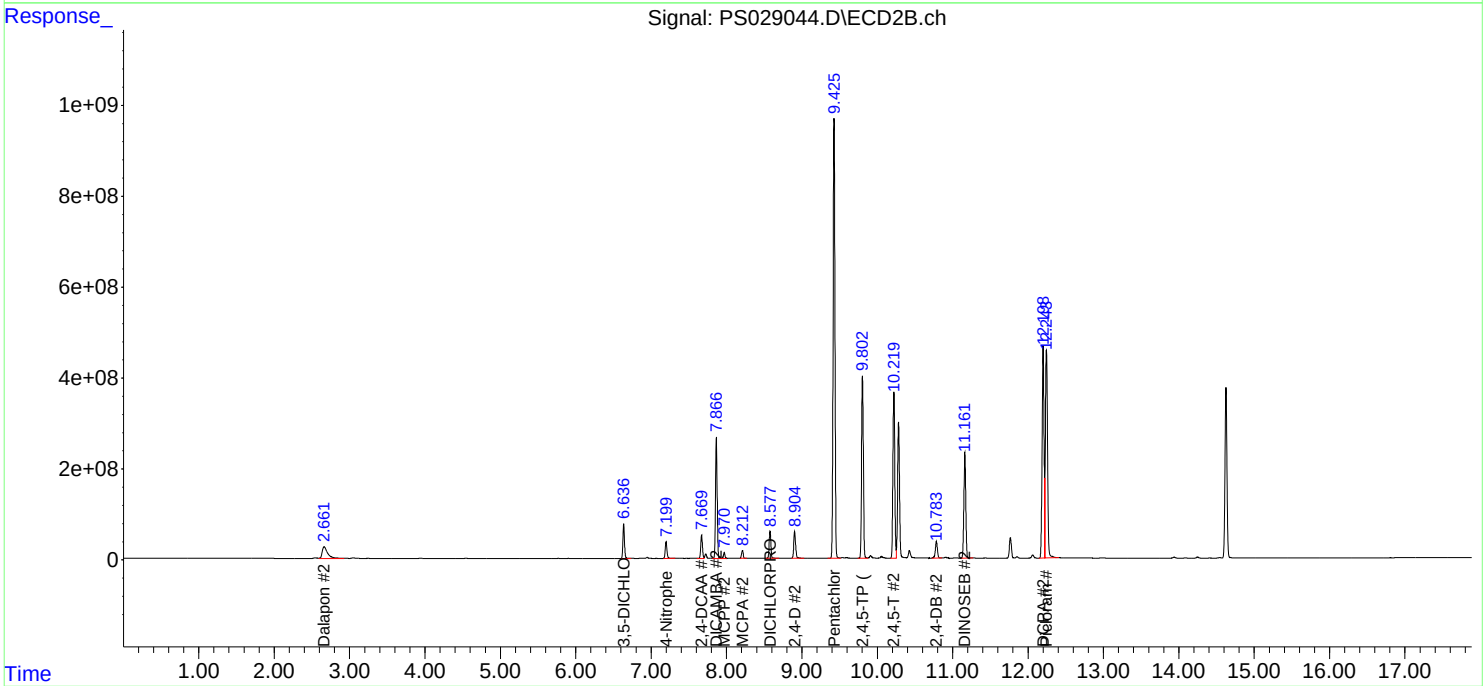
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS013125\
Data File : PS029044.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 01 Feb 2025 08:44
Operator : AR\AJ
Sample : HSTDCCC750
Misc :
ALS Vial : 34 Sample Multiplier: 1

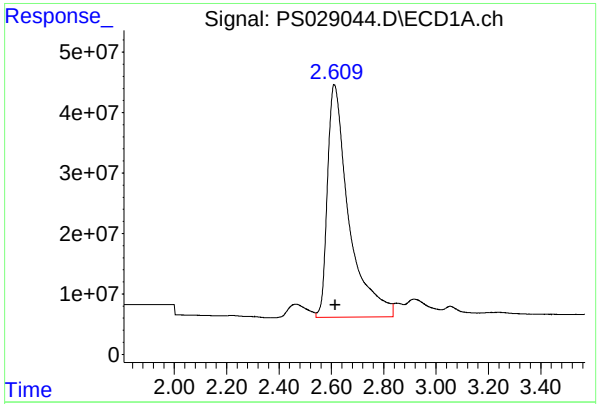
Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 03 01:01:39 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 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



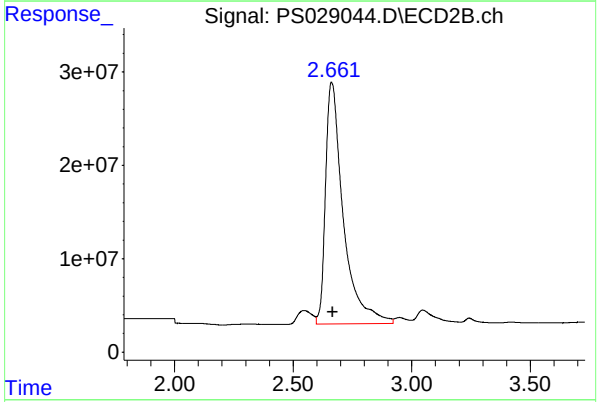




#1 Dalapon

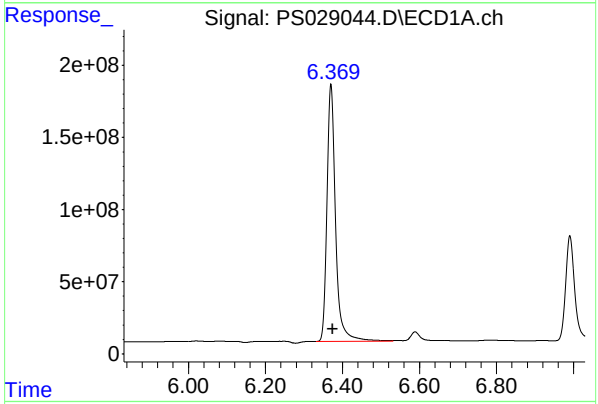
R.T.: 2.610 min
Delta R.T.: -0.005 min
Response: 2190060883
Conc: 734.49 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



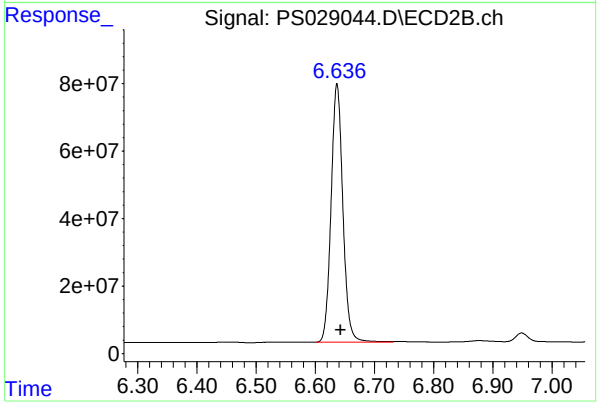
#1 Dalapon

R.T.: 2.662 min
Delta R.T.: -0.005 min
Response: 1354172800
Conc: 663.76 ng/ml



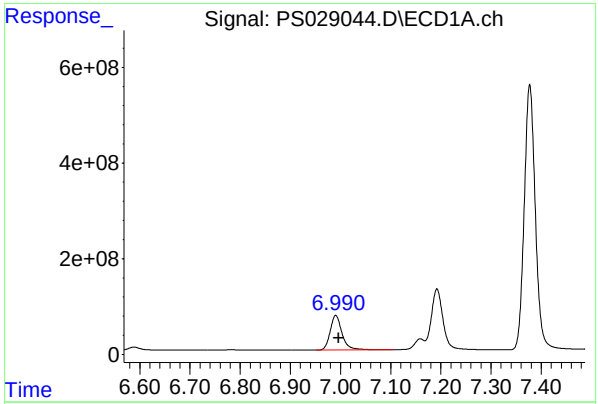
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.370 min
Delta R.T.: -0.005 min
Response: 2775880557
Conc: 694.52 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

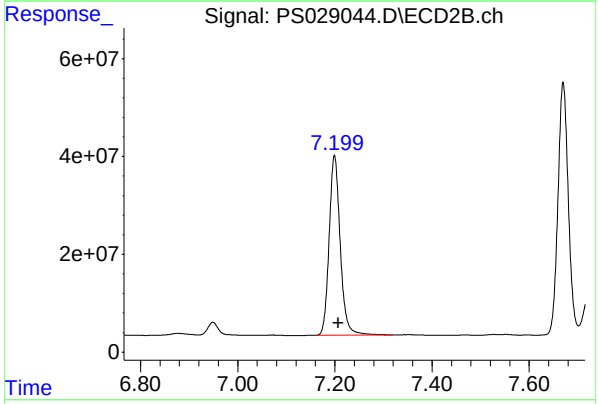
R.T.: 6.637 min
Delta R.T.: -0.006 min
Response: 1059066826
Conc: 640.84 ng/ml



#3 4-Nitrophenol

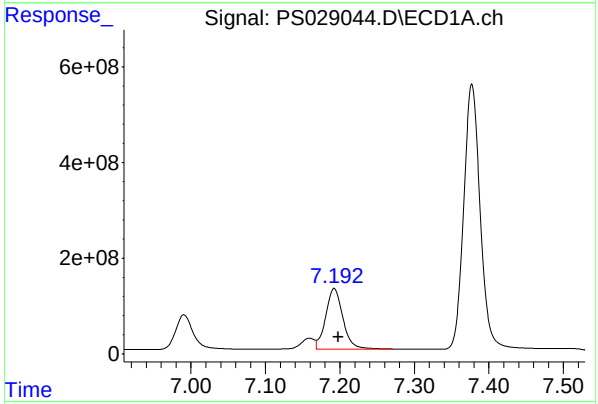
R.T.: 6.990 min
Delta R.T.: -0.005 min
Response: 1194100379
Conc: 673.84 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



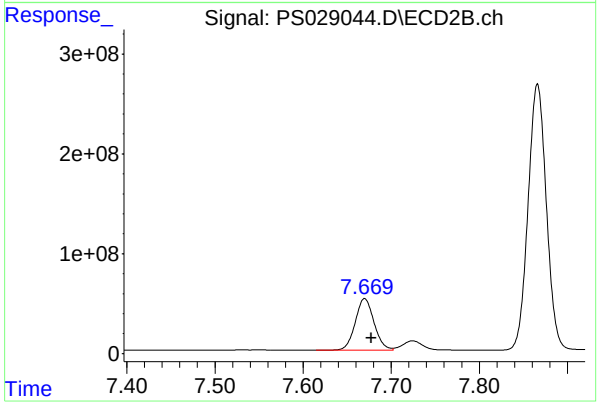
#3 4-Nitrophenol

R.T.: 7.199 min
Delta R.T.: -0.008 min
Response: 582303527
Conc: 654.44 ng/ml



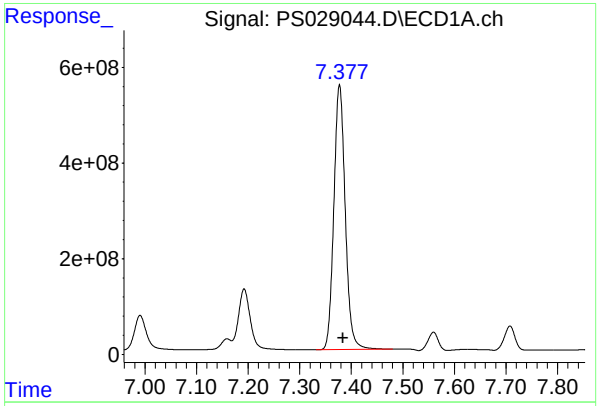
#4 2,4-DCAA

R.T.: 7.192 min
Delta R.T.: -0.005 min
Response: 2039896783
Conc: 732.72 ng/ml



#4 2,4-DCAA

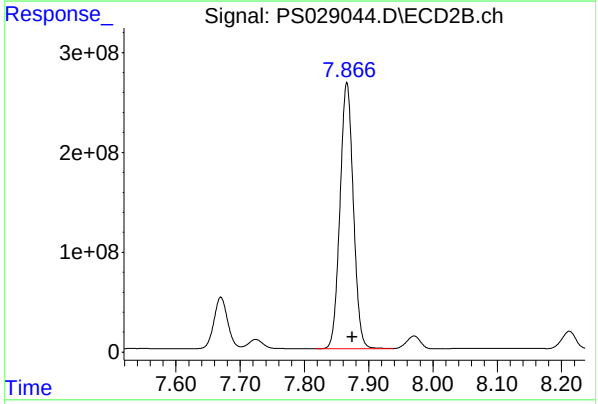
R.T.: 7.670 min
Delta R.T.: -0.008 min
Response: 765199547
Conc: 685.78 ng/ml



#5 DICAMBA

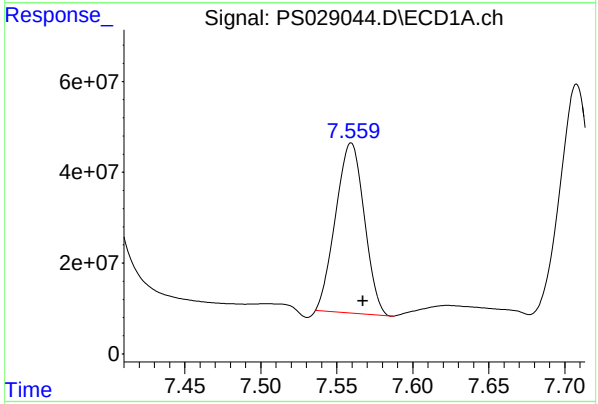
R.T.: 7.377 min
Delta R.T.: -0.006 min
Response: 8479012250
Conc: 714.84 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



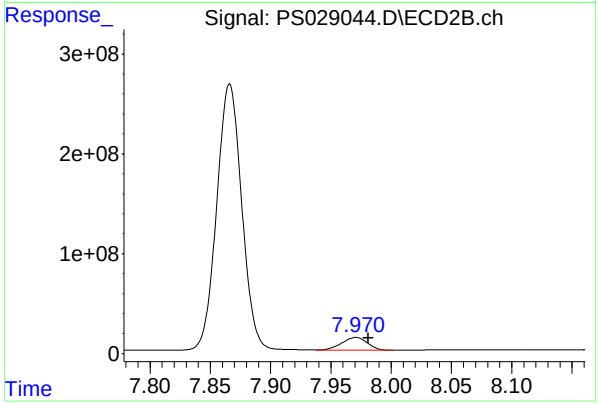
#5 DICAMBA

R.T.: 7.866 min
Delta R.T.: -0.009 min
Response: 3851198517
Conc: 691.54 ng/ml



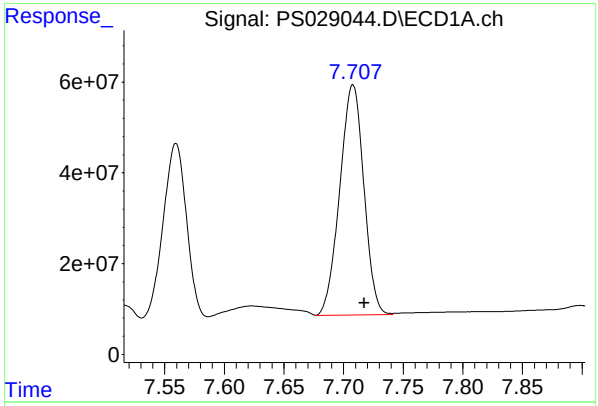
#6 MCPP

R.T.: 7.559 min
Delta R.T.: -0.008 min
Response: 491443686
Conc: 72.10 ug/ml



#6 MCPP

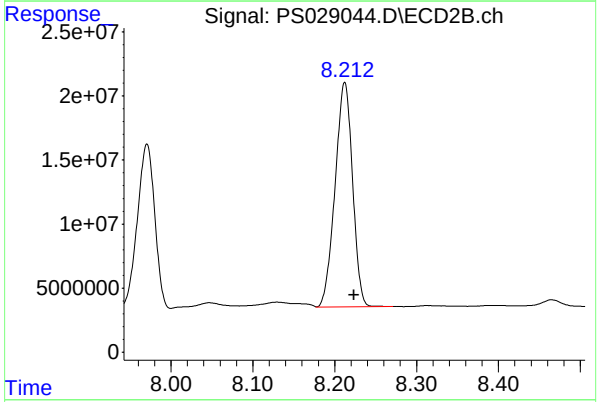
R.T.: 7.971 min
Delta R.T.: -0.010 min
Response: 188752322
Conc: 62.75 ug/ml



#7 MCPA

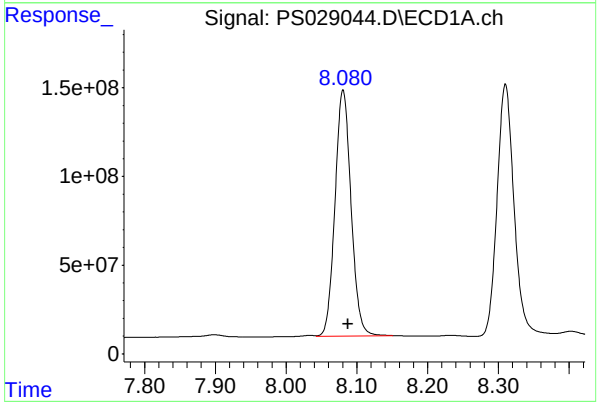
R.T.: 7.708 min
Delta R.T.: -0.010 min
Response: 711734045
Conc: 72.25 ug/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



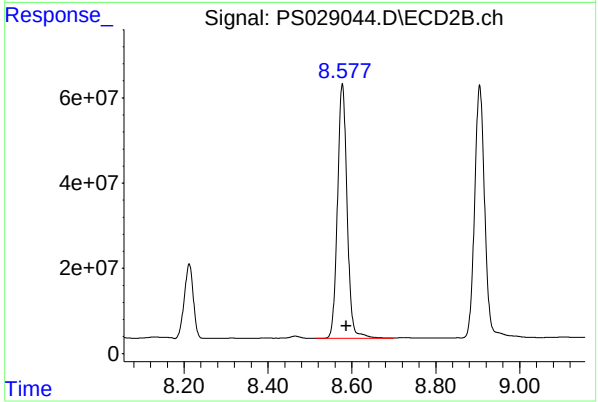
#7 MCPA

R.T.: 8.212 min
Delta R.T.: -0.011 min
Response: 259885297
Conc: 61.19 ug/ml



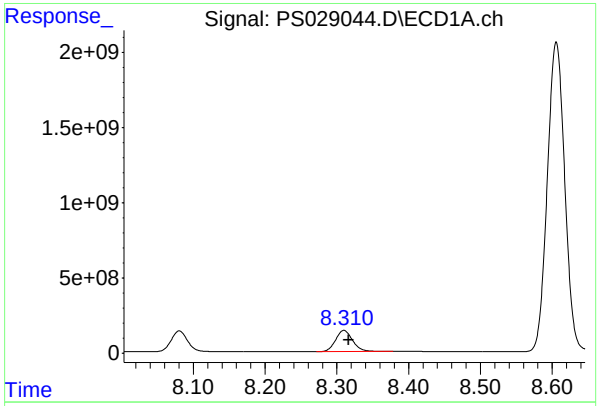
#8 DICHLORPROP

R.T.: 8.081 min
Delta R.T.: -0.007 min
Response: 2186171837
Conc: 689.96 ng/ml



#8 DICHLORPROP

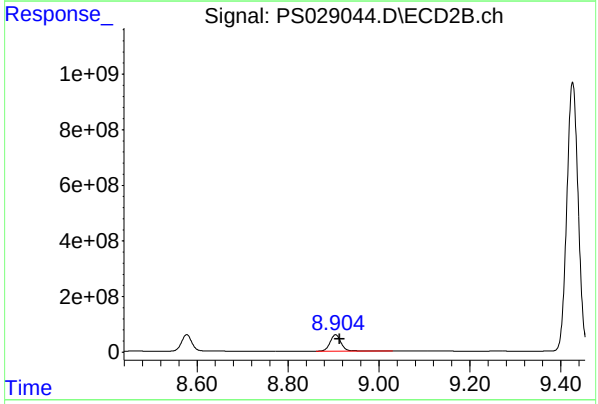
R.T.: 8.577 min
Delta R.T.: -0.009 min
Response: 949065876
Conc: 675.20 ng/ml



#9 2,4-D

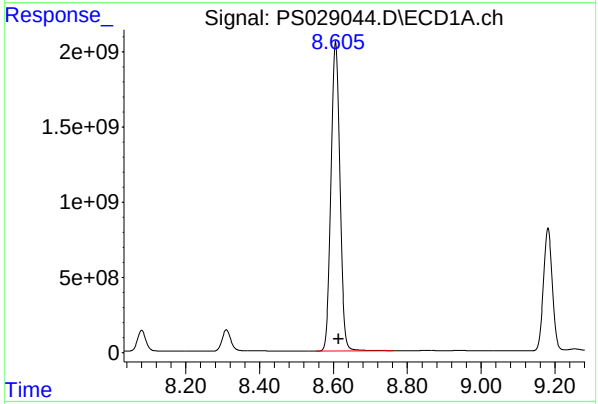
R.T.: 8.310 min
Delta R.T.: -0.007 min
Response: 2328817720
Conc: 689.11 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



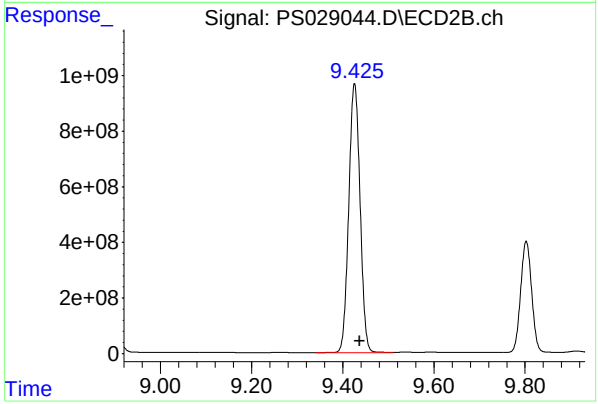
#9 2,4-D

R.T.: 8.905 min
Delta R.T.: -0.009 min
Response: 989431284
Conc: 659.83 ng/ml



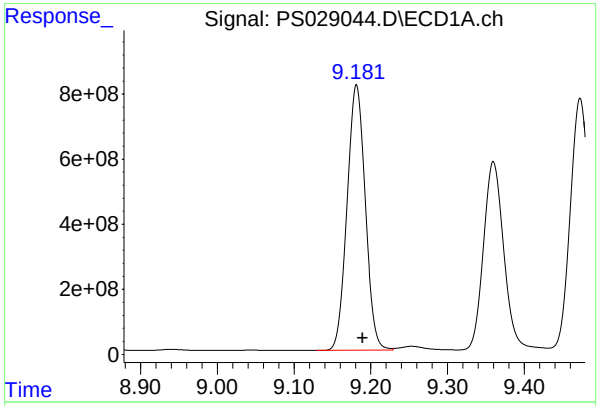
#10 Pentachlorophenol

R.T.: 8.606 min
Delta R.T.: -0.009 min
Response: 34801506953
Conc: 721.47 ng/ml



#10 Pentachlorophenol

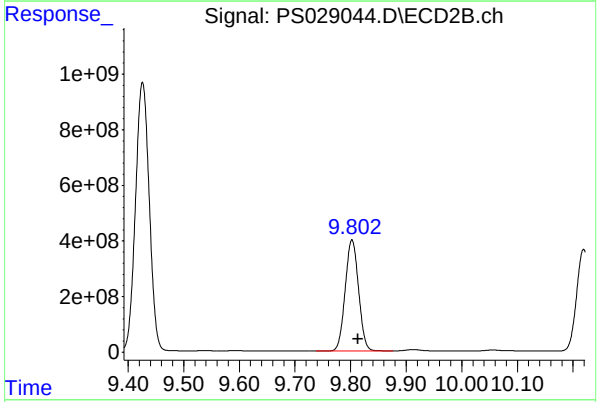
R.T.: 9.426 min
Delta R.T.: -0.011 min
Response: 16647606539
Conc: 718.62 ng/ml



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

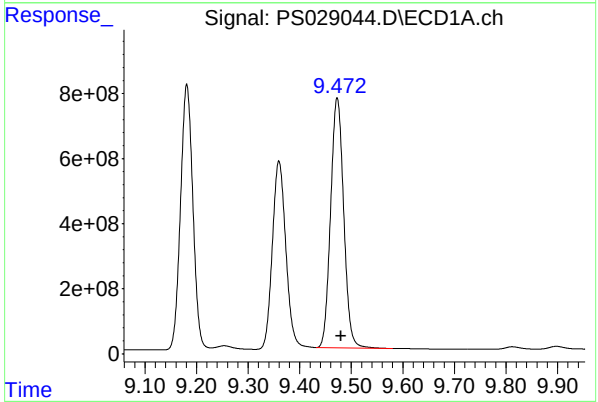
R.T.: 9.181 min
Delta R.T.: -0.008 min
Response: 13543746181
Conc: 707.89 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



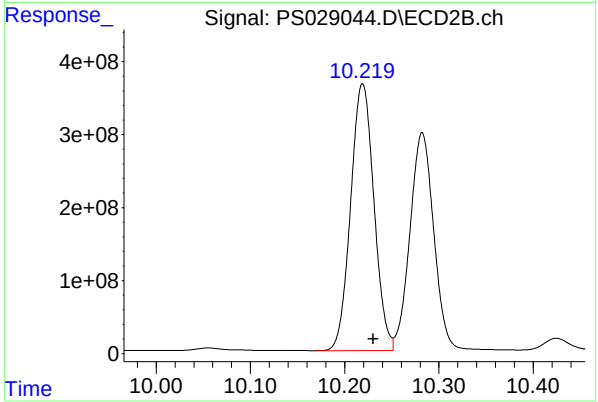
#11 2,4,5-TP (SILVEX)

R.T.: 9.803 min
Delta R.T.: -0.011 min
Response: 6698357259
Conc: 711.12 ng/ml



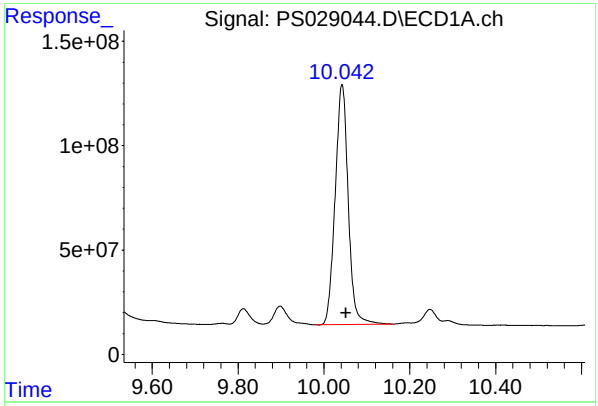
#12 2,4,5-T

R.T.: 9.473 min
Delta R.T.: -0.007 min
Response: 13524200444
Conc: 704.50 ng/ml



#12 2,4,5-T

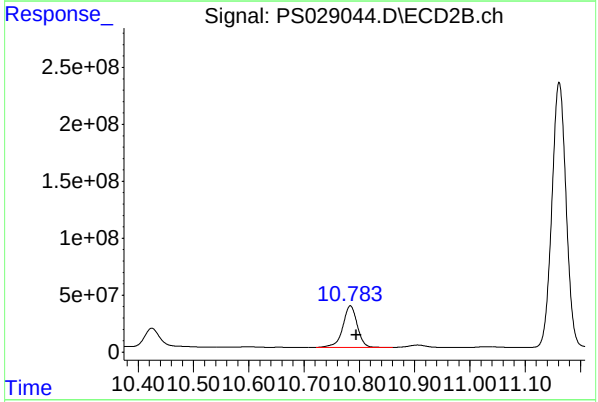
R.T.: 10.219 min
Delta R.T.: -0.011 min
Response: 6288593639
Conc: 698.03 ng/ml



#13 2,4-DB

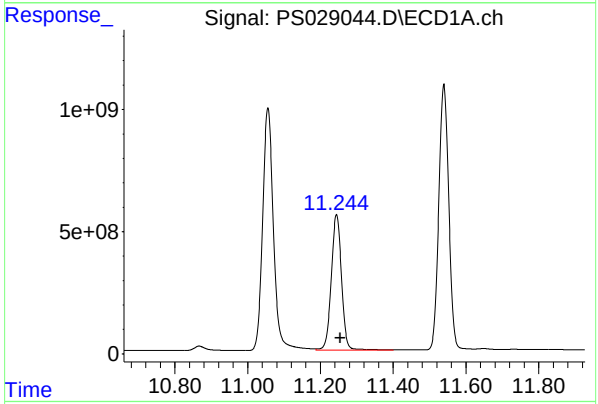
R.T.: 10.042 min
Delta R.T.: -0.009 min
Response: 2428733015
Conc: 684.66 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



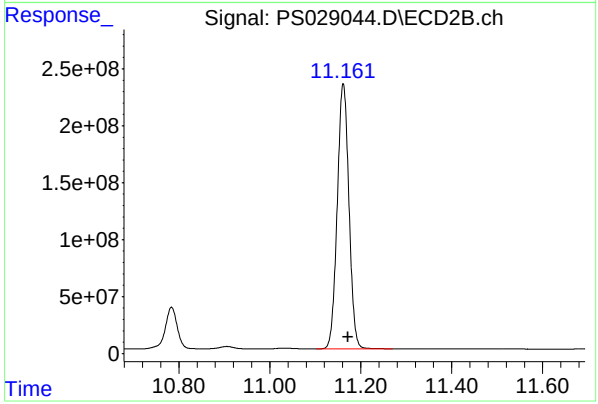
#13 2,4-DB

R.T.: 10.784 min
Delta R.T.: -0.011 min
Response: 663416183
Conc: 666.24 ng/ml



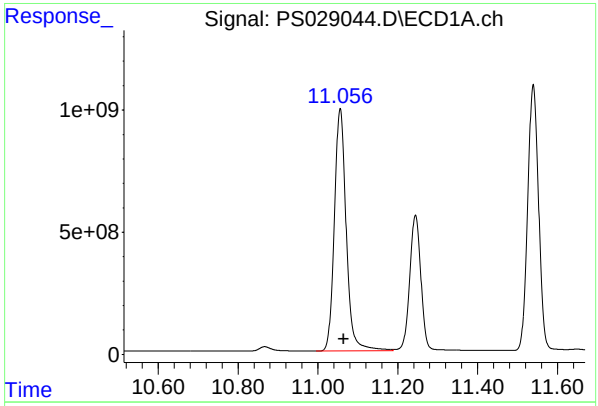
#14 DINOSEB

R.T.: 11.244 min
Delta R.T.: -0.010 min
Response: 10874434273
Conc: 657.17 ng/ml



#14 DINOSEB

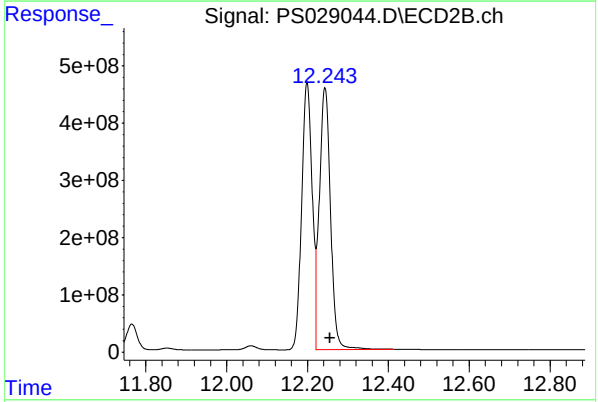
R.T.: 11.162 min
Delta R.T.: -0.011 min
Response: 4148668917
Conc: 646.48 ng/ml



#15 Picloram

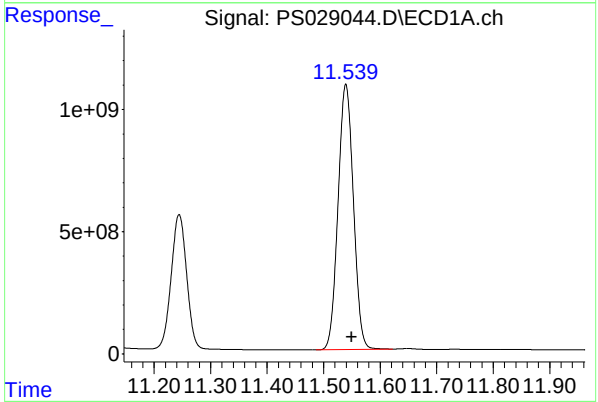
R.T.: 11.056 min
Delta R.T.: -0.009 min
Response: 20526698427
Conc: 650.56 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



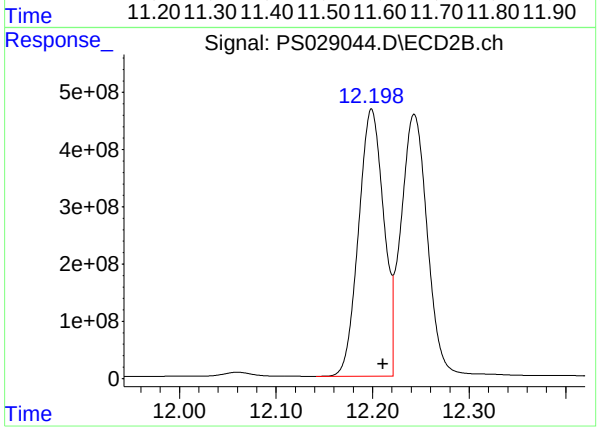
#15 Picloram

R.T.: 12.243 min
Delta R.T.: -0.012 min
Response: 8746519650
Conc: 651.77 ng/ml



#16 DCPA

R.T.: 11.539 min
Delta R.T.: -0.010 min
Response: 20499788645
Conc: 714.75 ng/ml



#16 DCPA

R.T.: 12.199 min
Delta R.T.: -0.012 min
Response: 8438871889
Conc: 743.36 ng/ml

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Fax : 908 789 8922

Analytical Sequence

Client: RU2 Engineering, LLC **SDG No.:** Q1216

Project: NYCDDC SANTWOBR Brooklyn Bridge BI **Instrument ID:** ECD_S

GC Column: RTX-CLP **ID:** 0.32 (mm) **Inst. Calib. Date(s):** 01/14/2025 01/14/2025

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

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DATAFILE	DCAA RT #	RT #
I.BLK	I.BLK	01/14/2025	10:07	PS028900.D	7.20	0.00
HSTDICC200	HSTDICC200	01/14/2025	10:31	PS028901.D	7.20	0.00
HSTDICC500	HSTDICC500	01/14/2025	10:55	PS028902.D	7.20	0.00
HSTDICC750	HSTDICC750	01/14/2025	11:19	PS028903.D	7.20	0.00
HSTDICC1000	HSTDICC1000	01/14/2025	11:43	PS028904.D	7.20	0.00
HSTDICC1500	HSTDICC1500	01/14/2025	12:07	PS028905.D	7.20	0.00
I.BLK	I.BLK	01/31/2025	20:44	PS029019.D	7.20	0.00
HSTDCCC750	HSTDCCC750	01/31/2025	21:08	PS029020.D	7.20	0.00
PB166428BL	PB166428BL	01/31/2025	22:44	PS029022.D	7.19	0.00
PB166428BS	PB166428BS	01/31/2025	23:08	PS029023.D	7.20	0.00
PB166356TB	PB166356TB	01/31/2025	23:32	PS029024.D	7.20	0.00
JPP-29.1-012825MS	Q1215-04MS	02/01/2025	00:20	PS029026.D	7.20	0.00
JPP-29.1-012825MSD	Q1215-04MSD	02/01/2025	00:44	PS029027.D	7.20	0.00
JPP-18.1-012825	Q1216-04	02/01/2025	01:32	PS029029.D	7.20	0.00
JPP-21.1-012825	Q1216-08	02/01/2025	01:56	PS029030.D	7.19	0.00
I.BLK	I.BLK	02/01/2025	02:20	PS029031.D	7.20	0.00
HSTDCCC750	HSTDCCC750	02/01/2025	02:44	PS029032.D	7.19	0.00
JPP-21.2-012825	Q1216-12	02/01/2025	03:56	PS029033.D	7.20	0.00
JPP-26.1-012825	Q1216-16	02/01/2025	04:20	PS029034.D	7.19	0.00
JPP-26.2-012825	Q1216-20	02/01/2025	04:44	PS029035.D	7.20	0.00
I.BLK	I.BLK	02/01/2025	07:56	PS029043.D	7.19	0.00
HSTDCCC750	HSTDCCC750	02/01/2025	08:44	PS029044.D	7.19	0.00

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Fax : 908 789 8922

Analytical Sequence

Client: RU2 Engineering, LLC **SDG No.:** Q1216

Project: NYCDDC SANTWOBR Brooklyn Bridge BI **Instrument ID:** ECD_S

GC Column: RTX-CLP2 **ID:** 0.32 (mm) **Inst. Calib. Date(s):** 01/14/2025 01/14/2025

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

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DATAFILE	DCAA RT #	RT #
I.BLK	I.BLK	01/14/2025	10:07	PS028900.D	7.68	0.00
HSTDICC200	HSTDICC200	01/14/2025	10:31	PS028901.D	7.68	0.00
HSTDICC500	HSTDICC500	01/14/2025	10:55	PS028902.D	7.68	0.00
HSTDICC750	HSTDICC750	01/14/2025	11:19	PS028903.D	7.68	0.00
HSTDICC1000	HSTDICC1000	01/14/2025	11:43	PS028904.D	7.68	0.00
HSTDICC1500	HSTDICC1500	01/14/2025	12:07	PS028905.D	7.68	0.00
I.BLK	I.BLK	01/31/2025	20:44	PS029019.D	7.67	0.00
HSTDCCC750	HSTDCCC750	01/31/2025	21:08	PS029020.D	7.67	0.00
PB166428BL	PB166428BL	01/31/2025	22:44	PS029022.D	7.67	0.00
PB166428BS	PB166428BS	01/31/2025	23:08	PS029023.D	7.67	0.00
PB166356TB	PB166356TB	01/31/2025	23:32	PS029024.D	7.67	0.00
JPP-29.1-012825MS	Q1215-04MS	02/01/2025	00:20	PS029026.D	7.67	0.00
JPP-29.1-012825MSD	Q1215-04MSD	02/01/2025	00:44	PS029027.D	7.67	0.00
JPP-18.1-012825	Q1216-04	02/01/2025	01:32	PS029029.D	7.67	0.00
JPP-21.1-012825	Q1216-08	02/01/2025	01:56	PS029030.D	7.67	0.00
I.BLK	I.BLK	02/01/2025	02:20	PS029031.D	7.67	0.00
HSTDCCC750	HSTDCCC750	02/01/2025	02:44	PS029032.D	7.67	0.00
JPP-21.2-012825	Q1216-12	02/01/2025	03:56	PS029033.D	7.67	0.00
JPP-26.1-012825	Q1216-16	02/01/2025	04:20	PS029034.D	7.67	0.00
JPP-26.2-012825	Q1216-20	02/01/2025	04:44	PS029035.D	7.67	0.00
I.BLK	I.BLK	02/01/2025	07:56	PS029043.D	7.67	0.00
HSTDCCC750	HSTDCCC750	02/01/2025	08:44	PS029044.D	7.67	0.00

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COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

JPP-29.1-012825MS

Contract: RUTW01

Lab Code: CHEM **Case No.:** Q1216 **SAS No.:** Q1216 **SDG NO.:** Q1216

Lab Sample ID: Q1215-04MS **Date(s) Analyzed:** 02/01/2025 02/01/2025

Instrument ID (1): ECD_S **Instrument ID (2):** ECD_S

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

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%RPD
2,4-D	1	8.31	8.26	8.36	52.4	9
	2	8.91	8.86	8.96	47.9	
2,4,5-TP(Silvex)	1	9.18	9.13	9.23	50.6	22.6
	2	9.81	9.76	9.86	63.5	

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COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

JPP-29.1-012825MSD

Contract: RUTW01

Lab Code: CHEM **Case No.:** Q1216 **SAS No.:** Q1216 **SDG NO.:** Q1216

Lab Sample ID: Q1215-04MSD **Date(s) Analyzed:** 02/01/2025 02/01/2025

Instrument ID (1): ECD_S **Instrument ID (2):** ECD_S

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

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%RPD
2,4-D	1	8.31	8.26	8.36	52.5	9
	2	8.91	8.86	8.96	48.0	
2,4,5-TP(Silvex)	1	9.18	9.13	9.23	50.4	23.5
	2	9.81	9.76	9.86	63.8	

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COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

PB166428BS

Contract: RUTW01

Lab Code: CHEM **Case No.:** Q1216 **SAS No.:** Q1216 **SDG NO.:** Q1216

Lab Sample ID: PB166428BS **Date(s) Analyzed:** 01/31/2025 01/31/2025

Instrument ID (1): ECD_S **Instrument ID (2):** ECD_S

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

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%RPD
2,4-D	1	8.31	8.26	8.36	5.20	10.1
	2	8.91	8.86	8.96	4.70	
2,4,5-TP(Silvex)	1	9.18	9.13	9.23	5.30	5.8
	2	9.81	9.76	9.86	5.00	

QC SAMPLE DATA

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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	
Client Sample ID:	PB166428BL	SDG No.:	Q1216
Lab Sample ID:	PB166428BL	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
PS029022.D	1	01/31/25 10:55	01/31/25 22:44	PB166428

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	2.00	U	0.49	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	2.00	U	0.45	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	477		39 - 175	95%	SPK: 500

Comments:

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

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS013125\
Data File : PS029022.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 31 Jan 2025 22:44
Operator : AR\AJ
Sample : PB166428BL
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
PB166428BL

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 01 00:29:10 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 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	7.194	7.672	1328.7E6	476.6E6	477.249	427.102
	Target Compounds						

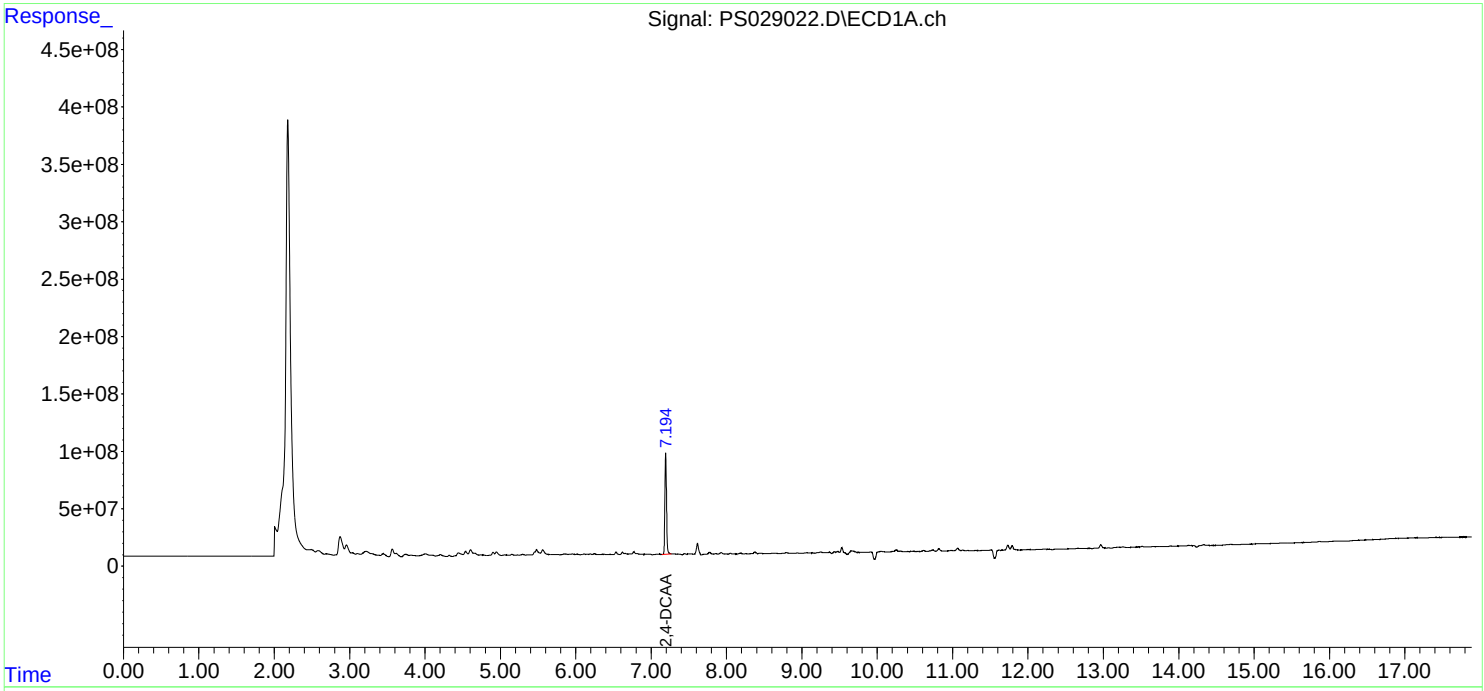
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

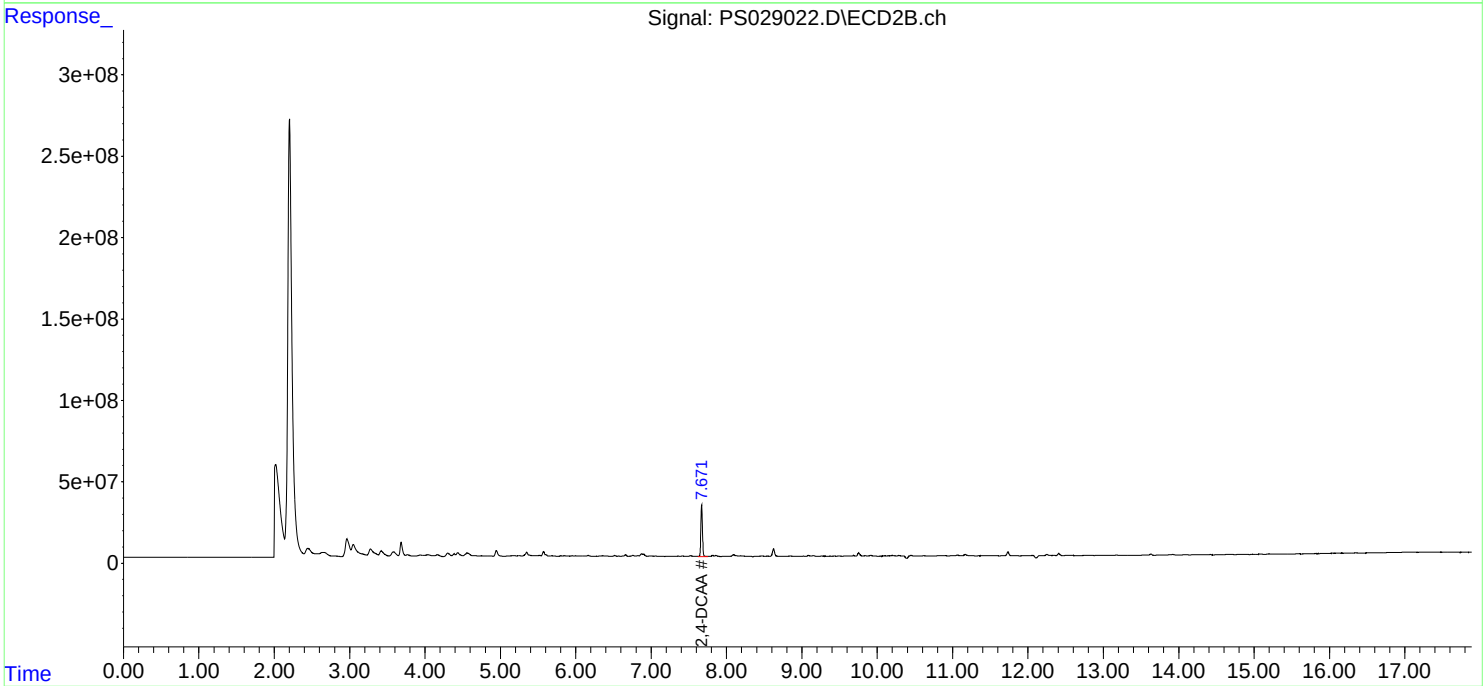
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS013125\
Data File : PS029022.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 31 Jan 2025 22:44
Operator : AR\AJ
Sample : PB166428BL
Misc :
ALS Vial : 15 Sample Multiplier: 1

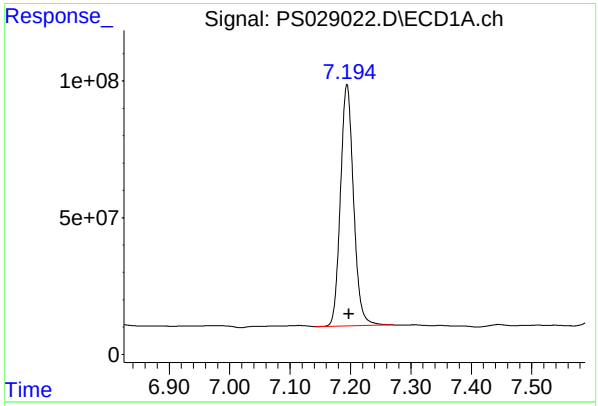
Instrument :
ECD_S
ClientSampleId :
PB166428BL

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 01 00:29:10 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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



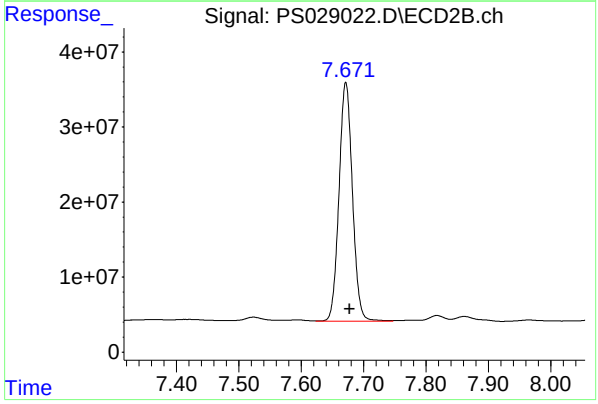




#4 2,4-DCAA

R.T.: 7.194 min
Delta R.T.: -0.004 min
Response: 1328667621
Conc: 477.25 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB166428BL



#4 2,4-DCAA

R.T.: 7.672 min
Delta R.T.: -0.006 min
Response: 476566031
Conc: 427.10 ng/ml

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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/14/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/14/25
Client Sample ID:	PIBLK-PS028900.D	SDG No.:	Q1216
Lab Sample ID:	I.BLK-PS028900.D	Matrix:	TCLP
Analytical Method:	SW8151A	% Solid:	0 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Herbicide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS028900.D	1		01/14/25	PS011425

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	2.00	U	0.49	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	2.00	U	0.45	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	492		39 - 175	98%	SPK: 500

Comments:

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

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS011425\
Data File : PS028900.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Jan 2025 10:07
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: Jan 14 12:27:21 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 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	7.198	7.678	1320.2E6	549.1E6	474.225	492.107
	Target Compounds						

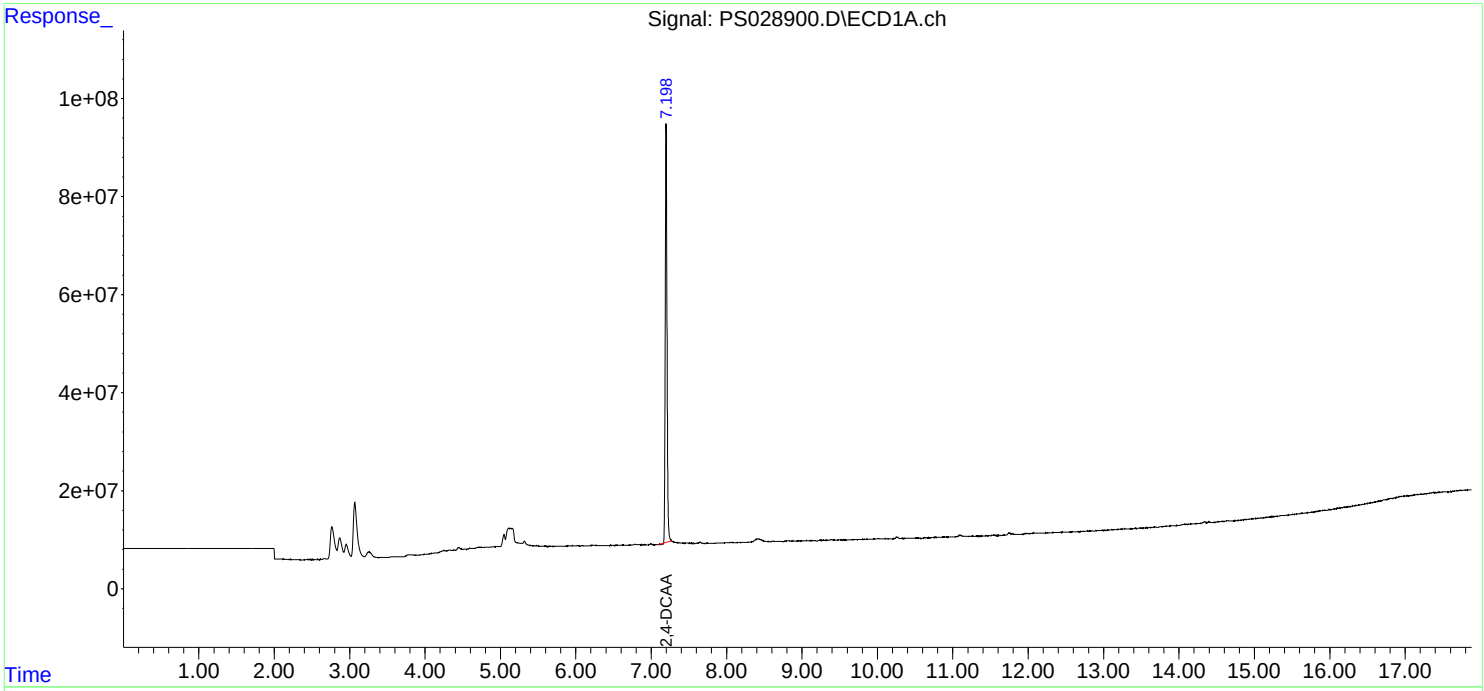
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

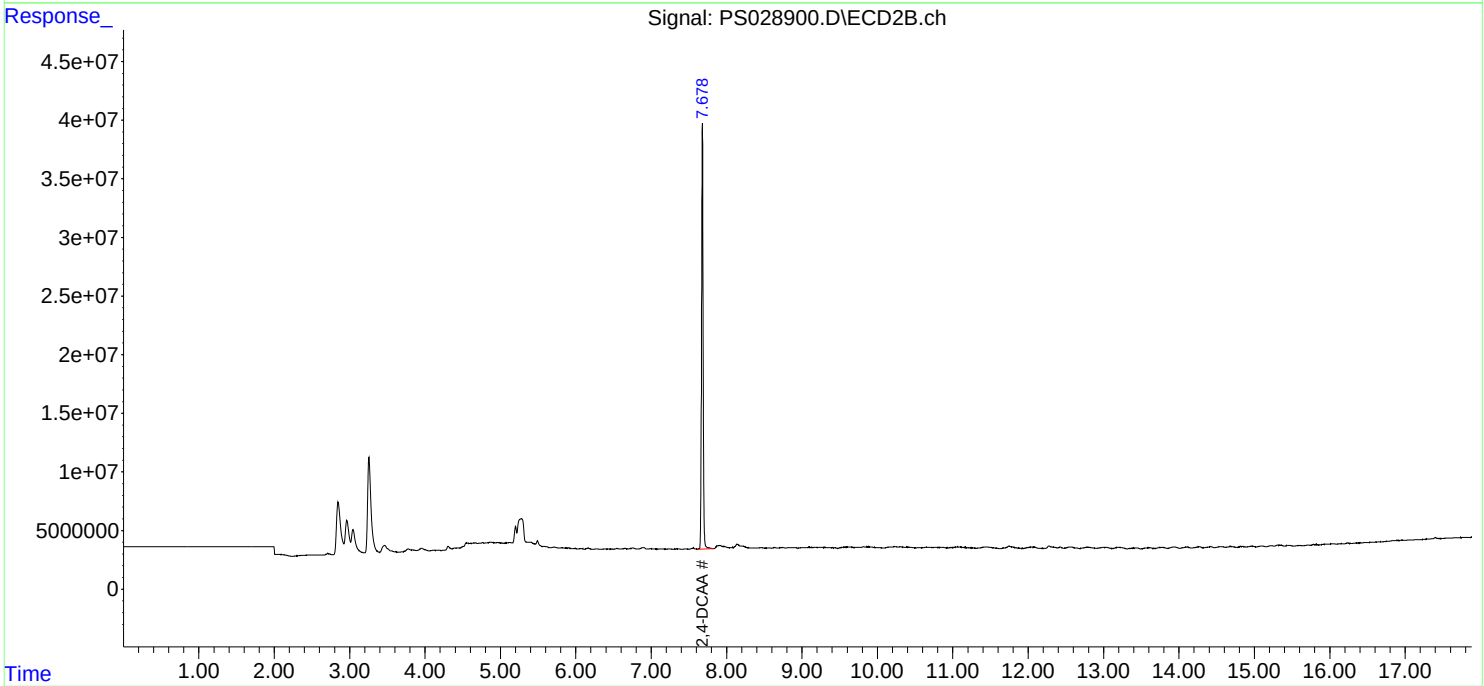
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS011425\
Data File : PS028900.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Jan 2025 10:07
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

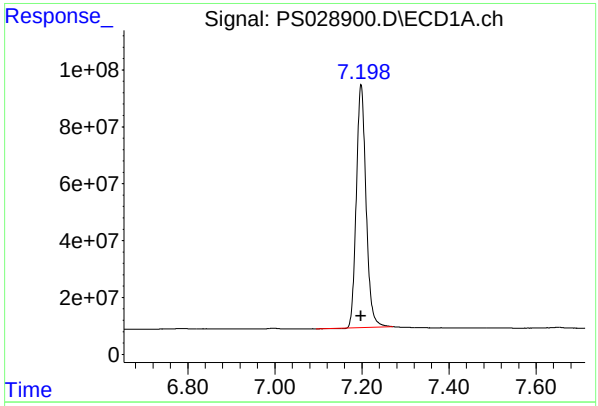
Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jan 14 12:27:21 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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



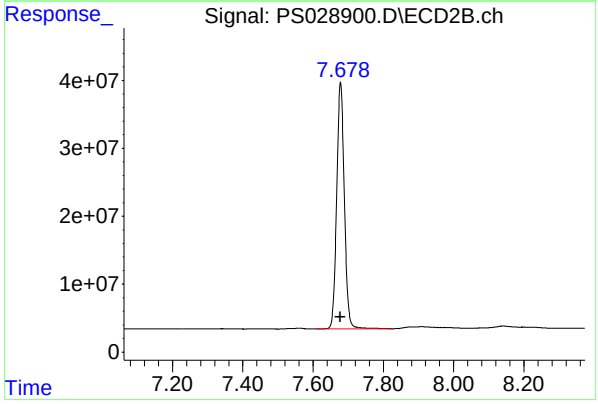




#4 2,4-DCAA

R.T.: 7.198 min
Delta R.T.: 0.000 min
Response: 1320247914
Conc: 474.22 ng/ml

Instrument :
ECD_S
ClientSampleId :
I.BLK



#4 2,4-DCAA

R.T.: 7.678 min
Delta R.T.: 0.000 min
Response: 549099897
Conc: 492.11 ng/ml

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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/31/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/31/25
Client Sample ID:	PIBLK-PS029019.D	SDG No.:	Q1216
Lab Sample ID:	I.BLK-PS029019.D	Matrix:	TCLP
Analytical Method:	SW8151A	% Solid:	0 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Herbicide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS029019.D	1		01/31/25	PS013125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	2.00	U	0.49	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	2.00	U	0.45	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	581		39 - 175	116%	SPK: 500

Comments:

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

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS013125\
Data File : PS029019.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 31 Jan 2025 20:44
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 01 00:28:20 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 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	7.195	7.672	1617.7E6	614.5E6	581.074	550.702
	Target Compounds						

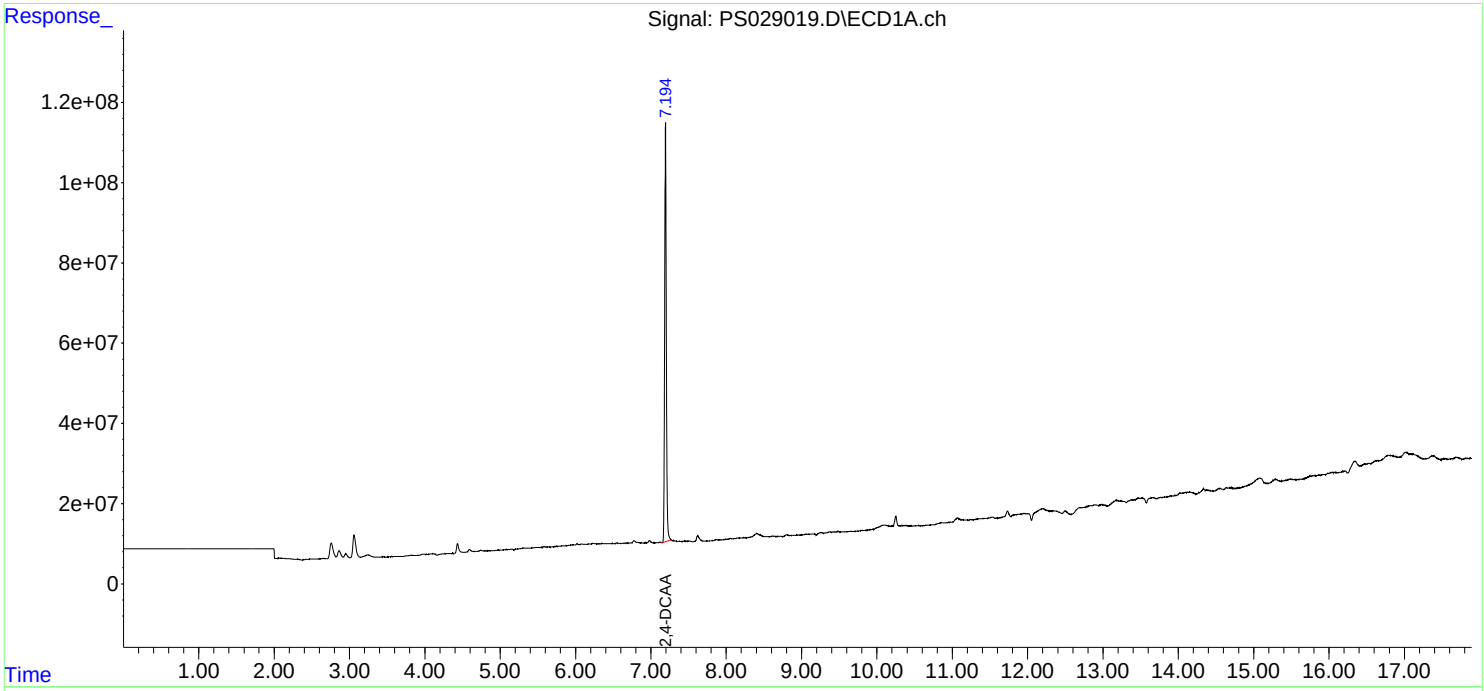
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

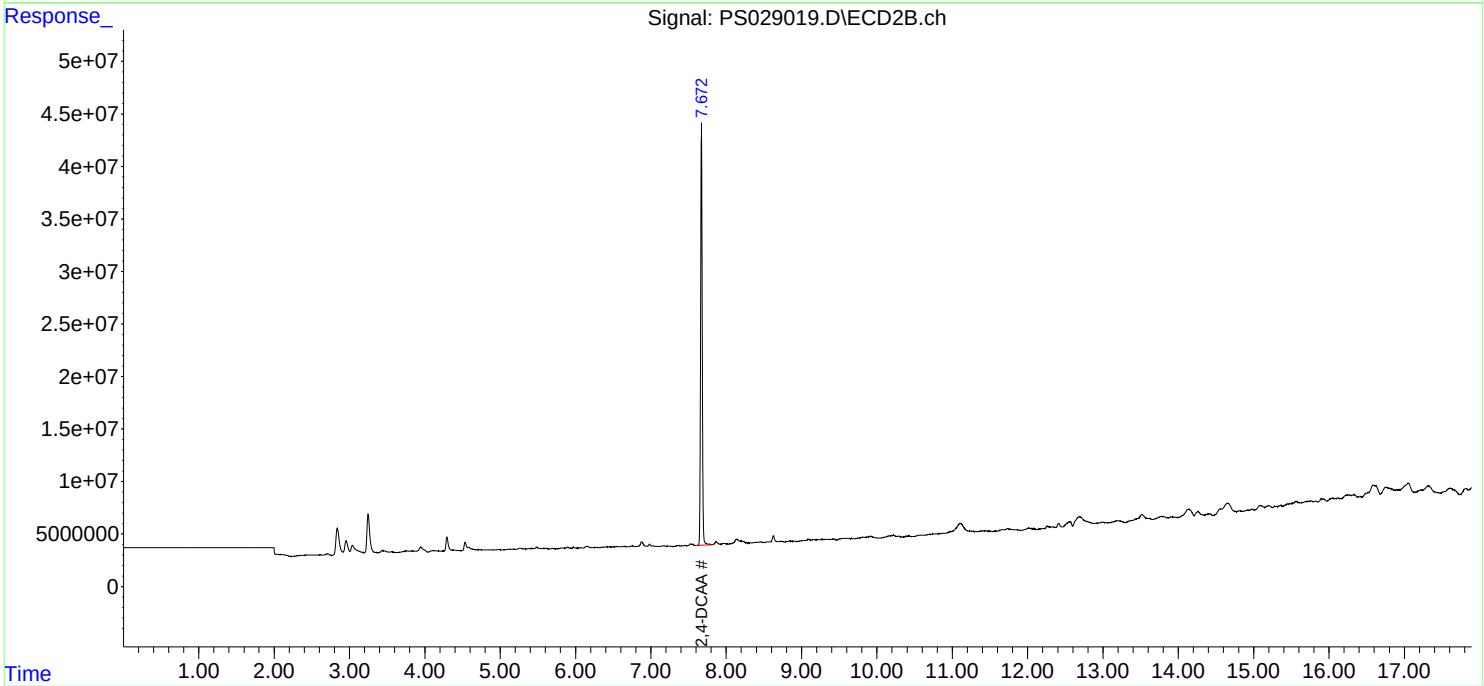
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS013125\
Data File : PS029019.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 31 Jan 2025 20:44
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

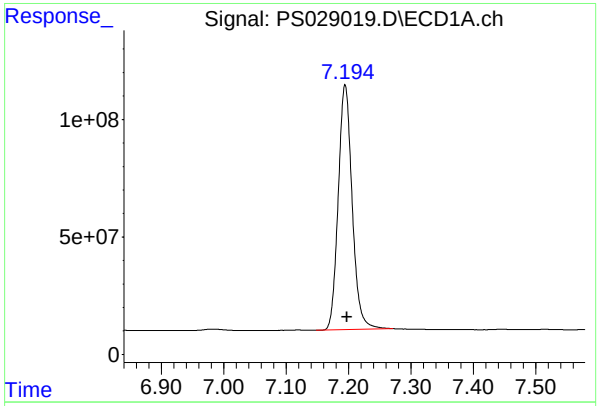
Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 01 00:28:20 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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



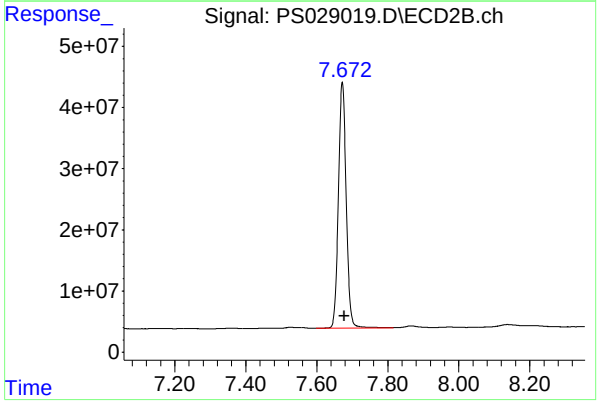




#4 2,4-DCAA

R.T.: 7.195 min
Delta R.T.: -0.003 min
Response: 1617716853
Conc: 581.07 ng/ml

Instrument :
ECD_S
ClientSampleId :
I.BLK



#4 2,4-DCAA

R.T.: 7.672 min
Delta R.T.: -0.006 min
Response: 614480244
Conc: 550.70 ng/ml

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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	02/01/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	02/01/25
Client Sample ID:	PIBLK-PS029031.D	SDG No.:	Q1216
Lab Sample ID:	I.BLK-PS029031.D	Matrix:	TCLP
Analytical Method:	SW8151A	% Solid:	0 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Herbicide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS029031.D	1		02/01/25	PS013125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	2.00	U	0.49	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	2.00	U	0.45	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	584		39 - 175	117%	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\PS013125\
Data File : PS029031.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 01 Feb 2025 02:20
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 01 05:18:17 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 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	7.195	7.672	1626.2E6	618.4E6	584.137	554.191
	Target Compounds						

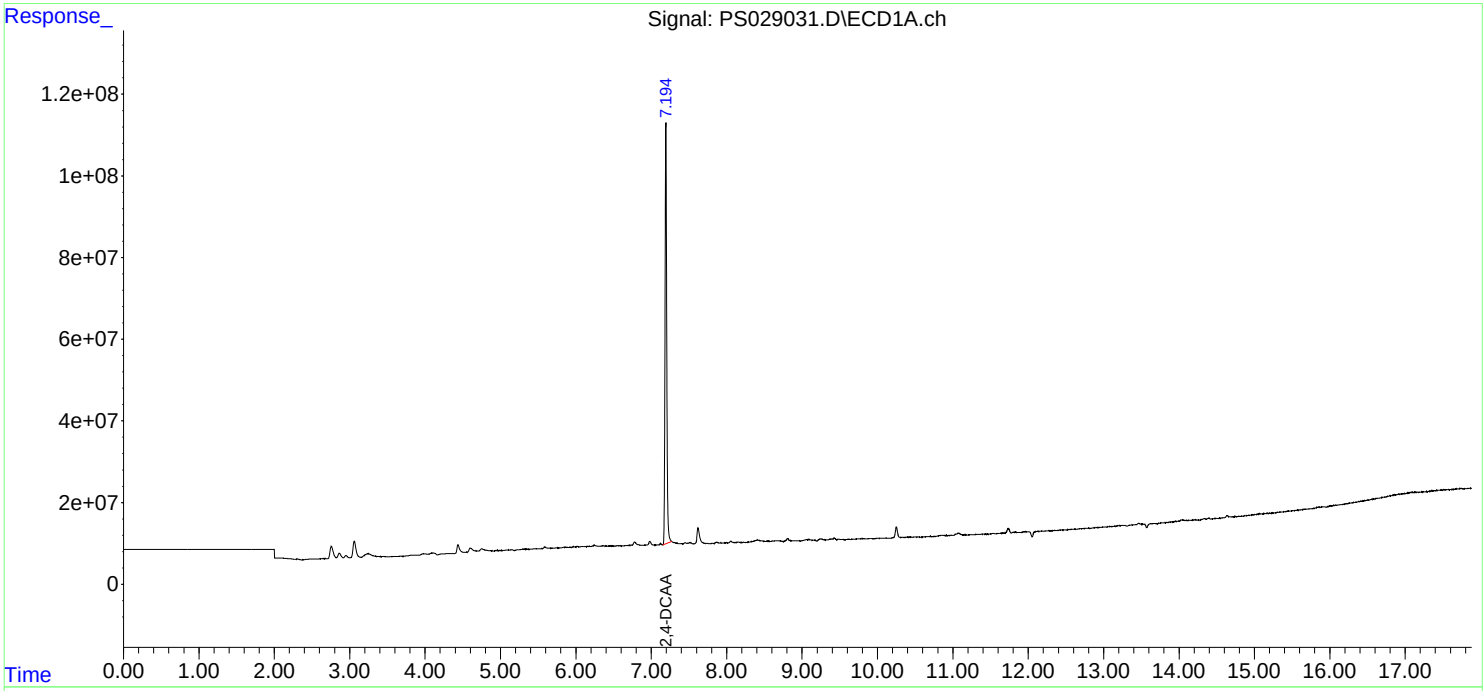
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

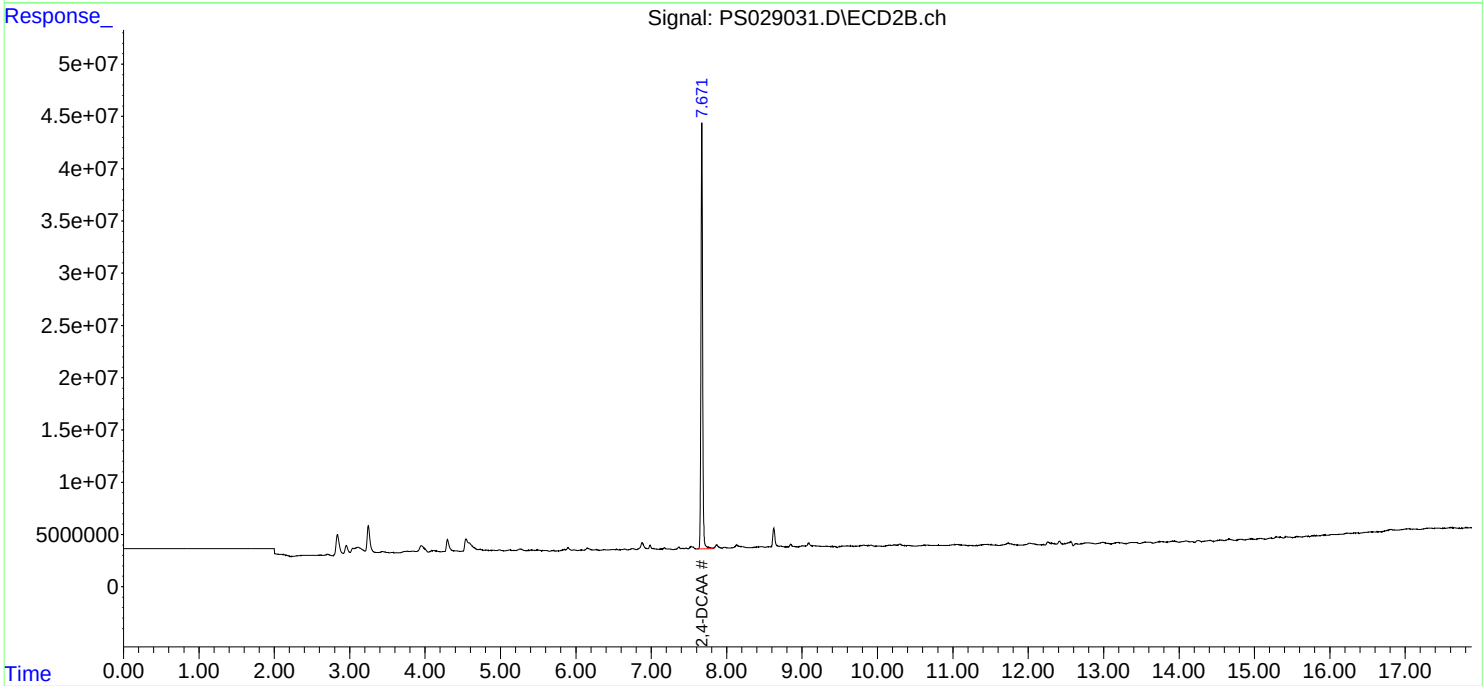
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS013125\
Data File : PS029031.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 01 Feb 2025 02:20
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

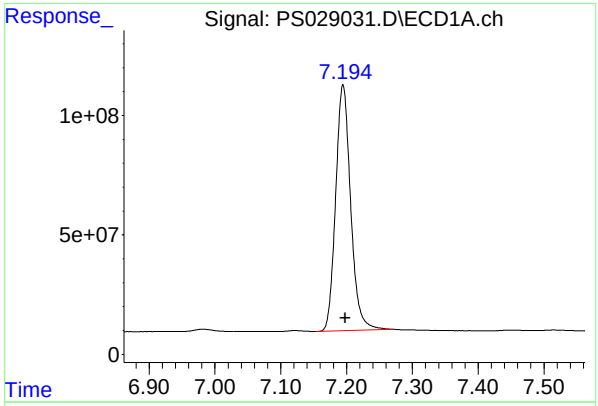
Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 01 05:18:17 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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



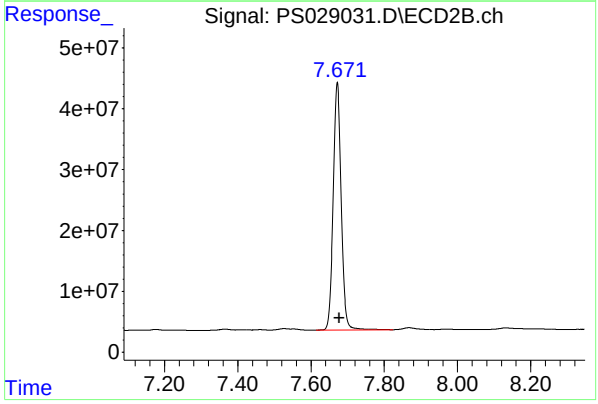




#4 2,4-DCAA

R.T.: 7.195 min
Delta R.T.: -0.003 min
Response: 1626244276
Conc: 584.14 ng/ml

Instrument :
ECD_S
ClientSampleId :
I.BLK



#4 2,4-DCAA

R.T.: 7.672 min
Delta R.T.: -0.006 min
Response: 618373300
Conc: 554.19 ng/ml

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Fax : 908 789 8922

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	02/01/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	02/01/25
Client Sample ID:	PIBLK-PS029043.D	SDG No.:	Q1216
Lab Sample ID:	I.BLK-PS029043.D	Matrix:	TCLP
Analytical Method:	SW8151A	% Solid:	0 Decanted:
Sample Wt/Vol:	1000 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Herbicide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS029043.D	1		02/01/25	PS013125

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	2.00	U	0.49	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	2.00	U	0.45	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	572		39 - 175	114%	SPK: 500

Comments:

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

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS013125\
Data File : PS029043.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 01 Feb 2025 07:56
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 03 01:01:22 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 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	7.192	7.670	1593.4E6	614.2E6	572.349	550.495
	Target Compounds						

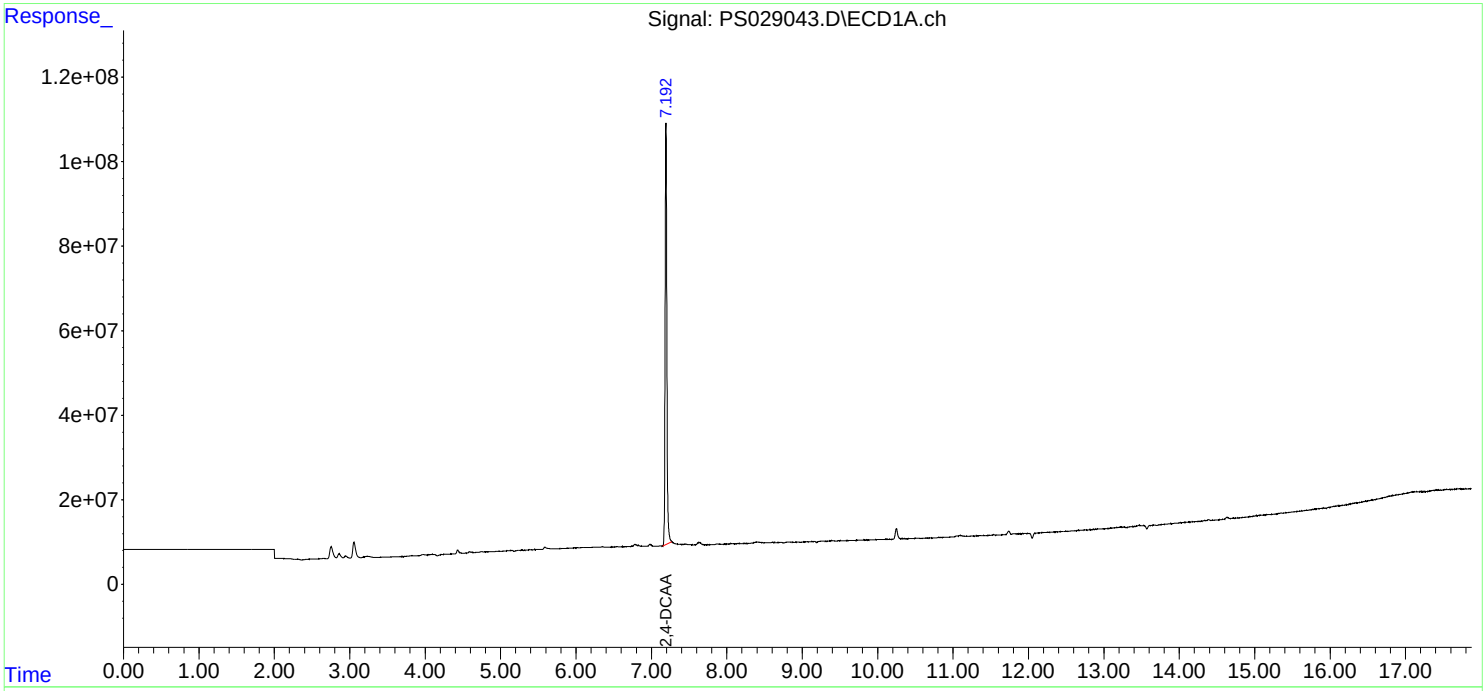
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

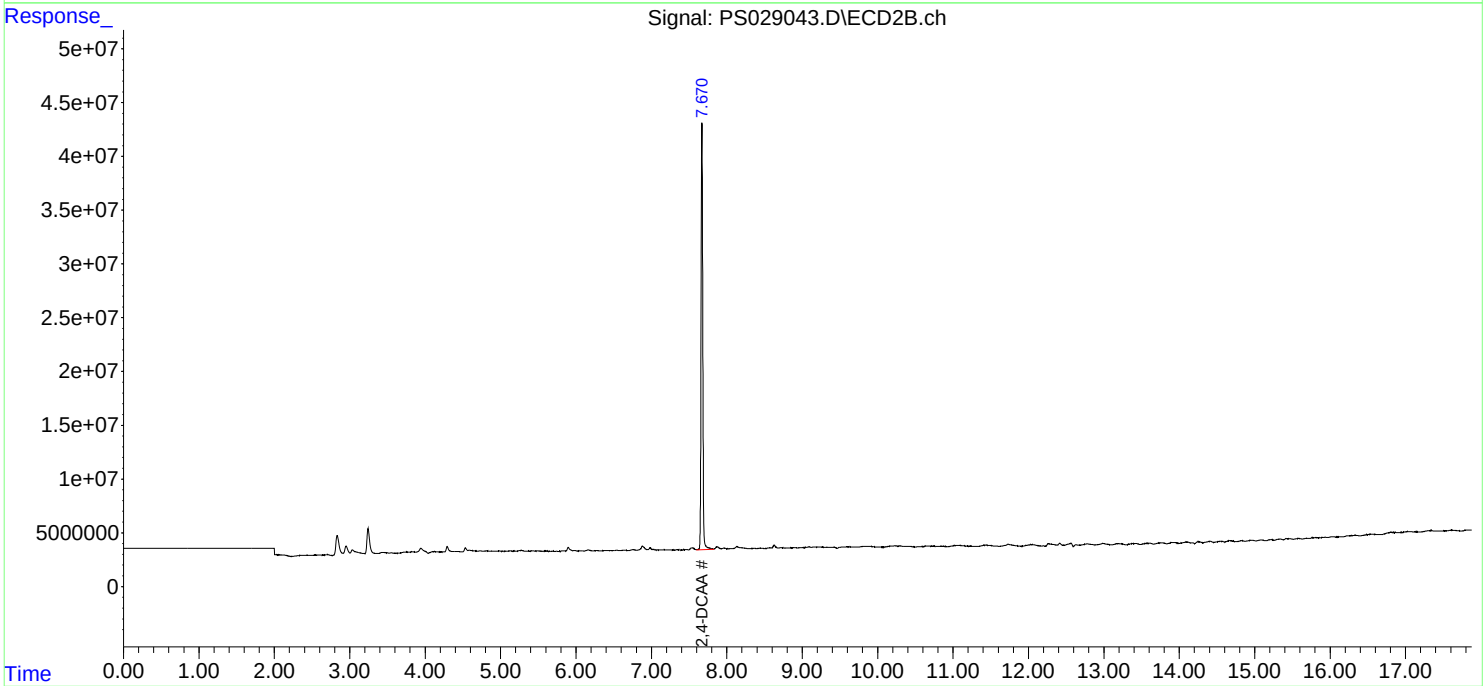
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS013125\
Data File : PS029043.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 01 Feb 2025 07:56
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

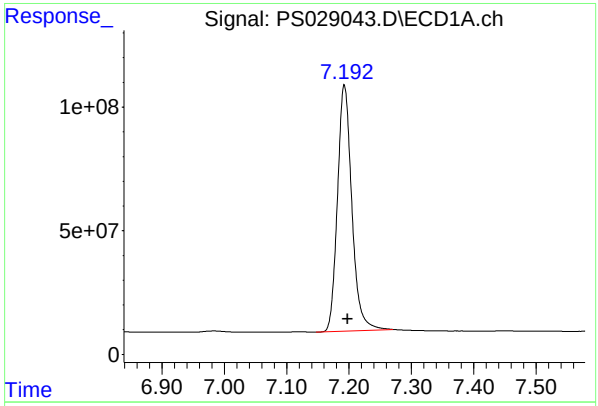
Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 03 01:01:22 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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



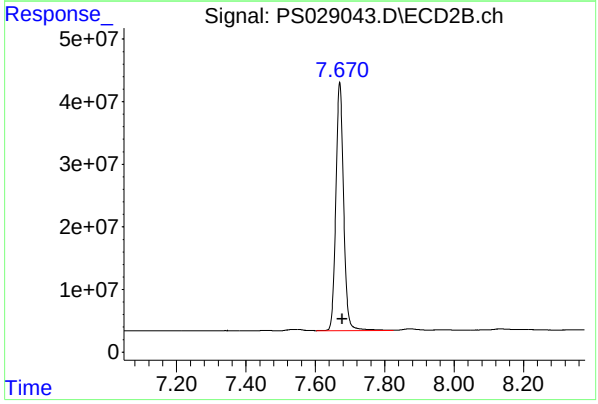




#4 2,4-DCAA

R.T.: 7.192 min
Delta R.T.: -0.005 min
Response: 1593426279
Conc: 572.35 ng/ml

Instrument :
ECD_S
ClientSampleId :
I.BLK



#4 2,4-DCAA

R.T.: 7.670 min
Delta R.T.: -0.007 min
Response: 614249687
Conc: 550.50 ng/ml

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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	
Client Sample ID:	PB166428BS	SDG No.:	Q1216
Lab Sample ID:	PB166428BS	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
PS029023.D	1	01/31/25 10:55	01/31/25 23:08	PB166428

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	5.20		0.49	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	5.30		0.45	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	543		39 - 175	109%	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\PS013125\
Data File : PS029023.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 31 Jan 2025 23:08
Operator : AR\AJ
Sample : PB166428BS
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
PB166428BS

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 01 00:29:20 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 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	7.195	7.672	1512.9E6	545.9E6	543.441	489.282
	Target Compounds						
1) T	Dalapon	2.612	2.663	1575.4E6	973.6E6	528.343	477.211
2) T	3,5-DICHL...	6.372	6.638	2046.6E6	753.6E6	512.044	456.012
3) T	4-Nitroph...	6.993	7.202	872.7E6	423.4E6	492.487	475.846
5) T	DICAMBA	7.380	7.869	6162.3E6	2679.0E6	519.524	481.058
6) T	MCPP	7.561	7.972	347.6E6	128.6E6	50.994	42.760
7) T	MCPA	7.708	8.212	496.0E6	179.0E6	50.351	42.142
8) T	DICHLORPROP	8.083	8.580	1625.8E6	680.4E6	513.108	484.059
9) T	2,4-D	8.313	8.906	1744.7E6	708.5E6	516.271	472.513
10) T	Pentachlo...	8.609	9.428	25808.4E6	11884.2E6	535.033	513.001
11) T	2,4,5-TP ...	9.184	9.806	10051.8E6	4742.4E6	525.373	503.473
12) T	2,4,5-T	9.475	10.222	10076.2E6	4484.0E6	524.886	497.720
13) T	2,4-DB	10.045	10.787	1821.9E6	468.8E6	513.584	470.762
14) T	DINOSEB	11.249	11.164	8226.9E6	3031.6E6	497.173	472.413
15) T	Picloram	11.059	12.247	15163.6E6	6151.4E6	480.587	458.384
16) T	DCPA	11.544	12.203	15201.3E6	5968.6E6	530.012	525.761

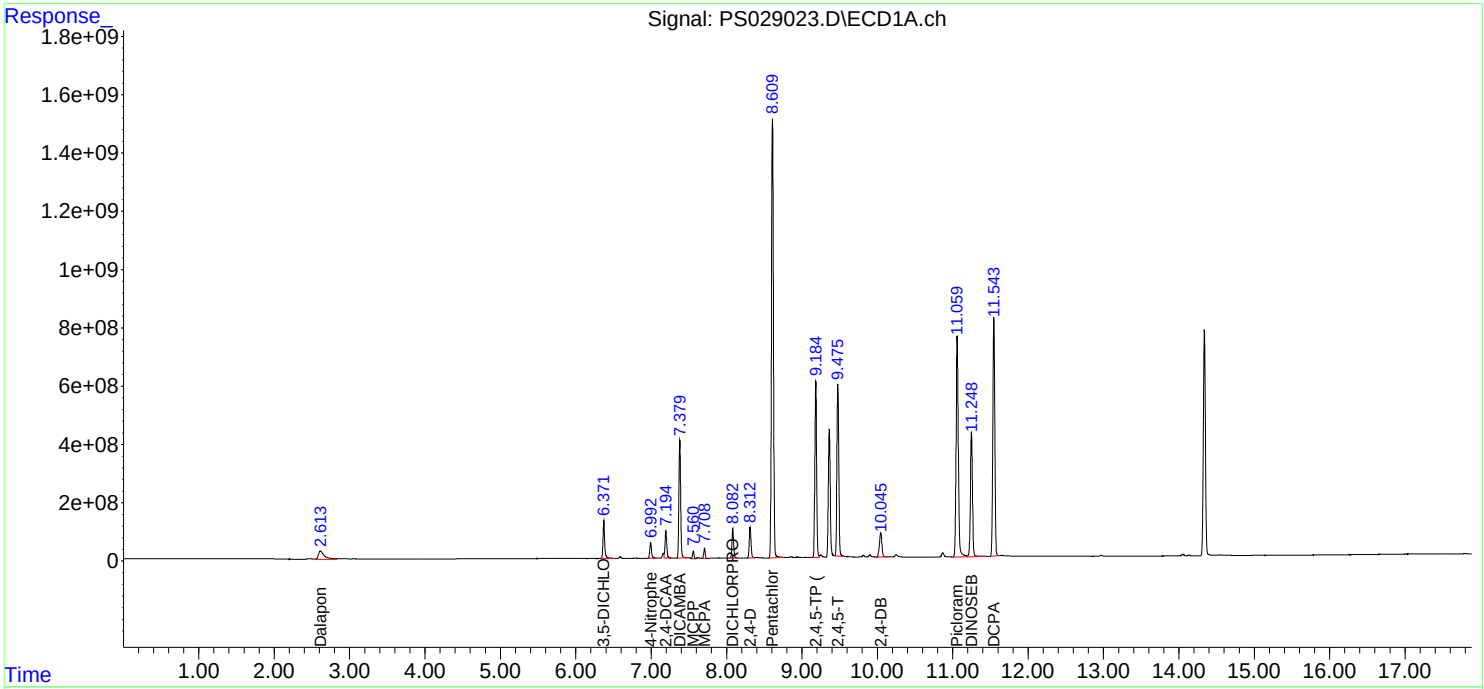
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

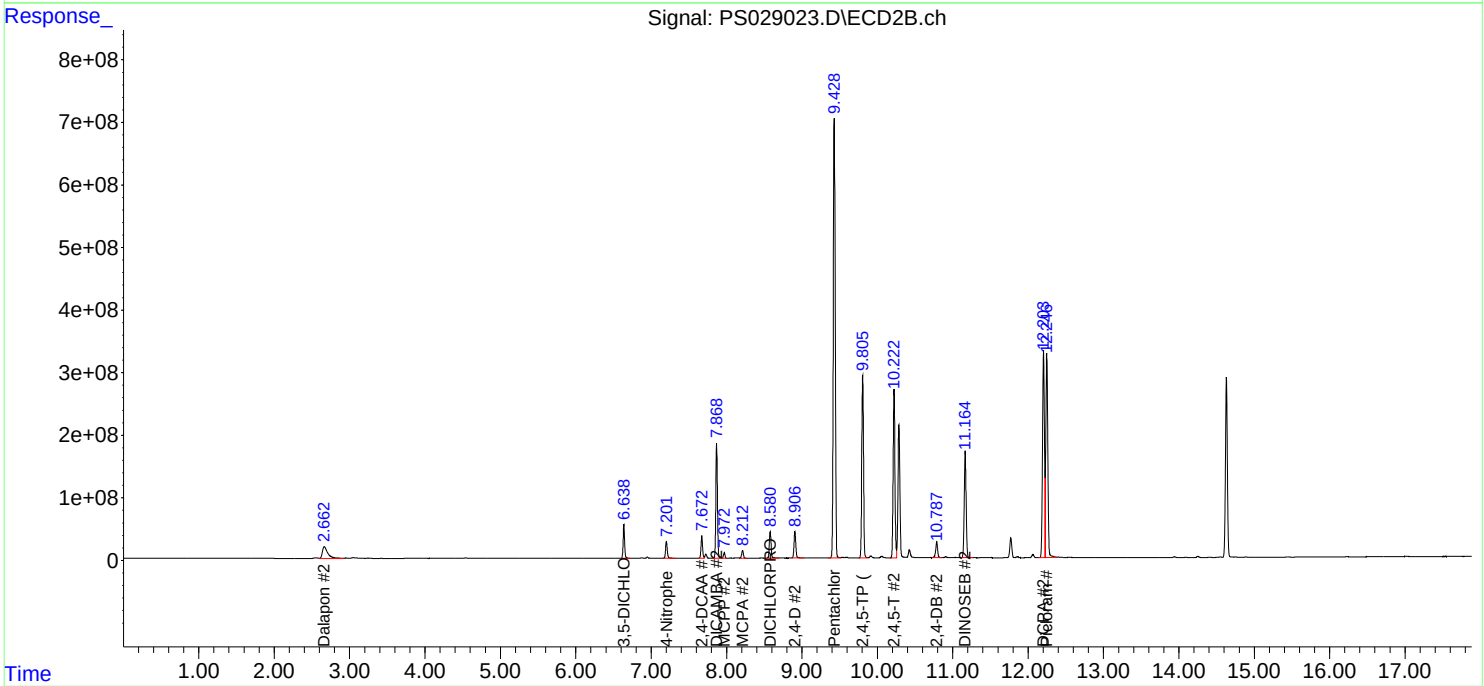
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS013125\
Data File : PS029023.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 31 Jan 2025 23:08
Operator : AR\AJ
Sample : PB166428BS
Misc :
ALS Vial : 16 Sample Multiplier: 1

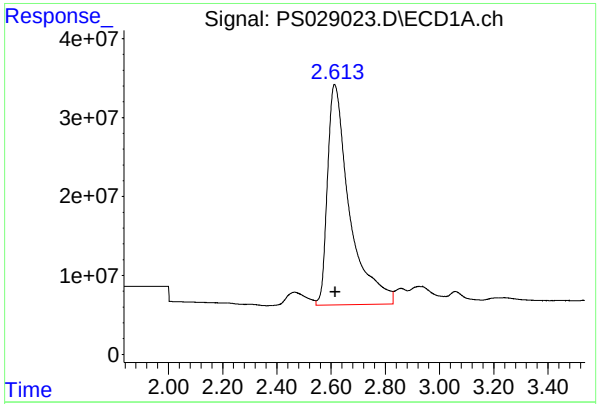
Instrument :
ECD_S
ClientSampleId :
PB166428BS

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 01 00:29:20 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 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



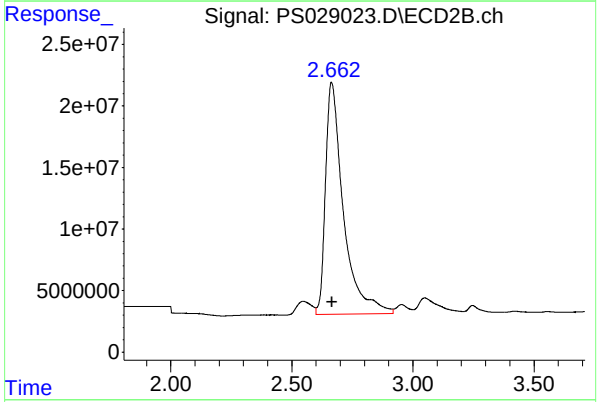




#1 Dalapon

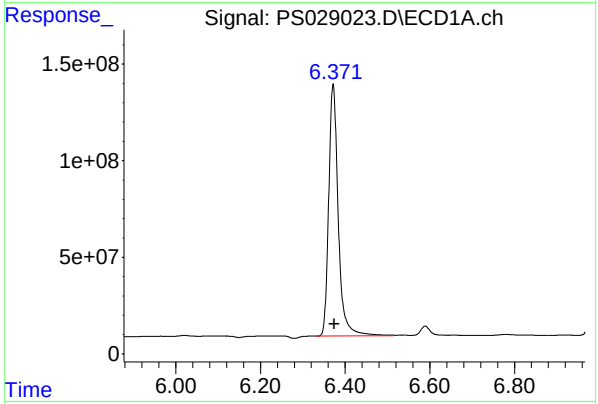
R.T.: 2.612 min
Delta R.T.: -0.003 min
Response: 1575383058
Conc: 528.34 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB166428BS



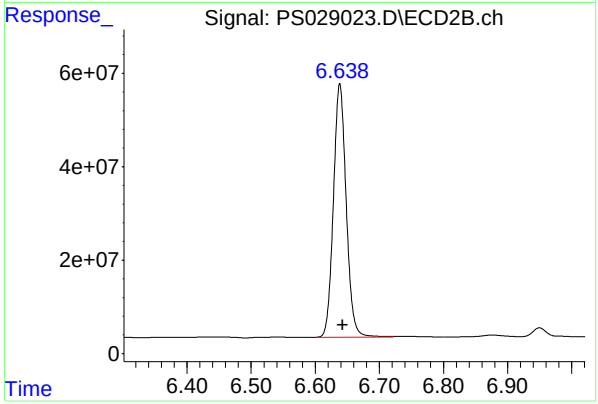
#1 Dalapon

R.T.: 2.663 min
Delta R.T.: -0.004 min
Response: 973581072
Conc: 477.21 ng/ml



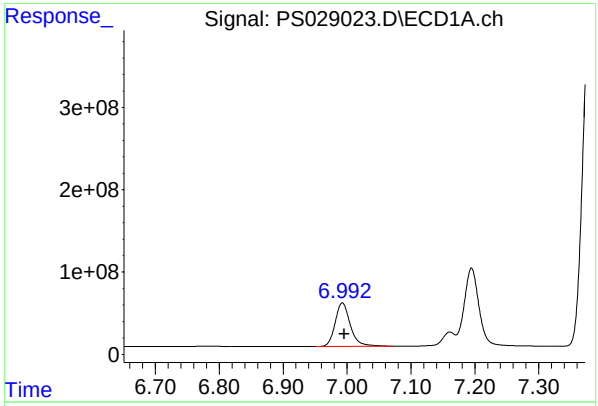
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.372 min
Delta R.T.: -0.003 min
Response: 2046564288
Conc: 512.04 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

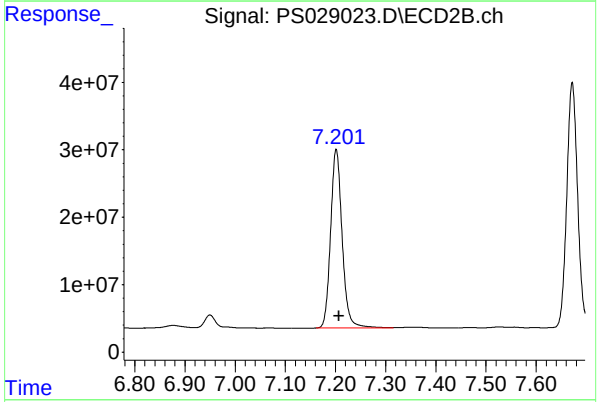
R.T.: 6.638 min
Delta R.T.: -0.005 min
Response: 753614740
Conc: 456.01 ng/ml



#3 4-Nitrophenol

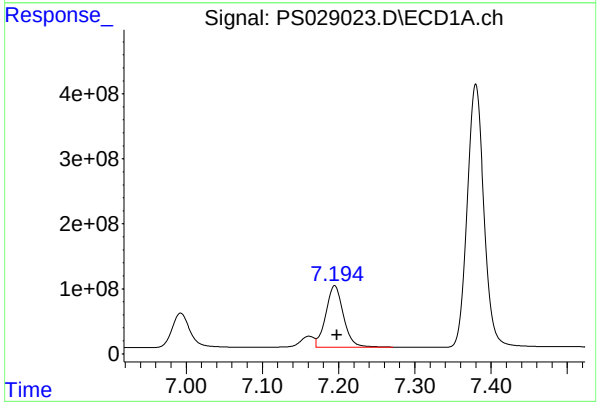
R.T.: 6.993 min
Delta R.T.: -0.003 min
Response: 872727015
Conc: 492.49 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB166428BS



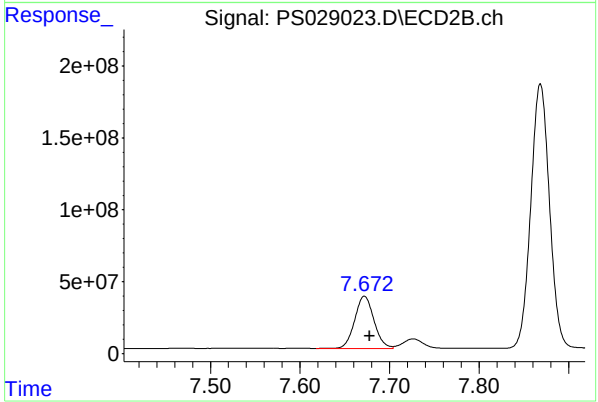
#3 4-Nitrophenol

R.T.: 7.202 min
Delta R.T.: -0.006 min
Response: 423395741
Conc: 475.85 ng/ml



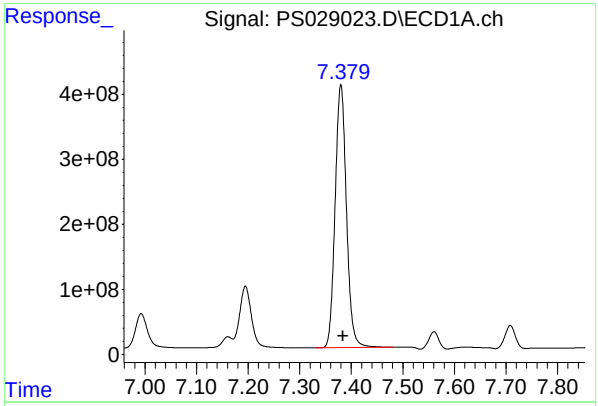
#4 2,4-DCAA

R.T.: 7.195 min
Delta R.T.: -0.003 min
Response: 1512945229
Conc: 543.44 ng/ml



#4 2,4-DCAA

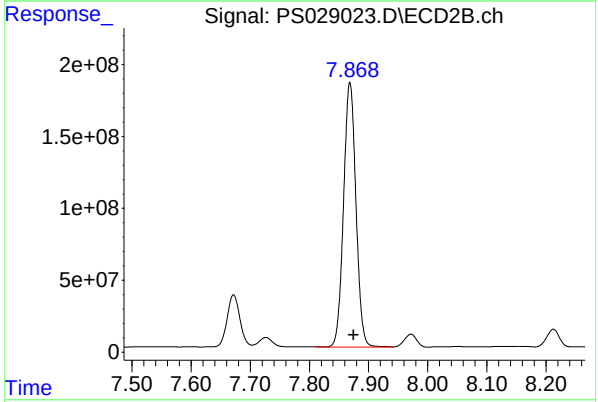
R.T.: 7.672 min
Delta R.T.: -0.006 min
Response: 545946897
Conc: 489.28 ng/ml



#5 DICAMBA

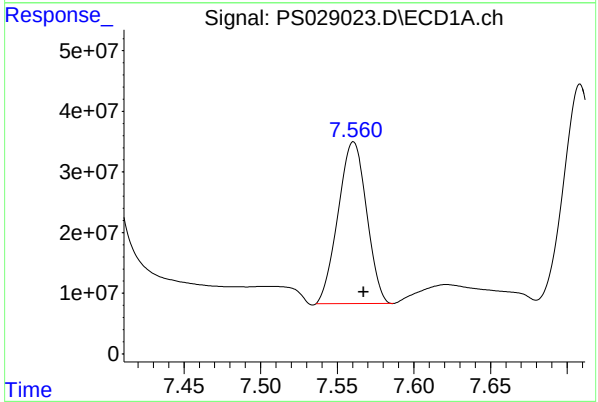
R.T.: 7.380 min
Delta R.T.: -0.004 min
Response: 6162306871
Conc: 519.52 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB166428BS



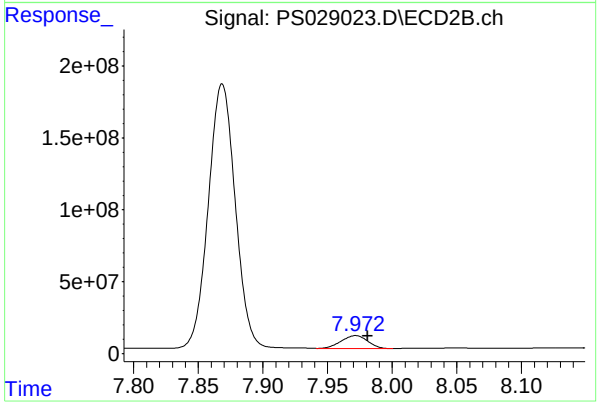
#5 DICAMBA

R.T.: 7.869 min
Delta R.T.: -0.006 min
Response: 2679030309
Conc: 481.06 ng/ml



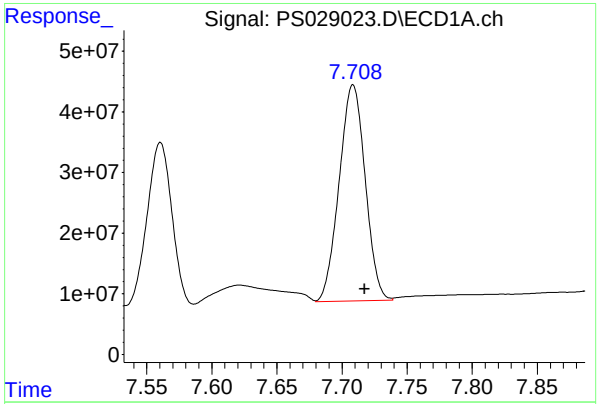
#6 MCPP

R.T.: 7.561 min
Delta R.T.: -0.007 min
Response: 347590121
Conc: 50.99 ug/ml



#6 MCPP

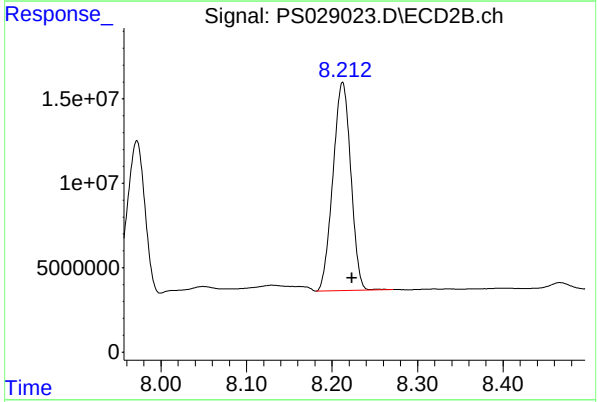
R.T.: 7.972 min
Delta R.T.: -0.009 min
Response: 128620297
Conc: 42.76 ug/ml



#7 MCPA

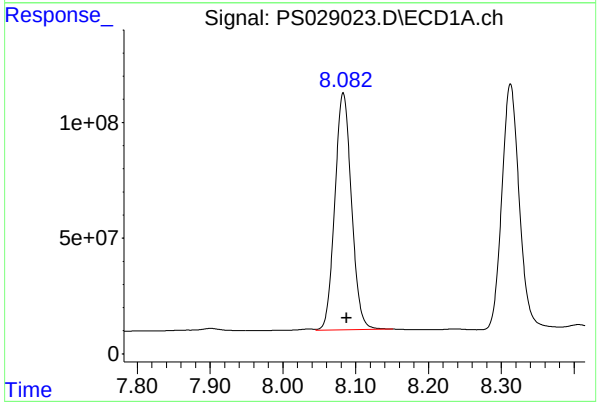
R.T.: 7.708 min
Delta R.T.: -0.009 min
Response: 496006896
Conc: 50.35 ug/ml

Instrument :
ECD_S
ClientSampleId :
PB166428BS



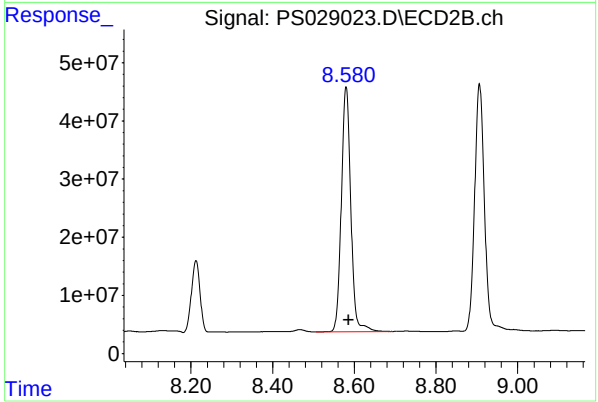
#7 MCPA

R.T.: 8.212 min
Delta R.T.: -0.011 min
Response: 178994424
Conc: 42.14 ug/ml



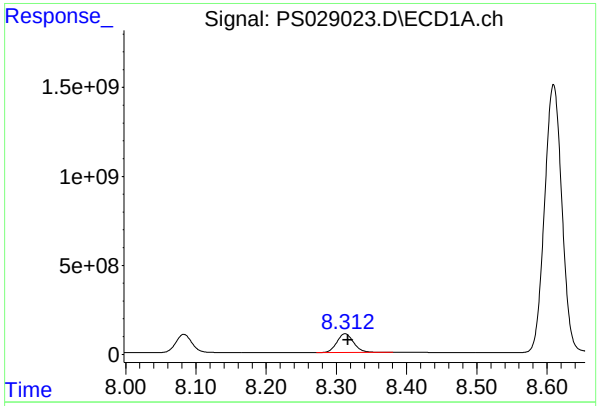
#8 DICHLORPROP

R.T.: 8.083 min
Delta R.T.: -0.005 min
Response: 1625819125
Conc: 513.11 ng/ml



#8 DICHLORPROP

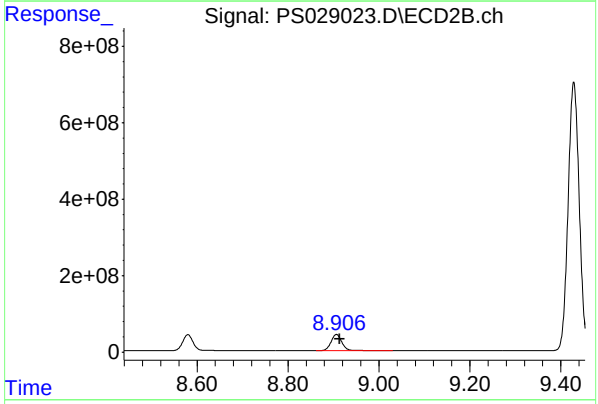
R.T.: 8.580 min
Delta R.T.: -0.006 min
Response: 680393107
Conc: 484.06 ng/ml



#9 2,4-D

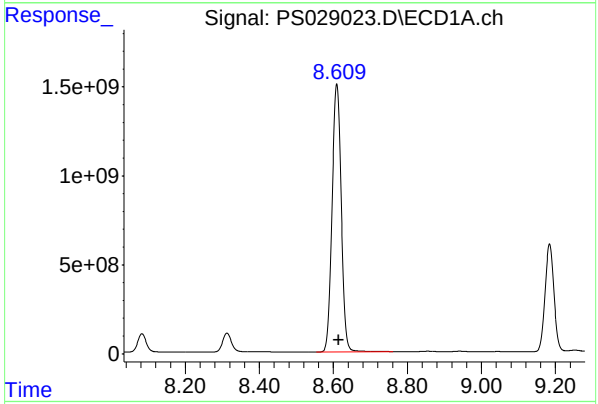
R.T.: 8.313 min
Delta R.T.: -0.004 min
Response: 1744710512
Conc: 516.27 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB166428BS



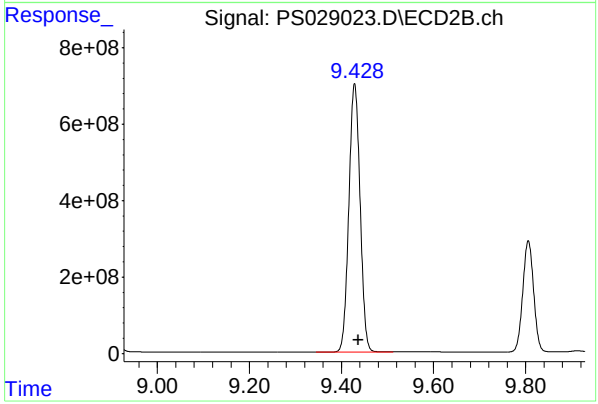
#9 2,4-D

R.T.: 8.906 min
Delta R.T.: -0.007 min
Response: 708541341
Conc: 472.51 ng/ml



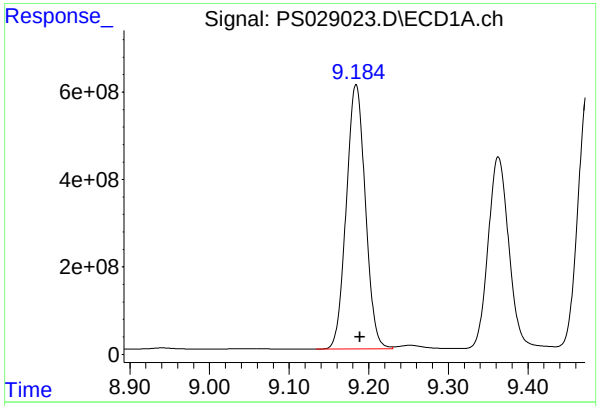
#10 Pentachlorophenol

R.T.: 8.609 min
Delta R.T.: -0.005 min
Response: 25808423962
Conc: 535.03 ng/ml



#10 Pentachlorophenol

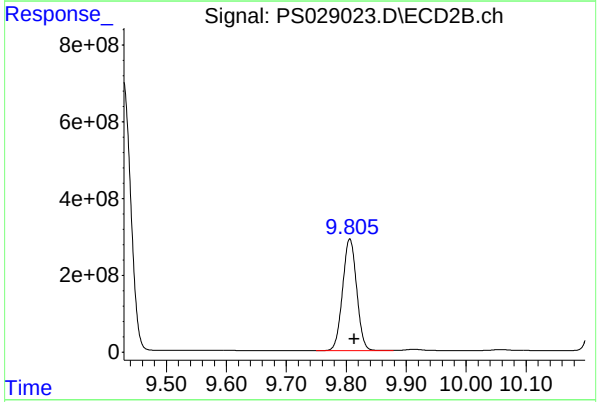
R.T.: 9.428 min
Delta R.T.: -0.009 min
Response: 11884188994
Conc: 513.00 ng/ml



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

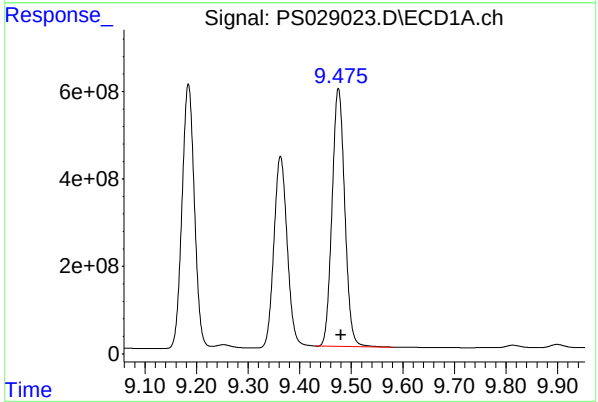
R.T.: 9.184 min
Delta R.T.: -0.005 min
Response: 10051776389
Conc: 525.37 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB166428BS



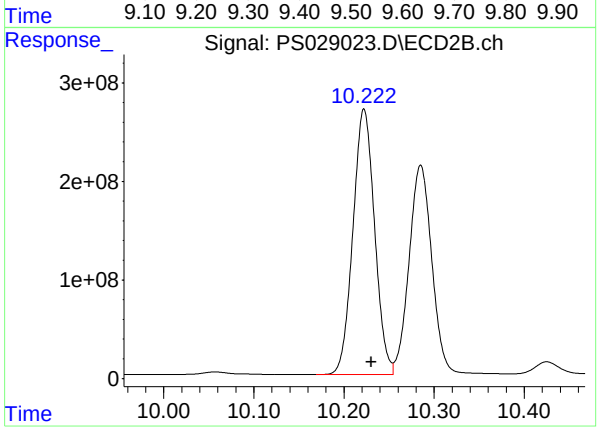
#11 2,4,5-TP (SILVEX)

R.T.: 9.806 min
Delta R.T.: -0.008 min
Response: 4742418670
Conc: 503.47 ng/ml



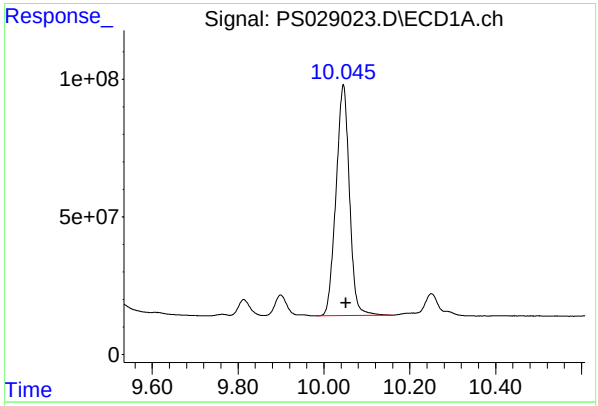
#12 2,4,5-T

R.T.: 9.475 min
Delta R.T.: -0.005 min
Response: 10076205708
Conc: 524.89 ng/ml



#12 2,4,5-T

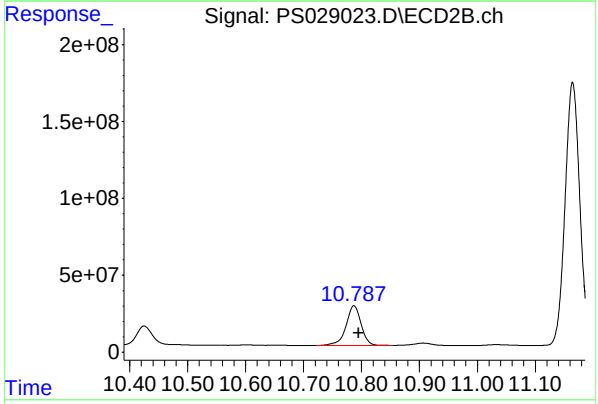
R.T.: 10.222 min
Delta R.T.: -0.008 min
Response: 4483959716
Conc: 497.72 ng/ml



#13 2,4-DB

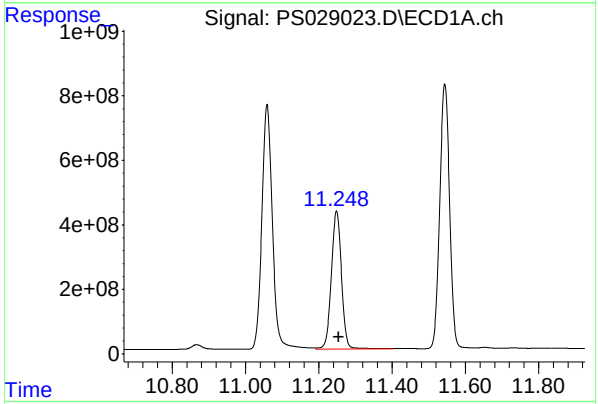
R.T.: 10.045 min
Delta R.T.: -0.005 min
Response: 1821863591
Conc: 513.58 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB166428BS



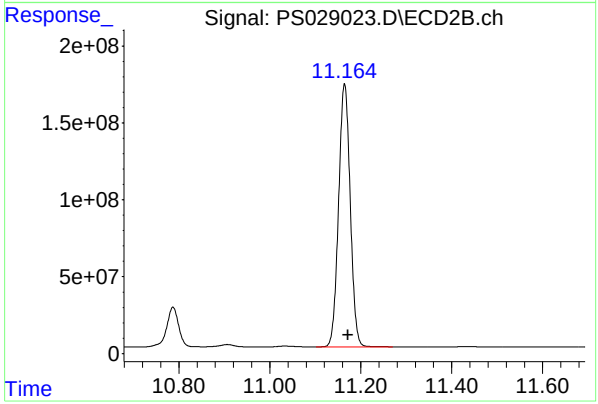
#13 2,4-DB

R.T.: 10.787 min
Delta R.T.: -0.008 min
Response: 468764229
Conc: 470.76 ng/ml



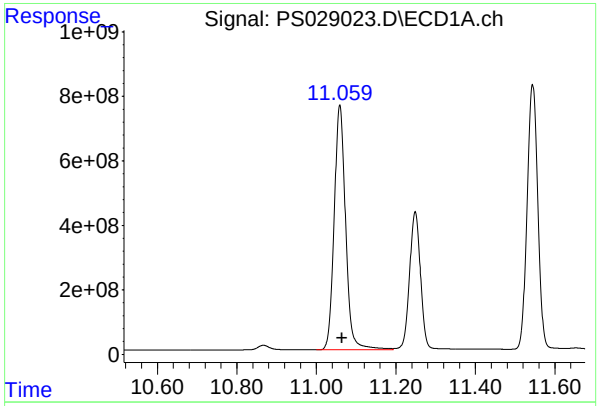
#14 DINOSEB

R.T.: 11.249 min
Delta R.T.: -0.006 min
Response: 8226875031
Conc: 497.17 ng/ml



#14 DINOSEB

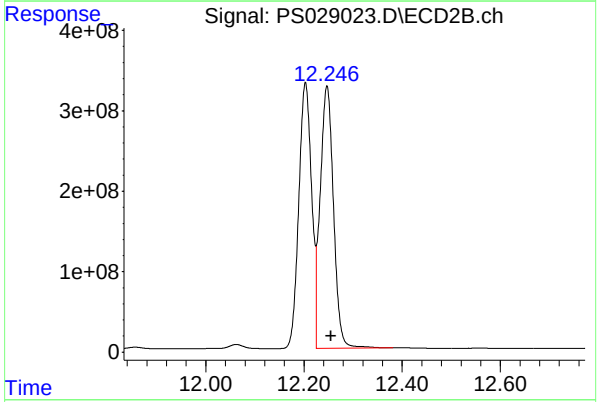
R.T.: 11.164 min
Delta R.T.: -0.008 min
Response: 3031624191
Conc: 472.41 ng/ml



#15 Picloram

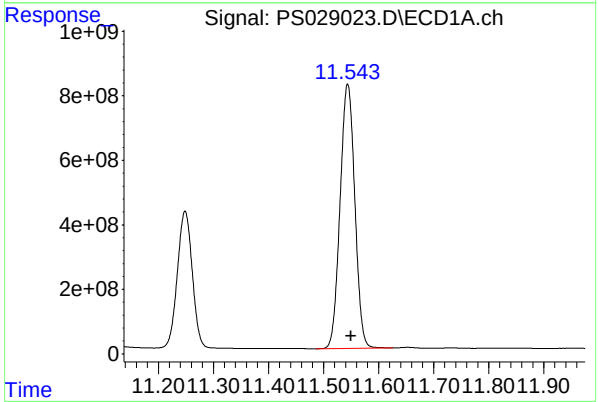
R.T.: 11.059 min
Delta R.T.: -0.006 min
Response: 15163567990
Conc: 480.59 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB166428BS



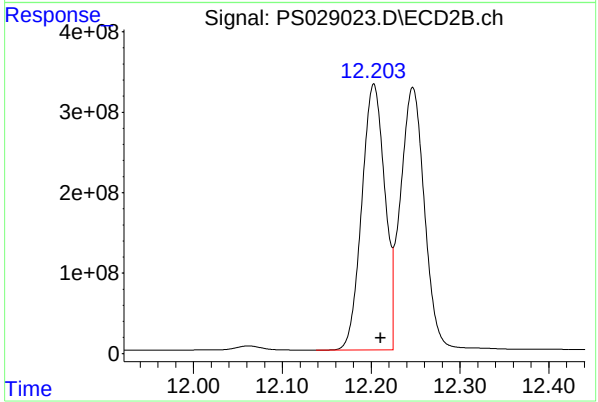
#15 Picloram

R.T.: 12.247 min
Delta R.T.: -0.009 min
Response: 6151356109
Conc: 458.38 ng/ml



#16 DCPA

R.T.: 11.544 min
Delta R.T.: -0.006 min
Response: 15201291601
Conc: 530.01 ng/ml



#16 DCPA

R.T.: 12.203 min
Delta R.T.: -0.008 min
Response: 5968618127
Conc: 525.76 ng/ml

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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/29/25
Client Sample ID:	JPP-29.1-012825MS	SDG No.:	Q1216
Lab Sample ID:	Q1215-04MS	Matrix:	TCLP
Analytical Method:	SW8151A	% Solid:	0 Decanted:
Sample Wt/Vol:	100 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Herbicide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS029026.D	1	01/31/25 10:55	02/01/25 00:20	PB166428

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	52.4		4.90	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	63.5		4.50	20.0	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	591		39 - 175	118%	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\PS013125\
Data File : PS029026.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 01 Feb 2025 00:20
Operator : AR\AJ
Sample : Q1215-04MS
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
JPP-29.1-012825MS

Manual Integrations APPROVED

Reviewed By :Abdul Mirza 02/03/2025
Supervised By :Ankita Jodhani 02/05/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 01 05:17:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 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	7.195	7.672	1645.6E6	405.2E6	591.078	363.120 #
	Target Compounds						
1) T	Dalapon	2.613	2.667	1008.8E6	685.7E6	338.319m	336.098m
2) T	3,5-DICHL...	6.372	6.638	1912.1E6	708.2E6	478.402	428.523
3) T	4-Nitroph...	6.993	7.204	26757683	10589793	15.100	11.902
5) T	DICAMBA	7.380	7.868	5178.7E6	2380.7E6	436.600	427.496
6) T	MCPP	7.559	7.971	344.1E6	116.8E6	50.476m	38.833
7) T	MCPA	7.708	8.211	407.9E6	193.4E6	41.404	45.526
8) T	DICHLORPROP	8.083	8.579	1447.3E6	595.9E6	456.754	423.943
9) T	2,4-D	8.311	8.905	1772.4E6	717.7E6	524.469	478.592
10) T	Pentachlo...	8.608	9.429	19939.8E6	8940.5E6	413.372	385.930
11) T	2,4,5-TP ...	9.184	9.806	9676.2E6	5982.5E6	505.743	635.130 #
12) T	2,4,5-T	9.475	10.222	9000.7E6	4133.8E6	468.862	458.847
13) T	2,4-DB	10.047	10.786	1248.2E6	387.6E6	351.860	389.218
14) T	DINOSEB	11.248	11.164	4730.8E6	1689.0E6	285.895	263.193
15) T	Picloram	11.058	12.245	12532.2E6	5135.6E6	397.189	382.695
16) T	DCPA	11.541	12.202	11253.8E6	5298.5E6	392.379	466.728

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

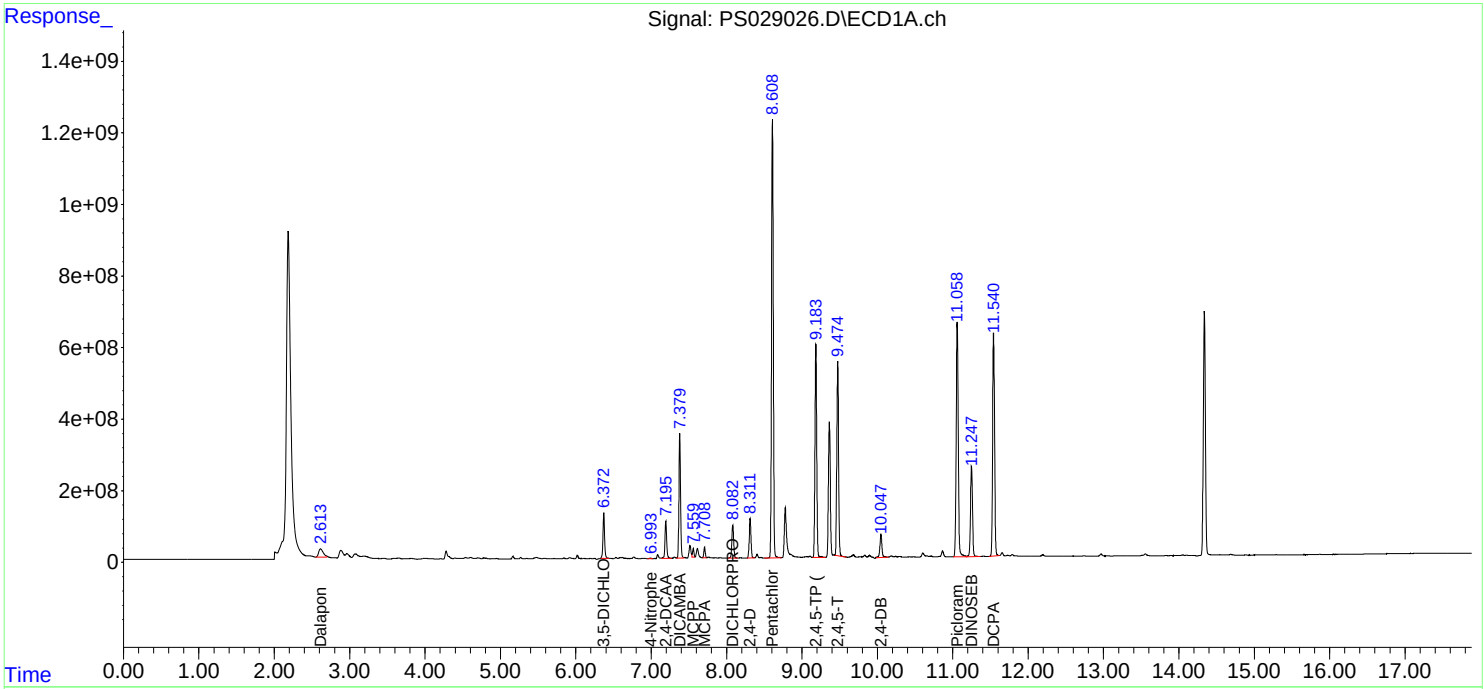
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS013125\
Data File : PS029026.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 01 Feb 2025 00:20
Operator : AR\AJ
Sample : Q1215-04MS
Misc :
ALS Vial : 19 Sample Multiplier: 1

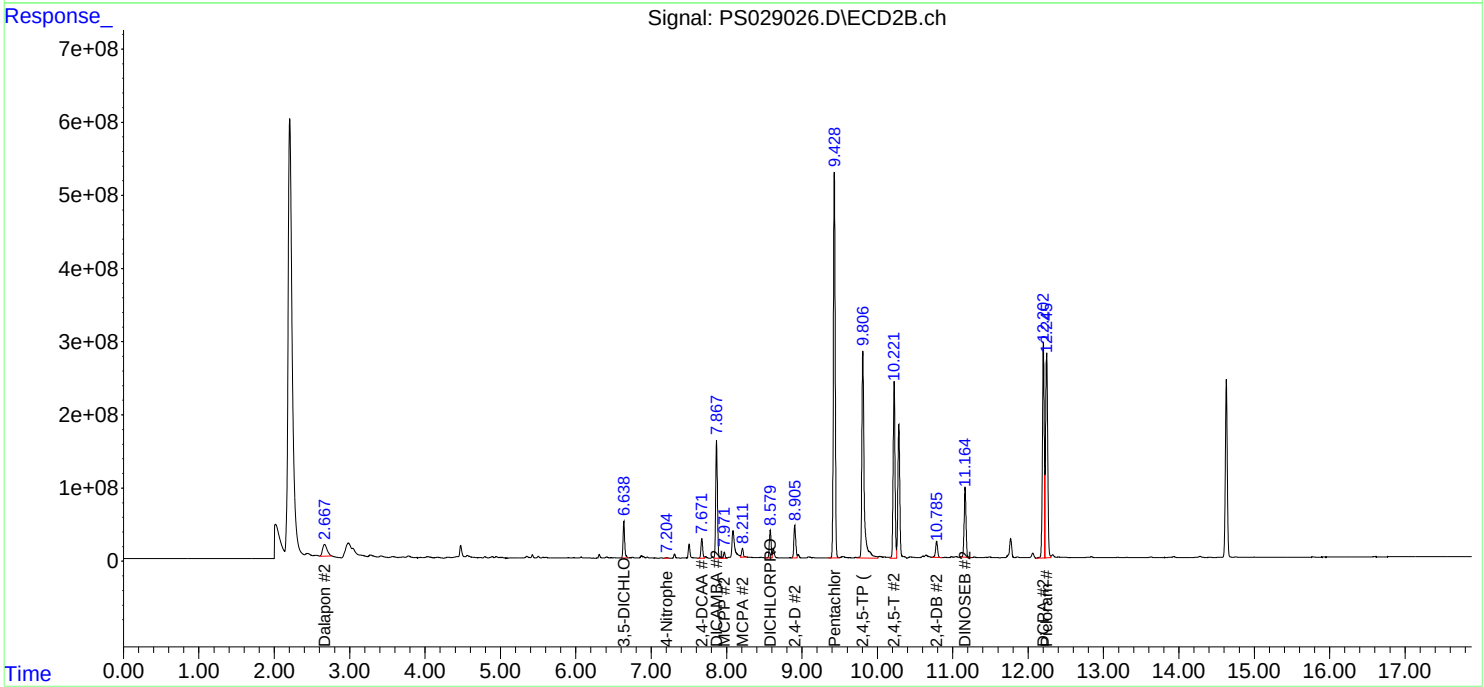
Instrument :
ECD_S
ClientSampleId :
JPP-29.1-012825MS

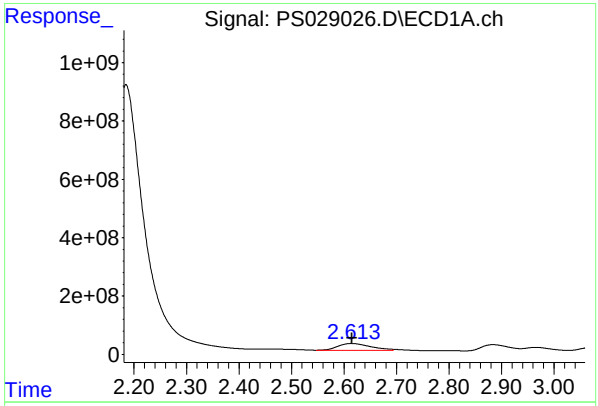
Manual Integrations APPROVED
Reviewed By :Abdul Mirza 02/03/2025
Supervised By :Ankita Jodhani 02/05/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 01 05:17:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 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







#1 Dalapon

R.T.: 2.613 min
Delta R.T.: -0.002 mi
Response: 1008781228
Conc: 338.32 ng/m

Instrument :
ECD_S
ClientSampleId :
JPP-29.1-012825MS

Manual Integrations APPROVED

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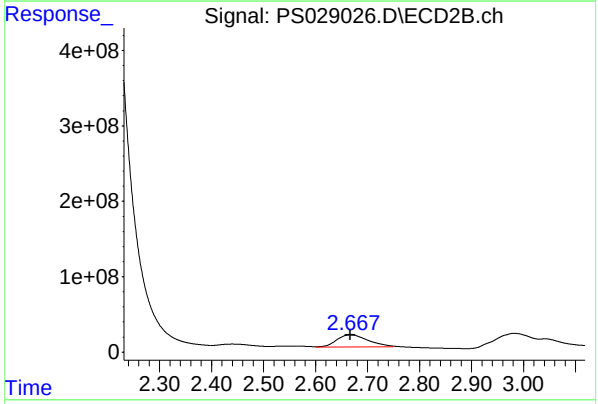
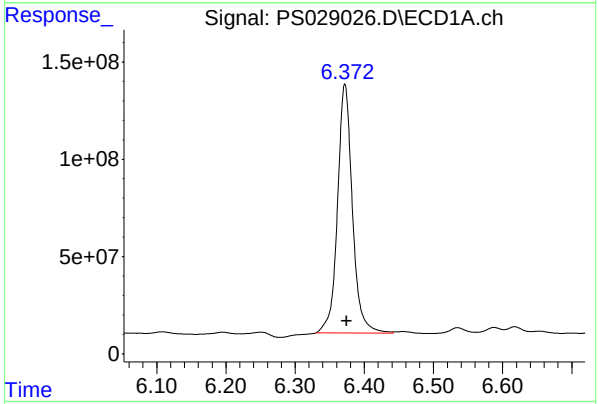


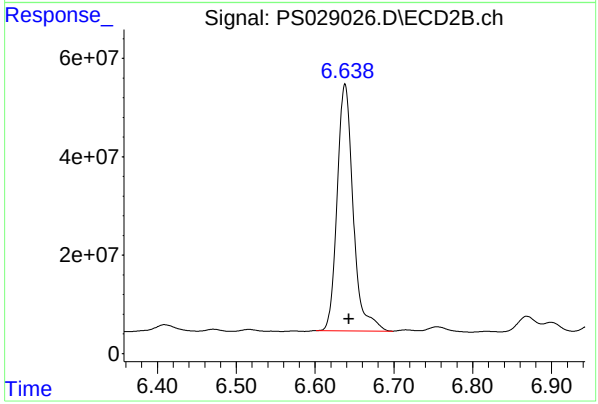
#1 Dalapon

R.T.: 2.667 min
Delta R.T.: 0.000 min
Response: 685689329
Conc: 336.10 ng/ml m



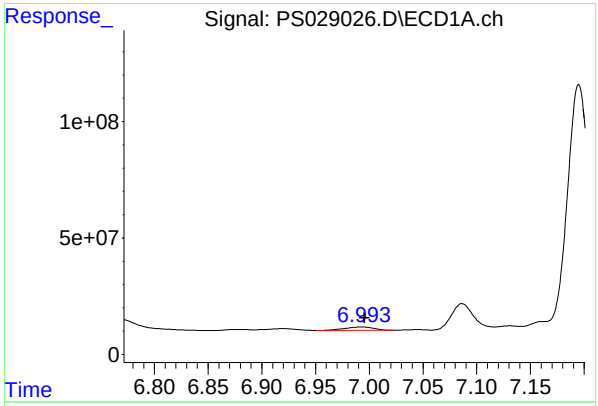
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.372 min
Delta R.T.: -0.003 min
Response: 1912099971
Conc: 478.40 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.638 min
Delta R.T.: -0.005 min
Response: 708186511
Conc: 428.52 ng/ml



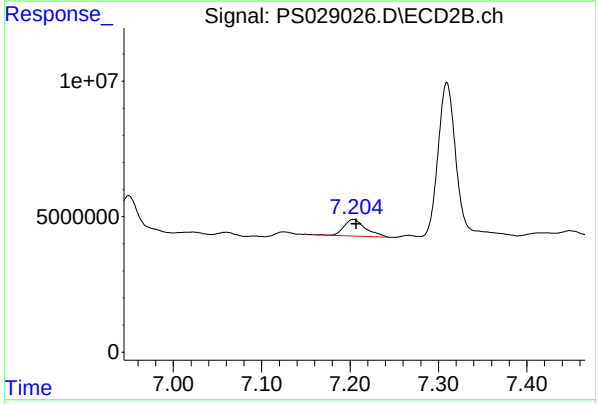
#3 4-Nitrophenol

R.T.: 6.993 min
Delta R.T.: -0.003 min
Response: 26757683
Conc: 15.10 ng/ml

Instrument :
ECD_S
ClientSampleId :
JPP-29.1-012825MS

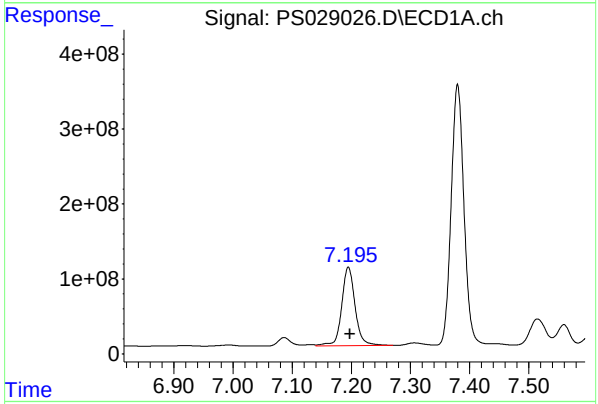
Manual Integrations APPROVED

Reviewed By :Abdul Mirza 02/03/2025
Supervised By :Ankita Jodhani 02/05/2025



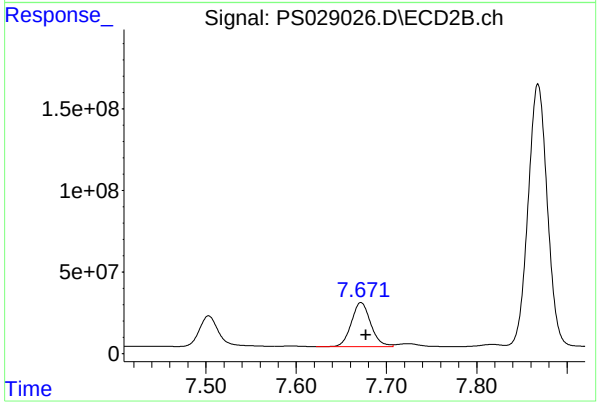
#3 4-Nitrophenol

R.T.: 7.204 min
Delta R.T.: -0.003 min
Response: 10589793
Conc: 11.90 ng/ml



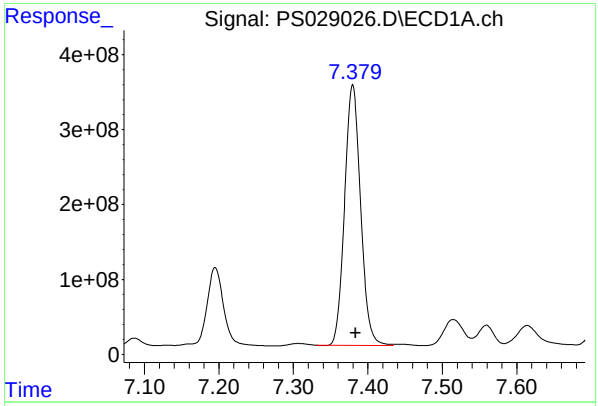
#4 2,4-DCAA

R.T.: 7.195 min
Delta R.T.: -0.003 min
Response: 1645568690
Conc: 591.08 ng/ml



#4 2,4-DCAA

R.T.: 7.672 min
Delta R.T.: -0.006 min
Response: 405174152
Conc: 363.12 ng/ml



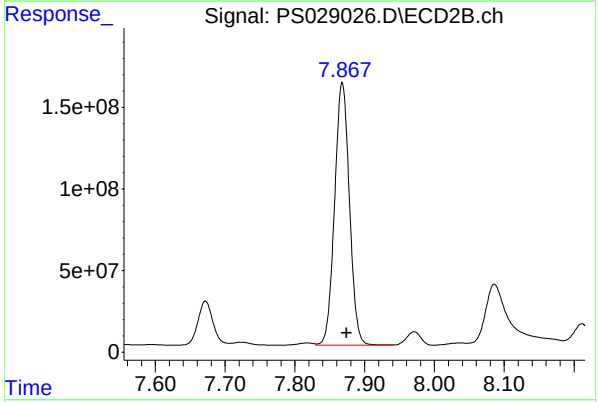
#5 DICAMBA

R.T.: 7.380 min
Delta R.T.: -0.004 min
Response: 5178703093
Conc: 436.60 ng/ml

Instrument :
ECD_S
ClientSampleId :
JPP-29.1-012825MS

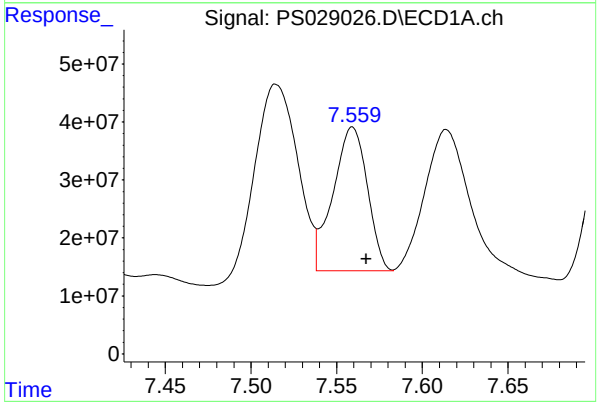
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 02/03/2025
Supervised By :Ankita Jodhani 02/05/2025



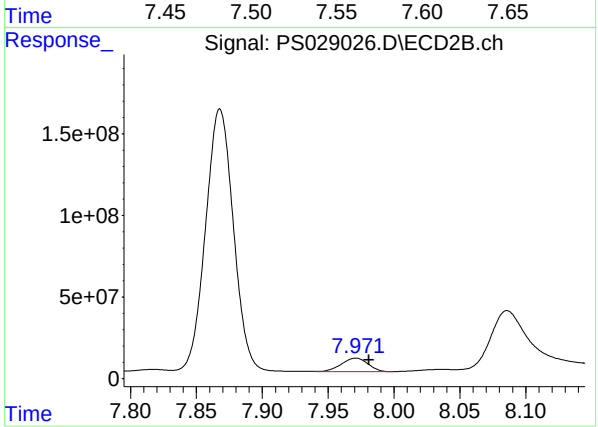
#5 DICAMBA

R.T.: 7.868 min
Delta R.T.: -0.007 min
Response: 2380739778
Conc: 427.50 ng/ml



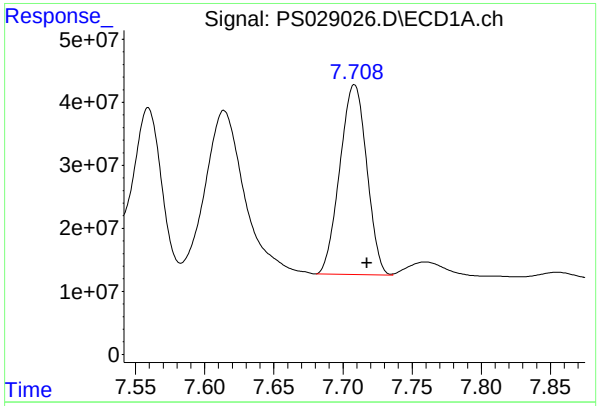
#6 MCPP

R.T.: 7.559 min
Delta R.T.: -0.009 min
Response: 344054940
Conc: 50.48 ug/ml m



#6 MCPP

R.T.: 7.971 min
Delta R.T.: -0.010 min
Response: 116808638
Conc: 38.83 ug/ml



#7 MCPA

R.T.: 7.708 min
Delta R.T.: -0.009 min
Response: 407868901
Conc: 41.40 ug/ml

Instrument :
ECD_S
ClientSampleId :
JPP-29.1-012825MS

Manual Integrations APPROVED

Reviewed By :Abdul Mirza 02/03/2025
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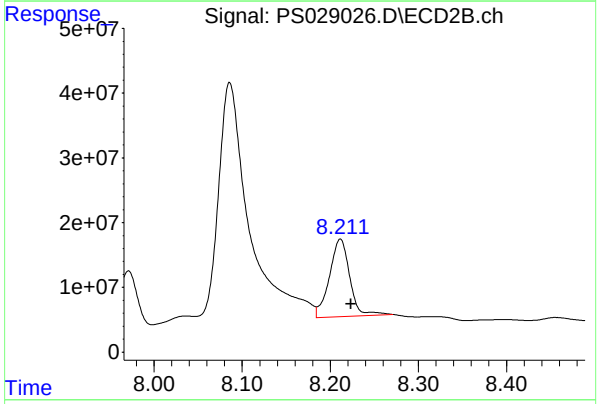
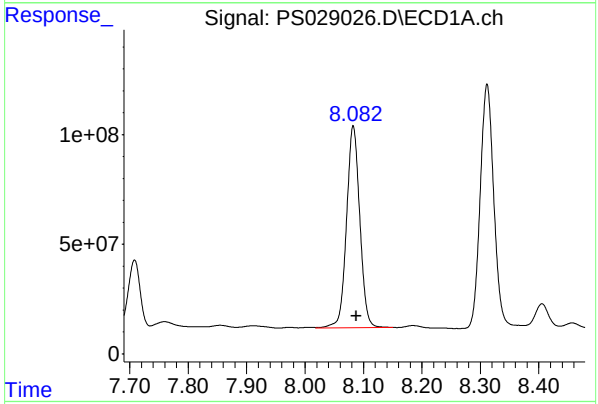


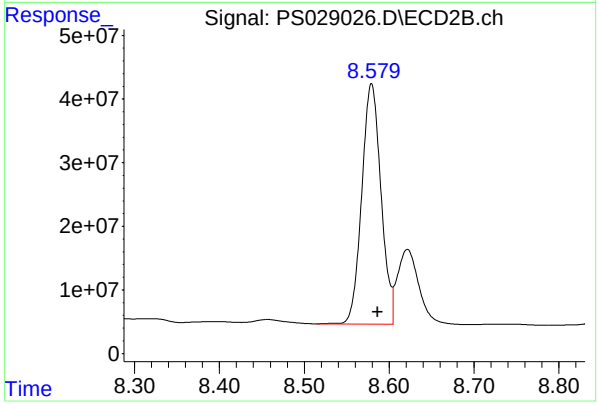
#7 MCPA

R.T.: 8.211 min
Delta R.T.: -0.012 min
Response: 193367716
Conc: 45.53 ug/ml



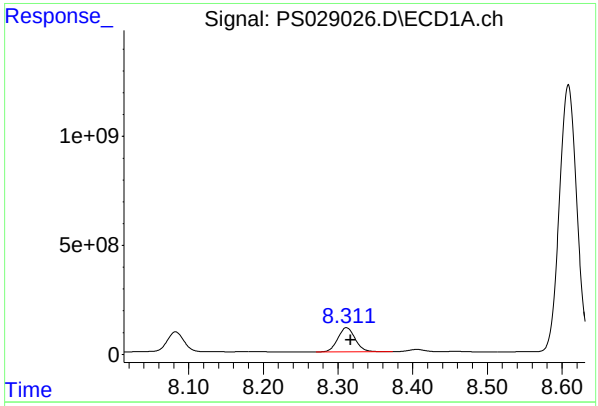
#8 DICHLORPROP

R.T.: 8.083 min
Delta R.T.: -0.005 min
Response: 1447257820
Conc: 456.75 ng/ml



#8 DICHLORPROP

R.T.: 8.579 min
Delta R.T.: -0.007 min
Response: 595893517
Conc: 423.94 ng/ml



#9 2,4-D

R.T.: 8.311 min
Delta R.T.: -0.005 min
Response: 1772418502
Conc: 524.47 ng/ml

Instrument :
ECD_S
ClientSampleId :
JPP-29.1-012825MS

Manual Integrations APPROVED

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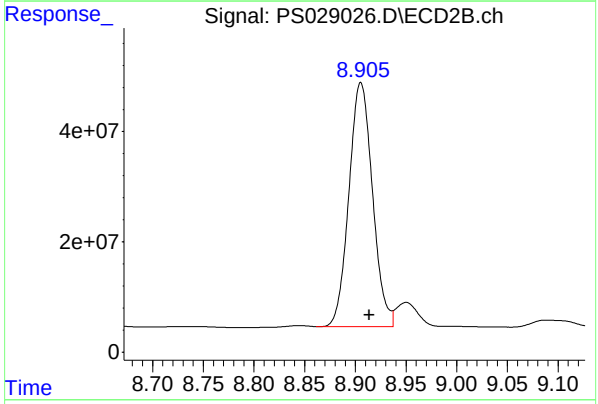
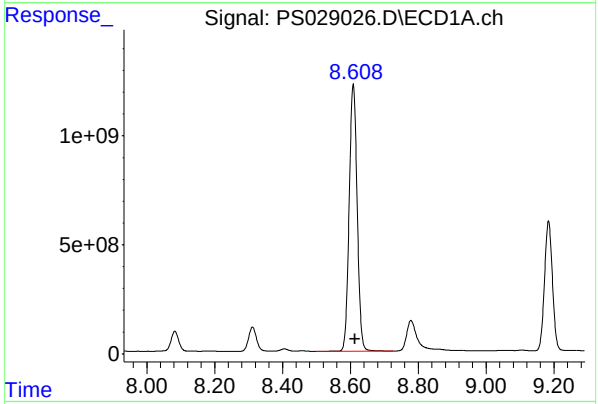


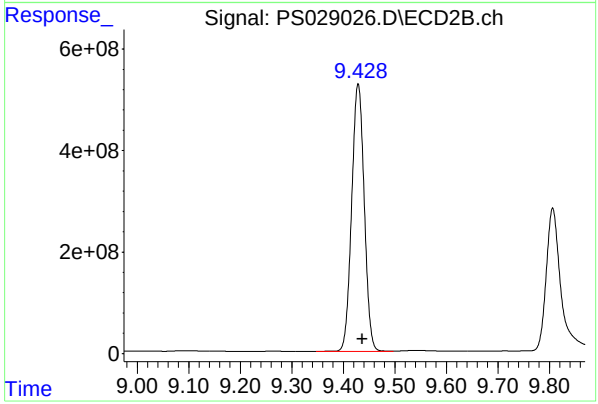
#9 2,4-D

R.T.: 8.905 min
Delta R.T.: -0.008 min
Response: 717656978
Conc: 478.59 ng/ml



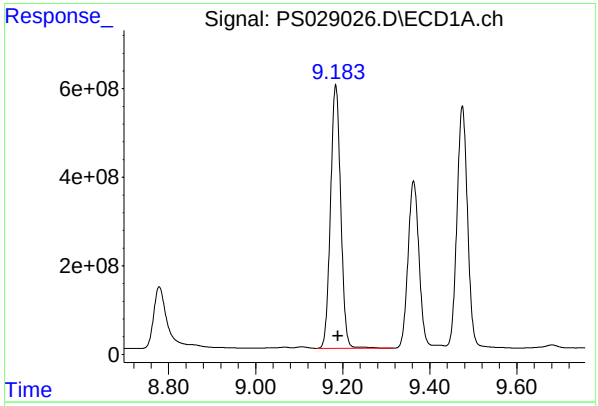
#10 Pentachlorophenol

R.T.: 8.608 min
Delta R.T.: -0.006 min
Response: 19939847238
Conc: 413.37 ng/ml



#10 Pentachlorophenol

R.T.: 9.429 min
Delta R.T.: -0.008 min
Response: 8940454460
Conc: 385.93 ng/ml



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

R.T.: 9.184 min
Delta R.T.: -0.005 min
Response: 9676217682
Conc: 505.74 ng/ml

Instrument :
ECD_S
ClientSampleId :
JPP-29.1-012825MS

Manual Integrations APPROVED

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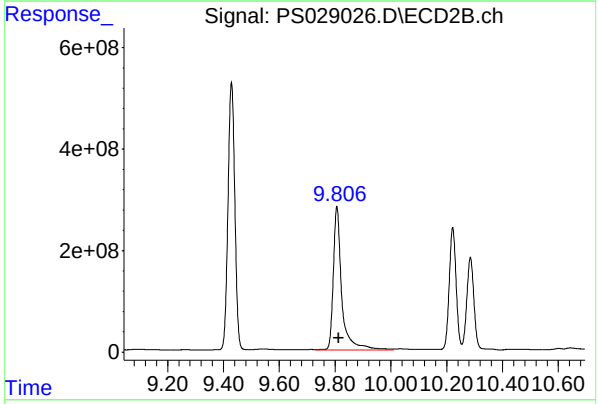
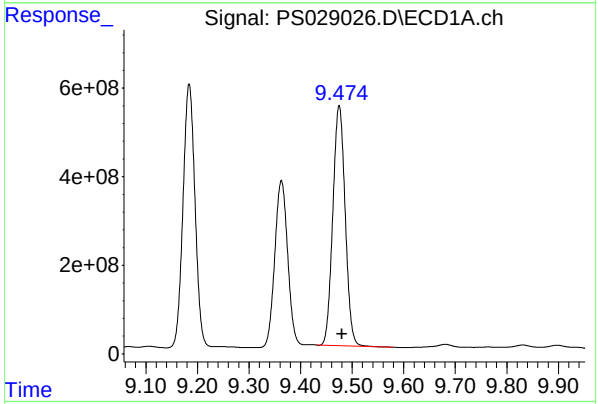


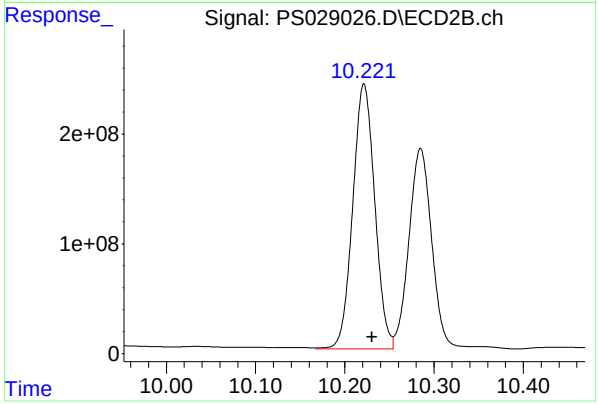
#11 2,4,5-TP (SILVEX)

R.T.: 9.806 min
Delta R.T.: -0.007 min
Response: 5982540276
Conc: 635.13 ng/ml



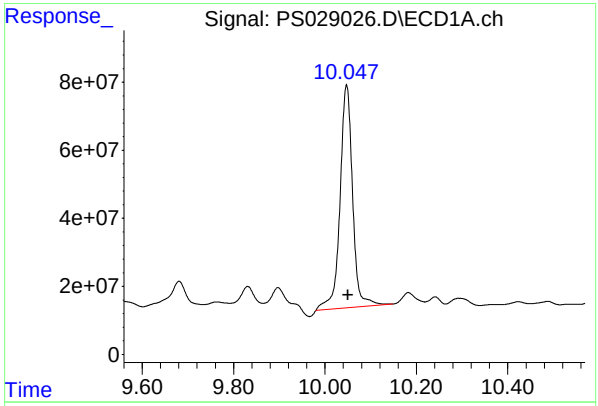
#12 2,4,5-T

R.T.: 9.475 min
Delta R.T.: -0.005 min
Response: 9000704007
Conc: 468.86 ng/ml



#12 2,4,5-T

R.T.: 10.222 min
Delta R.T.: -0.009 min
Response: 4133754227
Conc: 458.85 ng/ml



#13 2,4-DB

R.T.: 10.047 min
Delta R.T.: -0.004 min
Response: 1248172364
Conc: 351.86 ng/ml

Instrument :
ECD_S
ClientSampleId :
JPP-29.1-012825MS

Manual Integrations APPROVED

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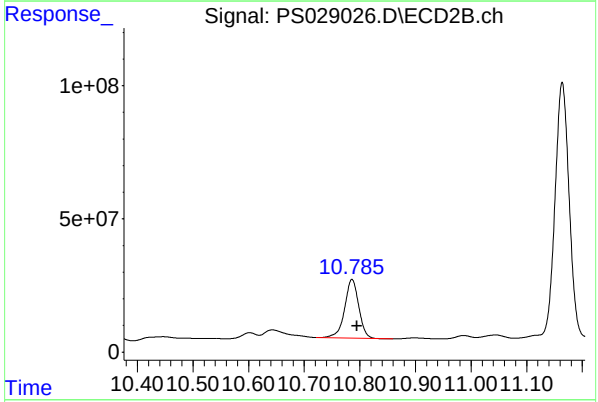
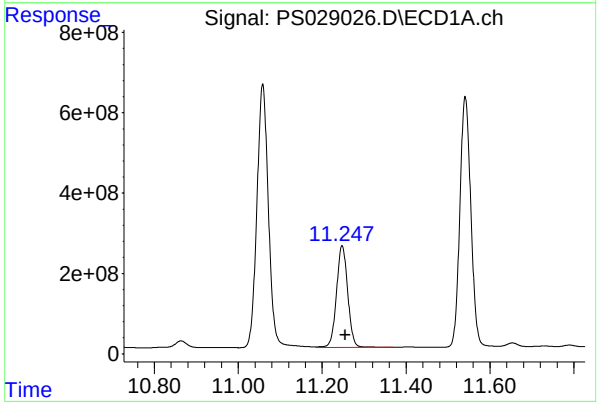


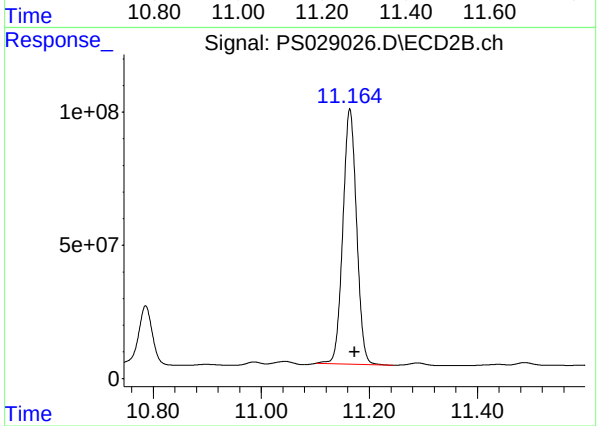
#13 2,4-DB

R.T.: 10.786 min
Delta R.T.: -0.009 min
Response: 387565827
Conc: 389.22 ng/ml



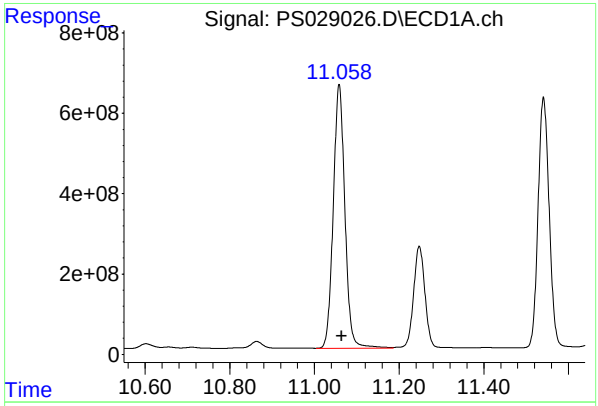
#14 DINOSEB

R.T.: 11.248 min
Delta R.T.: -0.007 min
Response: 4730790143
Conc: 285.89 ng/ml



#14 DINOSEB

R.T.: 11.164 min
Delta R.T.: -0.009 min
Response: 1688995609
Conc: 263.19 ng/ml



#15 Picloram

R.T.: 11.058 min
Delta R.T.: -0.006 min
Response: 12532155156
Conc: 397.19 ng/ml

Instrument :
ECD_S
ClientSampleId :
JPP-29.1-012825MS

Manual Integrations APPROVED

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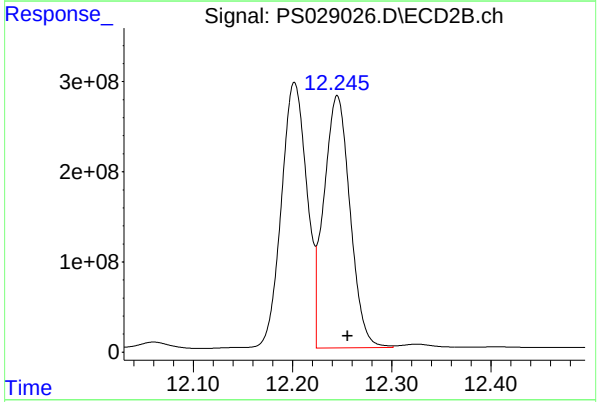
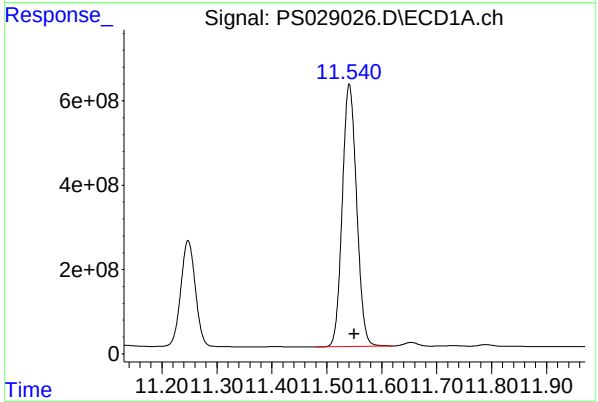


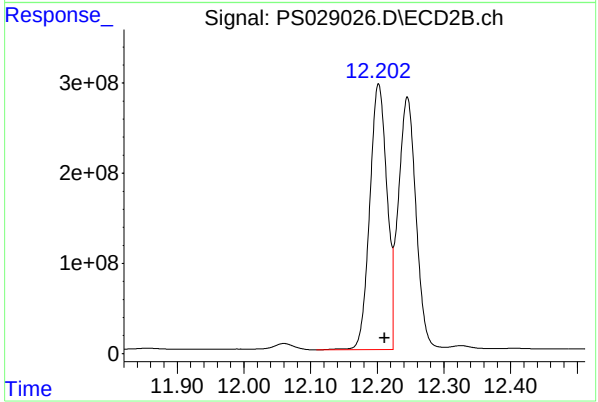
#15 Picloram

R.T.: 12.245 min
Delta R.T.: -0.011 min
Response: 5135641112
Conc: 382.70 ng/ml



#16 DCPA

R.T.: 11.541 min
Delta R.T.: -0.009 min
Response: 11253834570
Conc: 392.38 ng/ml



#16 DCPA

R.T.: 12.202 min
Delta R.T.: -0.009 min
Response: 5298456478
Conc: 466.73 ng/ml

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

Report of Analysis

Client:	RU2 Engineering, LLC	Date Collected:	01/28/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/29/25
Client Sample ID:	JPP-29.1-012825MSD	SDG No.:	Q1216
Lab Sample ID:	Q1215-04MSD	Matrix:	TCLP
Analytical Method:	SW8151A	% Solid:	0 Decanted:
Sample Wt/Vol:	100 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Herbicide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS029027.D	1	01/31/25 10:55	02/01/25 00:44	PB166428

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	52.5		4.90	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	63.8		4.50	20.0	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	592		39 - 175	118%	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\PS013125\
Data File : PS029027.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 01 Feb 2025 00:44
Operator : AR\AJ
Sample : Q1215-04MSD
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
JPP-29.1-012825MSD

Manual Integrations APPROVED
Reviewed By :Abdul Mirza 02/03/2025
Supervised By :Ankita Jodhani 02/05/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 01 05:17:27 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 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	7.195	7.672	1647.7E6	406.1E6	591.853	363.976 #
	Target Compounds						
1) T	Dalapon	2.617	2.668	992.7E6	651.0E6	332.941m	319.075m
2) T	3,5-DICHL...	6.372	6.638	1907.8E6	707.2E6	477.326	427.907
3) T	4-Nitroph...	6.993	7.204	24520379	10132998	13.837	11.388
5) T	DICAMBA	7.379	7.868	5183.0E6	2381.5E6	436.959	427.629
6) T	MCPP	7.559	7.971	368.0E6	117.3E6	53.982m	38.988 #
7) T	MCPA	7.708	8.211	411.7E6	196.0E6	41.797	46.155
8) T	DICHLORPROP	8.083	8.579	1436.0E6	598.5E6	453.190	425.821
9) T	2,4-D	8.311	8.906	1773.8E6	719.2E6	524.887	479.597
10) T	Pentachlo...	8.609	9.429	19943.3E6	8960.9E6	413.444	386.810
11) T	2,4,5-TP ...	9.184	9.806	9636.3E6	6005.7E6	503.655	637.591 #
12) T	2,4,5-T	9.475	10.222	9022.1E6	4147.0E6	469.977	460.315
13) T	2,4-DB	10.047	10.786	1253.8E6	392.5E6	353.451	394.164
14) T	DINOSEB	11.249	11.164	4787.2E6	1691.5E6	289.301	263.586
15) T	Picloram	11.058	12.245	12558.9E6	5159.1E6	398.035	384.443
16) T	DCPA	11.541	12.202	11267.1E6	5284.1E6	392.843	465.461

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS013125\
Data File : PS029027.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 01 Feb 2025 00:44
Operator : AR\AJ
Sample : Q1215-04MSD
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
JPP-29.1-012825MSD

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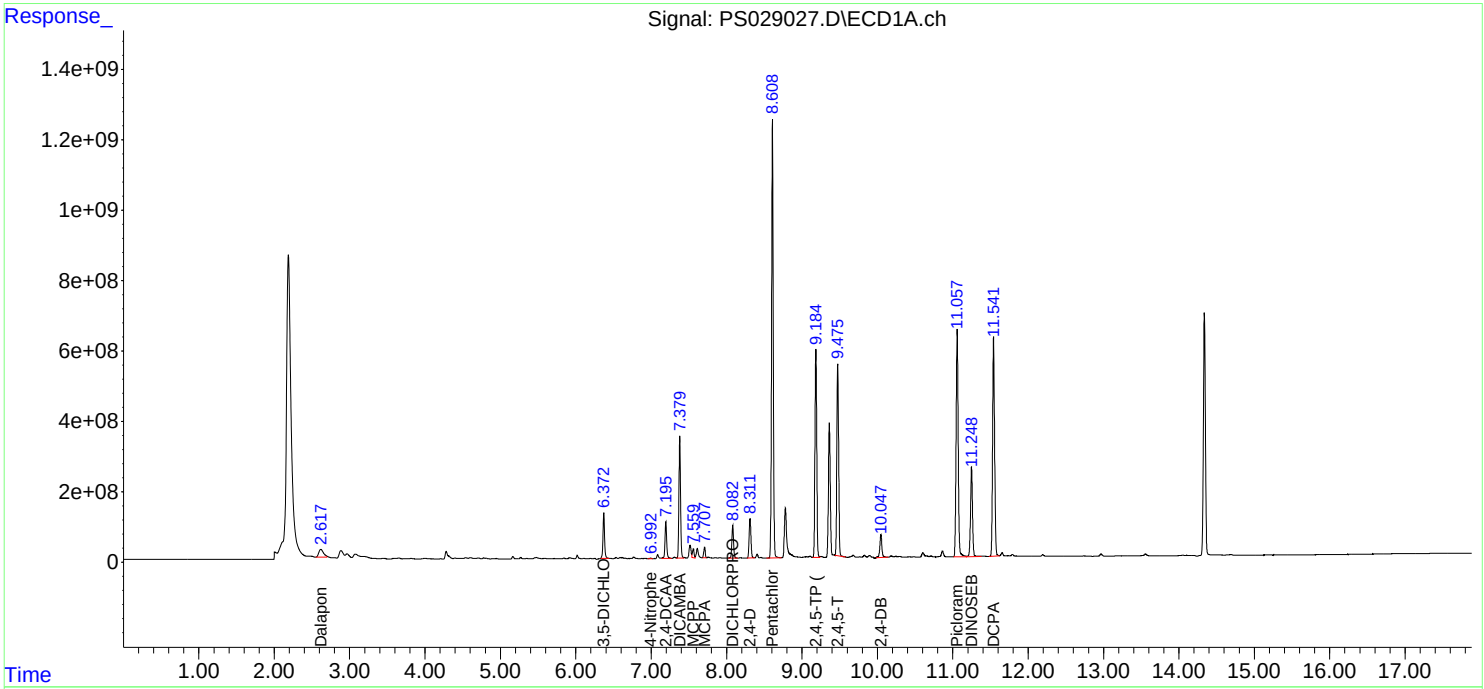
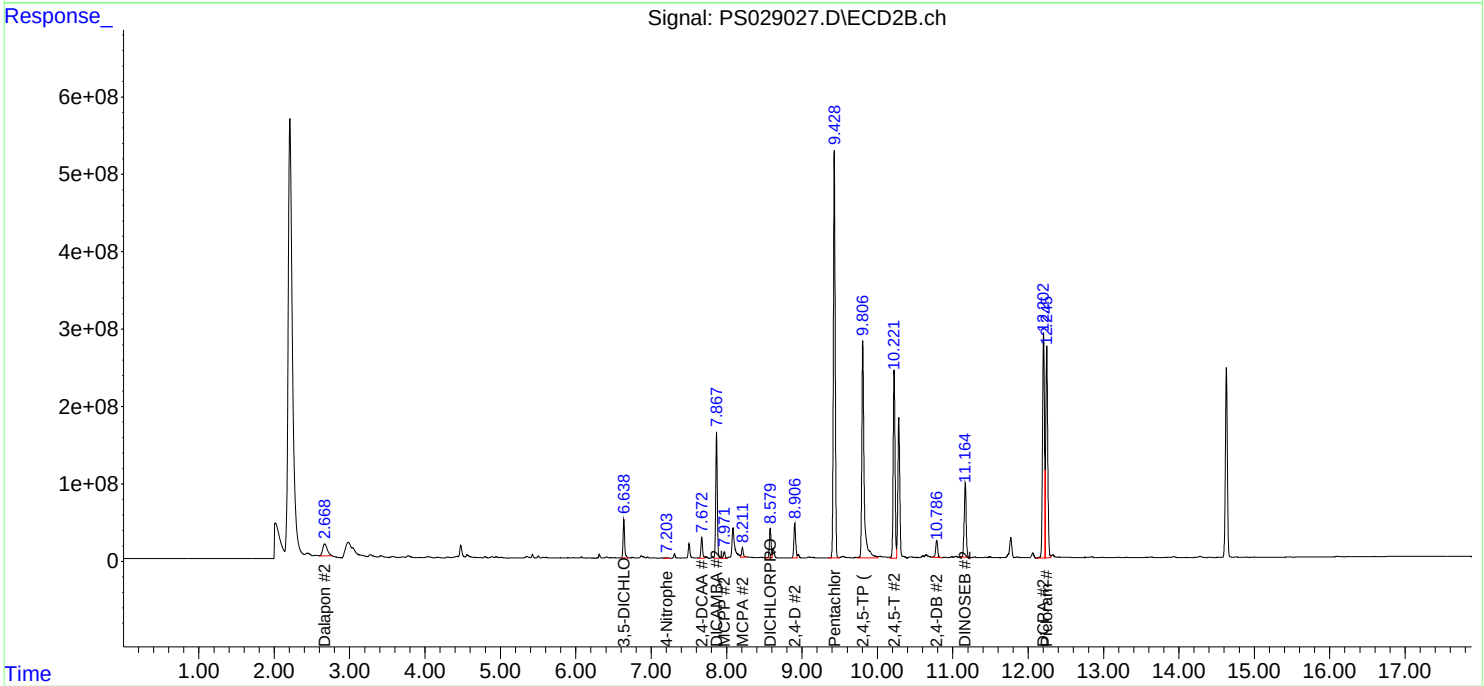
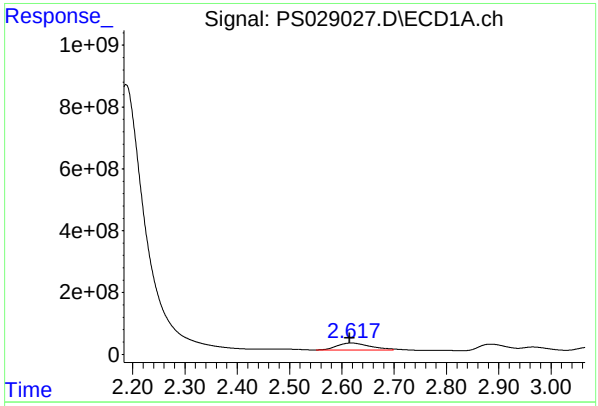
Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 01 05:17:27 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS011425.M
Quant Title : 8080.M
QLast Update : Tue Jan 14 12:25:39 2025
Response via : Initial Calibration
Integrator: ChemStation

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







#1 Dalapon

R.T.: 2.617 min
Delta R.T.: 0.002 mi
Response: 992745194
Conc: 332.94 ng/m

Instrument :
ECD_S
ClientSampleId :
JPP-29.1-012825MSD

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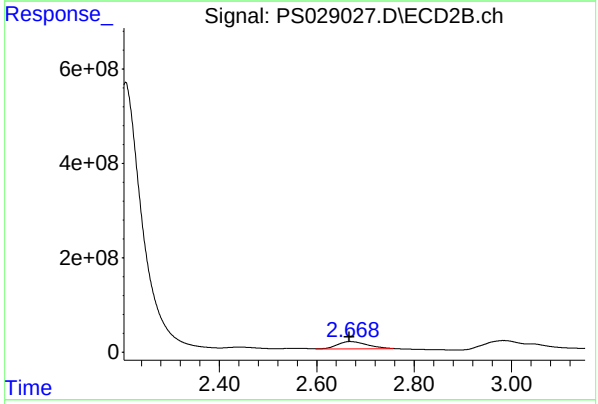
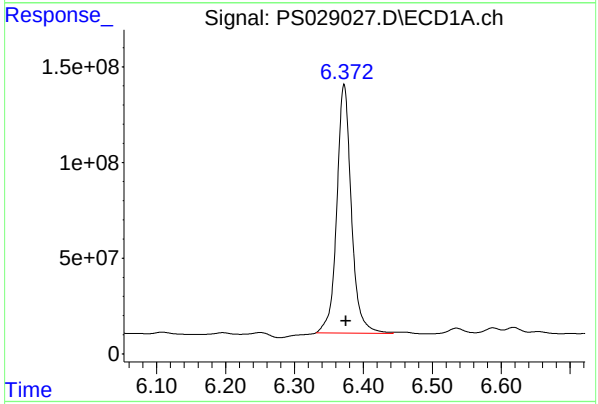


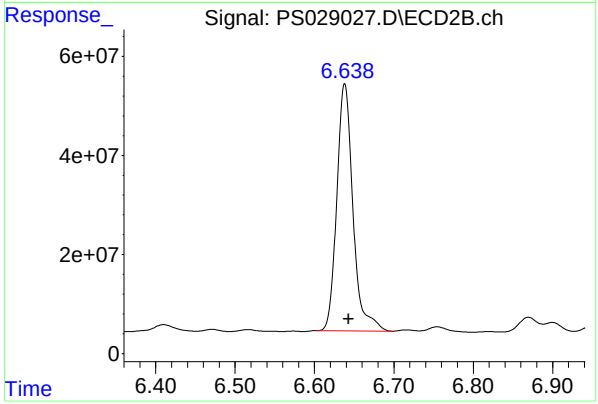
#1 Dalapon

R.T.: 2.668 min
Delta R.T.: 0.001 min
Response: 650960368
Conc: 319.08 ng/ml m



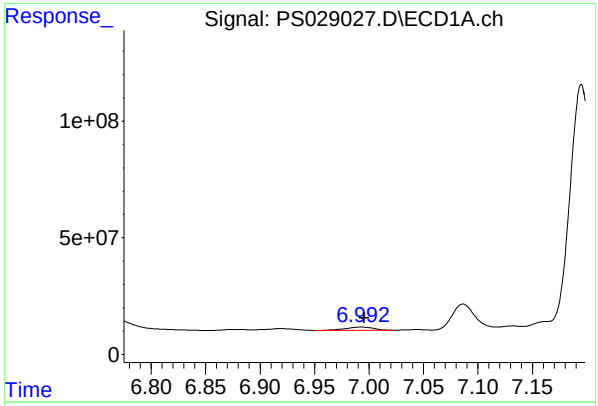
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.372 min
Delta R.T.: -0.003 min
Response: 1907800929
Conc: 477.33 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.638 min
Delta R.T.: -0.005 min
Response: 707167964
Conc: 427.91 ng/ml



#3 4-Nitrophenol

R.T.: 6.993 min
Delta R.T.: -0.003 min
Response: 24520379
Conc: 13.84 ng/ml

Instrument :
ECD_S
ClientSampleId :
JPP-29.1-012825MSD

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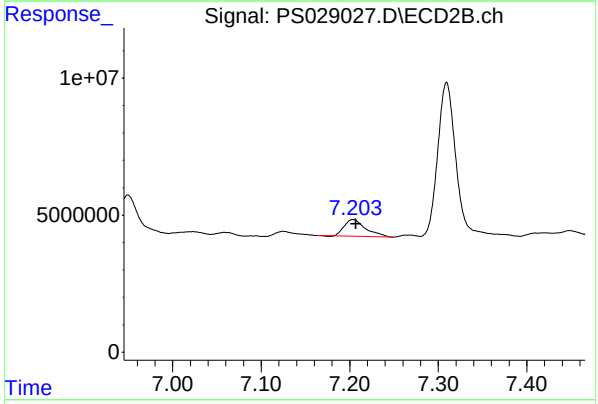
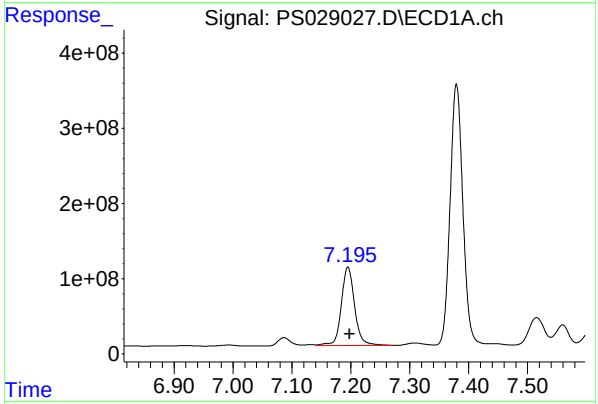


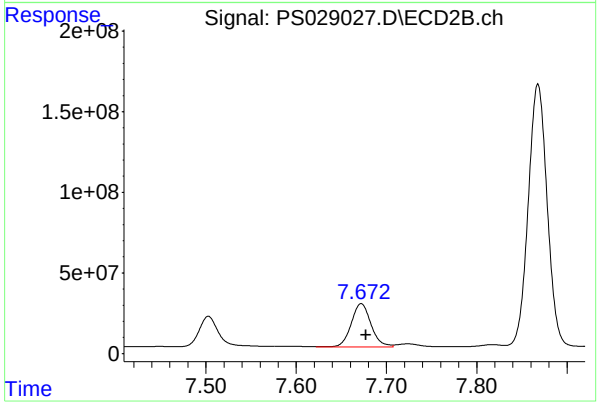
#3 4-Nitrophenol

R.T.: 7.204 min
Delta R.T.: -0.003 min
Response: 10132998
Conc: 11.39 ng/ml



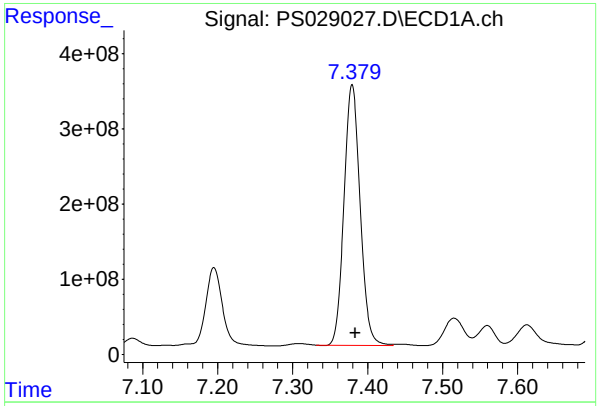
#4 2,4-DCAA

R.T.: 7.195 min
Delta R.T.: -0.003 min
Response: 1647726224
Conc: 591.85 ng/ml



#4 2,4-DCAA

R.T.: 7.672 min
Delta R.T.: -0.005 min
Response: 406129182
Conc: 363.98 ng/ml



#5 DICAMBA

R.T.: 7.379 min
Delta R.T.: -0.004 mi
Response: 5182959837
Conc: 436.96 ng/m

Instrument :
ECD_S
ClientSampleId :
JPP-29.1-012825MSD

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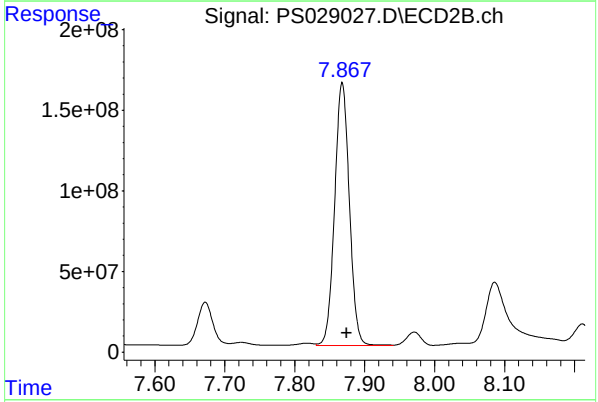
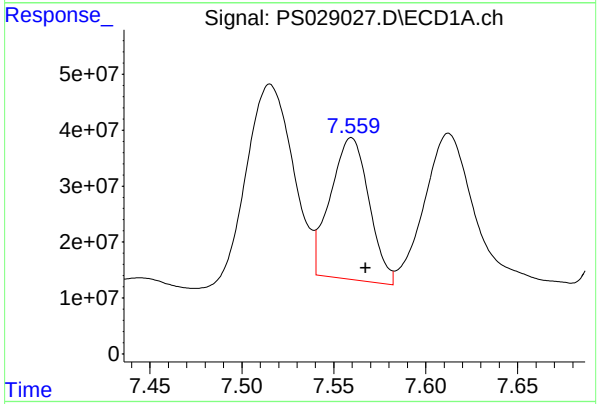


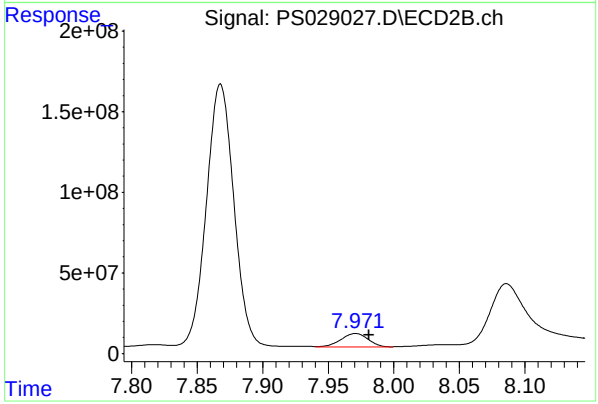
#5 DICAMBA

R.T.: 7.868 min
Delta R.T.: -0.007 min
Response: 2381484710
Conc: 427.63 ng/ml



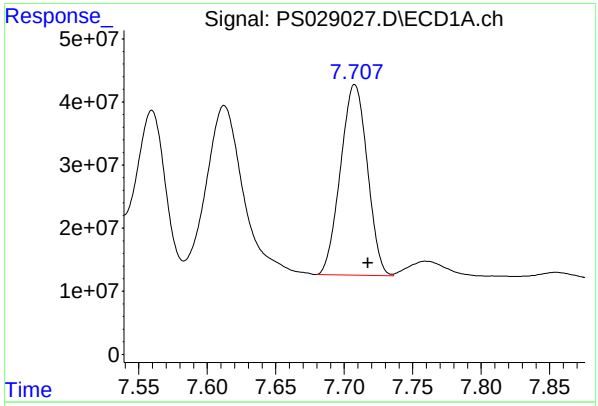
#6 MCPP

R.T.: 7.559 min
Delta R.T.: -0.008 min
Response: 367957072
Conc: 53.98 ug/ml m



#6 MCPP

R.T.: 7.971 min
Delta R.T.: -0.010 min
Response: 117275276
Conc: 38.99 ug/ml



#7 MCPA

R.T.: 7.708 min
Delta R.T.: -0.010 min
Response: 411743994
Conc: 41.80 ug/ml

Instrument :
ECD_S
ClientSampleId :
JPP-29.1-012825MSD

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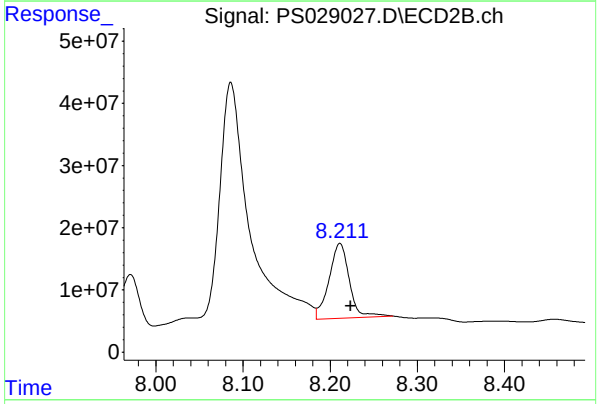
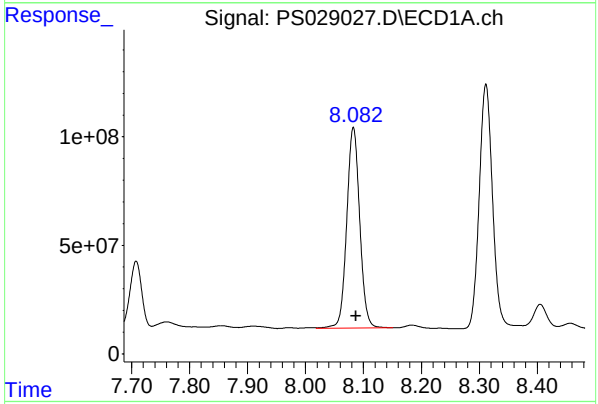


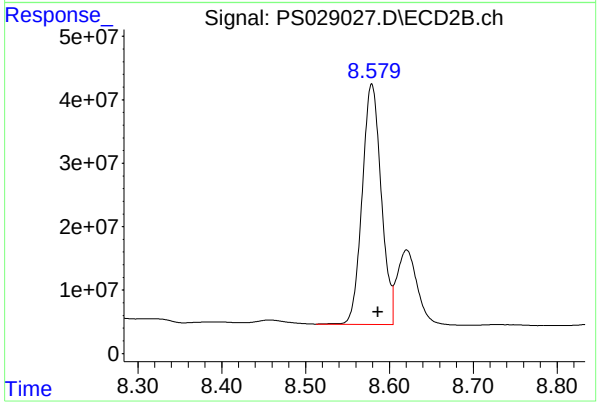
#7 MCPA

R.T.: 8.211 min
Delta R.T.: -0.012 min
Response: 196039823
Conc: 46.15 ug/ml



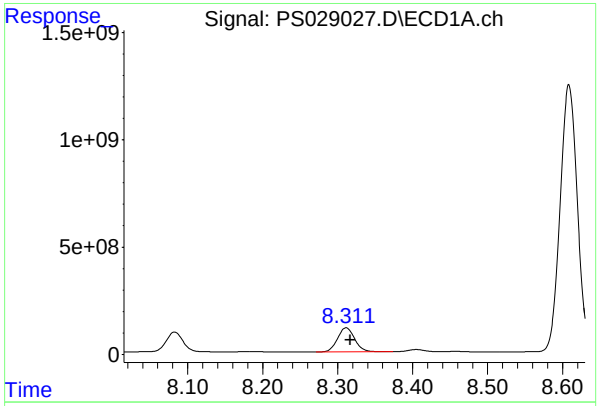
#8 DICHLORPROP

R.T.: 8.083 min
Delta R.T.: -0.005 min
Response: 1435964063
Conc: 453.19 ng/ml



#8 DICHLORPROP

R.T.: 8.579 min
Delta R.T.: -0.007 min
Response: 598534107
Conc: 425.82 ng/ml



#9 2,4-D

R.T.: 8.311 min
Delta R.T.: -0.005 min
Response: 1773829544
Conc: 524.89 ng/ml

Instrument :
ECD_S
ClientSampleId :
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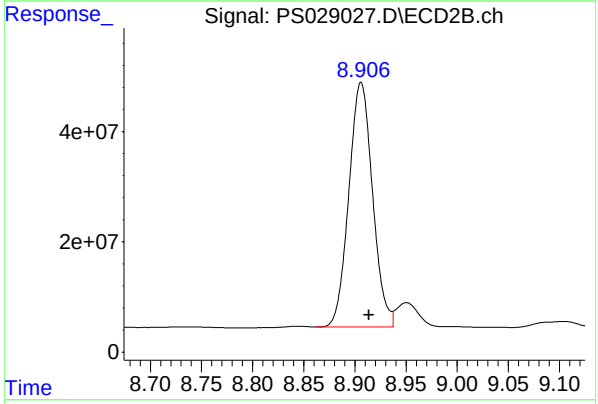
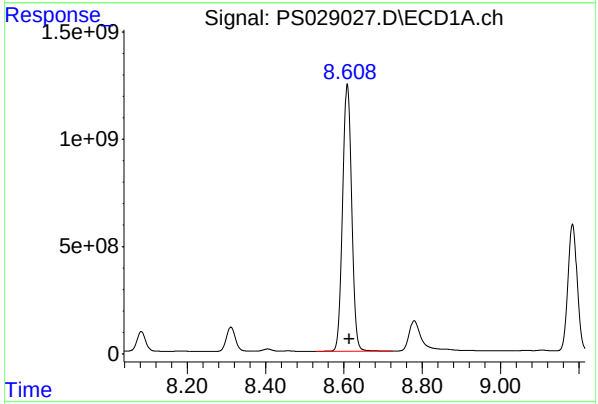


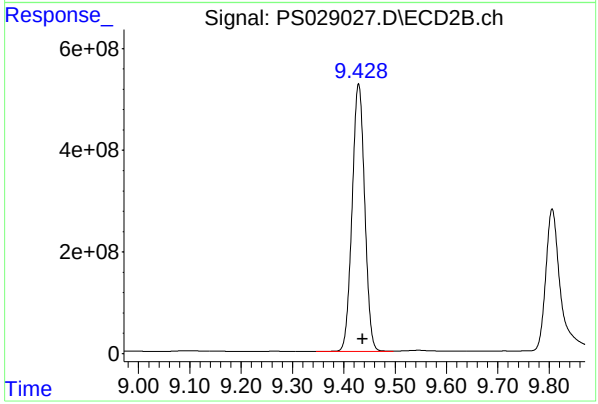
#9 2,4-D

R.T.: 8.906 min
Delta R.T.: -0.008 min
Response: 719163957
Conc: 479.60 ng/ml



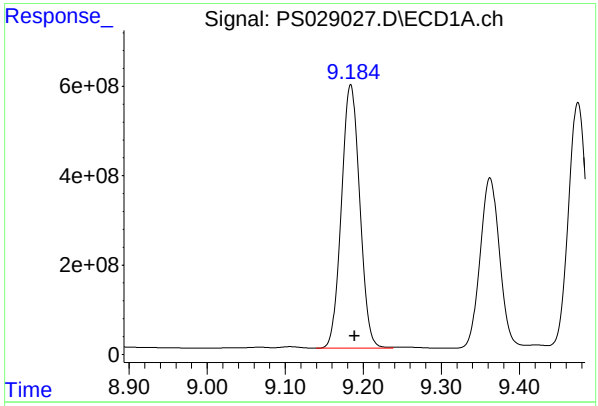
#10 Pentachlorophenol

R.T.: 8.609 min
Delta R.T.: -0.006 min
Response: 19943323606
Conc: 413.44 ng/ml



#10 Pentachlorophenol

R.T.: 9.429 min
Delta R.T.: -0.008 min
Response: 8960855134
Conc: 386.81 ng/ml



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

R.T.: 9.184 min
Delta R.T.: -0.005 min
Response: 9636266092
Conc: 503.66 ng/ml

Instrument :
ECD_S
ClientSampleId :
JPP-29.1-012825MSD

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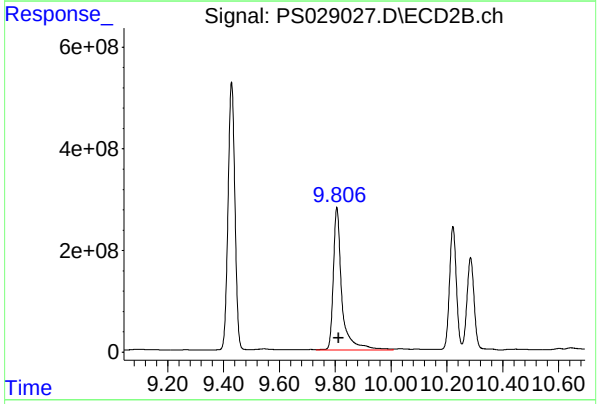
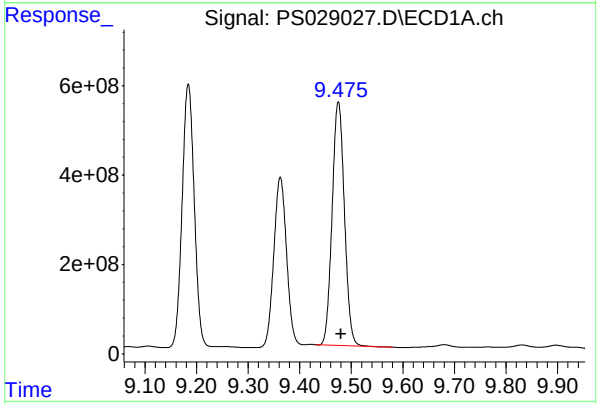


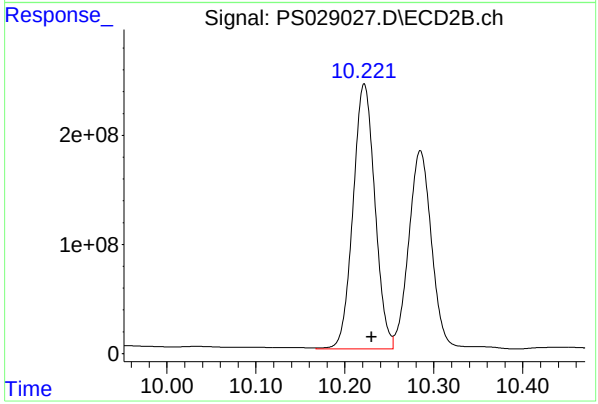
#11 2,4,5-TP (SILVEX)

R.T.: 9.806 min
Delta R.T.: -0.007 min
Response: 6005727454
Conc: 637.59 ng/ml



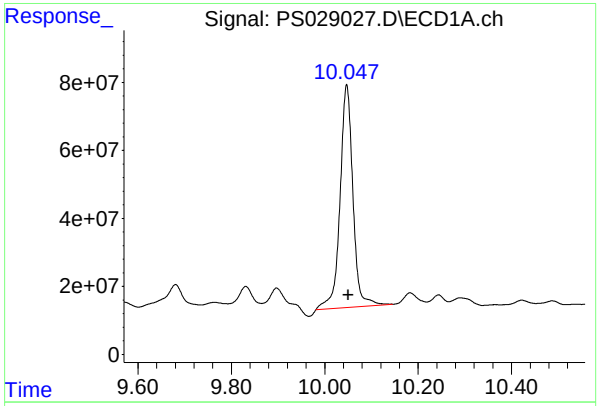
#12 2,4,5-T

R.T.: 9.475 min
Delta R.T.: -0.005 min
Response: 9022121236
Conc: 469.98 ng/ml



#12 2,4,5-T

R.T.: 10.222 min
Delta R.T.: -0.009 min
Response: 4146979980
Conc: 460.32 ng/ml



#13 2,4-DB

R.T.: 10.047 min
Delta R.T.: -0.004 min
Response: 1253814694
Conc: 353.45 ng/ml

Instrument :
ECD_S
ClientSampleId :
JPP-29.1-012825MSD

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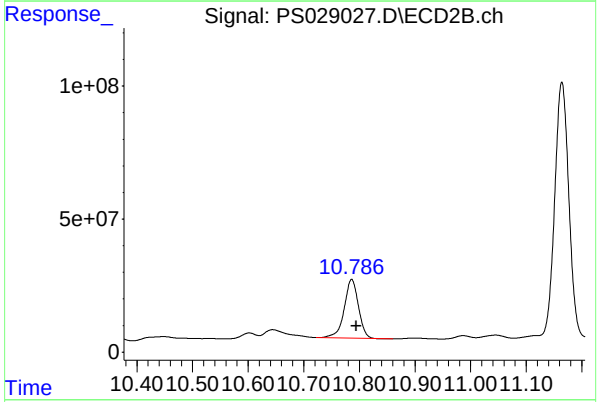
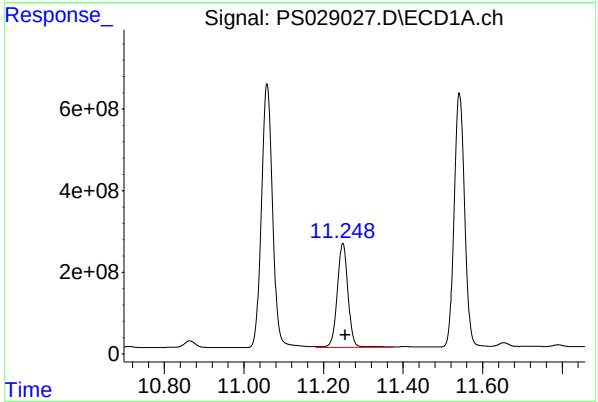


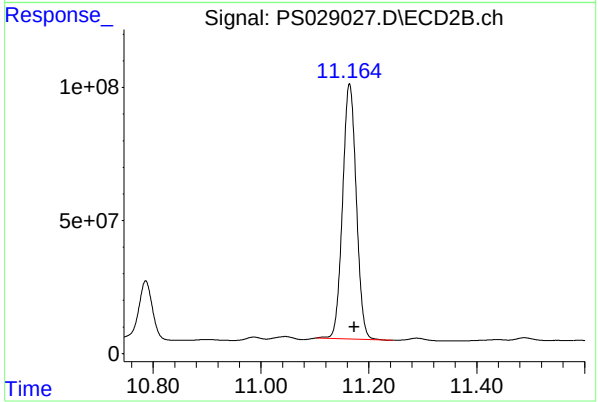
#13 2,4-DB

R.T.: 10.786 min
Delta R.T.: -0.009 min
Response: 392491436
Conc: 394.16 ng/ml



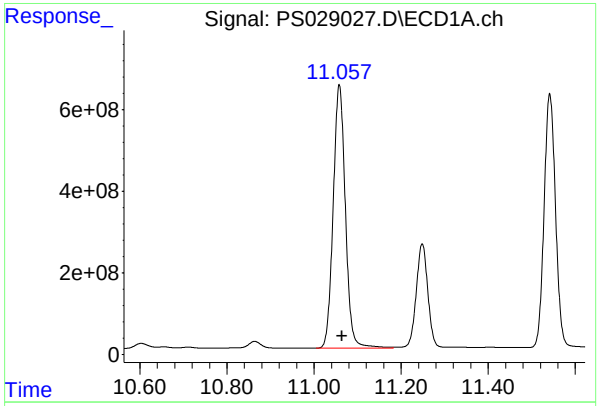
#14 DINOSEB

R.T.: 11.249 min
Delta R.T.: -0.006 min
Response: 4787151624
Conc: 289.30 ng/ml



#14 DINOSEB

R.T.: 11.164 min
Delta R.T.: -0.008 min
Response: 1691515543
Conc: 263.59 ng/ml



#15 Picloram

R.T.: 11.058 min
Delta R.T.: -0.006 min
Response: 12558861498
Conc: 398.04 ng/ml

Instrument :
ECD_S
ClientSampleId :
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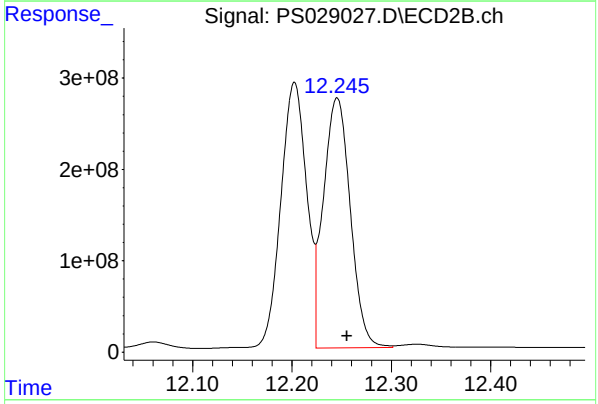
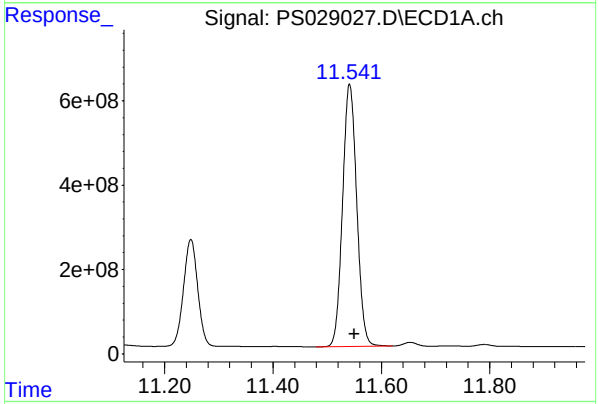
Reviewed By :Abdul Mirza 02/03/2025
Supervised By :Ankita Jodhani 02/05/2025



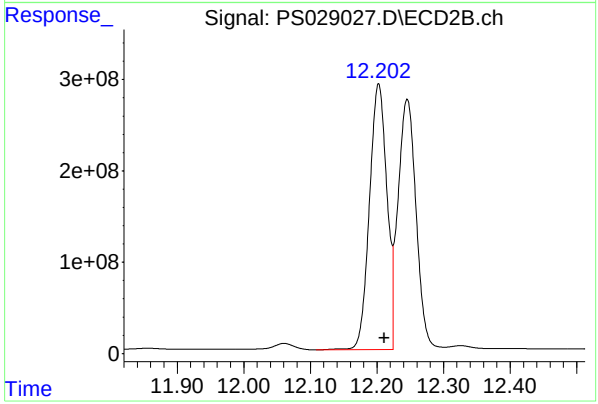
#15 Picloram

R.T.: 12.245 min
Delta R.T.: -0.010 min
Response: 5159090788
Conc: 384.44 ng/ml



#16 DCPA

R.T.: 11.541 min
Delta R.T.: -0.008 min
Response: 11267141509
Conc: 392.84 ng/ml



#16 DCPA

R.T.: 12.202 min
Delta R.T.: -0.008 min
Response: 5284077182
Conc: 465.46 ng/ml

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

Manual Integration Report

Sequence:	PS011425	Instrument	ECD_s

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
HSTDICC1500	PS028905.D	Dalapon	Abdul	1/14/2025 4:08:21 PM	Ankita	1/15/2025 7:45:19	Peak Integrated by Software
HSTDICV750	PS028906.D	2,4-DCAA	Abdul	1/14/2025 4:08:25 PM	Ankita	1/15/2025 7:45:21	Peak Integrated by Software
HSTDICV750	PS028906.D	Dalapon	Abdul	1/14/2025 4:08:25 PM	Ankita	1/15/2025 7:45:21	Peak Integrated by Software
HSTDCCC750	PS028908.D	Dalapon	Abdul	1/14/2025 4:08:28 PM	Ankita	1/15/2025 7:45:22	Peak Integrated by Software

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Manual Integration Report

Sequence:	PS013125	Instrument	ECD_s

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
HSTDCCC750	PS029008.D	MCPA #2	Abdul	2/3/2025 3:56:30 PM	Ankita	2/5/2025 8:49:53	Peak Integrated by Software
PB166356TB	PS029024.D	2,4-DCAA	Abdul	2/3/2025 9:56:17 AM	Ankita	2/3/2025 1:14:51	Peak Integrated by Software
Q1215-04MS	PS029026.D	Dalapon	Abdul	2/3/2025 3:56:22 PM	Ankita	2/5/2025 8:50:00	Peak Integrated by Software
Q1215-04MS	PS029026.D	Dalapon #2	Abdul	2/3/2025 3:56:22 PM	Ankita	2/5/2025 8:50:00	Peak Integrated by Software
Q1215-04MS	PS029026.D	MCPP	Abdul	2/3/2025 3:56:22 PM	Ankita	2/5/2025 8:50:00	Peak Integrated by Software
Q1215-04MSD	PS029027.D	Dalapon	Abdul	2/3/2025 3:56:16 PM	Ankita	2/5/2025 8:50:01	Peak Integrated by Software
Q1215-04MSD	PS029027.D	Dalapon #2	Abdul	2/3/2025 3:56:16 PM	Ankita	2/5/2025 8:50:01	Peak Integrated by Software
Q1215-04MSD	PS029027.D	MCPP	Abdul	2/3/2025 3:56:16 PM	Ankita	2/5/2025 8:50:01	Peak Integrated by Software

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Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QCBatch ID # PS011425

Review By	Abdul	Review On	1/14/2025 4:08:46 PM		
Supervise By	Ankita	Supervise On	1/15/2025 7:45:27 AM		
SubDirectory	PS011425	HP Acquire Method		HP Processing Method	ps011425 8151

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

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	HEXANE	PS028899.D	14 Jan 2025 09:43	AR\AJ	Ok
2	I.BLK	PS028900.D	14 Jan 2025 10:07	AR\AJ	Ok
3	HSTDICC200	PS028901.D	14 Jan 2025 10:31	AR\AJ	Ok
4	HSTDICC500	PS028902.D	14 Jan 2025 10:55	AR\AJ	Ok
5	HSTDICC750	PS028903.D	14 Jan 2025 11:19	AR\AJ	Ok
6	HSTDICC1000	PS028904.D	14 Jan 2025 11:43	AR\AJ	Ok
7	HSTDICC1500	PS028905.D	14 Jan 2025 12:07	AR\AJ	Ok,M
8	HSTDICV750	PS028906.D	14 Jan 2025 12:31	AR\AJ	Ok,M
9	I.BLK	PS028907.D	14 Jan 2025 12:56	AR\AJ	Ok
10	HSTDCCC750	PS028908.D	14 Jan 2025 13:20	AR\AJ	Ok,M

M : Manual Integration

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Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QCBatch ID # PS013125

Review By	Abdul	Review On	2/3/2025 9:56:56 AM		
Supervise By	Ankita	Supervise On	2/5/2025 8:50:07 AM		
SubDirectory	PS013125	HP Acquire Method		HP Processing Method	ps114225 8151

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

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	HEXANE	PS029006.D	31 Jan 2025 10:23	AR\AJ	Ok
2	I.BLK	PS029007.D	31 Jan 2025 10:47	AR\AJ	Ok
3	HSTDCCC750	PS029008.D	31 Jan 2025 13:00	AR\AJ	Ok,M
4	PB166416BL	PS029009.D	31 Jan 2025 16:44	AR\AJ	Ok
5	PB166416BS	PS029010.D	31 Jan 2025 17:08	AR\AJ	Ok
6	Q1218-01	PS029011.D	31 Jan 2025 17:32	AR\AJ	Ok,M
7	Q1219-01	PS029012.D	31 Jan 2025 17:56	AR\AJ	Ok
8	Q1221-01	PS029013.D	31 Jan 2025 18:20	AR\AJ	Ok
9	Q1239-01	PS029014.D	31 Jan 2025 18:44	AR\AJ	Ok
10	Q1239-04	PS029015.D	31 Jan 2025 19:08	AR\AJ	Ok
11	Q1239-07	PS029016.D	31 Jan 2025 19:32	AR\AJ	Ok,M
12	Q1239-07MS	PS029017.D	31 Jan 2025 19:56	AR\AJ	Ok,M
13	Q1239-07MSD	PS029018.D	31 Jan 2025 20:20	AR\AJ	Ok,M
14	I.BLK	PS029019.D	31 Jan 2025 20:44	AR\AJ	Ok
15	HSTDCCC750	PS029020.D	31 Jan 2025 21:08	AR\AJ	Ok
16	Q1239-10	PS029021.D	31 Jan 2025 22:20	AR\AJ	Ok
17	PB166428BL	PS029022.D	31 Jan 2025 22:44	AR\AJ	Ok
18	PB166428BS	PS029023.D	31 Jan 2025 23:08	AR\AJ	Ok
19	PB166356TB	PS029024.D	31 Jan 2025 23:32	AR\AJ	Ok,M
20	Q1215-04	PS029025.D	31 Jan 2025 23:56	AR\AJ	Ok
21	Q1215-04MS	PS029026.D	01 Feb 2025 00:20	AR\AJ	Ok,M

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Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QCBatch ID # PS013125

Review By	Abdul	Review On	2/3/2025 9:56:56 AM		
Supervise By	Ankita	Supervise On	2/5/2025 8:50:07 AM		
SubDirectory	PS013125	HP Acquire Method		HP Processing Method	ps114225 8151

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

22	Q1215-04MSD	PS029027.D	01 Feb 2025 00:44	AR\AJ	Ok,M
23	Q1215-08	PS029028.D	01 Feb 2025 01:08	AR\AJ	Ok
24	Q1216-04	PS029029.D	01 Feb 2025 01:32	AR\AJ	Ok
25	Q1216-08	PS029030.D	01 Feb 2025 01:56	AR\AJ	Ok
26	I.BLK	PS029031.D	01 Feb 2025 02:20	AR\AJ	Ok
27	HSTDCCC750	PS029032.D	01 Feb 2025 02:44	AR\AJ	Ok
28	Q1216-12	PS029033.D	01 Feb 2025 03:56	AR\AJ	Ok
29	Q1216-16	PS029034.D	01 Feb 2025 04:20	AR\AJ	Ok
30	Q1216-20	PS029035.D	01 Feb 2025 04:44	AR\AJ	Ok
31	Q1232-04	PS029036.D	01 Feb 2025 05:08	AR\AJ	Ok,M
32	Q1232-08	PS029037.D	01 Feb 2025 05:32	AR\AJ	Ok
33	Q1232-12	PS029038.D	01 Feb 2025 05:56	AR\AJ	Ok
34	Q1232-16	PS029039.D	01 Feb 2025 06:20	AR\AJ	Ok
35	Q1232-20	PS029040.D	01 Feb 2025 06:44	AR\AJ	Ok
36	Q1235-04	PS029041.D	01 Feb 2025 07:08	AR\AJ	Ok
37	Q1235-08	PS029042.D	01 Feb 2025 07:32	AR\AJ	Ok
38	I.BLK	PS029043.D	01 Feb 2025 07:56	AR\AJ	Ok
39	HSTDCCC750	PS029044.D	01 Feb 2025 08:44	AR\AJ	Ok

M : Manual Integration

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Fax : 908 789 8922

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QCBatch ID # PS011425

Review By	Abdul	Review On	1/14/2025 4:08:46 PM		
Supervise By	Ankita	Supervise On	1/15/2025 7:45:27 AM		
SubDirectory	PS011425	HP Acquire Method		HP Processing Method	ps011425 8151

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

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	HEXANE	HEXANE	PS028899.D	14 Jan 2025 09:43		AR\AJ	Ok
2	I.BLK	I.BLK	PS028900.D	14 Jan 2025 10:07		AR\AJ	Ok
3	HSTDICC200	HSTDICC200	PS028901.D	14 Jan 2025 10:31		AR\AJ	Ok
4	HSTDICC500	HSTDICC500	PS028902.D	14 Jan 2025 10:55		AR\AJ	Ok
5	HSTDICC750	HSTDICC750	PS028903.D	14 Jan 2025 11:19		AR\AJ	Ok
6	HSTDICC1000	HSTDICC1000	PS028904.D	14 Jan 2025 11:43		AR\AJ	Ok
7	HSTDICC1500	HSTDICC1500	PS028905.D	14 Jan 2025 12:07		AR\AJ	Ok,M
8	HSTDICV750	ICVPS011425	PS028906.D	14 Jan 2025 12:31		AR\AJ	Ok,M
9	I.BLK	I.BLK	PS028907.D	14 Jan 2025 12:56		AR\AJ	Ok
10	HSTDCCC750	HSTDCCC750	PS028908.D	14 Jan 2025 13:20		AR\AJ	Ok,M

M : Manual Integration

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Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QCBatch ID # PS013125

Review By	Abdul	Review On	2/3/2025 9:56:56 AM		
Supervise By	Ankita	Supervise On	2/5/2025 8:50:07 AM		
SubDirectory	PS013125	HP Acquire Method		HP Processing Method	ps114225 8151

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

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	HEXANE	HEXANE	PS029006.D	31 Jan 2025 10:23		AR\AJ	Ok
2	I.BLK	I.BLK	PS029007.D	31 Jan 2025 10:47		AR\AJ	Ok
3	HSTDCCC750	HSTDCCC750	PS029008.D	31 Jan 2025 13:00		AR\AJ	Ok,M
4	PB166416BL	PB166416BL	PS029009.D	31 Jan 2025 16:44		AR\AJ	Ok
5	PB166416BS	PB166416BS	PS029010.D	31 Jan 2025 17:08		AR\AJ	Ok
6	Q1218-01	BELL-25-002	PS029011.D	31 Jan 2025 17:32		AR\AJ	Ok,M
7	Q1219-01	LAW-25-0015	PS029012.D	31 Jan 2025 17:56		AR\AJ	Ok
8	Q1221-01	CHESTNUT-CONCRE	PS029013.D	31 Jan 2025 18:20		AR\AJ	Ok
9	Q1239-01	286	PS029014.D	31 Jan 2025 18:44		AR\AJ	Ok
10	Q1239-04	348	PS029015.D	31 Jan 2025 19:08		AR\AJ	Ok
11	Q1239-07	RBR22266	PS029016.D	31 Jan 2025 19:32		AR\AJ	Ok,M
12	Q1239-07MS	RBR22266MS	PS029017.D	31 Jan 2025 19:56	Some compound recovery fail	AR\AJ	Ok,M
13	Q1239-07MSD	RBR22266MSD	PS029018.D	31 Jan 2025 20:20	Some compound recovery fail	AR\AJ	Ok,M
14	I.BLK	I.BLK	PS029019.D	31 Jan 2025 20:44		AR\AJ	Ok
15	HSTDCCC750	HSTDCCC750	PS029020.D	31 Jan 2025 21:08		AR\AJ	Ok
16	Q1239-10	357	PS029021.D	31 Jan 2025 22:20		AR\AJ	Ok
17	PB166428BL	PB166428BL	PS029022.D	31 Jan 2025 22:44		AR\AJ	Ok
18	PB166428BS	PB166428BS	PS029023.D	31 Jan 2025 23:08		AR\AJ	Ok

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Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QCBatch ID # PS013125

Review By	Abdul	Review On	2/3/2025 9:56:56 AM		
Supervise By	Ankita	Supervise On	2/5/2025 8:50:07 AM		
SubDirectory	PS013125	HP Acquire Method		HP Processing Method	ps114225 8151

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

19	PB166356TB	PB166356TB	PS029024.D	31 Jan 2025 23:32		AR\AJ	Ok,M
20	Q1215-04	JPP-29.1-012825	PS029025.D	31 Jan 2025 23:56		AR\AJ	Ok
21	Q1215-04MS	JPP-29.1-012825MS	PS029026.D	01 Feb 2025 00:20		AR\AJ	Ok,M
22	Q1215-04MSD	JPP-29.1-012825MSD	PS029027.D	01 Feb 2025 00:44		AR\AJ	Ok,M
23	Q1215-08	JPP-29.2-012825	PS029028.D	01 Feb 2025 01:08		AR\AJ	Ok
24	Q1216-04	JPP-18.1-012825	PS029029.D	01 Feb 2025 01:32		AR\AJ	Ok
25	Q1216-08	JPP-21.1-012825	PS029030.D	01 Feb 2025 01:56		AR\AJ	Ok
26	I.BLK	I.BLK	PS029031.D	01 Feb 2025 02:20		AR\AJ	Ok
27	HSTDCCC750	HSTDCCC750	PS029032.D	01 Feb 2025 02:44		AR\AJ	Ok
28	Q1216-12	JPP-21.2-012825	PS029033.D	01 Feb 2025 03:56		AR\AJ	Ok
29	Q1216-16	JPP-26.1-012825	PS029034.D	01 Feb 2025 04:20		AR\AJ	Ok
30	Q1216-20	JPP-26.2-012825	PS029035.D	01 Feb 2025 04:44		AR\AJ	Ok
31	Q1232-04	JPP-46.2-012925	PS029036.D	01 Feb 2025 05:08		AR\AJ	Ok,M
32	Q1232-08	JPP-46.1-012925	PS029037.D	01 Feb 2025 05:32		AR\AJ	Ok
33	Q1232-12	JPP-42.1-012925	PS029038.D	01 Feb 2025 05:56		AR\AJ	Ok
34	Q1232-16	JPP-42.2-012925	PS029039.D	01 Feb 2025 06:20		AR\AJ	Ok
35	Q1232-20	JPP-51.1-012925	PS029040.D	01 Feb 2025 06:44		AR\AJ	Ok
36	Q1235-04	JPP-51.2-012925	PS029041.D	01 Feb 2025 07:08		AR\AJ	Ok
37	Q1235-08	JPP-16.1-012925	PS029042.D	01 Feb 2025 07:32		AR\AJ	Ok

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Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QCBatch ID # PS013125

Review By	Abdul	Review On	2/3/2025 9:56:56 AM		
Supervise By	Ankita	Supervise On	2/5/2025 8:50:07 AM		
SubDirectory	PS013125	HP Acquire Method		HP Processing Method	ps114225 8151

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

38	I.BLK	I.BLK	PS029043.D	01 Feb 2025 07:56		AR\AJ	Ok
39	HSTDCCC750	HSTDCCC750	PS029044.D	01 Feb 2025 08:44		AR\AJ	Ok

M : Manual Integration

Alliance TECHNICAL GROUP

TCLP EXTRACTION LOGPAGE

PB166356

SOP ID : M1311-TCLP-15

SDG No : N/A

Weigh By : JP

Balance ID : WC SC-7

pH Meter ID : WC PH METER-1

Extraction By : JP

Filter By : JP

Pippete ID : WC

Tumbler ID : T-1 / T-2

TCLP Filter ID : 114771

Start Prep Date : 01/30/2025 **Time :** 14:00

End Prep Date : 01/31/2025 **Time :** 07:15

Combination Ratio : 20

ZHE Cleaning Batch : N/A

Initial Room Temperature: 23 °C

Final Room Temperature: 22 °C

TCLP Technician Signature : JP

Supervisor By : 12

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

Chemical Used	ML/SAMPLE U	Lot Number
TCLP-FLUID-1	N/A	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	W1937,W1938,W1939,W1940,W1941,W1942
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 fiftration and before preservation. TUMBLER T-1 / T-2 checked,30 rpm. Particle size reduction is not required. p1235-08 is used for MS-MSD.

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
01/31/25 09:45	JP / TCLP Room	SKG. & TCL
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

TCLP EXTRACTION LOGPAGE

PB166356

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
PB166356TB	LEB356	N/A	N/A	2000	N/A	N/A	N/A	4.94	1.0	T-2
Q1215-04	JPP-29.1-012825	01	100.02	2000	N/A	N/A	N/A	6.0	1.5	T-1
Q1215-08	JPP-29.2-012825	02	100.03	2000	N/A	N/A	N/A	7.2	1.0	T-1
Q1216-04	JPP-18.1-012825	03	100.02	2000	N/A	N/A	N/A	7.0	1.5	T-1
Q1216-08	JPP-21.1-012825	04	100.01	2000	N/A	N/A	N/A	7.2	1.0	T-1
Q1216-12	JPP-21.2-012825	05	100.02	2000	N/A	N/A	N/A	7.0	1.5	T-1
Q1216-16	JPP-26.1-012825	06	100.03	2000	N/A	N/A	N/A	6.2	1.0	T-1
Q1216-20	JPP-26.2-012825	07	100.04	2000	N/A	N/A	N/A	7.2	1.0	T-1
Q1218-02	BELL-25-002	08	100.02	2000	N/A	N/A	N/A	3.0	1.5	T-1
Q1219-02	LAW-25-0015	09	100.02	2000	N/A	N/A	N/A	3.0	1.0	T-1
Q1221-02	CHESTNUT-CONCRETE	10	100.03	2000	N/A	N/A	N/A	10.5	1.5	T-1
Q1232-04	JPP-46.2-012925	11	100.04	2000	N/A	N/A	N/A	5.8	1.0	T-2
Q1232-08	JPP-46.1-012925	12	100.02	2000	N/A	N/A	N/A	7.6	1.5	T-2
Q1232-12	JPP-42.1-012925	13	100.03	2000	N/A	N/A	N/A	7.6	1.0	T-2
Q1232-16	JPP-42.2-012925	14	100.02	2000	N/A	N/A	N/A	7.2	1.5	T-2
Q1232-20	JPP-51.1-012925	15	100.01	2000	N/A	N/A	N/A	7.0	1.0	T-2
Q1235-04	JPP-51.2-012925	16	100.03	2000	N/A	N/A	N/A	7.6	1.5	T-2
Q1235-08	JPP-16.1-012925	17	100.04	2000	N/A	N/A	N/A	7.6	1.0	T-2

SampleID	ClientID	Sample Weight (g)	Filter Weight (g)	Filtrate (mL)	Filter + Solid (After 100°C)	% solids	% Dry Solids
PB166356TB	LEB356	N/A	N/A	N/A	N/A	N/A	N/A
Q1215-04	JPP-29.1-012825	N/A	N/A	N/A	N/A	100	N/A
Q1215-08	JPP-29.2-012825	N/A	N/A	N/A	N/A	100	N/A
Q1216-04	JPP-18.1-012825	N/A	N/A	N/A	N/A	100	N/A
Q1216-08	JPP-21.1-012825	N/A	N/A	N/A	N/A	100	N/A
Q1216-12	JPP-21.2-012825	N/A	N/A	N/A	N/A	100	N/A
Q1216-16	JPP-26.1-012825	N/A	N/A	N/A	N/A	100	N/A
Q1216-20	JPP-26.2-012825	N/A	N/A	N/A	N/A	100	N/A
Q1218-02	BELL-25-002	N/A	N/A	N/A	N/A	100	N/A
Q1219-02	LAW-25-0015	N/A	N/A	N/A	N/A	100	N/A
Q1221-02	CHESTNUT-CONCRETE	N/A	N/A	N/A	N/A	100	N/A
Q1232-04	JPP-46.2-012925	N/A	N/A	N/A	N/A	100	N/A
Q1232-08	JPP-46.1-012925	N/A	N/A	N/A	N/A	100	N/A
Q1232-12	JPP-42.1-012925	N/A	N/A	N/A	N/A	100	N/A
Q1232-16	JPP-42.2-012925	N/A	N/A	N/A	N/A	100	N/A
Q1232-20	JPP-51.1-012925	N/A	N/A	N/A	N/A	100	N/A
Q1235-04	JPP-51.2-012925	N/A	N/A	N/A	N/A	100	N/A
Q1235-08	JPP-16.1-012925	N/A	N/A	N/A	N/A	100	N/A

Alliance TECHNICAL GROUP

TCLP Fluid Determination

PB166356

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

Thermometer ID : FLASHPOINT

SampleID	ClientID	Sample Weight (g)	Volume DI Water (mL)	PH after 5 min stir	PH after 10 min stir	Extraction Fluid 1 or 2	pH Extraction Fluid
PB166356TB	LEB356	N/A	N/A	N/A	N/A	#1	4.94
Q1215-04	JPP-29.1-012825	5.02	96.5	8.2	3.5	#1	4.94
Q1215-08	JPP-29.2-012825	5.03	96.5	9.0	4.0	#1	4.94
Q1216-04	JPP-18.1-012825	5.02	96.5	8.6	3.5	#1	4.94
Q1216-08	JPP-21.1-012825	5.01	96.5	9.0	4.0	#1	4.94
Q1216-12	JPP-21.2-012825	5.02	96.5	9.1	4.0	#1	4.94
Q1216-16	JPP-26.1-012825	5.00	96.5	8.6	3.5	#1	4.94
Q1216-20	JPP-26.2-012825	5.03	96.5	9.3	4.0	#1	4.94
Q1218-02	BELL-25-002	5.04	96.5	5.6	2.0	#1	4.94
Q1219-02	LAW-25-0015	5.03	96.5	5.5	2.5	#1	4.94
Q1221-02	CHESTNUT-CONCRETE	5.04	96.5	11.0	4.5	#1	4.94
Q1232-04	JPP-46.2-012925	5.02	96.5	7.2	2.5	#1	4.94
Q1232-08	JPP-46.1-012925	5.01	96.5	10.5	3.5	#1	4.94
Q1232-12	JPP-42.1-012925	5.02	96.5	11.5	4.5	#1	4.94
Q1232-16	JPP-42.2-012925	5.00	96.5	10.0	4.0	#1	4.94
Q1232-20	JPP-51.1-012925	5.03	96.5	9.1	3.5	#1	4.94
Q1235-04	JPP-51.2-012925	5.04	96.5	11.5	4.5	#1	4.94
Q1235-08	JPP-16.1-012925	5.05	96.5	10.5	4.0	#1	4.94

WORKLIST(Hardcopy Internal Chain)

WorkList Name : TCLP Q1221 **WorkList ID :** 187275 **Department :** TCLP Extraction **Date :** 01-30-2025 08:09:15

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1215-04	JPP-29.1-012825	Solid	TCLP Extraction	Cool 4 deg C	RUTW01	E11	01/28/2025	1311
Q1215-08	JPP-29.2-012825	Solid	TCLP Extraction	Cool 4 deg C	RUTW01	E11	01/28/2025	1311
Q1216-04	JPP-18.1-012825	Solid	TCLP Extraction	Cool 4 deg C	RUTW01	E11	01/28/2025	1311
Q1216-08	JPP-21.1-012825	Solid	TCLP Extraction	Cool 4 deg C	RUTW01	E11	01/28/2025	1311
Q1216-12	JPP-21.2-012825	Solid	TCLP Extraction	Cool 4 deg C	RUTW01	E11	01/28/2025	1311
Q1216-16	JPP-26.1-012825	Solid	TCLP Extraction	Cool 4 deg C	RUTW01	E11	01/28/2025	1311
Q1216-20	JPP-26.2-012825	Solid	TCLP Extraction	Cool 4 deg C	RUTW01	E11	01/28/2025	1311
Q1218-02	BELL-25-002	Solid	TCLP Extraction	Cool 4 deg C	RUTW01	E11	01/28/2025	1311
Q1219-02	LAW-25-0015	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	N41	01/29/2025	1311
Q1221-02	CHESTNUT-CONCRETE	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	N41	01/29/2025	1311
Q1232-04	JPP-46.2-012925	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	N41	01/29/2025	1311
Q1232-08	JPP-46.1-012925	Solid	TCLP Extraction	Cool 4 deg C	RUTW01	E11	01/29/2025	1311
Q1232-12	JPP-42.1-012925	Solid	TCLP Extraction	Cool 4 deg C	RUTW01	E11	01/29/2025	1311
Q1232-16	JPP-42.2-012925	Solid	TCLP Extraction	Cool 4 deg C	RUTW01	E11	01/29/2025	1311
Q1232-20	JPP-51.1-012925	Solid	TCLP Extraction	Cool 4 deg C	RUTW01	E11	01/29/2025	1311
Q1235-04	JPP-51.2-012925	Solid	TCLP Extraction	Cool 4 deg C	RUTW01	E11	01/29/2025	1311
Q1235-08	JPP-16.1-012925	Solid	TCLP Extraction	Cool 4 deg C	RUTW01	E11	01/29/2025	1311

12:30

Date/Time 01/30/25 12:30

Raw Sample Received by: [signature]

Raw Sample Relinquished by: [signature]

Date/Time 01/30/25 16:00

Raw Sample Received by: [signature]

Raw Sample Relinquished by: [signature]

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PB166428

SOP ID:	M8151A-Herbicide-22				
Clean Up SOP #:	N/A			**Extraction Start Date :**	01/31/2025
Matrix :	Water			**Extraction Start Time :**	10:55
Weigh By:	N/A	**Extraction By:**	RS	**Extraction End Date :**	01/31/2025
Balance check:	N/A	**Filter By:**	RS	**Extraction End Time :**	16:40
Balance ID:	N/A	**pH Meter ID:**	N/A	**Concentration By:**	EH
pH Strip Lot#:	E3574	**Hood ID:**	4,5,6,7	**Supervisor By :**	rajesh

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

Standared 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
12N H2SO4	N/A	EP2552
NAOH 6N	N/A	EP2553
ISO OCTANE	N/A	E3554
METHANOL	N/A	V14150
Diazomethane	N/A	EP2575
Hexane	N/A	E3872
NACL	N/A	M4459
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

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

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

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
01/31/25	RS (Ext. Lab)	R. Patel / MCB Labs
16:41	**Preparation Group**	**Analysis Group**

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PrepBatch ID : PB166428

Analytical Method: M8151A-Herbicide-22

Concentration Date: 01/31/2025

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	P Pos
					AddedBy	VerifiedBy				
PB166356TB	PB166356TB	TCLP Herbicide	100	6	RUPESH	ritesh	10			SL
PB166428BL	HBLK428	TCLP Herbicide	1000	6	RUPESH	ritesh	10			
PB166428BS	HLCS428	TCLP Herbicide	1000	6	RUPESH	ritesh	10			
Q1215-04	JPP-29.1-012825	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		
Q1215-04MS	JPP-29.1-012825MS	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		
Q1215-04MSD	JPP-29.1-012825MSD	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		
Q1215-08	JPP-29.2-012825	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		
Q1216-04	JPP-18.1-012825	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		
Q1216-08	JPP-21.1-012825	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		
Q1216-12	JPP-21.2-012825	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		
Q1216-16	JPP-26.1-012825	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		
Q1216-20	JPP-26.2-012825	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		
Q1232-04	JPP-46.2-012925	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		
Q1232-08	JPP-46.1-012925	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		
Q1232-12	JPP-42.1-012925	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		
Q1232-16	JPP-42.2-012925	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		
Q1232-20	JPP-51.1-012925	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		
Q1235-04	JPP-51.2-012925	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		
Q1235-08	JPP-16.1-012925	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		SEP-1

* **Extracts relinquished on the same date as received.**

1/31/25

Alliance TECHNICAL GROUP

TCLP EXTRACTION LOGPAGE

PB166356

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
PB166356TB	LEB356	N/A	N/A	2000	N/A	N/A	N/A	4.94	1.0	T-2
Q1215-04	JPP-29.1-012825	01	100.02	2000	N/A	N/A	N/A	6.0	1.5	T-1
Q1215-08	JPP-29.2-012825	02	100.03	2000	N/A	N/A	N/A	7.2	1.0	T-1
Q1216-04	JPP-18.1-012825	03	100.02	2000	N/A	N/A	N/A	7.0	1.5	T-1
Q1216-08	JPP-21.1-012825	04	100.01	2000	N/A	N/A	N/A	7.2	1.0	T-1
Q1216-12	JPP-21.2-012825	05	100.02	2000	N/A	N/A	N/A	7.0	1.5	T-1
Q1216-16	JPP-26.1-012825	06	100.03	2000	N/A	N/A	N/A	6.2	1.0	T-1
Q1216-20	JPP-26.2-012825	07	100.04	2000	N/A	N/A	N/A	7.2	1.0	T-1
Q1218-02	BELL-25-002	08	100.02	2000	N/A	N/A	N/A	3.0	1.5	T-1
Q1219-02	LAW-25-0015	09	100.02	2000	N/A	N/A	N/A	3.0	1.0	T-1
Q1221-02	CHESTNUT-CONCRETE	10	100.03	2000	N/A	N/A	N/A	10.5	1.5	T-1
Q1232-04	JPP-46.2-012925	11	100.04	2000	N/A	N/A	N/A	5.8	1.0	T-2
Q1232-08	JPP-46.1-012925	12	100.02	2000	N/A	N/A	N/A	7.6	1.5	T-2
Q1232-12	JPP-42.1-012925	13	100.03	2000	N/A	N/A	N/A	7.6	1.0	T-2
Q1232-16	JPP-42.2-012925	14	100.02	2000	N/A	N/A	N/A	7.2	1.5	T-2
Q1232-20	JPP-51.1-012925	15	100.01	2000	N/A	N/A	N/A	7.0	1.0	T-2
Q1235-04	JPP-51.2-012925	16	100.03	2000	N/A	N/A	N/A	7.6	1.5	T-2
Q1235-08	JPP-16.1-012925	17	100.04	2000	N/A	N/A	N/A	7.6	1.0	T-2

04/31/25

0911-45

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

Prep Standard - Chemical Standard Summary

Order ID : Q1216

Test : TCLP Herbicide

Prepbatch ID : PB166428,

Sequence ID/Qc Batch ID: PS013125,

Standard ID :
EP2552,EP2553,EP2576,PP24061,PP24062,PP24064,PP24065,PP24066,PP24067,PP24068,PP24069,PP24070,PP24078,PP24079,

Chemical ID :
E3370,E3551,E3554,E3657,E3826,E3843,M5173,P10549,P11180,P11181,P12619,P12629,P12686,P12708,P12709,P13506,P13507,P13508,P13509,P13523,P13524,P13525,W3112,

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Extractions STANDARD PREPARATION LOG

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

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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3884	6 N NAOH	EP2553	10/21/2024	04/21/2025	Rajesh Parikh	Extraction_SCALE_2 (EX-SC-2)	None	RUPESHKUMAR SHAH 10/21/2024

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

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Extractions STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
601	Acidified Sodium Sulphate 2	EP2576	01/06/2025	06/02/2025	Rajesh Parikh	Extraction_SCALE_2 (EX-SC-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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1321	2/200 PPM Herb Mega Mix	PP24061	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

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Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1851	2/200 PPM Herb Mega Mix 2nd Source	PP24062	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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1452	1500 PPB HERB MIX STD	PP24064	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

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Pest/Pcb STANDARD PREPARATION LOG

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

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

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

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

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Pest/Pcb STANDARD PREPARATION LOG

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

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

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

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

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Pest/Pcb STANDARD PREPARATION LOG

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

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

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

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

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Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
60	5000 PPB Herbicide Surg Spike (Free Acid)	PP24078	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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1848	5000/500000 PPB Herbicide Spike (Free Acid)	PP24079	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

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CHEMICAL RECEIPT LOG BOOK

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

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

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

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H2762008	06/05/2025	12/05/2024 / Rajesh	12/05/2024 / Rajesh	E3843

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

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

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

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

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

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

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

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Fax : 908 789 8922

CHEMICAL RECEIPT LOG BOOK

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

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

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

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

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

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	P13506

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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

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	P13508

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	P13509

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	P13523

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	P13523

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

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Fax : 908 789 8922

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

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

avantor™ | J.T.Baker®

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 ($(C_2H_5)_2O$) (by GC, corrected for water)	>= 99.0 %	100.0
Alcohol (C_2H_5OH)	Passes Test	PT
Carbonyl Compounds (as HCHO) (by polarography)	<= 0.001 %	< 0.001
Color (APHA)	<= 10	< 5
Peroxide (as H_2O_2)	<= 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

James T Ethier
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 QUIMICOS 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_2SO_4
SPECIFICATION NUMBER :	6399	RELEASE DATE:	ABR/21/2023
LOT NUMBER :	313201		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na_2SO_4)	Min. 99.0%	99.7 %
pH of a 5% solution at 25°C	5.2 - 9.2	6.1
Insoluble matter	Max. 0.01%	0.005 %
Loss on ignition	Max. 0.5%	0.1 %
Chloride (Cl)	Max. 0.001%	<0.001 %
Nitrogen compounds (as N)	Max. 5 ppm	<5 ppm
Phosphate (PO_4)	Max. 0.001%	<0.001 %
Heavy metals (as Pb)	Max. 5 ppm	<5 ppm
Iron (Fe)	Max. 0.001%	<0.001 %
Calcium (Ca)	Max. 0.01%	0.002 %
Magnesium (Mg)	Max. 0.005%	0.001 %
Potassium (K)	Max. 0.008%	0.003 %
Extraction-concentration suitability	Passes test	Passes test
Appearance	Passes test	Passes test
Identification	Passes test	Passes test
Solubility and foreing matter	Passes test	Passes test
Retained on US Standard No. 10 sieve	Max. 1%	0.1 %
Retained on US Standard No. 60 sieve	Min. 94%	97.3 %
Through US Standard No. 60 sieve	Max. 5%	2.5 %
Through US Standard No. 100 sieve	Max. 10%	0.1 %

COMMENTS

QC: PhC Irma Belmares

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

RG-02-01, Ed. 3

Recd. by RP on 7/24/23 E3551

Certificate of Analysis

MilliporeSigma

Date of Release: 6/9/2023

Name: 2,2,4–Trimethylpentane [Isooctane]
OmniSolv®

Item No: TX1389 all size codes

Lot / Batch No: 63160

Country of Origin: Germany

Characteristic	Requirement		Results	Units
	Min.	Max.		
Assay (GC)	99.5		> 99.99	%
Capillary ECD responsive substances (as PCNB)		5	0.24	ng/L
Color (APHA)		10	< 10	
Evaporation residue		1	< 0.5	ppm
Filtered through 0.2 µm filter			Passes test	
Fluorescence (as quinine base)		250	71	ppt
Form			Clear liquid	
Infrared Spectrum			Conforms	
Refractive index (at 20°C)			1.3915	
UV Abs. at 200 nm		1.00	0.137	AU
UV Abs. at 220 nm		0.05	0.024	AU
UV Abs. at 230 nm		0.02	0.003	AU
UV Abs. at 250 nm		0.005	0.003	AU
UV Abs. at 270 nm		0.005	0.002	AU
UV Abs. at 300 nm		0.005	0.004	AU
UV Cut–off		200	191.1	nm
Water (H2O)		0.01	0.001	%

Michael Hutchinson,
Quality Control Manager
This document has been produced electronically and is valid without a signature.

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

Recd by RP on 8/9/23

E3554

VWR®

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

We certify that this batch conforms to the specifications listed.

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

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

Additional Information

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

Product meets analytical specifications of the grades listed.

E 3657	E 3659
E 3654	E 3660

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

avantor™ | J.T.Baker®

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

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	3
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	1
ECD-Sensitive Impurities (as Ethylene Dibromide) - Single Impurity Peak (ng/mL)	≤ 5	1
Assay (Total Saturated C_6 Isomers) (by GC, corrected for water)	≥ 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_2SO_4	Passes Test	Passes Test
Water (by KF, coulometric)	≤ 0.05 %	< 0.01 %

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

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

E3826

Rec'd by RP on 11/7/24

Jamie Croak
Director Quality Operations, Bioscience Production

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

avantor™ | J.T.Baker

Material No.: 9254-03
Batch No.: 24H2762008
Manufactured Date: 2024-04-18
Expiration Date:2027-04-18
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ($(CH_3)_2CO$) (by GC, corrected forwater)	>= 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_2O)	<= 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

J Croak
Jamie Croak
Director Quality Operations, Bioscience Production

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

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

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

Certificate of Analysis

Test	Specification	Result
ACS - Assay (as HCl) (by acid-base titrn)	36.5 - 38.0 %	37.6
ACS - Color (APHA)	<= 10	5
ACS - Residue after Ignition	<= 3 ppm	1
ACS - Specific Gravity at 60°/60°F	1.185 - 1.192	1.189
ACS - Bromide (Br)	<= 0.005 %	< 0.005
ACS - Extractable Organic Substances	<= 5 ppm	< 1
ACS - Free Chlorine (as Cl_2)	<= 0.5 ppm	< 0.5
Phosphate (PO_4)	<= 0.05 ppm	< 0.03
Sulfate (SO_4)	<= 0.5 ppm	< 0.3
Sulfite (SO_3)	<= 0.8 ppm	0.3
Ammonium (NH_4)	<= 3 ppm	< 1
Trace Impurities - Arsenic (As)	<= 0.010 ppm	< 0.003
Trace Impurities - Aluminum (Al)	<= 10.0 ppb	0.5
Arsenic and Antimony (as As)	<= 5 ppb	< 3
Trace Impurities - Barium (Ba)	<= 1.0 ppb	< 0.2
Trace Impurities - Beryllium (Be)	<= 1.0 ppb	< 0.2
Trace Impurities - Bismuth (Bi)	<= 10.0 ppb	< 1.0
Trace Impurities - Boron (B)	<= 20.0 ppb	< 5.0
Trace Impurities - Cadmium (Cd)	<= 1.0 ppb	< 0.3
Trace Impurities - Calcium (Ca)	<= 50.0 ppb	15.0
Trace Impurities - Chromium (Cr)	<= 1.0 ppb	< 0.4
Trace Impurities - Cobalt (Co)	<= 1.0 ppb	< 0.3
Trace Impurities - Copper (Cu)	<= 1.0 ppb	< 0.1
Trace Impurities - Gallium (Ga)	<= 1.0 ppb	< 0.2

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

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

For Laboratory, Research or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications

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

James Ethier
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 0.25µm
Rtx-5 (cat.#10223)

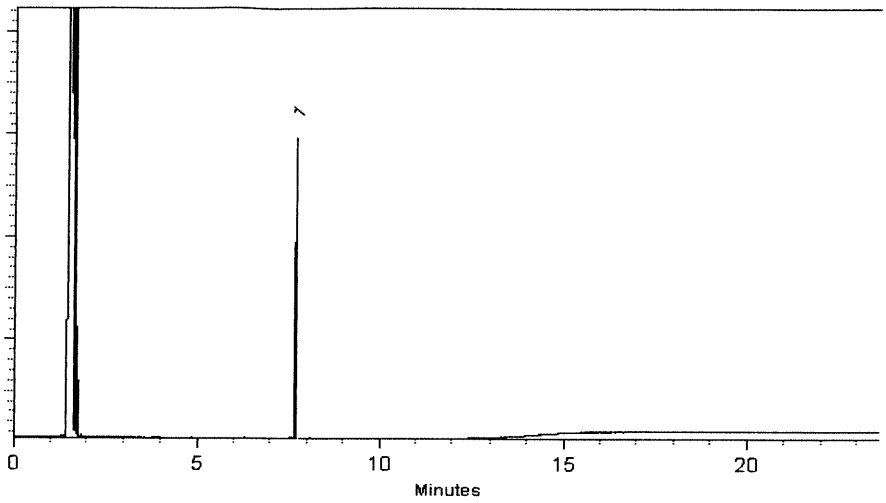
Carrier Gas:
hydrogen-constant pressure 10 psi.

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

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



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

Katelyn McGlinn - 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 111177 to P 111186

AR 11/02/21

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 2,4-Dichlorophenylacetic Acid Methyl Ester Standard

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

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

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

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

CERTIFIED VALUES

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

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

P111177
↓
P111186

AR
11/02/21

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

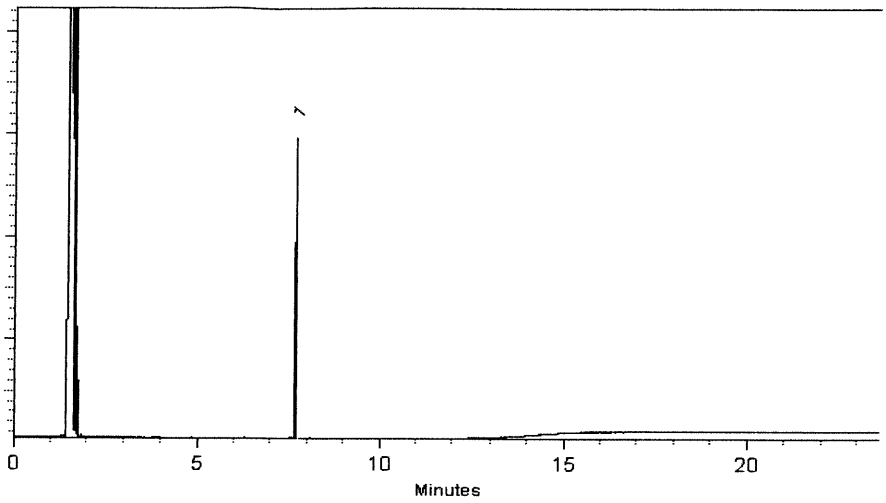
Carrier Gas:
hydrogen-constant pressure 10 psi.

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

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



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

Katelyn McGlinn - 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 111177
to
P 111186

AR
11/02/21

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Certificate of Analysis

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Certificate #3222.01

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

Description : 2,4-Dichlorophenylacetic Acid Methyl Ester Standard

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

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

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

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

CERTIFIED VALUES

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

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

P111177
↓
P111186

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P12616 (S) → P12620 7/5/2023

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

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

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

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

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

CERTIFIED VALUES

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

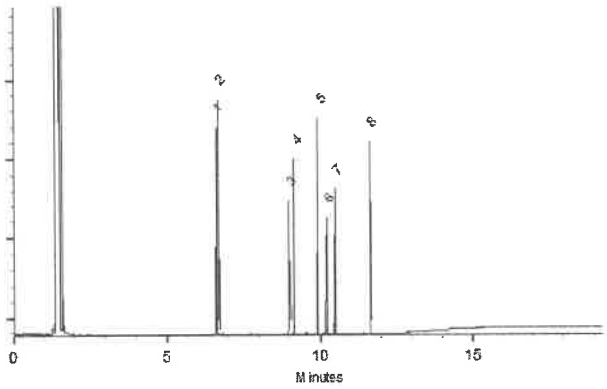
Carrier Gas:
hydrogen-constant pressure 10 psi.

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 J Maye

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

Justine Albertson - Operations Tech-ARM QC

Date Passed: 18-Nov-2019

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

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P12626 (5) - P12630

7/5/2023

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

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

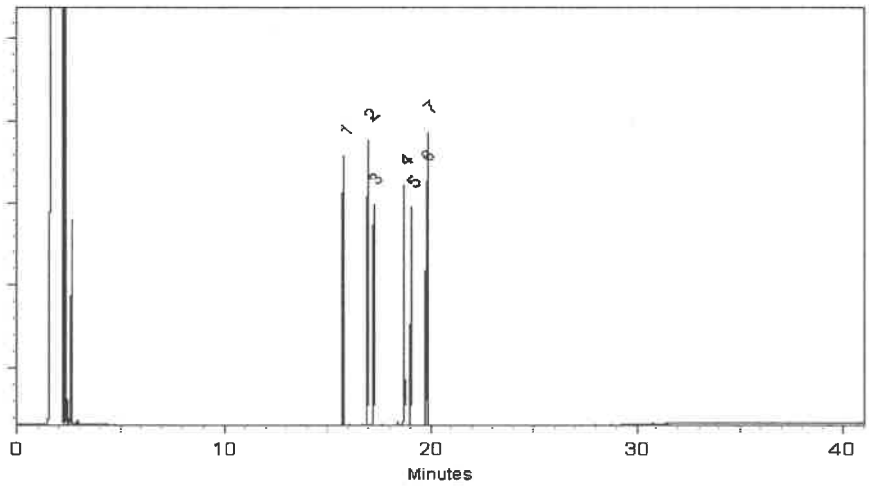
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



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

Penelope Riglin - Operations Tech I

Date Mixed: 09-Dec-2022 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 12-Dec-2022

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

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

P 12685 ↓ P 12689 (S)

7/24/23

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

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

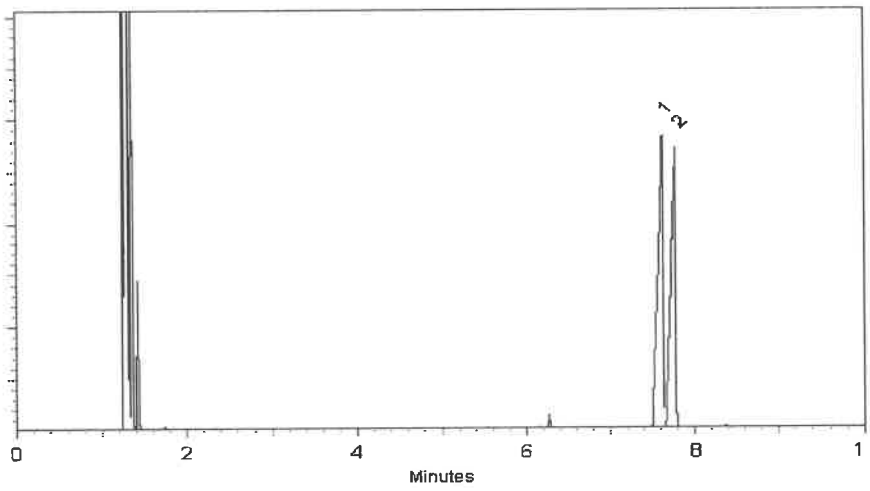
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



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

Morgan Craighead - Mix Technician

Date Mixed: 12-Jul-2023 **Balance Serial #** B442140311

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 19-Jul-2023

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

Agilent

Trusted Answers

P12706 ↓ P12715 (10)

ISO 17034

Reference Material Certificate

Product Information Sheet

Product Name: Chlorinated Methylated Herbicides Standard

Product Number: HBM-8151M-1

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

Lot Number: 0006752480

Lot Issue Date: 18-Jul-2023

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.

CSD-QA-015.2

ISO 17025
Cert No. AT-1937

Agilent

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 for information regarding this analytical reference material.

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

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

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

Sample lot approver:

Monica Bourgeois
QMS Representative

P12706 (10)
↓
P12715

8.15.23

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ISO 17034
REFERENCE MATERIAL PRODUCER

ISO 17034
Cert No. AR-1936

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

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

ISO 17025
Cert No. AT-1937

Agilent

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P12706 ↓ P12715 (10)

ISO 17034

Reference Material Certificate

Product Information Sheet

Product Name: Chlorinated Methylated Herbicides Standard

Product Number: HBM-8151M-1

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

Lot Number: 0006752480

Lot Issue Date: 18-Jul-2023

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.

CSD-QA-015.2

ISO 17025
Cert No. AT-1937

Agilent

Trusted Answers

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

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

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

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

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

Sample lot approver:

Monica Bourgeois
QMS Representative

P12706 (10)
↓
P12715

8.15.23

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ISO 17034
Cert No. AR-1936

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

www.agilent.com/quality/
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Cert No. AT-1937

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 32049 **Lot No.:** A0212676

Description : 2,4-Dichlorophenylacetic Acid Standard

2, 4-Dichlorophenyl Acetic Acid 200µg/mL, Methanol, 1mL/ampul

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

Expiration Date : March 31, 2027 **Storage:** 10°C or colder

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

P13497 ↓ P13515 } Y.P. 08/16/24

CERTIFIED VALUES

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

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

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

Specific Reference Material Notes:
Failure to derivatize this standard will lead to incorrect quantitative results.

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

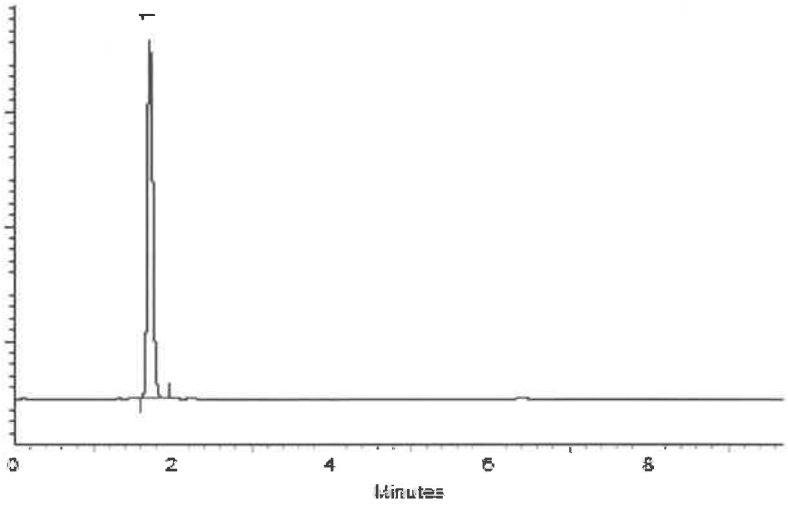
Mobile Phase A:
0.14% H3PO4 in water

Mobile Phase B:
acetonitrile

Mobile Phase Composition:
90%B Isocratic

Det. Type:
Wavelength: 220 & 254 nm

Inj. Vol
5µl



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

Ethan Winiarski - Operations Tech I

Date Mixed: 11-Jun-2024 **Balance Serial #** B345965662

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-Jun-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  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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Certificate of Analysis

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Testing Laboratory
Certificate #3222.02

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Catalog No. : 32049 **Lot No.:** A0212676

Description : 2,4-Dichlorophenylacetic Acid Standard

2, 4-Dichlorophenyl Acetic Acid 200µg/mL, Methanol, 1mL/ampul

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

Expiration Date : March 31, 2027 **Storage:** 10°C or colder

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

P13497 ↓ P13515 } Y.P. 08/16/24

CERTIFIED VALUES

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

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

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

Specific Reference Material Notes:
Failure to derivatize this standard will lead to incorrect quantitative results.

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

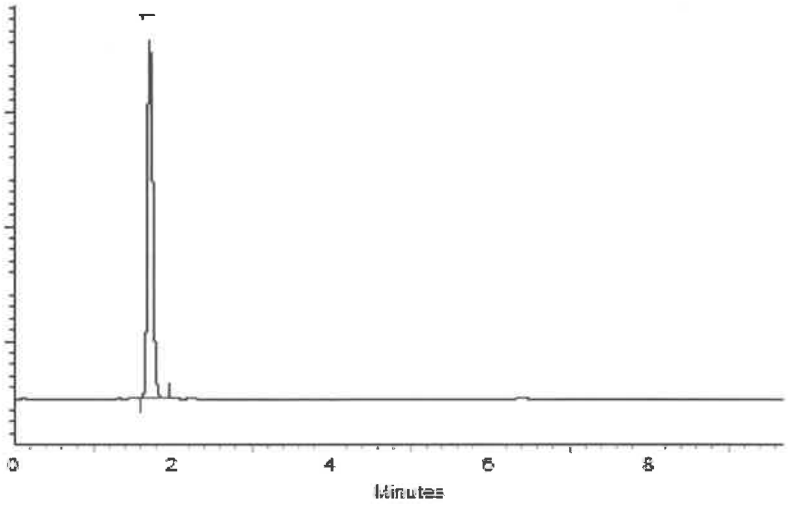
Mobile Phase A:
0.14% H3PO4 in water

Mobile Phase B:
acetonitrile

Mobile Phase Composition:
90%B Isocratic

Det. Type:
Wavelength: 220 & 254 nm

Inj. Vol
5µl



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

Ethan Winiarski - Operations Tech I

Date Mixed: 11-Jun-2024 **Balance Serial #** B345965662

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-Jun-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  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.

RESTEK
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

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 32049 **Lot No.:** A0212676

Description : 2,4-Dichlorophenylacetic Acid Standard

2, 4-Dichlorophenyl Acetic Acid 200µg/mL, Methanol, 1mL/ampul

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

Expiration Date : March 31, 2027 **Storage:** 10°C or colder

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

P13497 ↓ P13515 } Y.P. 08/16/24

CERTIFIED VALUES

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

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

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

Specific Reference Material Notes:
Failure to derivatize this standard will lead to incorrect quantitative results.

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

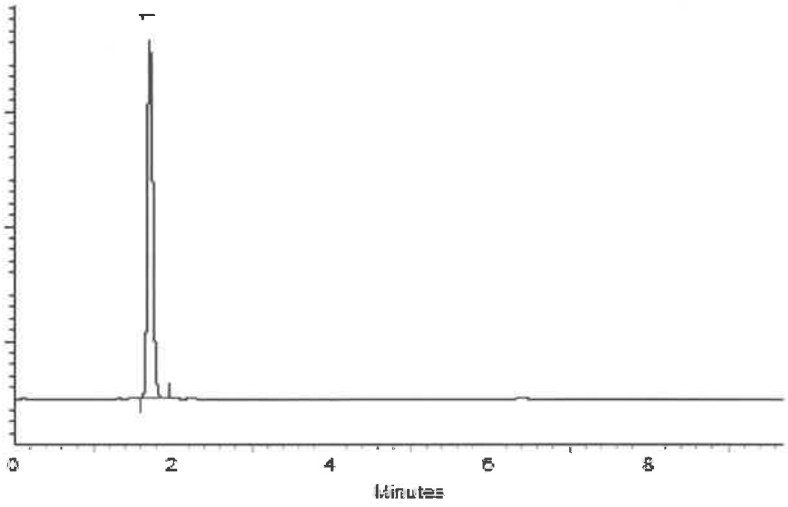
Mobile Phase A:
0.14% H3PO4 in water

Mobile Phase B:
acetonitrile

Mobile Phase Composition:
90%B Isocratic

Det. Type:
Wavelength: 220 & 254 nm

Inj. Vol
5µl



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

Ethan Winiarski - Operations Tech I

Date Mixed: 11-Jun-2024 **Balance Serial #** B345965662

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-Jun-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

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

Certified Uncertainty Value Notes:

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

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

  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

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chromatographic plus

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Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 32049 **Lot No.:** A0212676

Description : 2,4-Dichlorophenylacetic Acid Standard

2, 4-Dichlorophenyl Acetic Acid 200µg/mL, Methanol, 1mL/ampul

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

Expiration Date : March 31, 2027 **Storage:** 10°C or colder

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

P13497 ↓ P13515 } Y.P. 08/16/24

CERTIFIED VALUES

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

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

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

Specific Reference Material Notes:
Failure to derivatize this standard will lead to incorrect quantitative results.

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

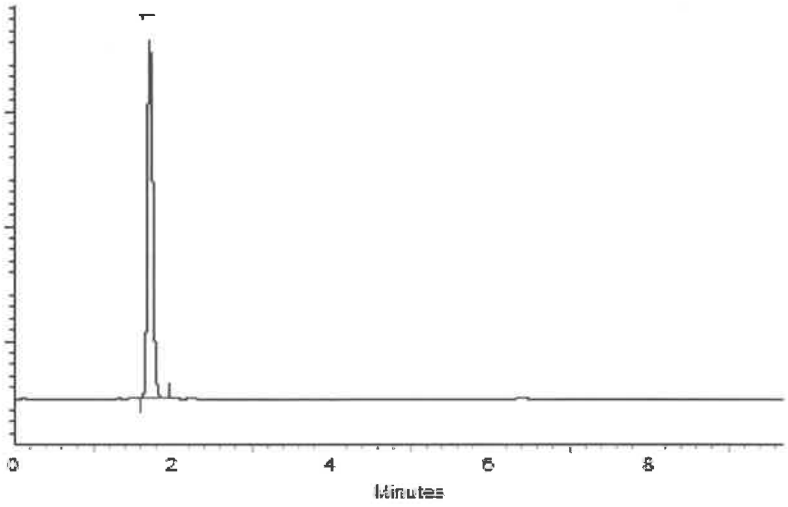
Mobile Phase A:
0.14% H3PO4 in water

Mobile Phase B:
acetonitrile

Mobile Phase Composition:
90%B Isocratic

Det. Type:
Wavelength: 220 & 254 nm

Inj. Vol
5µl



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Ethan Winiarski - Operations Tech I

Date Mixed: 11-Jun-2024 **Balance Serial #** B345965662

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-Jun-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

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- 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:

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  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.

(18)

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ISO 17034

Reference Material Certificate

Product Information Sheet

Product Name:	Chlorinated Herbicides Standard	**Lot Number:**	0006810955
Product Number:	HBM-8151A-1	**Lot Issue Date:**	20-Aug-2024
Storage Conditions:	Store at Room Temperature (15° to 30°C).	**Expiration Date:**	30-Sep-2026

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

Matrix: methanol (methyl alcohol)

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

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

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

P13520 ↓ P13536 (18)

CSD-QA-015.2

9/4/2024

ISO 17025
Cert No. AT-1937

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(18)

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Trusted Answers

ISO 17034

Reference Material Certificate

Product Information Sheet

Product Name:	Chlorinated Herbicides Standard	**Lot Number:**	0006810955
Product Number:	HBM-8151A-1	**Lot Issue Date:**	20-Aug-2024
Storage Conditions:	Store at Room Temperature (15° to 30°C).	**Expiration Date:**	30-Sep-2026

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

Matrix: methanol (methyl alcohol)

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

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

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

P13520 ↓ P13536 (18)

CSD-QA-015.2

9/4/2024

ISO 17025
Cert No. AT-1937

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(18)

Agilent
Trusted Answers

ISO 17034

Reference Material Certificate

Product Information Sheet

Product Name:	Chlorinated Herbicides Standard	**Lot Number:**	0006810955
Product Number:	HBM-8151A-1	**Lot Issue Date:**	20-Aug-2024
Storage Conditions:	Store at Room Temperature (15° to 30°C).	**Expiration Date:**	30-Sep-2026

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2,4-DB	100.1	±	0.5 µg/mL	000094-82-6	RM02866
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dicamba	100.3	±	0.5 µg/mL	001918-00-9	RM22113
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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
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silvex	100.5	±	0.5 µg/mL	000093-72-1	RM22116
2,4,5-T	100.3	±	0.5 µg/mL	000093-76-5	RM19314

Matrix: methanol (methyl alcohol)

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

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

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

P13520 ↓ P13536 (18)

CSD-QA-015.2

9/4/2024

ISO 17025
Cert No. AT-1937

250 Smith Street North Kingstown, Rhode Island 02852 www.agilent.com/quality

SHIPPING DOCUMENTS

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO. Q1216
QUOTE NO.
COC Number 2041068

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: RU2 Engineering LLC
ADDRESS: 2 Melinda Drive, Monroe Twp, NJ 08831
CITY STATE: ZIP:
ATTENTION: Ruta Manani
PHONE: 609-409-4564 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: SANDTWOBR BMCR Project
PROJECT NO.: LOCATION: Brooklyn, NYC
PROJECT MANAGER: Ruta Manani
e-mail: Rmanani@Ru2eng.com
PHONE: FAX:

CLIENT BILLING INFORMATION

BILL TO: Same as Company address PO#:
ADDRESS:
CITY STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX (RUSH) Standard 10 days DAYS*
HARDCOPY (DATA PACKAGE): Standard 10 days DAYS*
EDD: Standard 10 days DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

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

ANALYSIS

1 TCL VOC + TICs MTBE TBA
2 TCLP VOCs
3 TPH GRO - DRO
4 TCL SVOCs + TICs
5 TAL Metals
6 Pesticides, PCBs
7 RCRA characteristics
8 Paint filter
9 full TCLP

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES 1	2	3	4	5	6	7	8	9	COMMENTS
1.	JPP-18.1-012825	Soil		G	1/28/25	8:35	3	X	X	X							
2.	JPP-18.1-012825	Soil	C		1/28/25	8:41	7			X	X	X	X	X	X	X	
3.	JPP-21.1-012825	Soil		G	1/28/25	9:25	3	X	X	X							
4.	JPP-21.1-012825	Soil	C		1/28/25	9:30	7			X	X	X	X	X	X	X	
5.	JPP-21.2-012825	Soil		G	1/28/25	10:44	3	X	X	X							
6.	JPP-21.2-012825	Soil	C		1/28/25	10:50	7			X	X	X	X	X	X	X	
7.	JPP-26.1-012825	Soil		G	1/28/25	11:28	3	X	X	X							
8.	JPP-26.1-012825	Soil	C		1/28/25	11:35	7			X	X	X	X	X	X	X	
9.	JPP-26.2-012825	Soil		G	1/28/25	13:20	3	X	X	X							
10.	JPP-26.2-012825	Soil	C		1/28/25	13:32	7			X	X	X	X	X	X	X	

PRESERVATIVES: A-HCl B-HNO3 C-H2SO4 D-NaOH E-ICE F-OTHER

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

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1. AA	1/29/2025	1. 1045 1-29-25
2.		2.
3.	1614 1.29.25	3.

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 2.8 °C
Comments: Preserve extra sample jar if additional analysis is Required

Page 1 of 2

CLIENT: ☐ Hand Delivered ☐ Other
CHEMTECH: ☐ Picked Up ☐ Field Sampling

Shipment Complete ☐ YES ☐ NO

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1216 RUTW01
Client Name : RU2 Engineering, LLC
Client Contact : Rutu Manani
Invoice Name : RU2 Engineering, LLC
Invoice Contact : Rutu Manani

Order Date : 1/29/2025 11:54:00 AM
Project Name : SANDTWOBR BMCR Bro
Receive DateTime : 1/29/2025 4:14:00 PM
Purchase Order :

YG
02/03/25
NYCDDC SANTWOBR Brooklyn Bridge BBMCR

Project Mgr :
Report Type : NYS ASP B
EDD Type : Excel NY
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1216-01	JPP-18.1-012825	Solid	01/28/2025	08:35					
					VOCMS Group1		8260D		10 Bus. Days
Q1216-05	JPP-21.1-012825	Solid	01/28/2025	09:25					
					VOCMS Group1		8260D		10 Bus. Days
Q1216-09	JPP-21.2-012825	Solid	01/28/2025	10:44					
					VOCMS Group1		8260D		10 Bus. Days
Q1216-13	JPP-26.1-012825	Solid	01/28/2025	11:28					
					VOCMS Group1		8260D		10 Bus. Days
Q1216-17	JPP-26.2-012825	Solid	01/28/2025	13:20					
					VOCMS Group1		8260D		10 Bus. Days

Relinguished By:
Date / Time : 1-29-25 1700

Received By :
Date / Time : 1-29-25 17:00

Storage Area : VOA Refridgerator Room

Samples in Sm Frig @1700.