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 : Q1242

ATTENTION : Rutu Manani

Laboratory Certification ID # 20012

Table Of Contents for Q1242

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

Cover Page

Order ID : Q1242

Project ID : NYCDDC SANTWOBR Brooklyn Bridge BBMCR

Client : RU2 Engineering, LLC

Lab Sample Number	Client Sample Number
Q1242-01	JPP-6.2-013025
Q1242-02	JPP-6.2-013025
Q1242-03	JPP-6.2-013025
Q1242-04	JPP-6.2-013025

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 : APPROVED
By Nimisha Pandya, QA/QC Supervisor at 11:48 am, Feb 14, 2025

Date: 2/7/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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

CASE NARRATIVE

RU2 Engineering, LLC
Project Name: NYCDDC SANTWOBR Brooklyn Bridge BBMCR
Project # N/A
Chemtech Project # Q1242
Test Name: TCLP Herbicide

A. Number of Samples and Date of Receipt:
4 Solid samples were received on 01/30/2025.

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.

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

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_____ APPROVED
By Nimisha Pandya, QA/QC Supervisor at 11:49 am, Feb 14, 2025

284 Sheffield Street, Mountainside NJ 07092 Tel.
908-789-8900 Fax: 908-789-8922

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

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

GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: Q1242 MATRIX: TCLP

METHOD: 8151A/3510/1311

		NA	NO	YES
1.	Chromatograms Labeled/Compounds Identified.			✓
2.	Standard Summary Submitted.			✓
3.	Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis, 12 HOURS IF 8000 SERIES METHOD. The Initial Calibration met the requirements . The Continuous Calibration met the requirements .			✓
4.	Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
5.	Surrogate Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable ranges.			✓
6.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable range. The MS recoveries met the requirements for all compounds . The MSD recoveries met the acceptable requirements . The Blank Spike met requirements for all samples . The RPD met criteria .			✓
7.	Retention Time Shift Meet Criteria (if applicable) Comments:			✓
8.	Extraction Holding Time Met If not met, list number of days exceeded for each sample:			✓
9.	Analysis Holding Time Met If not met, list those compounds and their recoveries which fall outside the acceptable range.			✓

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

GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)

NA NO YES

ADDITIONAL COMMENTS:

QA REVIEW

REVIEWED
By Sohil Jodhani, QA/QC Director at 10:38 am, Feb 14, 2025

Date

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1242

	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:** 02/07/2025

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

LAB CHRONICLE

OrderID:	Q1242	**OrderDate:**	1/30/2025 3:02:00 PM
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
Q1242-01	**JPP-6.2-013025**	**SOIL**			**01/30/25**			**01/30/25**
			Diesel Range Organics	8015D		01/31/25	01/31/25	
			Gasoline Range Organics	8015D			01/31/25	
Q1242-04	**JPP-6.2-013025**	**TCLP**			**01/30/25**			**01/30/25**
			TCLP Herbicide	8151A		02/03/25	02/03/25	

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

Hit Summary Sheet
SW-846

SDG No.: Q1242 **Order ID:** Q1242

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

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

Surrogate Summary

SDG No.: Q1242

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-PS029046.D	PIBLK-PS029046.D	2,4-DCAA	1	500	484	97		39	175
		2,4-DCAA	2	500	446	89		39	175
PB166485BL	PB166485BL	2,4-DCAA	1	500	498	100		39	175
		2,4-DCAA	2	500	452	90		39	175
PB166485BS	PB166485BS	2,4-DCAA	1	500	526	105		39	175
		2,4-DCAA	2	500	467	93		39	175
PB166423TB	PB166423TB	2,4-DCAA	1	500	497	99		39	175
		2,4-DCAA	2	500	363	73		39	175
Q1241-04MS	JPP-3.5-013025MS	2,4-DCAA	1	500	558	112		39	175
		2,4-DCAA	2	500	366	73		39	175
Q1241-04MSD	JPP-3.5-013025MSD	2,4-DCAA	1	500	567	113		39	175
		2,4-DCAA	2	500	374	75		39	175
Q1242-04	JPP-6.2-013025	2,4-DCAA	1	500	634	127		39	175
		2,4-DCAA	2	500	403	81		39	175
I.BLK-PS029059.D	PIBLK-PS029059.D	2,4-DCAA	1	500	492	98		39	175
		2,4-DCAA	2	500	457	91		39	175

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

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1242

Client: RU2 Engineering, LLC

Analytical Method: 8151A **DataFile :** PS029052.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-3.5-013025MS**											
Q1241-04MS	2,4-D	50	0	52.8	ug/L	106				65	135	
	2,4,5-TP(Silvex)	50	0	51.0	ug/L	102				62	139	

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

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1242

Client: RU2 Engineering, LLC

Analytical Method: 8151A **DataFile :** PS029053.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-3.5-013025MSD**											
Q1241-04MSD	2,4-D	50	0	53.3	ug/L	107		1		65	135	20
	2,4,5-TP(Silvex)	50	0	51.7	ug/L	103		1		62	139	20

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

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1242

Client: RU2 Engineering, LLC

Analytical Method: 8151A **Datafile :** PS029049.D

Lab Sample ID	Parameter	Spike	Result	Units	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	RPD
PB166485BS	2,4-D	5	5.00	ug/L	100				83	130	
	2,4,5-TP(Silvex)	5	5.10	ug/L	102				78	127	

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

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB166485BL

Lab Name: CHEMTECH Contract: RUTW01

Lab Code: CHEM Case No.: Q1242 SAS No.: Q1242 SDG NO.: Q1242

Lab Sample ID: PB166485BL Lab File ID: PS029048.D

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

Sulfur Cleanup: (Y/N) N Date Extracted: 02/03/2025

Date Analyzed (1): 02/03/2025 Date Analyzed (2): 02/03/2025

Time Analyzed (1): 16:09 Time Analyzed (2): 16:09

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
PB166485BS	PB166485BS	PS029049.D	02/03/2025	02/03/2025
PB166423TB	PB166423TB	PS029050.D	02/03/2025	02/03/2025
JPP-3.5-013025MS	Q1241-04MS	PS029052.D	02/03/2025	02/03/2025
JPP-3.5-013025MSD	Q1241-04MSD	PS029053.D	02/03/2025	02/03/2025
JPP-6.2-013025	Q1242-04	PS029058.D	02/03/2025	02/03/2025

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:	02/03/25
Client Sample ID:	PB166423TB	SDG No.:	Q1242
Lab Sample ID:	PB166423TB	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
PS029050.D	1	02/03/25 09:00	02/03/25 16:57	PB166485

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	497		39 - 175	99%	SPK: 500

Comments:

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

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

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS020325\
Data File : PS029050.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 03 Feb 2025 16:57
Operator : AR\AJ
Sample : PB166423TB
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
PB166423TB

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 04 01:10:40 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	7.668	1382.7E6	404.9E6	496.648	362.909	#
	Target Compounds							

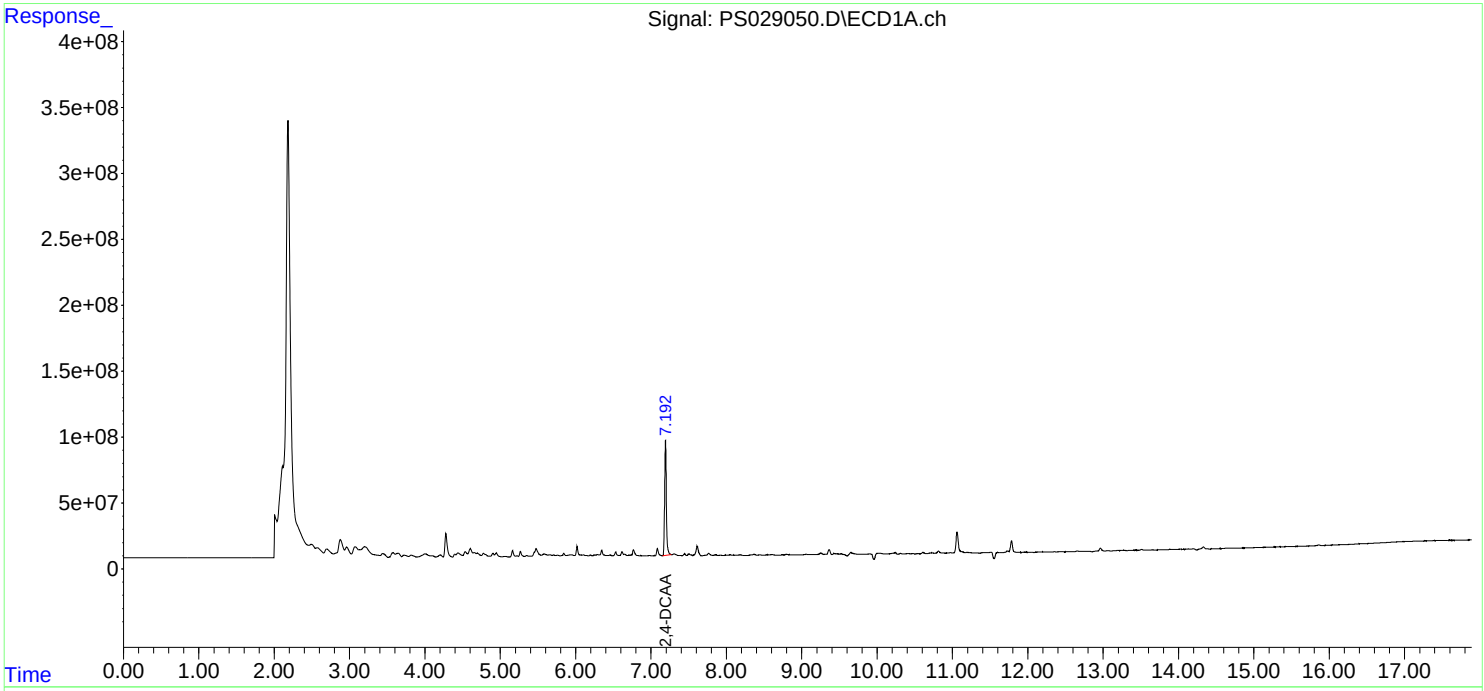
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

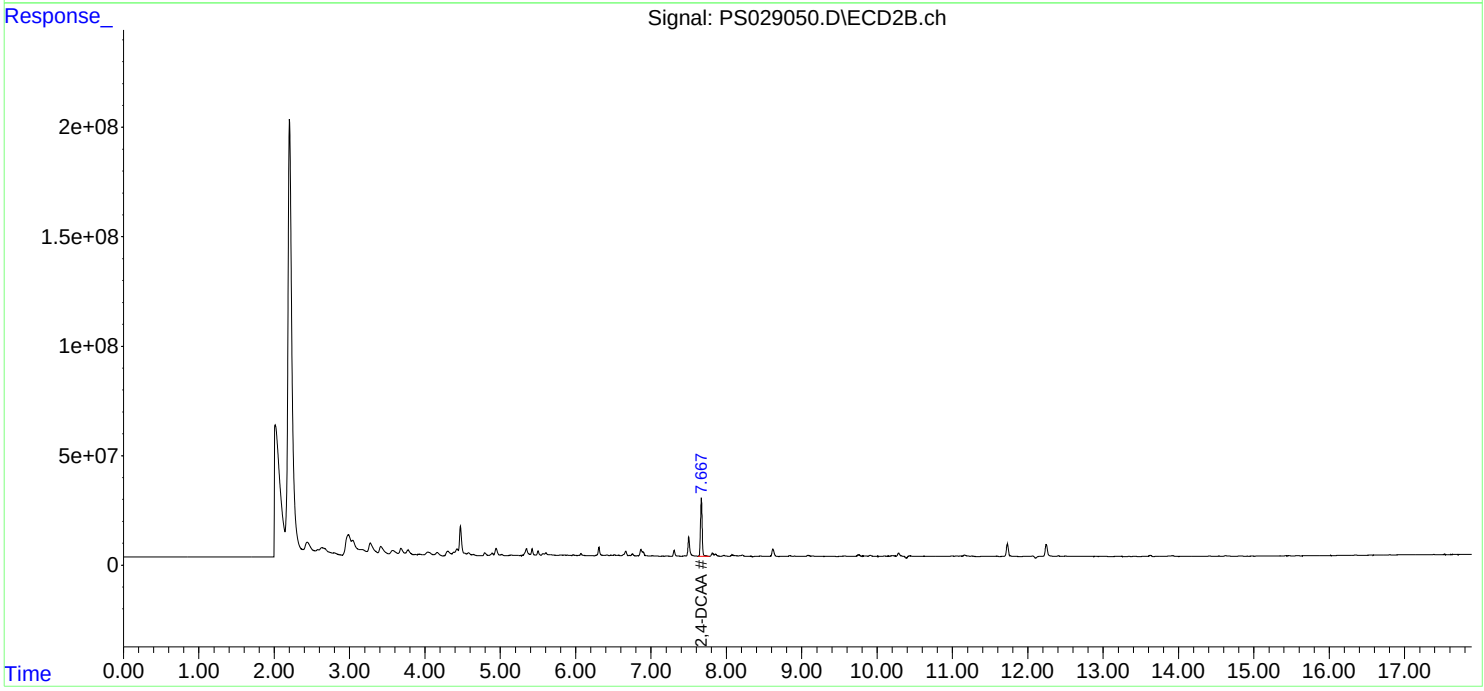
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS020325\
Data File : PS029050.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 03 Feb 2025 16:57
Operator : AR\AJ
Sample : PB166423TB
Misc :
ALS Vial : 6 Sample Multiplier: 1

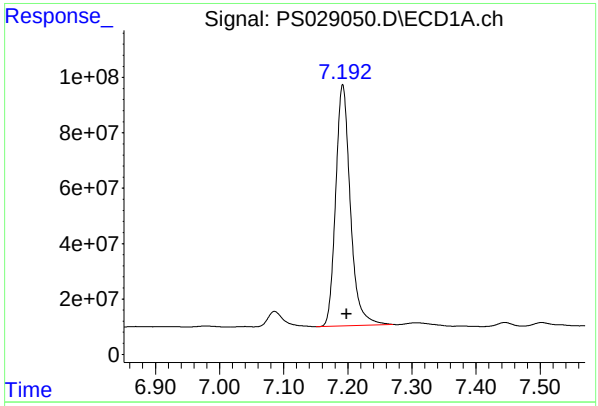
Instrument :
ECD_S
ClientSampleId :
PB166423TB

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 04 01:10:40 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



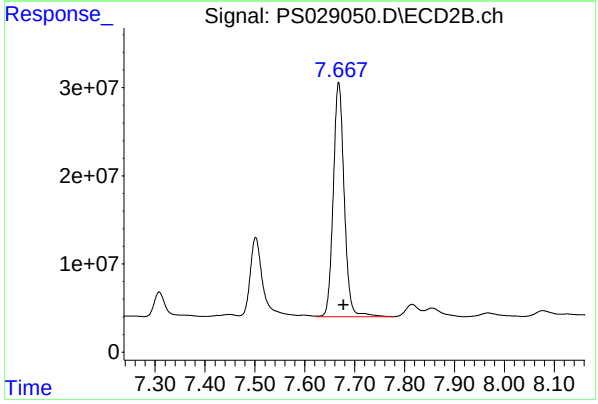




#4 2,4-DCAA

R.T.: 7.192 min
Delta R.T.: -0.006 min
Response: 1382673704
Conc: 496.65 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB166423TB



#4 2,4-DCAA

R.T.: 7.668 min
Delta R.T.: -0.010 min
Response: 404938871
Conc: 362.91 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:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-6.2-013025	SDG No.:	Q1242
Lab Sample ID:	Q1242-04	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
PS029058.D	1	02/03/25 09:00	02/03/25 20:09	PB166485

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	634		39 - 175	127%	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\PS020325\
Data File : PS029058.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 03 Feb 2025 20:09
Operator : AR\AJ
Sample : Q1242-04
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
JPP-6.2-013025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 04 01:14:18 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	7.193	7.669	1764.4E6	449.8E6	633.762	403.104	#
	Target Compounds							

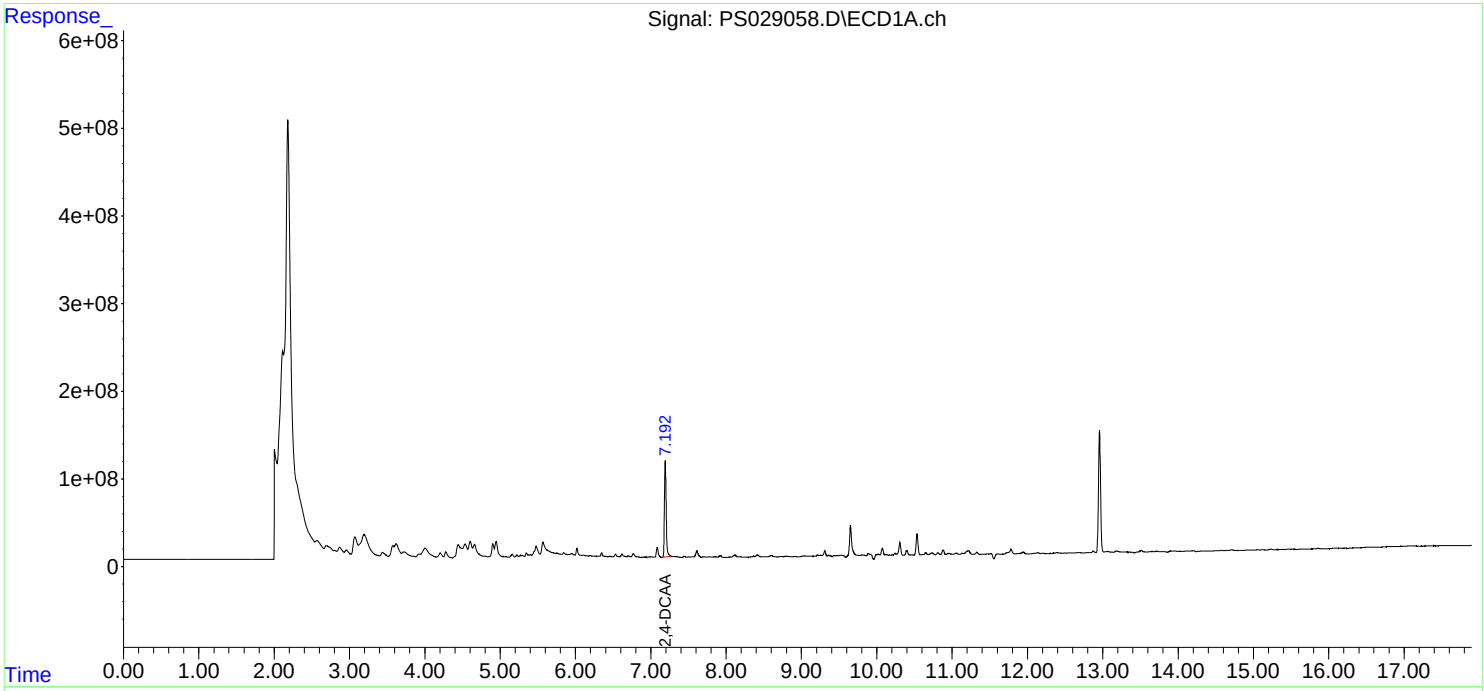
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

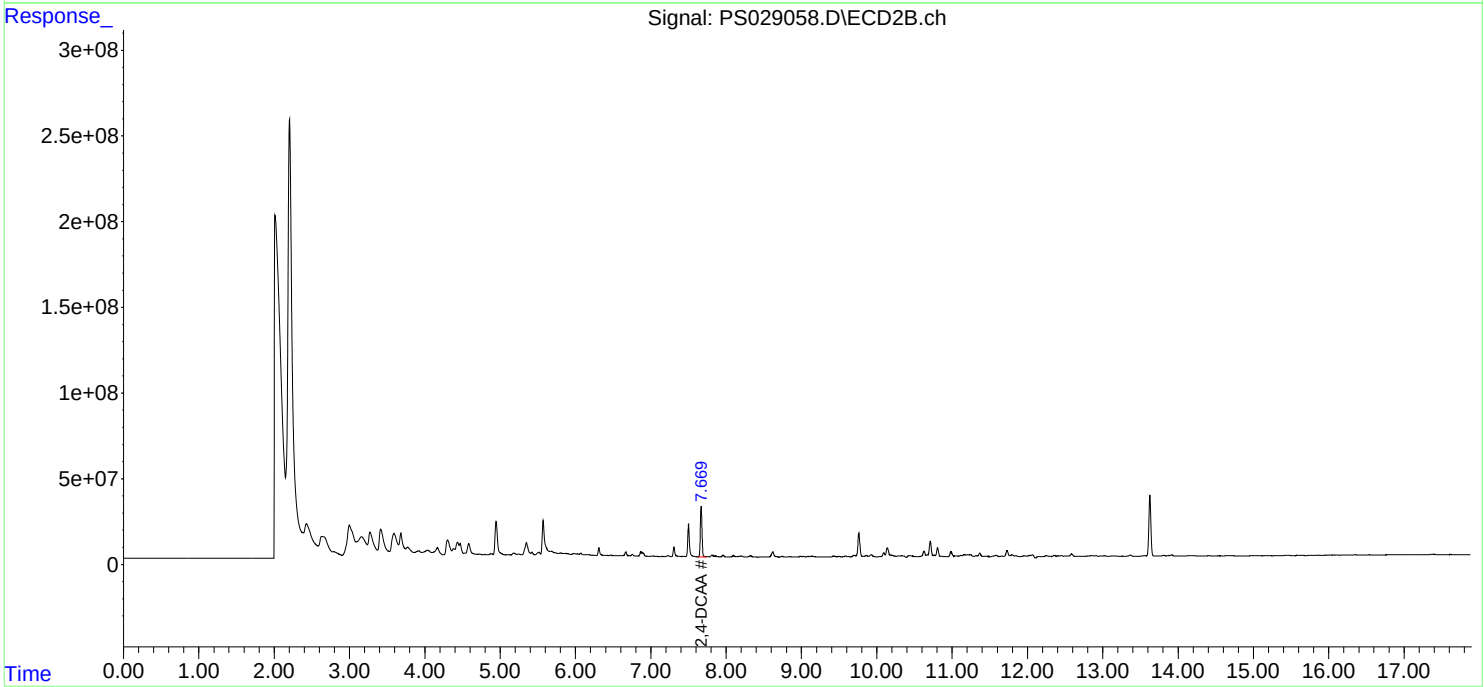
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS020325\
Data File : PS029058.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 03 Feb 2025 20:09
Operator : AR\AJ
Sample : Q1242-04
Misc :
ALS Vial : 14 Sample Multiplier: 1

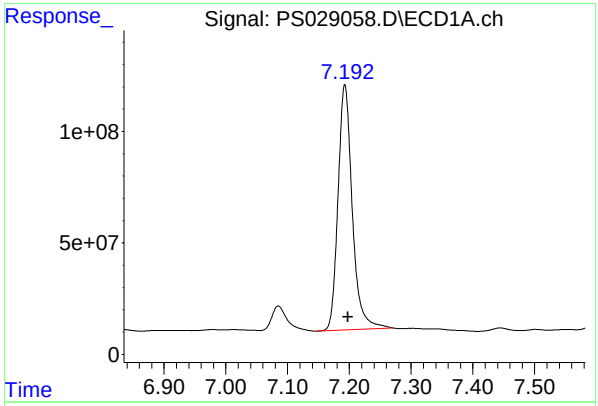
Instrument :
ECD_S
ClientSampleId :
JPP-6.2-013025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 04 01:14:18 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



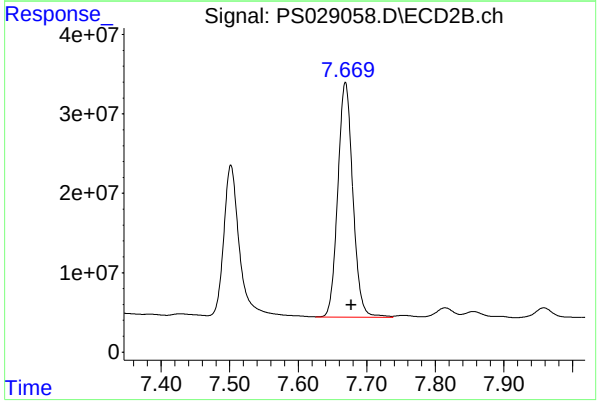




#4 2,4-DCAA

R.T.: 7.193 min
Delta R.T.: -0.005 min
Response: 1764402195
Conc: 633.76 ng/ml

Instrument :
ECD_S
ClientSampleId :
JPP-6.2-013025



#4 2,4-DCAA

R.T.: 7.669 min
Delta R.T.: -0.009 min
Response: 449789232
Conc: 403.10 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.:** Q1242 **SAS No.:** Q1242 **SDG NO.:** Q1242

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

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.:** Q1242 **SAS No.:** Q1242 **SDG NO.:** Q1242

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

Alliance TECHNICAL GROUP
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.:** Q1242 **SAS No.:** Q1242 **SDG NO.:** Q1242

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

Alliance TECHNICAL GROUP
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.:** Q1242 **SAS No.:** Q1242 **SDG NO.:** Q1242

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

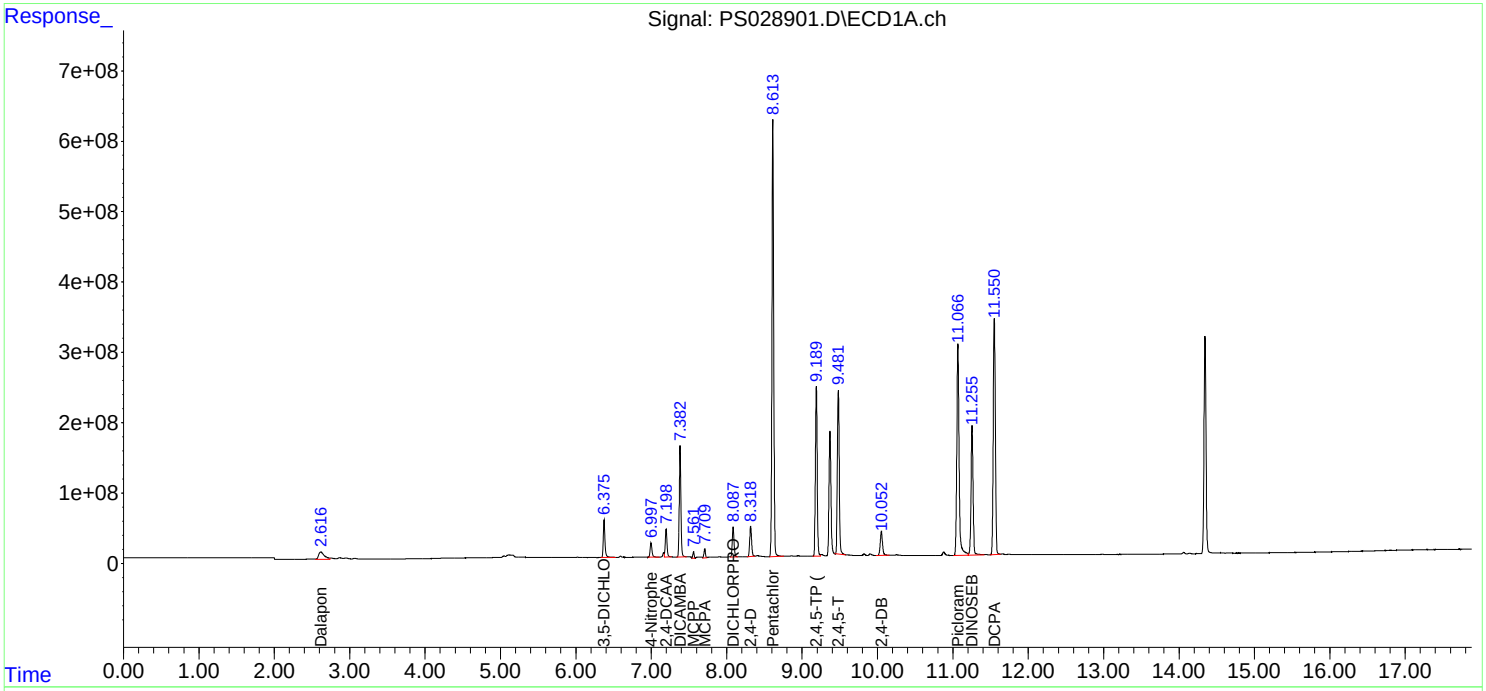
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

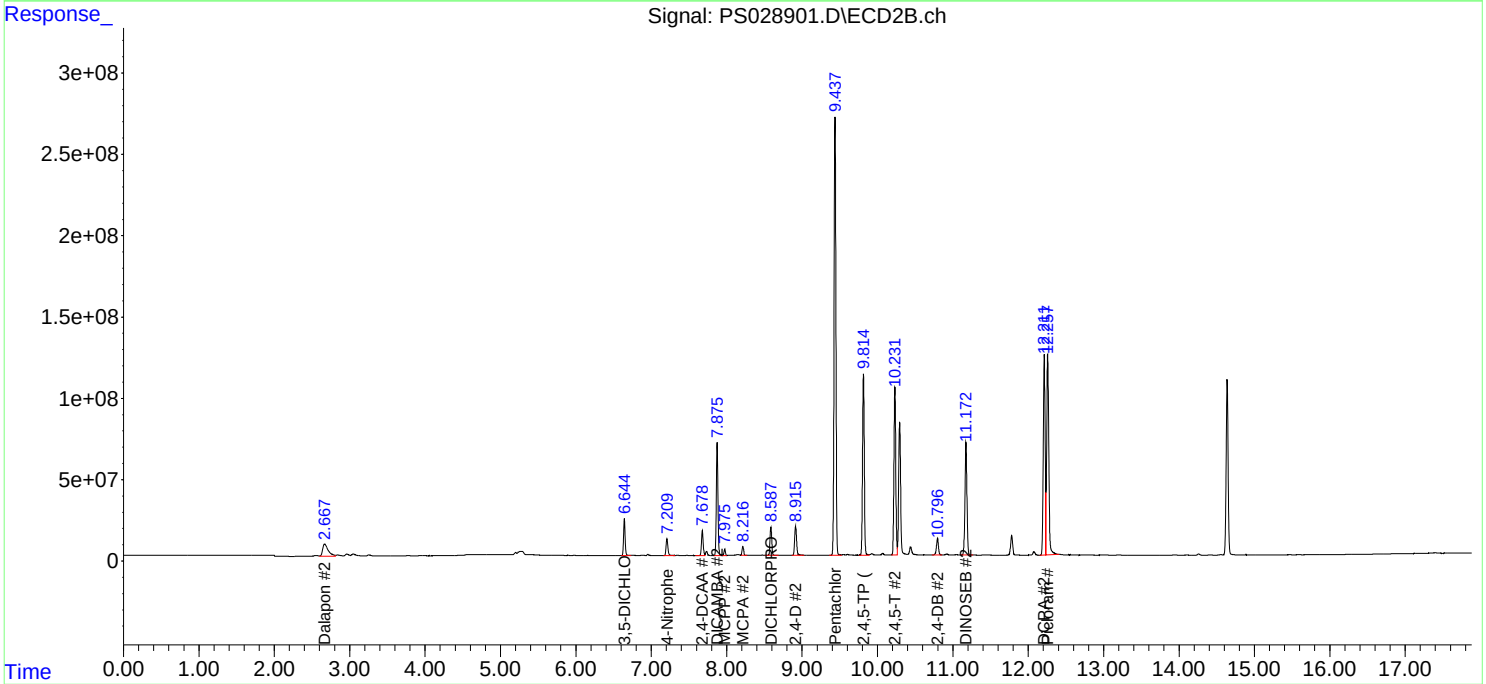
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS011425\
Data File : PS028901.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Jan 2025 10:31
Operator : AR\AJ
Sample : HSTDICC200
Misc :
ALS Vial : 3 Sample Multiplier: 1

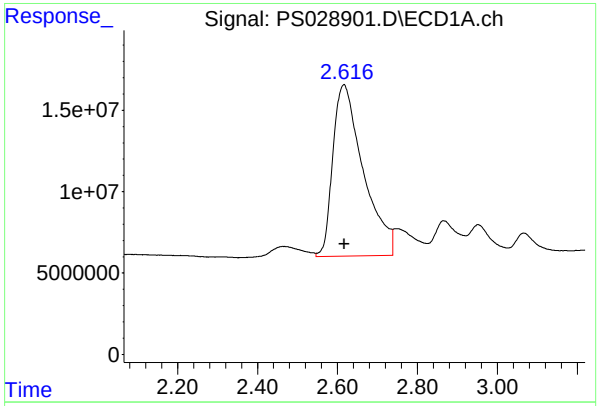
Instrument :
ECD_S
ClientSampleId :
HSTDICC200

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



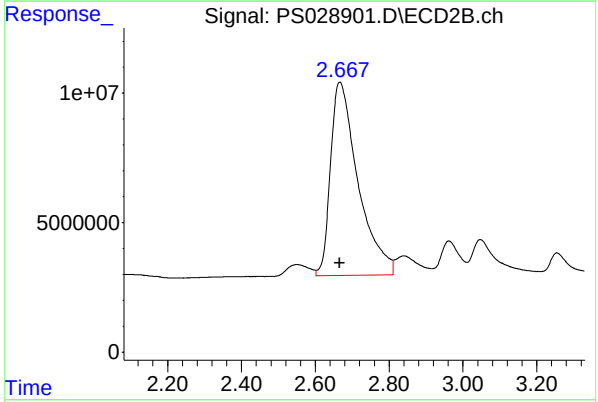




#1 Dalapon

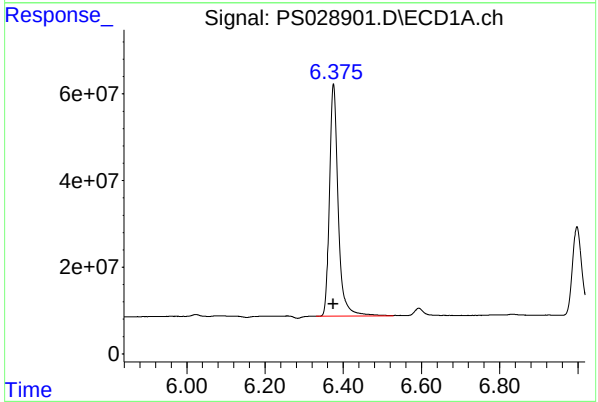
R.T.: 2.617 min
Delta R.T.: 0.000 min
Response: 555991432
Conc: 184.94 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC200



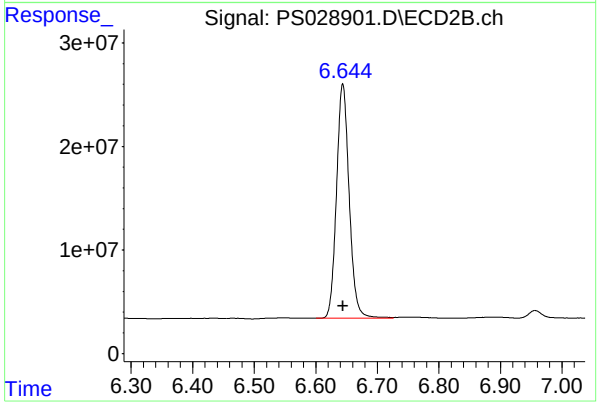
#1 Dalapon

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



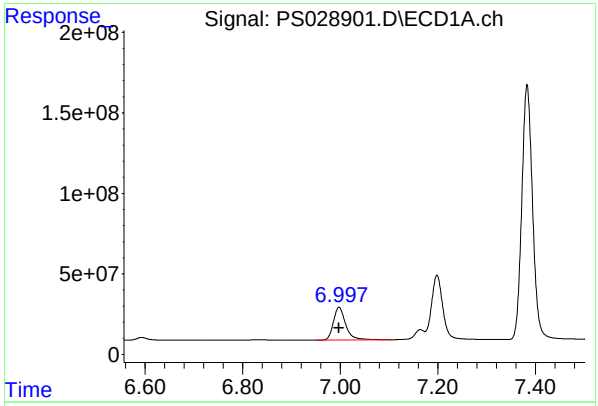
#2 3,5-DICHLOROBENZOIC ACID

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



#2 3,5-DICHLOROBENZOIC ACID

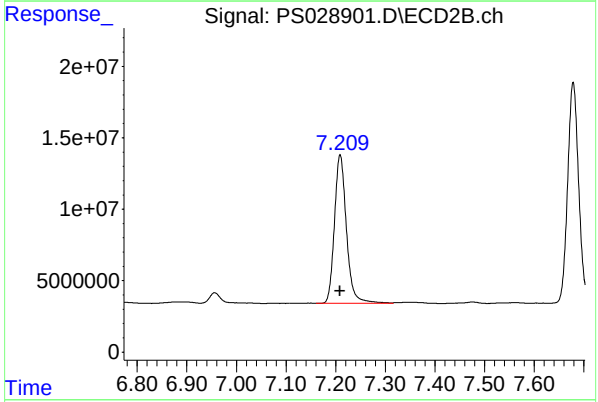
R.T.: 6.644 min
Delta R.T.: 0.000 min
Response: 323964765
Conc: 192.11 ng/ml



#3 4-Nitrophenol

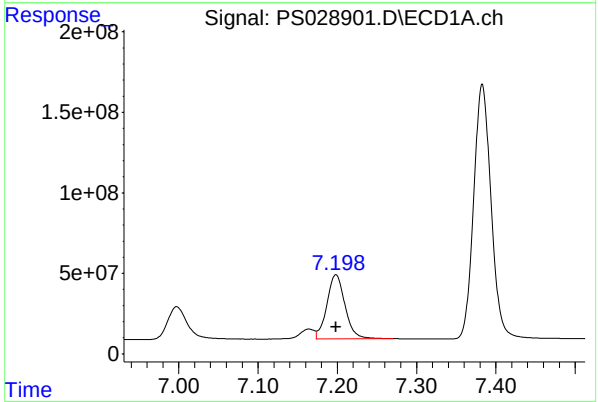
R.T.: 6.997 min
Delta R.T.: 0.000 min
Response: 352019894
Conc: 192.73 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC200



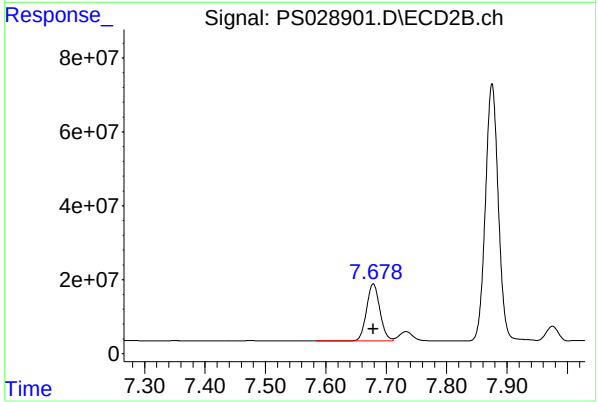
#3 4-Nitrophenol

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



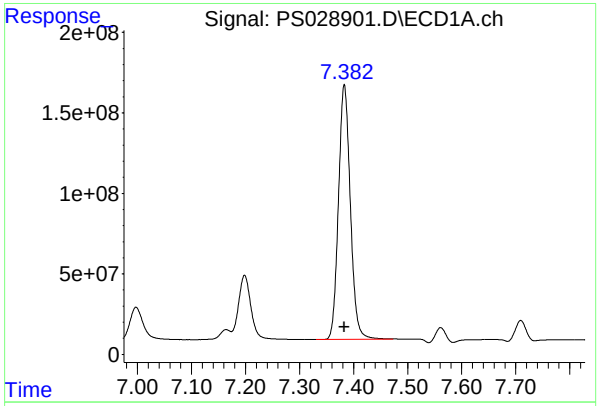
#4 2,4-DCAA

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



#4 2,4-DCAA

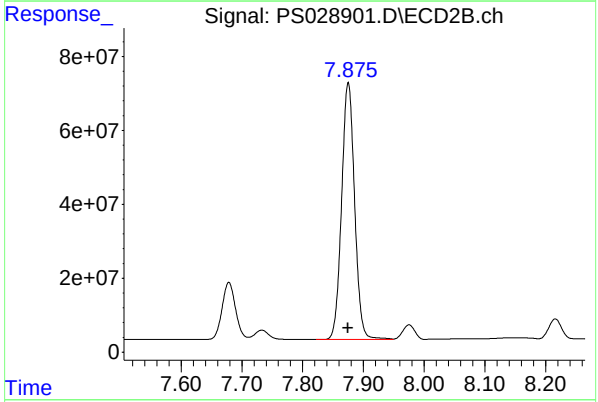
R.T.: 7.679 min
Delta R.T.: 0.000 min
Response: 237909654
Conc: 208.25 ng/ml



#5 DICAMBA

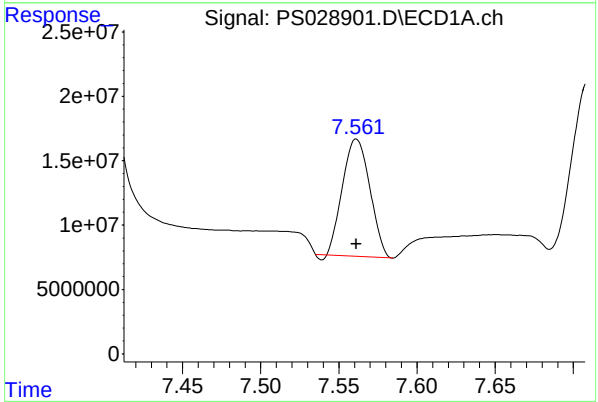
R.T.: 7.383 min
Delta R.T.: 0.000 min
Response: 2411181004
Conc: 197.79 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC200



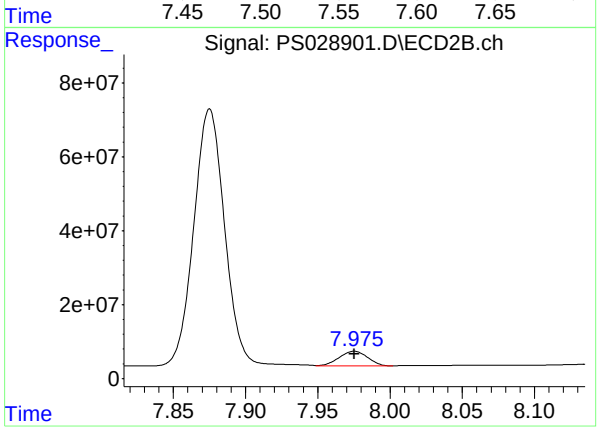
#5 DICAMBA

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



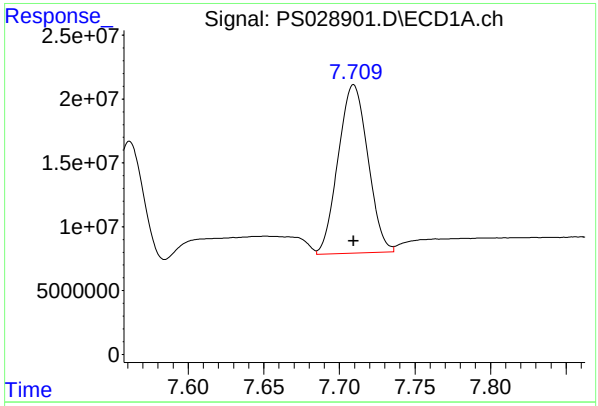
#6 MCPP

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



#6 MCPP

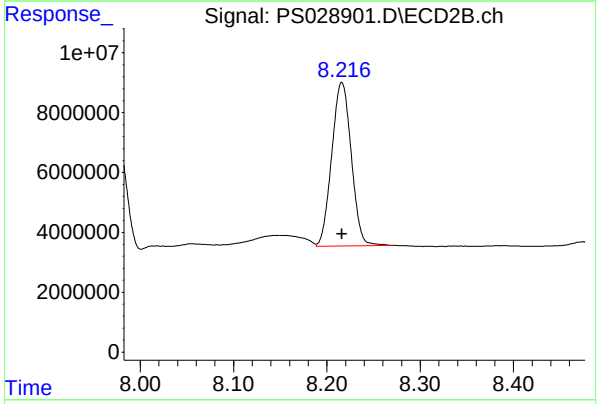
R.T.: 7.975 min
Delta R.T.: 0.000 min
Response: 54294236
Conc: 18.26 ug/ml



#7 MCPA

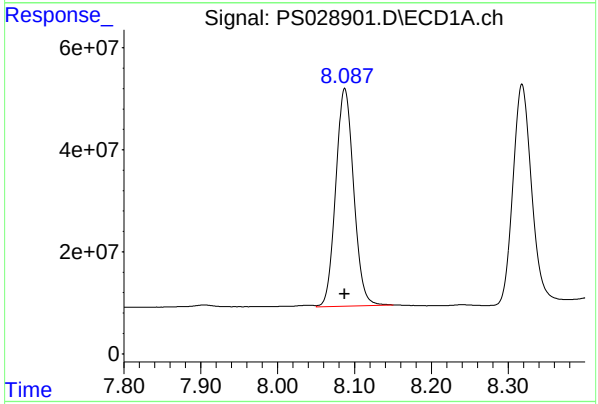
R.T.: 7.709 min
Delta R.T.: 0.000 min
Response: 180716111
Conc: 18.38 ug/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC200



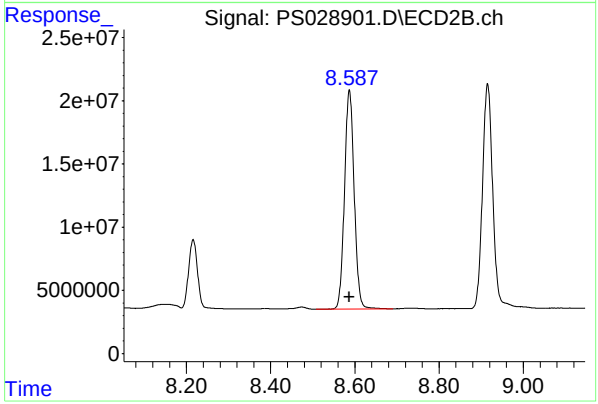
#7 MCPA

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



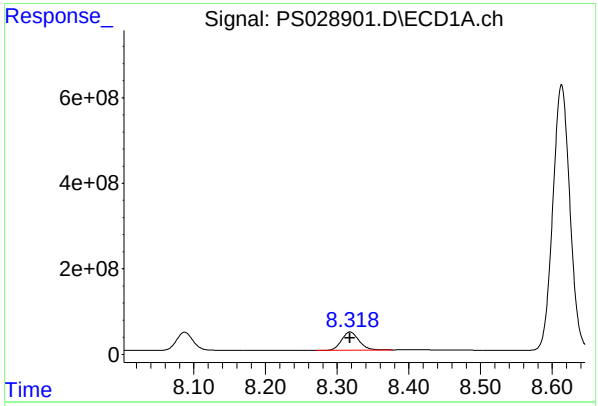
#8 DICHLORPROP

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



#8 DICHLORPROP

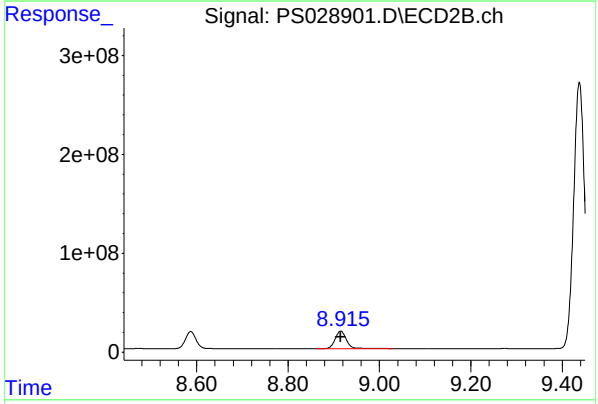
R.T.: 8.587 min
Delta R.T.: 0.000 min
Response: 277889937
Conc: 193.74 ng/ml



#9 2,4-D

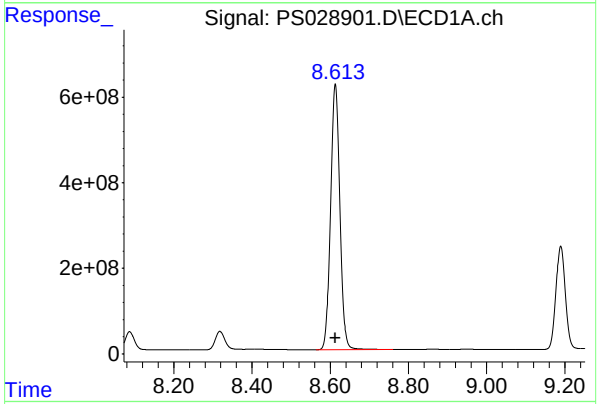
R.T.: 8.318 min
Delta R.T.: 0.000 min
Response: 713408528
Conc: 202.88 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC200



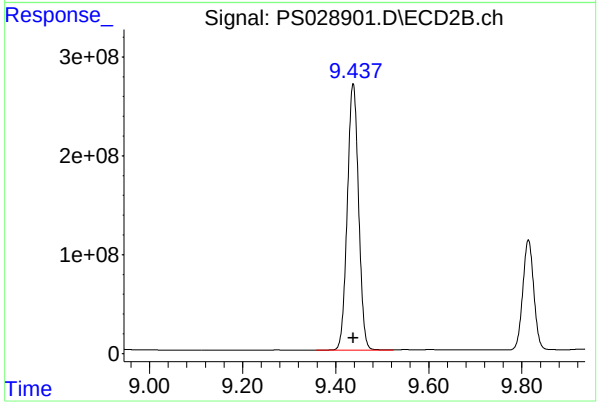
#9 2,4-D

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



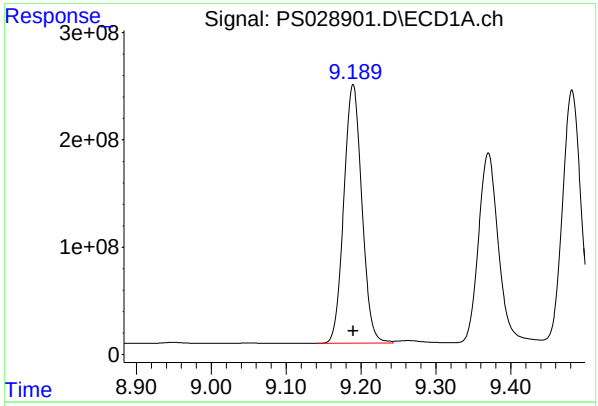
#10 Pentachlorophenol

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



#10 Pentachlorophenol

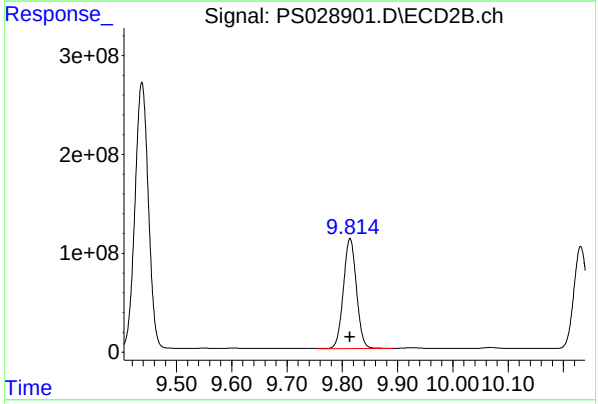
R.T.: 9.438 min
Delta R.T.: 0.000 min
Response: 4528045122
Conc: 193.00 ng/ml



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

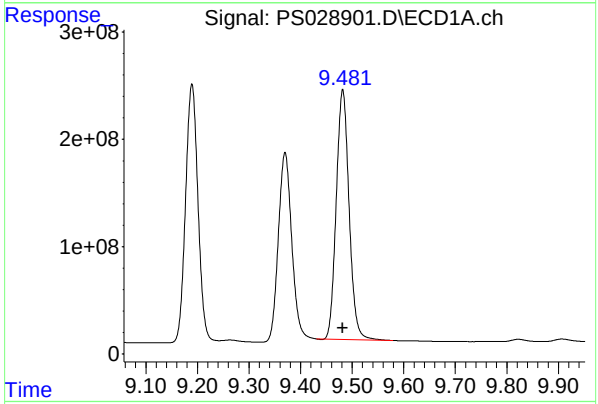
R.T.: 9.189 min
Delta R.T.: 0.000 min
Response: 4036785566
Conc: 203.41 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC200



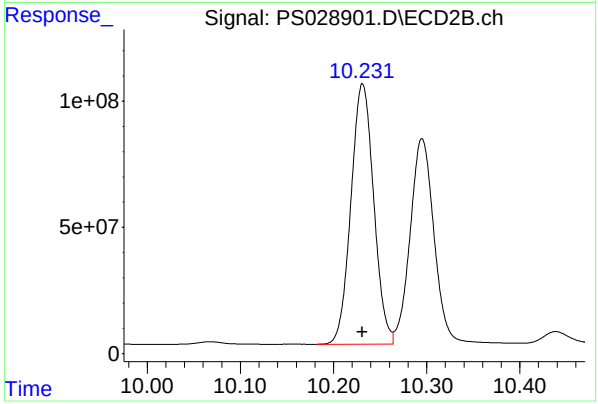
#11 2,4,5-TP (SILVEX)

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



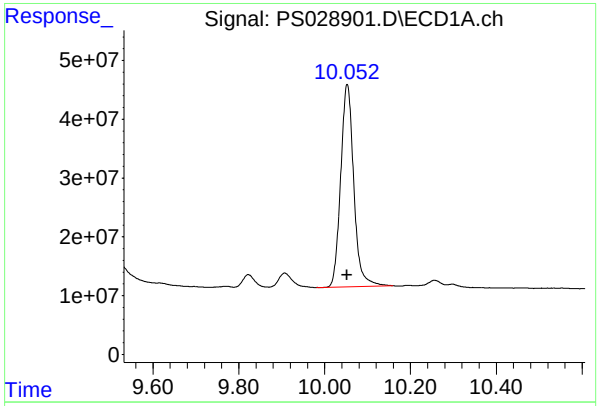
#12 2,4,5-T

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



#12 2,4,5-T

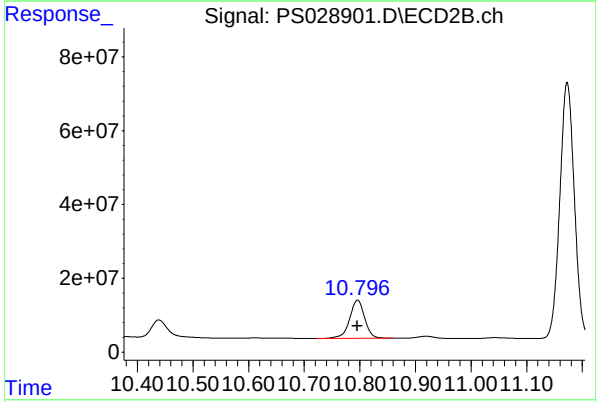
R.T.: 10.231 min
Delta R.T.: 0.000 min
Response: 1754365931
Conc: 192.50 ng/ml



#13 2,4-DB

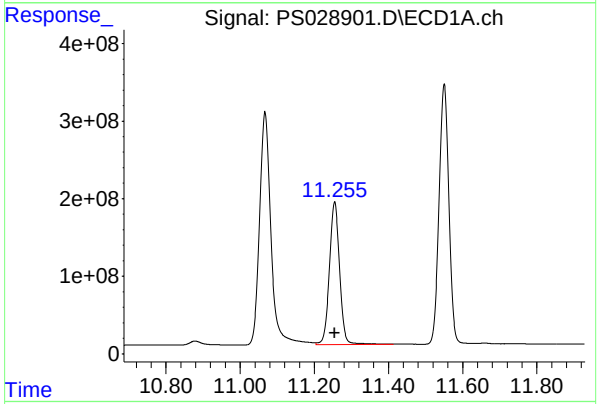
R.T.: 10.053 min
Delta R.T.: 0.000 min
Response: 727478115
Conc: 199.80 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC200



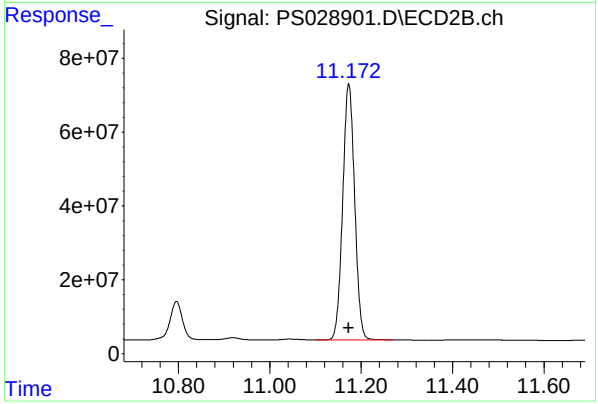
#13 2,4-DB

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



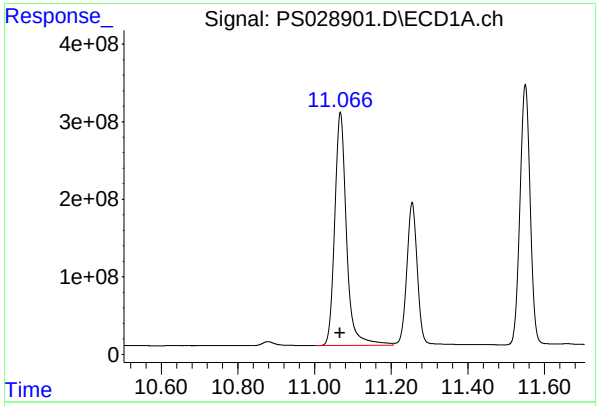
#14 DINOSEB

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



#14 DINOSEB

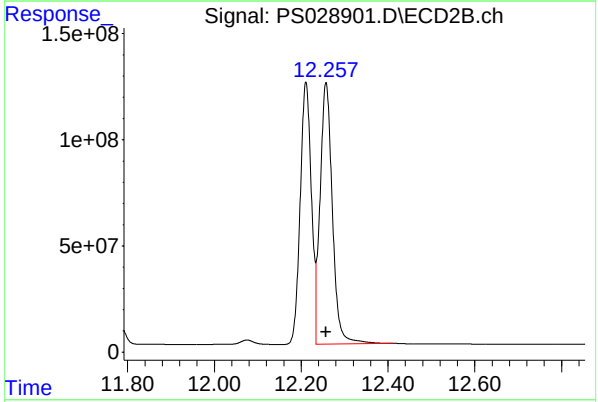
R.T.: 11.173 min
Delta R.T.: 0.000 min
Response: 1259565479
Conc: 192.83 ng/ml



#15 Picloram

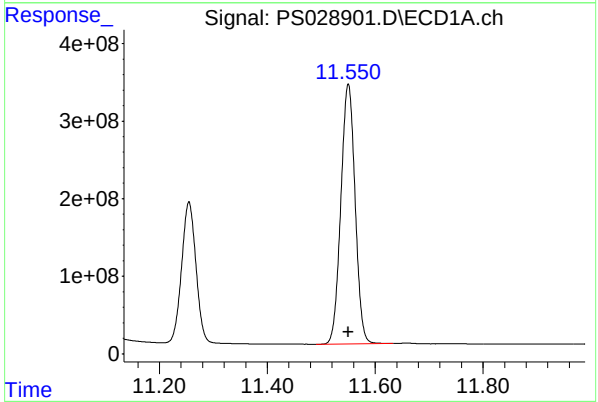
R.T.: 11.067 min
Delta R.T.: 0.000 min
Response: 6433530937
Conc: 198.93 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC200



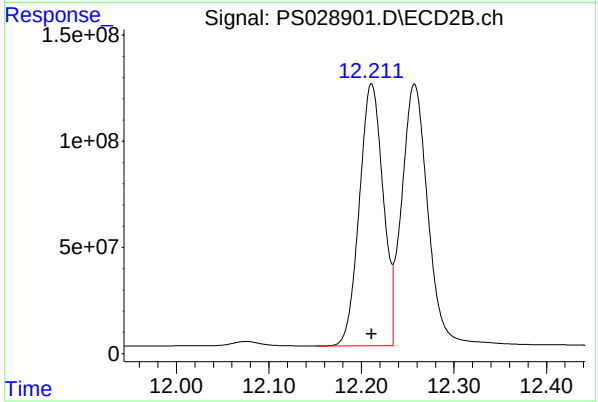
#15 Picloram

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 0.32mm 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	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

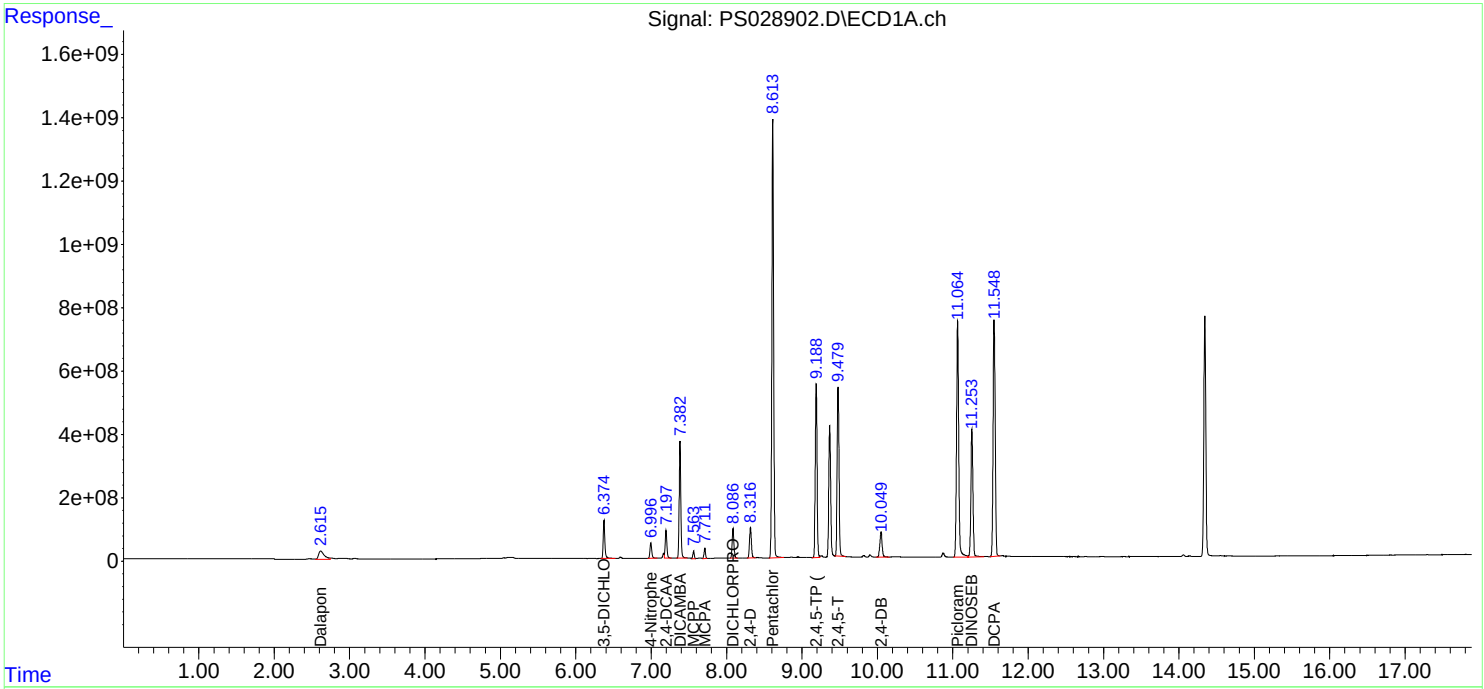
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

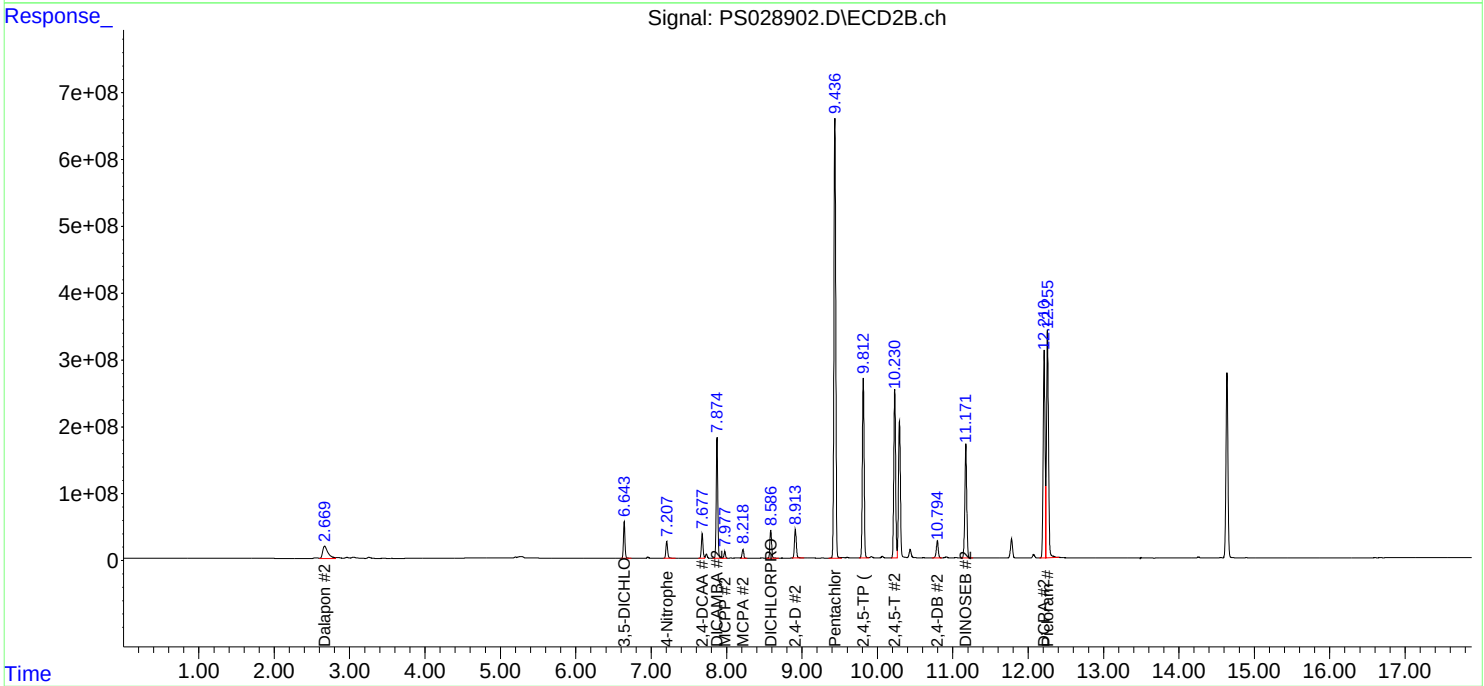
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS011425\
Data File : PS028902.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Jan 2025 10:55
Operator : AR\AJ
Sample : HSTDICC500
Misc :
ALS Vial : 4 Sample Multiplier: 1

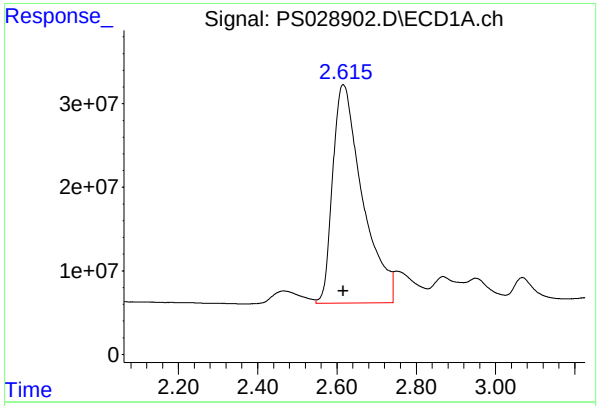
Instrument :
ECD_S
ClientSampleId :
HSTDICC500

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



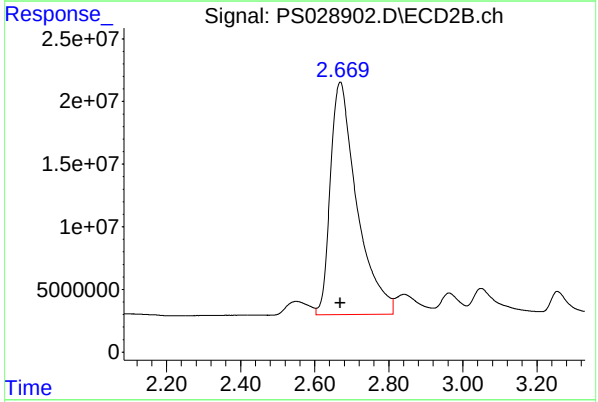




#1 Dalapon

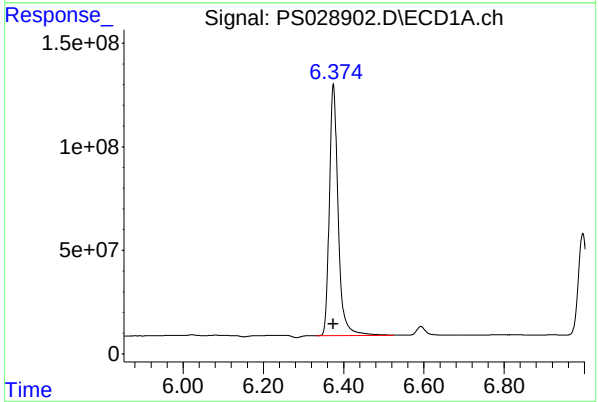
R.T.: 2.616 min
Delta R.T.: 0.000 mi
Response: 1356183583
Conc: 452.40 ng/m

Instrument :
ECD_S
ClientSampleId :
HSTDICC500



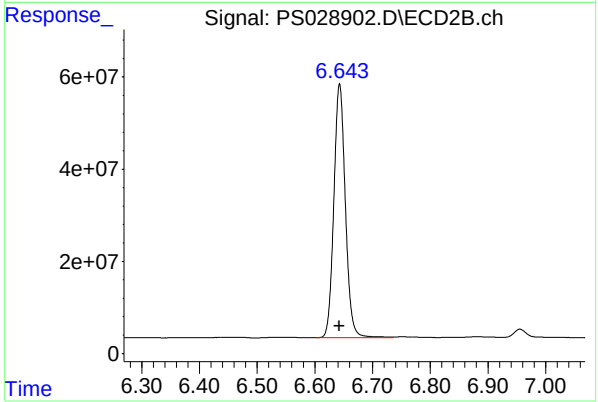
#1 Dalapon

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



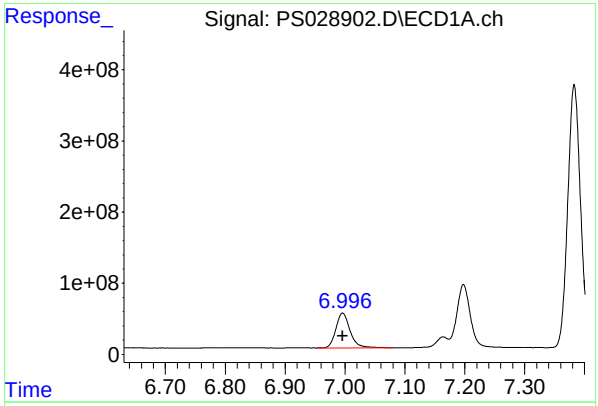
#2 3,5-DICHLOROBENZOIC ACID

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



#2 3,5-DICHLOROBENZOIC ACID

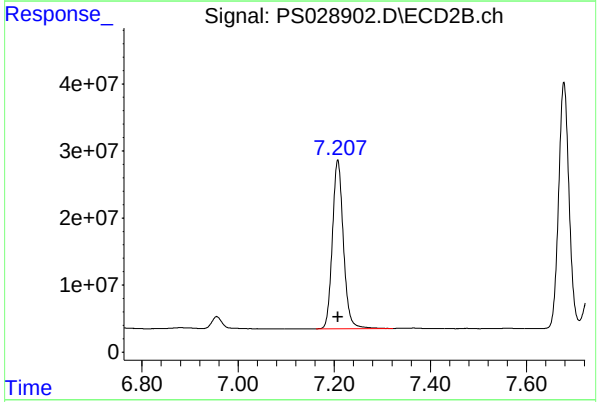
R.T.: 6.643 min
Delta R.T.: 0.000 min
Response: 763637203
Conc: 456.82 ng/ml



#3 4-Nitrophenol

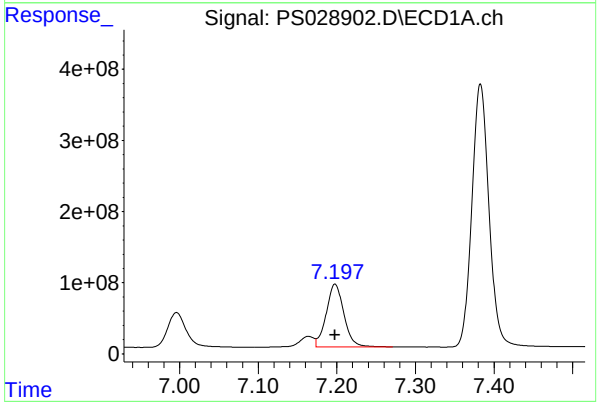
R.T.: 6.996 min
Delta R.T.: 0.000 min
Response: 802588060
Conc: 444.48 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC500



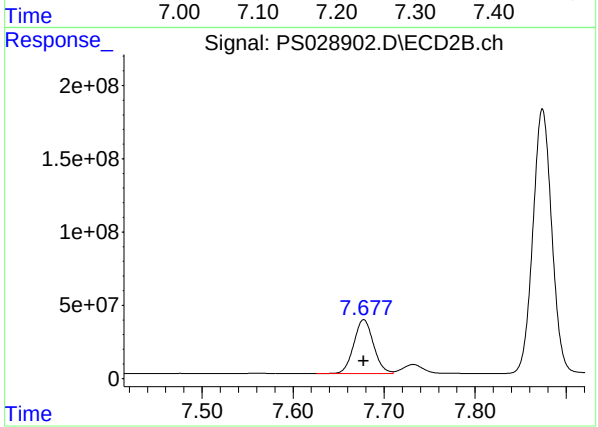
#3 4-Nitrophenol

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



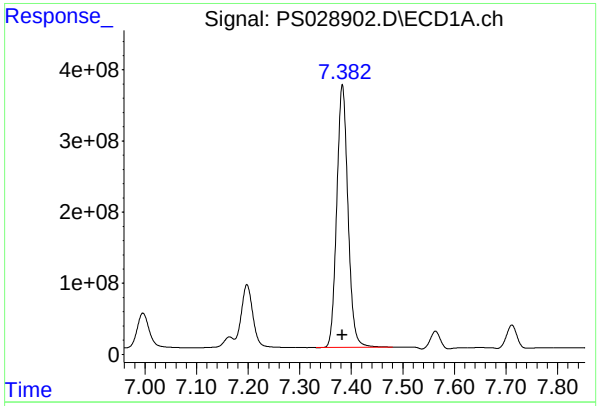
#4 2,4-DCAA

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



#4 2,4-DCAA

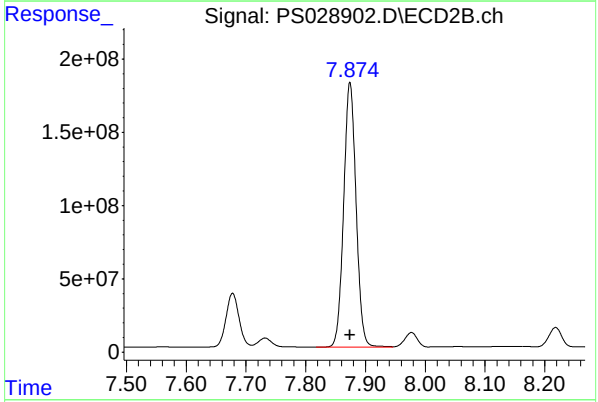
R.T.: 7.678 min
Delta R.T.: 0.000 min
Response: 551807225
Conc: 488.54 ng/ml



#5 DICAMBA

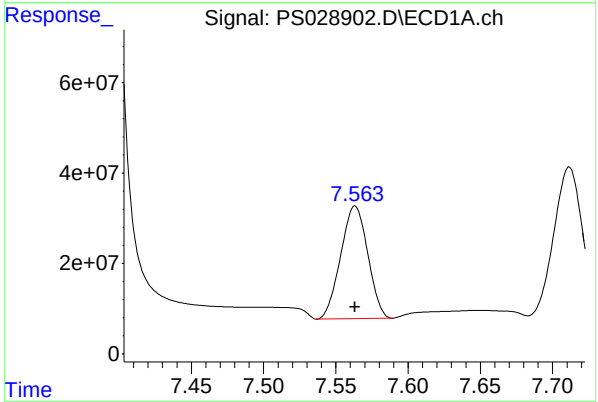
R.T.: 7.383 min
Delta R.T.: 0.000 min
Response: 5578793060
Conc: 461.68 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC500



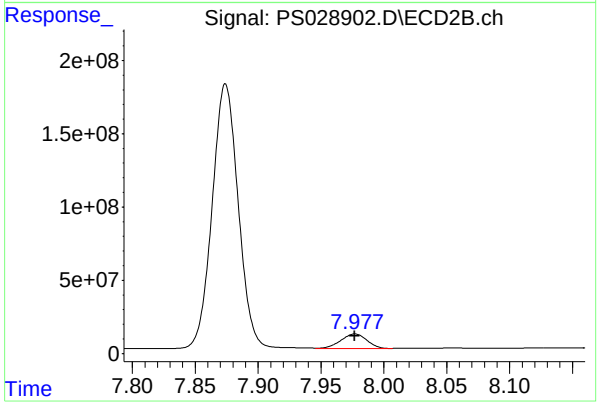
#5 DICAMBA

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



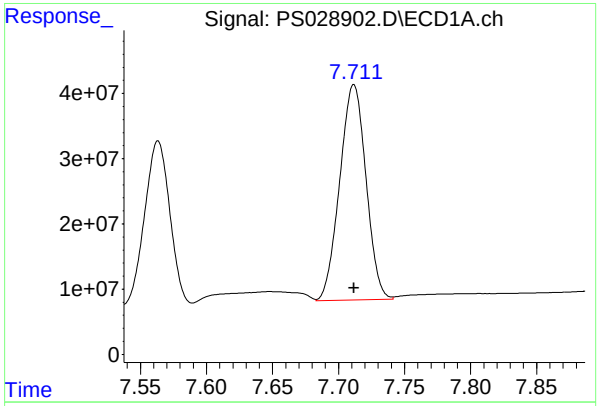
#6 MCPP

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



#6 MCPP

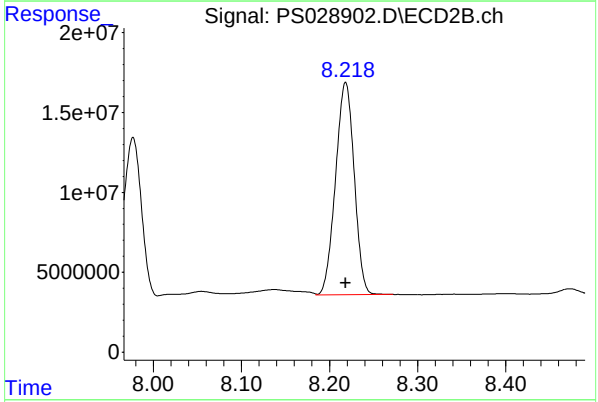
R.T.: 7.977 min
Delta R.T.: 0.000 min
Response: 141886506
Conc: 47.47 ug/ml



#7 MCPA

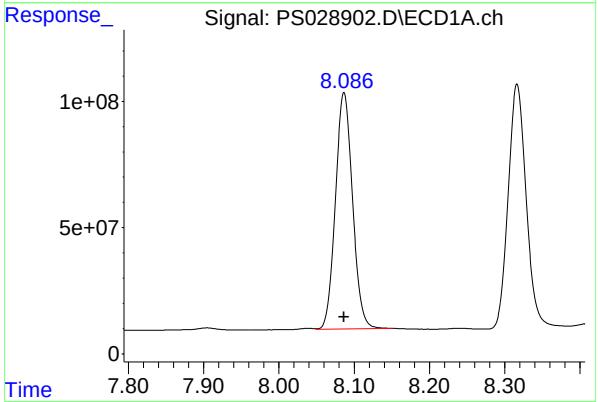
R.T.: 7.712 min
Delta R.T.: 0.000 min
Response: 456415243
Conc: 46.44 ug/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC500



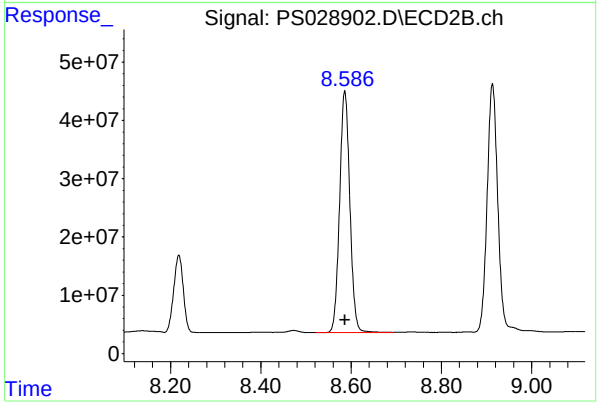
#7 MCPA

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



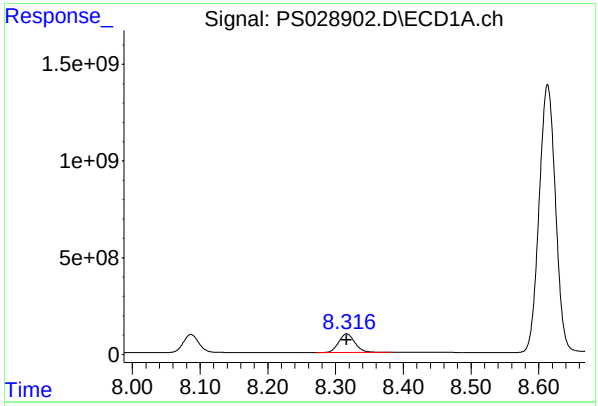
#8 DICHLORPROP

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



#8 DICHLORPROP

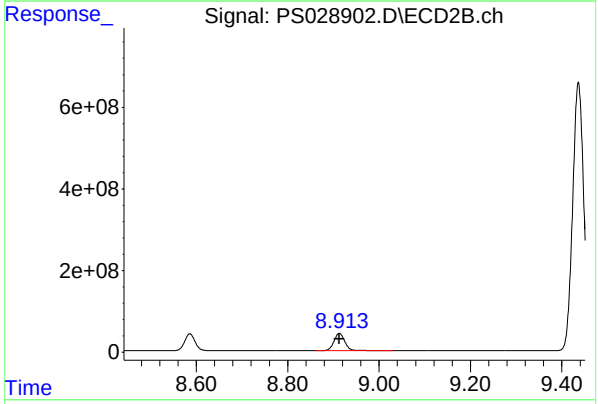
R.T.: 8.586 min
Delta R.T.: 0.000 min
Response: 653308254
Conc: 460.22 ng/ml



#9 2,4-D

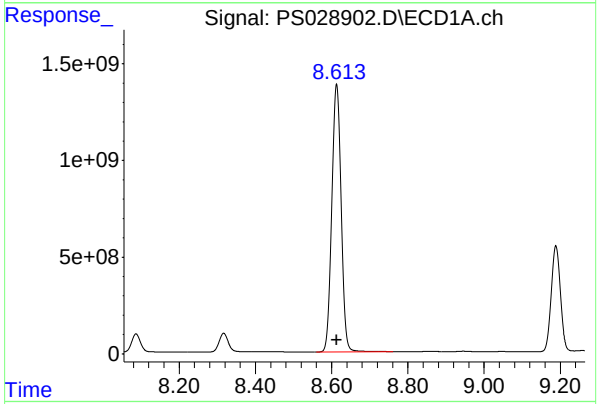
R.T.: 8.316 min
Delta R.T.: 0.000 min
Response: 1592927104
Conc: 458.53 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC500



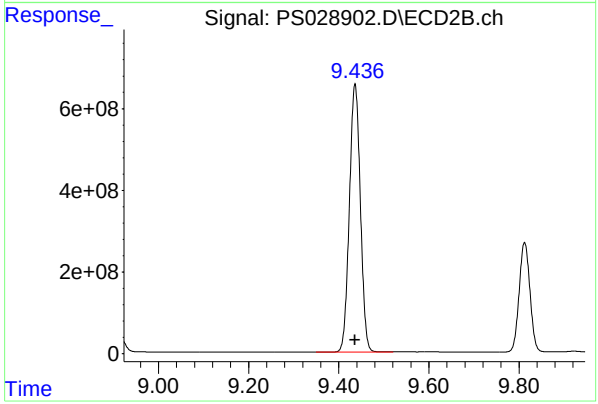
#9 2,4-D

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



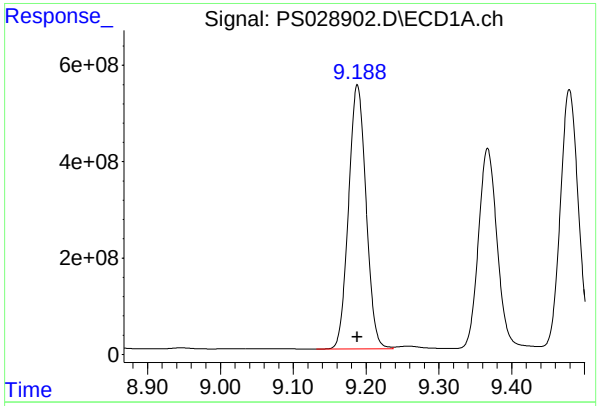
#10 Pentachlorophenol

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



#10 Pentachlorophenol

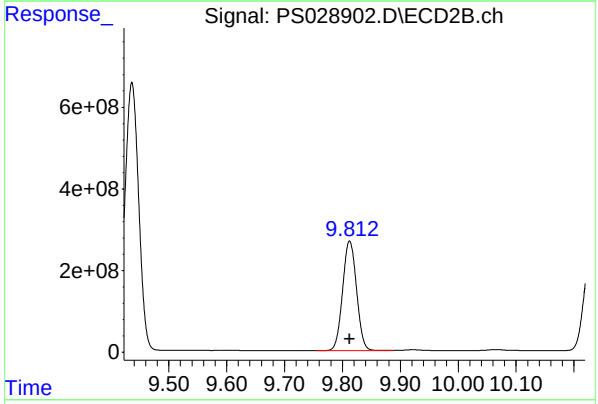
R.T.: 9.436 min
Delta R.T.: 0.000 min
Response: 11116848551
Conc: 474.22 ng/ml



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

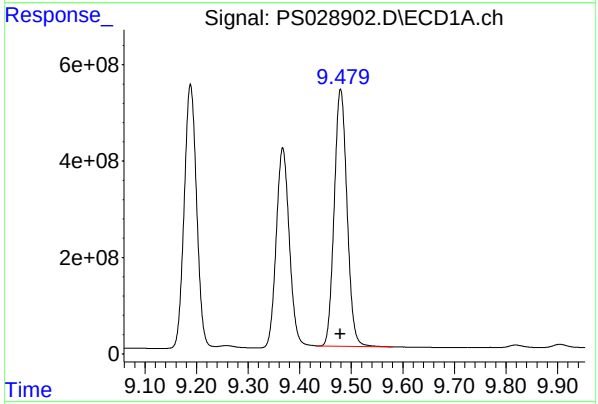
R.T.: 9.188 min
Delta R.T.: 0.000 min
Response: 9128474142
Conc: 464.88 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC500



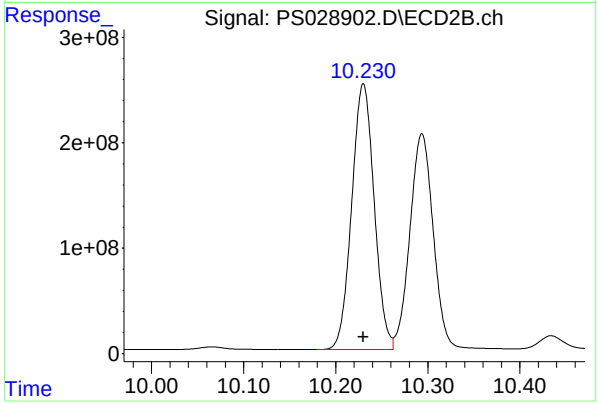
#11 2,4,5-TP (SILVEX)

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



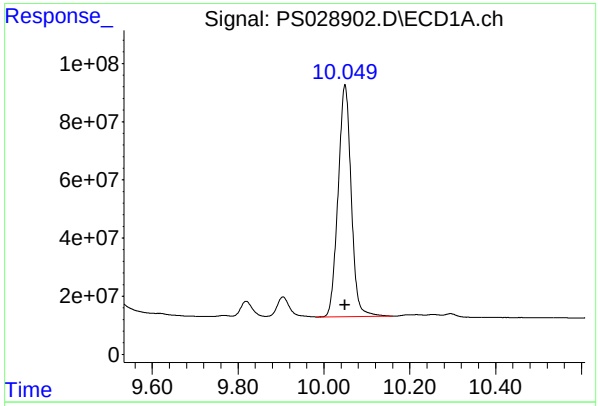
#12 2,4,5-T

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



#12 2,4,5-T

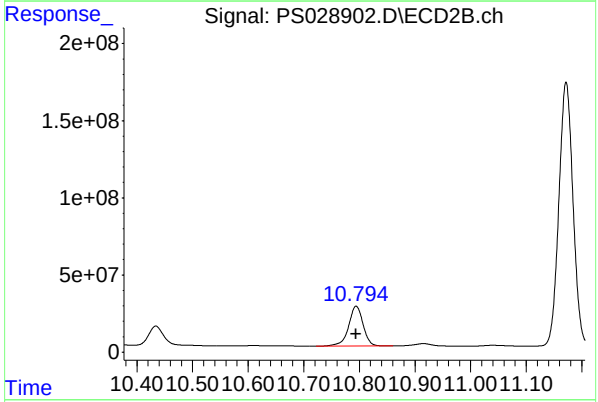
R.T.: 10.230 min
Delta R.T.: 0.000 min
Response: 4276992400
Conc: 471.18 ng/ml



#13 2,4-DB

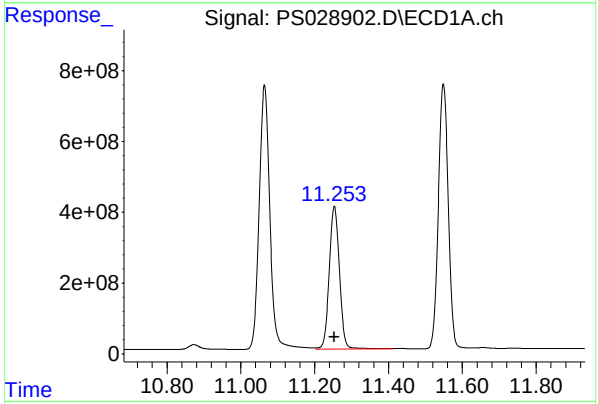
R.T.: 10.049 min
Delta R.T.: 0.000 min
Response: 1686623050
Conc: 467.08 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC500



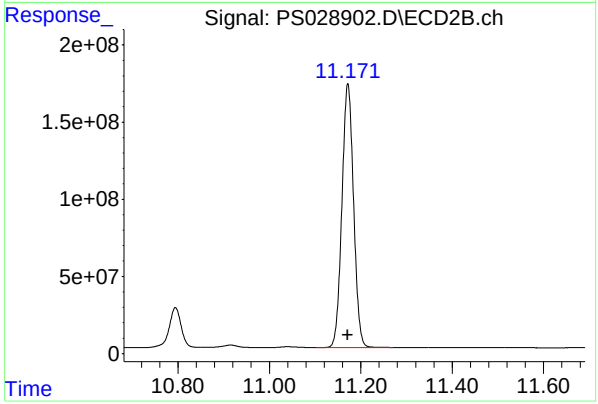
#13 2,4-DB

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



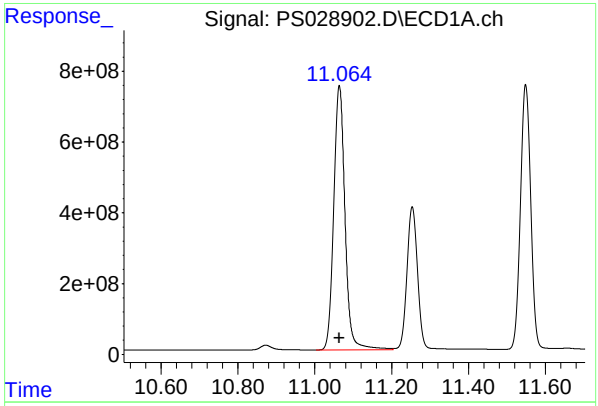
#14 DINOSEB

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



#14 DINOSEB

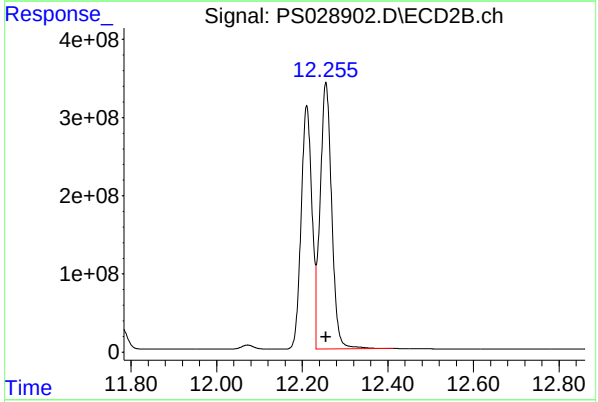
R.T.: 11.172 min
Delta R.T.: 0.000 min
Response: 3019847995
Conc: 464.85 ng/ml



#15 Picloram

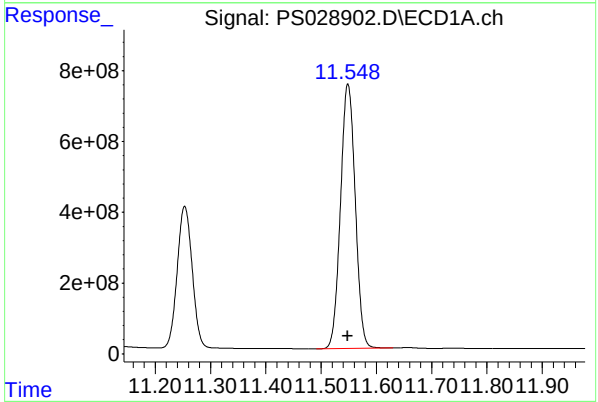
R.T.: 11.064 min
Delta R.T.: 0.000 min
Response: 15027107162
Conc: 468.04 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC500



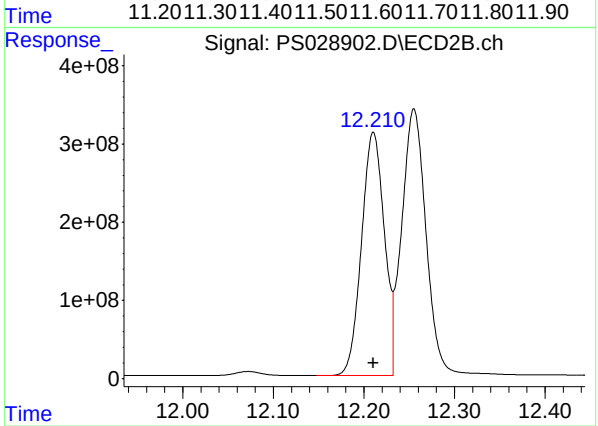
#15 Picloram

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 0.32mm x 0.25µm

		Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
		System Monitoring Compounds						
4)	S	2,4-DCAA	7.197	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

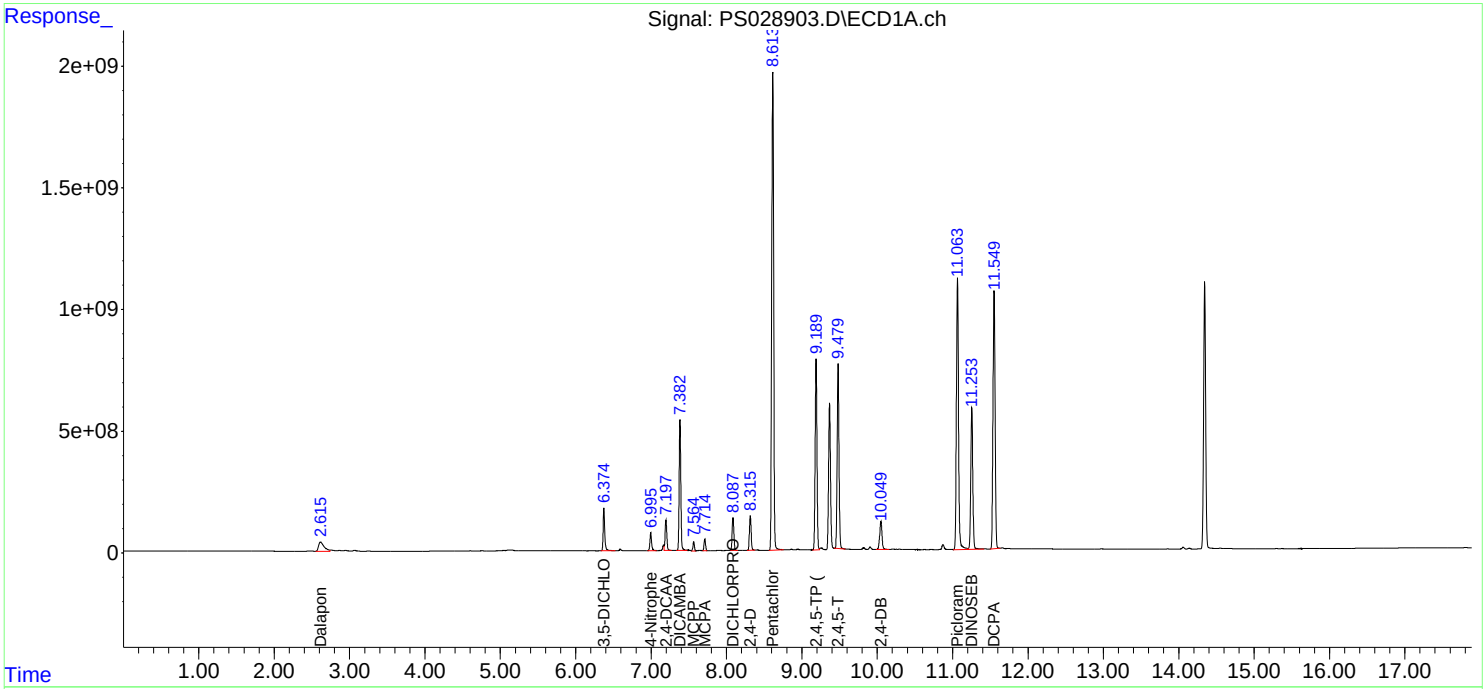
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

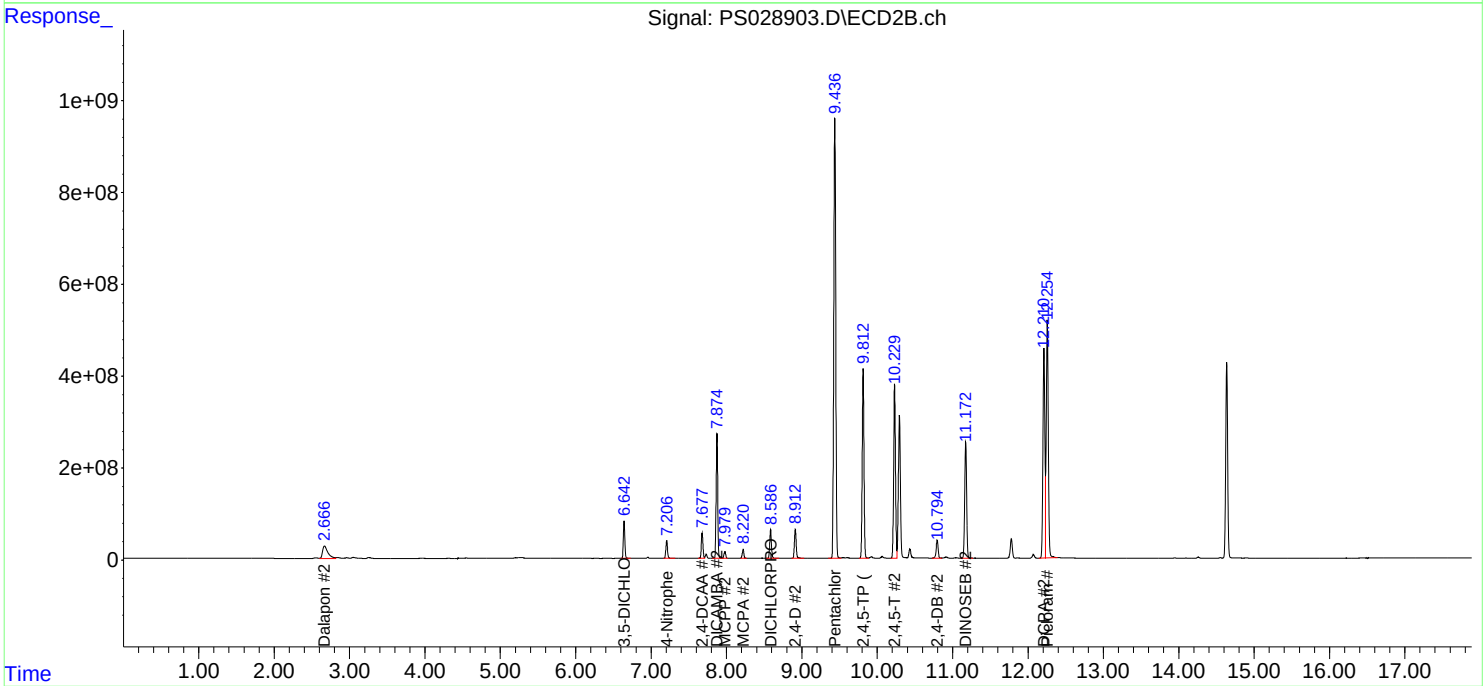
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS011425\
Data File : PS028903.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Jan 2025 11:19
Operator : AR\AJ
Sample : HSTDICC750
Misc :
ALS Vial : 5 Sample Multiplier: 1

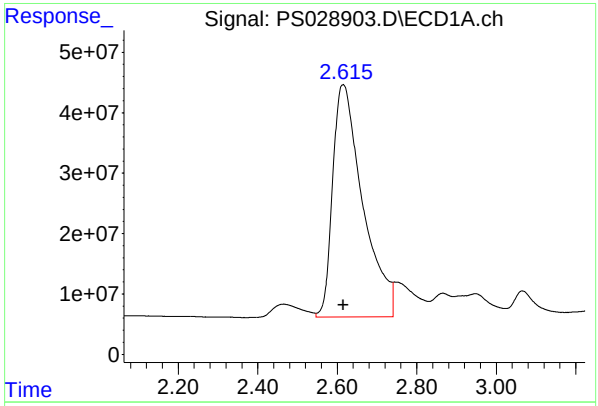
Instrument :
ECD_S
ClientSampleId :
HSTDICC750

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



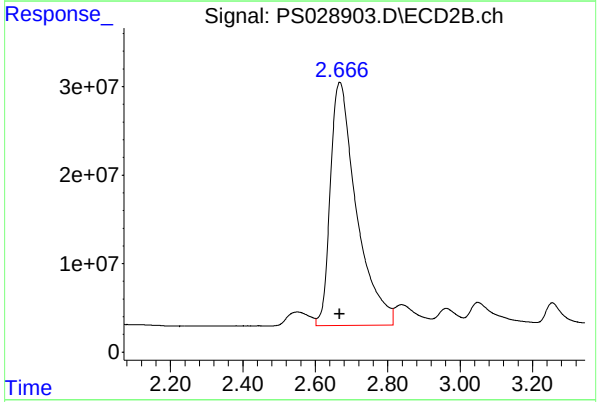




#1 Dalapon

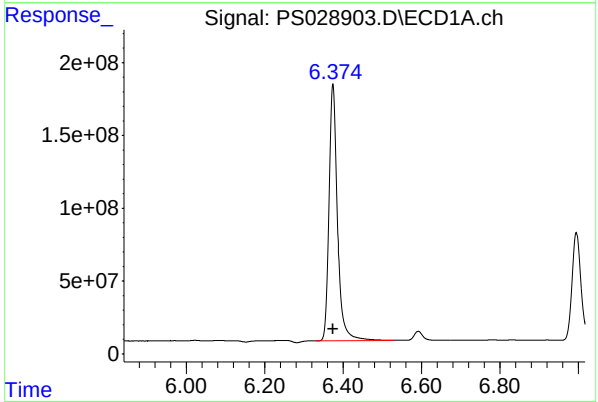
R.T.: 2.615 min
Delta R.T.: 0.000 min
Response: 2018665694
Conc: 682.50 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC750



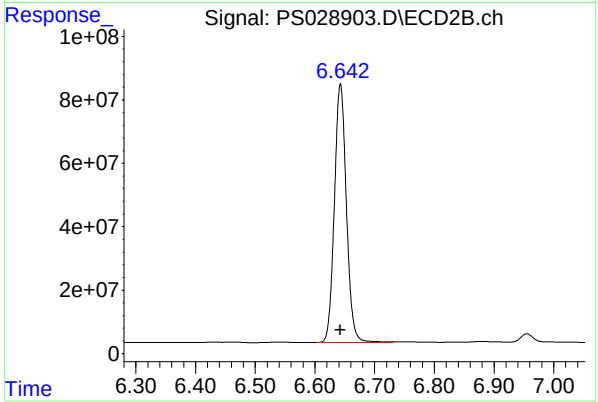
#1 Dalapon

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



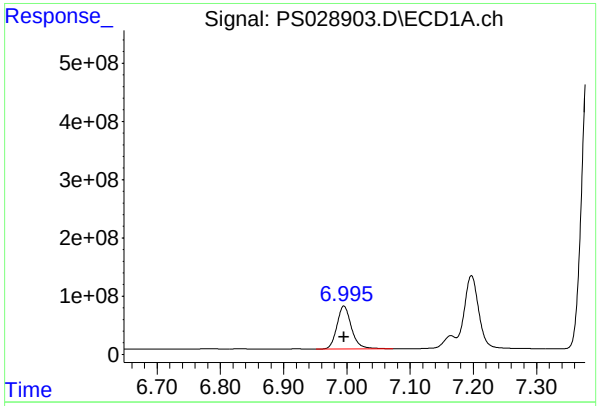
#2 3,5-DICHLOROBENZOIC ACID

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



#2 3,5-DICHLOROBENZOIC ACID

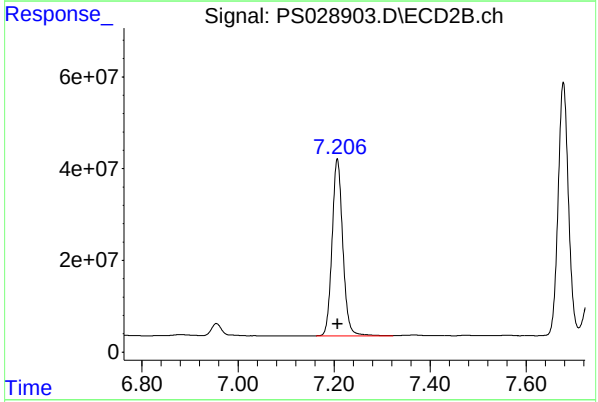
R.T.: 6.643 min
Delta R.T.: 0.000 min
Response: 1137550883
Conc: 697.50 ng/ml



#3 4-Nitrophenol

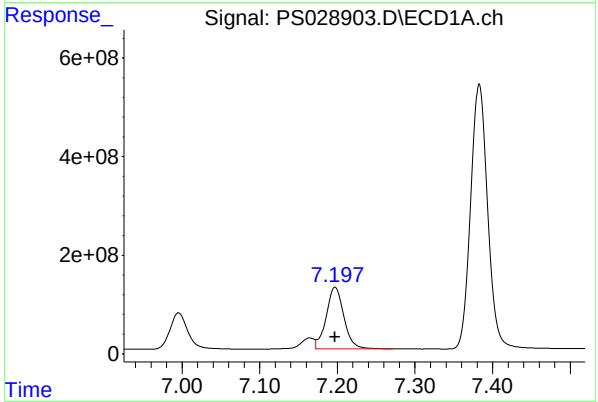
R.T.: 6.995 min
Delta R.T.: 0.000 min
Response: 1173142744
Conc: 682.50 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC750



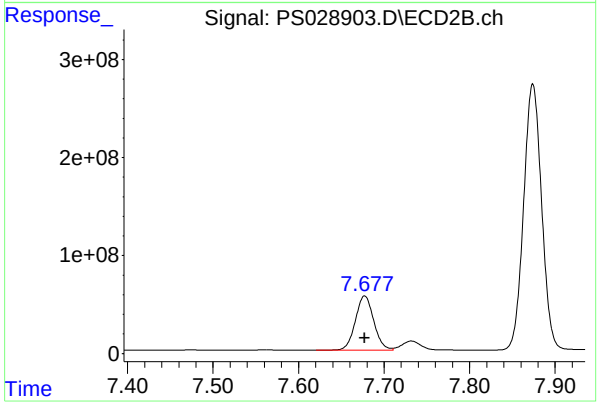
#3 4-Nitrophenol

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



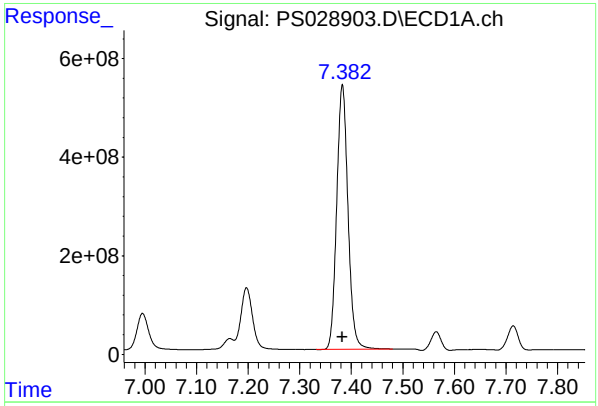
#4 2,4-DCAA

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



#4 2,4-DCAA

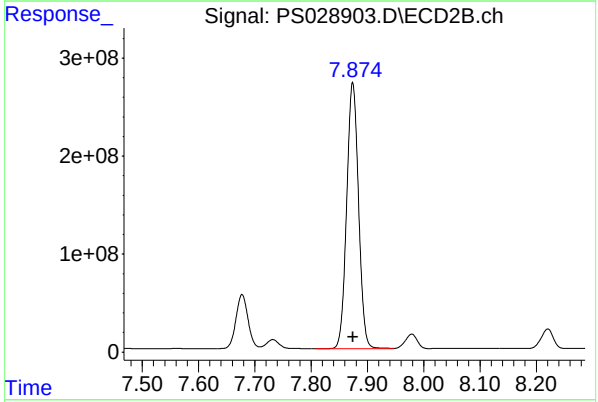
R.T.: 7.677 min
Delta R.T.: 0.000 min
Response: 821510640
Conc: 750.00 ng/ml



#5 DICAMBA

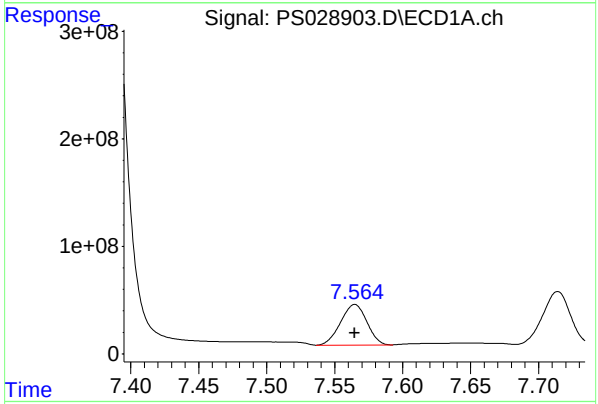
R.T.: 7.383 min
Delta R.T.: 0.000 min
Response: 8146681260
Conc: 705.00 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC750



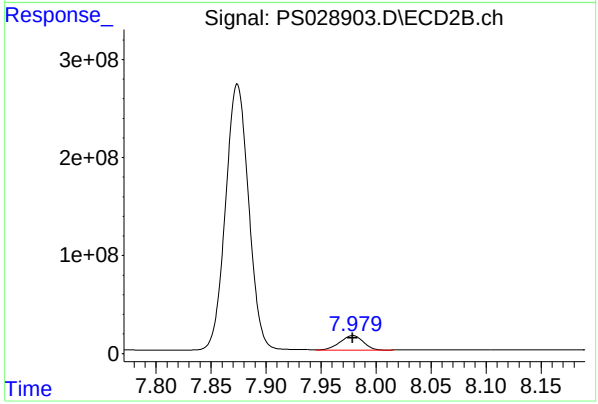
#5 DICAMBA

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



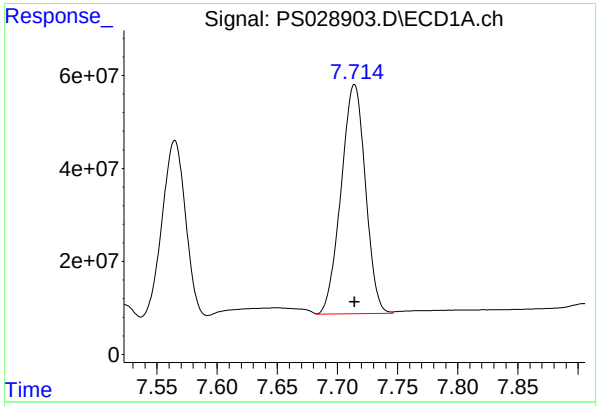
#6 MCPP

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



#6 MCPP

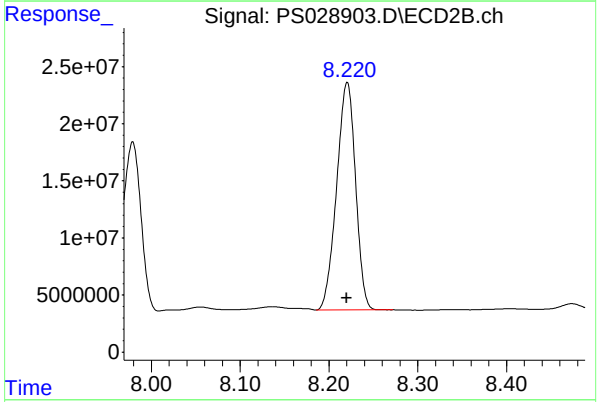
R.T.: 7.979 min
Delta R.T.: 0.000 min
Response: 215723572
Conc: 70.50 ug/ml



#7 MCPA

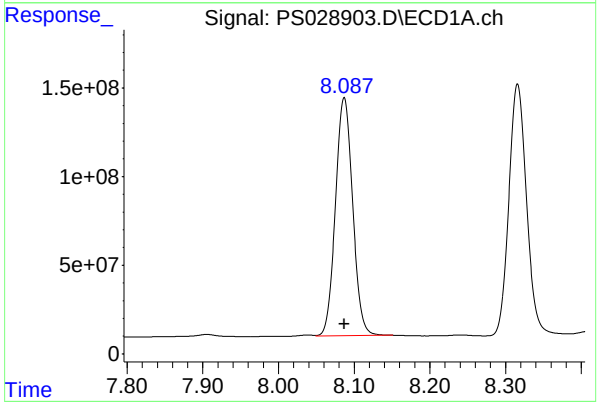
R.T.: 7.714 min
Delta R.T.: 0.000 min
Response: 694066365
Conc: 69.75 ug/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC750



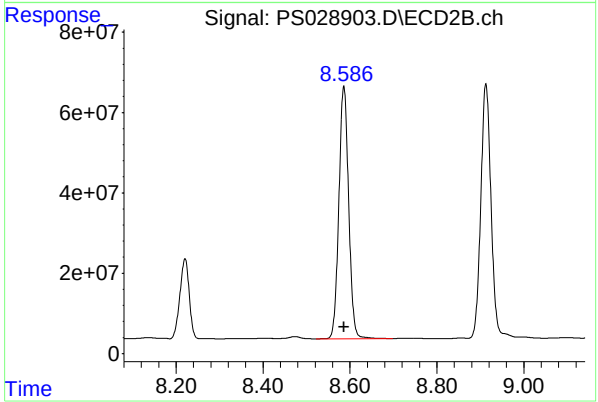
#7 MCPA

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



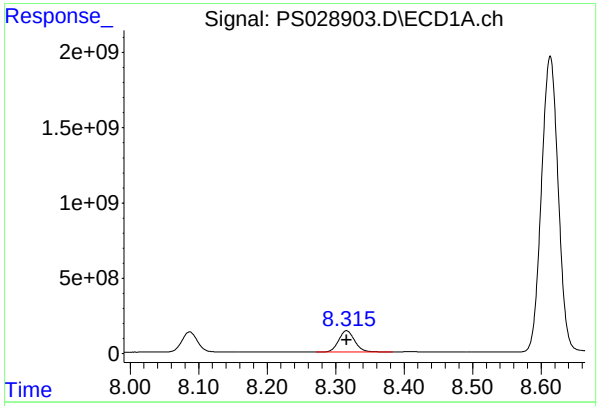
#8 DICHLORPROP

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



#8 DICHLORPROP

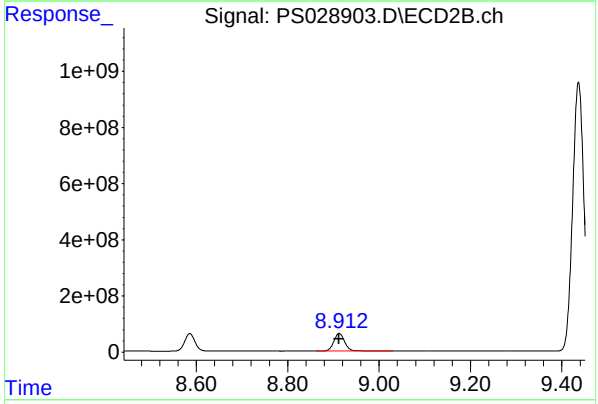
R.T.: 8.586 min
Delta R.T.: 0.000 min
Response: 980342169
Conc: 705.00 ng/ml



#9 2,4-D

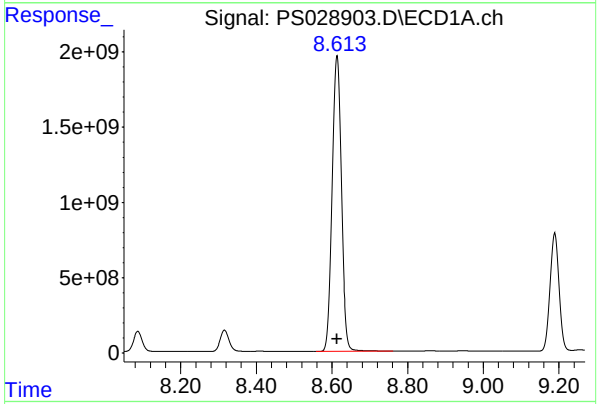
R.T.: 8.316 min
Delta R.T.: 0.000 min
Response: 2282808841
Conc: 705.00 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC750



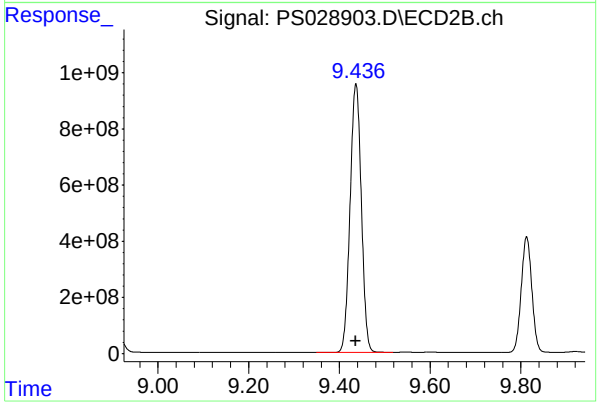
#9 2,4-D

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



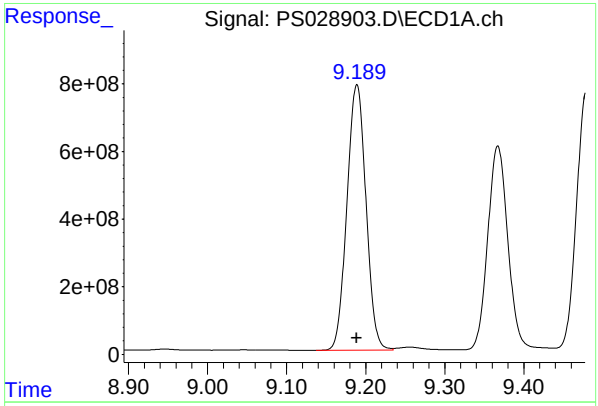
#10 Pentachlorophenol

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



#10 Pentachlorophenol

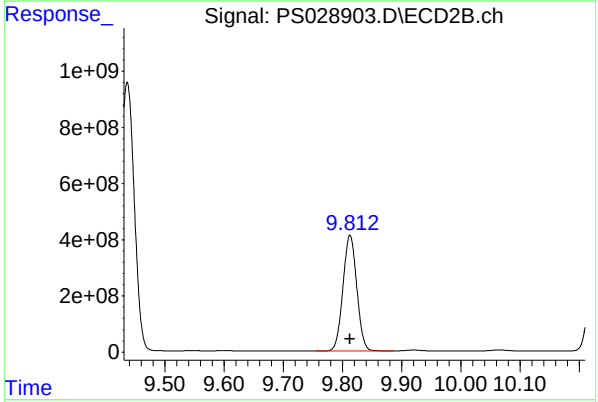
R.T.: 9.436 min
Delta R.T.: 0.000 min
Response: 16453088564
Conc: 712.50 ng/ml



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

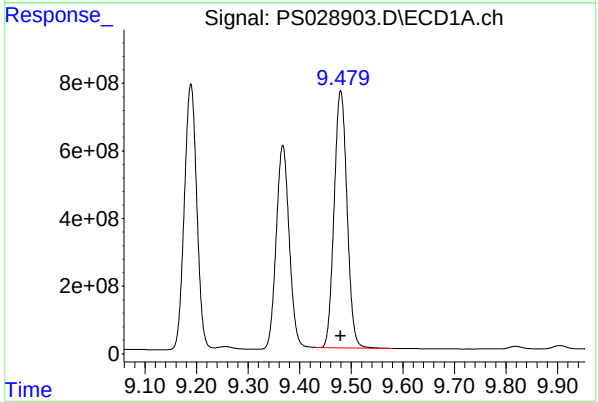
R.T.: 9.189 min
Delta R.T.: 0.000 min
Response: 13141574024
Conc: 712.50 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC750



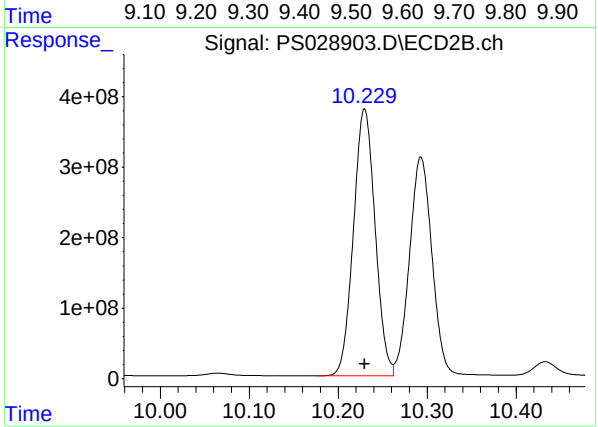
#11 2,4,5-TP (SILVEX)

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



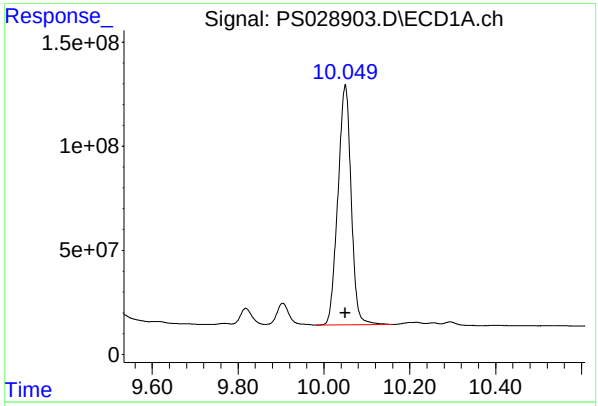
#12 2,4,5-T

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



#12 2,4,5-T

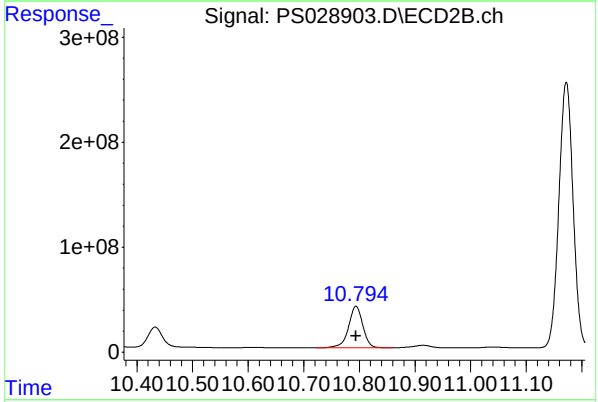
R.T.: 10.230 min
Delta R.T.: 0.000 min
Response: 6407989455
Conc: 712.50 ng/ml



#13 2,4-DB

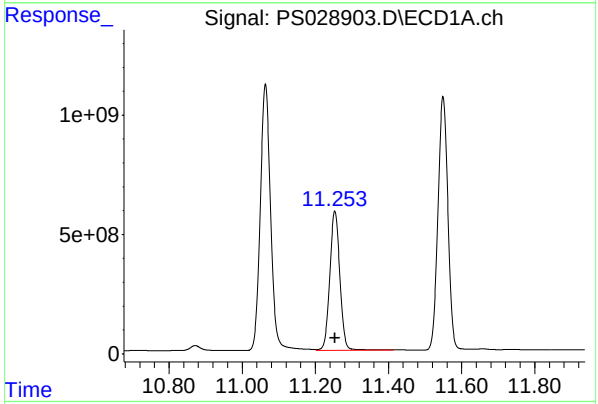
R.T.: 10.050 min
Delta R.T.: 0.000 min
Response: 2460493983
Conc: 712.50 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC750



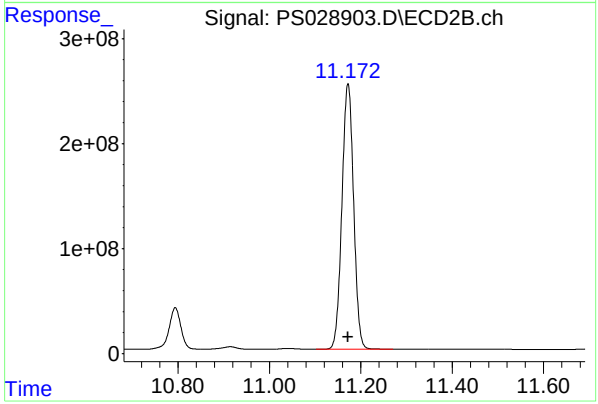
#13 2,4-DB

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



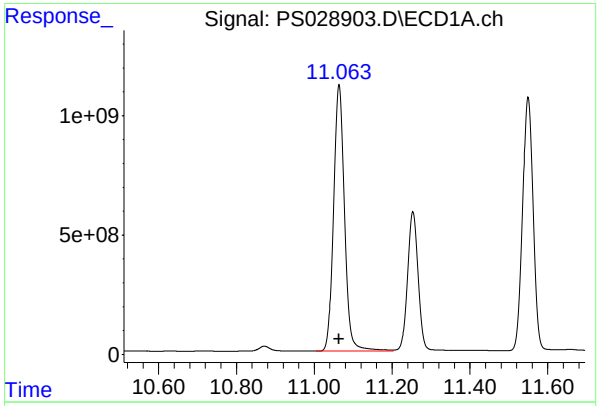
#14 DINOSEB

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



#14 DINOSEB

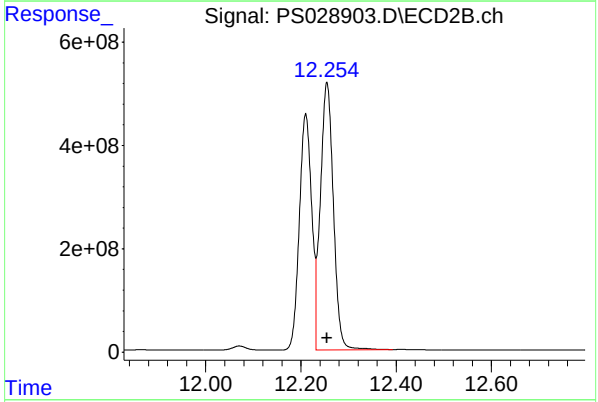
R.T.: 11.172 min
Delta R.T.: 0.000 min
Response: 4486583360
Conc: 705.00 ng/ml



#15 Picloram

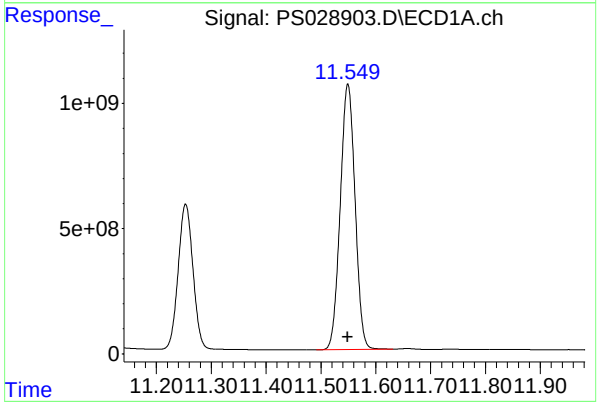
R.T.: 11.064 min
Delta R.T.: 0.000 min
Response: 21960519904
Conc: 712.50 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC750



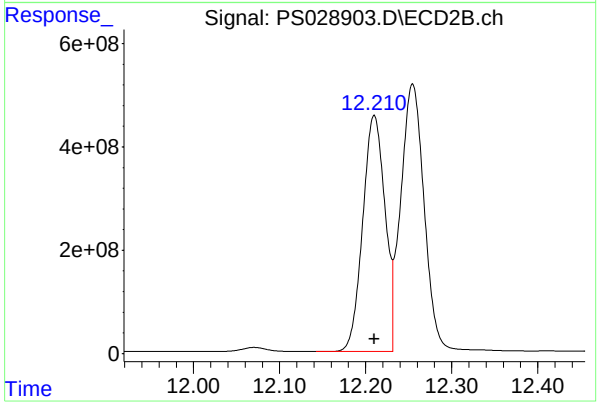
#15 Picloram

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

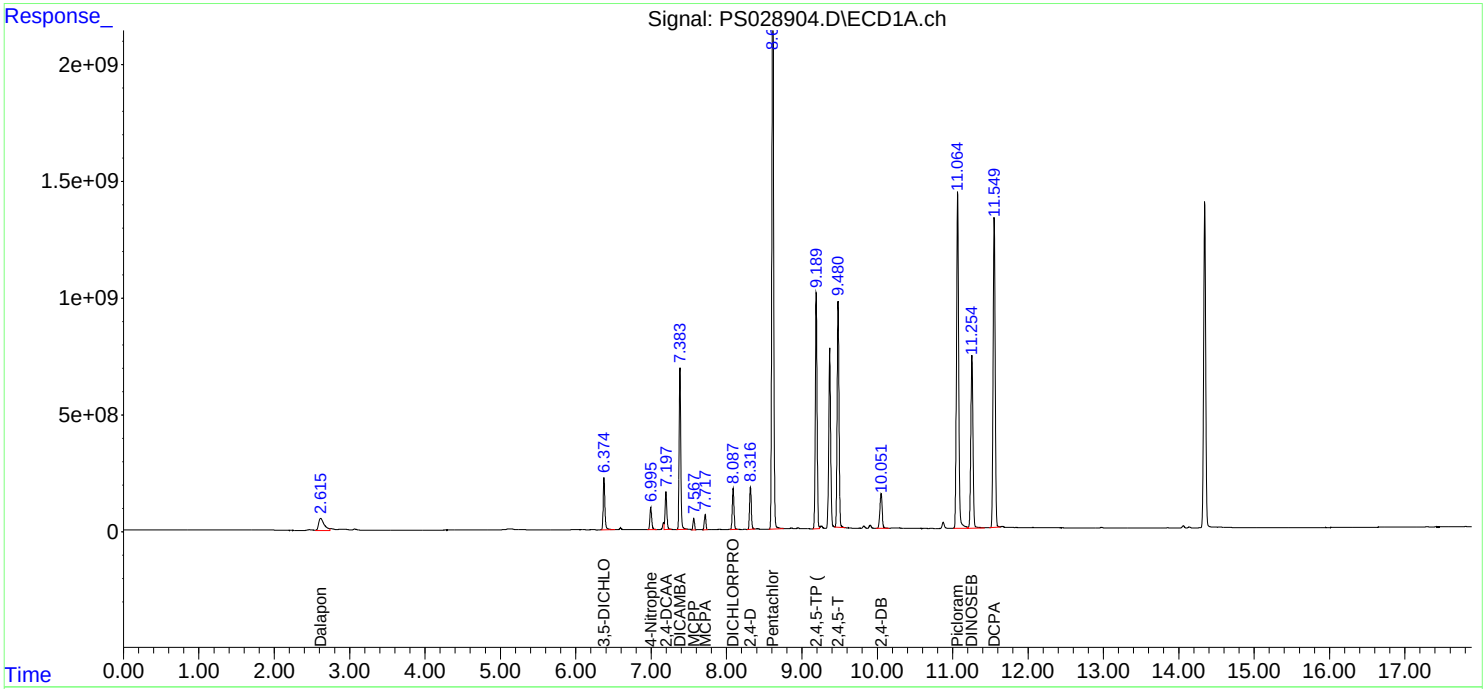
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

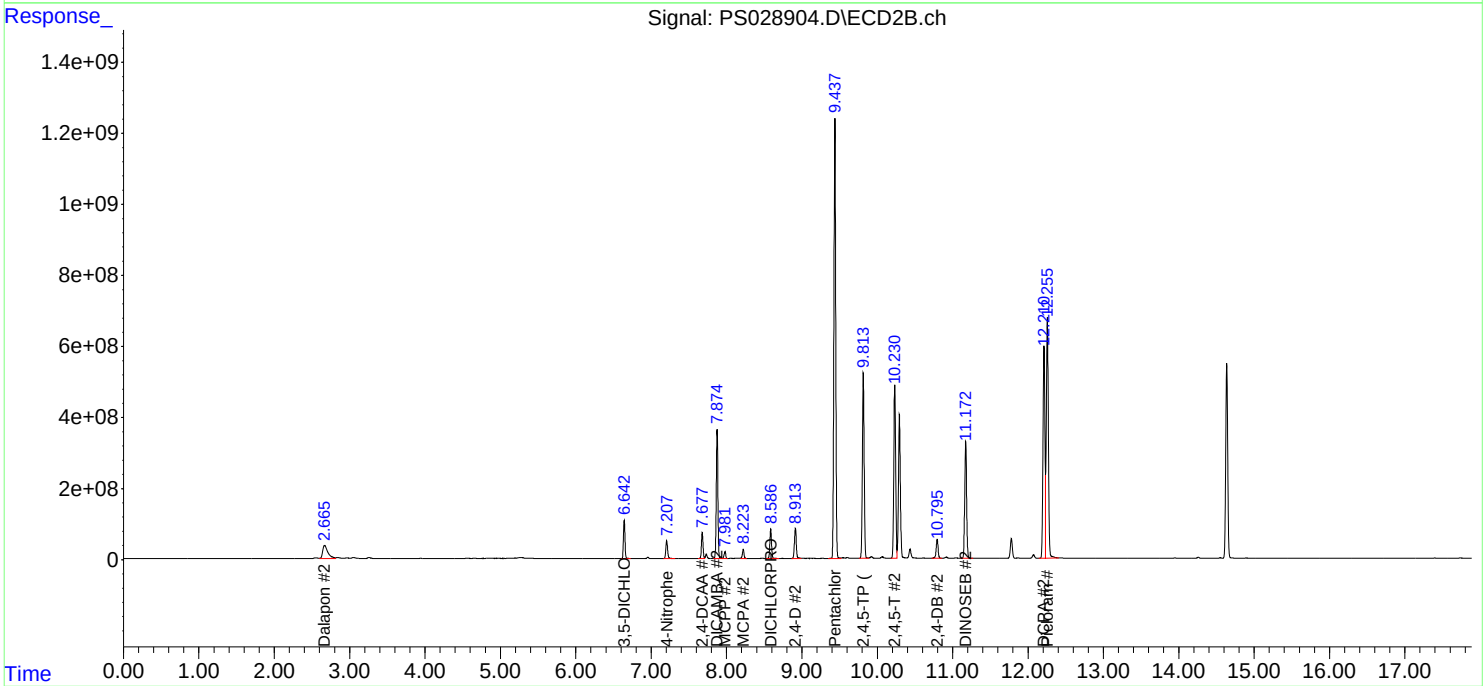
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS011425\
Data File : PS028904.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Jan 2025 11:43
Operator : AR\AJ
Sample : HSTDICC1000
Misc :
ALS Vial : 6 Sample Multiplier: 1

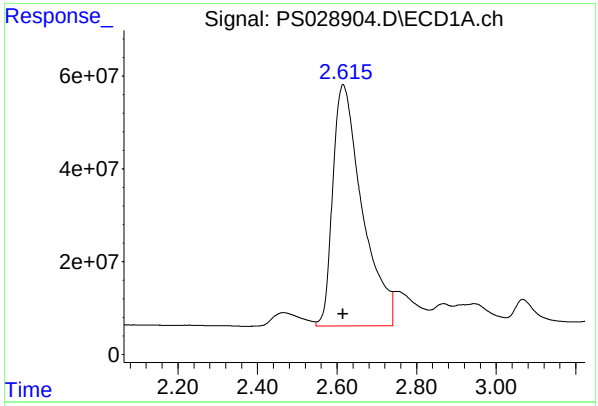
Instrument :
ECD_S
ClientSampleId :
HSTDICC1000

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



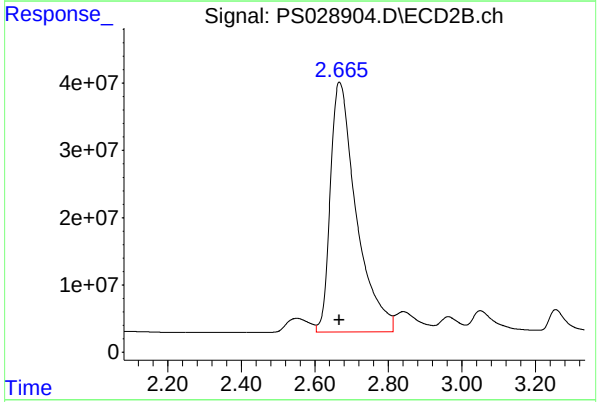




#1 Dalapon

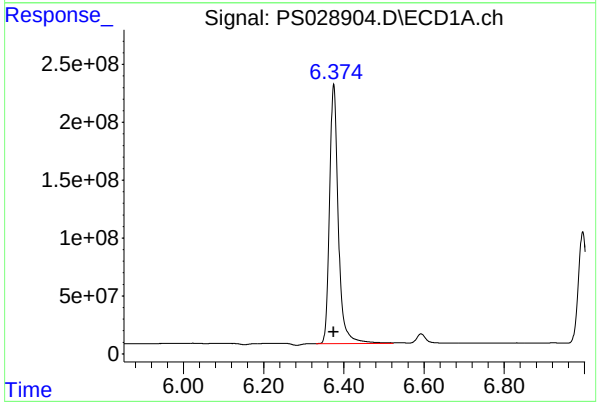
R.T.: 2.615 min
Delta R.T.: 0.000 min
Response: 2669664670
Conc: 895.34 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000



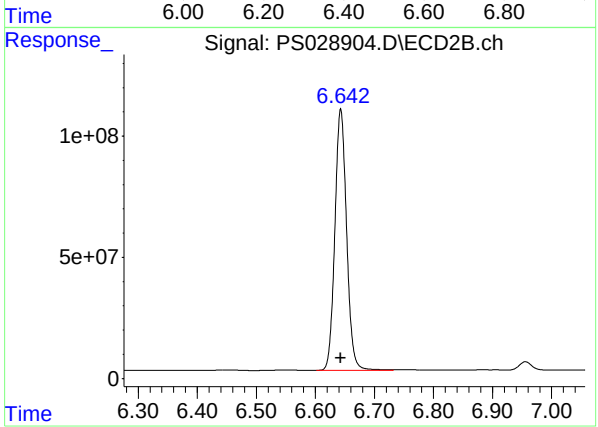
#1 Dalapon

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



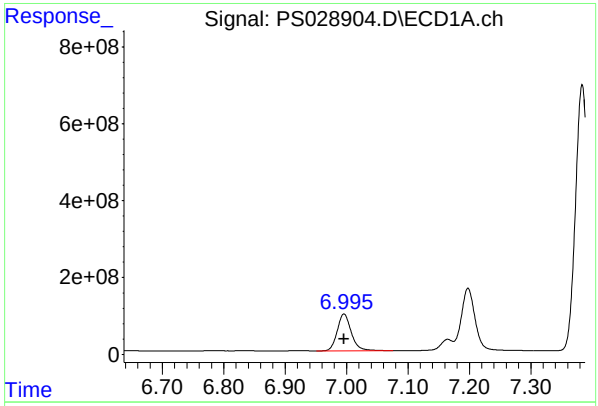
#2 3,5-DICHLOROBENZOIC ACID

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



#2 3,5-DICHLOROBENZOIC ACID

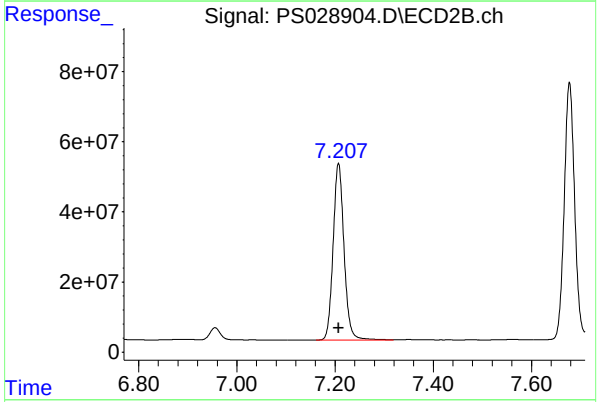
R.T.: 6.643 min
Delta R.T.: 0.000 min
Response: 1483913982
Conc: 897.92 ng/ml



#3 4-Nitrophenol

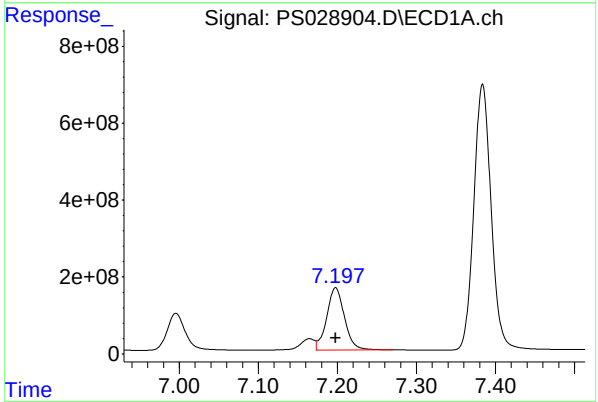
R.T.: 6.996 min
Delta R.T.: 0.000 min
Response: 1520903644
Conc: 858.26 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000



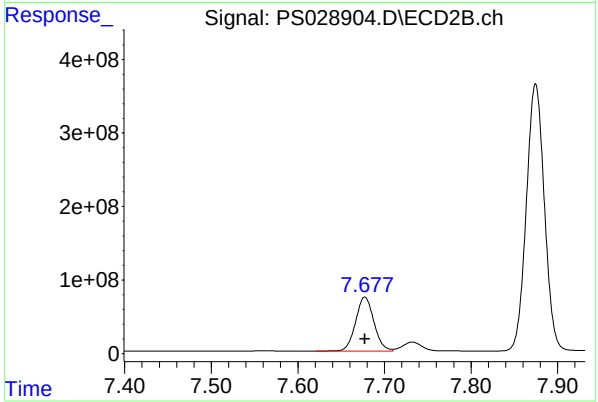
#3 4-Nitrophenol

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



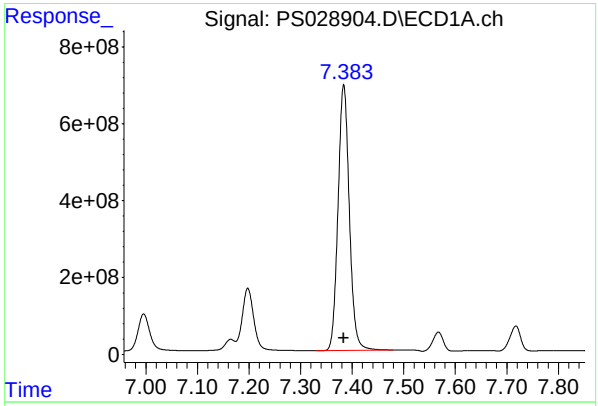
#4 2,4-DCAA

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



#4 2,4-DCAA

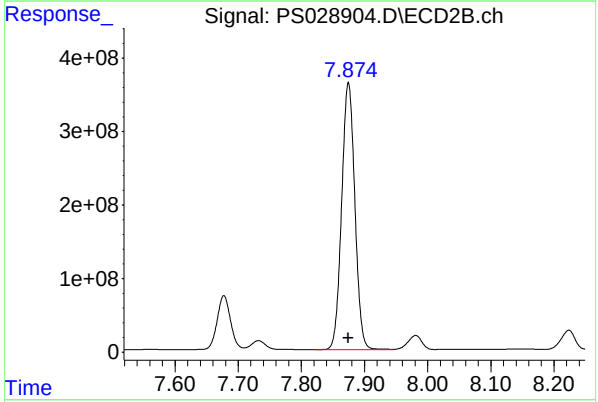
R.T.: 7.678 min
Delta R.T.: 0.000 min
Response: 1074742027
Conc: 963.19 ng/ml



#5 DICAMBA

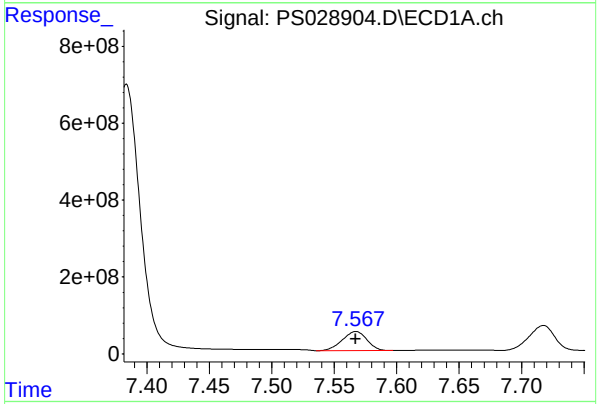
R.T.: 7.384 min
Delta R.T.: 0.000 min
Response: 10523289784
Conc: 887.18 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000



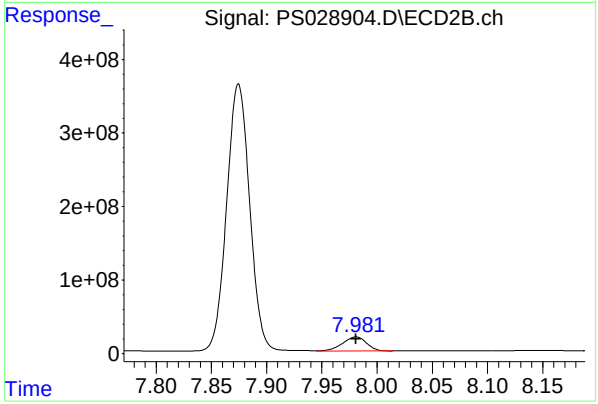
#5 DICAMBA

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



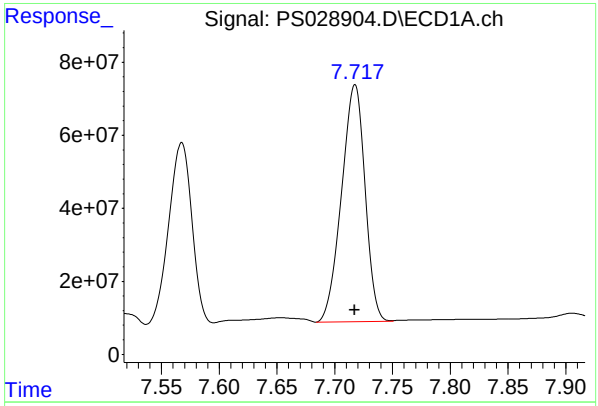
#6 MCPP

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



#6 MCPP

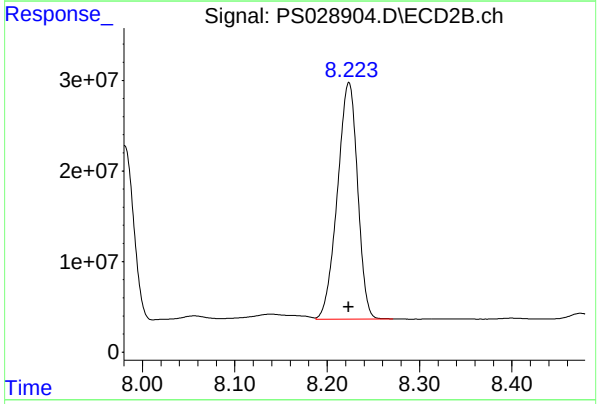
R.T.: 7.981 min
Delta R.T.: 0.000 min
Response: 288116567
Conc: 95.78 ug/ml



#7 MCPA

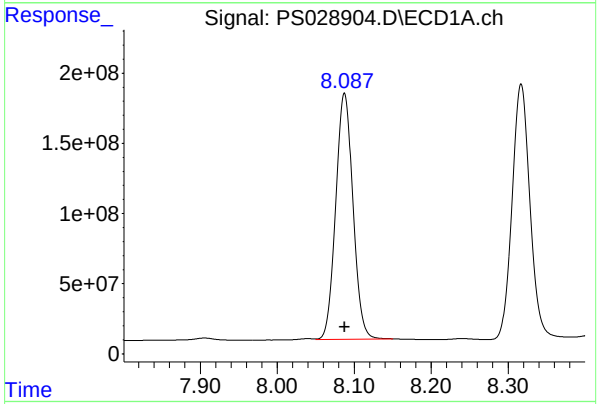
R.T.: 7.717 min
Delta R.T.: 0.000 min
Response: 922758739
Conc: 93.67 ug/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000



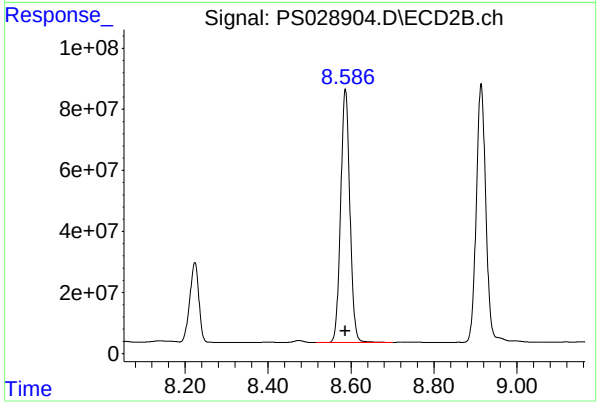
#7 MCPA

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



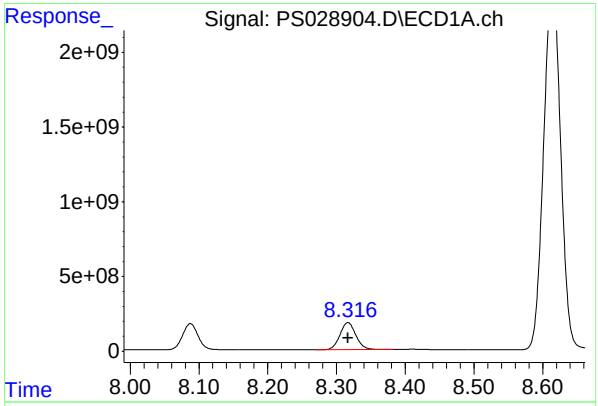
#8 DICHLORPROP

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



#8 DICHLORPROP

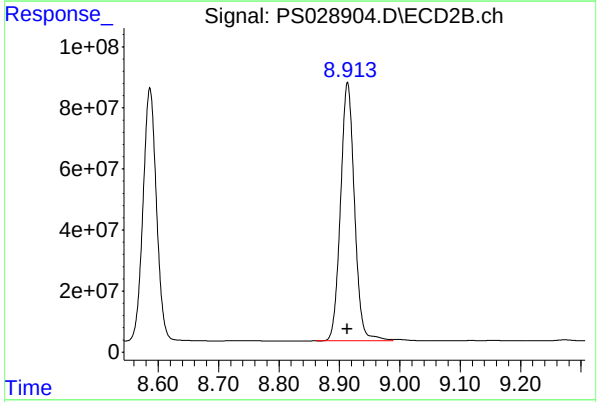
R.T.: 8.586 min
Delta R.T.: 0.000 min
Response: 1281862566
Conc: 911.97 ng/ml



#9 2,4-D

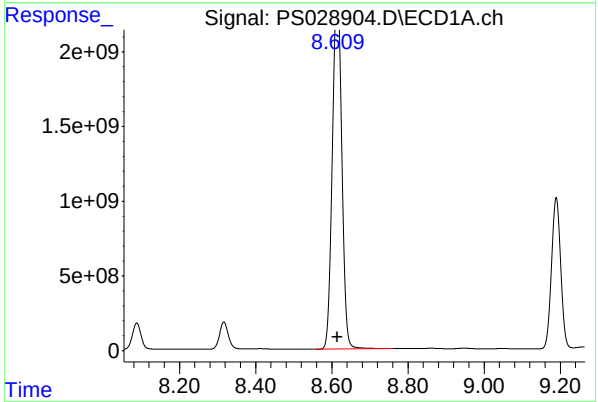
R.T.: 8.317 min
Delta R.T.: 0.000 min
Response: 2910090795
Conc: 861.11 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000



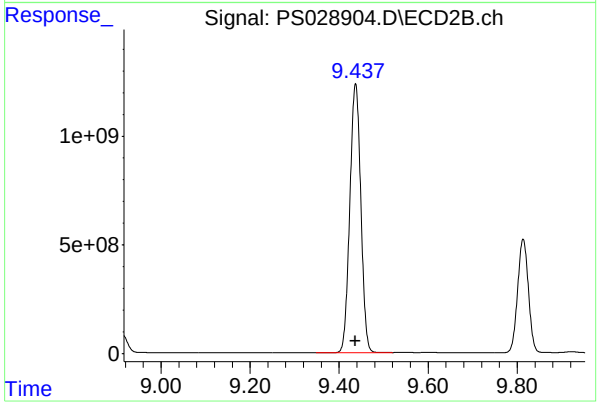
#9 2,4-D

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



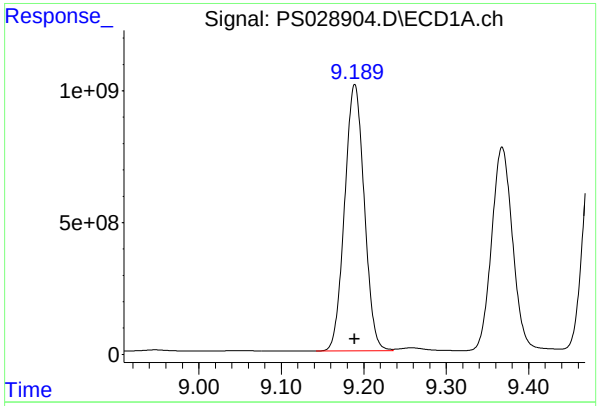
#10 Pentachlorophenol

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



#10 Pentachlorophenol

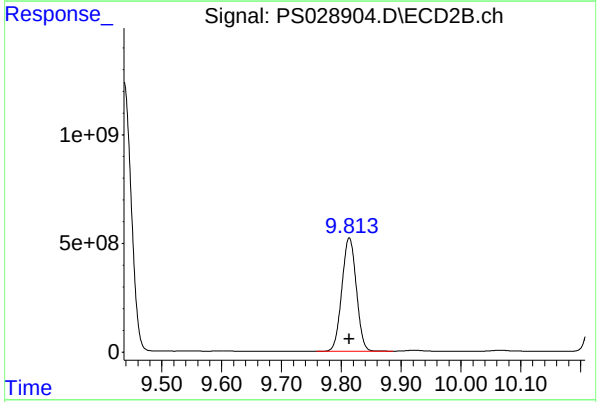
R.T.: 9.437 min
Delta R.T.: 0.000 min
Response: 21219501611
Conc: 915.98 ng/ml



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

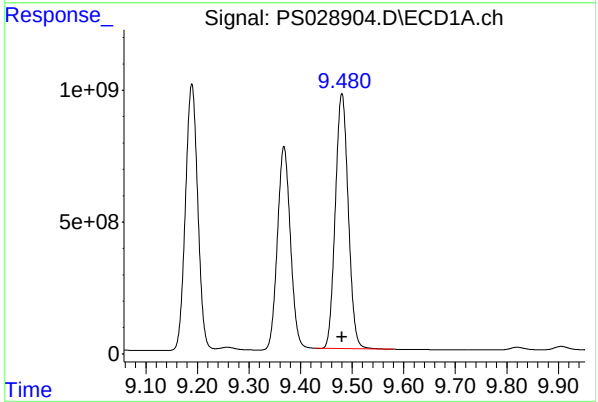
R.T.: 9.189 min
Delta R.T.: 0.000 min
Response: 16741146063
Conc: 875.00 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000



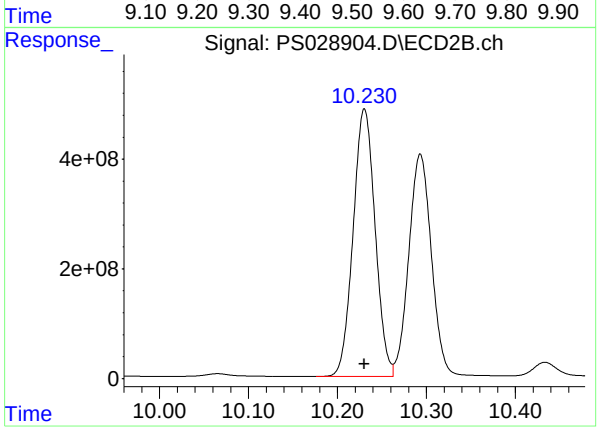
#11 2,4,5-TP (SILVEX)

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



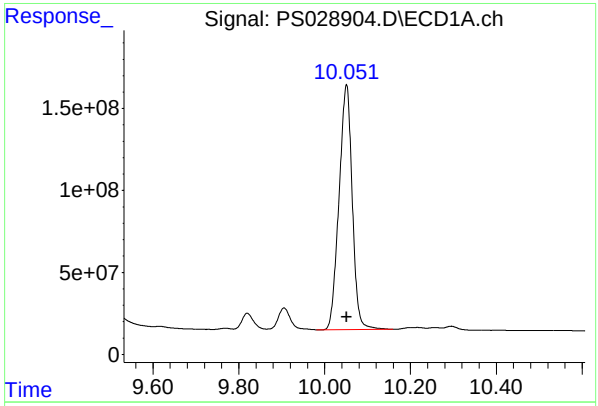
#12 2,4,5-T

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



#12 2,4,5-T

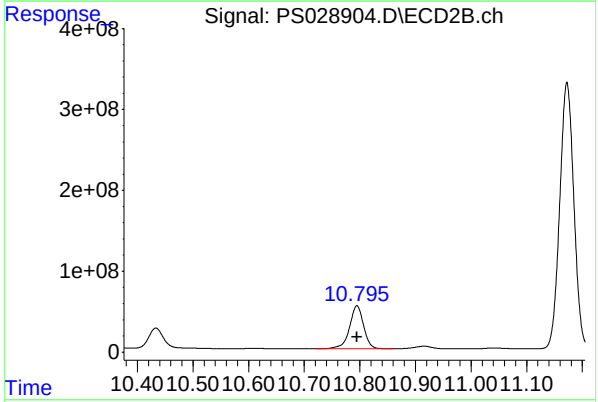
R.T.: 10.230 min
Delta R.T.: 0.000 min
Response: 8364414839
Conc: 928.45 ng/ml



#13 2,4-DB

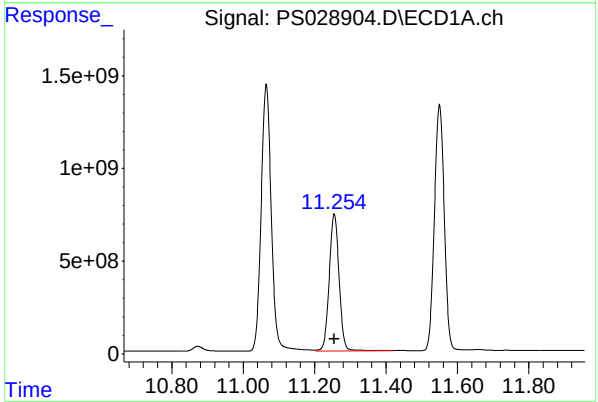
R.T.: 10.051 min
Delta R.T.: 0.000 min
Response: 3188652966
Conc: 898.88 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000



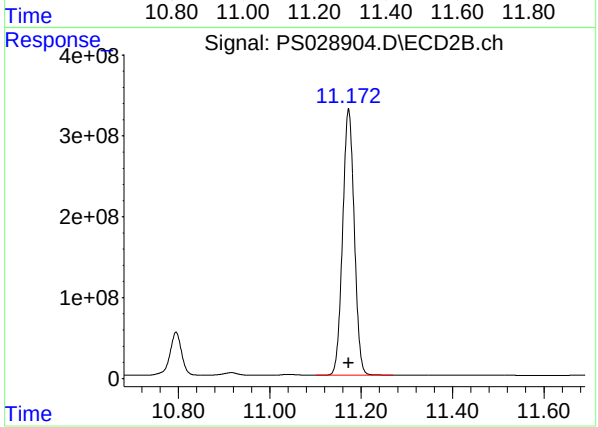
#13 2,4-DB

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



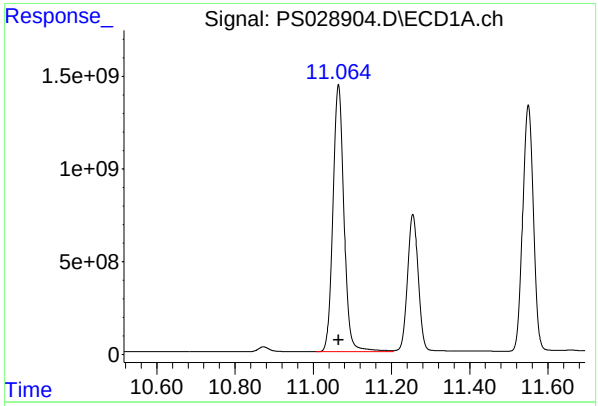
#14 DINOSEB

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



#14 DINOSEB

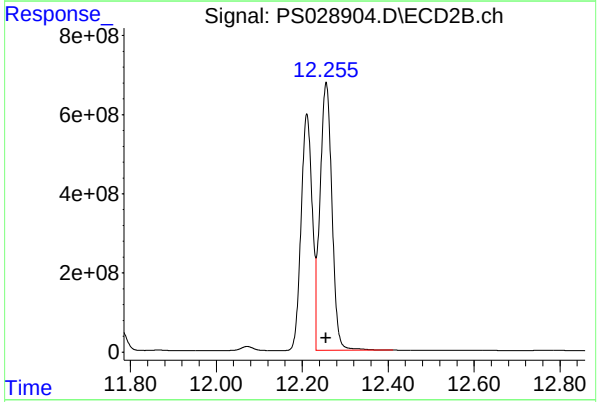
R.T.: 11.172 min
Delta R.T.: 0.000 min
Response: 5809479977
Conc: 905.28 ng/ml



#15 Picloram

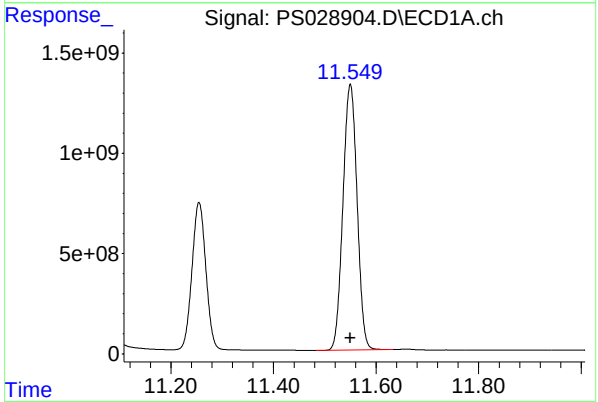
R.T.: 11.064 min
Delta R.T.: 0.000 min
Response: 28395601774
Conc: 899.96 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000



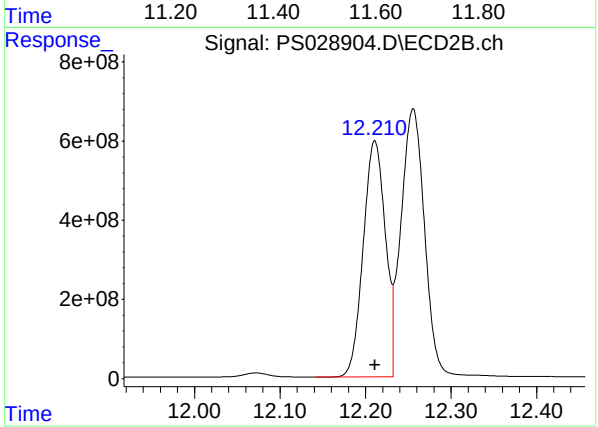
#15 Picloram

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.

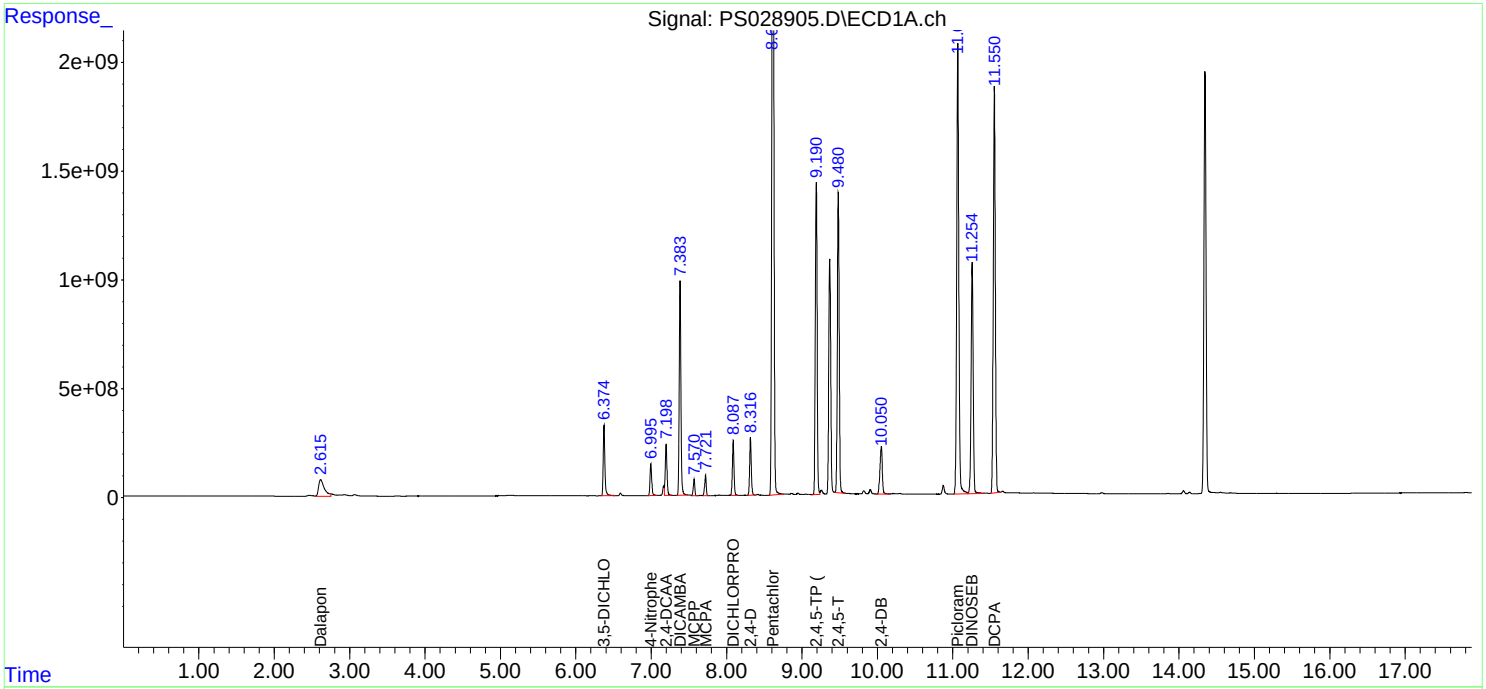
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS011425\
Data File : PS028905.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Jan 2025 12:07
Operator : AR\AJ
Sample : HSTDICC1500
Misc :
ALS Vial : 7 Sample Multiplier: 1

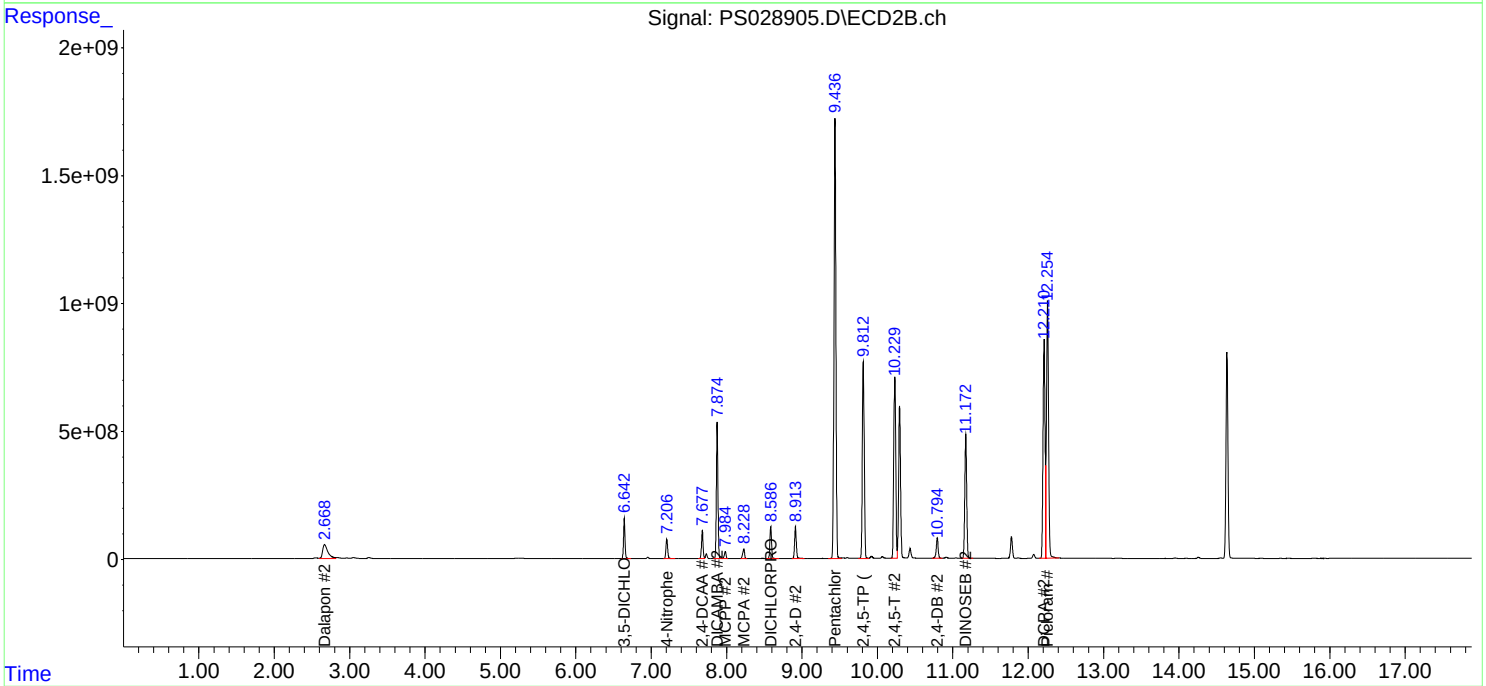
Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

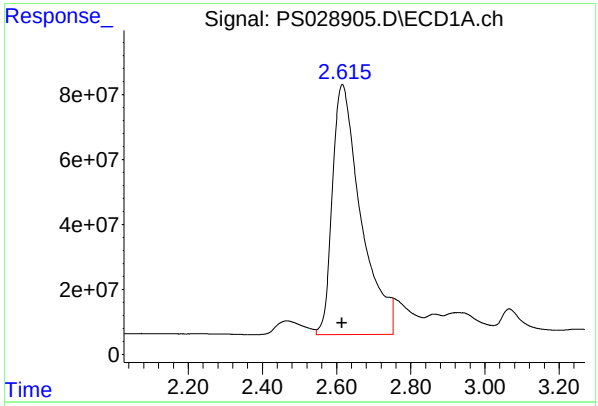
Manual Integrations APPROVED
Reviewed By :Abdul Mirza 01/14/2025
Supervised By :Ankita Jodhani 01/15/2025

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







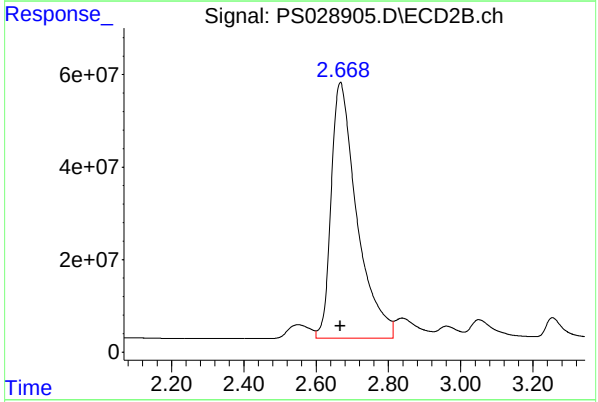
#1 Dalapon

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

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

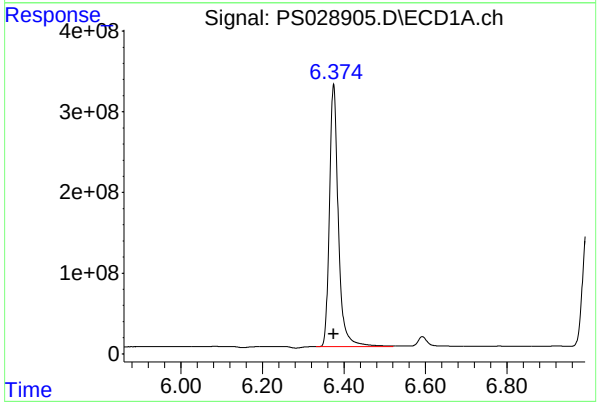
Manual Integrations APPROVED

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



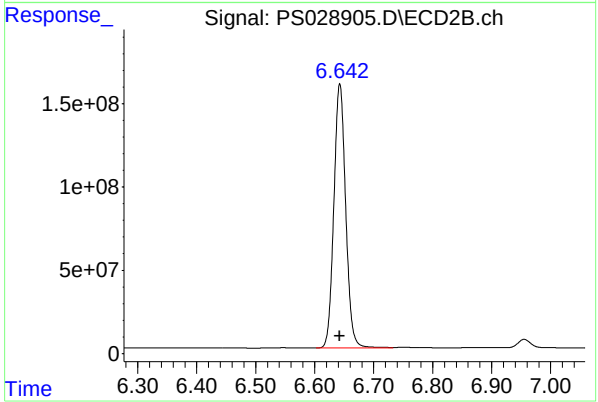
#1 Dalapon

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



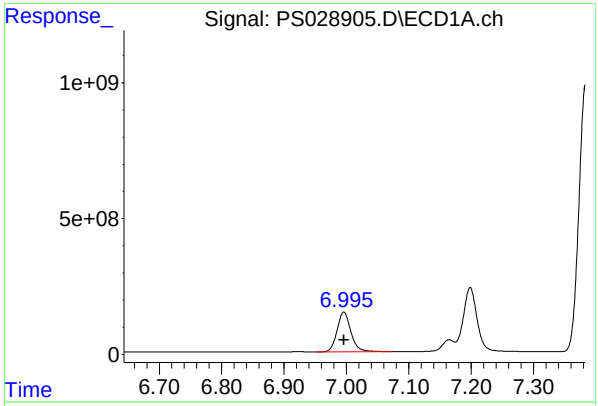
#2 3,5-DICHLOROBENZOIC ACID

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



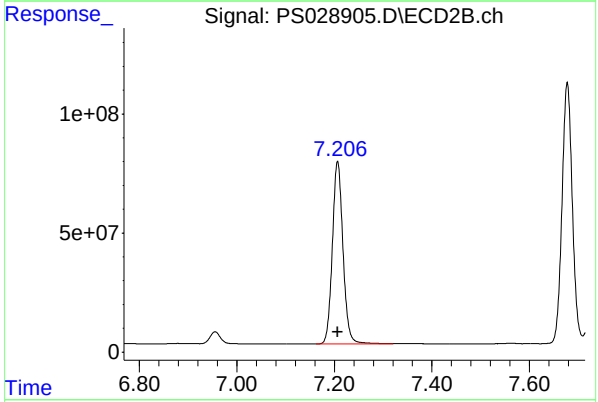
#3 4-Nitrophenol

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

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

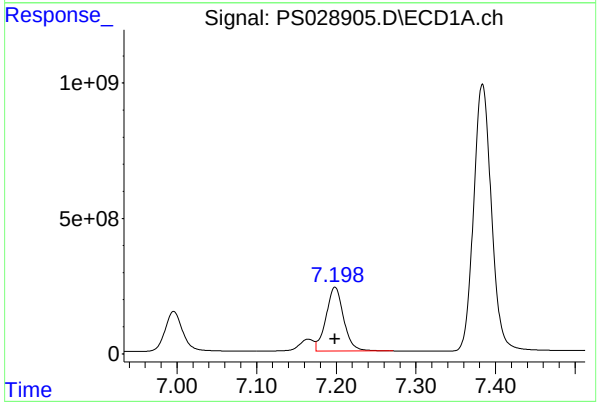
Manual Integrations APPROVED

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



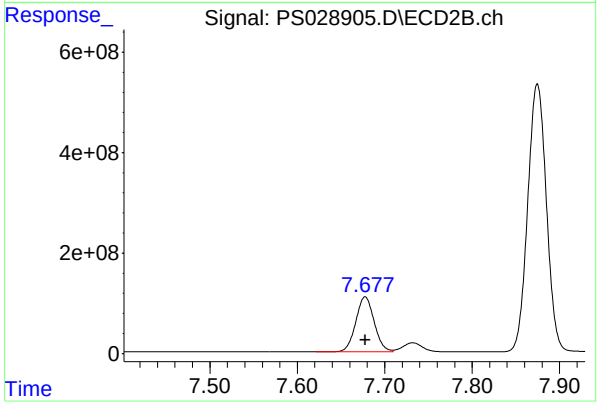
#3 4-Nitrophenol

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



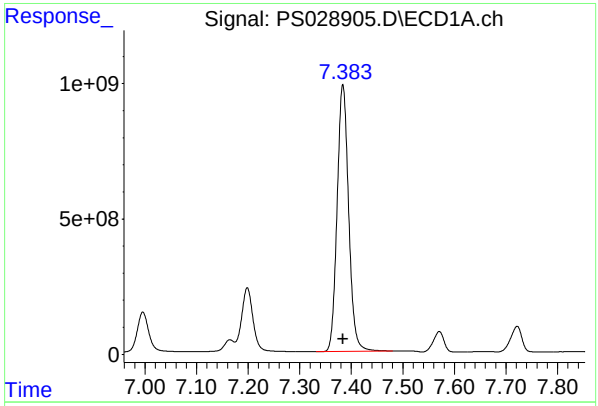
#4 2,4-DCAA

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



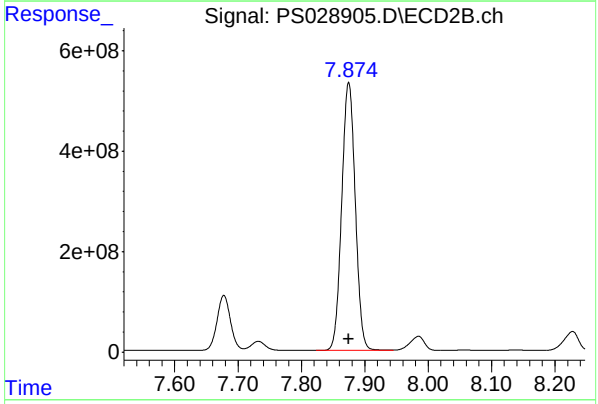
#5 DICAMBA

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

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

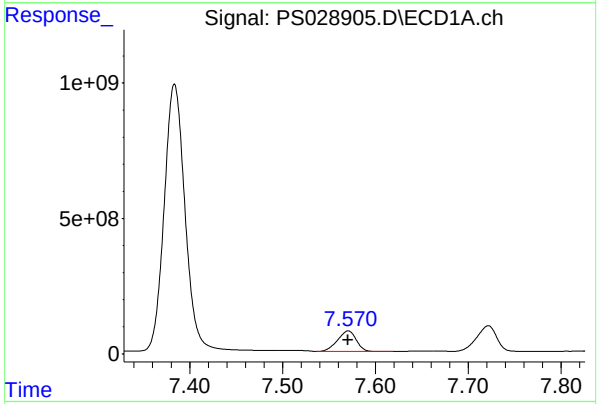
Manual Integrations APPROVED

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



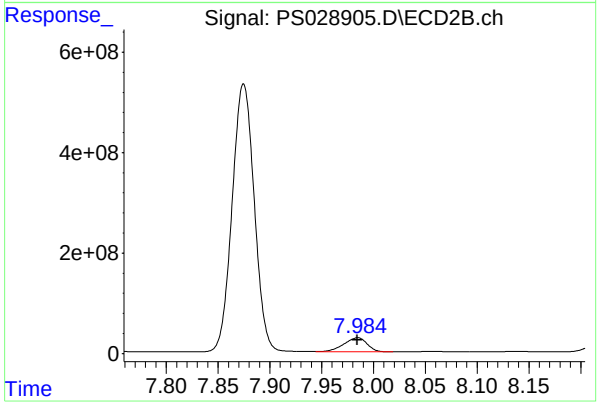
#5 DICAMBA

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



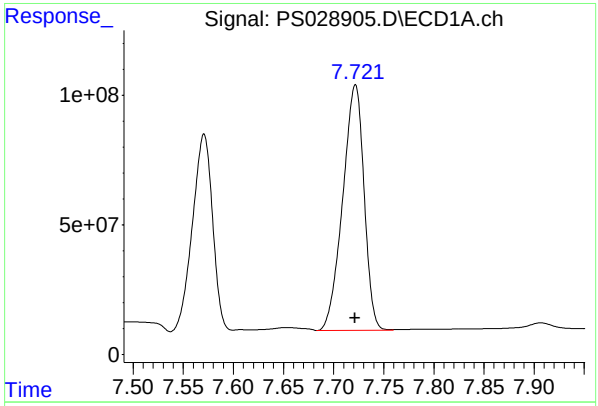
#6 MCPP

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



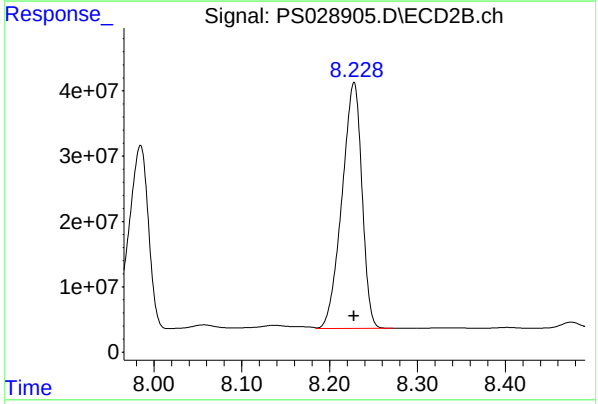
#7 MCPA

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

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

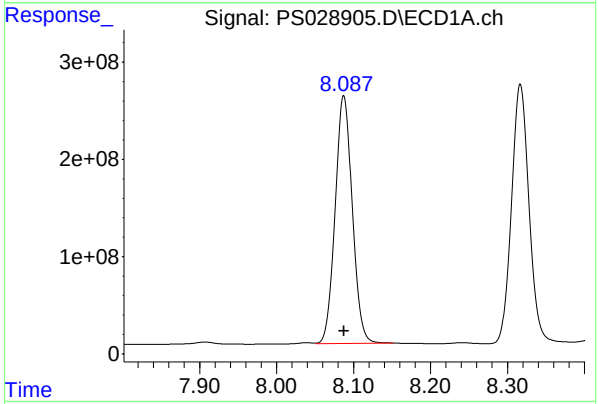
Manual Integrations APPROVED

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



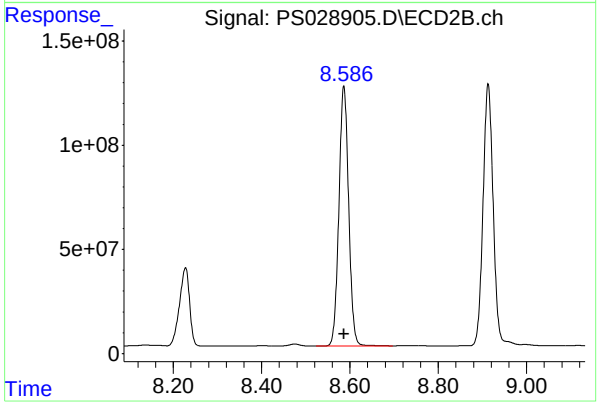
#7 MCPA

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



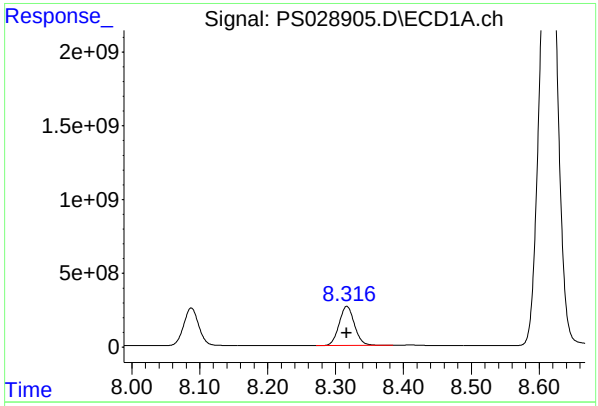
#8 DICHLORPROP

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



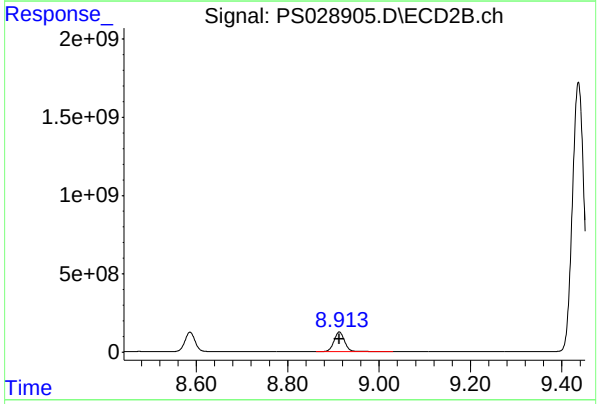
#9 2,4-D

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

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

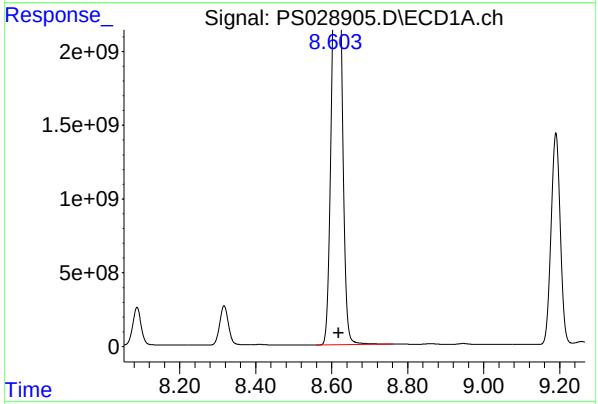
Manual Integrations APPROVED

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



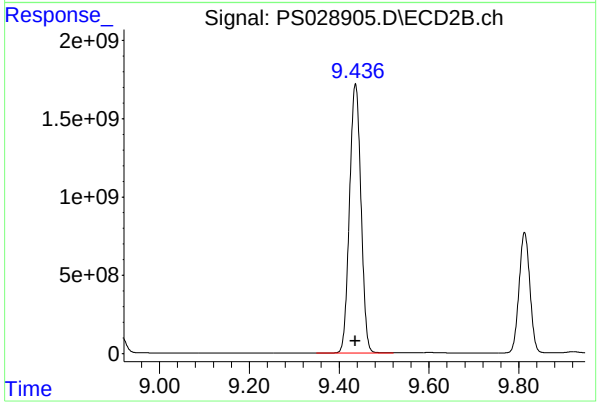
#9 2,4-D

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



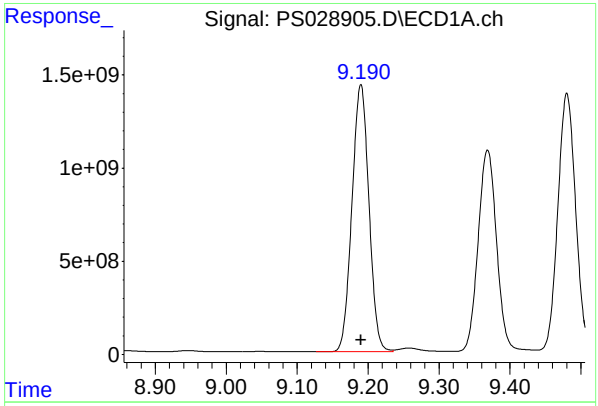
#10 Pentachlorophenol

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



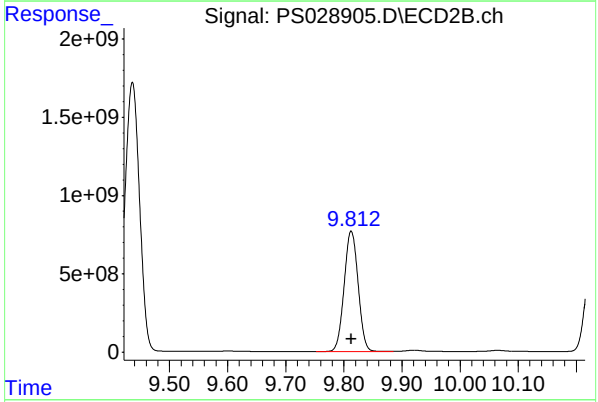
#11 2,4,5-TP (SILVEX)

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

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

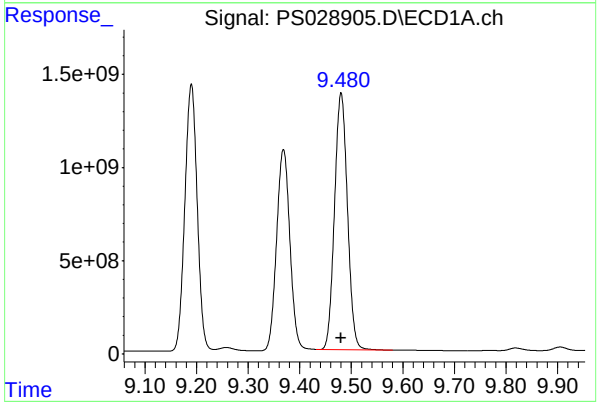
Manual Integrations APPROVED

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



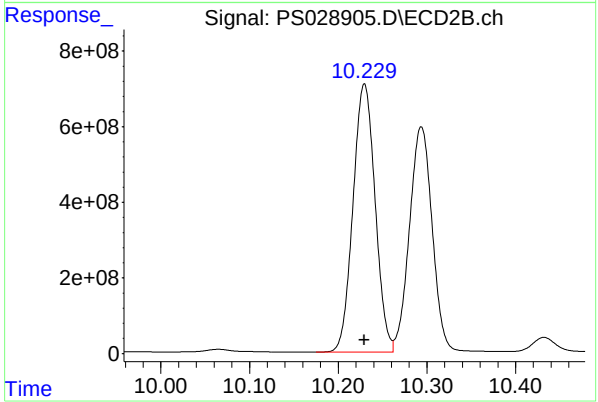
#11 2,4,5-TP (SILVEX)

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



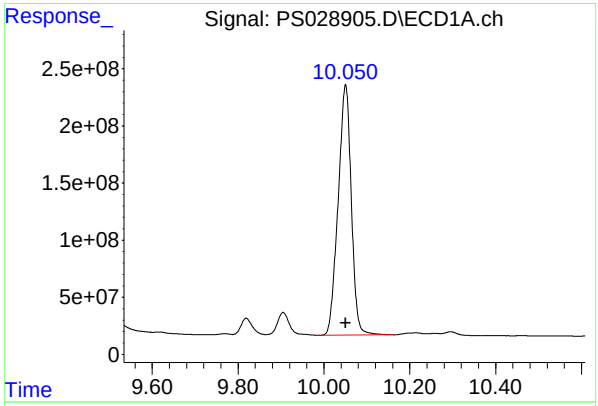
#12 2,4,5-T

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



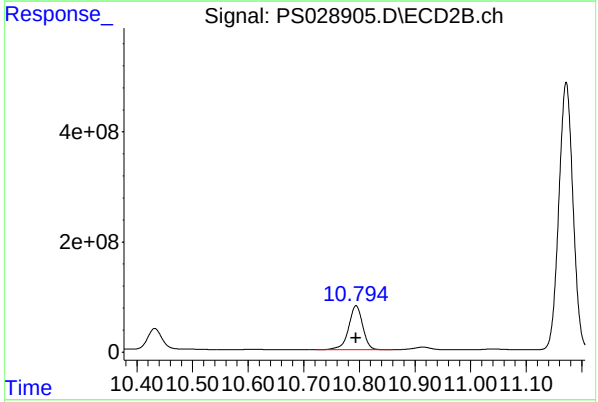
#13 2,4-DB

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

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

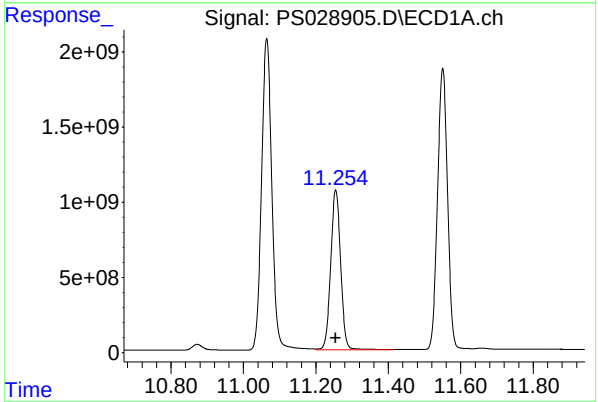
Manual Integrations APPROVED

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



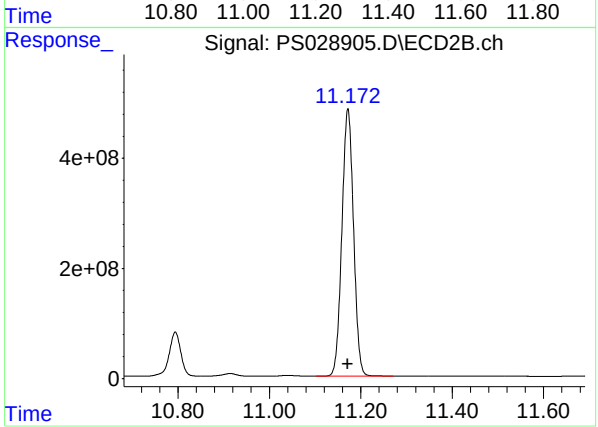
#13 2,4-DB

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



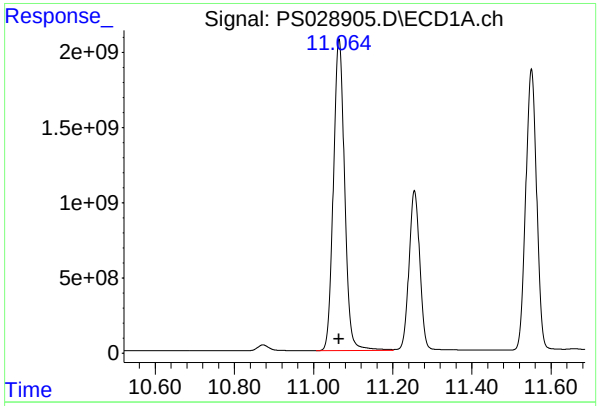
#14 DINOSEB

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



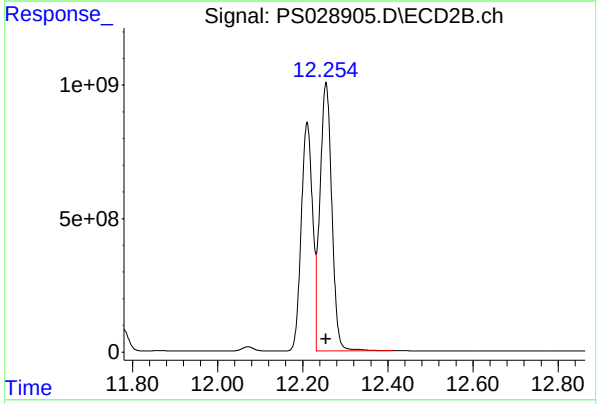
#15 Picloram

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

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

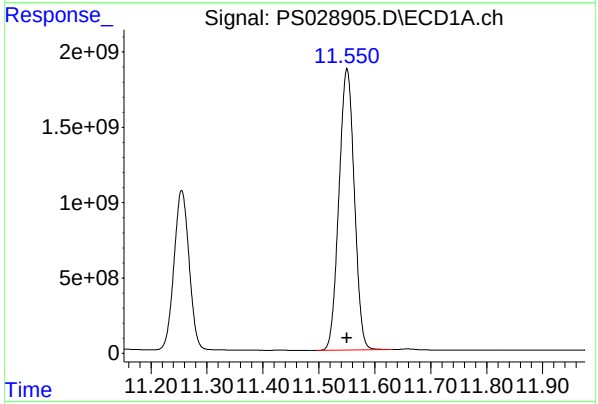
Manual Integrations APPROVED

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



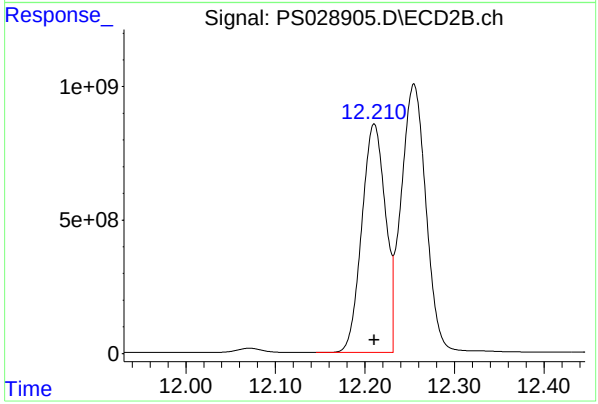
#15 Picloram

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.

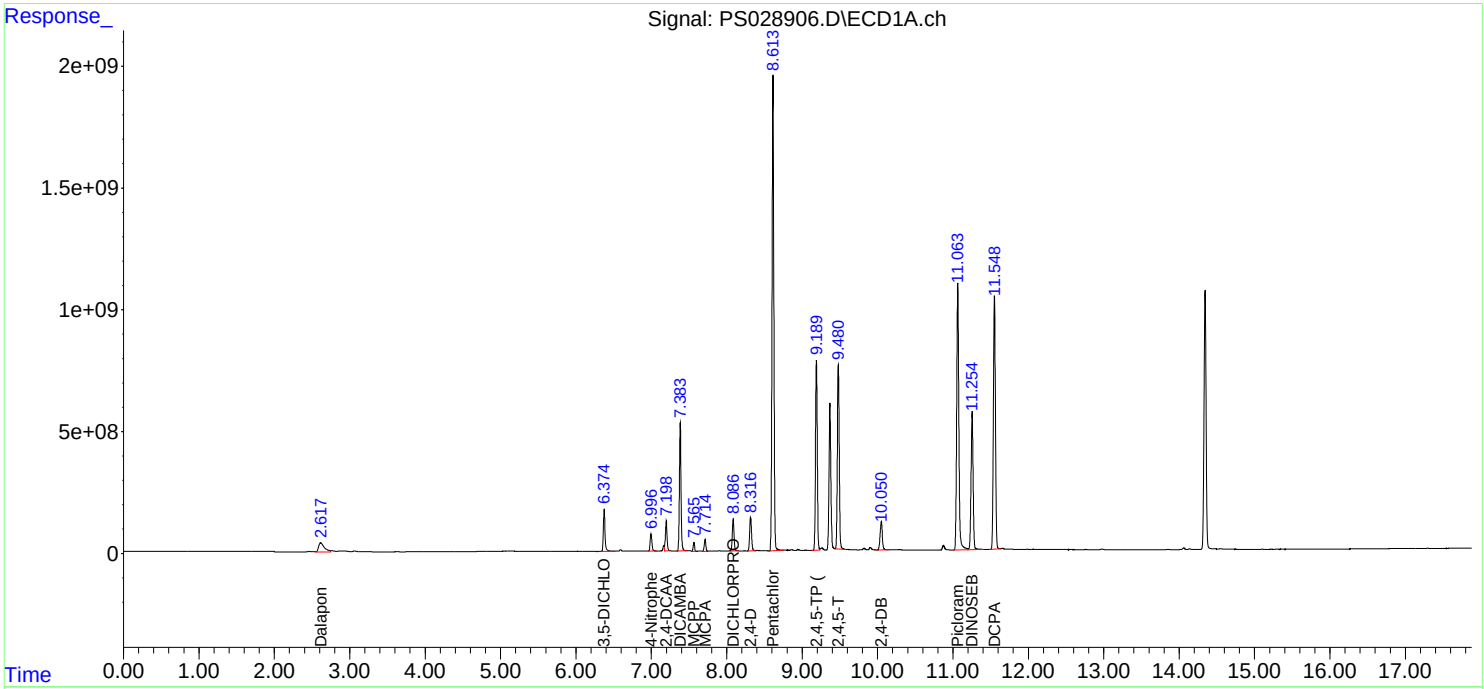
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS011425\
Data File : PS028906.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Jan 2025 12:31
Operator : AR\AJ
Sample : HSTDICV750
Misc :
ALS Vial : 8 Sample Multiplier: 1

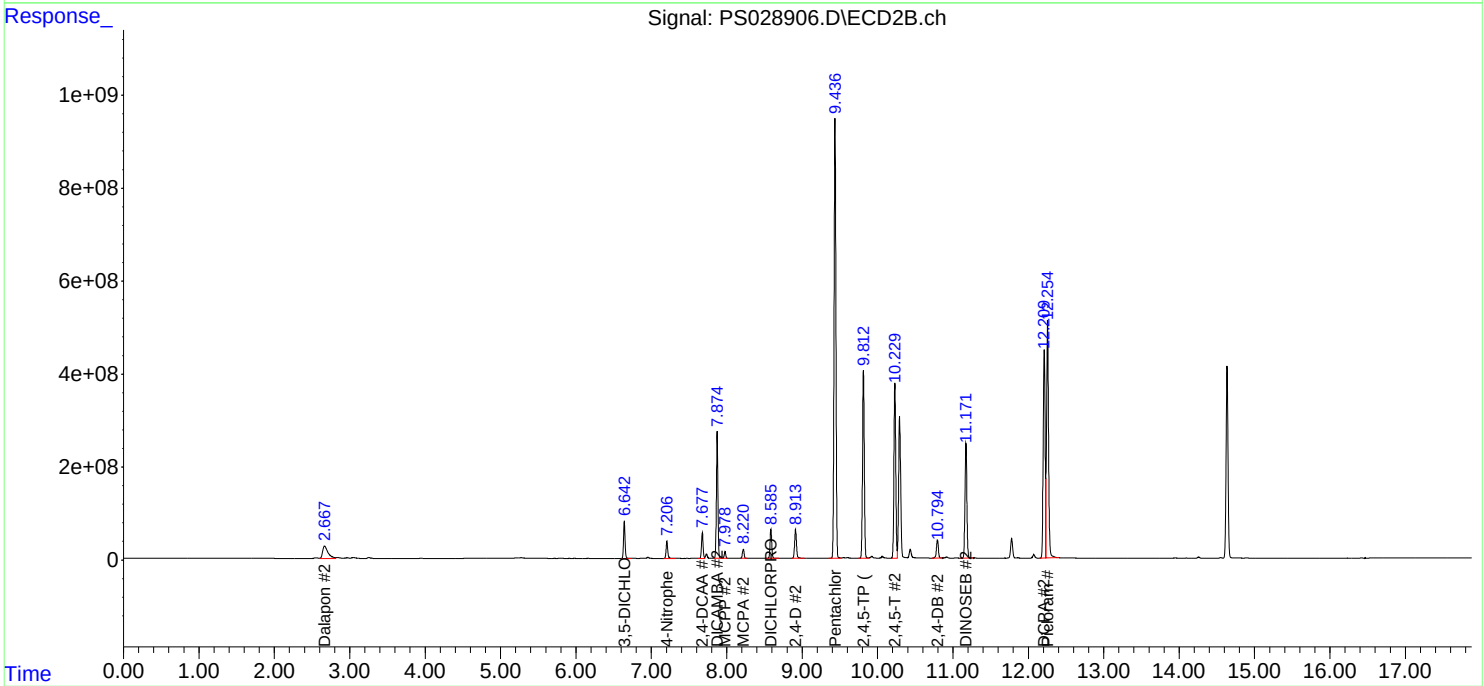
Instrument :
ECD_S
ClientSampleId :
ICVPS011425

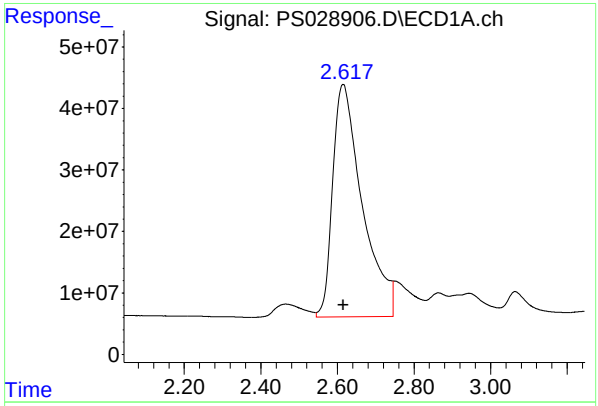
Manual Integrations APPROVED
Reviewed By :Abdul Mirza 01/14/2025
Supervised By :Ankita Jodhani 01/15/2025

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







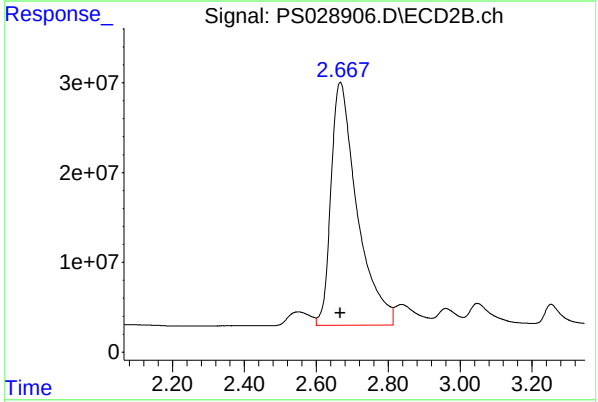
#1 Dalapon

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

Instrument :
ECD_S
ClientSampleId :
ICVPS011425

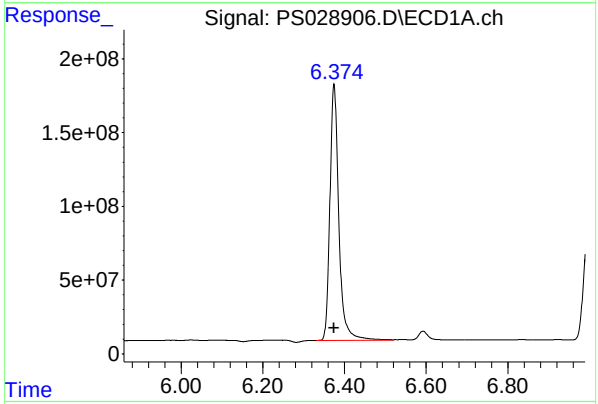
Manual Integrations APPROVED

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



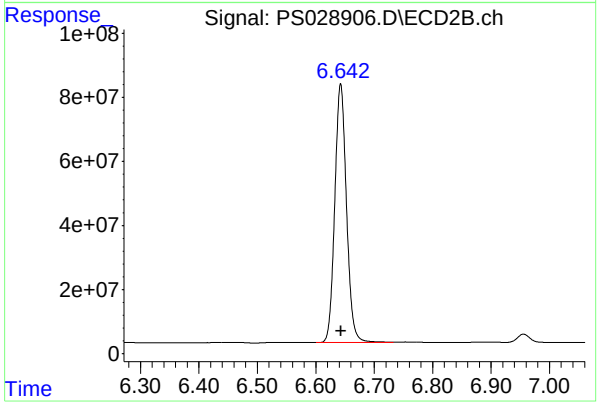
#1 Dalapon

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



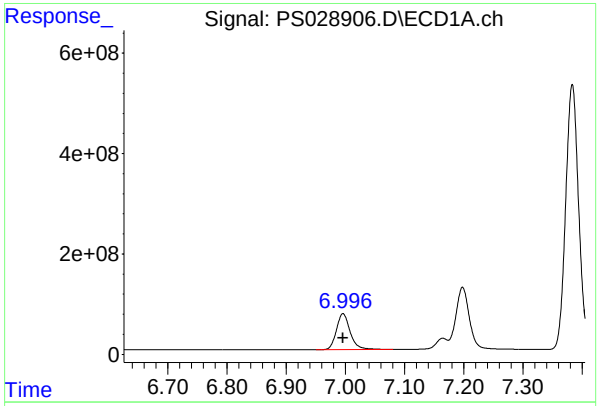
#2 3,5-DICHLOROBENZOIC ACID

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



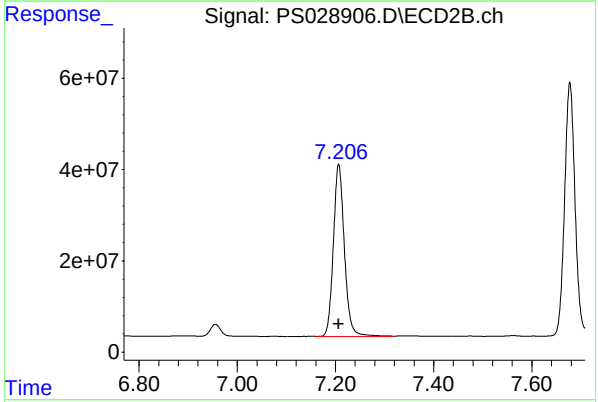
#3 4-Nitrophenol

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

Instrument :
ECD_S
ClientSampleId :
ICVPS011425

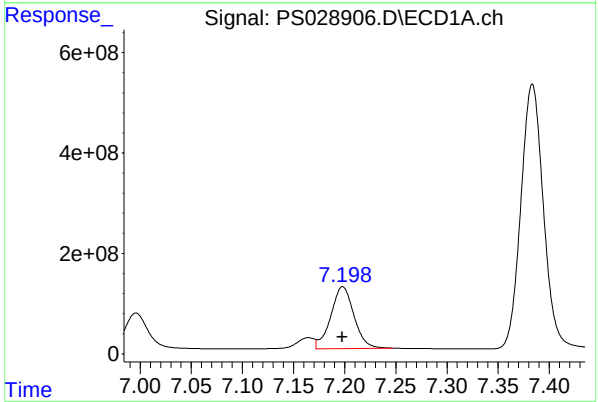
Manual Integrations APPROVED

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



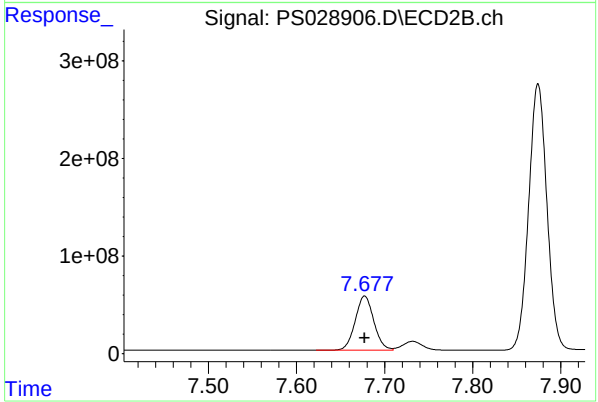
#3 4-Nitrophenol

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



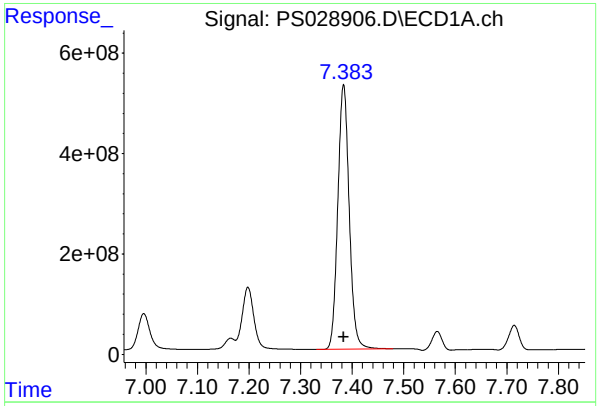
#4 2,4-DCAA

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



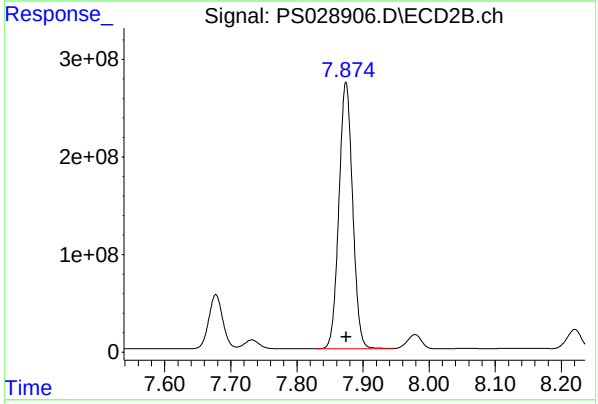
#5 DICAMBA

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

Instrument :
ECD_S
ClientSampleId :
ICVPS011425

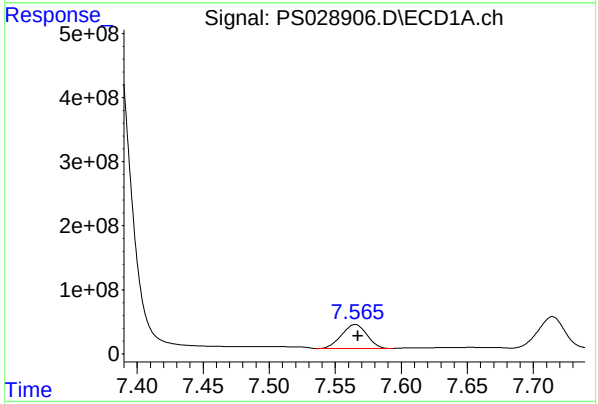
Manual Integrations APPROVED

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



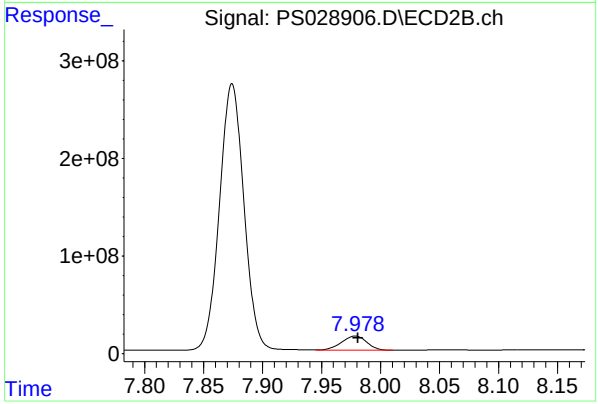
#5 DICAMBA

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



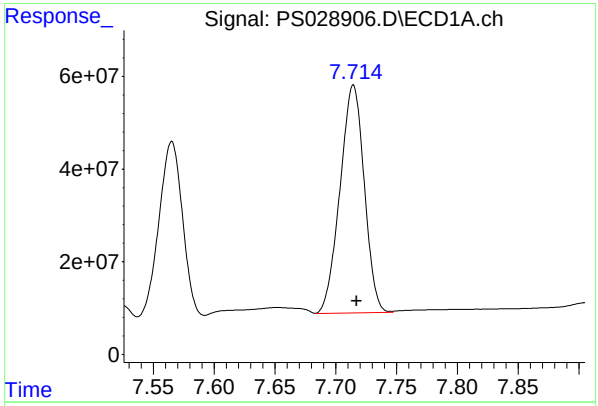
#6 MCPP

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



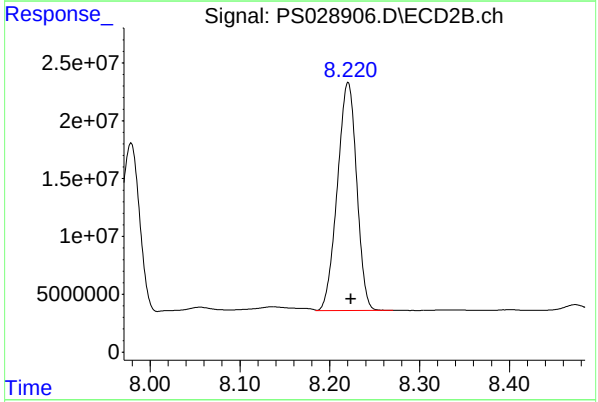
#7 MCPA

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

Instrument :
ECD_S
ClientSampleId :
ICVPS011425

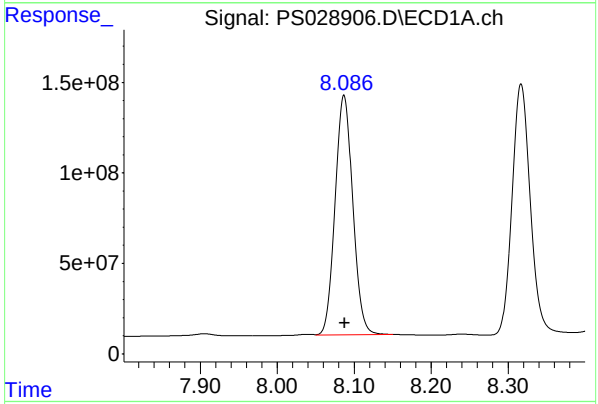
Manual Integrations APPROVED

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



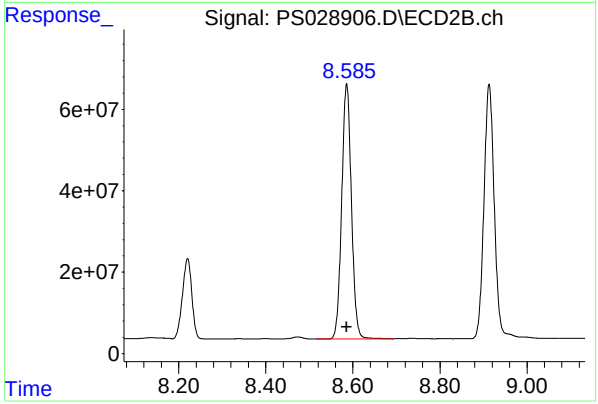
#7 MCPA

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



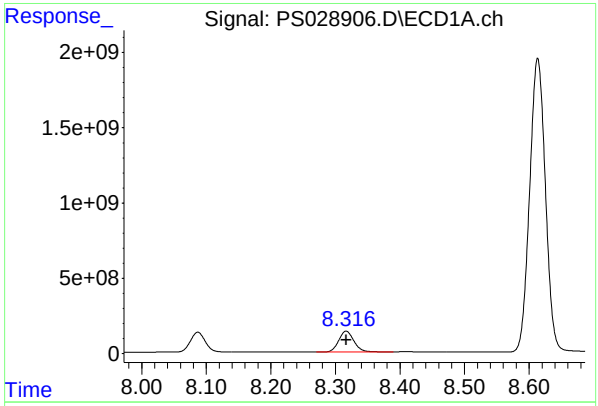
#8 DICHLORPROP

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



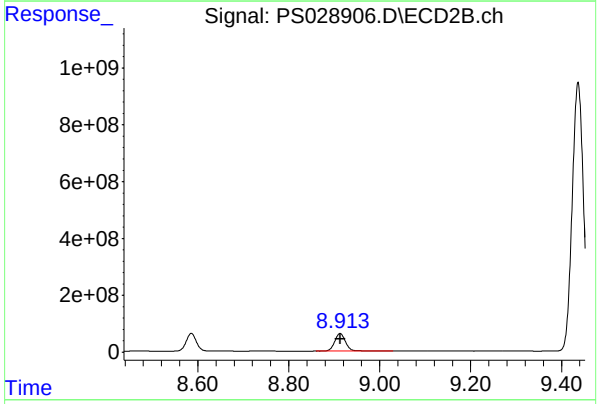
#9 2,4-D

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

Instrument :
ECD_S
ClientSampleId :
ICVPS011425

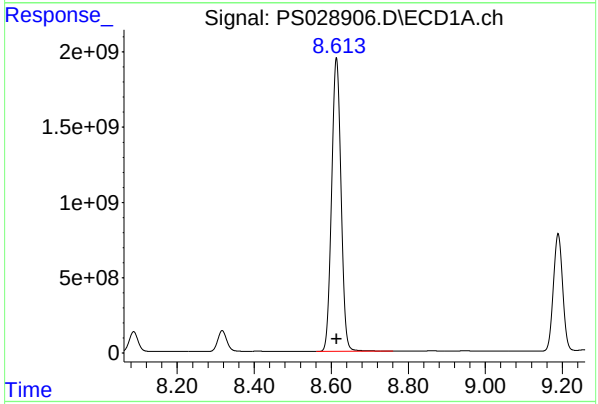
Manual Integrations APPROVED

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



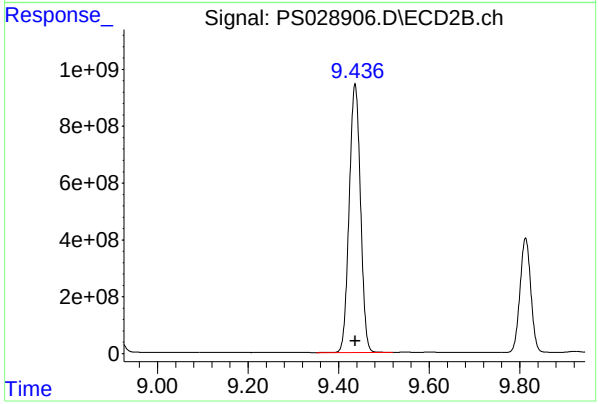
#9 2,4-D

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



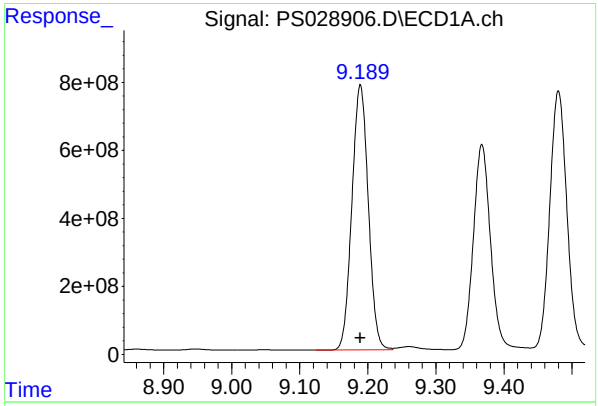
#10 Pentachlorophenol

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



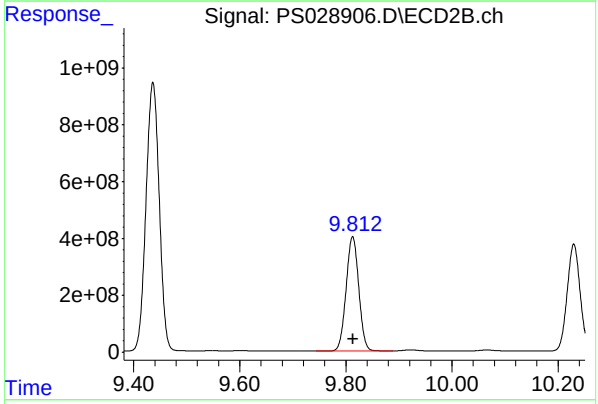
#11 2,4,5-TP (SILVEX)

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

Instrument :
ECD_S
ClientSampleId :
ICVPS011425

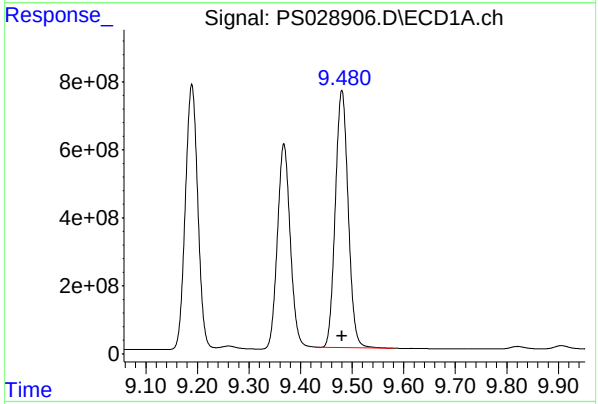
Manual Integrations APPROVED

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



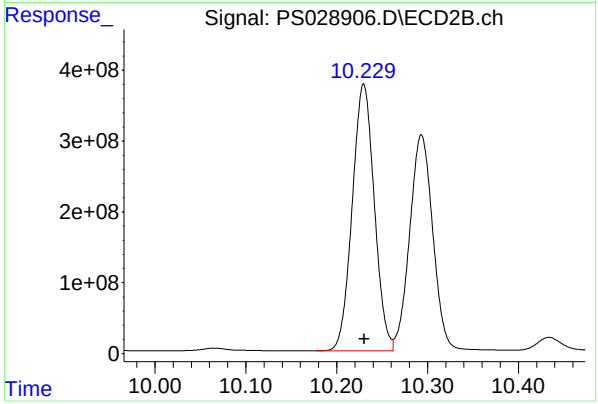
#11 2,4,5-TP (SILVEX)

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



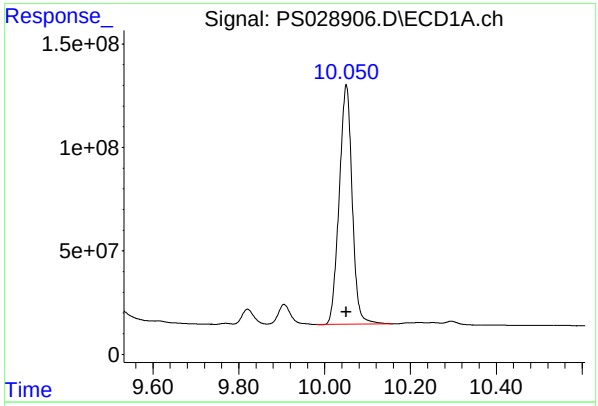
#12 2,4,5-T

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



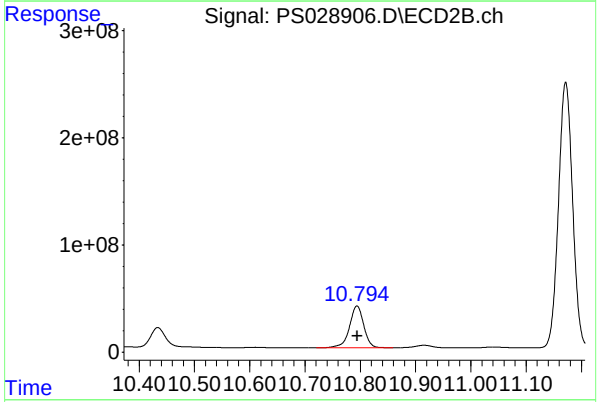
#13 2,4-DB

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

Instrument :
ECD_S
ClientSampleId :
ICVPS011425

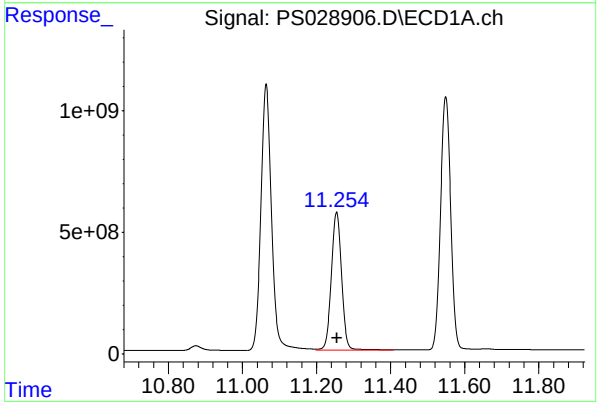
Manual Integrations APPROVED

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



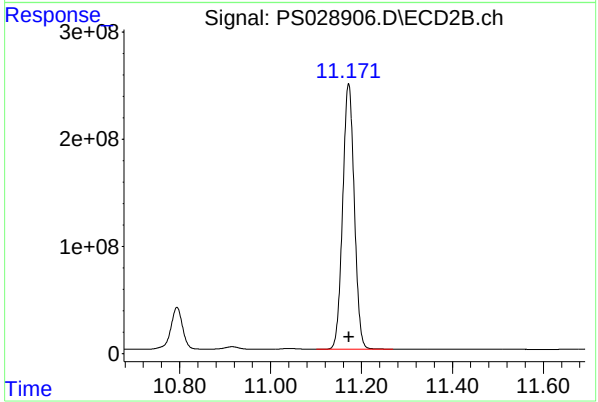
#13 2,4-DB

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



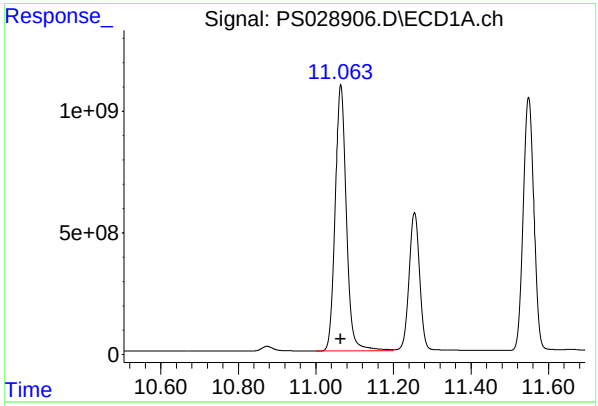
#14 DINOSEB

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



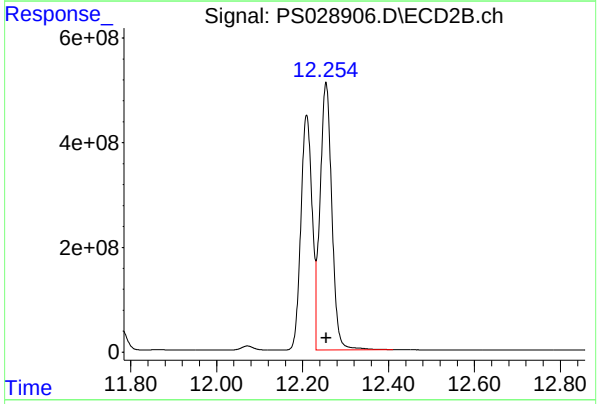
#15 Picloram

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

Instrument :
ECD_S
ClientSampleId :
ICVPS011425

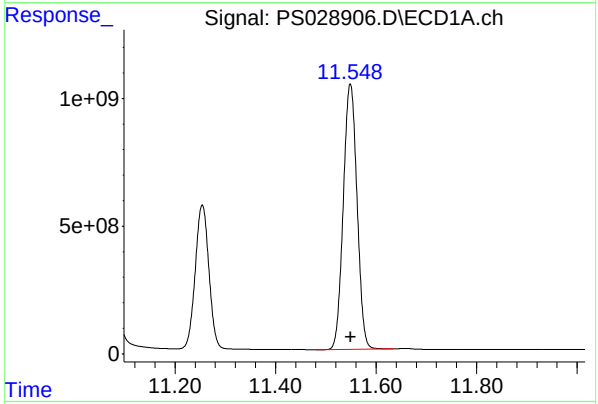
Manual Integrations APPROVED

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



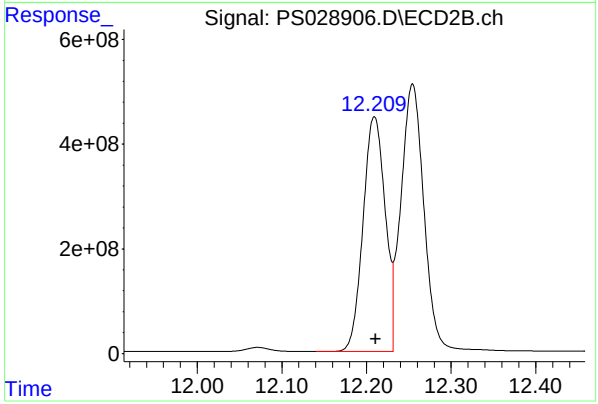
#15 Picloram

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

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.:** Q1242 **SAS No.:** Q1242 **SDG NO.:** Q1242

Continuing Calib Date: 02/03/2025 **Initial Calibration Date(s):** 01/14/2025 01/14/2025

Continuing Calib Time: 10:38 **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

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.:** Q1242 **SAS No.:** Q1242 **SDG NO.:** Q1242

Continuing Calib Date: 02/03/2025 **Initial Calibration Date(s):** 01/14/2025 01/14/2025

Continuing Calib Time: 10:38 **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	8.90	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.:** Q1242 **SAS No.:** Q1242 **SDG NO.:** Q1242

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

Client Sample No.: CCAL01 **Date Analyzed:** 02/03/2025

Lab Sample No.: HSTDCCC750 **Data File :** PS029047.D **Time Analyzed:** 10:38

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	9.180	9.089	9.289	723.740	712.500	1.6
2,4-D	8.309	8.216	8.416	700.140	705.000	-0.7
2,4-DCAA	7.191	7.097	7.297	744.770	750.000	-0.7

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.:** Q1242 **SAS No.:** Q1242 **SDG NO.:** Q1242

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

Client Sample No.: CCAL01 **Date Analyzed:** 02/03/2025

Lab Sample No.: HSTDCCC750 **Data File :** PS029047.D **Time Analyzed:** 10:38

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	9.802	9.713	9.913	708.950	712.500	-0.5
2,4-D	8.903	8.813	9.013	652.250	705.000	-7.5
2,4-DCAA	7.669	7.577	7.777	675.660	750.000	-9.9

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS020325\
Data File : PS029047.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 03 Feb 2025 10:38
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 04 01:09:29 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	7.191	7.669	2073.4E6	753.9E6	744.766	675.662
		Target Compounds						
1)	T	Dalapon	2.613	2.664	2303.4E6	1383.1E6	772.515	677.926
2)	T	3,5-DICHL...	6.369	6.636	2826.0E6	1051.7E6	707.053	636.365
3)	T	4-Nitroph...	6.989	7.199	1238.5E6	590.4E6	698.916	663.508
5)	T	DICAMBA	7.376	7.865	8638.5E6	3818.0E6	728.282	685.568
6)	T	MCPP	7.559	7.970	493.4E6	186.2E6	72.388	61.895
7)	T	MCPA	7.707	8.211	718.0E6	256.8E6	72.890	60.452
8)	T	DICHLORPROP	8.079	8.577	2227.7E6	932.8E6	703.076	663.608
9)	T	2,4-D	8.309	8.903	2366.1E6	978.1E6	700.139	652.247
10)	T	Pentachlo...	8.605	9.425	35522.0E6	16602.9E6	736.405	716.693
11)	T	2,4,5-TP ...	9.180	9.802	13847.1E6	6677.9E6	723.740	708.954
12)	T	2,4,5-T	9.470	10.218	13774.7E6	6262.8E6	717.545	695.176
13)	T	2,4-DB	10.041	10.783	2452.0E6	649.9E6	691.206	652.668
14)	T	DINOSEB	11.242	11.160	11501.8E6	4352.1E6	695.083	678.188
15)	T	Picloram	11.054	12.241	21720.0E6	9108.0E6	688.385	678.707
16)	T	DCPA	11.538	12.197	20758.2E6	8436.2E6	723.761	743.120

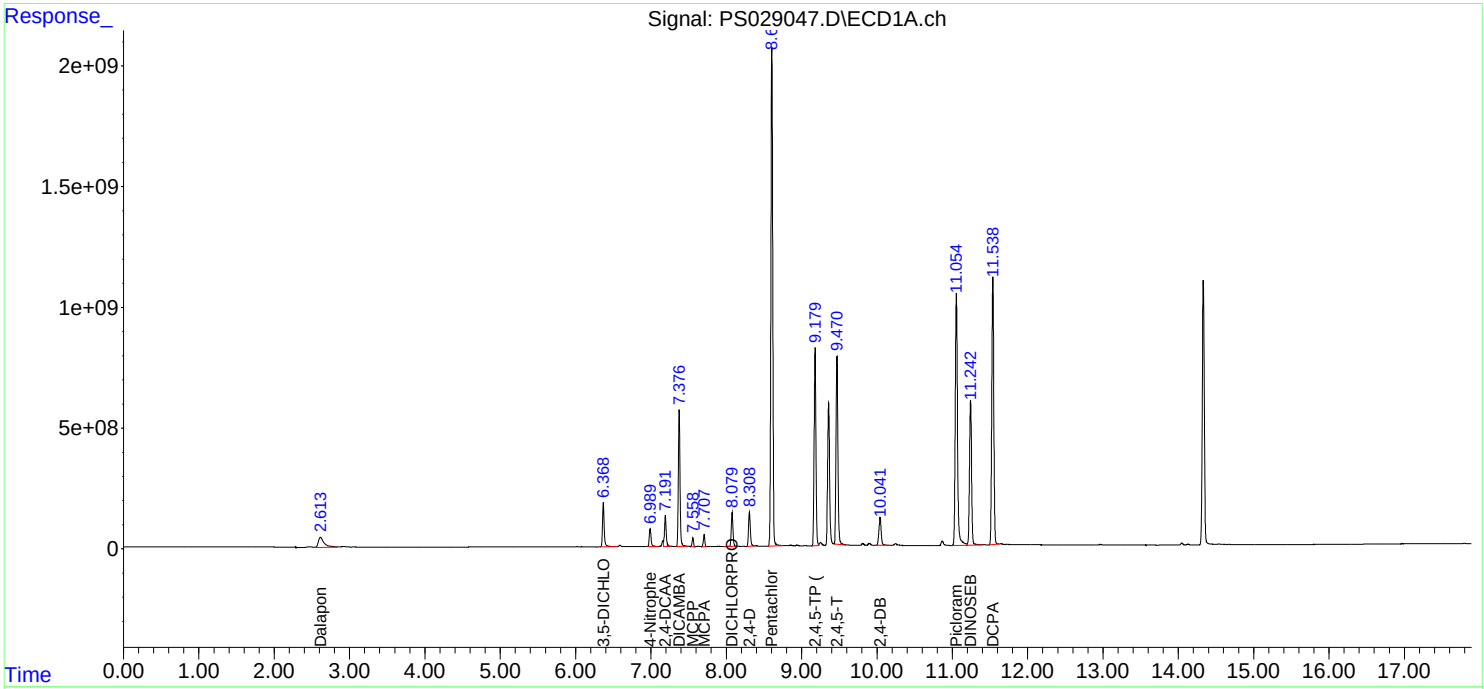
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

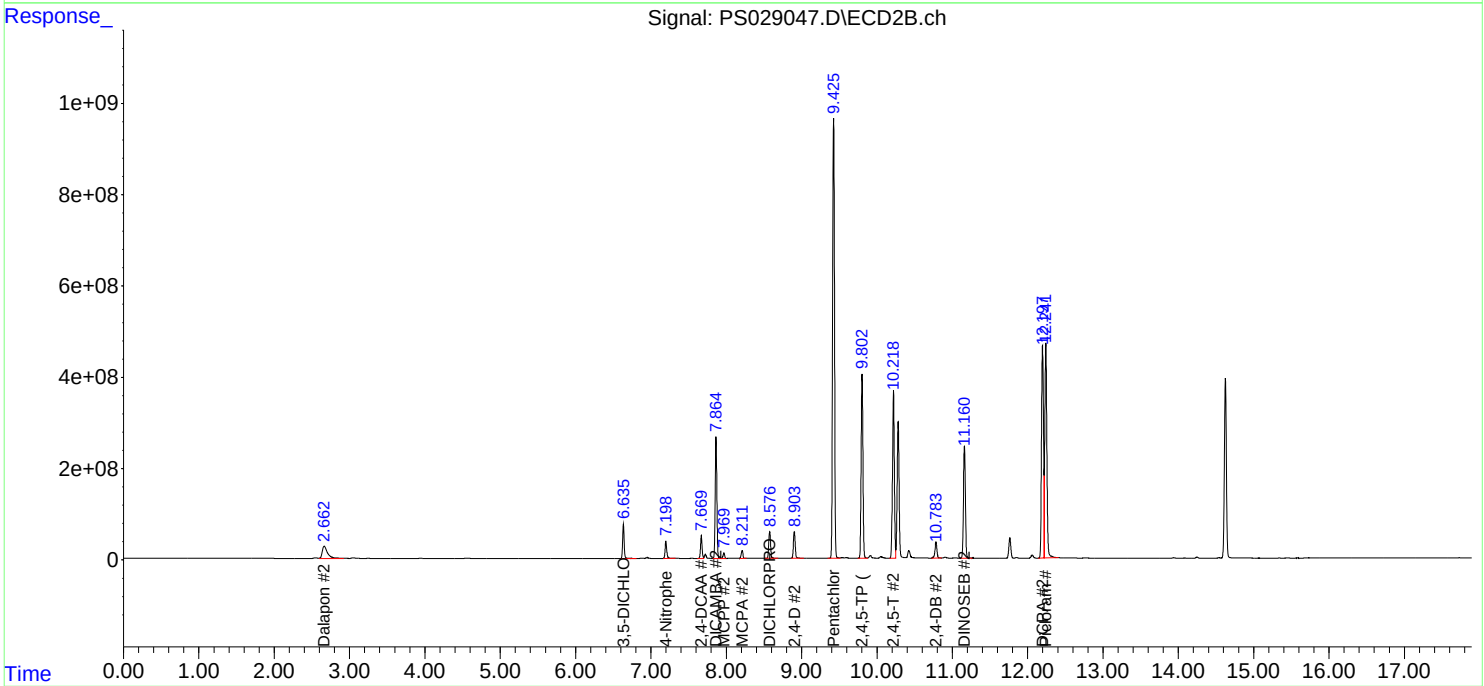
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS020325\
Data File : PS029047.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 03 Feb 2025 10:38
Operator : AR\AJ
Sample : HSTDCCC750
Misc :
ALS Vial : 3 Sample Multiplier: 1

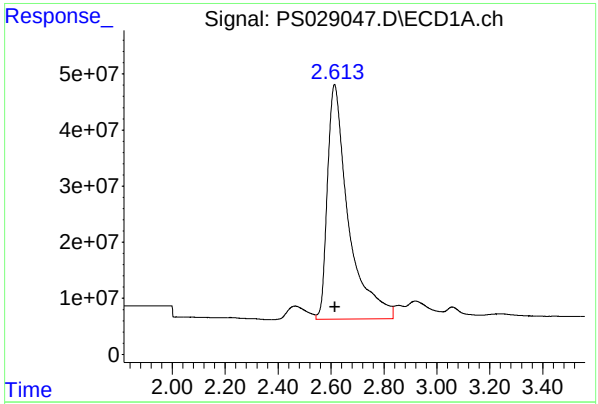
Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 04 01:09:29 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



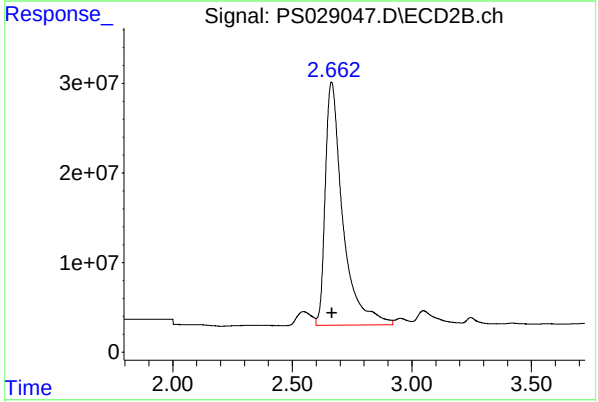




#1 Dalapon

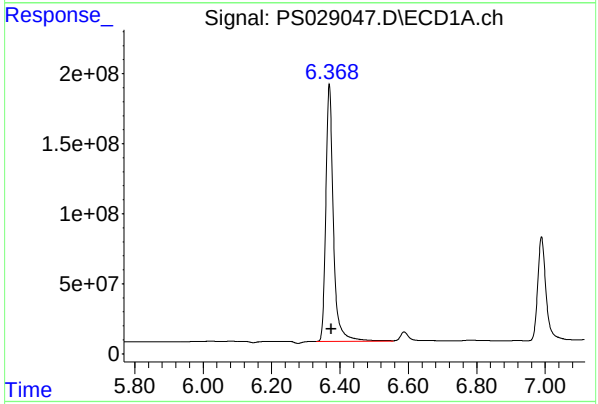
R.T.: 2.613 min
Delta R.T.: -0.002 min
Response: 2303441798
Conc: 772.52 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



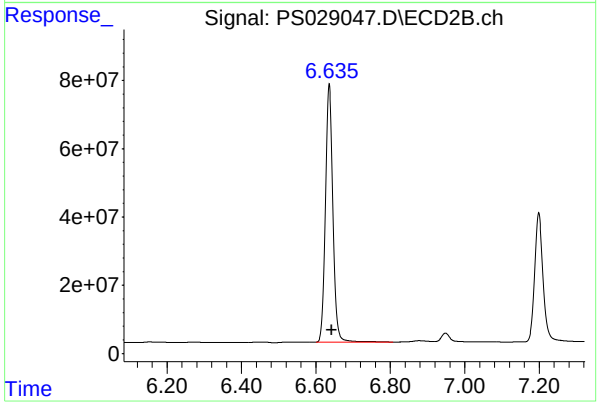
#1 Dalapon

R.T.: 2.664 min
Delta R.T.: -0.003 min
Response: 1383068661
Conc: 677.93 ng/ml



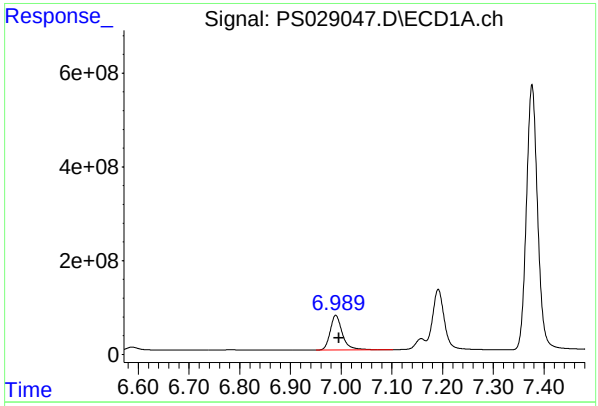
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.369 min
Delta R.T.: -0.006 min
Response: 2825985732
Conc: 707.05 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

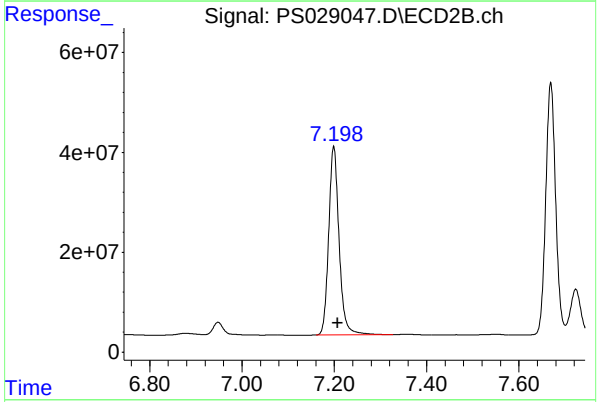
R.T.: 6.636 min
Delta R.T.: -0.007 min
Response: 1051669434
Conc: 636.36 ng/ml



#3 4-Nitrophenol

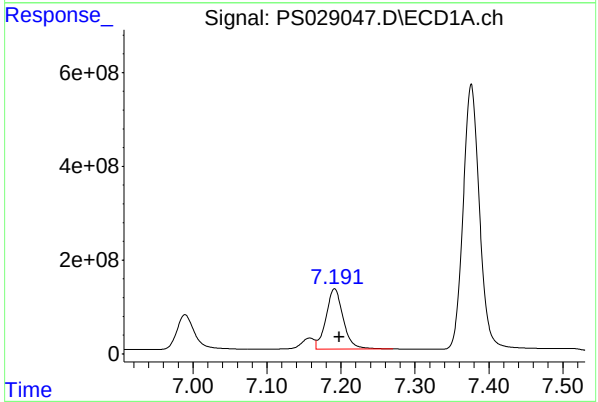
R.T.: 6.989 min
Delta R.T.: -0.006 min
Response: 1238535108
Conc: 698.92 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



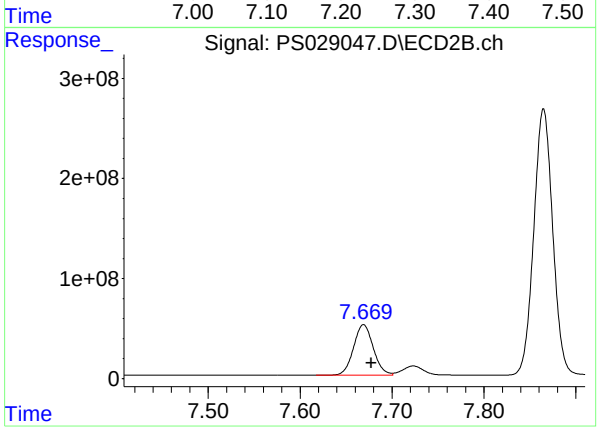
#3 4-Nitrophenol

R.T.: 7.199 min
Delta R.T.: -0.008 min
Response: 590372119
Conc: 663.51 ng/ml



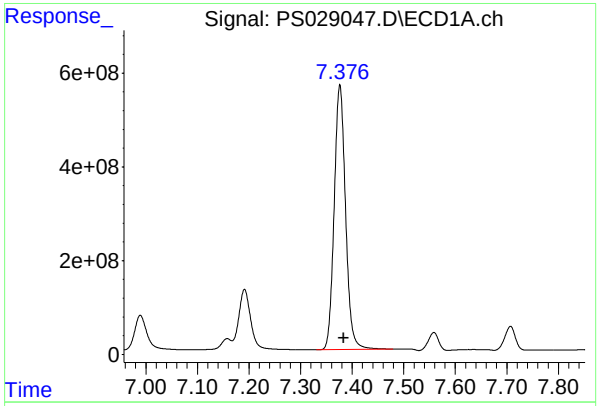
#4 2,4-DCAA

R.T.: 7.191 min
Delta R.T.: -0.006 min
Response: 2073437494
Conc: 744.77 ng/ml



#4 2,4-DCAA

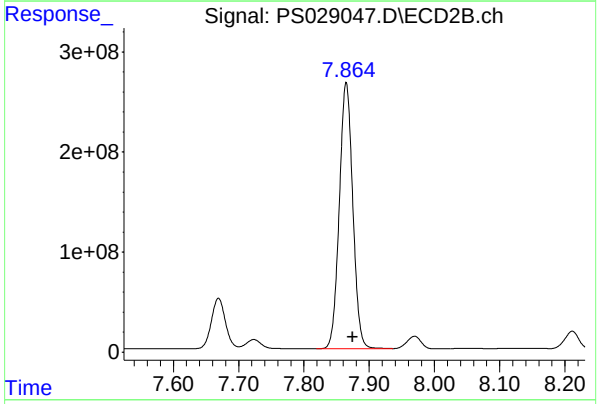
R.T.: 7.669 min
Delta R.T.: -0.008 min
Response: 753912418
Conc: 675.66 ng/ml



#5 DICAMBA

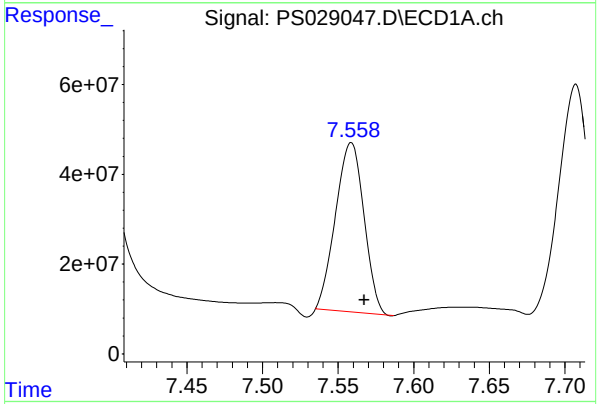
R.T.: 7.376 min
Delta R.T.: -0.007 min
Response: 8638474131
Conc: 728.28 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



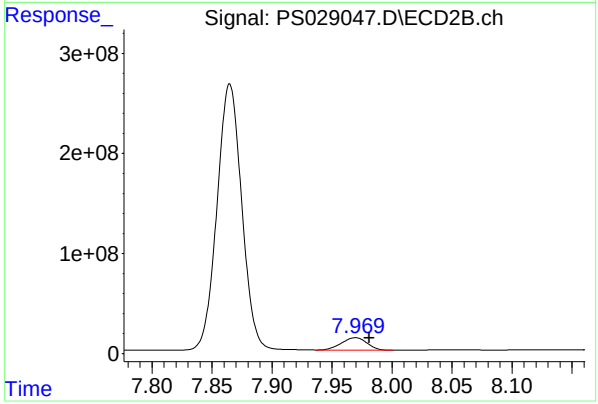
#5 DICAMBA

R.T.: 7.865 min
Delta R.T.: -0.010 min
Response: 3817953850
Conc: 685.57 ng/ml



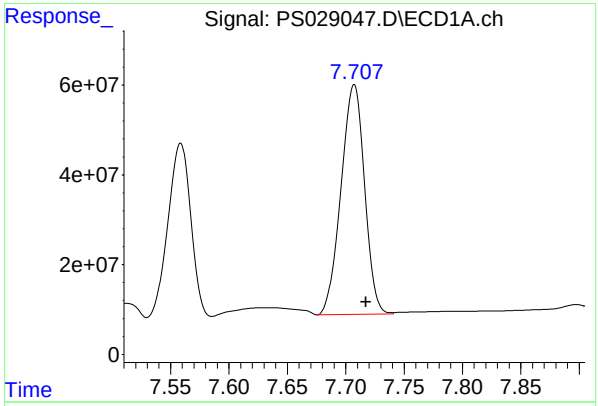
#6 MCPP

R.T.: 7.559 min
Delta R.T.: -0.009 min
Response: 493419504
Conc: 72.39 ug/ml



#6 MCPP

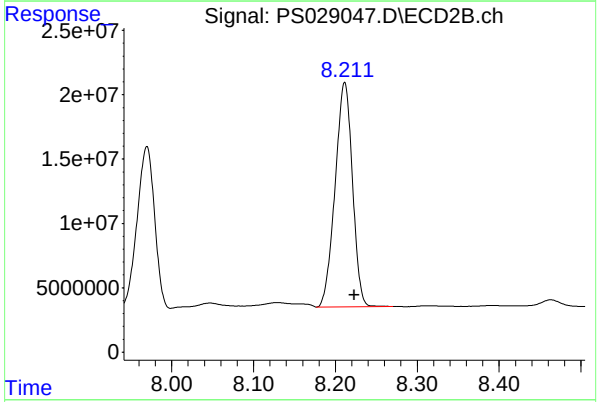
R.T.: 7.970 min
Delta R.T.: -0.011 min
Response: 186177909
Conc: 61.90 ug/ml



#7 MCPA

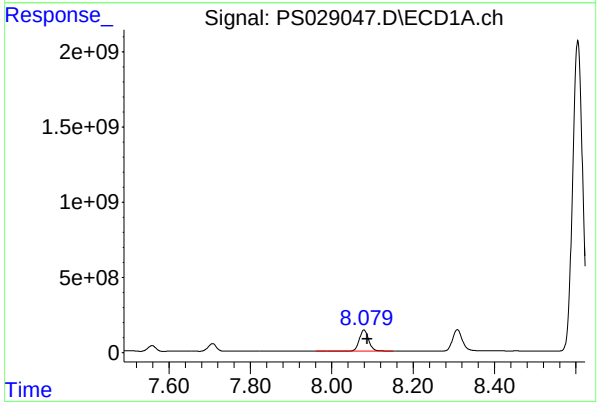
R.T.: 7.707 min
Delta R.T.: -0.010 min
Response: 718041697
Conc: 72.89 ug/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



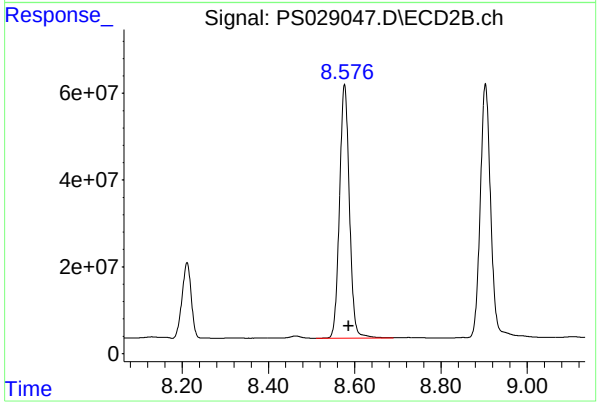
#7 MCPA

R.T.: 8.211 min
Delta R.T.: -0.012 min
Response: 256766390
Conc: 60.45 ug/ml



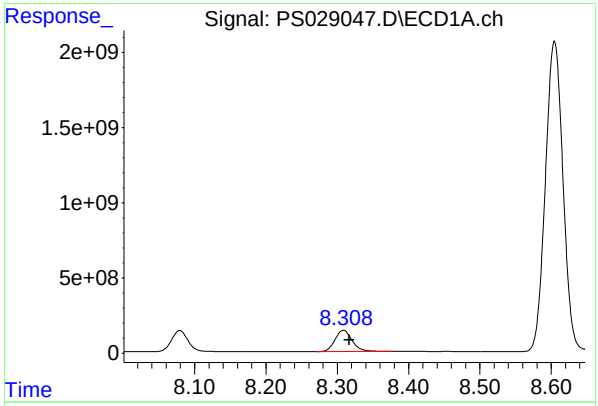
#8 DICHLORPROP

R.T.: 8.079 min
Delta R.T.: -0.009 min
Response: 2227746722
Conc: 703.08 ng/ml



#8 DICHLORPROP

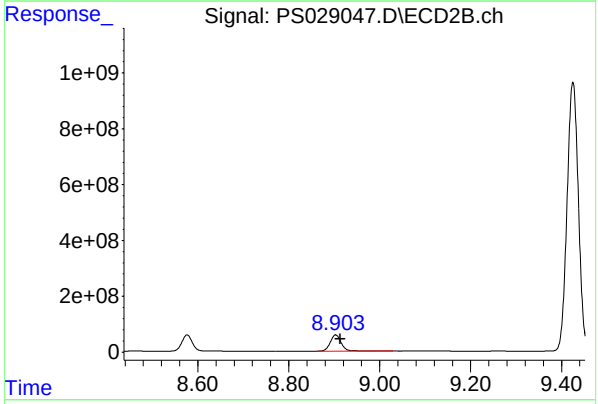
R.T.: 8.577 min
Delta R.T.: -0.010 min
Response: 932766875
Conc: 663.61 ng/ml



#9 2,4-D

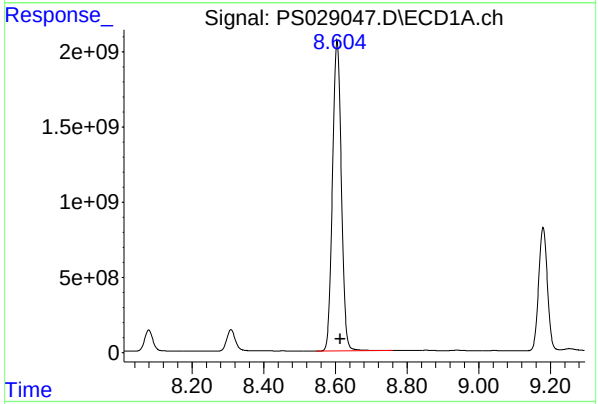
R.T.: 8.309 min
Delta R.T.: -0.008 min
Response: 2366084182
Conc: 700.14 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



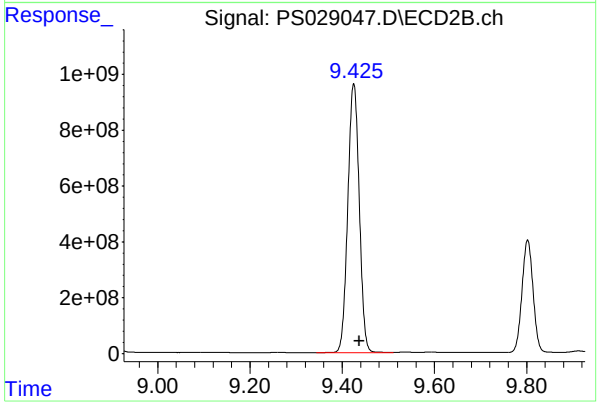
#9 2,4-D

R.T.: 8.903 min
Delta R.T.: -0.010 min
Response: 978056554
Conc: 652.25 ng/ml



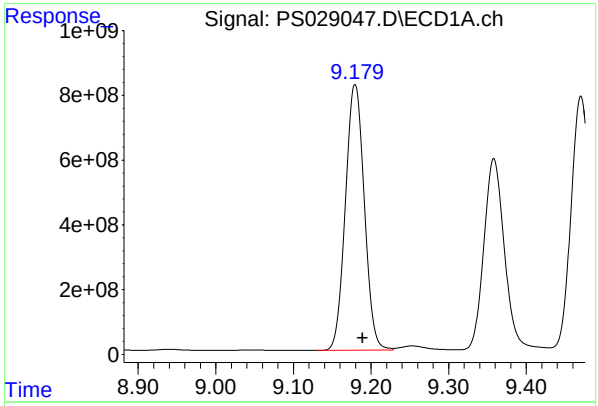
#10 Pentachlorophenol

R.T.: 8.605 min
Delta R.T.: -0.010 min
Response: 35522015150
Conc: 736.41 ng/ml



#10 Pentachlorophenol

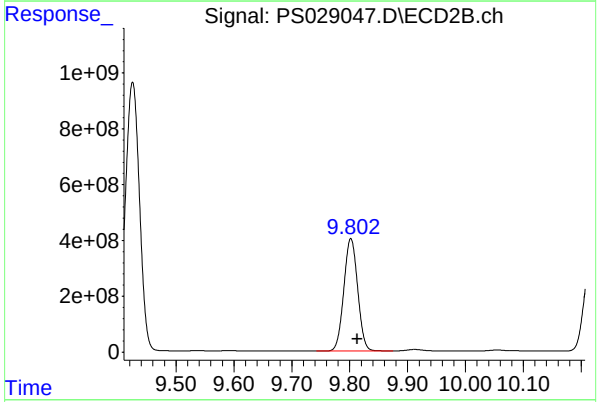
R.T.: 9.425 min
Delta R.T.: -0.012 min
Response: 16602924779
Conc: 716.69 ng/ml



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

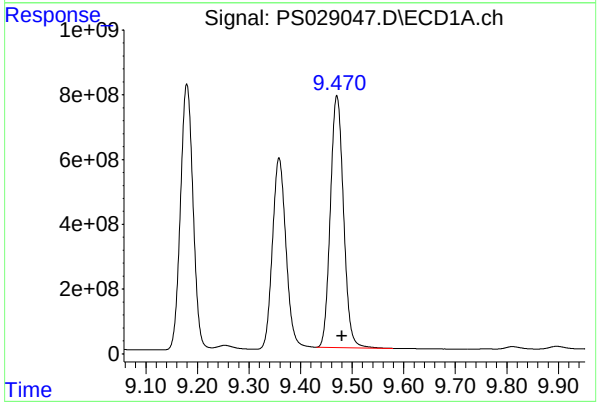
R.T.: 9.180 min
Delta R.T.: -0.010 min
Response: 13847078285
Conc: 723.74 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



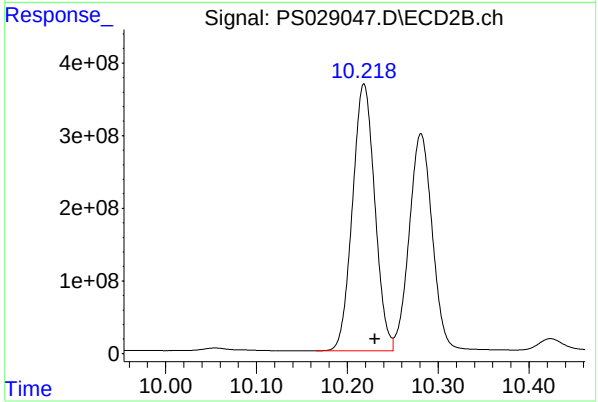
#11 2,4,5-TP (SILVEX)

R.T.: 9.802 min
Delta R.T.: -0.011 min
Response: 6677921819
Conc: 708.95 ng/ml



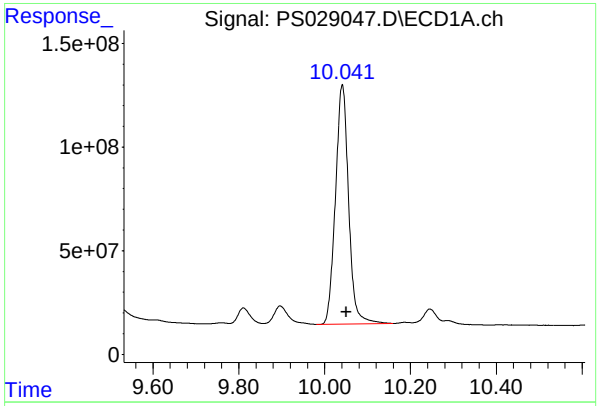
#12 2,4,5-T

R.T.: 9.470 min
Delta R.T.: -0.010 min
Response: 13774661937
Conc: 717.55 ng/ml



#12 2,4,5-T

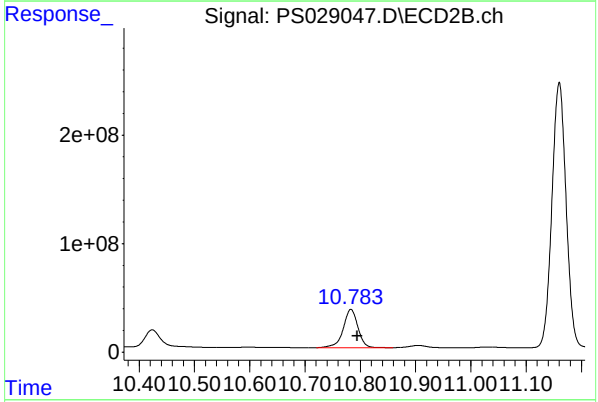
R.T.: 10.218 min
Delta R.T.: -0.012 min
Response: 6262842170
Conc: 695.18 ng/ml



#13 2,4-DB

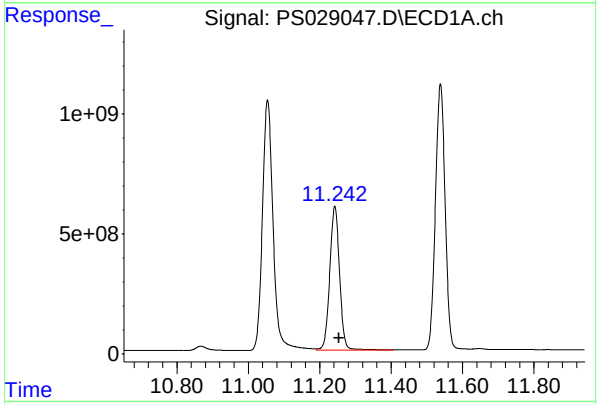
R.T.: 10.041 min
Delta R.T.: -0.010 min
Response: 2451954122
Conc: 691.21 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



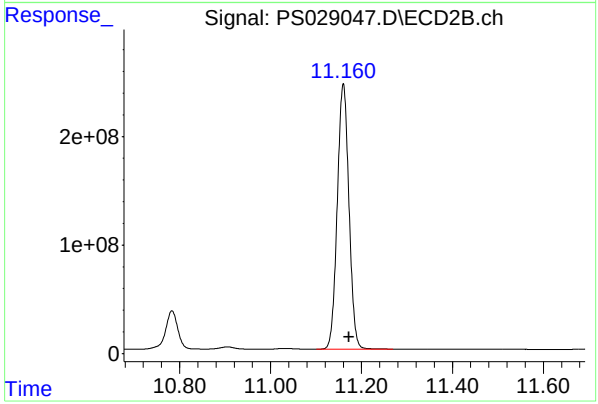
#13 2,4-DB

R.T.: 10.783 min
Delta R.T.: -0.012 min
Response: 649898012
Conc: 652.67 ng/ml



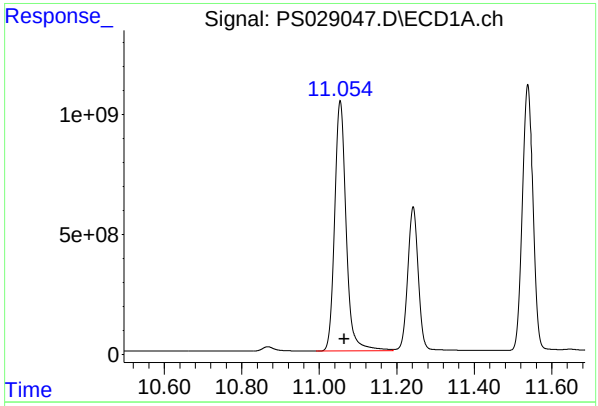
#14 DINOSEB

R.T.: 11.242 min
Delta R.T.: -0.012 min
Response: 11501762002
Conc: 695.08 ng/ml



#14 DINOSEB

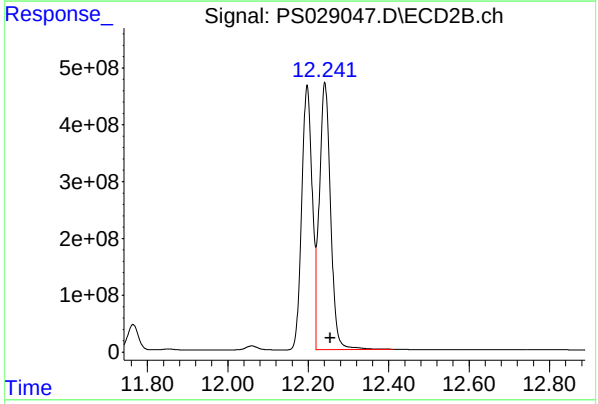
R.T.: 11.160 min
Delta R.T.: -0.013 min
Response: 4352148755
Conc: 678.19 ng/ml



#15 Picloram

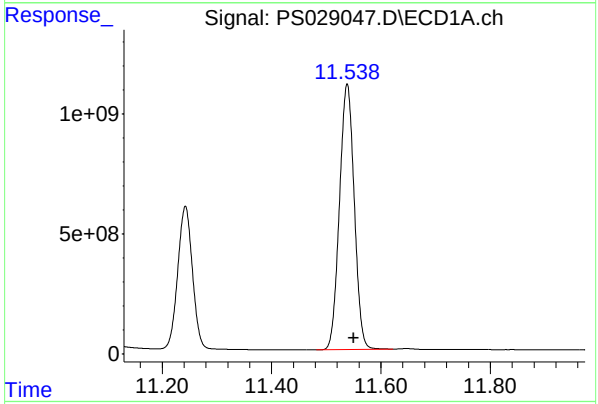
R.T.: 11.054 min
Delta R.T.: -0.010 min
Response: 21720019621
Conc: 688.38 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



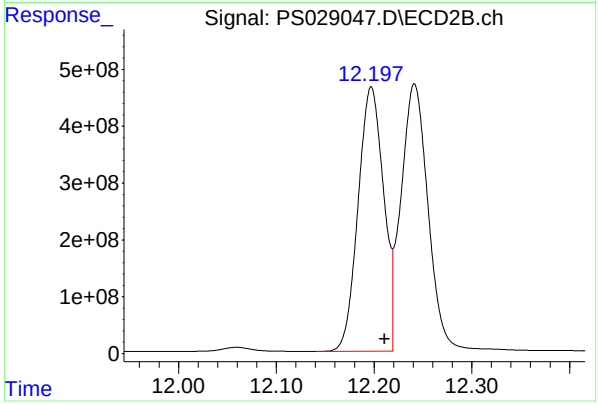
#15 Picloram

R.T.: 12.241 min
Delta R.T.: -0.014 min
Response: 9108026323
Conc: 678.71 ng/ml



#16 DCPA

R.T.: 11.538 min
Delta R.T.: -0.011 min
Response: 20758205605
Conc: 723.76 ng/ml



#16 DCPA

R.T.: 12.197 min
Delta R.T.: -0.014 min
Response: 8436156230
Conc: 743.12 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.:** Q1242 **SAS No.:** Q1242 **SDG NO.:** Q1242

Continuing Calib Date: 02/03/2025 **Initial Calibration Date(s):** 01/14/2025 01/14/2025

Continuing Calib Time: 20:57 **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

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.:** Q1242 **SAS No.:** Q1242 **SDG NO.:** Q1242

Continuing Calib Date: 02/03/2025 **Initial Calibration Date(s):** 01/14/2025 01/14/2025

Continuing Calib Time: 20:57 **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	8.90	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.:** Q1242 **SAS No.:** Q1242 **SDG NO.:** Q1242

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

Client Sample No.: CCAL02 **Date Analyzed:** 02/03/2025

Lab Sample No.: HSTDCCC750 **Data File :** PS029060.D **Time Analyzed:** 20:57

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	9.180	9.089	9.289	720.700	712.500	1.2
2,4-D	8.308	8.216	8.416	699.060	705.000	-0.8
2,4-DCAA	7.192	7.097	7.297	741.660	750.000	-1.1

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.:** Q1242 **SAS No.:** Q1242 **SDG NO.:** Q1242

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

Client Sample No.: CCAL02 **Date Analyzed:** 02/03/2025

Lab Sample No.: HSTDCCC750 **Data File :** PS029060.D **Time Analyzed:** 20:57

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	710.800	712.500	-0.2
2,4-D	8.903	8.813	9.013	657.380	705.000	-6.8
2,4-DCAA	7.669	7.577	7.777	680.490	750.000	-9.3

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS020325\
Data File : PS029060.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 03 Feb 2025 20:57
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 04 01:14:57 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	7.669	2064.8E6	759.3E6	741.663	680.492
		Target Compounds						
1)	T	Dalapon	2.612	2.662	2230.3E6	1360.2E6	747.988	666.726
2)	T	3,5-DICHL...	6.369	6.636	2816.2E6	1051.9E6	704.608	636.487
3)	T	4-Nitroph...	6.990	7.199	1205.5E6	582.3E6	680.268	654.411
5)	T	DICAMBA	7.376	7.865	8621.0E6	3838.4E6	726.808	689.237
6)	T	MCPP	7.558	7.970	492.1E6	187.1E6	72.202	62.212
7)	T	MCPA	7.707	8.211	718.0E6	256.8E6	72.884	60.453
8)	T	DICHLORPROP	8.079	8.577	2220.6E6	944.8E6	700.811	672.143
9)	T	2,4-D	8.308	8.903	2362.4E6	985.8E6	699.063	657.382
10)	T	Pentachlo...	8.605	9.425	35493.8E6	16694.9E6	735.821	720.664
11)	T	2,4,5-TP ...	9.180	9.803	13788.9E6	6695.3E6	720.697	710.801
12)	T	2,4,5-T	9.471	10.219	13736.9E6	6292.6E6	715.579	698.476
13)	T	2,4-DB	10.041	10.783	2456.0E6	659.7E6	692.347	662.489
14)	T	DINOSEB	11.242	11.161	10932.8E6	4095.9E6	660.701	638.258
15)	T	Picloram	11.054	12.242	20865.1E6	8741.2E6	661.289	651.374
16)	T	DCPA	11.539	12.198	20806.5E6	8459.9E6	725.443	745.216

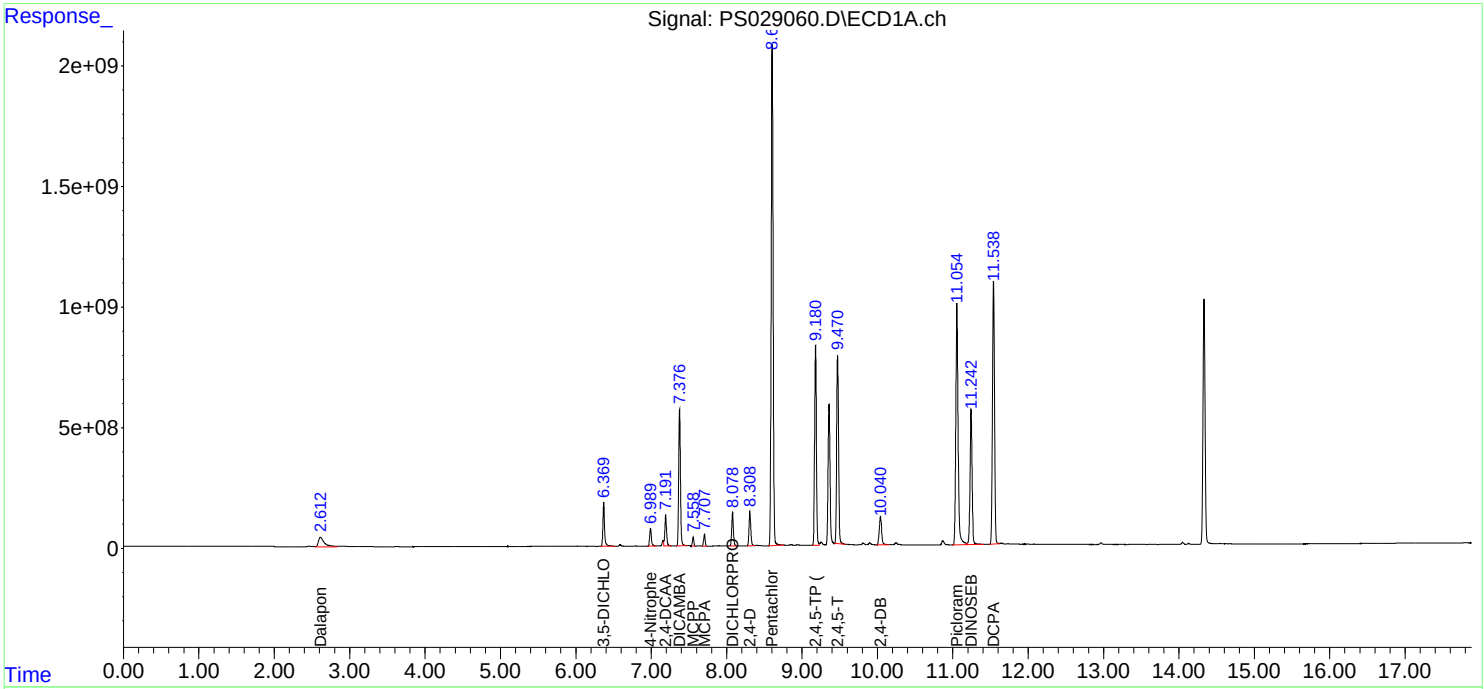
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

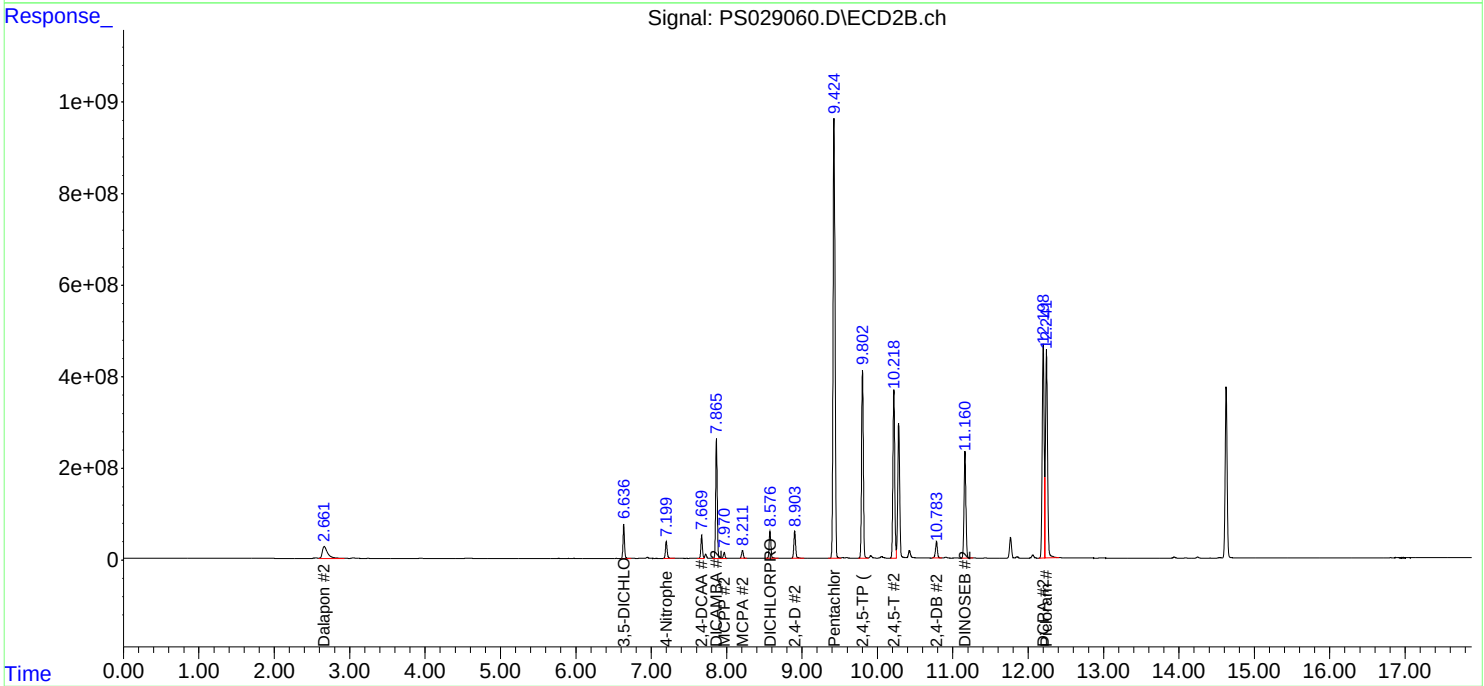
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS020325\
Data File : PS029060.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 03 Feb 2025 20:57
Operator : AR\AJ
Sample : HSTDCCC750
Misc :
ALS Vial : 3 Sample Multiplier: 1

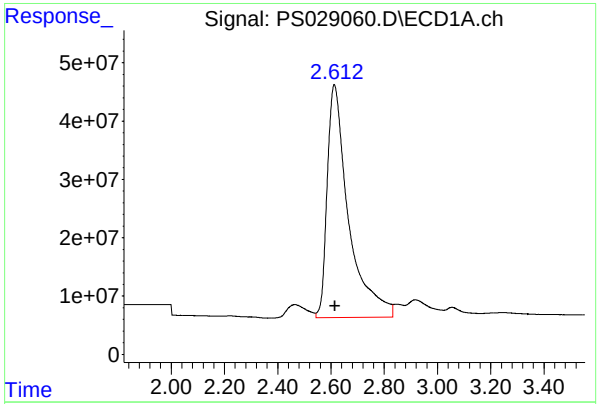
Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 04 01:14:57 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



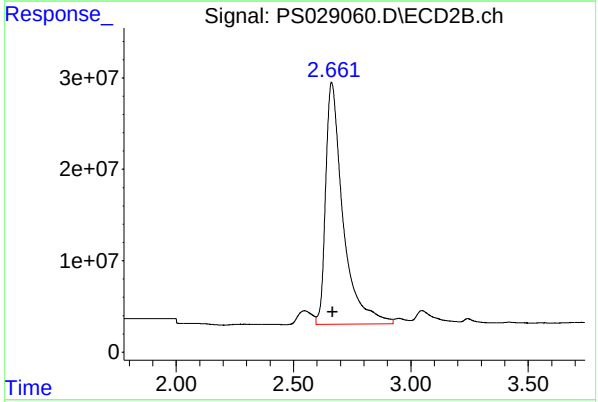




#1 Dalapon

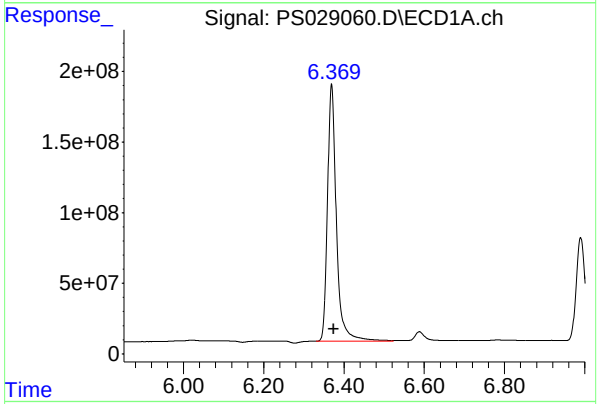
R.T.: 2.612 min
Delta R.T.: -0.003 min
Response: 2230306366
Conc: 747.99 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



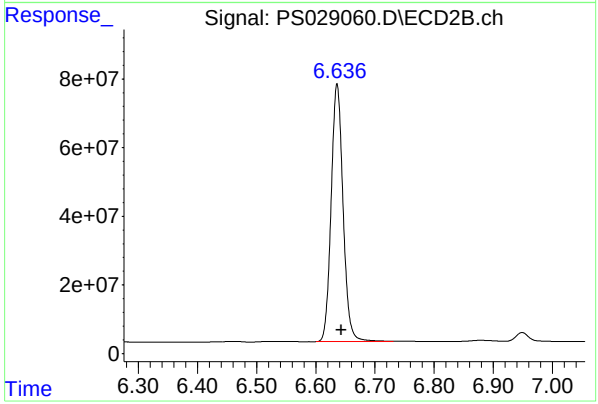
#1 Dalapon

R.T.: 2.662 min
Delta R.T.: -0.005 min
Response: 1360218626
Conc: 666.73 ng/ml



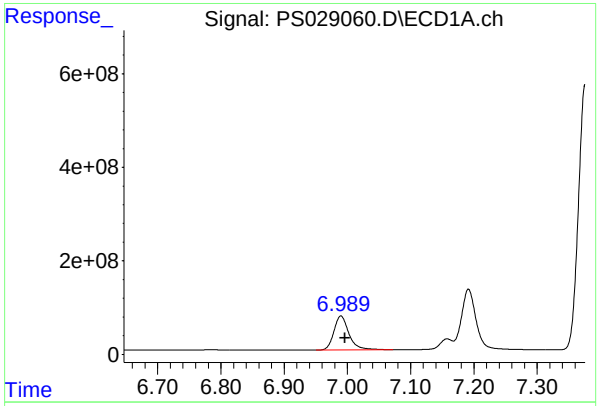
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.369 min
Delta R.T.: -0.006 min
Response: 2816215313
Conc: 704.61 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

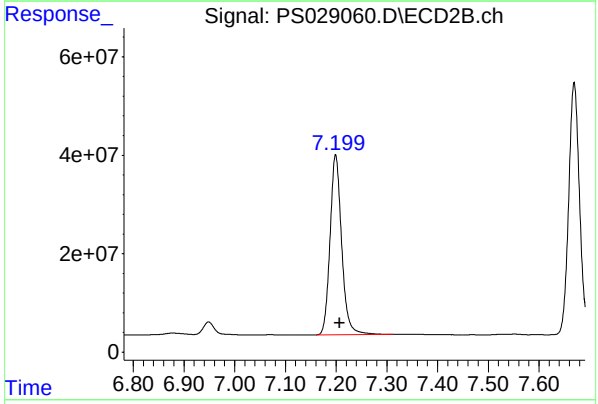
R.T.: 6.636 min
Delta R.T.: -0.007 min
Response: 1051870878
Conc: 636.49 ng/ml



#3 4-Nitrophenol

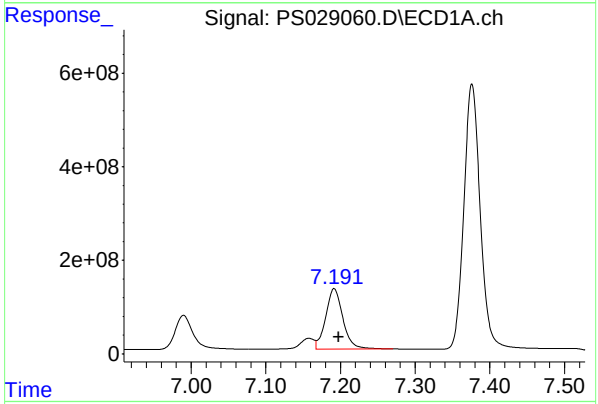
R.T.: 6.990 min
Delta R.T.: -0.006 min
Response: 1205489578
Conc: 680.27 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



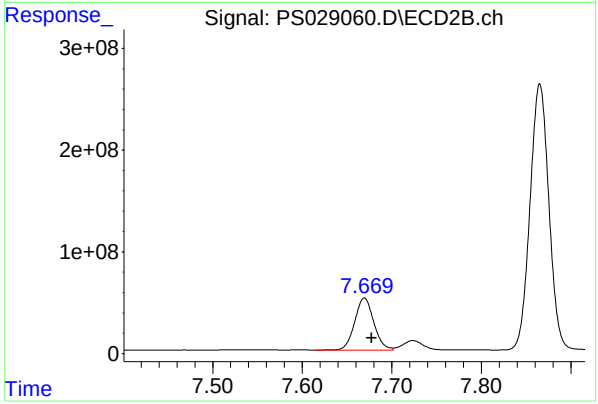
#3 4-Nitrophenol

R.T.: 7.199 min
Delta R.T.: -0.008 min
Response: 582278323
Conc: 654.41 ng/ml



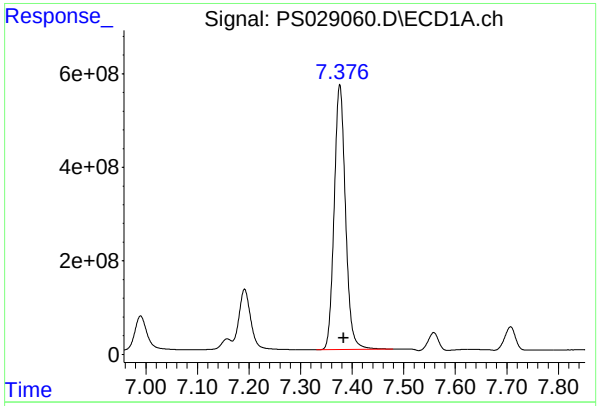
#4 2,4-DCAA

R.T.: 7.192 min
Delta R.T.: -0.006 min
Response: 2064799391
Conc: 741.66 ng/ml



#4 2,4-DCAA

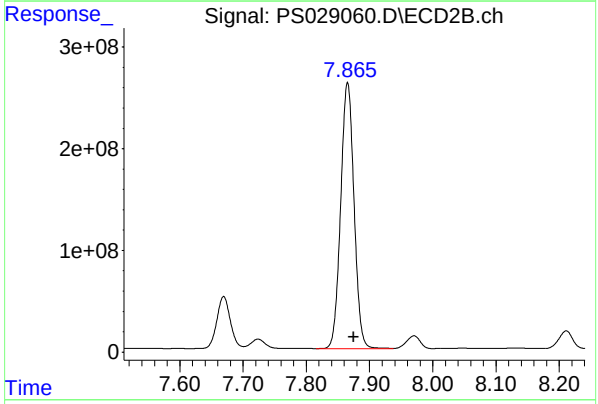
R.T.: 7.669 min
Delta R.T.: -0.008 min
Response: 759301872
Conc: 680.49 ng/ml



#5 DICAMBA

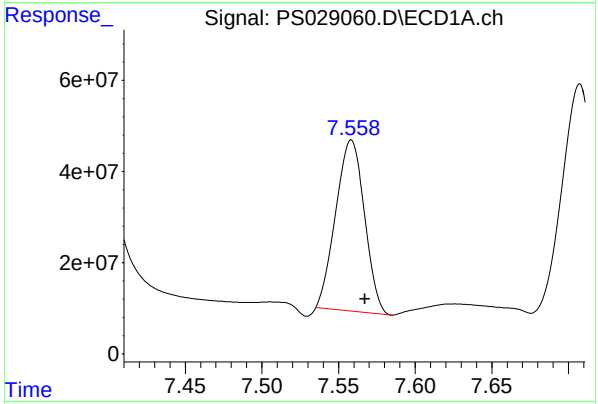
R.T.: 7.376 min
Delta R.T.: -0.008 min
Response: 8620987124
Conc: 726.81 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



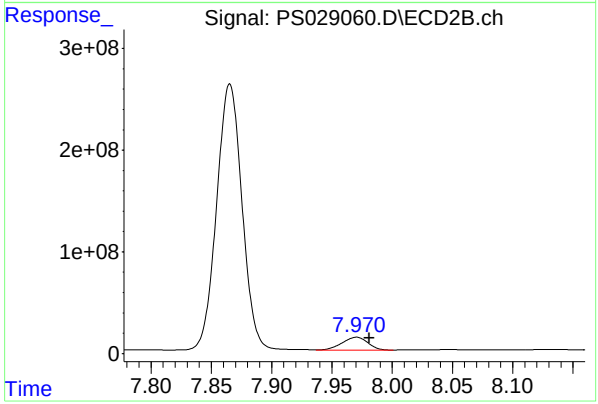
#5 DICAMBA

R.T.: 7.865 min
Delta R.T.: -0.009 min
Response: 3838384916
Conc: 689.24 ng/ml



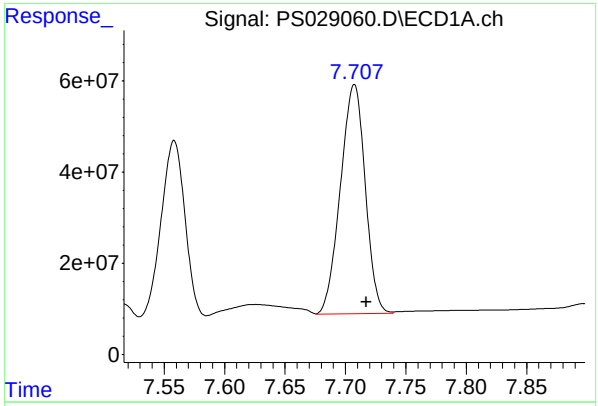
#6 MCPP

R.T.: 7.558 min
Delta R.T.: -0.009 min
Response: 492146637
Conc: 72.20 ug/ml



#6 MCPP

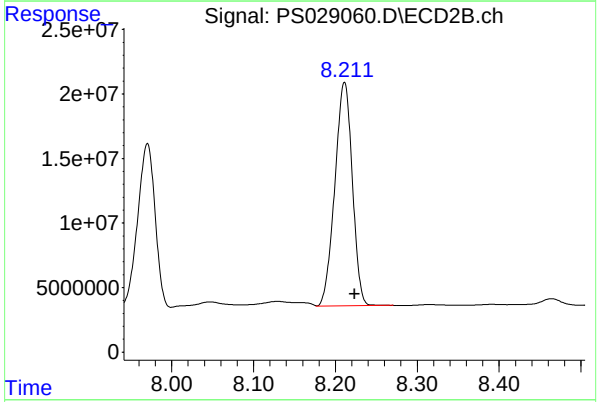
R.T.: 7.970 min
Delta R.T.: -0.011 min
Response: 187131288
Conc: 62.21 ug/ml



#7 MCPA

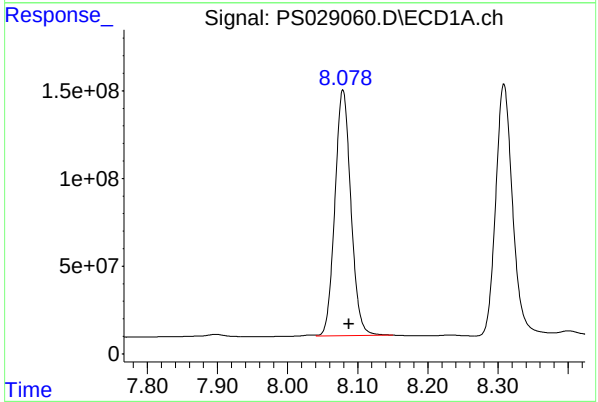
R.T.: 7.707 min
Delta R.T.: -0.010 min
Response: 717980479
Conc: 72.88 ug/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



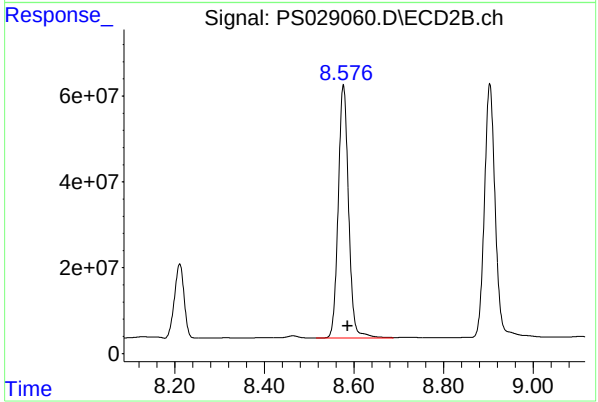
#7 MCPA

R.T.: 8.211 min
Delta R.T.: -0.012 min
Response: 256771038
Conc: 60.45 ug/ml



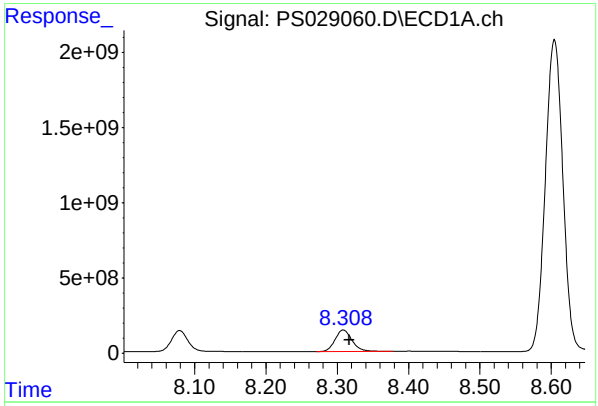
#8 DICHLORPROP

R.T.: 8.079 min
Delta R.T.: -0.009 min
Response: 2220569119
Conc: 700.81 ng/ml



#8 DICHLORPROP

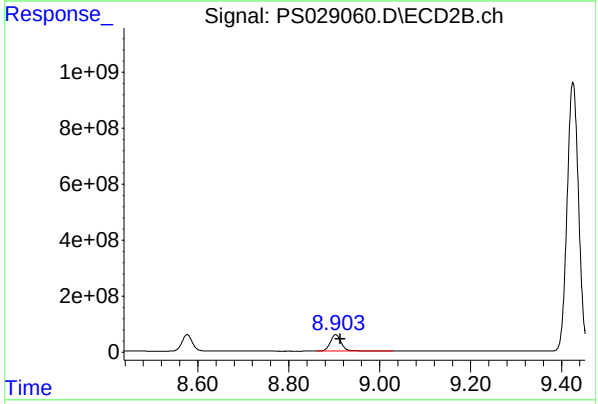
R.T.: 8.577 min
Delta R.T.: -0.010 min
Response: 944763862
Conc: 672.14 ng/ml



#9 2,4-D

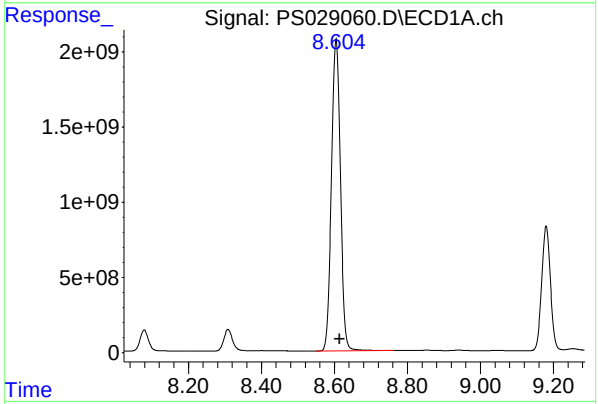
R.T.: 8.308 min
Delta R.T.: -0.008 min
Response: 2362447742
Conc: 699.06 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



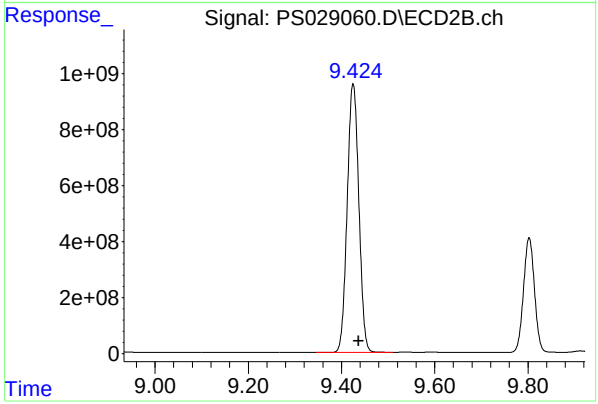
#9 2,4-D

R.T.: 8.903 min
Delta R.T.: -0.010 min
Response: 985755364
Conc: 657.38 ng/ml



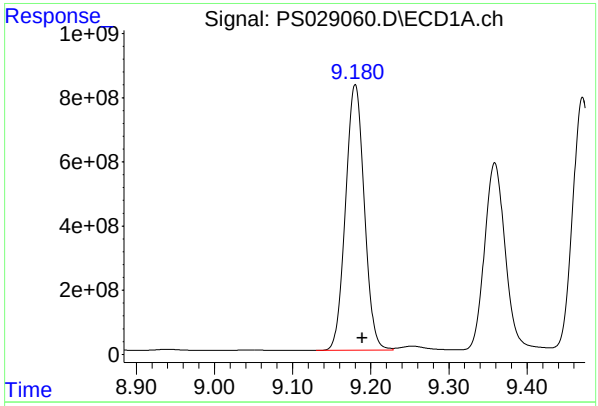
#10 Pentachlorophenol

R.T.: 8.605 min
Delta R.T.: -0.010 min
Response: 35493835461
Conc: 735.82 ng/ml



#10 Pentachlorophenol

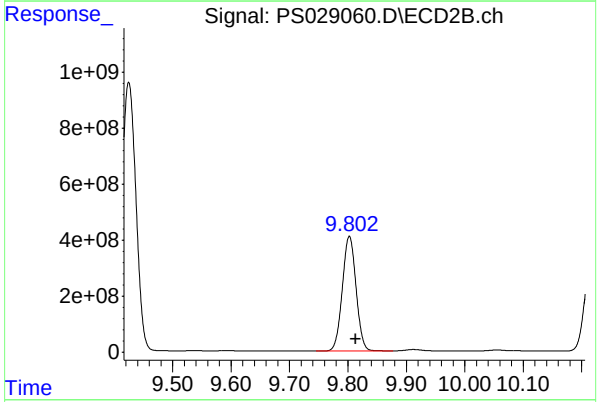
R.T.: 9.425 min
Delta R.T.: -0.012 min
Response: 16694915183
Conc: 720.66 ng/ml



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

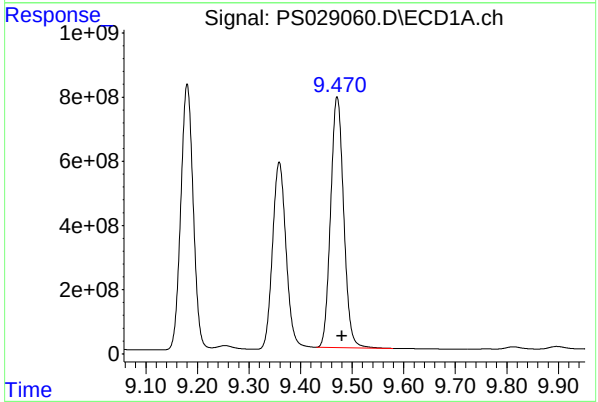
R.T.: 9.180 min
Delta R.T.: -0.009 min
Response: 13788855937
Conc: 720.70 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



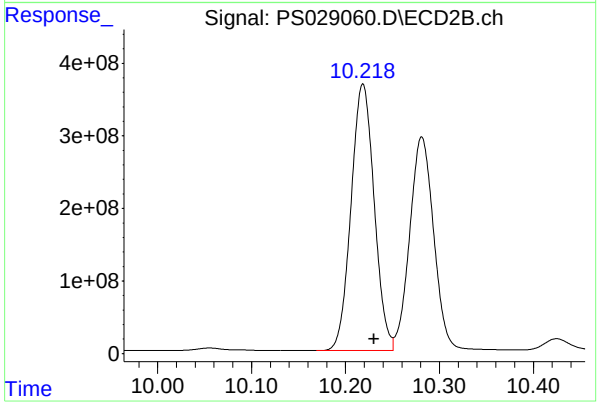
#11 2,4,5-TP (SILVEX)

R.T.: 9.803 min
Delta R.T.: -0.011 min
Response: 6695319603
Conc: 710.80 ng/ml



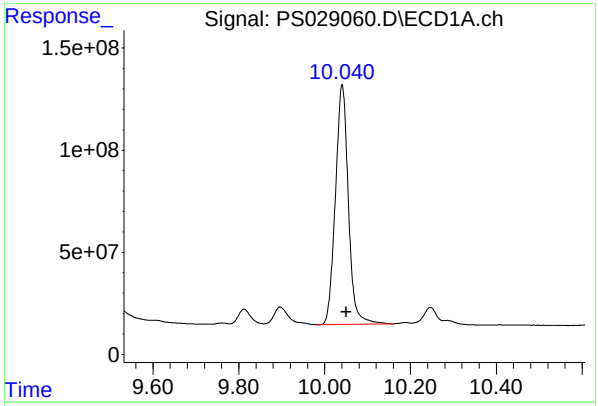
#12 2,4,5-T

R.T.: 9.471 min
Delta R.T.: -0.009 min
Response: 13736914380
Conc: 715.58 ng/ml



#12 2,4,5-T

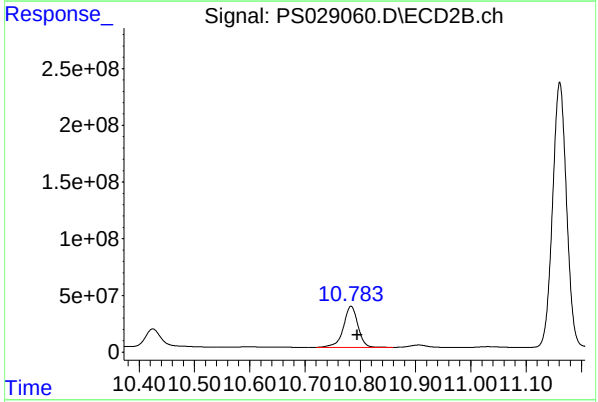
R.T.: 10.219 min
Delta R.T.: -0.012 min
Response: 6292577580
Conc: 698.48 ng/ml



#13 2,4-DB

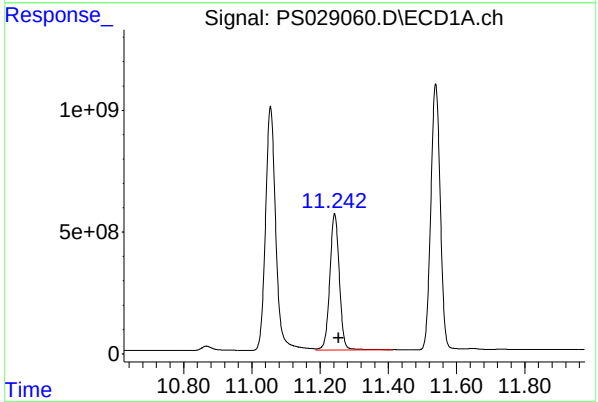
R.T.: 10.041 min
Delta R.T.: -0.010 min
Response: 2456000393
Conc: 692.35 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



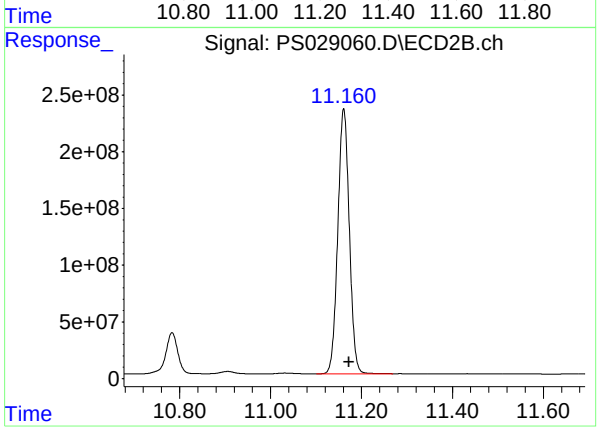
#13 2,4-DB

R.T.: 10.783 min
Delta R.T.: -0.012 min
Response: 659677469
Conc: 662.49 ng/ml



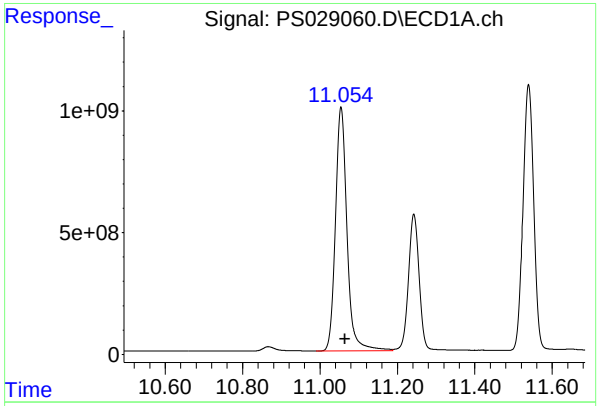
#14 DINOSEB

R.T.: 11.242 min
Delta R.T.: -0.012 min
Response: 10932822534
Conc: 660.70 ng/ml



#14 DINOSEB

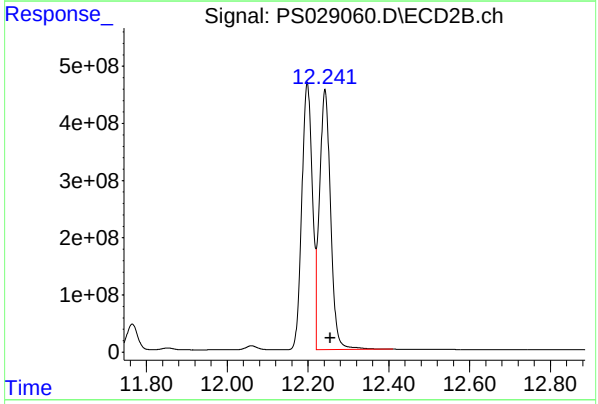
R.T.: 11.161 min
Delta R.T.: -0.012 min
Response: 4095903206
Conc: 638.26 ng/ml



#15 Picloram

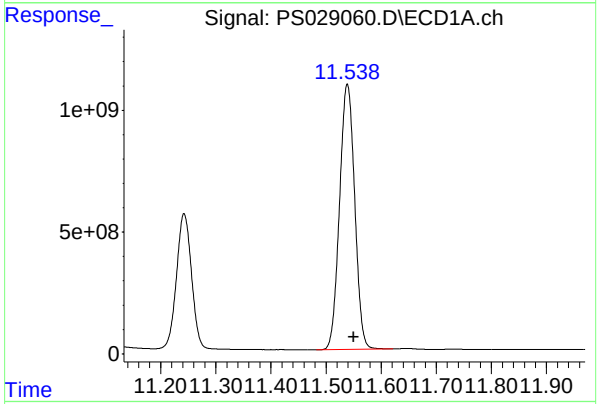
R.T.: 11.054 min
Delta R.T.: -0.010 min
Response: 20865103253
Conc: 661.29 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



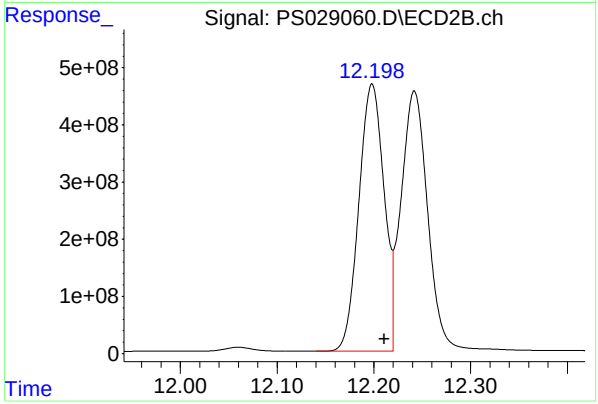
#15 Picloram

R.T.: 12.242 min
Delta R.T.: -0.014 min
Response: 8741224148
Conc: 651.37 ng/ml



#16 DCPA

R.T.: 11.539 min
Delta R.T.: -0.011 min
Response: 20806454215
Conc: 725.44 ng/ml



#16 DCPA

R.T.: 12.198 min
Delta R.T.: -0.013 min
Response: 8459948615
Conc: 745.22 ng/ml

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

Analytical Sequence

Client: RU2 Engineering, LLC **SDG No.:** Q1242

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	02/03/2025	10:14	PS029046.D	7.19	0.00
HSTDCCC750	HSTDCCC750	02/03/2025	10:38	PS029047.D	7.19	0.00
PB166485BL	PB166485BL	02/03/2025	16:09	PS029048.D	7.19	0.00
PB166485BS	PB166485BS	02/03/2025	16:33	PS029049.D	7.19	0.00
PB166423TB	PB166423TB	02/03/2025	16:57	PS029050.D	7.19	0.00
JPP-3.5-013025MS	Q1241-04MS	02/03/2025	17:45	PS029052.D	7.19	0.00
JPP-3.5-013025MSD	Q1241-04MSD	02/03/2025	18:09	PS029053.D	7.19	0.00
JPP-6.2-013025	Q1242-04	02/03/2025	20:09	PS029058.D	7.19	0.00
I.BLK	I.BLK	02/03/2025	20:33	PS029059.D	7.19	0.00
HSTDCCC750	HSTDCCC750	02/03/2025	20:57	PS029060.D	7.19	0.00

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

Analytical Sequence

Client: RU2 Engineering, LLC **SDG No.:** Q1242

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	02/03/2025	10:14	PS029046.D	7.67	0.00
HSTDCCC750	HSTDCCC750	02/03/2025	10:38	PS029047.D	7.67	0.00
PB166485BL	PB166485BL	02/03/2025	16:09	PS029048.D	7.66	0.00
PB166485BS	PB166485BS	02/03/2025	16:33	PS029049.D	7.67	0.00
PB166423TB	PB166423TB	02/03/2025	16:57	PS029050.D	7.67	0.00
JPP-3.5-013025MS	Q1241-04MS	02/03/2025	17:45	PS029052.D	7.67	0.00
JPP-3.5-013025MSD	Q1241-04MSD	02/03/2025	18:09	PS029053.D	7.67	0.00
JPP-6.2-013025	Q1242-04	02/03/2025	20:09	PS029058.D	7.67	0.00
I.BLK	I.BLK	02/03/2025	20:33	PS029059.D	7.67	0.00
HSTDCCC750	HSTDCCC750	02/03/2025	20:57	PS029060.D	7.67	0.00

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

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

JPP-3.5-013025MS

Contract: RUTW01

Lab Code: CHEM **Case No.:** Q1242 **SAS No.:** Q1242 **SDG NO.:** Q1242

Lab Sample ID: Q1241-04MS **Date(s) Analyzed:** 02/03/2025 02/03/2025

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	52.8	10.1
	2	8.90	8.85	8.95	47.7	
2,4,5-TP(Silvex)	1	9.18	9.13	9.23	51.0	4.2
	2	9.80	9.75	9.85	48.9	

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

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

JPP-3.5-013025MSD

Contract: RUTW01

Lab Code: CHEM **Case No.:** Q1242 **SAS No.:** Q1242 **SDG NO.:** Q1242

Lab Sample ID: Q1241-04MSD **Date(s) Analyzed:** 02/03/2025 02/03/2025

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	53.3	10
	2	8.90	8.85	8.95	48.2	
2,4,5-TP(Silvex)	1	9.18	9.13	9.23	51.7	3.9
	2	9.80	9.75	9.85	49.7	

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

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

PB166485BS

Contract: RUTW01

Lab Code: CHEM **Case No.:** Q1242 **SAS No.:** Q1242 **SDG NO.:** Q1242

Lab Sample ID: PB166485BS **Date(s) Analyzed:** 02/03/2025 02/03/2025

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
2,4,5-TP(Silvex)	1	9.18	9.13	9.23	5.10	4
	2	9.80	9.75	9.85	4.90	
2,4-D	1	8.31	8.26	8.36	5.00	10.5
	2	8.90	8.85	8.95	4.50	

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:	PB166485BL	SDG No.:	Q1242
Lab Sample ID:	PB166485BL	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
PS029048.D	1	02/03/25 09:00	02/03/25 16:09	PB166485

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	498		39 - 175	100%	SPK: 500

Comments:

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

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS020325\
Data File : PS029048.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 03 Feb 2025 16:09
Operator : AR\AJ
Sample : PB166485BL
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
PB166485BL

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 04 01:09:51 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	7.664	1387.7E6	504.8E6	498.455	452.381
	Target Compounds						

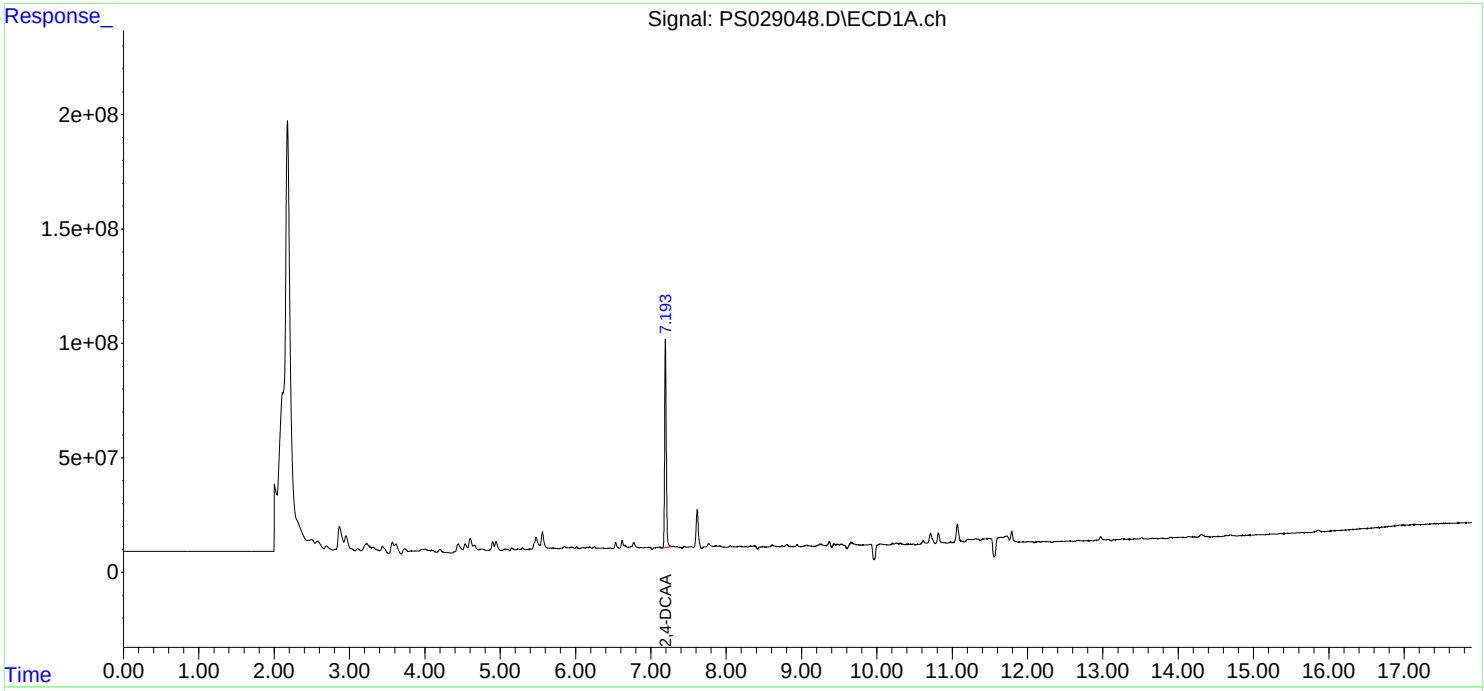
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

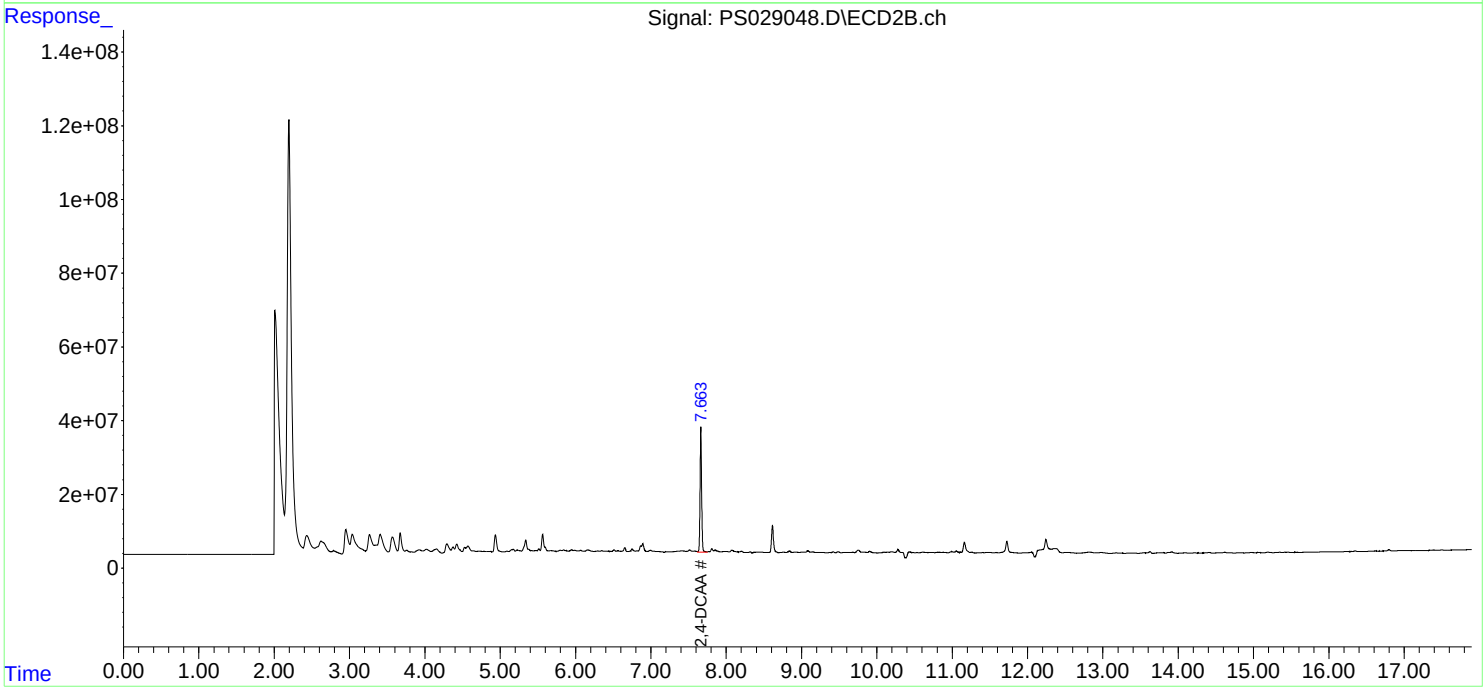
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS020325\
Data File : PS029048.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 03 Feb 2025 16:09
Operator : AR\AJ
Sample : PB166485BL
Misc :
ALS Vial : 4 Sample Multiplier: 1

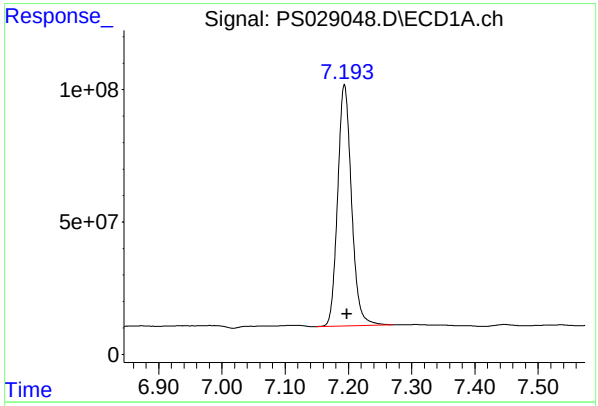
Instrument :
ECD_S
ClientSampleId :
PB166485BL

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 04 01:09:51 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



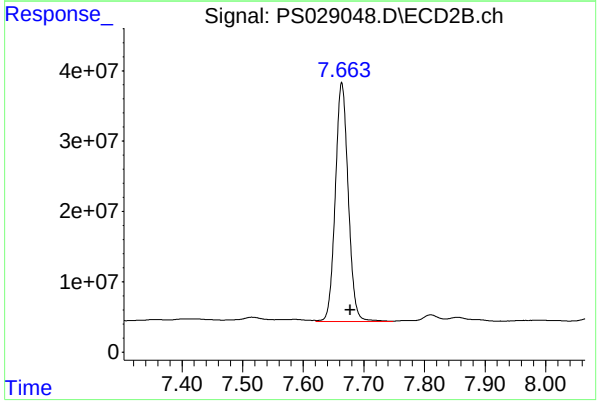




#4 2,4-DCAA

R.T.: 7.194 min
Delta R.T.: -0.004 min
Response: 1387704770
Conc: 498.45 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB166485BL



#4 2,4-DCAA

R.T.: 7.664 min
Delta R.T.: -0.014 min
Response: 504772114
Conc: 452.38 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.:	Q1242
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						

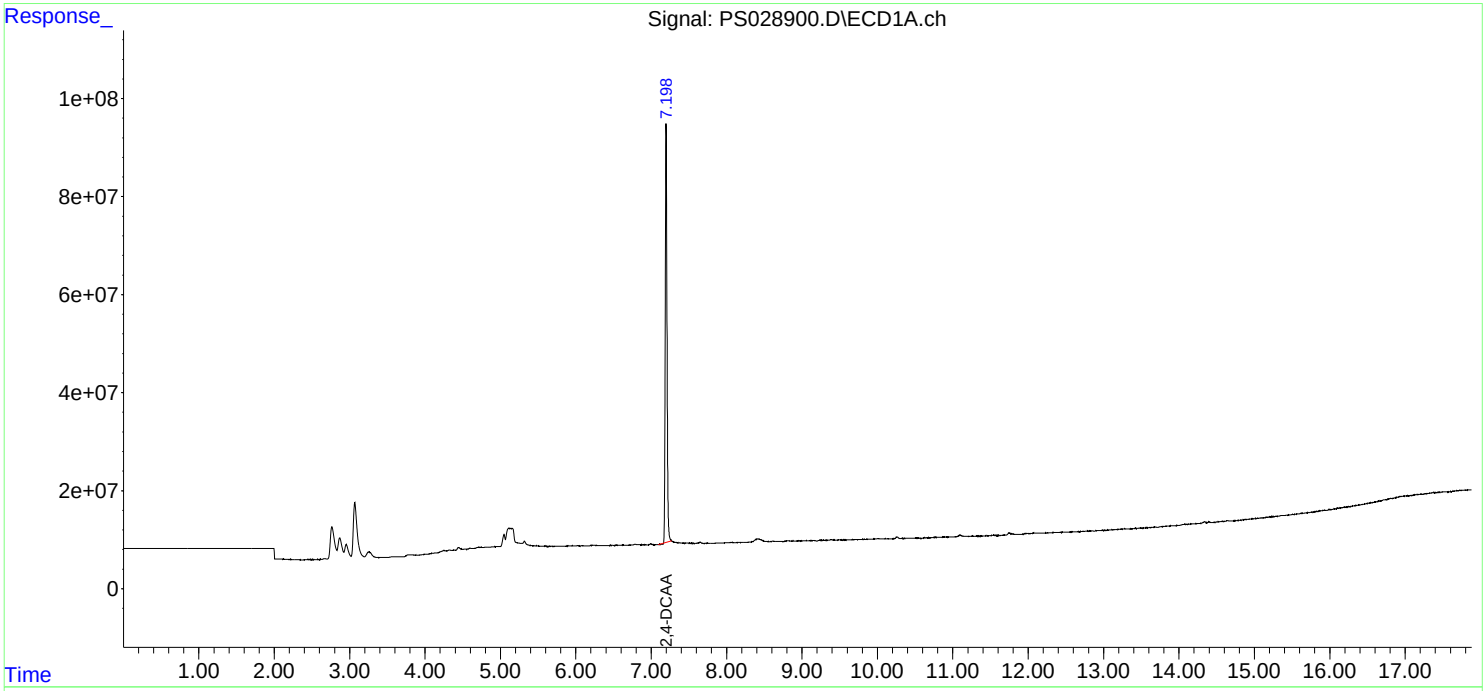
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

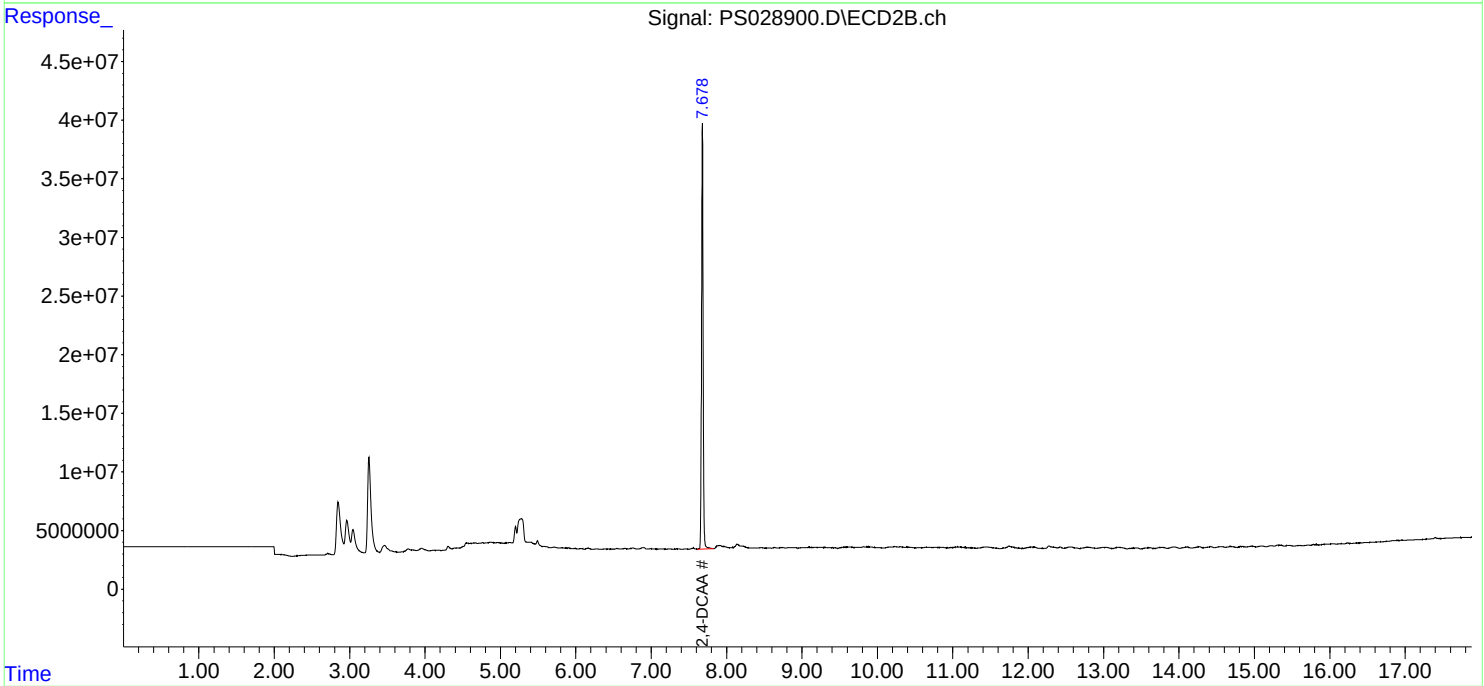
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS011425\
Data File : PS028900.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 14 Jan 2025 10:07
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

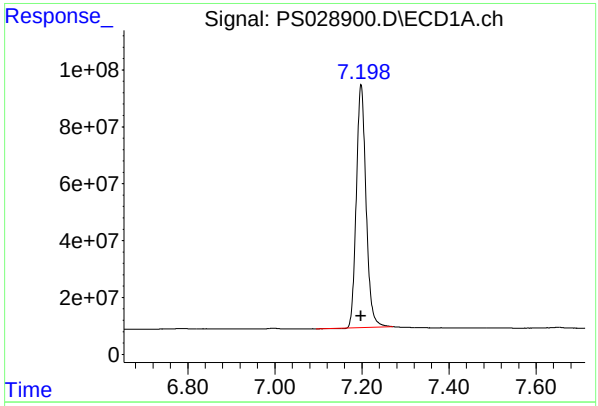
Instrument :
ECD_S
ClientSampleId :
I.BLK

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



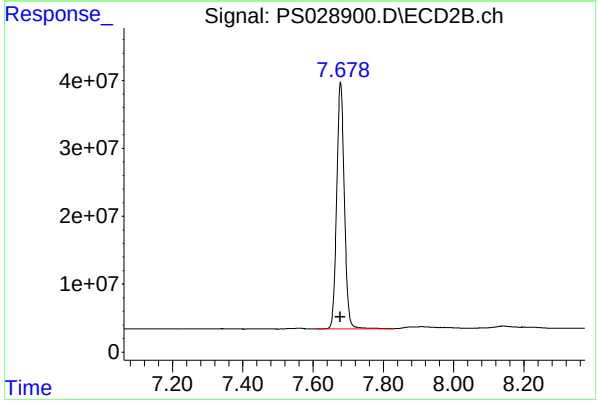




#4 2,4-DCAA

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

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:	02/03/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	02/03/25
Client Sample ID:	PIBLK-PS029046.D	SDG No.:	Q1242
Lab Sample ID:	I.BLK-PS029046.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
PS029046.D	1		02/03/25	ps020325

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	484		39 - 175	97%	SPK: 500

Comments:

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

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS020325\
Data File : PS029046.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 03 Feb 2025 10:14
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 04 01:09:12 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	7.669	1347.5E6	497.3E6	484.002	445.693
	Target Compounds						

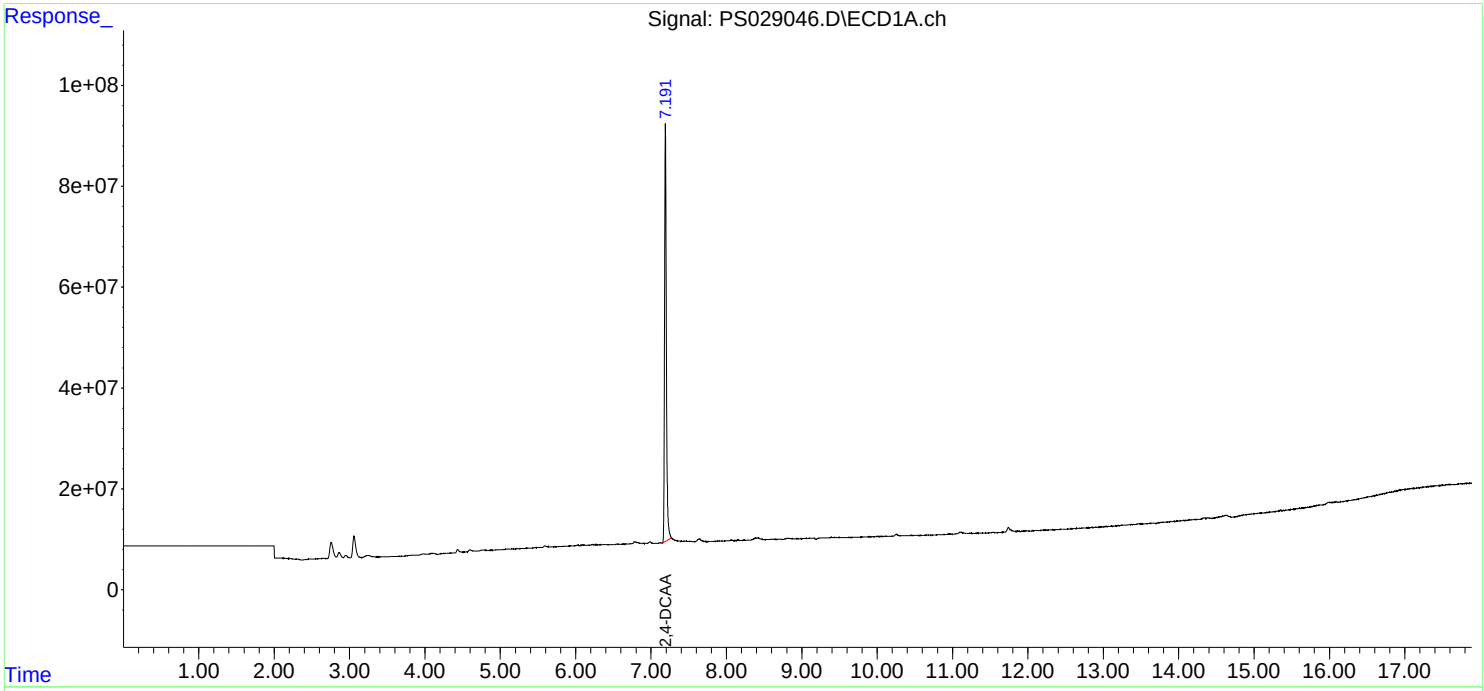
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

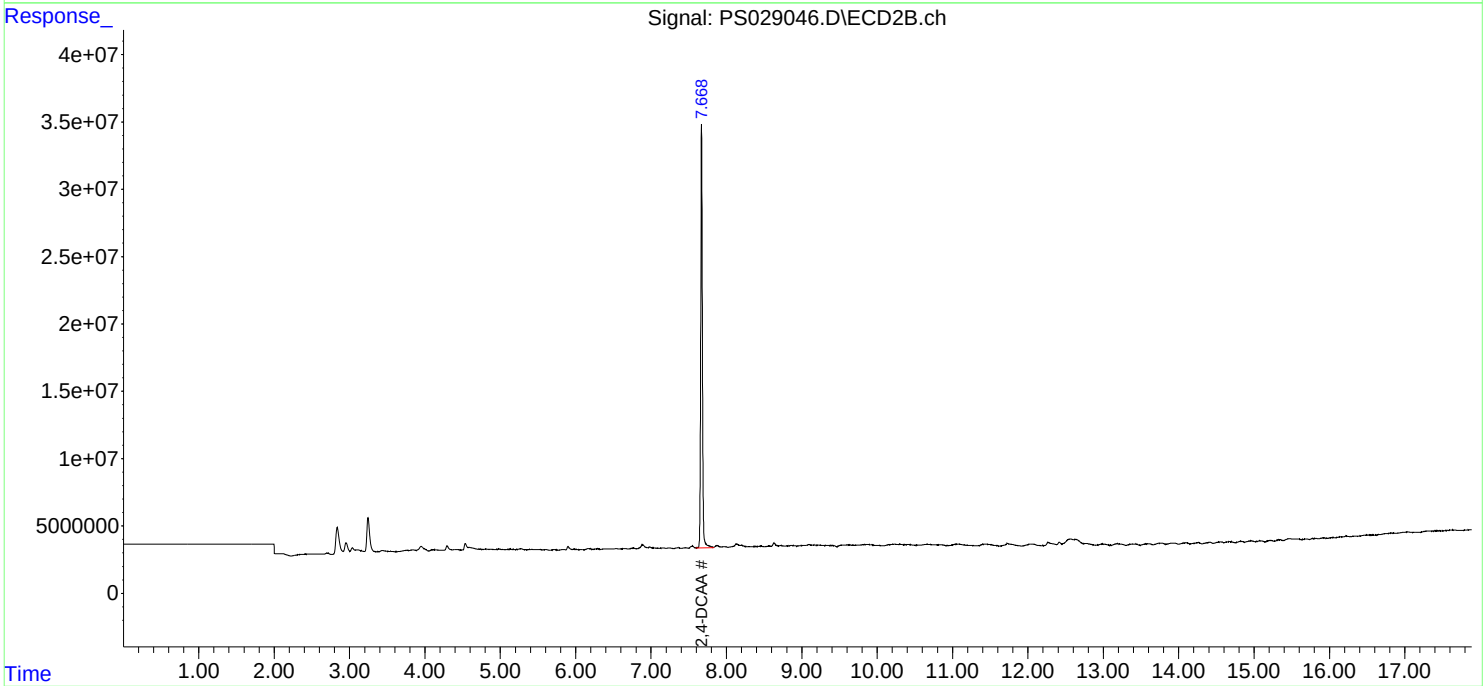
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS020325\
Data File : PS029046.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 03 Feb 2025 10:14
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

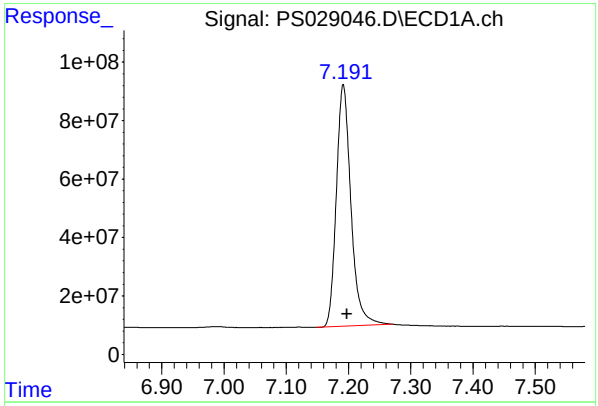
Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 04 01:09:12 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



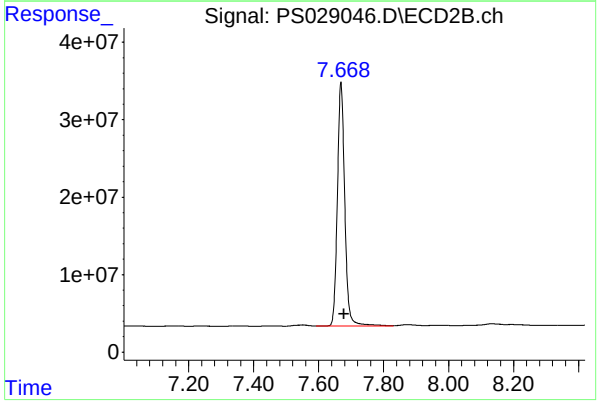




#4 2,4-DCAA

R.T.: 7.192 min
Delta R.T.: -0.006 min
Response: 1347466271
Conc: 484.00 ng/ml

Instrument :
ECD_S
ClientSampleId :
I.BLK



#4 2,4-DCAA

R.T.: 7.669 min
Delta R.T.: -0.009 min
Response: 497310324
Conc: 445.69 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:	02/03/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	02/03/25
Client Sample ID:	PIBLK-PS029059.D	SDG No.:	Q1242
Lab Sample ID:	I.BLK-PS029059.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
PS029059.D	1		02/03/25	ps020325

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\PS020325\
Data File : PS029059.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 03 Feb 2025 20:33
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 04 01:14:40 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	1368.9E6	509.6E6	491.709	456.706
	Target Compounds						

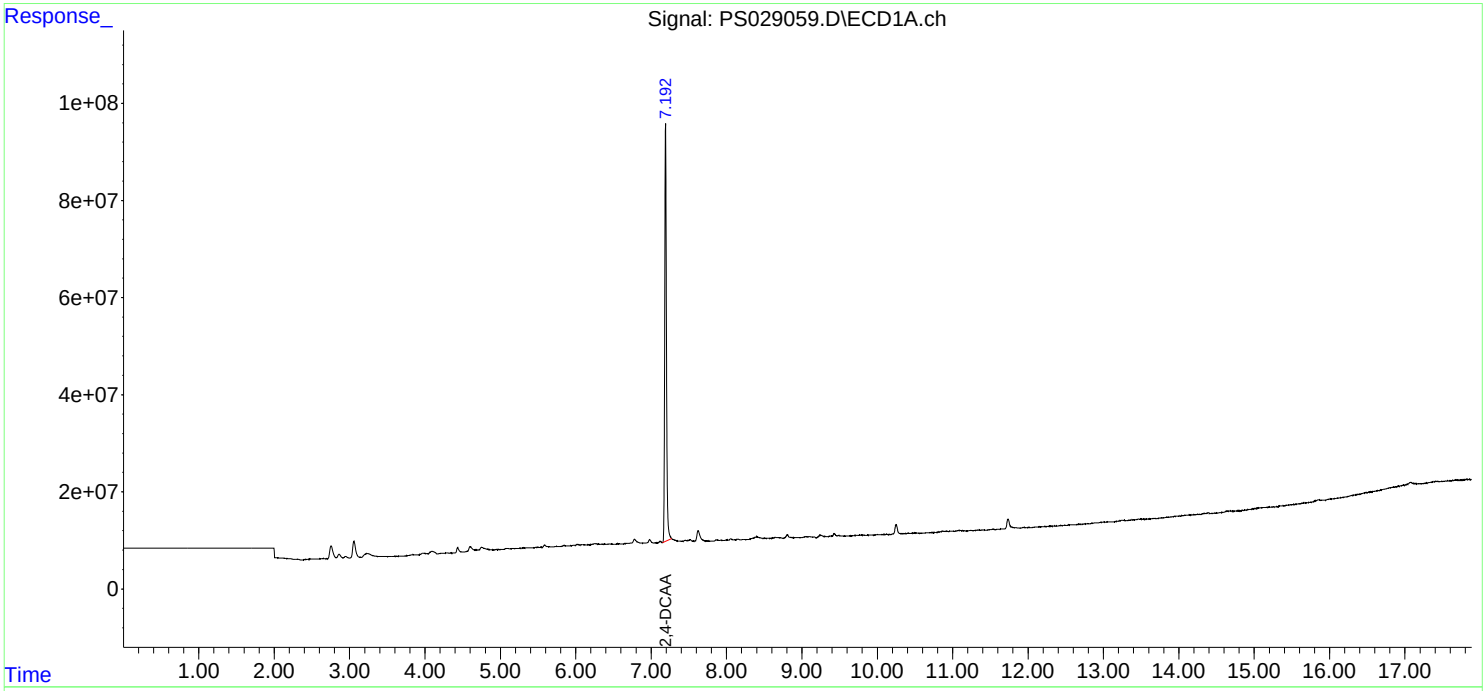
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

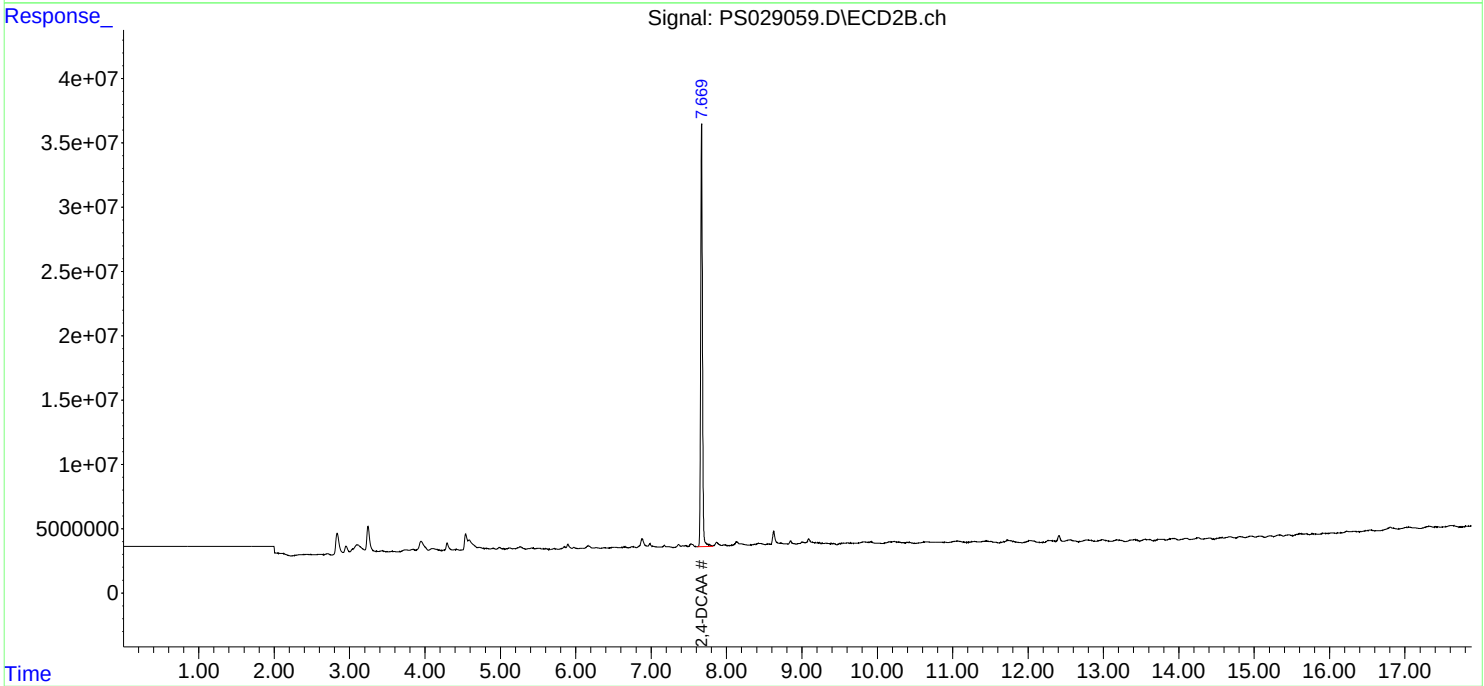
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS020325\
Data File : PS029059.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 03 Feb 2025 20:33
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

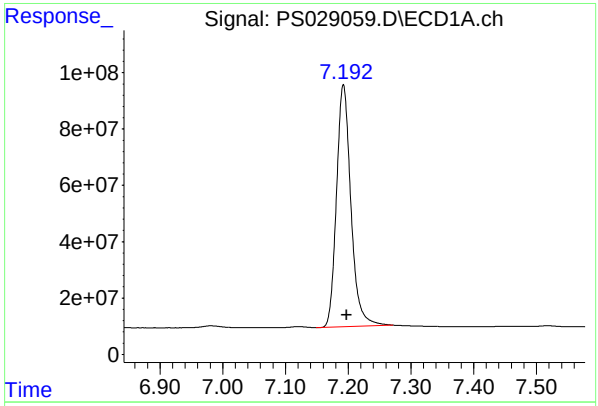
Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 04 01:14:40 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



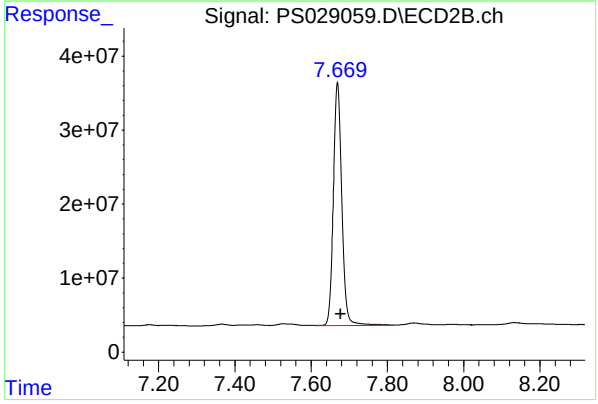




#4 2,4-DCAA

R.T.: 7.192 min
Delta R.T.: -0.005 min
Response: 1368923374
Conc: 491.71 ng/ml

Instrument :
ECD_S
ClientSampleId :
I.BLK



#4 2,4-DCAA

R.T.: 7.670 min
Delta R.T.: -0.008 min
Response: 509598541
Conc: 456.71 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:	PB166485BS	SDG No.:	Q1242
Lab Sample ID:	PB166485BS	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
PS029049.D	1	02/03/25 09:00	02/03/25 16:33	PB166485

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	5.00		0.49	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	5.10		0.45	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	526		39 - 175	105%	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\PS020325\
Data File : PS029049.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 03 Feb 2025 16:33
Operator : AR\AJ
Sample : PB166485BS
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
PB166485BS

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 04 01:10:15 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 0.25µm

	Compound	RT#1	RT#2	Resp#1	Resp#2	ng/ml	ng/ml
	System Monitoring Compounds						
4) S	2,4-DCAA	7.193	7.668	1464.1E6	520.6E6	525.902	466.557
	Target Compounds						
1) T	Dalapon	2.613	2.664	1494.2E6	912.2E6	501.109	447.101
2) T	3,5-DICHL...	6.370	6.635	1986.6E6	723.1E6	497.029	437.548
3) T	4-Nitroph...	6.991	7.199	844.0E6	406.3E6	476.289	456.585
5) T	DICAMBA	7.377	7.864	5983.8E6	2559.3E6	504.471	459.557
6) T	MCPP	7.557	7.967	315.8E6	123.7E6	46.330	41.133
7) T	MCPA	7.705	8.208	477.6E6	171.5E6	48.480	40.374
8) T	DICHLORPROP	8.080	8.575	1572.9E6	642.7E6	496.408	457.270
9) T	2,4-D	8.310	8.903	1676.0E6	677.6E6	495.926	451.904
10) T	Pentachlo...	8.606	9.424	25160.2E6	11463.2E6	521.596	494.829
11) T	2,4,5-TP ...	9.181	9.801	9728.1E6	4587.9E6	508.455	487.068
12) T	2,4,5-T	9.472	10.218	9747.2E6	4295.3E6	507.745	476.776
13) T	2,4-DB	10.043	10.783	1696.9E6	440.3E6	478.345	442.190
14) T	DINOSEB	11.244	11.159	8096.9E6	2955.6E6	489.315	460.566
15) T	Picloram	11.056	12.242	14672.0E6	5836.3E6	465.009	434.909
16) T	DCPA	11.539	12.197	14775.3E6	5800.8E6	515.158	510.982

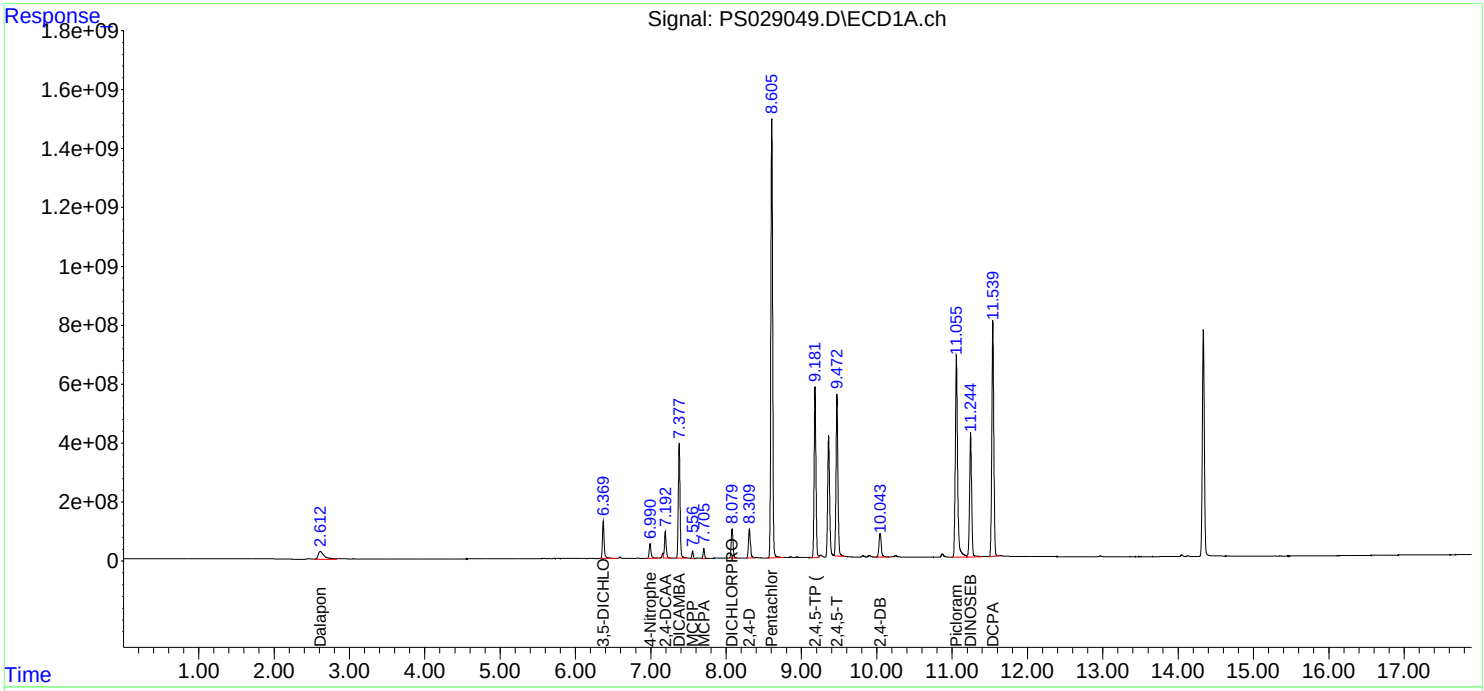
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

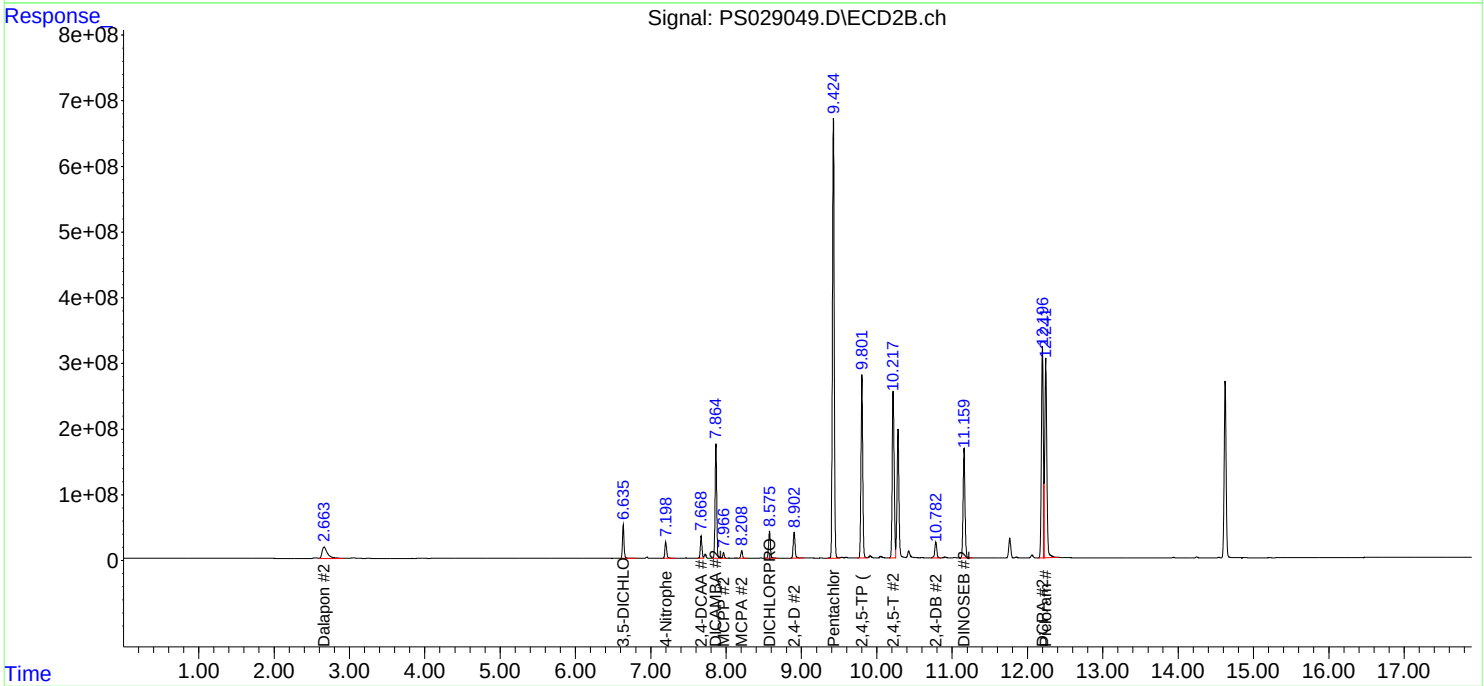
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS020325\
Data File : PS029049.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 03 Feb 2025 16:33
Operator : AR\AJ
Sample : PB166485BS
Misc :
ALS Vial : 5 Sample Multiplier: 1

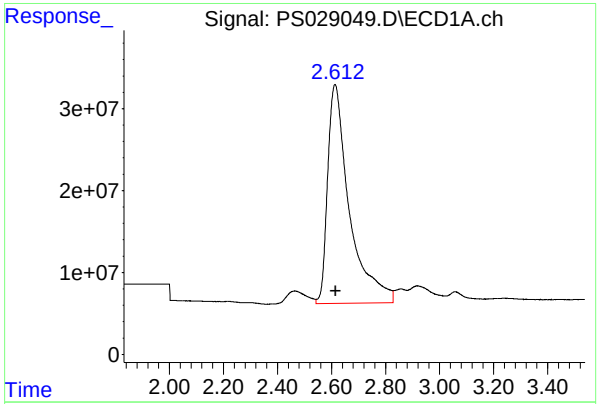
Instrument :
ECD_S
ClientSampleId :
PB166485BS

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 04 01:10:15 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



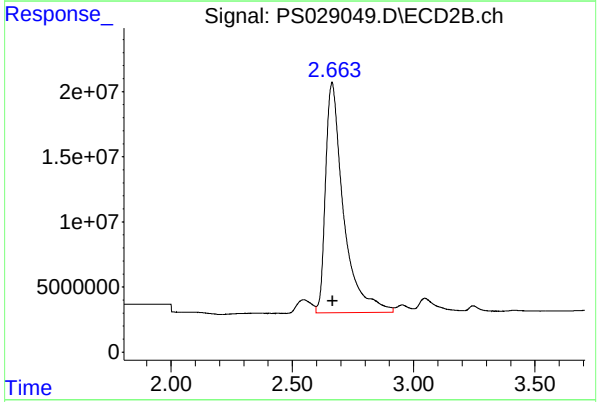




#1 Dalapon

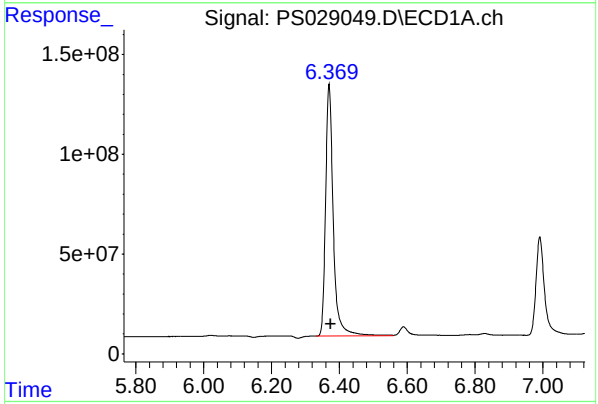
R.T.: 2.613 min
Delta R.T.: -0.002 min
Response: 1494179514
Conc: 501.11 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB166485BS



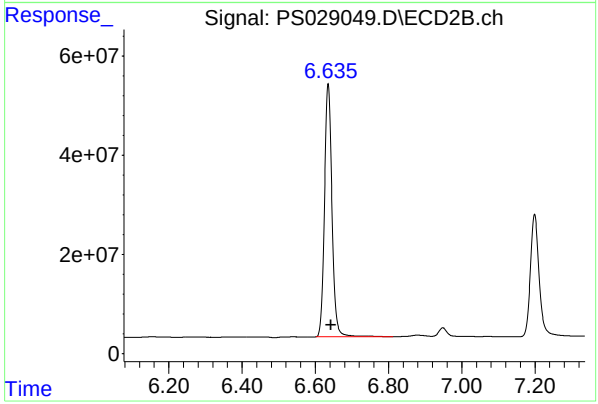
#1 Dalapon

R.T.: 2.664 min
Delta R.T.: -0.003 min
Response: 912152658
Conc: 447.10 ng/ml



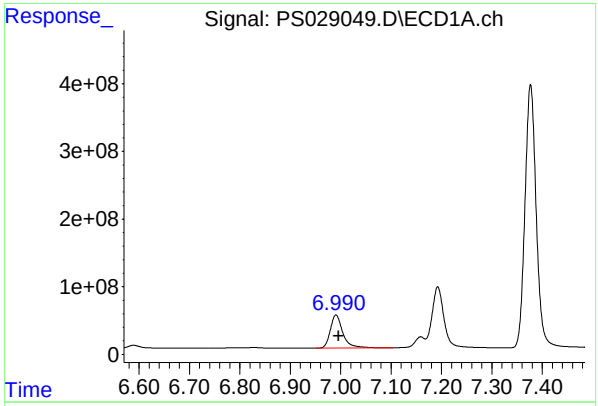
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.370 min
Delta R.T.: -0.005 min
Response: 1986550913
Conc: 497.03 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

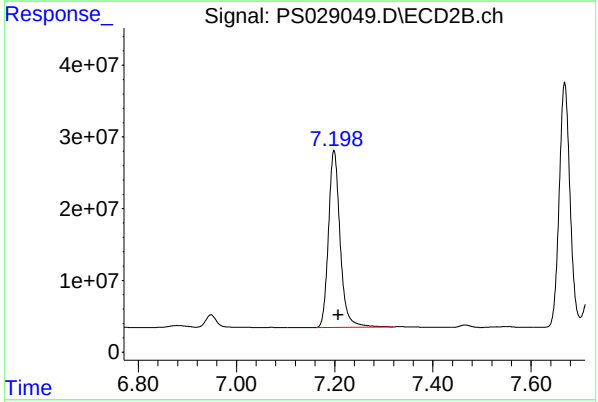
R.T.: 6.635 min
Delta R.T.: -0.008 min
Response: 723100142
Conc: 437.55 ng/ml



#3 4-Nitrophenol

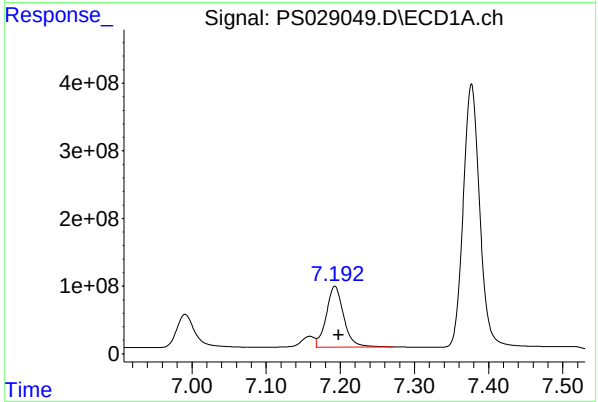
R.T.: 6.991 min
Delta R.T.: -0.005 min
Response: 844022324
Conc: 476.29 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB166485BS



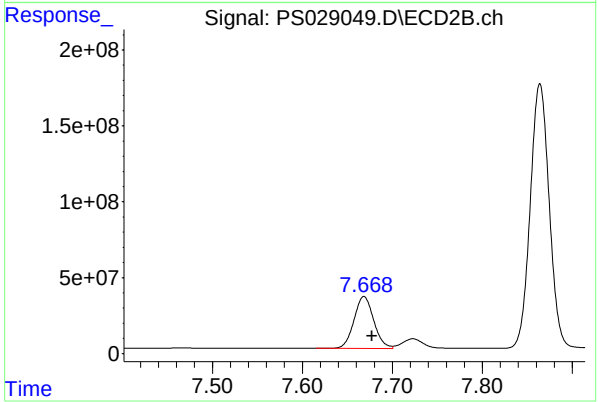
#3 4-Nitrophenol

R.T.: 7.199 min
Delta R.T.: -0.008 min
Response: 406257683
Conc: 456.59 ng/ml



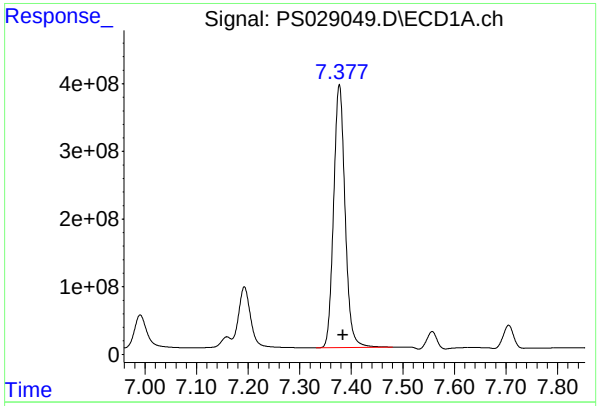
#4 2,4-DCAA

R.T.: 7.193 min
Delta R.T.: -0.005 min
Response: 1464118521
Conc: 525.90 ng/ml



#4 2,4-DCAA

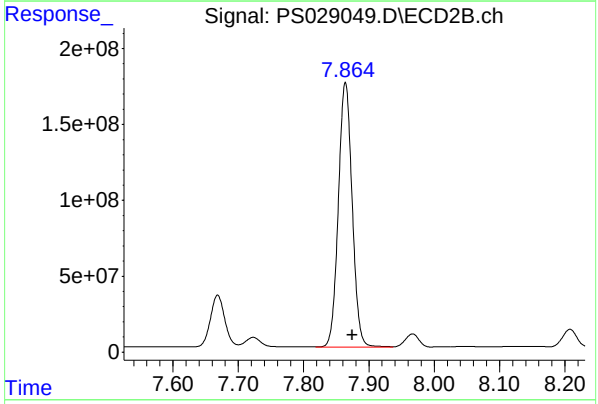
R.T.: 7.668 min
Delta R.T.: -0.009 min
Response: 520589988
Conc: 466.56 ng/ml



#5 DICAMBA

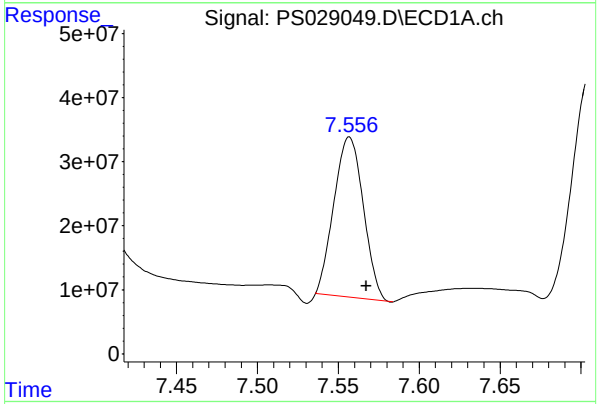
R.T.: 7.377 min
Delta R.T.: -0.007 min
Response: 5983750027
Conc: 504.47 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB166485BS



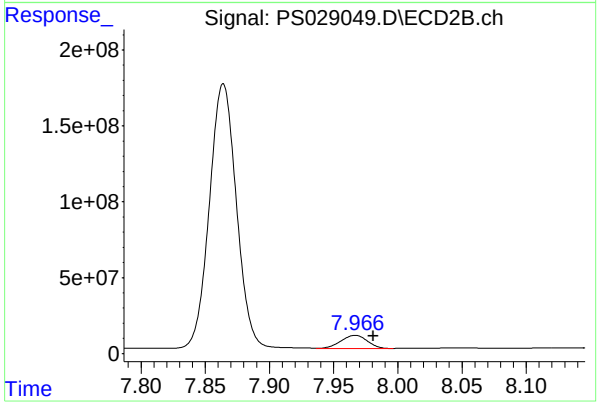
#5 DICAMBA

R.T.: 7.864 min
Delta R.T.: -0.011 min
Response: 2559291605
Conc: 459.56 ng/ml



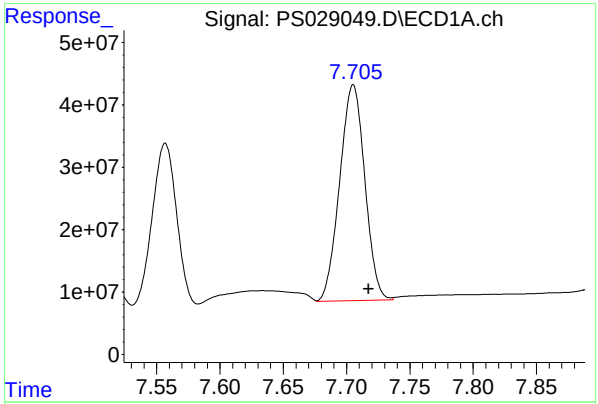
#6 MCPP

R.T.: 7.557 min
Delta R.T.: -0.011 min
Response: 315798389
Conc: 46.33 ug/ml



#6 MCPP

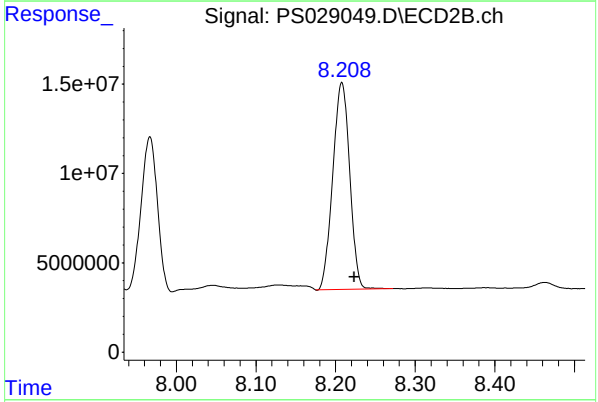
R.T.: 7.967 min
Delta R.T.: -0.014 min
Response: 123725908
Conc: 41.13 ug/ml



#7 MCPA

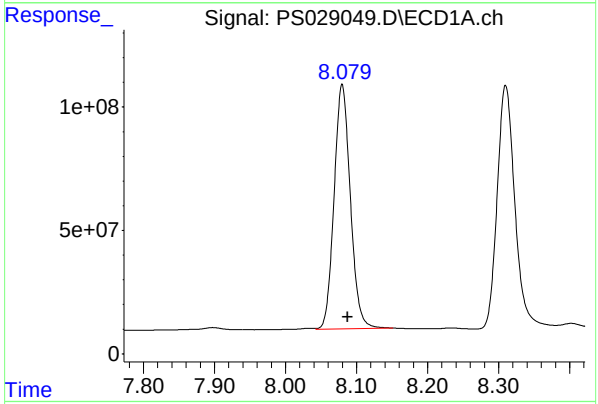
R.T.: 7.705 min
Delta R.T.: -0.012 min
Response: 477577225
Conc: 48.48 ug/ml

Instrument :
ECD_S
ClientSampleId :
PB166485BS



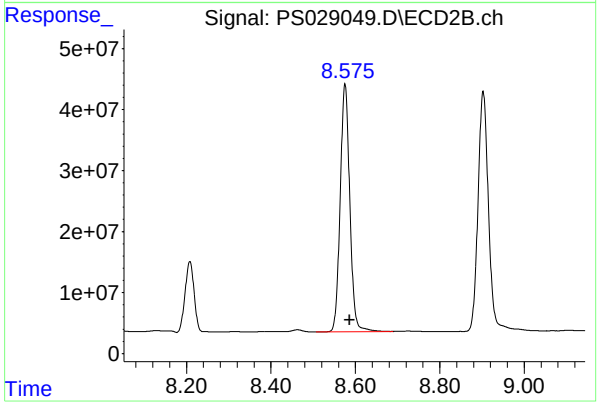
#7 MCPA

R.T.: 8.208 min
Delta R.T.: -0.016 min
Response: 171488181
Conc: 40.37 ug/ml



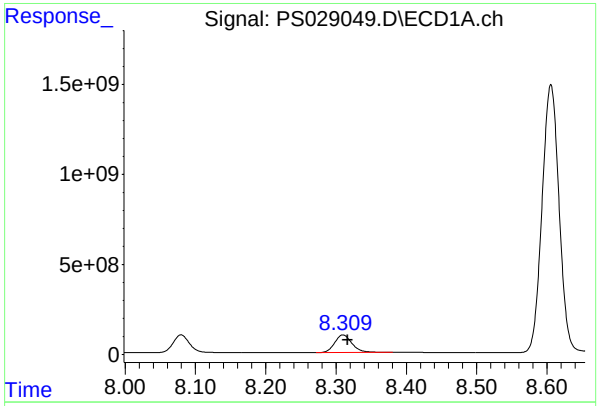
#8 DICHLORPROP

R.T.: 8.080 min
Delta R.T.: -0.008 min
Response: 1572903052
Conc: 496.41 ng/ml



#8 DICHLORPROP

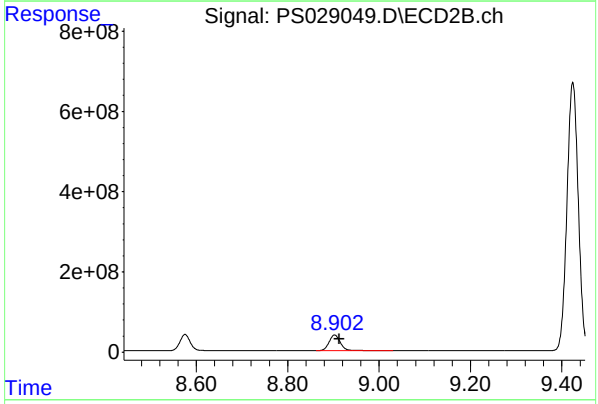
R.T.: 8.575 min
Delta R.T.: -0.011 min
Response: 642738464
Conc: 457.27 ng/ml



#9 2,4-D

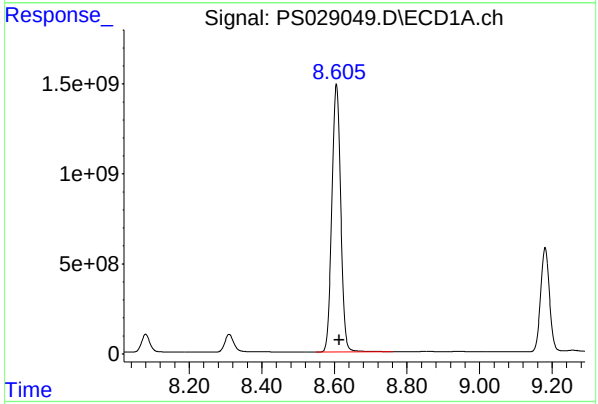
R.T.: 8.310 min
Delta R.T.: -0.007 min
Response: 1675957844
Conc: 495.93 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB166485BS



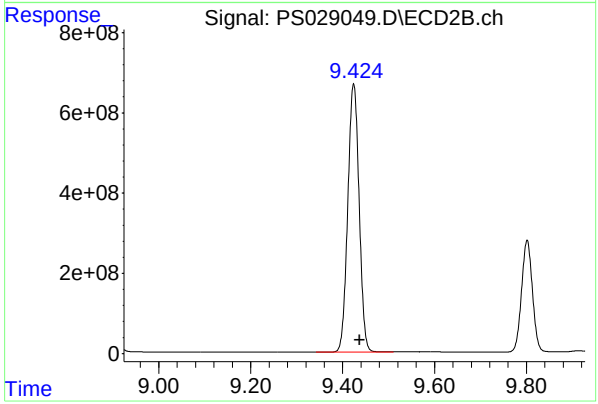
#9 2,4-D

R.T.: 8.903 min
Delta R.T.: -0.011 min
Response: 677638410
Conc: 451.90 ng/ml



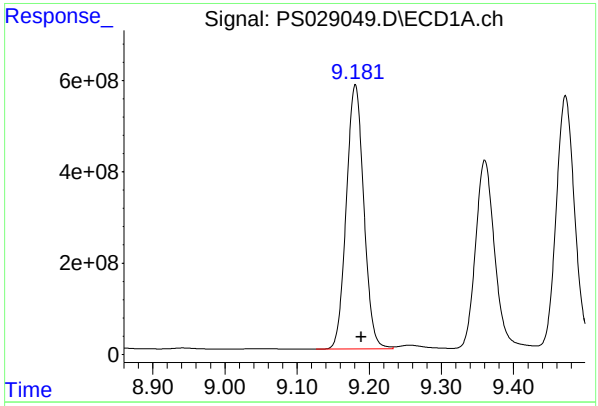
#10 Pentachlorophenol

R.T.: 8.606 min
Delta R.T.: -0.009 min
Response: 25160228516
Conc: 521.60 ng/ml



#10 Pentachlorophenol

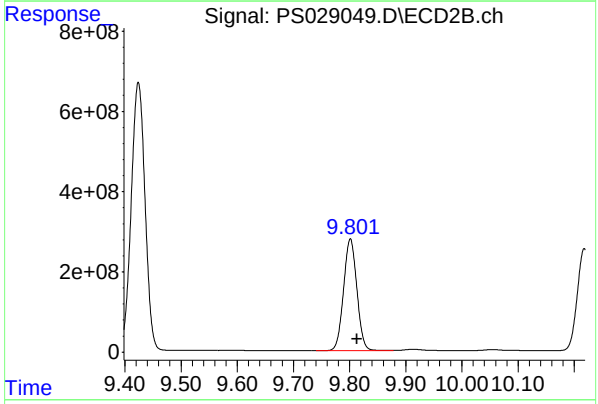
R.T.: 9.424 min
Delta R.T.: -0.013 min
Response: 11463225596
Conc: 494.83 ng/ml



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

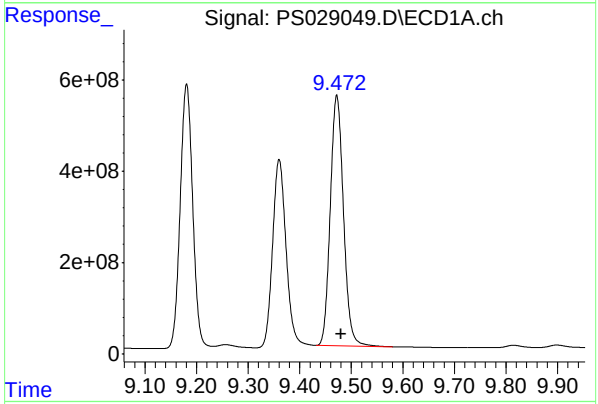
R.T.: 9.181 min
Delta R.T.: -0.008 min
Response: 9728095201
Conc: 508.45 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB166485BS



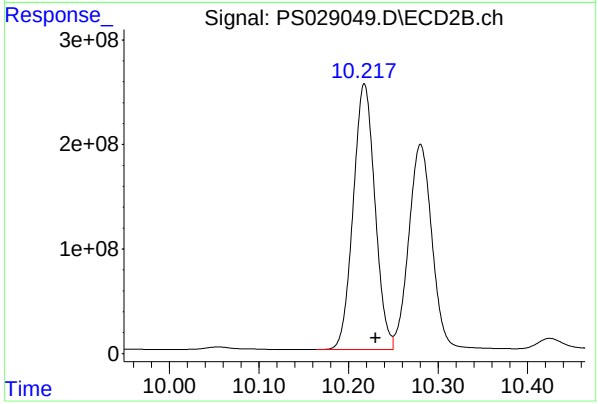
#11 2,4,5-TP (SILVEX)

R.T.: 9.801 min
Delta R.T.: -0.012 min
Response: 4587886477
Conc: 487.07 ng/ml



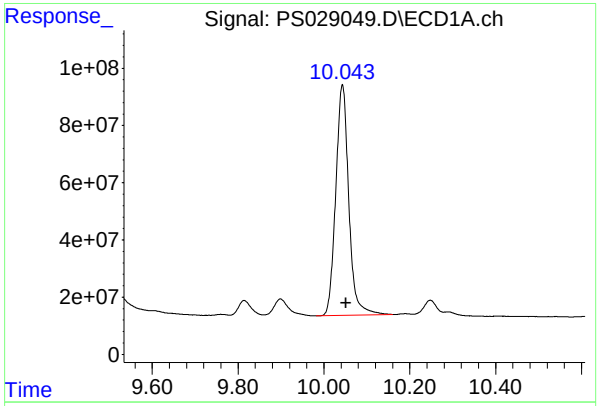
#12 2,4,5-T

R.T.: 9.472 min
Delta R.T.: -0.008 min
Response: 9747151134
Conc: 507.75 ng/ml



#12 2,4,5-T

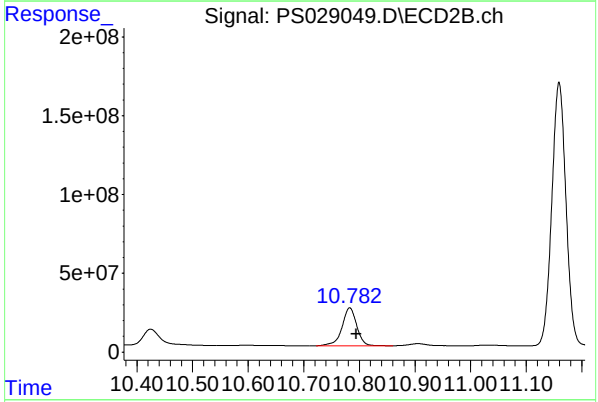
R.T.: 10.218 min
Delta R.T.: -0.013 min
Response: 4295278117
Conc: 476.78 ng/ml



#13 2,4-DB

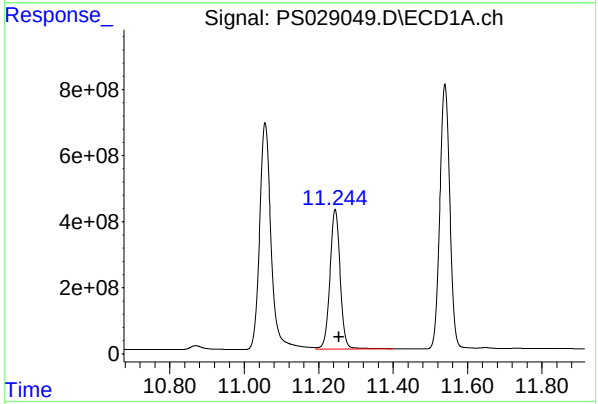
R.T.: 10.043 min
Delta R.T.: -0.008 min
Response: 1696859172
Conc: 478.34 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB166485BS



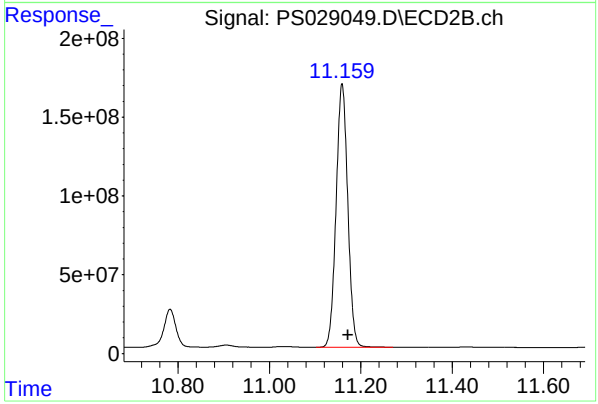
#13 2,4-DB

R.T.: 10.783 min
Delta R.T.: -0.012 min
Response: 440313946
Conc: 442.19 ng/ml



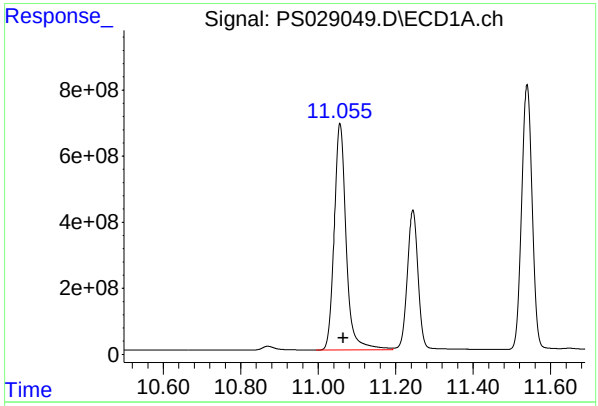
#14 DINOSEB

R.T.: 11.244 min
Delta R.T.: -0.011 min
Response: 8096850638
Conc: 489.32 ng/ml



#14 DINOSEB

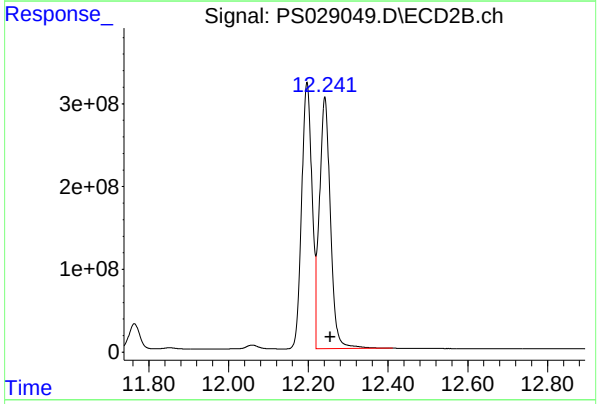
R.T.: 11.159 min
Delta R.T.: -0.013 min
Response: 2955600303
Conc: 460.57 ng/ml



#15 Picloram

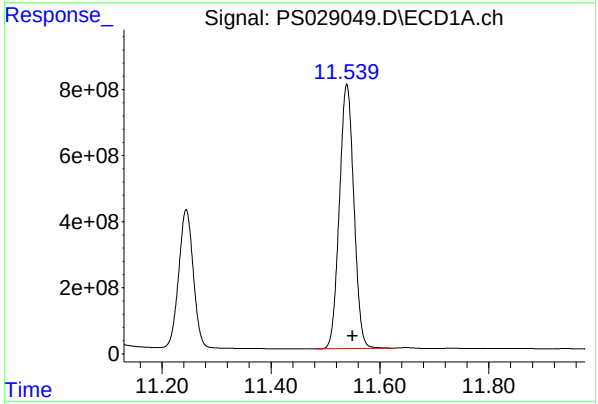
R.T.: 11.056 min
Delta R.T.: -0.008 min
Response: 14672036479
Conc: 465.01 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB166485BS



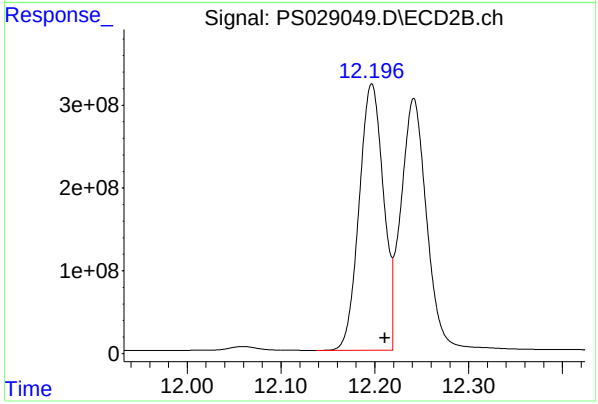
#15 Picloram

R.T.: 12.242 min
Delta R.T.: -0.014 min
Response: 5836338089
Conc: 434.91 ng/ml



#16 DCPA

R.T.: 11.539 min
Delta R.T.: -0.010 min
Response: 14775258661
Conc: 515.16 ng/ml



#16 DCPA

R.T.: 12.197 min
Delta R.T.: -0.014 min
Response: 5800844564
Conc: 510.98 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:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-3.5-013025MS	SDG No.:	Q1242
Lab Sample ID:	Q1241-04MS	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
PS029052.D	1	02/03/25 09:00	02/03/25 17:45	PB166485

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	52.8		4.90	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	51.0		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\PS020325\
Data File : PS029052.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 03 Feb 2025 17:45
Operator : AR\AJ
Sample : Q1241-04MS
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
JPP-3.5-013025MS

Manual Integrations APPROVED

Reviewed By :Abdul Mirza 02/04/2025
Supervised By :Ankita Jodhani 02/04/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 04 01:11:33 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	7.193	7.669	1553.3E6	408.7E6	557.943	366.323 #
		Target Compounds						
1)	T	Dalapon	2.614	2.664	1006.2E6	894.1E6	337.456m	438.271m#
2)	T	3,5-DICHL...	6.369	6.635	1928.5E6	683.1E6	482.509m	413.323m
3)	T	4-Nitroph...	6.992	7.201	36574517	15900378	20.639	17.870m
5)	T	DICAMBA	7.376	7.864	5298.8E6	2391.8E6	446.721	429.483
6)	T	MCPP	7.556	7.968	336.2E6	118.3E6	49.327m	39.345
7)	T	MCPA	7.704	8.208	424.7E6	200.0E6	43.117	47.098
8)	T	DICHLORPROP	8.079	8.576	1448.4E6	597.8E6	457.123	425.330
9)	T	2,4-D	8.308	8.902	1785.0E6	714.8E6	528.205	476.679
10)	T	Pentachlo...	8.605	9.425	21150.1E6	9363.2E6	438.462	404.179
11)	T	2,4,5-TP ...	9.180	9.802	9752.0E6	4610.4E6	509.706	489.454
12)	T	2,4,5-T	9.471	10.218	9155.1E6	4140.5E6	476.903	459.598
13)	T	2,4-DB	10.043	10.782	1222.0E6	371.4E6	344.469	373.009
14)	T	DINOSEB	11.243	11.159	5472.3E6	1950.6E6	330.705	303.966
15)	T	Picloram	11.054	12.241	12517.9E6	5017.0E6	396.736	373.853
16)	T	DCPA	11.536	12.197	11423.5E6	5285.6E6	398.296	465.593

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

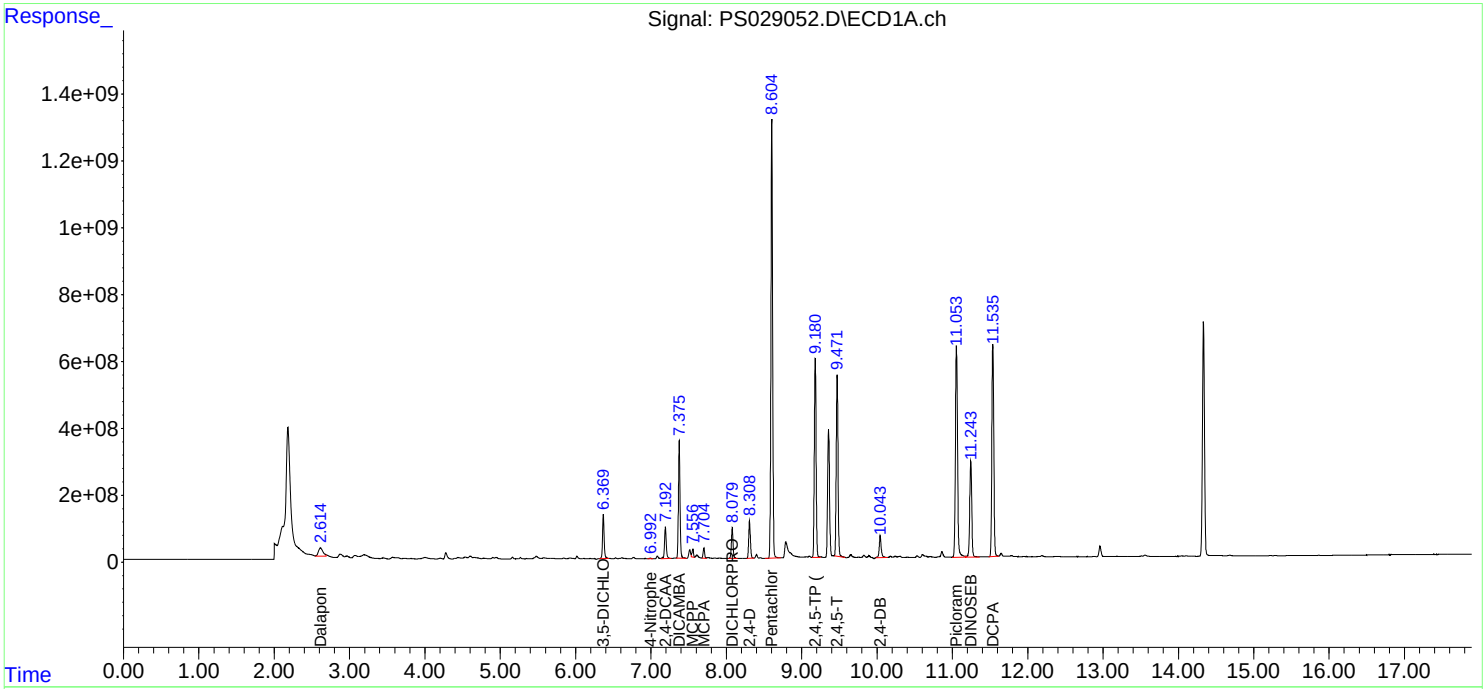
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS020325\
Data File : PS029052.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 03 Feb 2025 17:45
Operator : AR\AJ
Sample : Q1241-04MS
Misc :
ALS Vial : 8 Sample Multiplier: 1

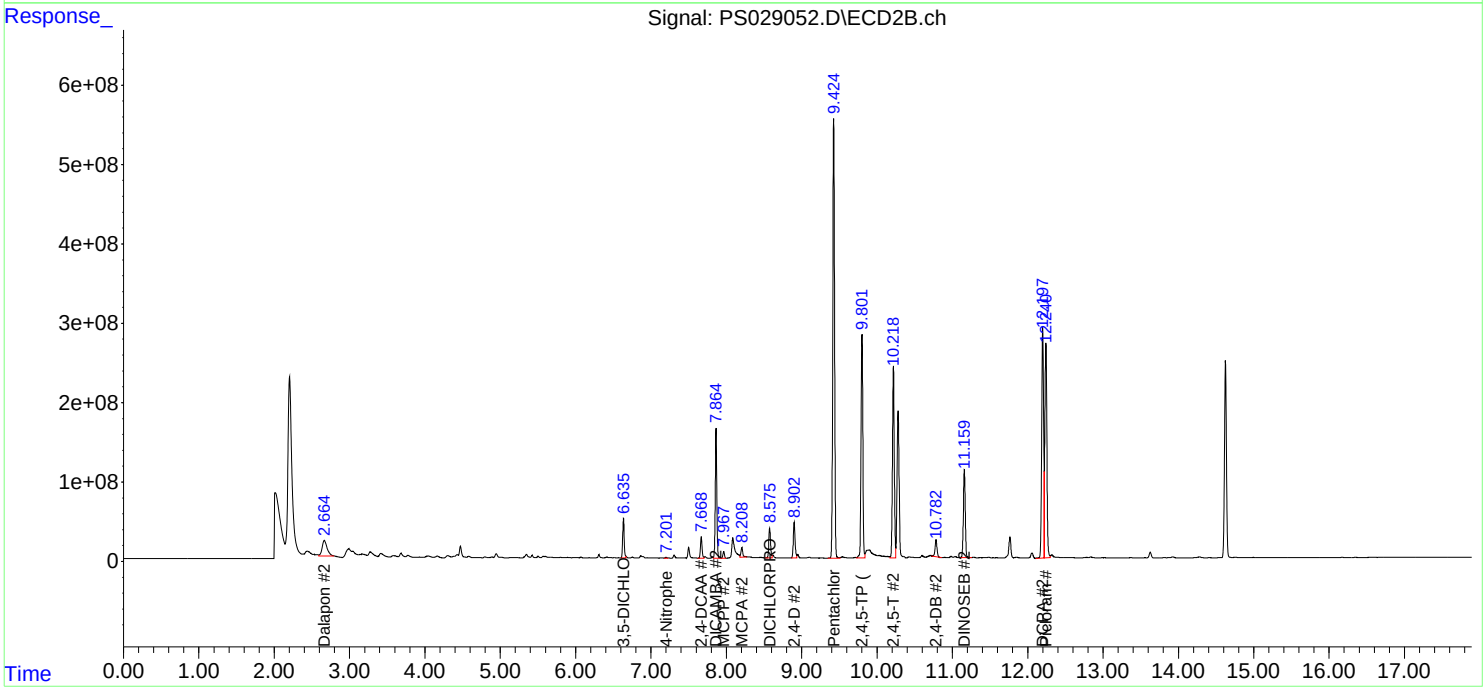
Instrument :
ECD_S
ClientSampleId :
JPP-3.5-013025MS

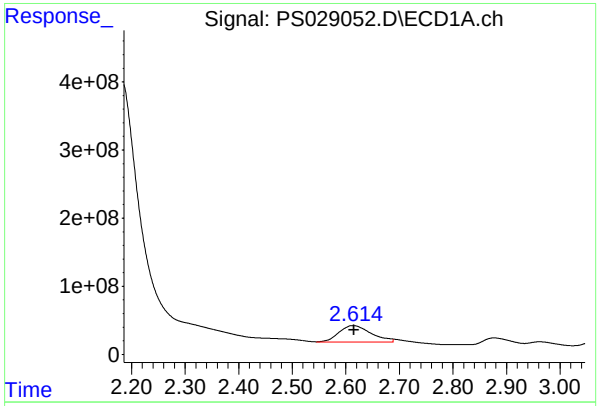
Manual Integrations APPROVED
Reviewed By :Abdul Mirza 02/04/2025
Supervised By :Ankita Jodhani 02/04/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 04 01:11:33 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







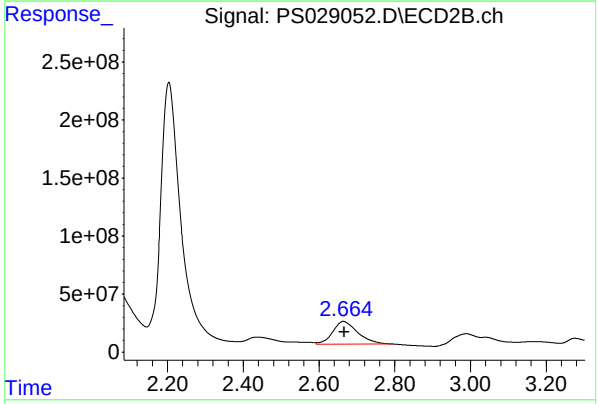
#1 Dalapon

R.T.: 2.614 min
Delta R.T.: 0.000 mi
Response: 1006205729
Conc: 337.46 ng/m

Instrument :
ECD_S
ClientSampleId :
JPP-3.5-013025MS

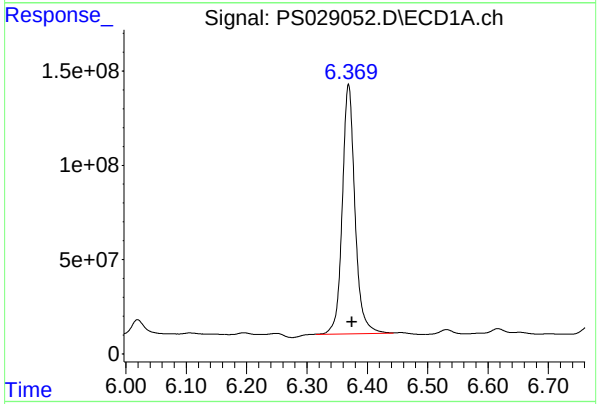
Manual Integrations APPROVED

Reviewed By :Abdul Mirza 02/04/2025
Supervised By :Ankita Jodhani 02/04/2025



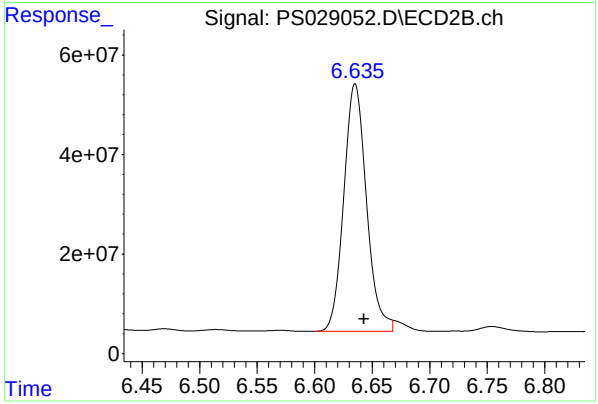
#1 Dalapon

R.T.: 2.664 min
Delta R.T.: -0.003 min
Response: 894137954
Conc: 438.27 ng/ml m



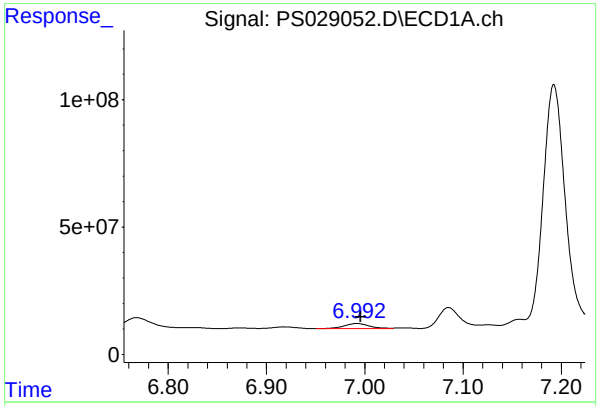
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.369 min
Delta R.T.: -0.006 min
Response: 1928517074
Conc: 482.51 ng/ml m



#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.635 min
Delta R.T.: -0.008 min
Response: 683065619
Conc: 413.32 ng/ml m



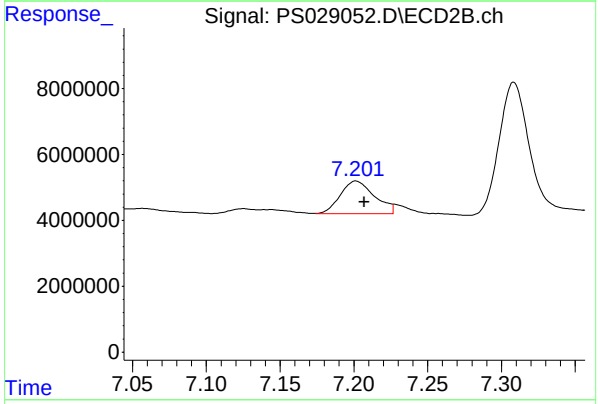
#3 4-Nitrophenol

R.T.: 6.992 min
Delta R.T.: -0.004 mi
Response: 36574517
Conc: 20.64 ng/m

Instrument :
ECD_S
ClientSampleId :
JPP-3.5-013025MS

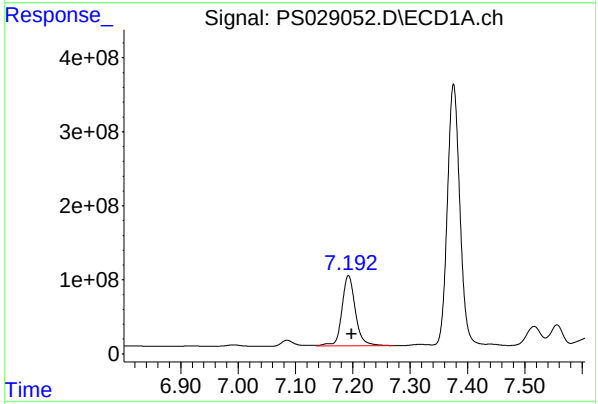
Manual Integrations APPROVED

Reviewed By :Abdul Mirza 02/04/2025
Supervised By :Ankita Jodhani 02/04/2025



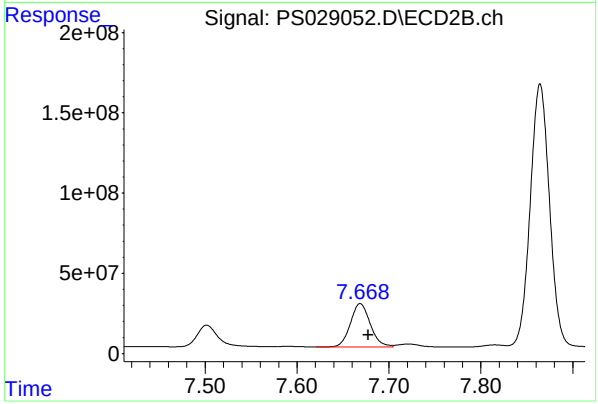
#3 4-Nitrophenol

R.T.: 7.201 min
Delta R.T.: -0.006 min
Response: 15900378
Conc: 17.87 ng/ml m



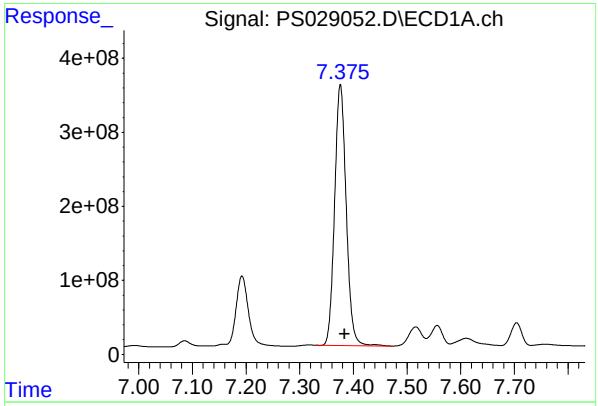
#4 2,4-DCAA

R.T.: 7.193 min
Delta R.T.: -0.005 min
Response: 1553319990
Conc: 557.94 ng/ml



#4 2,4-DCAA

R.T.: 7.669 min
Delta R.T.: -0.009 min
Response: 408748322
Conc: 366.32 ng/ml



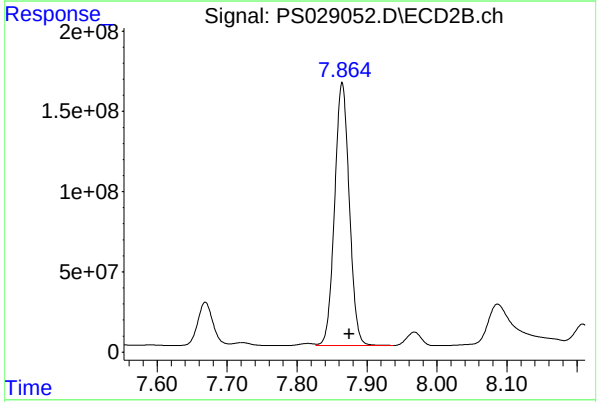
#5 DICAMBA

R.T.: 7.376 min
Delta R.T.: -0.008 mi
Response: 5298758424
Conc: 446.72 ng/m

Instrument :
ECD_S
ClientSampleId :
JPP-3.5-013025MS

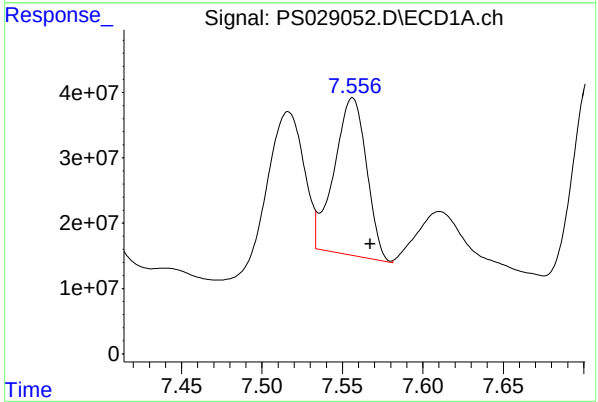
Manual Integrations APPROVED

Reviewed By :Abdul Mirza 02/04/2025
Supervised By :Ankita Jodhani 02/04/2025



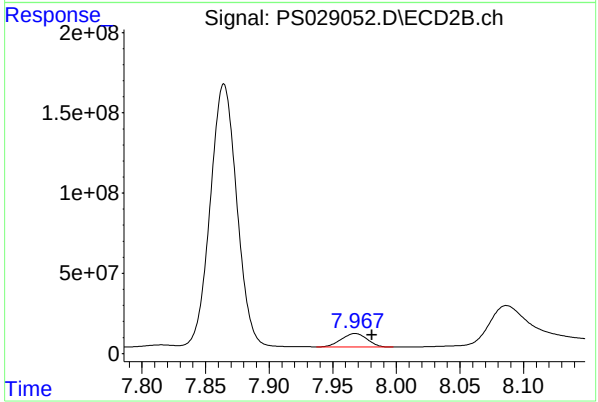
#5 DICAMBA

R.T.: 7.864 min
Delta R.T.: -0.010 min
Response: 2391807594
Conc: 429.48 ng/ml



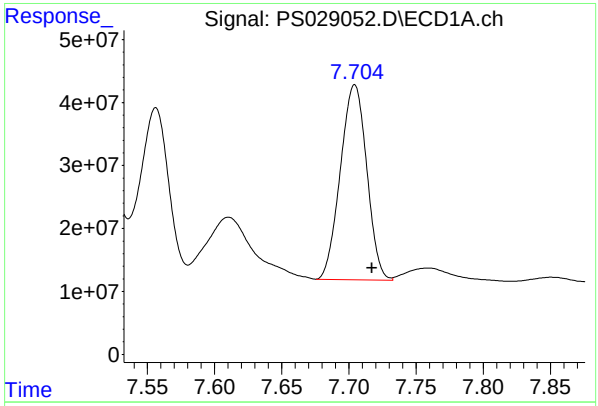
#6 MCPP

R.T.: 7.556 min
Delta R.T.: -0.011 min
Response: 336229535
Conc: 49.33 ug/ml m



#6 MCPP

R.T.: 7.968 min
Delta R.T.: -0.013 min
Response: 118347108
Conc: 39.34 ug/ml



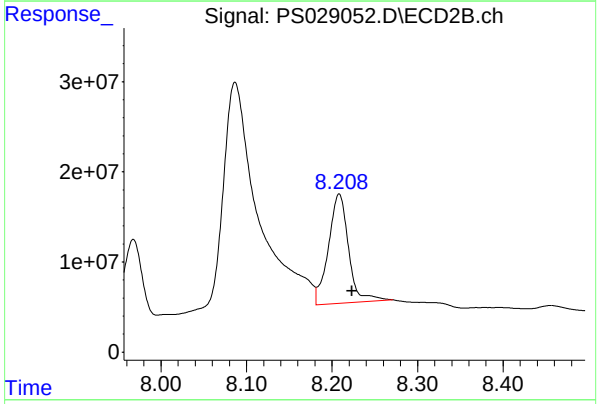
#7 MCPA

R.T.: 7.704 min
Delta R.T.: -0.013 min
Response: 424744106
Conc: 43.12 ug/ml

Instrument :
ECD_S
ClientSampleId :
JPP-3.5-013025MS

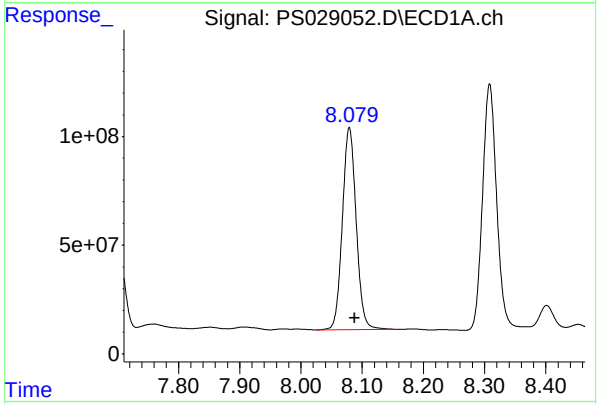
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 02/04/2025
Supervised By :Ankita Jodhani 02/04/2025



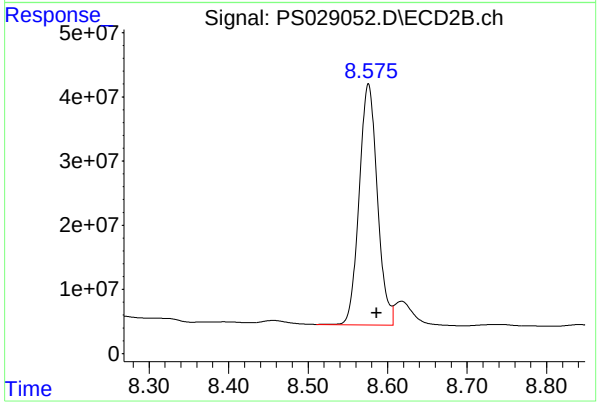
#7 MCPA

R.T.: 8.208 min
Delta R.T.: -0.015 min
Response: 200048168
Conc: 47.10 ug/ml



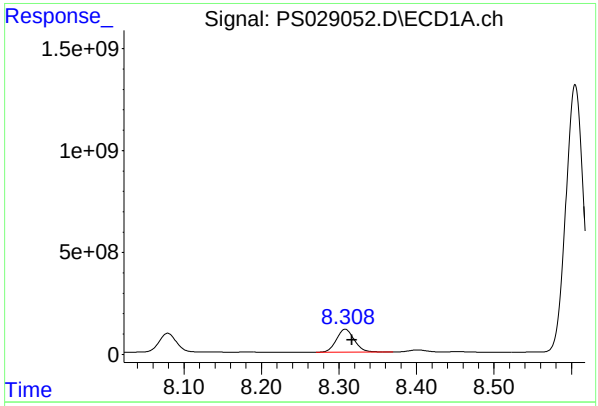
#8 DICHLORPROP

R.T.: 8.079 min
Delta R.T.: -0.009 min
Response: 1448428010
Conc: 457.12 ng/ml



#8 DICHLORPROP

R.T.: 8.576 min
Delta R.T.: -0.010 min
Response: 597843985
Conc: 425.33 ng/ml



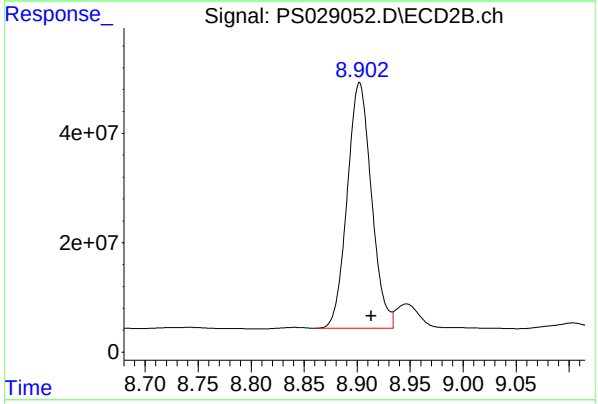
#9 2,4-D

R.T.: 8.308 min
Delta R.T.: -0.009 min
Response: 1785042936
Conc: 528.21 ng/ml

Instrument :
ECD_S
ClientSampleId :
JPP-3.5-013025MS

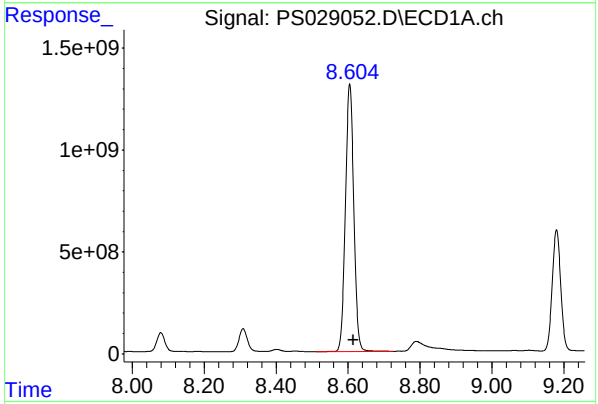
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 02/04/2025
Supervised By :Ankita Jodhani 02/04/2025



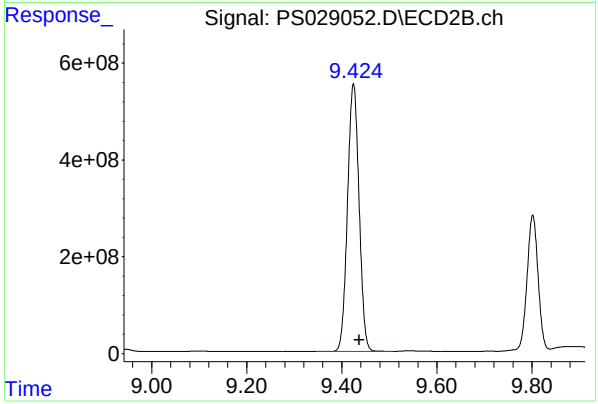
#9 2,4-D

R.T.: 8.902 min
Delta R.T.: -0.011 min
Response: 714788429
Conc: 476.68 ng/ml



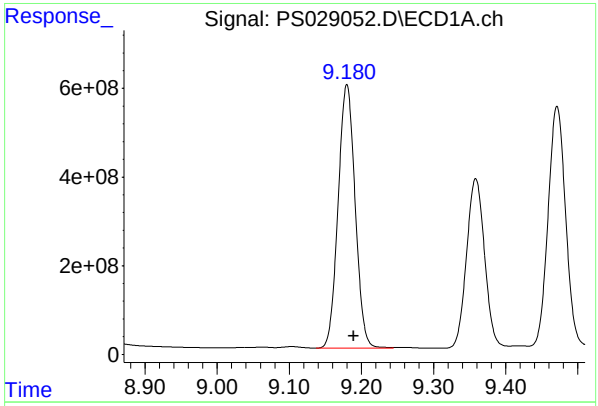
#10 Pentachlorophenol

R.T.: 8.605 min
Delta R.T.: -0.010 min
Response: 21150110290
Conc: 438.46 ng/ml



#10 Pentachlorophenol

R.T.: 9.425 min
Delta R.T.: -0.012 min
Response: 9363211115
Conc: 404.18 ng/ml



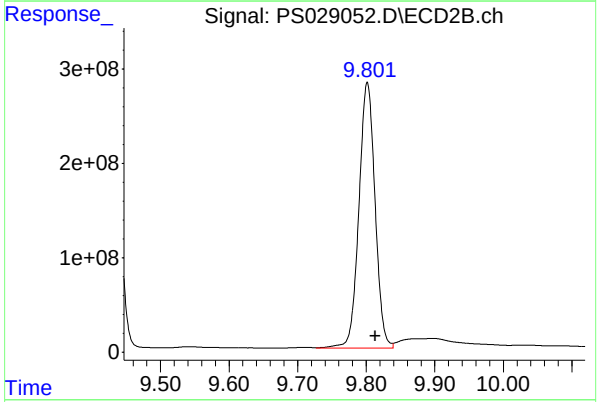
#11 2,4,5-TP (SILVEX)

R.T.: 9.180 min
Delta R.T.: -0.009 min
Response: 9752037818
Conc: 509.71 ng/ml

Instrument :
ECD_S
ClientSampleId :
JPP-3.5-013025MS

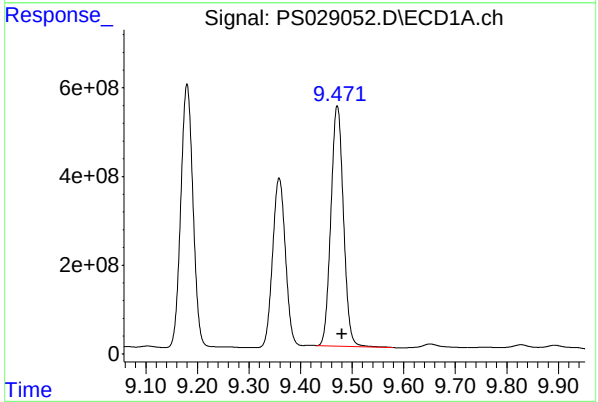
Manual Integrations APPROVED

Reviewed By :Abdul Mirza 02/04/2025
Supervised By :Ankita Jodhani 02/04/2025



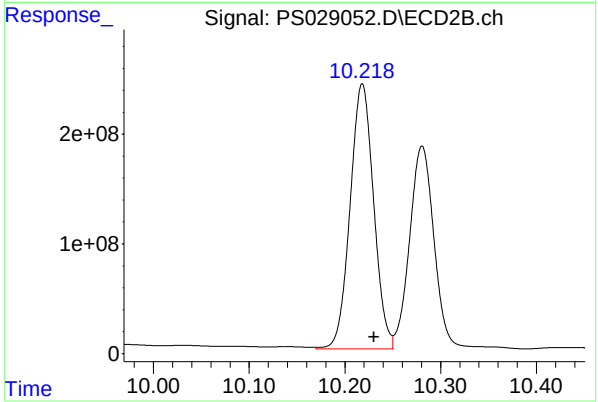
#11 2,4,5-TP (SILVEX)

R.T.: 9.802 min
Delta R.T.: -0.012 min
Response: 4610368523
Conc: 489.45 ng/ml



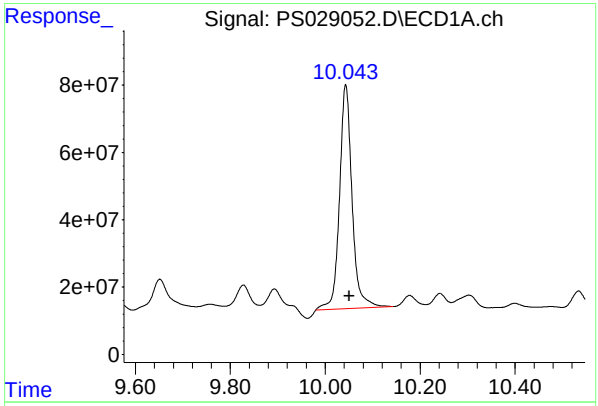
#12 2,4,5-T

R.T.: 9.471 min
Delta R.T.: -0.009 min
Response: 9155062826
Conc: 476.90 ng/ml



#12 2,4,5-T

R.T.: 10.218 min
Delta R.T.: -0.012 min
Response: 4140524382
Conc: 459.60 ng/ml



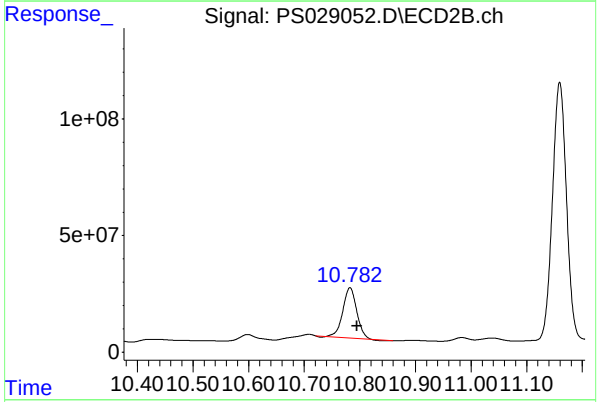
#13 2,4-DB

R.T.: 10.043 min
Delta R.T.: -0.008 min
Response: 1221952757
Conc: 344.47 ng/ml

Instrument :
ECD_S
ClientSampleId :
JPP-3.5-013025MS

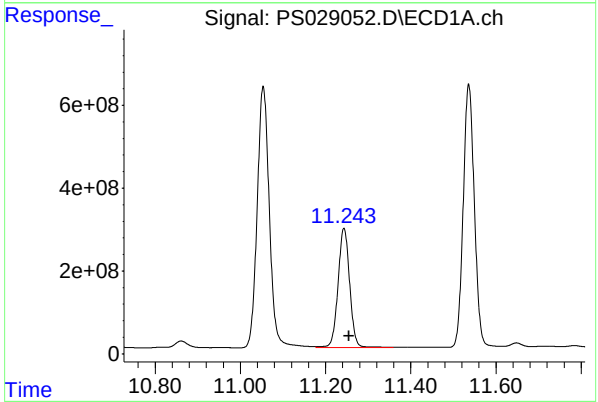
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 02/04/2025
Supervised By :Ankita Jodhani 02/04/2025



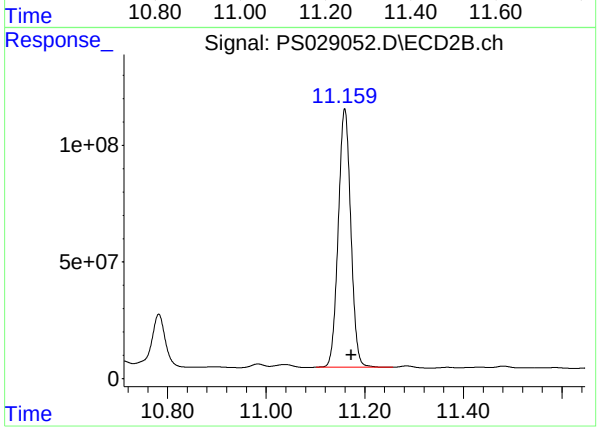
#13 2,4-DB

R.T.: 10.782 min
Delta R.T.: -0.013 min
Response: 371426000
Conc: 373.01 ng/ml



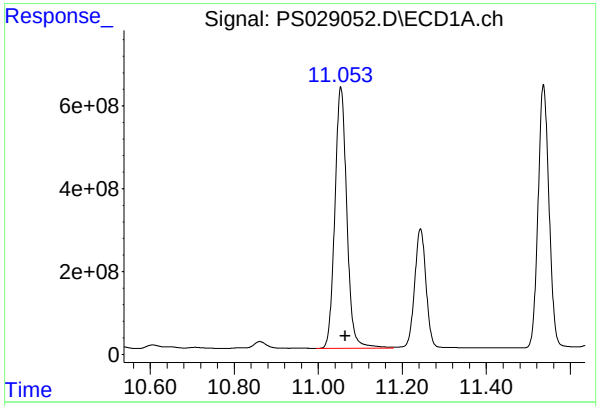
#14 DINOSEB

R.T.: 11.243 min
Delta R.T.: -0.012 min
Response: 5472284196
Conc: 330.71 ng/ml



#14 DINOSEB

R.T.: 11.159 min
Delta R.T.: -0.013 min
Response: 1950643480
Conc: 303.97 ng/ml



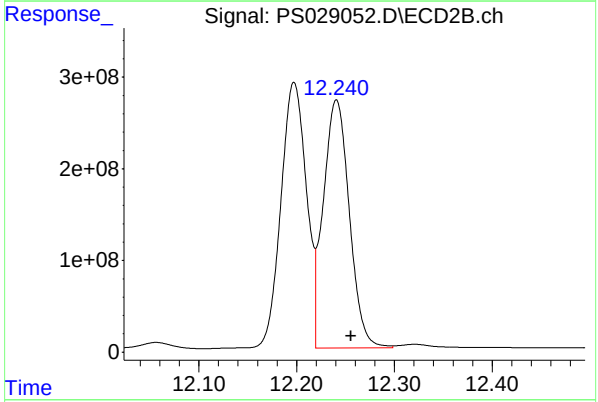
#15 Picloram

R.T.: 11.054 min
Delta R.T.: -0.011 min
Response: 12517888194
Conc: 396.74 ng/ml

Instrument :
ECD_S
ClientSampleId :
JPP-3.5-013025MS

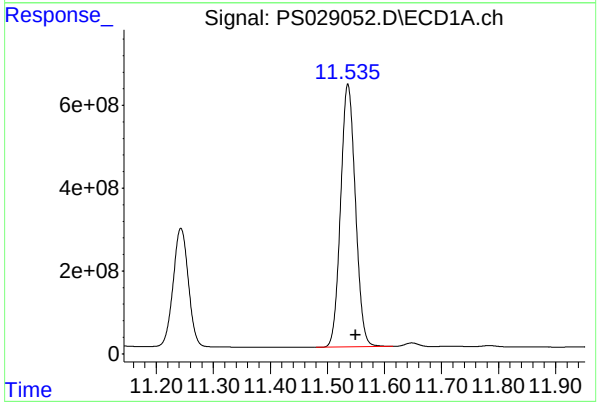
Manual Integrations APPROVED

Reviewed By :Abdul Mirza 02/04/2025
Supervised By :Ankita Jodhani 02/04/2025



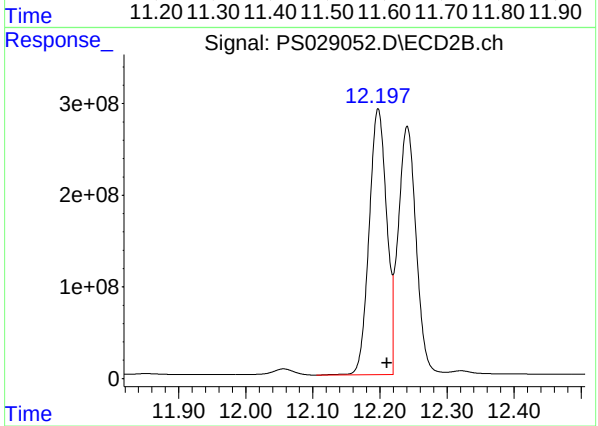
#15 Picloram

R.T.: 12.241 min
Delta R.T.: -0.015 min
Response: 5016986335
Conc: 373.85 ng/ml



#16 DCPA

R.T.: 11.536 min
Delta R.T.: -0.014 min
Response: 11423549418
Conc: 398.30 ng/ml



#16 DCPA

R.T.: 12.197 min
Delta R.T.: -0.013 min
Response: 5285569976
Conc: 465.59 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:	01/30/25
Project:	NYCDDC SANTWOBR Brooklyn Bridge BBMCR	Date Received:	01/30/25
Client Sample ID:	JPP-3.5-013025MSD	SDG No.:	Q1242
Lab Sample ID:	Q1241-04MSD	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
PS029053.D	1	02/03/25 09:00	02/03/25 18:09	PB166485

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	53.3		4.90	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	51.7		4.50	20.0	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	567		39 - 175	113%	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\PS020325\
Data File : PS029053.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 03 Feb 2025 18:09
Operator : AR\AJ
Sample : Q1241-04MSD
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
JPP-3.5-013025MSD

Manual Integrations APPROVED

Reviewed By :Abdul Mirza 02/04/2025
Supervised By :Ankita Jodhani 02/04/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 04 01:12:05 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	7.193	7.669	1579.8E6	417.3E6	567.437	373.997 #
		Target Compounds						
1)	T	Dalapon	2.613	2.666	1509.7E6	1440.3E6	506.327m	706.002 #
2)	T	3,5-DICHL...	6.369	6.635	1942.7E6	696.7E6	486.059m	421.560m
3)	T	4-Nitroph...	6.992	7.202	34991100	17151539	19.746	19.276m
5)	T	DICAMBA	7.376	7.865	5357.8E6	2421.0E6	451.697	434.721
6)	T	MCPP	7.555	7.968	376.4E6	119.7E6	55.228m	39.810 #
7)	T	MCPA	7.705	8.209	426.9E6	206.4E6	43.336	48.602
8)	T	DICHLORPROP	8.079	8.577	1464.8E6	606.0E6	462.291	431.160
9)	T	2,4-D	8.308	8.903	1800.2E6	723.3E6	532.698	482.368
10)	T	Pentachlo...	8.605	9.425	21468.1E6	9538.2E6	445.053	411.733
11)	T	2,4,5-TP ...	9.180	9.802	9889.2E6	4680.6E6	516.875	496.912
12)	T	2,4,5-T	9.471	10.218	9265.4E6	4191.5E6	482.652	465.258
13)	T	2,4-DB	10.043	10.783	1235.2E6	368.8E6	348.200	370.351
14)	T	DINOSEB	11.242	11.160	5595.9E6	1990.3E6	338.173	310.150
15)	T	Picloram	11.053	12.242	12681.8E6	5097.7E6	401.932	379.870
16)	T	DCPA	11.536	12.198	11479.3E6	5362.8E6	400.241	472.400

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

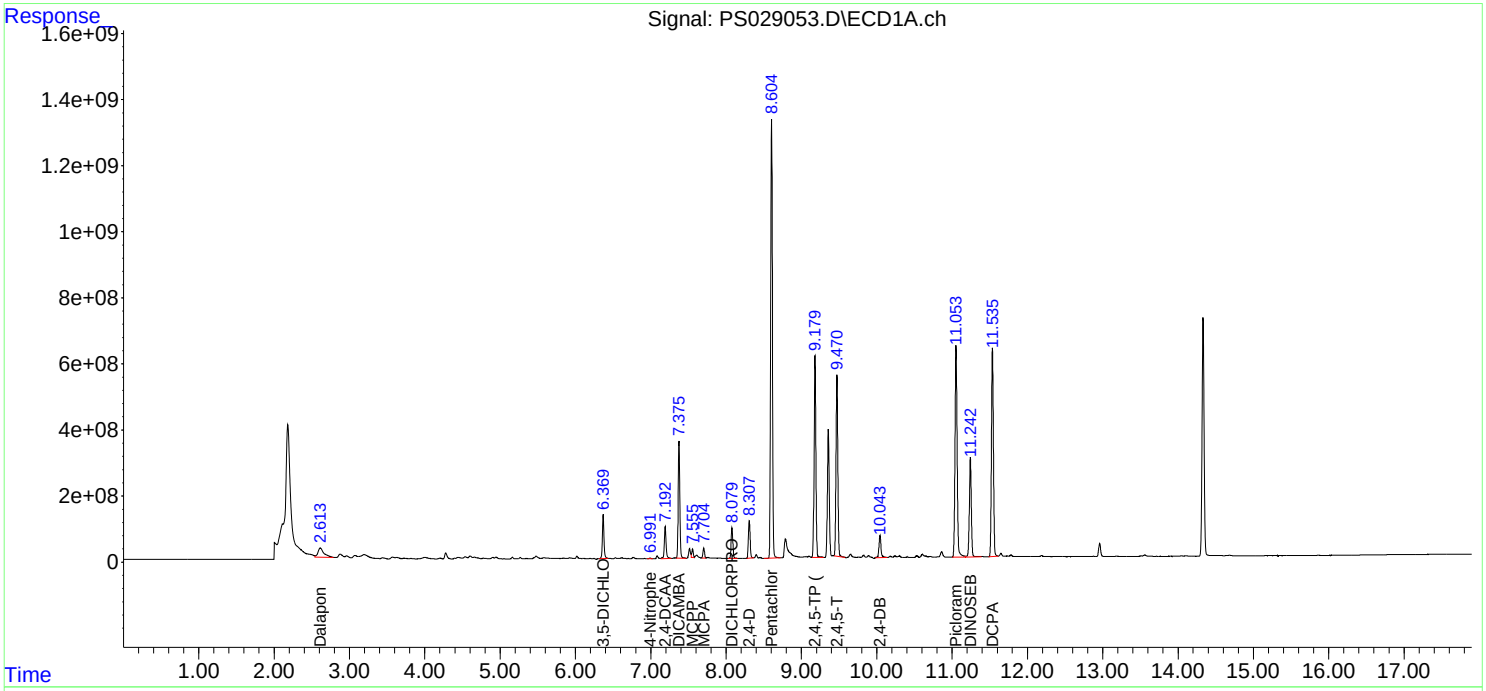
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS020325\
Data File : PS029053.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 03 Feb 2025 18:09
Operator : AR\AJ
Sample : Q1241-04MSD
Misc :
ALS Vial : 9 Sample Multiplier: 1

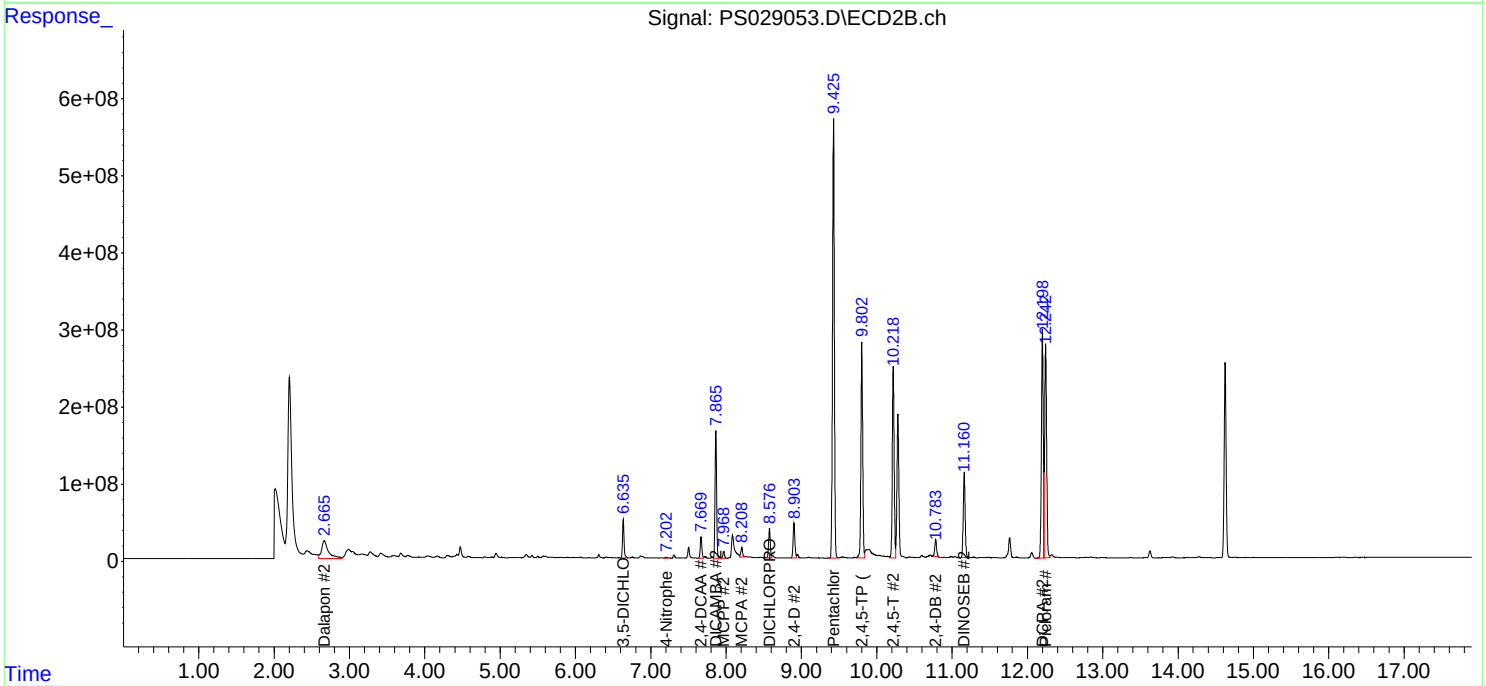
Instrument :
ECD_S
ClientSampleId :
JPP-3.5-013025MSD

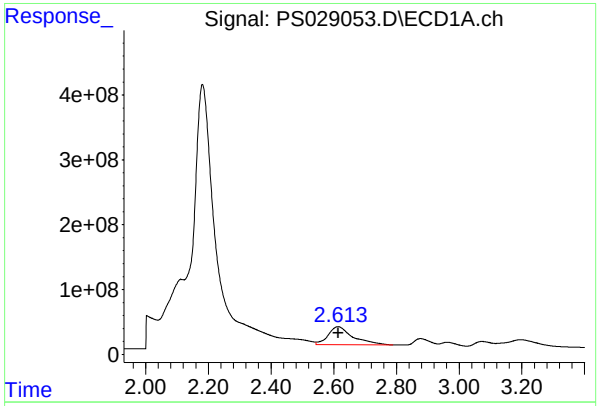
Manual Integrations APPROVED
Reviewed By :Abdul Mirza 02/04/2025
Supervised By :Ankita Jodhani 02/04/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Feb 04 01:12:05 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







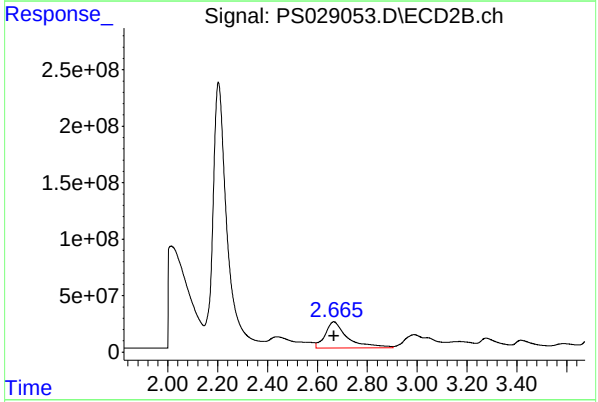
#1 Dalapon

R.T.: 2.613 min
Delta R.T.: -0.002 mi
Response: 1509736896
Conc: 506.33 ng/m

Instrument :
ECD_S
ClientSampleId :
JPP-3.5-013025MSD

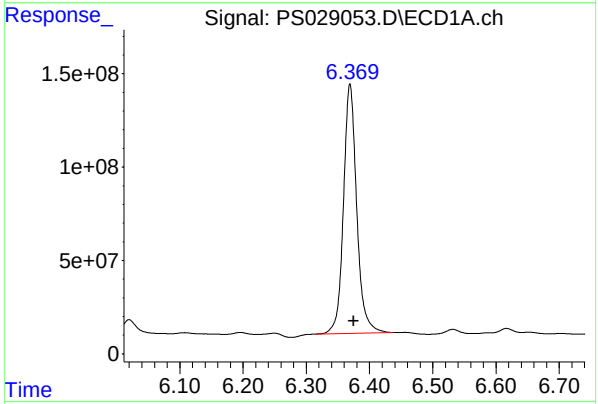
Manual Integrations APPROVED

Reviewed By :Abdul Mirza 02/04/2025
Supervised By :Ankita Jodhani 02/04/2025



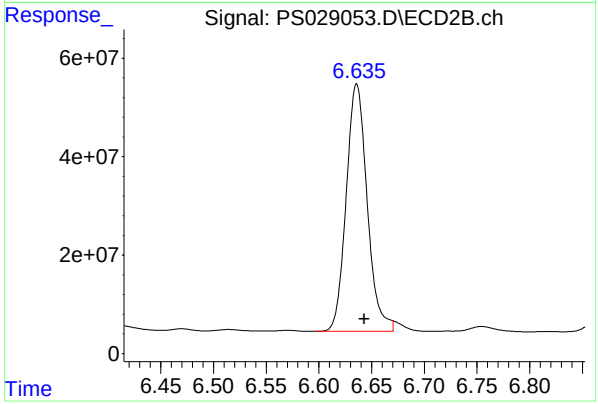
#1 Dalapon

R.T.: 2.666 min
Delta R.T.: -0.001 min
Response: 1440347481
Conc: 706.00 ng/ml



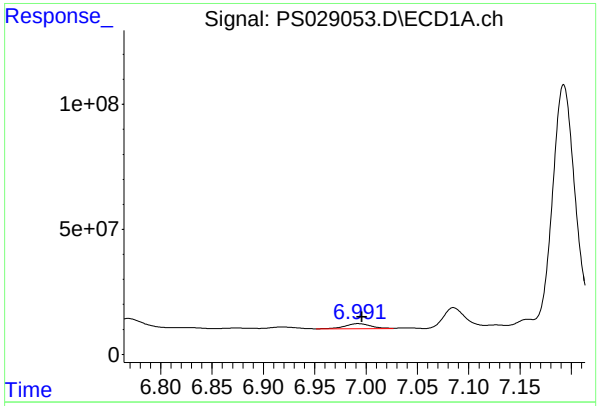
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.369 min
Delta R.T.: -0.006 min
Response: 1942706556
Conc: 486.06 ng/ml m



#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.635 min
Delta R.T.: -0.008 min
Response: 696679221
Conc: 421.56 ng/ml m



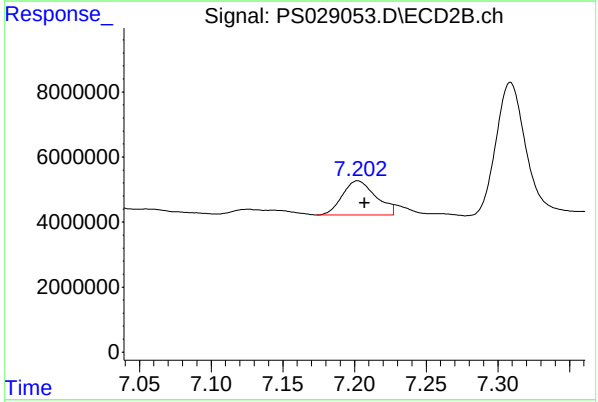
#3 4-Nitrophenol

R.T.: 6.992 min
Delta R.T.: -0.003 mi
Response: 34991100
Conc: 19.75 ng/ml

Instrument :
ECD_S
ClientSampleId :
JPP-3.5-013025MSD

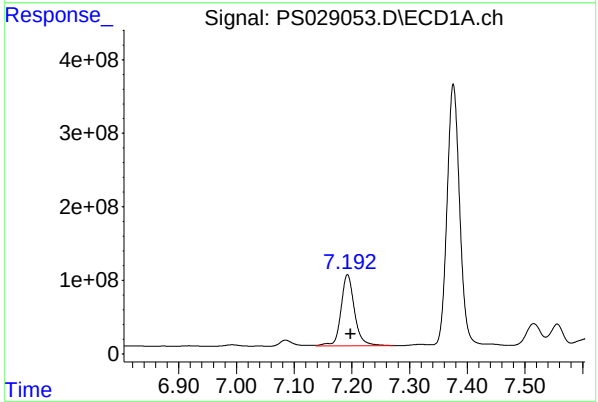
Manual Integrations APPROVED

Reviewed By :Abdul Mirza 02/04/2025
Supervised By :Ankita Jodhani 02/04/2025



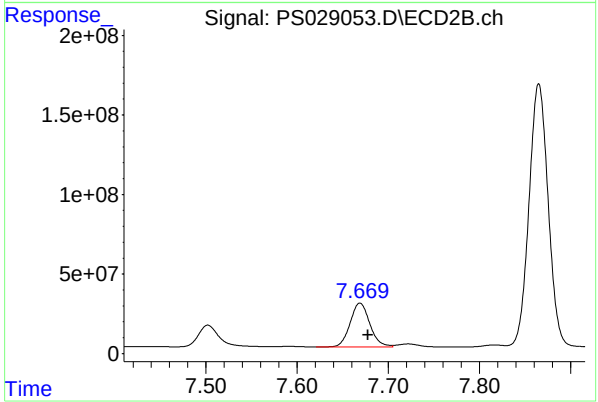
#3 4-Nitrophenol

R.T.: 7.202 min
Delta R.T.: -0.005 min
Response: 17151539
Conc: 19.28 ng/ml m



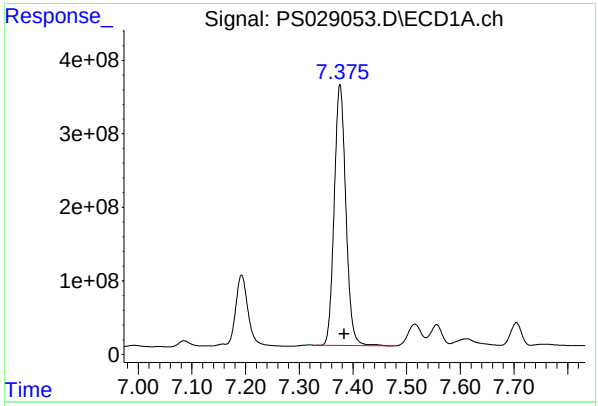
#4 2,4-DCAA

R.T.: 7.193 min
Delta R.T.: -0.005 min
Response: 1579751867
Conc: 567.44 ng/ml



#4 2,4-DCAA

R.T.: 7.669 min
Delta R.T.: -0.008 min
Response: 417311032
Conc: 374.00 ng/ml



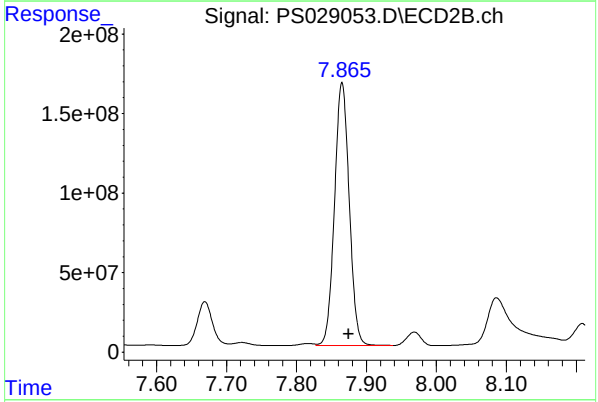
#5 DICAMBA

R.T.: 7.376 min
Delta R.T.: -0.008 mi
Response: 5357780979
Conc: 451.70 ng/m

Instrument :
ECD_S
ClientSampleId :
JPP-3.5-013025MSD

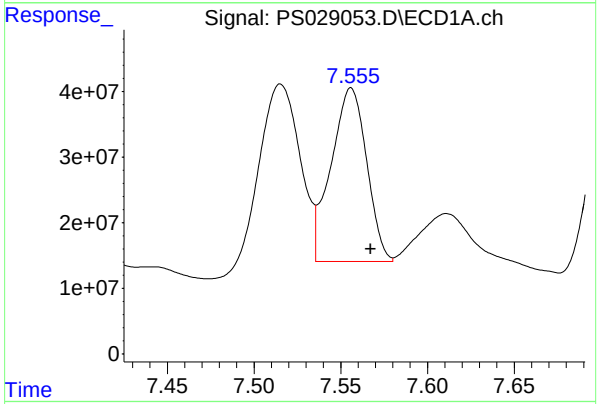
Manual Integrations APPROVED

Reviewed By :Abdul Mirza 02/04/2025
Supervised By :Ankita Jodhani 02/04/2025



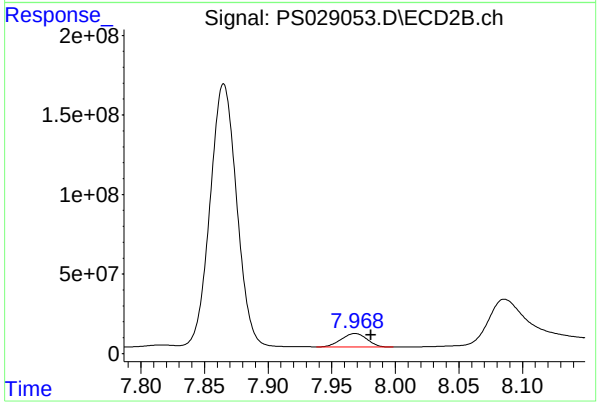
#5 DICAMBA

R.T.: 7.865 min
Delta R.T.: -0.009 min
Response: 2420975938
Conc: 434.72 ng/ml



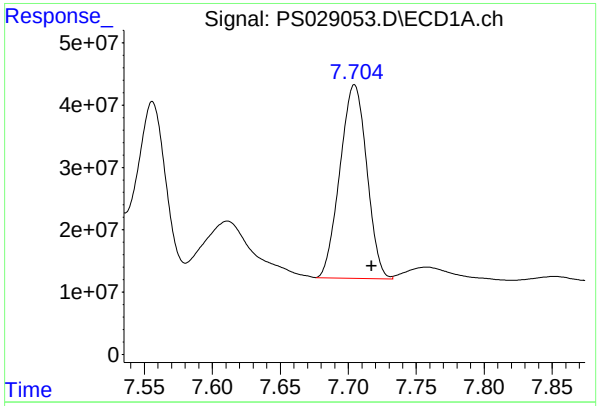
#6 MCPP

R.T.: 7.555 min
Delta R.T.: -0.012 min
Response: 376449375
Conc: 55.23 ug/ml m



#6 MCPP

R.T.: 7.968 min
Delta R.T.: -0.013 min
Response: 119746254
Conc: 39.81 ug/ml



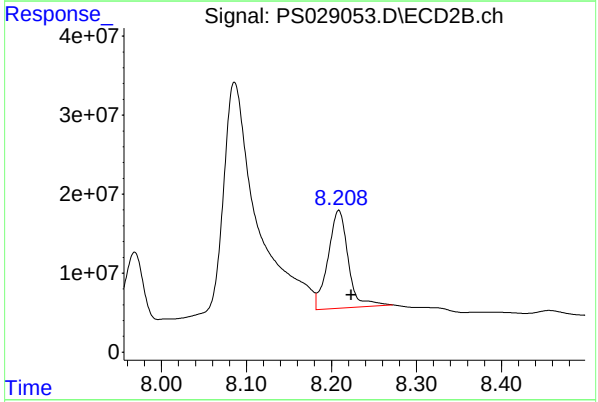
#7 MCPA

R.T.: 7.705 min
Delta R.T.: -0.013 min
Response: 426905672
Conc: 43.34 ug/ml

Instrument :
ECD_S
ClientSampleId :
JPP-3.5-013025MSD

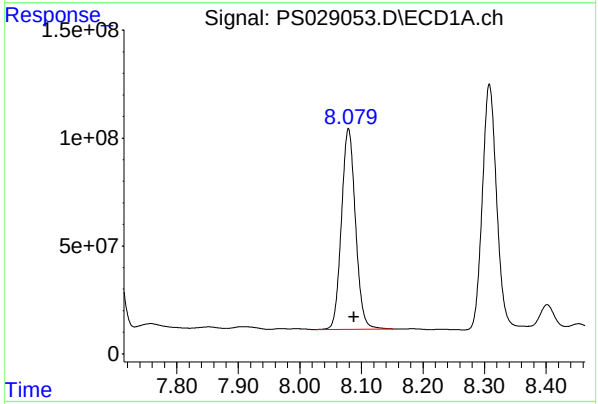
Manual Integrations APPROVED

Reviewed By :Abdul Mirza 02/04/2025
Supervised By :Ankita Jodhani 02/04/2025



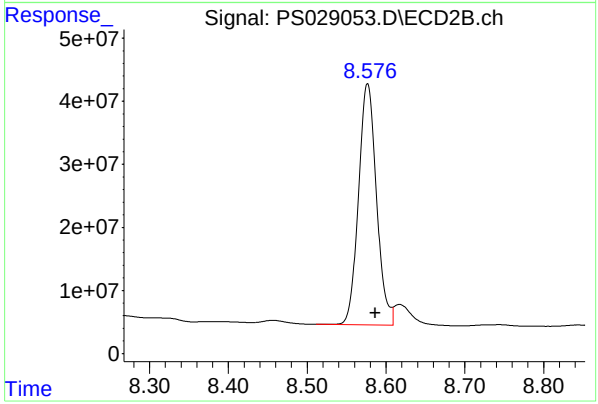
#7 MCPA

R.T.: 8.209 min
Delta R.T.: -0.015 min
Response: 206436245
Conc: 48.60 ug/ml



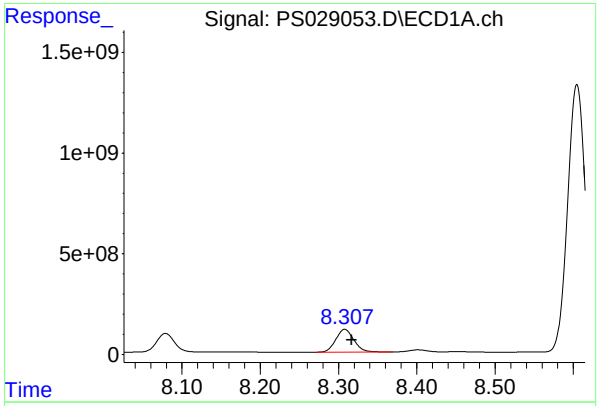
#8 DICHLORPROP

R.T.: 8.079 min
Delta R.T.: -0.009 min
Response: 1464802155
Conc: 462.29 ng/ml



#8 DICHLORPROP

R.T.: 8.577 min
Delta R.T.: -0.010 min
Response: 606037344
Conc: 431.16 ng/ml



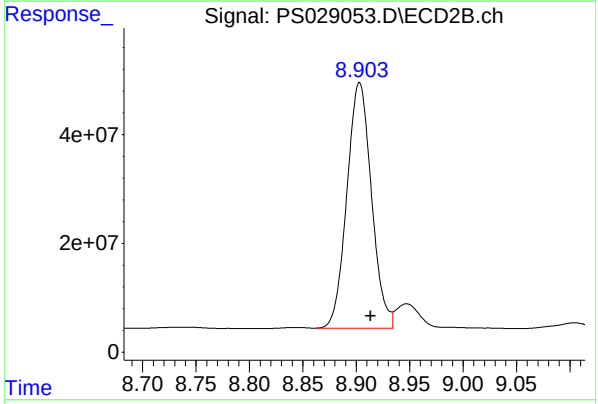
#9 2,4-D

R.T.: 8.308 min
Delta R.T.: -0.009 min
Response: 1800227468
Conc: 532.70 ng/ml

Instrument :
ECD_S
ClientSampleId :
JPP-3.5-013025MSD

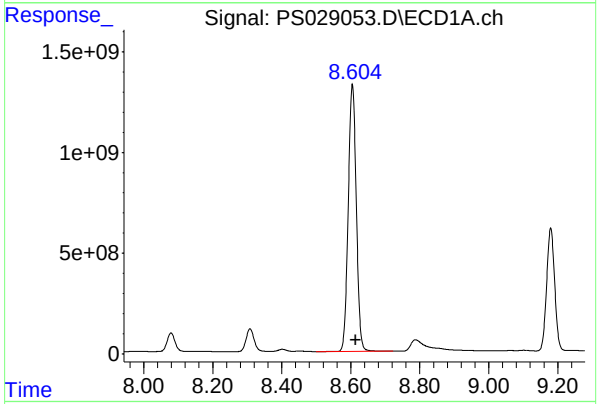
Manual Integrations APPROVED

Reviewed By :Abdul Mirza 02/04/2025
Supervised By :Ankita Jodhani 02/04/2025



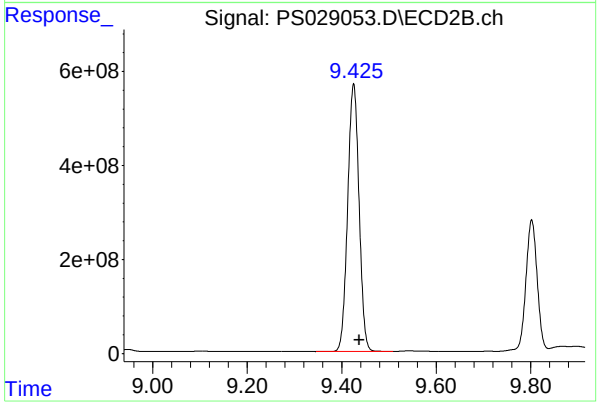
#9 2,4-D

R.T.: 8.903 min
Delta R.T.: -0.011 min
Response: 723318870
Conc: 482.37 ng/ml



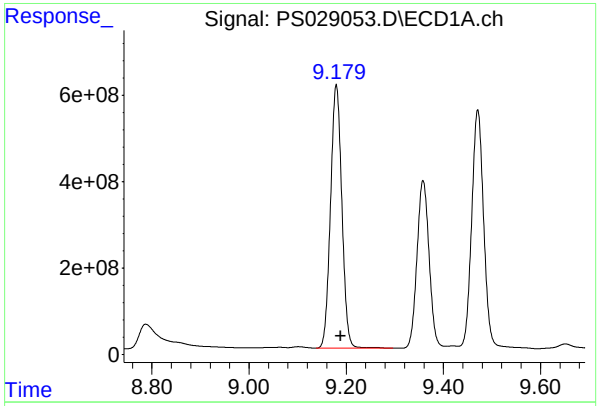
#10 Pentachlorophenol

R.T.: 8.605 min
Delta R.T.: -0.010 min
Response: 21468055062
Conc: 445.05 ng/ml



#10 Pentachlorophenol

R.T.: 9.425 min
Delta R.T.: -0.012 min
Response: 9538217627
Conc: 411.73 ng/ml



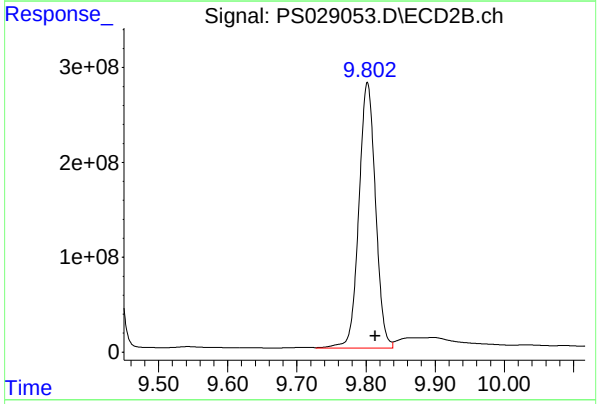
#11 2,4,5-TP (SILVEX)

R.T.: 9.180 min
Delta R.T.: -0.009 min
Response: 9889200415
Conc: 516.88 ng/ml

Instrument :
ECD_S
ClientSampleId :
JPP-3.5-013025MSD

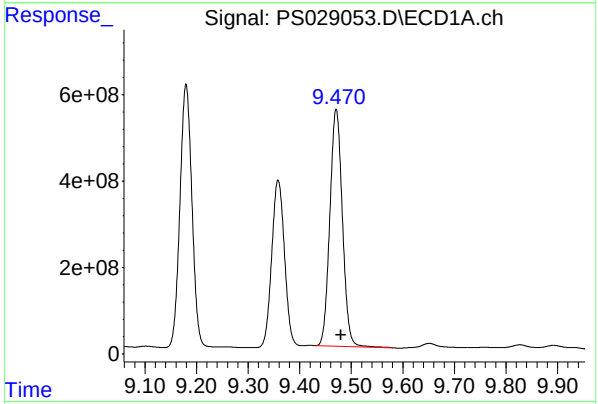
Manual Integrations APPROVED

Reviewed By :Abdul Mirza 02/04/2025
Supervised By :Ankita Jodhani 02/04/2025



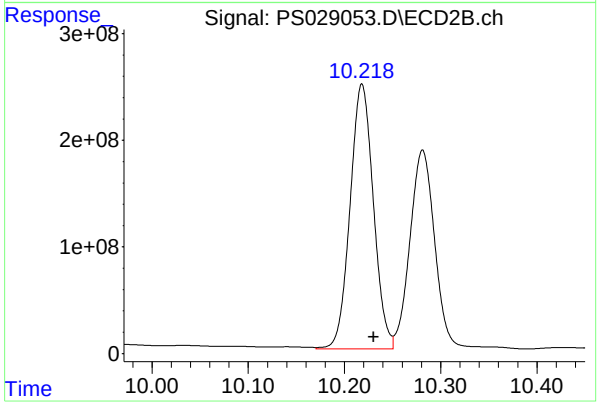
#11 2,4,5-TP (SILVEX)

R.T.: 9.802 min
Delta R.T.: -0.011 min
Response: 4680611551
Conc: 496.91 ng/ml



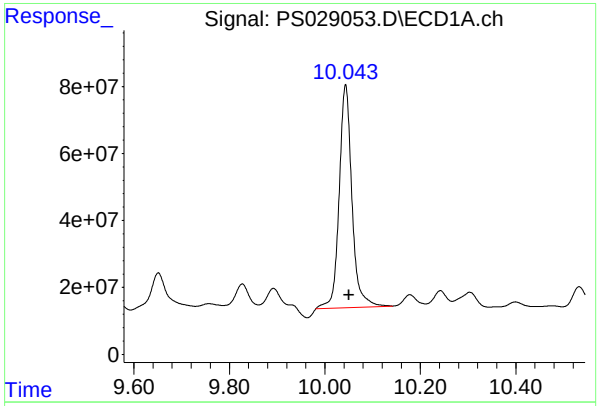
#12 2,4,5-T

R.T.: 9.471 min
Delta R.T.: -0.009 min
Response: 9265425031
Conc: 482.65 ng/ml



#12 2,4,5-T

R.T.: 10.218 min
Delta R.T.: -0.012 min
Response: 4191507689
Conc: 465.26 ng/ml



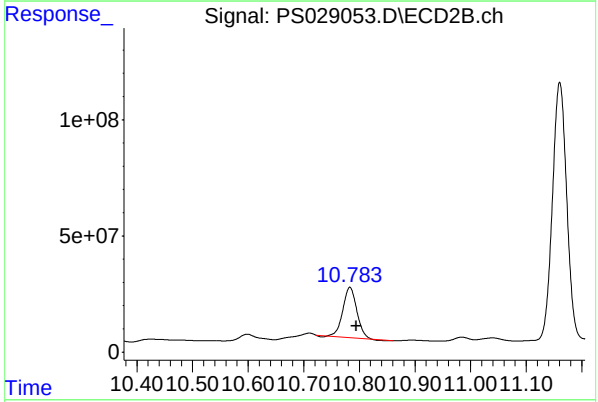
#13 2,4-DB

R.T.: 10.043 min
Delta R.T.: -0.007 min
Response: 1235190115
Conc: 348.20 ng/ml

Instrument :
ECD_S
ClientSampleId :
JPP-3.5-013025MSD

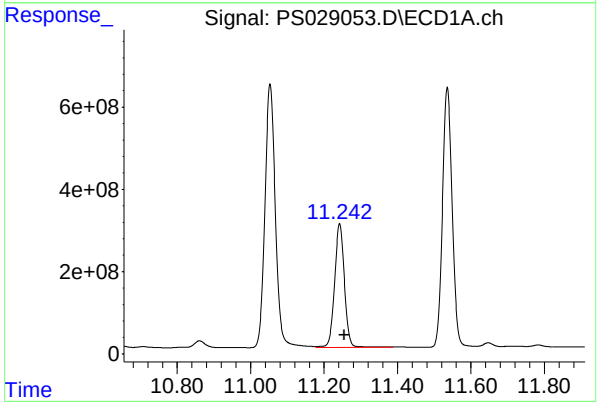
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 02/04/2025
Supervised By :Ankita Jodhani 02/04/2025



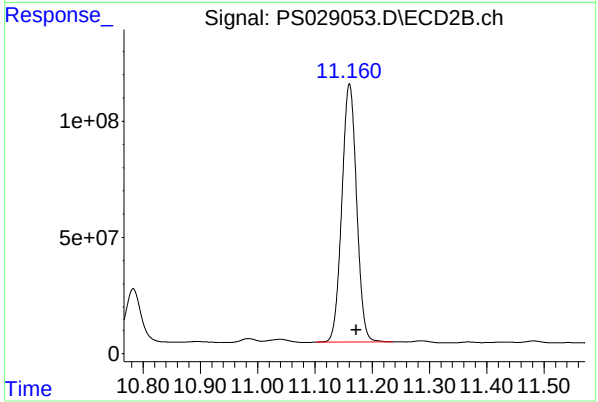
#13 2,4-DB

R.T.: 10.783 min
Delta R.T.: -0.012 min
Response: 368779087
Conc: 370.35 ng/ml



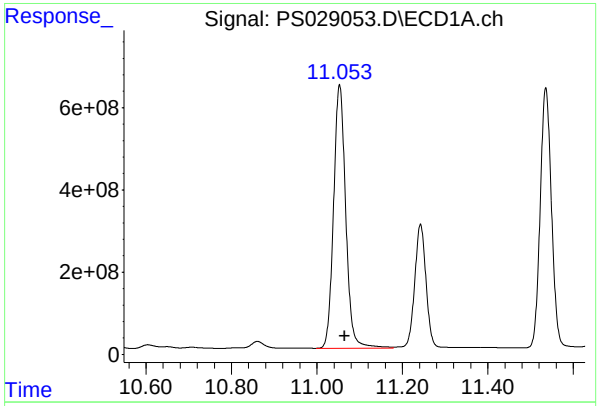
#14 DINOSEB

R.T.: 11.242 min
Delta R.T.: -0.012 min
Response: 5595852455
Conc: 338.17 ng/ml



#14 DINOSEB

R.T.: 11.160 min
Delta R.T.: -0.012 min
Response: 1990333861
Conc: 310.15 ng/ml



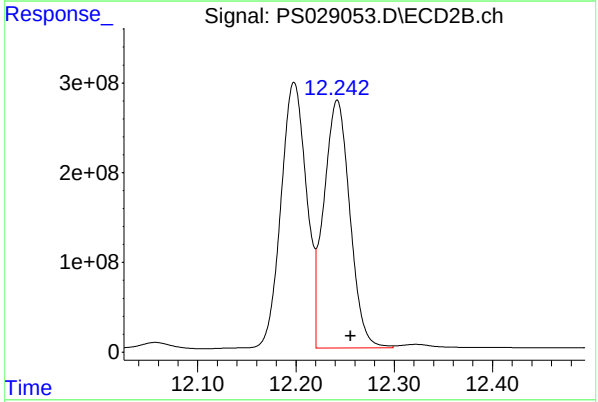
#15 Picloram

R.T.: 11.053 min
Delta R.T.: -0.012 min
Response: 12681828625
Conc: 401.93 ng/ml

Instrument :
ECD_S
ClientSampleId :
JPP-3.5-013025MSD

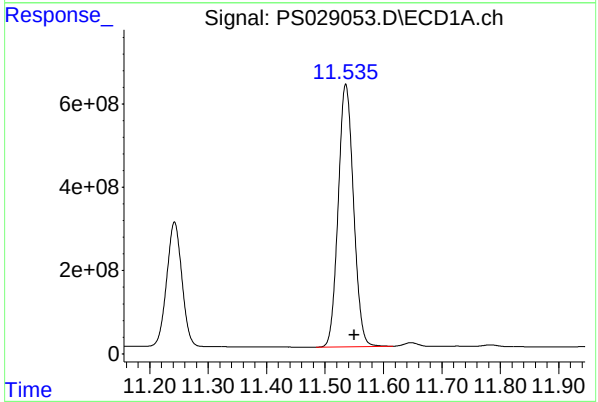
Manual Integrations APPROVED

Reviewed By :Abdul Mirza 02/04/2025
Supervised By :Ankita Jodhani 02/04/2025



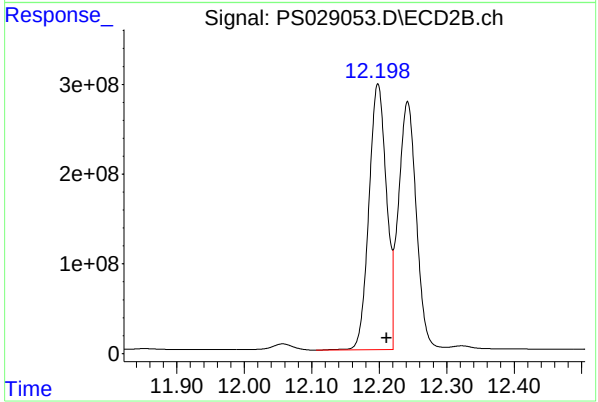
#15 Picloram

R.T.: 12.242 min
Delta R.T.: -0.014 min
Response: 5097726785
Conc: 379.87 ng/ml



#16 DCPA

R.T.: 11.536 min
Delta R.T.: -0.014 min
Response: 11479324096
Conc: 400.24 ng/ml



#16 DCPA

R.T.: 12.198 min
Delta R.T.: -0.013 min
Response: 5362846440
Conc: 472.40 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

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

Manual Integration Report

Sequence:	ps020325	Instrument	ECD_s

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q1241-04MS	PS029052.D	3,5-DICHLOROBENZOIC ACID	Abdul	2/4/2025 8:12:51 AM	Ankita	2/4/2025 9:01:44	Peak Integrated by Software
Q1241-04MS	PS029052.D	3,5-DICHLOROBENZOIC ACID #2	Abdul	2/4/2025 8:12:51 AM	Ankita	2/4/2025 9:01:44	Peak Integrated by Software
Q1241-04MS	PS029052.D	4-Nitrophenol #2	Abdul	2/4/2025 8:12:51 AM	Ankita	2/4/2025 9:01:44	Peak Integrated by Software
Q1241-04MS	PS029052.D	Dalapon	Abdul	2/4/2025 8:12:51 AM	Ankita	2/4/2025 9:01:44	Peak Integrated by Software
Q1241-04MS	PS029052.D	Dalapon #2	Abdul	2/4/2025 8:12:51 AM	Ankita	2/4/2025 9:01:44	Peak Integrated by Software
Q1241-04MS	PS029052.D	MCPP	Abdul	2/4/2025 8:12:51 AM	Ankita	2/4/2025 9:01:44	Peak Integrated by Software
Q1241-04MSD	PS029053.D	3,5-DICHLOROBENZOIC ACID	Abdul	2/4/2025 1:59:27 PM	Ankita	2/4/2025 3:35:09	Peak Integrated by Software
Q1241-04MSD	PS029053.D	3,5-DICHLOROBENZOIC ACID #2	Abdul	2/4/2025 1:59:27 PM	Ankita	2/4/2025 3:35:09	Peak Integrated by Software
Q1241-04MSD	PS029053.D	4-Nitrophenol #2	Abdul	2/4/2025 1:59:27 PM	Ankita	2/4/2025 3:35:09	Peak Integrated by Software
Q1241-04MSD	PS029053.D	Dalapon	Abdul	2/4/2025 1:59:27 PM	Ankita	2/4/2025 3:35:09	Peak Integrated by Software
Q1241-04MSD	PS029053.D	MCPP	Abdul	2/4/2025 1:59:27 PM	Ankita	2/4/2025 3:35:09	Peak Integrated by Software

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

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

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QCBatch ID # PS020325

Review By	Abdul	Review On	2/4/2025 8:13:08 AM		
Supervise By	Ankita	Supervise On	2/4/2025 9:01:51 AM		
SubDirectory	PS020325	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	PS029045.D	03 Feb 2025 09:50	AR\AJ	Ok
2	I.BLK	PS029046.D	03 Feb 2025 10:14	AR\AJ	Ok
3	HSTDCCC750	PS029047.D	03 Feb 2025 10:38	AR\AJ	Ok
4	PB166485BL	PS029048.D	03 Feb 2025 16:09	AR\AJ	Ok
5	PB166485BS	PS029049.D	03 Feb 2025 16:33	AR\AJ	Ok
6	PB166423TB	PS029050.D	03 Feb 2025 16:57	AR\AJ	Ok
7	Q1241-04	PS029051.D	03 Feb 2025 17:21	AR\AJ	Ok
8	Q1241-04MS	PS029052.D	03 Feb 2025 17:45	AR\AJ	Ok,M
9	Q1241-04MSD	PS029053.D	03 Feb 2025 18:09	AR\AJ	Ok,M
10	Q1241-08	PS029054.D	03 Feb 2025 18:33	AR\AJ	Ok
11	Q1241-12	PS029055.D	03 Feb 2025 18:57	AR\AJ	Ok
12	Q1241-16	PS029056.D	03 Feb 2025 19:21	AR\AJ	Ok
13	Q1241-20	PS029057.D	03 Feb 2025 19:45	AR\AJ	Ok
14	Q1242-04	PS029058.D	03 Feb 2025 20:09	AR\AJ	Ok
15	I.BLK	PS029059.D	03 Feb 2025 20:33	AR\AJ	Ok
16	HSTDCCC750	PS029060.D	03 Feb 2025 20:57	AR\AJ	Ok

M : Manual Integration

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

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

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QCBatch ID # PS020325

Review By	Abdul	Review On	2/4/2025 8:13:08 AM		
Supervise By	Ankita	Supervise On	2/4/2025 9:01:51 AM		
SubDirectory	PS020325	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	PS029045.D	03 Feb 2025 09:50		AR\AJ	Ok
2	I.BLK	I.BLK	PS029046.D	03 Feb 2025 10:14		AR\AJ	Ok
3	HSTDCCC750	HSTDCCC750	PS029047.D	03 Feb 2025 10:38		AR\AJ	Ok
4	PB166485BL	PB166485BL	PS029048.D	03 Feb 2025 16:09		AR\AJ	Ok
5	PB166485BS	PB166485BS	PS029049.D	03 Feb 2025 16:33		AR\AJ	Ok
6	PB166423TB	PB166423TB	PS029050.D	03 Feb 2025 16:57		AR\AJ	Ok
7	Q1241-04	JPP-3.5-013025	PS029051.D	03 Feb 2025 17:21		AR\AJ	Ok
8	Q1241-04MS	JPP-3.5-013025MS	PS029052.D	03 Feb 2025 17:45	Comp#14 recovery fail	AR\AJ	Ok,M
9	Q1241-04MSD	JPP-3.5-013025MSD	PS029053.D	03 Feb 2025 18:09	Comp#1,14 recovery fail , RPD fail	AR\AJ	Ok,M
10	Q1241-08	JPP-5.3-013025	PS029054.D	03 Feb 2025 18:33		AR\AJ	Ok
11	Q1241-12	JPP-5.2-013025	PS029055.D	03 Feb 2025 18:57		AR\AJ	Ok
12	Q1241-16	JPP-5.4-013025	PS029056.D	03 Feb 2025 19:21		AR\AJ	Ok
13	Q1241-20	JPP-51.4-013025	PS029057.D	03 Feb 2025 19:45		AR\AJ	Ok
14	Q1242-04	JPP-6.2-013025	PS029058.D	03 Feb 2025 20:09		AR\AJ	Ok
15	I.BLK	I.BLK	PS029059.D	03 Feb 2025 20:33		AR\AJ	Ok
16	HSTDCCC750	HSTDCCC750	PS029060.D	03 Feb 2025 20:57		AR\AJ	Ok

M : Manual Integration

Alliance TECHNICAL GROUP

TCLP EXTRACTION LOGPAGE

PB166423

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 : 01/31/2025 **Time :** 17:00

End Prep Date : 02/01/2025 **Time :** 11:15

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	W3166,W1938,W1939,W1940,
1 Liter Amber	N/A	90424-08
120ml Plastic bottle	N/A	405130101
1:1 HNO3	N/A	MP84041

Extraction Conformance/Non-Conformance Comments:

Matrix spikes added after filtration and before preservation. TUMBLER T-1 /T-2 checked,30 rpm. q1238-02 and 03 both samples we receive limited volume so no fluid determation. q1240-02 is oil sample so fluid determation % is <0.5. q1262-05 is used for MS-MSD.

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
02/01/25 13:00	JP / TCLP Room	5/29. / Ext
	Preparation Group	Analysis Group 02/01/25

Alliance TECHNICAL GROUP

TCLP EXTRACTION LOGPAGE

PB166423

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
PB166423TB	LEB423	N/A	N/A	2000	N/A	N/A	N/A	4.93	1.0	T-2
Q1238-01	ABATEMENT-WASTE	01	100.02	2000	N/A	N/A	N/A	11.0	1.5	T-1
Q1238-02	PERSONAL-PROTECT-EQUIPT	02	25.02	500	N/A	N/A	N/A	6.2	1.0	T-1
Q1238-03	PLASTIC-FROM-AREA	03	25.03	500	N/A	N/A	N/A	5.6	1.5	T-1
Q1239-02	286	04	100.02	2000	N/A	N/A	N/A	4.5	1.0	T-1
Q1239-05	348	05	100.01	2000	N/A	N/A	N/A	5.0	1.0	T-1
Q1239-08	RBR22266	06	100.02	2000	N/A	N/A	N/A	7.6	1.5	T-1
Q1239-11	357	07	100.02	2000	N/A	N/A	N/A	6.0	1.0	T-1
Q1240-02	MEG-OIL	N/A	N/A	N/A	N/A	N/A	N/A	7.6	1.5	N/A
Q1241-04	JPP-3.5-013025	08	100.03	2000	N/A	N/A	N/A	6.0	1.0	T-1
Q1241-08	JPP-5.3-013025	09	100.04	2000	N/A	N/A	N/A	7.0	1.5	T-1
Q1241-12	JPP-5.2-013025	10	100.02	2000	N/A	N/A	N/A	7.6	1.0	T-1
Q1241-16	JPP-5.4-013025	11	100.01	2000	N/A	N/A	N/A	7.2	1.5	T-2
Q1241-20	JPP-51.4-013025	12	100.02	2000	N/A	N/A	N/A	7.2	1.5	T-2
Q1242-04	JPP-6.2-013025	13	100.03	2000	N/A	N/A	N/A	7.6	1.0	T-2
Q1262-05	3762	14	100.02	2000	N/A	N/A	N/A	4.0	1.5	T-2

SampleID	ClientID	Sample Weight (g)	Filter Weight (g)	Filtrate (mL)	Filter + Solid (After 100°C)	% solids	% Dry Solids
PB166423TB	LEB423	N/A	N/A	N/A	N/A	N/A	N/A
Q1238-01	ABATEMENT-WASTE	N/A	N/A	N/A	N/A	100	N/A
Q1238-02	PERSONAL-PROTECT-EQUIPT	N/A	N/A	N/A	N/A	100	N/A
Q1238-03	PLASTIC-FROM-AREA	N/A	N/A	N/A	N/A	100	N/A
Q1239-02	286	N/A	N/A	N/A	N/A	100	N/A
Q1239-05	348	N/A	N/A	N/A	N/A	100	N/A
Q1239-08	RBR22266	N/A	N/A	N/A	N/A	100	N/A
Q1239-11	357	N/A	N/A	N/A	N/A	100	N/A
Q1240-02	MEG-OIL	N/A	N/A	N/A	N/A	<0.5	N/A
Q1241-04	JPP-3.5-013025	N/A	N/A	N/A	N/A	100	N/A
Q1241-08	JPP-5.3-013025	N/A	N/A	N/A	N/A	100	N/A
Q1241-12	JPP-5.2-013025	N/A	N/A	N/A	N/A	100	N/A
Q1241-16	JPP-5.4-013025	N/A	N/A	N/A	N/A	100	N/A
Q1241-20	JPP-51.4-013025	N/A	N/A	N/A	N/A	100	N/A
Q1242-04	JPP-6.2-013025	N/A	N/A	N/A	N/A	100	N/A
Q1262-05	3762	N/A	N/A	N/A	N/A	100	N/A

Alliance TECHNICAL GROUP

TCLP Fluid Determination

PB166423

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
PB166423TB	LEB423	N/A	N/A	N/A	N/A	#1	4.93
Q1238-01	ABATEMENT-WASTE	5.02	96.5	11.5	4.0	#1	4.93
Q1238-02	PERSONAL-PROTECT-EQUIPT	N/A	N/A	N/A	N/A	N/A	N/A
Q1238-03	PLASTIC-FROM-AREA	N/A	N/A	N/A	N/A	N/A	N/A
Q1239-02	286	5.04	96.5	7.0	2.5	#1	4.93
Q1239-05	348	5.02	96.5	7.2	2.5	#1	4.93
Q1239-08	RBR22266	5.01	96.5	10.5	3.5	#1	4.93
Q1239-11	357	5.02	96.5	8.0	3.0	#1	4.93
Q1240-02	MEG-OIL	N/A	N/A	N/A	N/A	N/A	N/A
Q1241-04	JPP-3.5-013025	5.02	96.5	8.6	3.5	#1	4.93
Q1241-08	JPP-5.3-013025	5.03	96.5	11.0	4.0	#1	4.93
Q1241-12	JPP-5.2-013025	5.03	96.5	11.5	4.5	#1	4.93
Q1241-16	JPP-5.4-013025	5.04	96.5	10.0	4.0	#1	4.93
Q1241-20	JPP-51.4-013025	5.03	96.5	9.0	3.5	#1	4.93
Q1242-04	JPP-6.2-013025	5.02	96.5	11.5	4.5	#1	4.93
Q1262-05	3762	5.00	96.5	6.0	2.0	#1	4.93

WORKLIST(Hardcopy Internal Chain)

WorkList Name : TCLP Q1242 **WorkList ID :** 187349 **Department :** TCLP Extraction **Date :** 01-31-2025 10:26:20

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1238-01	ABATEMENT-WASTE	Solid	TCLP Extraction	Cool 4 deg C	TOTA02	N41	01/27/2025	1311
Q1238-02	PERSONAL-PROTECT-EQUIP'	Solid	TCLP Extraction	Cool 4 deg C	TOTA02	N41	01/27/2025	1311
Q1238-03	PLASTIC-FROM-AREA	Solid	TCLP Extraction	Cool 4 deg C	TOTA02	N41	01/27/2025	1311
Q1239-02	286	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	N31	01/30/2025	1311
Q1239-05	348	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	N31	01/30/2025	1311
Q1239-08	RBR22266	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	N31	01/30/2025	1311
Q1239-11	357	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	N31	01/30/2025	1311
Q1240-02	MEG-OIL	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	N41	01/30/2025	1311
Q1241-04	JPP-3.5-013025	Solid	TCLP Extraction	Cool 4 deg C	RUTW01	E11	01/30/2025	1311
Q1241-08	JPP-5.3-013025	Solid	TCLP Extraction	Cool 4 deg C	RUTW01	E11	01/30/2025	1311
Q1241-12	JPP-5.2-013025	Solid	TCLP Extraction	Cool 4 deg C	RUTW01	E11	01/30/2025	1311
Q1241-16	JPP-5.4-013025	Solid	TCLP Extraction	Cool 4 deg C	RUTW01	E11	01/30/2025	1311
Q1241-20	JPP-51.4-013025	Solid	TCLP Extraction	Cool 4 deg C	RUTW01	E11	01/30/2025	1311
Q1242-04	JPP-6.2-013025	Solid	TCLP Extraction	Cool 4 deg C	RUTW01	E11	01/30/2025	1311
Q1262-05	3762	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	N41	01/31/2025	1311

Date/Time 01/31/25 16:20
Raw Sample Received by: JG (Wet C)
Raw Sample Relinquished by: RJ (Ext-lab)

Date/Time 01/31/25 18:30
Raw Sample Received by: RJ (Ext-lab)
Raw Sample Relinquished by: JG (Wet C)

Page 1 of 1

18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PB166485

SOP ID:	M8151A-Herbicide-22				
Clean Up SOP #:	N/A			**Extraction Start Date :**	02/03/2025
Matrix :	Water			**Extraction Start Time :**	09:00
Weigh By:	N/A	**Extraction By:**	RS	**Extraction End Date :**	02/03/2025
Balance check:	RJ	**Filter By:**	RS	**Extraction End Time :**	15:15
Balance ID:	EX-SC-2	**pH Meter ID:**	N/A	**Concentration By:**	EH
pH Strip Lot#:	E3574	**Hood ID:**	3,7	**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
LOD	0.2ML	5/500 PPM	PP24079
LOD	0.3ML	5/500 PPM	PP24079
LOQ	0.4ML	5/500 PPM	PP24079

Chemical Used	ML/SAMPLE USED	Lot Number
Ether	N/A	E3370
Acidified Na2SO4	N/A	EP2576
NAOH 6N	N/A	EP2553
1:3 SULPHURIC ACID	N/A	EP2564
NACL	N/A	M4459
ISO OCTANE	N/A	E3554
Diazomethane	N/A	EP2575
Hexane	N/A	E3868
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
Hexane	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
02/03/25	RS (Ext-Lab)	[signature] PEST/PEB (W)
15:20	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PrepBatch ID : PB166485

Analytical Method: M8151A-Herbicide-22

Concentration Date: 02/03/2025

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB166423TB	PB166423TB	TCLP Herbicide	100	6	RUPESH	ritesh	10			SEP-01
PB166485BL	HBLK485	TCLP Herbicide	1000	6	RUPESH	ritesh	10			2
PB166485BS	HLCS485	TCLP Herbicide	1000	6	RUPESH	ritesh	10			3
Q1168-07	LOD-MDL-WATER-01-QT1-2025	Herbicide	1000	6	RUPESH	ritesh	10			4
Q1168-08	LOQ-WATER-02-QT1-2025	Herbicide	1000	6	RUPESH	ritesh	10			5
Q1241-04	JPP-3.5-013025	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		6
Q1241-04MS	JPP-3.5-013025MS	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		7
Q1241-04MSD	JPP-3.5-013025MSD	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		8
Q1241-08	JPP-5.3-013025	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		9
Q1241-12	JPP-5.2-013025	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		10
Q1241-16	JPP-5.4-013025	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		11
Q1241-20	JPP-51.4-013025	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		12
Q1242-04	JPP-6.2-013025	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		13

* **Extracts relinquished on the same date as received.**

2/3/25

Alliance TECHNICAL GROUP

TCLP EXTRACTION LOGPAGE

PB166423

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	Pr Po
PB166423TB	LEB423	N/A	N/A	2000	N/A	N/A	N/A	4.93	1.0	T-2
Q1238-01	ABATEMENT-WASTE	01	100.02	2000	N/A	N/A	N/A	11.0	1.5	T-1
Q1238-02	PERSONAL-PROTECT-EQUIPT	02	25.02	500	N/A	N/A	N/A	6.2	1.0	T-1
Q1238-03	PLASTIC-FROM-AREA	03	25.03	500	N/A	N/A	N/A	5.6	1.5	T-1
Q1239-02	286	04	100.02	2000	N/A	N/A	N/A	4.5	1.0	T-1
Q1239-05	348	05	100.01	2000	N/A	N/A	N/A	5.0	1.0	T-1
Q1239-08	RBR22266	06	100.02	2000	N/A	N/A	N/A	7.6	1.5	T-1
Q1239-11	357	07	100.02	2000	N/A	N/A	N/A	6.0	1.0	T-1
Q1240-02	MEG-OIL	N/A	N/A	N/A	N/A	N/A	N/A	7.6	1.5	N/A
Q1241-04	JPP-3.5-013025	08	100.03	2000	N/A	N/A	N/A	6.0	1.0	T-1
Q1241-08	JPP-5.3-013025	09	100.04	2000	N/A	N/A	N/A	7.0	1.5	T-1
Q1241-12	JPP-5.2-013025	10	100.02	2000	N/A	N/A	N/A	7.6	1.0	T-1
Q1241-16	JPP-5.4-013025	11	100.01	2000	N/A	N/A	N/A	7.2	1.5	T-2
Q1241-20	JPP-51.4-013025	12	100.02	2000	N/A	N/A	N/A	7.2	1.5	T-2
Q1242-04	JPP-6.2-013025	13	100.03	2000	N/A	N/A	N/A	7.6	1.0	T-2
Q1262-05	3762	14	100.02	2000	N/A	N/A	N/A	4.0	1.5	T-2

02/01/25
13:00

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

Prep Standard - Chemical Standard Summary

Order ID : Q1242

Test : TCLP Herbicide

Prepbatch ID : PB166485,

Sequence ID/Qc Batch ID: ps020325,

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

Chemical ID :
E3370,E3551,E3657,E3826,E3843,M4459,M5173,P10549,P11180,P11181,P12619,P12629,P12686,P12708,P12709,P13506,P13507,P13508,P13509,P13523,P13524,P13525,W3112,

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

Extractions STANDARD PREPARATION LOG

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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1762	1:3 H2SO4 Soln	EP2564	11/20/2024	05/20/2025	Rajesh Parikh	None	None	RUPESHKUMAR SHAH 11/20/2024

FROM 250.00000ml of M5173 + 750.00000ml of W3112 = Final Quantity: 1000.000 ml

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

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

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

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

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

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

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

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

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

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

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

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

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-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 #
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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3624-05 / Sodium Chloride, Crystal (cs/4x2.5kg)	0000237721	04/13/2026	10/03/2022 / Ankita	10/30/2019 / AMANDEEP	M4459

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

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 #
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

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 #
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

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 #
Agilent Technologies	HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids	0006810955	06/11/2025	12/11/2024 / Abdul	09/03/2024 / Abdul	P13524

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Agilent Technologies	HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids	0006810955	06/11/2025	12/11/2024 / Abdul	09/03/2024 / Abdul	P13525

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Agilent Technologies	HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids	0006810955	06/11/2025	12/11/2024 / Abdul	09/03/2024 / Abdul	P13525

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

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

From M4452 to M4459

Received on : 10/30/2019
Received by : AK

avantor™ | J.T.Baker®

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

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay (NaCl) (by Ag titrn)	>= 99.0 %	100.3
pH of 5% Solution at 25°C	5.0 - 9.0	6.0
ACS - Insoluble Matter	<= 0.005 %	< 0.001
Iodide (I)	<= 0.002 %	< 0.002
Bromide (Br)	<= 0.01 %	< 0.01
Chlorate and Nitrate (as NO_3)	<= 0.003 %	< 0.001
ACS - Phosphate (PO_4)	<= 5 ppm	< 5
Sulfate (SO_4)	<= 0.004 %	< 0.004
Barium (Ba)	Passes Test	PT
ACS - Heavy Metals (as Pb)	<= 5 ppm	< 5
Iron (Fe)	<= 2 ppm	< 2
Calcium (Ca)	<= 0.002 %	< 0.001
Magnesium (Mg)	<= 0.001 %	< 0.001
Potassium (K)	<= 0.005 %	0.002

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

Country of Origin: US
Packaging Site: Paris Mfg Ctr & DC

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

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

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

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)

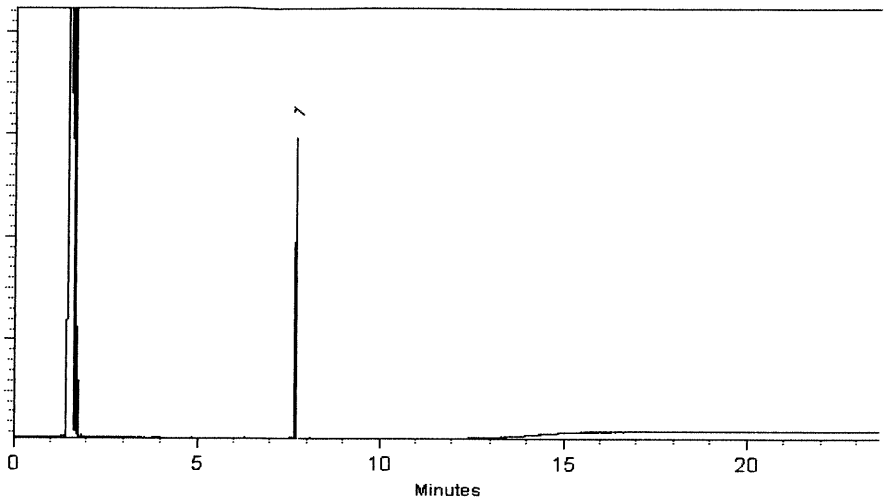
Carrier Gas:
hydrogen-constant pressure 10 psi.

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)

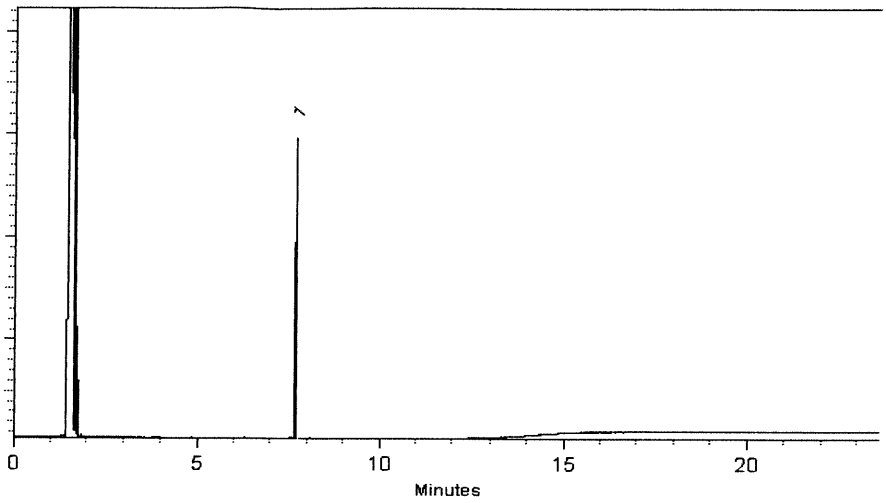
Carrier Gas:
hydrogen-constant pressure 10 psi.

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

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

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.

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)

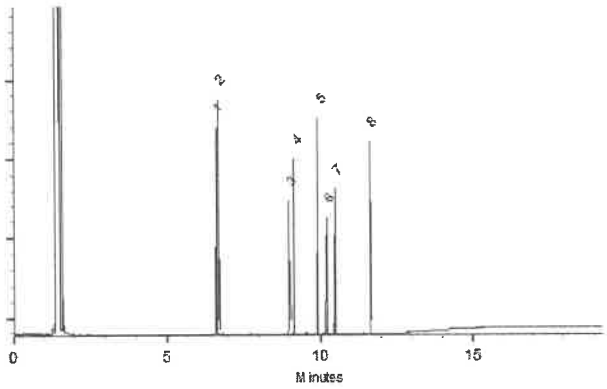
Carrier Gas:
hydrogen-constant pressure 10 psi.

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

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

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.

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.)

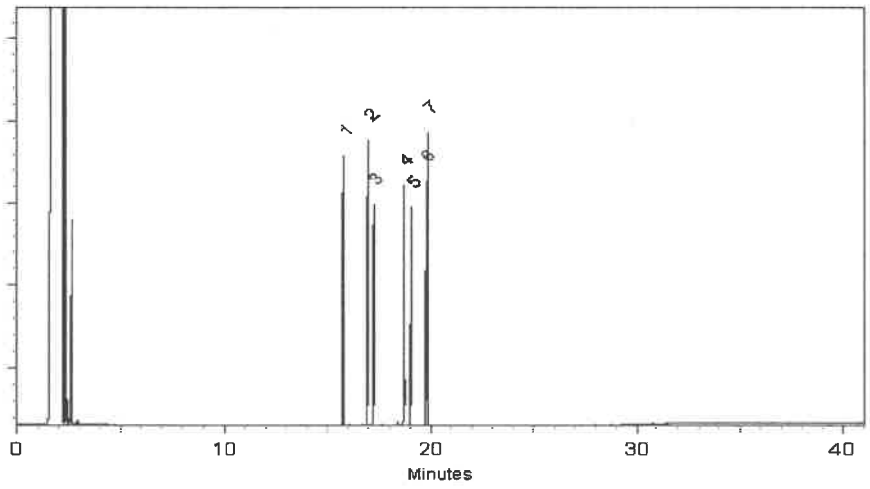
Inj. Temp:
250°C

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

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

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.

P 12685 (S)
↓
P 12689

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

7/24/23

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

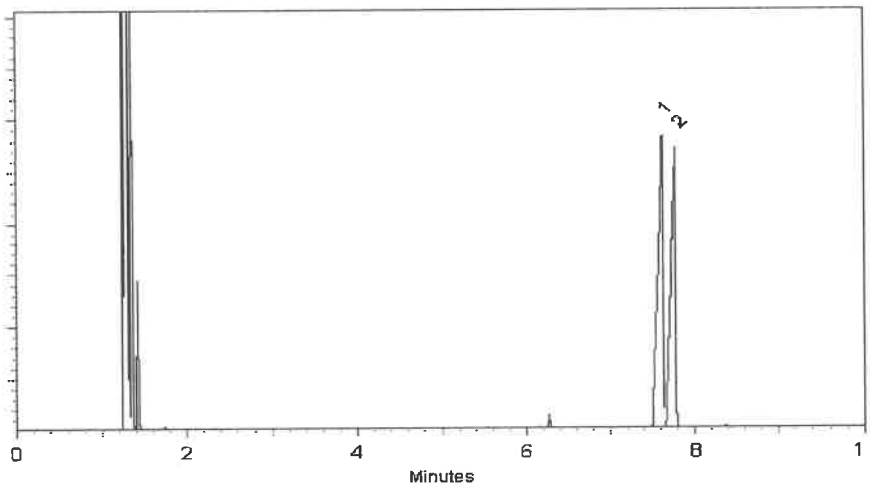
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



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

Morgan Craighead - Mix Technician

Date Mixed: 12-Jul-2023 **Balance Serial #** B442140311

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 19-Jul-2023

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

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 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

ANAB
ACCREDITED
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

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 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

ANAB
ACCREDITED
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

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.

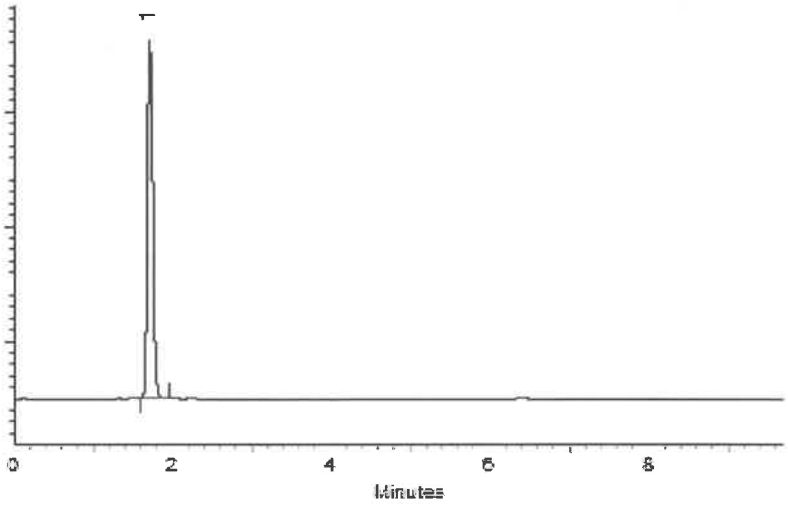
Mobile Phase A:
0.14% H3PO4 in water

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.

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.

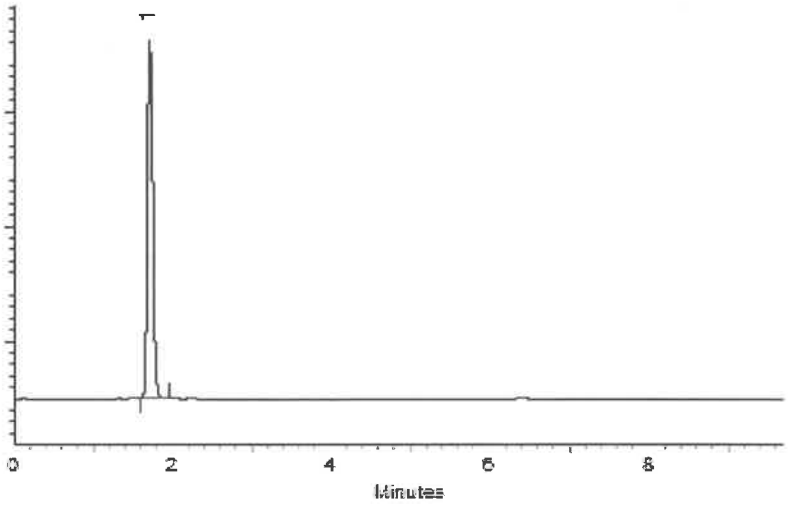
Mobile Phase A:
0.14% H3PO4 in water

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.

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.

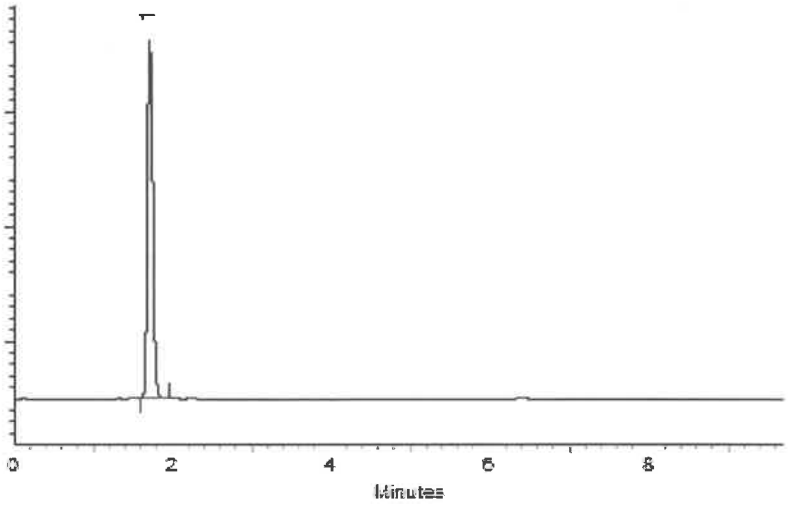
Mobile Phase A:
0.14% H3PO4 in water

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.

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.

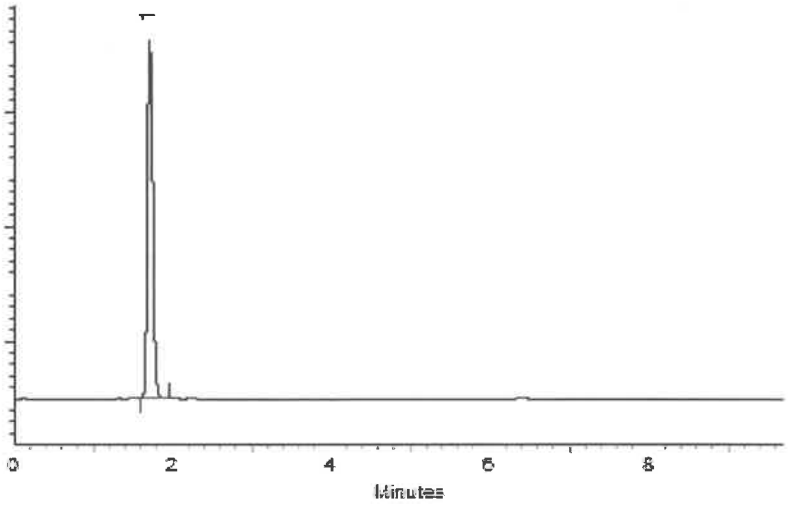
Mobile Phase A:
0.14% H3PO4 in water

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.

(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

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

250 Smith Street North Kingstown, Rhode Island 02852 www.agilent.com/quality

(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

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

250 Smith Street North Kingstown, Rhode Island 02852 www.agilent.com/quality

(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

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

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. Q1242
QUOTE NO.
COC Number 2041688

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: RU2 Engineering LLC
ADDRESS: 2 Melinda Drive, Monroe Twp, NJ 08831
CITY ZIP:
ATTENTION: Rutu Manani
PHONE: 609-409-4564 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: SANDTWOBRB/MCR Project
PROJECT NO.: LOCATION: Brooklyn, NYC
PROJECT MANAGER: Rutu 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 2 (Results + QC)
- ☐ Level 3 (Results + QC + Raw Data)
- ☐ Level 4 (QC + Full Raw Data)
- ☐ NJ Reduced
- ☐ NYS ASP A
- ☒ NYS ASP B
- ☐ US EPA CLP
- ☐ 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-6.2-013025	Soil		G	1/30/25	12:44	3	X	X	X							
2.	JPP-6.2-93025	Soil	C		1/30/25	12:52	8			X	X	X	X	X	X	X	
3.																	
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

PRESERVATIVES: ← Specify Preservatives
A-HCl D-NaOH
B-HN03 E-ICE
C-H2SO4 F-OTHER

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

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1. RA	1-30-25 1453	1.
2.		2.
3.		3.

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 4.1 °C
Comments: Preserve extra Sample Jar if additional analysis is Required
IR-Gun #1

Page 2 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

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1242 RUTW01
Client Name : RU2 Engineering, LLC
Client Contact : Rutu Manani
Invoice Name : RU2 Engineering, LLC
Invoice Contact : Rutu Manani

Order Date : 1/30/2025 3:02:00 PM
Project Name : NYCDDC SANTWOBR Bi
Receive DateTime : 1/30/2025 2:53:00 PM
Purchase Order :

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
Q1242-01	JPP-6.2-013025	Solid	01/30/2025	12:44					
					VOCMS Group1		8260D		10 Bus. Days

Relinguished By : [signature]
Date / Time : 1-30-25 15:50

Received By : [signature]
Date / Time : 1/30/25 1530

Storage Area : VOA Refridgerator Room

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1242 RUTW01
Client Name : RU2 Engineering, LLC
Client Contact : Rutu Manani
Invoice Name : RU2 Engineering, LLC
Invoice Contact : Rutu Manani

Order Date : 1/30/2025 3:02:00 PM
Project Name : NYCDDC SANTWOBR Bi
Receive DateTime : 1/30/2025 2:53:00 PM
Purchase Order :

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
Q1242-01	JPP-6.2-013025	Solid	01/30/2025	12:44					
					Gasoline Range Organics		8015D		10 Bus. Days

Relinguished By : CR
Date / Time : 1-30-25 1550

Received By : JC
Date / Time : 1/30/25 1550

Storage Area : VOA Refridgerator Room