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

DATA PACKAGE

GC SEMI-VOLATILES

PROJECT NAME : R36745

TETRA TECH, EMI

240 Continental Drive, Suite 200

Newark, DE - 19713

Phone No: 302-738-7551

ORDER ID : P4961

ATTENTION : Ava Heiss

Laboratory Certification ID # 20012

Table Of Contents for P4961

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Cover Page

Order ID : P4961

Project ID : R36745

Client : Tetra Tech, EMI

Lab Sample Number	Client Sample Number
P4961-01	C0RB8

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 : N. N. Pandya

APPROVED

By Nimisha Pandya, QA/QC Supervisor at 11:52 am, Dec 03, 2024

Date: 11/29/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

Tetra Tech, EMI
Project Name: R36745
Project # N/A
Chemtech Project # P4961
Test Name: TCLP Herbicide

A. Number of Samples and Date of Receipt:
1 Solid sample was received on 11/22/2024.

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

C. Analytical Techniques:
The analysis was performed on instrument ECD_S. The front column is RTX-CLPesticides which is 30 meters, 0.32 mm ID, 0. 5 um df,: Catalog # 11139. The rear column is RTX-CLPesticides2 which is 30 meters, 0.32 mm ID, 0.25 um df, Catalog #: 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 except for C0RB8 [2,4-DCAA(1) - 37%, 2,4-DCAA(2) - 35%], C0RB8MS [2,4-DCAA(1) - 36%, 2,4-DCAA(2) - 36%], C0RB8MSD [2,4-DCAA(1) - 37%, 2 and4-DCAA(2) - 36%] confirms with MS MSD.

The Retention Times were acceptable for all samples.

The MS {P4961-01MS} with File ID: PS028650.D recoveries met the requirements for all compounds except for 2,4,5-TP(Silvex)[155%] Due to matrix interference.

The MSD {P4961-01MSD} with File ID: PS028651.D recoveries met the acceptable requirements except for 2,4,5-TP(Silvex)[156%] Due to matrix interference.

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 .

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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.

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 N. N. Pandya

APPROVED
By Nimisha Pandya, QA/QC Supervisor at 11:52 am, Dec 03, 2024

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

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GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: P4961 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. The Surrogate recoveries met the acceptable criteria except for C0RB8 [2,4-DCAA(1) - 37%, 2,4-DCAA(2) - 35%], C0RB8MS [2,4-DCAA(1) - 36%, 2,4-DCAA(2) - 36%], C0RB8MSD [2,4-DCAA(1) - 37%, 2 and4-DCAA(2) - 36%] confirms with MS MSD.		✓	
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 {P4961-01MS} with File ID: PS028650.D recoveries met the requirements for all compounds except for 2,4,5-TP(Silvex)[155%] Due to matrix interference. The MSD {P4961-01MSD} with File ID: PS028651.D recoveries met the acceptable requirements except for 2,4,5-TP(Silvex)[156%] Due to matrix interference. The Blank Spike met requirements for all samples . The RPD met criteria .		✓	
7.	Retention Time Shift Meet Criteria (if applicable) Comments:			✓
8.	Extraction Holding Time Met If not met, list number of days exceeded for each sample:			✓

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GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)

		NA	NO	YES
9.	Analysis Holding Time Met			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			

ADDITIONAL COMMENTS:

S. M. Jodhani

QA REVIEW

REVIEWED

By Sohil Jodhani, QA/QC Director at 9:28 am, Dec 03, 2024

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: P4961

	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:** 11/29/2024

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LAB CHRONICLE

OrderID:	P4961	**OrderDate:**	11/22/2024 10:44:17 AM
Client:	Tetra Tech, EMI	**Project:**	R36745
Contact:	Ava Heiss	**Location:**	L61

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P4961-01	**C0RB8**	**TCLP**			**11/20/24**			**11/22/24**
			TCLP Herbicide	8151A		11/26/24	11/26/24	

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Hit Summary Sheet
SW-846

SDG No.: P4961 **Order ID:** P4961

Client: Tetra Tech, EMI **Project ID:** R36745

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units

Client ID :

Total Concentration: **0.000**

QC SUMMARY

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Surrogate Summary

SDG No.: P4961

Client: Tetra Tech, EMI

Analytical Method: 8151A

Lab Sample ID	Client ID	Parameter	Column	Spike	Result	Rec	Qual	Limits Low	Limits High
I.BLK-PS028631.D	PIBLK-PS028631.D	2,4-DCAA	1	500	492	98		39	175
		2,4-DCAA	2	500	492	98		39	175
I.BLK-PS028638.D	PIBLK-PS028638.D	2,4-DCAA	1	500	484	97		39	175
		2,4-DCAA	2	500	483	97		39	175
PB165273BL	PB165273BL	2,4-DCAA	1	500	508	102		39	175
		2,4-DCAA	2	500	497	99		39	175
PB165273BS	PB165273BS	2,4-DCAA	1	500	491	98		39	175
		2,4-DCAA	2	500	491	98		39	175
PB165159TB	PB165159TB	2,4-DCAA	1	500	274	55		39	175
		2,4-DCAA	2	500	267	53		39	175
I.BLK-PS028647.D	PIBLK-PS028647.D	2,4-DCAA	1	500	496	99		39	175
		2,4-DCAA	2	500	502	100		39	175
P4961-01	C0RB8	2,4-DCAA	1	500	184	37	*	39	175
		2,4-DCAA	2	500	176	35	*	39	175
P4961-01MS	C0RB8MS	2,4-DCAA	1	500	181	36	*	39	175
		2,4-DCAA	2	500	179	36	*	39	175
P4961-01MSD	C0RB8MSD	2,4-DCAA	1	500	183	37	*	39	175
		2,4-DCAA	2	500	178	36	*	39	175
I.BLK-PS028654.D	PIBLK-PS028654.D	2,4-DCAA	1	500	493	99		39	175
		2,4-DCAA	2	500	498	100		39	175

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: P4961

Client: Tetra Tech, EMI

Analytical Method: 8151A **DataFile :** PS028650.D

Lab Sample ID:	Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	RPD
Client Sample ID:	**C0RB8MS**											
P4961-01MS	2,4-D	50	0	46.4	ug/L	93				65	135	
	2,4,5-TP(Silvex)	50	0	77.4	ug/L	155	*			62	139	

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: P4961

Client: Tetra Tech, EMI

Analytical Method: 8151A **DataFile :** PS028651.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:	**C0RB8MSD**											
P4961-01MSD	2,4-D	50	0	47.5	ug/L	95		2		65	135	20
	2,4,5-TP(Silvex)	50	0	78.2	ug/L	156	*	1		62	139	20

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P4961

Client: Tetra Tech, EMI

Analytical Method: 8151A **Datafile :** PS028645.D

Lab Sample ID	Parameter	Spike	Result	Units	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	RPD
PB165273BS	2,4-D	5	4.90	ug/L	98				83	130	
	2,4,5-TP(Silvex)	5	4.70	ug/L	94				78	127	

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4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB165273BL

Lab Name: CHEMTECH Contract: TETR16

Lab Code: CHEM Case No.: P4961 SAS No.: P4961 SDG NO.: P4961

Lab Sample ID: PB165273BL Lab File ID: PS028644.D

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

Sulfur Cleanup: (Y/N) N Date Extracted: 11/26/2024

Date Analyzed (1): 11/26/2024 Date Analyzed (2): 11/26/2024

Time Analyzed (1): 19:13 Time Analyzed (2): 19:13

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
PB165273BS	PB165273BS	PS028645.D	11/26/2024	11/26/2024
PB165159TB	PB165159TB	PS028646.D	11/26/2024	11/26/2024
C0RB8	P4961-01	PS028649.D	11/26/2024	11/26/2024
C0RB8MS	P4961-01MS	PS028650.D	11/26/2024	11/26/2024
C0RB8MSD	P4961-01MSD	PS028651.D	11/26/2024	11/26/2024

COMMENTS:

SAMPLE DATA

Alliance TECHNICAL GROUP
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Fax : 908 789 8922

Report of Analysis

Client:	Tetra Tech, EMI	Date Collected:	11/20/24
Project:	R36745	Date Received:	11/22/24
Client Sample ID:	C0RB8	SDG No.:	P4961
Lab Sample ID:	P4961-01	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
PS028649.D	1	11/26/24 11:10	11/26/24 21:13	PB165273

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	4.90	U	4.90	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	4.50	U	4.50	20.0	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	184	*	39 - 175	37%	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\PS112624\
Data File : PS028649.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 21:13
Operator : AR\AJ
Sample : P4961-01
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
C0RB8

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 27 00:21:53 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 14:44:30 2024
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	7.226	7.723	493.4E6	237.0E6	183.926m	175.962
	Target Compounds						

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

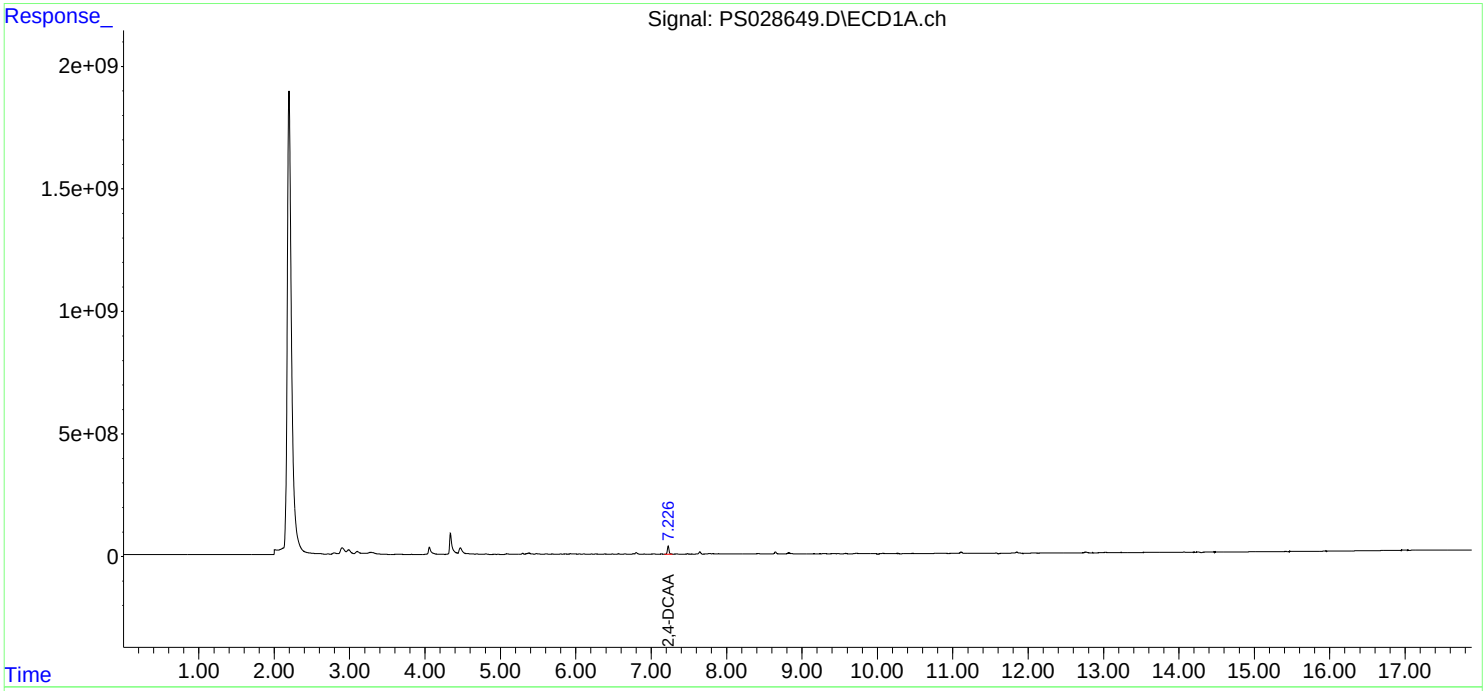
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS112624\
Data File : PS028649.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 21:13
Operator : AR\AJ
Sample : P4961-01
Misc :
ALS Vial : 17 Sample Multiplier: 1

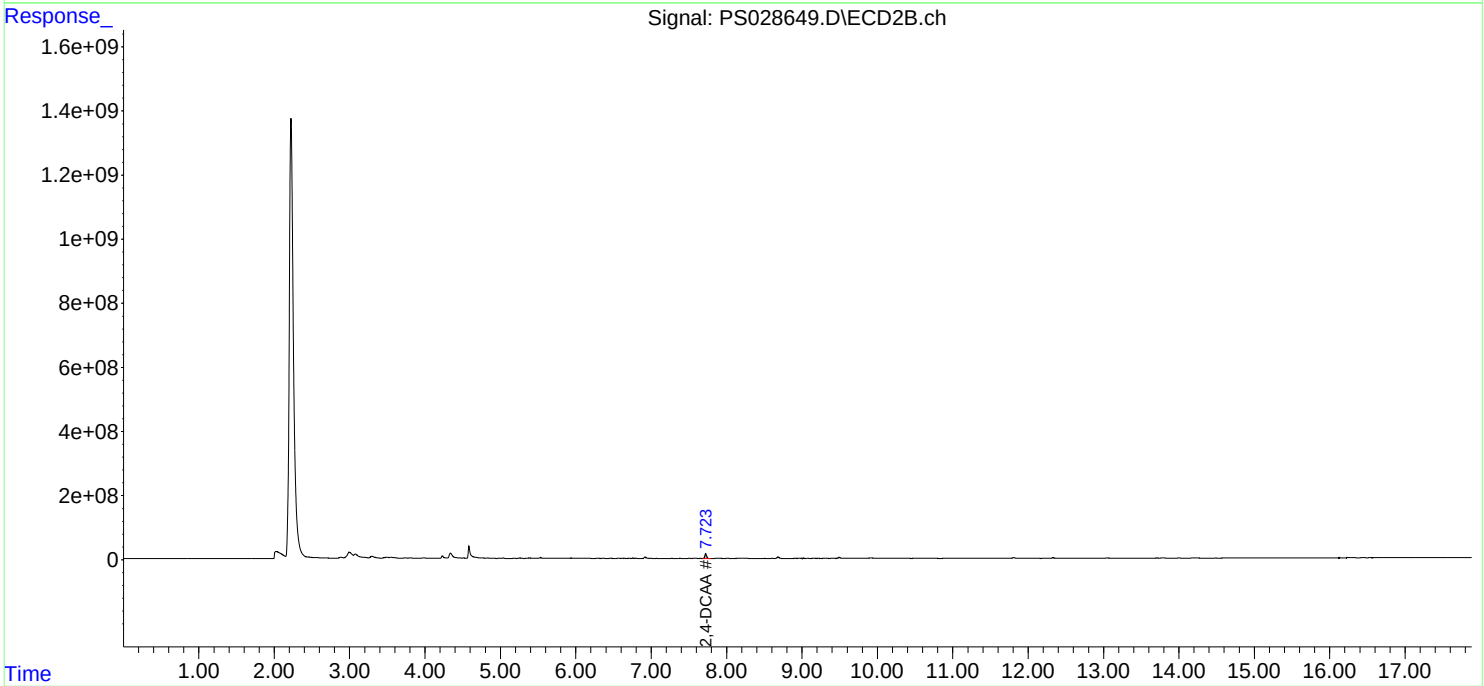
Instrument :
ECD_S
ClientSampleId :
C0RB8

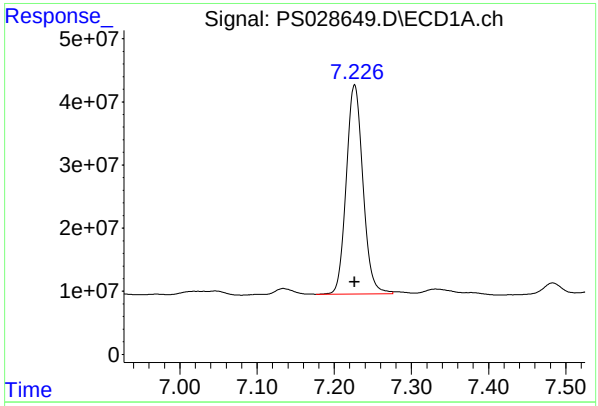
Manual Integrations APPROVED
Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 27 00:21:53 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 14:44:30 2024
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







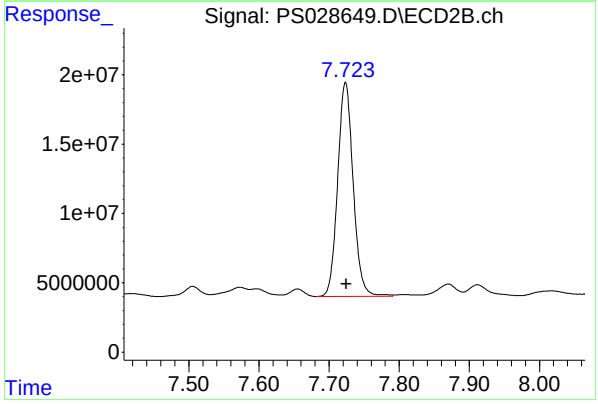
#4 2,4-DCAA

R.T.: 7.226 min
Delta R.T.: 0.000 min
Response: 493353281
Conc: 183.93 ng/ml

Instrument :
ECD_S
ClientSampleId :
C0RB8

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024



#4 2,4-DCAA

R.T.: 7.723 min
Delta R.T.: -0.001 min
Response: 237026345
Conc: 175.96 ng/ml

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

Report of Analysis

Client:	Tetra Tech, EMI	Date Collected:	
Project:	R36745	Date Received:	11/26/24
Client Sample ID:	PB165159TB	SDG No.:	P4961
Lab Sample ID:	PB165159TB	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
PS028646.D	1	11/26/24 11:10	11/26/24 20:01	PB165273

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	4.90	U	4.90	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	4.50	U	4.50	20.0	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	274		39 - 175	55%	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\PS112624\
Data File : PS028646.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 20:01
Operator : AR\AJ
Sample : PB165159TB
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
PB165159TB

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 27 00:20:09 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 14:44:30 2024
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	7.226	7.723	734.6E6	359.3E6	273.876	266.713
	Target Compounds						

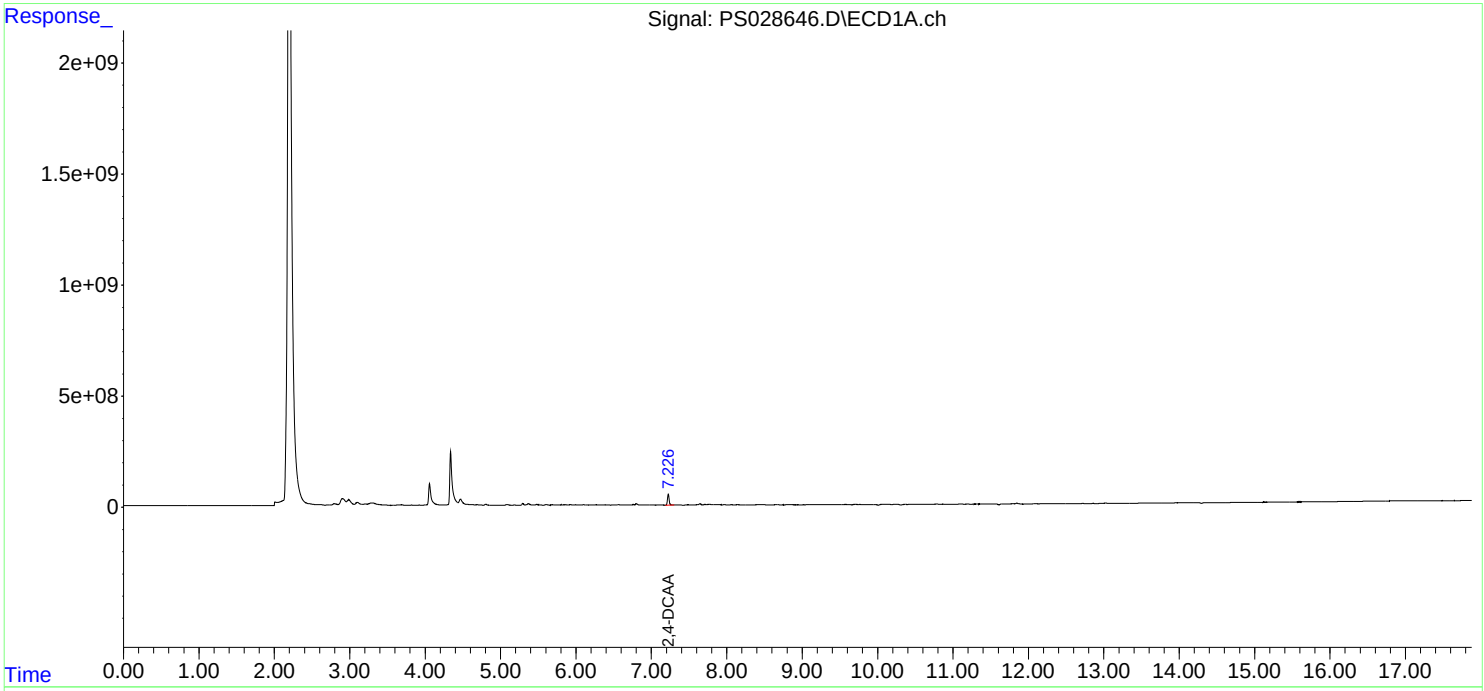
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

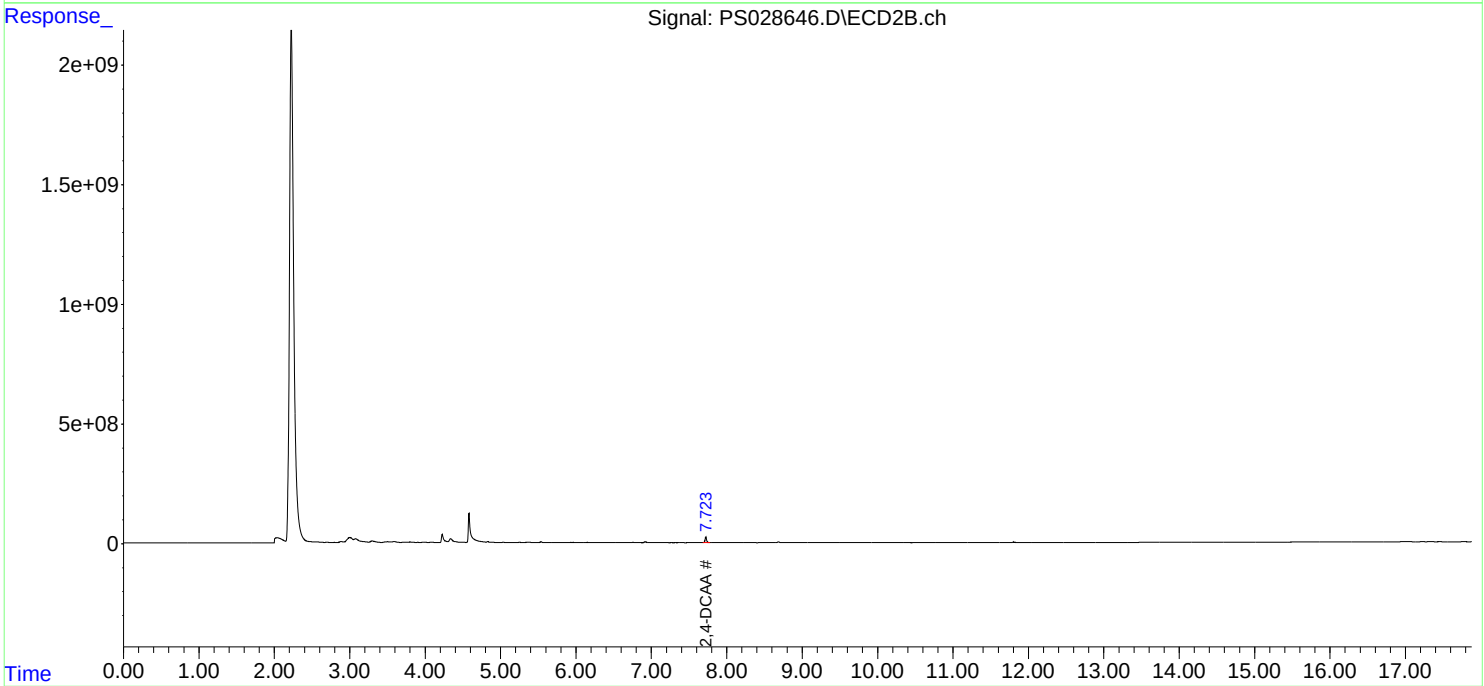
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS112624\
Data File : PS028646.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 20:01
Operator : AR\AJ
Sample : PB165159TB
Misc :
ALS Vial : 16 Sample Multiplier: 1

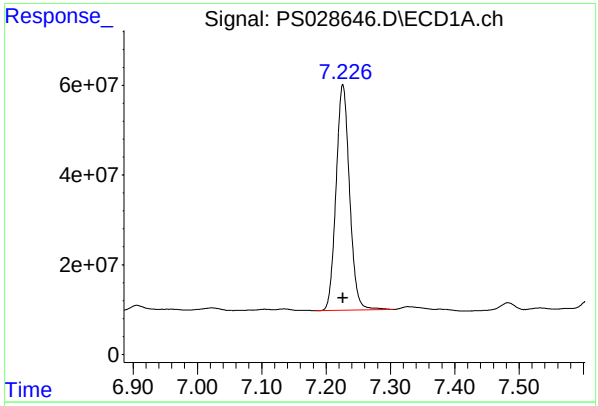
Instrument :
ECD_S
ClientSampleId :
PB165159TB

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 27 00:20:09 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 14:44:30 2024
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



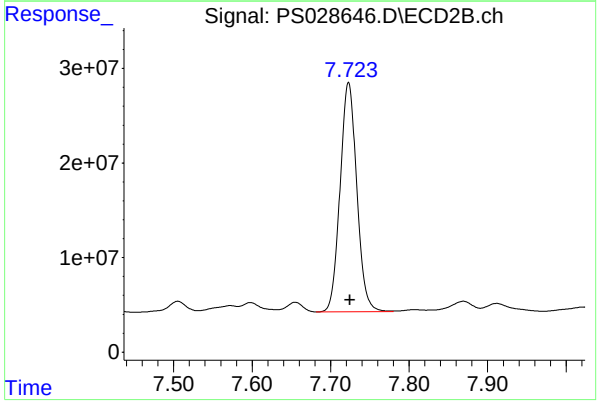




#4 2,4-DCAA

R.T.: 7.226 min
Delta R.T.: 0.000 min
Response: 734628994
Conc: 273.88 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB165159TB



#4 2,4-DCAA

R.T.: 7.723 min
Delta R.T.: -0.002 min
Response: 359270423
Conc: 266.71 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: TETR16

Lab Code: CHEM **Case No.:** P4961 **SAS No.:** P4961 **SDG NO.:** P4961

Instrument ID: ECD_S **Calibration Date(s):** 11/26/2024 11/26/2024

Calibration Times: 12:48 14:25

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

LAB FILE ID: RT 200 = PS028632.D RT 500 = PS028633.D

RT 750 = PS028634.D RT 1000 = PS028635.D RT 1500 = PS028636.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)	9.23	9.23	9.23	9.23	9.23	9.23	9.13	9.33
2,4-D	8.35	8.35	8.35	8.35	8.35	8.35	8.25	8.45
2,4-DCAA	7.23	7.23	7.23	7.23	7.23	7.23	7.13	7.33

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RETENTION TIMES OF INITIAL CALIBRATION

Contract: TETR16

Lab Code: CHEM **Case No.:** P4961 **SAS No.:** P4961 **SDG NO.:** P4961

Instrument ID: ECD_S **Calibration Date(s):** 11/26/2024 11/26/2024

Calibration Times: 12:48 14:25

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

LAB FILE ID: RT 200 = PS028632.D RT 500 = PS028633.D

RT 750 = PS028634.D RT 1000 = PS028635.D RT 1500 = PS028636.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)	9.87	9.87	9.87	9.87	9.87	9.87	9.77	9.97
2,4-D	8.97	8.97	8.97	8.97	8.97	8.97	8.87	9.07
2,4-DCAA	7.73	7.72	7.72	7.73	7.73	7.72	7.62	7.82

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: TETR16

Lab Code: CHEM **Case No.:** P4961 **SAS No.:** P4961 **SDG NO.:** P4961

Instrument ID: ECD_S **Calibration Date(s):** 11/26/2024 11/26/2024

Calibration Times: 12:48 14:25

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

LAB FILE ID: **CF 200 =** PS028632.D **CF 500 =** PS028633.D

CF 750 = PS028634.D **CF 1000 =** PS028635.D **CF 1500 =** PS028636.D

COMPOUND	CF 200	CF 500	CF 750	CF 1000	CF 1500	CF	% RSD
2,4,5-TP(Silvex)	20271400000	18910000000	18123500000	17499500000	16594600000	18279800000	8
2,4-D	3843050000	3484790000	3301520000	3180130000	3051260000	3372150000	9
2,4-DCAA	2980930000	2776190000	2647410000	2550090000	2457090000	2682340000	8

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: TETR16

Lab Code: CHEM **Case No.:** P4961 **SAS No.:** P4961 **SDG NO.:** P4961

Instrument ID: ECD_S **Calibration Date(s):** 11/26/2024 11/26/2024

Calibration Times: 12:48 14:25

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

LAB FILE ID: **CF 200 =** PS028632.D **CF 500 =** PS028633.D

CF 750 = PS028634.D **CF 1000 =** PS028635.D **CF 1500 =** PS028636.D

COMPOUND	CF 200	CF 500	CF 750	CF 1000	CF 1500	CF	% RSD
2,4,5-TP(Silvex)	9649960000	9698620000	9598260000	9499290000	9266470000	9542520000	2
2,4-D	1782570000	1704130000	1676500000	1652880000	1638760000	1690970000	3
2,4-DCAA	1414130000	1352070000	1334210000	1323400000	1311340000	1347030000	3

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS112624\
Data File : PS028632.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 12:48
Operator : AR\AJ
Sample : HSTDICC200
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDICC200

Manual Integrations APPROVED
Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 26 14:01:34 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 13:56:20 2024
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	7.225	7.725	596.2E6	282.8E6	209.342m	206.925
	Target Compounds						
1) T	Dalapon	2.630	2.687	531.5E6	407.6E6	183.455	185.641
2) T	3,5-DICHL...	6.399	6.681	800.4E6	379.1E6	200.243	190.612
3) T	4-Nitroph...	7.025	7.252	336.7E6	176.5E6	191.472	190.143
5) T	DICAMBA	7.412	7.923	2313.7E6	1110.1E6	195.684	182.160
6) T	MCPP	7.591	8.022	118.7E6	76224788	16.962	17.997
7) T	MCPA	7.740	8.265	186.0E6	120.6E6	18.166	19.223
8) T	DICHLORPROP	8.120	8.639	669.8E6	311.0E6	205.162	192.771
9) T	2,4-D	8.351	8.969	722.5E6	335.1E6	203.914	194.718
10) T	Pentachlo...	8.648	9.495	9682.2E6	4480.0E6	201.091	191.001
11) T	2,4,5-TP ...	9.227	9.873	3851.6E6	1833.5E6	201.635	190.020
12) T	2,4,5-T	9.519	10.293	3956.2E6	1799.0E6	201.698	190.769
13) T	2,4-DB	10.094	10.859	728.6E6	220.6E6	199.916	192.399
14) T	DINOSEB	11.303	11.238	3064.6E6	1182.6E6	197.062	187.415
15) T	Picloram	11.112	12.331	5805.4E6	2191.0E6	192.141	174.833
16) T	DCPA	11.596	12.281	5832.7E6	2127.2E6	202.702	190.123

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS112624\
Data File : PS028632.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 12:48
Operator : AR\AJ
Sample : HSTDICC200
Misc :
ALS Vial : 3 Sample Multiplier: 1

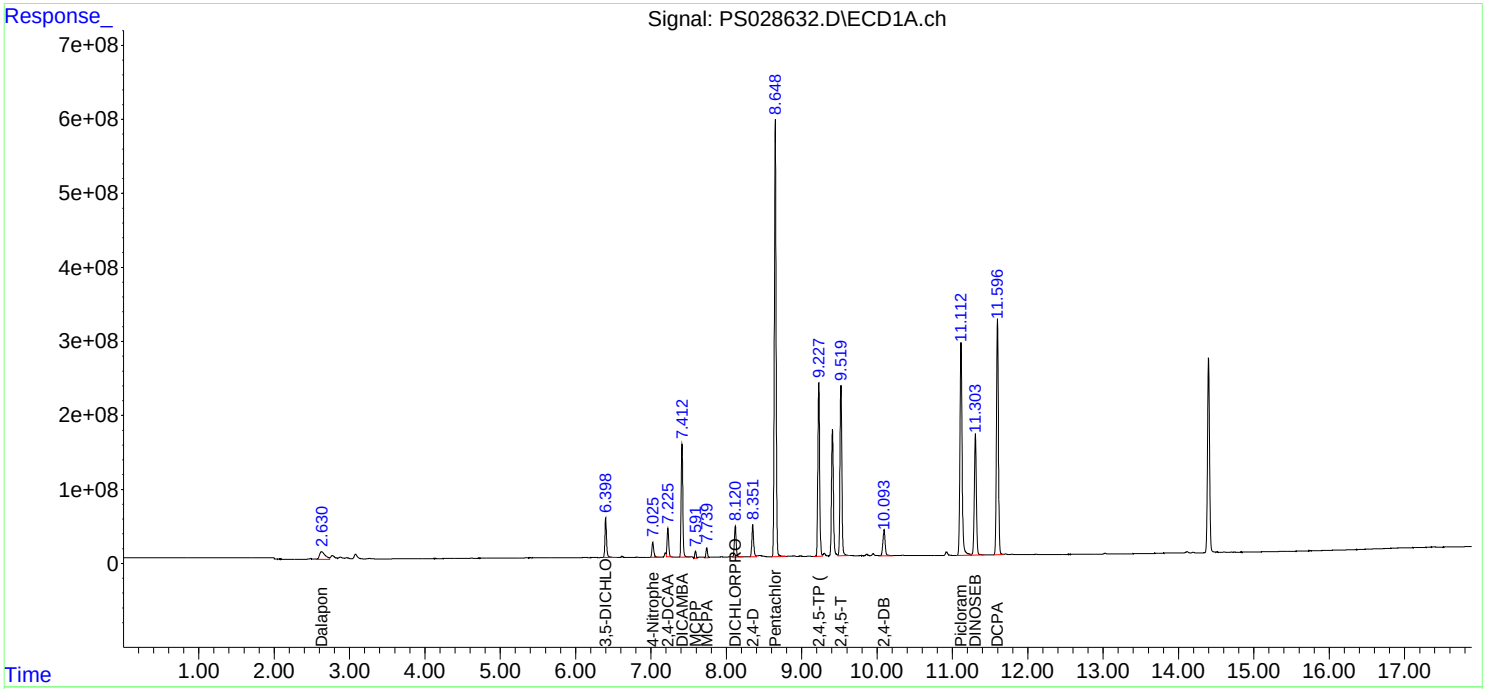
Instrument :
ECD_S
ClientSampleId :
HSTDICC200

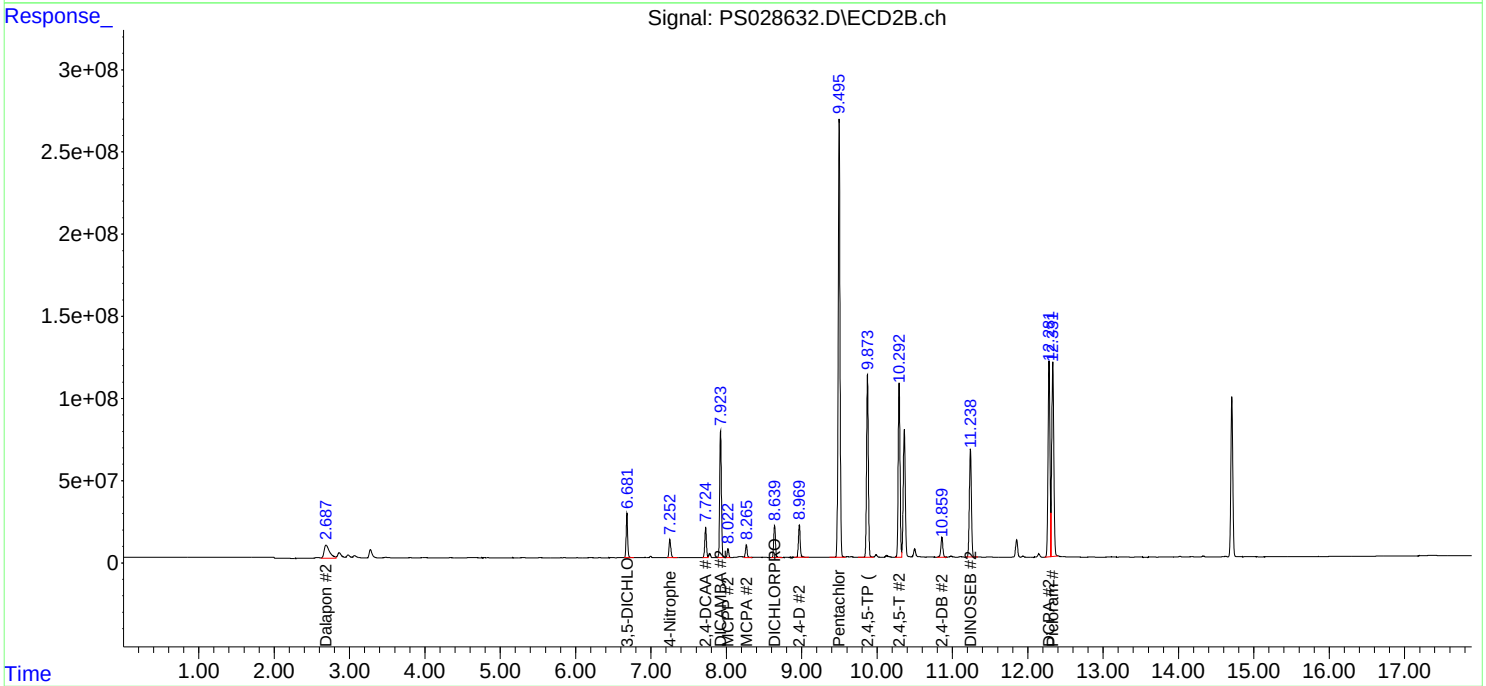
Manual Integrations APPROVED

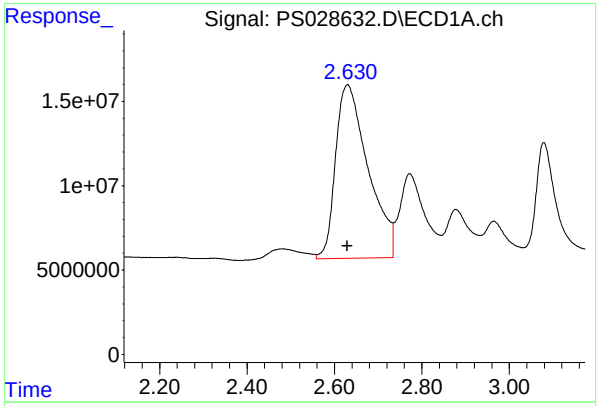
Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 26 14:01:34 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 13:56:20 2024
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







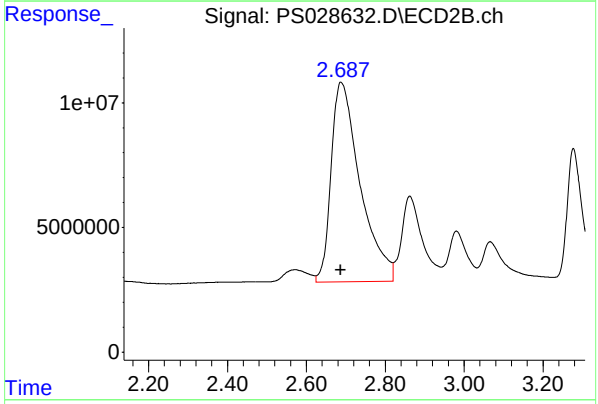
#1 Dalapon

R.T.: 2.630 min
Delta R.T.: 0.000 min
Response: 531505918
Conc: 183.45 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC200

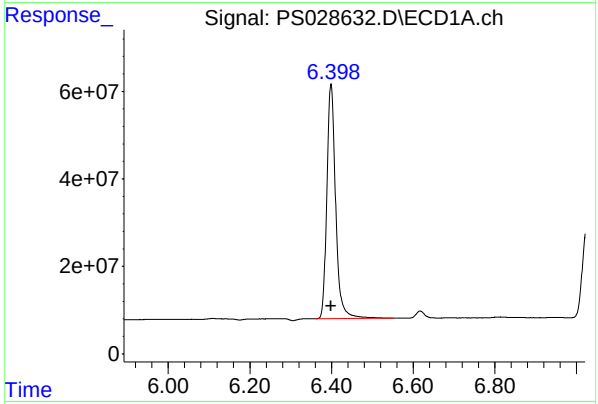
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024



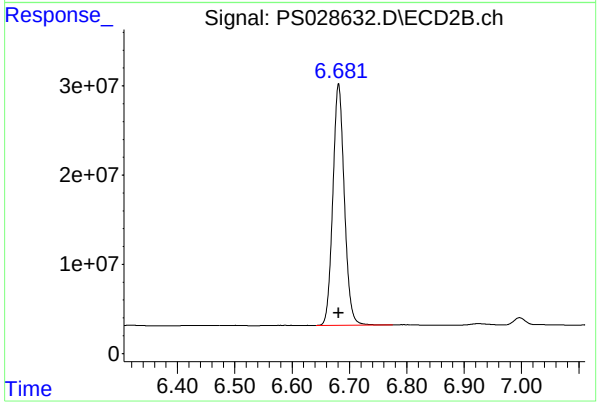
#1 Dalapon

R.T.: 2.687 min
Delta R.T.: 0.000 min
Response: 407591396
Conc: 185.64 ng/ml



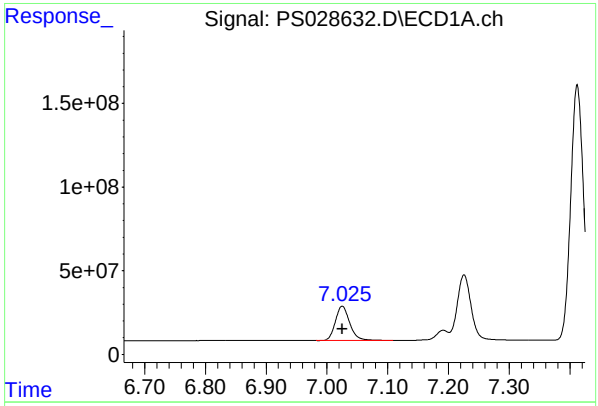
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.399 min
Delta R.T.: 0.000 min
Response: 800383739
Conc: 200.24 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.681 min
Delta R.T.: 0.000 min
Response: 379088878
Conc: 190.61 ng/ml



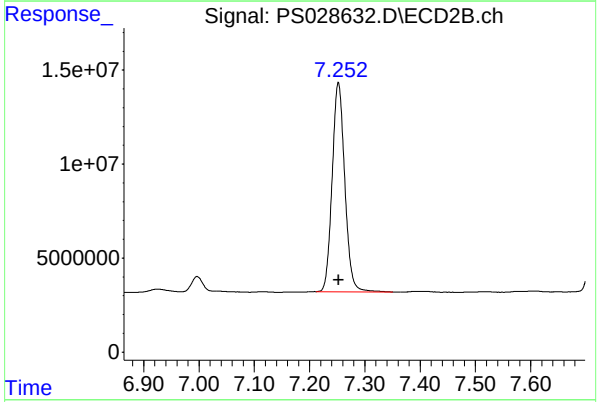
#3 4-Nitrophenol

R.T.: 7.025 min
Delta R.T.: 0.000 min
Response: 336669325
Conc: 191.47 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC200

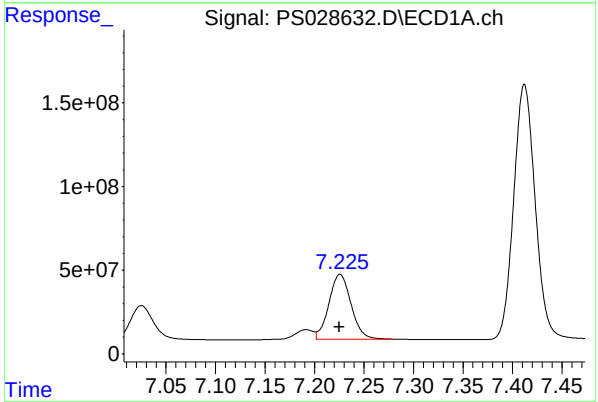
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024



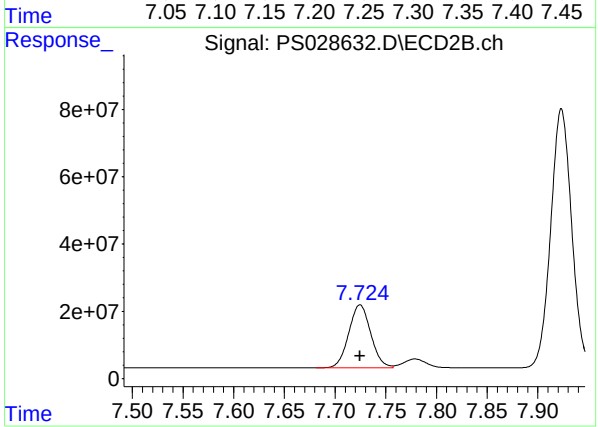
#3 4-Nitrophenol

R.T.: 7.252 min
Delta R.T.: 0.000 min
Response: 176471068
Conc: 190.14 ng/ml



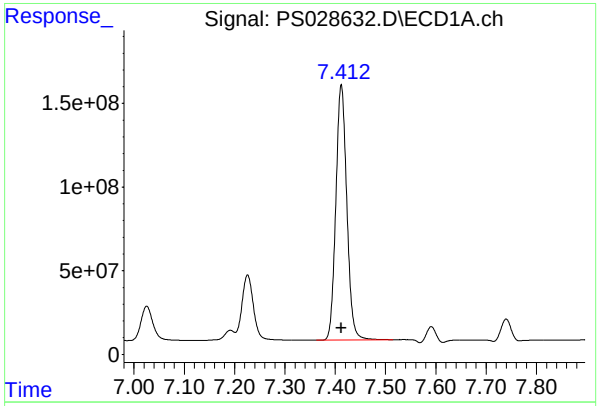
#4 2,4-DCAA

R.T.: 7.225 min
Delta R.T.: 0.000 min
Response: 596186068
Conc: 209.34 ng/ml m



#4 2,4-DCAA

R.T.: 7.725 min
Delta R.T.: 0.000 min
Response: 282825264
Conc: 206.92 ng/ml



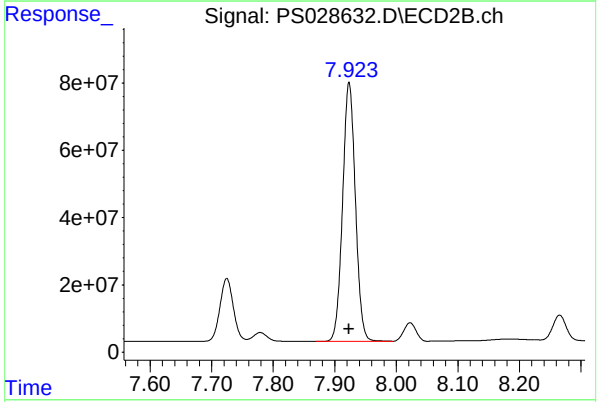
#5 DICAMBA

R.T.: 7.412 min
Delta R.T.: 0.000 min
Response: 2313682686
Conc: 195.68 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC200

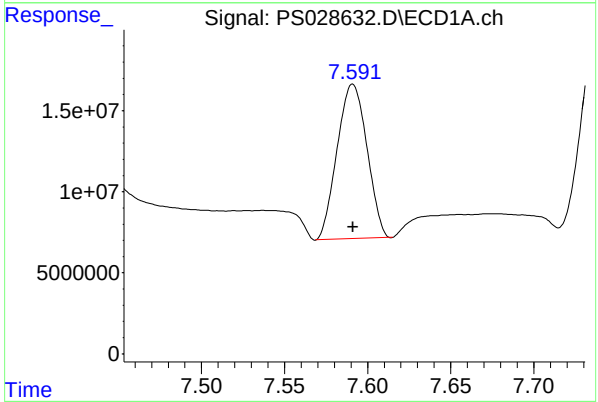
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024



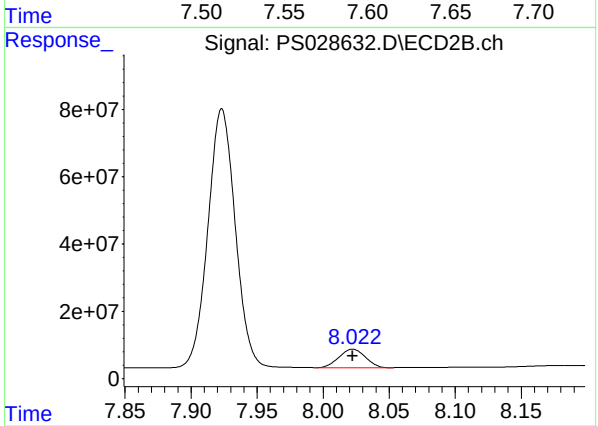
#5 DICAMBA

R.T.: 7.923 min
Delta R.T.: 0.000 min
Response: 1110140608
Conc: 182.16 ng/ml



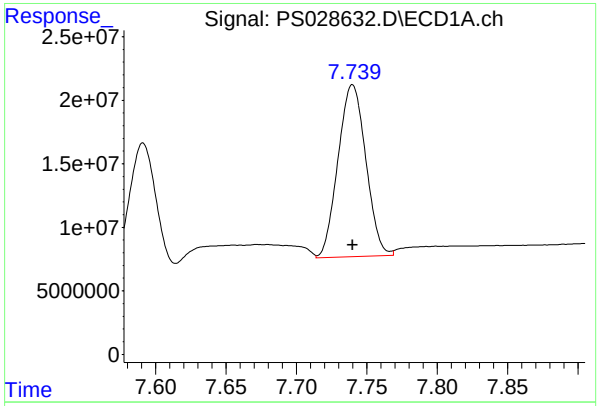
#6 MCPP

R.T.: 7.591 min
Delta R.T.: 0.000 min
Response: 118734787
Conc: 16.96 ug/ml



#6 MCPP

R.T.: 8.022 min
Delta R.T.: 0.000 min
Response: 76224788
Conc: 18.00 ug/ml



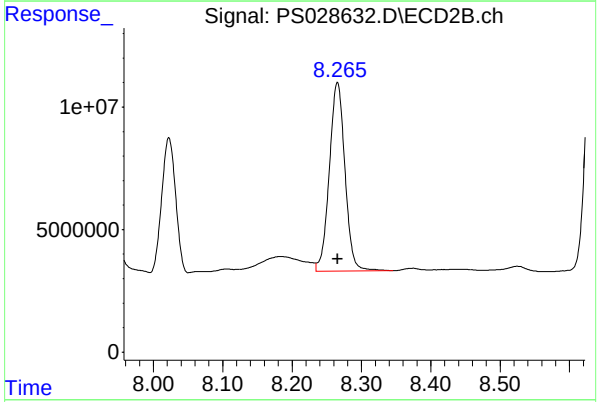
#7 MCPA

R.T.: 7.740 min
Delta R.T.: 0.000 min
Response: 185959363
Conc: 18.17 ug/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC200

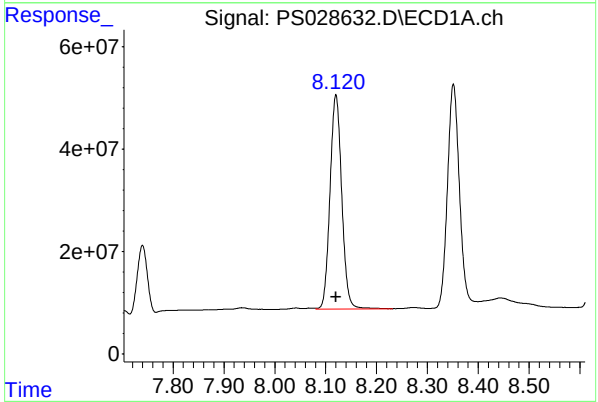
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024



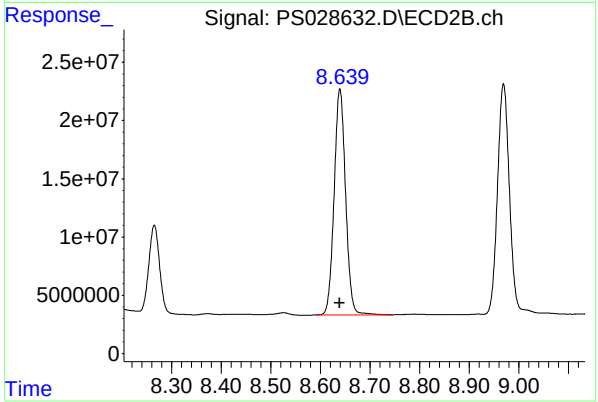
#7 MCPA

R.T.: 8.265 min
Delta R.T.: 0.000 min
Response: 120600312
Conc: 19.22 ug/ml



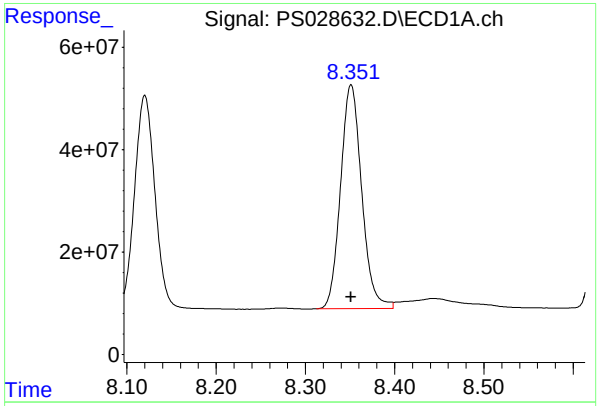
#8 DICHLORPROP

R.T.: 8.120 min
Delta R.T.: 0.000 min
Response: 669803146
Conc: 205.16 ng/ml



#8 DICHLORPROP

R.T.: 8.639 min
Delta R.T.: 0.000 min
Response: 310956668
Conc: 192.77 ng/ml



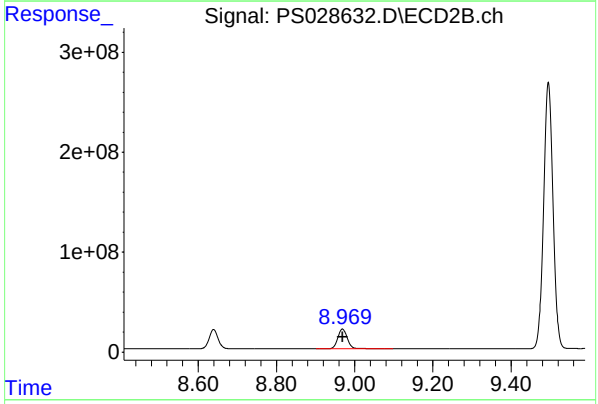
#9 2,4-D

R.T.: 8.351 min
Delta R.T.: 0.000 min
Response: 722492470
Conc: 203.91 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC200

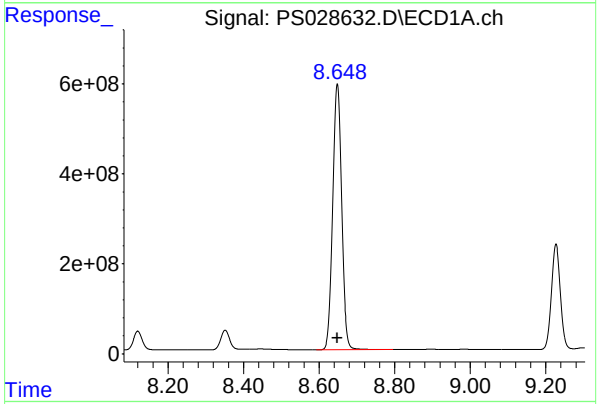
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024



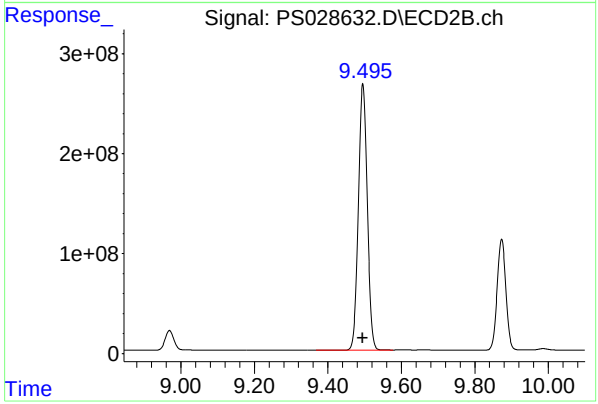
#9 2,4-D

R.T.: 8.969 min
Delta R.T.: 0.000 min
Response: 335123478
Conc: 194.72 ng/ml



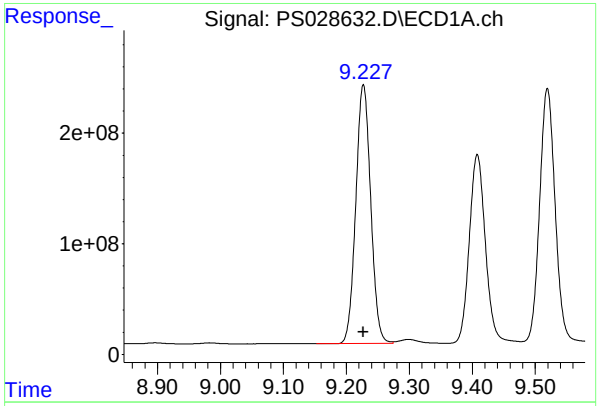
#10 Pentachlorophenol

R.T.: 8.648 min
Delta R.T.: 0.000 min
Response: 9682154401
Conc: 201.09 ng/ml



#10 Pentachlorophenol

R.T.: 9.495 min
Delta R.T.: 0.000 min
Response: 4479965532
Conc: 191.00 ng/ml



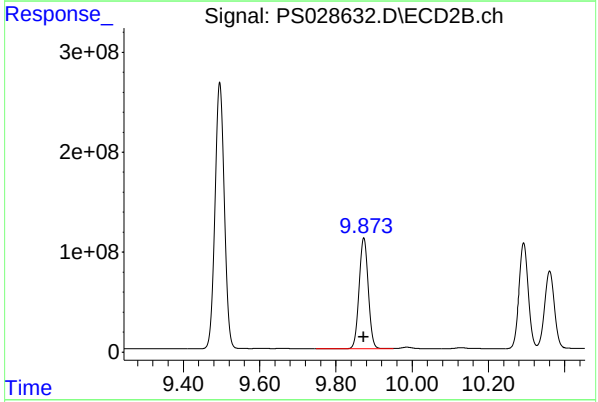
#11 2,4,5-TP (SILVEX)

R.T.: 9.227 min
Delta R.T.: 0.000 min
Response: 3851564126
Conc: 201.64 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC200

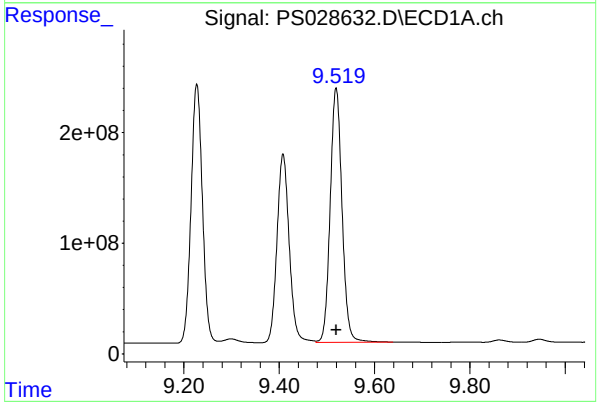
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024



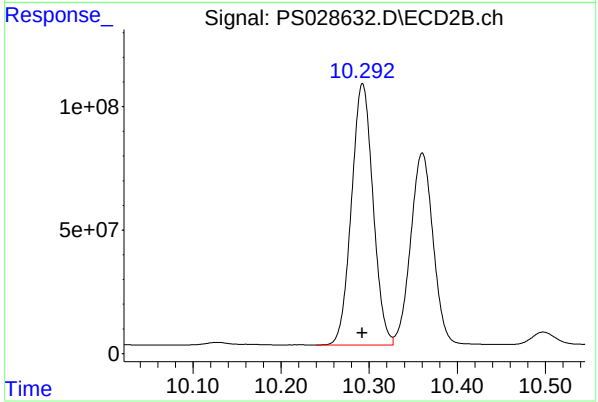
#11 2,4,5-TP (SILVEX)

R.T.: 9.873 min
Delta R.T.: 0.000 min
Response: 1833491790
Conc: 190.02 ng/ml



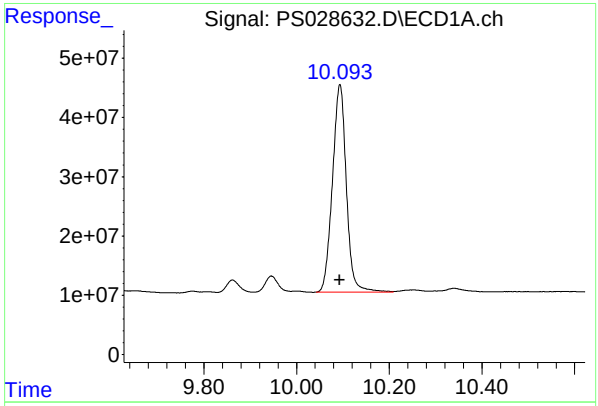
#12 2,4,5-T

R.T.: 9.519 min
Delta R.T.: 0.000 min
Response: 3956199350
Conc: 201.70 ng/ml



#12 2,4,5-T

R.T.: 10.293 min
Delta R.T.: 0.000 min
Response: 1798957032
Conc: 190.77 ng/ml



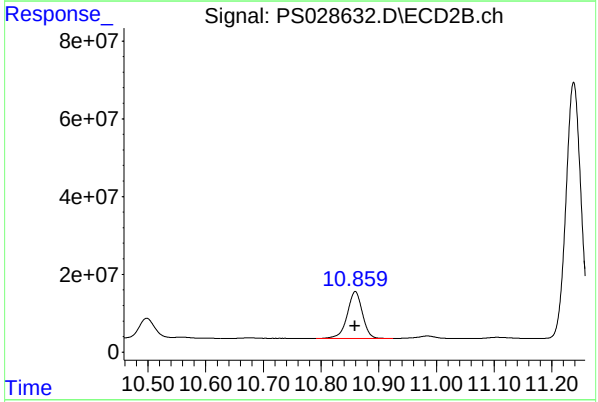
#13 2,4-DB

R.T.: 10.094 min
Delta R.T.: 0.000 min
Response: 728622483
Conc: 199.92 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC200

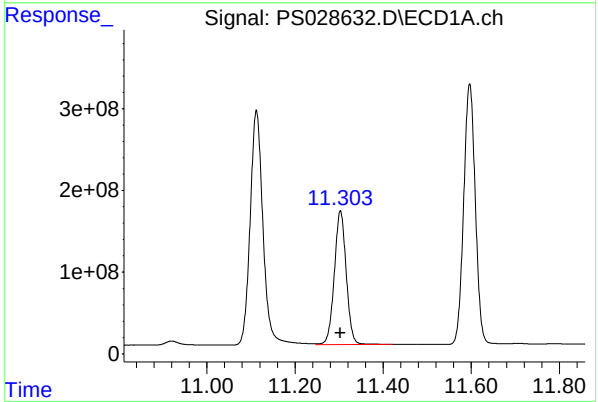
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024



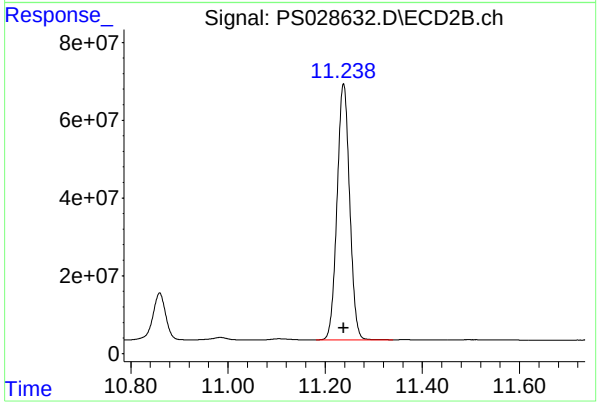
#13 2,4-DB

R.T.: 10.859 min
Delta R.T.: 0.000 min
Response: 220610040
Conc: 192.40 ng/ml



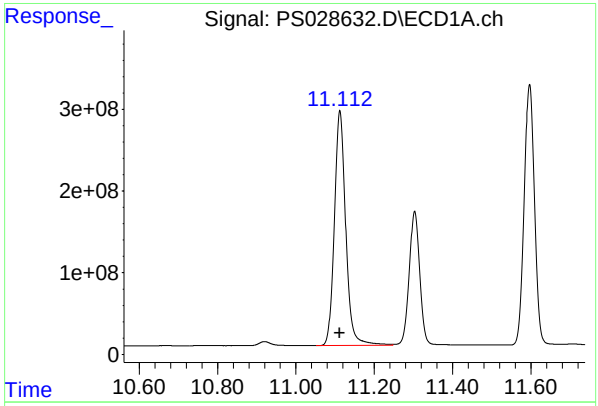
#14 DINOSEB

R.T.: 11.303 min
Delta R.T.: 0.000 min
Response: 3064581225
Conc: 197.06 ng/ml



#14 DINOSEB

R.T.: 11.238 min
Delta R.T.: 0.000 min
Response: 1182623872
Conc: 187.41 ng/ml



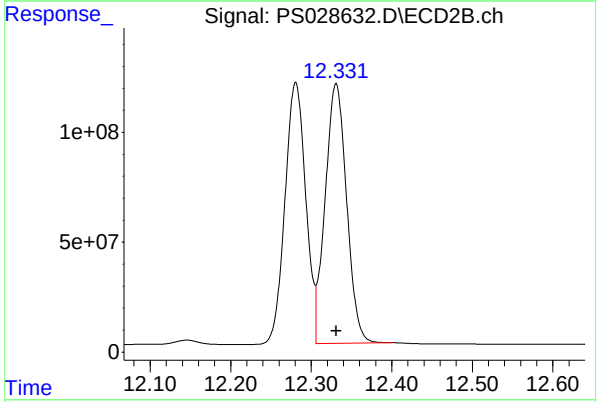
#15 Picloram

R.T.: 11.112 min
Delta R.T.: 0.000 min
Response: 5805389058
Conc: 192.14 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC200

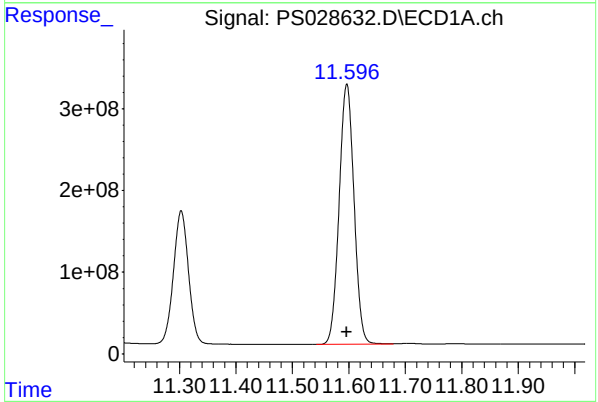
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024



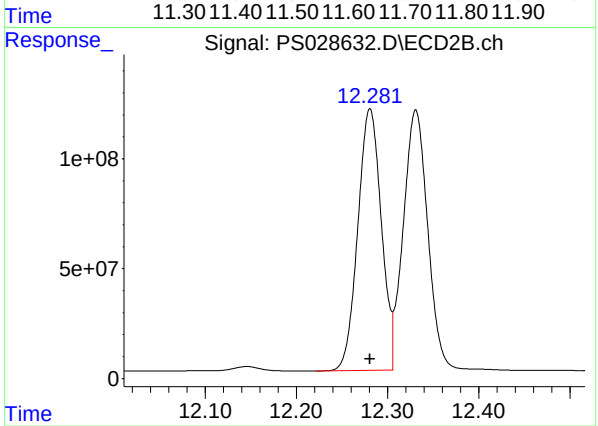
#15 Picloram

R.T.: 12.331 min
Delta R.T.: 0.000 min
Response: 2190959732
Conc: 174.83 ng/ml



#16 DCPA

R.T.: 11.596 min
Delta R.T.: 0.000 min
Response: 5832715053
Conc: 202.70 ng/ml



#16 DCPA

R.T.: 12.281 min
Delta R.T.: 0.000 min
Response: 2127209016
Conc: 190.12 ng/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS112624\
Data File : PS028633.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 13:13
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: Nov 26 13:59:39 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 13:56:20 2024
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	7.227	7.724	1388.1E6	676.0E6	511.872	503.324
	Target Compounds						
1) T	Dalapon	2.630	2.688	1315.4E6	991.0E6	455.840	455.921
2) T	3,5-DICHL...	6.399	6.681	1825.5E6	918.5E6	474.893	467.624
3) T	4-Nitroph...	7.026	7.252	789.4E6	416.7E6	460.955	459.219
5) T	DICAMBA	7.413	7.924	5518.3E6	2890.6E6	476.459	467.048
6) T	MCPP	7.594	8.025	338.8E6	201.9E6	46.148	46.660
7) T	MCPA	7.744	8.269	479.6E6	288.3E6	46.309	46.738
8) T	DICHLORPROP	8.120	8.639	1500.6E6	751.3E6	481.628	471.766
9) T	2,4-D	8.351	8.968	1637.9E6	800.9E6	482.693	473.841
10) T	Pentachlo...	8.650	9.496	22770.3E6	11234.6E6	487.141	480.246
11) T	2,4,5-TP ...	9.228	9.873	8982.2E6	4606.8E6	485.087	477.470
12) T	2,4,5-T	9.520	10.292	9226.6E6	4494.5E6	485.340	477.578
13) T	2,4-DB	10.092	10.858	1710.7E6	541.2E6	481.951	474.971
14) T	DINOSEB	11.303	11.237	7249.0E6	2972.6E6	477.647	470.349
15) T	Picloram	11.112	12.329	14399.5E6	6106.2E6	479.281	468.558
16) T	DCPA	11.597	12.280	13727.8E6	5412.9E6	490.753	481.432

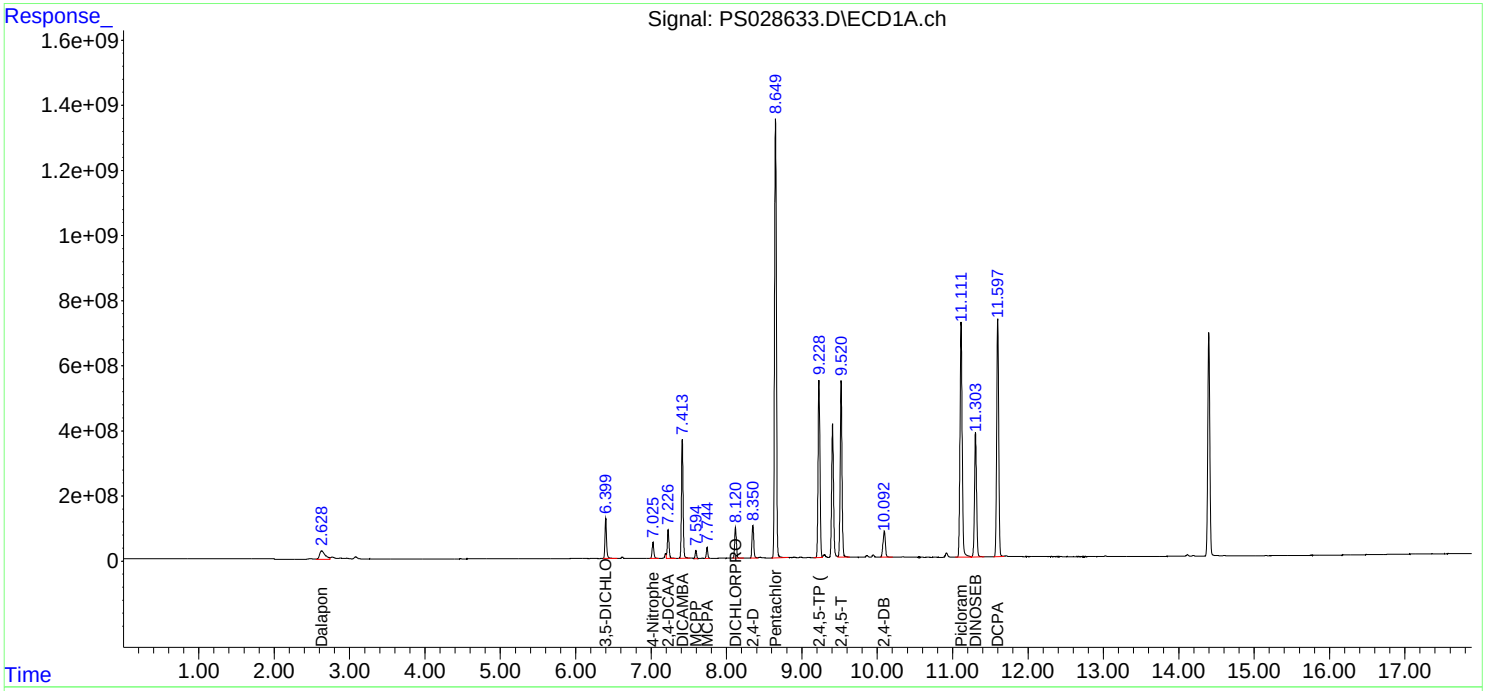
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

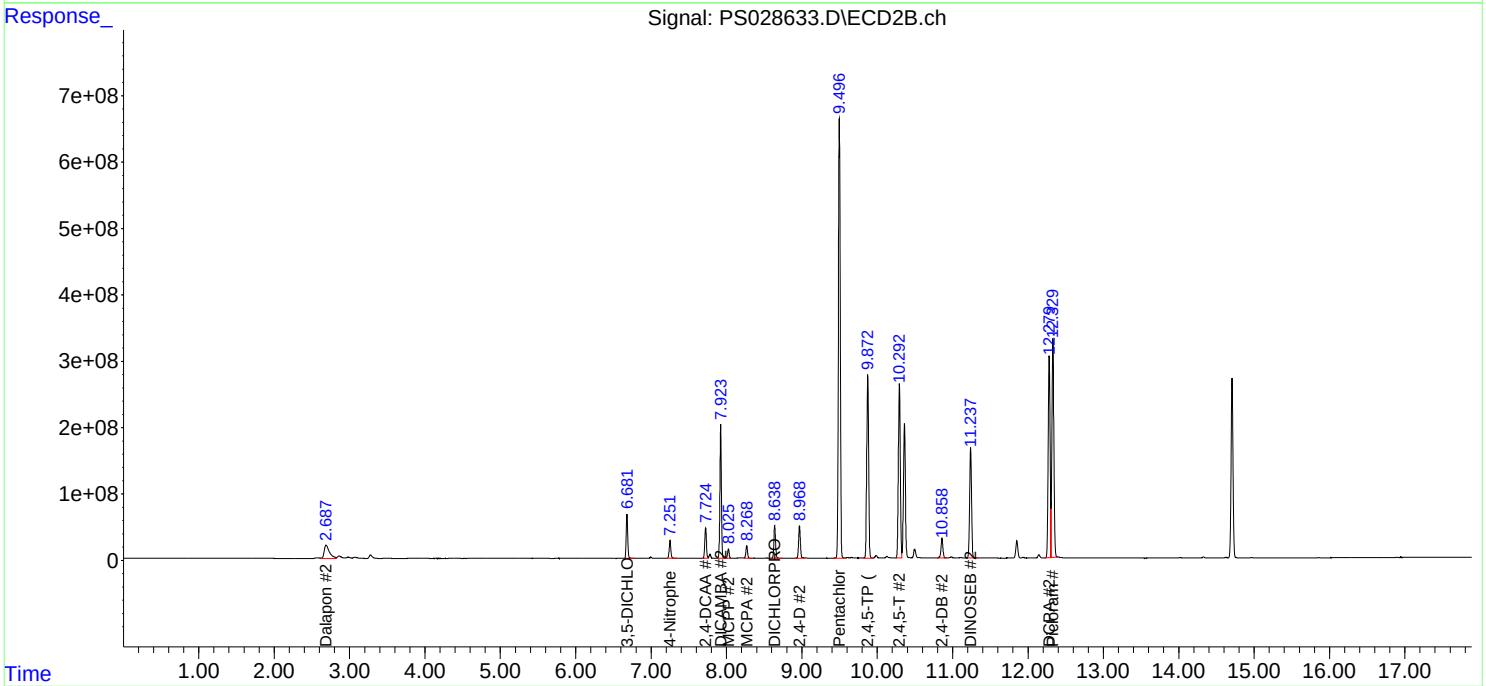
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS112624\
Data File : PS028633.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 13:13
Operator : AR\AJ
Sample : HSTDICC500
Misc :
ALS Vial : 4 Sample Multiplier: 1

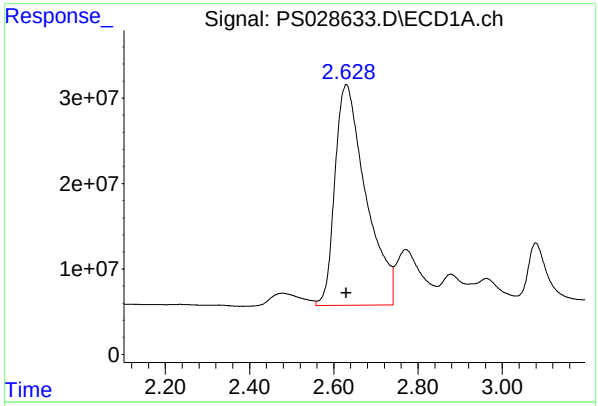
Instrument :
ECD_S
ClientSampleId :
HSTDICC500

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 26 13:59:39 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 13:56:20 2024
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



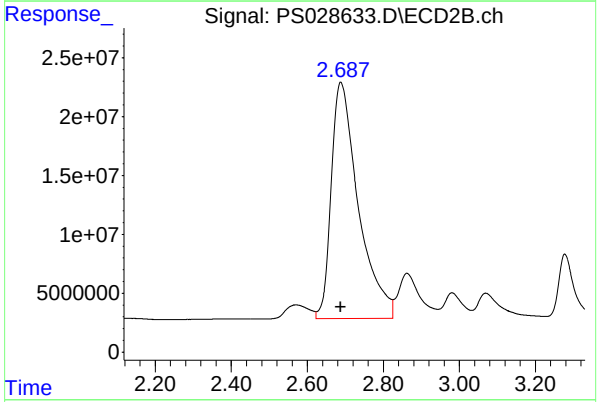




#1 Dalapon

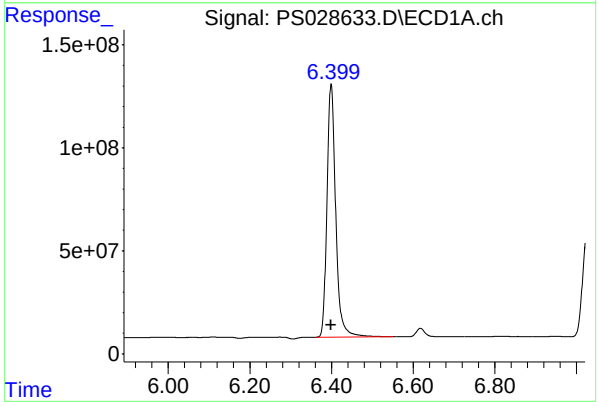
R.T.: 2.630 min
Delta R.T.: 0.000 min
Response: 1315384691
Conc: 455.84 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC500



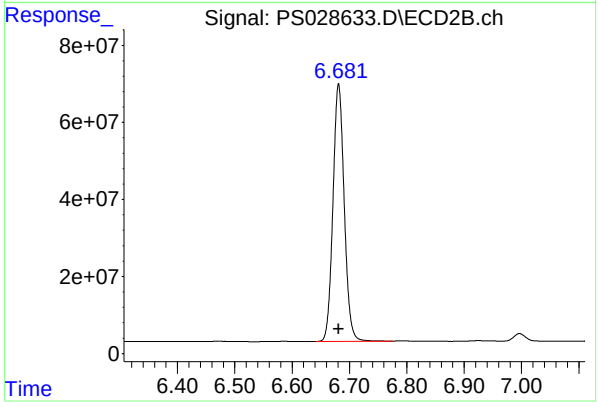
#1 Dalapon

R.T.: 2.688 min
Delta R.T.: 0.000 min
Response: 990999355
Conc: 455.92 ng/ml



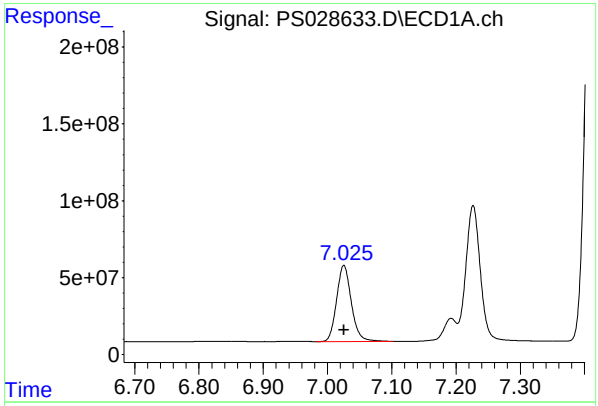
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.399 min
Delta R.T.: 0.000 min
Response: 1825496802
Conc: 474.89 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

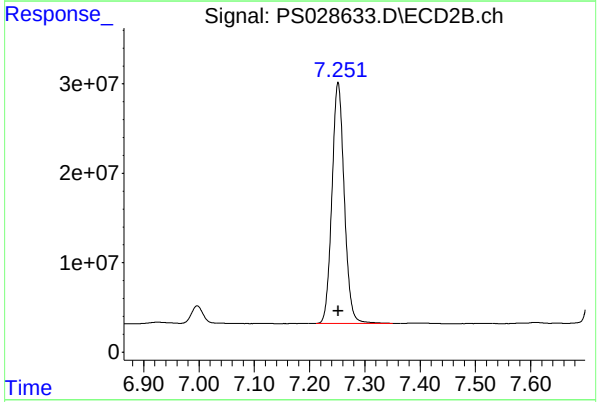
R.T.: 6.681 min
Delta R.T.: 0.000 min
Response: 918478096
Conc: 467.62 ng/ml



#3 4-Nitrophenol

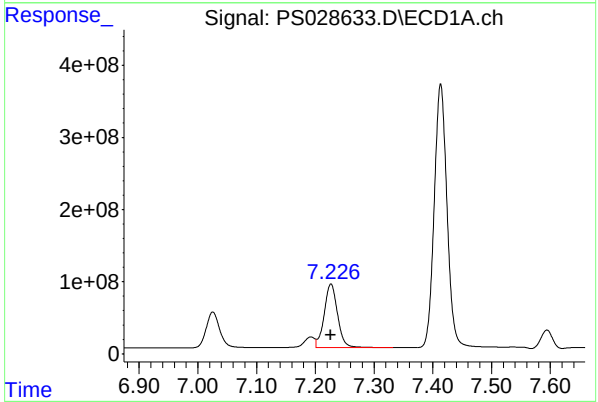
R.T.: 7.026 min
Delta R.T.: 0.000 min
Response: 789414521
Conc: 460.95 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC500



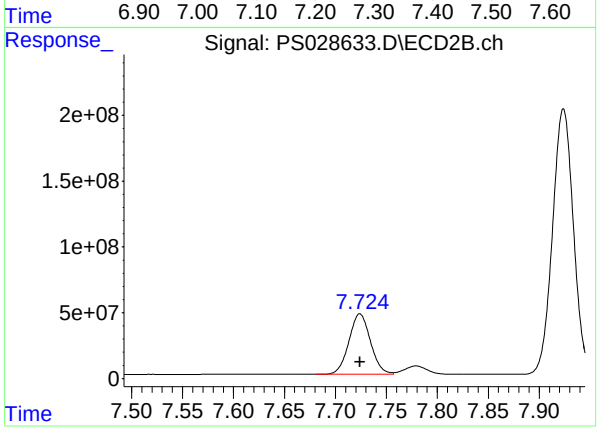
#3 4-Nitrophenol

R.T.: 7.252 min
Delta R.T.: 0.000 min
Response: 416666171
Conc: 459.22 ng/ml



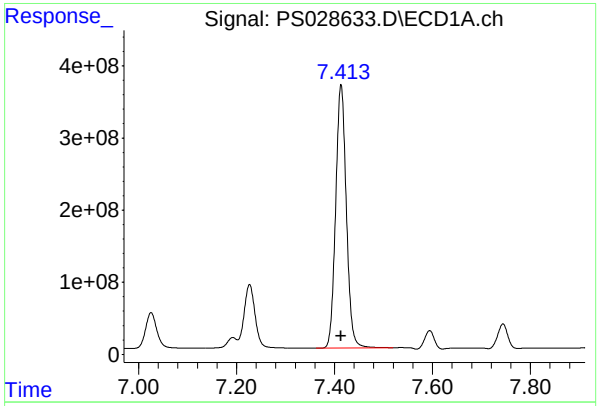
#4 2,4-DCAA

R.T.: 7.227 min
Delta R.T.: 0.000 min
Response: 1388095673
Conc: 511.87 ng/ml



#4 2,4-DCAA

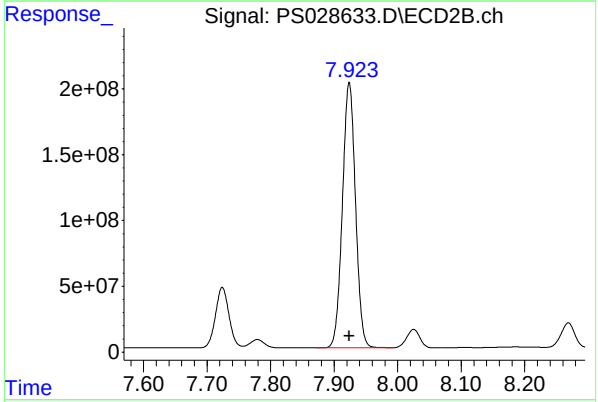
R.T.: 7.724 min
Delta R.T.: 0.000 min
Response: 676034916
Conc: 503.32 ng/ml



#5 DICAMBA

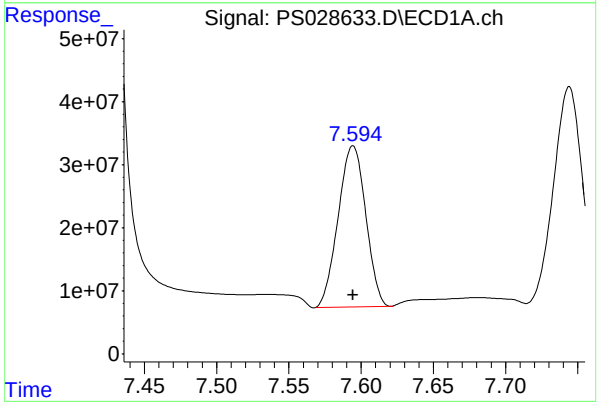
R.T.: 7.413 min
Delta R.T.: 0.000 min
Response: 5518297579
Conc: 476.46 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC500



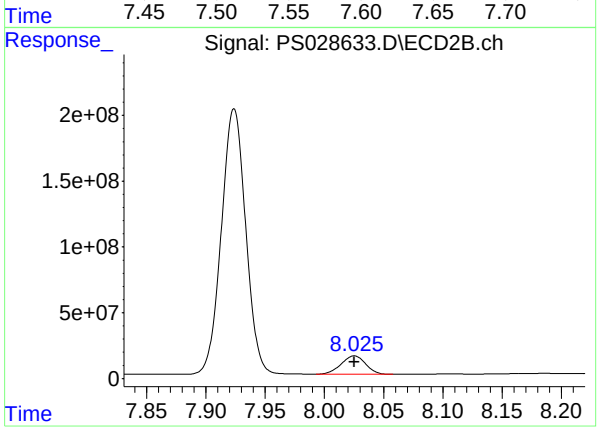
#5 DICAMBA

R.T.: 7.924 min
Delta R.T.: 0.000 min
Response: 2890555335
Conc: 467.05 ng/ml



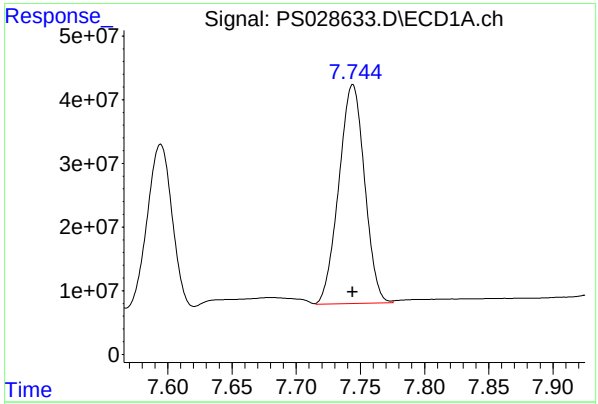
#6 MCPP

R.T.: 7.594 min
Delta R.T.: 0.000 min
Response: 338829888
Conc: 46.15 ug/ml



#6 MCPP

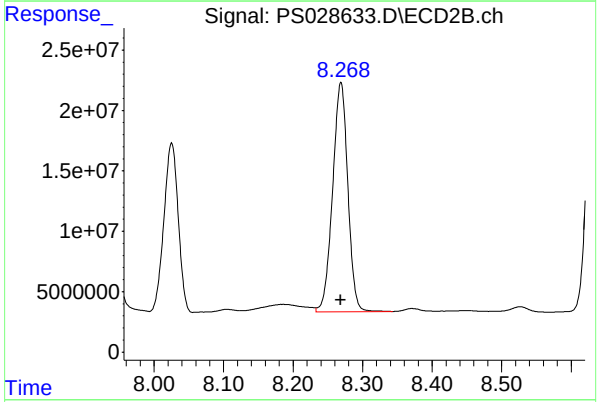
R.T.: 8.025 min
Delta R.T.: 0.000 min
Response: 201850430
Conc: 46.66 ug/ml



#7 MCPA

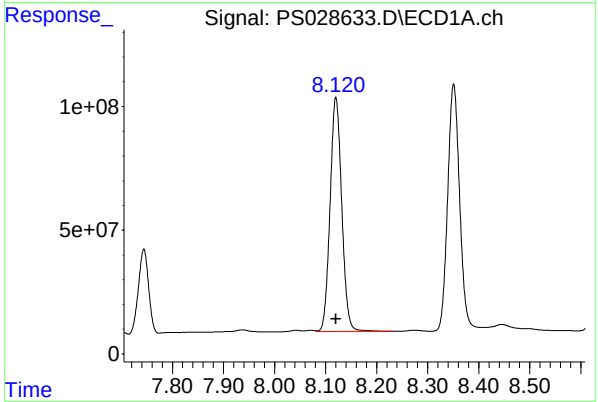
R.T.: 7.744 min
Delta R.T.: 0.000 min
Response: 479579809
Conc: 46.31 ug/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC500



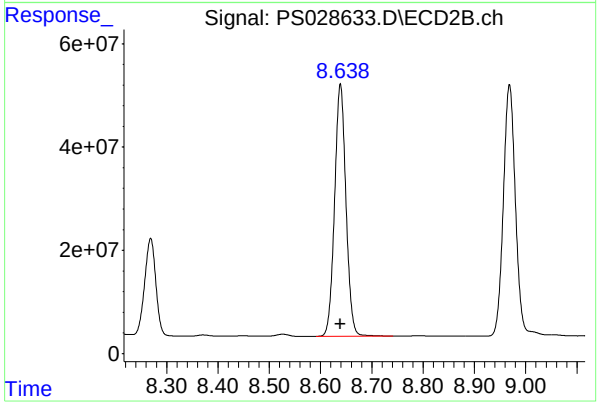
#7 MCPA

R.T.: 8.269 min
Delta R.T.: 0.000 min
Response: 288308319
Conc: 46.74 ug/ml



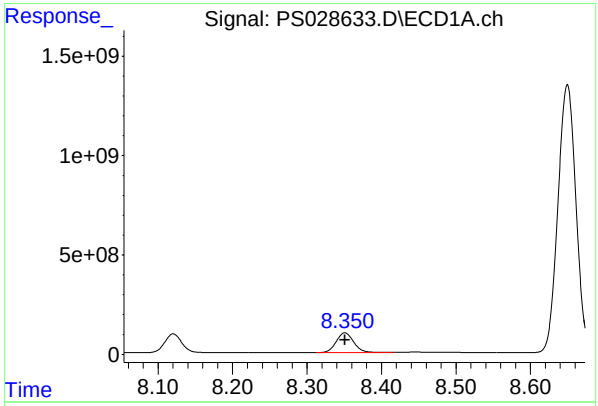
#8 DICHLORPROP

R.T.: 8.120 min
Delta R.T.: 0.000 min
Response: 1500626364
Conc: 481.63 ng/ml



#8 DICHLORPROP

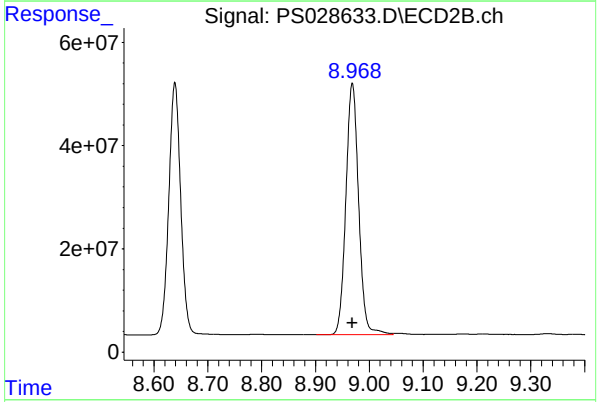
R.T.: 8.639 min
Delta R.T.: 0.000 min
Response: 751342050
Conc: 471.77 ng/ml



#9 2,4-D

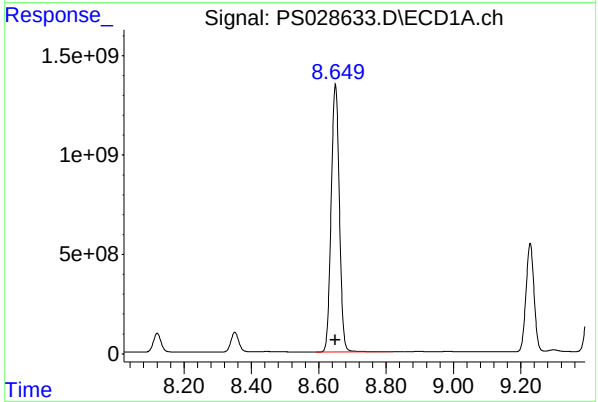
R.T.: 8.351 min
Delta R.T.: 0.000 min
Response: 1637852704
Conc: 482.69 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC500



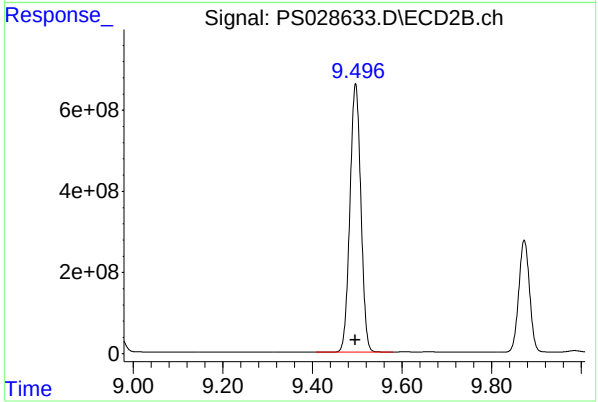
#9 2,4-D

R.T.: 8.968 min
Delta R.T.: 0.000 min
Response: 800941548
Conc: 473.84 ng/ml



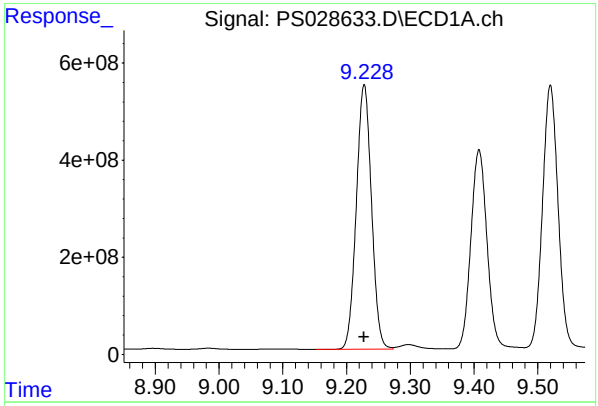
#10 Pentachlorophenol

R.T.: 8.650 min
Delta R.T.: 0.000 min
Response: 22770314861
Conc: 487.14 ng/ml



#10 Pentachlorophenol

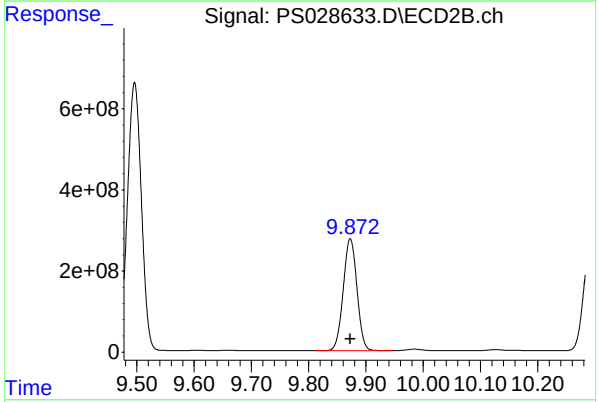
R.T.: 9.496 min
Delta R.T.: 0.000 min
Response: 11234613027
Conc: 480.25 ng/ml



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

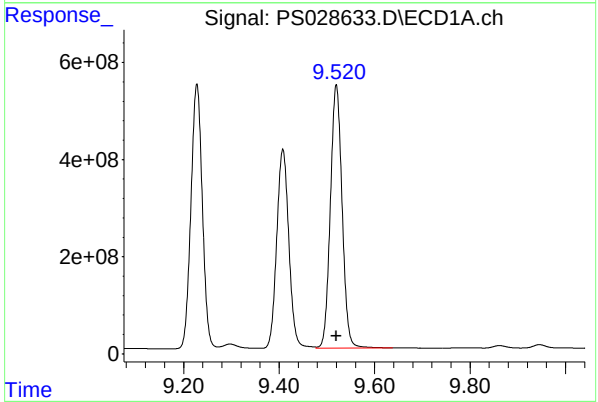
R.T.: 9.228 min
Delta R.T.: 0.000 min
Response: 8982234936
Conc: 485.09 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC500



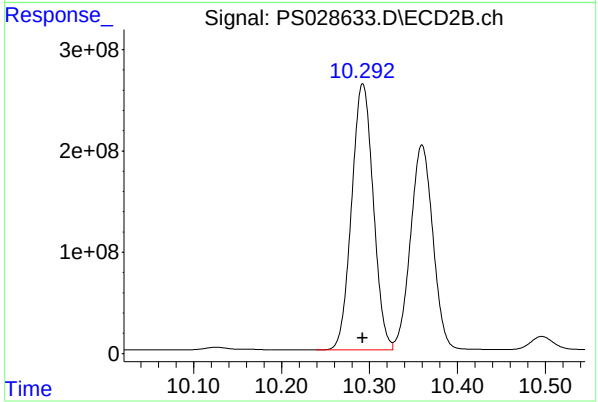
#11 2,4,5-TP (SILVEX)

R.T.: 9.873 min
Delta R.T.: 0.000 min
Response: 4606843818
Conc: 477.47 ng/ml



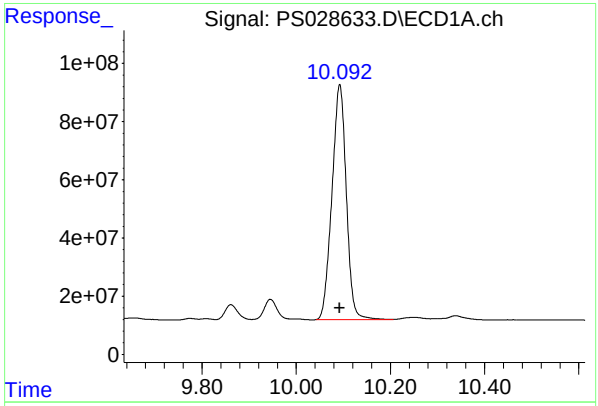
#12 2,4,5-T

R.T.: 9.520 min
Delta R.T.: 0.000 min
Response: 9226634087
Conc: 485.34 ng/ml



#12 2,4,5-T

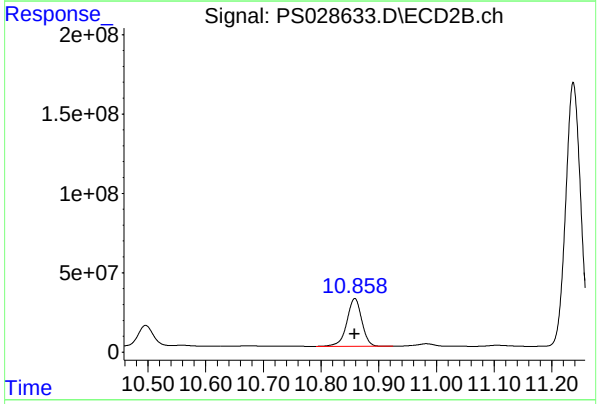
R.T.: 10.292 min
Delta R.T.: 0.000 min
Response: 4494457682
Conc: 477.58 ng/ml



#13 2,4-DB

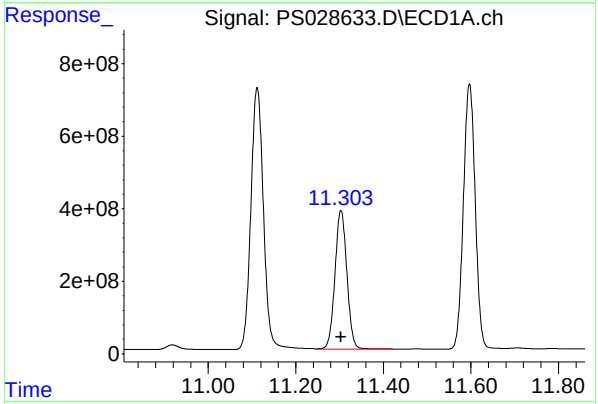
R.T.: 10.092 min
Delta R.T.: 0.000 min
Response: 1710697329
Conc: 481.95 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC500



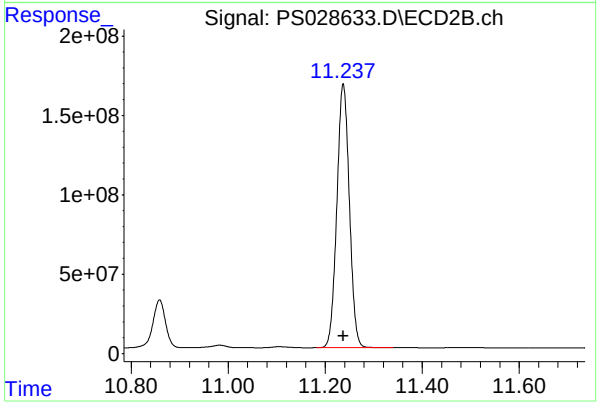
#13 2,4-DB

R.T.: 10.858 min
Delta R.T.: 0.000 min
Response: 541177287
Conc: 474.97 ng/ml



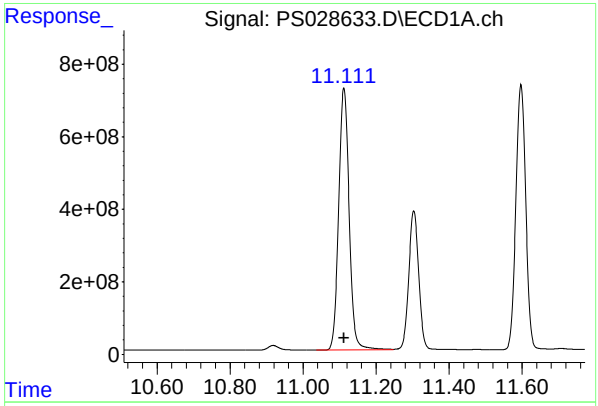
#14 DINOSEB

R.T.: 11.303 min
Delta R.T.: 0.000 min
Response: 7249002688
Conc: 477.65 ng/ml



#14 DINOSEB

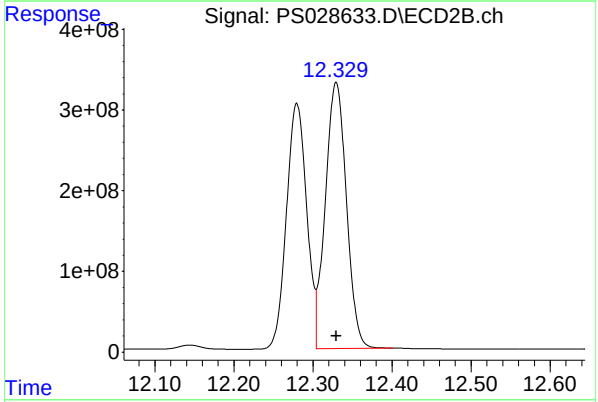
R.T.: 11.237 min
Delta R.T.: 0.000 min
Response: 2972610200
Conc: 470.35 ng/ml



#15 Picloram

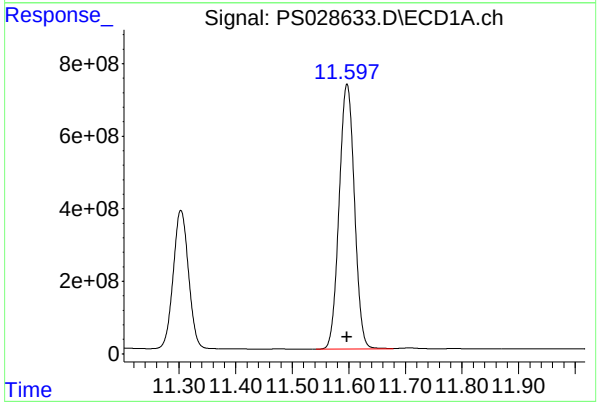
R.T.: 11.112 min
Delta R.T.: 0.000 min
Response: 14399516573
Conc: 479.28 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC500



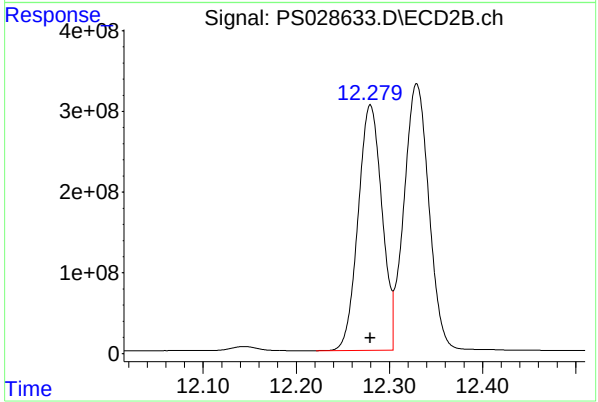
#15 Picloram

R.T.: 12.329 min
Delta R.T.: 0.000 min
Response: 6106195259
Conc: 468.56 ng/ml



#16 DCPA

R.T.: 11.597 min
Delta R.T.: 0.000 min
Response: 13727763257
Conc: 490.75 ng/ml



#16 DCPA

R.T.: 12.280 min
Delta R.T.: 0.000 min
Response: 5412879477
Conc: 481.43 ng/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS112624\
Data File : PS028634.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 13:37
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: Nov 26 13:57:10 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 13:56:20 2024
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	7.226	7.724	1985.6E6	1000.7E6	750.000	750.000
	Target Compounds						
1) T	Dalapon	2.630	2.690	1965.8E6	1480.5E6	682.500	682.500
2) T	3,5-DICHL...	6.399	6.681	2624.2E6	1362.3E6	697.500	697.500
3) T	4-Nitroph...	7.025	7.252	1153.5E6	613.5E6	682.500	682.500
5) T	DICAMBA	7.413	7.924	8053.0E6	4390.6E6	705.000	705.000
6) T	MCPP	7.596	8.027	527.0E6	307.2E6	70.500	70.500
7) T	MCPA	7.746	8.271	725.3E6	428.1E6	69.750	69.750
8) T	DICHLORPROP	8.121	8.639	2142.3E6	1118.6E6	705.000	705.000
9) T	2,4-D	8.351	8.969	2327.6E6	1181.9E6	705.000	705.000
10) T	Pentachlo...	8.649	9.496	32453.0E6	16483.8E6	712.500	712.500
11) T	2,4,5-TP ...	9.228	9.873	12913.0E6	6838.8E6	712.500	712.500
12) T	2,4,5-T	9.520	10.293	13250.2E6	6668.9E6	712.500	712.500
13) T	2,4-DB	10.092	10.858	2492.0E6	811.9E6	712.500	712.500
14) T	DINOSEB	11.303	11.238	10525.4E6	4452.3E6	705.000	705.000
15) T	Picloram	11.112	12.331	21213.4E6	9411.1E6	712.500	712.500
16) T	DCPA	11.597	12.281	19689.3E6	8071.0E6	720.000	720.000

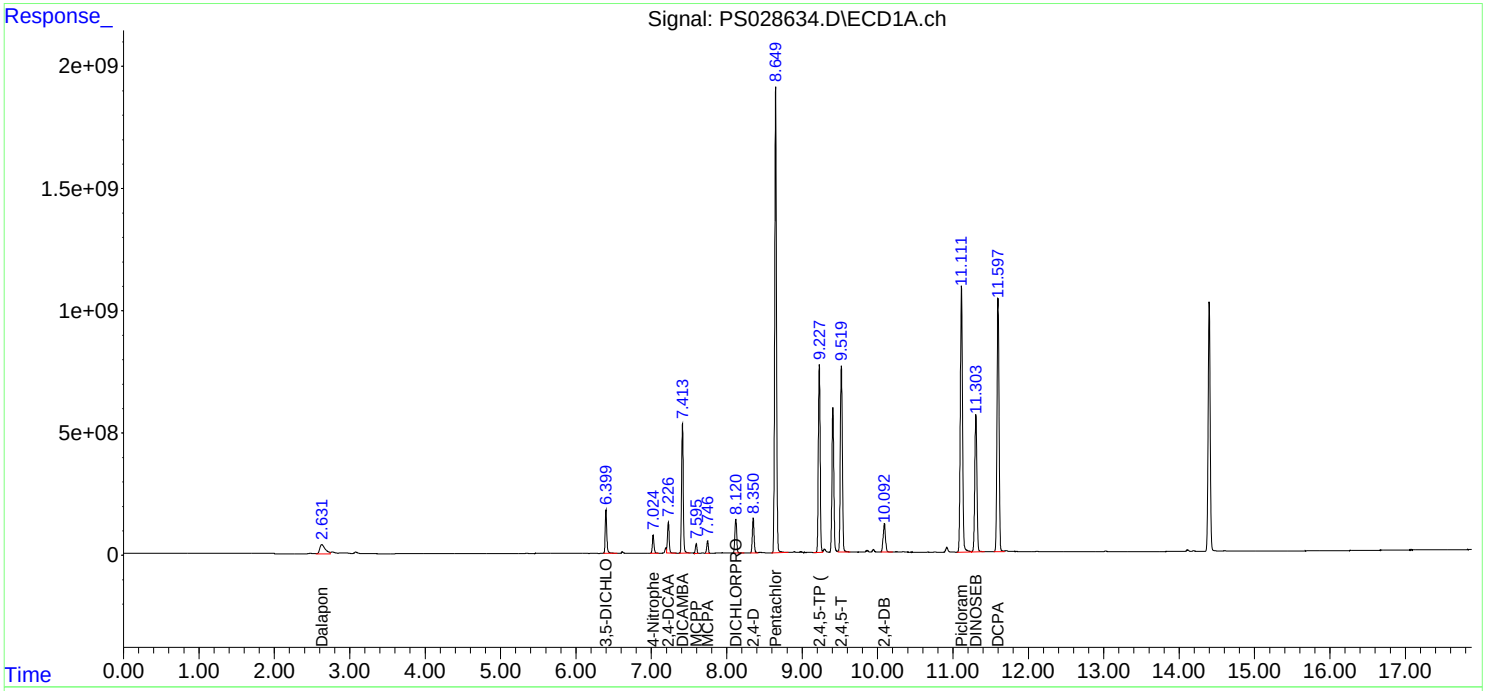
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

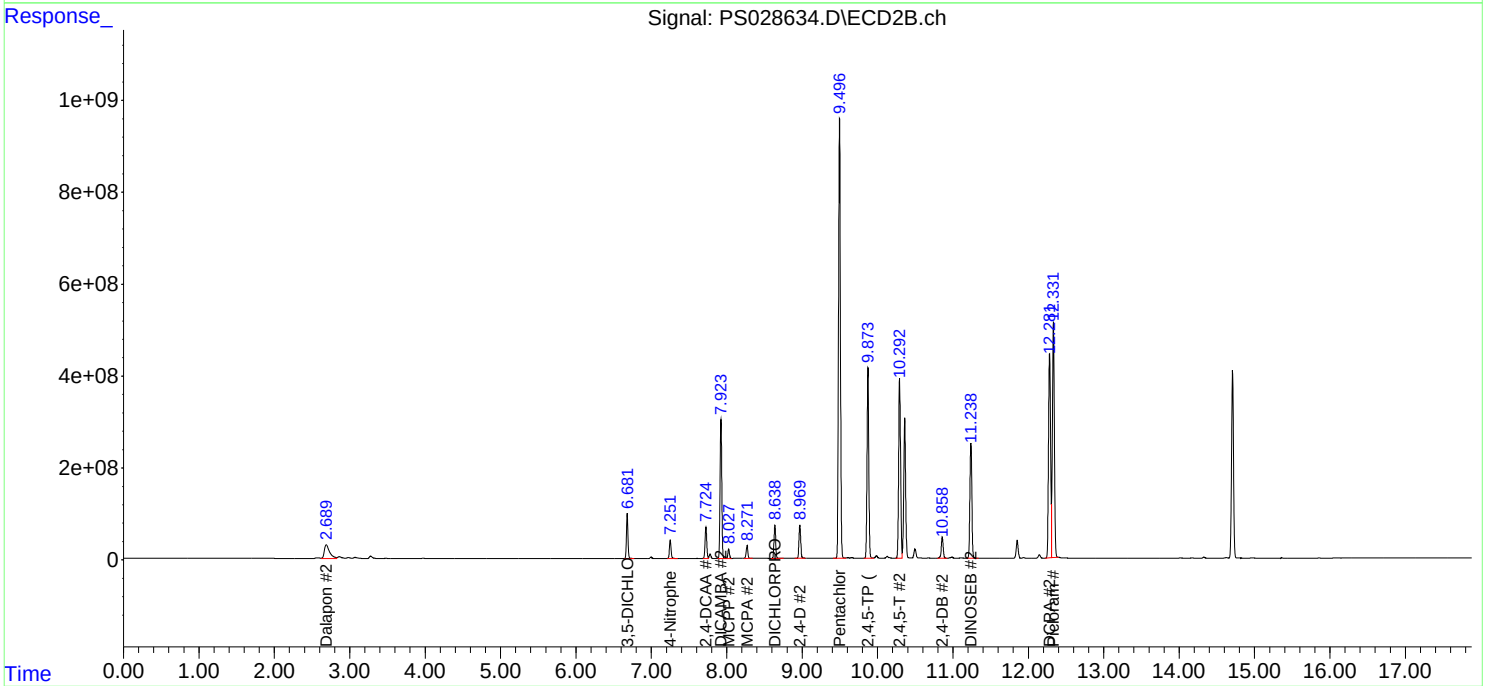
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS112624\
Data File : PS028634.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 13:37
Operator : AR\AJ
Sample : HSTDICC750
Misc :
ALS Vial : 5 Sample Multiplier: 1

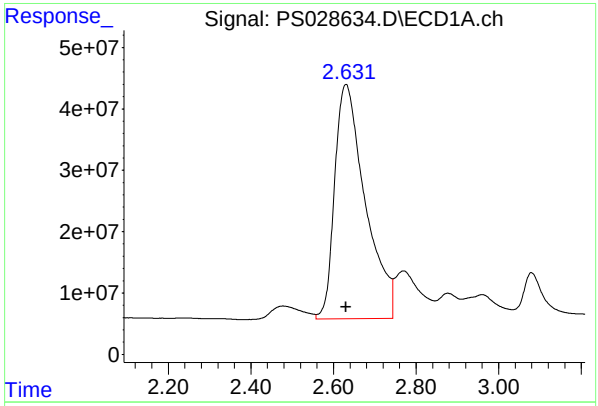
Instrument :
ECD_S
ClientSampleId :
HSTDICC750

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 26 13:57:10 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 13:56:20 2024
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



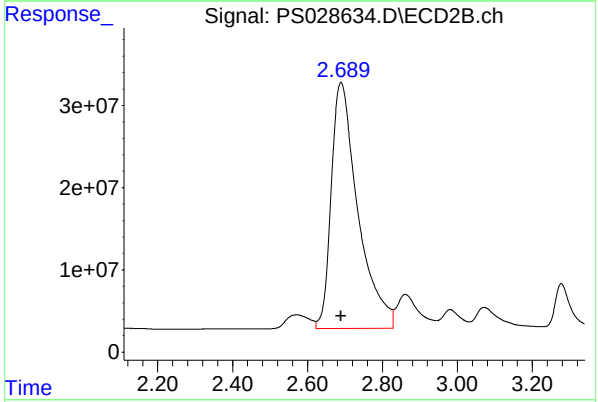




#1 Dalapon

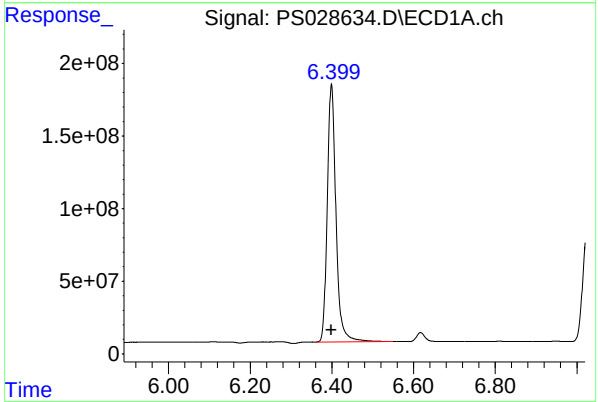
R.T.: 2.630 min
Delta R.T.: 0.000 min
Response: 1965803482
Conc: 682.50 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC750



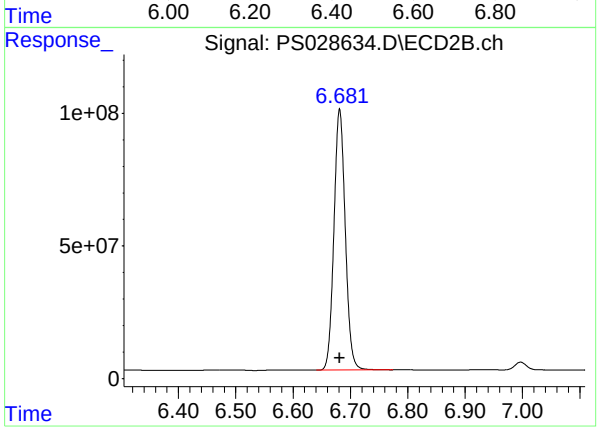
#1 Dalapon

R.T.: 2.690 min
Delta R.T.: 0.000 min
Response: 1480492417
Conc: 682.50 ng/ml



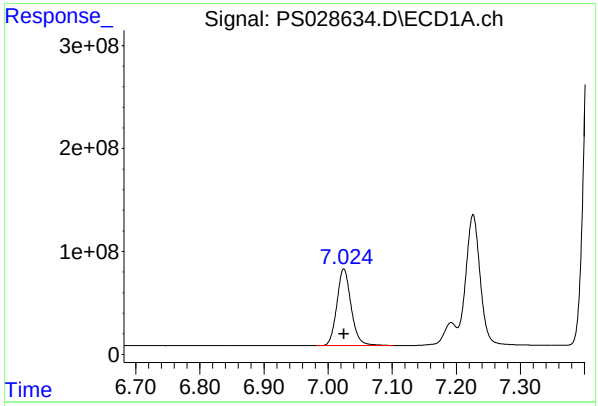
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.399 min
Delta R.T.: 0.000 min
Response: 2624153862
Conc: 697.50 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

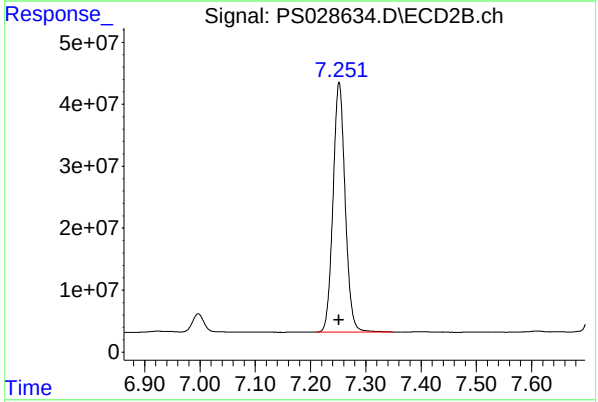
R.T.: 6.681 min
Delta R.T.: 0.000 min
Response: 1362254488
Conc: 697.50 ng/ml



#3 4-Nitrophenol

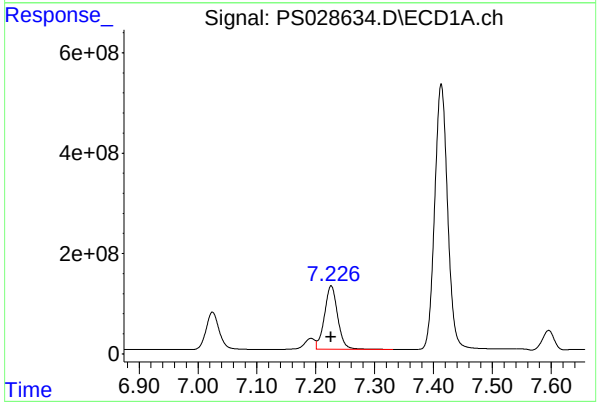
R.T.: 7.025 min
Delta R.T.: 0.000 min
Response: 1153527730
Conc: 682.50 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC750



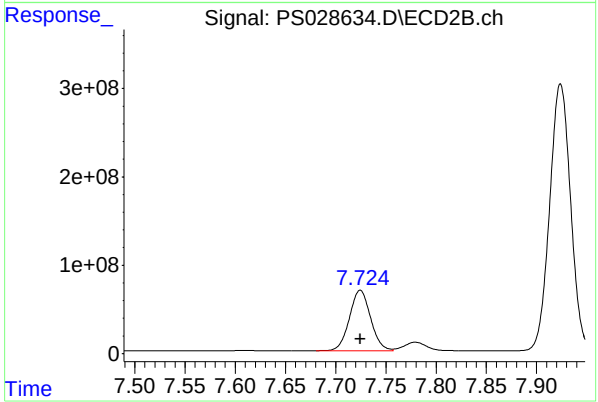
#3 4-Nitrophenol

R.T.: 7.252 min
Delta R.T.: 0.000 min
Response: 613513998
Conc: 682.50 ng/ml



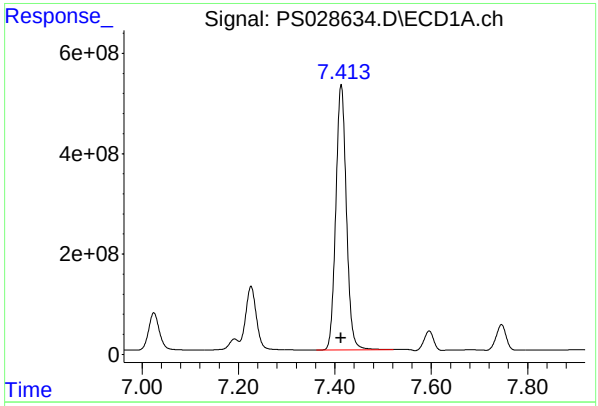
#4 2,4-DCAA

R.T.: 7.226 min
Delta R.T.: 0.000 min
Response: 1985559671
Conc: 750.00 ng/ml



#4 2,4-DCAA

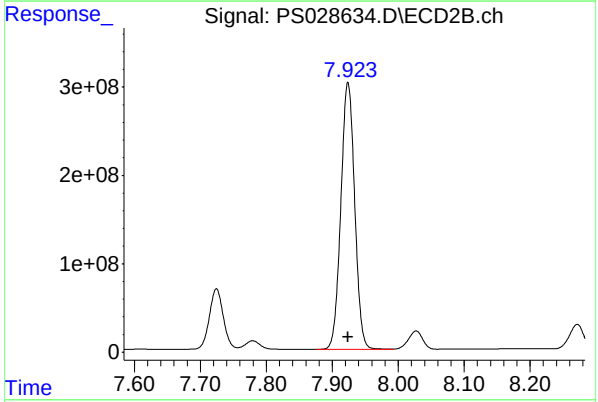
R.T.: 7.724 min
Delta R.T.: 0.000 min
Response: 1000657281
Conc: 750.00 ng/ml



#5 DICAMBA

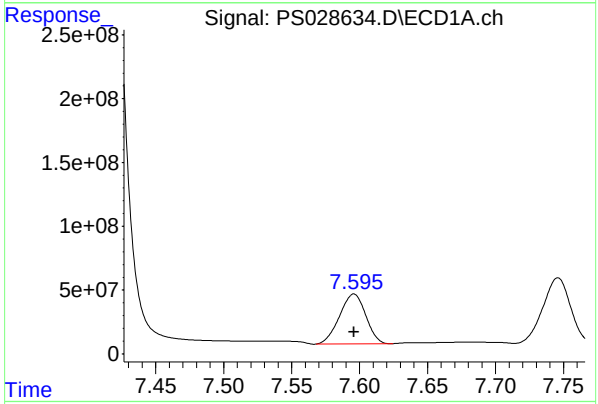
R.T.: 7.413 min
Delta R.T.: 0.000 min
Response: 8053032590
Conc: 705.00 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC750



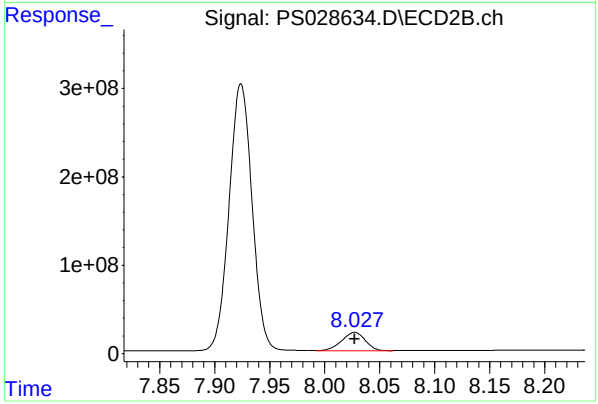
#5 DICAMBA

R.T.: 7.924 min
Delta R.T.: 0.000 min
Response: 4390649455
Conc: 705.00 ng/ml



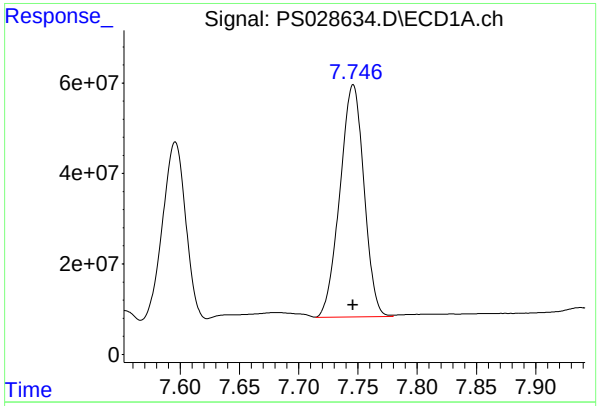
#6 MCPP

R.T.: 7.596 min
Delta R.T.: 0.000 min
Response: 527002813
Conc: 70.50 ug/ml



#6 MCPP

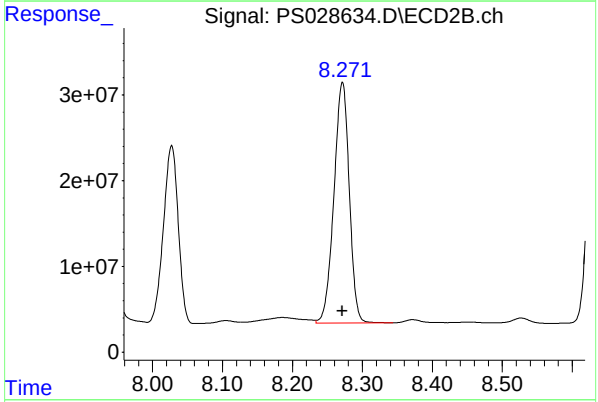
R.T.: 8.027 min
Delta R.T.: 0.000 min
Response: 307191521
Conc: 70.50 ug/ml



#7 MCPA

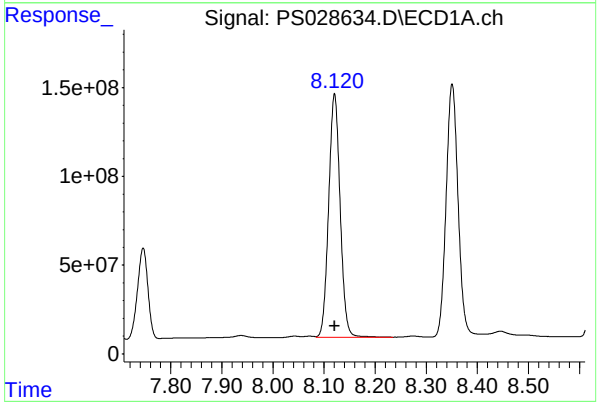
R.T.: 7.746 min
Delta R.T.: 0.000 min
Response: 725311784
Conc: 69.75 ug/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC750



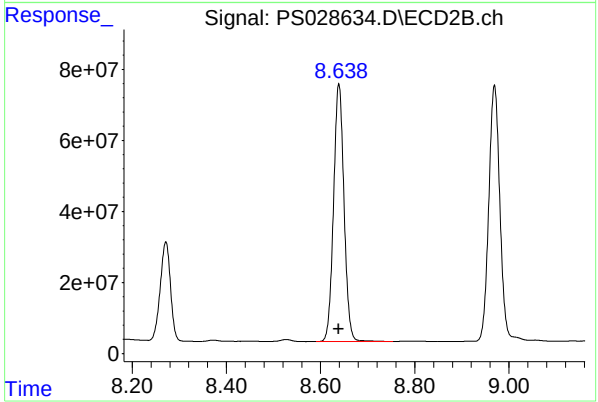
#7 MCPA

R.T.: 8.271 min
Delta R.T.: 0.000 min
Response: 428057377
Conc: 69.75 ug/ml



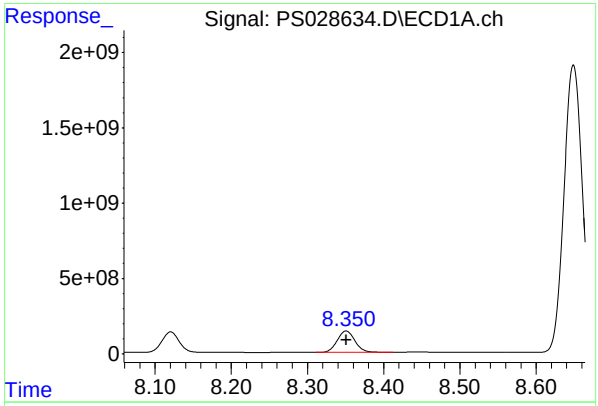
#8 DICHLORPROP

R.T.: 8.121 min
Delta R.T.: 0.000 min
Response: 2142254559
Conc: 705.00 ng/ml



#8 DICHLORPROP

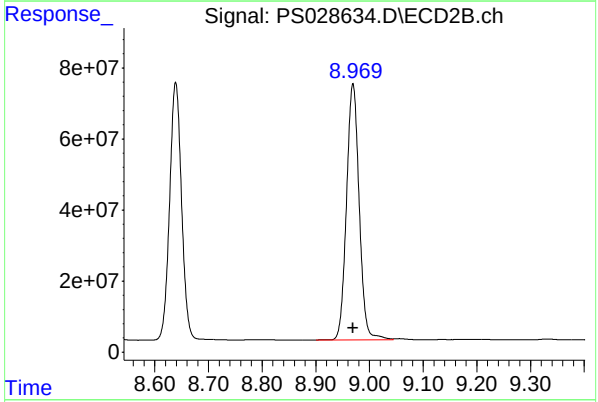
R.T.: 8.639 min
Delta R.T.: 0.000 min
Response: 1118574167
Conc: 705.00 ng/ml



#9 2,4-D

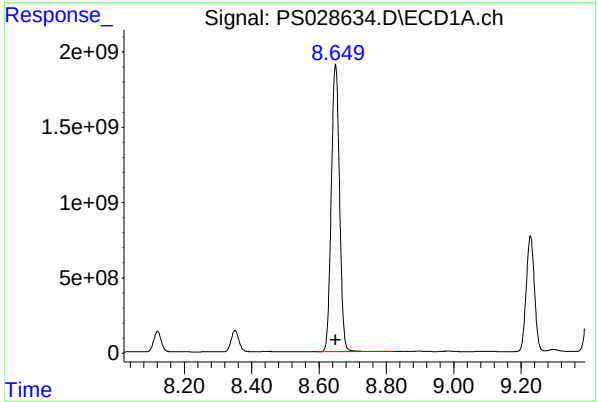
R.T.: 8.351 min
Delta R.T.: 0.000 min
Response: 2327569795
Conc: 705.00 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC750



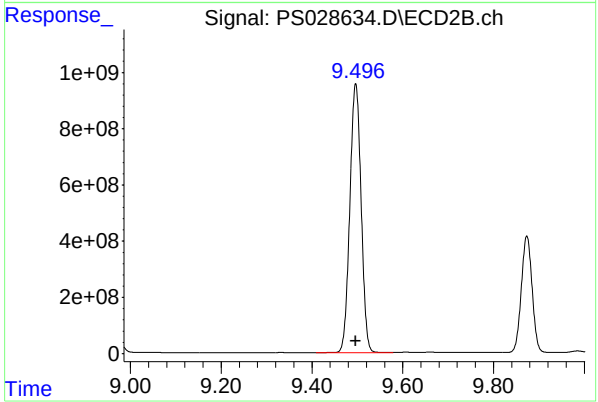
#9 2,4-D

R.T.: 8.969 min
Delta R.T.: 0.000 min
Response: 1181935531
Conc: 705.00 ng/ml



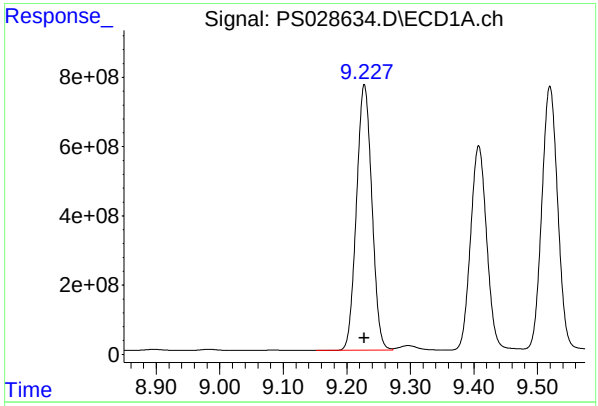
#10 Pentachlorophenol

R.T.: 8.649 min
Delta R.T.: 0.000 min
Response: 32452988068
Conc: 712.50 ng/ml



#10 Pentachlorophenol

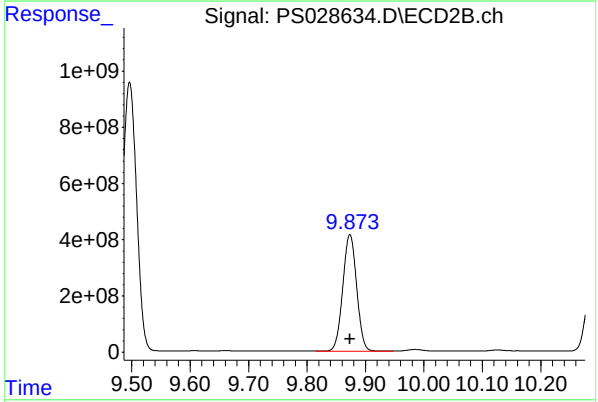
R.T.: 9.496 min
Delta R.T.: 0.000 min
Response: 16483783618
Conc: 712.50 ng/ml



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

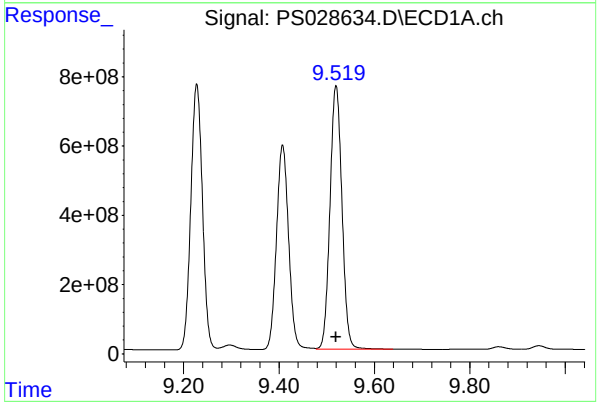
R.T.: 9.228 min
Delta R.T.: 0.000 min
Response: 12913017674
Conc: 712.50 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC750



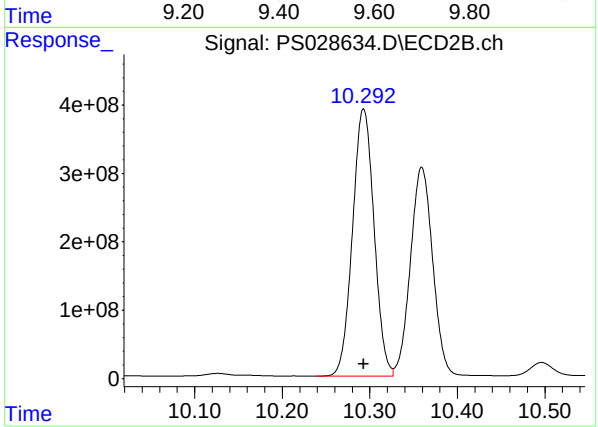
#11 2,4,5-TP (SILVEX)

R.T.: 9.873 min
Delta R.T.: 0.000 min
Response: 6838758973
Conc: 712.50 ng/ml



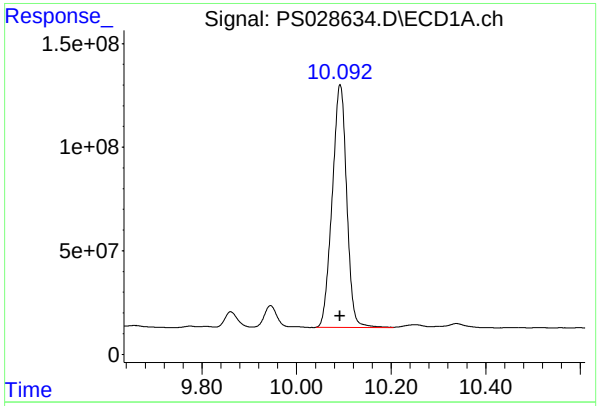
#12 2,4,5-T

R.T.: 9.520 min
Delta R.T.: 0.000 min
Response: 13250213490
Conc: 712.50 ng/ml



#12 2,4,5-T

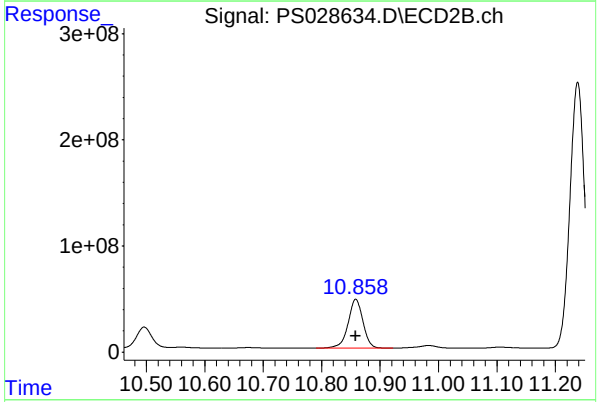
R.T.: 10.293 min
Delta R.T.: 0.000 min
Response: 6668911114
Conc: 712.50 ng/ml



#13 2,4-DB

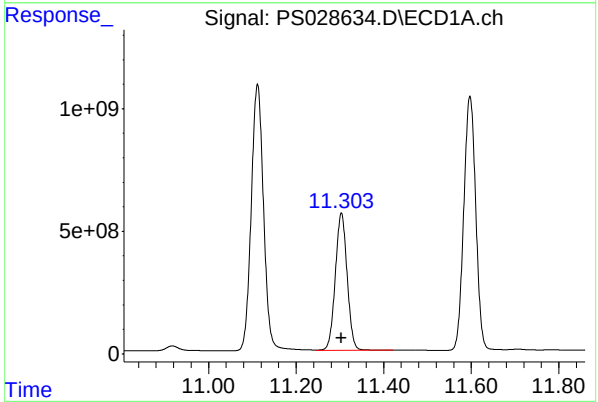
R.T.: 10.092 min
Delta R.T.: 0.000 min
Response: 2492032408
Conc: 712.50 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC750



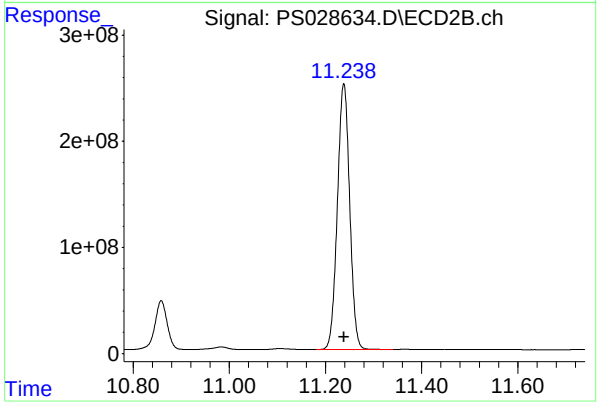
#13 2,4-DB

R.T.: 10.858 min
Delta R.T.: 0.000 min
Response: 811865853
Conc: 712.50 ng/ml



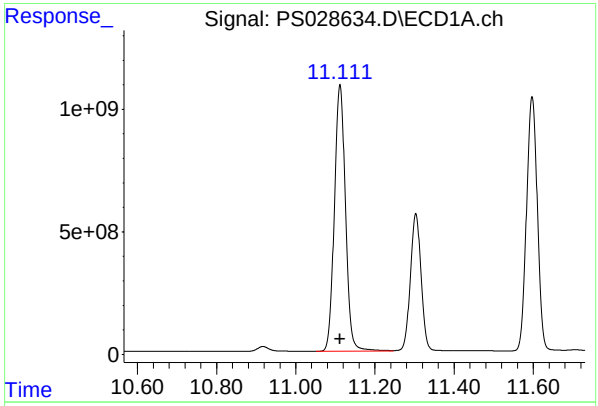
#14 DINOSEB

R.T.: 11.303 min
Delta R.T.: 0.000 min
Response: 10525356258
Conc: 705.00 ng/ml



#14 DINOSEB

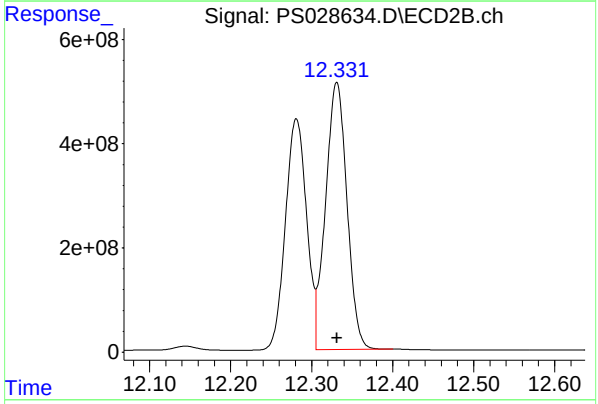
R.T.: 11.238 min
Delta R.T.: 0.000 min
Response: 4452293029
Conc: 705.00 ng/ml



#15 Picloram

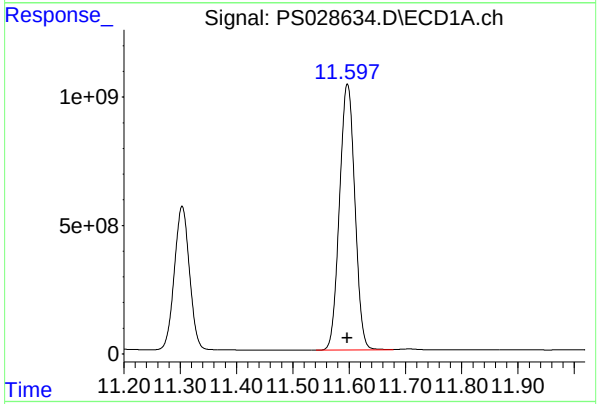
R.T.: 11.112 min
Delta R.T.: 0.000 min
Response: 21213446480
Conc: 712.50 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC750



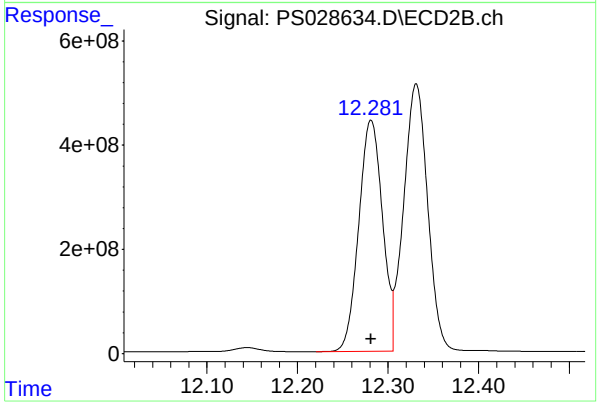
#15 Picloram

R.T.: 12.331 min
Delta R.T.: 0.000 min
Response: 9411136581
Conc: 712.50 ng/ml



#16 DCPA

R.T.: 11.597 min
Delta R.T.: 0.000 min
Response: 19689267967
Conc: 720.00 ng/ml



#16 DCPA

R.T.: 12.281 min
Delta R.T.: 0.000 min
Response: 8071028864
Conc: 720.00 ng/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS112624\
Data File : PS028635.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 14:01
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: Nov 26 14:17:52 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 14:17:43 2024
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	7.226	7.725	2550.1E6	1323.4E6	931.145	975.996
		Target Compounds						
1)	T	Dalapon	2.630	2.689	2619.6E6	1963.5E6	905.639	898.153
2)	T	3,5-DICHL...	6.399	6.681	3396.5E6	1805.0E6	868.484	913.085
3)	T	4-Nitroph...	7.024	7.251	1519.2E6	810.6E6	875.056	882.272
5)	T	DICAMBA	7.413	7.924	10463.0E6	5878.2E6	898.080	958.281
6)	T	MCPP	7.597	8.029	714.8E6	411.7E6	99.961	96.388
7)	T	MCPA	7.748	8.274	970.3E6	567.3E6	94.332	91.061
8)	T	DICHLORPROP	8.120	8.639	2762.6E6	1489.1E6	867.830	927.289
9)	T	2,4-D	8.350	8.969	2989.3E6	1553.7E6	865.875	911.790
10)	T	Pentachlo...	8.649	9.496	40226.6E6	21475.2E6	861.439	923.952
11)	T	2,4,5-TP ...	9.227	9.873	16624.5E6	9024.3E6	888.958	938.906
12)	T	2,4,5-T	9.519	10.292	17026.6E6	8787.5E6	887.193	936.329
13)	T	2,4-DB	10.092	10.859	3253.1E6	1085.1E6	906.273	947.284
14)	T	DINOSEB	11.303	11.237	13640.3E6	5898.5E6	892.035	936.066
15)	T	Picloram	11.110	12.330	27996.2E6	12779.6E6	932.334	1001.392
16)	T	DCPA	11.597	12.280	25255.0E6	10653.9E6	896.906	954.145

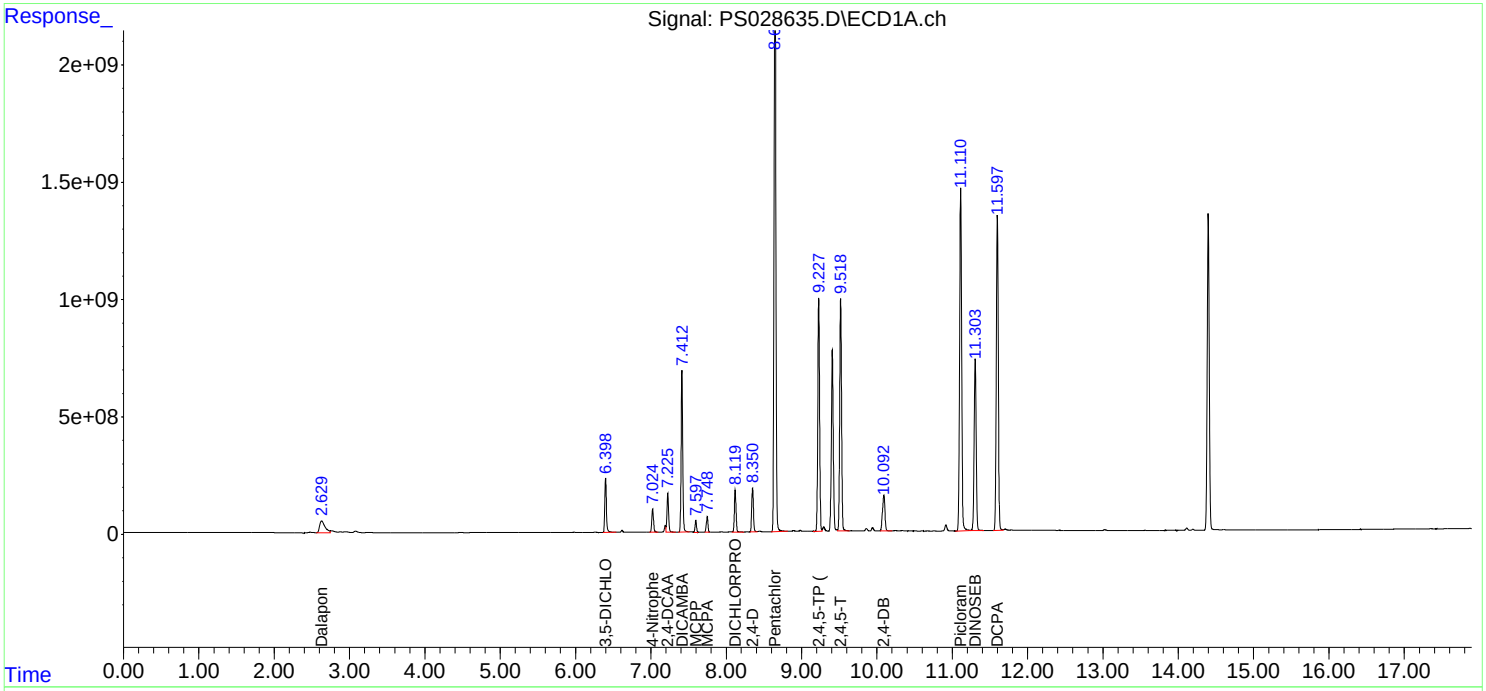
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

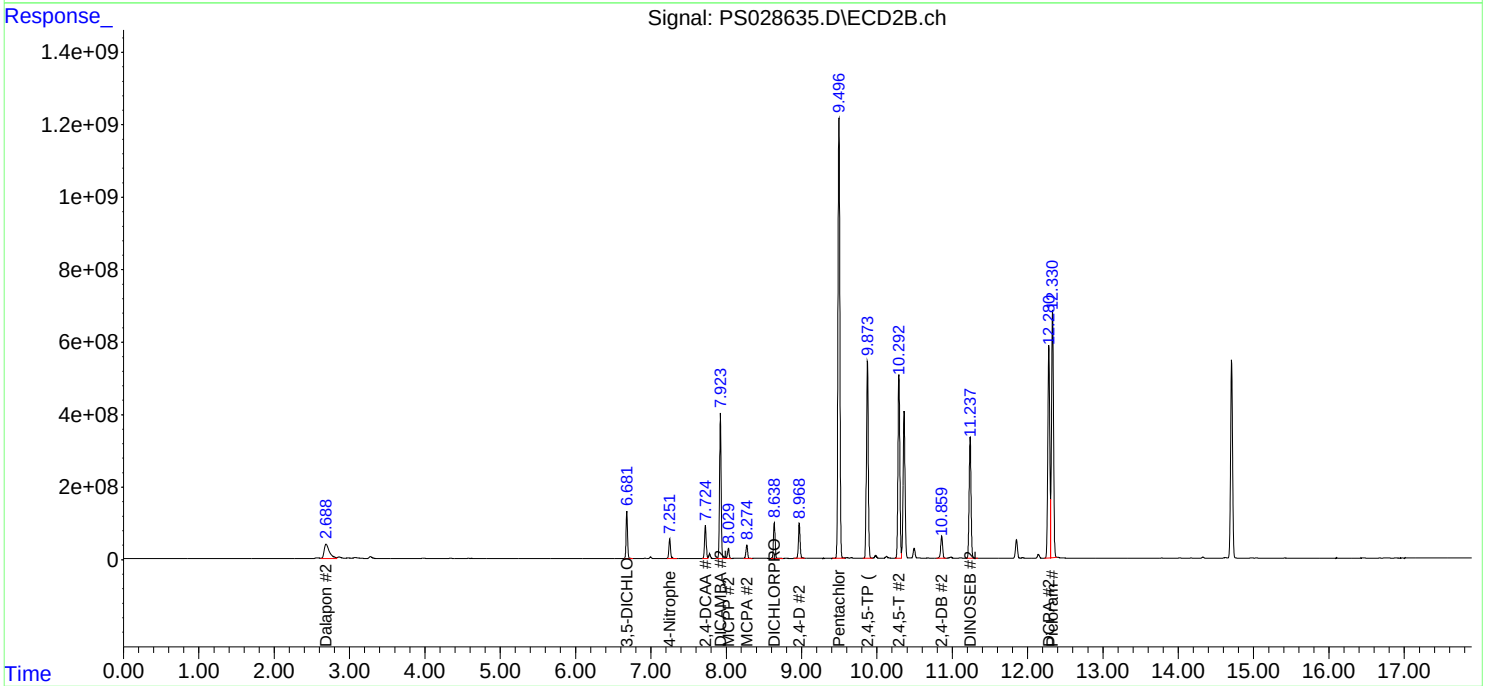
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS112624\
Data File : PS028635.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 14:01
Operator : AR\AJ
Sample : HSTDICC1000
Misc :
ALS Vial : 6 Sample Multiplier: 1

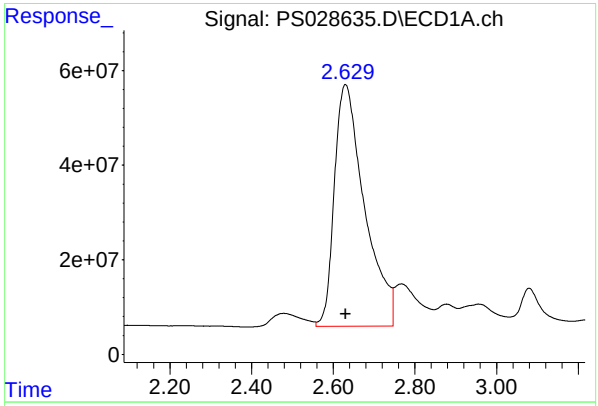
Instrument :
ECD_S
ClientSampleId :
HSTDICC1000

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 26 14:17:52 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 14:17:43 2024
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



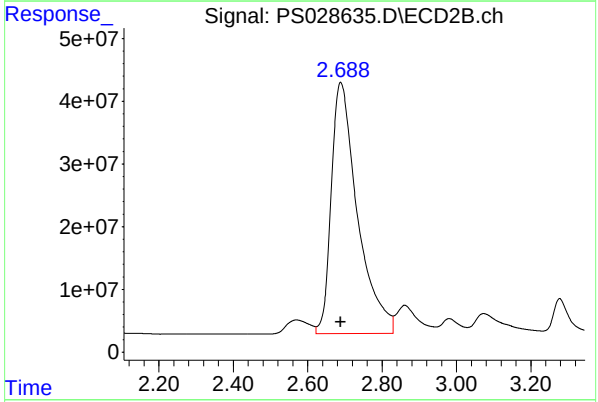




#1 Dalapon

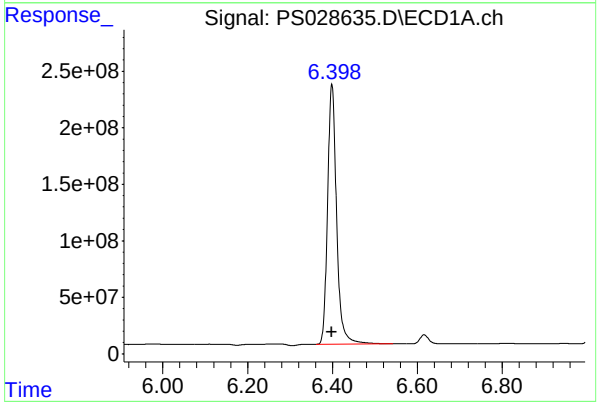
R.T.: 2.630 min
Delta R.T.: 0.000 min
Response: 2619638115
Conc: 905.64 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000



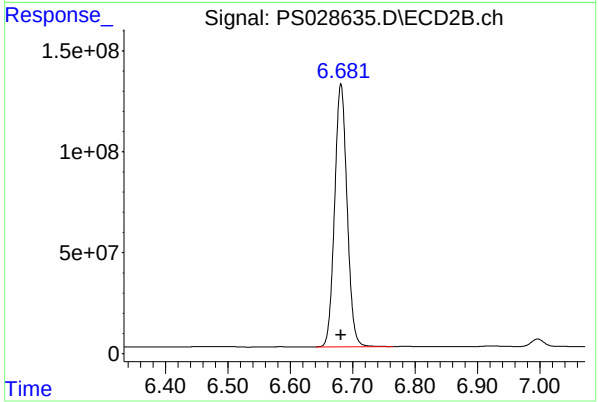
#1 Dalapon

R.T.: 2.689 min
Delta R.T.: 0.000 min
Response: 1963450086
Conc: 898.15 ng/ml



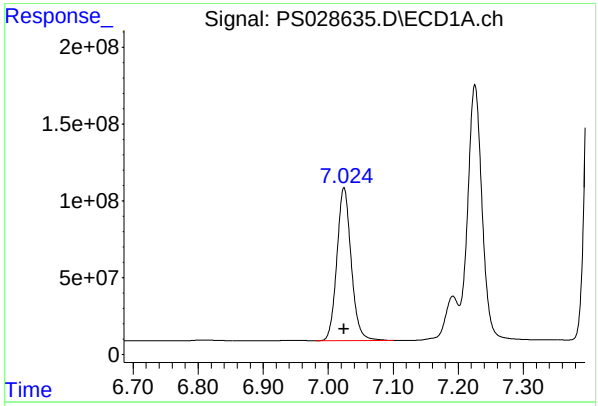
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.399 min
Delta R.T.: 0.000 min
Response: 3396490184
Conc: 868.48 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

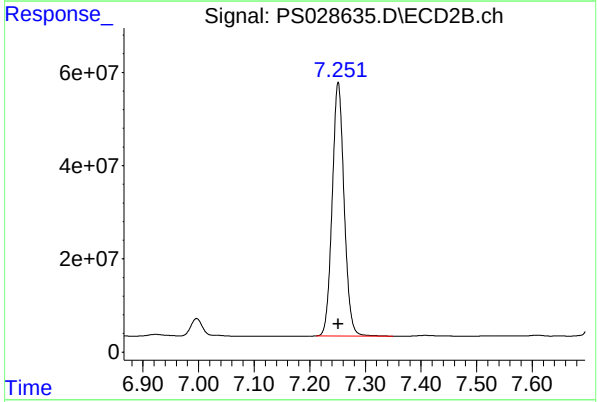
R.T.: 6.681 min
Delta R.T.: 0.000 min
Response: 1804995312
Conc: 913.08 ng/ml



#3 4-Nitrophenol

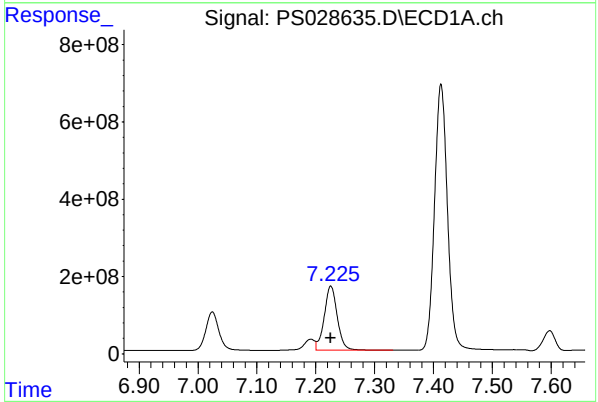
R.T.: 7.024 min
Delta R.T.: 0.000 min
Response: 1519181590
Conc: 875.06 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000



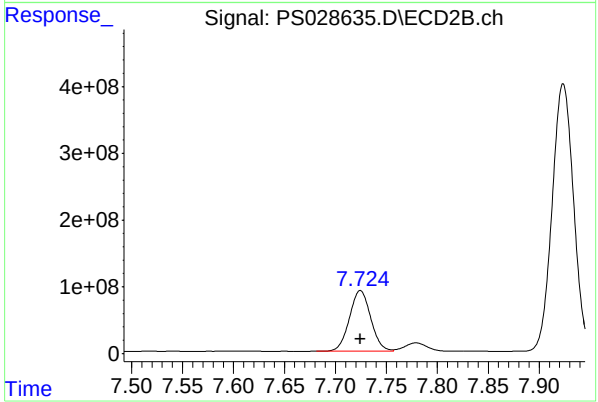
#3 4-Nitrophenol

R.T.: 7.251 min
Delta R.T.: 0.000 min
Response: 810601416
Conc: 882.27 ng/ml



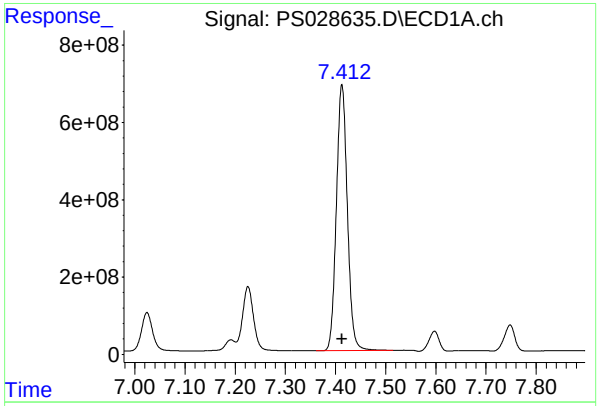
#4 2,4-DCAA

R.T.: 7.226 min
Delta R.T.: 0.000 min
Response: 2550086496
Conc: 931.15 ng/ml



#4 2,4-DCAA

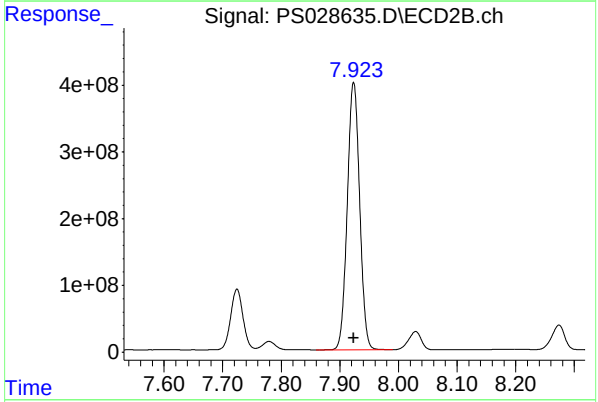
R.T.: 7.725 min
Delta R.T.: 0.000 min
Response: 1323403926
Conc: 976.00 ng/ml



#5 DICAMBA

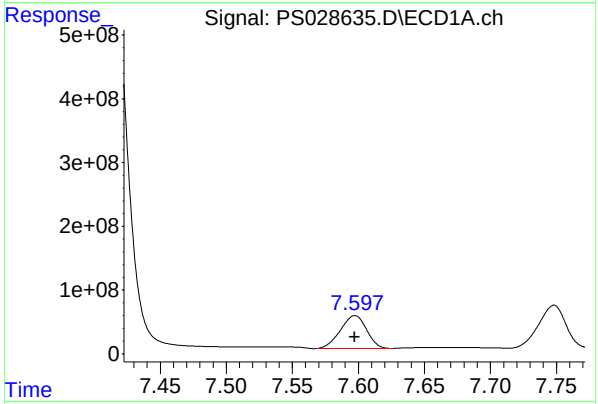
R.T.: 7.413 min
Delta R.T.: 0.000 min
Response: 10462952810
Conc: 898.08 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000



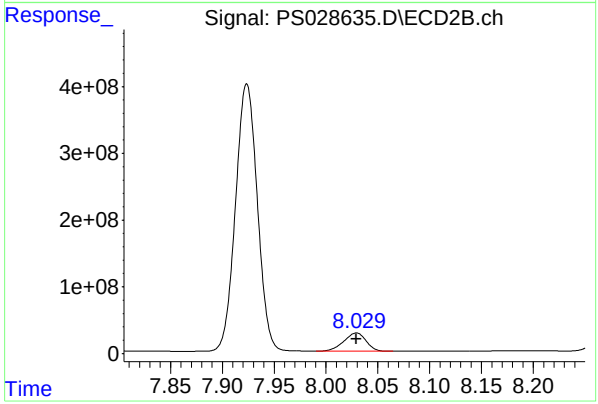
#5 DICAMBA

R.T.: 7.924 min
Delta R.T.: 0.000 min
Response: 5878185097
Conc: 958.28 ng/ml



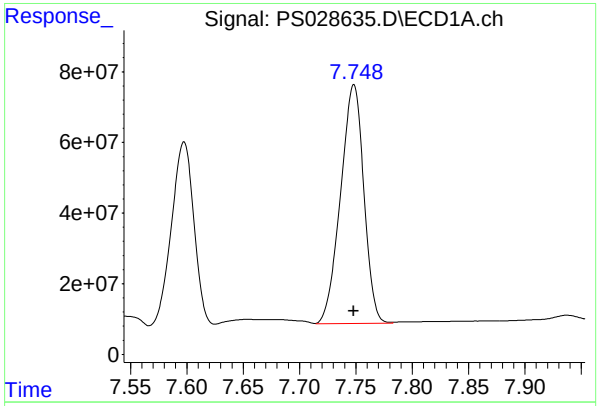
#6 MCPP

R.T.: 7.597 min
Delta R.T.: 0.000 min
Response: 714837563
Conc: 99.96 ug/ml



#6 MCPP

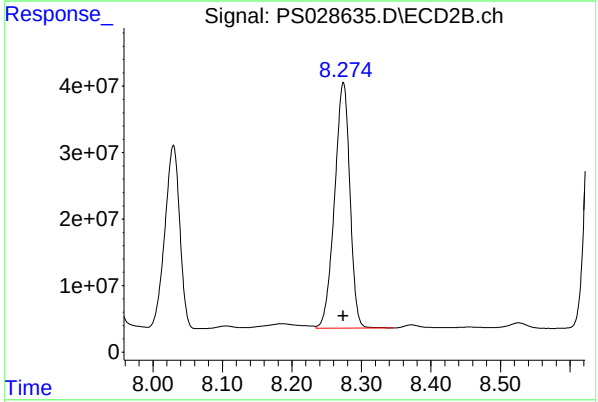
R.T.: 8.029 min
Delta R.T.: 0.000 min
Response: 411740563
Conc: 96.39 ug/ml



#7 MCPA

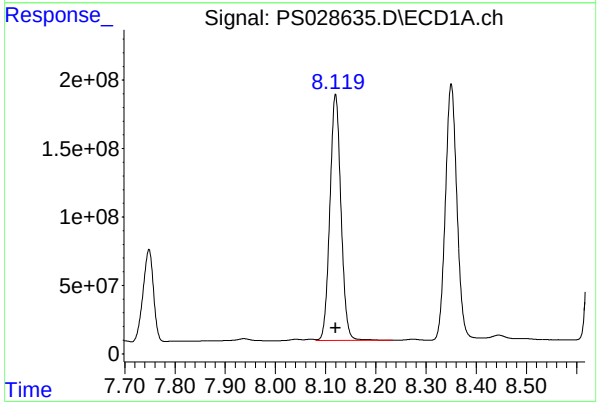
R.T.: 7.748 min
Delta R.T.: 0.000 min
Response: 970276310
Conc: 94.33 ug/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000



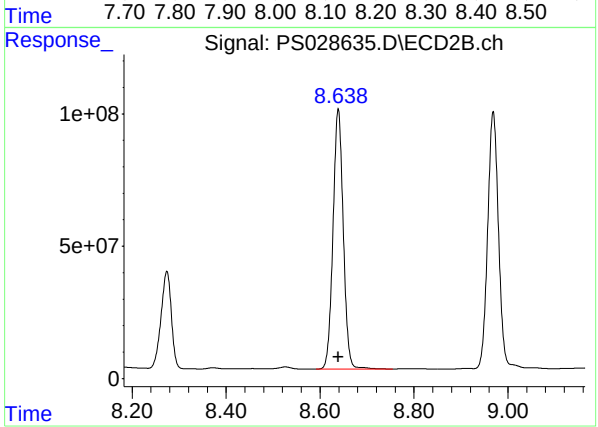
#7 MCPA

R.T.: 8.274 min
Delta R.T.: 0.000 min
Response: 567347179
Conc: 91.06 ug/ml



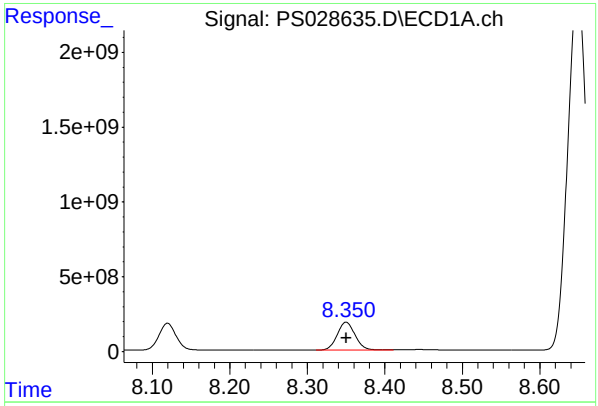
#8 DICHLORPROP

R.T.: 8.120 min
Delta R.T.: 0.000 min
Response: 2762552807
Conc: 867.83 ng/ml



#8 DICHLORPROP

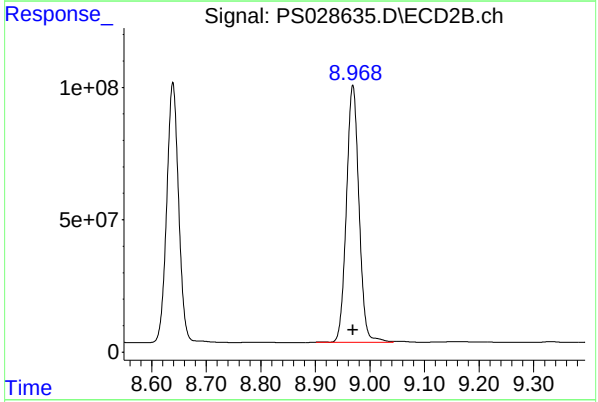
R.T.: 8.639 min
Delta R.T.: 0.000 min
Response: 1489084790
Conc: 927.29 ng/ml



#9 2,4-D

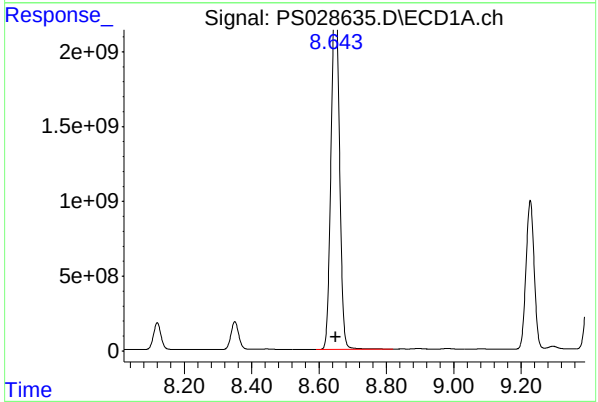
R.T.: 8.350 min
Delta R.T.: 0.000 min
Response: 2989321912
Conc: 865.87 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000



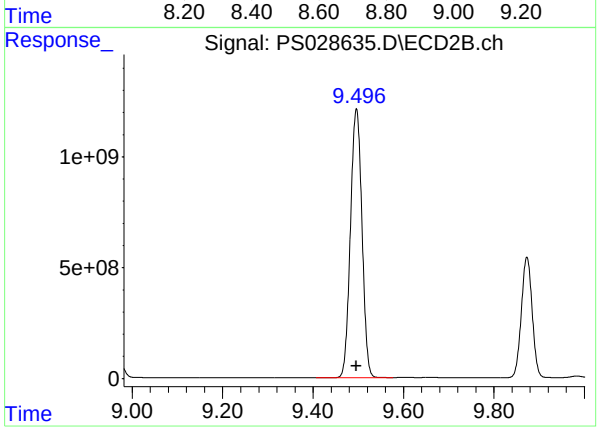
#9 2,4-D

R.T.: 8.969 min
Delta R.T.: 0.000 min
Response: 1553709767
Conc: 911.79 ng/ml



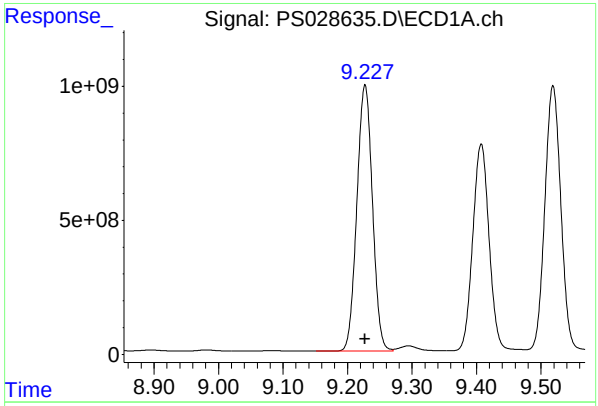
#10 Pentachlorophenol

R.T.: 8.649 min
Delta R.T.: 0.000 min
Response: 40226637390
Conc: 861.44 ng/ml



#10 Pentachlorophenol

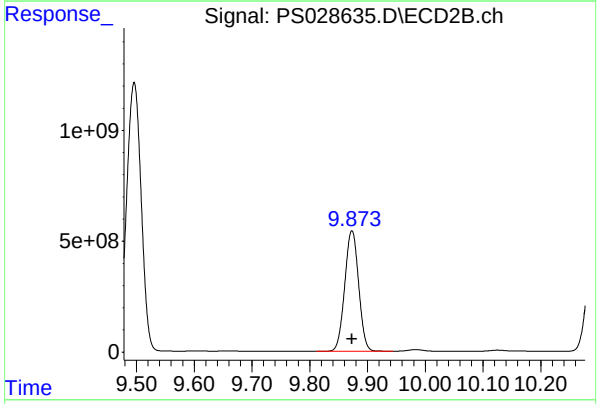
R.T.: 9.496 min
Delta R.T.: 0.000 min
Response: 21475233765
Conc: 923.95 ng/ml



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

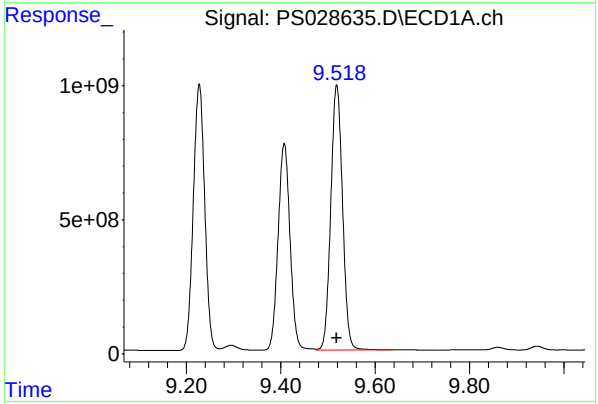
R.T.: 9.227 min
Delta R.T.: 0.000 min
Response: 16624490019
Conc: 888.96 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000



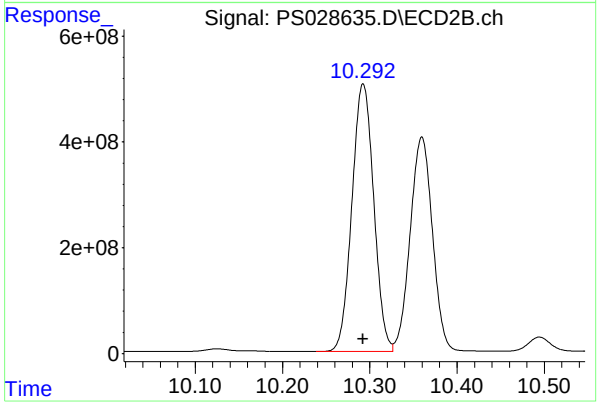
#11 2,4,5-TP (SILVEX)

R.T.: 9.873 min
Delta R.T.: 0.000 min
Response: 9024326473
Conc: 938.91 ng/ml



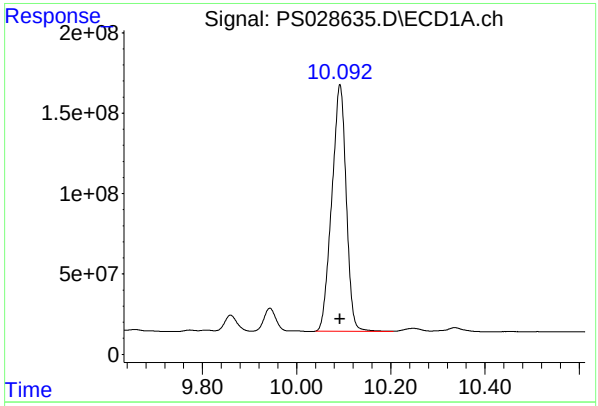
#12 2,4,5-T

R.T.: 9.519 min
Delta R.T.: 0.000 min
Response: 17026596920
Conc: 887.19 ng/ml



#12 2,4,5-T

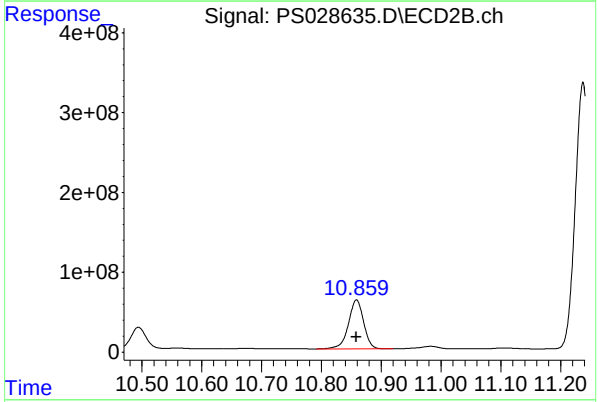
R.T.: 10.292 min
Delta R.T.: 0.000 min
Response: 8787456075
Conc: 936.33 ng/ml



#13 2,4-DB

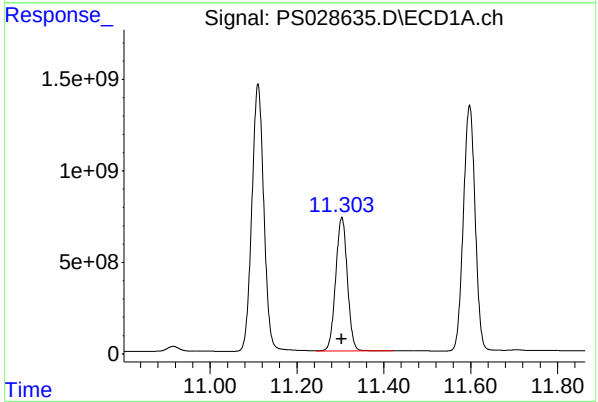
R.T.: 10.092 min
Delta R.T.: 0.000 min
Response: 3253123354
Conc: 906.27 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000



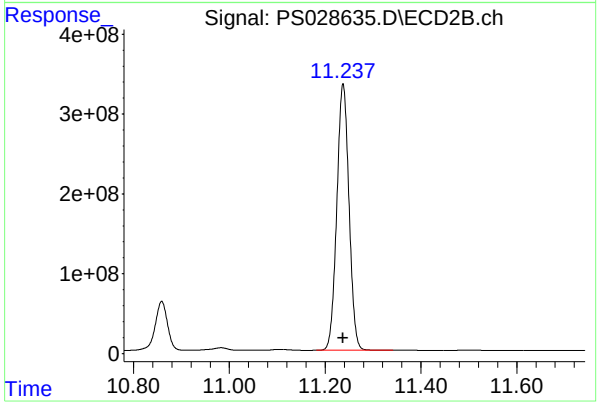
#13 2,4-DB

R.T.: 10.859 min
Delta R.T.: 0.000 min
Response: 1085148694
Conc: 947.28 ng/ml



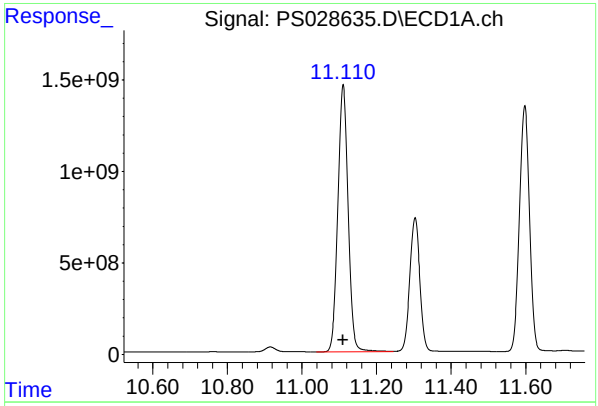
#14 DINOSEB

R.T.: 11.303 min
Delta R.T.: 0.000 min
Response: 13640322548
Conc: 892.04 ng/ml



#14 DINOSEB

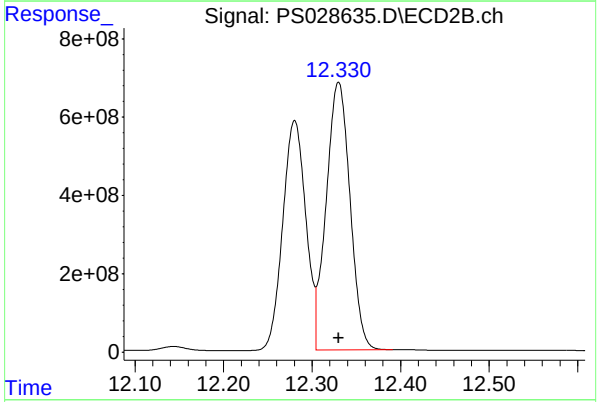
R.T.: 11.237 min
Delta R.T.: 0.000 min
Response: 5898526859
Conc: 936.07 ng/ml



#15 Picloram

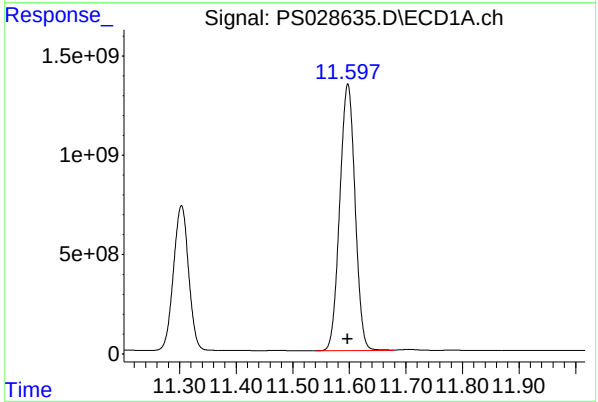
R.T.: 11.110 min
Delta R.T.: 0.000 min
Response: 27996240168
Conc: 932.33 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000



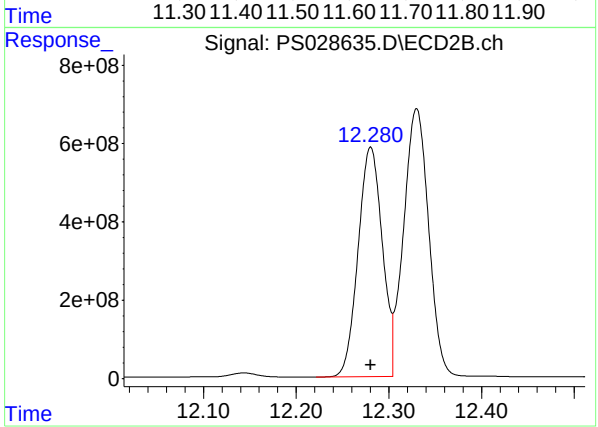
#15 Picloram

R.T.: 12.330 min
Delta R.T.: 0.000 min
Response: 12779605543
Conc: 1001.39 ng/ml



#16 DCPA

R.T.: 11.597 min
Delta R.T.: 0.000 min
Response: 25255023204
Conc: 896.91 ng/ml



#16 DCPA

R.T.: 12.280 min
Delta R.T.: 0.000 min
Response: 10653897069
Conc: 954.15 ng/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS112624\
Data File : PS028636.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 14:25
Operator : AR\AJ
Sample : HSTDICC1500
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 26 14:43:42 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 14:43:32 2024
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	7.226	7.725	3685.6E6	1967.0E6	1374.037	1460.255
		Target Compounds						
1)	T	Dalapon	2.630	2.688	4011.6E6	2968.4E6	1382.427	1359.282
2)	T	3,5-DICHL...	6.399	6.681	4889.4E6	2668.9E6	1276.728	1358.862
3)	T	4-Nitroph...	7.025	7.251	2252.9E6	1208.9E6	1310.611	1325.304
5)	T	DICAMBA	7.413	7.924	15229.7E6	8805.0E6	1326.571	1430.266
6)	T	MCPP	7.601	8.033	1111.5E6	627.6E6	152.308	145.694
7)	T	MCPA	7.753	8.278	1472.0E6	852.2E6	142.371	137.310
8)	T	DICHLORPROP	8.121	8.640	3993.6E6	2213.3E6	1282.849	1384.497
9)	T	2,4-D	8.350	8.969	4302.3E6	2310.6E6	1275.827	1366.463
10)	T	Pentachlo...	8.654	9.497	47986.8E6	30613.5E6	1088.319	1337.367
11)	T	2,4,5-TP ...	9.228	9.873	23647.2E6	13204.7E6	1293.628	1383.777
12)	T	2,4,5-T	9.520	10.293	24241.3E6	12841.2E6	1292.489	1379.252
13)	T	2,4-DB	10.092	10.859	4774.2E6	1640.8E6	1347.982	1430.884
14)	T	DINOSEB	11.303	11.237	19692.3E6	8706.1E6	1310.531	1387.195
15)	T	Picloram	11.111	12.330	40714.3E6	19103.7E6	1369.157	1481.977
16)	T	DCPA	11.597	12.280	35775.2E6	15584.4E6	1301.148	1404.348

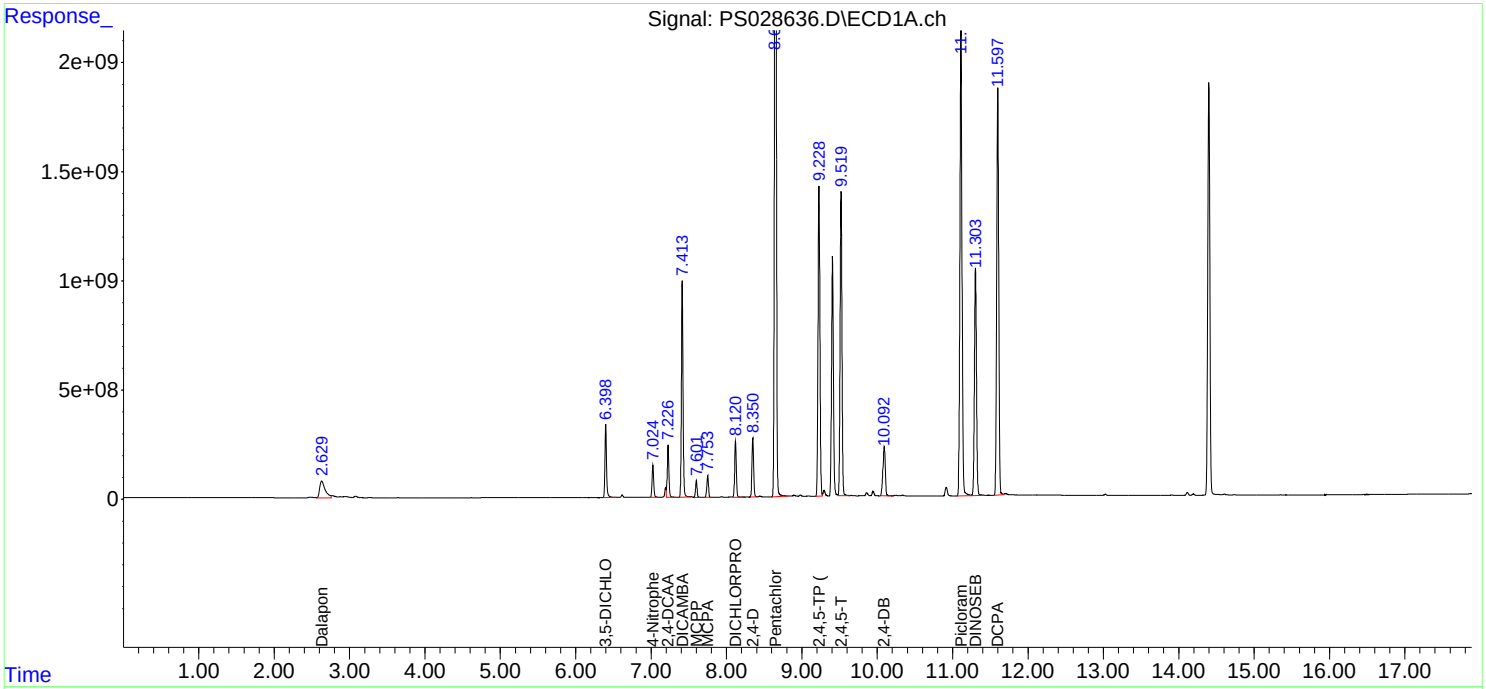
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

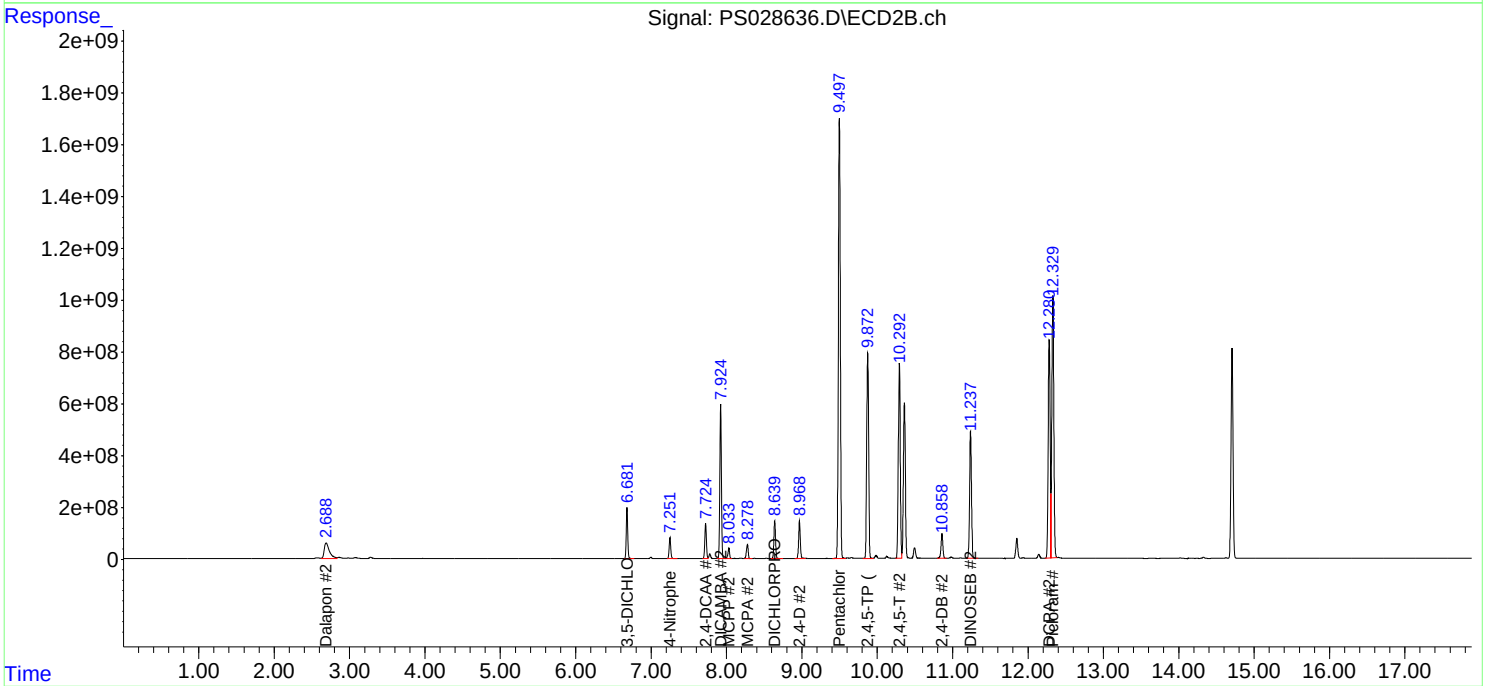
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS112624\
Data File : PS028636.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 14:25
Operator : AR\AJ
Sample : HSTDICC1500
Misc :
ALS Vial : 7 Sample Multiplier: 1

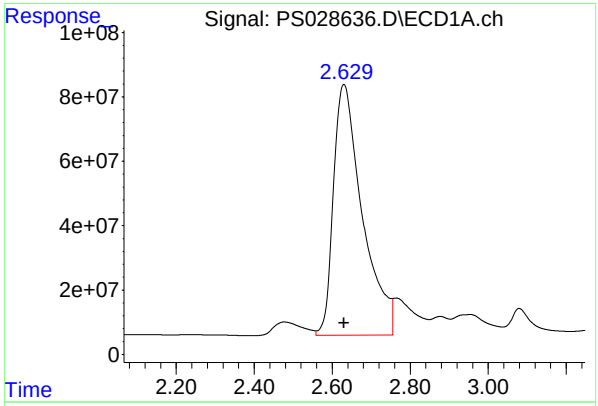
Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 26 14:43:42 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 14:43:32 2024
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



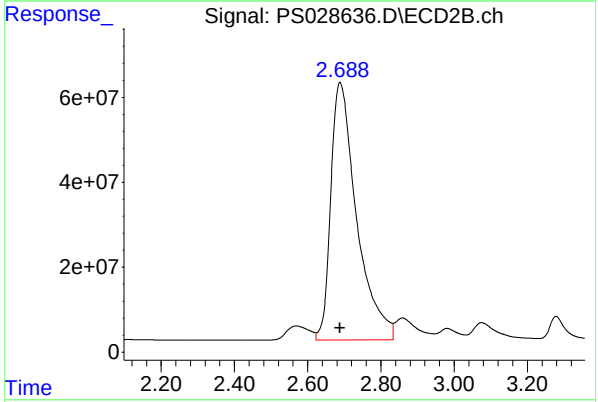




#1 Dalapon

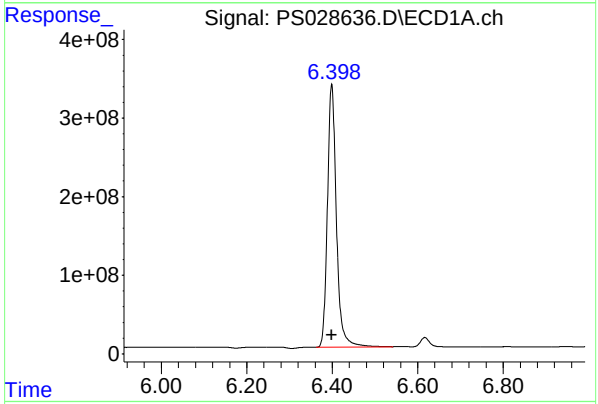
R.T.: 2.630 min
Delta R.T.: 0.000 min
Response: 4011590390
Conc: 1382.43 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500



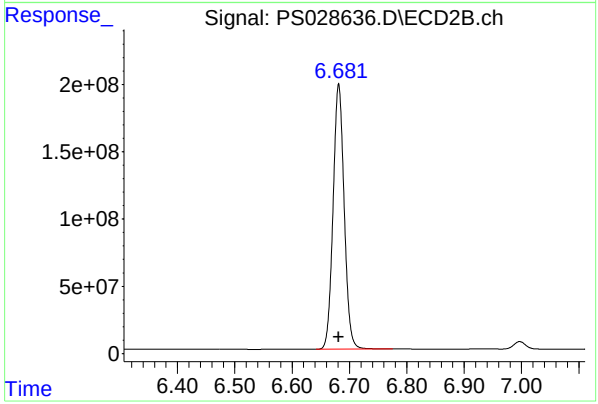
#1 Dalapon

R.T.: 2.688 min
Delta R.T.: 0.000 min
Response: 2968413659
Conc: 1359.28 ng/ml



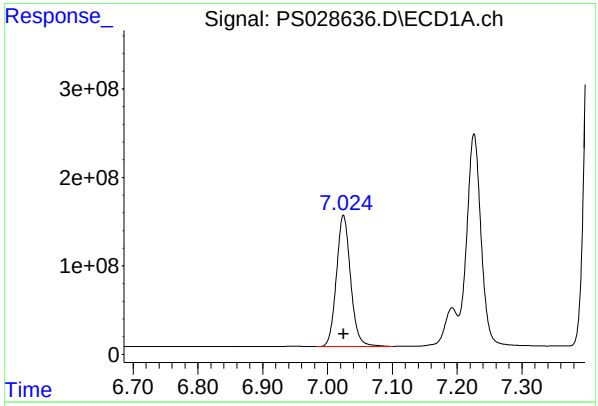
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.399 min
Delta R.T.: 0.000 min
Response: 4889428610
Conc: 1276.73 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

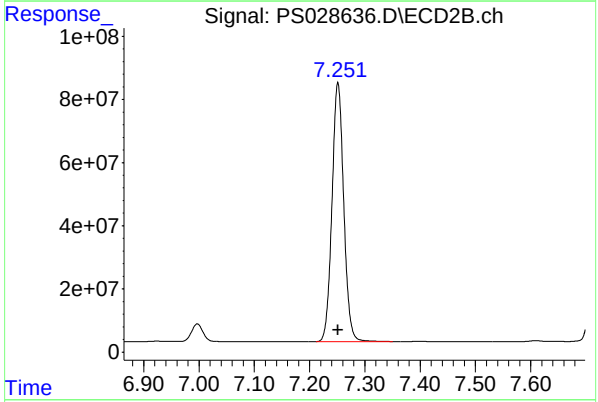
R.T.: 6.681 min
Delta R.T.: 0.000 min
Response: 2668928936
Conc: 1358.86 ng/ml



#3 4-Nitrophenol

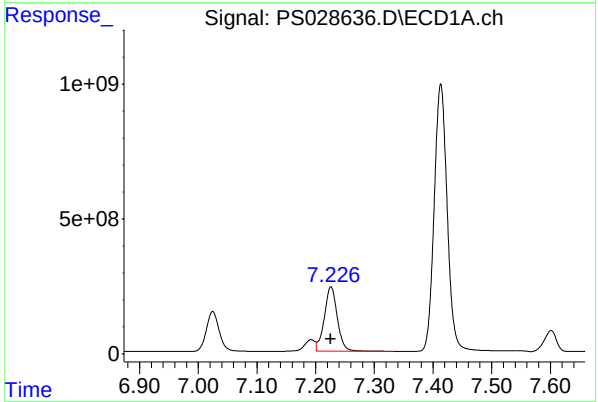
R.T.: 7.025 min
Delta R.T.: 0.000 min
Response: 2252905232
Conc: 1310.61 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500



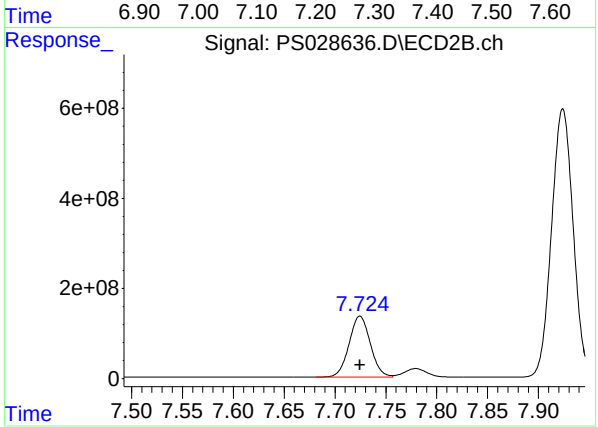
#3 4-Nitrophenol

R.T.: 7.251 min
Delta R.T.: 0.000 min
Response: 1208855399
Conc: 1325.30 ng/ml



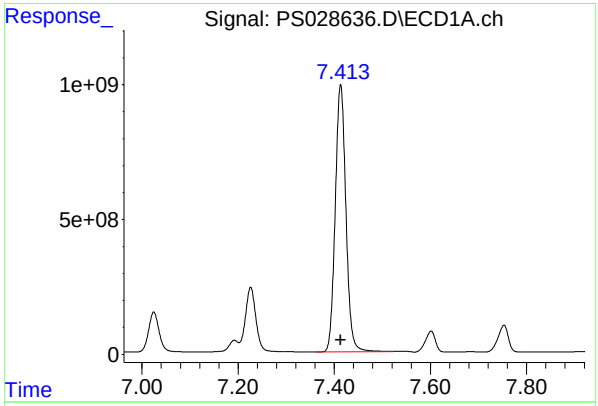
#4 2,4-DCAA

R.T.: 7.226 min
Delta R.T.: 0.000 min
Response: 3685638727
Conc: 1374.04 ng/ml



#4 2,4-DCAA

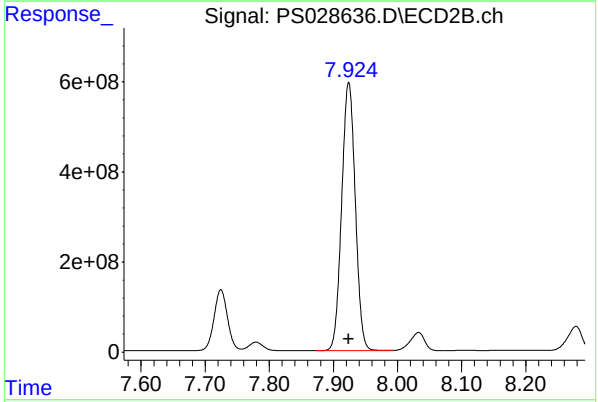
R.T.: 7.725 min
Delta R.T.: 0.000 min
Response: 1967007054
Conc: 1460.26 ng/ml



#5 DICAMBA

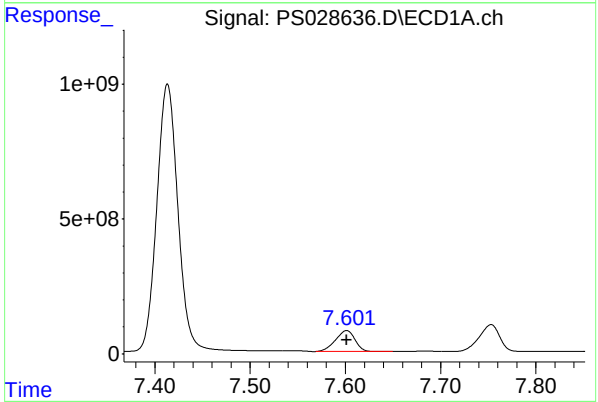
R.T.: 7.413 min
Delta R.T.: 0.000 min
Response: 15229739109
Conc: 1326.57 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500



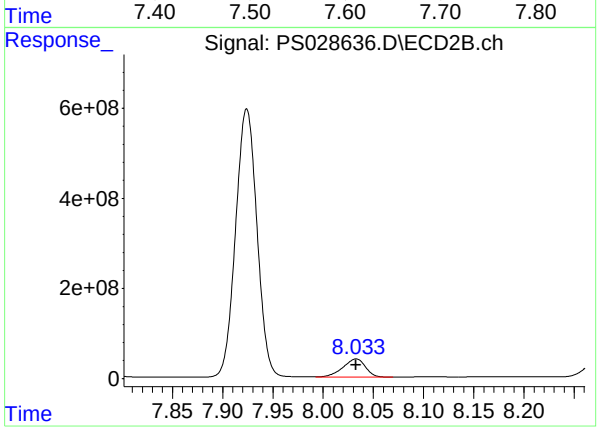
#5 DICAMBA

R.T.: 7.924 min
Delta R.T.: 0.000 min
Response: 8805023334
Conc: 1430.27 ng/ml



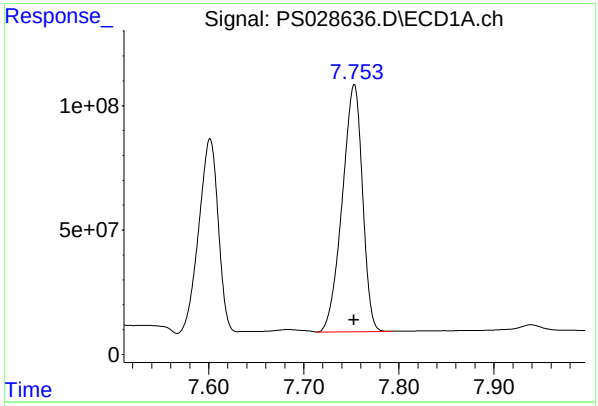
#6 MCPP

R.T.: 7.601 min
Delta R.T.: 0.000 min
Response: 1111468266
Conc: 152.31 ug/ml



#6 MCPP

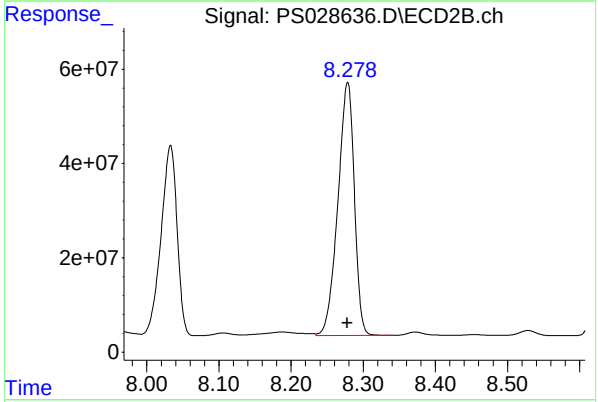
R.T.: 8.033 min
Delta R.T.: 0.000 min
Response: 627584328
Conc: 145.69 ug/ml



#7 MCPA

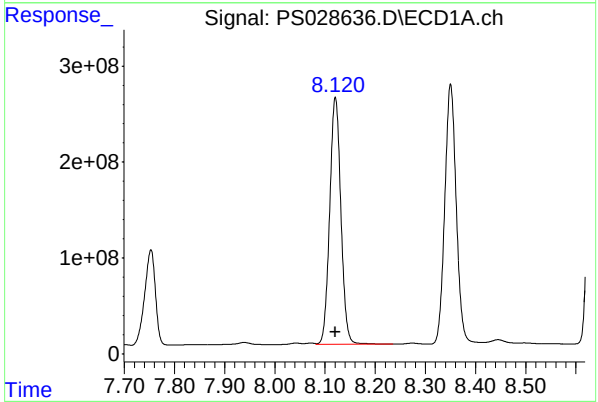
R.T.: 7.753 min
Delta R.T.: 0.000 min
Response: 1471978232
Conc: 142.37 ug/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500



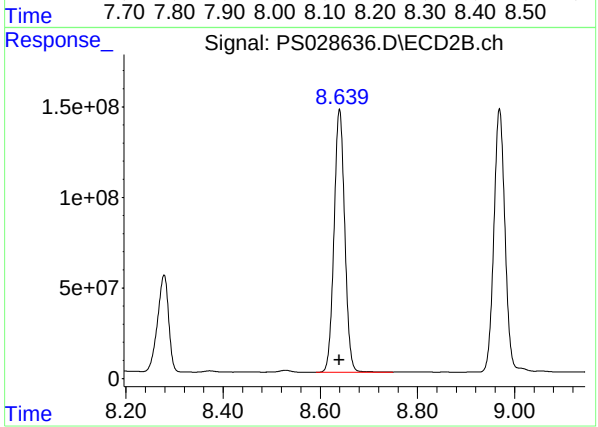
#7 MCPA

R.T.: 8.278 min
Delta R.T.: 0.000 min
Response: 852150879
Conc: 137.31 ug/ml



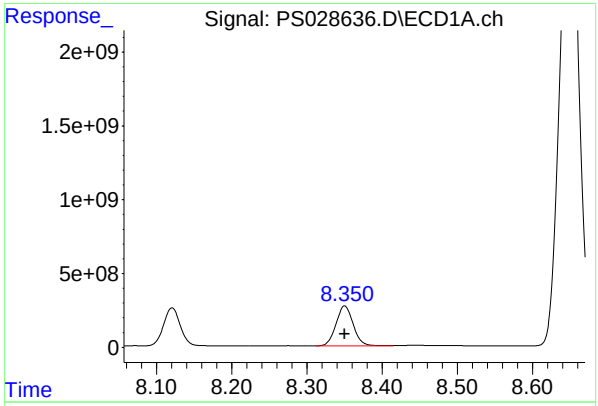
#8 DICHLORPROP

R.T.: 8.121 min
Delta R.T.: 0.000 min
Response: 3993640609
Conc: 1282.85 ng/ml



#8 DICHLORPROP

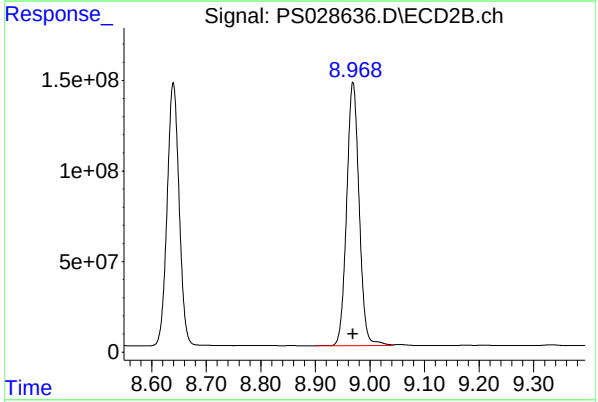
R.T.: 8.640 min
Delta R.T.: 0.000 min
Response: 2213282126
Conc: 1384.50 ng/ml



#9 2,4-D

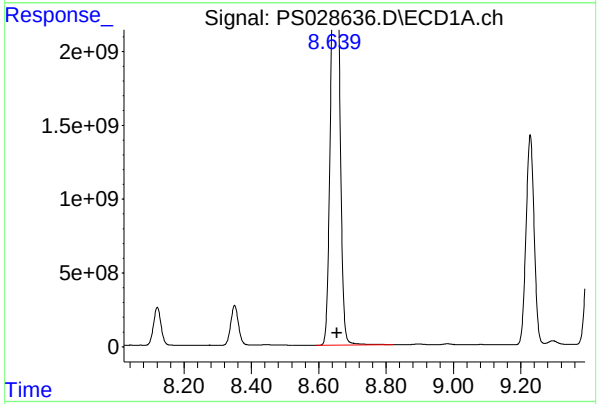
R.T.: 8.350 min
Delta R.T.: 0.000 min
Response: 4302278884
Conc: 1275.83 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500



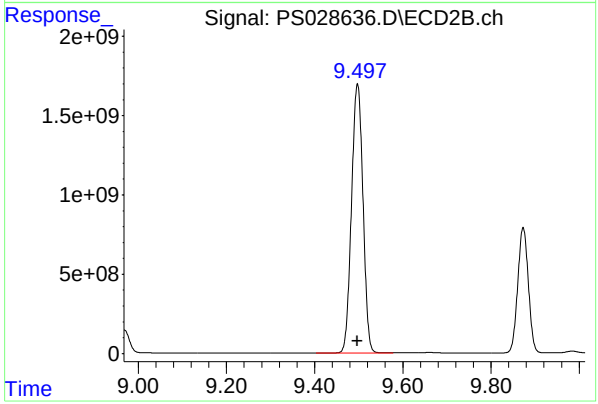
#9 2,4-D

R.T.: 8.969 min
Delta R.T.: 0.000 min
Response: 2310646374
Conc: 1366.46 ng/ml



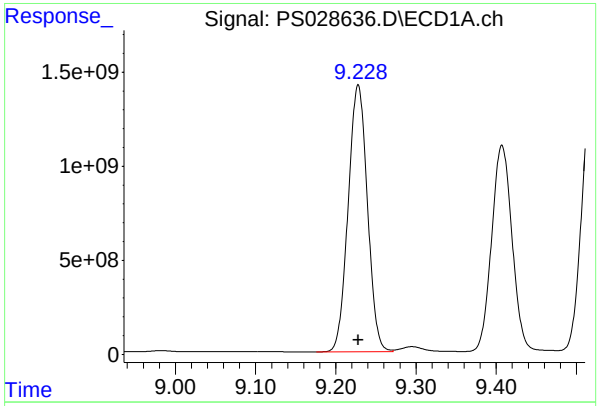
#10 Pentachlorophenol

R.T.: 8.654 min
Delta R.T.: 0.000 min
Response: 47986815842
Conc: 1088.32 ng/ml



#10 Pentachlorophenol

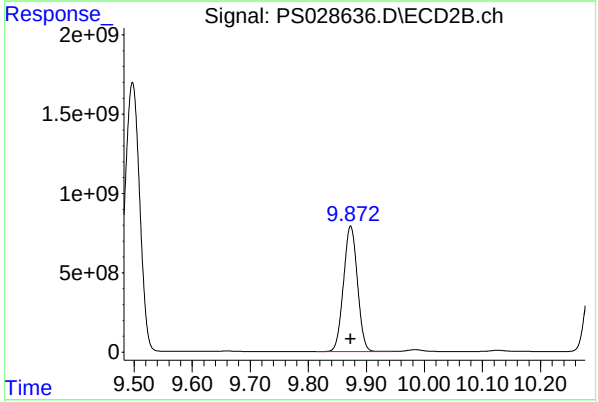
R.T.: 9.497 min
Delta R.T.: 0.000 min
Response: 30613496171
Conc: 1337.37 ng/ml



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

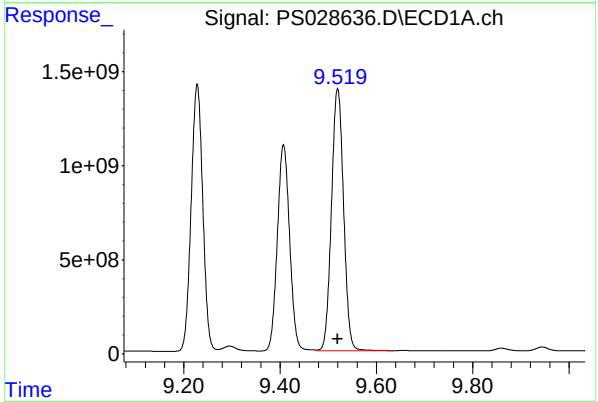
R.T.: 9.228 min
Delta R.T.: 0.000 min
Response: 23647234897
Conc: 1293.63 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500



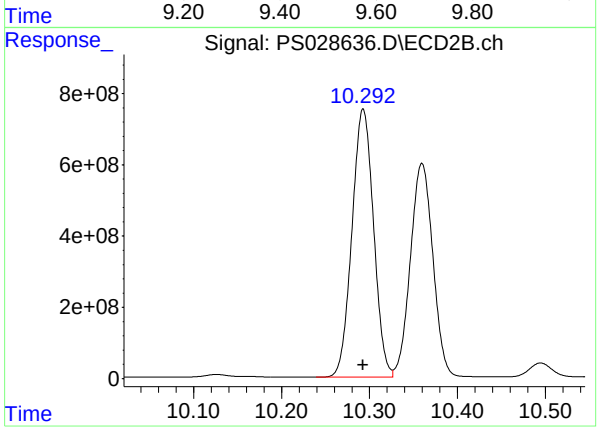
#11 2,4,5-TP (SILVEX)

R.T.: 9.873 min
Delta R.T.: 0.000 min
Response: 13204722398
Conc: 1383.78 ng/ml



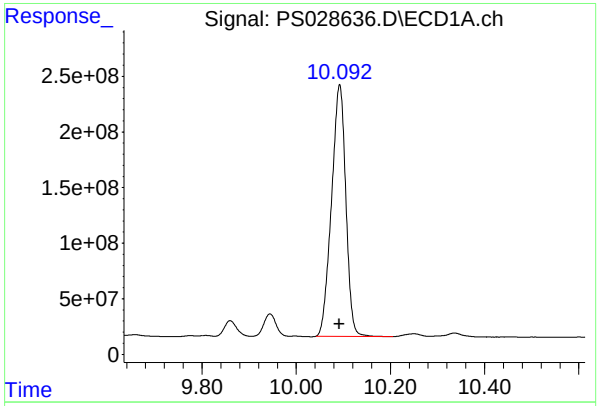
#12 2,4,5-T

R.T.: 9.520 min
Delta R.T.: 0.000 min
Response: 24241285481
Conc: 1292.49 ng/ml



#12 2,4,5-T

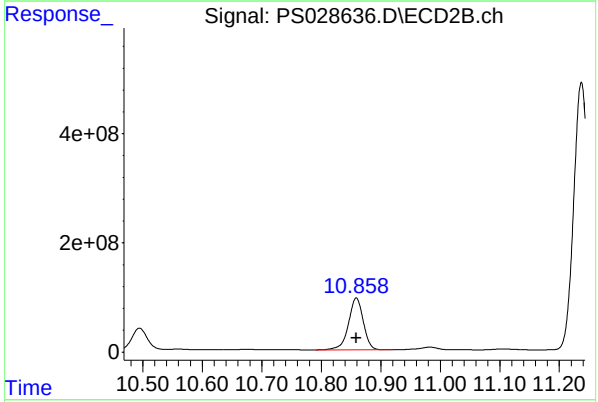
R.T.: 10.293 min
Delta R.T.: 0.000 min
Response: 12841234880
Conc: 1379.25 ng/ml



#13 2,4-DB

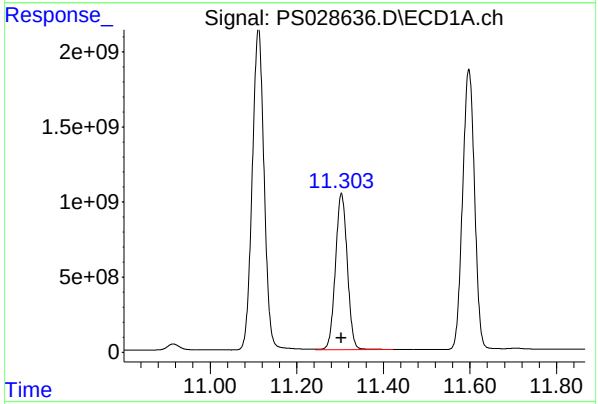
R.T.: 10.092 min
Delta R.T.: 0.000 min
Response: 4774157641
Conc: 1347.98 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500



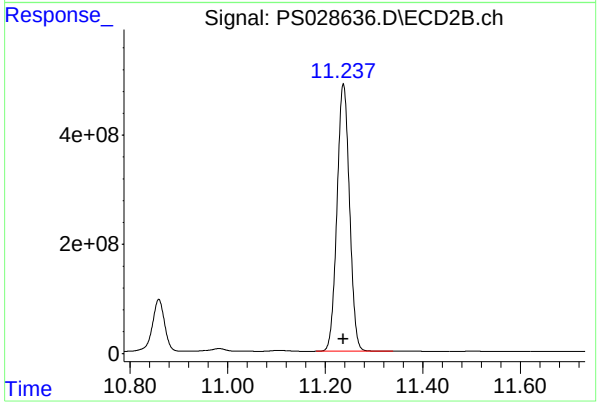
#13 2,4-DB

R.T.: 10.859 min
Delta R.T.: 0.000 min
Response: 1640825001
Conc: 1430.88 ng/ml



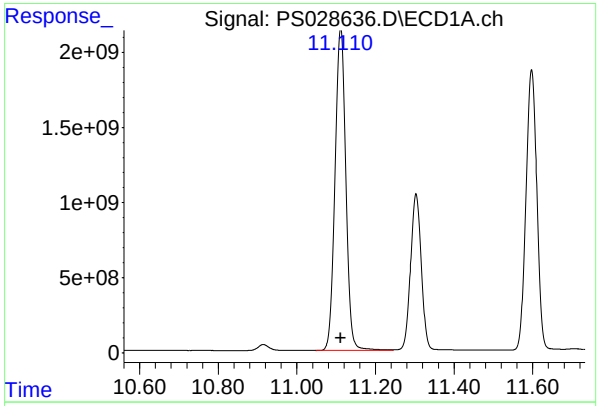
#14 DINOSEB

R.T.: 11.303 min
Delta R.T.: 0.000 min
Response: 19692331323
Conc: 1310.53 ng/ml



#14 DINOSEB

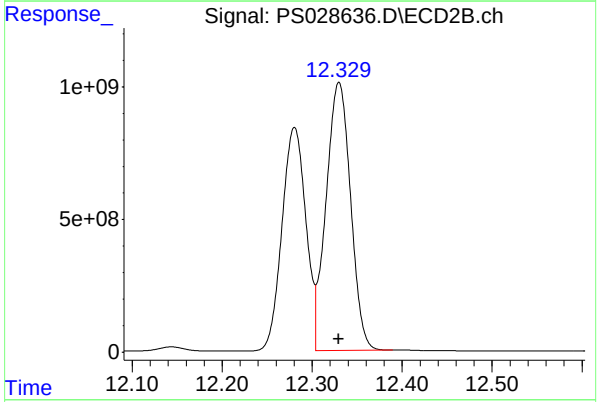
R.T.: 11.237 min
Delta R.T.: 0.000 min
Response: 8706066422
Conc: 1387.20 ng/ml



#15 Picloram

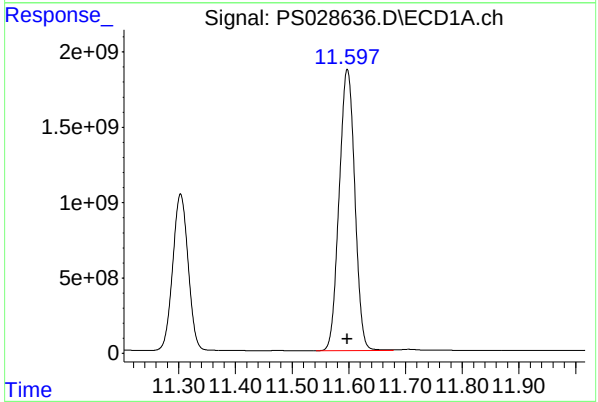
R.T.: 11.111 min
Delta R.T.: 0.000 min
Response: 40714301505
Conc: 1369.16 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500



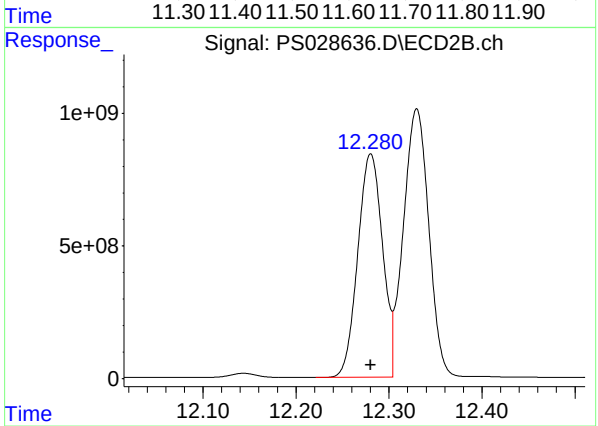
#15 Picloram

R.T.: 12.330 min
Delta R.T.: 0.000 min
Response: 19103714333
Conc: 1481.98 ng/ml



#16 DCPA

R.T.: 11.597 min
Delta R.T.: 0.000 min
Response: 35775236604
Conc: 1301.15 ng/ml



#16 DCPA

R.T.: 12.280 min
Delta R.T.: 0.000 min
Response: 15584359411
Conc: 1404.35 ng/ml

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS112624\
Data File : PS028637.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 14:49
Operator : AR\AJ
Sample : HSTDICV750
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
ICVPS112624

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 26 15:05:36 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 14:44:30 2024
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	7.227	7.724	1980.9E6	1002.6E6	738.487	744.275
	Target Compounds						
1) T	Dalapon	2.628	2.688	1962.0E6	1488.4E6	676.123	681.562
2) T	3,5-DICHL...	6.399	6.681	2618.4E6	1364.1E6	683.717	694.502
3) T	4-Nitroph...	7.025	7.251	1149.2E6	613.9E6	668.536	673.089
5) T	DICAMBA	7.413	7.924	8040.3E6	4402.9E6	700.339	715.199
6) T	MCPP	7.596	8.027	526.7E6	308.0E6	72.178	71.502
7) T	MCPA	7.746	8.271	723.8E6	428.9E6	70.010	69.106
8) T	DICHLORPROP	8.121	8.639	2143.4E6	1123.0E6	688.514	702.495
9) T	2,4-D	8.351	8.969	2328.9E6	1186.2E6	690.639	701.491
10) T	Pentachlo...	8.649	9.496	32534.2E6	16552.8E6	737.860	723.117
11) T	2,4,5-TP ...	9.228	9.873	12963.2E6	6878.3E6	709.158	720.801
12) T	2,4,5-T	9.520	10.292	13302.2E6	6719.4E6	709.243	721.720
13) T	2,4-DB	10.092	10.858	2502.9E6	816.8E6	706.697	712.323
14) T	DINOSEB	11.303	11.237	10572.3E6	4473.7E6	703.591	712.831
15) T	Picloram	11.111	12.329	21598.5E6	9600.9E6	726.324	744.791
16) T	DCPA	11.597	12.280	19788.9E6	8102.2E6	719.724	730.114

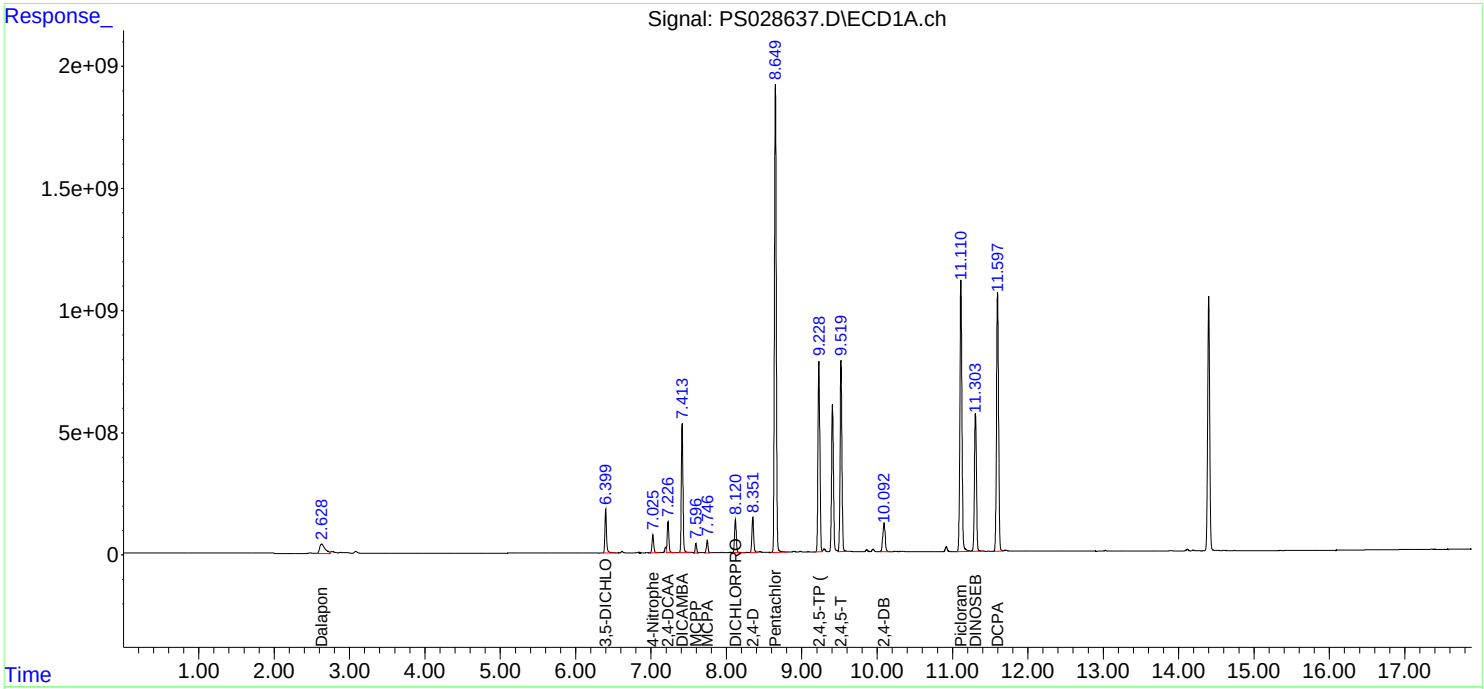
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

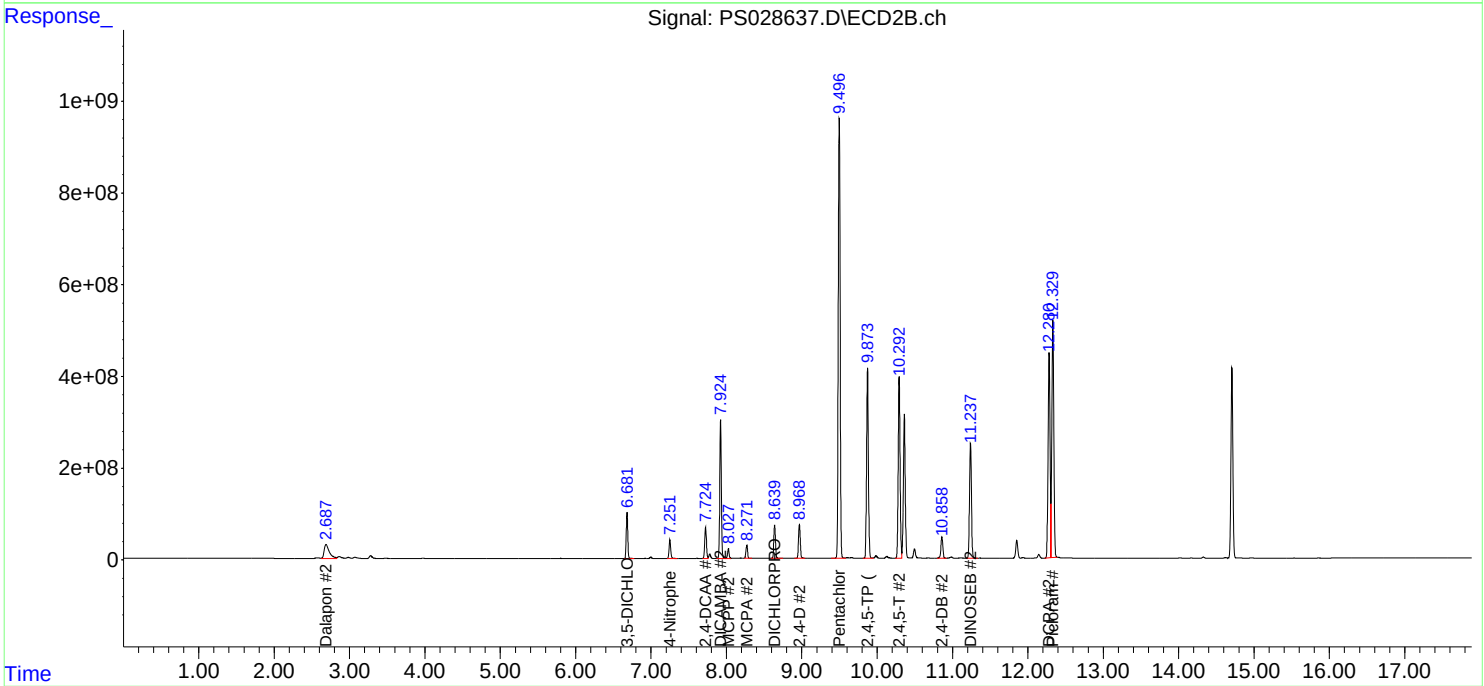
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS112624\
Data File : PS028637.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 14:49
Operator : AR\AJ
Sample : HSTDICV750
Misc :
ALS Vial : 8 Sample Multiplier: 1

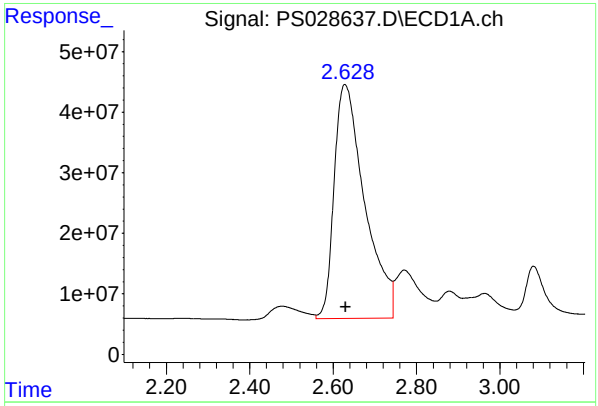
Instrument :
ECD_S
ClientSampleId :
ICVPS112624

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 26 15:05:36 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 14:44:30 2024
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



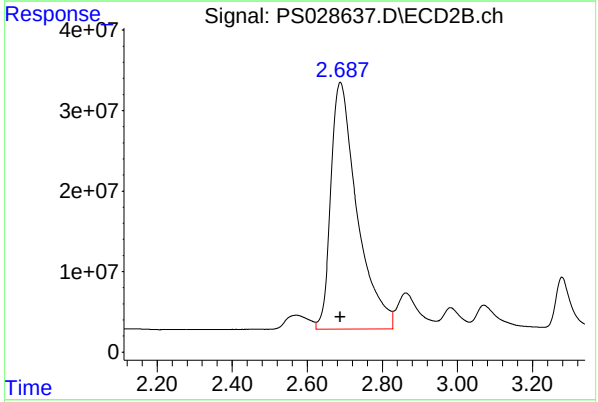




#1 Dalapon

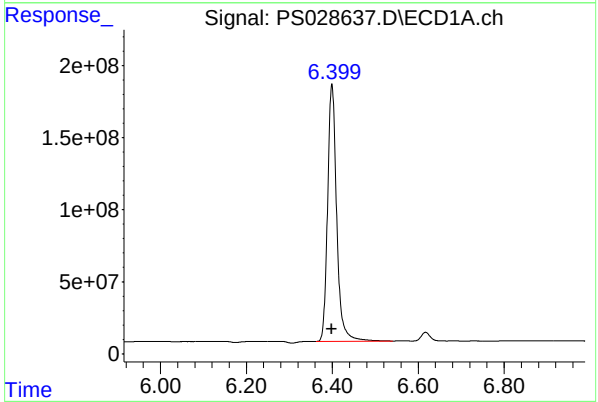
R.T.: 2.628 min
Delta R.T.: -0.002 min
Response: 1962004119
Conc: 676.12 ng/ml

Instrument :
ECD_S
ClientSampleId :
ICVPS112624



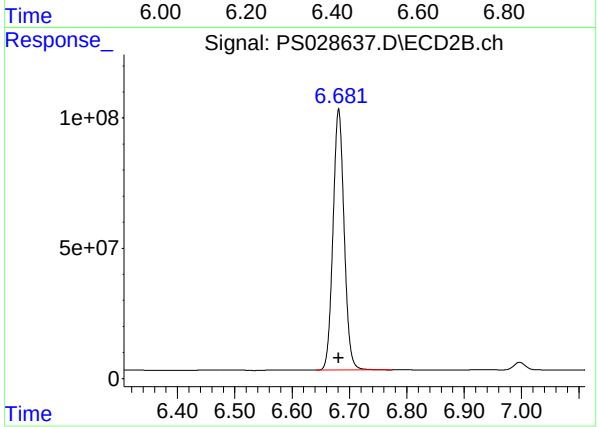
#1 Dalapon

R.T.: 2.688 min
Delta R.T.: 0.000 min
Response: 1488403206
Conc: 681.56 ng/ml



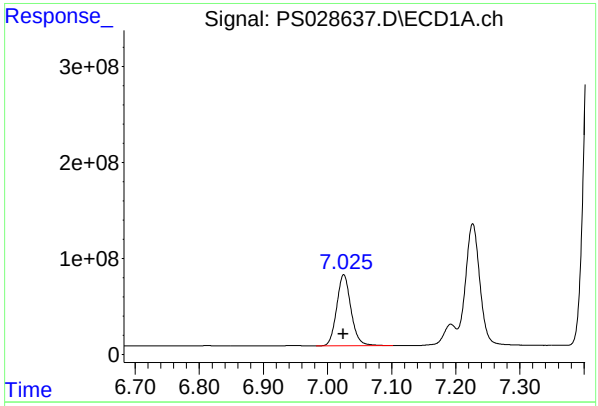
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.399 min
Delta R.T.: 0.000 min
Response: 2618399168
Conc: 683.72 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

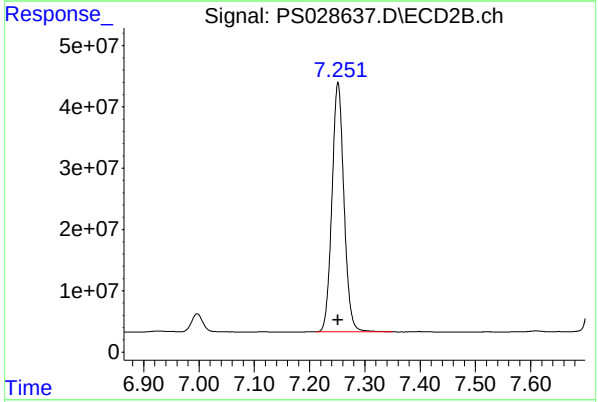
R.T.: 6.681 min
Delta R.T.: 0.000 min
Response: 1364065390
Conc: 694.50 ng/ml



#3 4-Nitrophenol

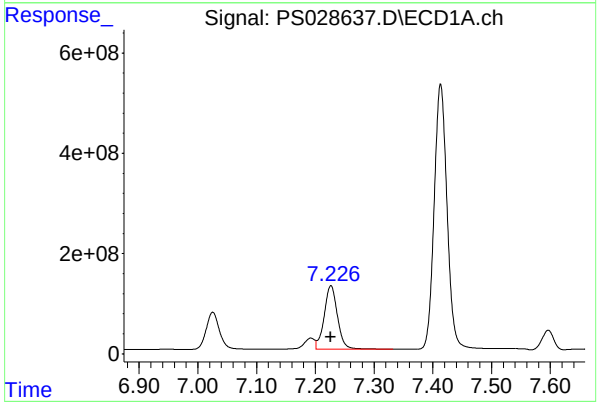
R.T.: 7.025 min
Delta R.T.: 0.000 min
Response: 1149195141
Conc: 668.54 ng/ml

Instrument :
ECD_S
ClientSampleId :
ICVPS112624



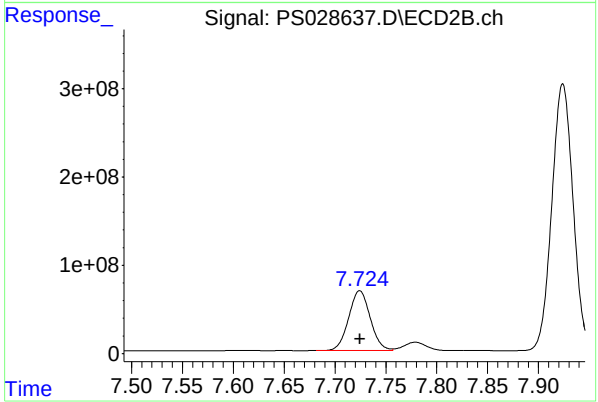
#3 4-Nitrophenol

R.T.: 7.251 min
Delta R.T.: 0.000 min
Response: 613947451
Conc: 673.09 ng/ml



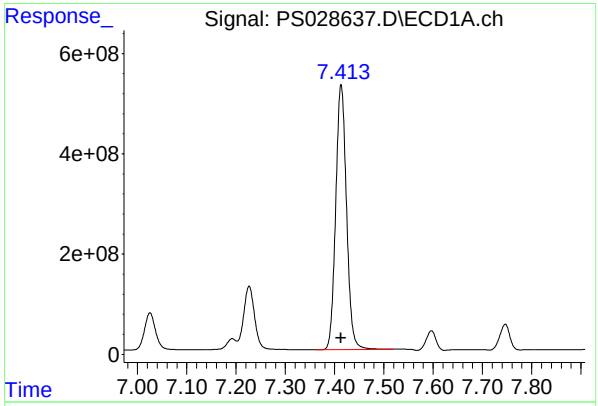
#4 2,4-DCAA

R.T.: 7.227 min
Delta R.T.: 0.000 min
Response: 1980875362
Conc: 738.49 ng/ml



#4 2,4-DCAA

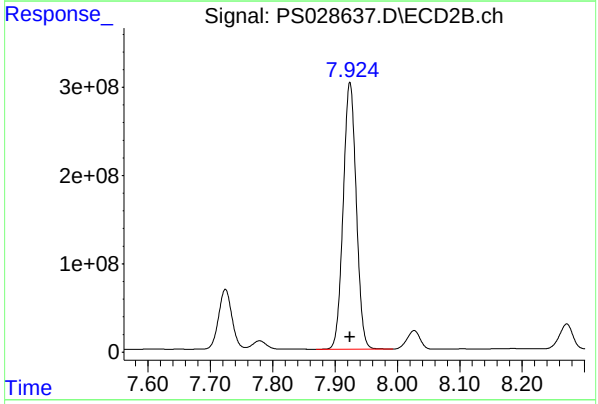
R.T.: 7.724 min
Delta R.T.: 0.000 min
Response: 1002560430
Conc: 744.28 ng/ml



#5 DICAMBA

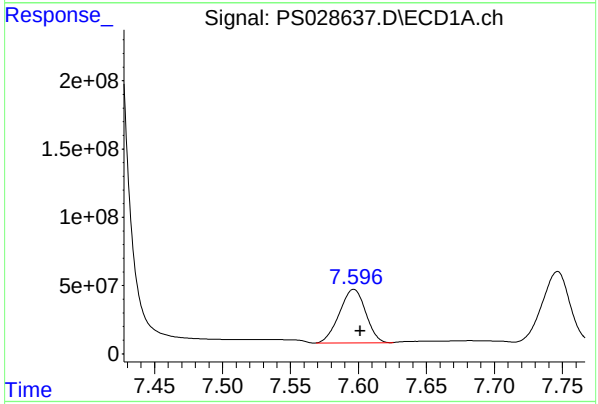
R.T.: 7.413 min
Delta R.T.: 0.000 min
Response: 8040262271
Conc: 700.34 ng/ml

Instrument :
ECD_S
ClientSampleId :
ICVPS112624



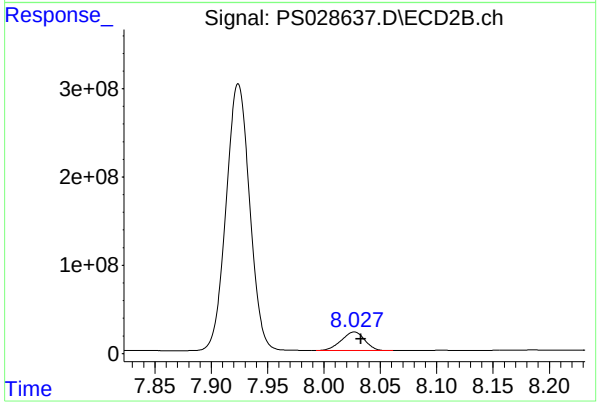
#5 DICAMBA

R.T.: 7.924 min
Delta R.T.: 0.000 min
Response: 4402918269
Conc: 715.20 ng/ml



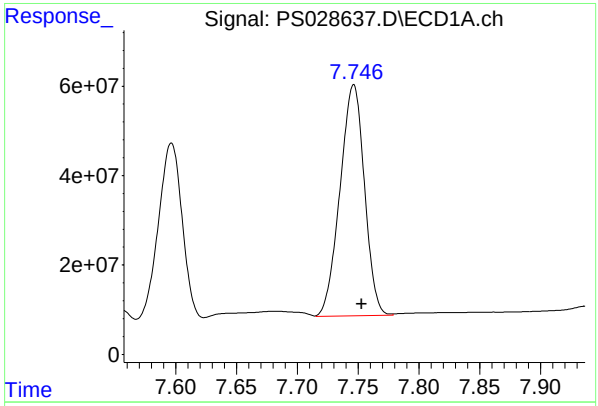
#6 MCPP

R.T.: 7.596 min
Delta R.T.: -0.005 min
Response: 526718689
Conc: 72.18 ug/ml



#6 MCPP

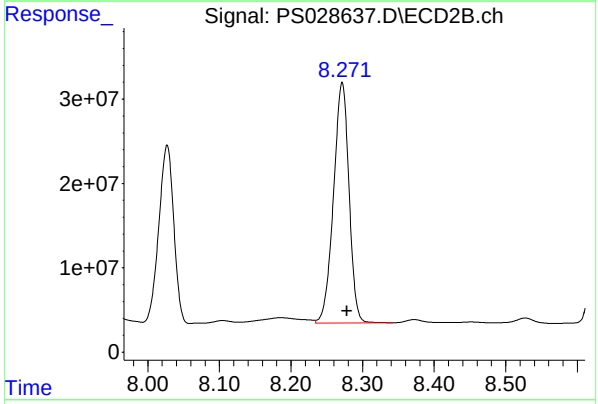
R.T.: 8.027 min
Delta R.T.: -0.006 min
Response: 307998496
Conc: 71.50 ug/ml



#7 MCPA

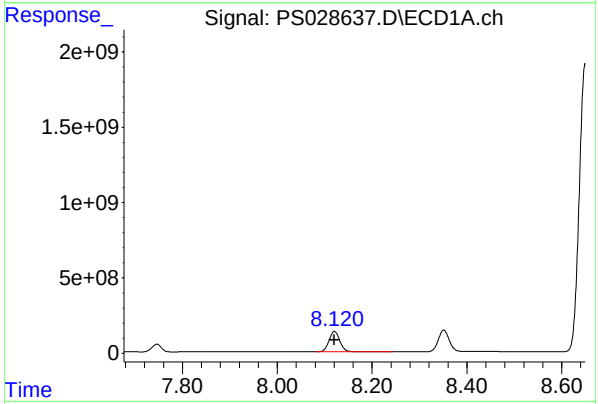
R.T.: 7.746 min
Delta R.T.: -0.007 min
Response: 723837694
Conc: 70.01 ug/ml

Instrument :
ECD_S
ClientSampleId :
ICVPS112624



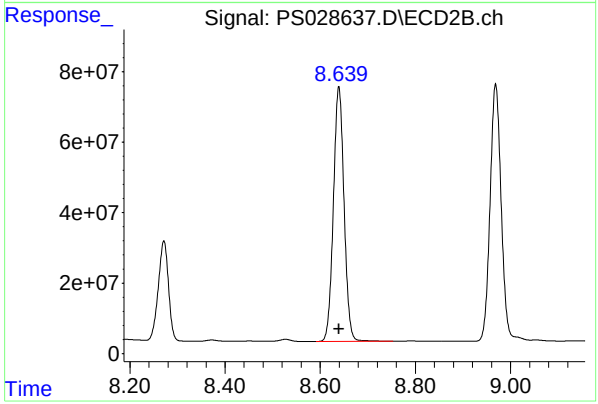
#7 MCPA

R.T.: 8.271 min
Delta R.T.: -0.007 min
Response: 428877642
Conc: 69.11 ug/ml



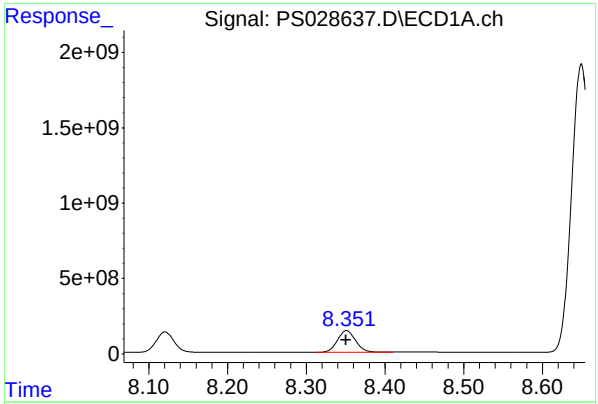
#8 DICHLORPROP

R.T.: 8.121 min
Delta R.T.: 0.000 min
Response: 2143414141
Conc: 688.51 ng/ml



#8 DICHLORPROP

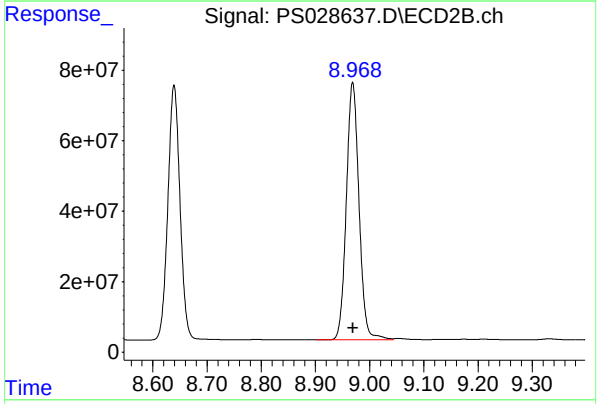
R.T.: 8.639 min
Delta R.T.: 0.000 min
Response: 1123020906
Conc: 702.49 ng/ml



#9 2,4-D

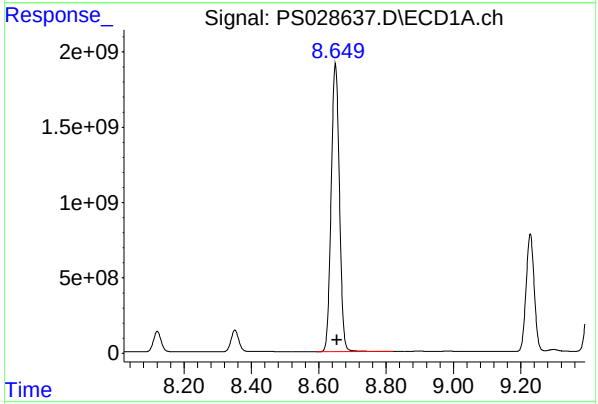
R.T.: 8.351 min
Delta R.T.: 0.000 min
Response: 2328938496
Conc: 690.64 ng/ml

Instrument :
ECD_S
ClientSampleId :
ICVPS112624



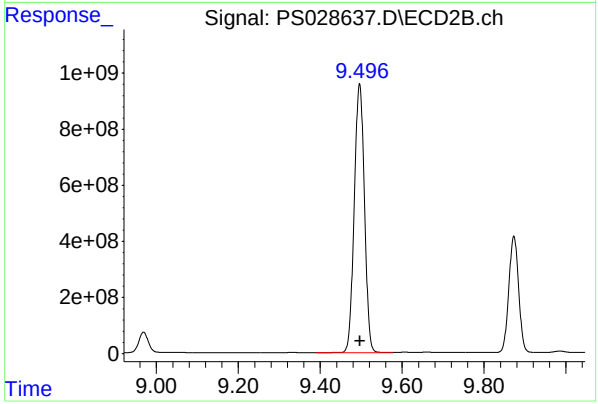
#9 2,4-D

R.T.: 8.969 min
Delta R.T.: 0.000 min
Response: 1186199775
Conc: 701.49 ng/ml



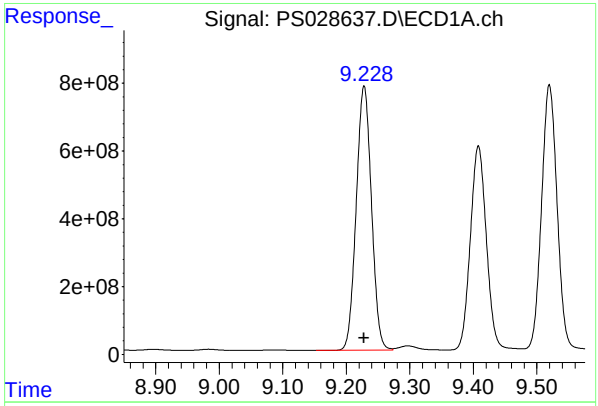
#10 Pentachlorophenol

R.T.: 8.649 min
Delta R.T.: -0.004 min
Response: 32534160281
Conc: 737.86 ng/ml



#10 Pentachlorophenol

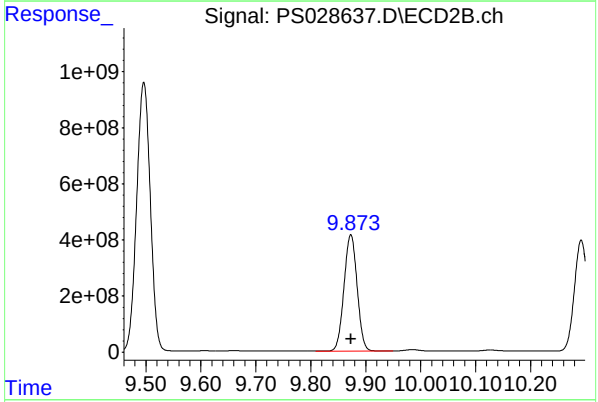
R.T.: 9.496 min
Delta R.T.: -0.001 min
Response: 16552789855
Conc: 723.12 ng/ml



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

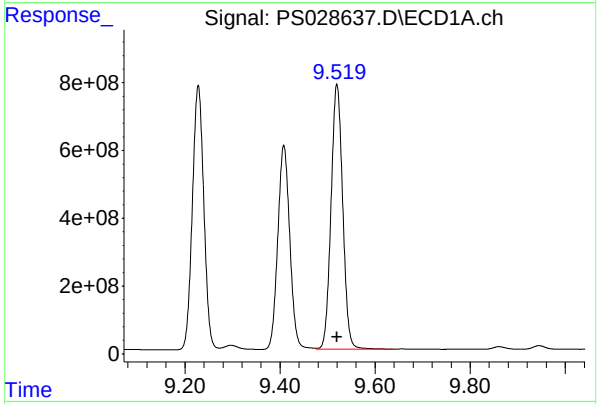
R.T.: 9.228 min
Delta R.T.: 0.000 min
Response: 12963248255
Conc: 709.16 ng/ml

Instrument :
ECD_S
ClientSampleId :
ICVPS112624



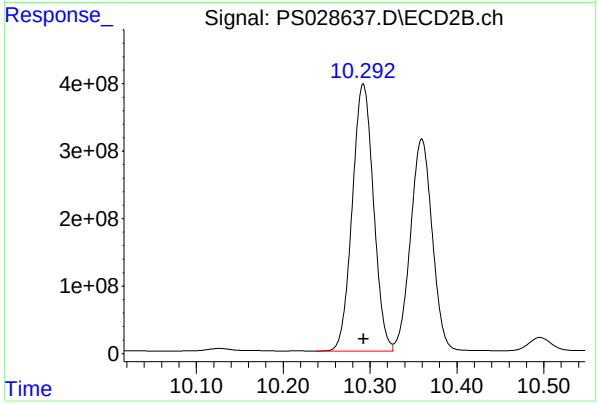
#11 2,4,5-TP (SILVEX)

R.T.: 9.873 min
Delta R.T.: 0.000 min
Response: 6878262048
Conc: 720.80 ng/ml



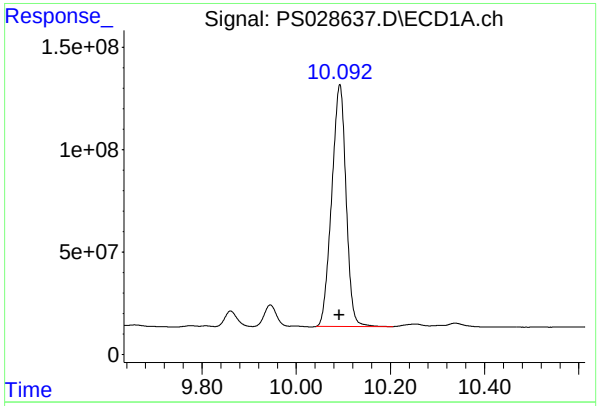
#12 2,4,5-T

R.T.: 9.520 min
Delta R.T.: 0.000 min
Response: 13302205418
Conc: 709.24 ng/ml



#12 2,4,5-T

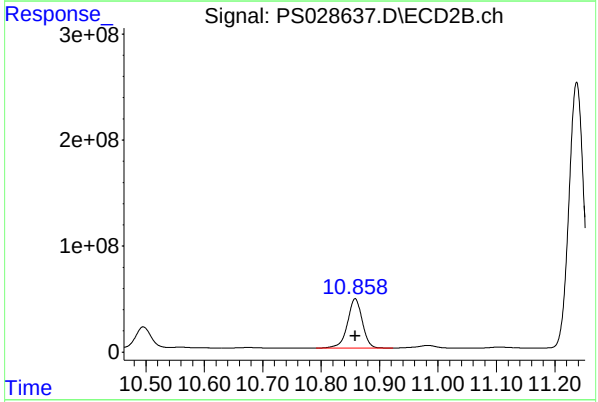
R.T.: 10.292 min
Delta R.T.: 0.000 min
Response: 6719421647
Conc: 721.72 ng/ml



#13 2,4-DB

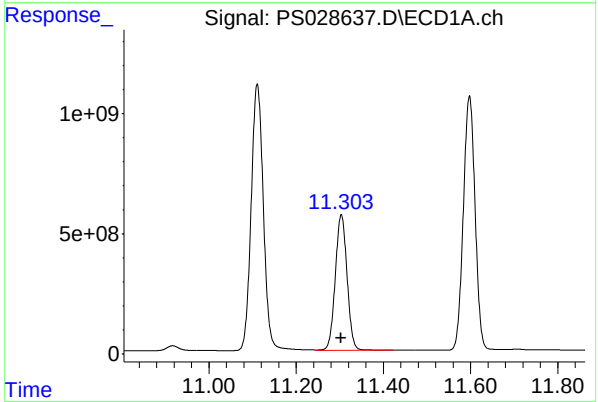
R.T.: 10.092 min
Delta R.T.: 0.000 min
Response: 2502915556
Conc: 706.70 ng/ml

Instrument :
ECD_S
ClientSampleId :
ICVPS112624



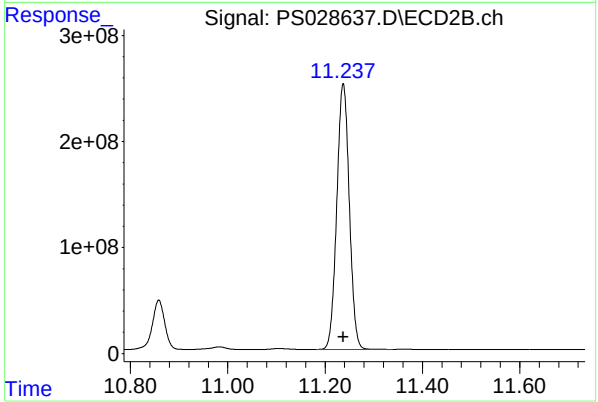
#13 2,4-DB

R.T.: 10.858 min
Delta R.T.: 0.000 min
Response: 816835202
Conc: 712.32 ng/ml



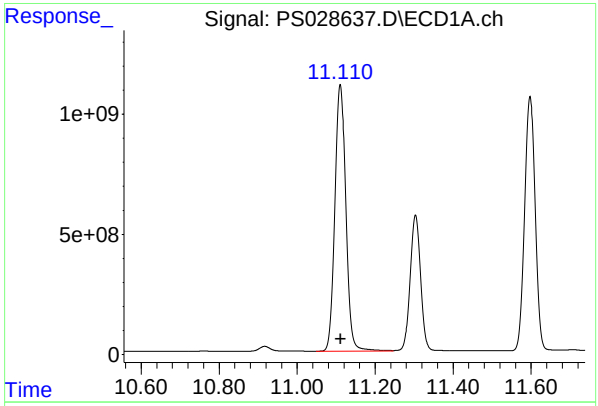
#14 DINOSEB

R.T.: 11.303 min
Delta R.T.: 0.000 min
Response: 10572321746
Conc: 703.59 ng/ml



#14 DINOSEB

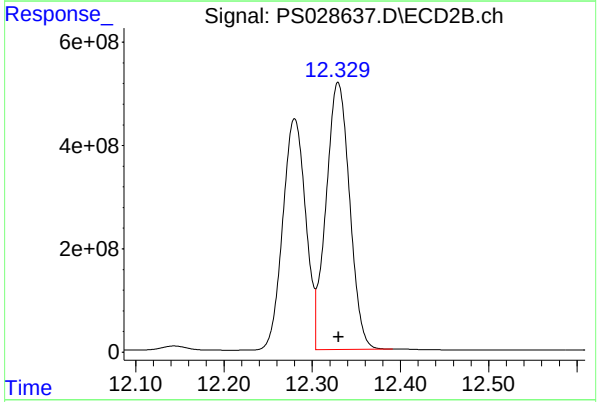
R.T.: 11.237 min
Delta R.T.: 0.000 min
Response: 4473743987
Conc: 712.83 ng/ml



#15 Picloram

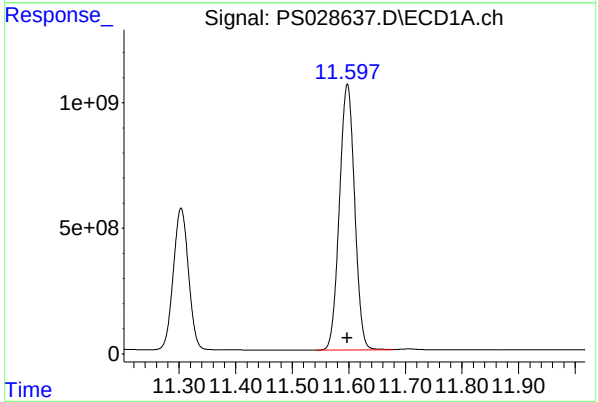
R.T.: 11.111 min
Delta R.T.: 0.000 min
Response: 21598543196
Conc: 726.32 ng/ml

Instrument :
ECD_S
ClientSampleId :
ICVPS112624



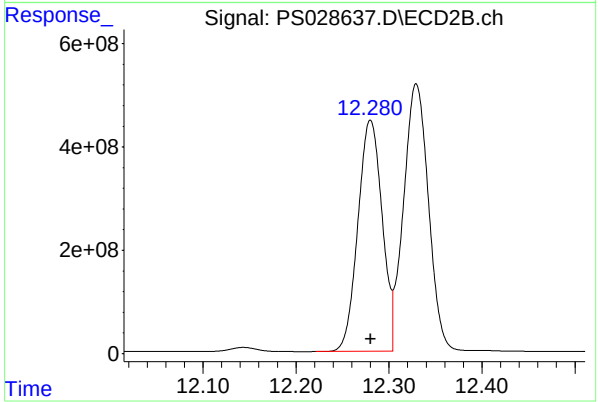
#15 Picloram

R.T.: 12.329 min
Delta R.T.: 0.000 min
Response: 9600873413
Conc: 744.79 ng/ml



#16 DCPA

R.T.: 11.597 min
Delta R.T.: 0.000 min
Response: 19788915190
Conc: 719.72 ng/ml



#16 DCPA

R.T.: 12.280 min
Delta R.T.: 0.000 min
Response: 8102231871
Conc: 730.11 ng/ml

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

CALIBRATION VERIFICATION SUMMARY

Contract: TETR16

Lab Code: CHEM **Case No.:** P4961 **SAS No.:** P4961 **SDG NO.:** P4961

Continuing Calib Date: 11/26/2024 **Initial Calibration Date(s):** 11/26/2024 11/26/2024

Continuing Calib Time: 16:01 **Initial Calibration Time(s):** 12:48 14:25

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	RT WINDOW TO	DIFF RT
2,4-DCAA	7.23	7.23	7.13	7.33	0.00
2,4-D	8.35	8.35	8.25	8.45	0.00
2,4,5-TP(Silvex)	9.23	9.23	9.13	9.33	0.00

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

CALIBRATION VERIFICATION SUMMARY

Contract: TETR16

Lab Code: CHEM **Case No.:** P4961 **SAS No.:** P4961 **SDG NO.:** P4961

Continuing Calib Date: 11/26/2024 **Initial Calibration Date(s):** 11/26/2024 11/26/2024

Continuing Calib Time: 16:01 **Initial Calibration Time(s):** 12:48 14:25

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	RT WINDOW TO	DIFF RT
2,4-DCAA	7.72	7.72	7.62	7.82	0.00
2,4-D	8.97	8.97	8.87	9.07	0.00
2,4,5-TP(Silvex)	9.87	9.87	9.77	9.97	0.00

Alliance TECHNICAL GROUP

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CALIBRATION VERIFICATION SUMMARY

Contract: TETR16

Lab Code: CHEM **Case No.:** P4961 **SAS No.:** P4961 **SDG NO.:** P4961

GC Column: RTX-CLP **ID:** 0.32 **(mm)** **Initi. Calib. Date(s):** 11/26/2024 11/26/2024

Client Sample No.: CCAL01 **Date Analyzed:** 11/26/2024

Lab Sample No.: HSTDCCC750 **Data File :** PS028639.D **Time Analyzed:** 16:01

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	9.227	9.128	9.328	708.020	712.500	-0.6
2,4-D	8.350	8.251	8.451	691.320	705.000	-1.9
2,4-DCAA	7.226	7.126	7.326	740.220	750.000	-1.3

Alliance TECHNICAL GROUP

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

CALIBRATION VERIFICATION SUMMARY

Contract: TETR16

Lab Code: CHEM **Case No.:** P4961 **SAS No.:** P4961 **SDG NO.:** P4961

GC Column: RTX-CLP2 **ID:** 0.32 **(mm)** **Initi. Calib. Date(s):** 11/26/2024 11/26/2024

Client Sample No.: CCAL01 **Date Analyzed:** 11/26/2024

Lab Sample No.: HSTDCCC750 **Data File :** PS028639.D **Time Analyzed:** 16:01

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	9.873	9.773	9.973	720.270	712.500	1.1
2,4-D	8.968	8.869	9.069	700.640	705.000	-0.6
2,4-DCAA	7.724	7.624	7.824	743.470	750.000	-0.9

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS112624\
Data File : PS028639.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 16:01
Operator : AR\AJ
Sample : HSTDCCC750
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 26 16:17:25 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 14:44:30 2024
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	7.226	7.724	1985.5E6	1001.5E6	740.220	743.469
	Target Compounds						
1) T	Dalapon	2.630	2.689	1962.7E6	1485.7E6	676.346	680.314
2) T	3,5-DICHL...	6.399	6.681	2632.7E6	1365.7E6	687.446	695.310
3) T	4-Nitroph...	7.025	7.251	1159.4E6	614.0E6	674.474	673.117
5) T	DICAMBA	7.413	7.923	8075.6E6	4400.7E6	703.415	714.844
6) T	MCPP	7.595	8.027	524.3E6	308.7E6	71.846	71.676
7) T	MCPA	7.745	8.271	725.6E6	429.4E6	70.179	69.198
8) T	DICHLORPROP	8.120	8.638	2148.0E6	1121.8E6	689.991	701.738
9) T	2,4-D	8.350	8.968	2331.2E6	1184.8E6	691.317	700.643
10) T	Pentachlo...	8.649	9.496	32548.9E6	16567.8E6	738.195	723.775
11) T	2,4,5-TP ...	9.227	9.873	12942.4E6	6873.2E6	708.017	720.266
12) T	2,4,5-T	9.519	10.292	13271.5E6	6688.1E6	707.607	718.355
13) T	2,4-DB	10.092	10.858	2492.1E6	814.1E6	703.633	709.921
14) T	DINOSEB	11.303	11.237	10574.4E6	4467.5E6	703.727	711.833
15) T	Picloram	11.111	12.330	21312.7E6	9430.5E6	716.711	731.572
16) T	DCPA	11.597	12.280	19761.1E6	8086.5E6	718.713	728.696

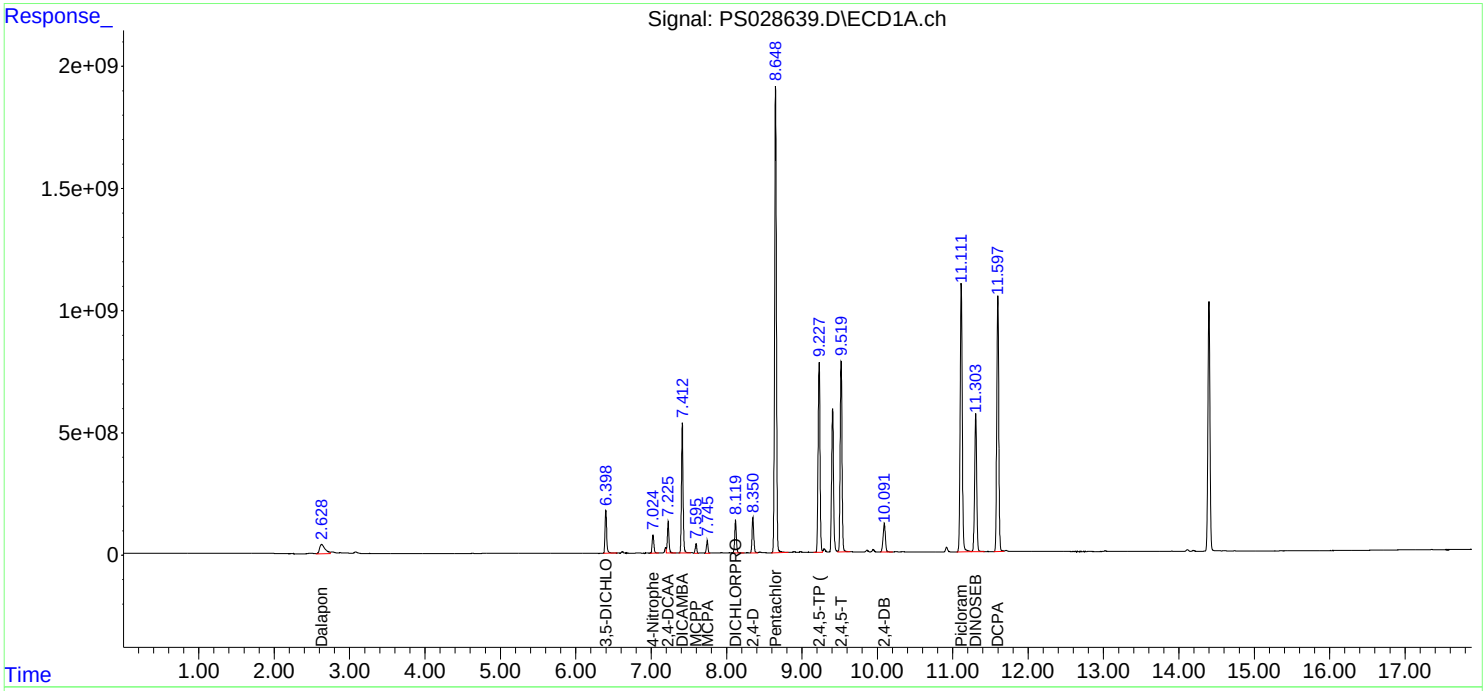
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

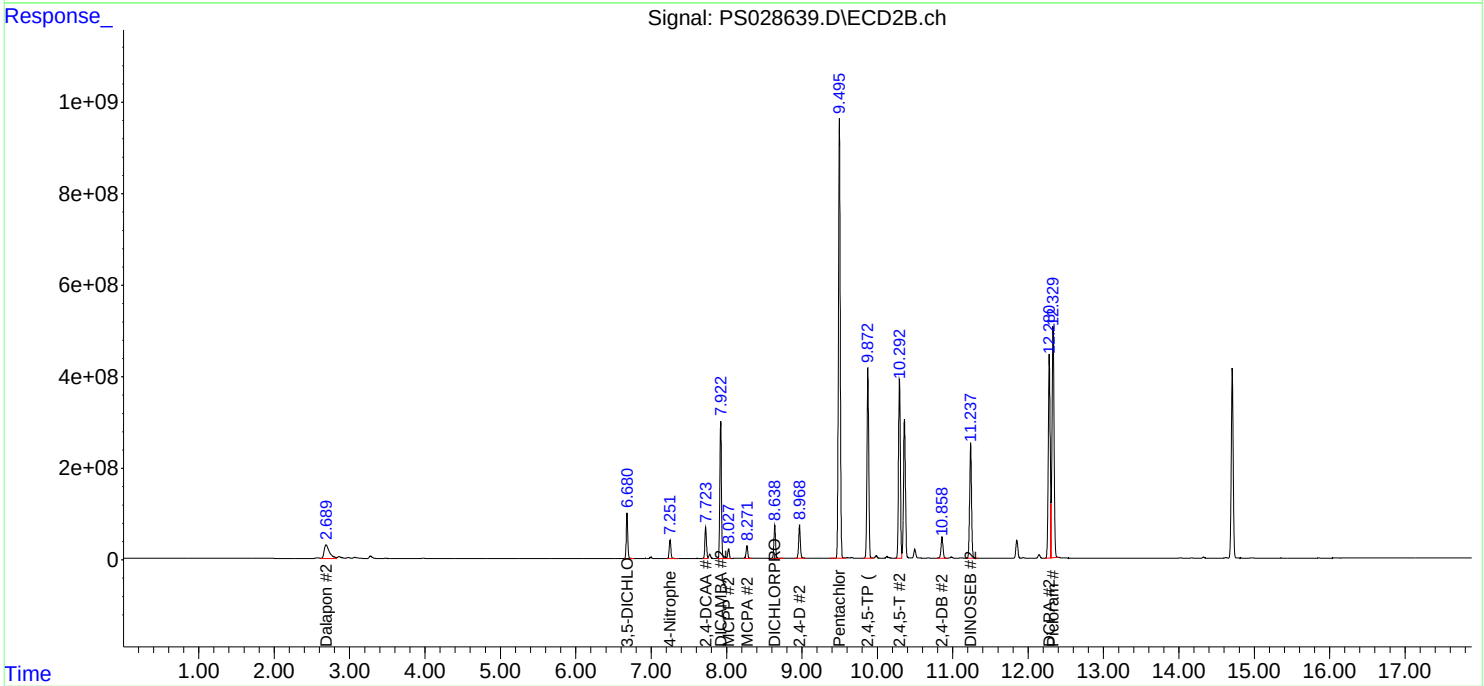
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS112624\
Data File : PS028639.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 16:01
Operator : AR\AJ
Sample : HSTDCCC750
Misc :
ALS Vial : 5 Sample Multiplier: 1

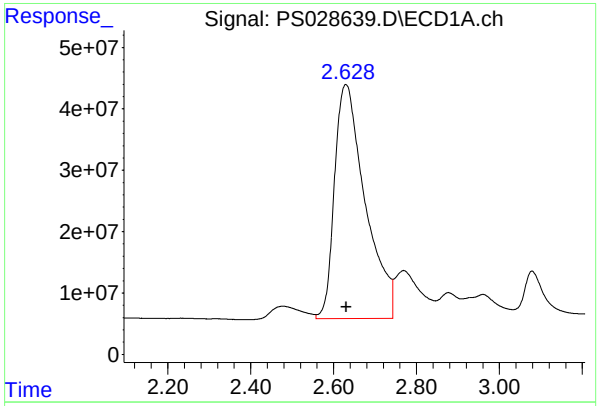
Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 26 16:17:25 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 14:44:30 2024
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



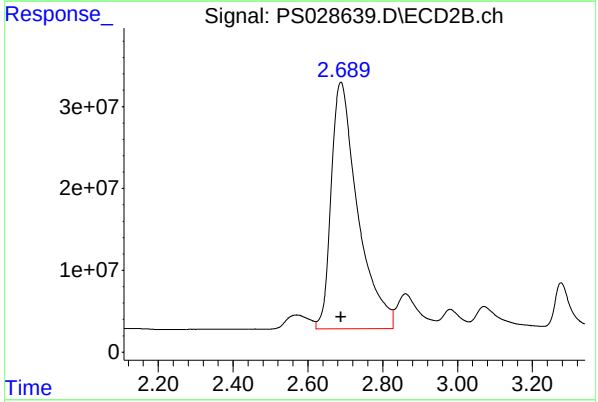




#1 Dalapon

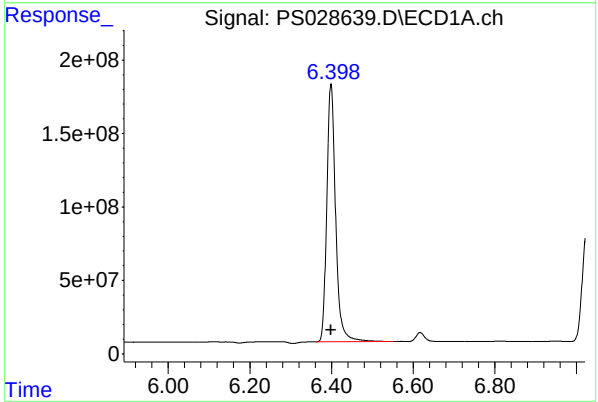
R.T.: 2.630 min
Delta R.T.: 0.000 min
Response: 1962652560
Conc: 676.35 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



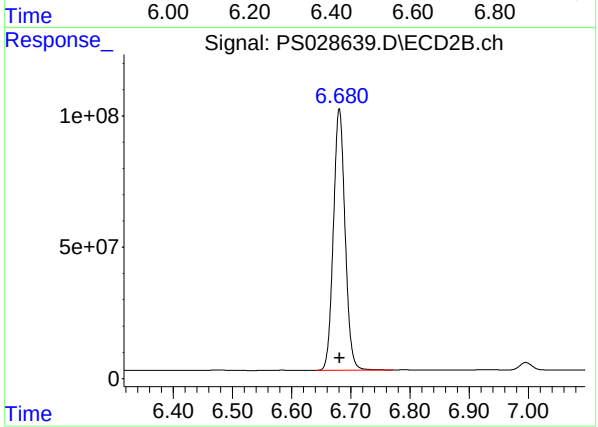
#1 Dalapon

R.T.: 2.689 min
Delta R.T.: 0.000 min
Response: 1485677556
Conc: 680.31 ng/ml



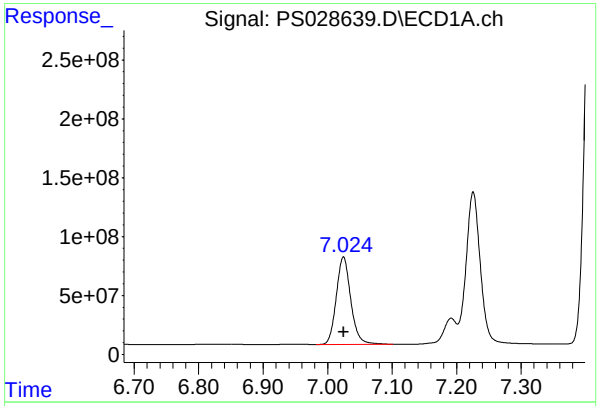
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.399 min
Delta R.T.: 0.000 min
Response: 2632680112
Conc: 687.45 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

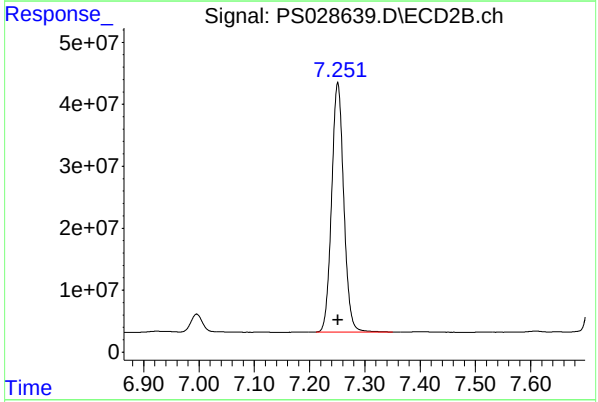
R.T.: 6.681 min
Delta R.T.: 0.000 min
Response: 1365651287
Conc: 695.31 ng/ml



#3 4-Nitrophenol

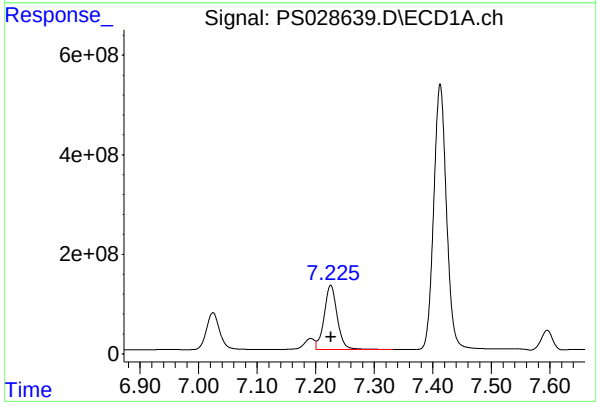
R.T.: 7.025 min
Delta R.T.: 0.000 min
Response: 1159403380
Conc: 674.47 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



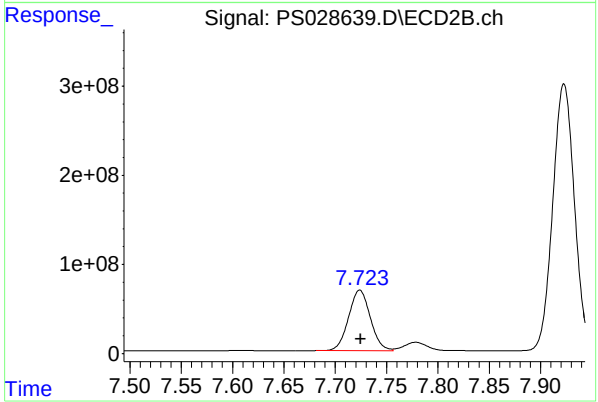
#3 4-Nitrophenol

R.T.: 7.251 min
Delta R.T.: 0.000 min
Response: 613973398
Conc: 673.12 ng/ml



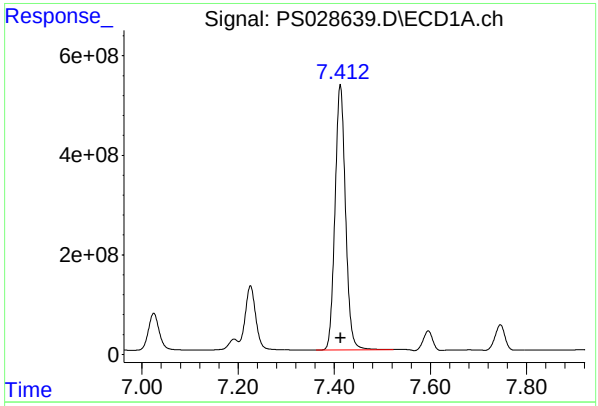
#4 2,4-DCAA

R.T.: 7.226 min
Delta R.T.: 0.000 min
Response: 1985524911
Conc: 740.22 ng/ml



#4 2,4-DCAA

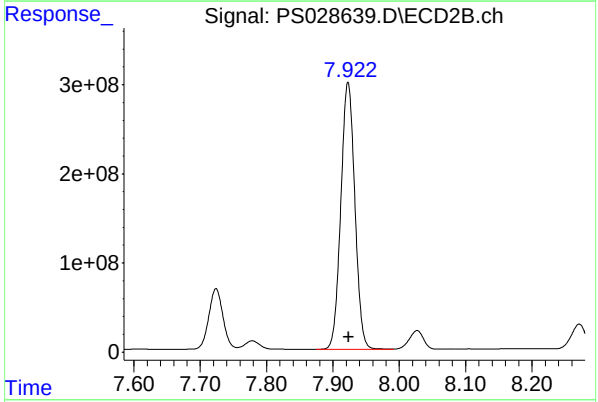
R.T.: 7.724 min
Delta R.T.: 0.000 min
Response: 1001475192
Conc: 743.47 ng/ml



#5 DICAMBA

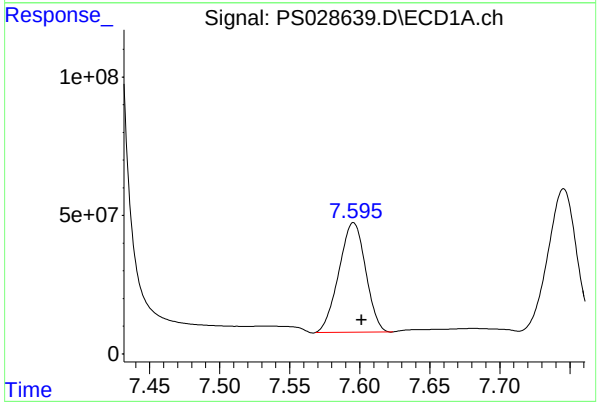
R.T.: 7.413 min
Delta R.T.: 0.000 mi
Response: 8075576983
Conc: 703.41 ng/m

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



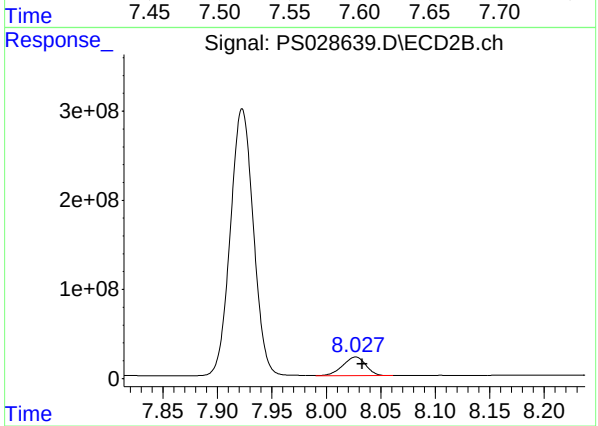
#5 DICAMBA

R.T.: 7.923 min
Delta R.T.: -0.001 min
Response: 4400733815
Conc: 714.84 ng/ml



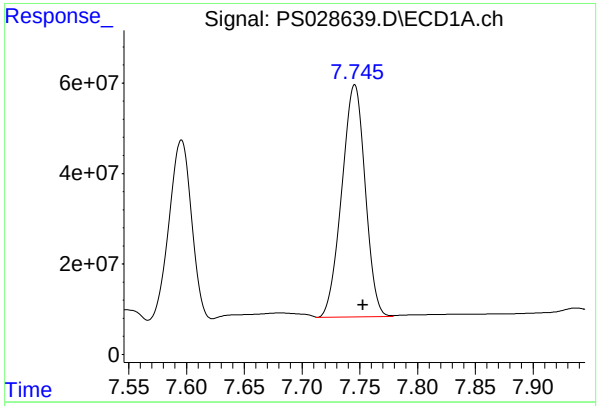
#6 MCPP

R.T.: 7.595 min
Delta R.T.: -0.006 min
Response: 524292037
Conc: 71.85 ug/ml



#6 MCPP

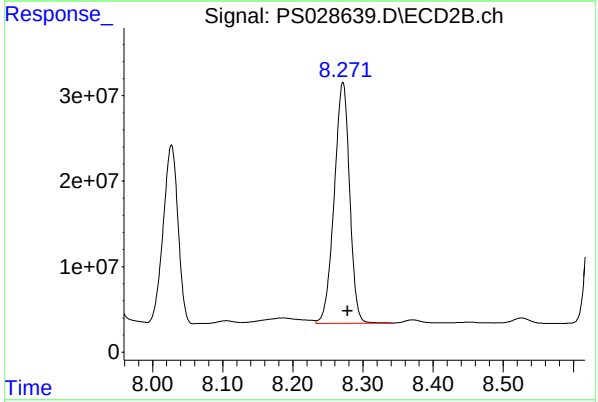
R.T.: 8.027 min
Delta R.T.: -0.006 min
Response: 308748289
Conc: 71.68 ug/ml



#7 MCPA

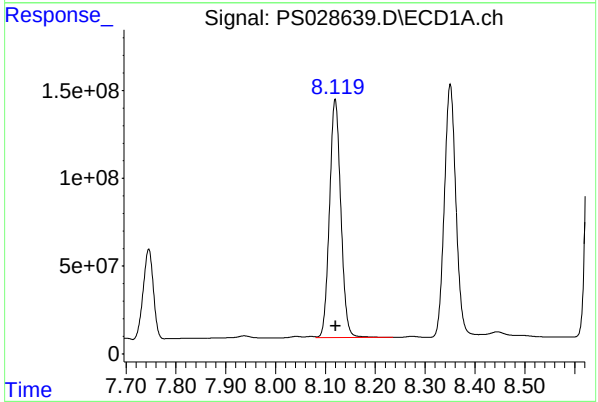
R.T.: 7.745 min
Delta R.T.: -0.007 min
Response: 725578703
Conc: 70.18 ug/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



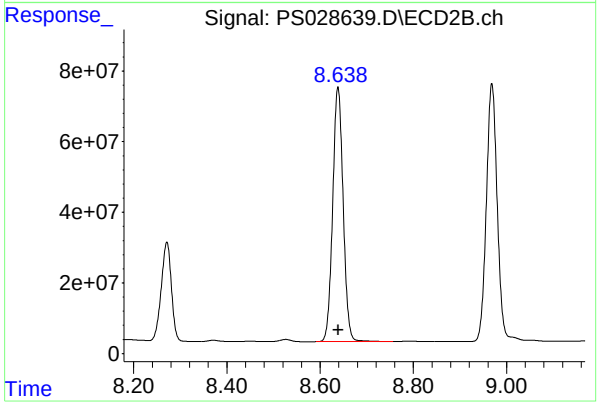
#7 MCPA

R.T.: 8.271 min
Delta R.T.: -0.007 min
Response: 429447802
Conc: 69.20 ug/ml



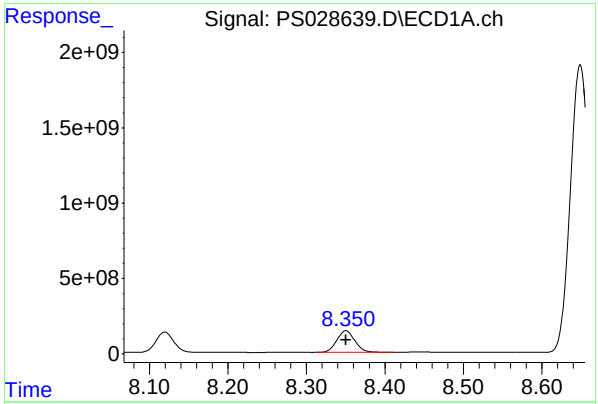
#8 DICHLORPROP

R.T.: 8.120 min
Delta R.T.: -0.001 min
Response: 2148012406
Conc: 689.99 ng/ml



#8 DICHLORPROP

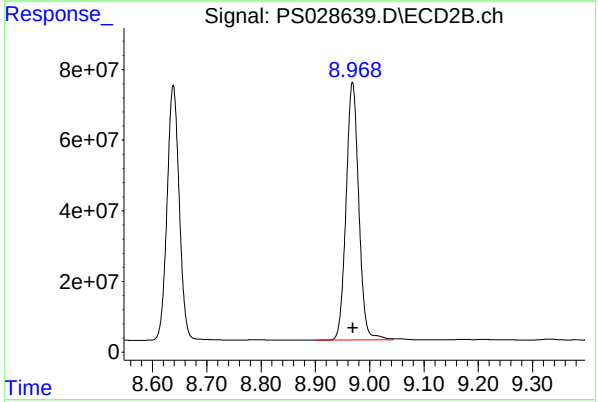
R.T.: 8.638 min
Delta R.T.: -0.001 min
Response: 1121810707
Conc: 701.74 ng/ml



#9 2,4-D

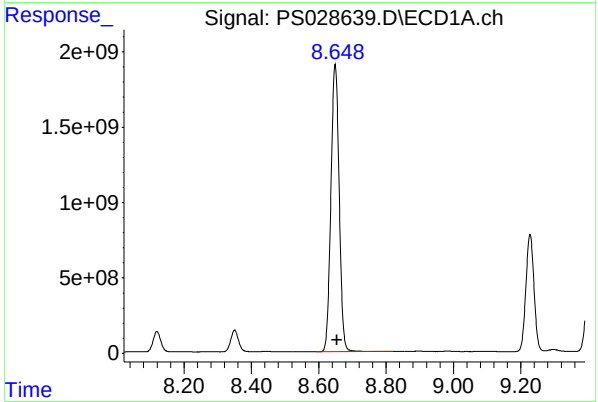
R.T.: 8.350 min
Delta R.T.: 0.000 min
Response: 2331223898
Conc: 691.32 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



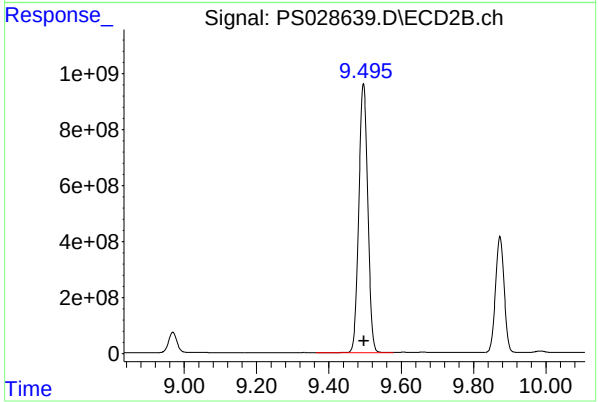
#9 2,4-D

R.T.: 8.968 min
Delta R.T.: 0.000 min
Response: 1184766041
Conc: 700.64 ng/ml



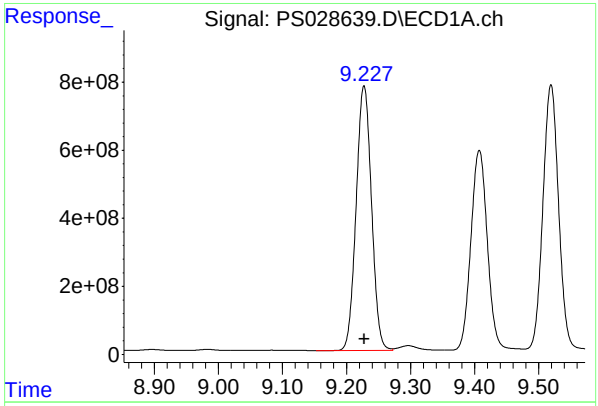
#10 Pentachlorophenol

R.T.: 8.649 min
Delta R.T.: -0.005 min
Response: 32548943069
Conc: 738.19 ng/ml



#10 Pentachlorophenol

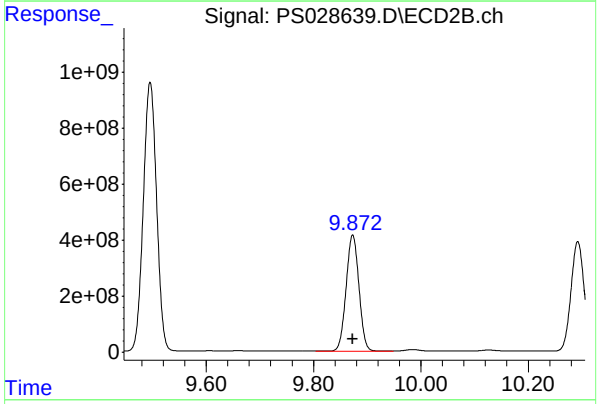
R.T.: 9.496 min
Delta R.T.: -0.002 min
Response: 16567842048
Conc: 723.77 ng/ml



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

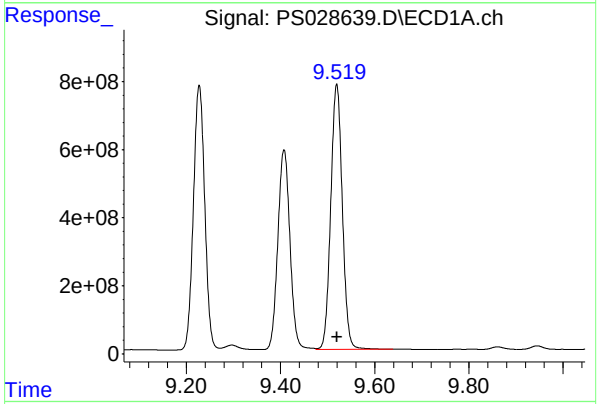
R.T.: 9.227 min
Delta R.T.: 0.000 min
Response: 12942398923
Conc: 708.02 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



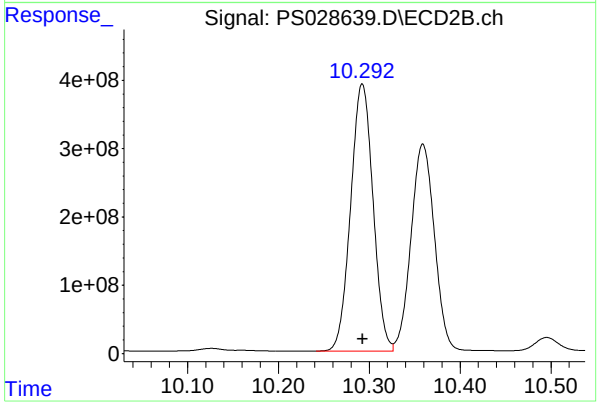
#11 2,4,5-TP (SILVEX)

R.T.: 9.873 min
Delta R.T.: 0.000 min
Response: 6873152825
Conc: 720.27 ng/ml



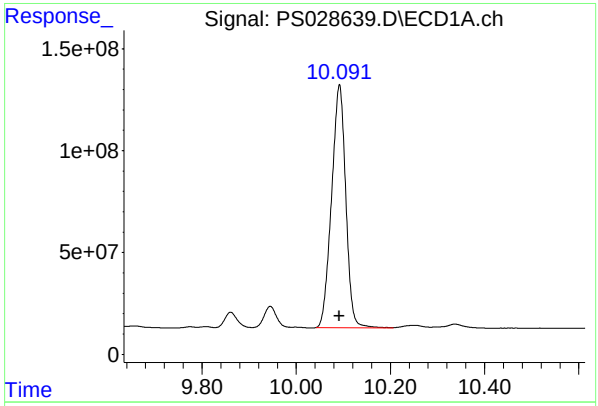
#12 2,4,5-T

R.T.: 9.519 min
Delta R.T.: 0.000 min
Response: 13271527176
Conc: 707.61 ng/ml



#12 2,4,5-T

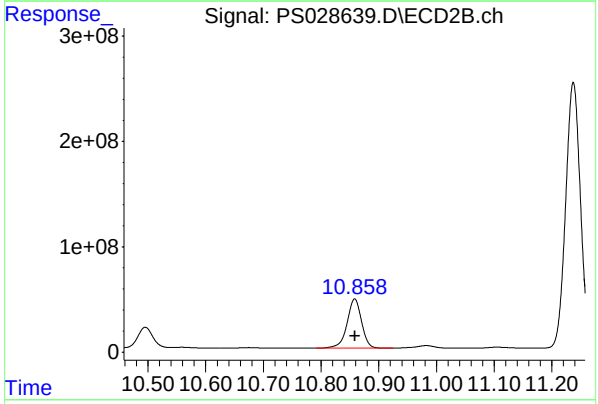
R.T.: 10.292 min
Delta R.T.: 0.000 min
Response: 6688090993
Conc: 718.36 ng/ml



#13 2,4-DB

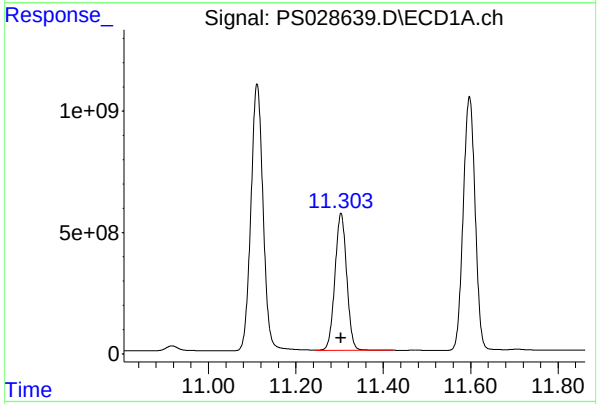
R.T.: 10.092 min
Delta R.T.: 0.000 min
Response: 2492064222
Conc: 703.63 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



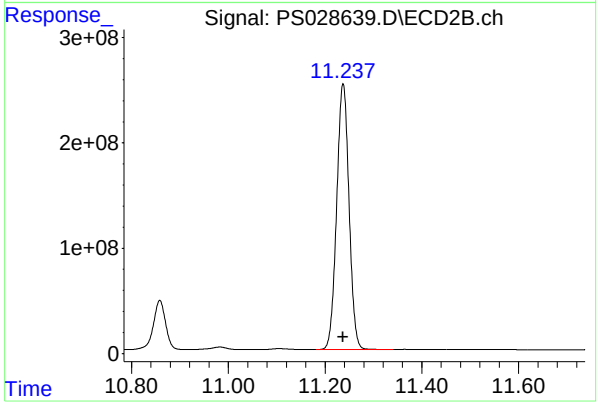
#13 2,4-DB

R.T.: 10.858 min
Delta R.T.: 0.000 min
Response: 814081045
Conc: 709.92 ng/ml



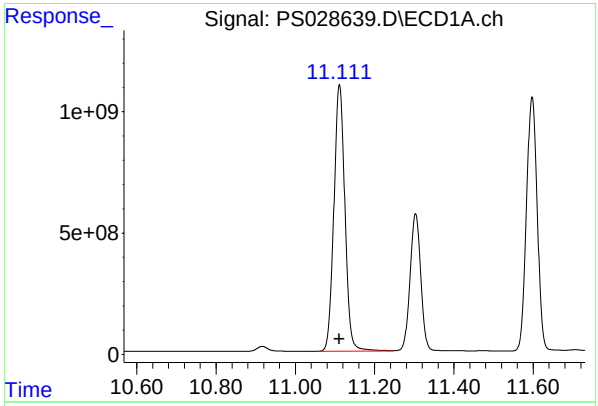
#14 DINOSEB

R.T.: 11.303 min
Delta R.T.: 0.000 min
Response: 10574354579
Conc: 703.73 ng/ml



#14 DINOSEB

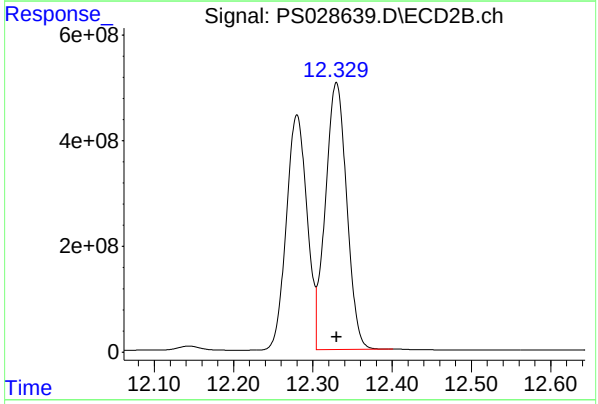
R.T.: 11.237 min
Delta R.T.: 0.000 min
Response: 4467476435
Conc: 711.83 ng/ml



#15 Picloram

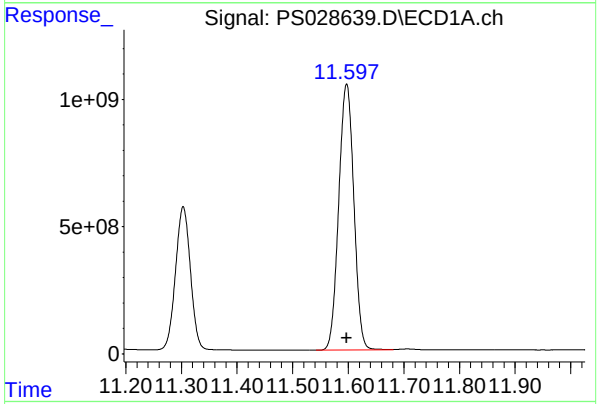
R.T.: 11.111 min
Delta R.T.: 0.000 min
Response: 21312678108
Conc: 716.71 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



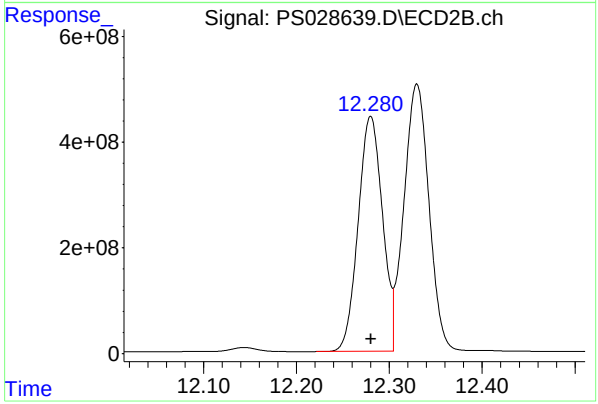
#15 Picloram

R.T.: 12.330 min
Delta R.T.: 0.000 min
Response: 9430467720
Conc: 731.57 ng/ml



#16 DCPA

R.T.: 11.597 min
Delta R.T.: 0.000 min
Response: 19761115231
Conc: 718.71 ng/ml



#16 DCPA

R.T.: 12.280 min
Delta R.T.: 0.000 min
Response: 8086494003
Conc: 728.70 ng/ml

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

CALIBRATION VERIFICATION SUMMARY

Contract: TETR16

Lab Code: CHEM **Case No.:** P4961 **SAS No.:** P4961 **SDG NO.:** P4961

Continuing Calib Date: 11/26/2024 **Initial Calibration Date(s):** 11/26/2024 11/26/2024

Continuing Calib Time: 20:49 **Initial Calibration Time(s):** 12:48 14:25

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	RT WINDOW TO	DIFF RT
2,4-DCAA	7.23	7.23	7.13	7.33	0.00
2,4-D	8.35	8.35	8.25	8.45	0.00
2,4,5-TP(Silvex)	9.23	9.23	9.13	9.33	0.00

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Fax : 908 789 8922

CALIBRATION VERIFICATION SUMMARY

Contract: TETR16

Lab Code: CHEM **Case No.:** P4961 **SAS No.:** P4961 **SDG NO.:** P4961

Continuing Calib Date: 11/26/2024 **Initial Calibration Date(s):** 11/26/2024 11/26/2024

Continuing Calib Time: 20:49 **Initial Calibration Time(s):** 12:48 14:25

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	RT WINDOW TO	DIFF RT
2,4-DCAA	7.72	7.72	7.62	7.82	0.00
2,4-D	8.97	8.97	8.87	9.07	0.00
2,4,5-TP(Silvex)	9.87	9.87	9.77	9.97	0.00

Alliance TECHNICAL GROUP

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

CALIBRATION VERIFICATION SUMMARY

Contract: TETR16

Lab Code: CHEM **Case No.:** P4961 **SAS No.:** P4961 **SDG NO.:** P4961

GC Column: RTX-CLP **ID:** 0.32 **(mm)** **Initi. Calib. Date(s):** 11/26/2024 11/26/2024

Client Sample No.: CCAL02 **Date Analyzed:** 11/26/2024

Lab Sample No.: HSTDCCC750 **Data File :** PS028648.D **Time Analyzed:** 20:49

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	9.228	9.128	9.328	707.630	712.500	-0.7
2,4-D	8.351	8.251	8.451	689.170	705.000	-2.2
2,4-DCAA	7.227	7.126	7.326	744.540	750.000	-0.7

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

CALIBRATION VERIFICATION SUMMARY

Contract: TETR16

Lab Code: CHEM **Case No.:** P4961 **SAS No.:** P4961 **SDG NO.:** P4961

GC Column: RTX-CLP2 **ID:** 0.32 **(mm)** **Initi. Calib. Date(s):** 11/26/2024 11/26/2024

Client Sample No.: CCAL02 **Date Analyzed:** 11/26/2024

Lab Sample No.: HSTDCCC750 **Data File :** PS028648.D **Time Analyzed:** 20:49

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	9.872	9.773	9.973	727.030	712.500	2.0
2,4-D	8.968	8.869	9.069	711.090	705.000	0.9
2,4-DCAA	7.723	7.624	7.824	752.870	750.000	0.4

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS112624\
Data File : PS028648.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 20:49
Operator : AR\AJ
Sample : HSTDCCC750
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 26 23:18:23 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 14:44:30 2024
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	7.227	7.723	1997.1E6	1014.1E6	744.545	752.870
		Target Compounds						
1)	T	Dalapon	2.631	2.689	1936.6E6	1449.6E6	667.359	663.816
2)	T	3,5-DICHL...	6.399	6.680	2650.6E6	1378.3E6	692.137	701.729
3)	T	4-Nitroph...	7.025	7.251	1160.2E6	622.1E6	674.966	682.033
5)	T	DICAMBA	7.414	7.923	8069.6E6	4446.8E6	702.891	722.325
6)	T	MCPP	7.597	8.026	525.3E6	301.6E6	71.990	70.019
7)	T	MCPA	7.747	8.270	724.2E6	422.7E6	70.048	68.109
8)	T	DICHLORPROP	8.121	8.638	2144.7E6	1135.4E6	688.929	710.218
9)	T	2,4-D	8.351	8.968	2324.0E6	1202.4E6	689.169	711.090
10)	T	Pentachlo...	8.650	9.495	32579.4E6	16816.1E6	738.885	734.622
11)	T	2,4,5-TP ...	9.228	9.872	12935.3E6	6937.7E6	707.628	727.029
12)	T	2,4,5-T	9.520	10.291	13262.5E6	6746.9E6	707.125	724.671
13)	T	2,4-DB	10.093	10.858	2482.5E6	821.0E6	700.945	715.994
14)	T	DINOSEB	11.304	11.237	10504.3E6	4466.8E6	699.063	711.726
15)	T	Picloram	11.111	12.328	20859.4E6	9342.5E6	701.469	724.748
16)	T	DCPA	11.597	12.279	19704.2E6	8174.6E6	716.643	736.635

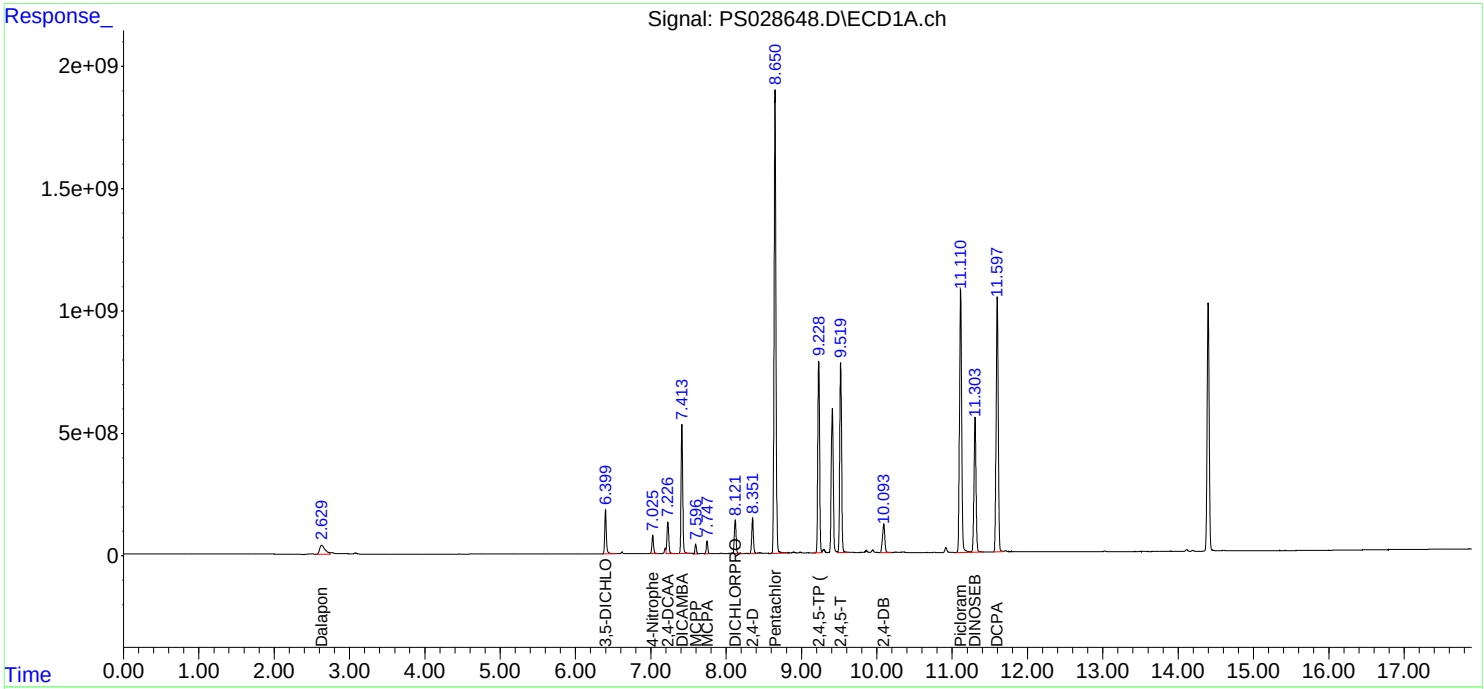
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

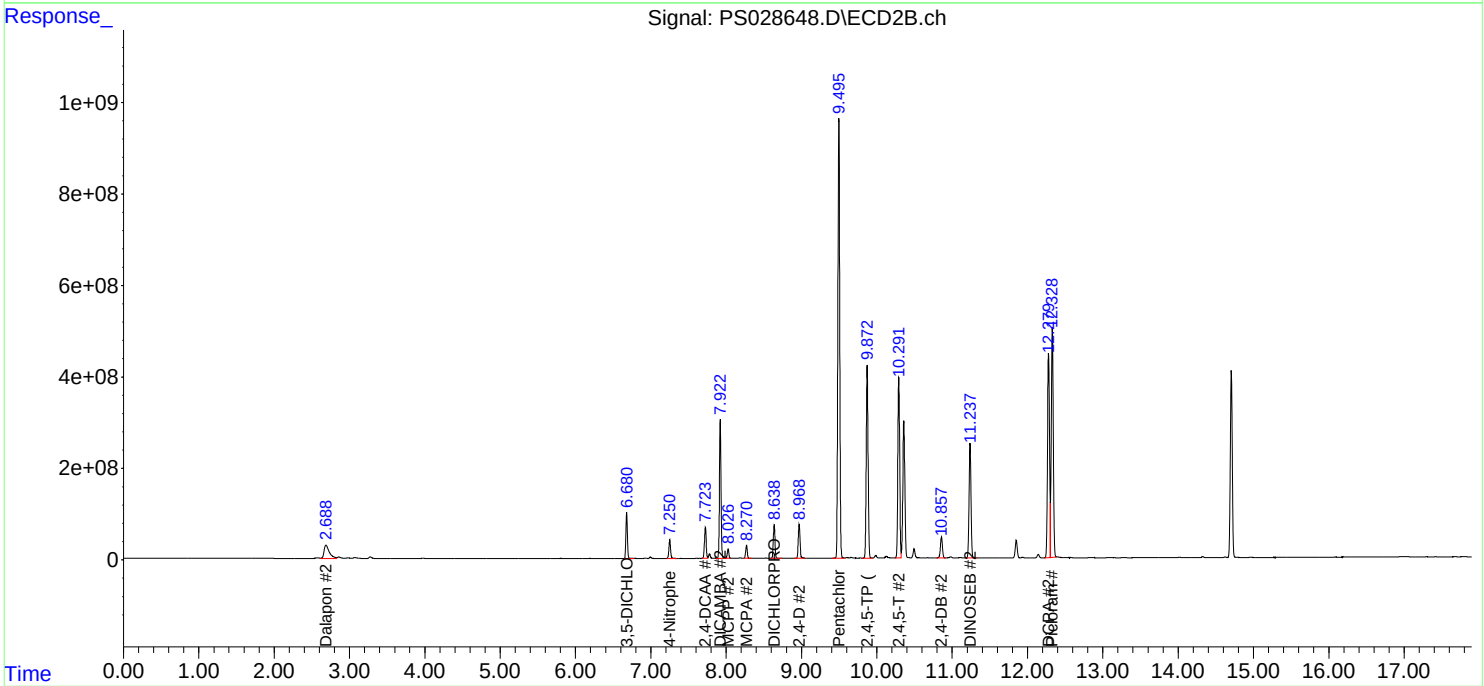
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS112624\
Data File : PS028648.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 20:49
Operator : AR\AJ
Sample : HSTDCCC750
Misc :
ALS Vial : 5 Sample Multiplier: 1

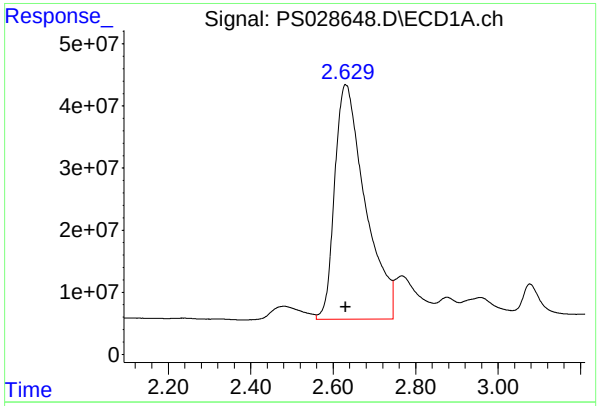
Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 26 23:18:23 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 14:44:30 2024
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



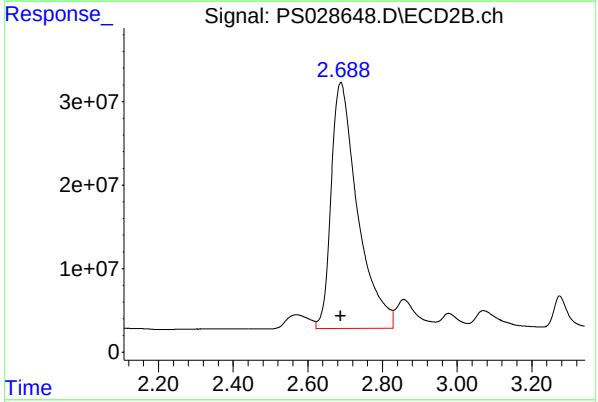




#1 Dalapon

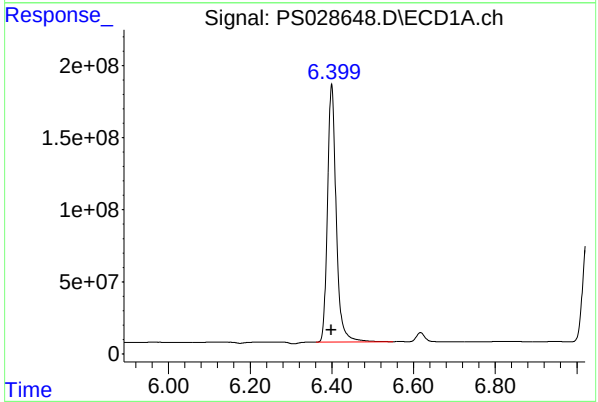
R.T.: 2.631 min
Delta R.T.: 0.000 min
Response: 1936572941
Conc: 667.36 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



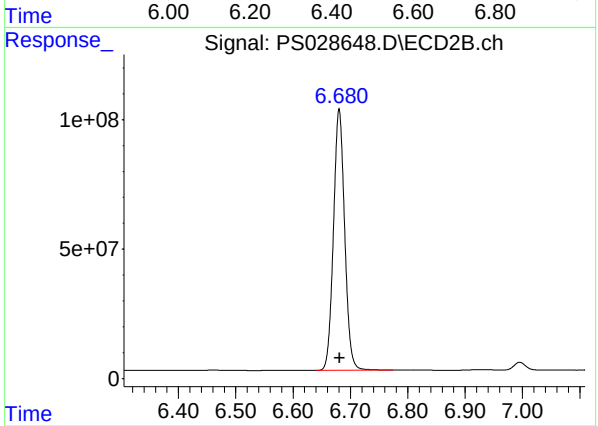
#1 Dalapon

R.T.: 2.689 min
Delta R.T.: 0.000 min
Response: 1449647387
Conc: 663.82 ng/ml



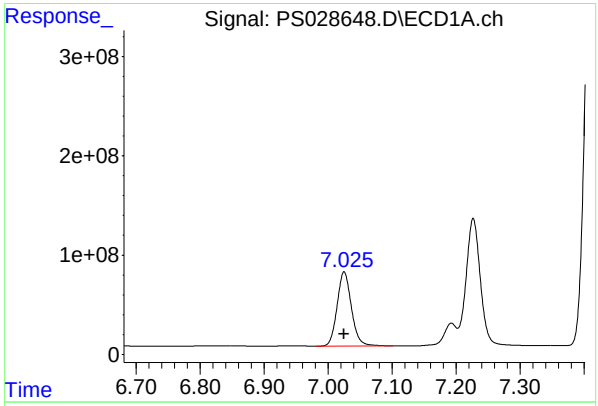
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.399 min
Delta R.T.: 0.000 min
Response: 2650644368
Conc: 692.14 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

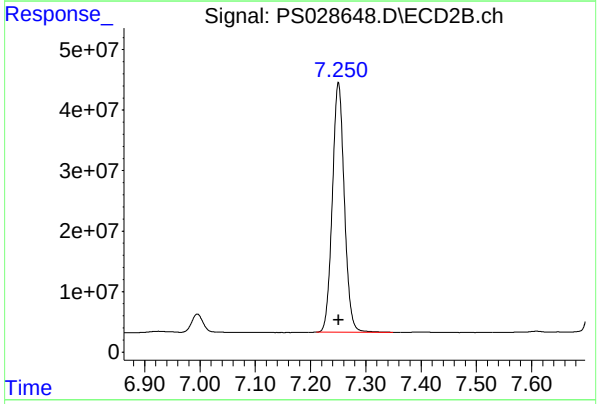
R.T.: 6.680 min
Delta R.T.: 0.000 min
Response: 1378259728
Conc: 701.73 ng/ml



#3 4-Nitrophenol

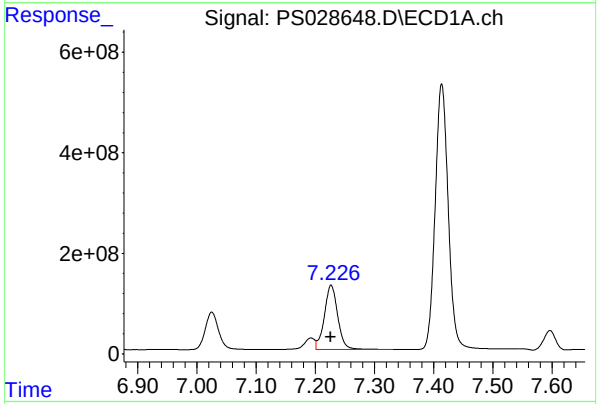
R.T.: 7.025 min
Delta R.T.: 0.000 min
Response: 1160249640
Conc: 674.97 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



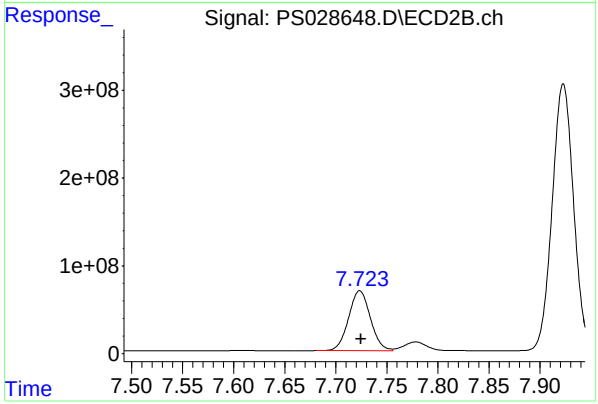
#3 4-Nitrophenol

R.T.: 7.251 min
Delta R.T.: 0.000 min
Response: 622105610
Conc: 682.03 ng/ml



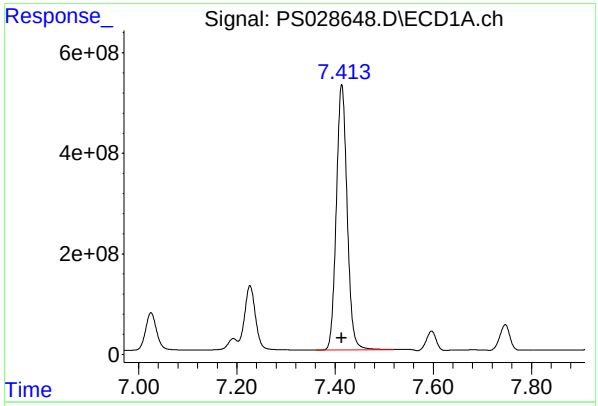
#4 2,4-DCAA

R.T.: 7.227 min
Delta R.T.: 0.000 min
Response: 1997124465
Conc: 744.54 ng/ml



#4 2,4-DCAA

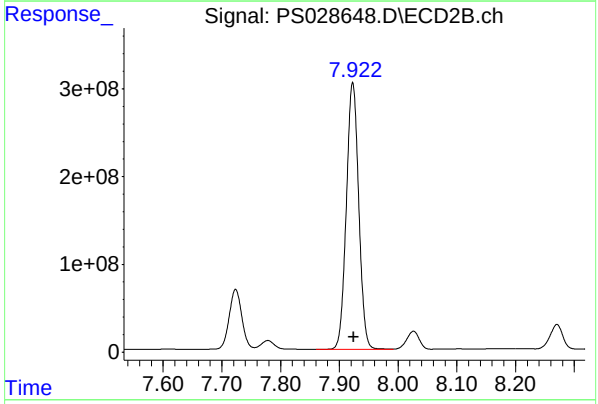
R.T.: 7.723 min
Delta R.T.: -0.001 min
Response: 1014138556
Conc: 752.87 ng/ml



#5 DICAMBA

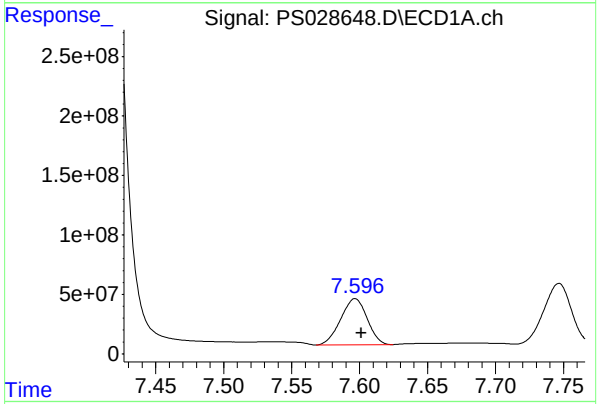
R.T.: 7.414 min
Delta R.T.: 0.000 min
Response: 8069557860
Conc: 702.89 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



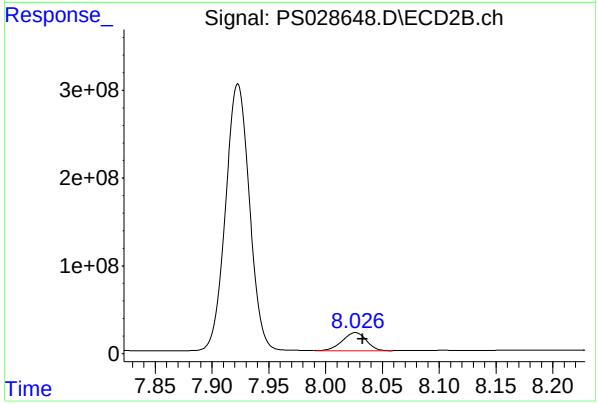
#5 DICAMBA

R.T.: 7.923 min
Delta R.T.: -0.001 min
Response: 4446787957
Conc: 722.32 ng/ml



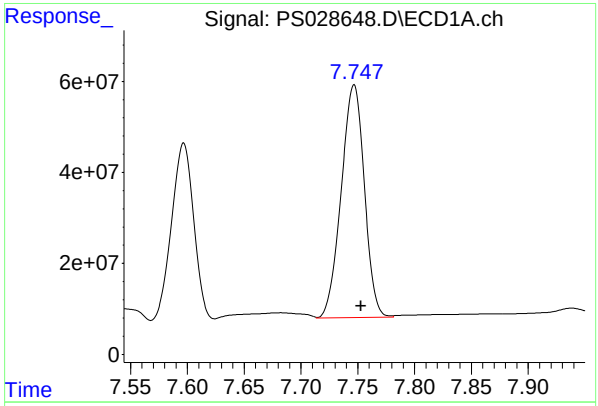
#6 MCPP

R.T.: 7.597 min
Delta R.T.: -0.005 min
Response: 525347608
Conc: 71.99 ug/ml



#6 MCPP

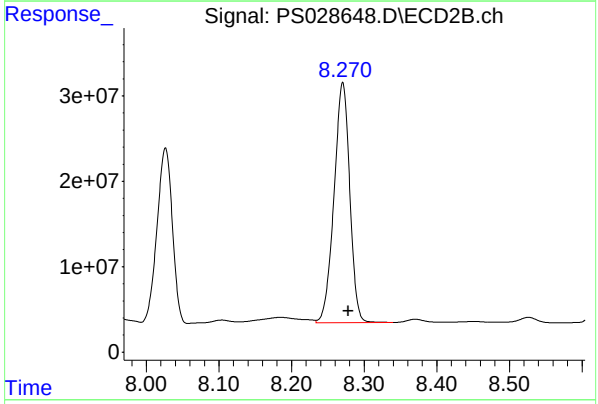
R.T.: 8.026 min
Delta R.T.: -0.006 min
Response: 301607734
Conc: 70.02 ug/ml



#7 MCPA

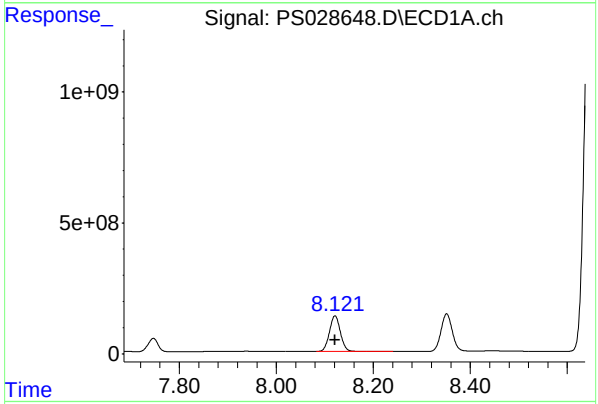
R.T.: 7.747 min
Delta R.T.: -0.006 mi
Response: 724230171
Conc: 70.05 ug/m

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



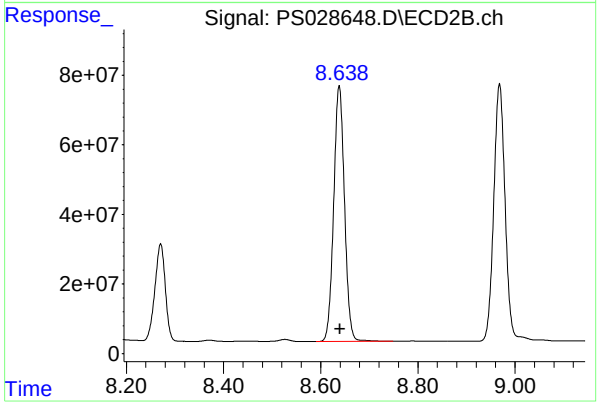
#7 MCPA

R.T.: 8.270 min
Delta R.T.: -0.008 min
Response: 422684527
Conc: 68.11 ug/ml



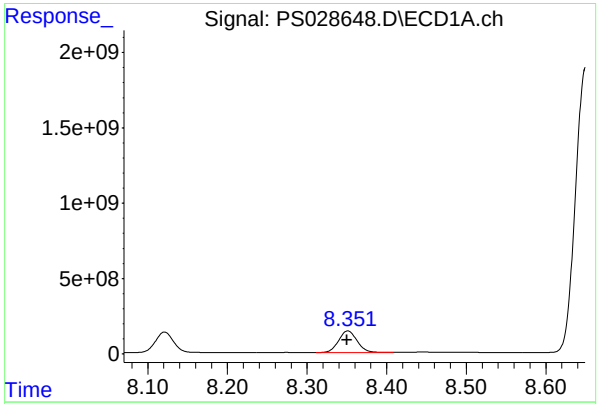
#8 DICHLORPROP

R.T.: 8.121 min
Delta R.T.: 0.000 min
Response: 2144706645
Conc: 688.93 ng/ml



#8 DICHLORPROP

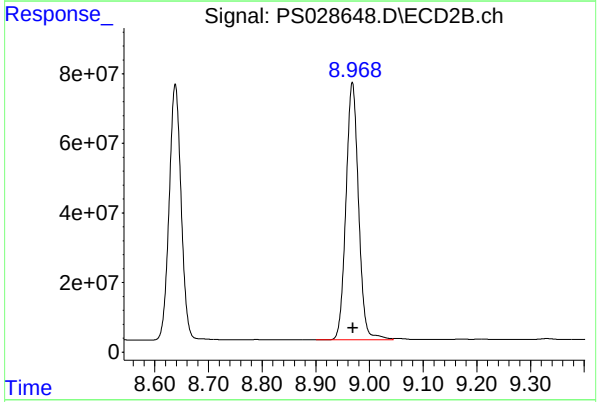
R.T.: 8.638 min
Delta R.T.: -0.001 min
Response: 1135366728
Conc: 710.22 ng/ml



#9 2,4-D

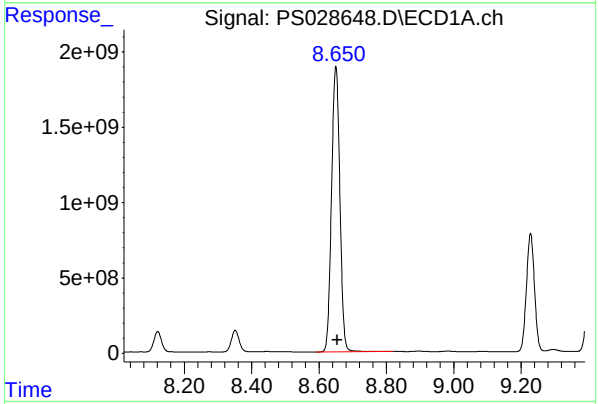
R.T.: 8.351 min
Delta R.T.: 0.001 min
Response: 2323981848
Conc: 689.17 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



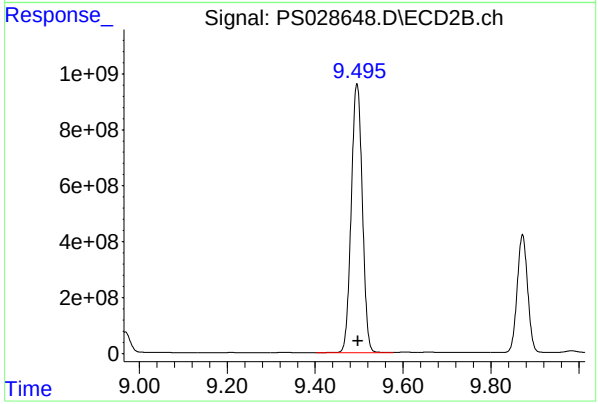
#9 2,4-D

R.T.: 8.968 min
Delta R.T.: 0.000 min
Response: 1202430792
Conc: 711.09 ng/ml



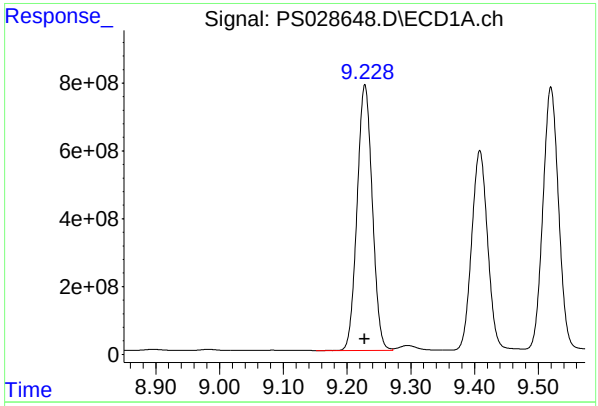
#10 Pentachlorophenol

R.T.: 8.650 min
Delta R.T.: -0.004 min
Response: 32579378093
Conc: 738.89 ng/ml



#10 Pentachlorophenol

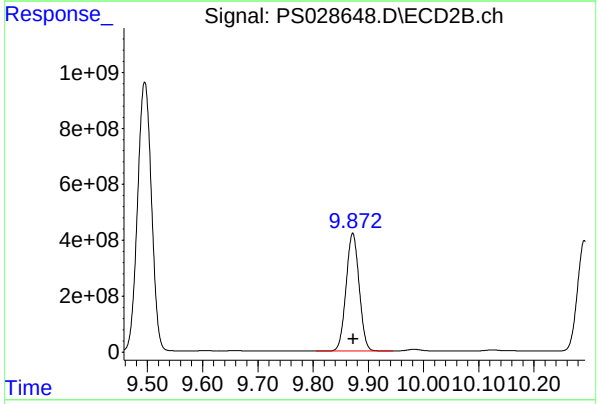
R.T.: 9.495 min
Delta R.T.: -0.002 min
Response: 16816148090
Conc: 734.62 ng/ml



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

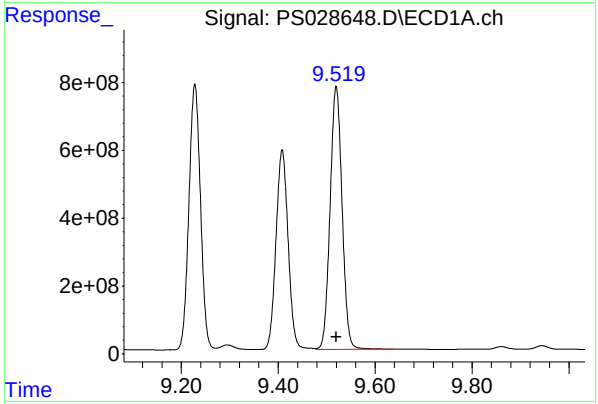
R.T.: 9.228 min
Delta R.T.: 0.000 min
Response: 12935287740
Conc: 707.63 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



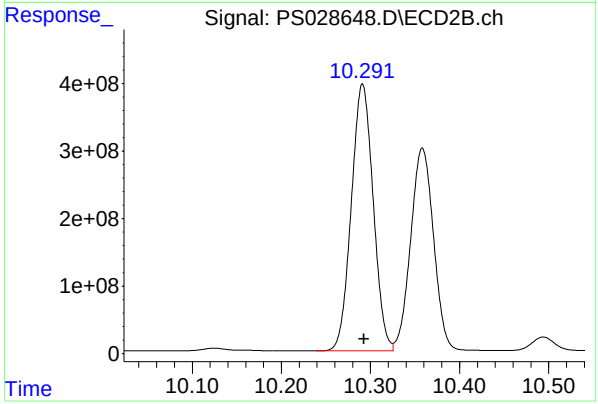
#11 2,4,5-TP (SILVEX)

R.T.: 9.872 min
Delta R.T.: -0.001 min
Response: 6937684577
Conc: 727.03 ng/ml



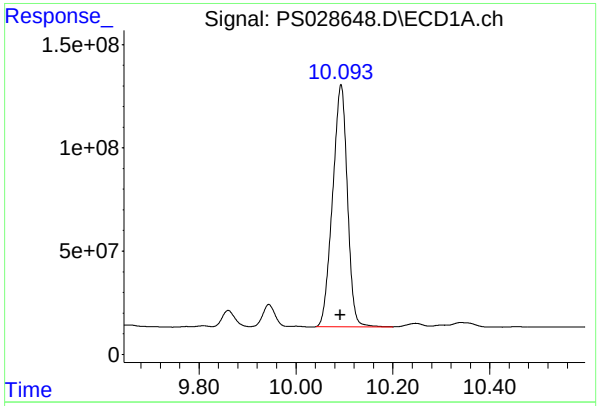
#12 2,4,5-T

R.T.: 9.520 min
Delta R.T.: 0.000 min
Response: 13262491048
Conc: 707.13 ng/ml



#12 2,4,5-T

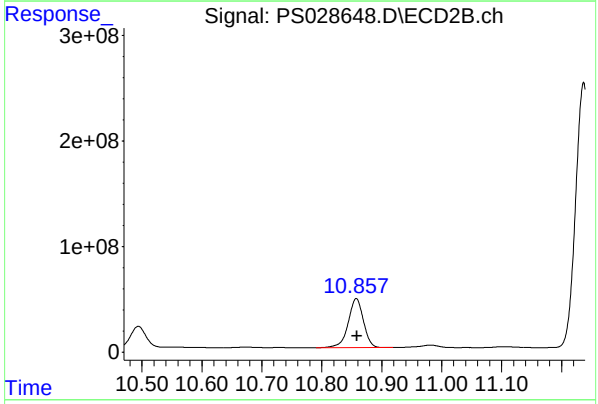
R.T.: 10.291 min
Delta R.T.: -0.002 min
Response: 6746893426
Conc: 724.67 ng/ml



#13 2,4-DB

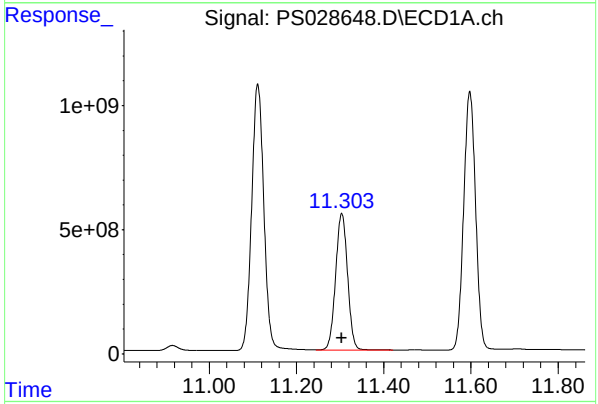
R.T.: 10.093 min
Delta R.T.: 0.000 min
Response: 2482543411
Conc: 700.95 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



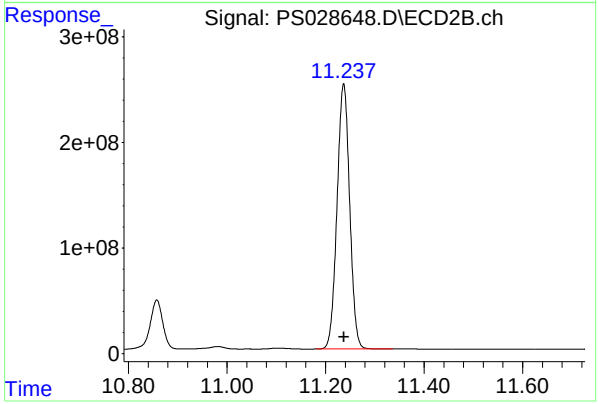
#13 2,4-DB

R.T.: 10.858 min
Delta R.T.: -0.001 min
Response: 821045188
Conc: 715.99 ng/ml



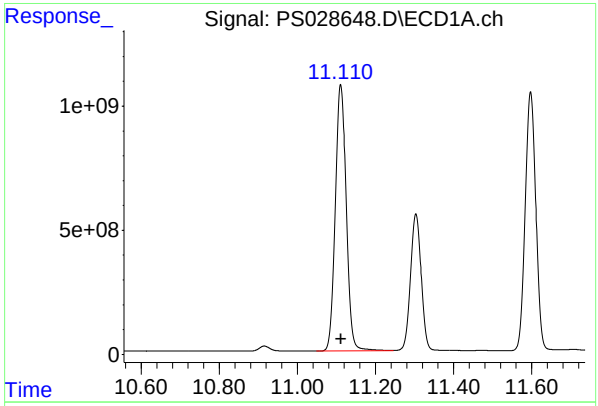
#14 DINOSEB

R.T.: 11.304 min
Delta R.T.: 0.000 min
Response: 10504273700
Conc: 699.06 ng/ml



#14 DINOSEB

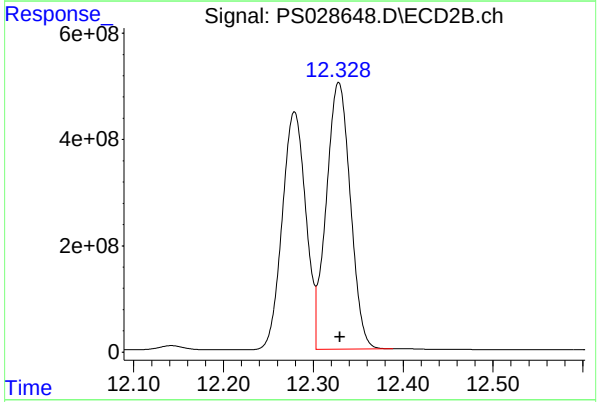
R.T.: 11.237 min
Delta R.T.: 0.000 min
Response: 4466807466
Conc: 711.73 ng/ml



#15 Picloram

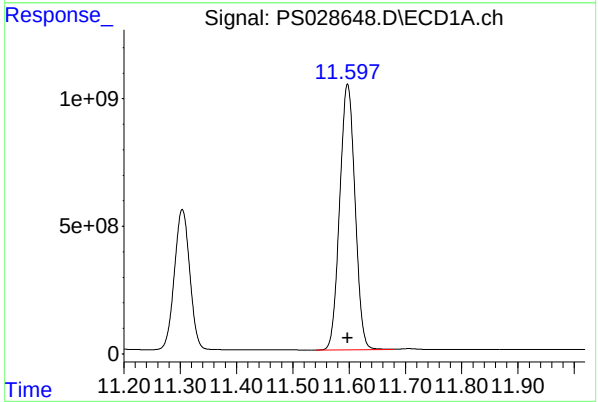
R.T.: 11.111 min
Delta R.T.: 0.000 min
Response: 20859436531
Conc: 701.47 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750



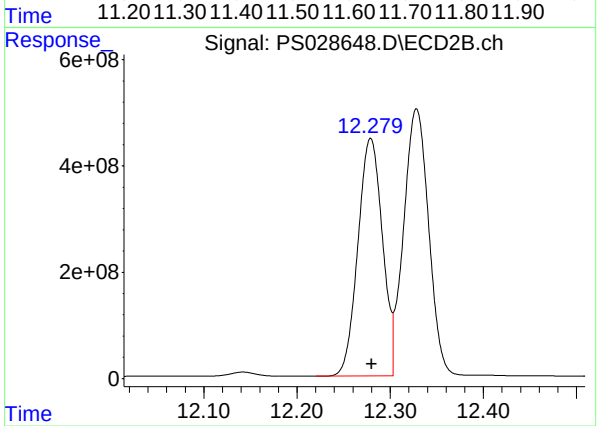
#15 Picloram

R.T.: 12.328 min
Delta R.T.: -0.002 min
Response: 9342500684
Conc: 724.75 ng/ml



#16 DCPA

R.T.: 11.597 min
Delta R.T.: 0.000 min
Response: 19704195230
Conc: 716.64 ng/ml



#16 DCPA

R.T.: 12.279 min
Delta R.T.: -0.001 min
Response: 8174596040
Conc: 736.63 ng/ml

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

CALIBRATION VERIFICATION SUMMARY

Contract: TETR16

Lab Code: CHEM **Case No.:** P4961 **SAS No.:** P4961 **SDG NO.:** P4961

Continuing Calib Date: 11/26/2024 **Initial Calibration Date(s):** 11/26/2024 11/26/2024

Continuing Calib Time: 23:37 **Initial Calibration Time(s):** 12:48 14:25

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	RT WINDOW TO	DIFF RT
2,4-DCAA	7.23	7.23	7.13	7.33	0.00
2,4-D	8.35	8.35	8.25	8.45	0.00
2,4,5-TP(Silvex)	9.23	9.23	9.13	9.33	0.00

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

CALIBRATION VERIFICATION SUMMARY

Contract: TETR16

Lab Code: CHEM **Case No.:** P4961 **SAS No.:** P4961 **SDG NO.:** P4961

Continuing Calib Date: 11/26/2024 **Initial Calibration Date(s):** 11/26/2024 11/26/2024

Continuing Calib Time: 23:37 **Initial Calibration Time(s):** 12:48 14:25

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM	RT WINDOW TO	DIFF RT
2,4-DCAA	7.72	7.72	7.62	7.82	0.00
2,4-D	8.97	8.97	8.87	9.07	0.00
2,4,5-TP(Silvex)	9.87	9.87	9.77	9.97	0.00

Alliance TECHNICAL GROUP

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

CALIBRATION VERIFICATION SUMMARY

Contract: TETR16

Lab Code: CHEM **Case No.:** P4961 **SAS No.:** P4961 **SDG NO.:** P4961

GC Column: RTX-CLP **ID:** 0.32 **(mm)** **Initi. Calib. Date(s):** 11/26/2024 11/26/2024

Client Sample No.: CCAL03 **Date Analyzed:** 11/26/2024

Lab Sample No.: HSTDCCC750 **Data File :** PS028655.D **Time Analyzed:** 23:37

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	9.228	9.128	9.328	712.830	712.500	0.0
2,4-D	8.351	8.251	8.451	693.910	705.000	-1.6
2,4-DCAA	7.226	7.126	7.326	734.170	750.000	-2.1

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

CALIBRATION VERIFICATION SUMMARY

Contract: TETR16

Lab Code: CHEM **Case No.:** P4961 **SAS No.:** P4961 **SDG NO.:** P4961

GC Column: RTX-CLP2 **ID:** 0.32 **(mm)** **Initi. Calib. Date(s):** 11/26/2024 11/26/2024

Client Sample No.: CCAL03 **Date Analyzed:** 11/26/2024

Lab Sample No.: HSTDCCC750 **Data File :** PS028655.D **Time Analyzed:** 23:37

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	9.871	9.773	9.973	729.110	712.500	2.3
2,4-D	8.968	8.869	9.069	715.560	705.000	1.5
2,4-DCAA	7.724	7.624	7.824	752.570	750.000	0.3

Quantitation Report (QT Reviewed)

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS112624\
Data File : PS028655.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 23:37
Operator : AR\AJ
Sample : HSTDCCC750
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Manual Integrations APPROVED
Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 26 23:26:19 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 14:44:30 2024
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	7.226	7.724	1969.3E6	1013.7E6	734.172m	752.570
	Target Compounds						
1) T	Dalapon	2.629	2.688	1943.2E6	1450.5E6	669.641	664.189
2) T	3,5-DICHL...	6.400	6.681	2660.8E6	1376.9E6	694.776	701.027
3) T	4-Nitroph...	7.026	7.251	1165.7E6	621.3E6	678.150	681.105
5) T	DICAMBA	7.414	7.923	8102.4E6	4462.1E6	705.755	724.805
6) T	MCPP	7.597	8.026	528.4E6	303.8E6	72.408	70.537
7) T	MCPA	7.747	8.271	729.9E6	425.4E6	70.595	68.542
8) T	DICHLORPROP	8.121	8.638	2152.8E6	1136.6E6	691.513	710.980
9) T	2,4-D	8.351	8.968	2340.0E6	1210.0E6	693.907	715.562
10) T	Pentachlo...	8.650	9.495	32773.0E6	16798.6E6	743.277	733.856
11) T	2,4,5-TP ...	9.228	9.871	13030.3E6	6957.6E6	712.828	729.114
12) T	2,4,5-T	9.520	10.291	13370.1E6	6770.5E6	712.863	727.211
13) T	2,4-DB	10.093	10.857	2503.8E6	822.7E6	706.945	717.396
14) T	DINOSEB	11.304	11.236	10573.0E6	4466.7E6	703.636	711.712
15) T	Picloram	11.111	12.327	20923.5E6	9300.0E6	703.624	721.450
16) T	DCPA	11.597	12.279	19850.7E6	8169.4E6	721.971	736.168

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

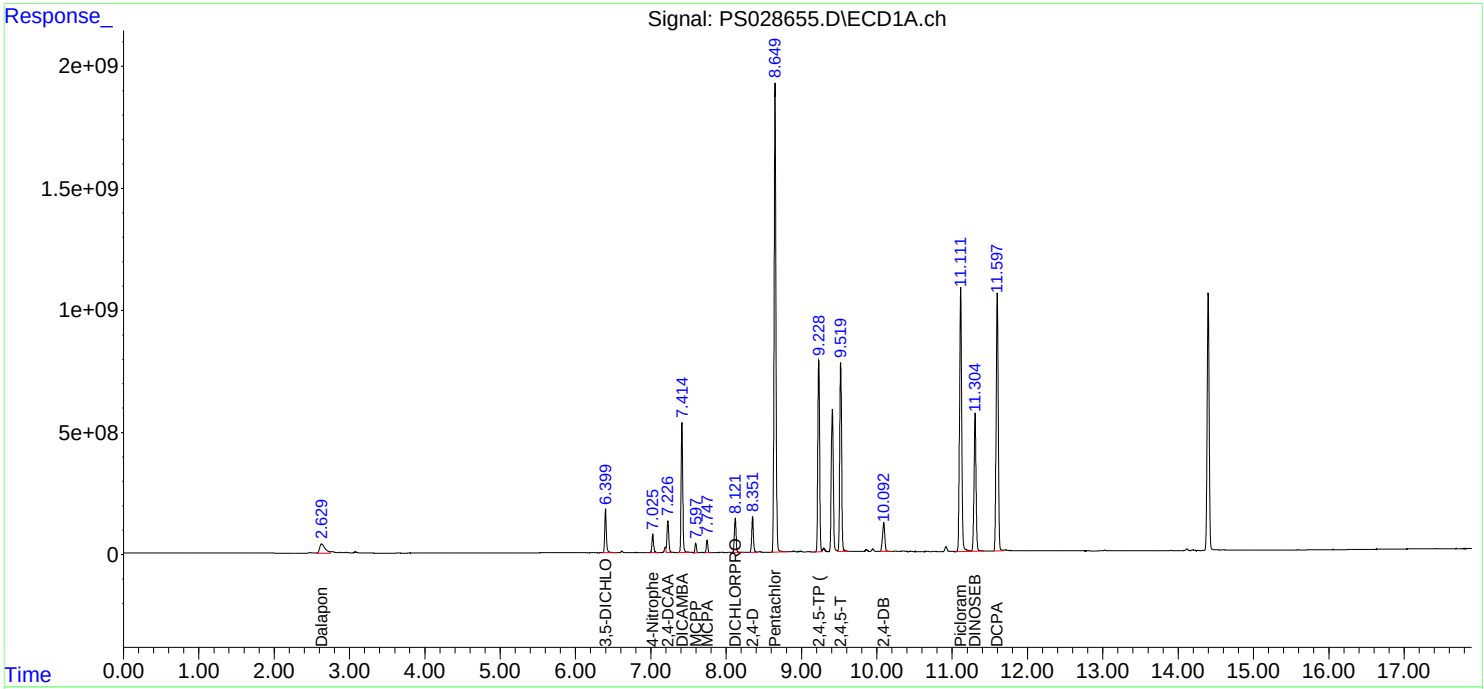
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS112624\
Data File : PS028655.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 23:37
Operator : AR\AJ
Sample : HSTDCCC750
Misc :
ALS Vial : 5 Sample Multiplier: 1

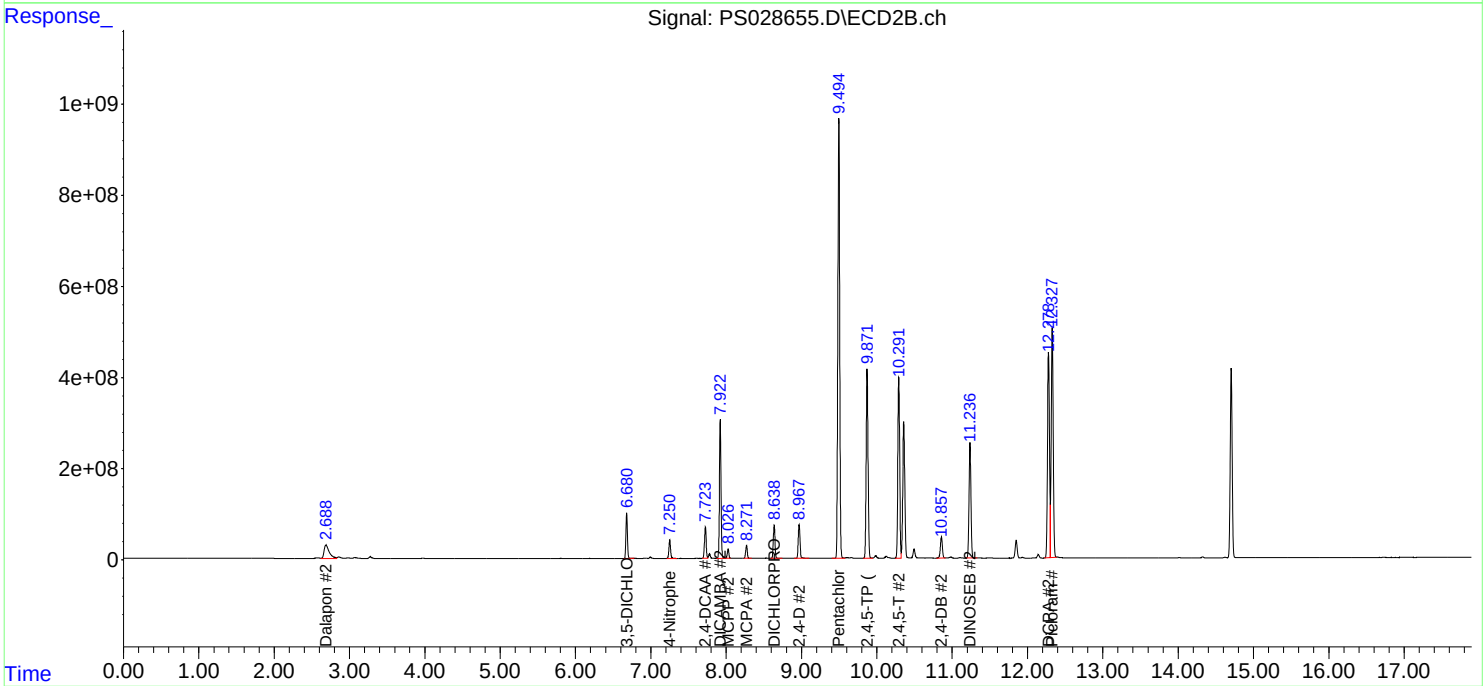
Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

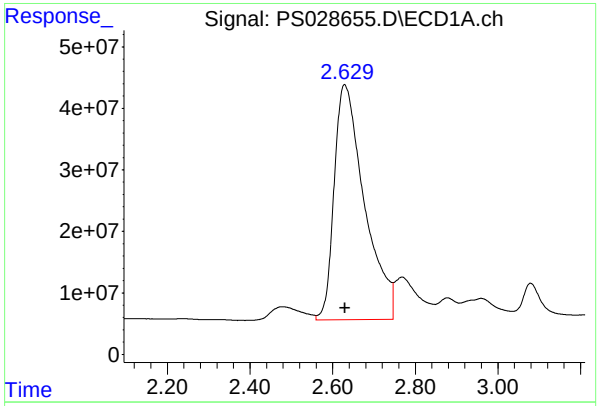
Manual Integrations APPROVED
Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 26 23:26:19 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 14:44:30 2024
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.: 2.629 min
Delta R.T.: 0.000 min
Response: 1943196011
Conc: 669.64 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
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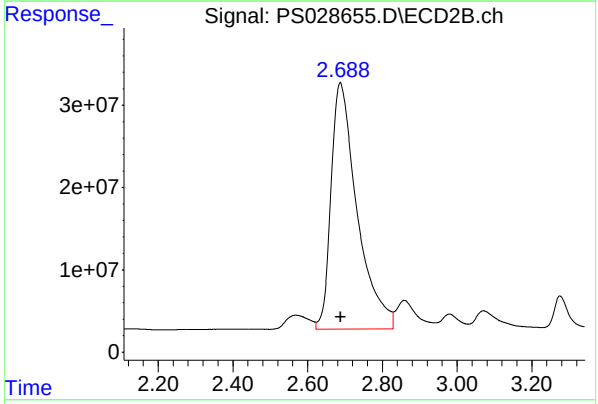
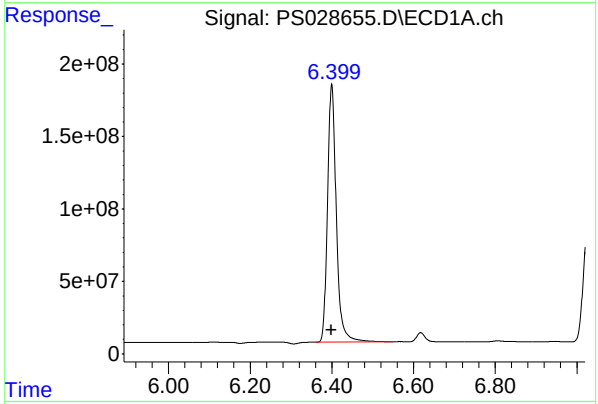


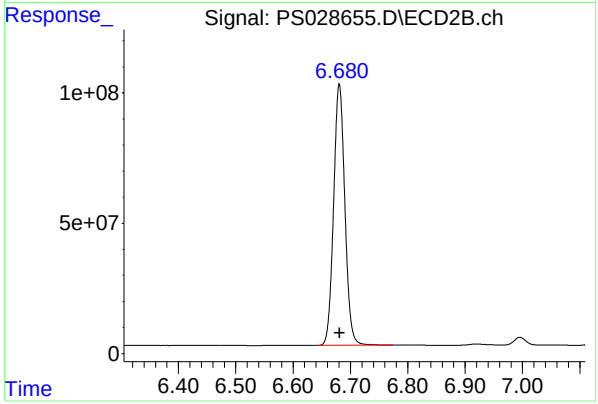
#1 Dalapon

R.T.: 2.688 min
Delta R.T.: 0.000 min
Response: 1450463605
Conc: 664.19 ng/ml



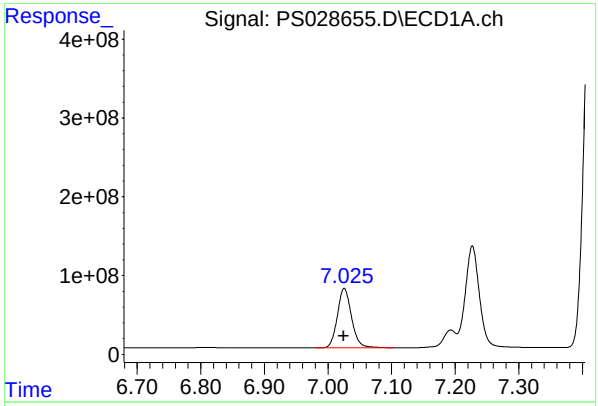
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.400 min
Delta R.T.: 0.000 min
Response: 2660751335
Conc: 694.78 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.681 min
Delta R.T.: 0.000 min
Response: 1376880423
Conc: 701.03 ng/ml



#3 4-Nitrophenol

R.T.: 7.026 min
Delta R.T.: 0.000 mi
Response: 1165721293
Conc: 678.15 ng/m

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
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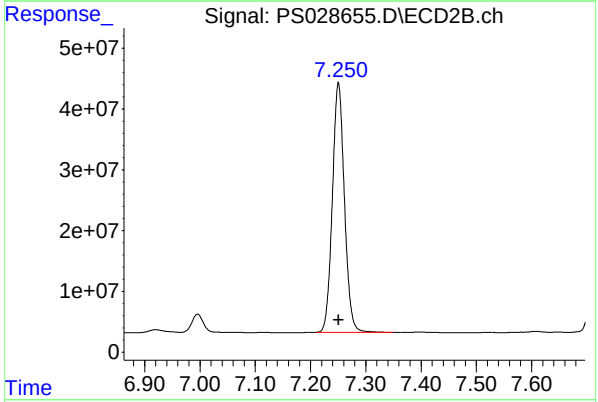
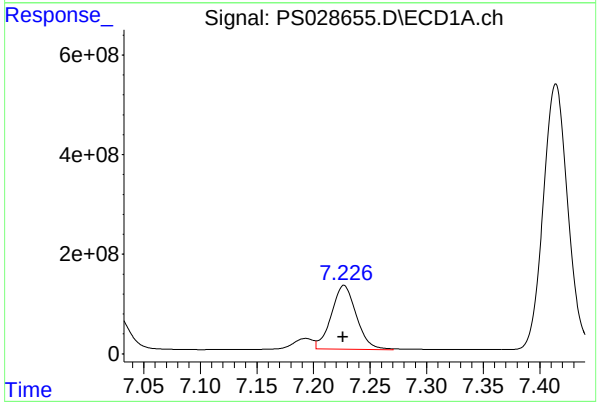


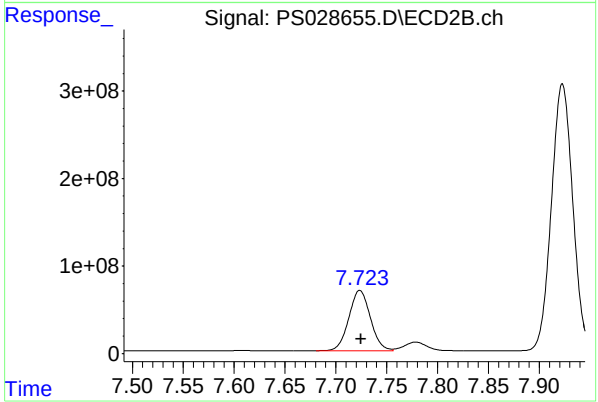
#3 4-Nitrophenol

R.T.: 7.251 min
Delta R.T.: 0.000 min
Response: 621259255
Conc: 681.10 ng/ml



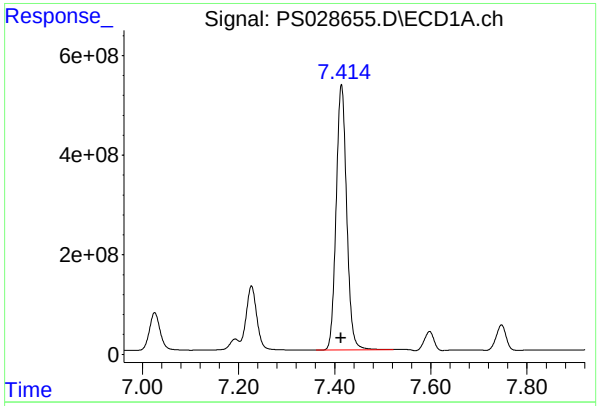
#4 2,4-DCAA

R.T.: 7.226 min
Delta R.T.: 0.000 min
Response: 1969299780
Conc: 734.17 ng/ml m



#4 2,4-DCAA

R.T.: 7.724 min
Delta R.T.: 0.000 min
Response: 1013734406
Conc: 752.57 ng/ml



#5 DICAMBA

R.T.: 7.414 min
Delta R.T.: 0.000 min
Response: 8102445787
Conc: 705.76 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Manual Integrations APPROVED

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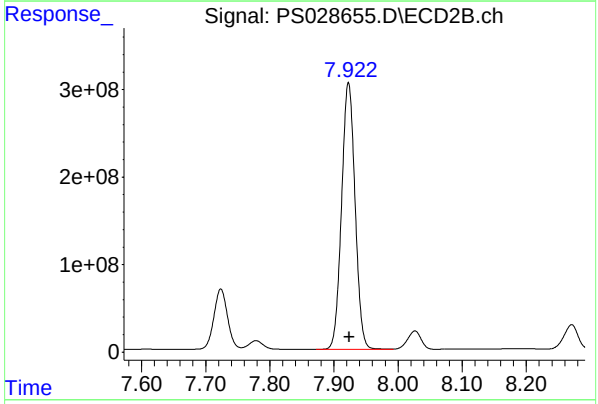
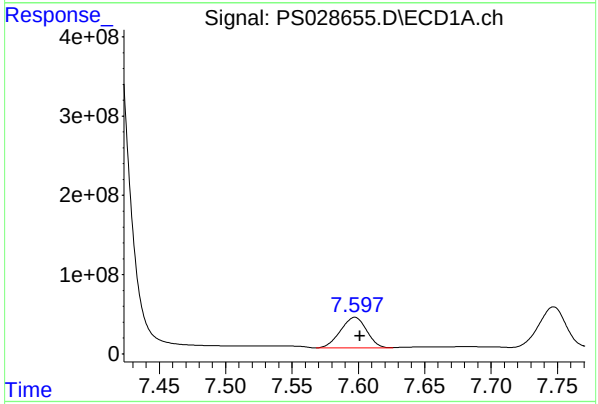


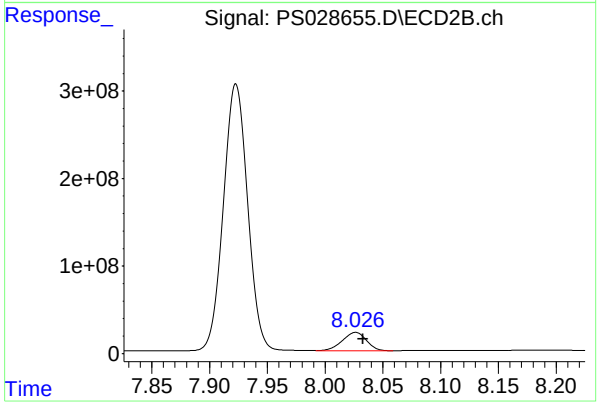
#5 DICAMBA

R.T.: 7.923 min
Delta R.T.: -0.001 min
Response: 4462058745
Conc: 724.81 ng/ml



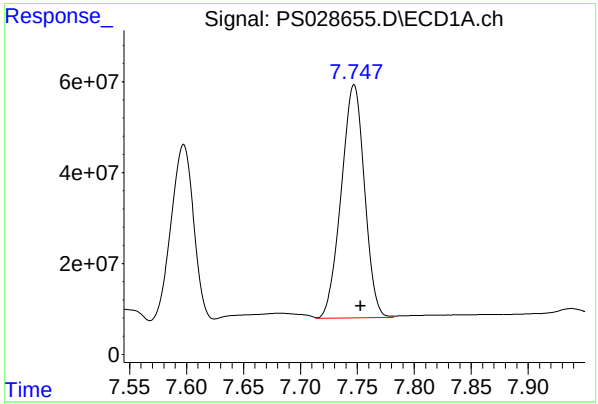
#6 MCPP

R.T.: 7.597 min
Delta R.T.: -0.004 min
Response: 528393121
Conc: 72.41 ug/ml



#6 MCPP

R.T.: 8.026 min
Delta R.T.: -0.006 min
Response: 303841366
Conc: 70.54 ug/ml



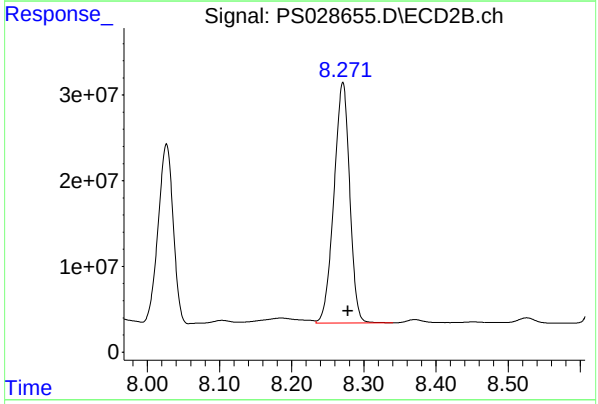
#7 MCPA

R.T.: 7.747 min
Delta R.T.: -0.006 min
Response: 729880792
Conc: 70.59 ug/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

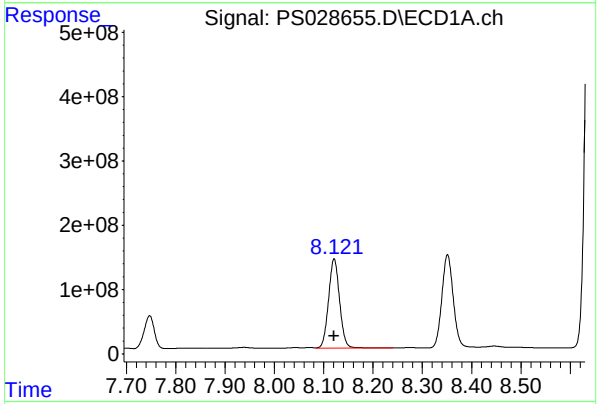
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024



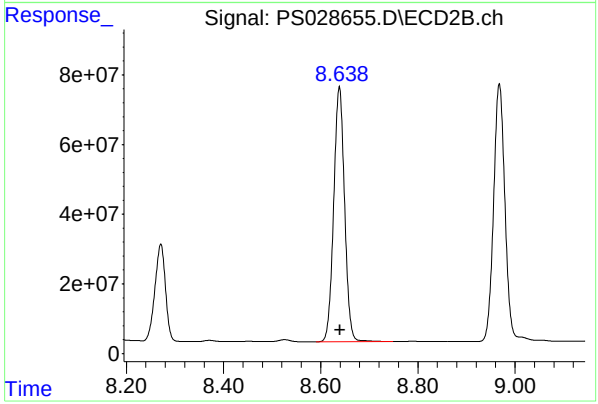
#7 MCPA

R.T.: 8.271 min
Delta R.T.: -0.008 min
Response: 425373516
Conc: 68.54 ug/ml



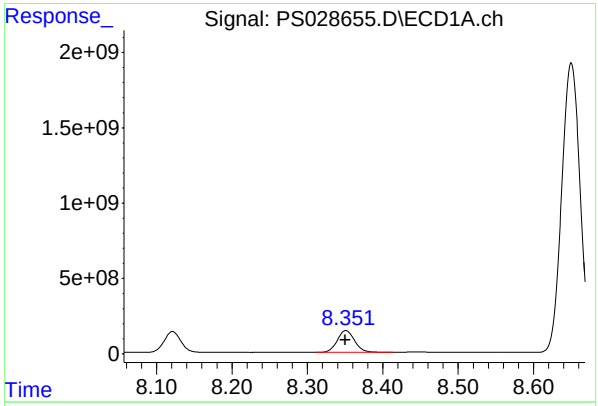
#8 DICHLORPROP

R.T.: 8.121 min
Delta R.T.: 0.000 min
Response: 2152751166
Conc: 691.51 ng/ml



#8 DICHLORPROP

R.T.: 8.638 min
Delta R.T.: -0.001 min
Response: 1136585327
Conc: 710.98 ng/ml



#9 2,4-D

R.T.: 8.351 min
Delta R.T.: 0.000 min
Response: 2339959240
Conc: 693.91 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Manual Integrations
APPROVED

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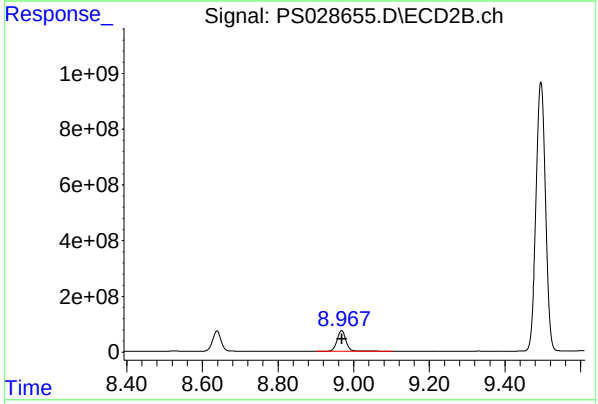
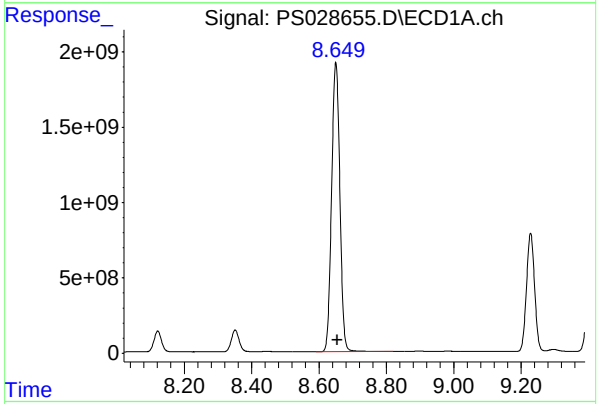


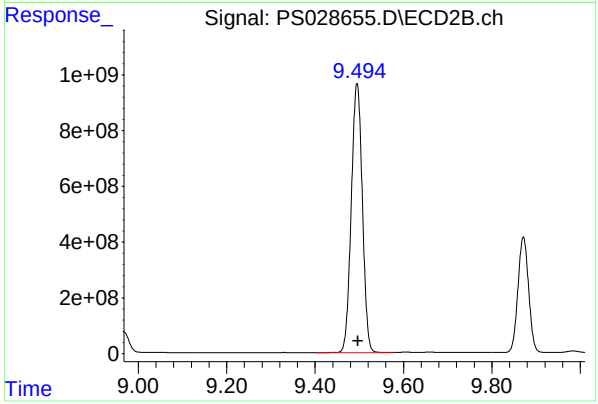
#9 2,4-D

R.T.: 8.968 min
Delta R.T.: -0.001 min
Response: 1209992769
Conc: 715.56 ng/ml



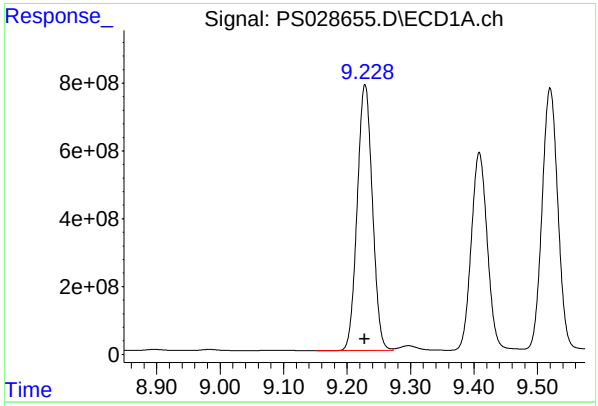
#10 Pentachlorophenol

R.T.: 8.650 min
Delta R.T.: -0.004 min
Response: 32773036694
Conc: 743.28 ng/ml



#10 Pentachlorophenol

R.T.: 9.495 min
Delta R.T.: -0.002 min
Response: 16798616518
Conc: 733.86 ng/ml



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

R.T.: 9.228 min
Delta R.T.: 0.000 min
Response: 13030335449
Conc: 712.83 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

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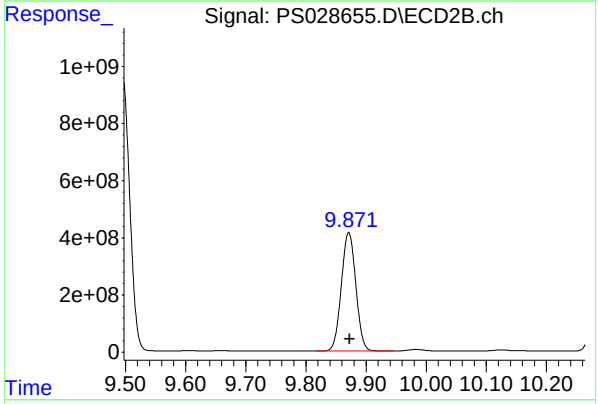
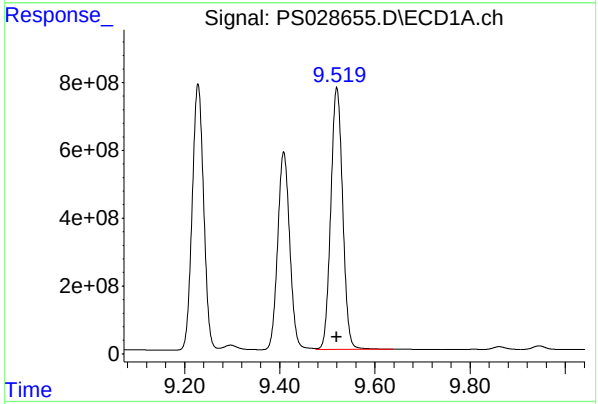


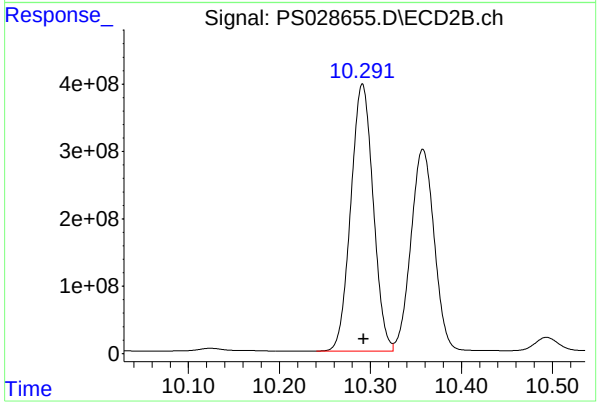
#11 2,4,5-TP (SILVEX)

R.T.: 9.871 min
Delta R.T.: -0.002 min
Response: 6957586106
Conc: 729.11 ng/ml



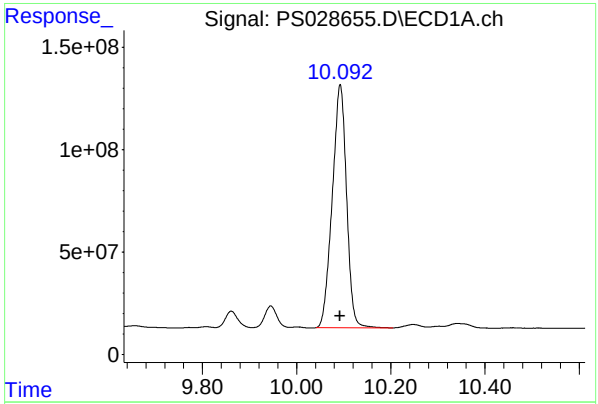
#12 2,4,5-T

R.T.: 9.520 min
Delta R.T.: 0.000 min
Response: 13370106086
Conc: 712.86 ng/ml



#12 2,4,5-T

R.T.: 10.291 min
Delta R.T.: -0.002 min
Response: 6770539121
Conc: 727.21 ng/ml



#13 2,4-DB

R.T.: 10.093 min
Delta R.T.: 0.000 min
Response: 2503793613
Conc: 706.95 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

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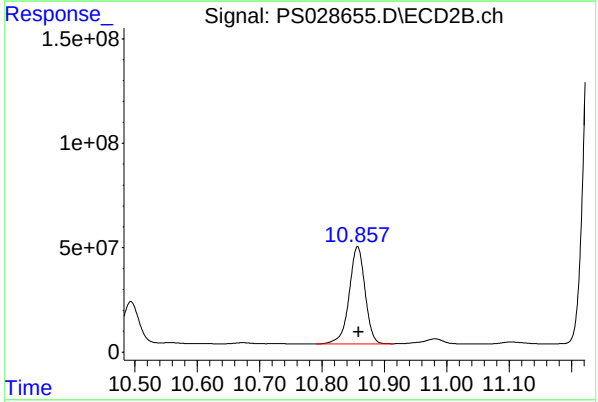
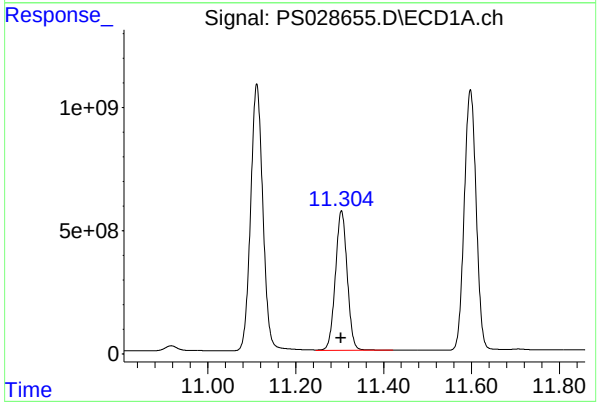


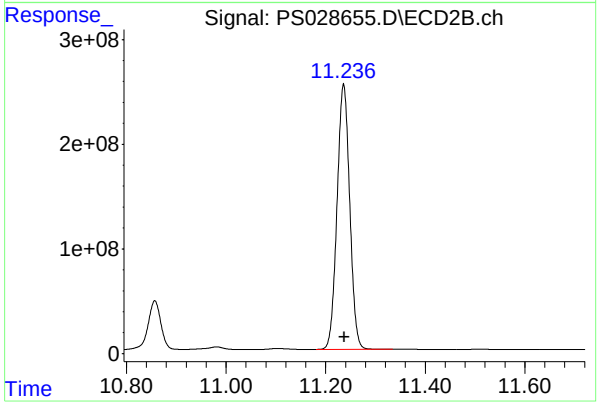
#13 2,4-DB

R.T.: 10.857 min
Delta R.T.: -0.002 min
Response: 822653506
Conc: 717.40 ng/ml



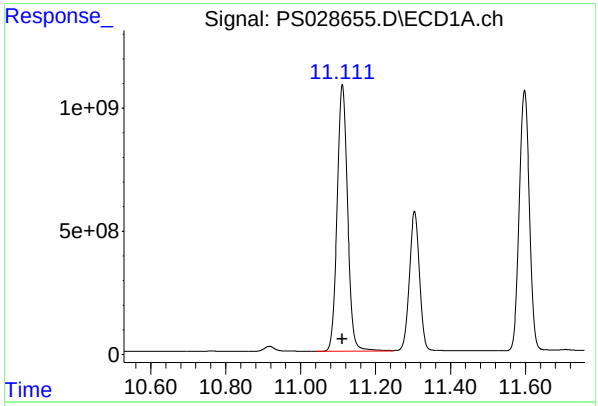
#14 DINOSEB

R.T.: 11.304 min
Delta R.T.: 0.000 min
Response: 10572993232
Conc: 703.64 ng/ml



#14 DINOSEB

R.T.: 11.236 min
Delta R.T.: -0.001 min
Response: 4466718812
Conc: 711.71 ng/ml



#15 Picloram

R.T.: 11.111 min
Delta R.T.: 0.000 min
Response: 20923501615
Conc: 703.62 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

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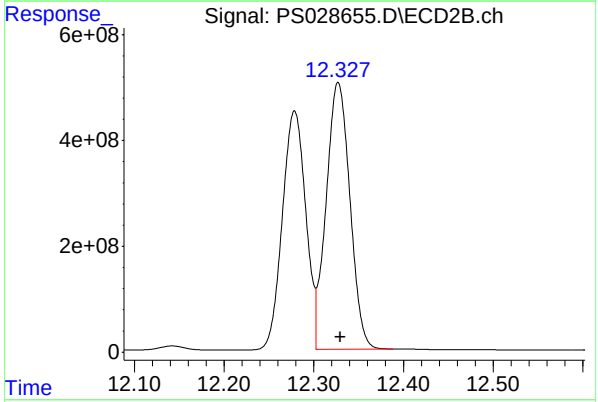
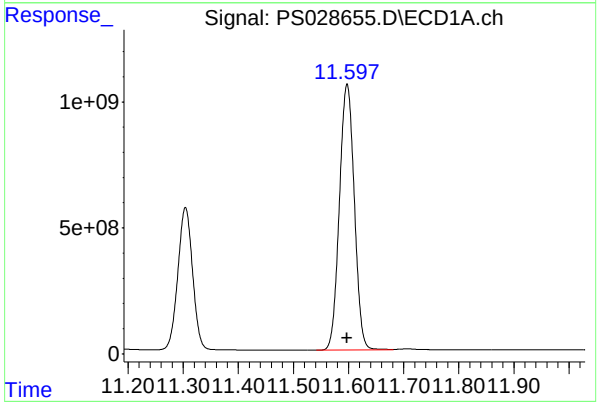
Supervised By :Ankita Jodhani 11/27/2024



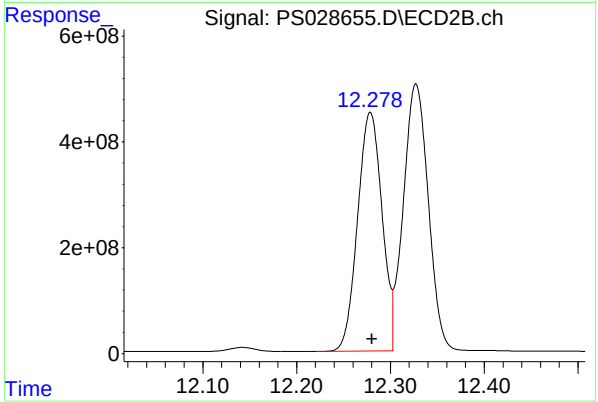
#15 Picloram

R.T.: 12.327 min
Delta R.T.: -0.003 min
Response: 9299989206
Conc: 721.45 ng/ml



#16 DCPA

R.T.: 11.597 min
Delta R.T.: 0.000 min
Response: 19850695388
Conc: 721.97 ng/ml



#16 DCPA

R.T.: 12.279 min
Delta R.T.: -0.002 min
Response: 8169418826
Conc: 736.17 ng/ml

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Fax : 908 789 8922

Analytical Sequence

Client: Tetra Tech, EMI **SDG No.:** P4961

Project: R36745 **Instrument ID:** ECD_S

GC Column: RTX-CLP **ID:** 0.32 (mm) **Inst. Calib. Date(s):** 11/26/2024 11/26/2024

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	11/26/2024	12:24	PS028631.D	7.23	0.00
HSTDICC200	HSTDICC200	11/26/2024	12:48	PS028632.D	7.23	0.00
HSTDICC500	HSTDICC500	11/26/2024	13:13	PS028633.D	7.23	0.00
HSTDICC750	HSTDICC750	11/26/2024	13:37	PS028634.D	7.23	0.00
HSTDICC1000	HSTDICC1000	11/26/2024	14:01	PS028635.D	7.23	0.00
HSTDICC1500	HSTDICC1500	11/26/2024	14:25	PS028636.D	7.23	0.00
I.BLK	I.BLK	11/26/2024	15:37	PS028638.D	7.23	0.00
HSTDCCC750	HSTDCCC750	11/26/2024	16:01	PS028639.D	7.23	0.00
PB165273BL	PB165273BL	11/26/2024	19:13	PS028644.D	7.23	0.00
PB165273BS	PB165273BS	11/26/2024	19:37	PS028645.D	7.23	0.00
PB165159TB	PB165159TB	11/26/2024	20:01	PS028646.D	7.23	0.00
I.BLK	I.BLK	11/26/2024	20:25	PS028647.D	7.23	0.00
HSTDCCC750	HSTDCCC750	11/26/2024	20:49	PS028648.D	7.23	0.00
C0RB8	P4961-01	11/26/2024	21:13	PS028649.D	7.23	0.00
C0RB8MS	P4961-01MS	11/26/2024	21:37	PS028650.D	7.23	0.00
C0RB8MSD	P4961-01MSD	11/26/2024	22:01	PS028651.D	7.23	0.00
I.BLK	I.BLK	11/26/2024	23:13	PS028654.D	7.23	0.00
HSTDCCC750	HSTDCCC750	11/26/2024	23:37	PS028655.D	7.23	0.00

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Fax : 908 789 8922

Analytical Sequence

Client: Tetra Tech, EMI **SDG No.:** P4961

Project: R36745 **Instrument ID:** ECD_S

GC Column: RTX-CLP2 **ID:** 0.32 (mm) **Inst. Calib. Date(s):** 11/26/2024 11/26/2024

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	11/26/2024	12:24	PS028631.D	7.72	0.00
HSTDICC200	HSTDICC200	11/26/2024	12:48	PS028632.D	7.73	0.00
HSTDICC500	HSTDICC500	11/26/2024	13:13	PS028633.D	7.72	0.00
HSTDICC750	HSTDICC750	11/26/2024	13:37	PS028634.D	7.72	0.00
HSTDICC1000	HSTDICC1000	11/26/2024	14:01	PS028635.D	7.73	0.00
HSTDICC1500	HSTDICC1500	11/26/2024	14:25	PS028636.D	7.73	0.00
I.BLK	I.BLK	11/26/2024	15:37	PS028638.D	7.72	0.00
HSTDCCC750	HSTDCCC750	11/26/2024	16:01	PS028639.D	7.72	0.00
PB165273BL	PB165273BL	11/26/2024	19:13	PS028644.D	7.72	0.00
PB165273BS	PB165273BS	11/26/2024	19:37	PS028645.D	7.72	0.00
PB165159TB	PB165159TB	11/26/2024	20:01	PS028646.D	7.72	0.00
I.BLK	I.BLK	11/26/2024	20:25	PS028647.D	7.72	0.00
HSTDCCC750	HSTDCCC750	11/26/2024	20:49	PS028648.D	7.72	0.00
C0RB8	P4961-01	11/26/2024	21:13	PS028649.D	7.72	0.00
C0RB8MS	P4961-01MS	11/26/2024	21:37	PS028650.D	7.72	0.00
C0RB8MSD	P4961-01MSD	11/26/2024	22:01	PS028651.D	7.72	0.00
I.BLK	I.BLK	11/26/2024	23:13	PS028654.D	7.72	0.00
HSTDCCC750	HSTDCCC750	11/26/2024	23:37	PS028655.D	7.72	0.00

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Fax : 908 789 8922

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

C0RB8MS

Contract: TETR16

Lab Code: CHEM **Case No.:** P4961 **SAS No.:** P4961 **SDG NO.:** P4961

Lab Sample ID: P4961-01MS **Date(s) Analyzed:** 11/26/2024 11/26/2024

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	8.35	8.30	8.40	46.0	0.9
	2	8.97	8.92	9.02	46.4	
2,4,5-TP(Silvex)	1	9.23	9.18	9.28	43.0	57.1
	2	9.88	9.83	9.93	77.4	

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Fax : 908 789 8922

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

C0RB8MSD

Contract: TETR16

Lab Code: CHEM **Case No.:** P4961 **SAS No.:** P4961 **SDG NO.:** P4961

Lab Sample ID: P4961-01MSD **Date(s) Analyzed:** 11/26/2024 11/26/2024

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	8.35	8.30	8.40	46.1	3
	2	8.97	8.92	9.02	47.5	
2,4,5-TP(Silvex)	1	9.23	9.18	9.28	43.4	57.2
	2	9.88	9.83	9.93	78.2	

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COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

PB165273BS

Contract: TETR16

Lab Code: CHEM **Case No.:** P4961 **SAS No.:** P4961 **SDG NO.:** P4961

Lab Sample ID: PB165273BS **Date(s) Analyzed:** 11/26/2024 11/26/2024

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	8.35	8.30	8.40	4.90	0
	2	8.97	8.92	9.02	4.90	
2,4,5-TP(Silvex)	1	9.23	9.18	9.28	4.70	0
	2	9.87	9.82	9.92	4.70	

QC SAMPLE DATA

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Fax : 908 789 8922

Report of Analysis

Client:	Tetra Tech, EMI	Date Collected:	
Project:	R36745	Date Received:	
Client Sample ID:	PB165273BL	SDG No.:	P4961
Lab Sample ID:	PB165273BL	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
PS028644.D	1	11/26/24 11:10	11/26/24 19:13	PB165273

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	0.49	U	0.49	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.45	U	0.45	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	508		39 - 175	102%	SPK: 500

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
P = Indicates >25% difference for detected concentrations between the two GC columns
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements
J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
S = Indicates estimated value where valid five-point calibration was not performed prior to analyte detection in sample.
() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS112624\
Data File : PS028644.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 19:13
Operator : AR\AJ
Sample : PB165273BL
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
PB165273BL

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 27 00:18:29 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 14:44:30 2024
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	7.226	7.723	1361.7E6	669.2E6	507.637m	496.779
	Target Compounds						

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS112624\
Data File : PS028644.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 19:13
Operator : AR\AJ
Sample : PB165273BL
Misc :
ALS Vial : 14 Sample Multiplier: 1

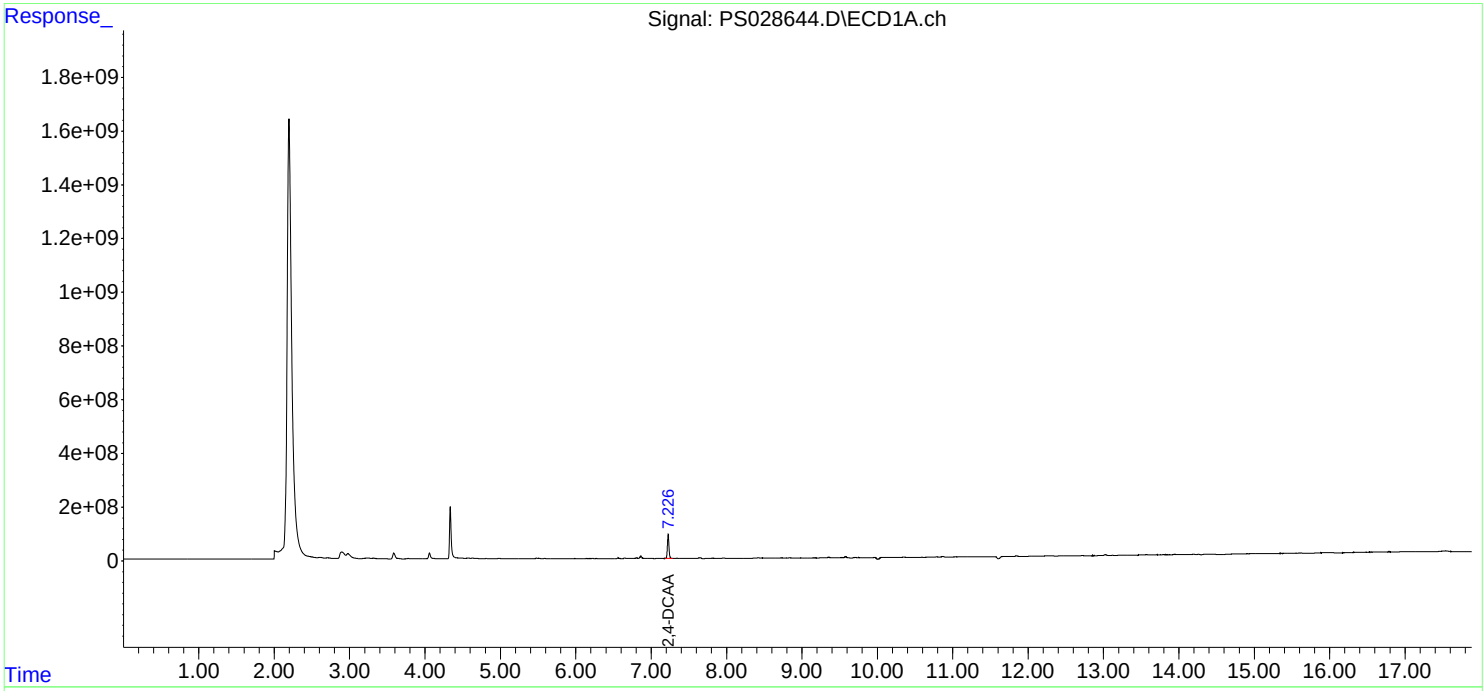
Instrument :
ECD_S
ClientSampleId :
PB165273BL

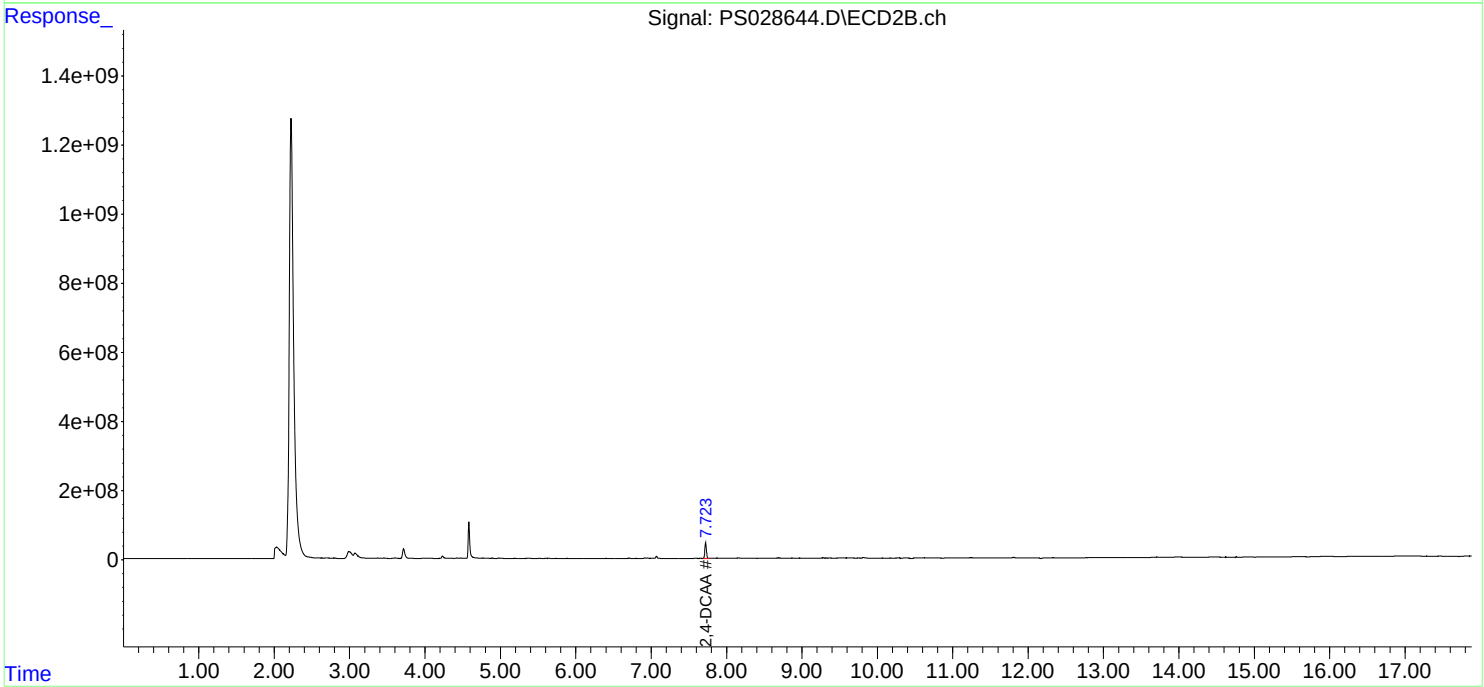
Manual Integrations APPROVED

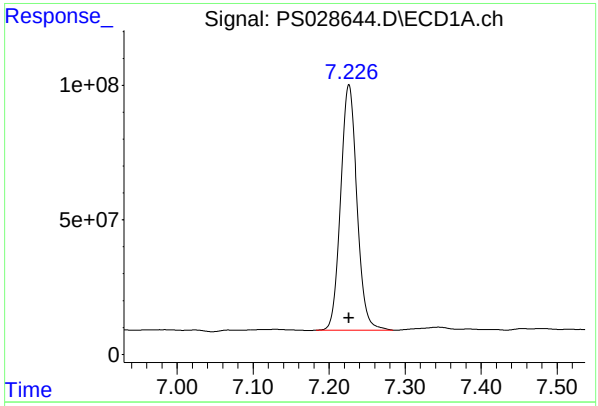
Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 27 00:18:29 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 14:44:30 2024
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







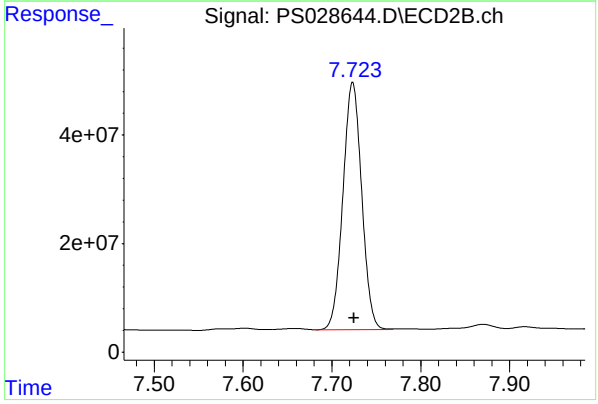
#4 2,4-DCAA

R.T.: 7.226 min
Delta R.T.: 0.000 mi
Response: 1361655998
Conc: 507.64 ng/m

Instrument :
ECD_S
ClientSampleId :
PB165273BL

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024



#4 2,4-DCAA

R.T.: 7.723 min
Delta R.T.: -0.001 min
Response: 669176167
Conc: 496.78 ng/ml

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Fax : 908 789 8922

Report of Analysis

Client:	Tetra Tech, EMI	Date Collected:	11/26/24
Project:	R36745	Date Received:	11/26/24
Client Sample ID:	PIBLK-PS028631.D	SDG No.:	P4961
Lab Sample ID:	I.BLK-PS028631.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
PS028631.D	1		11/26/24	PS112624

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	0.49	U	0.49	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.45	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\PS112624\
Data File : PS028631.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 12:24
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 26 14:45:13 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 14:44:30 2024
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	7.225	7.724	1318.5E6	662.1E6	491.551	491.546
	Target Compounds						

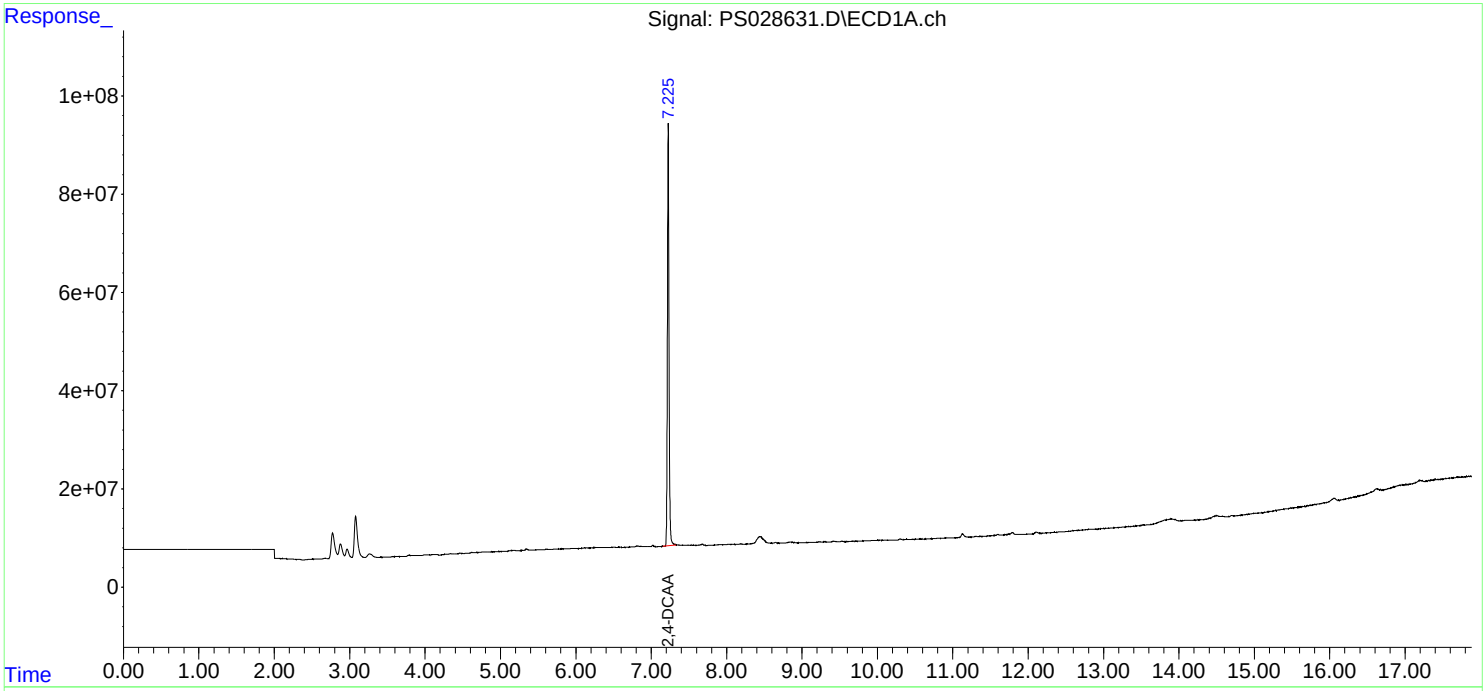
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

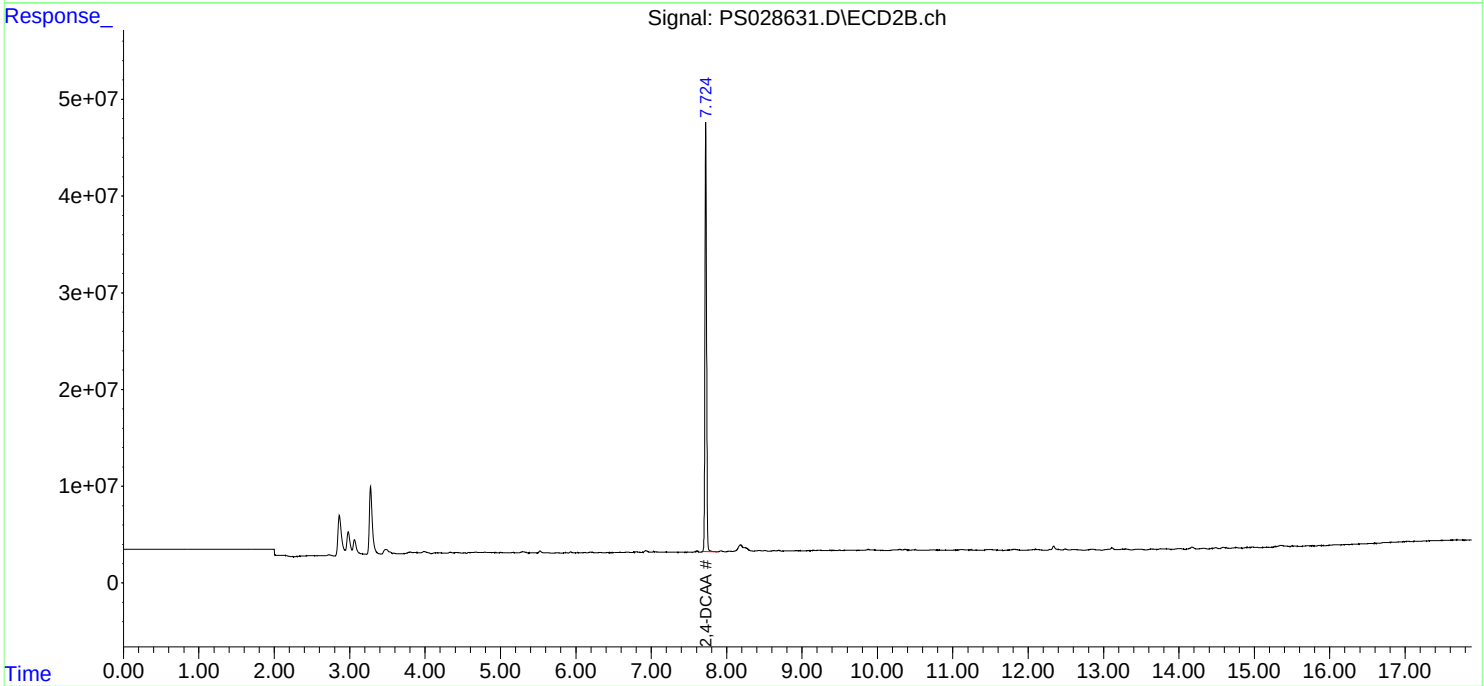
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS112624\
Data File : PS028631.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 12:24
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

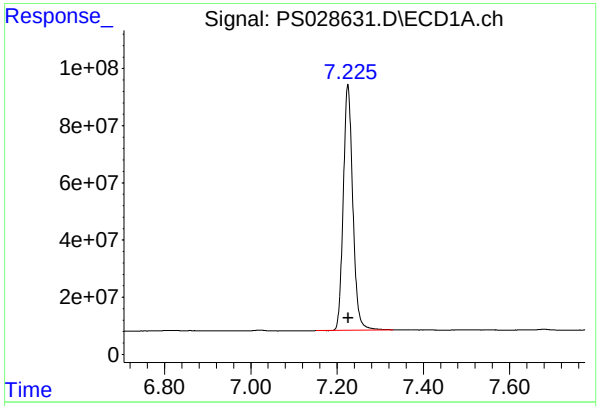
Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 26 14:45:13 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 14:44:30 2024
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



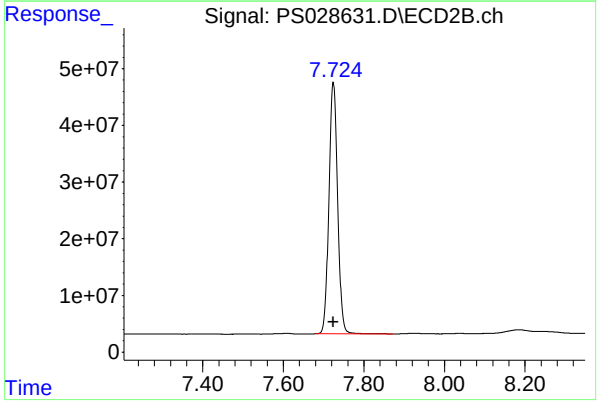




#4 2,4-DCAA

R.T.: 7.225 min
Delta R.T.: 0.000 min
Response: 1318509068
Conc: 491.55 ng/ml

Instrument :
ECD_S
ClientSampleId :
I.BLK



#4 2,4-DCAA

R.T.: 7.724 min
Delta R.T.: 0.000 min
Response: 662127019
Conc: 491.55 ng/ml

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Report of Analysis

Client:	Tetra Tech, EMI	Date Collected:	11/26/24
Project:	R36745	Date Received:	11/26/24
Client Sample ID:	PIBLK-PS028638.D	SDG No.:	P4961
Lab Sample ID:	I.BLK-PS028638.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
PS028638.D	1		11/26/24	PS112624

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	0.49	U	0.49	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.45	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\PS112624\
Data File : PS028638.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 15:37
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: Nov 26 16:08:57 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 14:44:30 2024
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	7.227	7.724	1297.3E6	651.1E6	483.641	483.334
	Target Compounds						

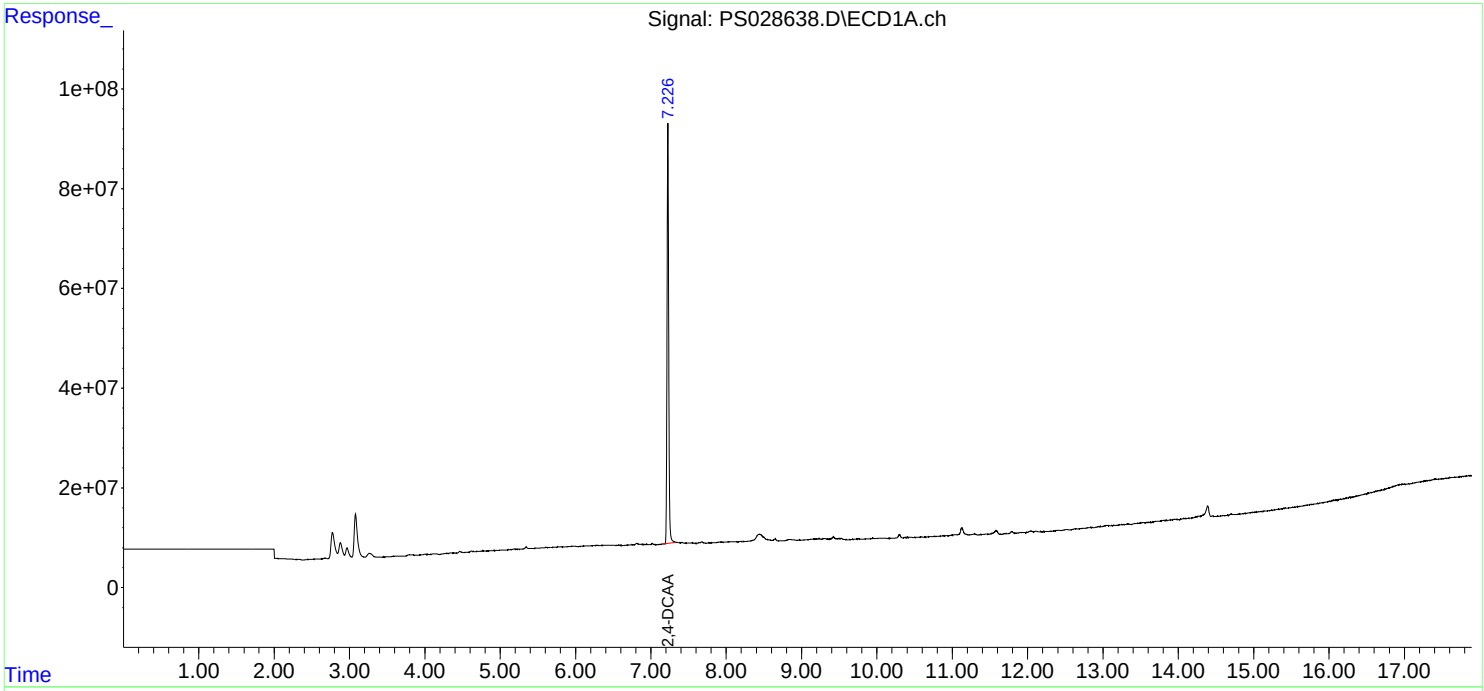
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

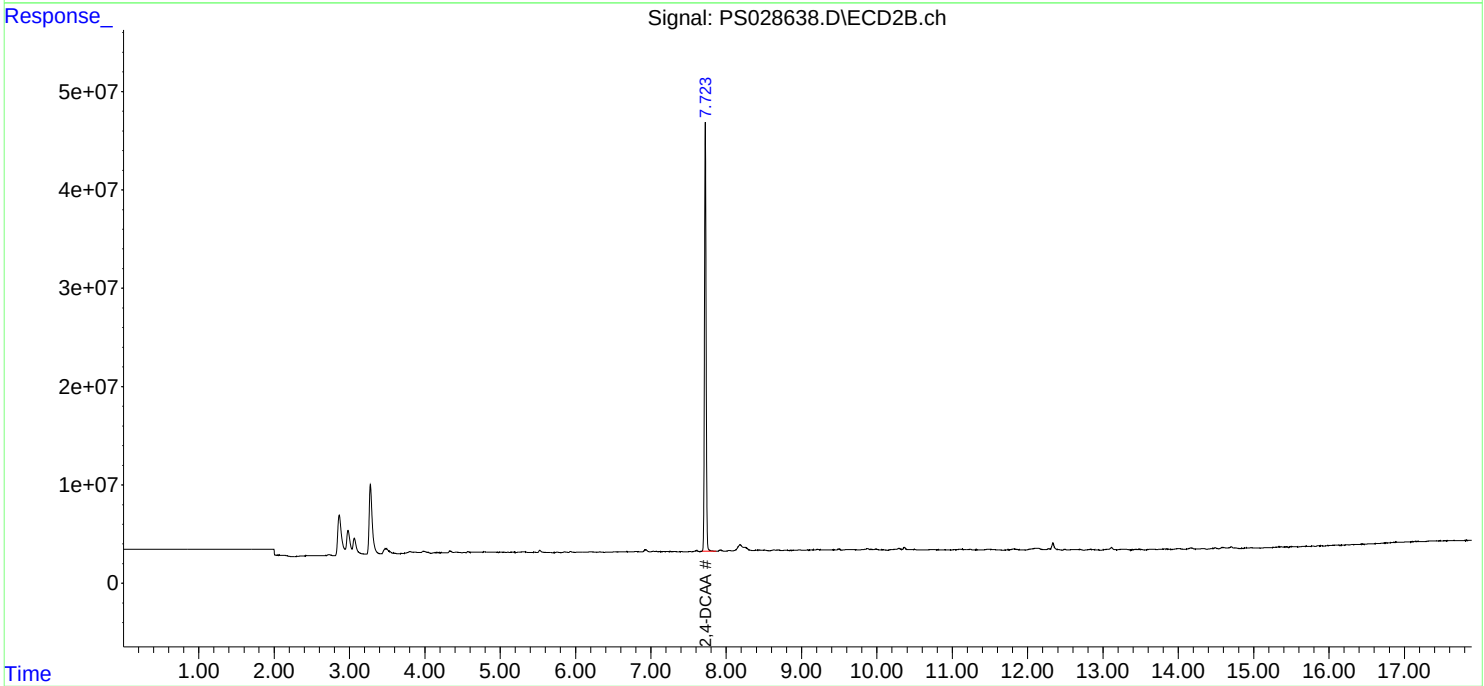
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS112624\
Data File : PS028638.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 15:37
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

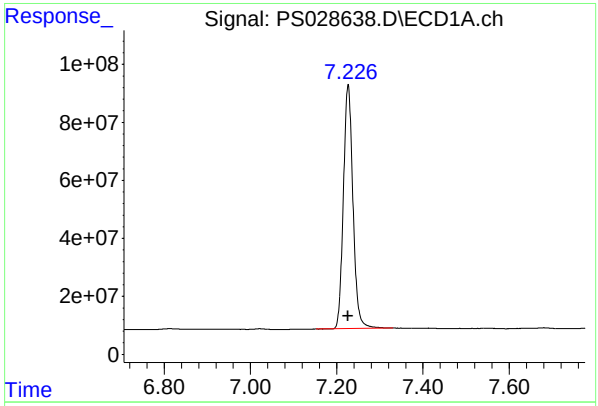
Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 26 16:08:57 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 14:44:30 2024
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



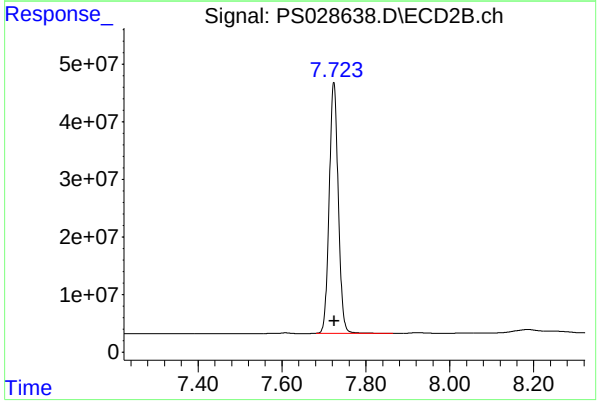




#4 2,4-DCAA

R.T.: 7.227 min
Delta R.T.: 0.000 min
Response: 1297291429
Conc: 483.64 ng/ml

Instrument :
ECD_S
ClientSampleId :
I.BLK



#4 2,4-DCAA

R.T.: 7.724 min
Delta R.T.: 0.000 min
Response: 651064838
Conc: 483.33 ng/ml

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

Report of Analysis

Client:	Tetra Tech, EMI	Date Collected:	11/26/24
Project:	R36745	Date Received:	11/26/24
Client Sample ID:	PIBLK-PS028647.D	SDG No.:	P4961
Lab Sample ID:	I.BLK-PS028647.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
PS028647.D	1		11/26/24	PS112624

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	0.49	U	0.49	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.45	U	0.45	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	502		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\PS112624\
Data File : PS028647.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 20:25
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: Nov 27 00:21:07 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 14:44:30 2024
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	7.226	7.723	1329.9E6	676.4E6	495.809	502.153
	Target Compounds						

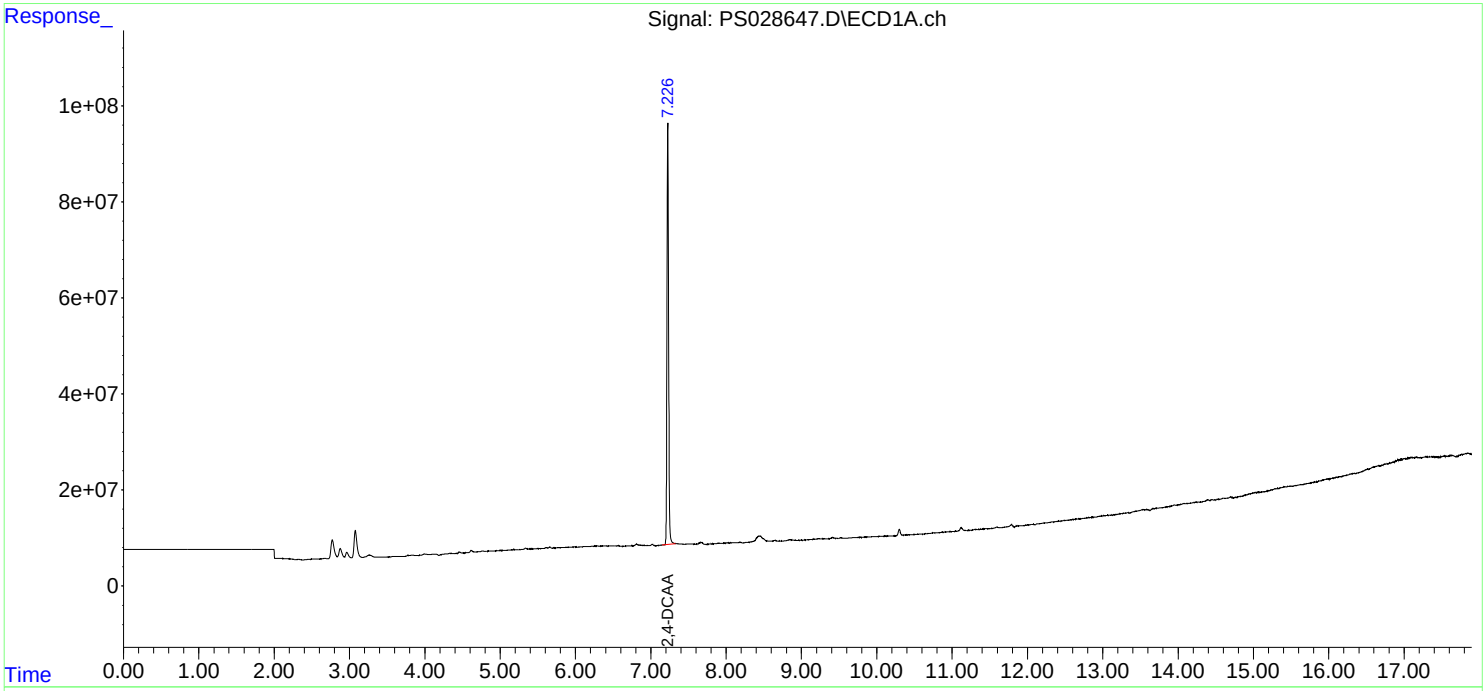
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

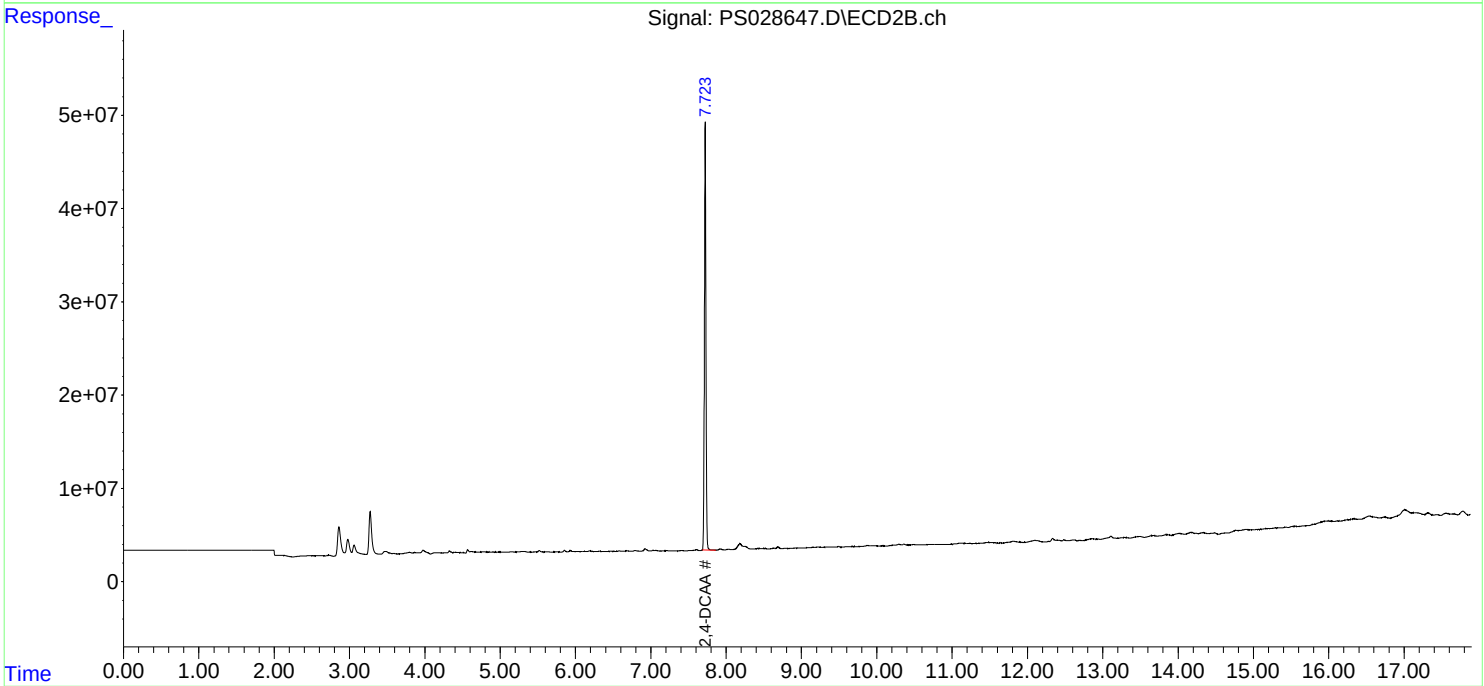
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS112624\
Data File : PS028647.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 20:25
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

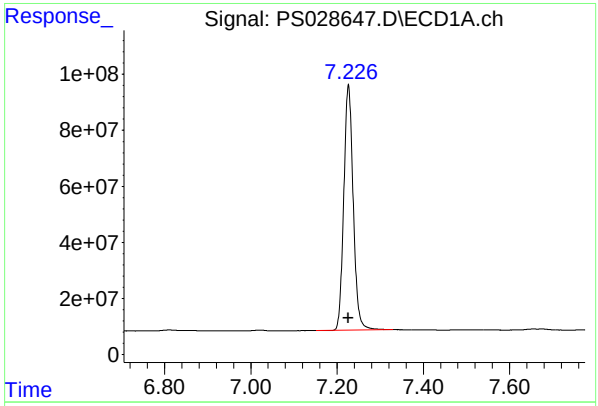
Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 27 00:21:07 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 14:44:30 2024
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



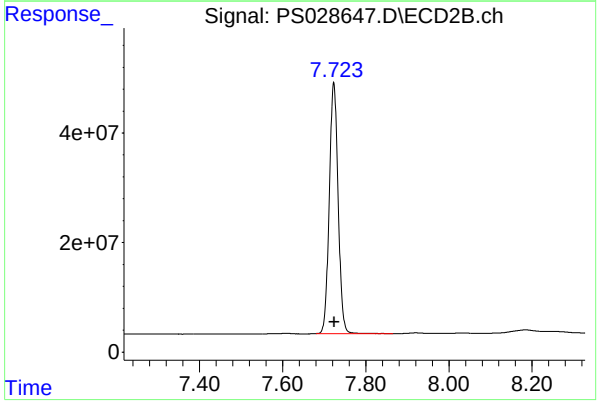




#4 2,4-DCAA

R.T.: 7.226 min
Delta R.T.: 0.000 min
Response: 1329928965
Conc: 495.81 ng/ml

Instrument :
ECD_S
ClientSampleId :
I.BLK



#4 2,4-DCAA

R.T.: 7.723 min
Delta R.T.: -0.001 min
Response: 676414948
Conc: 502.15 ng/ml

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

Report of Analysis

Client:	Tetra Tech, EMI	Date Collected:	11/26/24
Project:	R36745	Date Received:	11/26/24
Client Sample ID:	PIBLK-PS028654.D	SDG No.:	P4961
Lab Sample ID:	I.BLK-PS028654.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
PS028654.D	1		11/26/24	PS112624

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	0.49	U	0.49	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.45	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\PS112624\
Data File : PS028654.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 23:13
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: Nov 27 00:28:02 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 14:44:30 2024
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	7.227	7.724	1323.4E6	671.3E6	493.392	498.330
	Target Compounds						

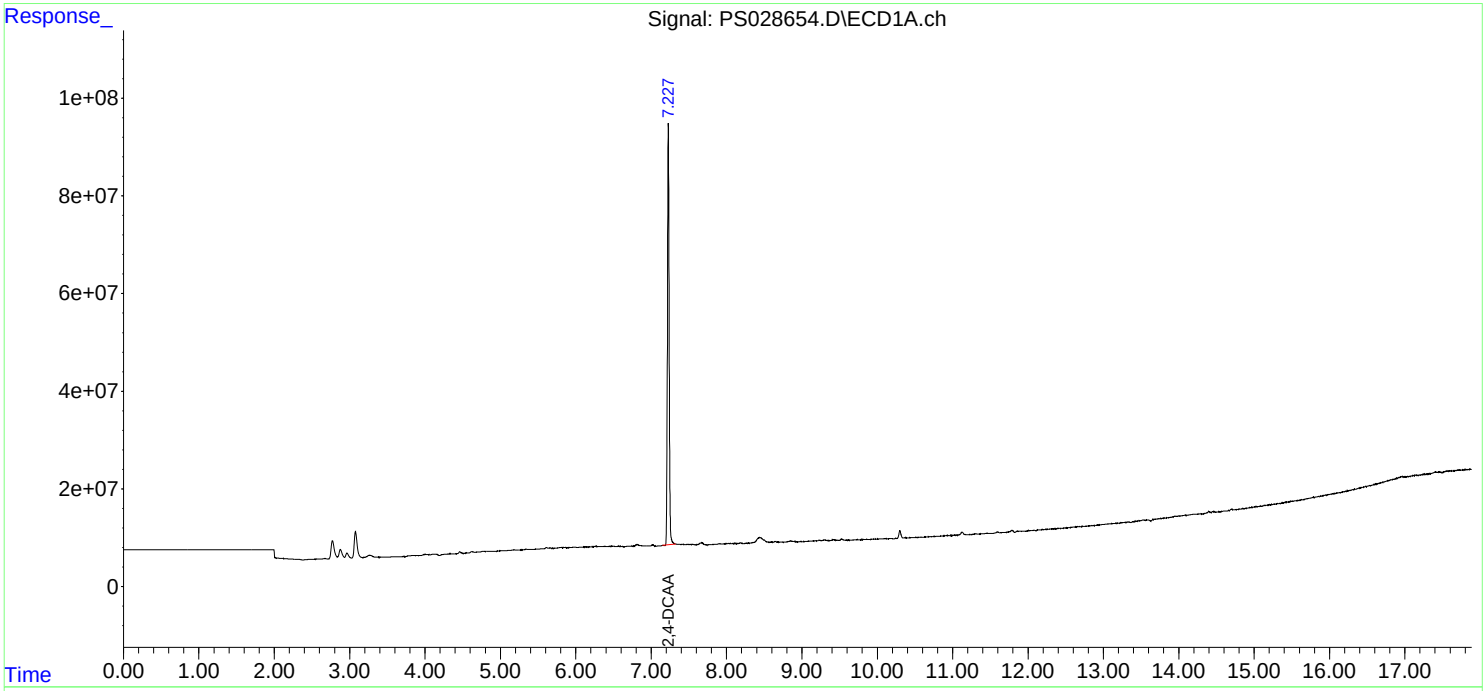
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

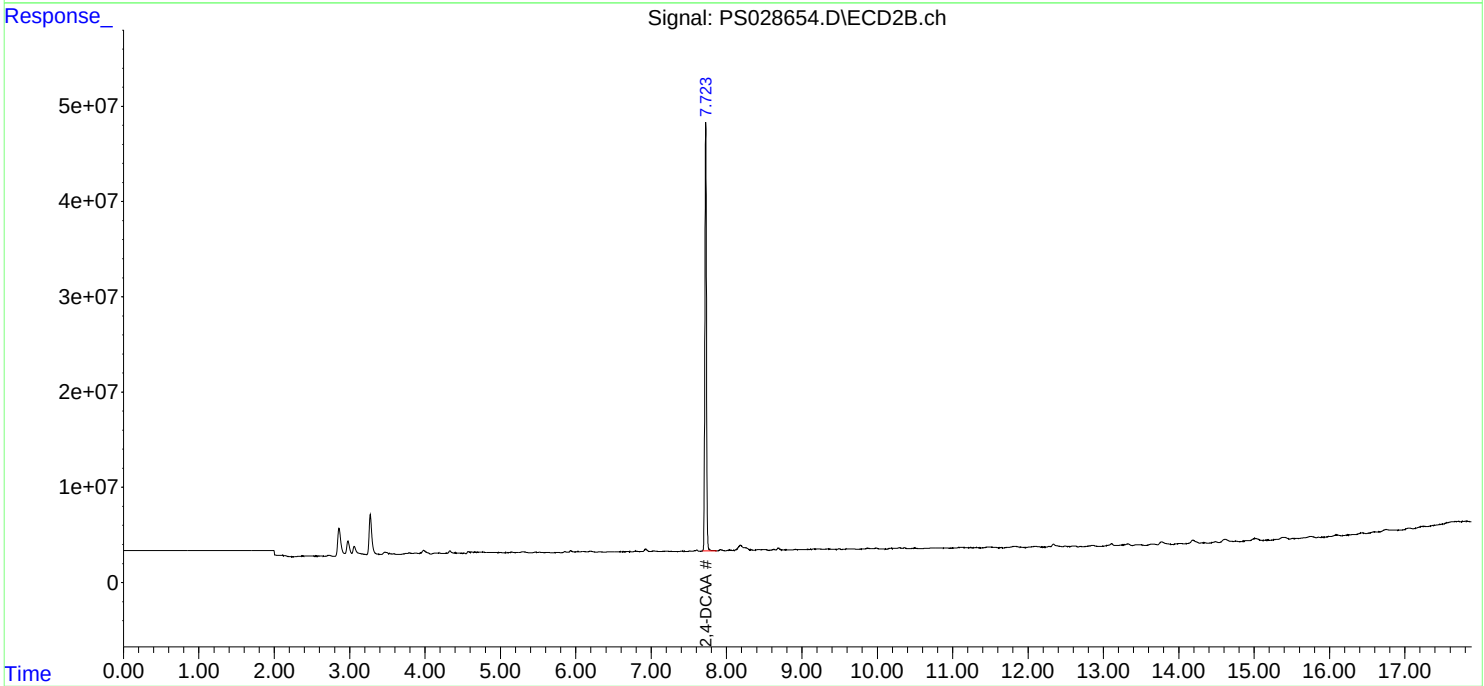
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS112624\
Data File : PS028654.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 23:13
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

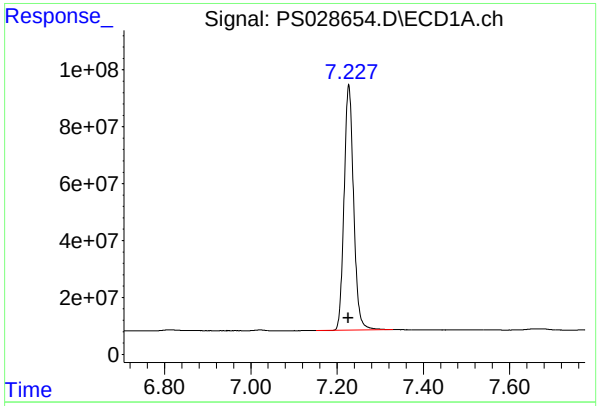
Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 27 00:28:02 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 14:44:30 2024
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



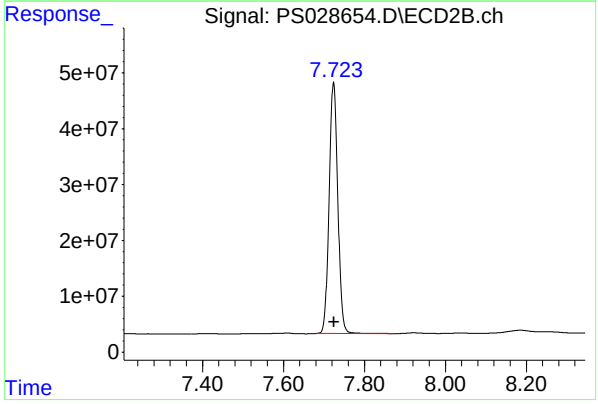




#4 2,4-DCAA

R.T.: 7.227 min
Delta R.T.: 0.001 min
Response: 1323446552
Conc: 493.39 ng/ml

Instrument :
ECD_S
ClientSampleId :
I.BLK



#4 2,4-DCAA

R.T.: 7.724 min
Delta R.T.: 0.000 min
Response: 671265401
Conc: 498.33 ng/ml

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

Report of Analysis

Client:	Tetra Tech, EMI	Date Collected:	
Project:	R36745	Date Received:	
Client Sample ID:	PB165273BS	SDG No.:	P4961
Lab Sample ID:	PB165273BS	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
PS028645.D	1	11/26/24 11:10	11/26/24 19:37	PB165273

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	4.90		0.49	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	4.70		0.45	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	491		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\PS112624\
Data File : PS028645.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 19:37
Operator : AR\AJ
Sample : PB165273BS
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
PB165273BS

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 27 00:19:21 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 14:44:30 2024
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	7.225	7.723	1316.5E6	661.7E6	490.814m	491.215
	Target Compounds						
1) T	Dalapon	2.629	2.691	1185.4E6	897.8E6	408.503m	411.094m
2) T	3,5-DICHL...	6.399	6.680	1808.6E6	866.8E6	472.269	441.300
3) T	4-Nitroph...	7.024	7.250	646.1E6	358.6E6	375.867	393.135m
5) T	DICAMBA	7.413	7.923	4828.3E6	2658.1E6	420.568	431.770
6) T	MCPP	7.594	8.024	301.0E6	178.7E6	41.249	41.490
7) T	MCPA	7.743	8.267	420.1E6	255.6E6	40.633	41.181
8) T	DICHLORPROP	8.120	8.638	1331.4E6	692.9E6	427.681	433.463
9) T	2,4-D	8.350	8.968	1646.9E6	821.2E6	488.375	485.660
10) T	Pentachlo...	8.649	9.495	21360.8E6	10689.7E6	484.452	466.983
11) T	2,4,5-TP ...	9.227	9.872	8577.4E6	4518.2E6	469.228m	473.482
12) T	2,4,5-T	9.519	10.291	8217.4E6	4123.5E6	438.133	442.897
13) T	2,4-DB	10.094	10.857	1153.7E6	504.5E6	325.740	439.933 #
14) T	DINOSEB	11.303	11.237	4502.6E6	1823.7E6	299.650	290.577
15) T	Picloram	11.111	12.329	10410.2E6	4375.5E6	350.079	339.434
16) T	DCPA	11.594	12.279	8656.2E6	4959.9E6	314.827	446.951 #

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS112624\
Data File : PS028645.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 19:37
Operator : AR\AJ
Sample : PB165273BS
Misc :
ALS Vial : 15 Sample Multiplier: 1

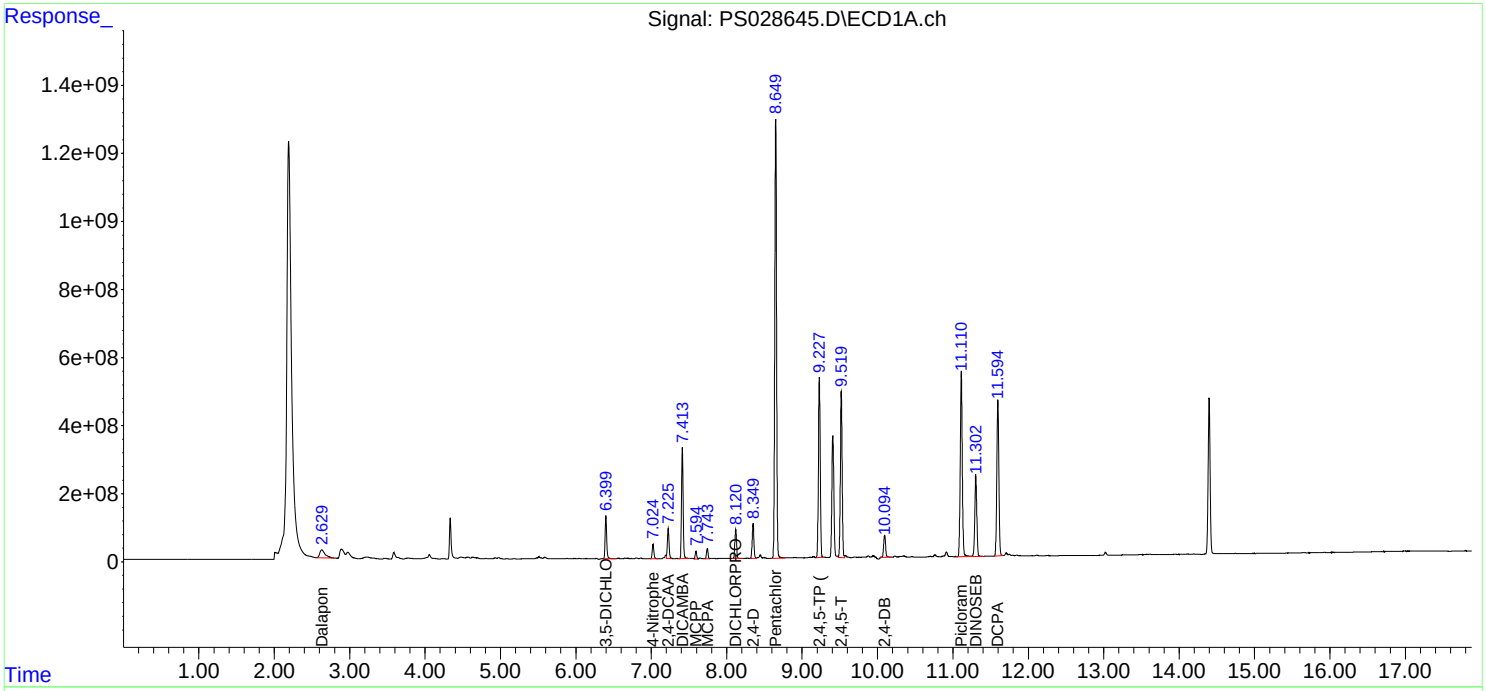
Instrument :
ECD_S
ClientSampleId :
PB165273BS

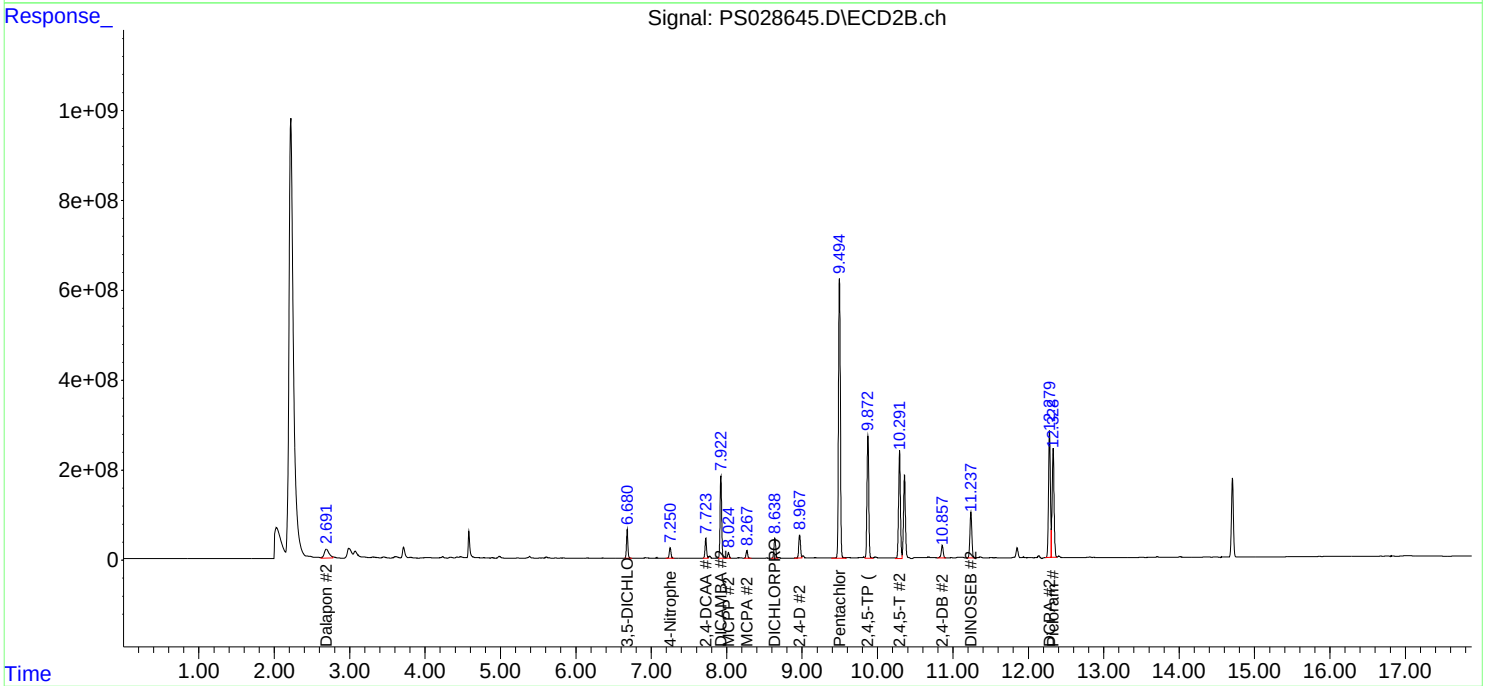
Manual Integrations APPROVED

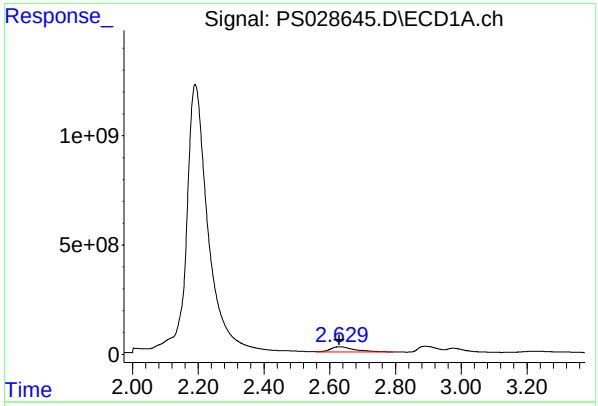
Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 27 00:19:21 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 14:44:30 2024
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







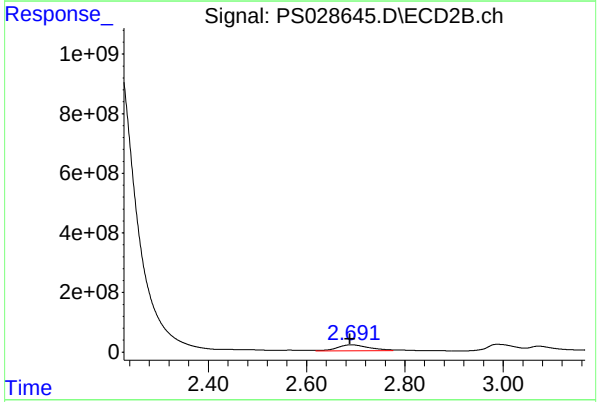
#1 Dalapon

R.T.: 2.629 min
Delta R.T.: 0.000 min
Response: 1185413885
Conc: 408.50 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB165273BS

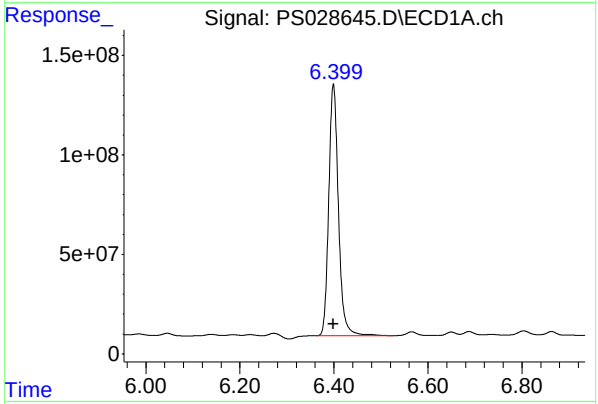
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024



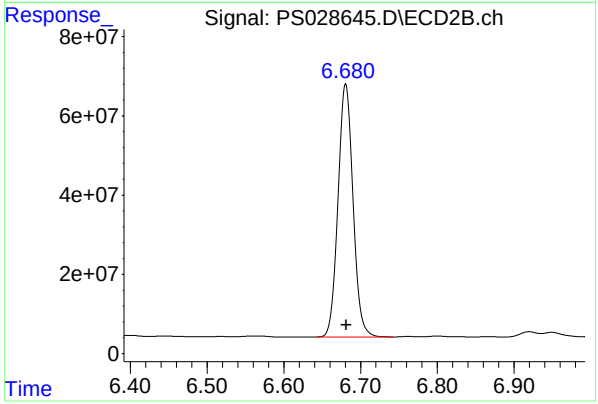
#1 Dalapon

R.T.: 2.691 min
Delta R.T.: 0.002 min
Response: 897751655
Conc: 411.09 ng/ml m



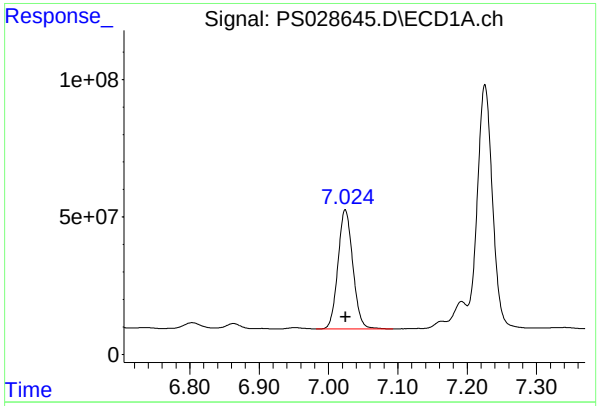
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.399 min
Delta R.T.: 0.000 min
Response: 1808627759
Conc: 472.27 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.680 min
Delta R.T.: 0.000 min
Response: 866753320
Conc: 441.30 ng/ml



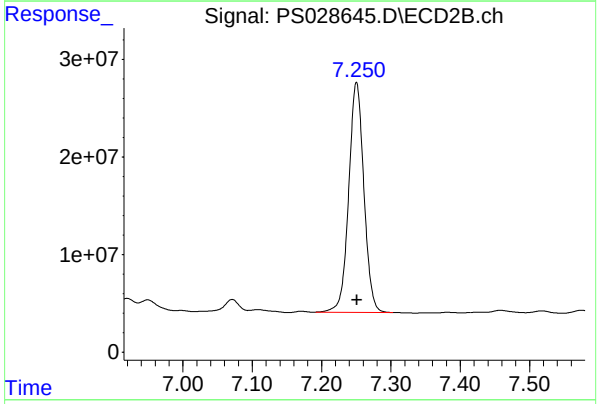
#3 4-Nitrophenol

R.T.: 7.024 min
Delta R.T.: 0.000 min
Response: 646105035
Conc: 375.87 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB165273BS

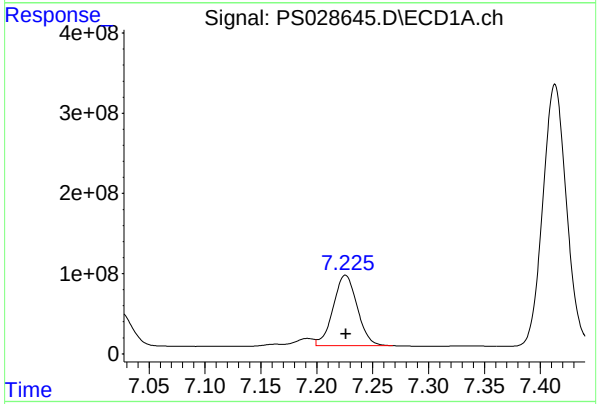
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024



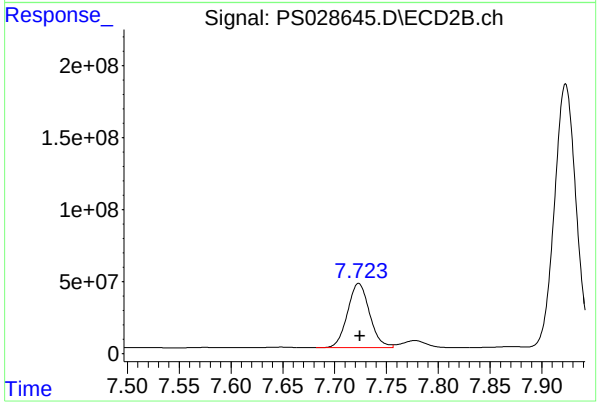
#3 4-Nitrophenol

R.T.: 7.250 min
Delta R.T.: -0.001 min
Response: 358592188
Conc: 393.14 ng/ml m



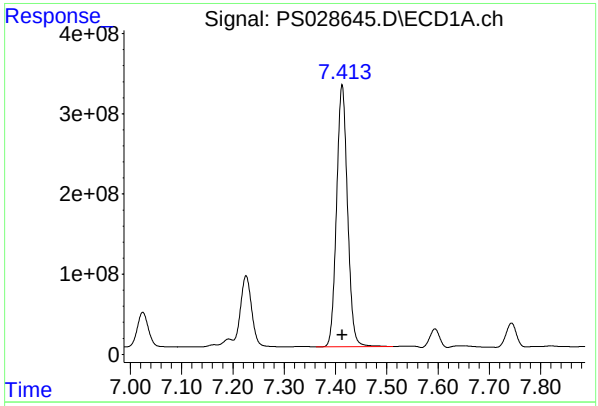
#4 2,4-DCAA

R.T.: 7.225 min
Delta R.T.: 0.000 min
Response: 1316531802
Conc: 490.81 ng/ml m



#4 2,4-DCAA

R.T.: 7.723 min
Delta R.T.: -0.001 min
Response: 661680970
Conc: 491.21 ng/ml



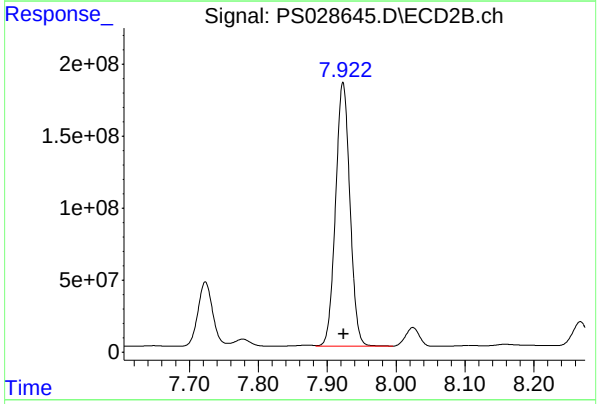
#5 DICAMBA

R.T.: 7.413 min
Delta R.T.: 0.000 min
Response: 4828348729
Conc: 420.57 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB165273BS

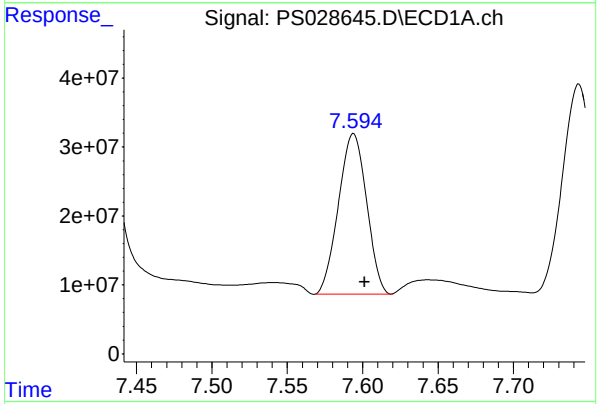
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024



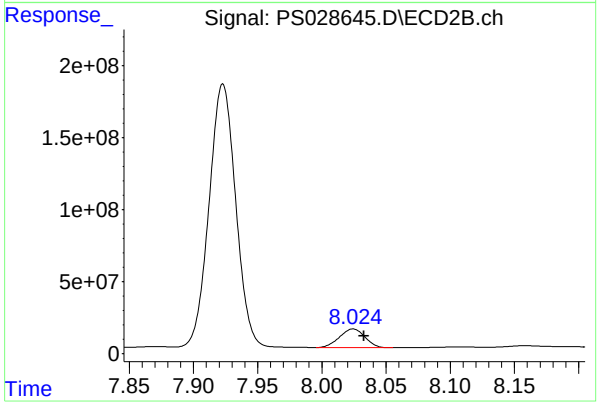
#5 DICAMBA

R.T.: 7.923 min
Delta R.T.: -0.001 min
Response: 2658070849
Conc: 431.77 ng/ml



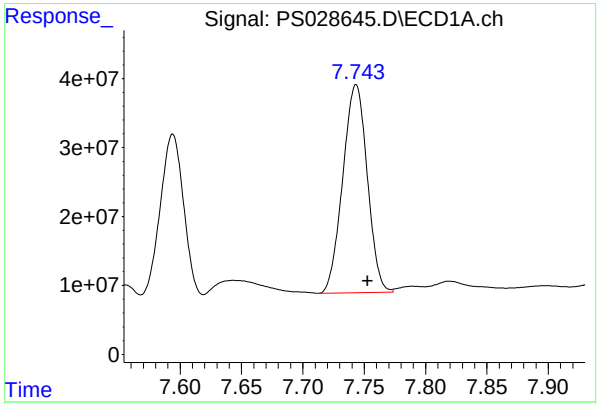
#6 MCPP

R.T.: 7.594 min
Delta R.T.: -0.007 min
Response: 301017808
Conc: 41.25 ug/ml



#6 MCPP

R.T.: 8.024 min
Delta R.T.: -0.008 min
Response: 178719625
Conc: 41.49 ug/ml



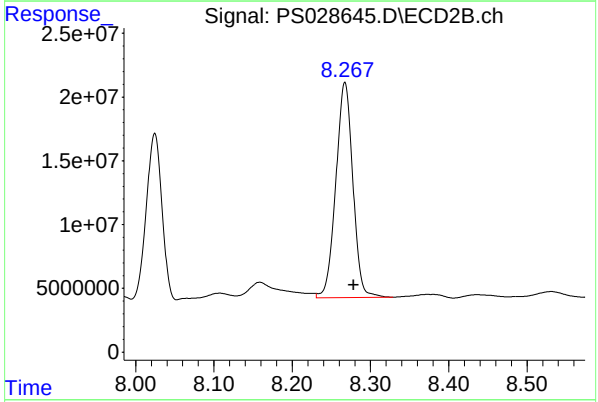
#7 MCPA

R.T.: 7.743 min
Delta R.T.: -0.010 min
Response: 420104135
Conc: 40.63 ug/ml

Instrument :
ECD_S
ClientSampleId :
PB165273BS

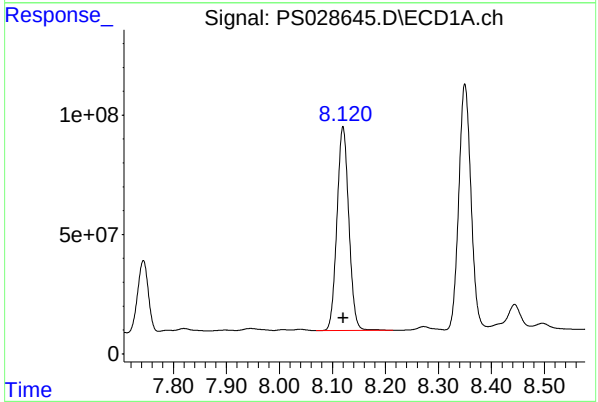
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024



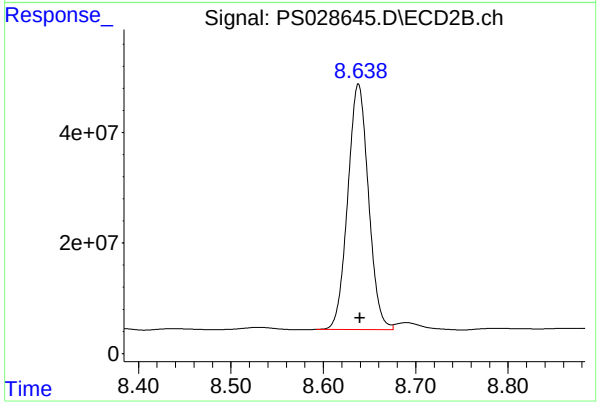
#7 MCPA

R.T.: 8.267 min
Delta R.T.: -0.011 min
Response: 255568670
Conc: 41.18 ug/ml



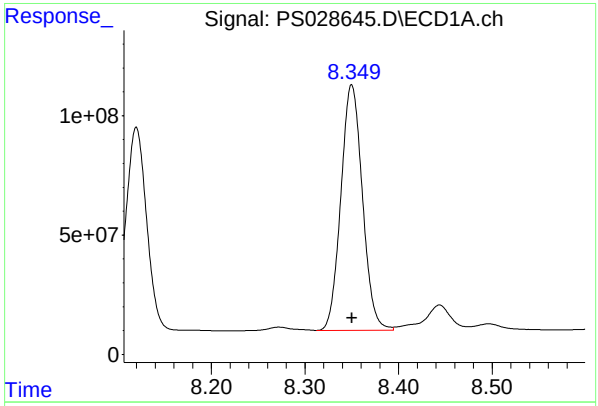
#8 DICHLORPROP

R.T.: 8.120 min
Delta R.T.: 0.000 min
Response: 1331414881
Conc: 427.68 ng/ml



#8 DICHLORPROP

R.T.: 8.638 min
Delta R.T.: -0.002 min
Response: 692941579
Conc: 433.46 ng/ml



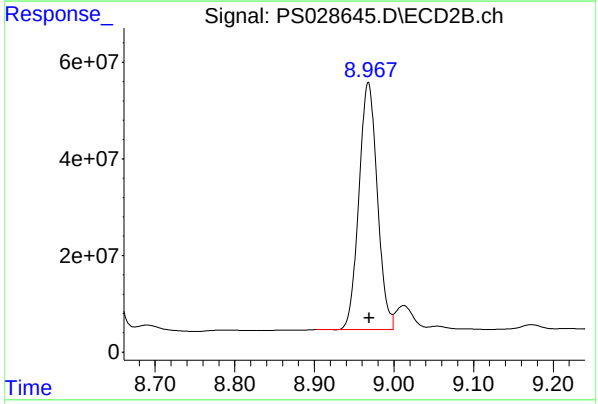
#9 2,4-D

R.T.: 8.350 min
Delta R.T.: 0.000 min
Response: 1646872937
Conc: 488.37 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB165273BS

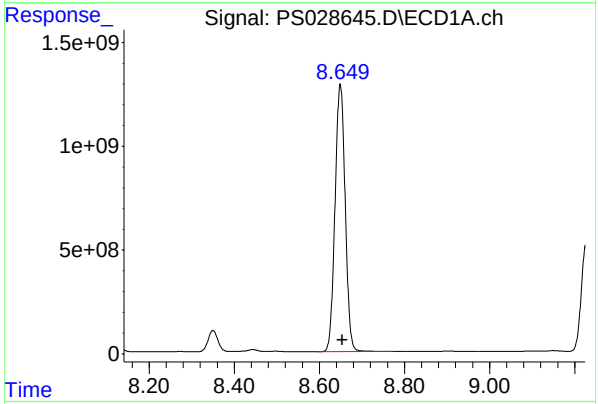
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024



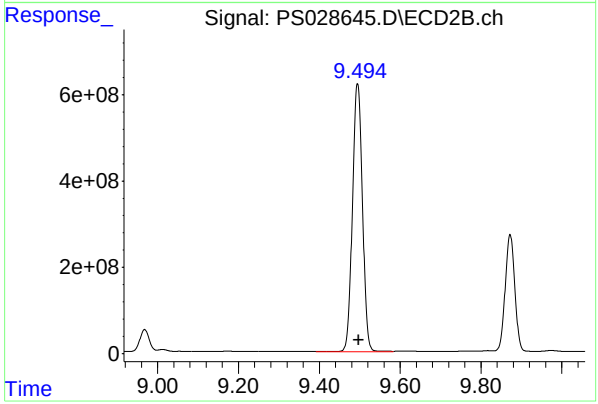
#9 2,4-D

R.T.: 8.968 min
Delta R.T.: -0.001 min
Response: 821235822
Conc: 485.66 ng/ml



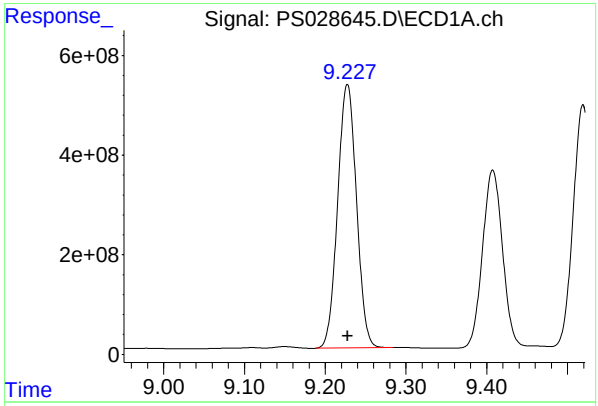
#10 Pentachlorophenol

R.T.: 8.649 min
Delta R.T.: -0.005 min
Response: 21360772935
Conc: 484.45 ng/ml



#10 Pentachlorophenol

R.T.: 9.495 min
Delta R.T.: -0.003 min
Response: 10689655411
Conc: 466.98 ng/ml



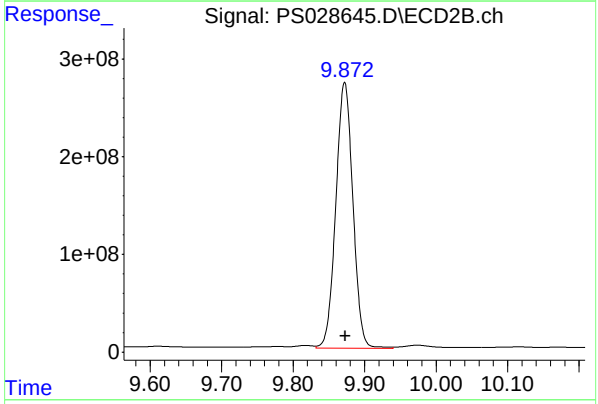
#11 2,4,5-TP (SILVEX)

R.T.: 9.227 min
Delta R.T.: 0.000 min
Response: 8577387093
Conc: 469.23 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB165273BS

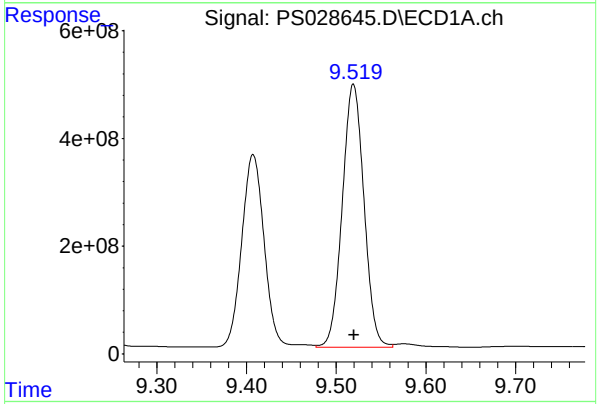
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024



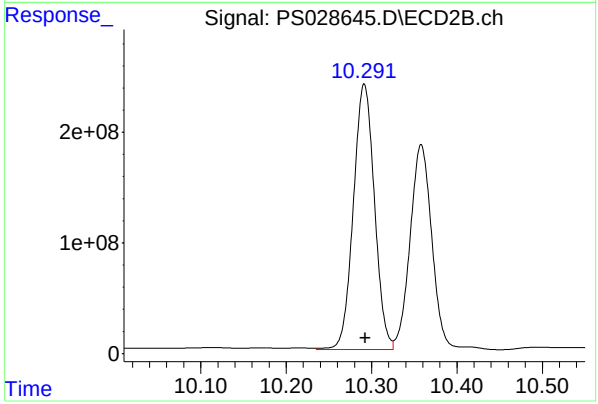
#11 2,4,5-TP (SILVEX)

R.T.: 9.872 min
Delta R.T.: 0.000 min
Response: 4518206648
Conc: 473.48 ng/ml



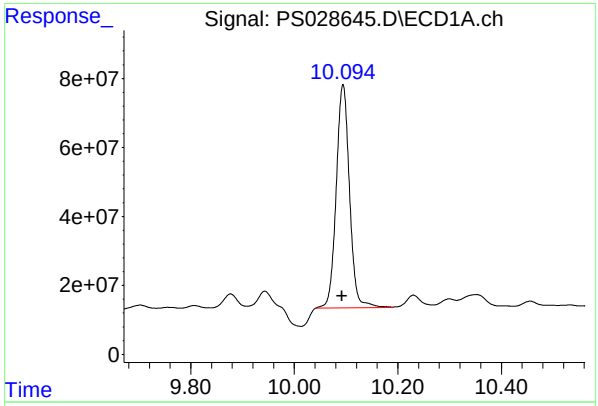
#12 2,4,5-T

R.T.: 9.519 min
Delta R.T.: 0.000 min
Response: 8217401153
Conc: 438.13 ng/ml



#12 2,4,5-T

R.T.: 10.291 min
Delta R.T.: -0.001 min
Response: 4123499112
Conc: 442.90 ng/ml



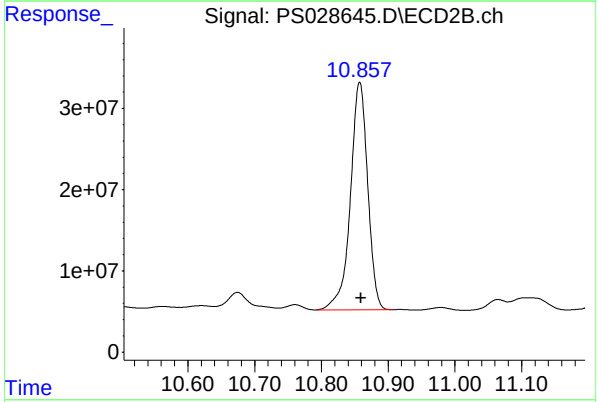
#13 2,4-DB

R.T.: 10.094 min
Delta R.T.: 0.002 min
Response: 1153675949
Conc: 325.74 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB165273BS

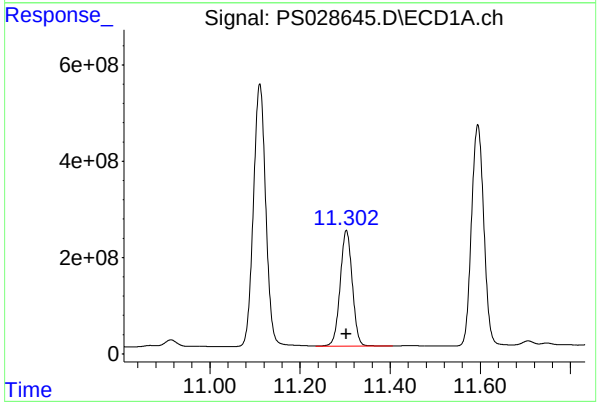
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024



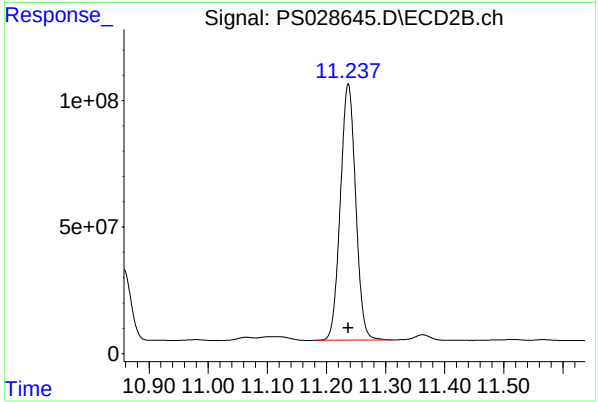
#13 2,4-DB

R.T.: 10.857 min
Delta R.T.: -0.002 min
Response: 504480420
Conc: 439.93 ng/ml



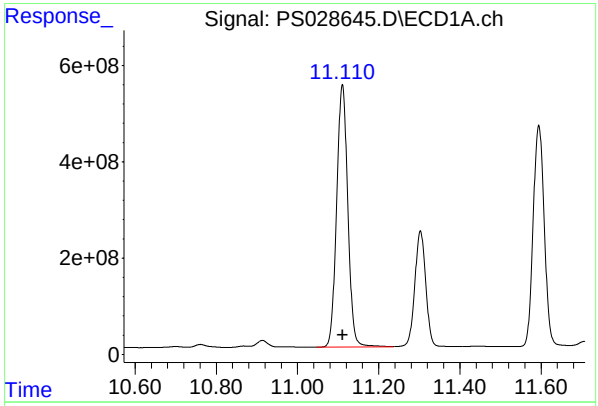
#14 DINOSEB

R.T.: 11.303 min
Delta R.T.: 0.000 min
Response: 4502607264
Conc: 299.65 ng/ml



#14 DINOSEB

R.T.: 11.237 min
Delta R.T.: 0.000 min
Response: 1823670267
Conc: 290.58 ng/ml



#15 Picloram

R.T.: 11.111 min
Delta R.T.: 0.000 min
Response: 10410224795
Conc: 350.08 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB165273BS

Manual Integrations APPROVED

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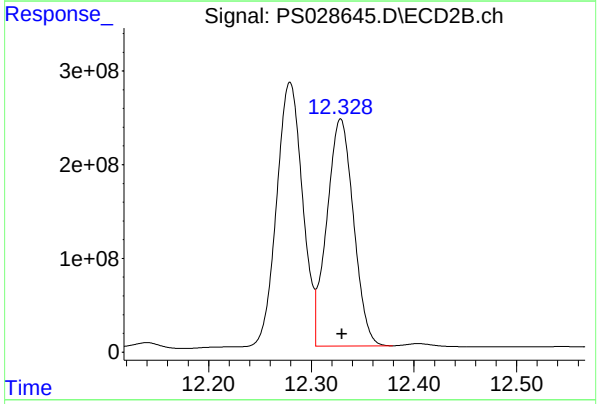
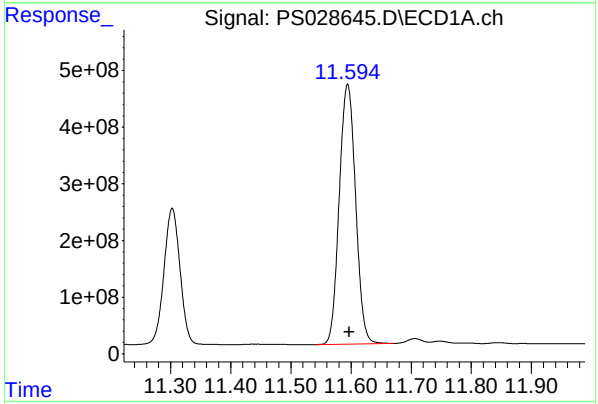


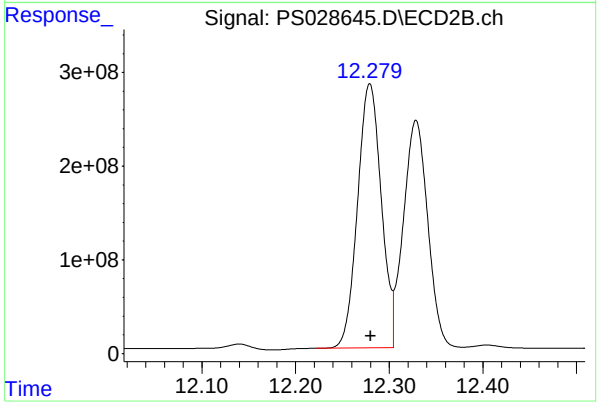
#15 Picloram

R.T.: 12.329 min
Delta R.T.: -0.001 min
Response: 4375538624
Conc: 339.43 ng/ml



#16 DCPA

R.T.: 11.594 min
Delta R.T.: -0.003 min
Response: 8656215102
Conc: 314.83 ng/ml



#16 DCPA

R.T.: 12.279 min
Delta R.T.: -0.001 min
Response: 4959908818
Conc: 446.95 ng/ml

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

Report of Analysis

Client:	Tetra Tech, EMI	Date Collected:	11/20/24
Project:	R36745	Date Received:	11/22/24
Client Sample ID:	C0RB8MS	SDG No.:	P4961
Lab Sample ID:	P4961-01MS	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
PS028650.D	1	11/26/24 11:10	11/26/24 21:37	PB165273

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	46.4		4.90	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	77.4	P	4.50	20.0	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	181	*	39 - 175	36%	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\PS112624\
Data File : PS028650.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 21:37
Operator : AR\AJ
Sample : P4961-01MS
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
C0RB8MS

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 27 00:22:52 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 14:44:30 2024
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	7.226	7.724	486.3E6	240.9E6	181.312m	178.854
	Target Compounds						
1) T	Dalapon	2.631	2.692	690.9E6	872.1E6	238.081	399.357 #
2) T	3,5-DICHL...	6.400	6.680	1261.0E6	606.3E6	329.279	308.679
5) T	DICAMBA	7.414	7.923	4323.2E6	2380.2E6	376.565	386.642
6) T	MCPP	7.594	8.023	245.9E6	154.2E6	33.702m	35.808m
7) T	MCPA	7.743	8.267	432.6E6	260.7E6	41.841	42.000
8) T	DICHLORPROP	8.121	8.638	1172.2E6	600.3E6	376.550	375.492
9) T	2,4-D	8.351	8.968	1551.1E6	784.1E6	459.966	463.705
10) T	Pentachlo...	8.650	9.495	9884.9E6	4859.3E6	224.186	212.282
11) T	2,4,5-TP ...	9.227	9.876	7868.2E6	7389.8E6	430.430m	774.406m#
12) T	2,4,5-T	9.520	10.291	7954.3E6	3928.1E6	424.107	421.911
13) T	2,4-DB	10.095	10.857	1013.9E6	414.5E6	286.286	361.475 #
14) T	DINOSEB	11.304	11.236	1605.6E6	610.7E6	106.856	97.314
15) T	Picloram	11.111	12.327	10948.4E6	4667.9E6	368.177	362.111
16) T	DCPA	11.597	12.279	11264.8E6	4810.5E6	409.702	433.485

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

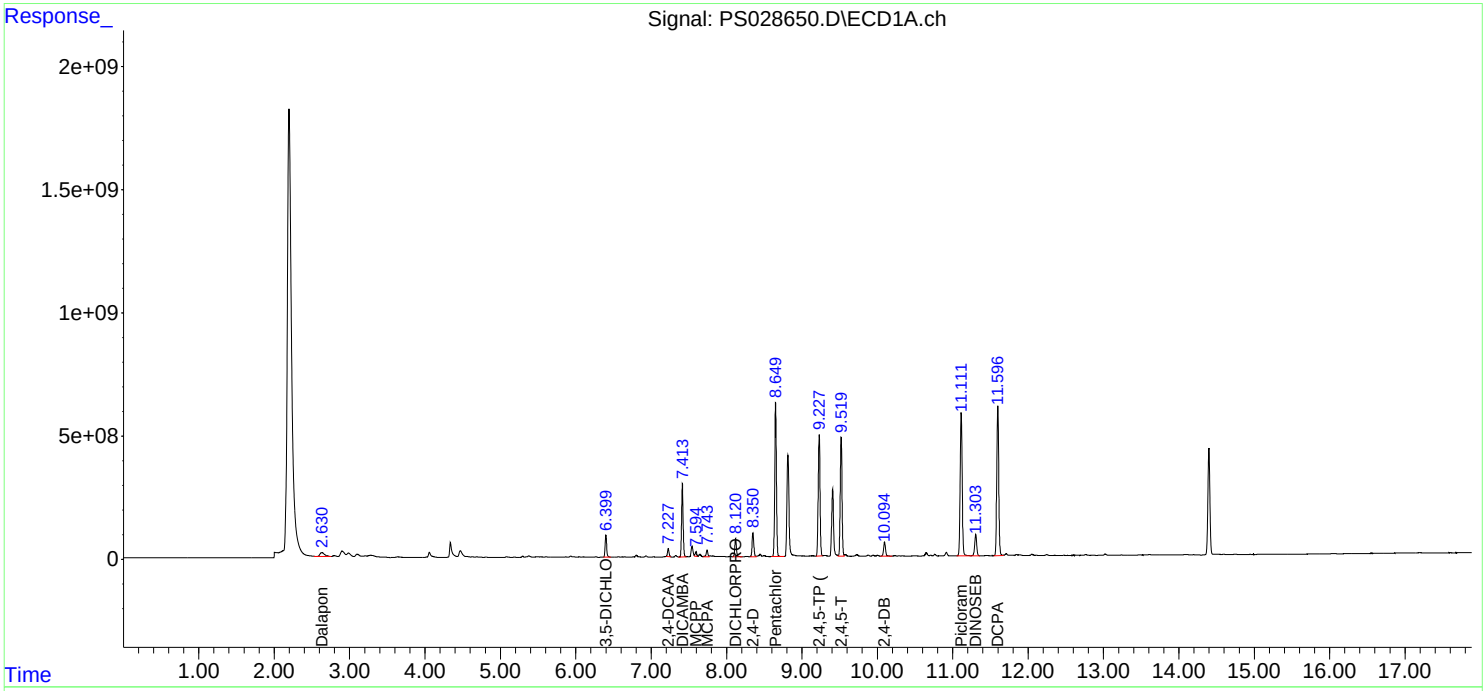
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS112624\
Data File : PS028650.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 21:37
Operator : AR\AJ
Sample : P4961-01MS
Misc :
ALS Vial : 18 Sample Multiplier: 1

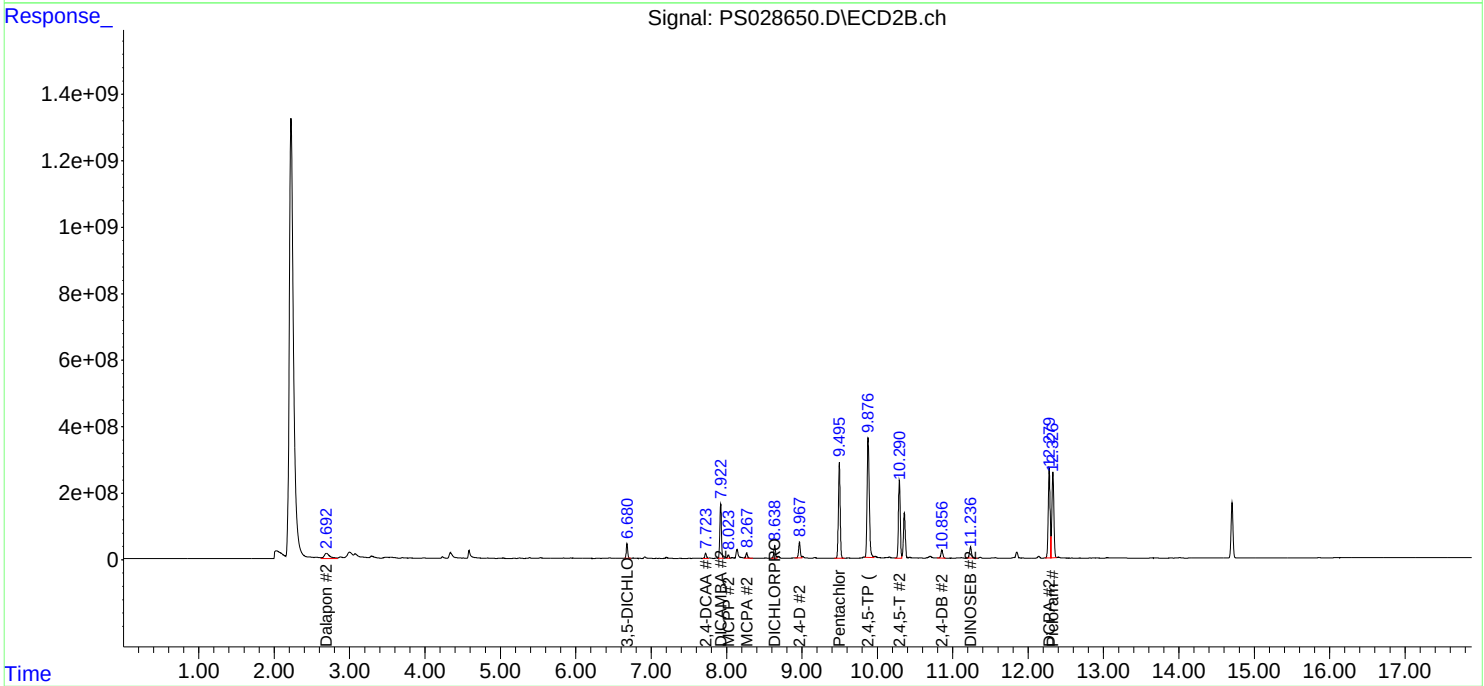
Instrument :
ECD_S
ClientSampleId :
C0RB8MS

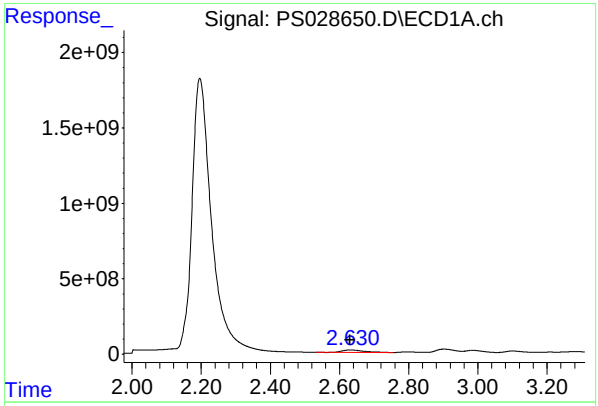
Manual Integrations APPROVED
Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 27 00:22:52 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 14:44:30 2024
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.: 2.631 min
Delta R.T.: 0.001 min
Response: 690874272
Conc: 238.08 ng/ml

Instrument :
ECD_S
ClientSampleId :
C0RB8MS

Manual Integrations APPROVED

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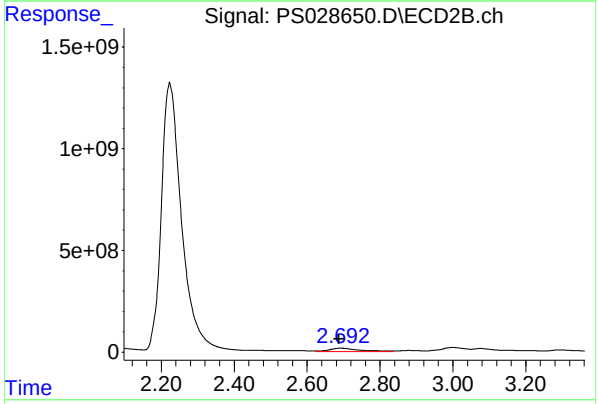
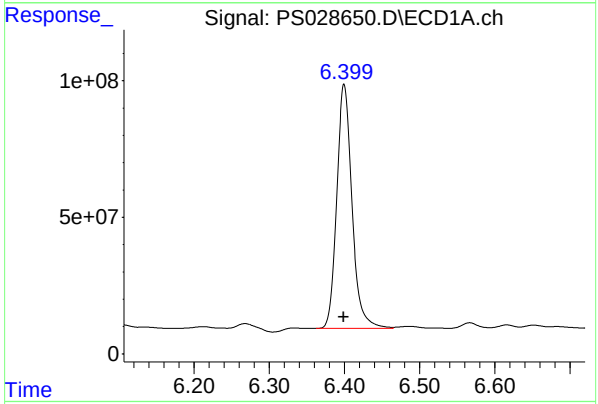


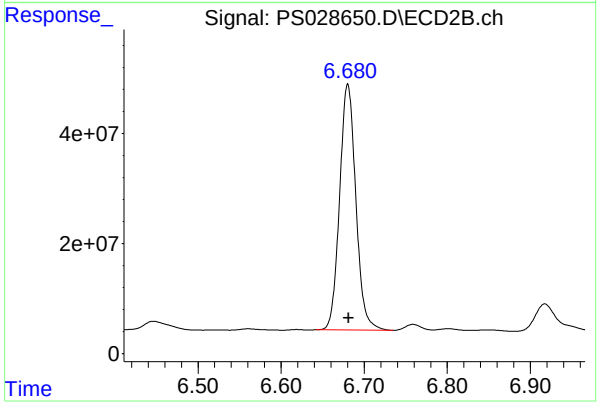
#1 Dalapon

R.T.: 2.692 min
Delta R.T.: 0.004 min
Response: 872120401
Conc: 399.36 ng/ml



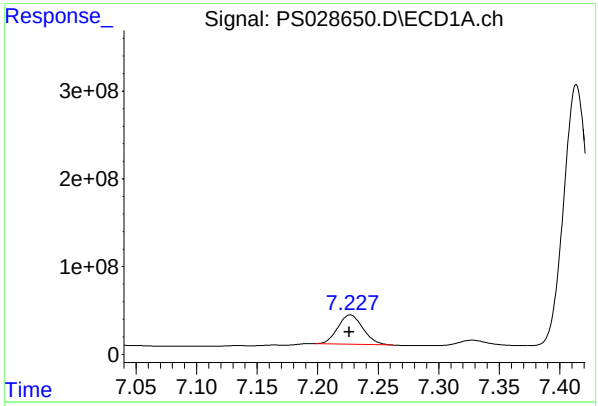
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.400 min
Delta R.T.: 0.000 min
Response: 1261025787
Conc: 329.28 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.680 min
Delta R.T.: 0.000 min
Response: 606273634
Conc: 308.68 ng/ml



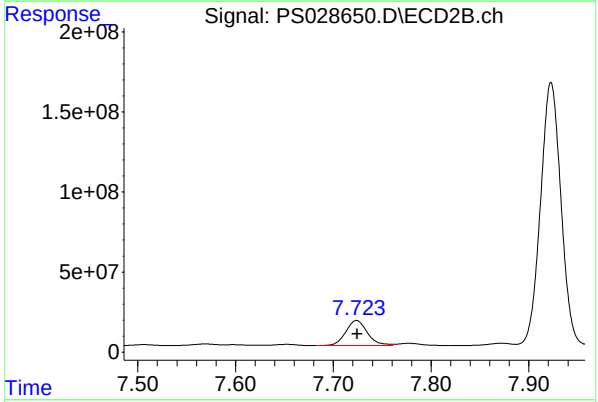
#4 2,4-DCAA

R.T.: 7.226 min
Delta R.T.: 0.000 min
Response: 486342223
Conc: 181.31 ng/ml

Instrument :
ECD_S
ClientSampleId :
C0RB8MS

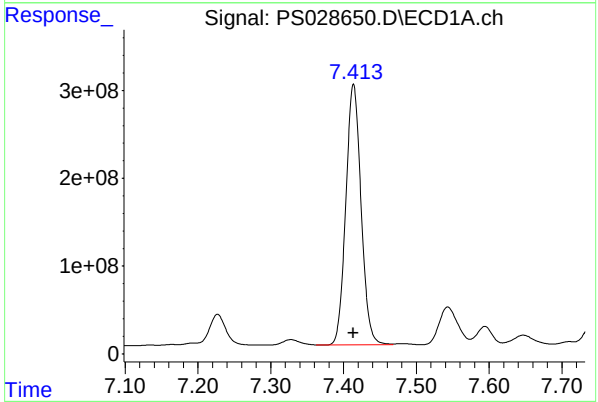
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024



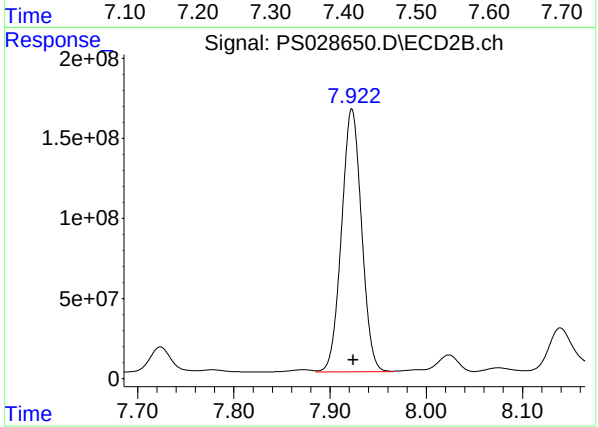
#4 2,4-DCAA

R.T.: 7.724 min
Delta R.T.: 0.000 min
Response: 240921149
Conc: 178.85 ng/ml



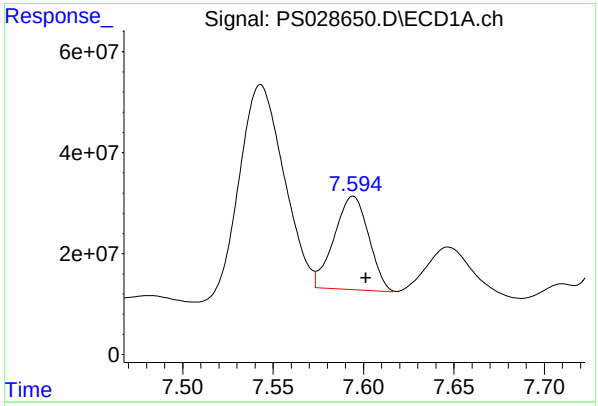
#5 DICAMBA

R.T.: 7.414 min
Delta R.T.: 0.000 min
Response: 4323168214
Conc: 376.57 ng/ml



#5 DICAMBA

R.T.: 7.923 min
Delta R.T.: -0.001 min
Response: 2380248831
Conc: 386.64 ng/ml



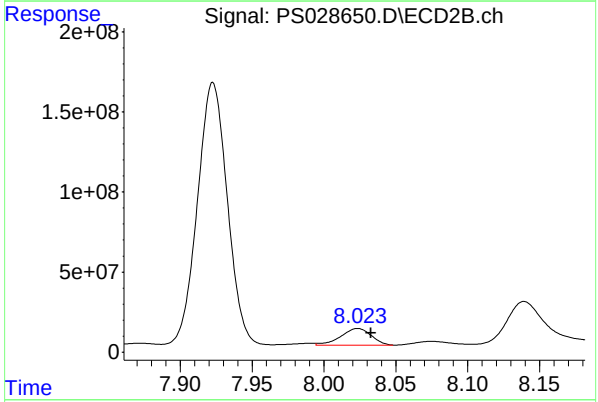
#6 MCPP

R.T.: 7.594 min
Delta R.T.: -0.007 mi
Response: 245943602
Conc: 33.70 ug/m

Instrument :
ECD_S
ClientSampleId :
C0RB8MS

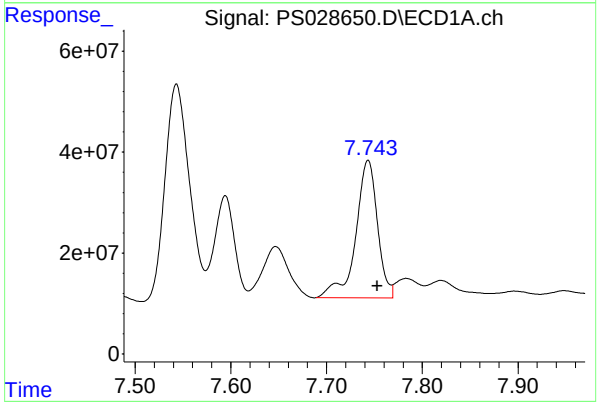
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024



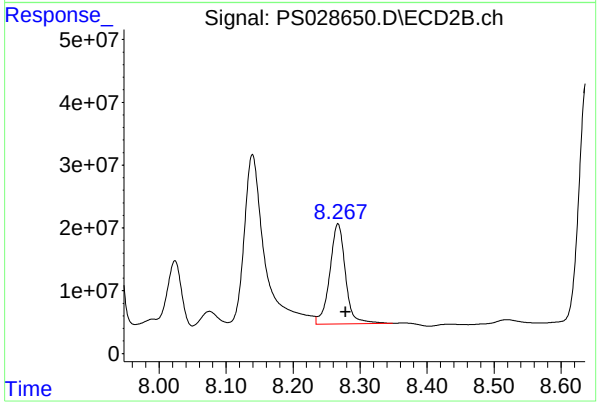
#6 MCPP

R.T.: 8.023 min
Delta R.T.: -0.009 min
Response: 154242303
Conc: 35.81 ug/ml m



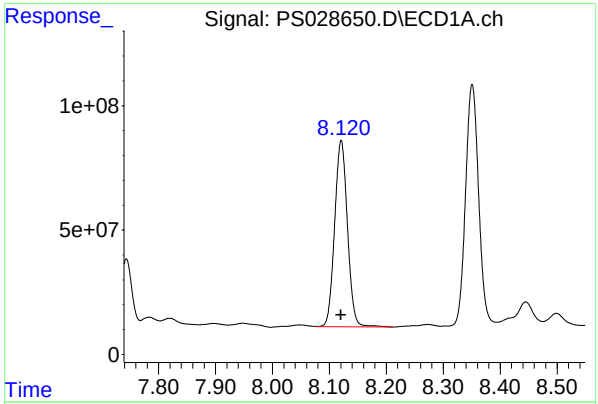
#7 MCPA

R.T.: 7.743 min
Delta R.T.: -0.009 min
Response: 432599008
Conc: 41.84 ug/ml



#7 MCPA

R.T.: 8.267 min
Delta R.T.: -0.011 min
Response: 260655930
Conc: 42.00 ug/ml



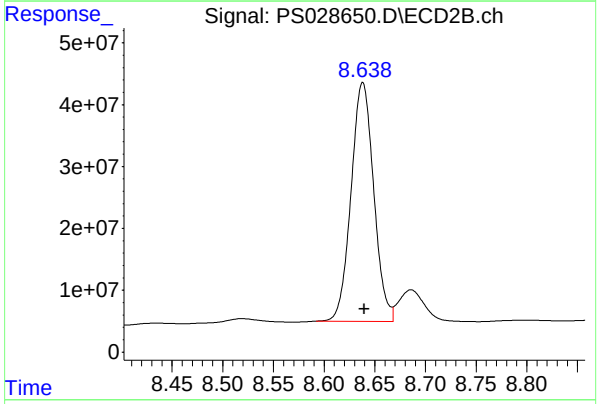
#8 DICHLORPROP

R.T.: 8.121 min
Delta R.T.: 0.000 min
Response: 1172237858
Conc: 376.55 ng/ml

Instrument :
ECD_S
ClientSampleId :
C0RB8MS

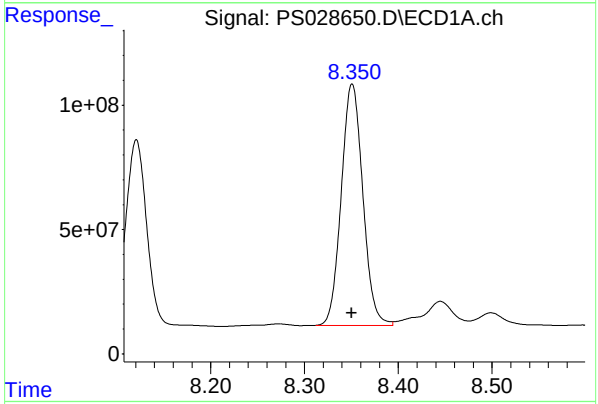
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024



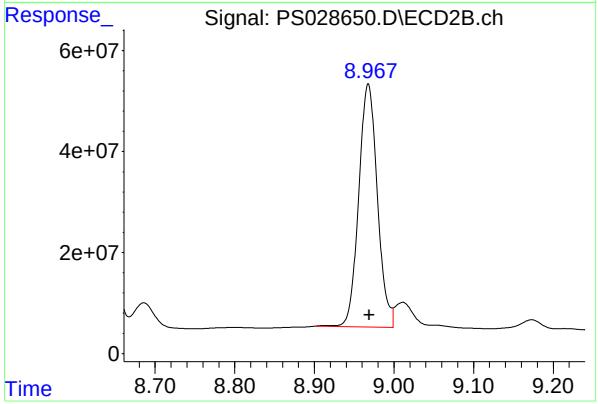
#8 DICHLORPROP

R.T.: 8.638 min
Delta R.T.: -0.001 min
Response: 600268911
Conc: 375.49 ng/ml



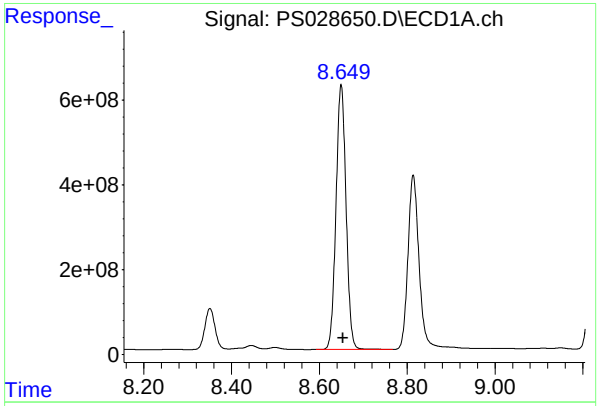
#9 2,4-D

R.T.: 8.351 min
Delta R.T.: 0.000 min
Response: 1551075354
Conc: 459.97 ng/ml



#9 2,4-D

R.T.: 8.968 min
Delta R.T.: -0.001 min
Response: 784110197
Conc: 463.70 ng/ml



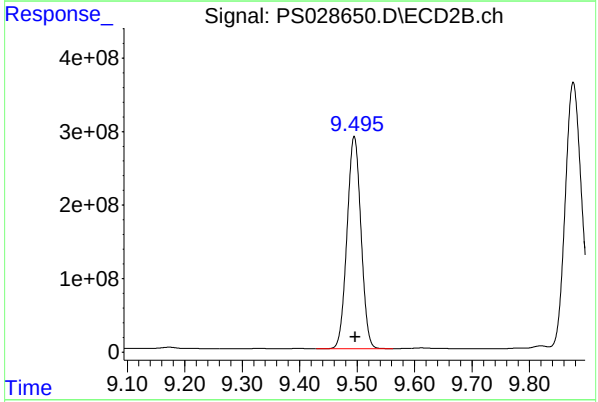
#10 Pentachlorophenol

R.T.: 8.650 min
Delta R.T.: -0.004 min
Response: 9884945914
Conc: 224.19 ng/ml

Instrument :
ECD_S
ClientSampleId :
C0RB8MS

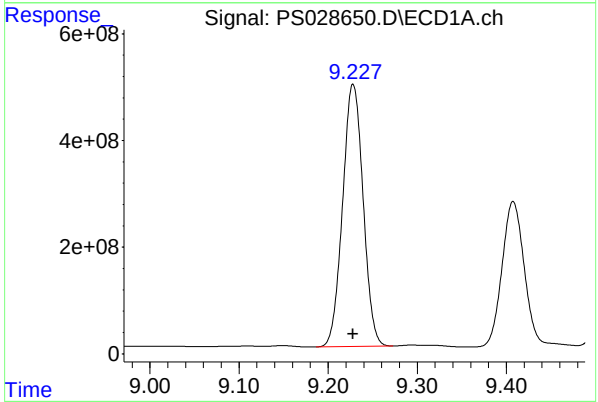
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024



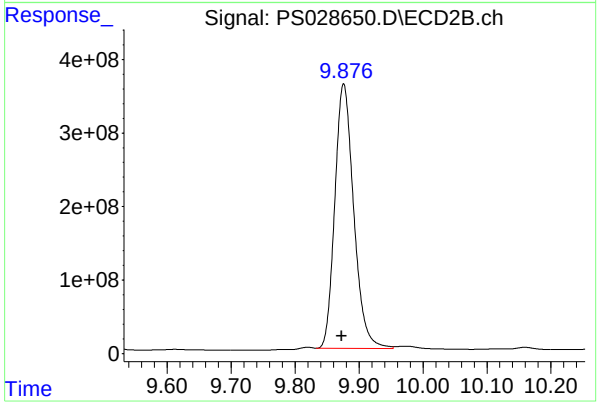
#10 Pentachlorophenol

R.T.: 9.495 min
Delta R.T.: -0.002 min
Response: 4859324111
Conc: 212.28 ng/ml



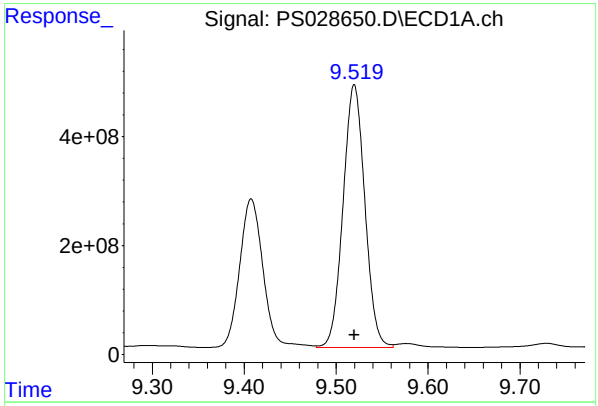
#11 2,4,5-TP (SILVEX)

R.T.: 9.227 min
Delta R.T.: 0.000 min
Response: 7868159833
Conc: 430.43 ng/ml m



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

R.T.: 9.876 min
Delta R.T.: 0.003 min
Response: 7389782229
Conc: 774.41 ng/ml m



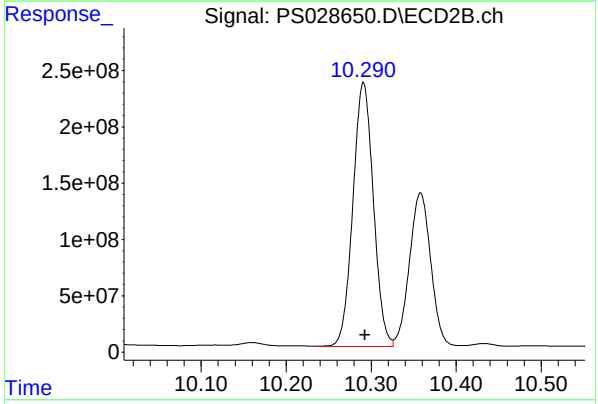
#12 2,4,5-T

R.T.: 9.520 min
Delta R.T.: 0.000 min
Response: 7954348645
Conc: 424.11 ng/ml

Instrument :
ECD_S
ClientSampleId :
C0RB8MS

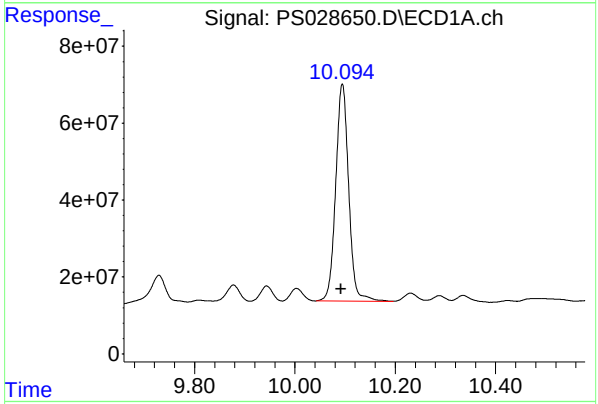
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024



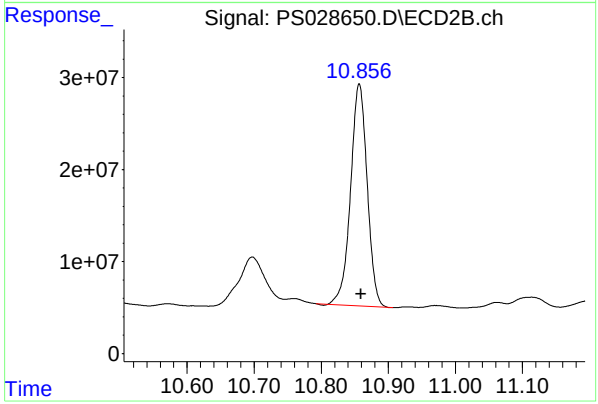
#12 2,4,5-T

R.T.: 10.291 min
Delta R.T.: -0.002 min
Response: 3928112914
Conc: 421.91 ng/ml



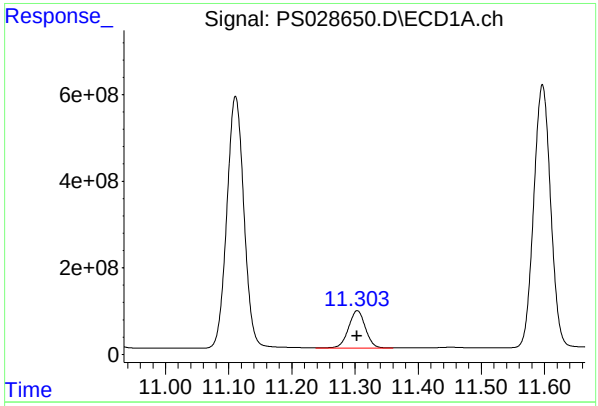
#13 2,4-DB

R.T.: 10.095 min
Delta R.T.: 0.002 min
Response: 1013940588
Conc: 286.29 ng/ml



#13 2,4-DB

R.T.: 10.857 min
Delta R.T.: -0.002 min
Response: 414510870
Conc: 361.47 ng/ml



#14 DINOSEB

R.T.: 11.304 min
Delta R.T.: 0.000 min
Response: 1605645077
Conc: 106.86 ng/ml

Instrument :
ECD_S
ClientSampleId :
C0RB8MS

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
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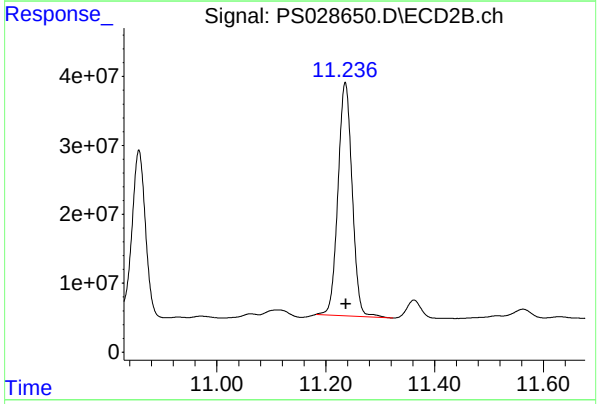
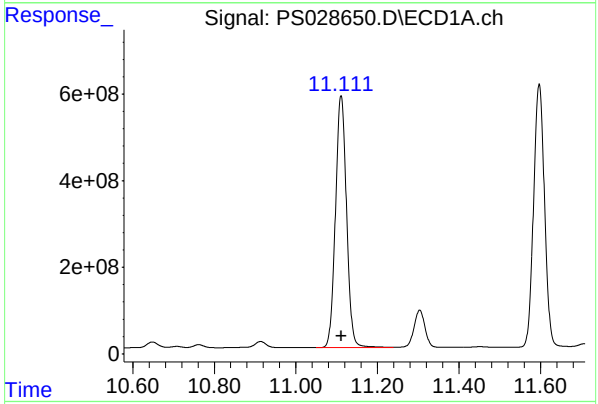


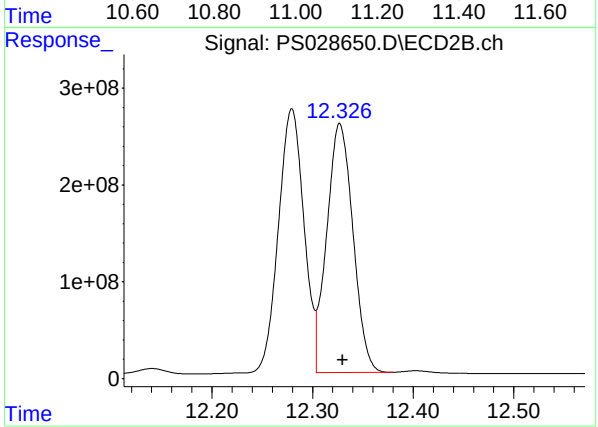
#14 DINOSEB

R.T.: 11.236 min
Delta R.T.: -0.001 min
Response: 610744505
Conc: 97.31 ng/ml



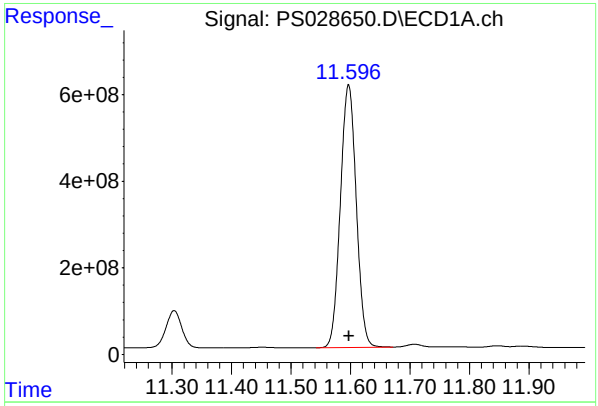
#15 Picloram

R.T.: 11.111 min
Delta R.T.: 0.000 min
Response: 10948404413
Conc: 368.18 ng/ml



#15 Picloram

R.T.: 12.327 min
Delta R.T.: -0.002 min
Response: 4667864133
Conc: 362.11 ng/ml



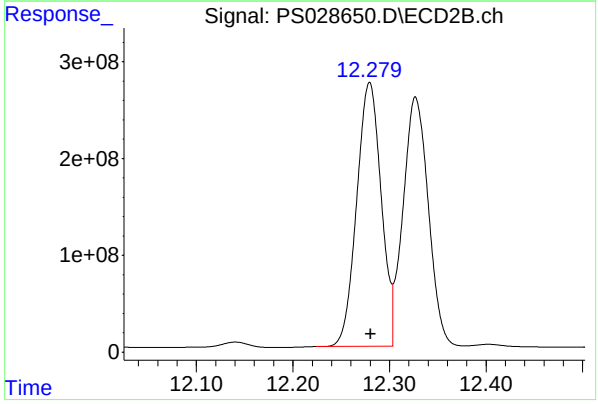
#16 DCPA

R.T.: 11.597 min
Delta R.T.: 0.000 min
Response: 11264810474
Conc: 409.70 ng/ml

Instrument :
ECD_S
ClientSampleId :
C0RB8MS

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024



#16 DCPA

R.T.: 12.279 min
Delta R.T.: -0.001 min
Response: 4810478222
Conc: 433.49 ng/ml

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

Report of Analysis

Client:	Tetra Tech, EMI	Date Collected:	11/20/24
Project:	R36745	Date Received:	11/22/24
Client Sample ID:	C0RB8MSD	SDG No.:	P4961
Lab Sample ID:	P4961-01MSD	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
PS028651.D	1	11/26/24 11:10	11/26/24 22:01	PB165273

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	47.5		4.90	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	78.2	P	4.50	20.0	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	183	*	39 - 175	37%	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\PS112624\
Data File : PS028651.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 22:01
Operator : AR\AJ
Sample : P4961-01MSD
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
C0RB8MSD

Manual Integrations APPROVED
Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 27 00:23:53 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 14:44:30 2024
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	7.226	7.723	491.1E6	239.7E6	183.087m	177.934
		Target Compounds						
1)	T	Dalapon	2.632	2.692	682.4E6	870.5E6	235.173	398.636 #
2)	T	3,5-DICHL...	6.400	6.680	1262.5E6	605.7E6	329.661	308.366
5)	T	DICAMBA	7.414	7.922	4332.6E6	2375.9E6	377.383	385.939
6)	T	MCPP	7.593	8.022	238.9E6	153.2E6	32.731m	35.561m
7)	T	MCPA	7.742	8.267	342.9E6	263.3E6	33.162m	42.420 #
8)	T	DICHLORPROP	8.121	8.638	1171.1E6	599.3E6	376.177	374.893
9)	T	2,4-D	8.351	8.967	1553.3E6	802.4E6	460.627	474.498
10)	T	Pentachlo...	8.650	9.494	9820.4E6	4847.7E6	222.723	211.772
11)	T	2,4,5-TP ...	9.227	9.875	7937.3E6	7466.5E6	434.213m	782.448m#
12)	T	2,4,5-T	9.519	10.291	7900.1E6	3926.0E6	421.213m	421.687
13)	T	2,4-DB	10.095	10.857	1007.0E6	416.7E6	284.334	363.367 #
14)	T	DINOSEB	11.303	11.235	1634.1E6	624.6E6	108.753	99.514
15)	T	Picloram	11.110	12.328	10964.8E6	4659.8E6	368.729	361.486
16)	T	DCPA	11.597	12.278	11437.1E6	4800.9E6	415.969	432.626

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

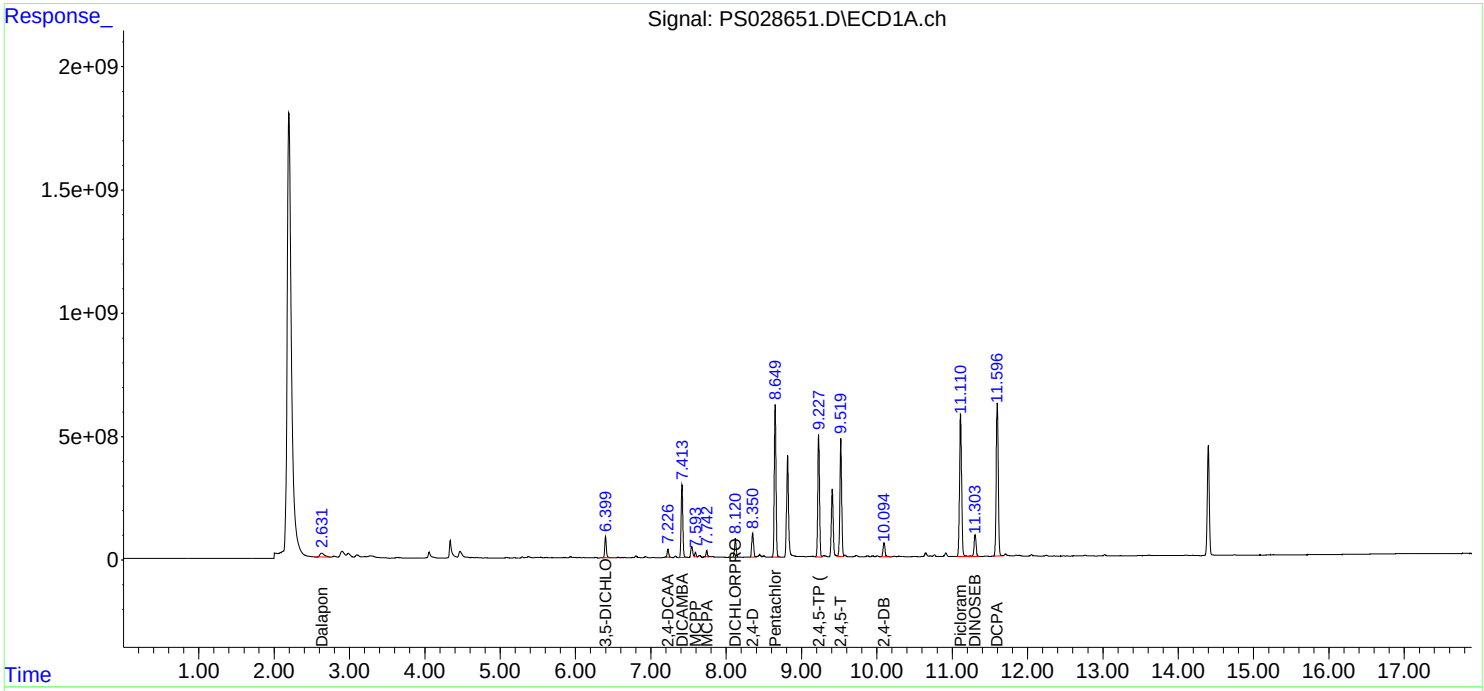
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS112624\
Data File : PS028651.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 26 Nov 2024 22:01
Operator : AR\AJ
Sample : P4961-01MSD
Misc :
ALS Vial : 19 Sample Multiplier: 1

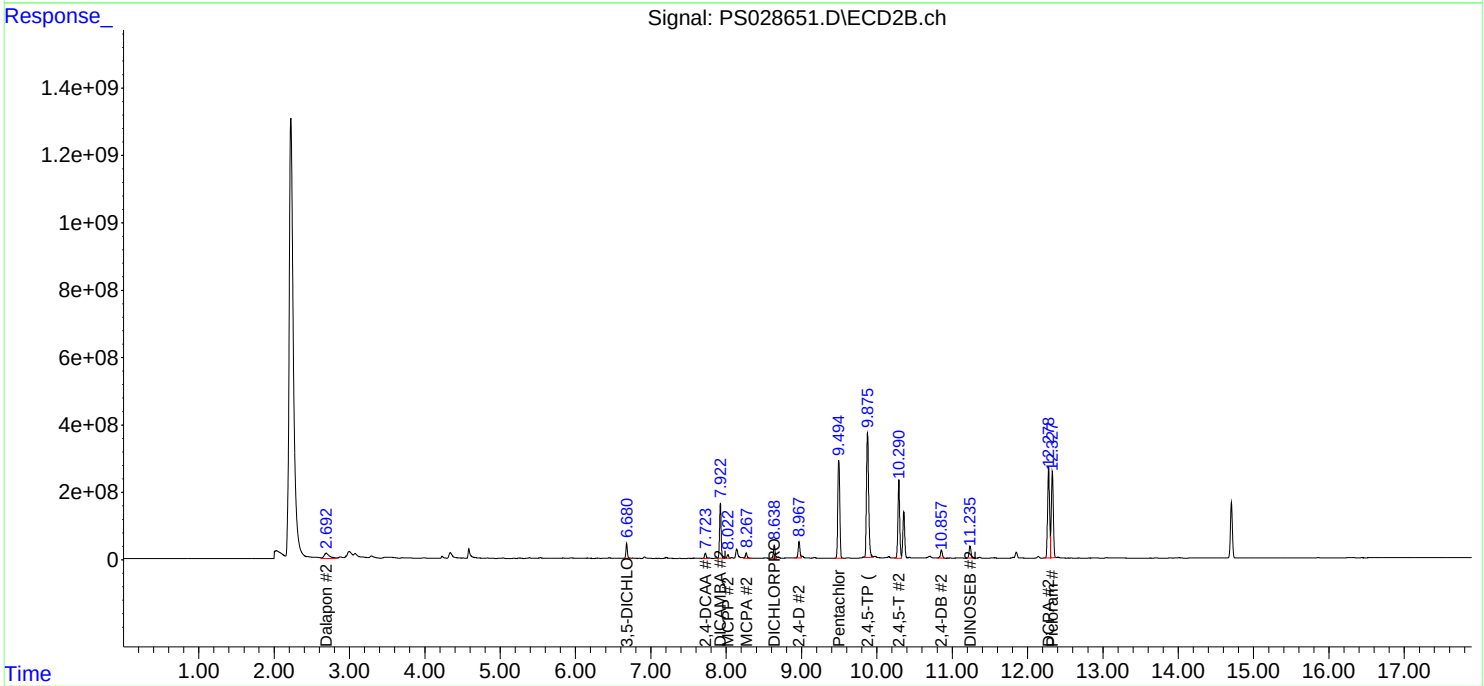
Instrument :
ECD_S
ClientSampleId :
C0RB8MSD

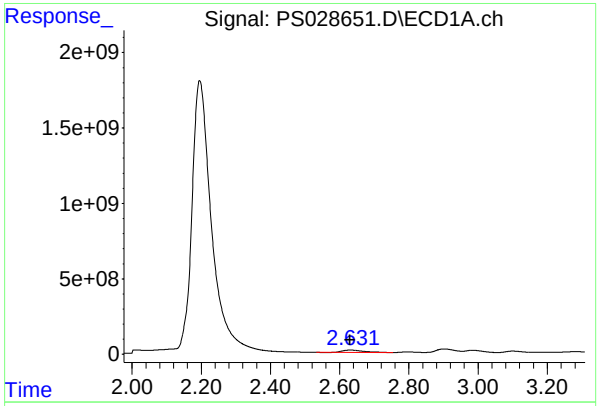
Manual Integrations APPROVED
Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 27 00:23:53 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS112624.M
Quant Title : 8080.M
QLast Update : Tue Nov 26 14:44:30 2024
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.: 2.632 min
Delta R.T.: 0.002 min
Response: 682437234
Conc: 235.17 ng/ml

Instrument :
ECD_S
ClientSampleId :
C0RB8MSD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
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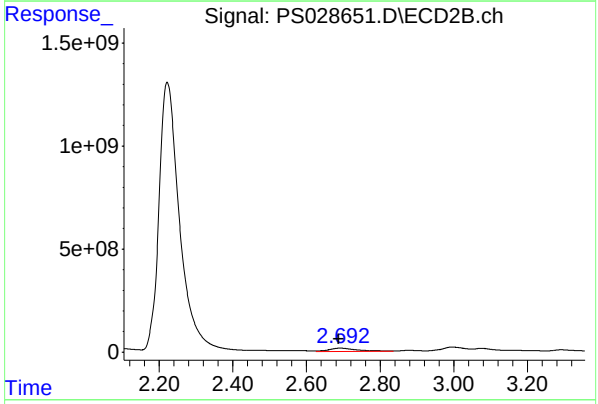
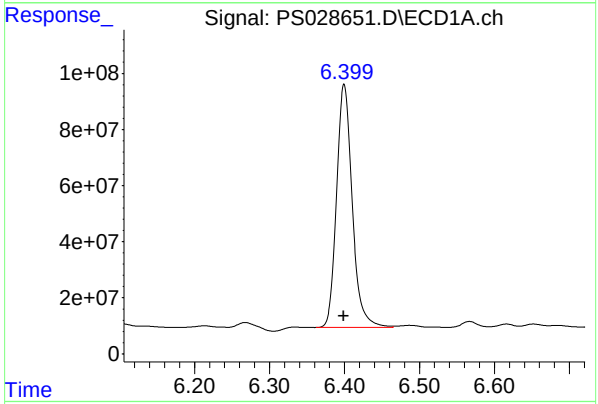


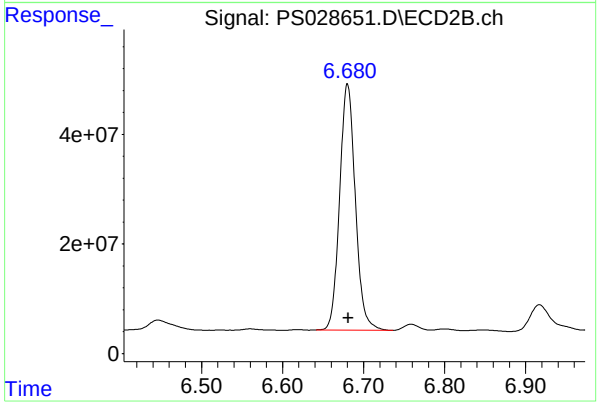
#1 Dalapon

R.T.: 2.692 min
Delta R.T.: 0.003 min
Response: 870546541
Conc: 398.64 ng/ml



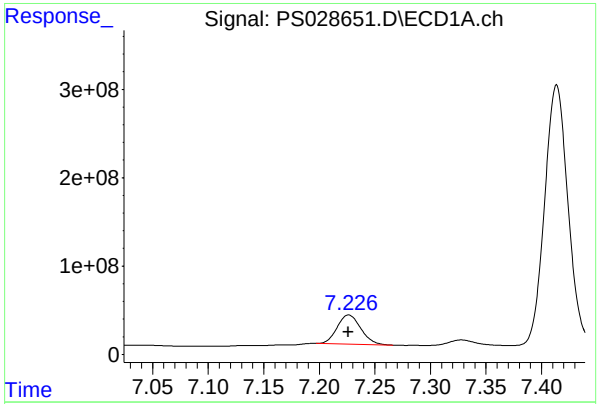
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.400 min
Delta R.T.: 0.000 min
Response: 1262486636
Conc: 329.66 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.680 min
Delta R.T.: -0.001 min
Response: 605658292
Conc: 308.37 ng/ml



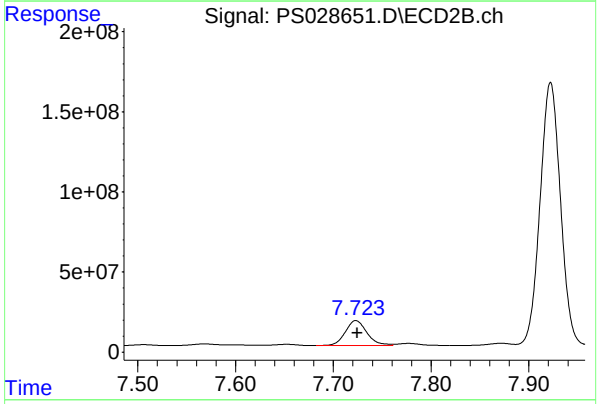
#4 2,4-DCAA

R.T.: 7.226 min
Delta R.T.: 0.000 min
Response: 491102917
Conc: 183.09 ng/ml

Instrument :
ECD_S
ClientSampleId :
C0RB8MSD

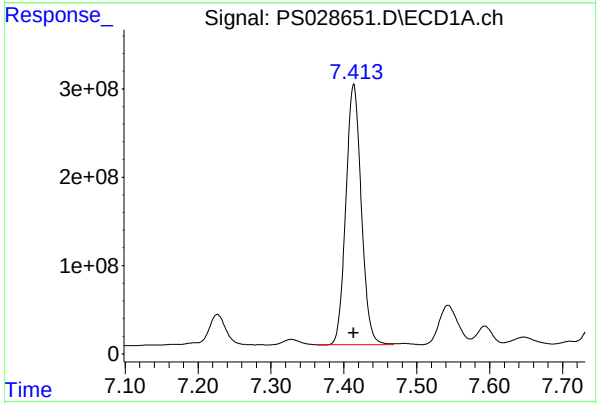
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024



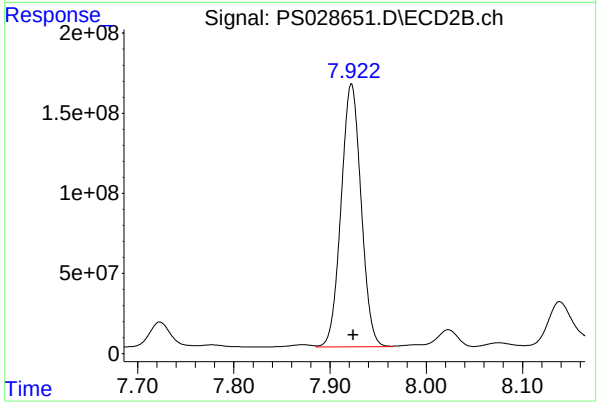
#4 2,4-DCAA

R.T.: 7.723 min
Delta R.T.: -0.001 min
Response: 239682225
Conc: 177.93 ng/ml



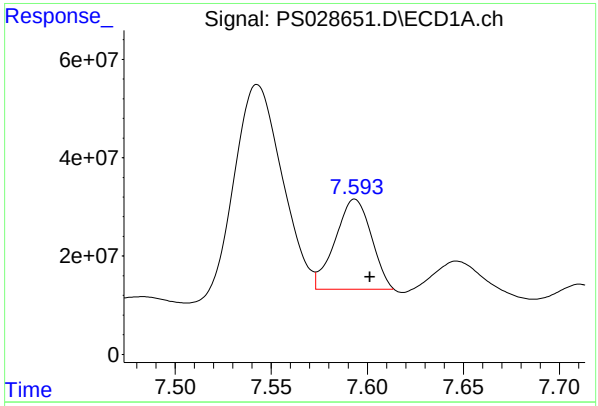
#5 DICAMBA

R.T.: 7.414 min
Delta R.T.: 0.000 min
Response: 4332553595
Conc: 377.38 ng/ml



#5 DICAMBA

R.T.: 7.922 min
Delta R.T.: -0.002 min
Response: 2375920727
Conc: 385.94 ng/ml



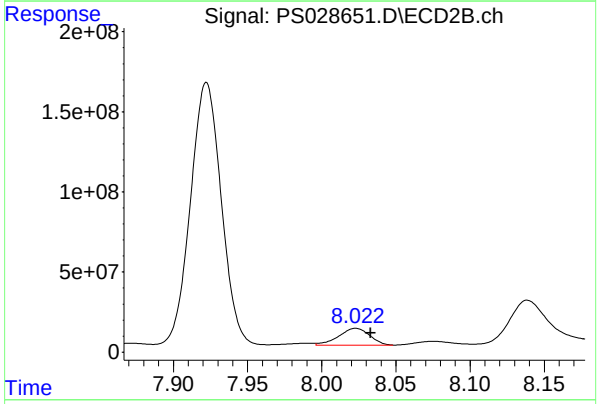
#6 MCPP

R.T.: 7.593 min
Delta R.T.: -0.008 min
Response: 238850613
Conc: 32.73 ug/ml

Instrument :
ECD_S
ClientSampleId :
C0RB8MSD

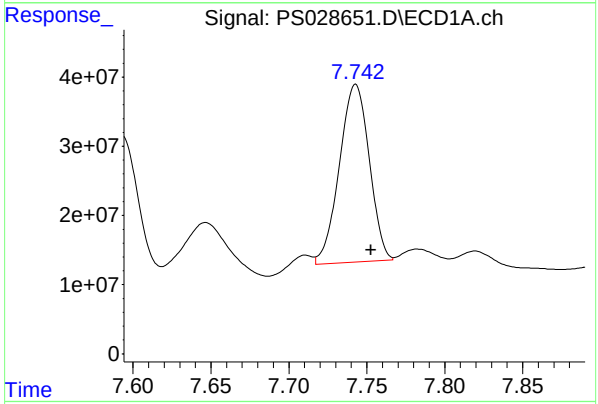
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024



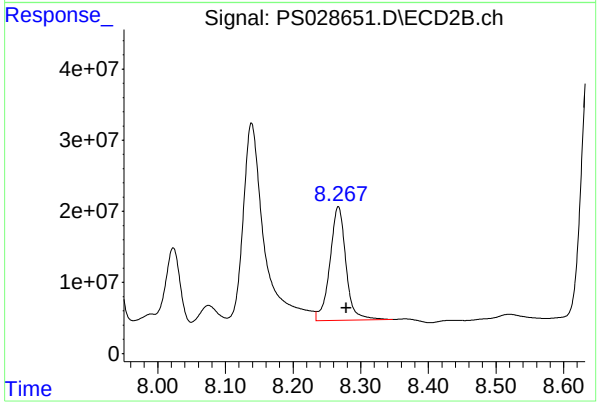
#6 MCPP

R.T.: 8.022 min
Delta R.T.: -0.010 min
Response: 153181073
Conc: 35.56 ug/ml m



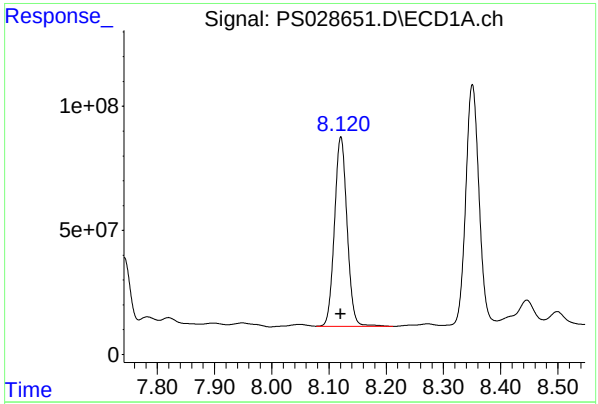
#7 MCPA

R.T.: 7.742 min
Delta R.T.: -0.010 min
Response: 342865667
Conc: 33.16 ug/ml m



#7 MCPA

R.T.: 8.267 min
Delta R.T.: -0.011 min
Response: 263257333
Conc: 42.42 ug/ml



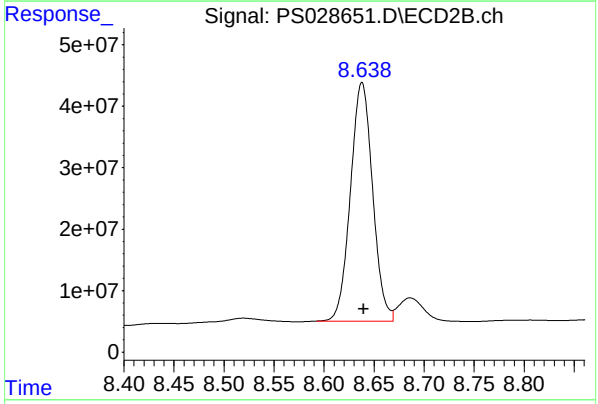
#8 DICHLORPROP

R.T.: 8.121 min
Delta R.T.: 0.000 min
Response: 1171078035
Conc: 376.18 ng/ml

Instrument :
ECD_S
ClientSampleId :
C0RB8MSD

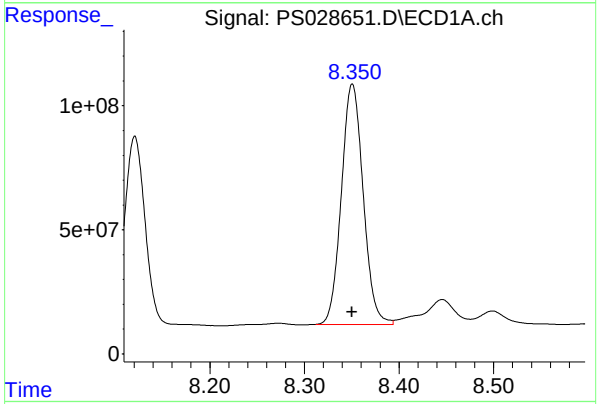
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024



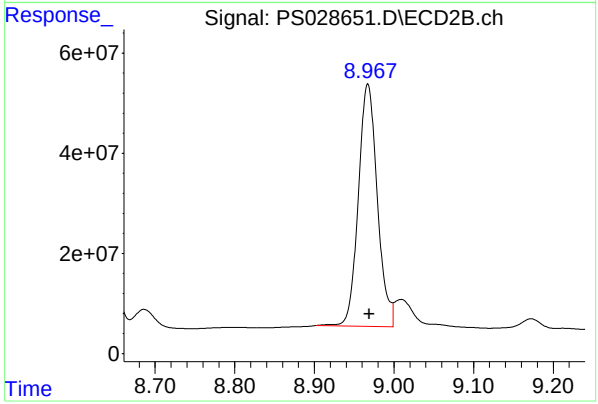
#8 DICHLORPROP

R.T.: 8.638 min
Delta R.T.: -0.002 min
Response: 599310724
Conc: 374.89 ng/ml



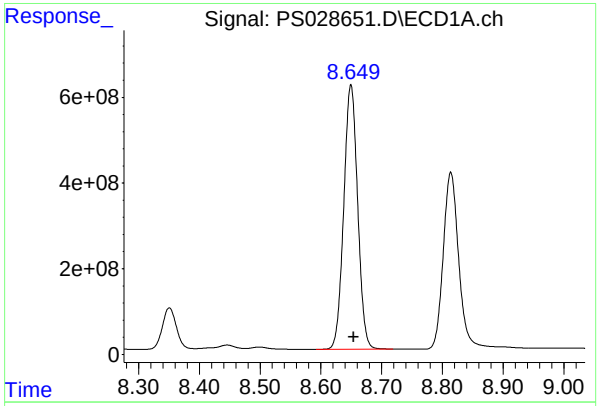
#9 2,4-D

R.T.: 8.351 min
Delta R.T.: 0.000 min
Response: 1553301881
Conc: 460.63 ng/ml



#9 2,4-D

R.T.: 8.967 min
Delta R.T.: -0.002 min
Response: 802361083
Conc: 474.50 ng/ml



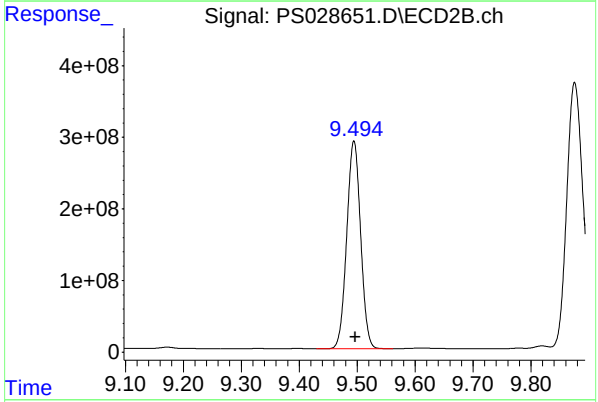
#10 Pentachlorophenol

R.T.: 8.650 min
Delta R.T.: -0.004 min
Response: 9820423184
Conc: 222.72 ng/ml

Instrument :
ECD_S
ClientSampleId :
C0RB8MSD

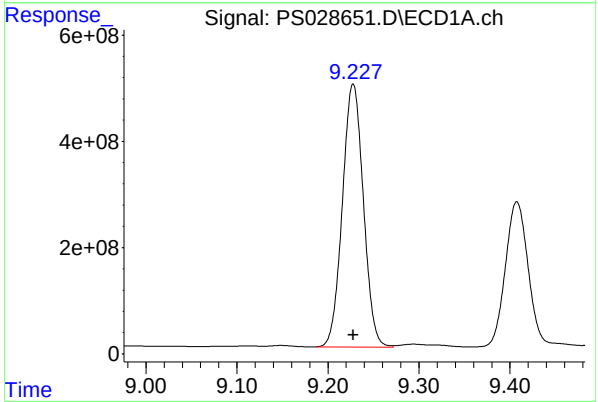
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024



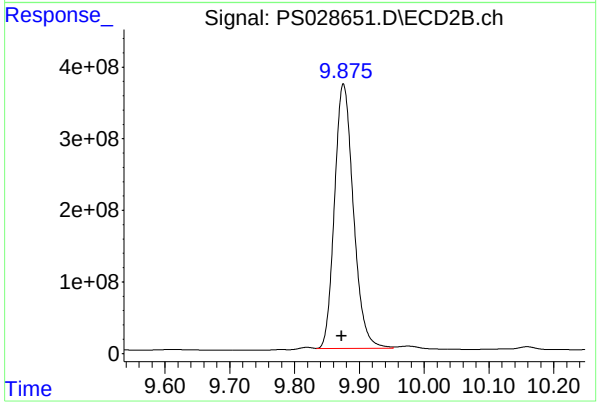
#10 Pentachlorophenol

R.T.: 9.494 min
Delta R.T.: -0.003 min
Response: 4847657994
Conc: 211.77 ng/ml



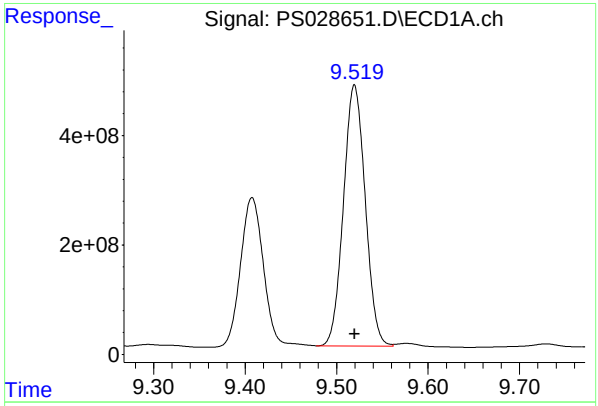
#11 2,4,5-TP (SILVEX)

R.T.: 9.227 min
Delta R.T.: 0.000 min
Response: 7937313383
Conc: 434.21 ng/ml m



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

R.T.: 9.875 min
Delta R.T.: 0.002 min
Response: 7466526789
Conc: 782.45 ng/ml m



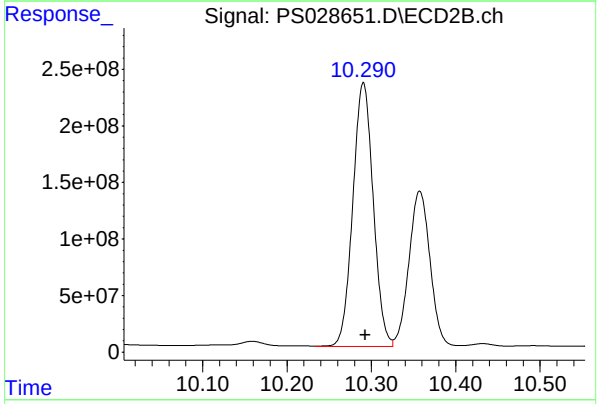
#12 2,4,5-T

R.T.: 9.519 min
Delta R.T.: 0.000 min
Response: 7900065814
Conc: 421.21 ng/ml

Instrument :
ECD_S
ClientSampleId :
C0RB8MSD

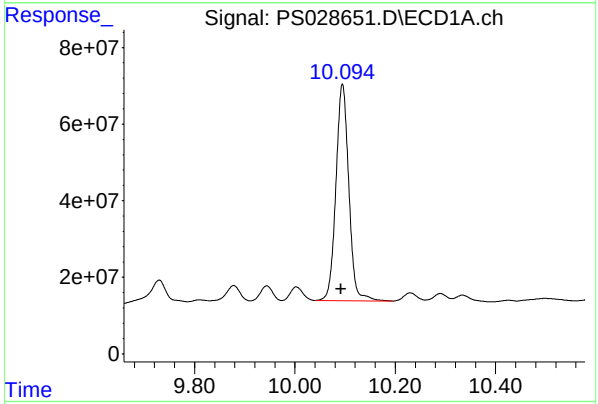
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024



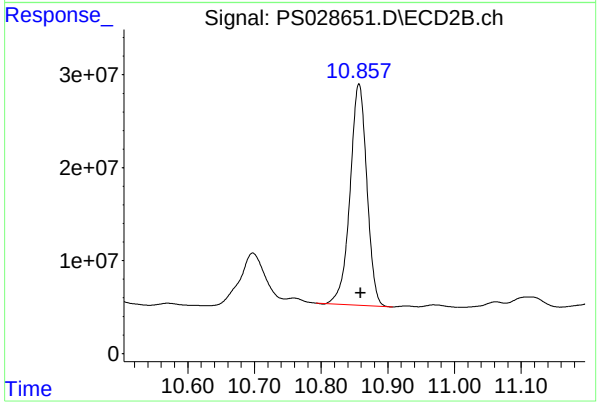
#12 2,4,5-T

R.T.: 10.291 min
Delta R.T.: -0.002 min
Response: 3926028439
Conc: 421.69 ng/ml



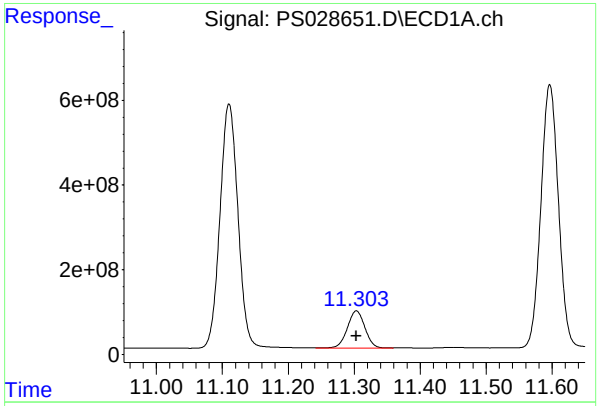
#13 2,4-DB

R.T.: 10.095 min
Delta R.T.: 0.003 min
Response: 1007027254
Conc: 284.33 ng/ml



#13 2,4-DB

R.T.: 10.857 min
Delta R.T.: -0.002 min
Response: 416680169
Conc: 363.37 ng/ml



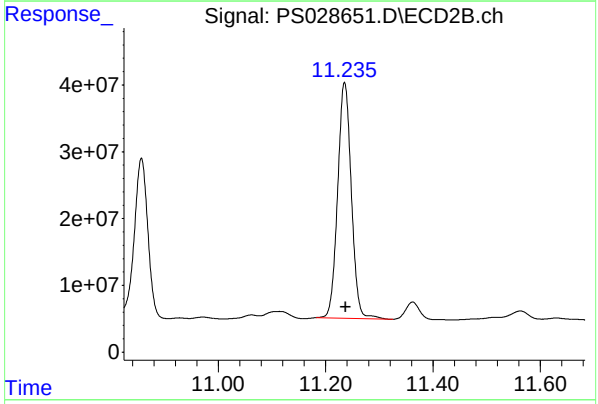
#14 DINOSEB

R.T.: 11.303 min
Delta R.T.: 0.000 min
Response: 1634142372
Conc: 108.75 ng/ml

Instrument :
ECD_S
ClientSampleId :
C0RB8MSD

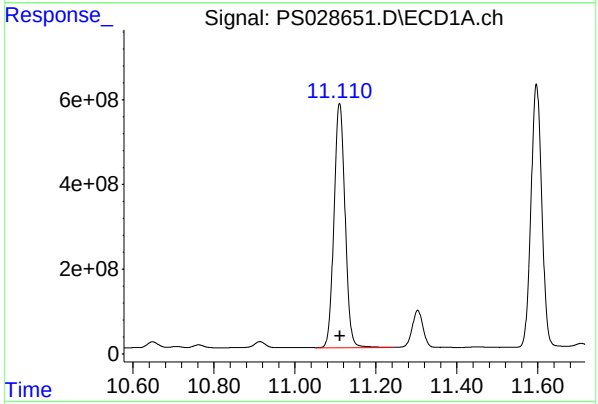
Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024



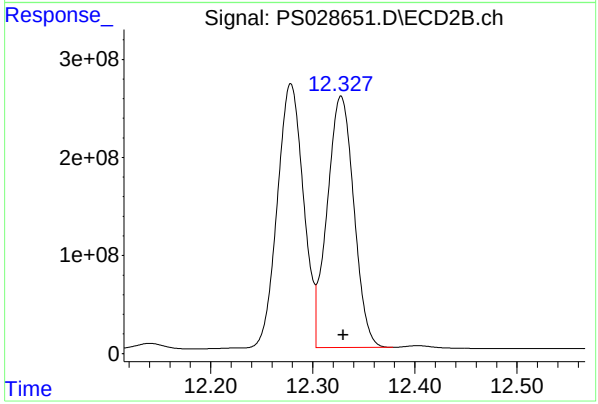
#14 DINOSEB

R.T.: 11.235 min
Delta R.T.: -0.002 min
Response: 624554826
Conc: 99.51 ng/ml



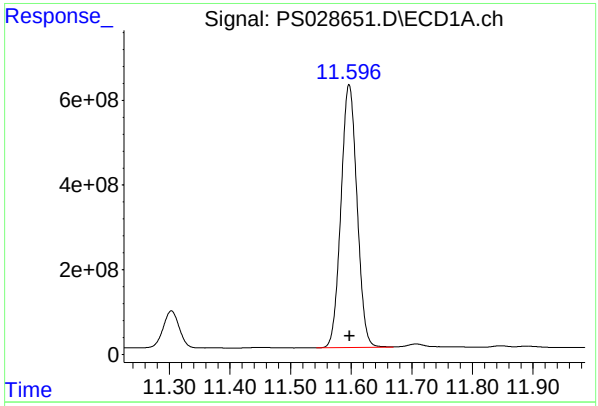
#15 Picloram

R.T.: 11.110 min
Delta R.T.: -0.001 min
Response: 10964818419
Conc: 368.73 ng/ml



#15 Picloram

R.T.: 12.328 min
Delta R.T.: -0.002 min
Response: 4659809921
Conc: 361.49 ng/ml



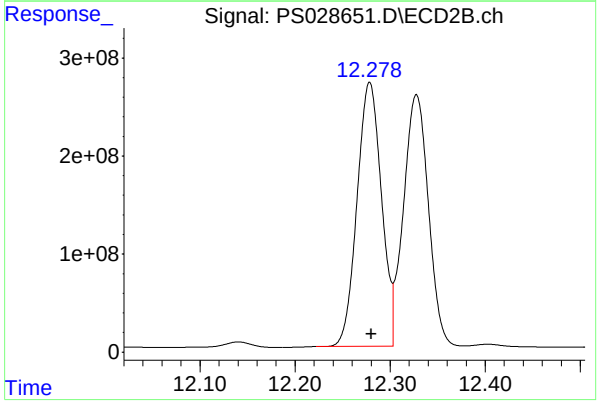
#16 DCPA

R.T.: 11.597 min
Delta R.T.: 0.000 mi
Response: 11437134096
Conc: 415.97 ng/m

Instrument :
ECD_S
ClientSampleId :
C0RB8MSD

Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/27/2024
Supervised By :Ankita Jodhani 11/27/2024



#16 DCPA

R.T.: 12.278 min
Delta R.T.: -0.002 min
Response: 4800948896
Conc: 432.63 ng/ml

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Manual Integration Report

Sequence:	PS112624	Instrument	ECD_s

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
HSTDICC200	PS028632.D	2,4-DCAA	yogesh	11/27/2024 8:45:28 AM	Ankita	11/27/2024 11:11:39	Peak Integrated by Software
PB165273BL	PS028644.D	2,4-DCAA	yogesh	11/27/2024 8:45:37 AM	Ankita	11/27/2024 11:11:47	Peak Integrated by Software
PB165273BS	PS028645.D	2,4,5-TP (SILVEX)	yogesh	11/27/2024 8:45:40 AM	Ankita	11/27/2024 11:11:49	Peak Integrated by Software
PB165273BS	PS028645.D	2,4-DCAA	yogesh	11/27/2024 8:45:40 AM	Ankita	11/27/2024 11:11:49	Peak Integrated by Software
PB165273BS	PS028645.D	4-Nitrophenol #2	yogesh	11/27/2024 8:45:40 AM	Ankita	11/27/2024 11:11:49	Peak Integrated by Software
PB165273BS	PS028645.D	Dalapon	yogesh	11/27/2024 8:45:40 AM	Ankita	11/27/2024 11:11:49	Peak Integrated by Software
PB165273BS	PS028645.D	Dalapon #2	yogesh	11/27/2024 8:45:40 AM	Ankita	11/27/2024 11:11:49	Peak Integrated by Software
P4961-01	PS028649.D	2,4-DCAA	yogesh	11/27/2024 8:45:40 AM	Ankita	11/27/2024 11:11:51	Peak Integrated by Software
P4961-01MS	PS028650.D	2,4,5-TP (SILVEX)	yogesh	11/27/2024 8:45:41 AM	Ankita	11/27/2024 11:11:53	Peak Integrated by Software
P4961-01MS	PS028650.D	2,4,5-TP (SILVEX) #2	yogesh	11/27/2024 8:45:41 AM	Ankita	11/27/2024 11:11:53	Peak Integrated by Software
P4961-01MS	PS028650.D	2,4-DCAA	yogesh	11/27/2024 8:45:41 AM	Ankita	11/27/2024 11:11:53	Peak Integrated by Software
P4961-01MS	PS028650.D	MCPP	yogesh	11/27/2024 8:45:41 AM	Ankita	11/27/2024 11:11:53	Peak Integrated by Software
P4961-01MS	PS028650.D	MCPP #2	yogesh	11/27/2024 8:45:41 AM	Ankita	11/27/2024 11:11:53	Peak Integrated by Software

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Manual Integration Report

Sequence:	PS112624	Instrument	ECD_s

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
P4961-01MSD	PS028651.D	2,4,5-T	yogesh	11/27/2024 8:45:43 AM	Ankita	11/27/2024 11:11:55	Peak Integrated by Software
P4961-01MSD	PS028651.D	2,4,5-TP (SILVEX)	yogesh	11/27/2024 8:45:43 AM	Ankita	11/27/2024 11:11:55	Peak Integrated by Software
P4961-01MSD	PS028651.D	2,4,5-TP (SILVEX) #2	yogesh	11/27/2024 8:45:43 AM	Ankita	11/27/2024 11:11:55	Peak Integrated by Software
P4961-01MSD	PS028651.D	2,4-DCAA	yogesh	11/27/2024 8:45:43 AM	Ankita	11/27/2024 11:11:55	Peak Integrated by Software
P4961-01MSD	PS028651.D	MCPA	yogesh	11/27/2024 8:45:43 AM	Ankita	11/27/2024 11:11:55	Peak Integrated by Software
P4961-01MSD	PS028651.D	MCPP	yogesh	11/27/2024 8:45:43 AM	Ankita	11/27/2024 11:11:55	Peak Integrated by Software
P4961-01MSD	PS028651.D	MCPP #2	yogesh	11/27/2024 8:45:43 AM	Ankita	11/27/2024 11:11:55	Peak Integrated by Software
HSTDCCC750	PS028655.D	2,4-DCAA	yogesh	11/27/2024 8:45:48 AM	Ankita	11/27/2024 11:11:58	Peak Integrated by Software

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Fax : 908 789 8922

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QCBatch ID # PS112624

Review By	yogesh	Review On	11/27/2024 8:46:05 AM		
Supervise By	Ankita	Supervise On	11/27/2024 11:12:35 AM		
SubDirectory	PS112624	HP Acquire Method		HP Processing Method	PS112624

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	PS028630.D	26 Nov 2024 12:00	AR\AJ	Ok
2	I.BLK	PS028631.D	26 Nov 2024 12:24	AR\AJ	Ok
3	HSTDICC200	PS028632.D	26 Nov 2024 12:48	AR\AJ	Ok,M
4	HSTDICC500	PS028633.D	26 Nov 2024 13:13	AR\AJ	Ok
5	HSTDICC750	PS028634.D	26 Nov 2024 13:37	AR\AJ	Ok
6	HSTDICC1000	PS028635.D	26 Nov 2024 14:01	AR\AJ	Ok
7	HSTDICC1500	PS028636.D	26 Nov 2024 14:25	AR\AJ	Ok
8	HSTDICV750	PS028637.D	26 Nov 2024 14:49	AR\AJ	Ok
9	I.BLK	PS028638.D	26 Nov 2024 15:37	AR\AJ	Ok
10	HSTDCCC750	PS028639.D	26 Nov 2024 16:01	AR\AJ	Ok
11	P4892-03	PS028640.D	26 Nov 2024 17:37	AR\AJ	Not Ok
12	P4892-03RE	PS028641.D	26 Nov 2024 18:01	AR\AJ	Not Ok
13	P4951-01	PS028642.D	26 Nov 2024 18:25	AR\AJ	Ok,M
14	P4985-05	PS028643.D	26 Nov 2024 18:49	AR\AJ	Ok,M
15	PB165273BL	PS028644.D	26 Nov 2024 19:13	AR\AJ	Ok,M
16	PB165273BS	PS028645.D	26 Nov 2024 19:37	AR\AJ	Ok,M
17	PB165159TB	PS028646.D	26 Nov 2024 20:01	AR\AJ	Ok
18	I.BLK	PS028647.D	26 Nov 2024 20:25	AR\AJ	Ok
19	HSTDCCC750	PS028648.D	26 Nov 2024 20:49	AR\AJ	Ok
20	P4961-01	PS028649.D	26 Nov 2024 21:13	AR\AJ	Ok,M
21	P4961-01MS	PS028650.D	26 Nov 2024 21:37	AR\AJ	Ok,M

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Fax : 908 789 8922

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QCBatch ID # PS112624

Review By	yogesh	Review On	11/27/2024 8:46:05 AM		
Supervise By	Ankita	Supervise On	11/27/2024 11:12:35 AM		
SubDirectory	PS112624	HP Acquire Method		HP Processing Method	PS112624

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

22	P4961-01MSD	PS028651.D	26 Nov 2024 22:01	AR\AJ	Ok,M
23	P4962-01	PS028652.D	26 Nov 2024 22:25	AR\AJ	Ok,M
24	P4995-02	PS028653.D	26 Nov 2024 22:49	AR\AJ	Ok
25	I.BLK	PS028654.D	26 Nov 2024 23:13	AR\AJ	Ok
26	HSTDCCC750	PS028655.D	26 Nov 2024 23:37	AR\AJ	Ok,M

M : Manual Integration

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Fax : 908 789 8922

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QCBatch ID # PS112624

Review By	yogesh	Review On	11/27/2024 8:46:05 AM		
Supervise By	Ankita	Supervise On	11/27/2024 11:12:35 AM		
SubDirectory	PS112624	HP Acquire Method		HP Processing Method	PS112624

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	PS028630.D	26 Nov 2024 12:00		AR\AJ	Ok
2	I.BLK	I.BLK	PS028631.D	26 Nov 2024 12:24		AR\AJ	Ok
3	HSTDICC200	HSTDICC200	PS028632.D	26 Nov 2024 12:48		AR\AJ	Ok,M
4	HSTDICC500	HSTDICC500	PS028633.D	26 Nov 2024 13:13		AR\AJ	Ok
5	HSTDICC750	HSTDICC750	PS028634.D	26 Nov 2024 13:37		AR\AJ	Ok
6	HSTDICC1000	HSTDICC1000	PS028635.D	26 Nov 2024 14:01		AR\AJ	Ok
7	HSTDICC1500	HSTDICC1500	PS028636.D	26 Nov 2024 14:25		AR\AJ	Ok
8	HSTDICV750	ICVPS112624	PS028637.D	26 Nov 2024 14:49		AR\AJ	Ok
9	I.BLK	I.BLK	PS028638.D	26 Nov 2024 15:37		AR\AJ	Ok
10	HSTDCCC750	HSTDCCC750	PS028639.D	26 Nov 2024 16:01		AR\AJ	Ok
11	P4892-03	WB-310-BOT	PS028640.D	26 Nov 2024 17:37	already analzyed	AR\AJ	Not Ok
12	P4892-03RE	WB-310-BOTRE	PS028641.D	26 Nov 2024 18:01	already analyzed	AR\AJ	Not Ok
13	P4951-01	AU-05-112124	PS028642.D	26 Nov 2024 18:25		AR\AJ	Ok,M
14	P4985-05	MH-740-WC	PS028643.D	26 Nov 2024 18:49		AR\AJ	Ok,M
15	PB165273BL	PB165273BL	PS028644.D	26 Nov 2024 19:13		AR\AJ	Ok,M
16	PB165273BS	PB165273BS	PS028645.D	26 Nov 2024 19:37	Recovery Fail in DICHLORPROP-I and DINOSEB-I	AR\AJ	Ok,M
17	PB165159TB	PB165159TB	PS028646.D	26 Nov 2024 20:01		AR\AJ	Ok

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Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QCBatch ID # PS112624

Review By	yogesh	Review On	11/27/2024 8:46:05 AM		
Supervise By	Ankita	Supervise On	11/27/2024 11:12:35 AM		
SubDirectory	PS112624	HP Acquire Method		HP Processing Method	PS112624

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	

18	I.BLK	I.BLK	PS028647.D	26 Nov 2024 20:25		AR\AJ	Ok
19	HSTDCCC750	HSTDCCC750	PS028648.D	26 Nov 2024 20:49		AR\AJ	Ok
20	P4961-01	C0RB8	PS028649.D	26 Nov 2024 21:13	Surrogate Fail in both column confirms with ms msd	AR\AJ	Ok,M
21	P4961-01MS	C0RB8MS	PS028650.D	26 Nov 2024 21:37	surrogate fail	AR\AJ	Ok,M
22	P4961-01MSD	C0RB8MSD	PS028651.D	26 Nov 2024 22:01	surrogate fail	AR\AJ	Ok,M
23	P4962-01	C0NB8	PS028652.D	26 Nov 2024 22:25		AR\AJ	Ok,M
24	P4995-02	001	PS028653.D	26 Nov 2024 22:49		AR\AJ	Ok
25	I.BLK	I.BLK	PS028654.D	26 Nov 2024 23:13		AR\AJ	Ok
26	HSTDCCC750	HSTDCCC750	PS028655.D	26 Nov 2024 23:37		AR\AJ	Ok,M

M : Manual Integration

Alliance TECHNICAL GROUP

TCLP EXTRACTION LOGPAGE

PB165159

SOP ID : M1311-TCLP-15

SDG No : N/A

Weigh By : JP

Balance ID : WC SC-4

pH Meter ID : WC PH METER-1

Extraction By : JP

Filter By : JP

Pippete ID : WC

Tumbler ID : T-1

TCLP Filter ID : 114771

Start Prep Date : 11/21/2024 **Time :** 14:00

End Prep Date : 11/22/2024 **Time :** 08:15

Combination Ratio : 20

ZHE Cleaning Batch : N/A

Initial Room Temperature: 23 °C

Final Room Temperature: 22 °C

TCLP Technician Signature : JP

Supervisor By : IZ

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,W2350,W2755
pH Strips	N/A	W1937,W1938,W1939,W1940,W1941,W1942
1 Liter Amber	N/A	90424-08
120ml Plastic bottle	N/A	405130101
1:1 HNO3	N/A	MP83122

Extraction Conformance/Non-Conformance Comments:

Matrix spikes are added after fiftration and before preservation. Tumbler T-1 checked,30 rpm. Particle size reduction is not required. P4938-04 IS USED FOR MS-MSD.

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
11/25/24 09:30	JP TCLP Room	JP EXT
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

TCLP EXTRACTION LOGPAGE

PB165159

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
P4938-04	MH-732	01	100.02	2000	N/A	N/A	N/A	4.5	1.0	T-1
P4938-08	MH-734	02	100.03	2000	N/A	N/A	N/A	5.5	1.5	T-1
P4946-01	BW-1	03	100.04	2000	N/A	N/A	N/A	5.6	1.0	T-1
P4946-02	BW-2	04	100.03	2000	N/A	N/A	N/A	6.0	1.5	T-1
P4961-01	C0RB8	05	100.04	2000	N/A	N/A	N/A	5.8	1.0	T-1
P4962-01	C0NB8	06	100.03	2000	N/A	N/A	N/A	6.0	1.5	T-1
PB165159TB	LEB159	07	N/A	2000	N/A	N/A	N/A	4.93	1.0	T-1

SampleID	ClientID	Sample Weight (g)	Filter Weight (g)	Filtrate (mL)	Filter + Solid (After 100°C)	% solids	% Dry Solids
P4938-04	MH-732	N/A	N/A	N/A	N/A	100	N/A
P4938-08	MH-734	N/A	N/A	N/A	N/A	100	N/A
P4946-01	BW-1	N/A	N/A	N/A	N/A	100	N/A
P4946-02	BW-2	N/A	N/A	N/A	N/A	100	N/A
P4961-01	C0RB8	N/A	N/A	N/A	N/A	100	N/A
P4962-01	C0NB8	N/A	N/A	N/A	N/A	100	N/A
PB165159TB	LEB159	N/A	N/A	N/A	N/A	N/A	N/A

Alliance TECHNICAL GROUP

TCLP Fluid Determination

PB165159

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
P4938-04	MH-732	5.02	96.5	7.0	2.0	#1	4.93
P4938-08	MH-734	5.03	96.5	7.6	2.5	#1	4.93
P4946-01	BW-1	5.02	96.5	7.6	2.5	#1	4.93
P4946-02	BW-2	5.03	96.5	8.6	3.0	#1	4.93
P4961-01	C0RB8	5.02	96.5	8.4	3.5	#1	4.93
P4962-01	C0NB8	5.01	96.5	8.0	3.0	#1	4.93
PB165159TB	LEB159	N/A	N/A	N/A	N/A	#1	4.93

WORKLIST(Hardcopy Internal Chain)

WorkList Name : tclp p4938 **WorkList ID :** 185691 **Department :** TCLP Extraction **Date :** 11-22-2024 10:50:14

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4938-04	MH-732	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	L51	11/20/2024	1311
P4938-08	MH-734	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	L51	11/20/2024	1311
P4946-01	BW-1	Solid	TCLP Extraction	Cool 4 deg C	PSEG04	L51	11/21/2024	1311
P4946-02	BW-2	Solid	TCLP Extraction	Cool 4 deg C	PSEG04	L51	11/21/2024	1311
P4961-01	C0RB8	Solid	TCLP Extraction	Cool 4 deg C	TETR16	L61	11/20/2024	1311
P4962-01	C0NB8	Solid	TCLP Extraction	Cool 4 deg C	TETR16	L61	11/20/2024	1311

Date/Time 11.22.24 12:00

Raw Sample Received by: JD (WDC)

Raw Sample Relinquished by: SM

Date/Time 11.22.24 15:00

Raw Sample Received by: SM

Raw Sample Relinquished by: WDC

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PB165273

SOP ID: M8151A-Herbicide-22

Clean Up SOP #: N/A

Matrix : Water

Weigh By: RJ

Balance check: RJ

Balance ID: EX-SC-2

pH Strip Lot#: N/A

Extraction By: RJ

Filter By: RJ

pH Meter ID: N/A

Hood ID: 3,7

Extraction Start Date : 11/26/2024

Extraction Start Time : 11:10

Extraction End Date : 11/26/2024

Extraction End Time : 16:25

Concentration By: EH

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	PP23930
Surrogate	1.0ML	5000 PPB	PP23949
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
Ether	N/A	E3370
Acidified Na2SO4	N/A	EP2503
NAOH 6N	N/A	EP2553
1:3 SULPHURIC ACID	N/A	EP2528
NACL	N/A	M4459
ISO OCTANE	N/A	E3554
Diazomethane	N/A	EP2529
Hexane	N/A	E3826
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 HCL <2 for soil Extraction, PH adjusted with 1:3 H2SO4 <2 after Hydrolysis, Derivatization procedure is completed and samples are ready to Analyze,40ML Vial Lot # 03-40 BTS721.

KD Bath ID: N/A

KD Bath Temperature: N/A

Envap ID: NEVAP-02

Envap Temperature: 40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
11/26/24	RP (Ext. Lab)	AJ (FGT PCB Lab)
16:30	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PrepBatch ID : PB165273

Analytical Method: M8151A-Herbicide-22

Concentration Date: 11/26/2024

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB165159TB	PB165159TB	TCLP Herbicide	100	6	RUPESH	ritesh	10			SEP-1
PB165252TB	PB165252TB	TCLP Herbicide	100	6	RUPESH	ritesh	10			2
PB165273BL	HBLK273	TCLP Herbicide	1000	6	RUPESH	ritesh	10			3
PB165273BS	HLCS273	TCLP Herbicide	1000	6	RUPESH	ritesh	10			4
P4961-01	C0RB8	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		5
P4961-01MS	C0RB8MS	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		6
P4961-01MSD	C0RB8MSD	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		7
P4962-01	C0NB8	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		8
P4995-02	001	TCLP Herbicide	100	6	RUPESH	ritesh	10	A		9

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

11/26/24

Alliance TECHNICAL GROUP

TCLP EXTRACTION LOGPAGE

PB165159

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
P4938-04	MH-732	01	100.02	2000	N/A	N/A	N/A	4.5	1.0	T-1
P4938-08	MH-734	02	100.03	2000	N/A	N/A	N/A	5.5	1.5	T-1
P4946-01	BW-1	03	100.04	2000	N/A	N/A	N/A	5.6	1.0	T-1
P4946-02	BW-2	04	100.03	2000	N/A	N/A	N/A	6.0	1.5	T-1
P4961-01	C0RB8	05	100.04	2000	N/A	N/A	N/A	5.8	1.0	T-1
P4962-01	C0NB8	06	100.03	2000	N/A	N/A	N/A	6.0	1.5	T-1
PB165159TB	LEB159	07	N/A	2000	N/A	N/A	N/A	4.93	1.0	T-1

11/25/24

09:30

Alliance TECHNICAL GROUP

TCLP EXTRACTION LOGPAGE

PB165252

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 Pu
P4995-02	001	N/A	N/A	N/A	N/A	N/A	N/A	7.6	1.5	N/
PB165252TB	LEB252	N/A	N/A	N/A	N/A	N/A	N/A	4.94	1.0	N/

11/26/2024

10:30

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Prep Standard - Chemical Standard Summary

Order ID : P4961

Test : TCLP Herbicide

Prepbatch ID : PB165273,

Sequence ID/Qc Batch ID: PS112624,

Standard ID :
EP2503,EP2528,EP2553,PP23930,PP23949,PP24061,PP24062,PP24064,PP24065,PP24066,PP24067,PP24068,PP24069,PP24070,

Chemical ID :
E3370,E3551,E3657,E3818,E3826,E3827,M4459,M5037,P10549,P11180,P11181,P12619,P12629,P12686,P12708,P12709,P12784,P12785,P13502,P13503,P13504,P13505,P13517,W3112,

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Extractions STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
601	Acidified Sodium Sulphate 2	EP2503	07/01/2024	12/15/2024	Rajesh Parikh	Extraction_SCALE_2 (EX-SC-2)	None	RUPESHKUMAR SHAH 07/01/2024

FROM 100.00000ml of E3370 + 150.00000ml of M5037 + 3000.00000ml of E3551 = Final Quantity: 3000.000 gram

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1762	1:3 H2SO4 Soln	EP2528	08/14/2024	12/15/2024	Rajesh Parikh	None	None	RUPESHKUMAR SHAH 08/14/2024

FROM 250.00000ml of M5037 + 750.00000ml of W3112 = Final Quantity: 1000.000 ml

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Extractions STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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
1848	5000/500000 PPB Herbicide Spike (Free Acid)	PP23930	10/30/2024	04/23/2025	Abdul Mirza	None	None	Ankita Jodhani 10/30/2024

FROM 0.50000ml of P13517 + 1.00000ml of P12784 + 1.00000ml of P12785 + 47.50000ml of E3818 = Final Quantity: 50.000 ml

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Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
60	5000 PPB Herbicide Surg Spike (Free Acid)	PP23949	11/11/2024	05/08/2025	Abdul Mirza	None	None	Ankita Jodhani 11/13/2024

FROM 1.25000ml of P13502 + 1.25000ml of P13503 + 1.25000ml of P13504 + 1.25000ml of P13505 + 195.00000ml of E3827 = Final Quantity: 200.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1321	2/200 PPM Herb Mega Mix	PP24061	11/26/2024	05/09/2025	Ankita Jodhani	None	None	Yogesh Patel 11/27/2024

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

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Pest/Pcb STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1851	2/200 PPM Herb Mega Mix 2nd Source	PP24062	11/26/2024	05/09/2025	Ankita Jodhani	None	None	Yogesh Patel 11/27/2024

FROM 1.00000ml of P11181 + 1.00000ml of P12708 + 1.00000ml of P12709 + 97.00000ml of E3826 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1452	1500 PPB HERB MIX STD	PP24064	11/26/2024	05/09/2025	Ankita Jodhani	None	None	Yogesh Patel 11/27/2024

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

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Pest/Pcb STANDARD PREPARATION LOG

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

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

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

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

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Pest/Pcb STANDARD PREPARATION LOG

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

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

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

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

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Pest/Pcb STANDARD PREPARATION LOG

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

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

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

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

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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	01/17/2025	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	01/03/2025	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-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H1462005	04/23/2025	10/23/2024 / Rajesh	10/09/2024 / Rajesh	E3818

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)	24H1462005	05/08/2025	11/08/2024 / Rajesh	11/07/2024 / Rajesh	E3827

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CHEMICAL RECEIPT LOG BOOK

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

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)	0000250349	12/15/2024	01/06/2022 / mohan	09/18/2021 / mohan	M5037

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

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	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

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

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Fax : 908 789 8922

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Agilent Technologies	HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids	0006750243	04/30/2025	10/30/2024 / Abdul	09/11/2023 / Abdul	P12784

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	0006750243	04/30/2025	10/30/2024 / Abdul	09/11/2023 / Abdul	P12784

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	0006750243	04/30/2025	10/30/2024 / Abdul	09/11/2023 / Abdul	P12785

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	0006750243	04/30/2025	10/30/2024 / Abdul	09/11/2023 / Abdul	P12785

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	05/11/2025	11/11/2024 / Abdul	08/16/2024 / yogesh	P13502

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	05/11/2025	11/11/2024 / Abdul	08/16/2024 / yogesh	P13503

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32049 / Herbicide, 8000 series, 515 Surrogate [free acid] 2,4-dichlorophenyl acetic acid, 1mL, 200ug/mL, MeOH	A0212676	05/11/2025	11/11/2024 / Abdul	08/16/2024 / yogesh	P13504

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	05/11/2025	11/11/2024 / Abdul	08/16/2024 / yogesh	P13505

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	0006750243	04/30/2025	10/30/2024 / Abdul	09/03/2024 / Abdul	P13517

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	0006750243	04/30/2025	10/30/2024 / Abdul	09/03/2024 / Abdul	P13517

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 RB 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

PO: PO2-329 PRODUCT CODE: SHIP DATE: 9/30/2024

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

avantor™ | J.T.Baker

Material No.: 9254-03
Batch No.: 24H1462005
Manufactured Date: 2024-05-24
Expiration Date:2027-05-24
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ($(CH_3)_2CO$) (by GC, corrected forwater)	>= 99.4 %	99.8 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.2 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titrable Acid (µeq/g)	<= 0.3	0.2
Titrable Base (µeq/g)	<= 0.6	<0.1
Water (H_2O)	<= 0.5 %	0.2 %
FID-Sensitive Impurities (as 2-Octanol)Single Impurity Peak (ng/mL)	<= 5	<1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	1

For Laboratory,Research,or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

Recd. by RP on 10/9/24

E 3818

Jamie Croak
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials,LLC
100 Matsonford Rd, Suite 200,Radnor,PA,19087.U.S.A.Phone 610.386.1700

Page 1 of 1

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.: 24H1462005
Manufactured Date: 2024-05-24
Expiration Date:2027-05-24
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ($(CH_3)_2CO$) (by GC, corrected forwater)	>= 99.4 %	99.8 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.2 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titrable Acid (µeq/g)	<= 0.3	0.2
Titrable Base (µeq/g)	<= 0.6	<0.1
Water (H_2O)	<= 0.5 %	0.2 %
FID-Sensitive Impurities (as 2-Octanol)Single Impurity Peak (ng/mL)	<= 5	<1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	1

For Laboratory,Research,or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

E3827

Recd by RP on ~~11/6~~ 11/7/24
RP 11/7

JCroak
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

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

M3033-38-33-40
no

avantor™ | J.T.Baker®

Material No.: 9673-33
Batch No.: 0000250349
Manufactured Date: 2019/12/17
Retest Date: 2024/12/15
Revision No: 1

Certificate of Analysis

Test	Specification	Result
ACS - Assay (H_2SO_4)	95.0 - 98.0 %	96.5
Appearance	Passes Test	PT
ACS - Color (APHA)	<= 10	5
ACS - Residue after Ignition	<= 3 ppm	1
ACS - Substances Reducing Permanganate (as SO_2)	<= 2 ppm	< 2
Ammonium (NH_4)	<= 1 ppm	< 1
Chloride (Cl)	<= 0.1 ppm	< 0.1
Nitrate (NO_3)	<= 0.2 ppm	< 0.1
Phosphate (PO_4)	<= 0.5 ppm	< 0.1
Trace Impurities - Aluminum (Al)	<= 30.0 ppb	0.2
Arsenic and Antimony (as As)	<= 4 ppb	< 2
Trace Impurities - Barium (Ba)	<= 10.0 ppb	< 1.0
Trace Impurities - Beryllium (Be)	<= 10.0 ppb	< 1.0
Trace Impurities - Bismuth (Bi)	<= 10.0 ppb	< 1.0
Trace Impurities - Boron (B)	<= 10.0 ppb	< 5.0
Trace Impurities - Cadmium (Cd)	<= 2.0 ppb	< 0.3
Trace Impurities - Calcium (Ca)	<= 50.0 ppb	2.9
Trace Impurities - Chromium (Cr)	<= 6.0 ppb	< 0.4
Trace Impurities - Cobalt (Co)	<= 0.5 ppb	< 0.3
Trace Impurities - Copper (Cu)	<= 1.0 ppb	< 0.1
Trace Impurities - Gallium (Ga)	<= 10.0 ppb	< 1.0
Trace Impurities - Germanium (Ge)	<= 10.0 ppb	< 10.0
Trace Impurities - Gold (Au)	<= 10.0 ppb	< 0.2
Heavy Metals (as Pb)	<= 500 ppb	< 100

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

Material No.: 9673-33
Batch No.: 0000250349

Test	Specification	Result
Trace Impurities - Iron (Fe)	<= 50.0 ppb	4.1
Trace Impurities - Lead (Pb)	<= 0.5 ppb	< 0.5
Trace Impurities - Lithium (Li)	<= 10.0 ppb	< 1.0
Trace Impurities - Magnesium (Mg)	<= 7.0 ppb	0.4
Trace Impurities - Manganese (Mn)	<= 1.0 ppb	< 0.4
Trace Impurities - Mercury (Hg)	<= 0.5 ppb	< 0.1
Trace Impurities - Molybdenum (Mo)	<= 10.0 ppb	< 5.0
Trace Impurities - Nickel (Ni)	<= 2.0 ppb	< 0.3
Trace Impurities - Niobium (Nb)	<= 10.0 ppb	< 1.0
Trace Impurities - Potassium (K)	<= 500.0 ppb	< 2.0
Trace Impurities - Selenium (Se)	<= 50.0 ppb	22.9
Trace Impurities - Silicon (Si)	<= 100.0 ppb	< 10.0
Trace Impurities - Silver (Ag)	<= 1.0 ppb	< 0.3
Trace Impurities - Sodium (Na)	<= 500.0 ppb	2.7
Trace Impurities - Strontium (Sr)	<= 5.0 ppb	< 0.2
Trace Impurities - Tantalum (Ta)	<= 10.0 ppb	< 5.0
Trace Impurities - Thallium (Tl)	<= 20.0 ppb	< 5.0
Trace Impurities - Tin (Sn)	<= 5.0 ppb	< 0.8
Trace Impurities - Titanium (Ti)	<= 10.0 ppb	< 1.0
Trace Impurities - Vanadium (V)	<= 10.0 ppb	< 1.0
Trace Impurities - Zinc (Zn)	<= 5.0 ppb	0.3
Trace Impurities - Zirconium (Zr)	<= 10.0 ppb	< 1.0

For Laboratory, Research or Manufacturing Use

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

James T Ethier
Jamie Ethier
Vice President Global Quality

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

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

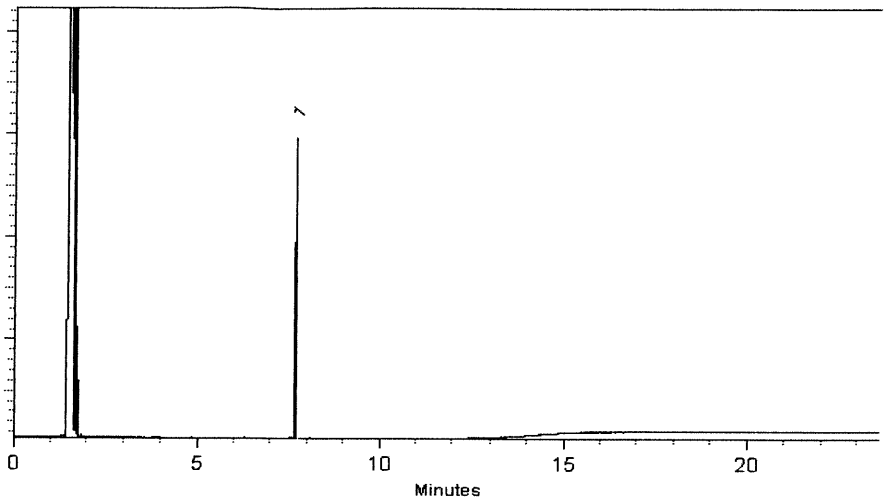
Carrier Gas:
hydrogen-constant pressure 10 psi.

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

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



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

Katelyn McGlinn - Operations Tech I

Date Mixed: 28-May-2021 **Balance:** B345965662

Marlina Cowan - Operations Tech I

Date Passed: 02-Jun-2021

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

P 111177 to P 111186

AR 11/02/21

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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32050 **Lot No.:** A0172864

Description : 2,4-Dichlorophenylacetic Acid Methyl Ester Standard

515 Surrogate (ester) 2, 4-dichlorophenyl Acetic Acid Methyl Ester
200µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 29, 2028 **Storage:** 10°C or colder

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

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2,4-Dichlorophenyl acetic acid methyl ester	202.0 µg/mL	+/- 1.4323	µg/mL	Gravimetric
	CAS # 55954-23-9 (Lot CSC42194-01)		+/- 6.8182	µg/mL	Unstressed
	Purity 99%		+/- 6.8182	µg/mL	Stressed

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

P111177
↓
P111186

AR
11/02/21

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

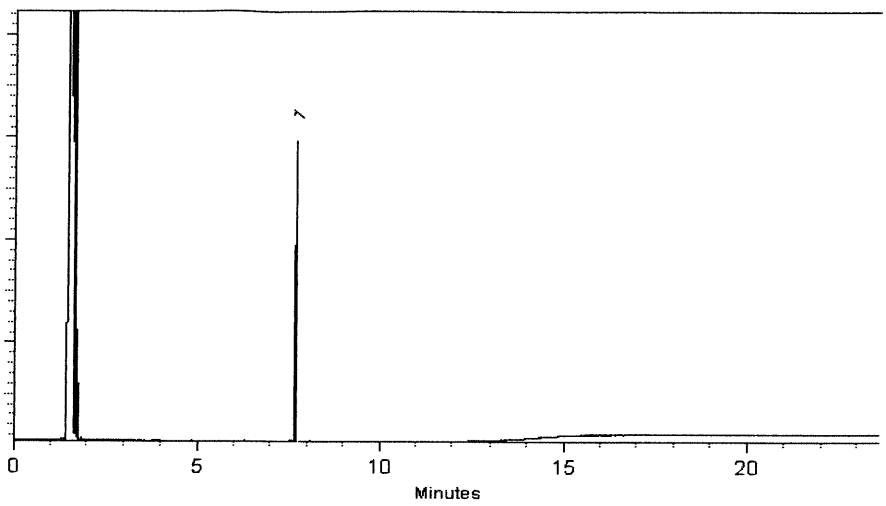
Carrier Gas:
hydrogen-constant pressure 10 psi.

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

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



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

Katelyn McGlinn - Operations Tech I

Date Mixed: 28-May-2021 **Balance:** B345965662

Marlina Cowan - Operations Tech I

Date Passed: 02-Jun-2021

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

P 111177 to P 111186

AR 11/02/21

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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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

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A2LA 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 (5)
→ 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 +/- 6.7507 +/- 6.7507	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	4-Nitroanisole **CAS #** 100-17-4 (Lot 24765/7) **Purity** 99%	200.0 µg/mL	+/- 1.4182 +/- 6.7507 +/- 6.7507	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Pentachloroanisole **CAS #** 1825-21-4 (Lot 7921100) **Purity** 99%	200.0 µg/mL	+/- 1.4182 +/- 6.7507 +/- 6.7507	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	Chloramben methyl ester **CAS #** 7286-84-2 (Lot 6487100) **Purity** 98%	199.9 µg/mL	+/- 1.4176 +/- 6.7480 +/- 6.7480	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	Bentazon methyl ester **CAS #** 61592-45-8 (Lot 817100) **Purity** 99%	200.0 µg/mL	+/- 1.4182 +/- 6.7507 +/- 6.7507	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	Picloram methyl ester **CAS #** 14143-55-6 (Lot 386-21B) **Purity** 98%	201.9 µg/mL	+/- 1.4315 +/- 6.8141 +/- 6.8141	µg/mL µg/mL 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 +/- 6.7507 +/- 6.7507	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

8	Acifluorfen methyl ester		200.0	µg/mL	+/-	1.4182	µg/mL	Gravimetric
	CAS # 50594-67-7	(Lot 6282300)			+/-	6.7507	µg/mL	Unstressed
	Purity 99%				+/-	6.7507	µg/mL	Stressed

Solvent: Hexane/Methyl-tert-butyl-ether
CAS # 110-54-3/1634-04-4
Purity 99%

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

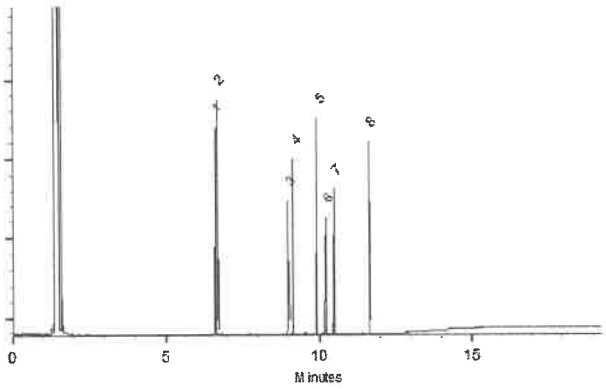
Carrier Gas:
hydrogen-constant pressure 10 psi.

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

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



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

Michael J Maye

Date Mixed: 14-Nov-2019 **Balance:** 1128353505

Justine Albertson - Operations Tech-ARM QC

Date Passed: 18-Nov-2019

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

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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.)

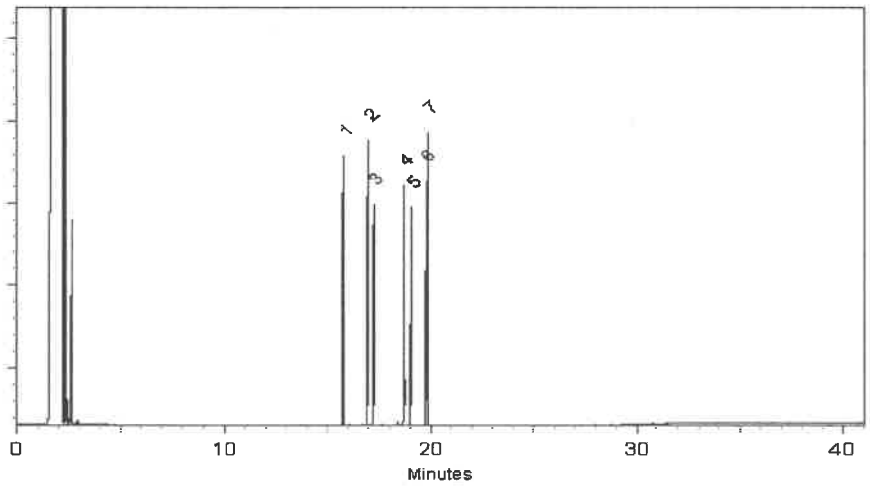
Inj. Temp:
250°C

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

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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 ↓ P 12689 (S)

7/24/23

Catalog No. : 32059 **Lot No.:** A0199844

Description : Herbicide Mix #3/ME (Methyl Ester)

Herbicide Mix #3/ME (Methyl Ester) 20,000 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2030 **Storage:** 10°C or colder

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

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

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

Carrier Gas:
hydrogen-constant pressure 10 psi.

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

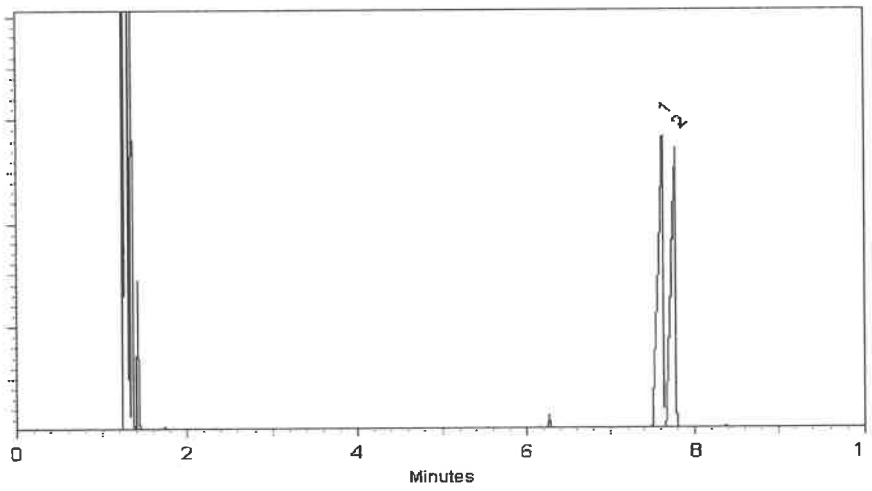
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



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

Morgan Craighead - Mix Technician

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

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 19-Jul-2023

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

Agilent

Trusted Answers

P12706 ↓ P12715 (10)

ISO 17034

Reference Material Certificate

Product Information Sheet

Product Name: Chlorinated Methylated Herbicides Standard

Product Number: HBM-8151M-1

Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006752480

Lot Issue Date: 18-Jul-2023

Expiration Date: 31-Aug-2025

Component Name	Concentration		Uncertainty	CAS#	Analyte Lot
acifluorfen methyl ester	100.3	±	0.5 µg/mL	050594-67-7	RM03058
bentazon methyl derivative	100.2	±	0.5 µg/mL	061592-45-8	RM13829
chloramben methyl ester	100.4	±	0.5 µg/mL	007286-84-2	RM03055
2,4-D methyl ester	100.2	±	0.5 µg/mL	001928-38-7	RM03040
dalapon methyl ester	100.4	±	0.5 µg/mL	017640-02-7	RM14219
2,4-DB methyl ester	100.2	±	0.5 µg/mL	018625-12-2	RM03029
DCPA	100.2	±	0.5 µg/mL	001861-32-1	RM13426
dicamba methyl ester	100.4	±	0.5 µg/mL	006597-78-0	RM03039
methyl-3,5-dichlorobenzoate	100.1	±	0.5 µg/mL	002905-67-1	RM03048
dichlorprop methyl ester	100.4	±	0.5 µg/mL	057153-17-0	NT02086
dinoseb methyl ether	100.5	±	0.5 µg/mL	006099-79-2	RM03051
MCPA methyl ester	10031	±	50 µg/mL	002436-73-9	RM12863
MCPP methyl ester	10031	±	50 µg/mL	023844-56-6	RM20060
4-nitroanisole	100.3	±	0.5 µg/mL	000100-17-4	RM02806
pentachloroanisole	100.4	±	0.5 µg/mL	001825-21-4	RM02457
picloram methyl ester	100.2	±	0.5 µg/mL	014143-55-6	RM03044
silvex methyl ester	100.2	±	0.5 µg/mL	004841-20-7	RM03799
2,4,5-T methyl ester	100.4	±	0.5 µg/mL	001928-37-6	RM03033

Matrix: methanol (methyl alcohol)

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

CSD-QA-015.2

ISO 17025
Cert No. AT-1937

Agilent

Trusted Answers

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20ºC to 25ºC immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

Intended Use:
This analytical reference standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Expiration of Certification:
The certification of this analytical reference standard is valid until the expiration date specified above, provided the material is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the material is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

P12706 (10)
↓
P12715

8.15.23

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REFERENCE MATERIAL PRODUCER

ISO 17034
Cert No. AR-1936

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www.agilent.com/quality/
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ISO 17025
Cert No. AT-1937

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P12706 ↓ P12715 | (10)

ISO 17034

Reference Material Certificate

Product Information Sheet

Product Name: Chlorinated Methylated Herbicides Standard

Product Number: HBM-8151M-1

Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006752480

Lot Issue Date: 18-Jul-2023

Expiration Date: 31-Aug-2025

Component Name	Concentration		Uncertainty	CAS#	Analyte Lot
acifluorfen methyl ester	100.3	±	0.5 µg/mL	050594-67-7	RM03058
bentazon methyl derivative	100.2	±	0.5 µg/mL	061592-45-8	RM13829
chloramben methyl ester	100.4	±	0.5 µg/mL	007286-84-2	RM03055
2,4-D methyl ester	100.2	±	0.5 µg/mL	001928-38-7	RM03040
dalapon methyl ester	100.4	±	0.5 µg/mL	017640-02-7	RM14219
2,4-DB methyl ester	100.2	±	0.5 µg/mL	018625-12-2	RM03029
DCPA	100.2	±	0.5 µg/mL	001861-32-1	RM13426
dicamba methyl ester	100.4	±	0.5 µg/mL	006597-78-0	RM03039
methyl-3,5-dichlorobenzoate	100.1	±	0.5 µg/mL	002905-67-1	RM03048
dichlorprop methyl ester	100.4	±	0.5 µg/mL	057153-17-0	NT02086
dinoseb methyl ether	100.5	±	0.5 µg/mL	006099-79-2	RM03051
MCPA methyl ester	10031	±	50 µg/mL	002436-73-9	RM12863
MCPP methyl ester	10031	±	50 µg/mL	023844-56-6	RM20060
4-nitroanisole	100.3	±	0.5 µg/mL	000100-17-4	RM02806
pentachloroanisole	100.4	±	0.5 µg/mL	001825-21-4	RM02457
picloram methyl ester	100.2	±	0.5 µg/mL	014143-55-6	RM03044
silvex methyl ester	100.2	±	0.5 µg/mL	004841-20-7	RM03799
2,4,5-T methyl ester	100.4	±	0.5 µg/mL	001928-37-6	RM03033

Matrix: methanol (methyl alcohol)

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

CSD-QA-015.2

ISO 17025
Cert No. AT-1937

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Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20ºC to 25ºC immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

Intended Use:
This analytical reference standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Expiration of Certification:
The certification of this analytical reference standard is valid until the expiration date specified above, provided the material is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the material is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

P12706 (10)
↓
P12715

8.15.23

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REFERENCE MATERIAL PRODUCER

ISO 17034
Cert No. AR-1936

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www.agilent.com/quality/
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ISO 17025
Cert No. AT-1937

P12766 ↓ P12785 (20)

Agilent
Trusted Answers

ISO 17034

9.11.23

Reference Material Certificate

Product Information Sheet

Product Name: Chlorinated Herbicides Standard
Product Number: HBM-8151A-1
Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006750243
Lot Issue Date: 07-Jul-2023
Expiration Date: 31-Aug-2025

Component Name	Concentration		Uncertainty	CAS#	Analyte Lot
acifluorfen	100.1	±	0.5 µg/mL	050594-66-6	NT02057
bentazon	100.1	±	0.5 µg/mL	025057-89-0	RM20289
chloramben	100.4	±	0.5 µg/mL	000133-90-4	RM02698
2,4-D	100.1	±	0.5 µg/mL	000094-75-7	RM17172
dalapon	100.4	±	0.5 µg/mL	000075-99-0	RM21030
2,4-DB	100.1	±	0.5 µg/mL	000094-82-6	RM02866
tetrachloroterephthalic acid	100.3	±	0.5 µg/mL	002136-79-0	RM13887
dicamba	100.2	±	0.5 µg/mL	001918-00-9	RM20089
3,5-dichlorobenzoic acid	100.0	±	0.5 µg/mL	000051-36-5	RM02768
dichlorprop	100.0	±	0.5 µg/mL	000120-36-5	RM20896
dinoseb	100.0	±	0.5 µg/mL	000088-85-7	RM20667
MCPA	10004	±	50 µg/mL	000094-74-6	RM12220
MCPP (mecoprop)	10037	±	50 µg/mL	000093-65-2	RM09273
4-nitrophenol	100.1	±	0.5 µg/mL	000100-02-7	RM03752
pentachlorophenol	100.1	±	0.5 µg/mL	000087-86-5	RM02474
picloram	100.4	±	0.5 µg/mL	001918-02-1	RM20442
silvex	100.1	±	0.5 µg/mL	000093-72-1	RM20208
2,4,5-T	100.4	±	0.5 µg/mL	000093-76-5	NT01808

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

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Trusted Answers

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

Intended Use:
This analytical reference standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Expiration of Certification:
The certification of this analytical reference standard is valid until the expiration date specified above, provided the material is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the material is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

P127 66 / 20
↓
P127 85 /

9/11/2023

ANAB ACCREDITED 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

Page: 2 of 2

www.agilent.com/quality/
CSD-QA-015.2

ISO 17025
Cert No. AT-1937

P12766 ↓ P12785 (20)

Agilent
Trusted Answers

ISO 17034

9.11.23

Reference Material Certificate

Product Information Sheet

Product Name: Chlorinated Herbicides Standard
Product Number: HBM-8151A-1
Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006750243
Lot Issue Date: 07-Jul-2023
Expiration Date: 31-Aug-2025

Component Name	Concentration		Uncertainty	CAS#	Analyte Lot
acifluorfen	100.1	±	0.5 µg/mL	050594-66-6	NT02057
bentazon	100.1	±	0.5 µg/mL	025057-89-0	RM20289
chloramben	100.4	±	0.5 µg/mL	000133-90-4	RM02698
2,4-D	100.1	±	0.5 µg/mL	000094-75-7	RM17172
dalapon	100.4	±	0.5 µg/mL	000075-99-0	RM21030
2,4-DB	100.1	±	0.5 µg/mL	000094-82-6	RM02866
tetrachloroterephthalic acid	100.3	±	0.5 µg/mL	002136-79-0	RM13887
dicamba	100.2	±	0.5 µg/mL	001918-00-9	RM20089
3,5-dichlorobenzoic acid	100.0	±	0.5 µg/mL	000051-36-5	RM02768
dichlorprop	100.0	±	0.5 µg/mL	000120-36-5	RM20896
dinoseb	100.0	±	0.5 µg/mL	000088-85-7	RM20667
MCPA	10004	±	50 µg/mL	000094-74-6	RM12220
MCPP (mecoprop)	10037	±	50 µg/mL	000093-65-2	RM09273
4-nitrophenol	100.1	±	0.5 µg/mL	000100-02-7	RM03752
pentachlorophenol	100.1	±	0.5 µg/mL	000087-86-5	RM02474
picloram	100.4	±	0.5 µg/mL	001918-02-1	RM20442
silvex	100.1	±	0.5 µg/mL	000093-72-1	RM20208
2,4,5-T	100.4	±	0.5 µg/mL	000093-76-5	NT01808

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

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Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

Intended Use:
This analytical reference standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Expiration of Certification:
The certification of this analytical reference standard is valid until the expiration date specified above, provided the material is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the material is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

P127 66 / 20
↓
P127 85 /

9/11/2023

ANAB ACCREDITED 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

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Fax: 1-814-353-1309

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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.

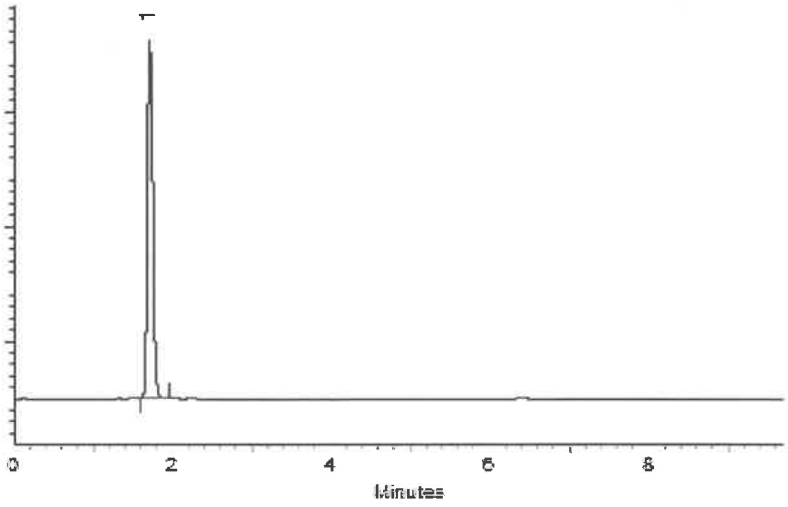
Mobile Phase A:
0.14% H3PO4 in water

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.
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Catalog No. : 32049 **Lot No.:** A0212676

Description : 2,4-Dichlorophenylacetic Acid Standard

2, 4-Dichlorophenyl Acetic Acid 200µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2027 **Storage:** 10°C or colder

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

P13497 ↓ P13515 } Y.P. 08/16/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2,4-dichlorophenylacetic acid	19719-28-9	STBK3827	99%	200.0 µg/mL	+/- 2.7154

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

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Specific Reference Material Notes:
Failure to derivatize this standard will lead to incorrect quantitative results.

Quality Confirmation Test

Column:
150mm x 4.6mm
Allure C18 Cat.(#9164565)

Flow Rate:
1.0 ml/min.

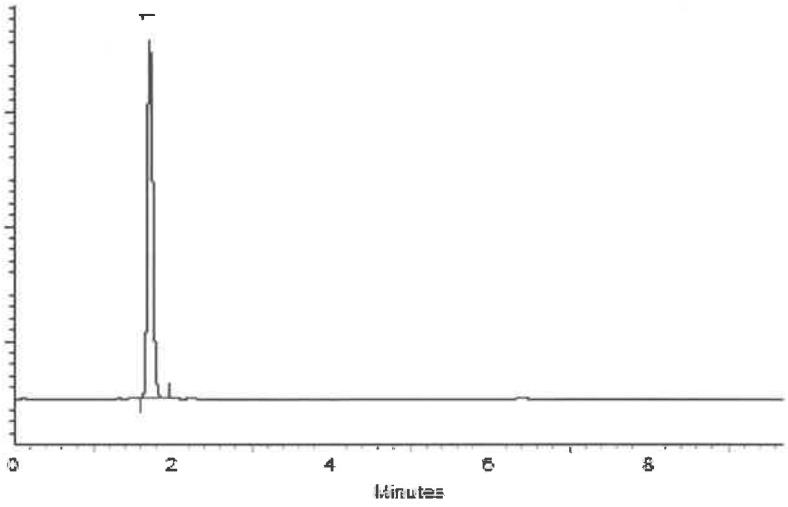
Mobile Phase A:
0.14% H3PO4 in water

Mobile Phase B:
acetonitrile

Mobile Phase Composition:
90%B Isocratic

Det. Type:
Wavelength: 220 & 254 nm

Inj. Vol
5µl



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Ethan Winiarski - Operations Tech I

Date Mixed: 11-Jun-2024 **Balance Serial #** B345965662

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-Jun-2024

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

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.
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Catalog No. : 32049 **Lot No.:** A0212676

Description : 2,4-Dichlorophenylacetic Acid Standard

2, 4-Dichlorophenyl Acetic Acid 200µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2027 **Storage:** 10°C or colder

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

P13497 ↓ P13515 Y.P. 08/16/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2,4-dichlorophenylacetic acid	19719-28-9	STBK3827	99%	200.0 µg/mL	+/- 2.7154

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

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Specific Reference Material Notes:
Failure to derivatize this standard will lead to incorrect quantitative results.

Quality Confirmation Test

Column:
150mm x 4.6mm
Allure C18 Cat.(#9164565)

Flow Rate:
1.0 ml/min.

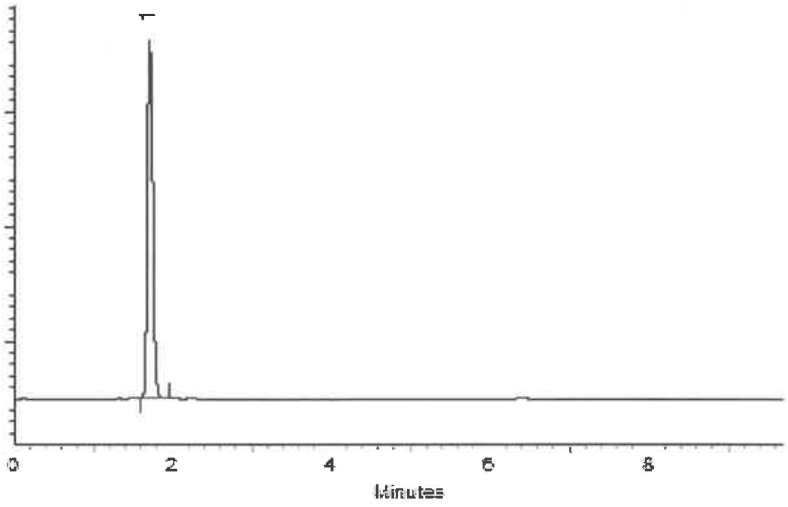
Mobile Phase A:
0.14% H3PO4 in water

Mobile Phase B:
acetonitrile

Mobile Phase Composition:
90%B Isocratic

Det. Type:
Wavelength: 220 & 254 nm

Inj. Vol
5µl



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Ethan Winiarski - Operations Tech I

Date Mixed: 11-Jun-2024 **Balance Serial #** B345965662

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-Jun-2024

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

General Certified Reference Material Notes

Expiration Notes:

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Purity Notes:

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Certified Uncertainty Value Notes:

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Manufacturing Notes:

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Handling Notes:

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Description : 2,4-Dichlorophenylacetic Acid Standard

2, 4-Dichlorophenyl Acetic Acid 200µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2027 **Storage:** 10°C or colder

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

P13497 ↓ P13515 } Y.P. 08/16/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2,4-dichlorophenylacetic acid	19719-28-9	STBK3827	99%	200.0 µg/mL	+/- 2.7154

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

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Specific Reference Material Notes:
Failure to derivatize this standard will lead to incorrect quantitative results.

Quality Confirmation Test

Column:
150mm x 4.6mm
Allure C18 Cat.(#9164565)

Flow Rate:
1.0 ml/min.

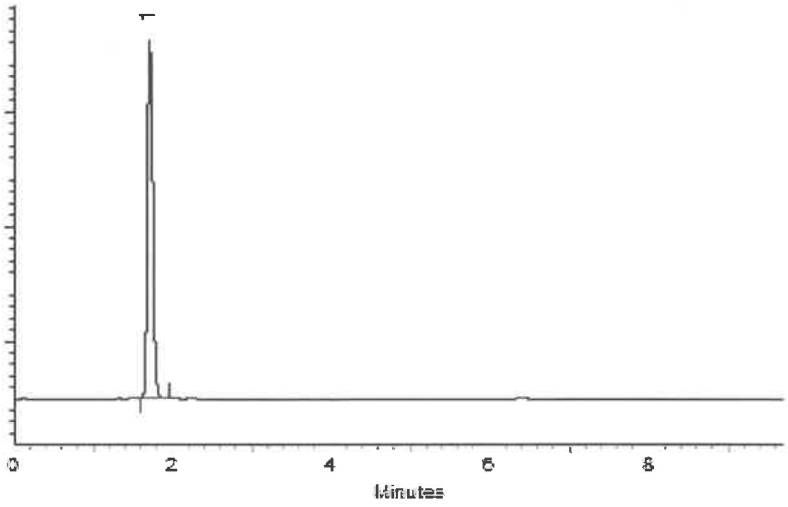
Mobile Phase A:
0.14% H3PO4 in water

Mobile Phase B:
acetonitrile

Mobile Phase Composition:
90%B Isocratic

Det. Type:
Wavelength: 220 & 254 nm

Inj. Vol
5µl



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Ethan Winiarski - Operations Tech I

Date Mixed: 11-Jun-2024 **Balance Serial #** B345965662

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-Jun-2024

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

General Certified Reference Material Notes

Expiration Notes:

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Purity Notes:

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Certified Uncertainty Value Notes:

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Handling Notes:

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Agilent
Trusted Answers

ISO 17034

Reference Material Certificate

Product Information Sheet

Product Name: Chlorinated Herbicides Standard
Product Number: HBM-8151A-1
Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006750243
Lot Issue Date: 07-Jul-2023
Expiration Date: 31-Aug-2025

Component Name	Concentration		Uncertainty	CAS#	Analyte Lot
acifluorfen	100.1	±	0.5 µg/mL	050594-66-6	NT02057
bentazon	100.1	±	0.5 µg/mL	025057-89-0	RM20289
chloramben	100.4	±	0.5 µg/mL	000133-90-4	RM02698
2,4-D	100.1	±	0.5 µg/mL	000094-75-7	RM17172
dalapon	100.4	±	0.5 µg/mL	000075-99-0	RM21030
2,4-DB	100.1	±	0.5 µg/mL	000094-82-6	RM02866
tetrachloroterephthalic acid	100.3	±	0.5 µg/mL	002136-79-0	RM13887
dicamba	100.2	±	0.5 µg/mL	001918-00-9	RM20089
3,5-dichlorobenzoic acid	100.0	±	0.5 µg/mL	000051-36-5	RM02768
dichlorprop	100.0	±	0.5 µg/mL	000120-36-5	RM20896
dinoseb	100.0	±	0.5 µg/mL	000088-85-7	RM20667
MCPA	10004	±	50 µg/mL	000094-74-6	RM12220
MCPP (mecoprop)	10037	±	50 µg/mL	000093-65-2	RM09273
4-nitrophenol	100.1	±	0.5 µg/mL	000100-02-7	RM03752
pentachlorophenol	100.1	±	0.5 µg/mL	000087-86-5	RM02474
picloram	100.4	±	0.5 µg/mL	001918-02-1	RM20442
silvex	100.1	±	0.5 µg/mL	000093-72-1	RM20208
2,4,5-T	100.4	±	0.5 µg/mL	000093-76-5	NT01808

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.

P13517 (2)
P13518

CSD-QA-015.2

ISO 17025
Cert No. AT-1937

9/4/2024

SHIPPING DOCUMENTS

P4961

USEPA CLP COC (LAB COPY)
DateShipped: 11/21/2024
CarrierName: FedEx
AirbillNo: 770122927243

CHAIN OF CUSTODY RECORD

DAS #: R36745
Cooler #:

No: 3-112124-095435-0004
Lab: Alliance Technical Grop
Lab Contact: Yazmeen Gomez
Lab Phone: 908-789-8900

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
BCA-IDW-01	C0RB8	Soil/ START	Composite	TCLP Herb(21)	1076 (<6C) (1)	IDW-01	11/20/2024 16:51	

Special Instructions:

Shipment for Case Complete? Y
Samples Transferred From Chain of Custody #

Analysis Key: TCLP Herb=Chlorinated Herbicides - TCLP

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
Samples	TX	11-21-24 1600		11-22-24 1005	3.1°C IR custody seals intact Temp blk. present

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488