

Cover Page

Order ID : Q1746

Project ID : Amtrak Sawtooth Bridges 2025

Client : Portal Partners Tri-Venture

Lab Sample Number

Q1746-01
Q1746-02
Q1746-03
Q1746-04
Q1746-05
Q1746-06
Q1746-07
Q1746-08

Client Sample Number

B-149-SB01
B-149-SB01
B-149-SB02
B-149-SB02
B-158-GW01
B-149-GW01
EB-2025-4-7
TB-2025-4-7

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

Signature : _____

Date: 4/17/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

CASE NARRATIVE

Portal Partners Tri-Venture

Project Name: Amtrak Sawtooth Bridges 2025

Project # N/A

Chemtech Project # Q1746

Test Name: TCLP Herbicide

A. Number of Samples and Date of Receipt:

4 Solid samples were received on 04/07/2025.

4 Water samples were received on 04/07/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Corrosivity, EPH, EPH, Hexavalent Chromium, Ignitability, Mercury, Metals ICP-TAL, METALS-TAL, PCB, pH, RCRA CHARACTERISTICS, Reactive Cyanide, Reactive Sulfide, SVOC-TCL BNA -20, TCLP BNA, TCLP Extraction, TCLP Herbicide, TCLP ICP Metals, TCLP Mercury, TCLP Pesticide, TCLP VOA, TCLP ZHE Extraction, TCLP-FULL, TPH GC, Trivalent Chromium, VOC-TCLVOA-10 and VOC-TCLVOA-10. 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 µm df, Catalog # 11139. The rear column is RTX-CLPesticides2 which is 30 meters, 0.32 mm ID, 0.25 µm df, Catalog #: 11324. The analysis of TCLP Herbicides was based on method 8151A and extraction was done based on method 3510 and TCLP extraction method was 1311.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for WC-LIQUID-20250404MSD [2,4-DCAA(2) - 131%], this compound did not meet the NJDKQP criteria but met the in-house criteria.

The Retention Times were acceptable for all samples.

The MS recoveries met the requirements for all compounds .

The MSD recoveries met the acceptable requirements .

The RPD met criteria .

The Blank Spike met requirements for all samples .

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

The Initial Calibration met the requirements .

The Continuous Calibration met the requirements .



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Phone: 908 789 8900 Fax: 908 789 8922

E. Additional Comments:

F. Manual Integration Comments:

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

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Signature_____

DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following “ Results Qualifiers” are used:

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1746

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 Custody

✓

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: PRADIP PRAJAPATI

Date: 04/17/2025

LAB CHRONICLE

OrderID:	Q1746	OrderDate:	4/7/2025 12:00:00 PM
Client:	Portal Partners Tri-Venture	Project:	Amtrak Sawtooth Bridges 2025
Contact:	Joseph Krupansky	Location:	L41,VOA Ref. #2 Soil,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1746-01	B-149-SB01	SOIL			04/05/25			04/07/25
			PCB	8082A		04/08/25	04/08/25	
			TPH GC	8015D		04/08/25	04/08/25	
Q1746-02	B-149-SB01	TCLP			04/05/25			04/07/25
			TCLP Herbicide	8151A		04/09/25	04/10/25	
Q1746-03	B-149-SB02	SOIL			04/06/25			04/07/25
			PCB	8082A		04/08/25	04/08/25	
			TPH GC	8015D		04/08/25	04/08/25	
Q1746-04	B-149-SB02	TCLP			04/06/25			04/07/25
			TCLP Herbicide	8151A		04/09/25	04/10/25	
Q1746-05	B-158-GW01	WATER			04/05/25			04/07/25
			PCB	8082A		04/08/25	04/08/25	
Q1746-06	B-149-GW01	WATER			04/06/25			04/07/25
			PCB	8082A		04/08/25	04/08/25	
Q1746-07	EB-2025-4-7	WATER			04/07/25			04/07/25
			PCB	8082A		04/08/25	04/08/25	



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Fax : 908 789 8922

Hit Summary Sheet
SW-846

SDG No.: Q1746

Order ID: Q1746

Client: Portal Partners Tri-Venture

Project ID: Amtrak Sawtooth Bridges 2025

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

Total Concentration: 0.000



QC SUMMARY

Surrogate Summary

SDG No.: Q1746

Client: Portal Partners Tri-Venture

Analytical Method: 8151A

Lab Sample ID	Client ID	Parameter	Column	Spike	Result	Rec	Qual	Limits	
								Low	High
I.BLK-PS029656.D	PIBLK-PS029656.D	2,4-DCAA	1	500	476	95		70 (39)	130 (175)
		2,4-DCAA	2	500	485	97		70 (39)	130 (175)
I.BLK-PS029763.D	PIBLK-PS029763.D	2,4-DCAA	1	500	594	119		70 (39)	130 (175)
		2,4-DCAA	2	500	582	116		70 (39)	130 (175)
Q1739-02MS	WC-LIQUID-20250404MS	2,4-DCAA	1	500	589	118		70 (39)	130 (175)
		2,4-DCAA	2	500	645	129		70 (39)	130 (175)
Q1739-02MSD	WC-LIQUID-20250404MSD	2,4-DCAA	1	500	593	119		70 (39)	130 (175)
		2,4-DCAA	2	500	656	131	*	70 (39)	130 (175)
PB167536BL	PB167536BL	2,4-DCAA	1	500	559	112		70 (39)	130 (175)
		2,4-DCAA	2	500	539	108		70 (39)	130 (175)
PB167536BS	PB167536BS	2,4-DCAA	1	500	556	111		70 (39)	130 (175)
		2,4-DCAA	2	500	581	116		70 (39)	130 (175)
PB167517TB	PB167517TB	2,4-DCAA	1	500	621	124		70 (39)	130 (175)
		2,4-DCAA	2	500	588	118		70 (39)	130 (175)
I.BLK-PS029772.D	PIBLK-PS029772.D	2,4-DCAA	1	500	618	124		70 (39)	130 (175)
		2,4-DCAA	2	500	610	122		70 (39)	130 (175)
Q1746-02	B-149-SB01	2,4-DCAA	1	500	622	124		70 (39)	130 (175)
		2,4-DCAA	2	500	588	118		70 (39)	130 (175)
Q1746-04	B-149-SB02	2,4-DCAA	1	500	636	127		70 (39)	130 (175)
		2,4-DCAA	2	500	598	120		70 (39)	130 (175)
I.BLK-PS029778.D	PIBLK-PS029778.D	2,4-DCAA	1	500	563	113		70 (39)	130 (175)
		2,4-DCAA	2	500	550	110		70 (39)	130 (175)

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1746

Client: Portal Partners Tri-Venture

Analytical Method: 8151A

DataFile : PS029766.D

Lab Sample ID:	Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Low	Limits High	RPD
Client Sample ID:	WC-LIQUID-20250404MS											
Q1739-02MS	2,4-D	50	0	58.8	ug/L	118				70 (65)	130 (135)	
	2,4,5-TP(Silvex)	50	0	60.7	ug/L	121				70 (62)	130 (139)	

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1746

Client: Portal Partners Tri-Venture

Analytical Method: 8151A

DataFile : PS029767.D

Lab Sample ID:	Parameter	Spike	Sample		Units	Rec	Rec		RPD		Limits	
			Result	Result			Qual	RPD	Qual	Low	High	RPD
Client Sample ID:	WC-LIQUID-20250404MSD											
Q1739-02MSD	2,4-D	50	0	60.0	ug/L	120		2		70 (65)	130 (135)	20 (20)
	2,4,5-TP(Silvex)	50	0	62.0	ug/L	124		2		70 (62)	130 (139)	20 (20)

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1746

Client: Portal Partners Tri-Venture

Analytical Method: 8151A **Datafile :** PS029769.D

Lab Sample ID	Parameter	Spike	Result	Units	Rec	RPD	Qual	RPD		Limits		RPD
								Qual	Low	High		
PB167536BS	2,4-D	5	5.70	ug/L	114				70 (83)	130 (130)		
	2,4,5-TP(Silvex)	5	5.80	ug/L	116				70 (78)	130 (127)		

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB167536BL

Lab Name: CHEMTECH

Contract: PORT06

Lab Code: CHEM Case No.: Q1746

SAS No.: Q1746 SDG NO.: Q1746

Lab Sample ID: PB167536BL

Lab File ID: PS029768.D

Matrix: (soil/water) water

Extraction: (Type) SEPF

Sulfur Cleanup: (Y/N) N

Date Extracted: 04/09/2025

Date Analyzed (1): 04/09/2025

Date Analyzed (2): 04/09/2025

Time Analyzed (1): 22:34

Time Analyzed (2): 22:34

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
WC-LIQUID-20250404MS	Q1739-02MS	PS029766.D	04/09/2025	04/09/2025
WC-LIQUID-20250404MSD	Q1739-02MSD	PS029767.D	04/09/2025	04/09/2025
PB167536BS	PB167536BS	PS029769.D	04/09/2025	04/09/2025
PB167517TB	PB167517TB	PS029771.D	04/09/2025	04/09/2025
B-149-SB01	Q1746-02	PS029776.D	04/10/2025	04/10/2025
B-149-SB02	Q1746-04	PS029777.D	04/10/2025	04/10/2025

COMMENTS: _____



SAMPLE DATA

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/09/25
Client Sample ID:	PB167517TB	SDG No.:	Q1746
Lab Sample ID:	PB167517TB	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
PS029771.D	1	04/09/25 12:55	04/09/25 23:47	PB167536

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	9.20	U	9.20	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	7.80	U	7.80	20.0	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	621		70 (39) - 130 (175)	124%	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\PS040925\
 Data File : PS029771.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 09 Apr 2025 23:47
 Operator : AR\AJ
 Sample : PB167517TB
 Misc :
 ALS Vial : 19 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 PB167517TB

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Apr 10 05:23:44 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
 Quant Title : 8080.M
 QLast Update : Wed Apr 02 23:52:55 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds						
4) S 2,4-DCAA	6.940	7.471	1266.9E6	400.7E6	621.373	587.953

Target Compounds

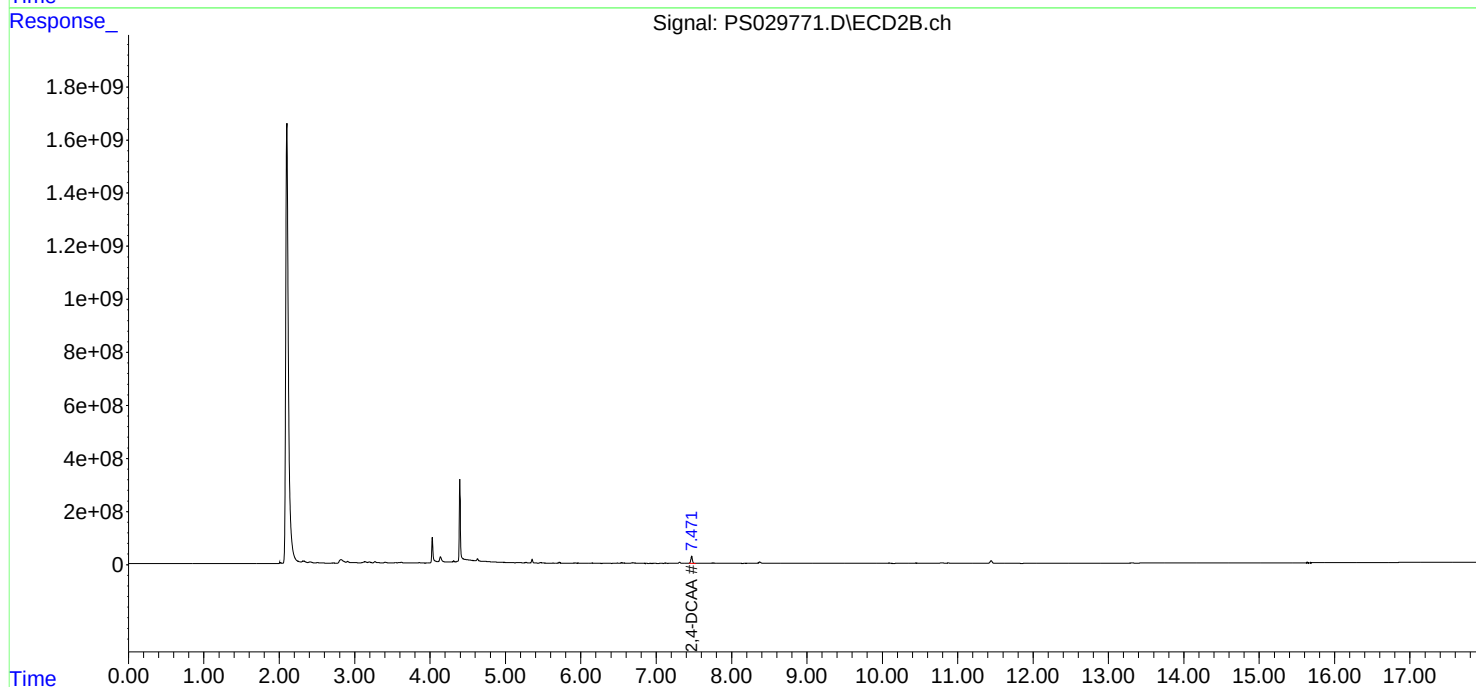
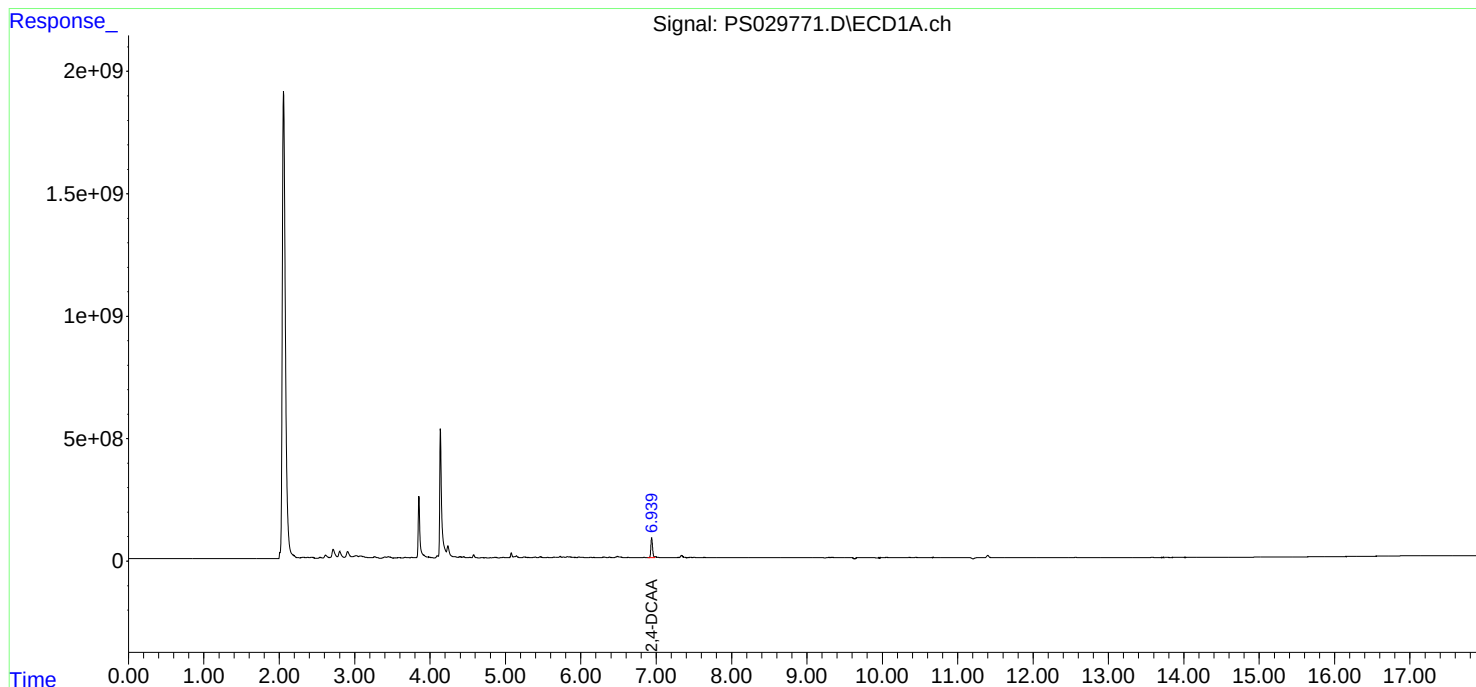
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

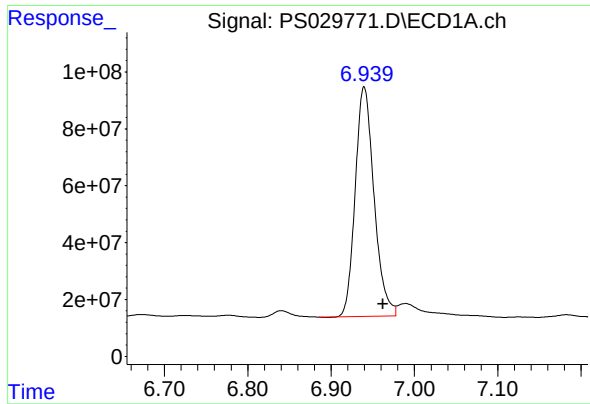
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS040925\
Data File : PS029771.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 09 Apr 2025 23:47
Operator : AR\AJ
Sample : PB167517TB
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
PB167517TB

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 10 05:23:44 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
Quant Title : 8080.M
QLast Update : Wed Apr 02 23:52:55 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm





#4 2,4-DCAA

R.T.: 6.940 min

Delta R.T.: -0.023 min

Response: 1266873172

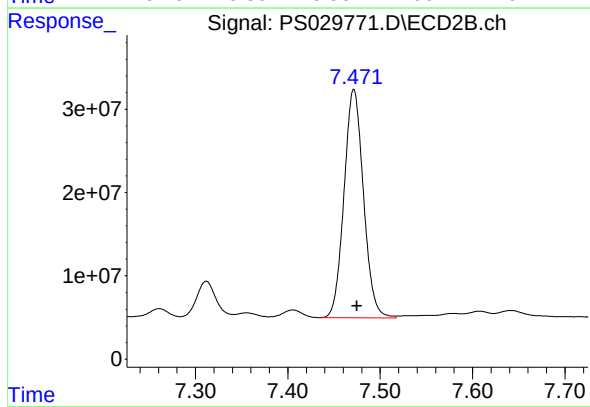
Conc: 621.37 ng/ml

Instrument :

ECD_S

ClientSampleId :

PB167517TB



#4 2,4-DCAA

R.T.: 7.471 min

Delta R.T.: -0.003 min

Response: 400697676

Conc: 587.95 ng/ml

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/05/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/07/25
Client Sample ID:	B-149-SB01	SDG No.:	Q1746
Lab Sample ID:	Q1746-02	Matrix:	TCLP
Analytical Method:	SW8151A	% Solid:	0
Sample Wt/Vol:	100	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	TCLP Herbicide
GPC Factor :	1.0	PH :	
Prep Method :	8151A	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS029776.D	1	04/09/25 12:55	04/10/25 02:58	PB167536

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	9.20	U	9.20	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	7.80	U	7.80	20.0	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	622		70 (39) - 130 (175)	124%	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

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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\PS040925\
 Data File : PS029776.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 10 Apr 2025 02:58
 Operator : AR\AJ
 Sample : Q1746-02
 Misc :
 ALS Vial : 22 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 B-149-SB01

Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
 Supervised By :mohammad ahmed 04/11/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Apr 10 05:25:11 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
 Quant Title : 8080.M
 QLast Update : Wed Apr 02 23:52:55 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

4) S	2,4-DCAA	6.955	7.495	1268.1E6	400.5E6	621.975m	587.697
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Target Compounds

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS040925\
Data File : PS029776.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 10 Apr 2025 02:58
Operator : AR\AJ
Sample : Q1746-02
Misc :
ALS Vial : 22 Sample Multiplier: 1

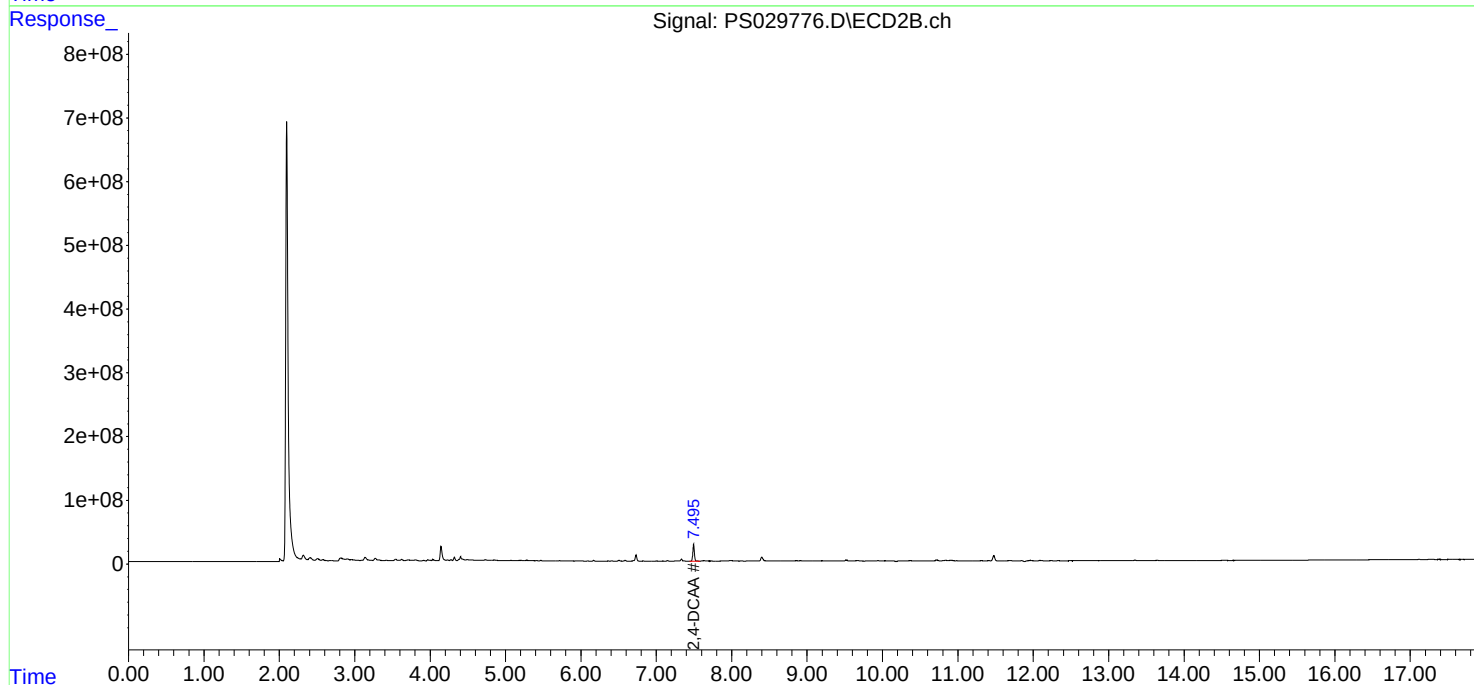
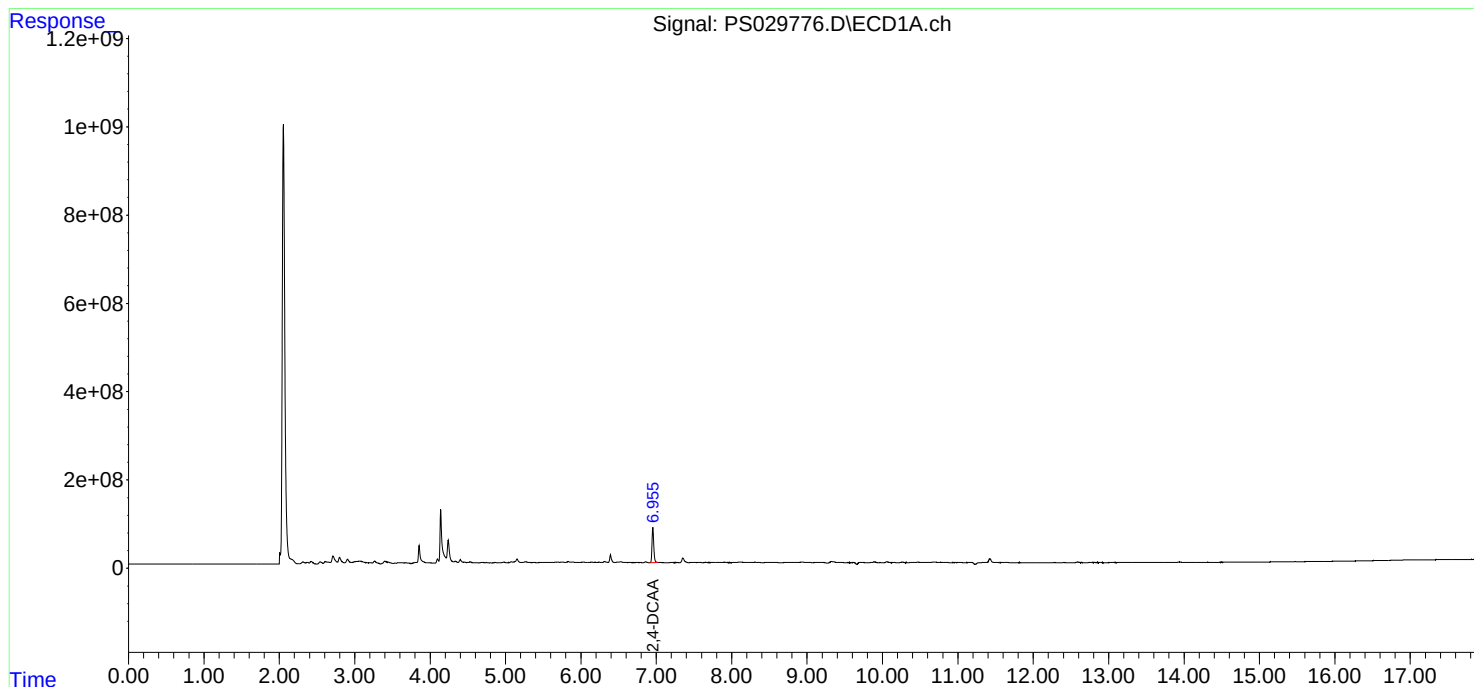
Instrument :
ECD_S
ClientSampleId :
B-149-SB01

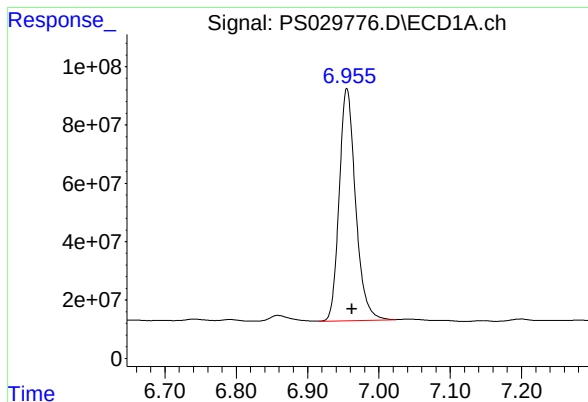
Manual Integrations
APPROVED

Reviewed By : Abdul Mirza 04/10/2025
Supervised By : mohammad ahmed 04/11/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 10 05:25:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
Quant Title : 8080.M
QLast Update : Wed Apr 02 23:52:55 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm





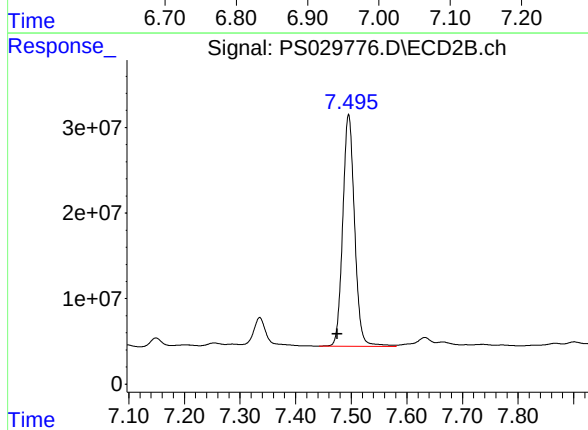
#4 2,4-DCAA

R.T.: 6.955 min
Delta R.T.: -0.008 min
Response: 1268101527
Conc: 621.97 ng/ml

Instrument :
ECD_S
ClientSampleId :
B-149-SB01

Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



#4 2,4-DCAA

R.T.: 7.495 min
Delta R.T.: 0.021 min
Response: 400523238
Conc: 587.70 ng/ml

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/06/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/07/25
Client Sample ID:	B-149-SB02	SDG No.:	Q1746
Lab Sample ID:	Q1746-04	Matrix:	TCLP
Analytical Method:	SW8151A	% Solid:	0
Sample Wt/Vol:	100	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	TCLP Herbicide
GPC Factor :	1.0	PH :	
Prep Method :	8151A	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS029777.D	1	04/09/25 12:55	04/10/25 03:22	PB167536

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	9.20	U	9.20	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	7.80	U	7.80	20.0	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	636		70 (39) - 130 (175)	127%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS040925\
 Data File : PS029777.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 10 Apr 2025 03:22
 Operator : AR\AJ
 Sample : Q1746-04
 Misc :
 ALS Vial : 23 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 B-149-SB02

Manual Integrations
APPROVED

Reviewed By : Abdul Mirza 04/10/2025
 Supervised By : mohammad ahmed 04/11/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Apr 10 05:25:23 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
 Quant Title : 8080.M
 QLast Update : Wed Apr 02 23:52:55 2025
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
 Signal #1 Info : 30M x 0.32mm x 0.5 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	6.955	7.496	1295.8E6	407.8E6	635.557m	598.364
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Target Compounds

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS040925\
Data File : PS029777.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 10 Apr 2025 03:22
Operator : AR\AJ
Sample : Q1746-04
Misc :
ALS Vial : 23 Sample Multiplier: 1

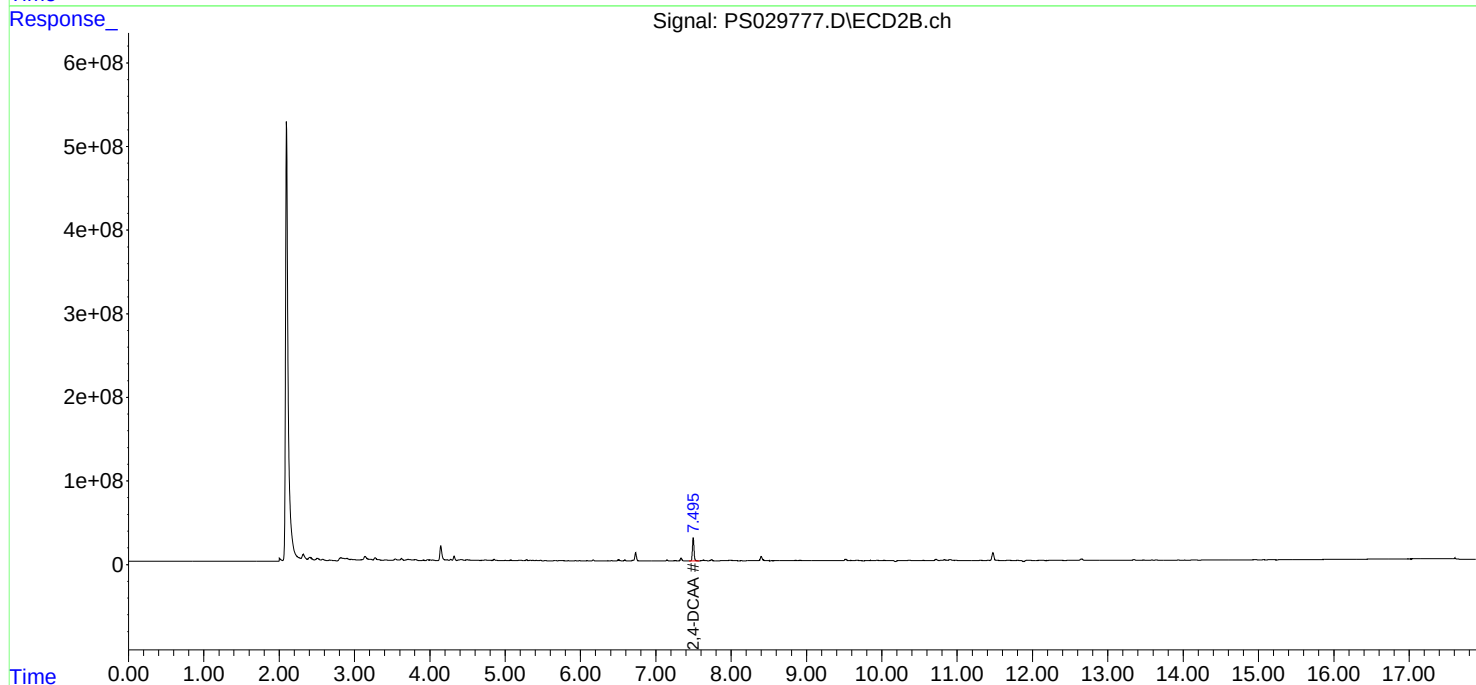
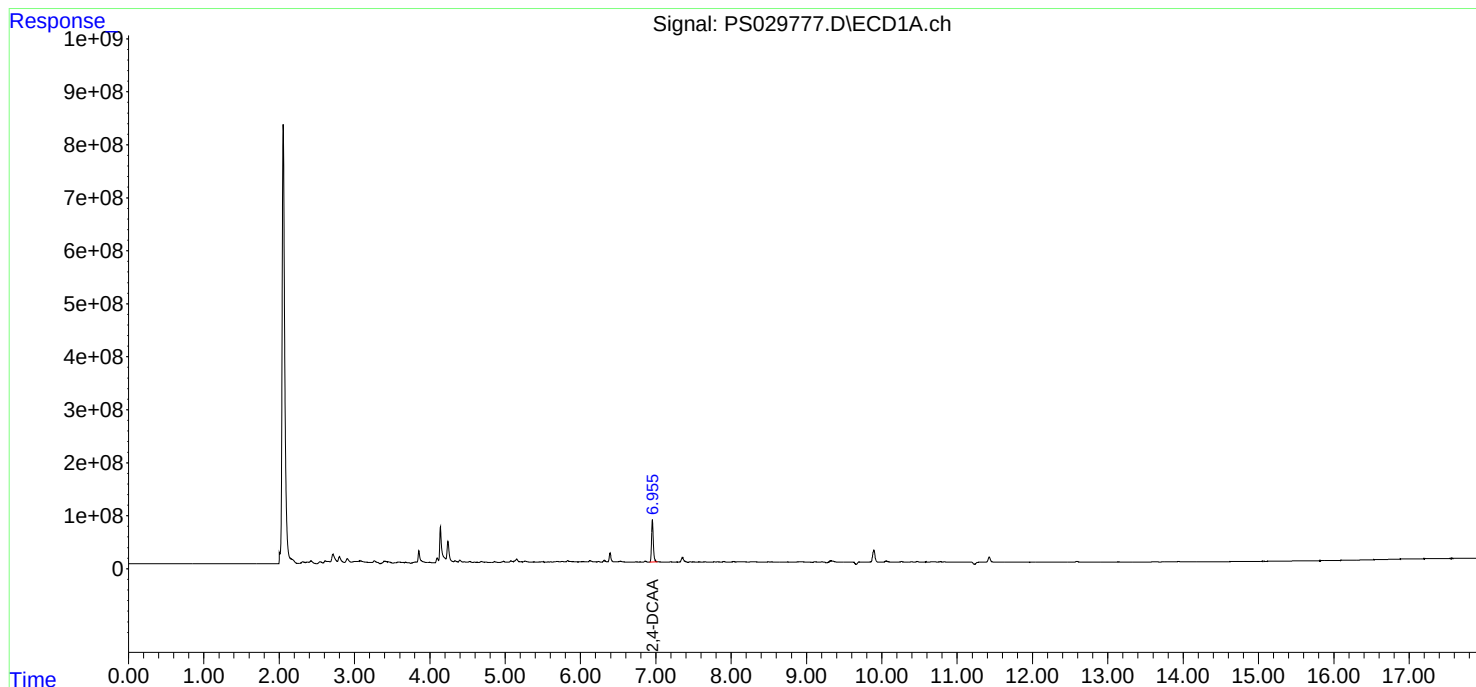
Instrument :
ECD_S
ClientSampleId :
B-149-SB02

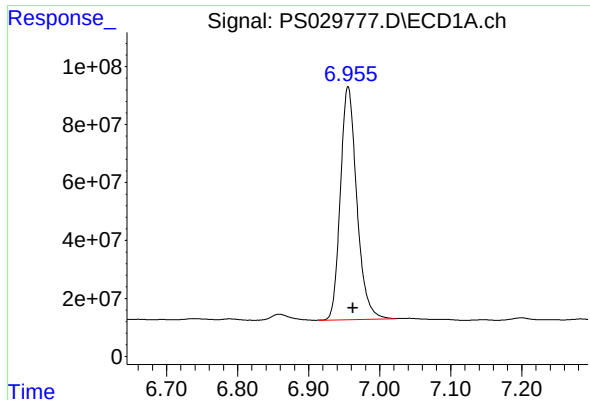
Manual Integrations
APPROVED

Reviewed By : Abdul Mirza 04/10/2025
Supervised By : mohammad ahmed 04/11/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 10 05:25:23 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
Quant Title : 8080.M
QLast Update : Wed Apr 02 23:52:55 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm





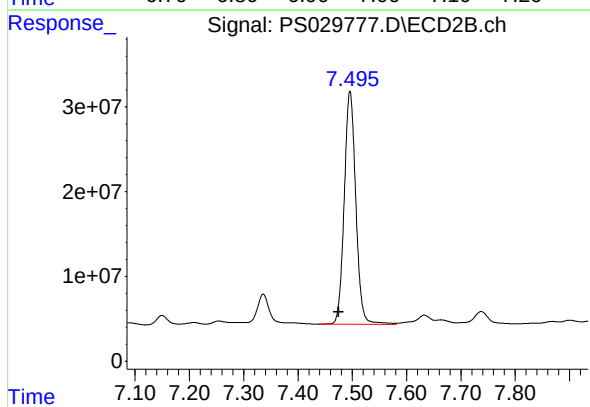
#4 2,4-DCAA

R.T.: 6.955 min
Delta R.T.: -0.007 min
Response: 1295792615
Conc: 635.56 ng/ml

Instrument :
ECD_S
ClientSampleId :
B-149-SB02

Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



#4 2,4-DCAA

R.T.: 7.496 min
Delta R.T.: 0.021 min
Response: 407792979
Conc: 598.36 ng/ml



CALIBRATION SUMMARY

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

[illegible]

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

LAB FILE ID:	RT 200 =	<u>PS029657.D</u>	RT 500 =	<u>PS029658.D</u>
RT 750 =	PS029659.D	RT 1000 =	PS029660.D	RT 1500 =
				PS029661.D

[illegible]

CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: PORT06
Lab Code: CHEM **Case No.:** Q1746 **SAS No.:** Q1746 **SDG NO.:** Q1746
Instrument ID: ECD_S **Calibration Date(s):** 04/02/2025 04/02/2025
Calibration Times: 17:32 20:44

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

LAB FILE ID:		CF 200 = <u>PS029657.D</u>	CF 500 = <u>PS029658.D</u>				
CF 750 = <u>PS029659.D</u>		CF 1000 = <u>PS029660.D</u>	CF 1500 = <u>PS029661.D</u>				
COMPOUND	CF 200	CF 500	CF 750	CF 1000	CF 1500	CF	% RSD
2,4,5-TP(Silvex)	12727900000	11569300000	11320400000	11249800000	11209500000	11615400000	5
2,4-D	2821030000	2334770000	2267580000	2246770000	2377810000	2409590000	10
2,4-DCAA	2302820000	2069000000	1979340000	1949030000	1893970000	2038830000	8



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

CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: PORT06
Lab Code: CHEM **Case No.:** Q1746 **SAS No.:** Q1746 **SDG NO.:** Q1746
Instrument ID: ECD_S **Calibration Date(s):** 04/02/2025 04/02/2025
Calibration Times: 17:32 20:44

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

LAB FILE ID:		CF 200 =	<u>PS029657.D</u>	CF 500 =	<u>PS029658.D</u>		
CF 750 =		<u>PS029659.D</u>	CF 1000 =	<u>PS029660.D</u>	CF 1500 =	<u>PS029661.D</u>	
COMPOUND	CF 200	CF 500	CF 750	CF 1000	CF 1500	CF	% RSD
2,4,5-TP(Silvex)	7615620000	7063890000	7056380000	7090810000	7238100000	7212960000	3
2,4-D	1263680000	1033640000	1003030000	1003730000	1088250000	1078460000	10
2,4-DCAA	756673000	677593000	660102000	658637000	654559000	681513000	6

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS040225\
 Data File : PS029657.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 02 Apr 2025 17:32
 Operator : AR\AJ
 Sample : HSTDICC200
 Misc :
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDICC200

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Apr 02 21:46:33 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
 Quant Title : 8080.M
 QLast Update : Wed Apr 02 21:45:08 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	6.963	7.476	460.6E6	151.3E6	232.686	229.260
Target Compounds							
1) T	Dalapon	2.463	2.533	731.9E6	336.4E6	224.174	219.295
2) T	3,5-DICHL...	6.166	6.471	622.3E6	198.4E6	211.603	211.486
3) T	4-Nitroph...	6.755	7.011	281.9E6	145.1E6	207.004	212.338
5) T	DICAMBA	7.140	7.663	1665.3E6	696.8E6	201.131	190.785
6) T	MCP	7.317	7.766	85252462	28218860	15.480	16.114
7) T	MCPA	7.459	7.997	120.6E6	41718309	16.342	18.360
8) T	DICHLORPROP	7.822	8.357	494.6E6	213.7E6	239.160	236.114
9) T	2,4-D	8.044	8.673	530.4E6	237.6E6	233.885	236.854
10) T	Pentachlo...	8.321	9.174	6661.6E6	3600.2E6	229.136	203.169
11) T	2,4,5-TP ...	8.888	9.553	2418.3E6	1447.0E6	213.623	205.058
12) T	2,4,5-T	9.171	9.959	2354.5E6	1338.6E6	208.050	202.548
13) T	2,4-DB	9.732	10.516	336.4E6	152.6E6	179.124	213.467
14) T	DINOSEB	10.896	10.888	1721.6E6	1043.9E6	207.542	210.790
15) T	Picloram	10.714	11.932	3148.9E6	2164.7E6	207.380	195.248
16) T	DCPA	11.196	11.912	2871.5E6	1841.8E6	208.516	183.261

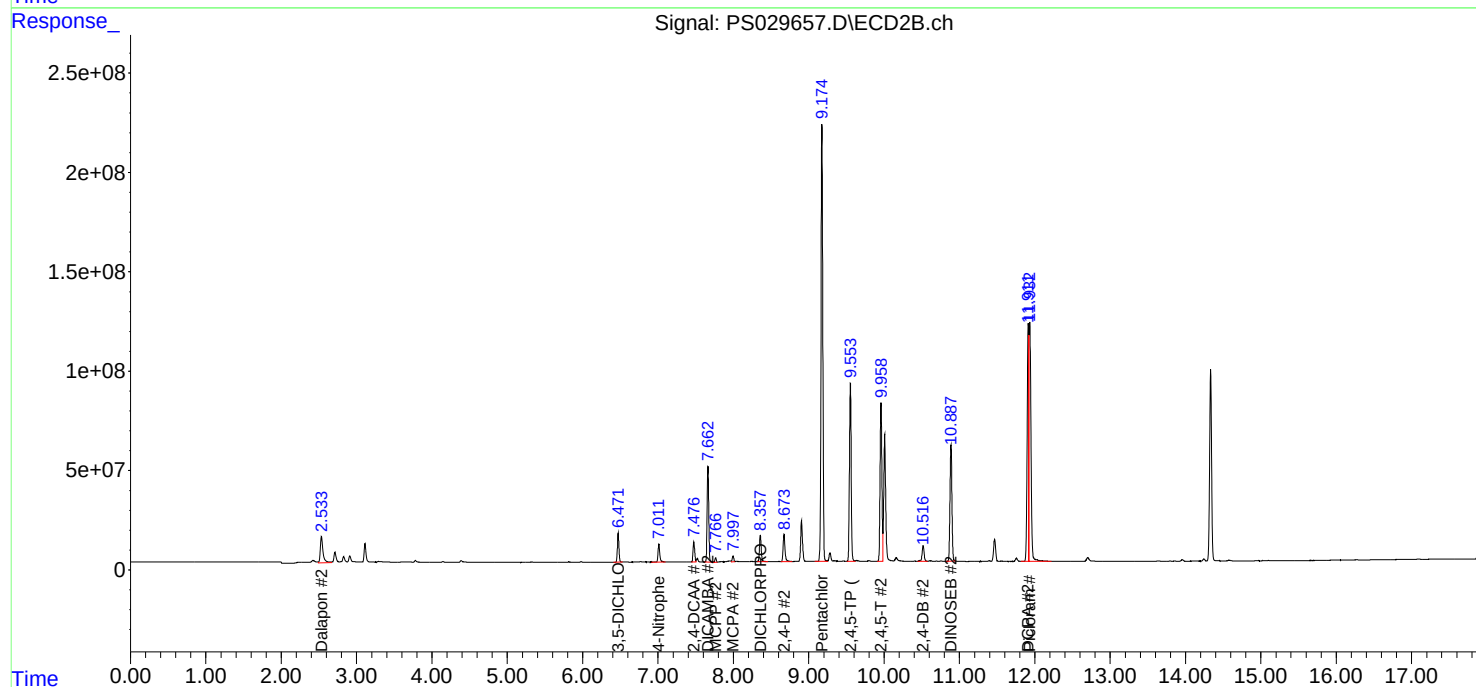
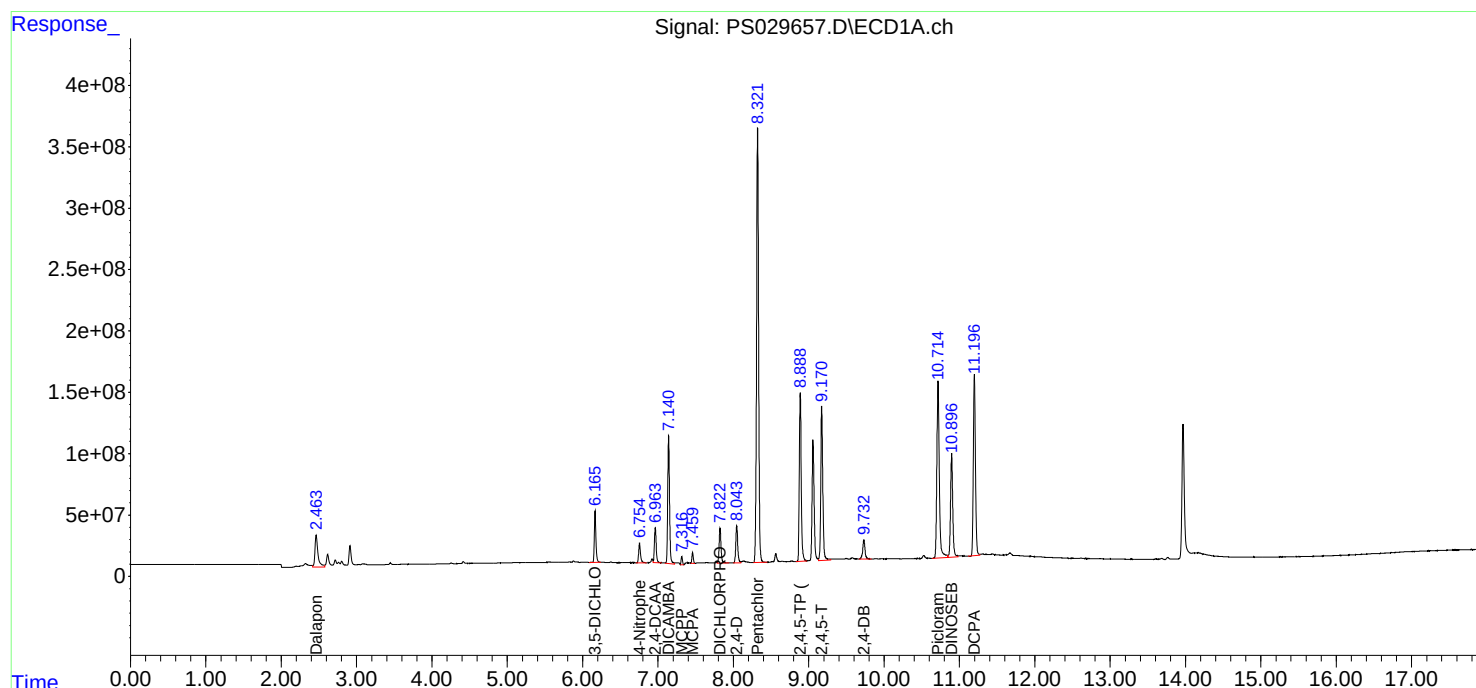
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

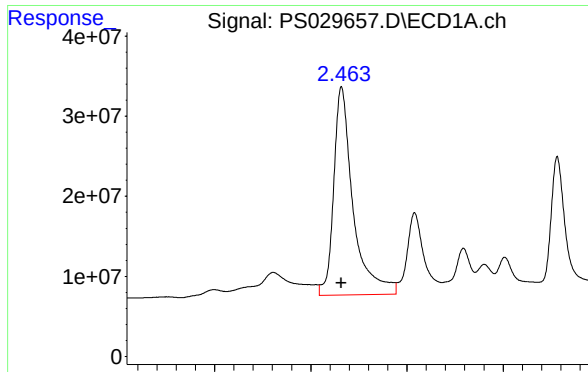
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS040225\
Data File : PS029657.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 02 Apr 2025 17:32
Operator : AR\AJ
Sample : HSTDICC200
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDICC200

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 02 21:46:33 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
Quant Title : 8080.M
QLast Update : Wed Apr 02 21:45:08 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

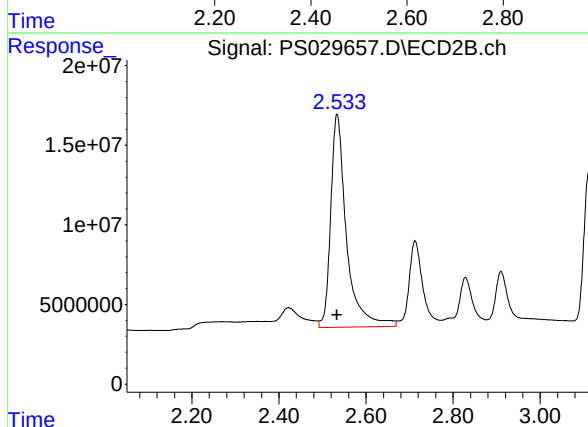




#1 Dalapon

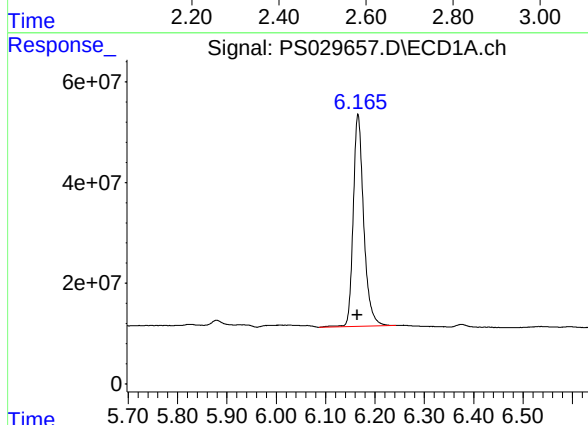
R.T.: 2.463 min
Delta R.T.: 0.000 min
Response: 731934729
Conc: 224.17 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC200



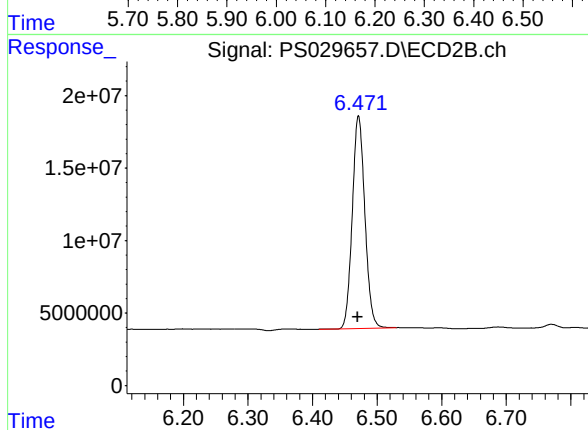
#1 Dalapon

R.T.: 2.533 min
Delta R.T.: 0.000 min
Response: 336353813
Conc: 219.30 ng/ml



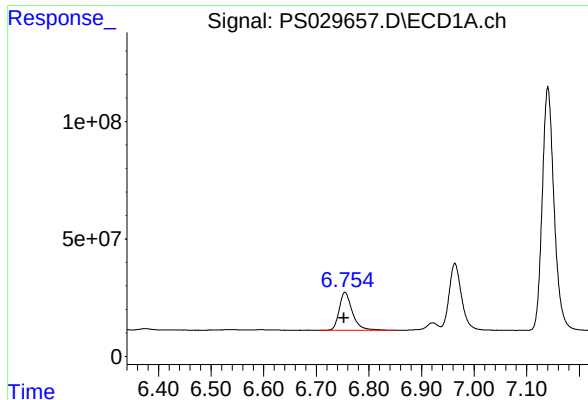
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.166 min
Delta R.T.: 0.000 min
Response: 622297322
Conc: 211.60 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

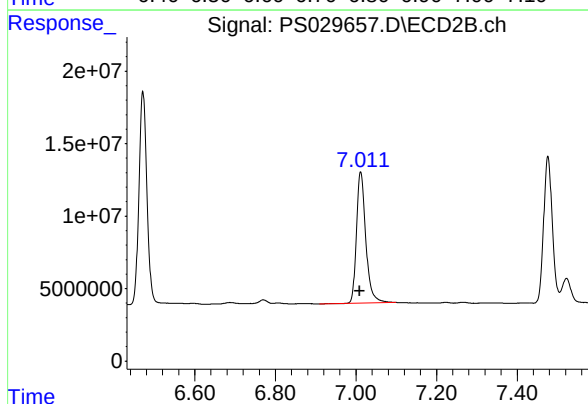
R.T.: 6.471 min
Delta R.T.: 0.000 min
Response: 198400474
Conc: 211.49 ng/ml



#3 4-Nitrophenol

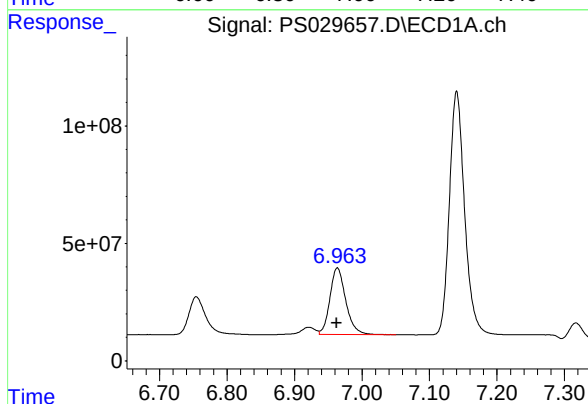
R.T.: 6.755 min
Delta R.T.: 0.001 min
Response: 281903407
Conc: 207.00 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC200



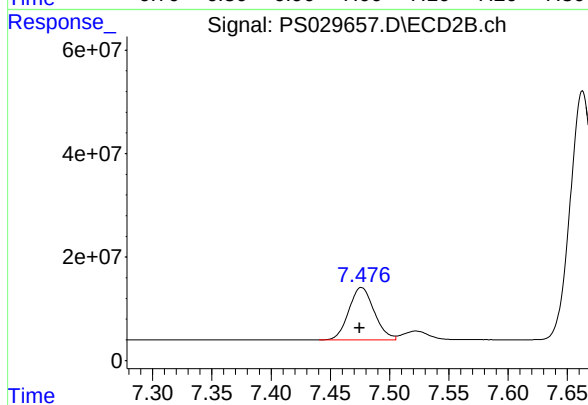
#3 4-Nitrophenol

R.T.: 7.011 min
Delta R.T.: 0.002 min
Response: 145131227
Conc: 212.34 ng/ml



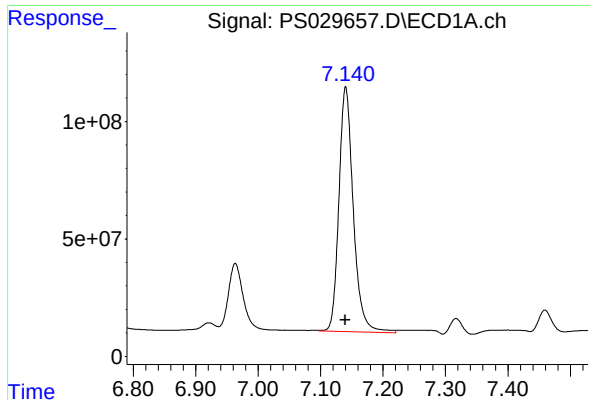
#4 2,4-DCAA

R.T.: 6.963 min
Delta R.T.: 0.000 min
Response: 460564681
Conc: 232.69 ng/ml



#4 2,4-DCAA

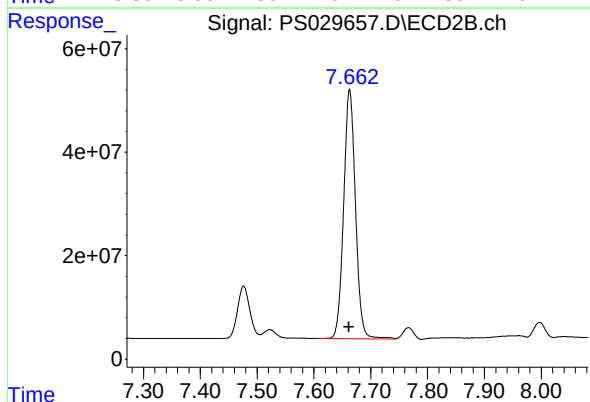
R.T.: 7.476 min
Delta R.T.: 0.001 min
Response: 151334671
Conc: 229.26 ng/ml



#5 DICAMBA

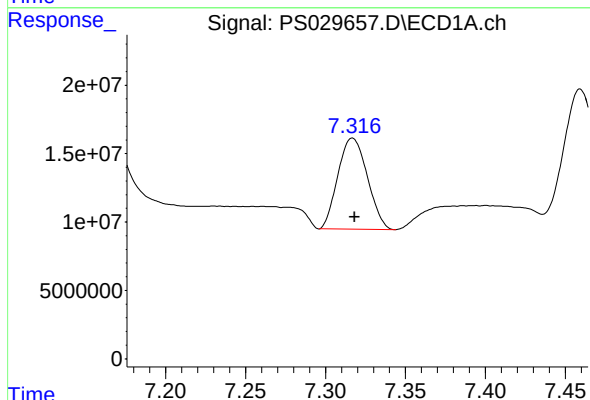
R.T.: 7.140 min
Delta R.T.: 0.000 min
Response: 1665316112
Conc: 201.13 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC200



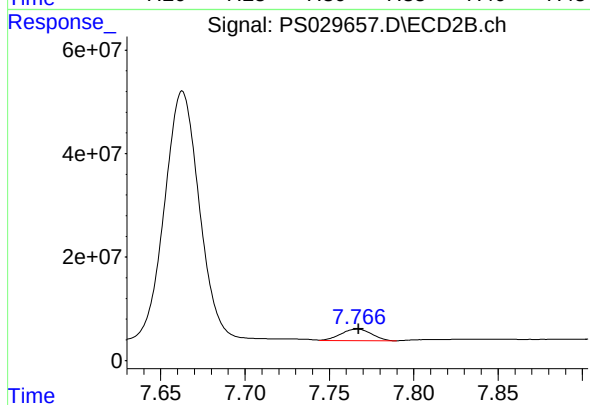
#5 DICAMBA

R.T.: 7.663 min
Delta R.T.: 0.001 min
Response: 696795395
Conc: 190.79 ng/ml



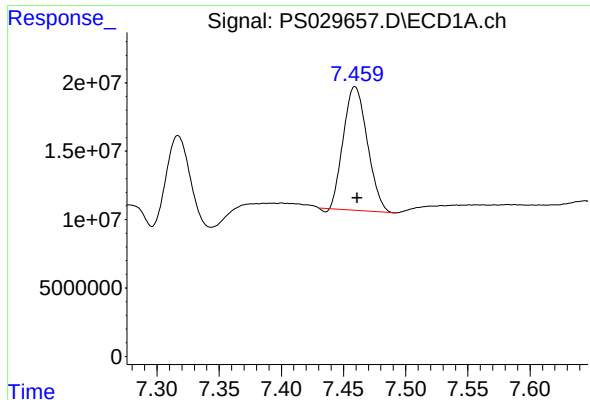
#6 MCPP

R.T.: 7.317 min
Delta R.T.: -0.001 min
Response: 85252462
Conc: 15.48 ug/ml



#6 MCPP

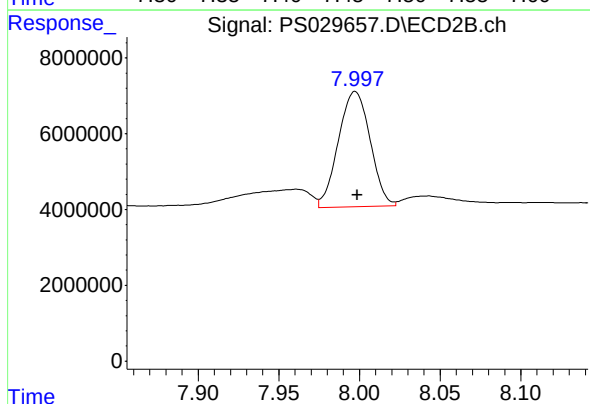
R.T.: 7.766 min
Delta R.T.: -0.001 min
Response: 28218860
Conc: 16.11 ug/ml



#7 MCPA

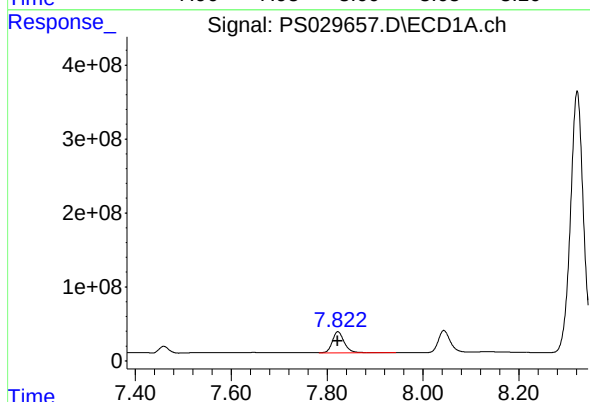
R.T.: 7.459 min
Delta R.T.: -0.002 min
Response: 120575211
Conc: 16.34 ug/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC200



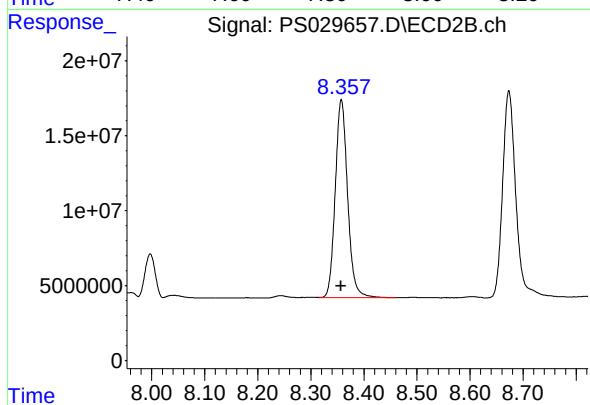
#7 MCPA

R.T.: 7.997 min
Delta R.T.: -0.001 min
Response: 41718309
Conc: 18.36 ug/ml



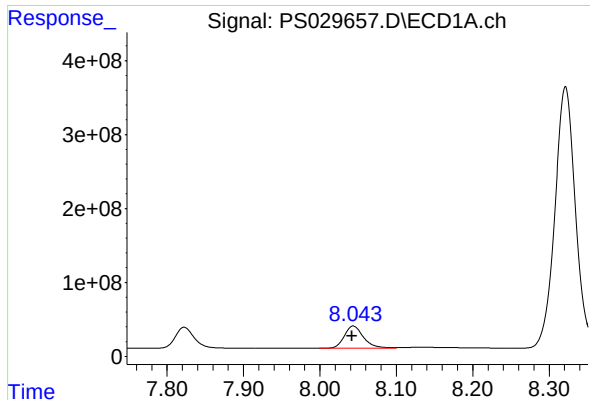
#8 DICHLORPROP

R.T.: 7.822 min
Delta R.T.: 0.000 min
Response: 494633615
Conc: 239.16 ng/ml



#8 DICHLORPROP

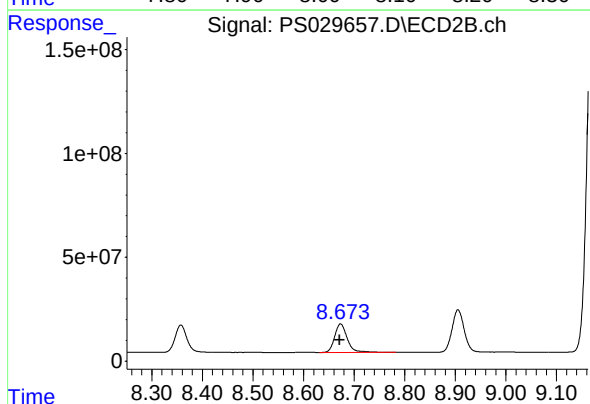
R.T.: 8.357 min
Delta R.T.: 0.001 min
Response: 213698070
Conc: 236.11 ng/ml



#9 2,4-D

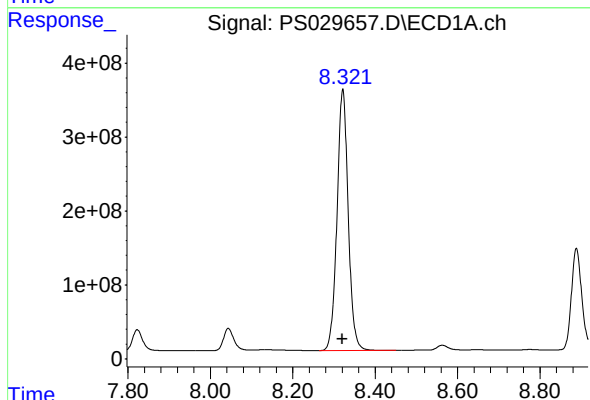
R.T.: 8.044 min
Delta R.T.: 0.001 min
Response: 530353272
Conc: 233.89 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC200



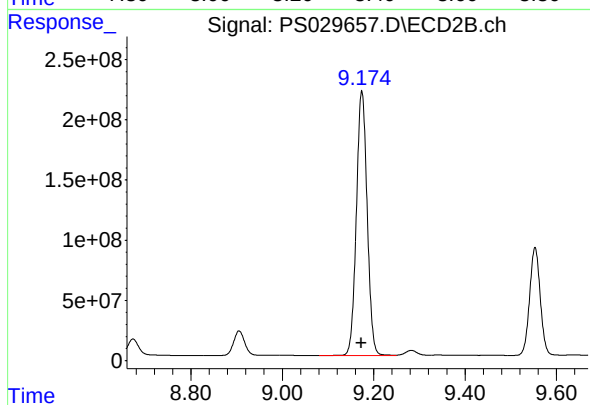
#9 2,4-D

R.T.: 8.673 min
Delta R.T.: 0.002 min
Response: 237571156
Conc: 236.85 ng/ml



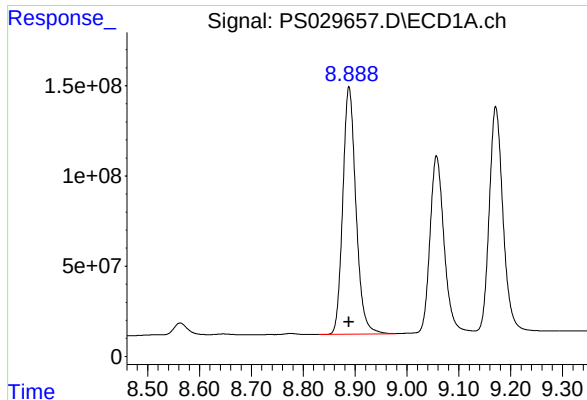
#10 Pentachlorophenol

R.T.: 8.321 min
Delta R.T.: 0.000 min
Response: 6661591819
Conc: 229.14 ng/ml



#10 Pentachlorophenol

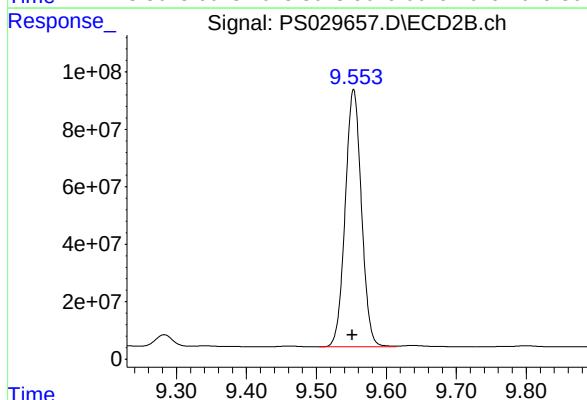
R.T.: 9.174 min
Delta R.T.: 0.000 min
Response: 3600173749
Conc: 203.17 ng/ml



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

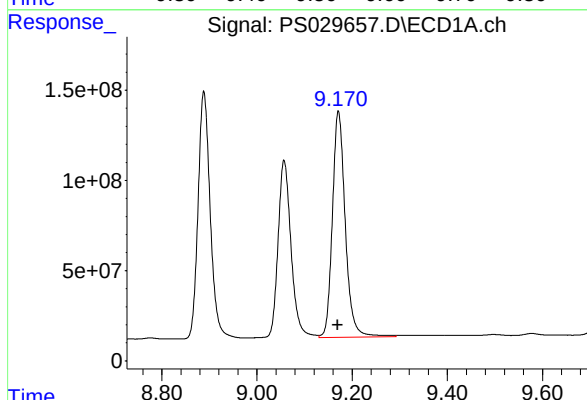
R.T.: 8.888 min
Delta R.T.: 0.000 min
Response: 2418295395
Conc: 213.62 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC200



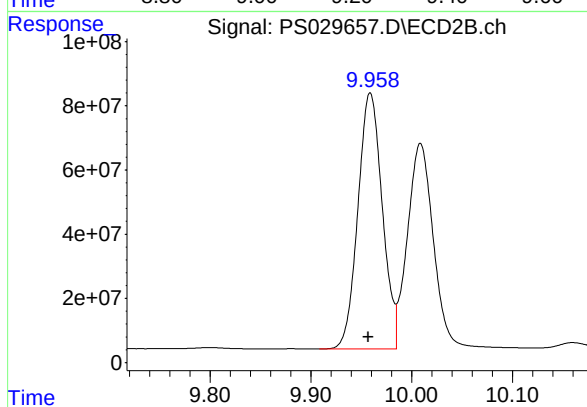
#11 2,4,5-TP (SILVEX)

R.T.: 9.553 min
Delta R.T.: 0.002 min
Response: 1446967771
Conc: 205.06 ng/ml



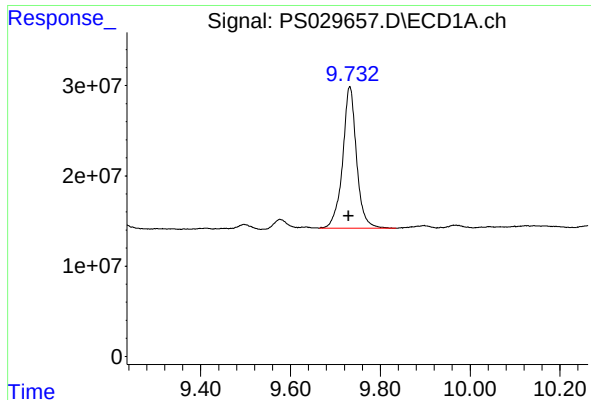
#12 2,4,5-T

R.T.: 9.171 min
Delta R.T.: 0.001 min
Response: 2354497182
Conc: 208.05 ng/ml



#12 2,4,5-T

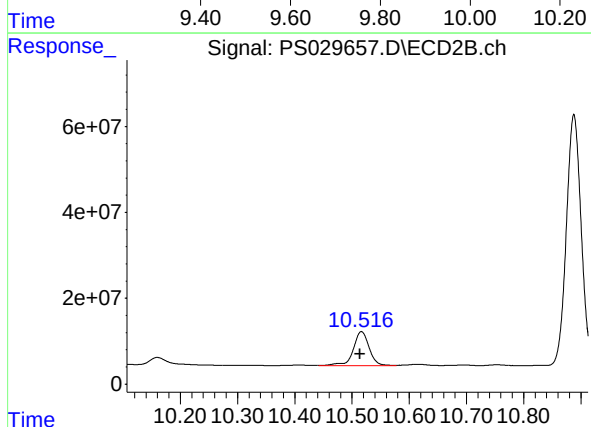
R.T.: 9.959 min
Delta R.T.: 0.002 min
Response: 1338585053
Conc: 202.55 ng/ml



#13 2,4-DB

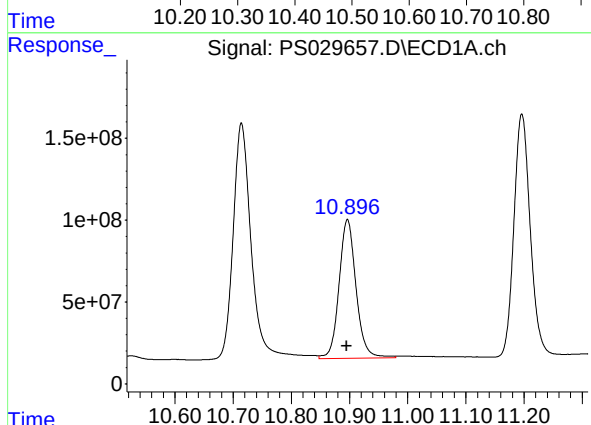
R.T.: 9.732 min
Delta R.T.: 0.003 min
Response: 336360413
Conc: 179.12 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC200



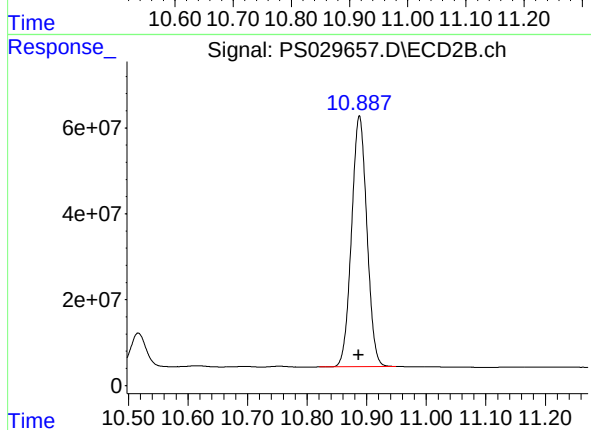
#13 2,4-DB

R.T.: 10.516 min
Delta R.T.: 0.002 min
Response: 152627392
Conc: 213.47 ng/ml



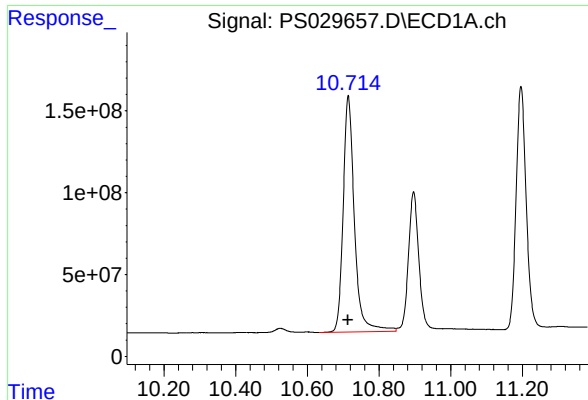
#14 DINOSEB

R.T.: 10.896 min
Delta R.T.: 0.001 min
Response: 1721611147
Conc: 207.54 ng/ml



#14 DINOSEB

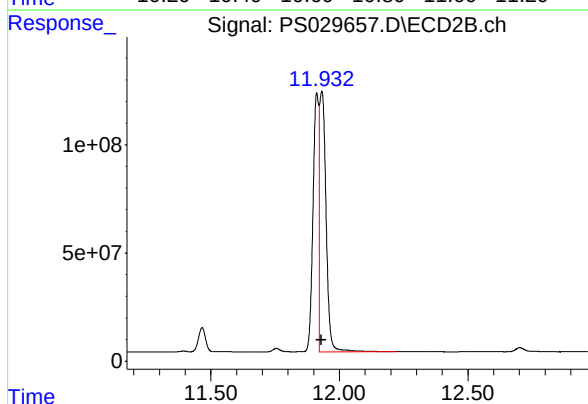
R.T.: 10.888 min
Delta R.T.: 0.001 min
Response: 1043866951
Conc: 210.79 ng/ml



#15 Picloram

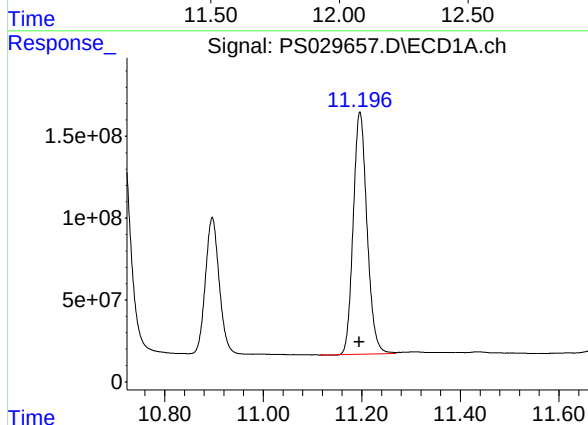
R.T.: 10.714 min
Delta R.T.: 0.001 min
Response: 3148932398
Conc: 207.38 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC200



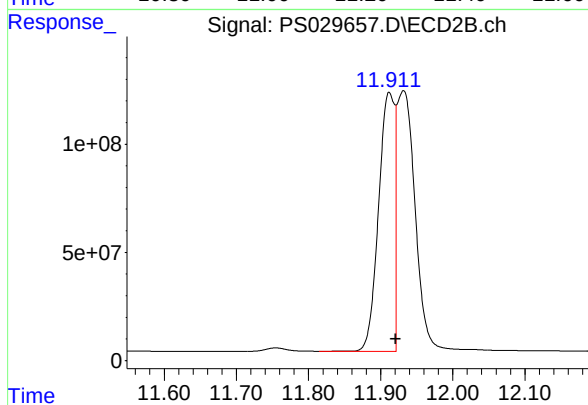
#15 Picloram

R.T.: 11.932 min
Delta R.T.: 0.002 min
Response: 2164676310
Conc: 195.25 ng/ml



#16 DCPA

R.T.: 11.196 min
Delta R.T.: 0.000 min
Response: 2871466571
Conc: 208.52 ng/ml



#16 DCPA

R.T.: 11.912 min
Delta R.T.: -0.009 min
Response: 1841799208
Conc: 183.26 ng/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS040225\
 Data File : PS029658.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 02 Apr 2025 17:56
 Operator : AR\AJ
 Sample : HSTDICC500
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDICC500

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Apr 02 21:46:49 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
 Quant Title : 8080.M
 QLast Update : Wed Apr 02 21:45:08 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	6.963	7.476	1034.5E6	338.8E6	522.648	513.249
Target Compounds							
1) T	Dalapon	2.463	2.533	1566.9E6	735.5E6	479.894	479.559
2) T	3,5-DICHL...	6.165	6.470	1411.1E6	445.8E6	479.828	475.161
3) T	4-Nitroph...	6.754	7.010	631.6E6	320.3E6	463.792	468.614
5) T	DICAMBA	7.140	7.662	3988.8E6	1692.4E6	481.754	463.398
6) T	MCPD	7.317	7.766	251.0E6	80048671	45.582	45.711
7) T	MCPA	7.460	7.997	336.8E6	103.6E6	45.643	45.594
8) T	DICHLORPROP	7.822	8.357	1008.0E6	434.8E6	487.379	480.426
9) T	2,4-D	8.043	8.672	1097.3E6	485.8E6	483.927	484.347
10) T	Pentachlo...	8.321	9.173	14175.8E6	8509.4E6	487.598	480.213
11) T	2,4,5-TP ...	8.887	9.552	5495.4E6	3355.3E6	485.444	475.506
12) T	2,4,5-T	9.170	9.957	5489.2E6	3151.1E6	485.039	476.804
13) T	2,4-DB	9.730	10.515	892.0E6	347.6E6	475.002	486.133
14) T	DINOSEB	10.895	10.886	3924.5E6	2357.1E6	473.097	475.967
15) T	Picloram	10.714	11.930	7202.2E6	5259.7E6	474.314	474.410
16) T	DCPA	11.196	11.913	6699.5E6	4331.2E6	486.495	430.957

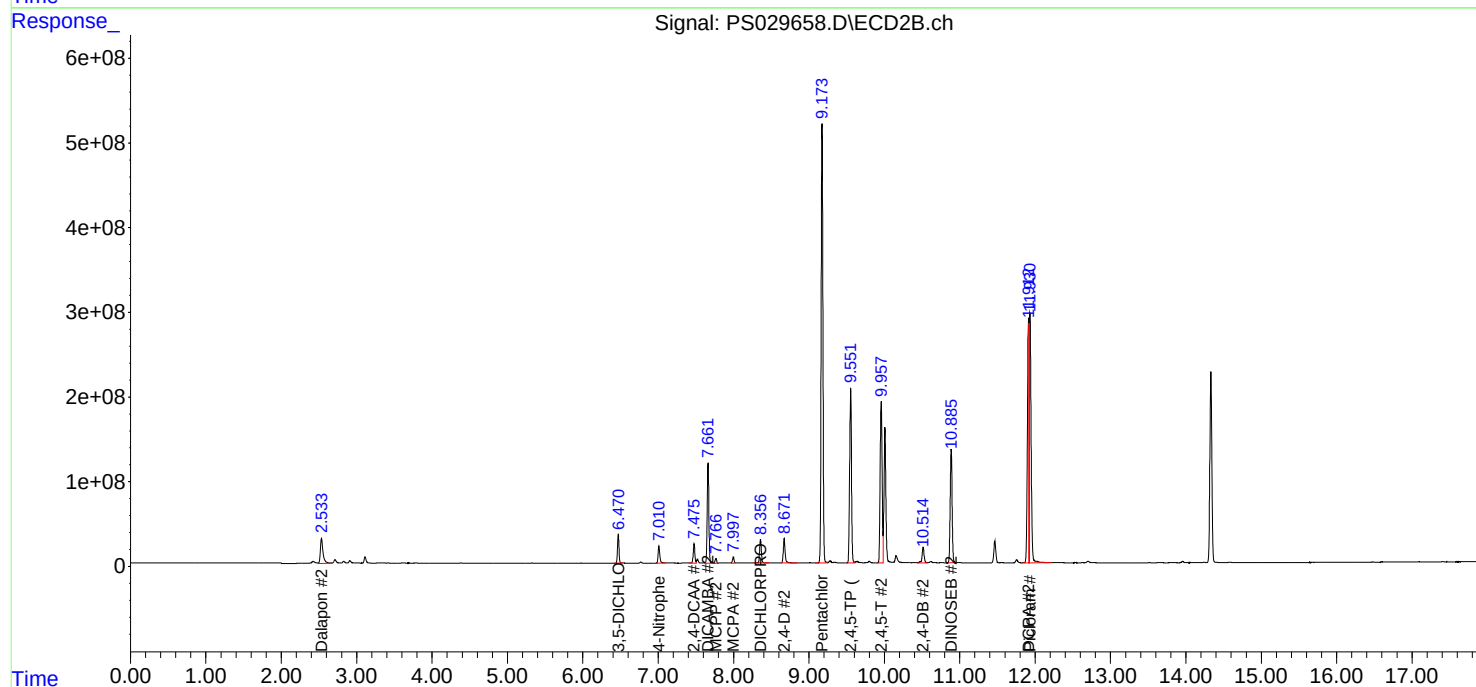
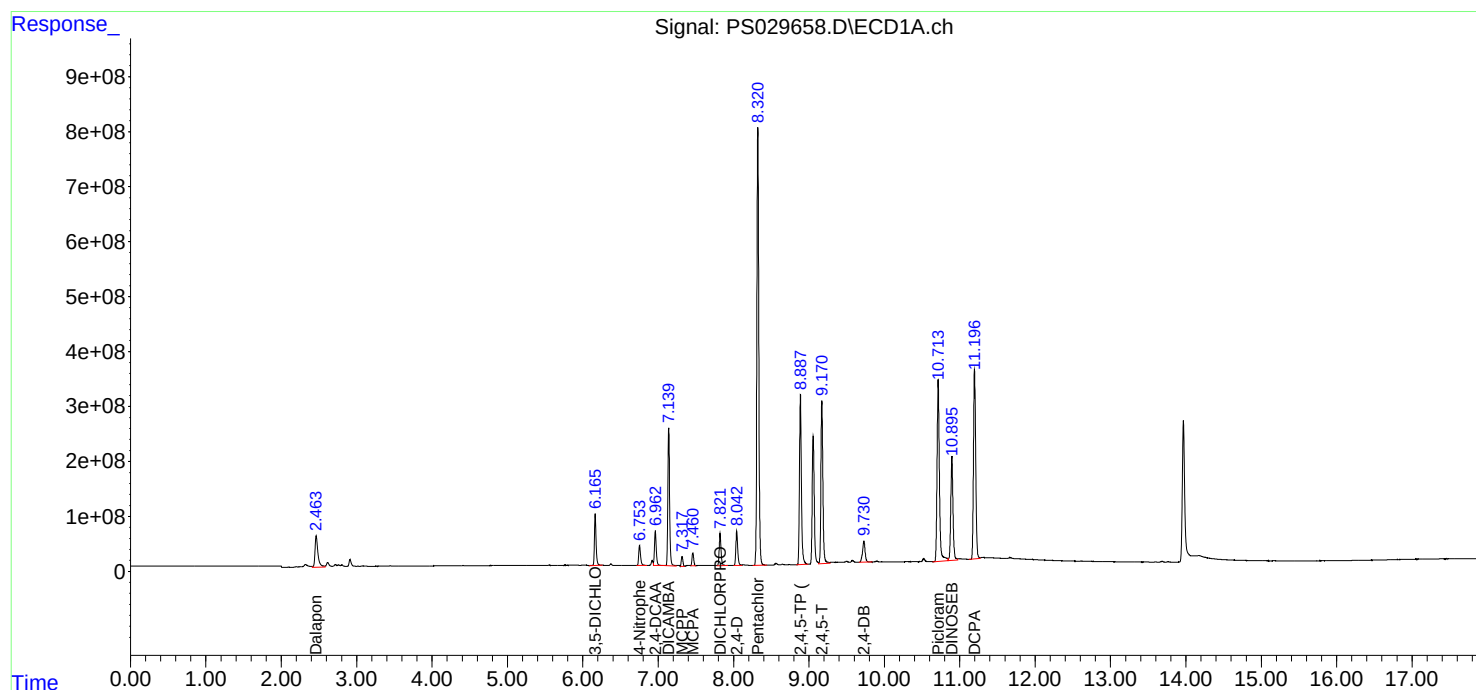
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

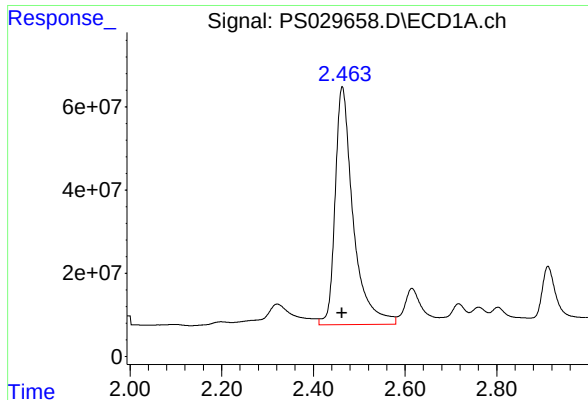
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS040225\
Data File : PS029658.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 02 Apr 2025 17:56
Operator : AR\AJ
Sample : HSTDICC500
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDICC500

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 02 21:46:49 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
Quant Title : 8080.M
QLast Update : Wed Apr 02 21:45:08 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm

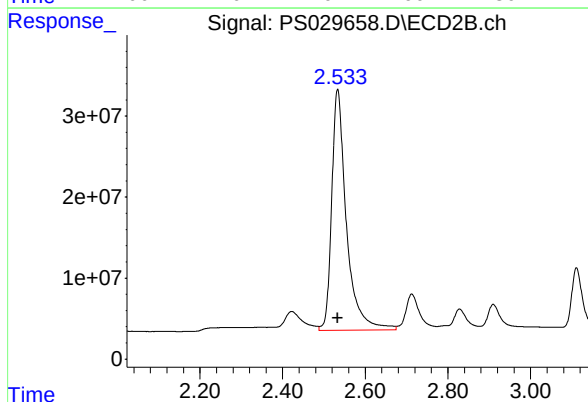




#1 Dalapon

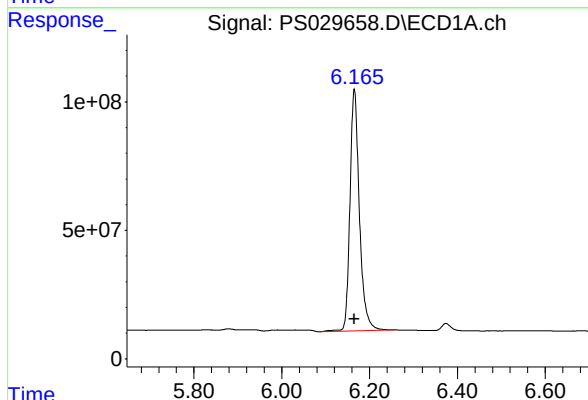
R.T.: 2.463 min
Delta R.T.: 0.000 min
Response: 1566868266
Conc: 479.89 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC500



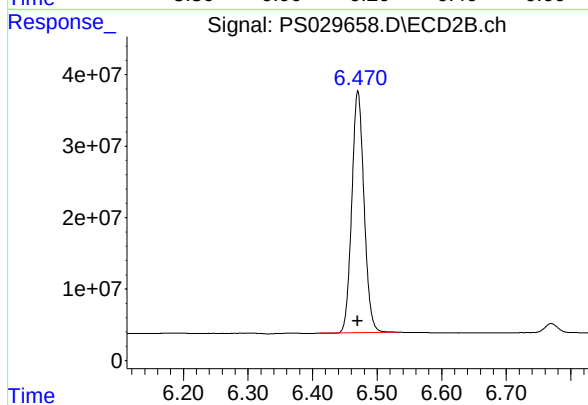
#1 Dalapon

R.T.: 2.533 min
Delta R.T.: 0.000 min
Response: 735543650
Conc: 479.56 ng/ml



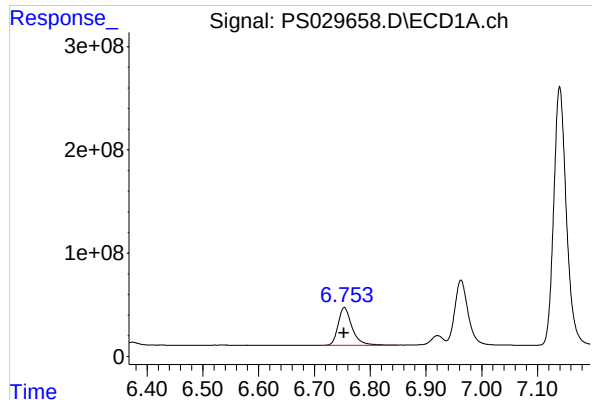
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.165 min
Delta R.T.: 0.000 min
Response: 1411113725
Conc: 479.83 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

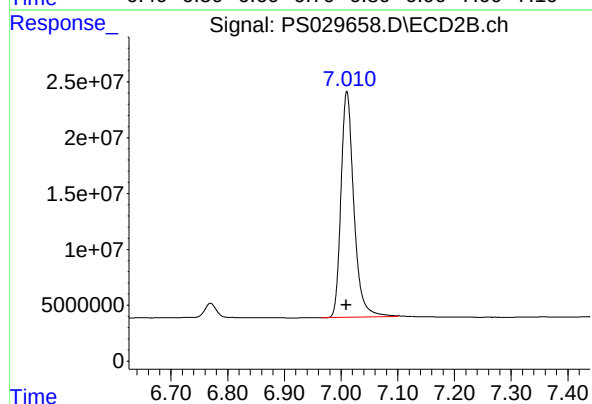
R.T.: 6.470 min
Delta R.T.: 0.000 min
Response: 445759457
Conc: 475.16 ng/ml



#3 4-Nitrophenol

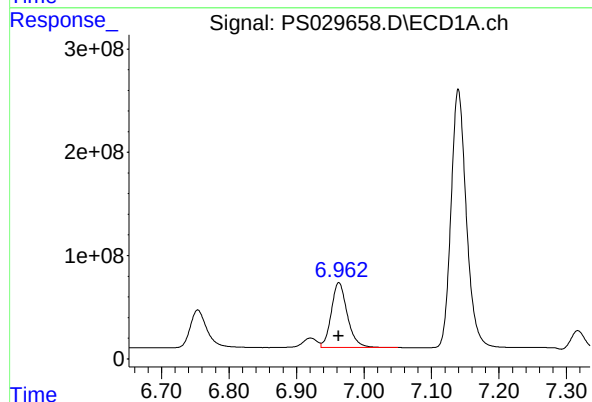
R.T.: 6.754 min
Delta R.T.: 0.000 min
Response: 631605452
Conc: 463.79 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC500



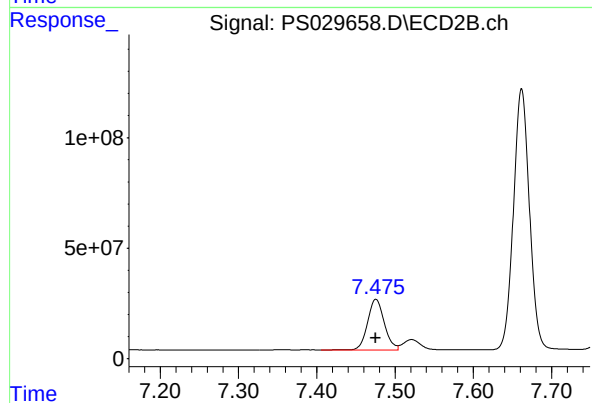
#3 4-Nitrophenol

R.T.: 7.010 min
Delta R.T.: 0.000 min
Response: 320294652
Conc: 468.61 ng/ml



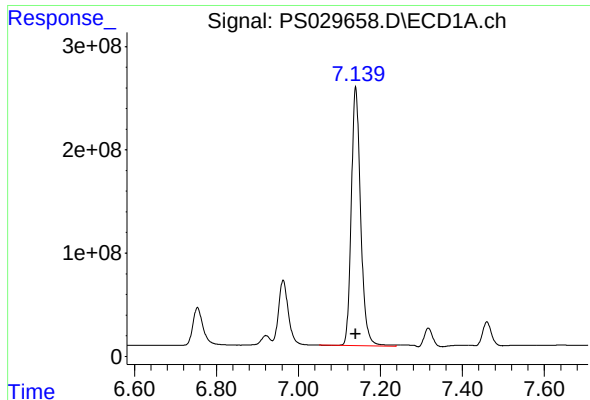
#4 2,4-DCAA

R.T.: 6.963 min
Delta R.T.: 0.000 min
Response: 1034497882
Conc: 522.65 ng/ml



#4 2,4-DCAA

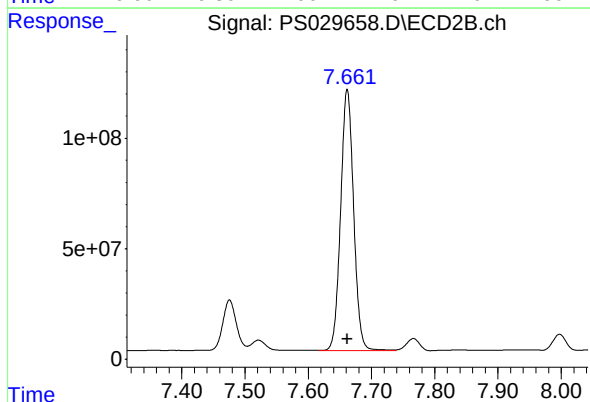
R.T.: 7.476 min
Delta R.T.: 0.000 min
Response: 338796484
Conc: 513.25 ng/ml



#5 DICAMBA

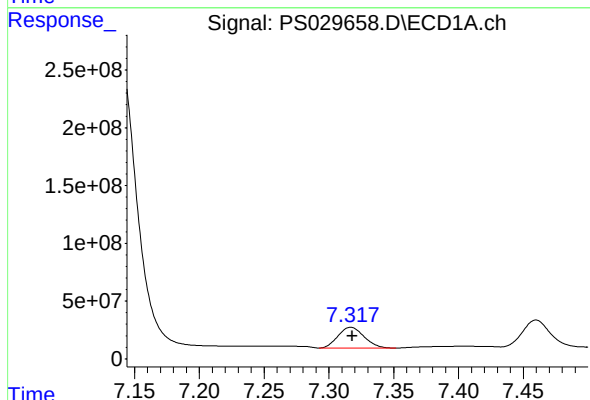
R.T.: 7.140 min
Delta R.T.: 0.000 min
Response: 3988816281
Conc: 481.75 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC500



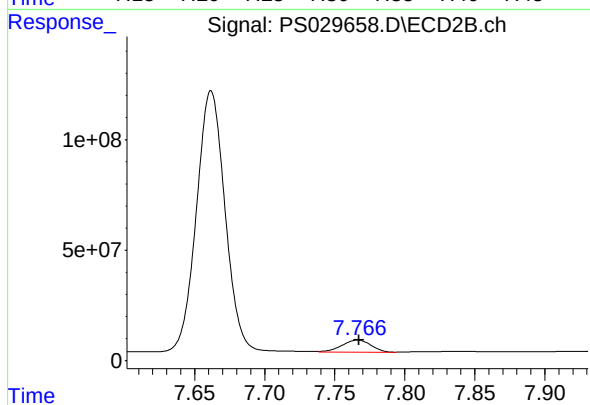
#5 DICAMBA

R.T.: 7.662 min
Delta R.T.: 0.000 min
Response: 1692444760
Conc: 463.40 ng/ml



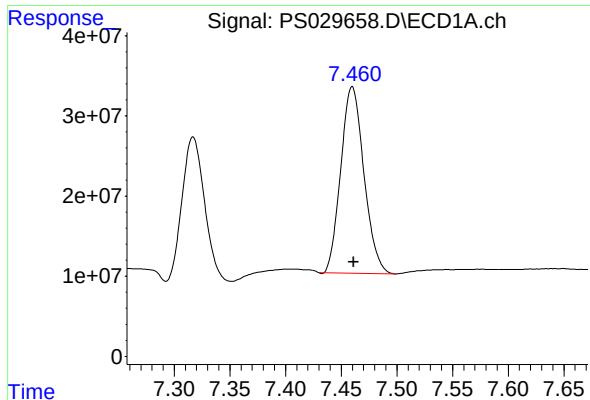
#6 MCPP

R.T.: 7.317 min
Delta R.T.: -0.001 min
Response: 251039502
Conc: 45.58 ug/ml



#6 MCPP

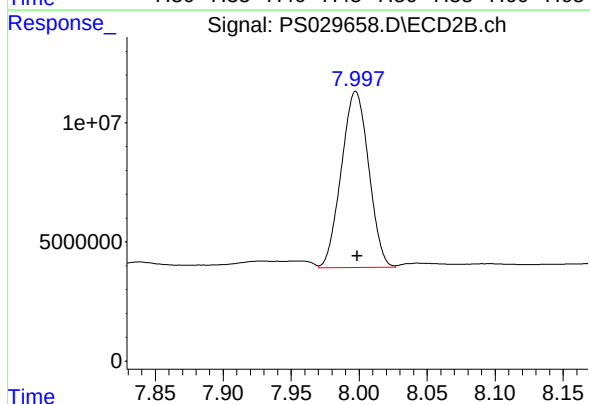
R.T.: 7.766 min
Delta R.T.: -0.001 min
Response: 80048671
Conc: 45.71 ug/ml



#7 MCPA

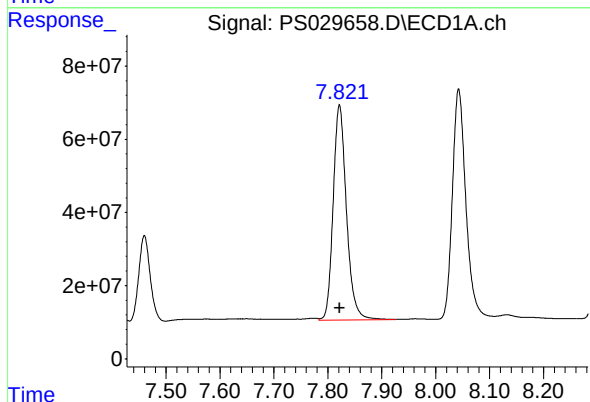
R.T.: 7.460 min
Delta R.T.: -0.001 min
Response: 336773031
Conc: 45.64 ug/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC500



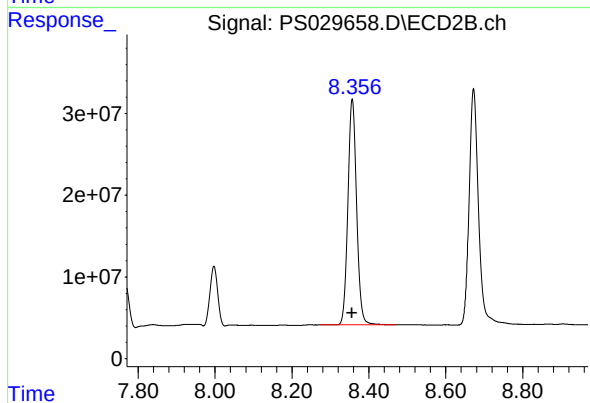
#7 MCPA

R.T.: 7.997 min
Delta R.T.: -0.001 min
Response: 103599616
Conc: 45.59 ug/ml



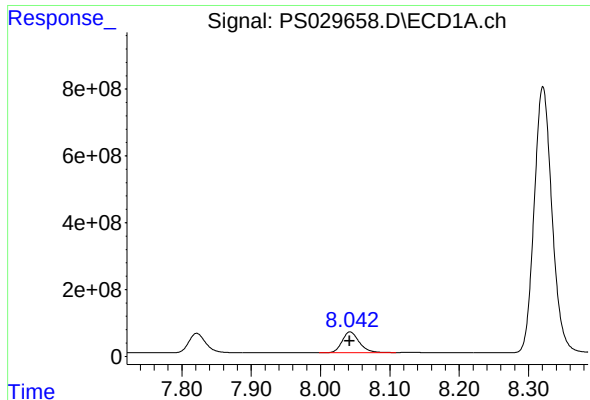
#8 DICHLORPROP

R.T.: 7.822 min
Delta R.T.: 0.000 min
Response: 1008003727
Conc: 487.38 ng/ml



#8 DICHLORPROP

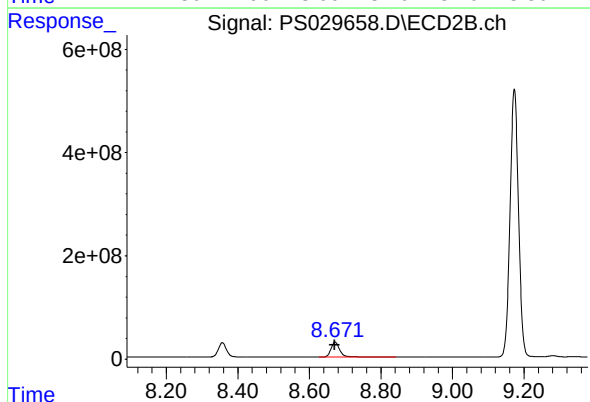
R.T.: 8.357 min
Delta R.T.: 0.000 min
Response: 434816803
Conc: 480.43 ng/ml



#9 2,4-D

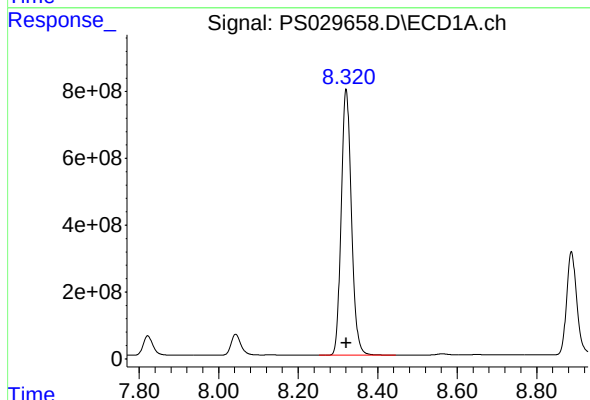
R.T.: 8.043 min
Delta R.T.: 0.000 min
Response: 1097342926
Conc: 483.93 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC500



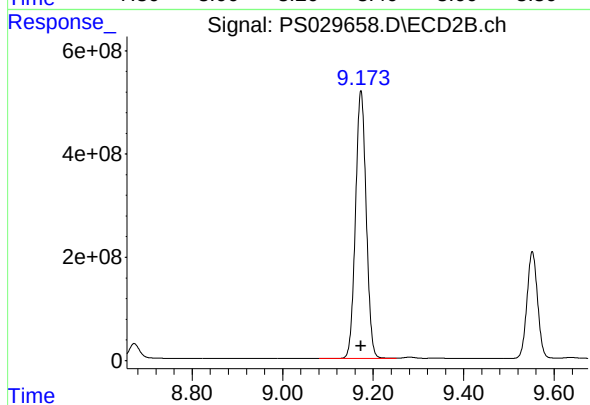
#9 2,4-D

R.T.: 8.672 min
Delta R.T.: 0.000 min
Response: 485813122
Conc: 484.35 ng/ml



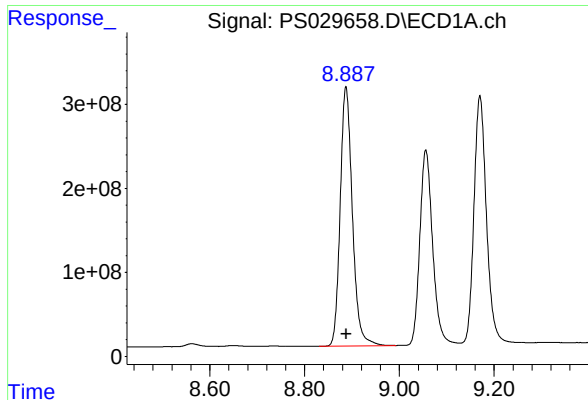
#10 Pentachlorophenol

R.T.: 8.321 min
Delta R.T.: 0.000 min
Response: 14175779414
Conc: 487.60 ng/ml



#10 Pentachlorophenol

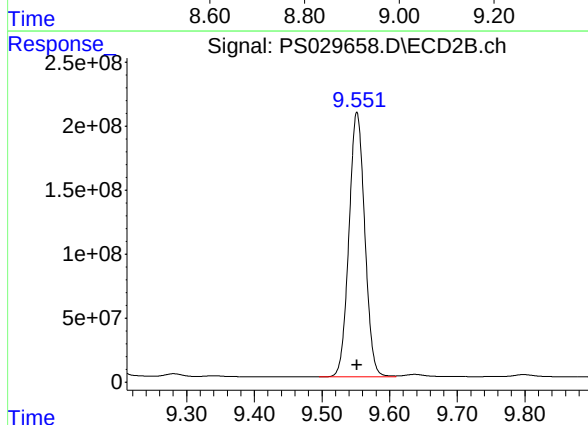
R.T.: 9.173 min
Delta R.T.: 0.000 min
Response: 8509405088
Conc: 480.21 ng/ml



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

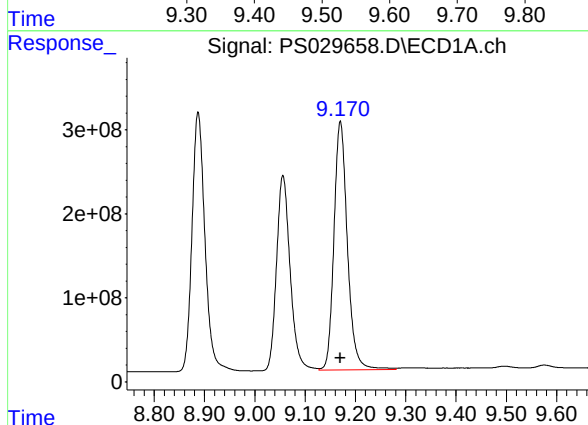
R.T.: 8.887 min
Delta R.T.: 0.000 min
Response: 5495408788
Conc: 485.44 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC500



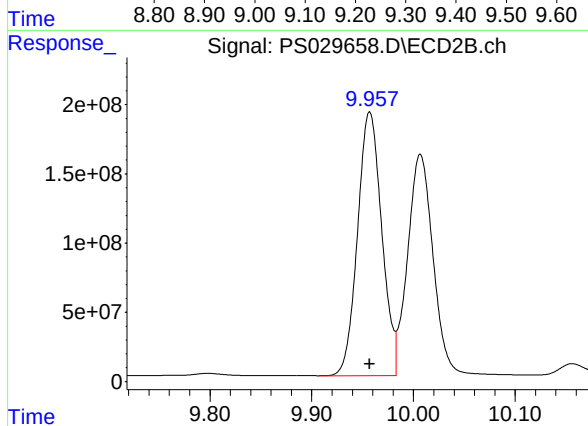
#11 2,4,5-TP (SILVEX)

R.T.: 9.552 min
Delta R.T.: 0.000 min
Response: 3355348379
Conc: 475.51 ng/ml



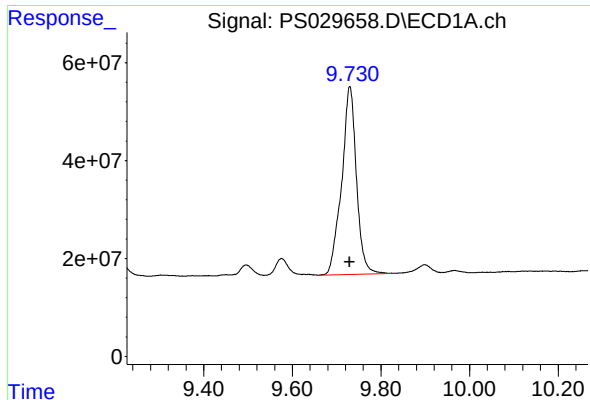
#12 2,4,5-T

R.T.: 9.170 min
Delta R.T.: 0.000 min
Response: 5489170816
Conc: 485.04 ng/ml



#12 2,4,5-T

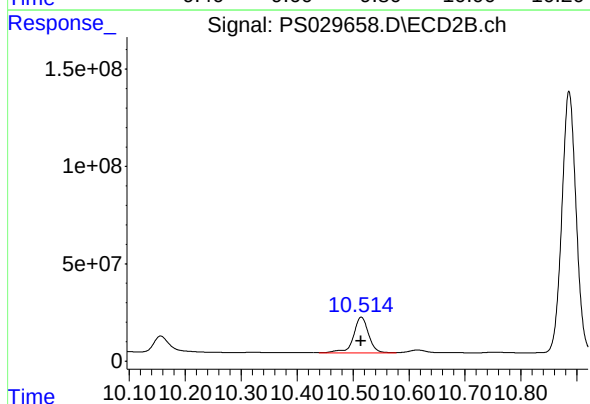
R.T.: 9.957 min
Delta R.T.: 0.000 min
Response: 3151075409
Conc: 476.80 ng/ml



#13 2,4-DB

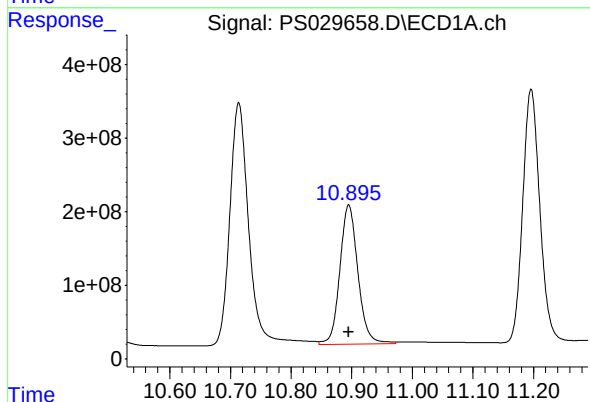
R.T.: 9.730 min
Delta R.T.: 0.000 min
Response: 891959970
Conc: 475.00 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC500



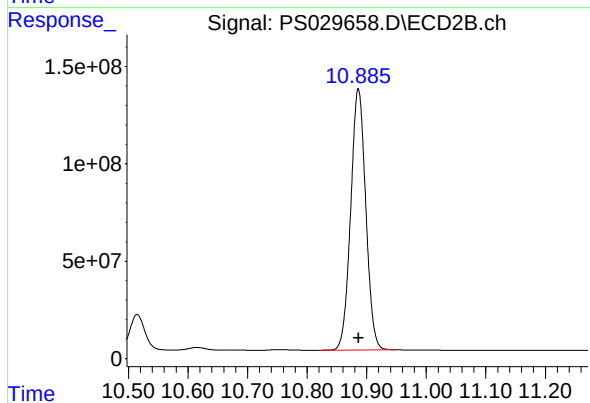
#13 2,4-DB

R.T.: 10.515 min
Delta R.T.: 0.000 min
Response: 347581679
Conc: 486.13 ng/ml



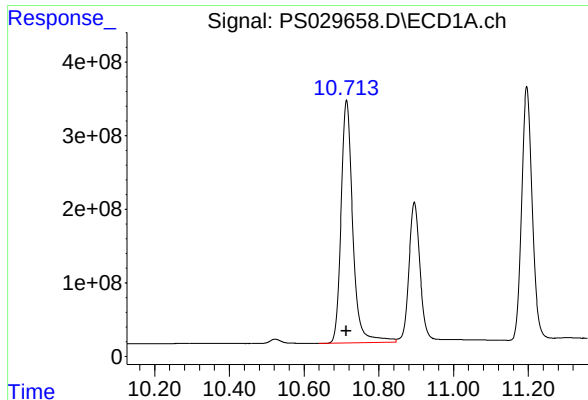
#14 DINOSEB

R.T.: 10.895 min
Delta R.T.: 0.000 min
Response: 3924458399
Conc: 473.10 ng/ml



#14 DINOSEB

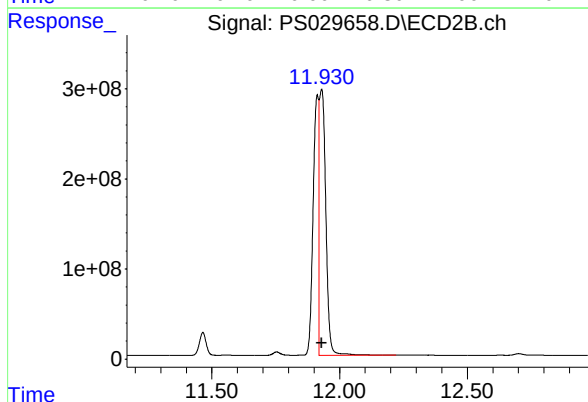
R.T.: 10.886 min
Delta R.T.: 0.000 min
Response: 2357060783
Conc: 475.97 ng/ml



#15 Picloram

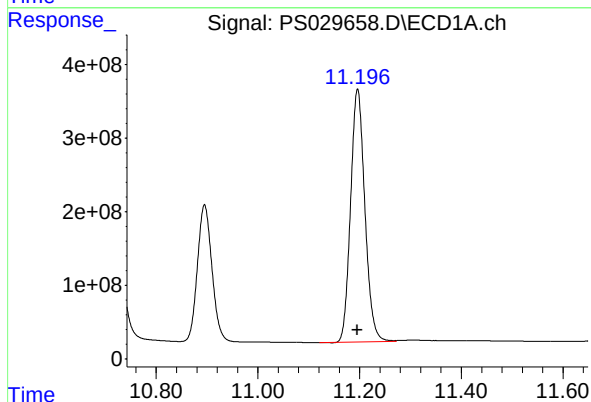
R.T.: 10.714 min
Delta R.T.: 0.000 min
Response: 7202160458
Conc: 474.31 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC500



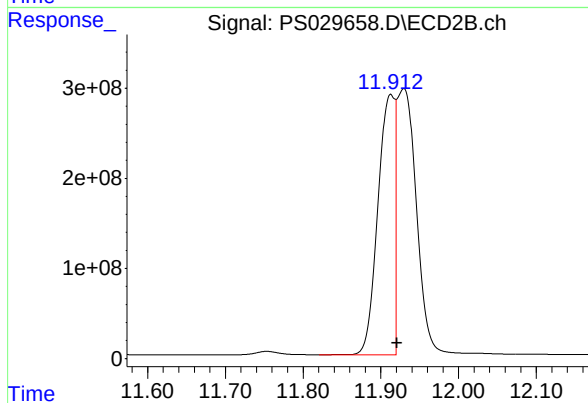
#15 Picloram

R.T.: 11.930 min
Delta R.T.: 0.000 min
Response: 5259679555
Conc: 474.41 ng/ml



#16 DCPA

R.T.: 11.196 min
Delta R.T.: 0.000 min
Response: 6699492104
Conc: 486.49 ng/ml



#16 DCPA

R.T.: 11.913 min
Delta R.T.: -0.008 min
Response: 4331176272
Conc: 430.96 ng/ml

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS040225\
 Data File : PS029659.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 02 Apr 2025 18:44
 Operator : AR\AJ
 Sample : HSTDICC750
 Misc :
 ALS Vial : 7 Sample Multiplier: 1

Instrument :

ECD_S

ClientSampleId :

HSTDICC750

Manual Integrations**APPROVED**

Reviewed By :Abdul Mirza 04/03/2025

Supervised By :mohammad ahmed 04/04/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Apr 02 21:47:20 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
 Quant Title : 8080.M
 QLast Update : Wed Apr 02 21:45:08 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	6.963	7.475	1484.5E6	495.1E6	750.000	750.000
Target Compounds							
1) T	Dalapon	2.463	2.533	2228.4E6	1046.8E6	682.500	682.500
2) T	3,5-DICHL...	6.165	6.470	2051.3E6	654.3E6	697.500	697.500
3) T	4-Nitroph...	6.753	7.009	929.4E6	466.5E6	682.500	682.500
5) T	DICAMBA	7.140	7.662	5837.2E6	2574.8E6	705.000	705.000
6) T	MCP	7.318	7.767	388.3E6	123.5E6	70.500	70.500
7) T	MCPA	7.461	7.999	514.6E6	158.5E6	69.750	69.750
8) T	DICHLORPROP	7.822	8.356	1458.1E6	638.1E6	705.000	705.000
9) T	2,4-D	8.042	8.671	1598.6E6	707.1E6	705.000	705.000
10) T	Pentachlo...	8.321	9.173	20714.3E6	12625.5E6	712.500	712.500
11) T	2,4,5-TP ...	8.888	9.551	8065.8E6	5027.7E6	712.500	712.500
12) T	2,4,5-T	9.170	9.957	8063.3E6	4708.7E6	712.500	712.500
13) T	2,4-DB	9.729	10.514	1337.9E6	509.4E6	712.500	712.500
14) T	DINOSEB	10.895	10.887	5848.2E6	3491.3E6	705.000	705.000
15) T	Picloram	10.713	11.930	10818.9E6	8266.2E6	712.500	745.591m
16) T	DCPA	11.195	11.913	9915.1E6	5912.6E6	720.000	588.309m

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS040225\
Data File : PS029659.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 02 Apr 2025 18:44
Operator : AR\AJ
Sample : HSTDICC750
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :

ECD_S

ClientSampleId :

HSTDICC750

Manual Integrations

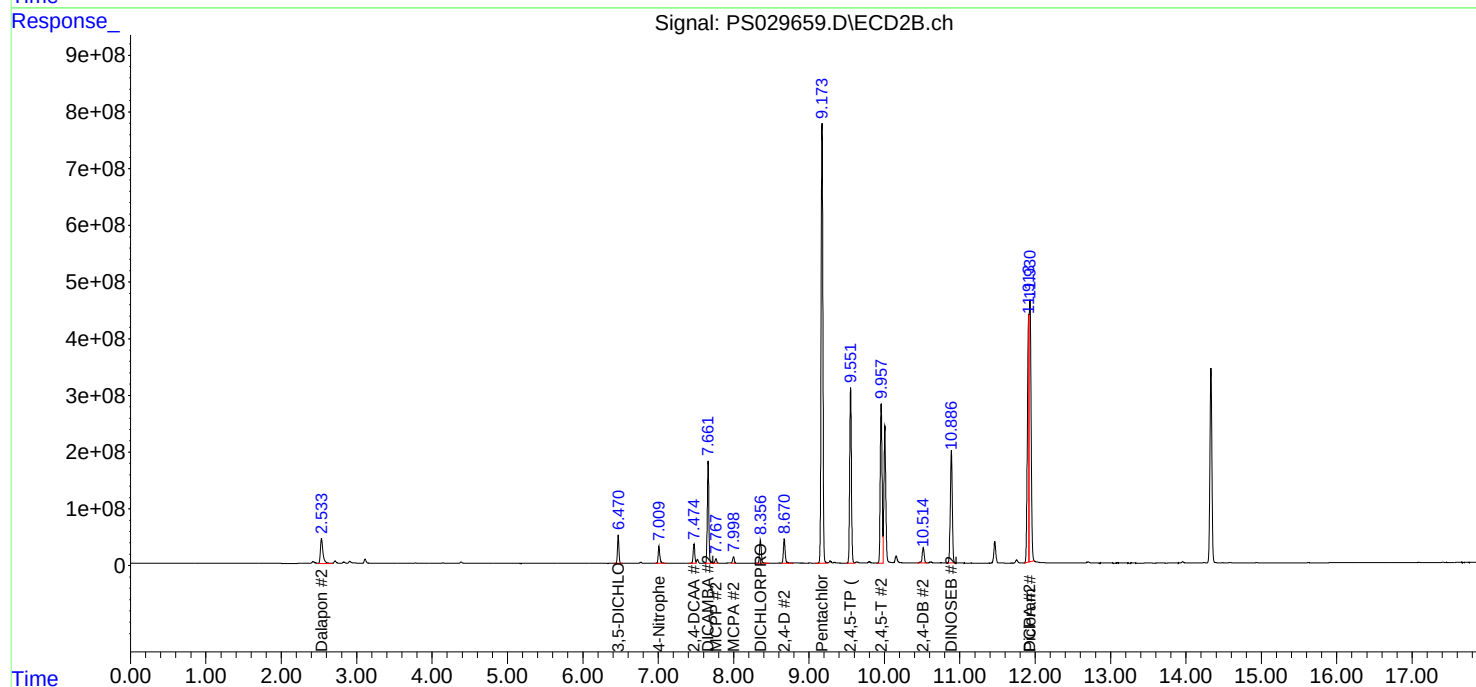
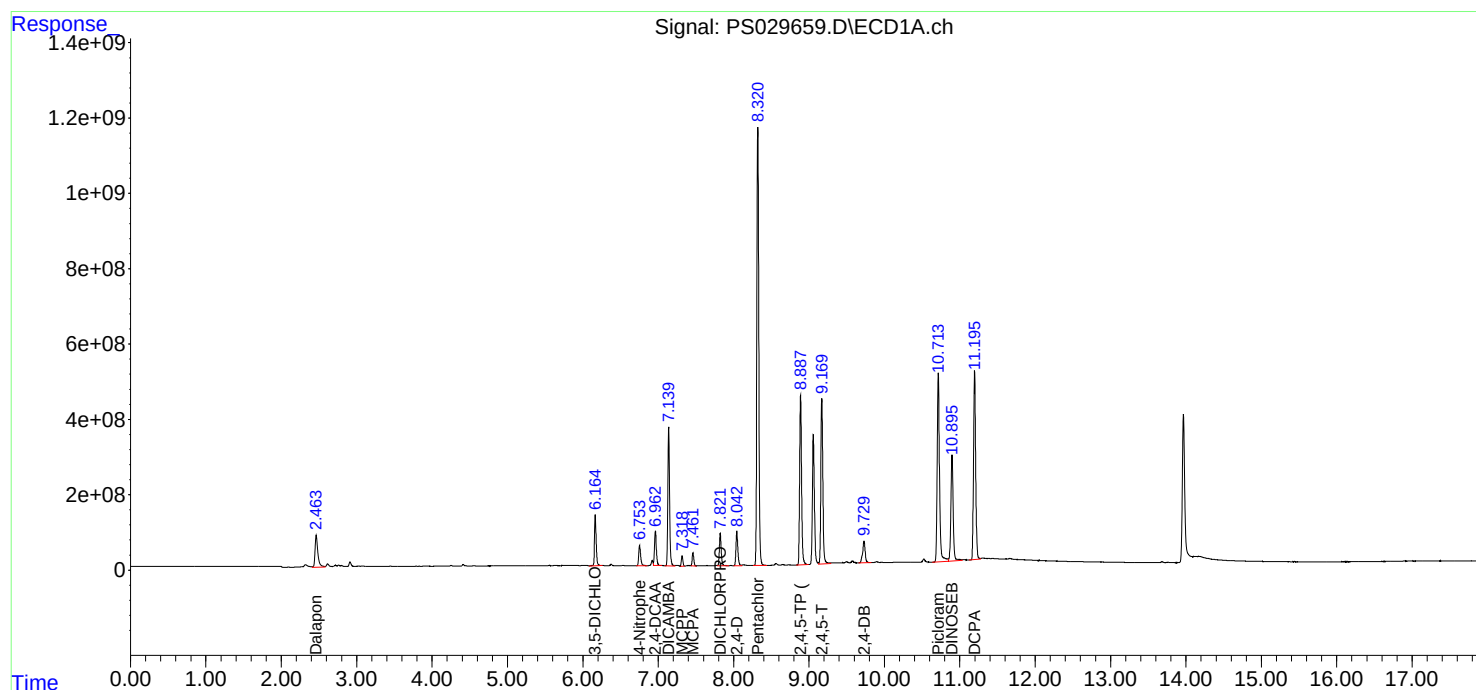
APPROVED

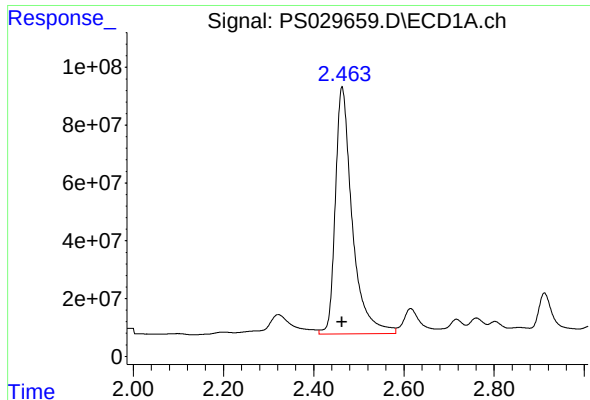
Reviewed By :Abdul Mirza 04/03/2025

Supervised By :mohammad ahmed 04/04/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 02 21:47:20 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
Quant Title : 8080.M
QLast Update : Wed Apr 02 21:45:08 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm





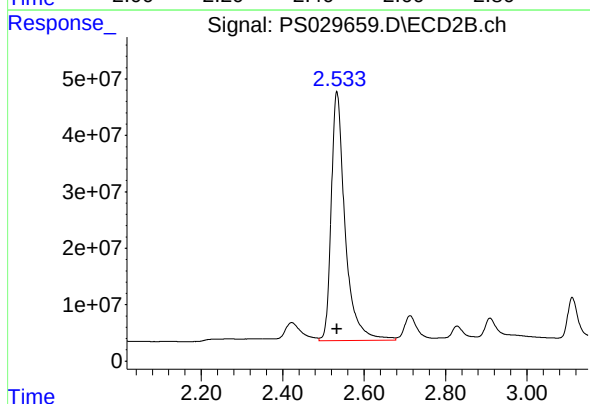
#1 Dalapon

R.T.: 2.463 min
Delta R.T.: 0.000 min
Response: 2228384729
Conc: 682.50 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC750

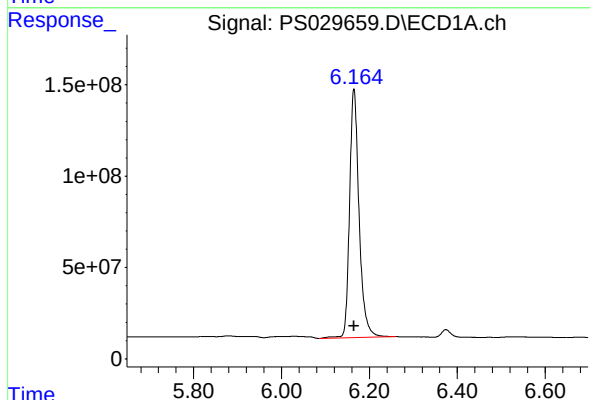
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/03/2025
Supervised By :mohammad ahmed 04/04/2025



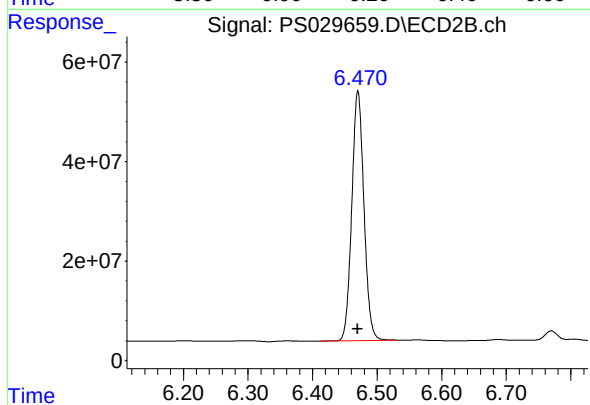
#1 Dalapon

R.T.: 2.533 min
Delta R.T.: 0.000 min
Response: 1046813946
Conc: 682.50 ng/ml



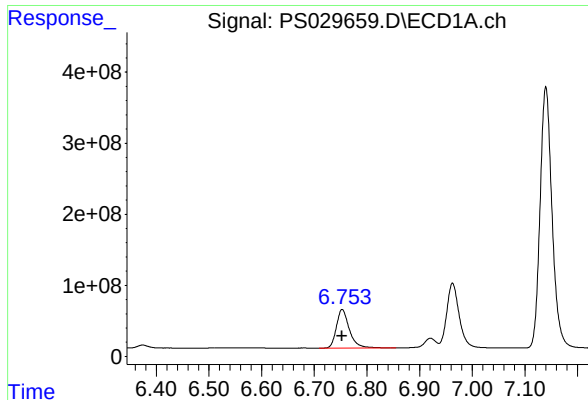
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.165 min
Delta R.T.: 0.000 min
Response: 2051257915
Conc: 697.50 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.470 min
Delta R.T.: 0.000 min
Response: 654341240
Conc: 697.50 ng/ml



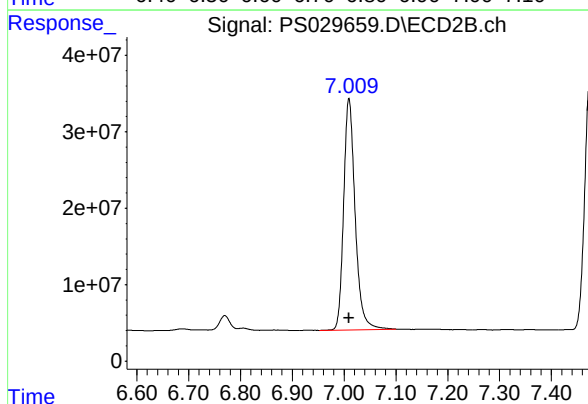
#3 4-Nitrophenol

R.T.: 6.753 min
Delta R.T.: 0.000 min
Response: 929448251
Conc: 682.50 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC750

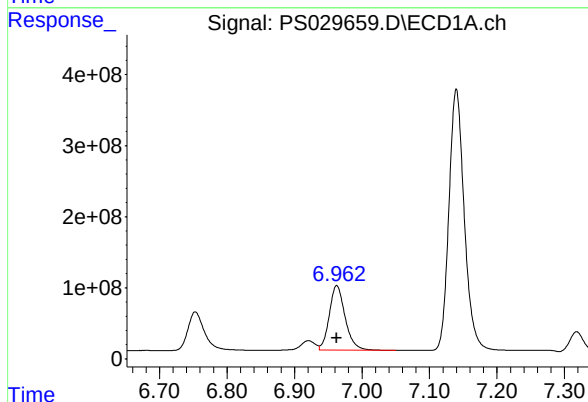
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/03/2025
Supervised By :mohammad ahmed 04/04/2025



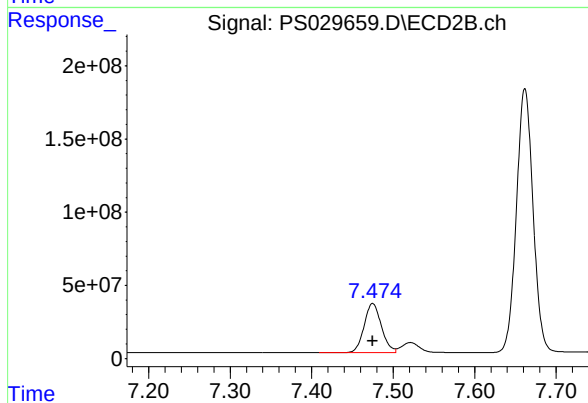
#3 4-Nitrophenol

R.T.: 7.009 min
Delta R.T.: 0.000 min
Response: 466483862
Conc: 682.50 ng/ml



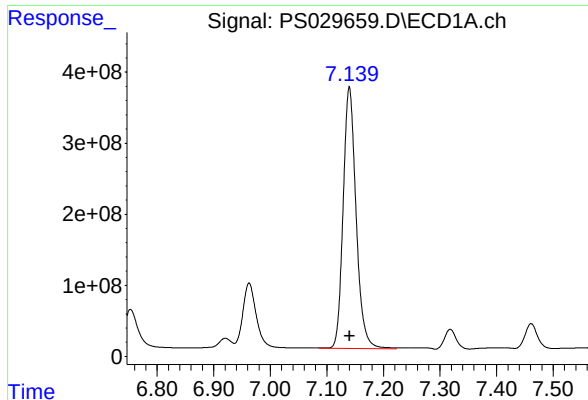
#4 2,4-DCAA

R.T.: 6.963 min
Delta R.T.: 0.000 min
Response: 1484503787
Conc: 750.00 ng/ml



#4 2,4-DCAA

R.T.: 7.475 min
Delta R.T.: 0.000 min
Response: 495076303
Conc: 750.00 ng/ml



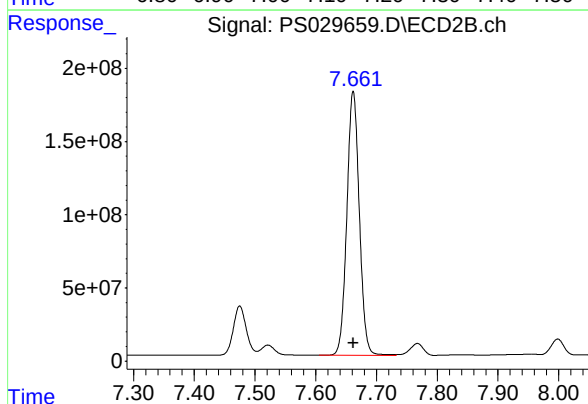
#5 DICAMBA

R.T.: 7.140 min
Delta R.T.: 0.000 min
Response: 5837239041
Conc: 705.00 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC750

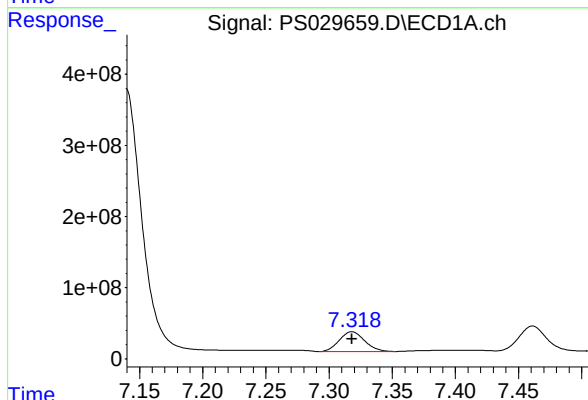
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/03/2025
Supervised By :mohammad ahmed 04/04/2025



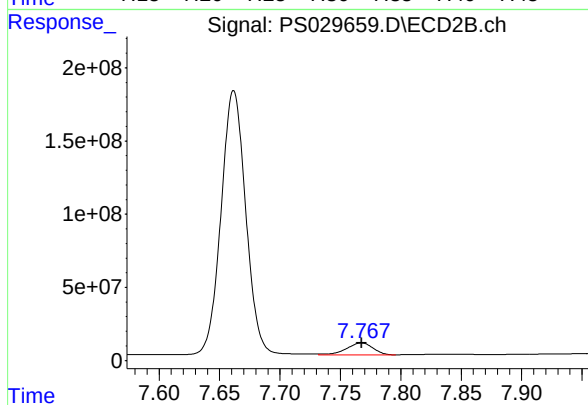
#5 DICAMBA

R.T.: 7.662 min
Delta R.T.: 0.000 min
Response: 2574833457
Conc: 705.00 ng/ml



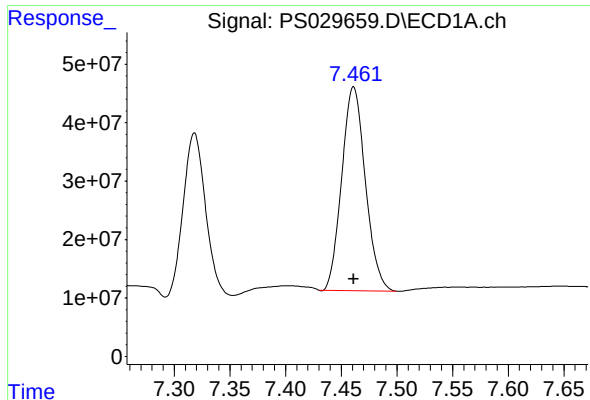
#6 MCPP

R.T.: 7.318 min
Delta R.T.: 0.000 min
Response: 388273166
Conc: 70.50 ug/ml



#6 MCPP

R.T.: 7.767 min
Delta R.T.: 0.000 min
Response: 123459301
Conc: 70.50 ug/ml



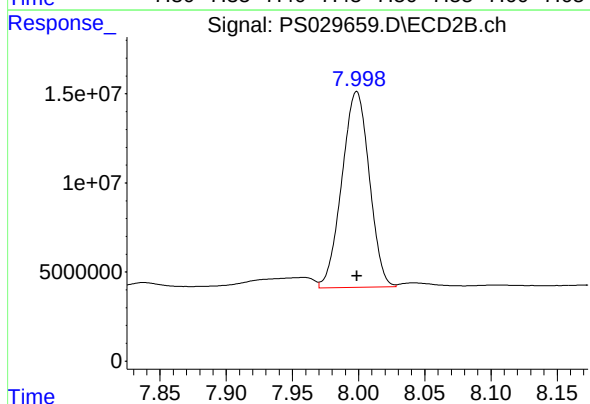
#7 MCPA

R.T.: 7.461 min
Delta R.T.: 0.000 min
Response: 514646256
Conc: 69.75 ug/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC750

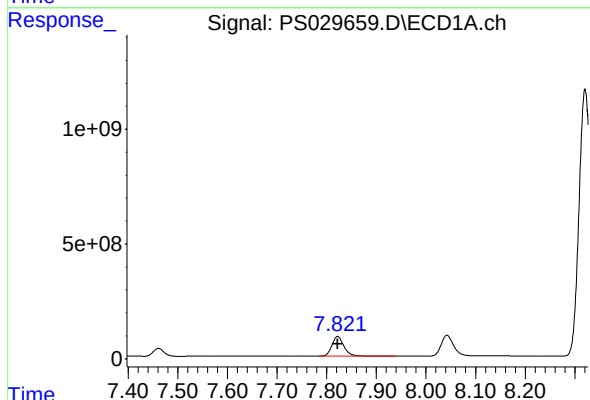
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/03/2025
Supervised By :mohammad ahmed 04/04/2025



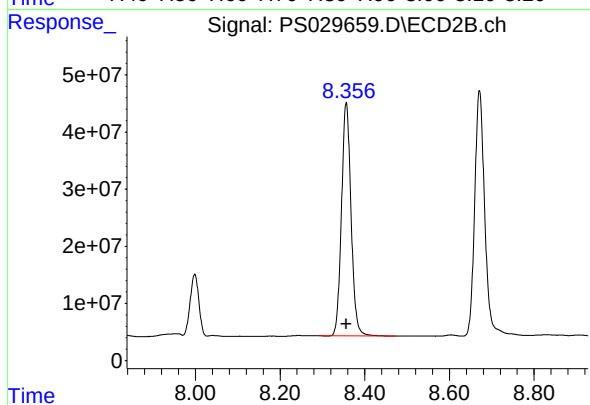
#7 MCPA

R.T.: 7.999 min
Delta R.T.: 0.000 min
Response: 158487737
Conc: 69.75 ug/ml



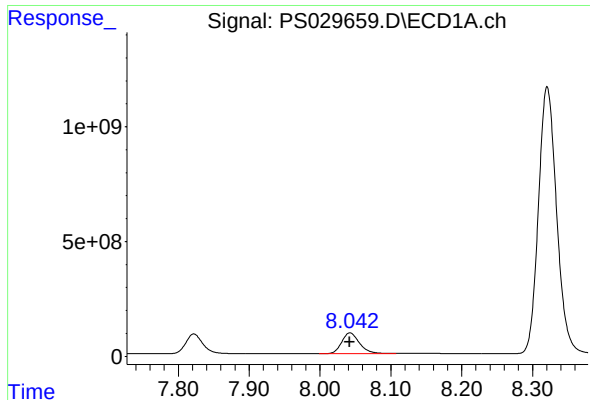
#8 DICHLORPROP

R.T.: 7.822 min
Delta R.T.: 0.000 min
Response: 1458089230
Conc: 705.00 ng/ml



#8 DICHLORPROP

R.T.: 8.356 min
Delta R.T.: 0.000 min
Response: 638070319
Conc: 705.00 ng/ml



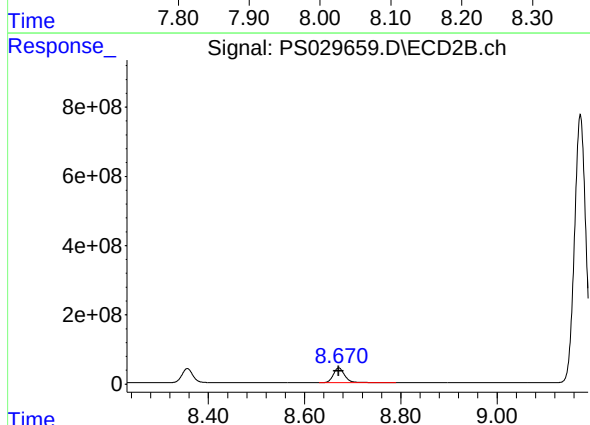
#9 2,4-D

R.T.: 8.042 min
Delta R.T.: 0.000 min
Response: 1598642604
Conc: 705.00 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC750

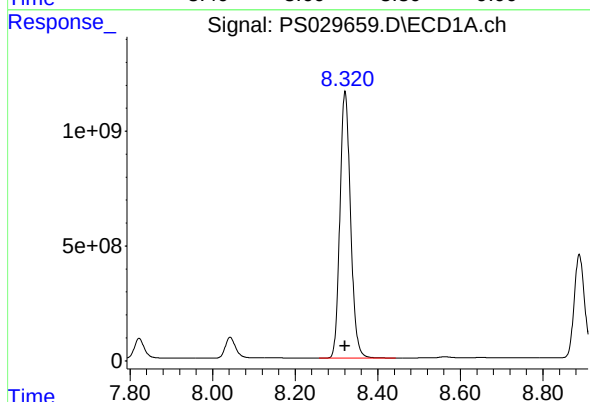
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/03/2025
Supervised By :mohammad ahmed 04/04/2025



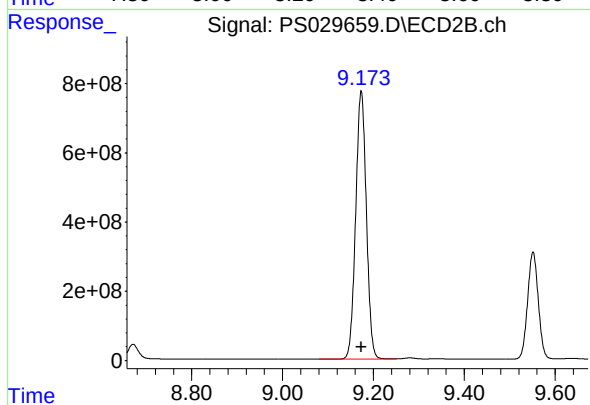
#9 2,4-D

R.T.: 8.671 min
Delta R.T.: 0.000 min
Response: 707133970
Conc: 705.00 ng/ml



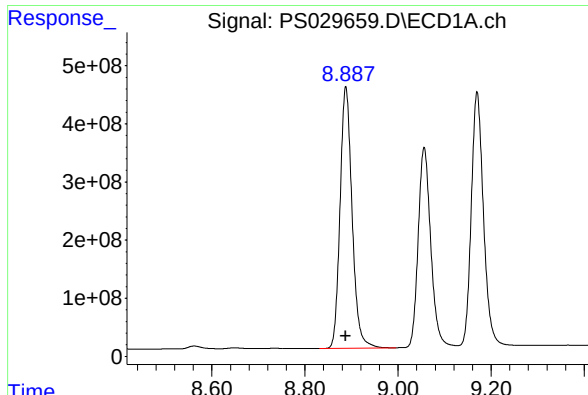
#10 Pentachlorophenol

R.T.: 8.321 min
Delta R.T.: 0.000 min
Response: 20714283824
Conc: 712.50 ng/ml



#10 Pentachlorophenol

R.T.: 9.173 min
Delta R.T.: 0.000 min
Response: 12625547070
Conc: 712.50 ng/ml



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

R.T.: 8.888 min
Delta R.T.: 0.000 min
Response: 8065771048
Conc: 712.50 ng/ml

Instrument :

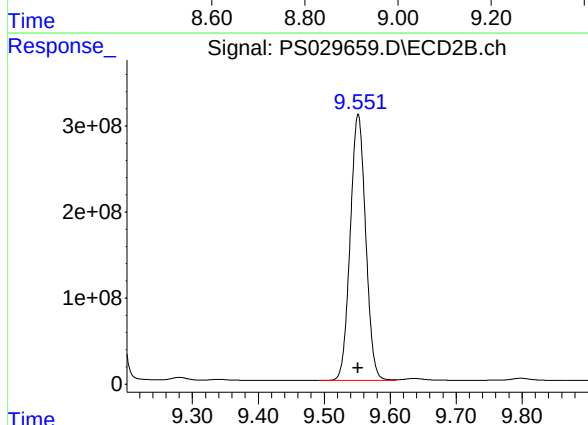
ECD_S

ClientSampleId :

HSTDICC750

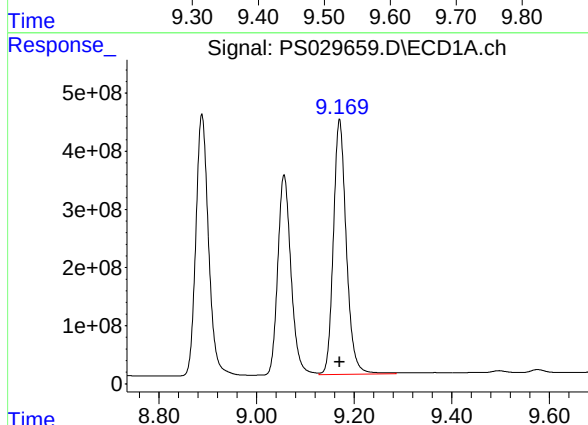
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/03/2025
Supervised By :mohammad ahmed 04/04/2025



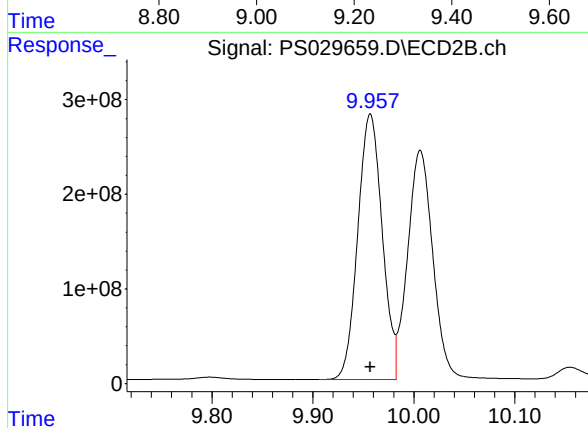
#11 2,4,5-TP (SILVEX)

R.T.: 9.551 min
Delta R.T.: 0.000 min
Response: 5027671480
Conc: 712.50 ng/ml



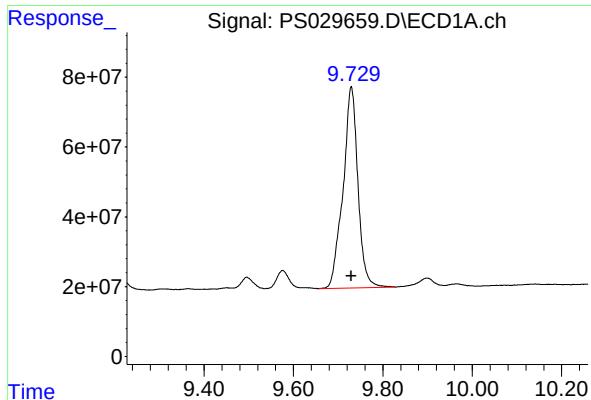
#12 2,4,5-T

R.T.: 9.170 min
Delta R.T.: 0.000 min
Response: 8063347000
Conc: 712.50 ng/ml



#12 2,4,5-T

R.T.: 9.957 min
Delta R.T.: 0.000 min
Response: 4708725173
Conc: 712.50 ng/ml



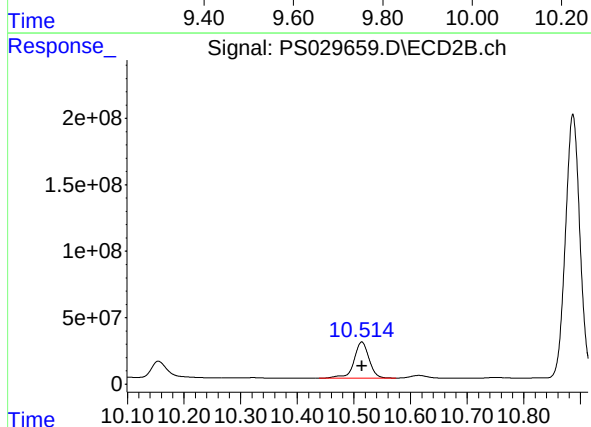
#13 2,4-DB

R.T.: 9.729 min
Delta R.T.: 0.000 min
Response: 1337934625
Conc: 712.50 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC750

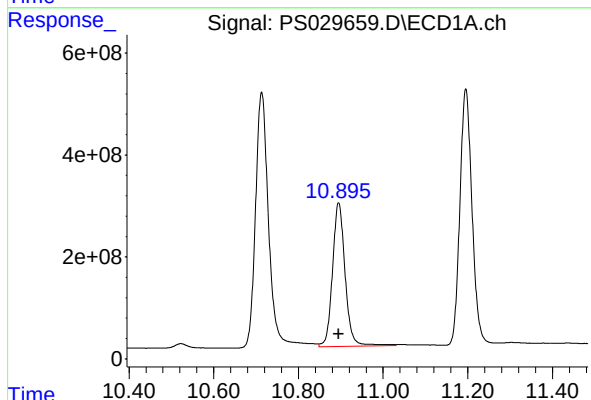
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/03/2025
Supervised By :mohammad ahmed 04/04/2025



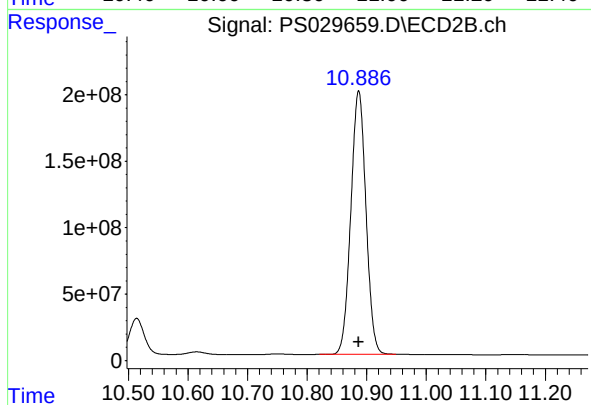
#13 2,4-DB

R.T.: 10.514 min
Delta R.T.: 0.000 min
Response: 509432895
Conc: 712.50 ng/ml



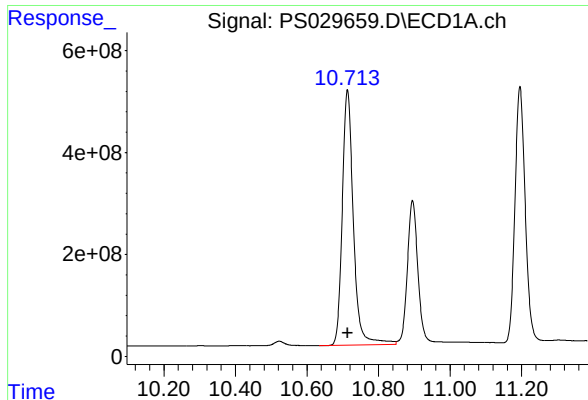
#14 DINOSEB

R.T.: 10.895 min
Delta R.T.: 0.000 min
Response: 5848156275
Conc: 705.00 ng/ml



#14 DINOSEB

R.T.: 10.887 min
Delta R.T.: 0.000 min
Response: 3491268927
Conc: 705.00 ng/ml



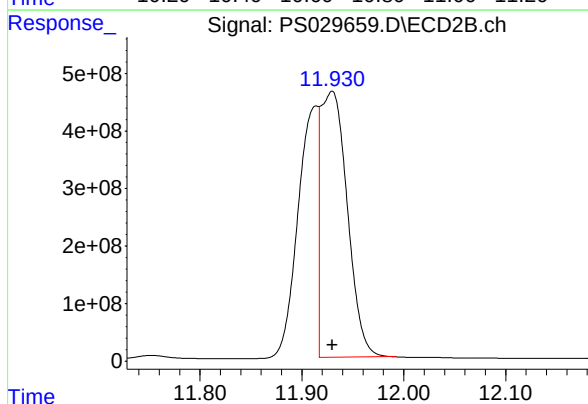
#15 Picloram

R.T.: 10.713 min
Delta R.T.: 0.000 min
Response: 10818873063
Conc: 712.50 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC750

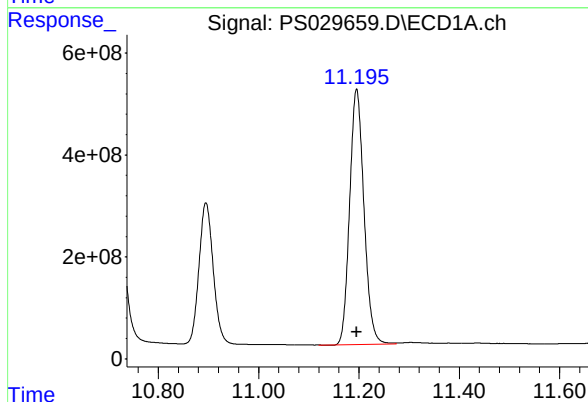
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/03/2025
Supervised By :mohammad ahmed 04/04/2025



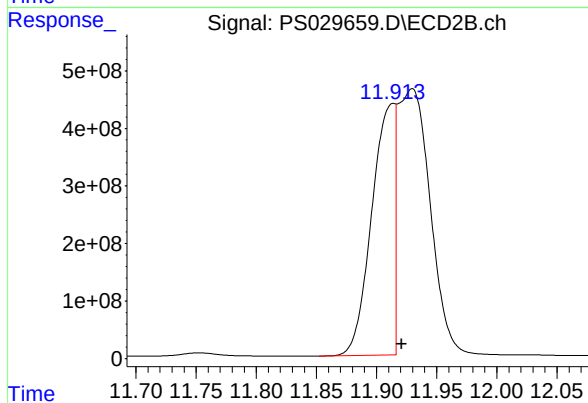
#15 Picloram

R.T.: 11.930 min
Delta R.T.: 0.000 min
Response: 8266209349
Conc: 745.59 ng/ml m



#16 DCPA

R.T.: 11.195 min
Delta R.T.: 0.000 min
Response: 9915081854
Conc: 720.00 ng/ml



#16 DCPA

R.T.: 11.913 min
Delta R.T.: -0.007 min
Response: 5912584742
Conc: 588.31 ng/ml m

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS040225\
 Data File : PS029660.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 02 Apr 2025 19:32
 Operator : AR\AJ
 Sample : HSTDICC1000
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDICC1000

Manual Integrations
 APPROVED

Reviewed By :Abdul Mirza 04/03/2025
 Supervised By :mohammad ahmed 04/04/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Apr 02 21:47:50 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
 Quant Title : 8080.M
 QLast Update : Wed Apr 02 21:45:08 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	6.963	7.475	1949.0E6	658.6E6	984.687	997.781
Target Compounds							
1) T	Dalapon	2.463	2.533	2931.9E6	1379.7E6	897.971	899.538
2) T	3,5-DICHL...	6.165	6.471	2698.4E6	869.7E6	917.551	927.061
3) T	4-Nitroph...	6.753	7.010	1229.4E6	617.9E6	902.763	903.979
5) T	DICAMBA	7.140	7.662	7768.3E6	3498.9E6	938.223	958.015
6) T	MCPD	7.319	7.769	543.2E6	167.9E6	98.636	95.855
7) T	MCPA	7.463	8.001	699.2E6	216.5E6	94.768	95.274
8) T	DICHLORPROP	7.822	8.357	1904.9E6	846.0E6	921.024	934.778
9) T	2,4-D	8.043	8.671	2112.0E6	943.5E6	931.373	940.657
10) T	Pentachlo...	8.322	9.174	27238.3E6	16770.4E6	936.904	946.407
11) T	2,4,5-TP ...	8.888	9.552	10687.3E6	6736.3E6	944.073	954.635
12) T	2,4,5-T	9.170	9.957	10696.9E6	6311.3E6	945.212	954.996
13) T	2,4-DB	9.730	10.515	1781.8E6	690.0E6	948.880	965.102
14) T	DINOSEB	10.895	10.887	7700.3E6	4684.3E6	928.272	945.920
15) T	Picloram	10.713	11.929	14447.2E6	12036.9E6	951.454	1085.696m
16) T	DCPA	11.196	11.916	13124.1E6	7801.9E6	953.028	776.299m

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS040225\
Data File : PS029660.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 02 Apr 2025 19:32
Operator : AR\AJ
Sample : HSTDICC1000
Misc :
ALS Vial : 9 Sample Multiplier: 1

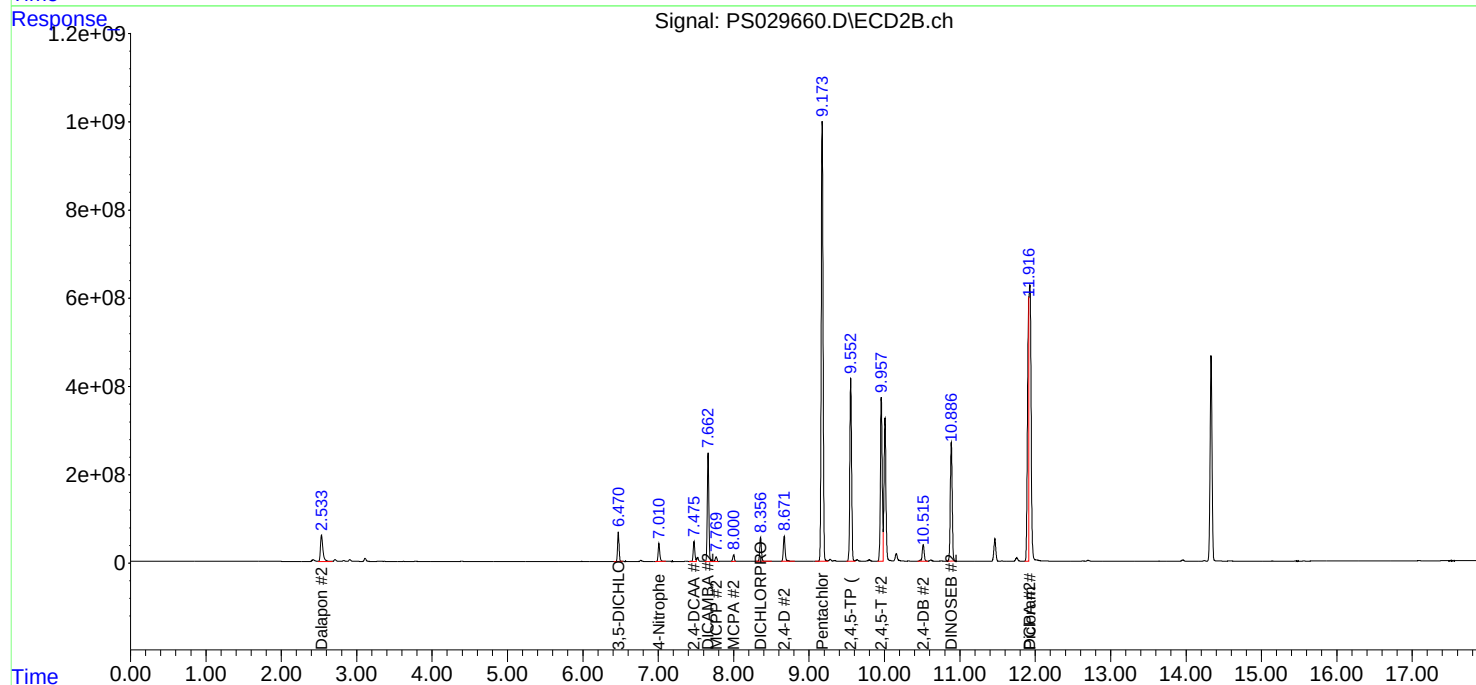
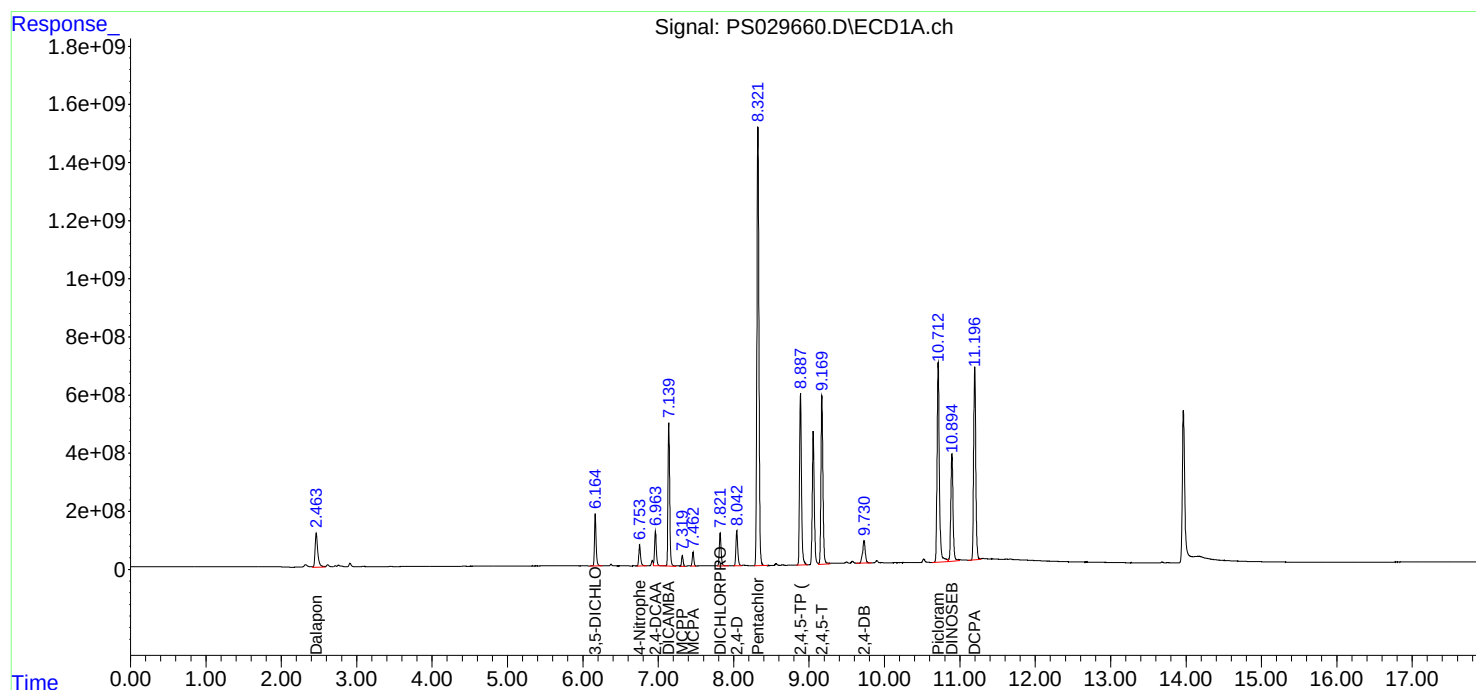
Instrument :
ECD_S
ClientSampleId :
HSTDICC1000

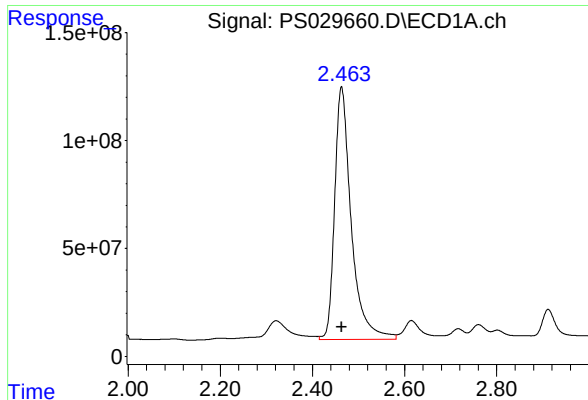
Manual Integrations
APPROVED

Reviewed By : Abdul Mirza 04/03/2025
Supervised By : mohammad ahmed 04/04/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 02 21:47:50 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
Quant Title : 8080.M
QLast Update : Wed Apr 02 21:45:08 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm





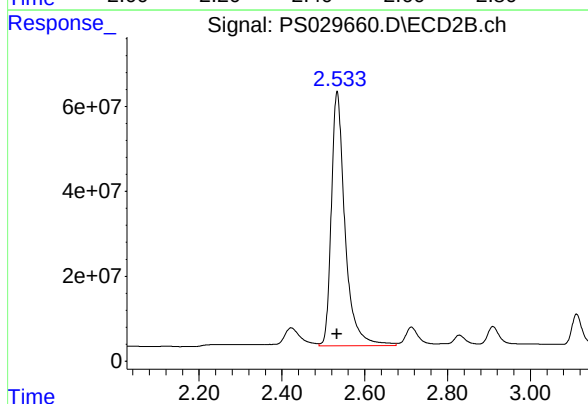
#1 Dalapon

R.T.: 2.463 min
Delta R.T.: 0.000 min
Response: 2931904194
Conc: 897.97 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000

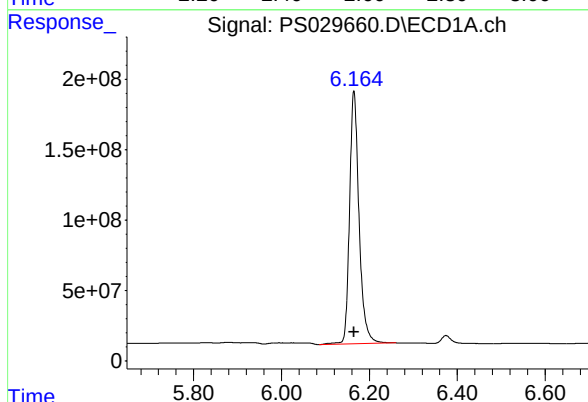
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/03/2025
Supervised By :mohammad ahmed 04/04/2025



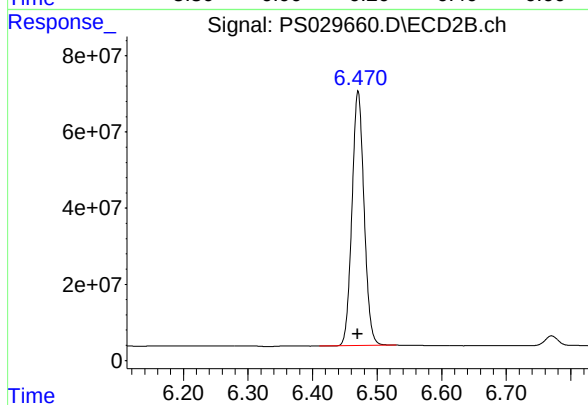
#1 Dalapon

R.T.: 2.533 min
Delta R.T.: 0.000 min
Response: 1379704778
Conc: 899.54 ng/ml



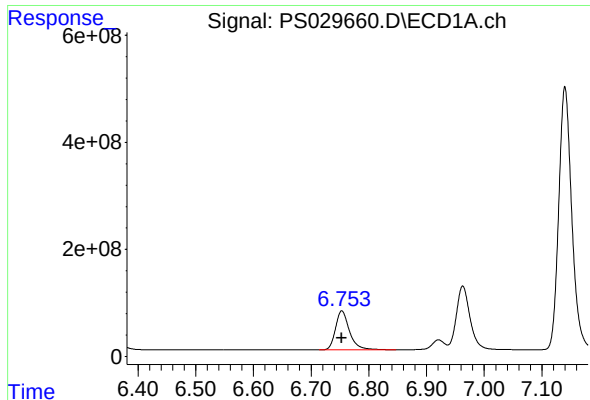
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.165 min
Delta R.T.: 0.000 min
Response: 2698400361
Conc: 917.55 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.471 min
Delta R.T.: 0.000 min
Response: 869698084
Conc: 927.06 ng/ml



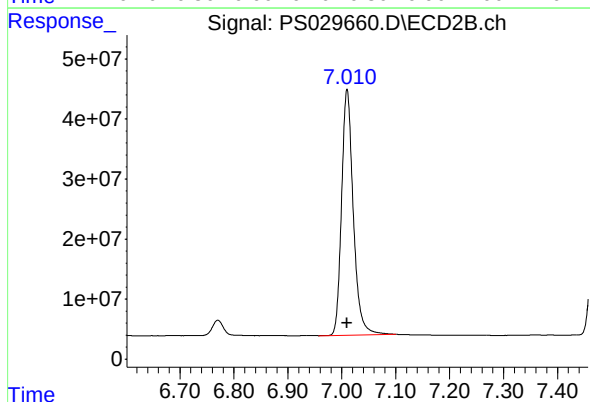
#3 4-Nitrophenol

R.T.: 6.753 min
Delta R.T.: 0.000 min
Response: 1229408712
Conc: 902.76 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000

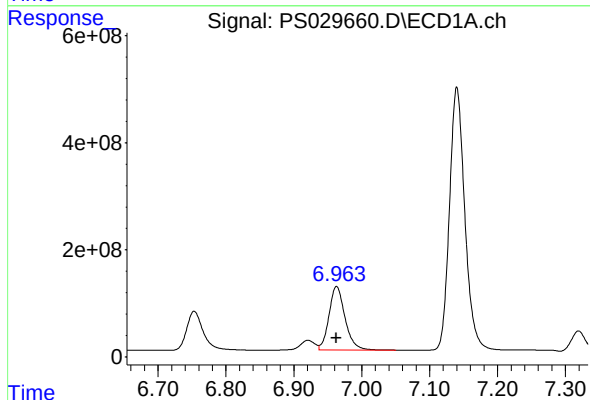
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/03/2025
Supervised By :mohammad ahmed 04/04/2025



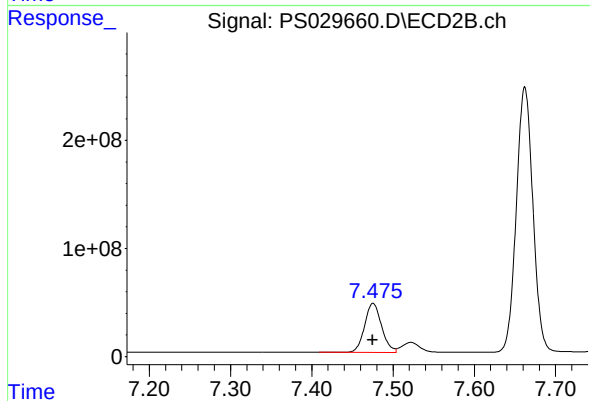
#3 4-Nitrophenol

R.T.: 7.010 min
Delta R.T.: 0.000 min
Response: 617862993
Conc: 903.98 ng/ml



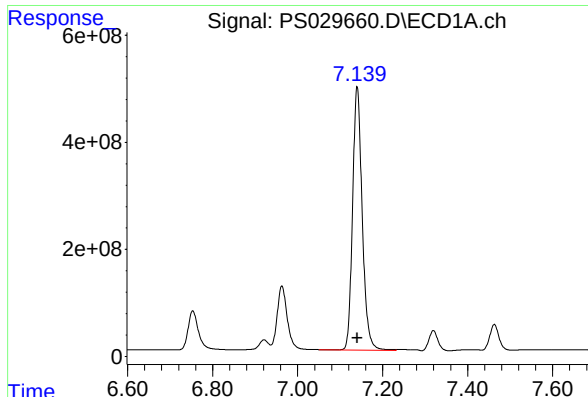
#4 2,4-DCAA

R.T.: 6.963 min
Delta R.T.: 0.000 min
Response: 1949027966
Conc: 984.69 ng/ml



#4 2,4-DCAA

R.T.: 7.475 min
Delta R.T.: 0.000 min
Response: 658637284
Conc: 997.78 ng/ml



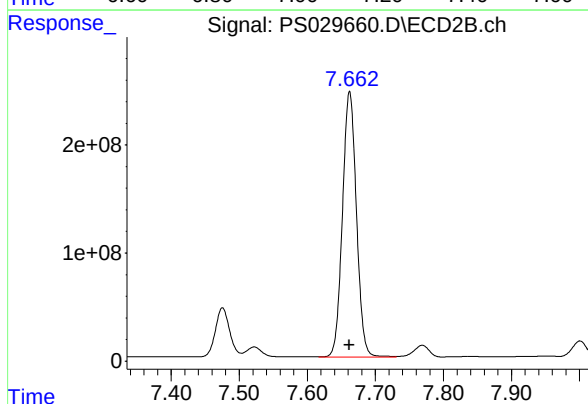
#5 DICAMBA

R.T.: 7.140 min
Delta R.T.: 0.000 min
Response: 7768270498
Conc: 938.22 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000

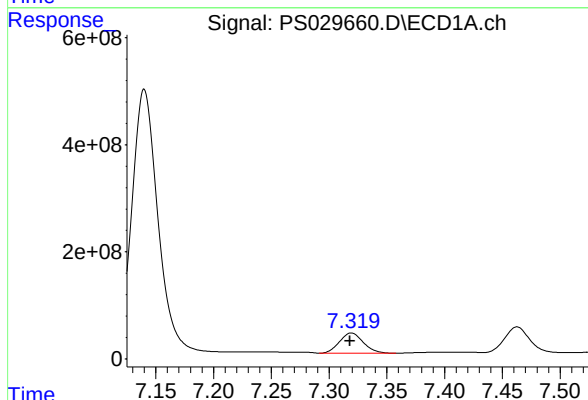
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/03/2025
Supervised By :mohammad ahmed 04/04/2025



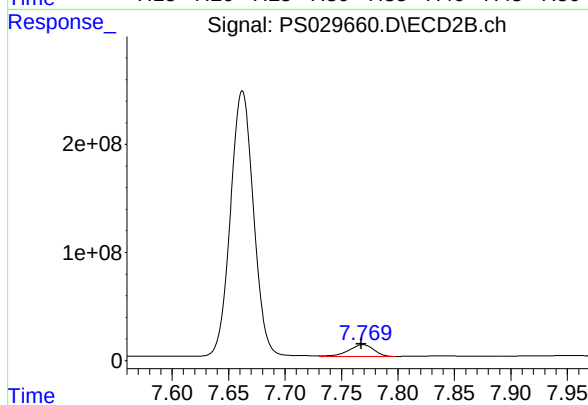
#5 DICAMBA

R.T.: 7.662 min
Delta R.T.: 0.000 min
Response: 3498905684
Conc: 958.01 ng/ml



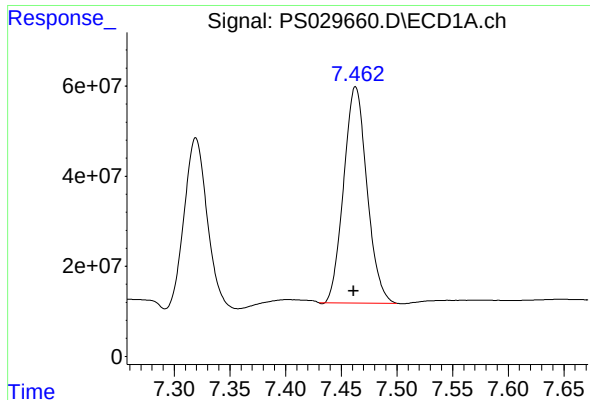
#6 MCPP

R.T.: 7.319 min
Delta R.T.: 0.001 min
Response: 543229329
Conc: 98.64 ug/ml



#6 MCPP

R.T.: 7.769 min
Delta R.T.: 0.002 min
Response: 167861106
Conc: 95.86 ug/ml



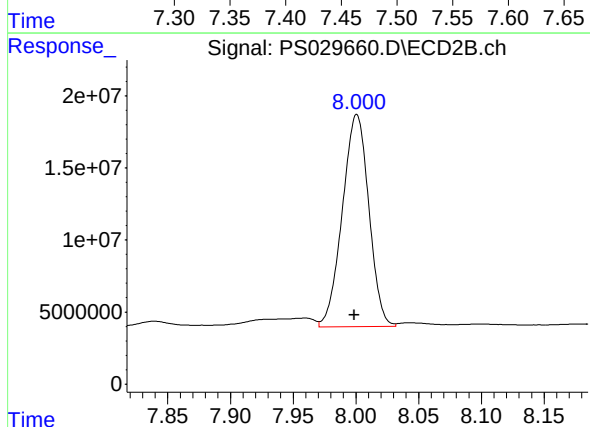
#7 MCPA

R.T.: 7.463 min
Delta R.T.: 0.002 min
Response: 699238388
Conc: 94.77 ug/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000

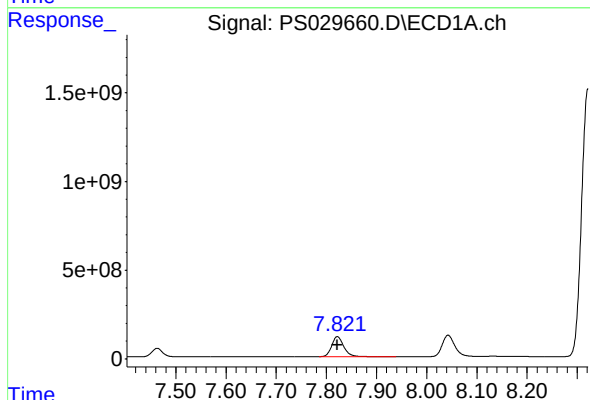
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/03/2025
Supervised By :mohammad ahmed 04/04/2025



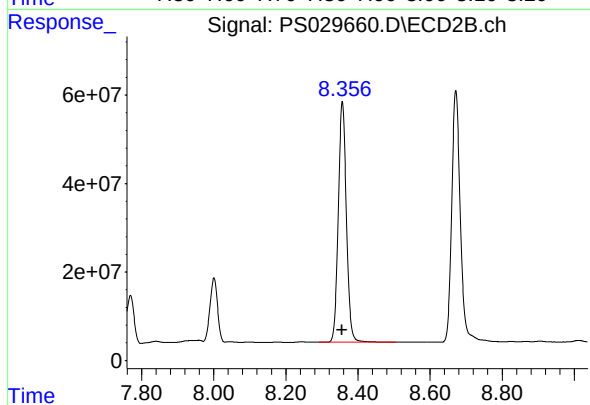
#7 MCPA

R.T.: 8.001 min
Delta R.T.: 0.002 min
Response: 216483308
Conc: 95.27 ug/ml



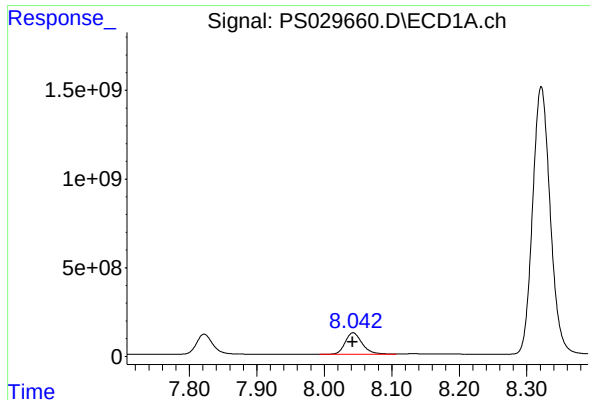
#8 DICHLORPROP

R.T.: 7.822 min
Delta R.T.: 0.000 min
Response: 1904873098
Conc: 921.02 ng/ml



#8 DICHLORPROP

R.T.: 8.357 min
Delta R.T.: 0.000 min
Response: 846033877
Conc: 934.78 ng/ml



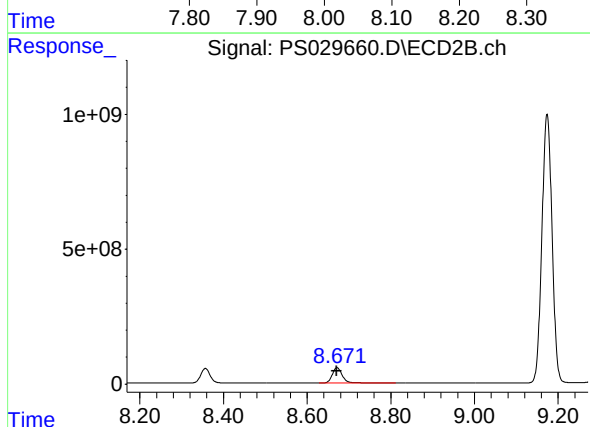
#9 2,4-D

R.T.: 8.043 min
Delta R.T.: 0.000 min
Response: 2111960224
Conc: 931.37 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000

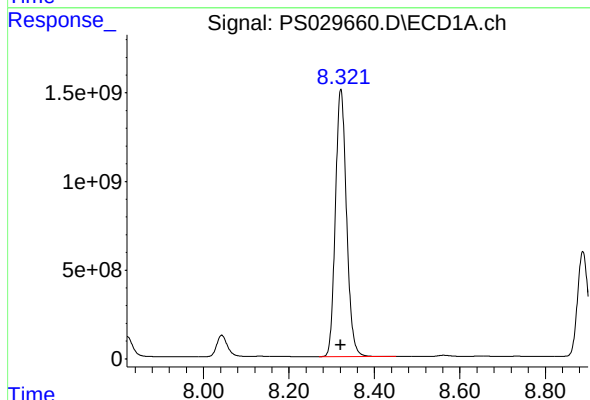
Manual Integrations
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Supervised By :mohammad ahmed 04/04/2025



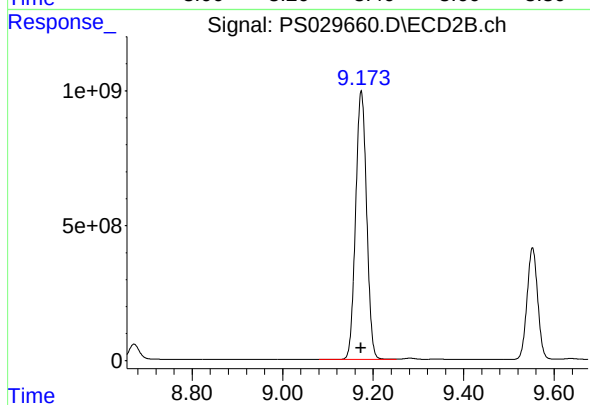
#9 2,4-D

R.T.: 8.671 min
Delta R.T.: 0.000 min
Response: 943504117
Conc: 940.66 ng/ml



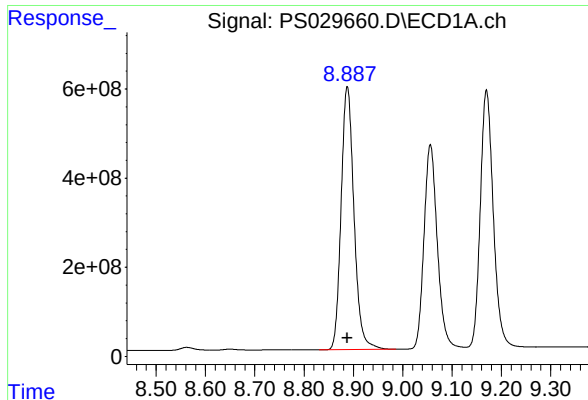
#10 Pentachlorophenol

R.T.: 8.322 min
Delta R.T.: 0.000 min
Response: 27238310436
Conc: 936.90 ng/ml



#10 Pentachlorophenol

R.T.: 9.174 min
Delta R.T.: 0.000 min
Response: 16770397791
Conc: 946.41 ng/ml



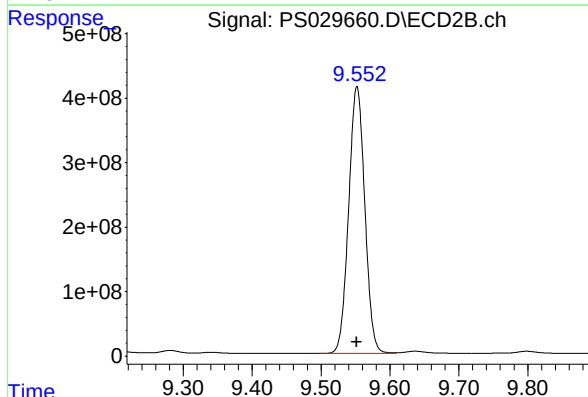
#11 2,4,5-TP (SILVEX)

R.T.: 8.888 min
Delta R.T.: 0.000 min
Response: 10687262604
Conc: 944.07 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000

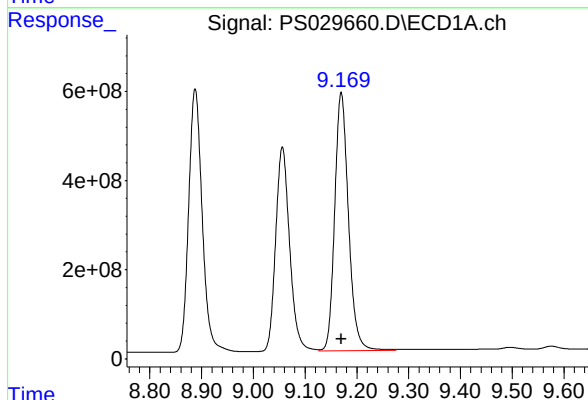
Manual Integrations
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Supervised By :mohammad ahmed 04/04/2025



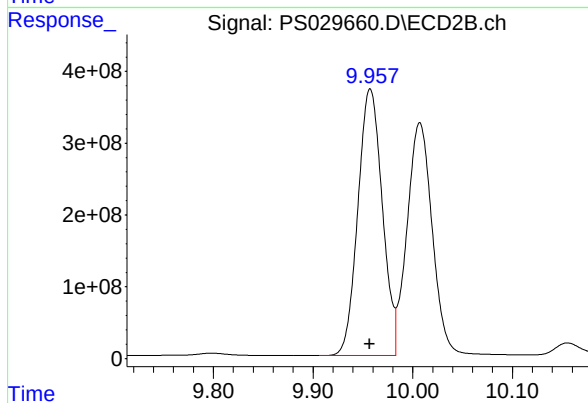
#11 2,4,5-TP (SILVEX)

R.T.: 9.552 min
Delta R.T.: 0.000 min
Response: 6736269494
Conc: 954.64 ng/ml



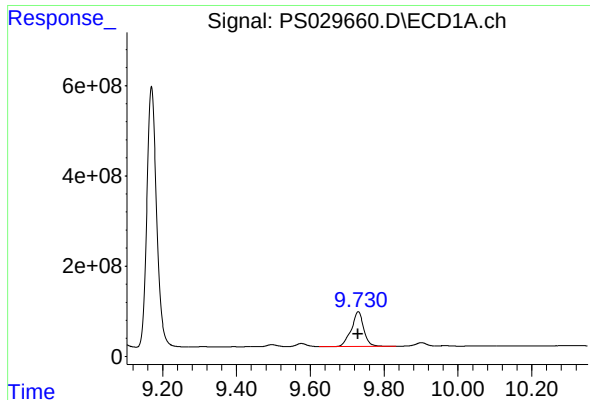
#12 2,4,5-T

R.T.: 9.170 min
Delta R.T.: 0.000 min
Response: 10696948094
Conc: 945.21 ng/ml



#12 2,4,5-T

R.T.: 9.957 min
Delta R.T.: 0.000 min
Response: 6311320366
Conc: 955.00 ng/ml



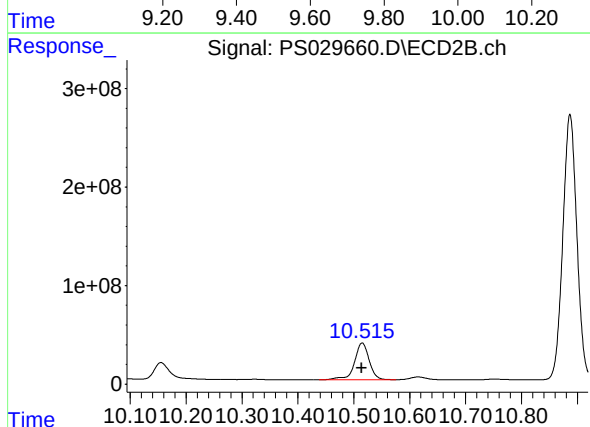
#13 2,4-DB

R.T.: 9.730 min
Delta R.T.: 0.000 min
Response: 1781810233
Conc: 948.88 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000

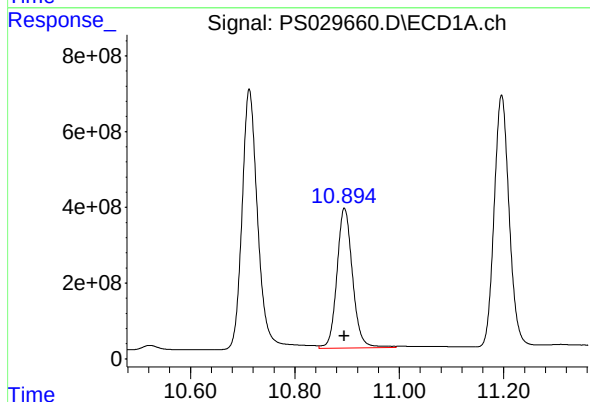
Manual Integrations
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Reviewed By :Abdul Mirza 04/03/2025
Supervised By :mohammad ahmed 04/04/2025



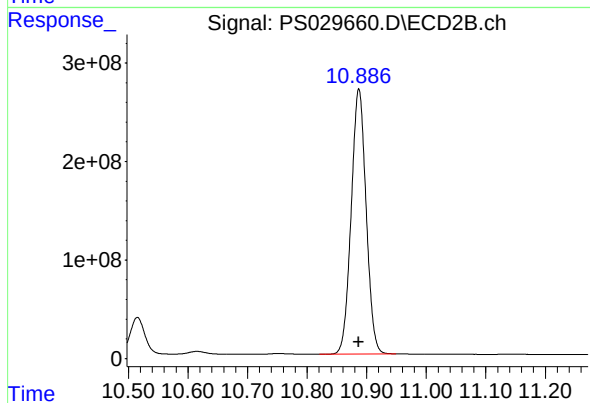
#13 2,4-DB

R.T.: 10.515 min
Delta R.T.: 0.001 min
Response: 690041535
Conc: 965.10 ng/ml



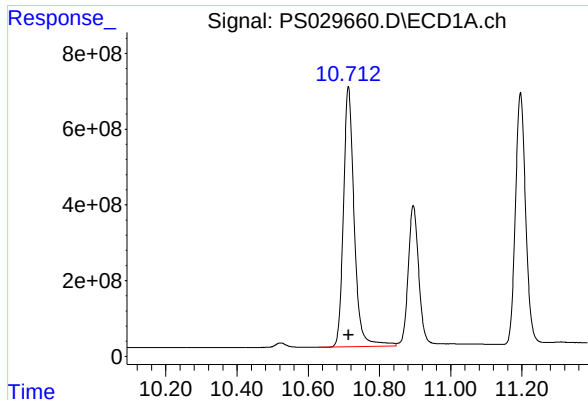
#14 DINOSEB

R.T.: 10.895 min
Delta R.T.: 0.000 min
Response: 7700250924
Conc: 928.27 ng/ml



#14 DINOSEB

R.T.: 10.887 min
Delta R.T.: 0.000 min
Response: 4684339661
Conc: 945.92 ng/ml



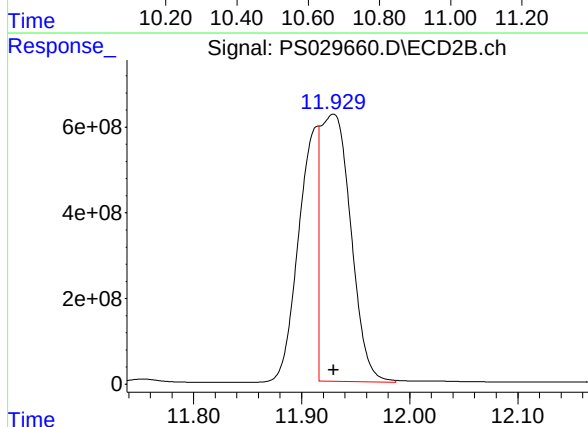
#15 Picloram

R.T.: 10.713 min
Delta R.T.: 0.000 min
Response: 14447241965
Conc: 951.45 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000

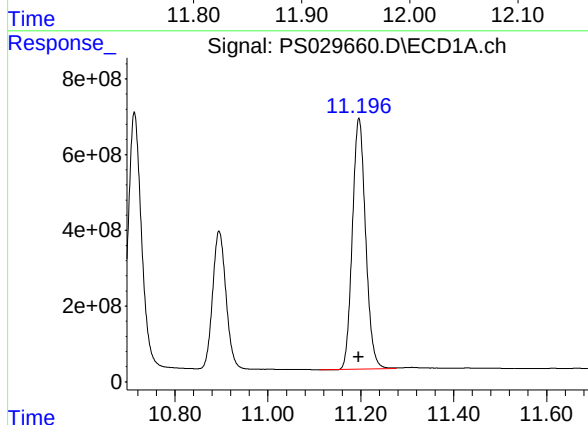
Manual Integrations
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Supervised By :mohammad ahmed 04/04/2025



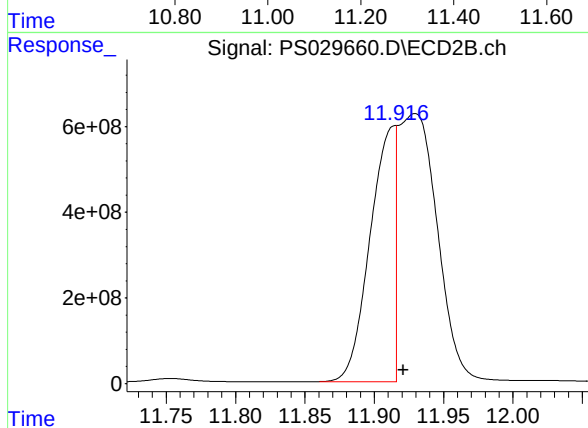
#15 Picloram

R.T.: 11.929 min
Delta R.T.: 0.000 min
Response: 12036880251
Conc: 1085.70 ng/ml m



#16 DCPA

R.T.: 11.196 min
Delta R.T.: 0.000 min
Response: 13124092426
Conc: 953.03 ng/ml



#16 DCPA

R.T.: 11.916 min
Delta R.T.: -0.005 min
Response: 7801908533
Conc: 776.30 ng/ml m

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS040225\
 Data File : PS029661.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 02 Apr 2025 20:44
 Operator : AR\AJ
 Sample : HSTDICC1500
 Misc :
 ALS Vial : 12 Sample Multiplier: 1

Instrument :

ECD_S

ClientSampleId :

HSTDICC1500

Manual Integrations**APPROVED**

Reviewed By :Abdul Mirza 04/03/2025

Supervised By :mohammad ahmed 04/04/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Apr 02 21:51:14 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
 Quant Title : 8080.M
 QLast Update : Wed Apr 02 21:45:08 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	6.962	7.475	2841.0E6	981.8E6	1435.303	1487.406
Target Compounds							
1) T	Dalapon	2.462	2.532	4108.4E6	1942.9E6	1258.290	1266.710
2) T	3,5-DICHL...	6.164	6.469	3928.4E6	1296.2E6	1335.806	1381.746
3) T	4-Nitroph...	6.752	7.009	1875.7E6	929.8E6	1377.303	1360.341
5) T	DICAMBA	7.139	7.661	10886.5E6	5336.9E6	1314.829	1461.273
6) T	MCPD	7.321	7.771	837.1E6	239.9E6	151.995	136.979
7) T	MCPA	7.464	8.003	1077.4E6	321.6E6	146.013	141.540
8) T	DICHLORPROP	7.821	8.356	2998.8E6	1359.0E6	1449.942	1501.547
9) T	2,4-D	8.041	8.670	3352.7E6	1534.4E6	1478.541	1529.798
10) T	Pentachlo...	8.320	9.173	41860.3E6	24798.8E6	1439.850	1399.475
11) T	2,4,5-TP ...	8.887	9.551	15973.5E6	10314.3E6	1411.040	1461.696
12) T	2,4,5-T	9.169	9.956	15670.7E6	9380.7E6	1384.705	1419.436
13) T	2,4-DB	9.729	10.514	2397.1E6	1045.2E6	1276.563	1461.825
14) T	DINOSEB	10.894	10.886	11584.2E6	7136.0E6	1396.490	1440.994
15) T	Picloram	10.712	11.927	21908.2E6	17647.2E6	1442.814	1591.730m
16) T	DCPA	11.195	11.918	19405.2E6	13389.7E6	1409.141	1332.294m

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS040225\
Data File : PS029661.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 02 Apr 2025 20:44
Operator : AR\AJ
Sample : HSTDICC1500
Misc :
ALS Vial : 12 Sample Multiplier: 1

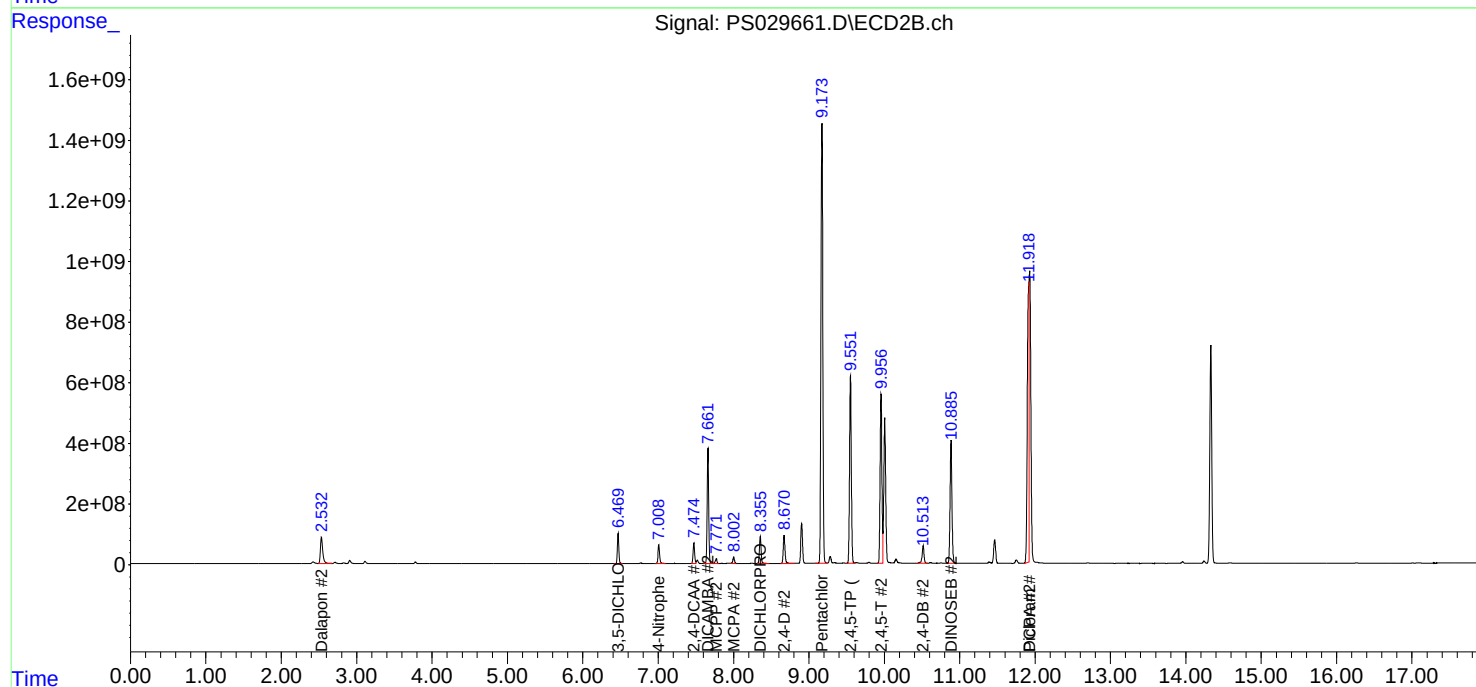
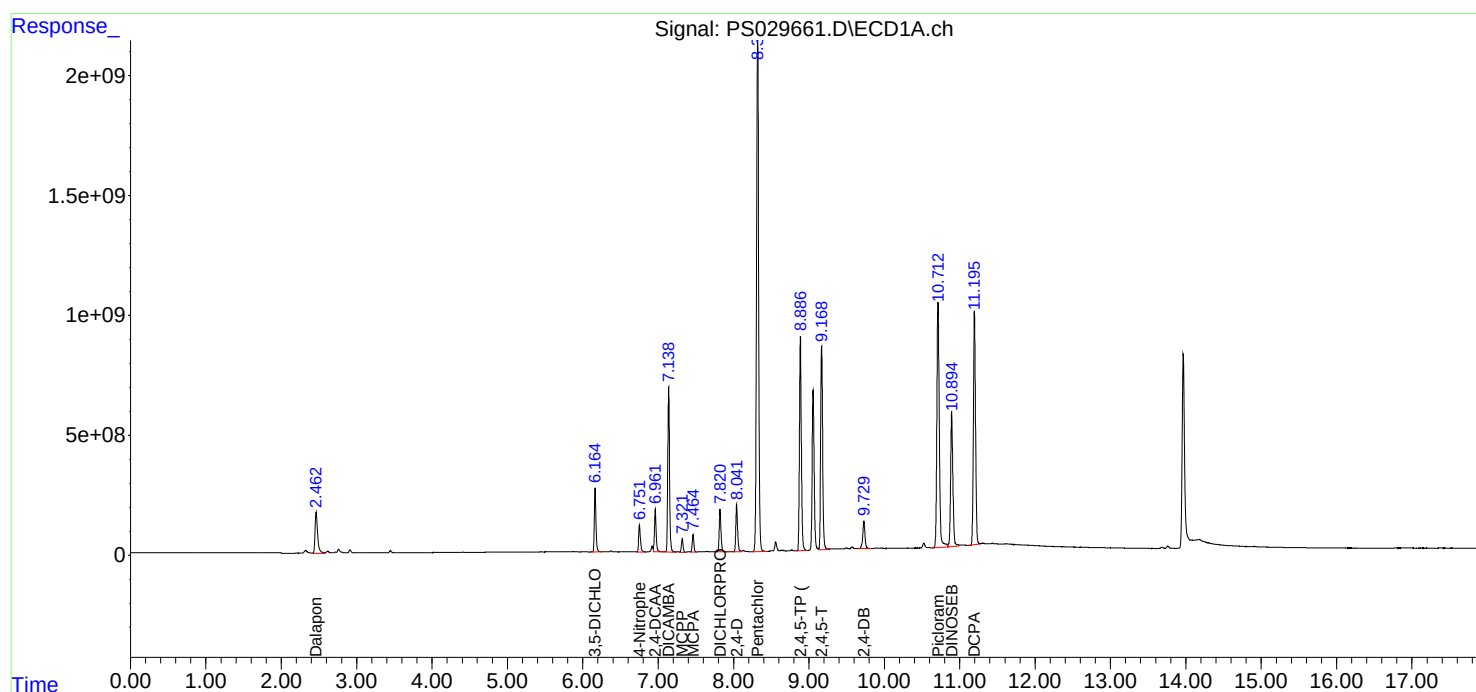
Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

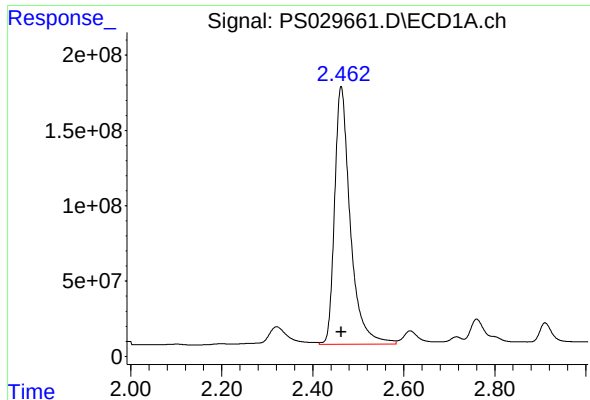
Manual Integrations
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Reviewed By :Abdul Mirza 04/03/2025
Supervised By :mohammad ahmed 04/04/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 02 21:51:14 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
Quant Title : 8080.M
QLast Update : Wed Apr 02 21:45:08 2025
Response via : Initial Calibration
Integrator: ChemStation

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





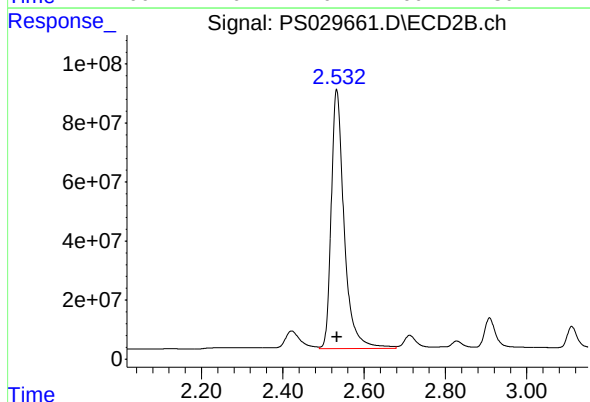
#1 Dalapon

R.T.: 2.462 min
Delta R.T.: 0.000 min
Response: 4108358980
Conc: 1258.29 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

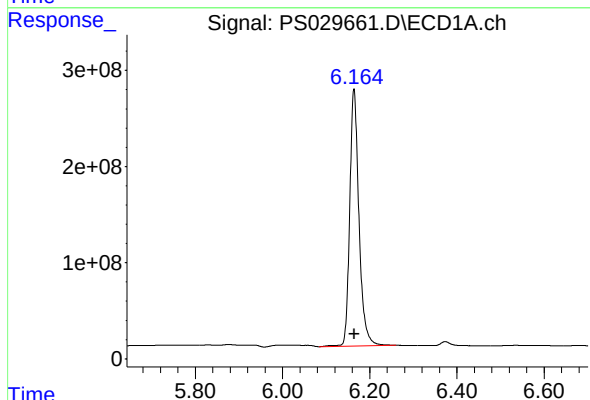
Manual Integrations
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Supervised By :mohammad ahmed 04/04/2025



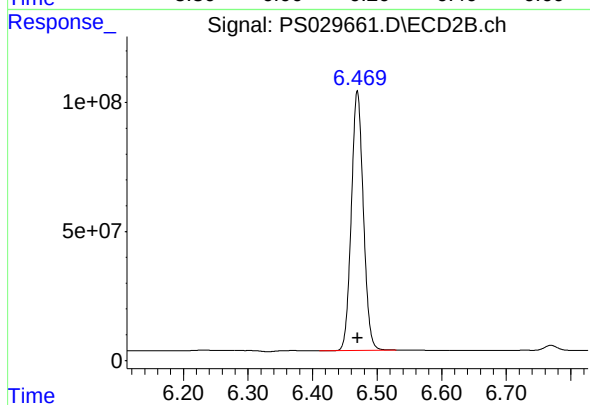
#1 Dalapon

R.T.: 2.532 min
Delta R.T.: 0.000 min
Response: 1942871242
Conc: 1266.71 ng/ml



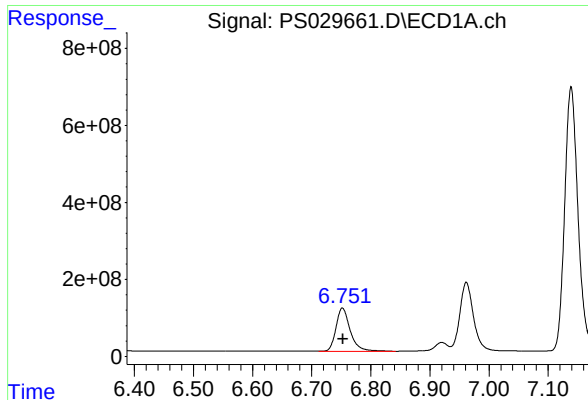
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.164 min
Delta R.T.: 0.000 min
Response: 3928433575
Conc: 1335.81 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.469 min
Delta R.T.: 0.000 min
Response: 1296248758
Conc: 1381.75 ng/ml



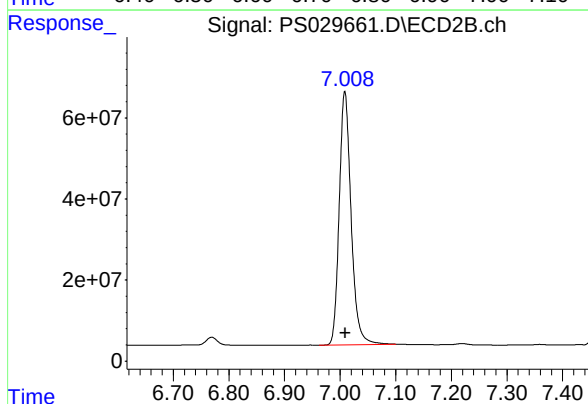
#3 4-Nitrophenol

R.T.: 6.752 min
Delta R.T.: 0.000 min
Response: 1875650660
Conc: 1377.30 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

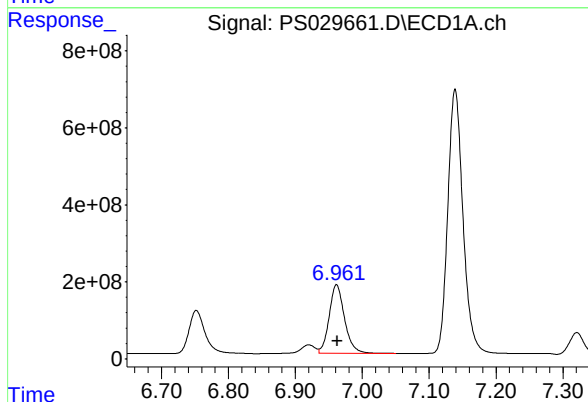
**Manual Integrations
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Supervised By :mohammad ahmed 04/04/2025



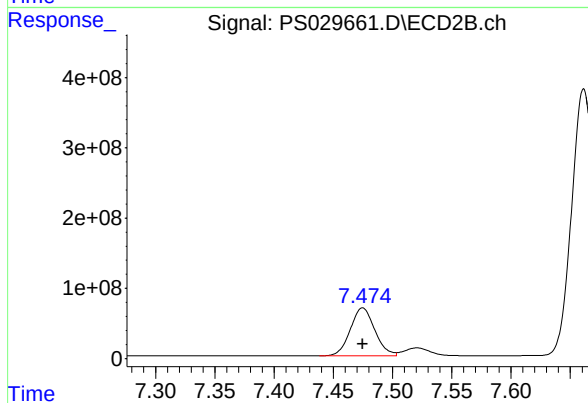
#3 4-Nitrophenol

R.T.: 7.009 min
Delta R.T.: 0.000 min
Response: 929783256
Conc: 1360.34 ng/ml



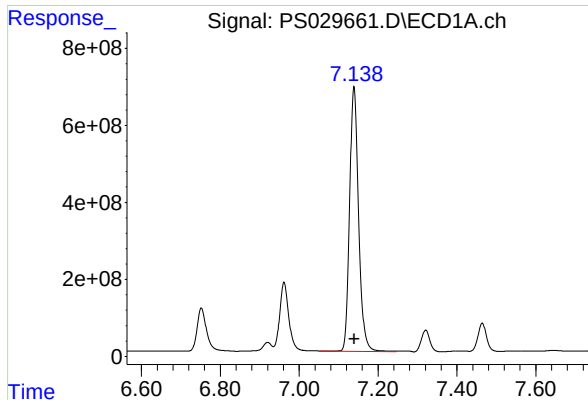
#4 2,4-DCAA

R.T.: 6.962 min
Delta R.T.: 0.000 min
Response: 2840950026
Conc: 1435.30 ng/ml



#4 2,4-DCAA

R.T.: 7.475 min
Delta R.T.: 0.000 min
Response: 981839106
Conc: 1487.41 ng/ml



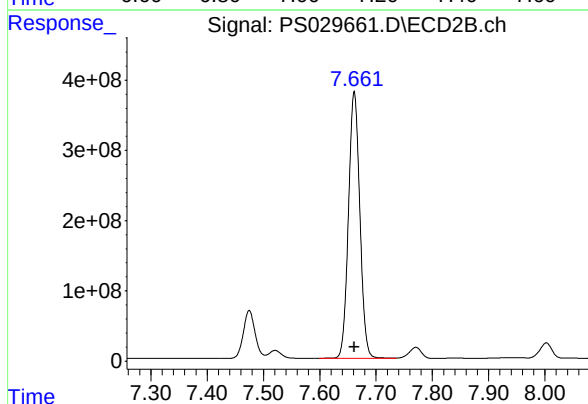
#5 DICAMBA

R.T.: 7.139 min
Delta R.T.: 0.000 min
Response: 10886487221
Conc: 1314.83 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

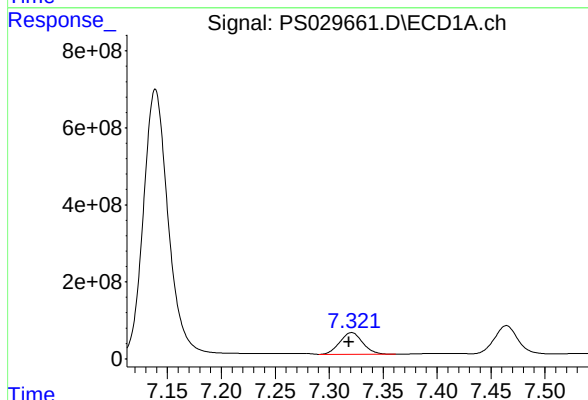
Manual Integrations
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Supervised By :mohammad ahmed 04/04/2025



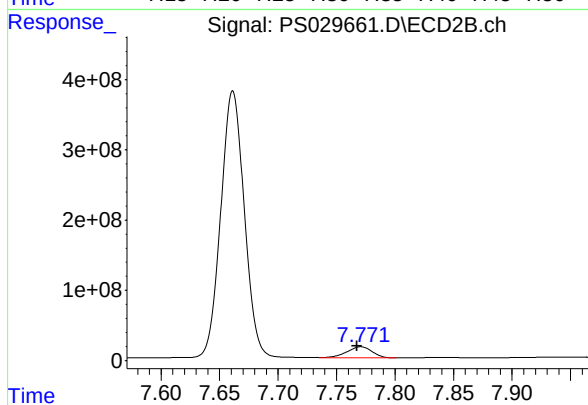
#5 DICAMBA

R.T.: 7.661 min
Delta R.T.: 0.000 min
Response: 5336929441
Conc: 1461.27 ng/ml



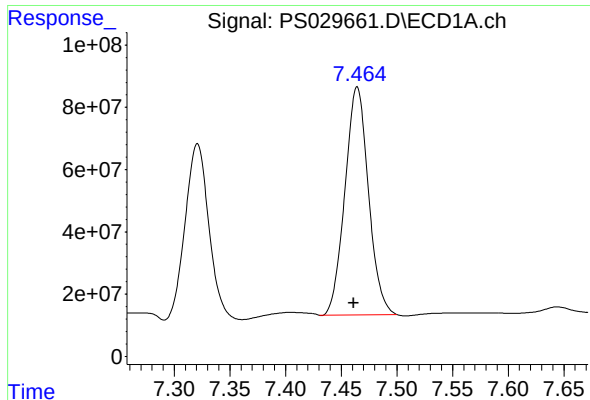
#6 MCPP

R.T.: 7.321 min
Delta R.T.: 0.003 min
Response: 837102081
Conc: 152.00 ug/ml



#6 MCPP

R.T.: 7.771 min
Delta R.T.: 0.003 min
Response: 239877882
Conc: 136.98 ug/ml



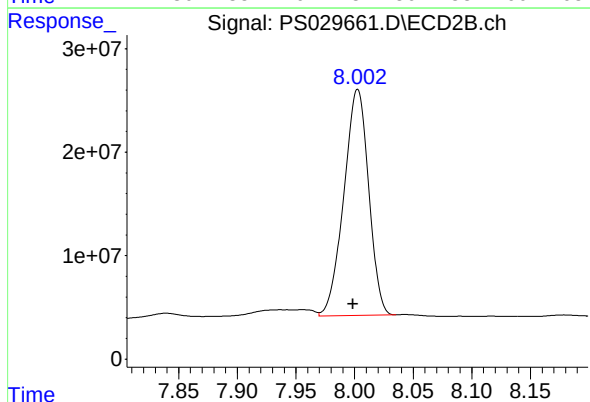
#7 MCPA

R.T.: 7.464 min
Delta R.T.: 0.003 min
Response: 1077350418
Conc: 146.01 ug/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

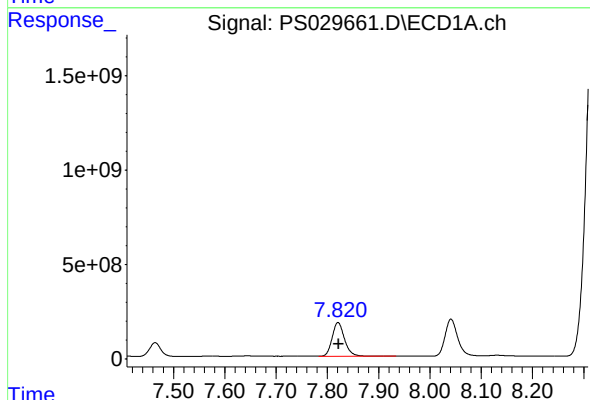
Manual Integrations
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Supervised By :mohammad ahmed 04/04/2025



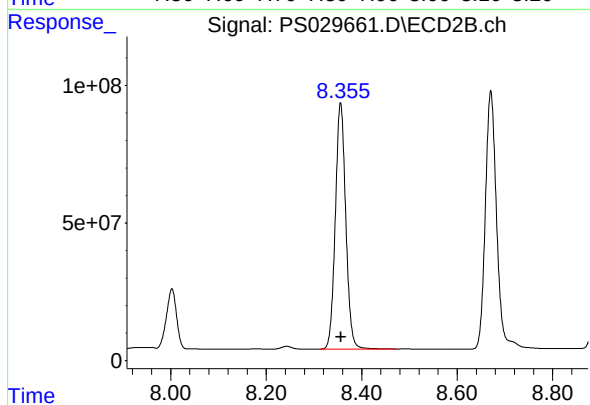
#7 MCPA

R.T.: 8.003 min
Delta R.T.: 0.004 min
Response: 321610430
Conc: 141.54 ug/ml



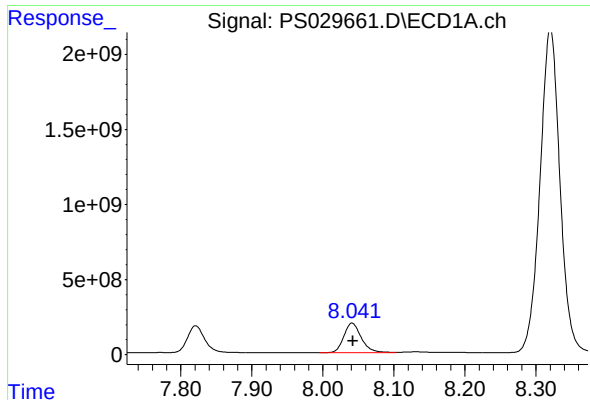
#8 DICHLORPROP

R.T.: 7.821 min
Delta R.T.: -0.001 min
Response: 2998787481
Conc: 1449.94 ng/ml



#8 DICHLORPROP

R.T.: 8.356 min
Delta R.T.: 0.000 min
Response: 1358996852
Conc: 1501.55 ng/ml



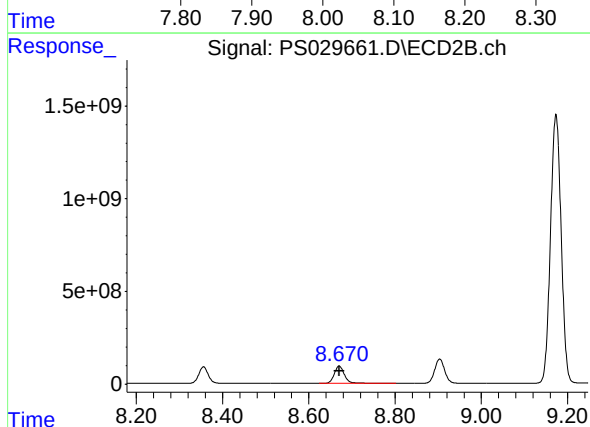
#9 2,4-D

R.T.: 8.041 min
Delta R.T.: -0.001 min
Response: 3352707918
Conc: 1478.54 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

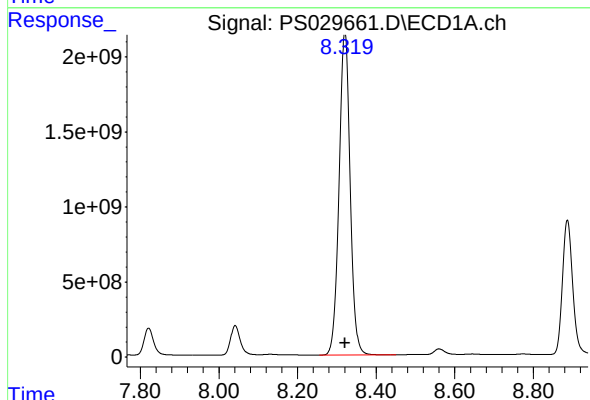
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Supervised By :mohammad ahmed 04/04/2025



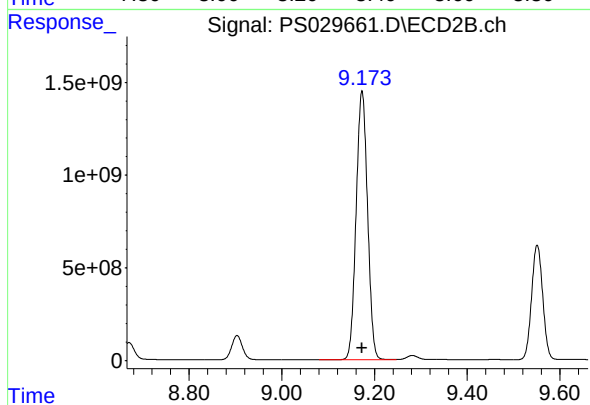
#9 2,4-D

R.T.: 8.670 min
Delta R.T.: 0.000 min
Response: 1534428295
Conc: 1529.80 ng/ml



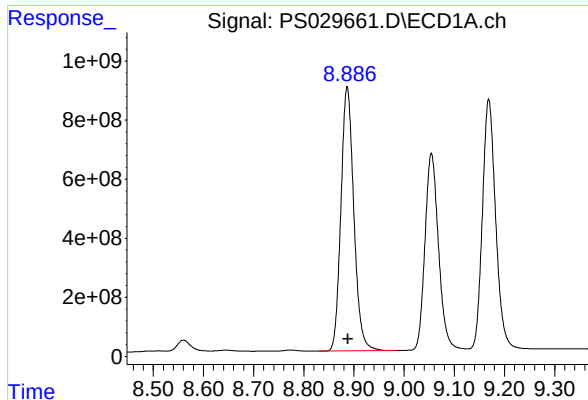
#10 Pentachlorophenol

R.T.: 8.320 min
Delta R.T.: 0.000 min
Response: 41860303298
Conc: 1439.85 ng/ml



#10 Pentachlorophenol

R.T.: 9.173 min
Delta R.T.: 0.000 min
Response: 24798795122
Conc: 1399.48 ng/ml



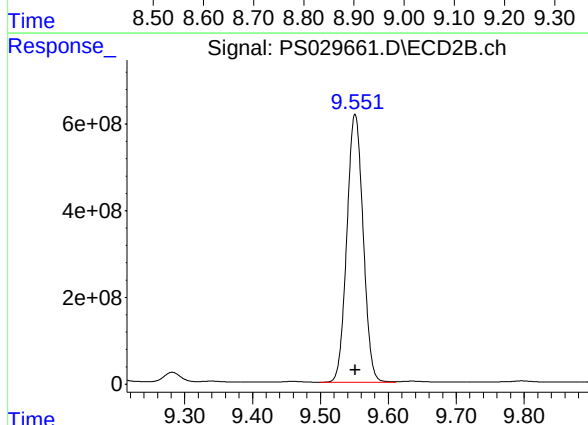
#11 2,4,5-TP (SILVEX)

R.T.: 8.887 min
Delta R.T.: -0.001 min
Response: 15973508319
Conc: 1411.04 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

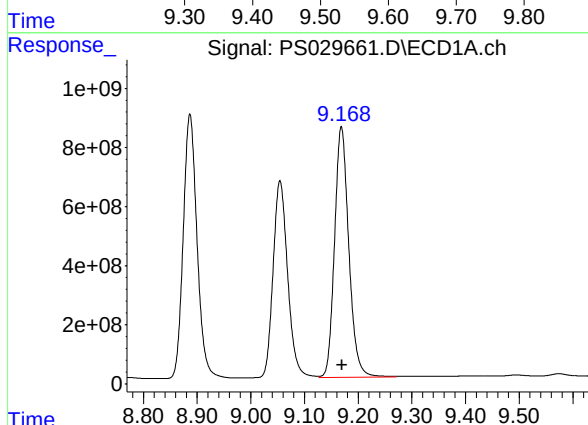
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Reviewed By :Abdul Mirza 04/03/2025
Supervised By :mohammad ahmed 04/04/2025



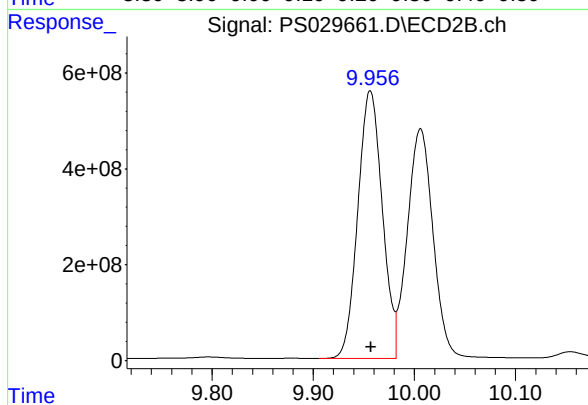
#11 2,4,5-TP (SILVEX)

R.T.: 9.551 min
Delta R.T.: 0.000 min
Response: 10314285572
Conc: 1461.70 ng/ml



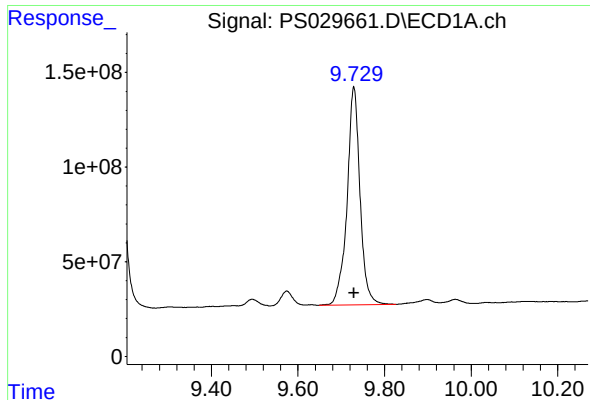
#12 2,4,5-T

R.T.: 9.169 min
Delta R.T.: -0.001 min
Response: 15670680767
Conc: 1384.71 ng/ml



#12 2,4,5-T

R.T.: 9.956 min
Delta R.T.: 0.000 min
Response: 9380678174
Conc: 1419.44 ng/ml



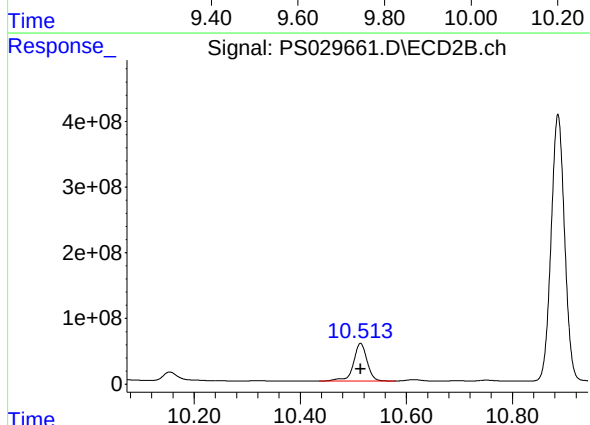
#13 2,4-DB

R.T.: 9.729 min
Delta R.T.: 0.000 min
Response: 2397133404
Conc: 1276.56 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

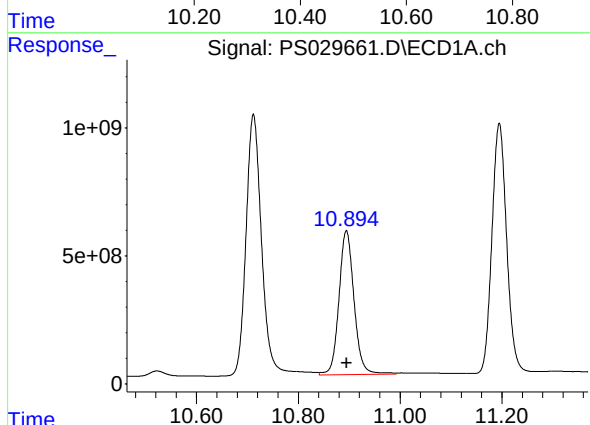
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/03/2025
Supervised By :mohammad ahmed 04/04/2025



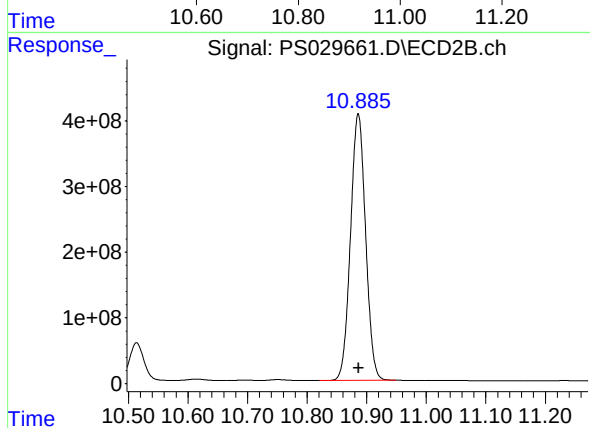
#13 2,4-DB

R.T.: 10.514 min
Delta R.T.: 0.000 min
Response: 1045195523
Conc: 1461.83 ng/ml



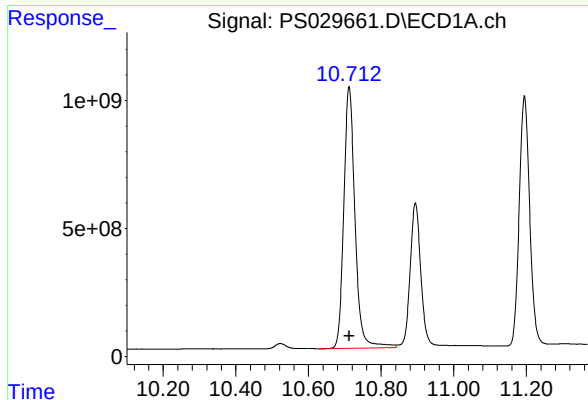
#14 DINOSEB

R.T.: 10.894 min
Delta R.T.: 0.000 min
Response: 11584240374
Conc: 1396.49 ng/ml



#14 DINOSEB

R.T.: 10.886 min
Delta R.T.: 0.000 min
Response: 7136024947
Conc: 1440.99 ng/ml



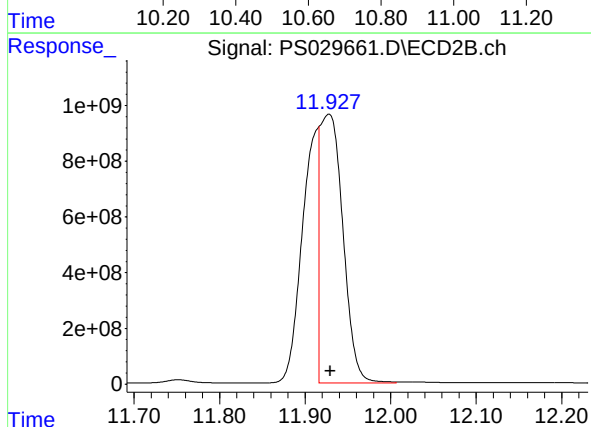
#15 Picloram

R.T.: 10.712 min
Delta R.T.: -0.001 min
Response: 21908246614
Conc: 1442.81 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

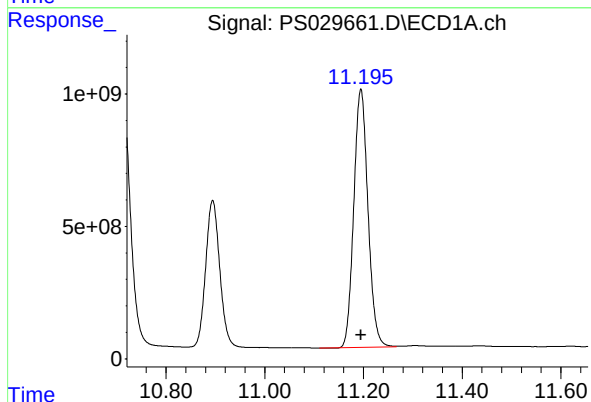
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/03/2025
Supervised By :mohammad ahmed 04/04/2025



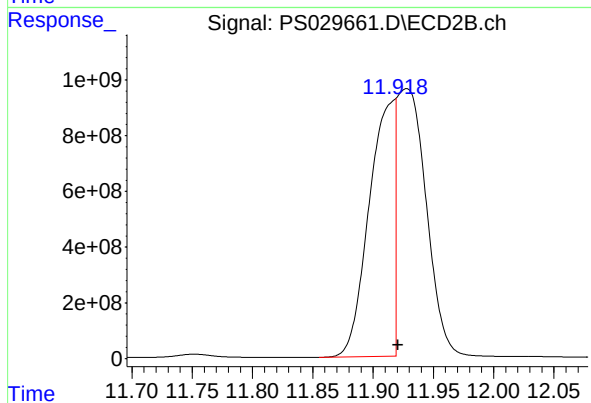
#15 Picloram

R.T.: 11.927 min
Delta R.T.: -0.002 min
Response: 17647184452
Conc: 1591.73 ng/ml m



#16 DCPA

R.T.: 11.195 min
Delta R.T.: 0.000 min
Response: 19405207559
Conc: 1409.14 ng/ml



#16 DCPA

R.T.: 11.918 min
Delta R.T.: -0.002 min
Response: 13389723415
Conc: 1332.29 ng/ml m

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS040225\
 Data File : PS029662.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 02 Apr 2025 21:32
 Operator : AR\AJ
 Sample : HSTDICV750
 Misc :
 ALS Vial : 14 Sample Multiplier: 1

Instrument :

ECD_S

ClientSampleId :

ICVPS040225

Manual Integrations**APPROVED**

Reviewed By :Abdul Mirza 04/03/2025

Supervised By :mohammad ahmed 04/04/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Apr 02 22:04:21 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
 Quant Title : 8080.M
 QLast Update : Wed Apr 02 21:58:31 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	6.962	7.474	1498.3E6	503.3E6	734.900	738.464
Target Compounds							
1) T	Dalapon	2.462	2.533	2190.2E6	1024.0E6	645.618	645.003
2) T	3,5-DICHL...	6.164	6.469	2082.1E6	662.8E6	692.238	686.463
3) T	4-Nitroph...	6.752	7.009	957.2E6	475.6E6	681.345	670.774
5) T	DICAMBA	7.138	7.661	5694.1E6	2612.2E6	684.231	707.267
6) T	MCP	7.317	7.767	392.2E6	118.2E6	72.358	70.010
7) T	MCPA	7.460	7.998	518.2E6	157.7E6	71.284	69.331
8) T	DICHLORPROP	7.820	8.356	1603.0E6	696.5E6	728.820	720.851
9) T	2,4-D	8.041	8.670	1760.6E6	789.5E6	730.675	732.044
10) T	Pentachlo...	8.319	9.173	22517.6E6	12981.3E6	740.590	724.092
11) T	2,4,5-TP ...	8.886	9.551	8387.3E6	5243.7E6	722.086	726.984
12) T	2,4,5-T	9.168	9.956	8196.2E6	4791.7E6	712.435	714.872
13) T	2,4-DB	9.728	10.513	1209.9E6	524.8E6	665.952	707.282
14) T	DINOSEB	10.894	10.886	5970.8E6	3628.9E6	707.265	709.775
15) T	Picloram	10.711	11.928	11195.9E6	9179.9E6	722.295	783.175m
16) T	DCPA	11.194	11.916	10250.4E6	6152.8E6	733.951	667.456m

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS040225\
Data File : PS029662.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 02 Apr 2025 21:32
Operator : AR\AJ
Sample : HSTDICV750
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :

ECD_S

ClientSampleId :

ICVPS040225

Manual Integrations

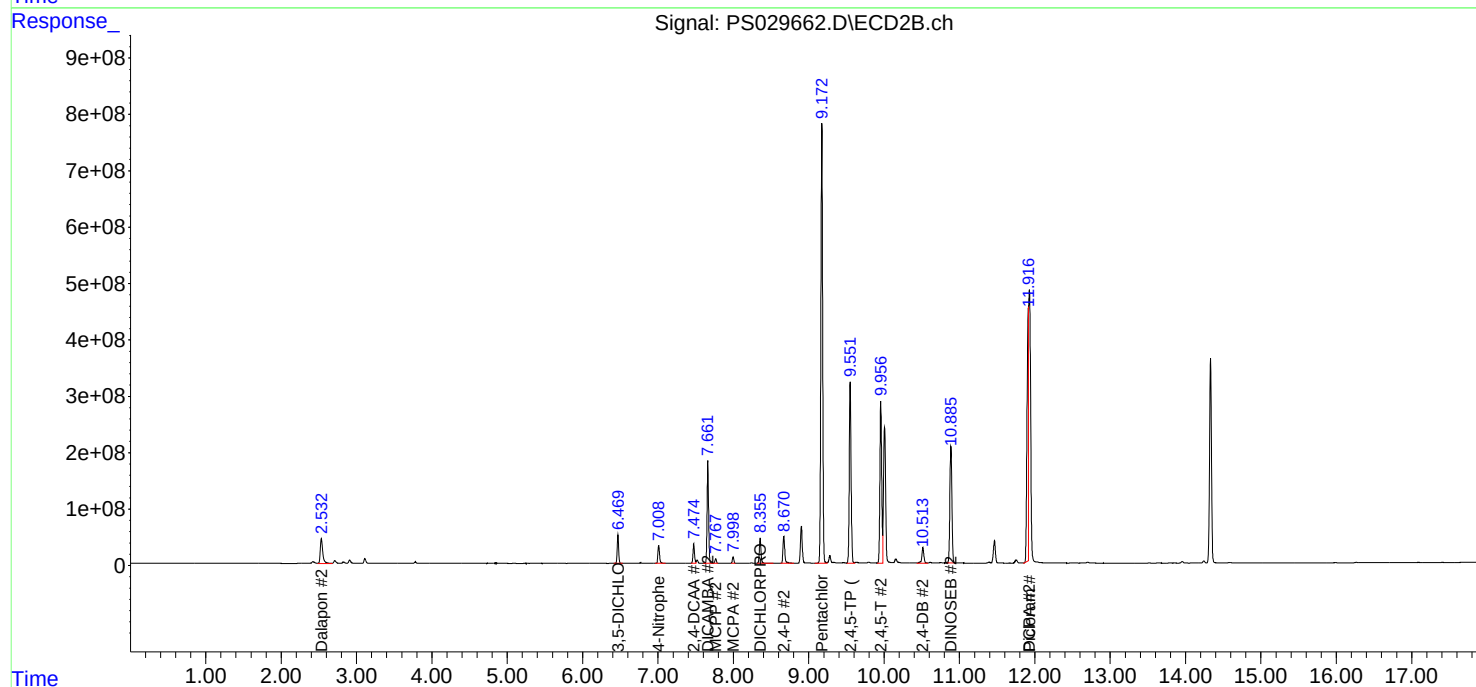
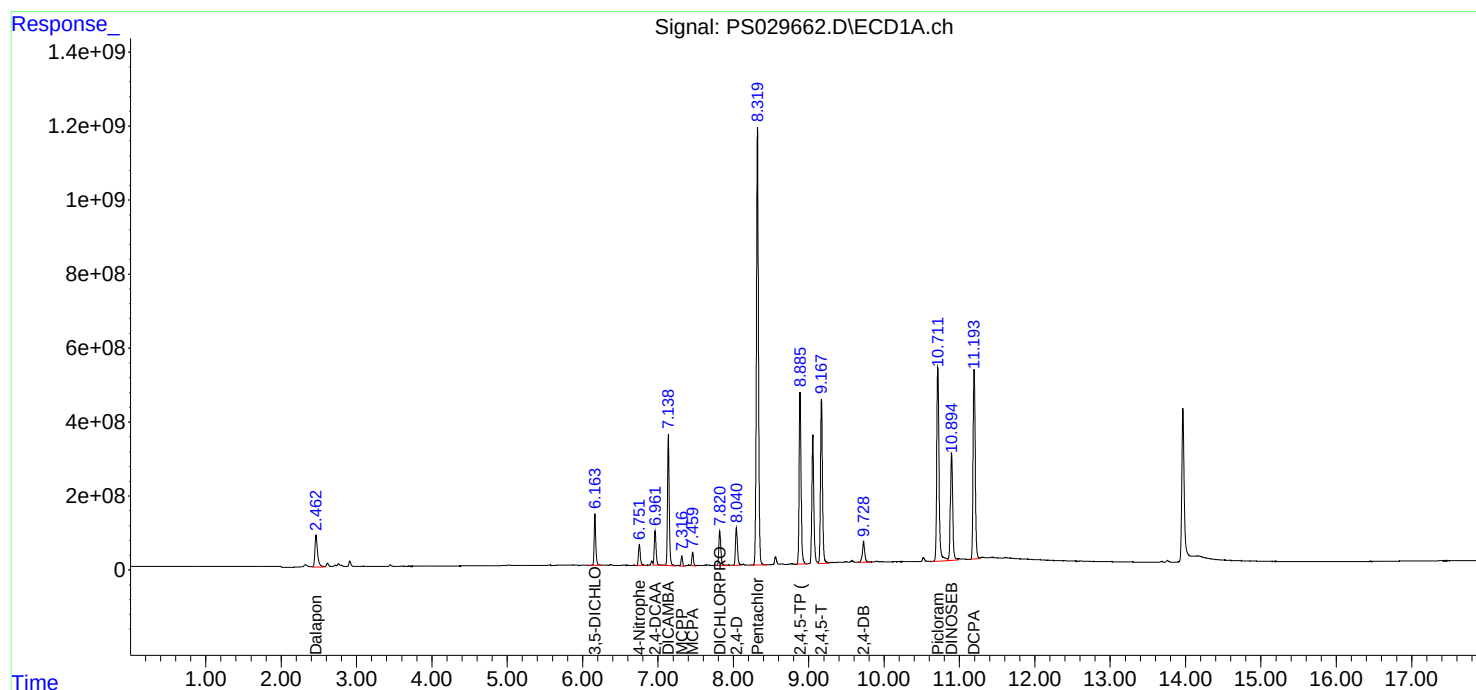
APPROVED

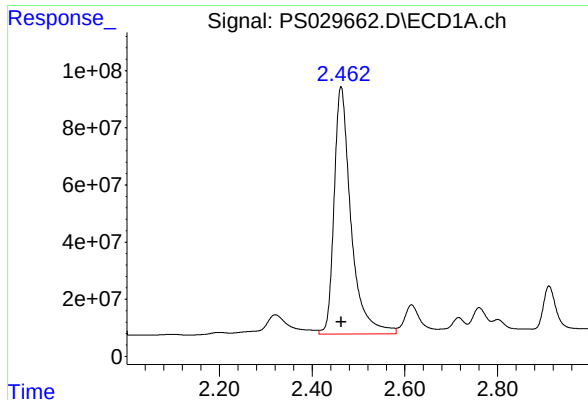
Reviewed By :Abdul Mirza 04/03/2025

Supervised By :mohammad ahmed 04/04/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 02 22:04:21 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
Quant Title : 8080.M
QLast Update : Wed Apr 02 21:58:31 2025
Response via : Initial Calibration
Integrator: ChemStation

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





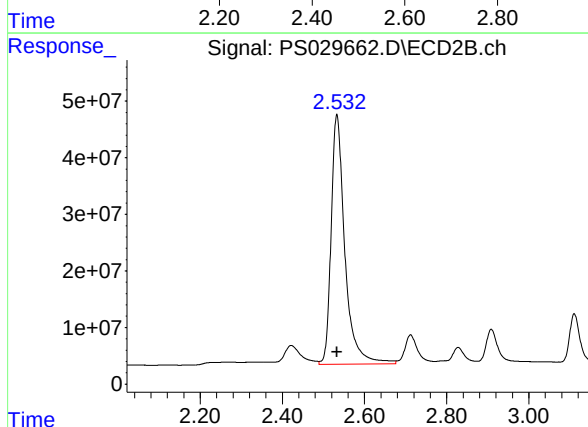
#1 Dalapon

R.T.: 2.462 min
Delta R.T.: 0.000 min
Response: 2190191506
Conc: 645.62 ng/ml

Instrument :
ECD_S
ClientSampleId :
ICVPS040225

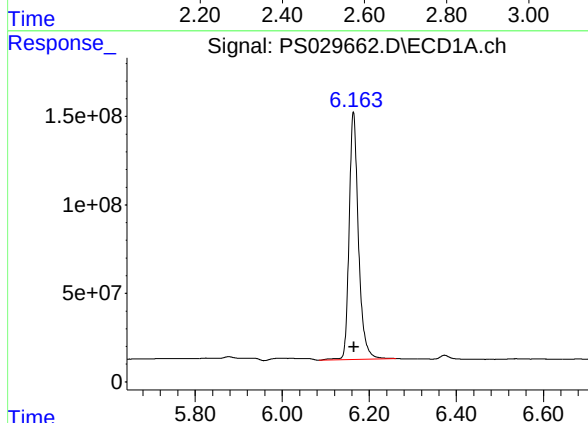
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/03/2025
Supervised By :mohammad ahmed 04/04/2025



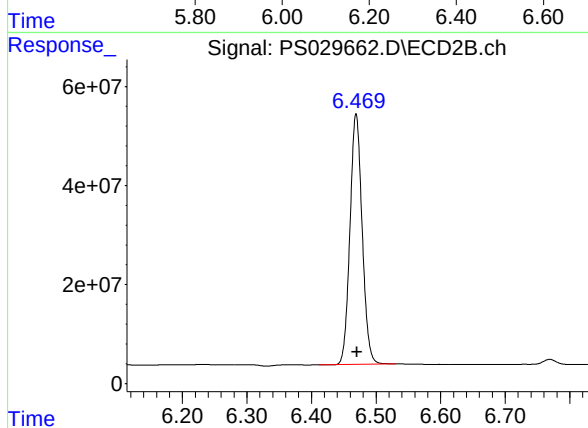
#1 Dalapon

R.T.: 2.533 min
Delta R.T.: 0.000 min
Response: 1024004548
Conc: 645.00 ng/ml



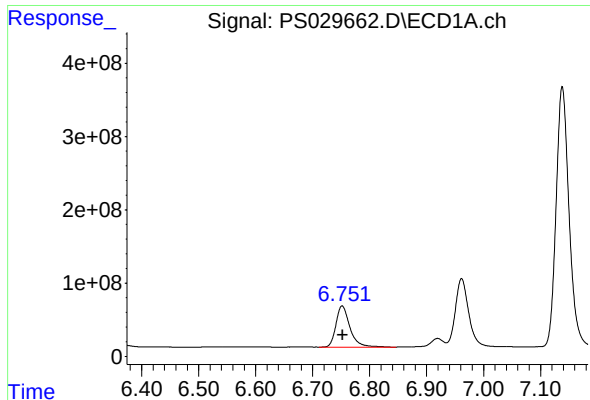
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.164 min
Delta R.T.: -0.001 min
Response: 2082084613
Conc: 692.24 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.469 min
Delta R.T.: -0.001 min
Response: 662818833
Conc: 686.46 ng/ml



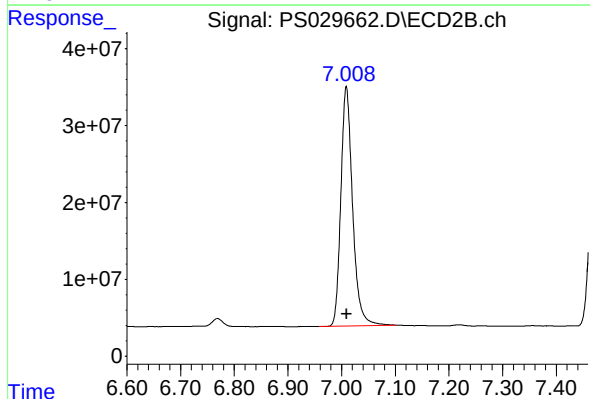
#3 4-Nitrophenol

R.T.: 6.752 min
Delta R.T.: -0.001 min
Response: 957152195
Conc: 681.34 ng/ml

Instrument :
ECD_S
ClientSampleId :
ICVPS040225

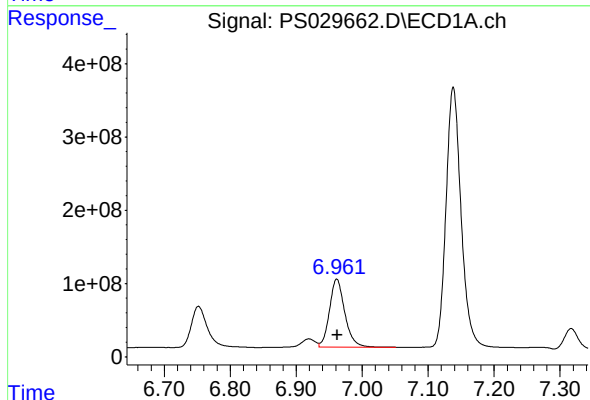
**Manual Integrations
APPROVED**

Reviewed By :Abdul Mirza 04/03/2025
Supervised By :mohammad ahmed 04/04/2025



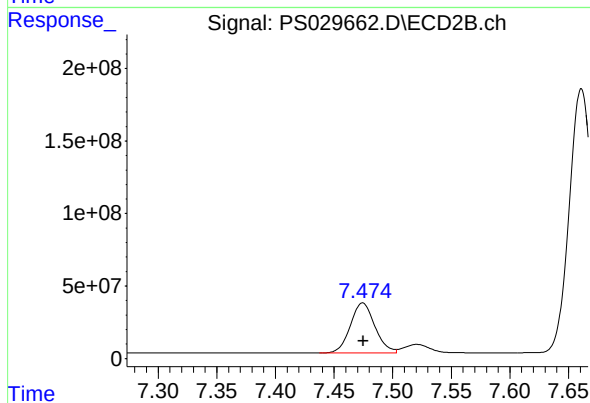
#3 4-Nitrophenol

R.T.: 7.009 min
Delta R.T.: 0.000 min
Response: 475577336
Conc: 670.77 ng/ml



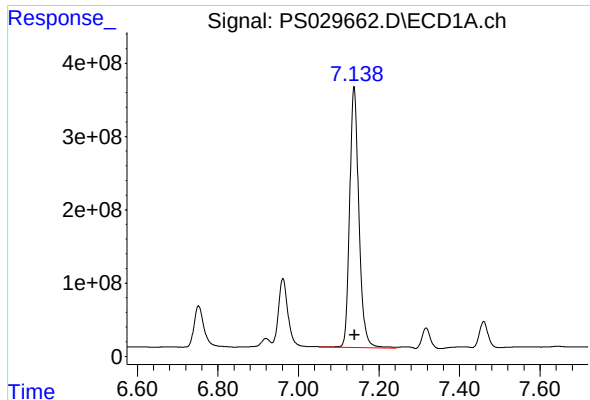
#4 2,4-DCAA

R.T.: 6.962 min
Delta R.T.: -0.001 min
Response: 1498336160
Conc: 734.90 ng/ml



#4 2,4-DCAA

R.T.: 7.474 min
Delta R.T.: 0.000 min
Response: 503272874
Conc: 738.46 ng/ml



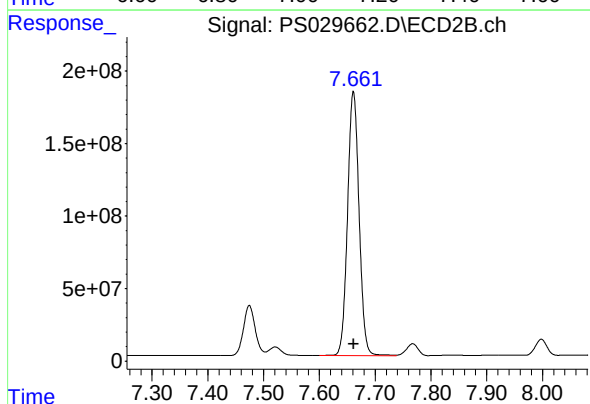
#5 DICAMBA

R.T.: 7.138 min
Delta R.T.: -0.002 min
Response: 5694131009
Conc: 684.23 ng/ml

Instrument :
ECD_S
ClientSampleId :
ICVPS040225

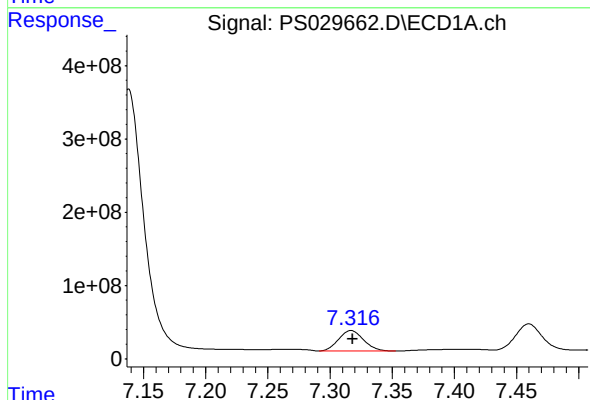
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/03/2025
Supervised By :mohammad ahmed 04/04/2025



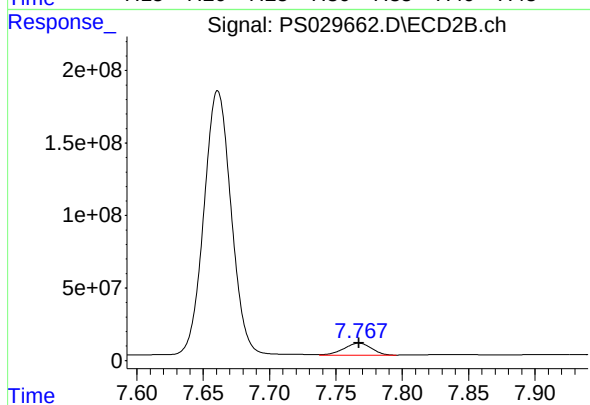
#5 DICAMBA

R.T.: 7.661 min
Delta R.T.: 0.000 min
Response: 2612199541
Conc: 707.27 ng/ml



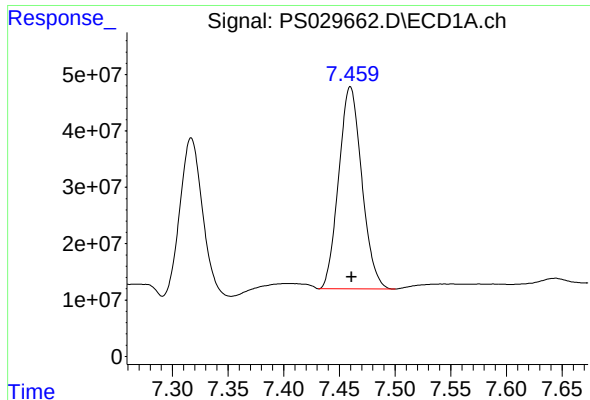
#6 MCP

R.T.: 7.317 min
Delta R.T.: -0.001 min
Response: 392172325
Conc: 72.36 ug/ml



#6 MCP

R.T.: 7.767 min
Delta R.T.: 0.000 min
Response: 118210914
Conc: 70.01 ug/ml



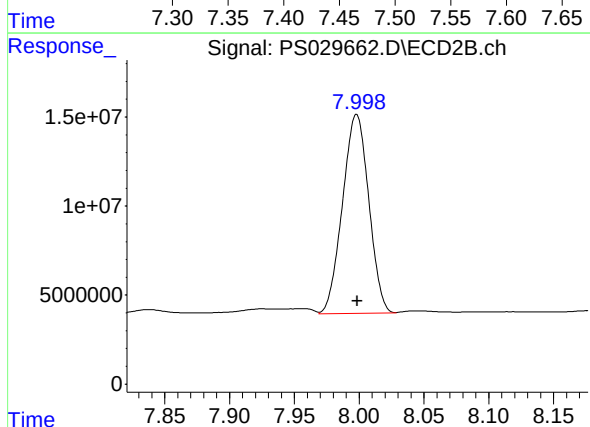
#7 MCPA

R.T.: 7.460 min
Delta R.T.: -0.001 min
Response: 518166545
Conc: 71.28 ug/ml

Instrument :
ECD_S
ClientSampleId :
ICVPS040225

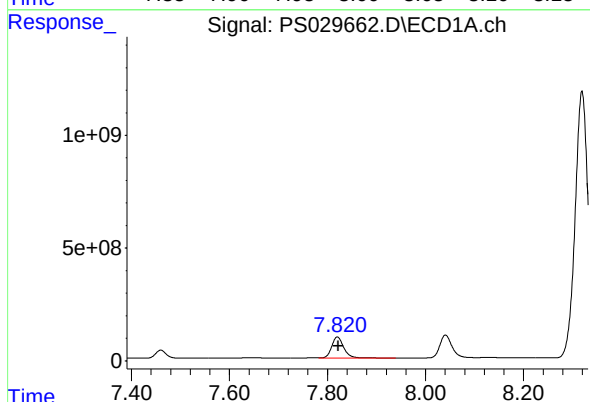
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/03/2025
Supervised By :mohammad ahmed 04/04/2025



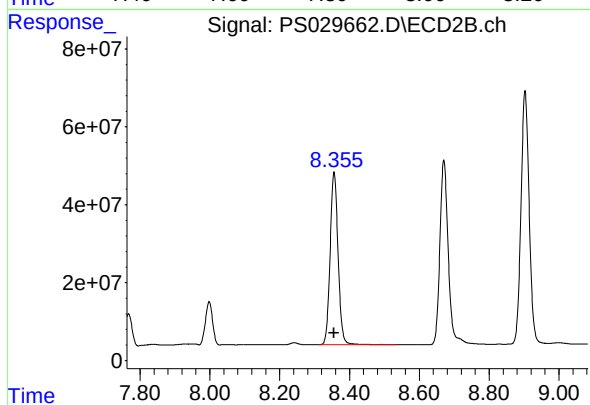
#7 MCPA

R.T.: 7.998 min
Delta R.T.: 0.000 min
Response: 157745338
Conc: 69.33 ug/ml



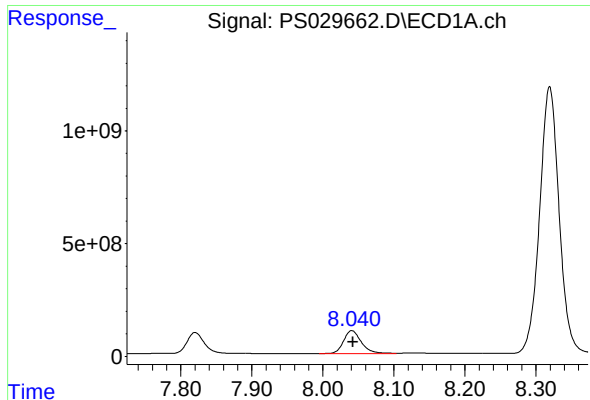
#8 DICHLORPROP

R.T.: 7.820 min
Delta R.T.: -0.002 min
Response: 1602994513
Conc: 728.82 ng/ml



#8 DICHLORPROP

R.T.: 8.356 min
Delta R.T.: 0.000 min
Response: 696452307
Conc: 720.85 ng/ml



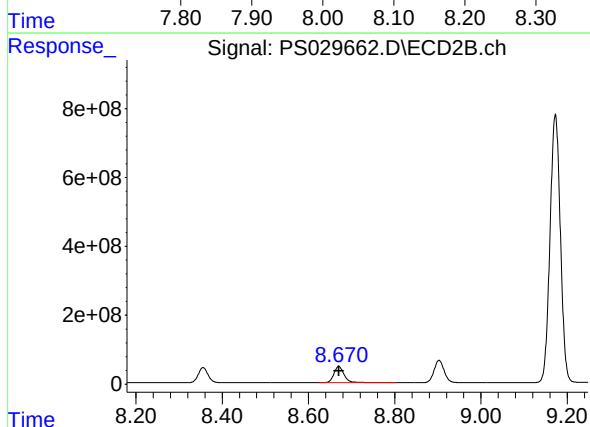
#9 2,4-D

R.T.: 8.041 min
Delta R.T.: -0.001 min
Response: 1760626420
Conc: 730.67 ng/ml

Instrument :
ECD_S
ClientSampleId :
ICVPS040225

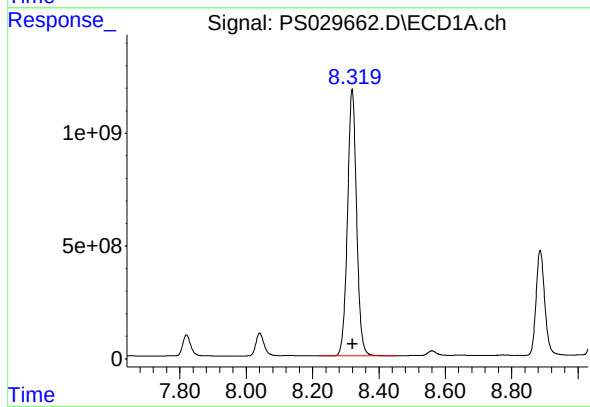
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/03/2025
Supervised By :mohammad ahmed 04/04/2025



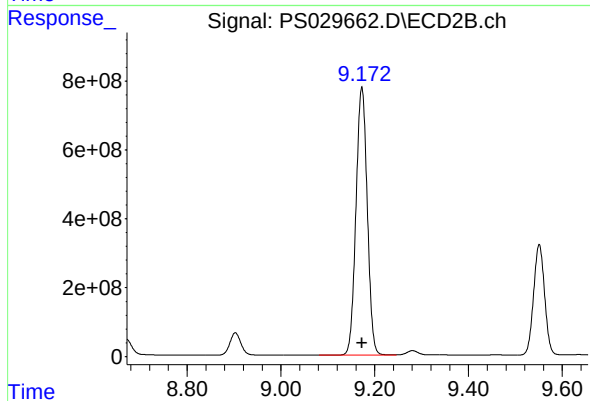
#9 2,4-D

R.T.: 8.670 min
Delta R.T.: 0.000 min
Response: 789483756
Conc: 732.04 ng/ml



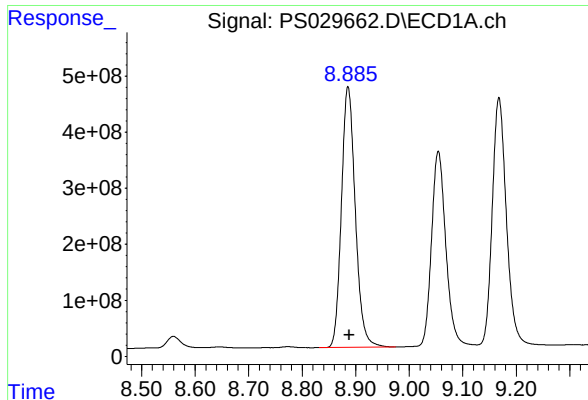
#10 Pentachlorophenol

R.T.: 8.319 min
Delta R.T.: -0.001 min
Response: 22517626662
Conc: 740.59 ng/ml



#10 Pentachlorophenol

R.T.: 9.173 min
Delta R.T.: 0.000 min
Response: 12981310805
Conc: 724.09 ng/ml



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

R.T.: 8.886 min
Delta R.T.: -0.002 min
Response: 8387280951
Conc: 722.09 ng/ml

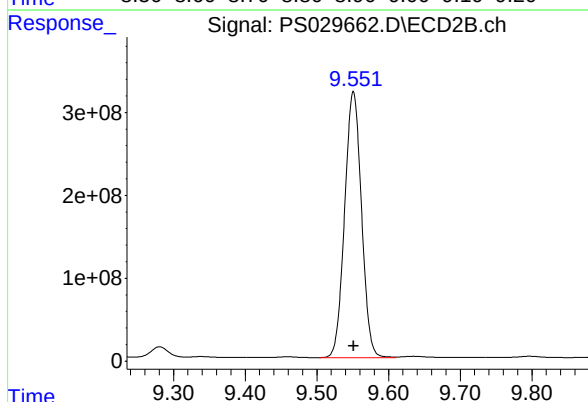
Instrument :

ECD_S

ClientSampleId :
ICVPS040225

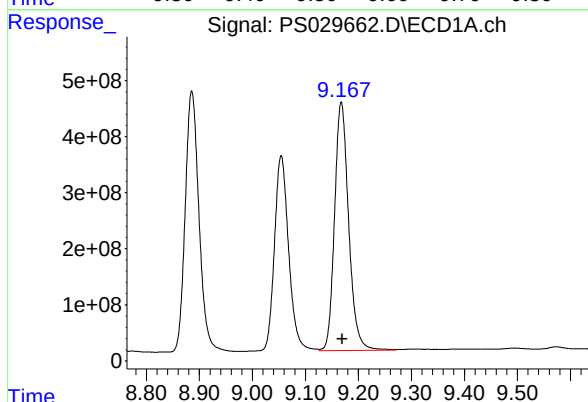
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/03/2025
Supervised By :mohammad ahmed 04/04/2025



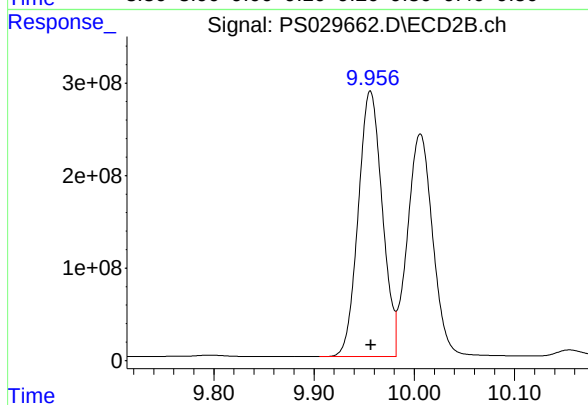
#11 2,4,5-TP (SILVEX)

R.T.: 9.551 min
Delta R.T.: 0.000 min
Response: 5243705599
Conc: 726.98 ng/ml



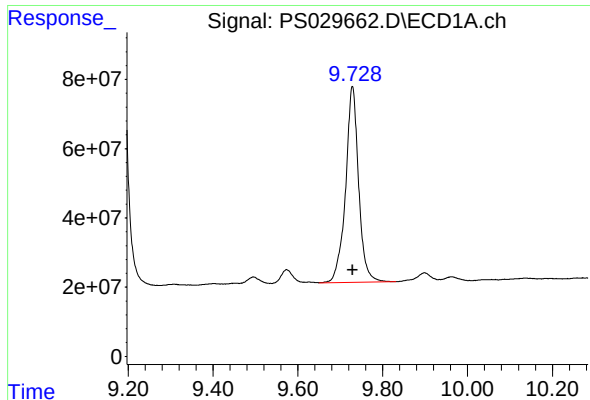
#12 2,4,5-T

R.T.: 9.168 min
Delta R.T.: -0.002 min
Response: 8196155687
Conc: 712.43 ng/ml



#12 2,4,5-T

R.T.: 9.956 min
Delta R.T.: 0.000 min
Response: 4791671449
Conc: 714.87 ng/ml



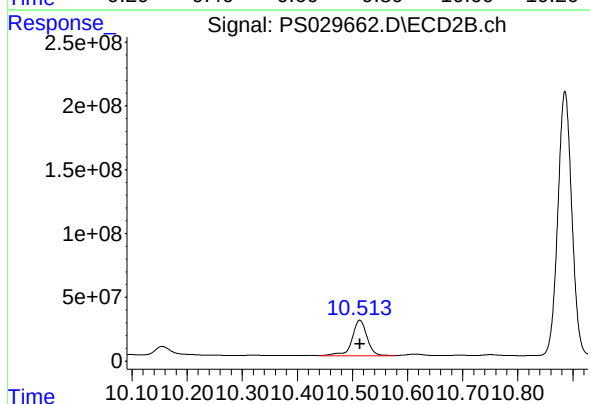
#13 2,4-DB

R.T.: 9.728 min
Delta R.T.: -0.001 min
Response: 1209865167
Conc: 665.95 ng/ml

Instrument :
ECD_S
ClientSampleId :
ICVPS040225

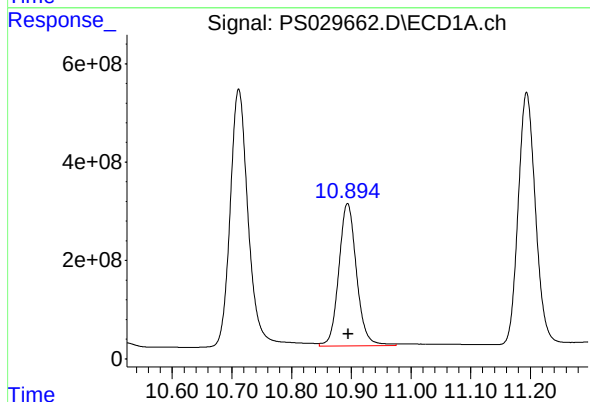
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/03/2025
Supervised By :mohammad ahmed 04/04/2025



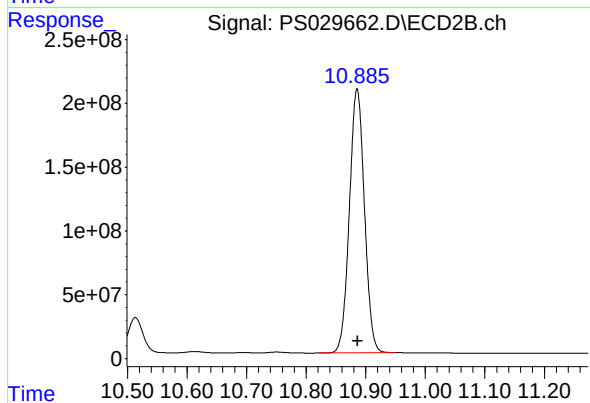
#13 2,4-DB

R.T.: 10.513 min
Delta R.T.: 0.000 min
Response: 524785986
Conc: 707.28 ng/ml



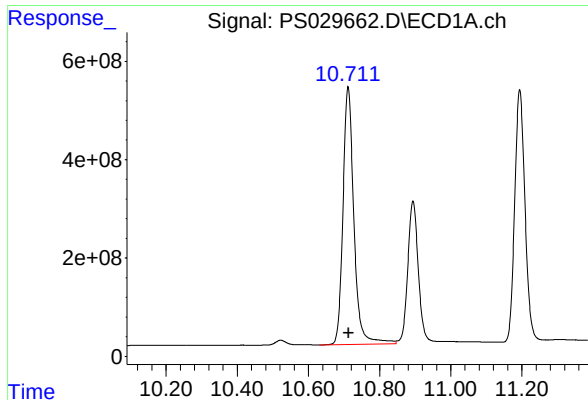
#14 DINOSEB

R.T.: 10.894 min
Delta R.T.: -0.001 min
Response: 5970759942
Conc: 707.26 ng/ml



#14 DINOSEB

R.T.: 10.886 min
Delta R.T.: -0.001 min
Response: 3628936908
Conc: 709.77 ng/ml



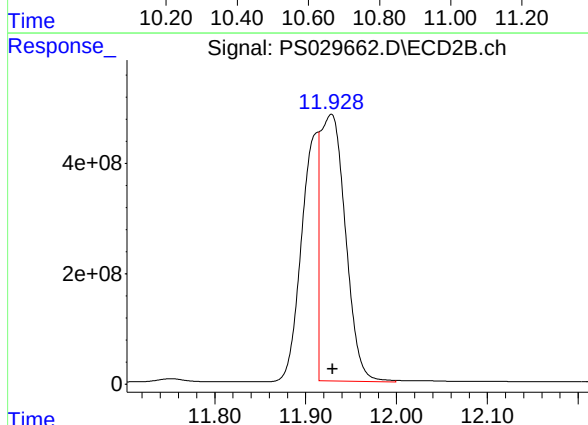
#15 Picloram

R.T.: 10.711 min
Delta R.T.: -0.002 min
Response: 11195866194
Conc: 722.30 ng/ml

Instrument :
ECD_S
ClientSampleId :
ICVPS040225

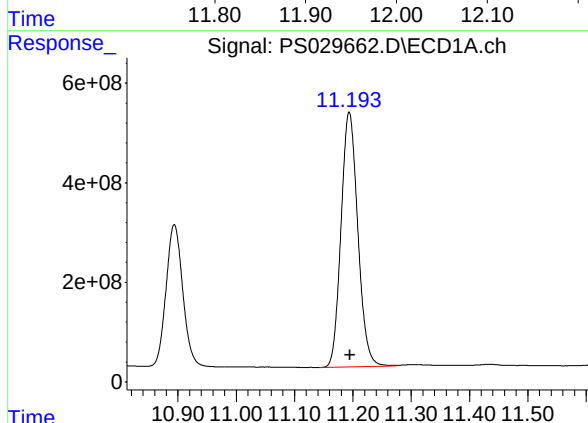
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/03/2025
Supervised By :mohammad ahmed 04/04/2025



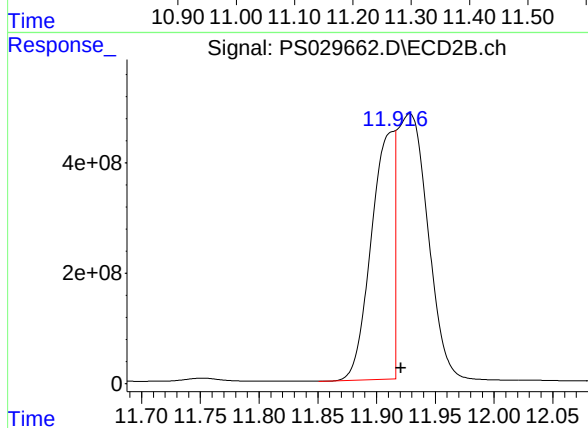
#15 Picloram

R.T.: 11.928 min
Delta R.T.: -0.001 min
Response: 9179942750
Conc: 783.18 ng/ml m



#16 DCPA

R.T.: 11.194 min
Delta R.T.: -0.002 min
Response: 10250438974
Conc: 733.95 ng/ml



#16 DCPA

R.T.: 11.916 min
Delta R.T.: -0.005 min
Response: 6152809061
Conc: 667.46 ng/ml m



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

CALIBRATION VERIFICATION SUMMARY

Contract: PORT06

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG NO.: Q1746

Continuing Calib Date: 04/09/2025 Initial Calibration Date(s): 04/02/2025 04/02/2025

Continuing Calib Time: 20:34 Initial Calibration Time(s): 17:32 20:44

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
2,4-DCAA	6.94	6.96	6.86	7.06	0.02
2,4-D	8.02	8.04	7.94	8.14	0.02
2,4,5-TP(Silvex)	8.86	8.89	8.79	8.99	0.03



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Fax : 908 789 8922

CALIBRATION VERIFICATION SUMMARY

Contract: PORT06

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG NO.: Q1746

Continuing Calib Date: 04/09/2025 Initial Calibration Date(s): 04/02/2025 04/02/2025

Continuing Calib Time: 20:34 Initial Calibration Time(s): 17:32 20:44

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
2,4-DCAA	7.47	7.48	7.38	7.58	0.01
2,4-D	8.66	8.67	8.57	8.77	0.01
2,4,5-TP(Silvex)	9.54	9.55	9.45	9.65	0.01



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CALIBRATION VERIFICATION SUMMARY

Contract: PORT06

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG NO.: Q1746

GC Column: RTX-CLP ID: 0.32 (mm) Initi. Calib. Date(s): 04/02/2025 04/02/2025

Client Sample No.: CCAL01 Date Analyzed: 04/09/2025

Lab Sample No.: HSTDCCC750 Data File : PS029764.D Time Analyzed: 20:34

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-TP(Silvex)	8.863	8.788	8.988	735.080	712.500	3.2
2,4-D	8.020	7.942	8.142	723.340	705.000	2.6
2,4-DCAA	6.943	6.863	7.063	740.470	750.000	-1.3



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CALIBRATION VERIFICATION SUMMARY

Contract: PORT06

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG NO.: Q1746

GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 04/02/2025 04/02/2025

Client Sample No.: CCAL01 Date Analyzed: 04/09/2025

Lab Sample No.: HSTDCCC750 Data File : PS029764.D Time Analyzed: 20:34

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-TP(Silvex)	9.538	9.451	9.651	765.850	712.500	7.5
2,4-D	8.659	8.571	8.771	705.850	705.000	0.1
2,4-DCAA	7.467	7.375	7.575	764.180	750.000	1.9

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS040925\
 Data File : PS029764.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 09 Apr 2025 20:34
 Operator : AR\AJ
 Sample : HSTDCCC750
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :

ECD_S

ClientSampleId :

HSTDCCC750

Manual Integrations**APPROVED**

Reviewed By :Abdul Mirza 04/10/2025

Supervised By :mohammad ahmed 04/11/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Apr 10 06:54:21 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
 Quant Title : 8080.M
 QLast Update : Wed Apr 02 23:52:55 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	6.943	7.467	1509.7E6	520.8E6	740.473	764.180
Target Compounds							
1) T	Dalapon	2.459	2.530	2270.3E6	982.0E6	669.244	618.551
2) T	3,5-DICHL...	6.150	6.463	2272.0E6	675.1E6	755.368	699.143
3) T	4-Nitroph...	6.735	7.001	1077.2E6	477.9E6	766.819	674.069
5) T	DICAMBA	7.120	7.653	6271.4E6	2743.5E6	753.598	742.828
6) T	MCP	7.298	7.760	398.1E6	113.2E6	73.458	67.058
7) T	MCPA	7.440	7.990	566.4E6	163.4E6	77.923m	71.823
8) T	DICHLORPROP	7.800	8.346	1615.9E6	716.5E6	734.708	741.614
9) T	2,4-D	8.020	8.659	1743.0E6	761.2E6	723.345	705.848
10) T	Pentachlo...	8.299	9.161	22259.3E6	13838.9E6	732.094	771.928
11) T	2,4,5-TP ...	8.863	9.538	8538.3E6	5524.1E6	735.085	765.853
12) T	2,4,5-T	9.144	9.942	8905.6E6	5202.2E6	774.104	776.114
13) T	2,4-DB	9.702	10.499	1471.4E6	530.9E6	809.886	715.491
14) T	DINOSEB	10.866	10.871	6125.0E6	3708.9E6	725.532	725.419
15) T	Picloram	10.684	11.908	11393.6E6	7182.5E6	735.051	607.432m
16) T	DCPA	11.165	11.899	10799.7E6	6564.0E6	773.282	741.635m

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS040925\
Data File : PS029764.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 09 Apr 2025 20:34
Operator : AR\AJ
Sample : HSTDCCC750
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :

ECD_S

ClientSampleId :

HSTDCCC750

Manual Integrations

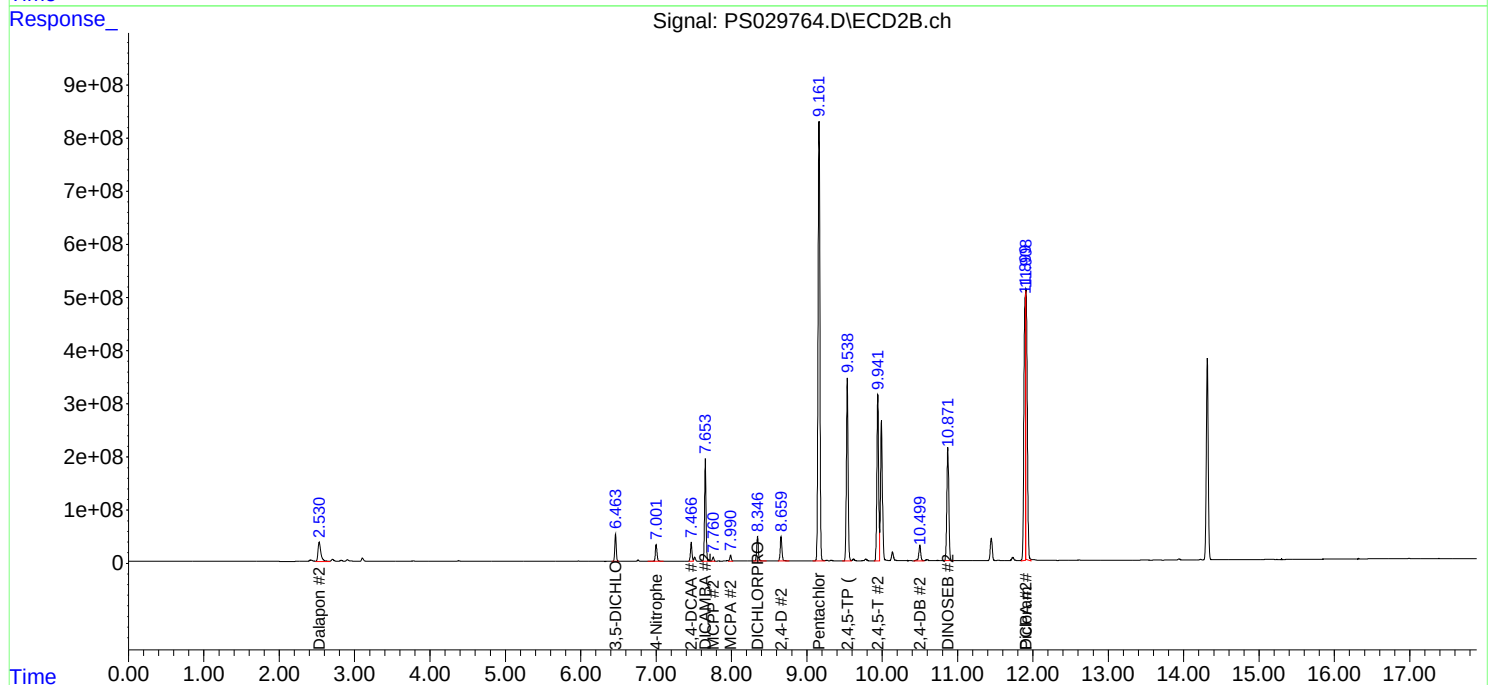
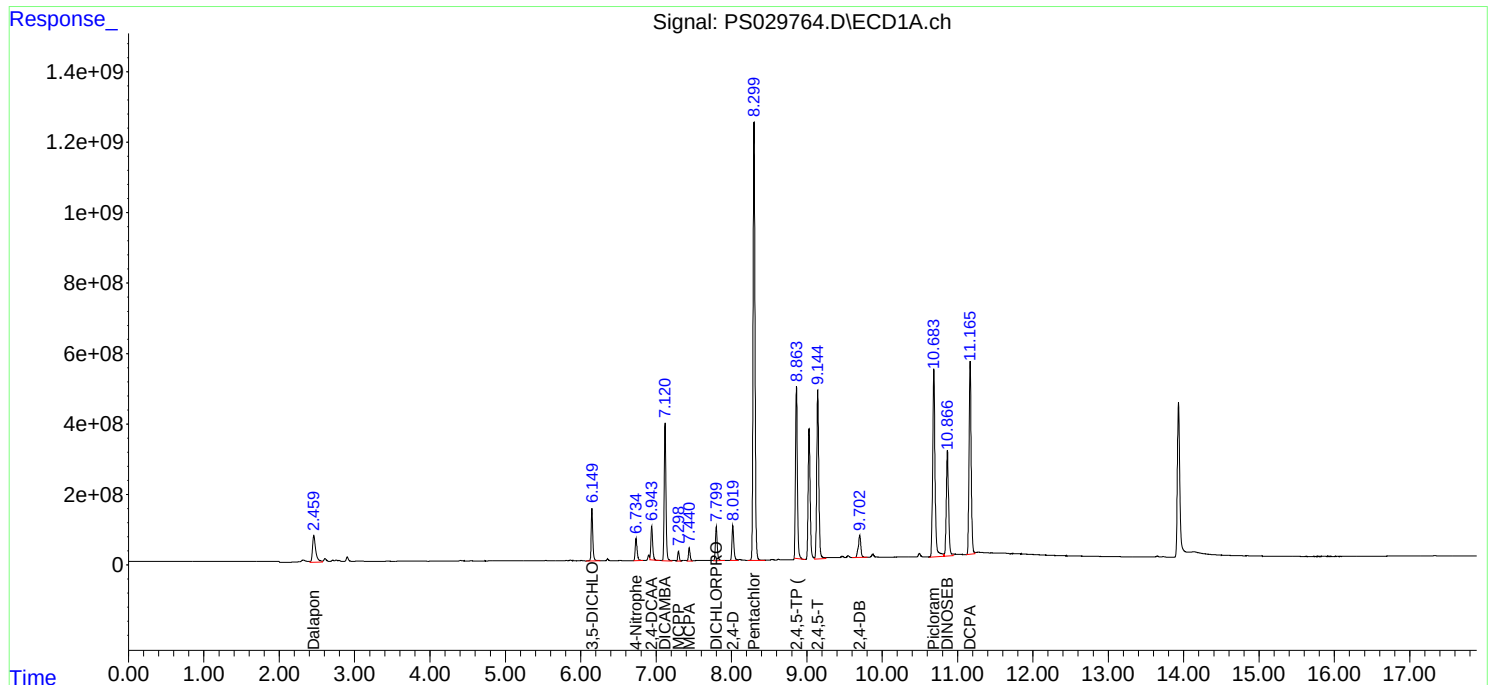
APPROVED

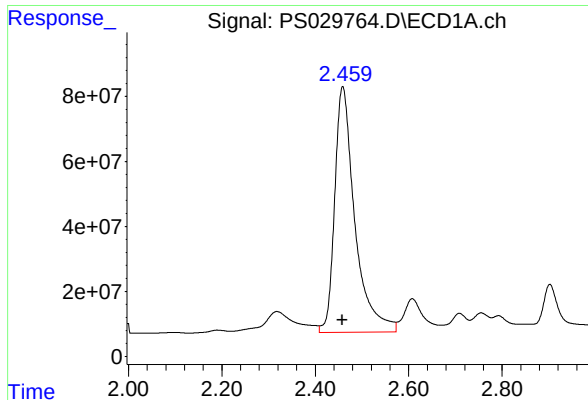
Reviewed By :Abdul Mirza 04/10/2025

Supervised By :mohammad ahmed 04/11/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 10 06:54:21 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
Quant Title : 8080.M
QLast Update : Wed Apr 02 23:52:55 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm





#1 Dalapon

R.T.: 2.459 min
Delta R.T.: 0.000 min
Response: 2270341859
Conc: 669.24 ng/ml

Instrument :

ECD_S

ClientSampleId :

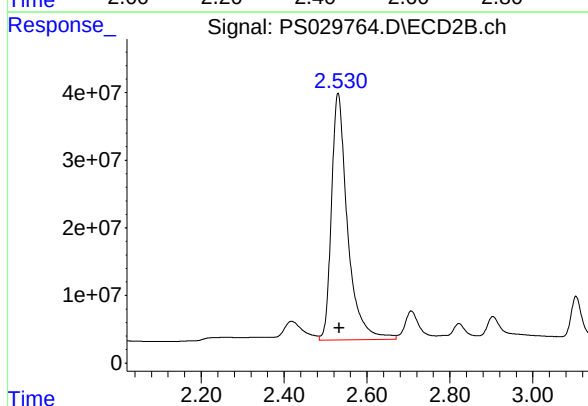
HSTDCCC750

Manual Integrations

APPROVED

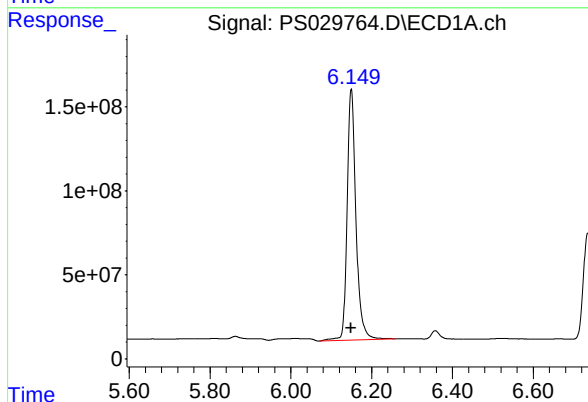
Reviewed By :Abdul Mirza 04/10/2025

Supervised By :mohammad ahmed 04/11/2025



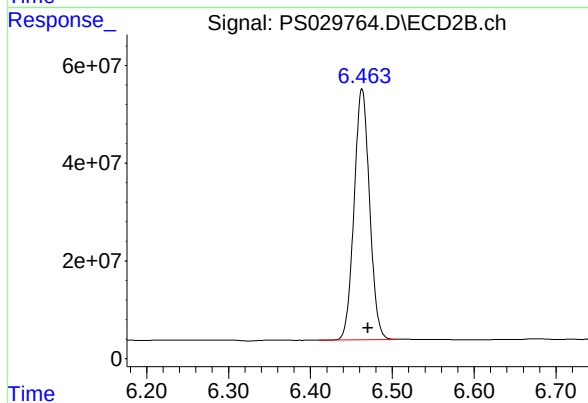
#1 Dalapon

R.T.: 2.530 min
Delta R.T.: -0.003 min
Response: 982008205
Conc: 618.55 ng/ml



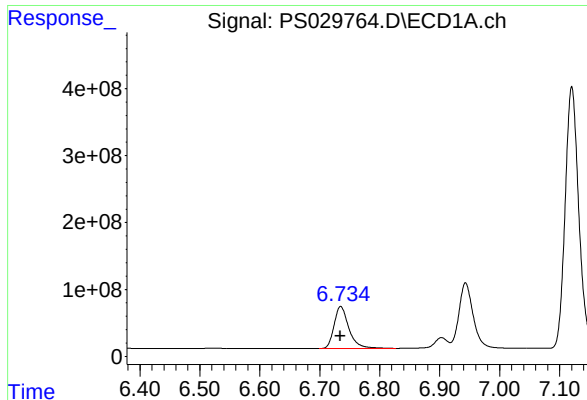
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.150 min
Delta R.T.: 0.000 min
Response: 2271965841
Conc: 755.37 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.463 min
Delta R.T.: -0.007 min
Response: 675062340
Conc: 699.14 ng/ml



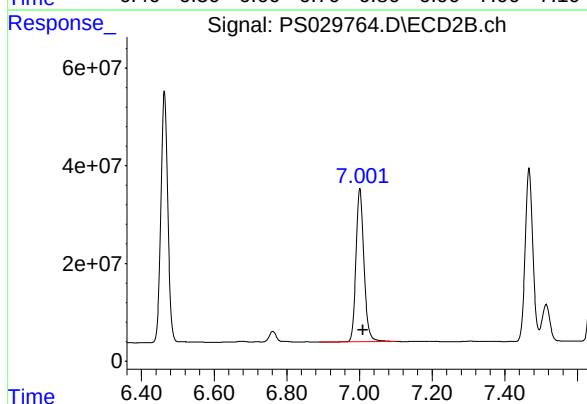
#3 4-Nitrophenol

R.T.: 6.735 min
Delta R.T.: 0.000 min
Response: 1077227025
Conc: 766.82 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

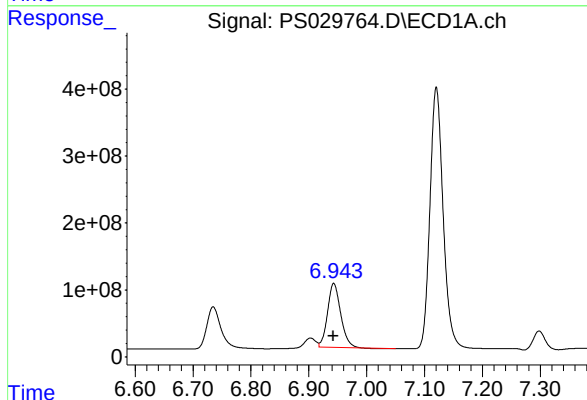
**Manual Integrations
APPROVED**

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



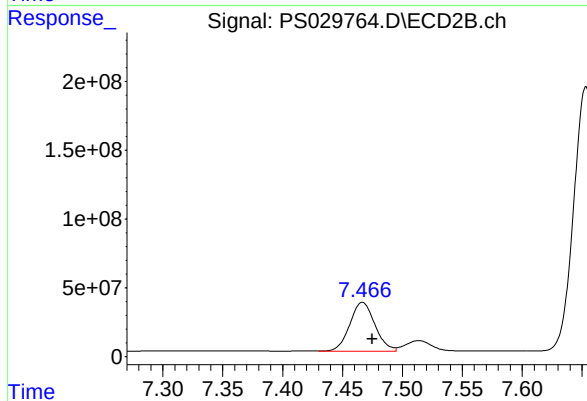
#3 4-Nitrophenol

R.T.: 7.001 min
Delta R.T.: -0.008 min
Response: 477913485
Conc: 674.07 ng/ml



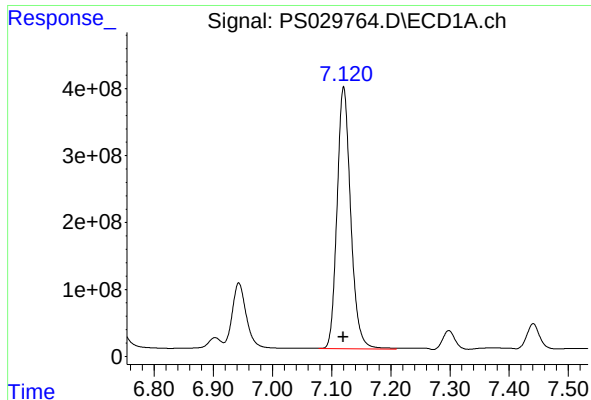
#4 2,4-DCAA

R.T.: 6.943 min
Delta R.T.: 0.001 min
Response: 1509699257
Conc: 740.47 ng/ml



#4 2,4-DCAA

R.T.: 7.467 min
Delta R.T.: -0.008 min
Response: 520798321
Conc: 764.18 ng/ml



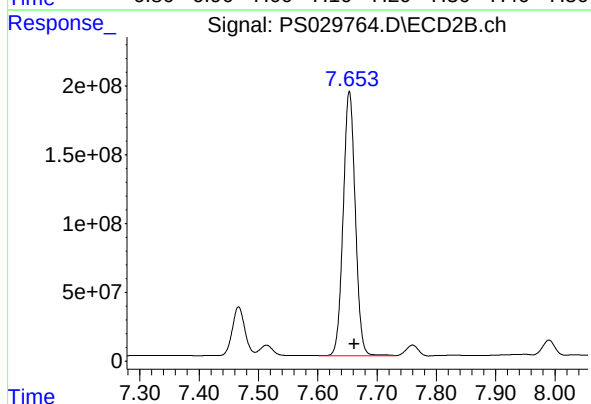
#5 DICAMBA

R.T.: 7.120 min
Delta R.T.: 0.000 min
Response: 6271398506
Conc: 753.60 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

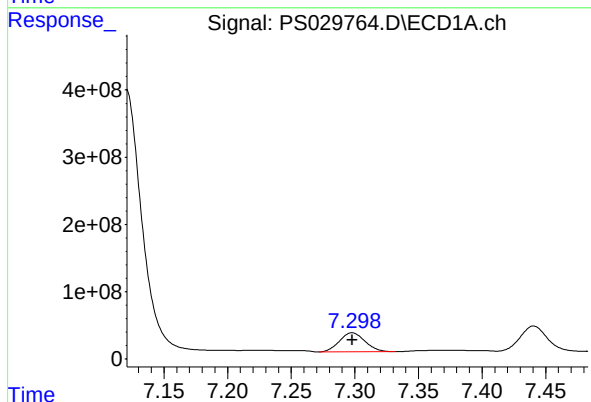
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



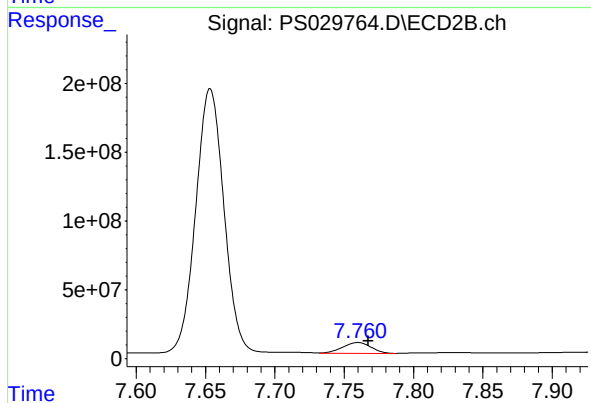
#5 DICAMBA

R.T.: 7.653 min
Delta R.T.: -0.008 min
Response: 2743539410
Conc: 742.83 ng/ml



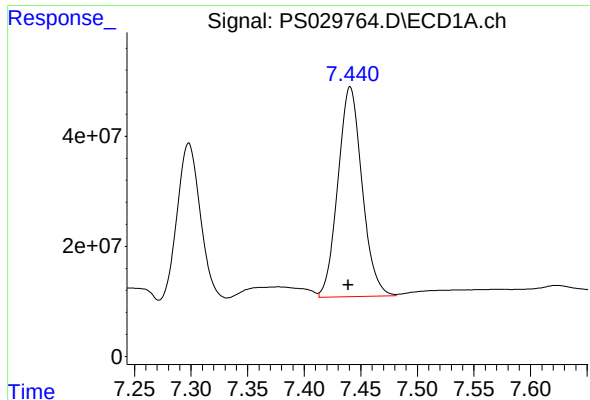
#6 MCPP

R.T.: 7.298 min
Delta R.T.: 0.000 min
Response: 398131569
Conc: 73.46 ug/ml



#6 MCPP

R.T.: 7.760 min
Delta R.T.: -0.008 min
Response: 113225912
Conc: 67.06 ug/ml



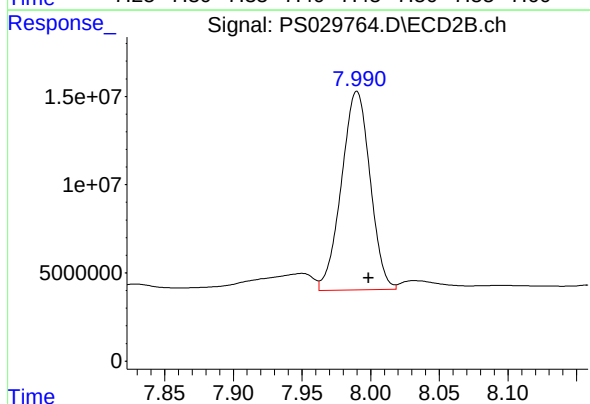
#7 MCPA

R.T.: 7.440 min
Delta R.T.: 0.001 min
Response: 566419562
Conc: 77.92 ug/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

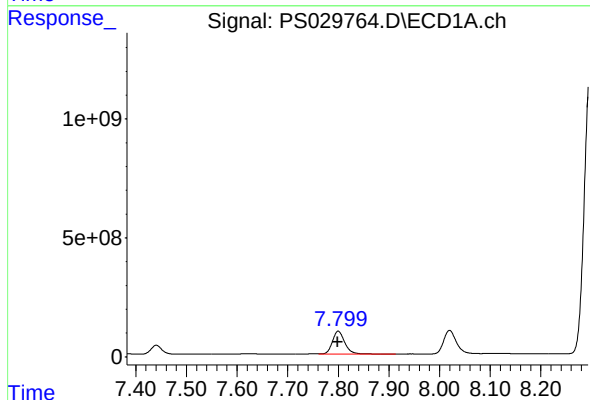
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



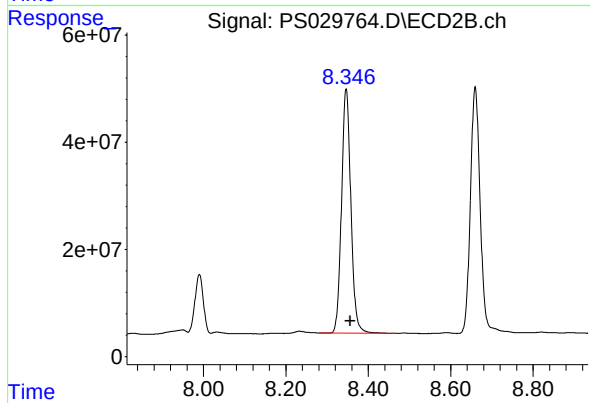
#7 MCPA

R.T.: 7.990 min
Delta R.T.: -0.009 min
Response: 163416990
Conc: 71.82 ug/ml



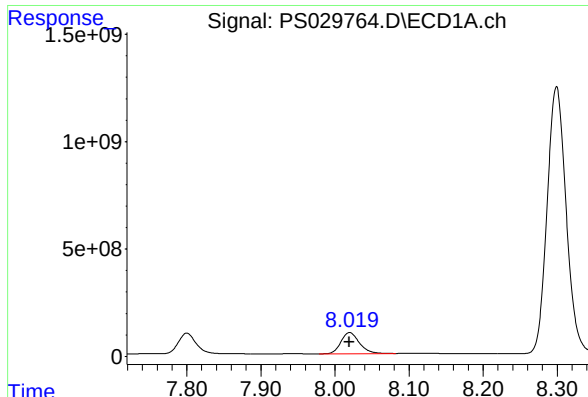
#8 DICHLORPROP

R.T.: 7.800 min
Delta R.T.: 0.000 min
Response: 1615944945
Conc: 734.71 ng/ml



#8 DICHLORPROP

R.T.: 8.346 min
Delta R.T.: -0.010 min
Response: 716512575
Conc: 741.61 ng/ml



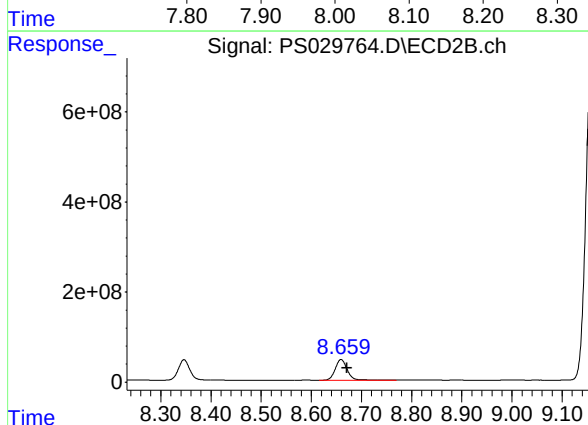
#9 2,4-D

R.T.: 8.020 min
Delta R.T.: 0.000 min
Response: 1742964220
Conc: 723.34 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

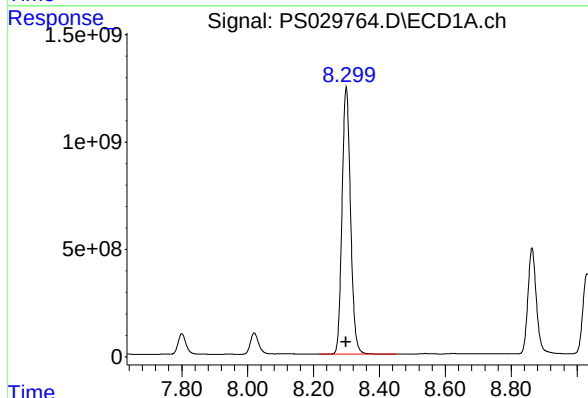
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



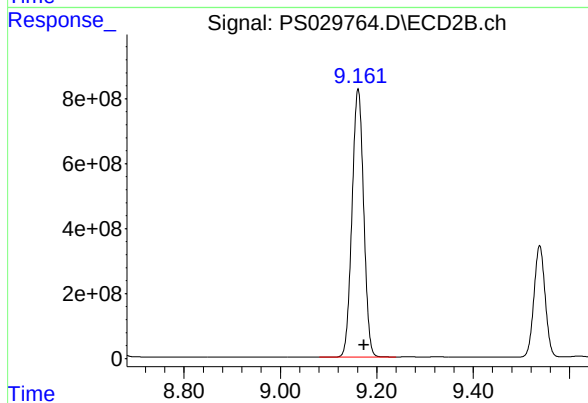
#9 2,4-D

R.T.: 8.659 min
Delta R.T.: -0.012 min
Response: 761231944
Conc: 705.85 ng/ml



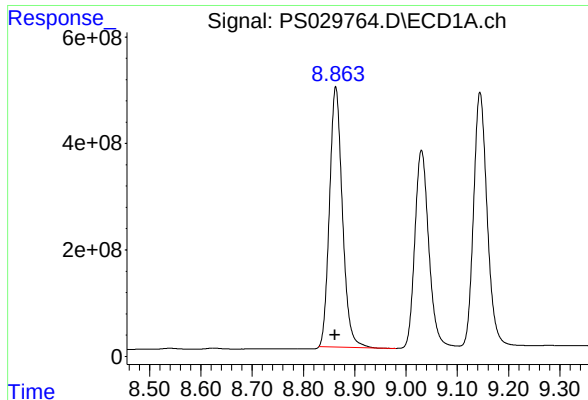
#10 Pentachlorophenol

R.T.: 8.299 min
Delta R.T.: 0.001 min
Response: 22259324465
Conc: 732.09 ng/ml



#10 Pentachlorophenol

R.T.: 9.161 min
Delta R.T.: -0.012 min
Response: 13838911156
Conc: 771.93 ng/ml



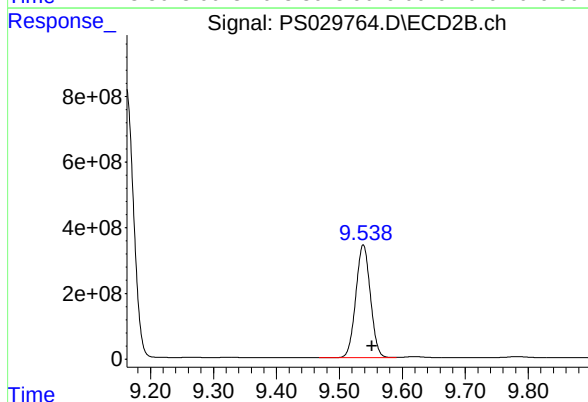
#11 2,4,5-TP (SILVEX)

R.T.: 8.863 min
Delta R.T.: 0.001 min
Response: 8538269883
Conc: 735.08 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

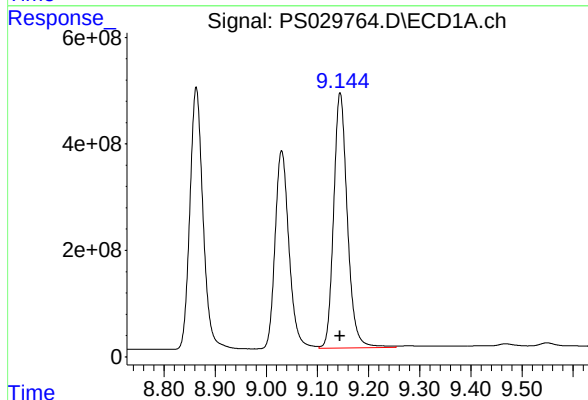
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



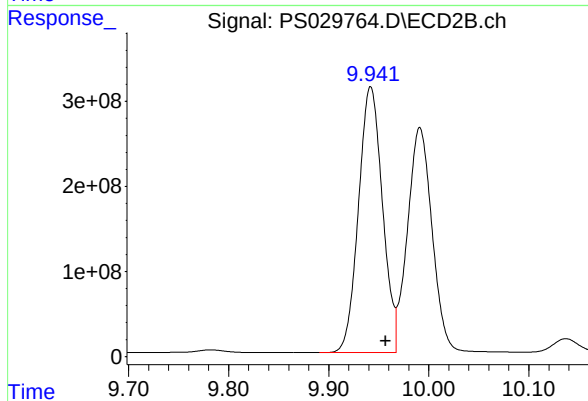
#11 2,4,5-TP (SILVEX)

R.T.: 9.538 min
Delta R.T.: -0.013 min
Response: 5524066096
Conc: 765.85 ng/ml



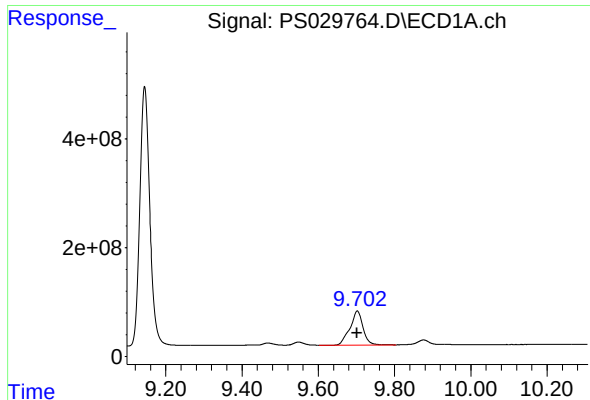
#12 2,4,5-T

R.T.: 9.144 min
Delta R.T.: 0.000 min
Response: 8905617056
Conc: 774.10 ng/ml



#12 2,4,5-T

R.T.: 9.942 min
Delta R.T.: -0.015 min
Response: 5202163537
Conc: 776.11 ng/ml



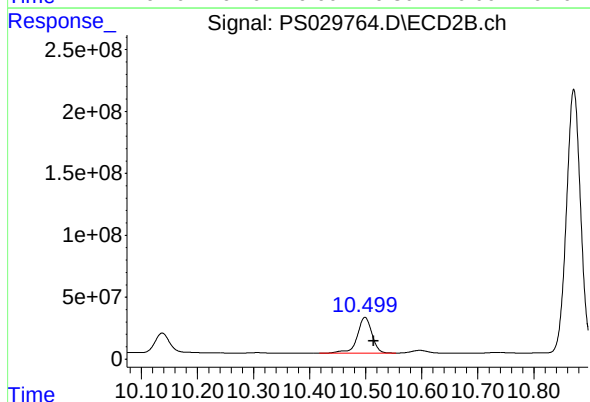
#13 2,4-DB

R.T.: 9.702 min
Delta R.T.: 0.001 min
Response: 1471356212
Conc: 809.89 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

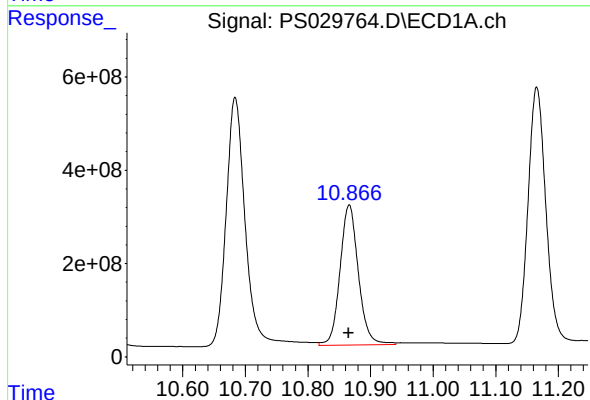
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



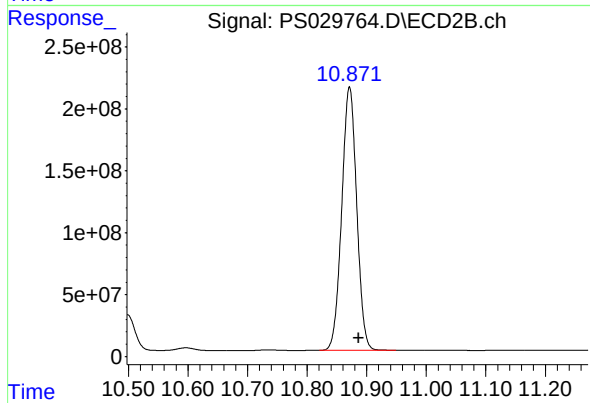
#13 2,4-DB

R.T.: 10.499 min
Delta R.T.: -0.015 min
Response: 530877019
Conc: 715.49 ng/ml



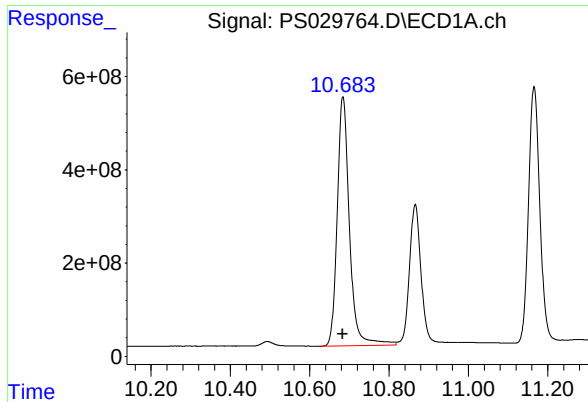
#14 DINOSEB

R.T.: 10.866 min
Delta R.T.: 0.001 min
Response: 6124973825
Conc: 725.53 ng/ml



#14 DINOSEB

R.T.: 10.871 min
Delta R.T.: -0.015 min
Response: 3708922847
Conc: 725.42 ng/ml



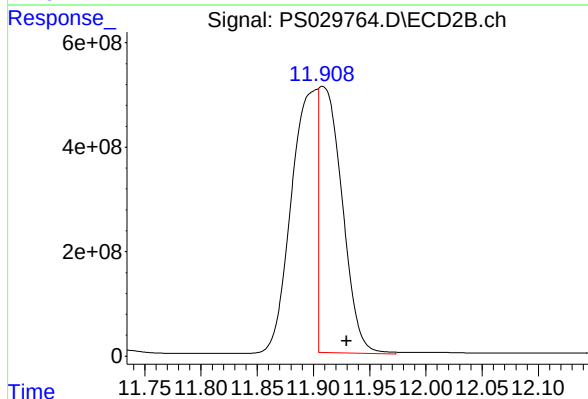
#15 Picloram

R.T.: 10.684 min
Delta R.T.: 0.000 min
Response: 11393575051
Conc: 735.05 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

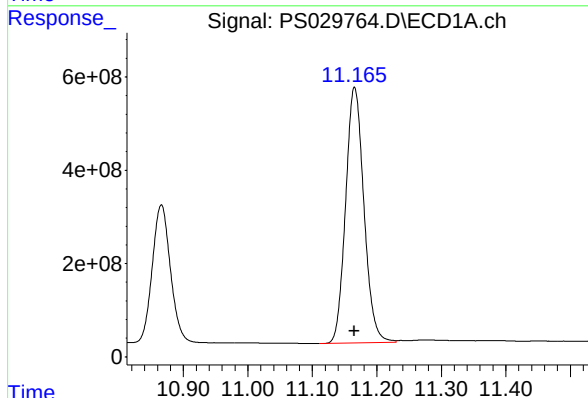
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



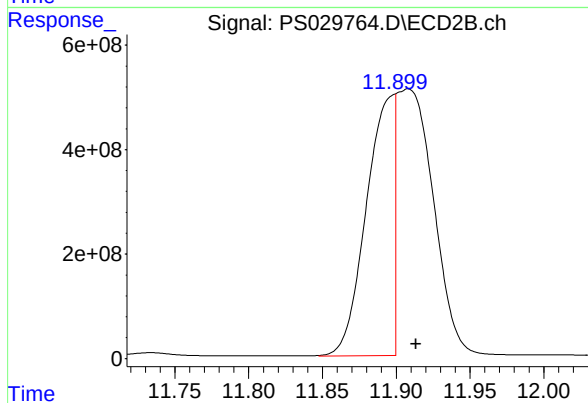
#15 Picloram

R.T.: 11.908 min
Delta R.T.: -0.022 min
Response: 7182528977
Conc: 607.43 ng/ml m



#16 DCPA

R.T.: 11.165 min
Delta R.T.: 0.000 min
Response: 10799740203
Conc: 773.28 ng/ml



#16 DCPA

R.T.: 11.899 min
Delta R.T.: -0.014 min
Response: 6563963088
Conc: 741.64 ng/ml m



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

CALIBRATION VERIFICATION SUMMARY

Contract: PORT06

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG NO.: Q1746

Continuing Calib Date: 04/10/2025 Initial Calibration Date(s): 04/02/2025 04/02/2025

Continuing Calib Time: 01:46 Initial Calibration Time(s): 17:32 20:44

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
2,4-DCAA	6.94	6.96	6.86	7.06	0.02
2,4-D	8.01	8.04	7.94	8.14	0.03
2,4,5-TP(Silvex)	8.85	8.89	8.79	8.99	0.04



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Fax : 908 789 8922

CALIBRATION VERIFICATION SUMMARY

Contract: PORT06

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG NO.: Q1746

Continuing Calib Date: 04/10/2025 Initial Calibration Date(s): 04/02/2025 04/02/2025

Continuing Calib Time: 01:46 Initial Calibration Time(s): 17:32 20:44

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
2,4-DCAA	7.48	7.48	7.38	7.58	0.00
2,4-D	8.67	8.67	8.57	8.77	0.00
2,4,5-TP(Silvex)	9.55	9.55	9.45	9.65	0.00



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CALIBRATION VERIFICATION SUMMARY
Contract: PORT06
Lab Code: CHEM **Case No.:** Q1746 **SAS No.:** Q1746 **SDG NO.:** Q1746
GC Column: RTX-CLP **ID:** 0.32 (mm) **Initi. Calib. Date(s):** 04/02/2025 04/02/2025
Client Sample No.: CCAL02 **Date Analyzed:** 04/10/2025
Lab Sample No.: HSTDCCC750 **Data File :** PS029773.D **Time Analyzed:** 01:46

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-TP(Silvex)	8.853	8.788	8.988	800.440	712.500	12.3
2,4-D	8.012	7.942	8.142	758.180	705.000	7.5
2,4-DCAA	6.936	6.863	7.063	810.730	750.000	8.1



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

CALIBRATION VERIFICATION SUMMARY

Contract: PORT06

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG NO.: Q1746

GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 04/02/2025 04/02/2025

Client Sample No.: CCAL02 Date Analyzed: 04/10/2025

Lab Sample No.: HSTDCCC750 Data File : PS029773.D Time Analyzed: 01:46

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-TP(Silvex)	9.553	9.451	9.651	813.430	712.500	14.2
2,4-D	8.673	8.571	8.771	749.720	705.000	6.3
2,4-DCAA	7.478	7.375	7.575	812.560	750.000	8.3

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS040925\
 Data File : PS029773.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 10 Apr 2025 01:46
 Operator : AR\AJ
 Sample : HSTDCCC750
 Misc :
 ALS Vial : 24 Sample Multiplier: 1

Instrument :

ECD_S

ClientSampleId :

HSTDCCC750

Manual Integrations**APPROVED**

Reviewed By :Abdul Mirza 04/10/2025

Supervised By :mohammad ahmed 04/11/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Apr 10 06:45:53 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
 Quant Title : 8080.M
 QLast Update : Wed Apr 02 23:52:55 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds						
4) S 2,4-DCAA	6.936	7.478	1652.9E6	553.8E6	810.729m	812.563
Target Compounds						
1) T Dalapon	2.457	2.530	2344.9E6	1034.1E6	691.221	651.372
2) T 3,5-DICHL...	6.143	6.473	2383.7E6	716.7E6	792.530	742.301
3) T 4-Nitroph...	6.728	7.012	1091.0E6	496.5E6	776.633m	700.223
5) T DICAMBA	7.113	7.665	6612.6E6	2925.8E6	794.594	792.167
6) T MCPP	7.291	7.772	426.1E6	122.3E6	78.622	72.408
7) T MCPA	7.433	8.003	573.2E6	171.7E6	78.851m	75.459
8) T DICHLORPROP	7.792	8.359	1698.7E6	756.1E6	772.333	782.545
9) T 2,4-D	8.012	8.673	1826.9E6	808.5E6	758.184	749.717
10) T Pentachlo...	8.290	9.174	23559.8E6	14693.6E6	774.866	819.603m
11) T 2,4,5-TP ...	8.853	9.553	9297.4E6	5867.2E6	800.437m	813.427
12) T 2,4,5-T	9.135	9.956	9374.9E6	5450.6E6	814.899	813.184m
13) T 2,4-DB	9.692	10.513	1539.3E6	567.1E6	847.307m	764.281
14) T DINOSEB	10.856	10.886	6412.2E6	3818.3E6	759.551	746.812
15) T Picloram	10.673	11.924	12321.7E6	8254.7E6	794.930	698.105m
16) T DCPA	11.155	11.913	11536.7E6	6691.2E6	826.049	756.014m

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS040925\
Data File : PS029773.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 10 Apr 2025 01:46
Operator : AR\AJ
Sample : HSTDCCC750
Misc :
ALS Vial : 24 Sample Multiplier: 1

Instrument :

ECD_S

ClientSampleId :

HSTDCCC750

Manual Integrations

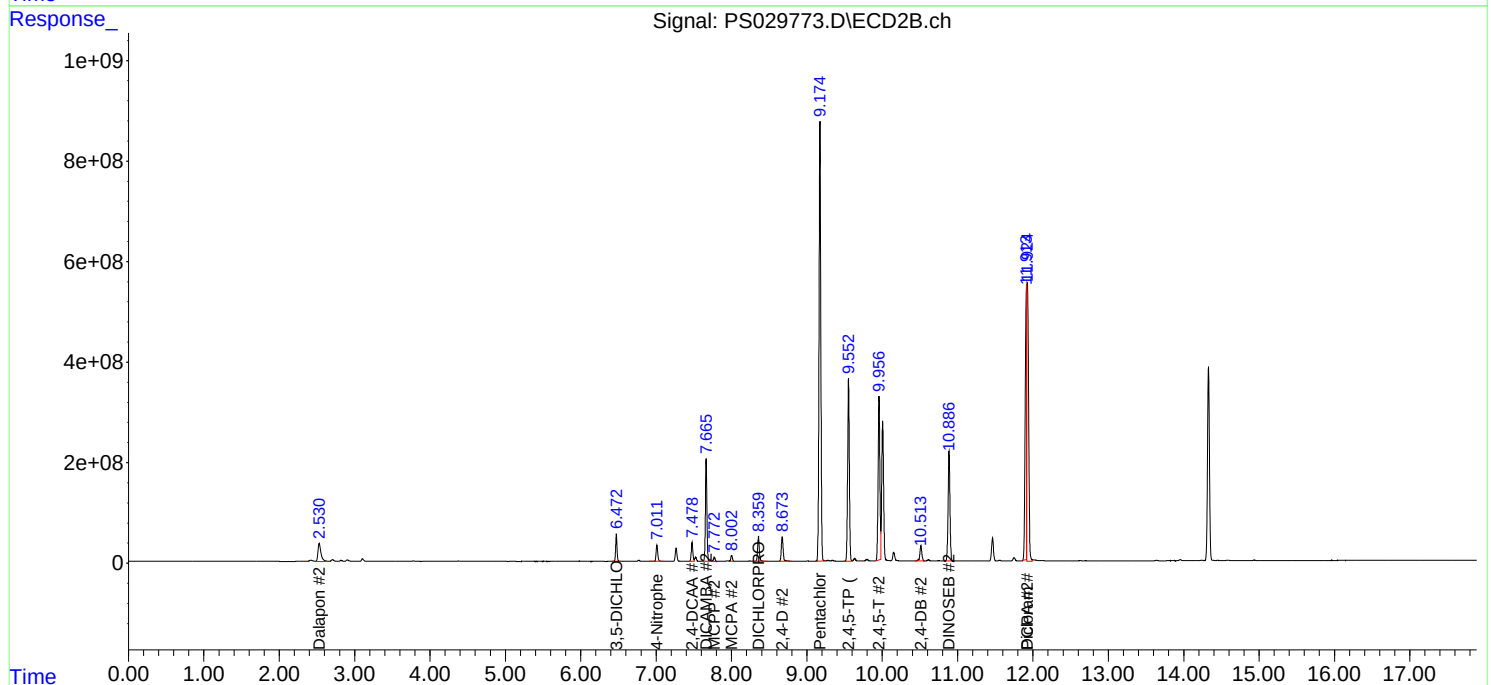
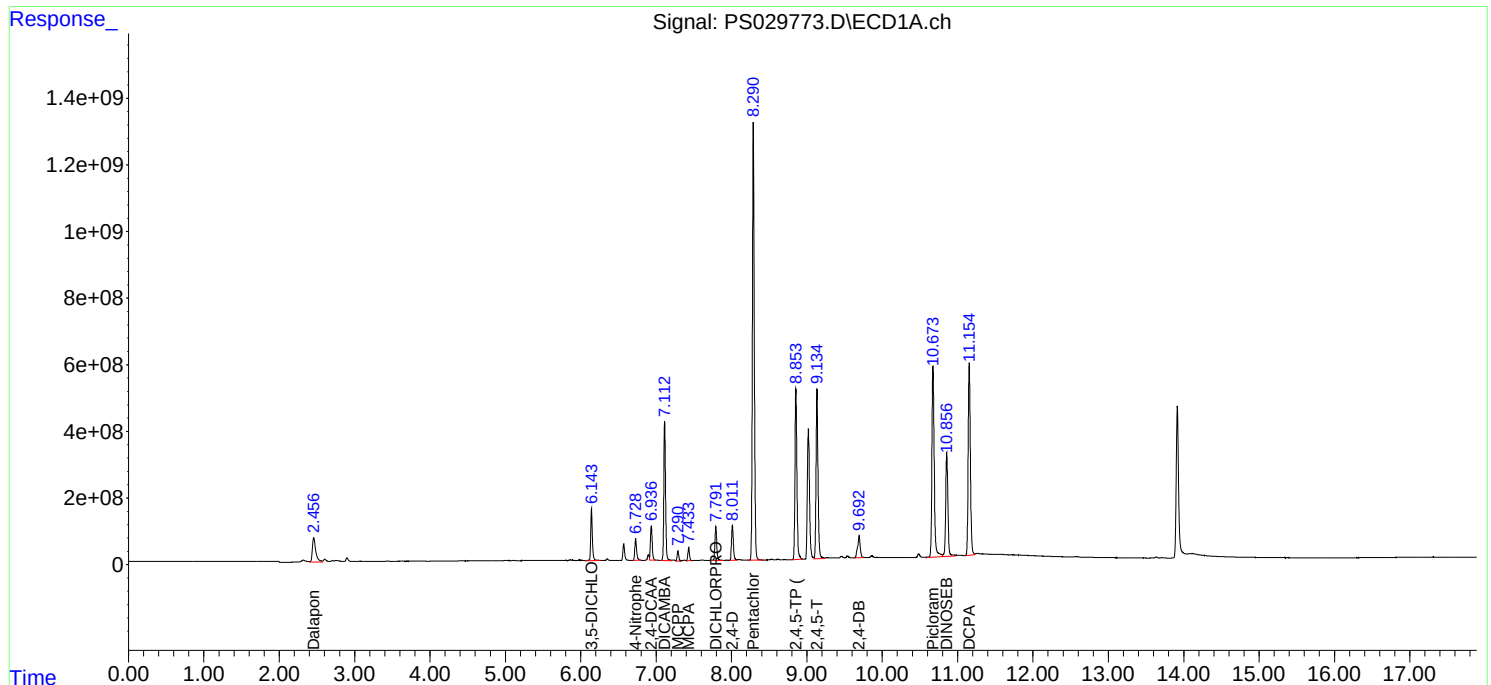
APPROVED

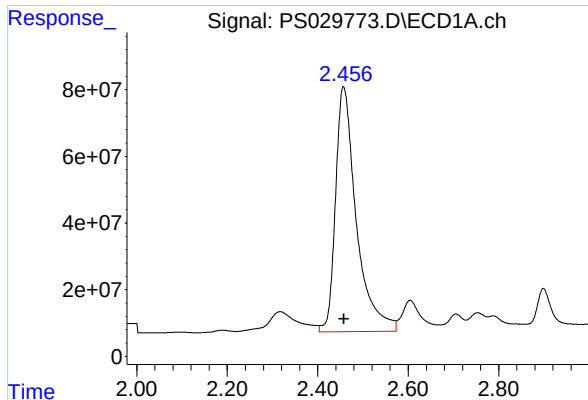
Reviewed By :Abdul Mirza 04/10/2025

Supervised By :mohammad ahmed 04/11/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 10 06:45:53 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
Quant Title : 8080.M
QLast Update : Wed Apr 02 23:52:55 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm





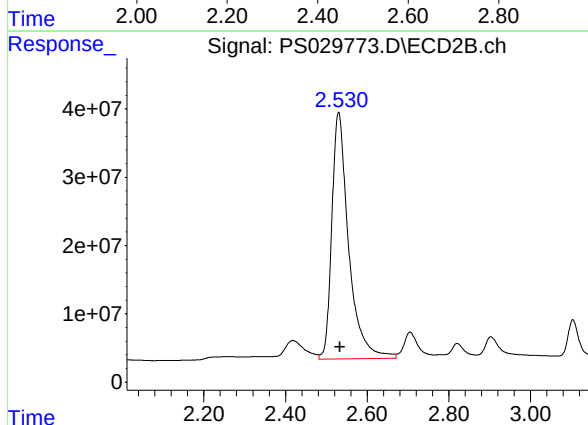
#1 Dalapon

R.T.: 2.457 min
Delta R.T.: -0.001 min
Response: 2344895021
Conc: 691.22 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

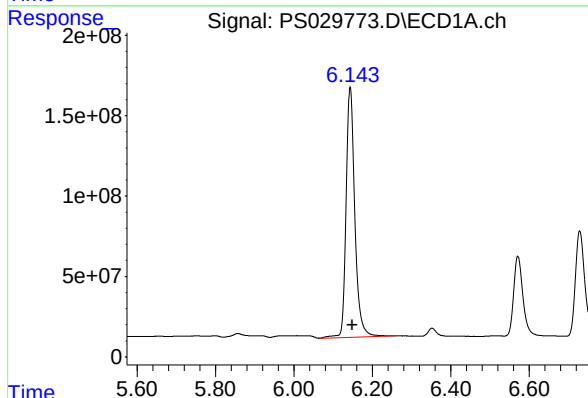
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



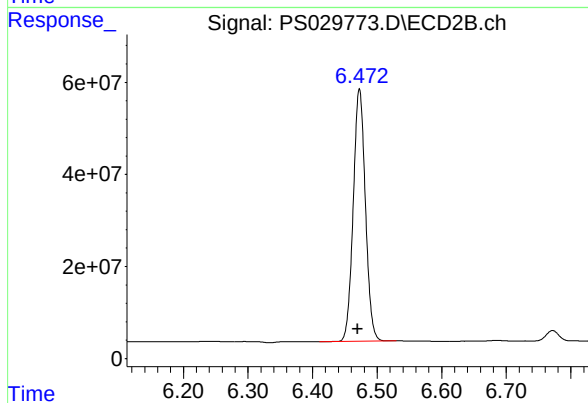
#1 Dalapon

R.T.: 2.530 min
Delta R.T.: -0.003 min
Response: 1034115133
Conc: 651.37 ng/ml



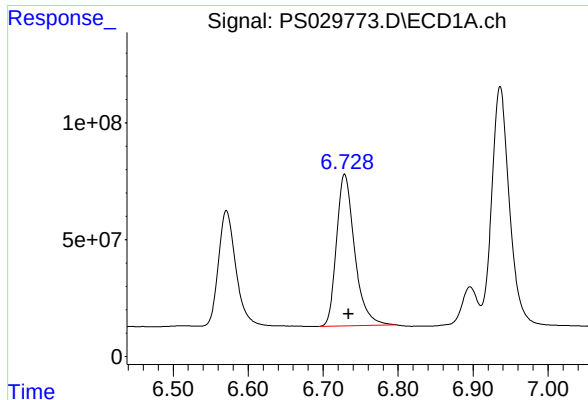
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.143 min
Delta R.T.: -0.006 min
Response: 2383738424
Conc: 792.53 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.473 min
Delta R.T.: 0.002 min
Response: 716733695
Conc: 742.30 ng/ml



#3 4-Nitrophenol

R.T.: 6.728 min
Delta R.T.: -0.006 min
Response: 1091013471
Conc: 776.63 ng/ml

Instrument :

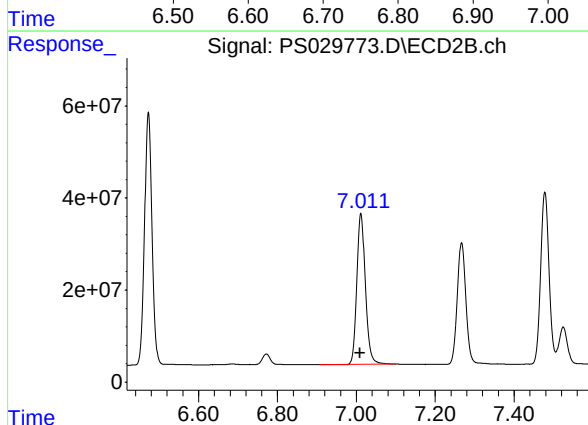
ECD_S

ClientSampleId :

HSTDCCC750

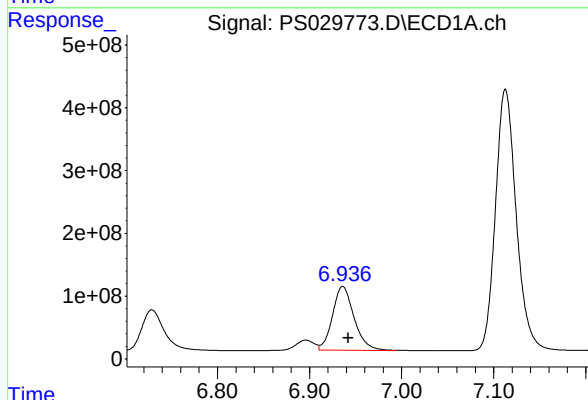
**Manual Integrations
APPROVED**

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



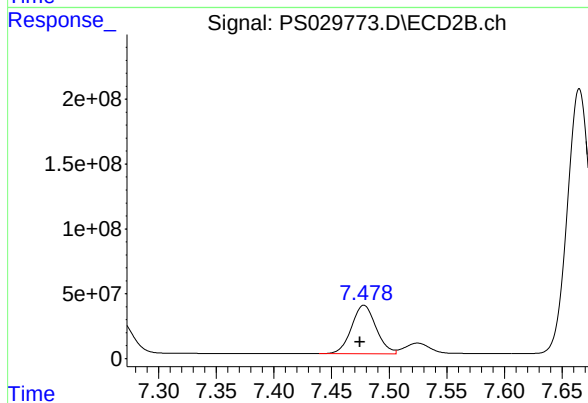
#3 4-Nitrophenol

R.T.: 7.012 min
Delta R.T.: 0.002 min
Response: 496456625
Conc: 700.22 ng/ml



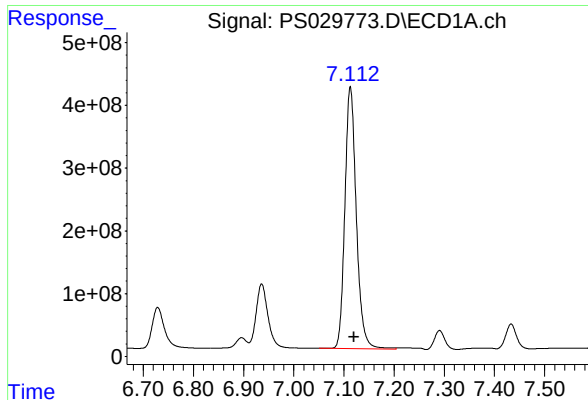
#4 2,4-DCAA

R.T.: 6.936 min
Delta R.T.: -0.006 min
Response: 1652938849
Conc: 810.73 ng/ml m



#4 2,4-DCAA

R.T.: 7.478 min
Delta R.T.: 0.003 min
Response: 553772057
Conc: 812.56 ng/ml



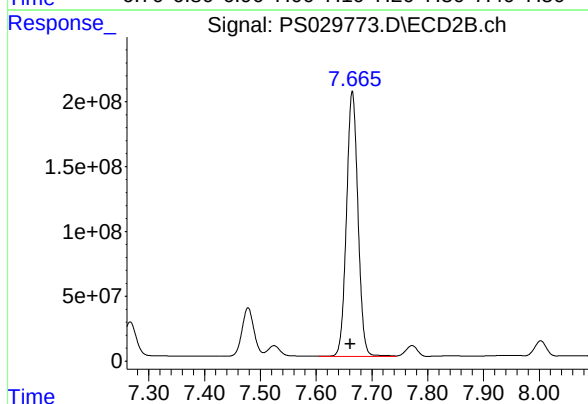
#5 DICAMBA

R.T.: 7.113 min
Delta R.T.: -0.007 min
Response: 6612568955
Conc: 794.59 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

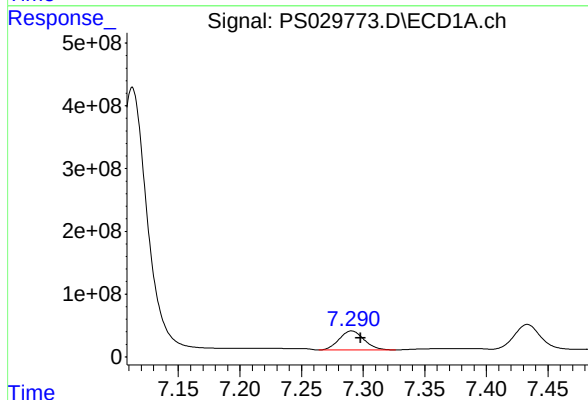
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



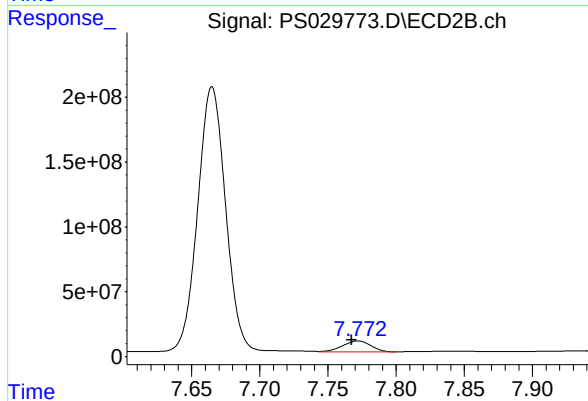
#5 DICAMBA

R.T.: 7.665 min
Delta R.T.: 0.003 min
Response: 2925766690
Conc: 792.17 ng/ml



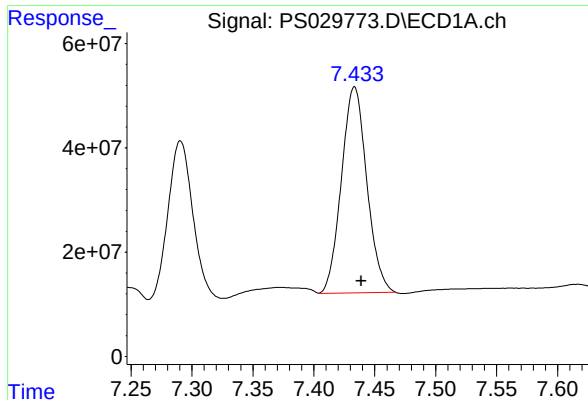
#6 MCP

R.T.: 7.291 min
Delta R.T.: -0.007 min
Response: 426119493
Conc: 78.62 ug/ml



#6 MCP

R.T.: 7.772 min
Delta R.T.: 0.005 min
Response: 122259966
Conc: 72.41 ug/ml



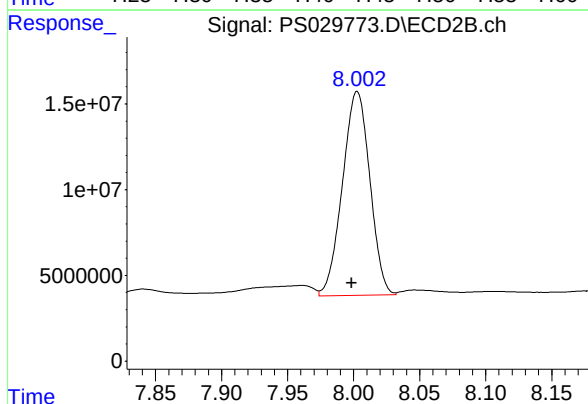
#7 MCPA

R.T.: 7.433 min
Delta R.T.: -0.006 min
Response: 573167063
Conc: 78.85 ug/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

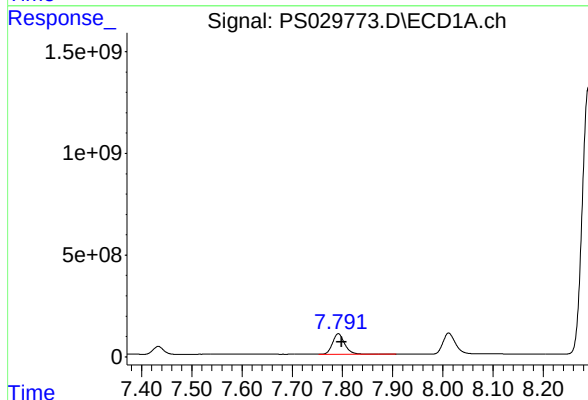
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



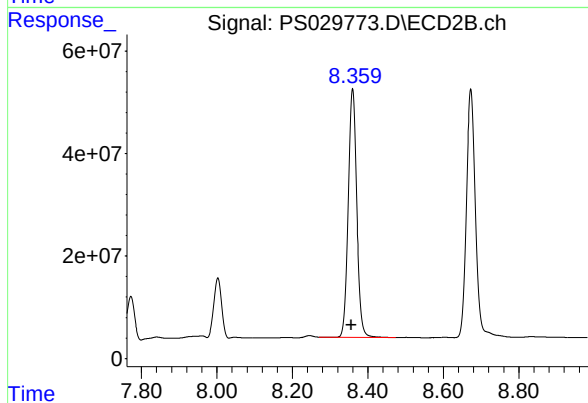
#7 MCPA

R.T.: 8.003 min
Delta R.T.: 0.004 min
Response: 171689272
Conc: 75.46 ug/ml



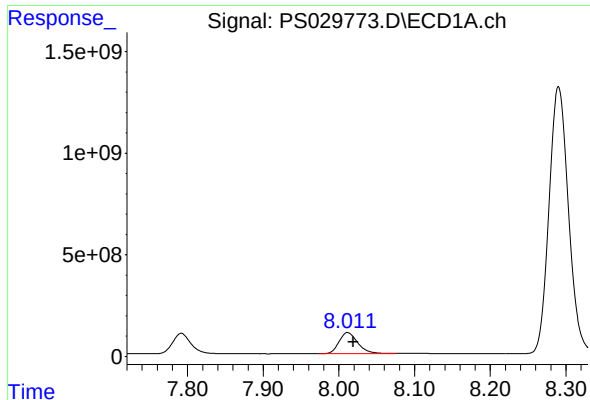
#8 DICHLORPROP

R.T.: 7.792 min
Delta R.T.: -0.007 min
Response: 1698698738
Conc: 772.33 ng/ml



#8 DICHLORPROP

R.T.: 8.359 min
Delta R.T.: 0.003 min
Response: 756057979
Conc: 782.55 ng/ml



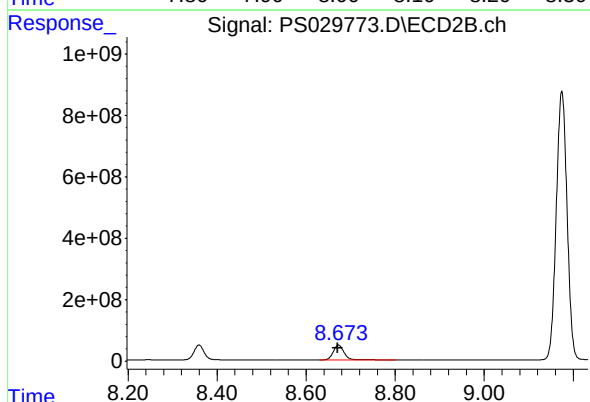
#9 2,4-D

R.T.: 8.012 min
Delta R.T.: -0.007 min
Response: 1826912252
Conc: 758.18 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

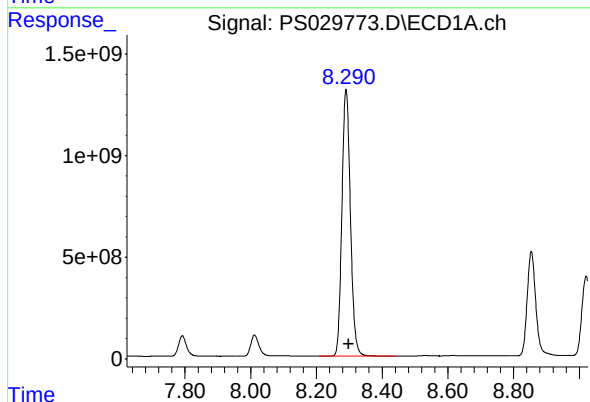
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



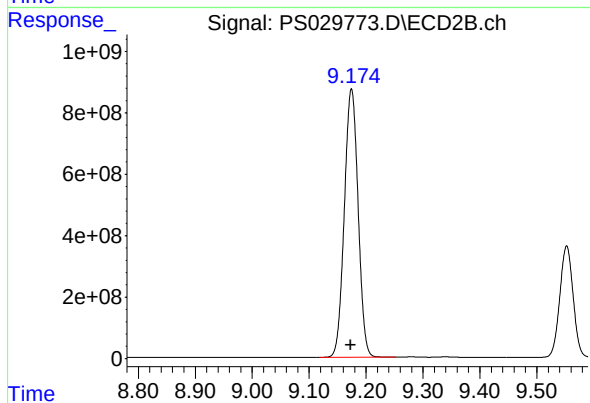
#9 2,4-D

R.T.: 8.673 min
Delta R.T.: 0.002 min
Response: 808542842
Conc: 749.72 ng/ml



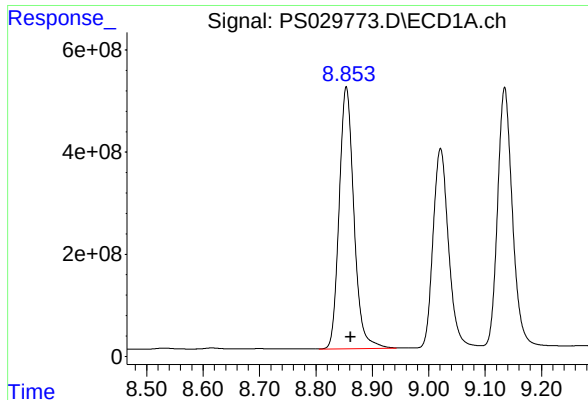
#10 Pentachlorophenol

R.T.: 8.290 min
Delta R.T.: -0.008 min
Response: 23559789166
Conc: 774.87 ng/ml



#10 Pentachlorophenol

R.T.: 9.174 min
Delta R.T.: 0.000 min
Response: 14693607702
Conc: 819.60 ng/ml m



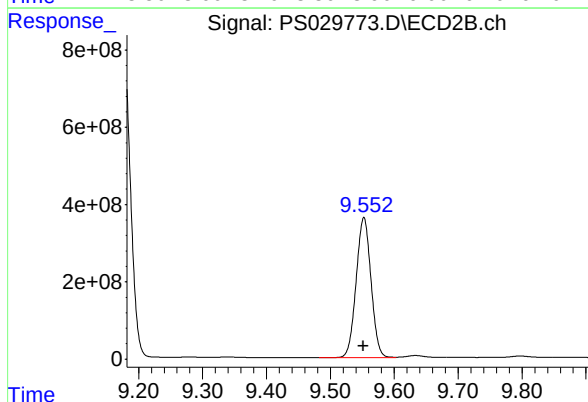
#11 2,4,5-TP (SILVEX)

R.T.: 8.853 min
Delta R.T.: -0.009 min
Response: 9297363652
Conc: 800.44 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

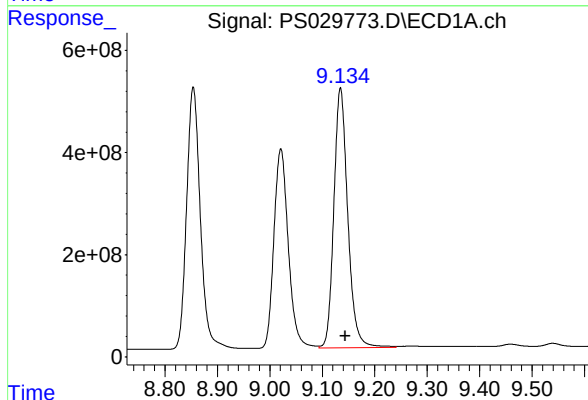
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



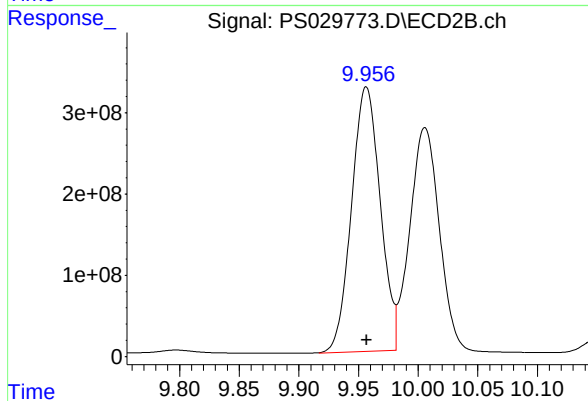
#11 2,4,5-TP (SILVEX)

R.T.: 9.553 min
Delta R.T.: 0.001 min
Response: 5867217390
Conc: 813.43 ng/ml



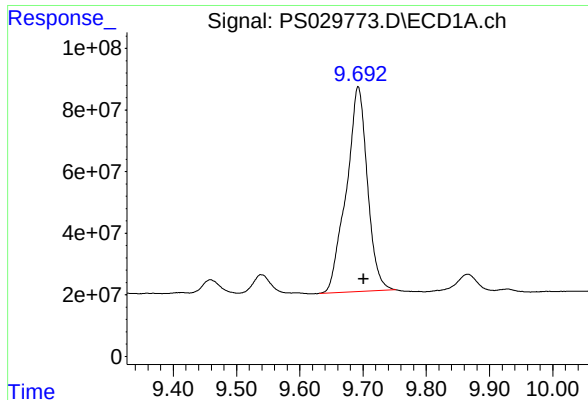
#12 2,4,5-T

R.T.: 9.135 min
Delta R.T.: -0.009 min
Response: 9374947728
Conc: 814.90 ng/ml



#12 2,4,5-T

R.T.: 9.956 min
Delta R.T.: 0.000 min
Response: 5450639449
Conc: 813.18 ng/ml m



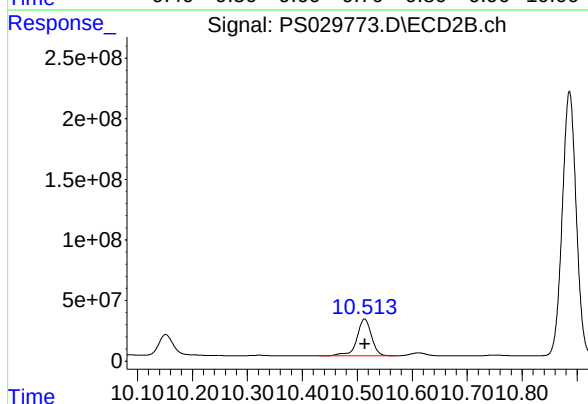
#13 2,4-DB

R.T.: 9.692 min
Delta R.T.: -0.009 min
Response: 1539339111
Conc: 847.31 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

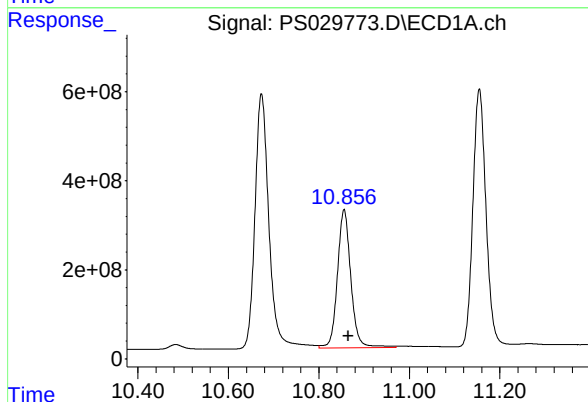
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



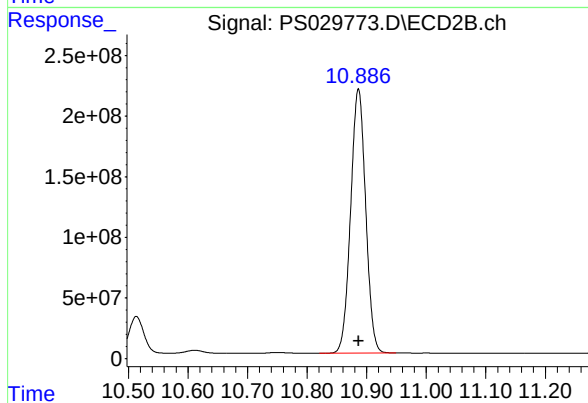
#13 2,4-DB

R.T.: 10.513 min
Delta R.T.: 0.000 min
Response: 567077691
Conc: 764.28 ng/ml



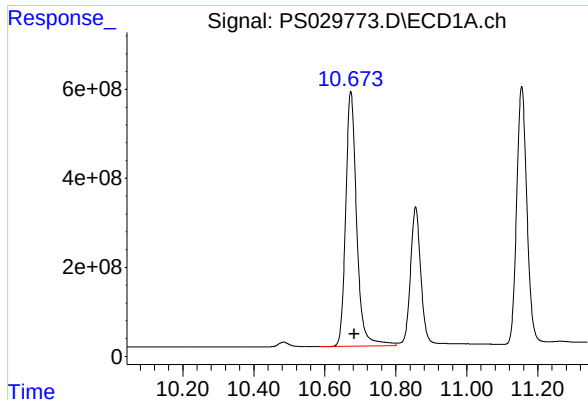
#14 DINOSEB

R.T.: 10.856 min
Delta R.T.: -0.009 min
Response: 6412164456
Conc: 759.55 ng/ml



#14 DINOSEB

R.T.: 10.886 min
Delta R.T.: 0.000 min
Response: 3818301832
Conc: 746.81 ng/ml



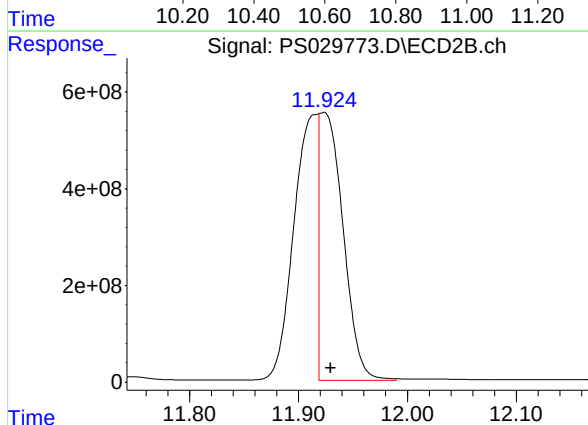
#15 Picloram

R.T.: 10.673 min
Delta R.T.: -0.010 min
Response: 12321735520
Conc: 794.93 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

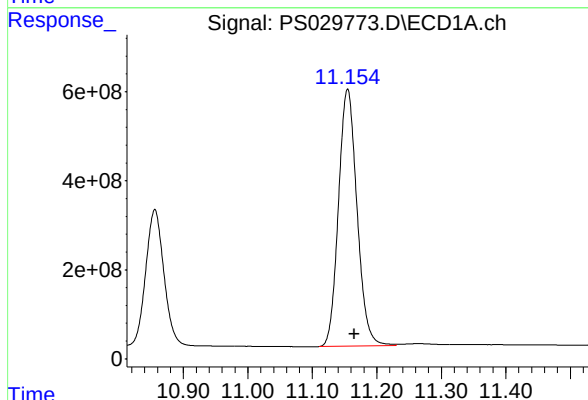
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



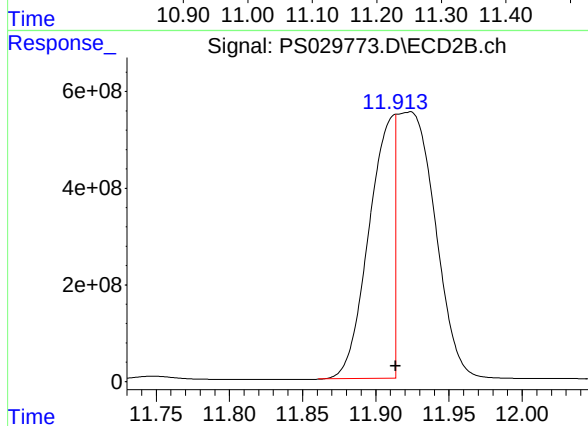
#15 Picloram

R.T.: 11.924 min
Delta R.T.: -0.006 min
Response: 8254690187
Conc: 698.10 ng/ml m



#16 DCPA

R.T.: 11.155 min
Delta R.T.: -0.010 min
Response: 11536685589
Conc: 826.05 ng/ml



#16 DCPA

R.T.: 11.913 min
Delta R.T.: 0.000 min
Response: 6691228066
Conc: 756.01 ng/ml m



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

CALIBRATION VERIFICATION SUMMARY

Contract: PORT06

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG NO.: Q1746

Continuing Calib Date: 04/10/2025 Initial Calibration Date(s): 04/02/2025 04/02/2025

Continuing Calib Time: 04:10 Initial Calibration Time(s): 17:32 20:44

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
2,4-DCAA	6.96	6.96	6.86	7.06	0.01
2,4-D	8.04	8.04	7.94	8.14	0.01
2,4,5-TP(Silvex)	8.88	8.89	8.79	8.99	0.01



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Fax : 908 789 8922

CALIBRATION VERIFICATION SUMMARY

Contract: PORT06

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG NO.: Q1746

Continuing Calib Date: 04/10/2025 Initial Calibration Date(s): 04/02/2025 04/02/2025

Continuing Calib Time: 04:10 Initial Calibration Time(s): 17:32 20:44

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
2,4-DCAA	7.50	7.48	7.38	7.58	-0.01
2,4-D	8.69	8.67	8.57	8.77	-0.02
2,4,5-TP(Silvex)	9.57	9.55	9.45	9.65	-0.02



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CALIBRATION VERIFICATION SUMMARY

Contract: PORT06

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG NO.: Q1746

GC Column: RTX-CLP ID: 0.32 (mm) Initi. Calib. Date(s): 04/02/2025 04/02/2025

Client Sample No.: CCAL03 Date Analyzed: 04/10/2025

Lab Sample No.: HSTDCCC750 Data File : PS029779.D Time Analyzed: 04:10

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-TP(Silvex)	8.879	8.788	8.988	715.890	712.500	0.5
2,4-D	8.035	7.942	8.142	682.280	705.000	-3.2
2,4-DCAA	6.955	6.863	7.063	735.610	750.000	-1.9



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CALIBRATION VERIFICATION SUMMARY

Contract: PORT06

Lab Code: CHEM Case No.: Q1746 SAS No.: Q1746 SDG NO.: Q1746

GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 04/02/2025 04/02/2025

Client Sample No.: CCAL03 Date Analyzed: 04/10/2025

Lab Sample No.: HSTDCCC750 Data File : PS029779.D Time Analyzed: 04:10

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-TP(Silvex)	9.573	9.451	9.651	730.130	712.500	2.5
2,4-D	8.692	8.571	8.771	669.740	705.000	-5.0
2,4-DCAA	7.495	7.375	7.575	718.420	750.000	-4.2

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS040925\
 Data File : PS029779.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 10 Apr 2025 04:10
 Operator : AR\AJ
 Sample : HSTDCCC750
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDCCC750

**Manual Integrations
 APPROVED**

Reviewed By : Abdul
 Mirza
 04/10/2025

Supervised By : mohammad
 ahmed
 04/11/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Apr 10 05:25:45 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
 Quant Title : 8080.M
 QLast Update : Wed Apr 02 23:52:55 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	6.955	7.495	1499.8E6	489.6E6	735.610	718.420
Target Compounds							
1) T	Dalapon	2.455	2.528	2071.2E6	931.3E6	610.553	586.618m
2) T	3,5-DICHL...	6.158	6.486	2141.0E6	638.4E6	711.837	661.210
3) T	4-Nitroph...	6.746	7.027	1014.3E6	444.3E6	722.001	626.721
5) T	DICAMBA	7.132	7.682	5896.5E6	2579.8E6	708.550	698.487
6) T	MCP	7.310	7.789	372.7E6	106.4E6	68.768	63.024
7) T	MCPA	7.454	8.020	488.2E6	148.6E6	67.161	65.295m
8) T	DICHLORPROP	7.814	8.378	1543.7E6	682.3E6	701.881	706.211
9) T	2,4-D	8.035	8.692	1644.0E6	722.3E6	682.275	669.739
10) T	Pentachlo...	8.314	9.194	21121.4E6	13169.4E6	694.669	734.583
11) T	2,4,5-TP ...	8.879	9.573	8315.3E6	5266.4E6	715.889	730.132
12) T	2,4,5-T	9.161	9.978	8374.6E6	4952.7E6	727.950	738.898
13) T	2,4-DB	9.720	10.535	1386.0E6	510.3E6	762.895	687.767
14) T	DINOSEB	10.885	10.908	5675.6E6	3393.8E6	672.299	663.791
15) T	Picloram	10.703	11.942	10618.7E6	7294.3E6	685.057	616.886m
16) T	DCPA	11.185	11.937	10222.2E6	5955.9E6	731.930	672.934m

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS040925\
Data File : PS029779.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 10 Apr 2025 04:10
Operator : AR\AJ
Sample : HSTDCCC750
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :

ECD_S

ClientSampleId :

HSTDCCC750

Manual Integrations

APPROVED

Reviewed By :Abdul

Mirza

04/10/2025

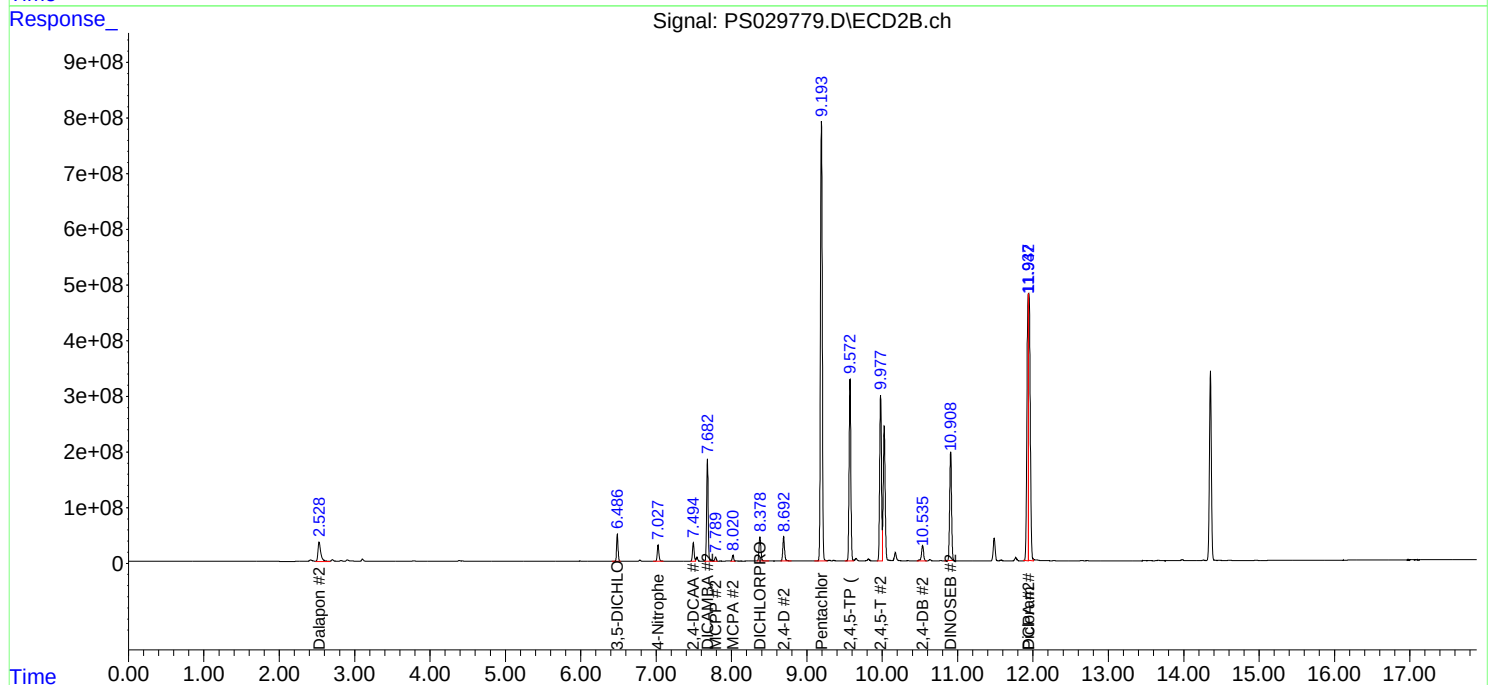
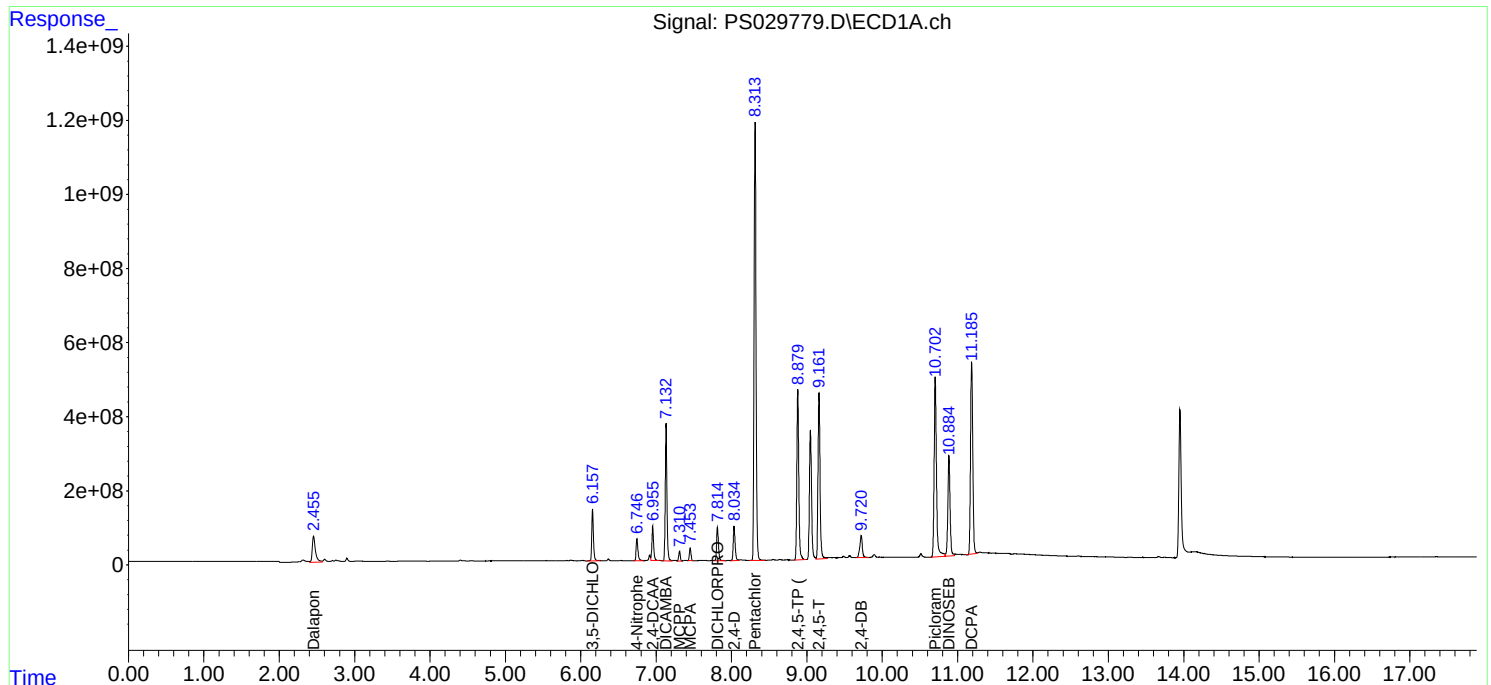
Supervised By :mohammad

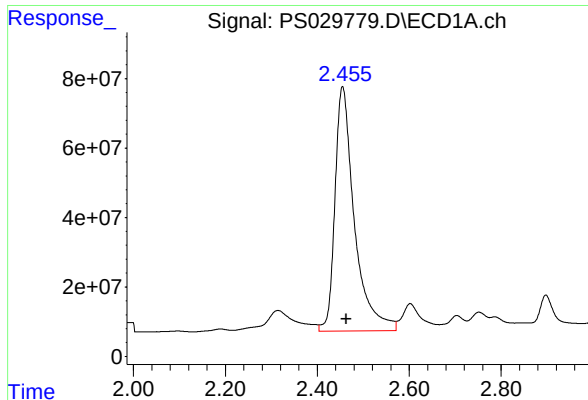
ahmed

04/11/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 10 05:25:45 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
Quant Title : 8080.M
QLast Update : Wed Apr 02 23:52:55 2025
Response via : Initial Calibration
Integrator: ChemStation

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





#1 Dalapon

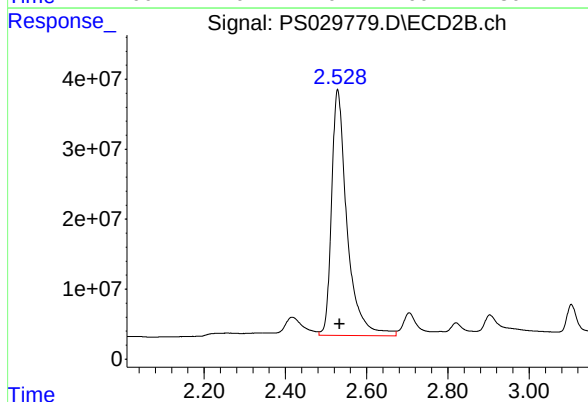
R.T.: 2.455 min
Delta R.T.: -0.008 min
Response: 2071238778
Conc: 610.55 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Manual Integrations
APPROVED

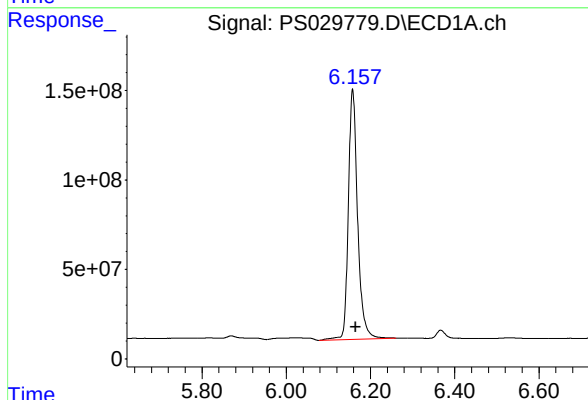
Reviewed By :Abdul
Mirza
04/10/2025

Supervised By :mohammad
ahmed
04/11/2025



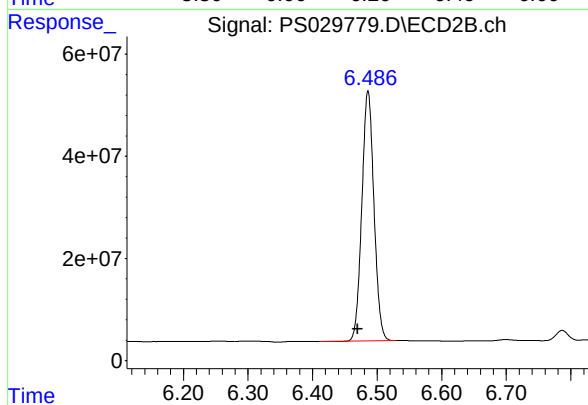
#1 Dalapon

R.T.: 2.528 min
Delta R.T.: -0.005 min
Response: 931311634
Conc: 586.62 ng/ml



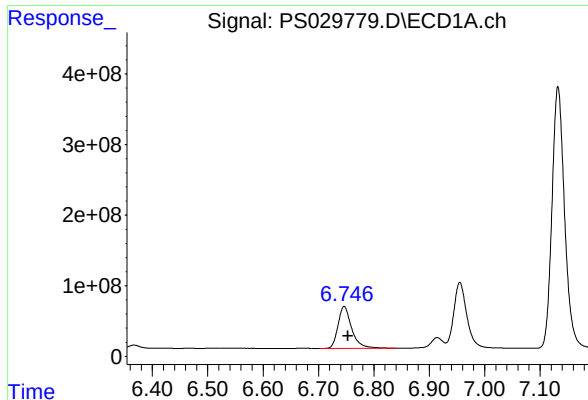
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.158 min
Delta R.T.: -0.007 min
Response: 2141033486
Conc: 711.84 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.486 min
Delta R.T.: 0.016 min
Response: 638435770
Conc: 661.21 ng/ml



#3 4-Nitrophenol

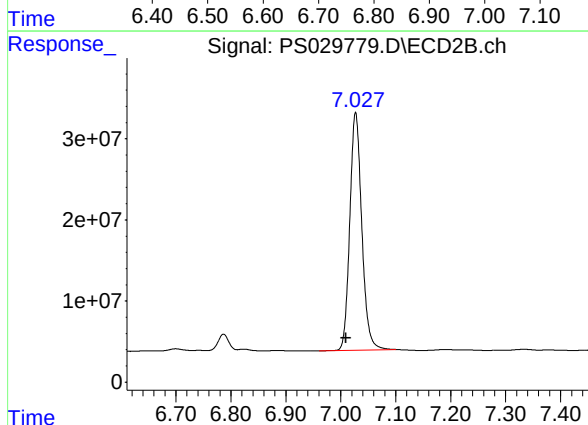
R.T.: 6.746 min
Delta R.T.: -0.007 min
Response: 1014266068
Conc: 722.00 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Manual Integrations
APPROVED

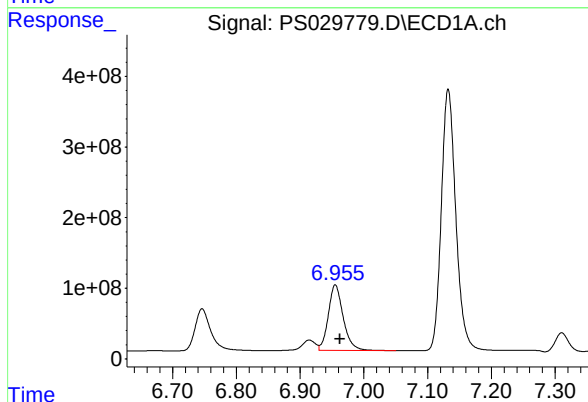
Reviewed By :Abdul
Mirza
04/10/2025

Supervised By :mohammad
ahmed
04/11/2025



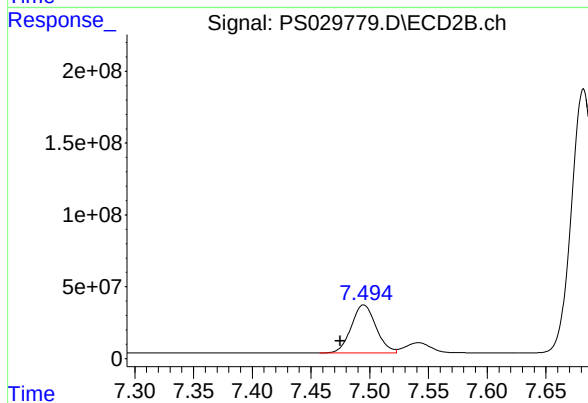
#3 4-Nitrophenol

R.T.: 7.027 min
Delta R.T.: 0.018 min
Response: 444344210
Conc: 626.72 ng/ml



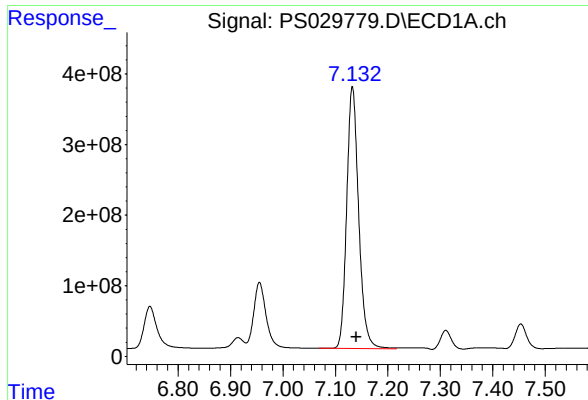
#4 2,4-DCAA

R.T.: 6.955 min
Delta R.T.: -0.007 min
Response: 1499783962
Conc: 735.61 ng/ml



#4 2,4-DCAA

R.T.: 7.495 min
Delta R.T.: 0.020 min
Response: 489612356
Conc: 718.42 ng/ml



#5 DICAMBA

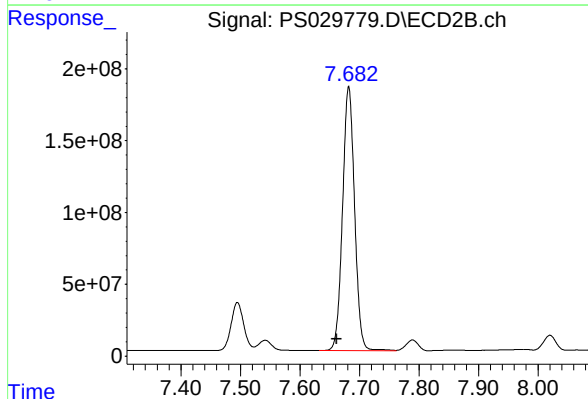
R.T.: 7.132 min
Delta R.T.: -0.007 min
Response: 5896508973
Conc: 708.55 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Manual Integrations
APPROVED

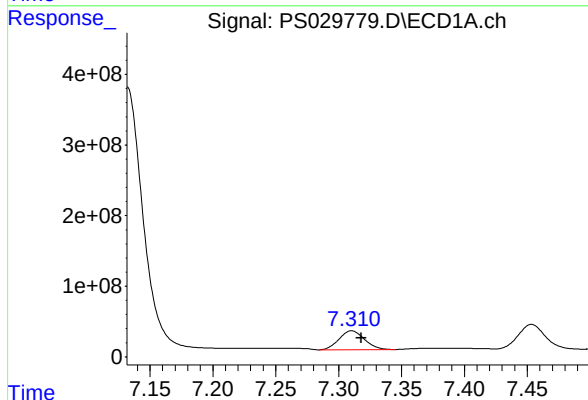
Reviewed By :Abdul
Mirza
04/10/2025

Supervised By :mohammad
ahmed
04/11/2025



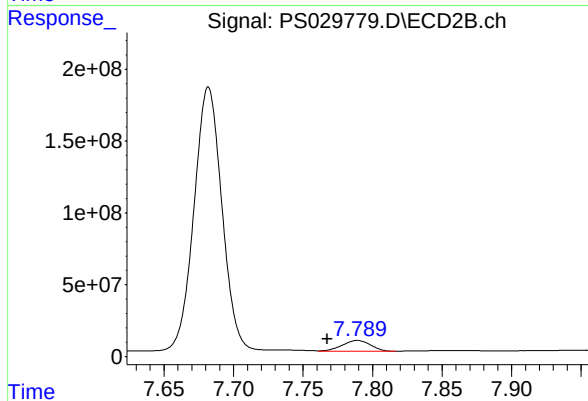
#5 DICAMBA

R.T.: 7.682 min
Delta R.T.: 0.020 min
Response: 2579769170
Conc: 698.49 ng/ml



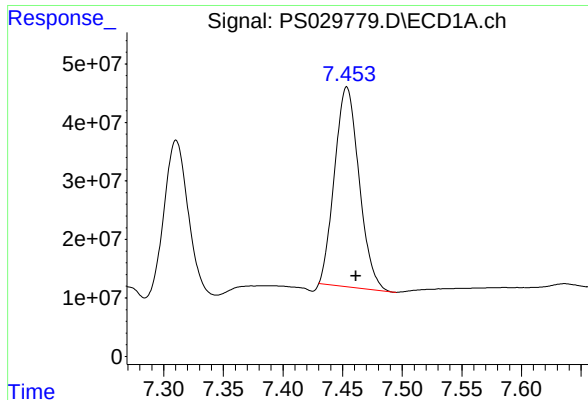
#6 MCPP

R.T.: 7.310 min
Delta R.T.: -0.008 min
Response: 372711227
Conc: 68.77 ug/ml



#6 MCPP

R.T.: 7.789 min
Delta R.T.: 0.022 min
Response: 106414142
Conc: 63.02 ug/ml



#7 MCPA

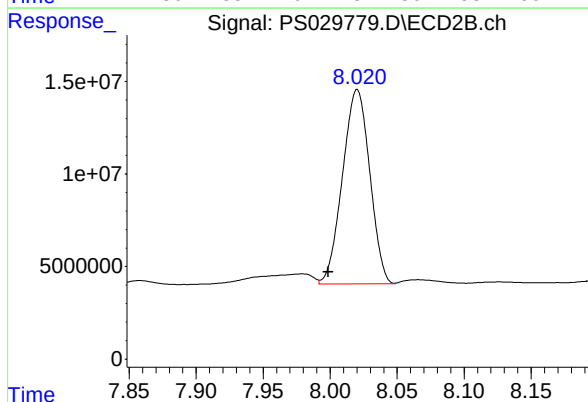
R.T.: 7.454 min
Delta R.T.: -0.008 min
Response: 488191566
Conc: 67.16 ug/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Manual Integrations
APPROVED

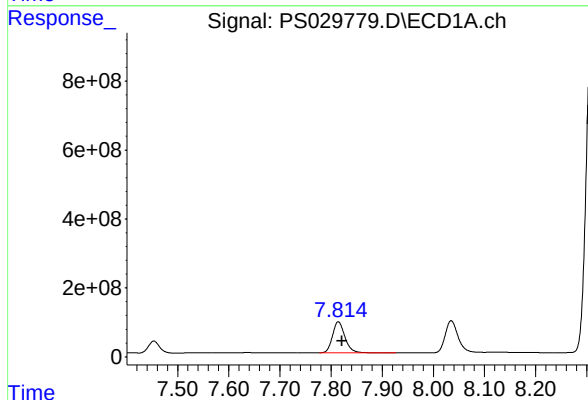
Reviewed By :Abdul
Mirza
04/10/2025

Supervised By :mohammad
ahmed
04/11/2025



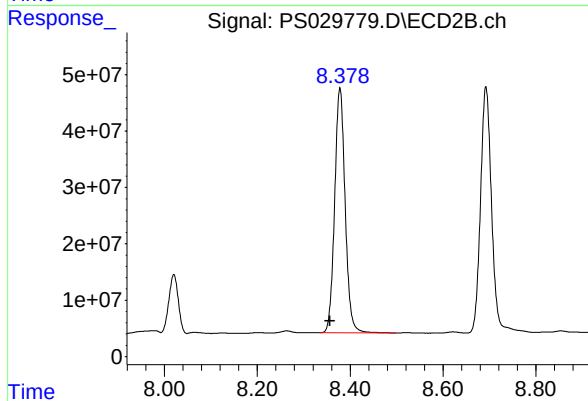
#7 MCPA

R.T.: 8.020 min
Delta R.T.: 0.021 min
Response: 148563324
Conc: 65.29 ug/ml



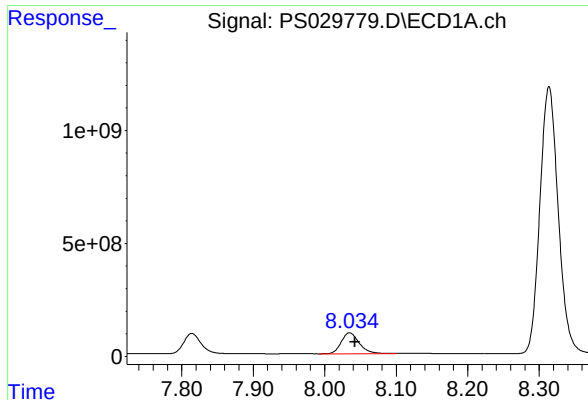
#8 DICHLORPROP

R.T.: 7.814 min
Delta R.T.: -0.008 min
Response: 1543743132
Conc: 701.88 ng/ml



#8 DICHLORPROP

R.T.: 8.378 min
Delta R.T.: 0.022 min
Response: 682307211
Conc: 706.21 ng/ml



#9 2,4-D

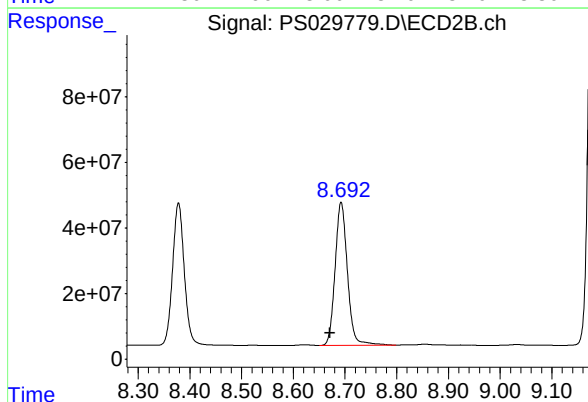
R.T.: 8.035 min
Delta R.T.: -0.008 min
Response: 1644003466
Conc: 682.28 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Manual Integrations
APPROVED

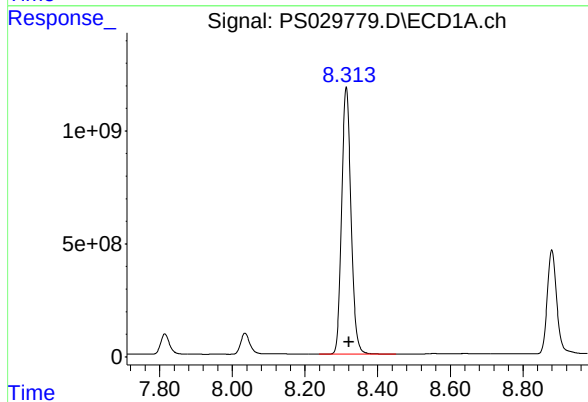
Reviewed By :Abdul
Mirza
04/10/2025

Supervised By :mohammad
ahmed
04/11/2025



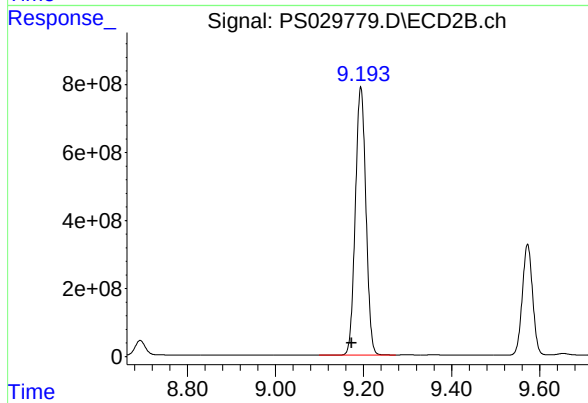
#9 2,4-D

R.T.: 8.692 min
Delta R.T.: 0.021 min
Response: 722289946
Conc: 669.74 ng/ml



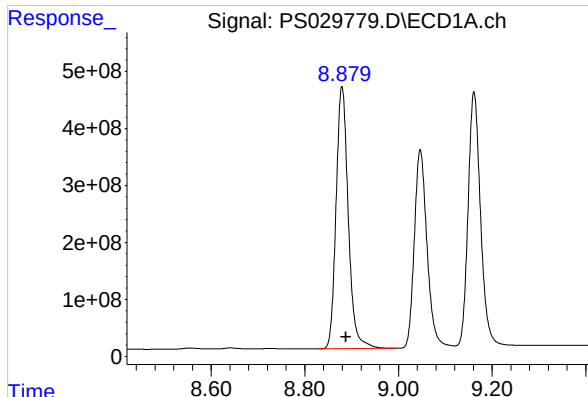
#10 Pentachlorophenol

R.T.: 8.314 min
Delta R.T.: -0.007 min
Response: 21121395745
Conc: 694.67 ng/ml



#10 Pentachlorophenol

R.T.: 9.194 min
Delta R.T.: 0.020 min
Response: 13169396161
Conc: 734.58 ng/ml



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

R.T.: 8.879 min
Delta R.T.: -0.008 min
Response: 8315300999
Conc: 715.89 ng/ml

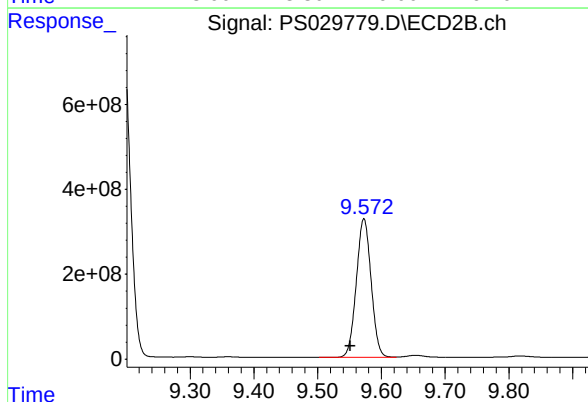
Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Manual Integrations
APPROVED

Reviewed By :Abdul
Mirza

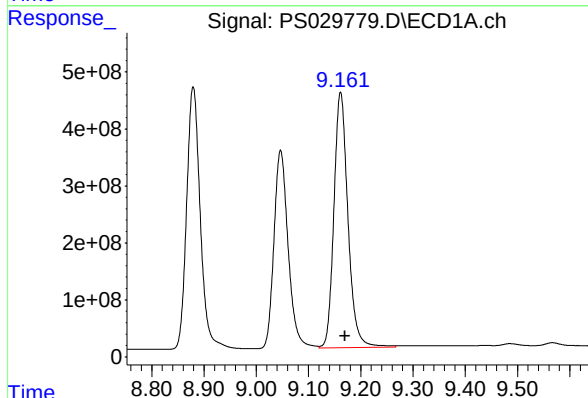
04/10/2025

Supervised By :mohammad
ahmed
04/11/2025



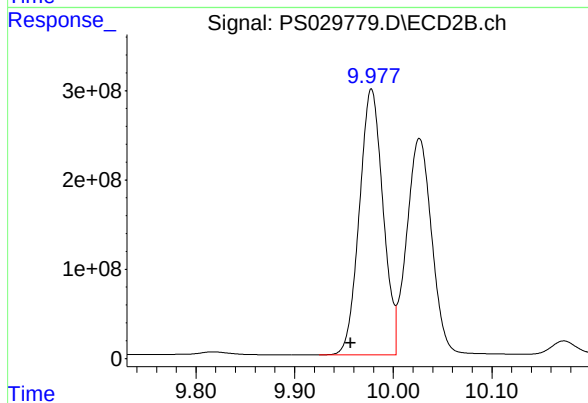
#11 2,4,5-TP (SILVEX)

R.T.: 9.573 min
Delta R.T.: 0.021 min
Response: 5266412404
Conc: 730.13 ng/ml



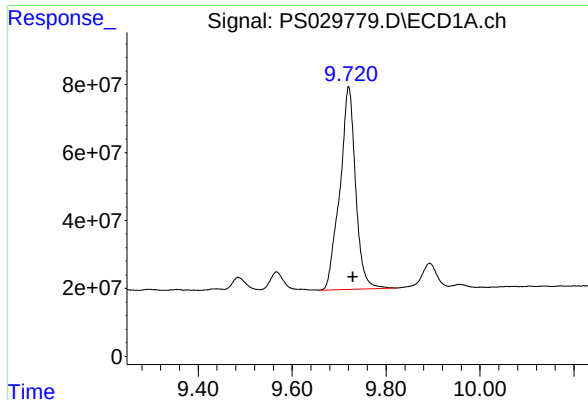
#12 2,4,5-T

R.T.: 9.161 min
Delta R.T.: -0.009 min
Response: 8374643007
Conc: 727.95 ng/ml



#12 2,4,5-T

R.T.: 9.978 min
Delta R.T.: 0.021 min
Response: 4952714243
Conc: 738.90 ng/ml



#13 2,4-DB

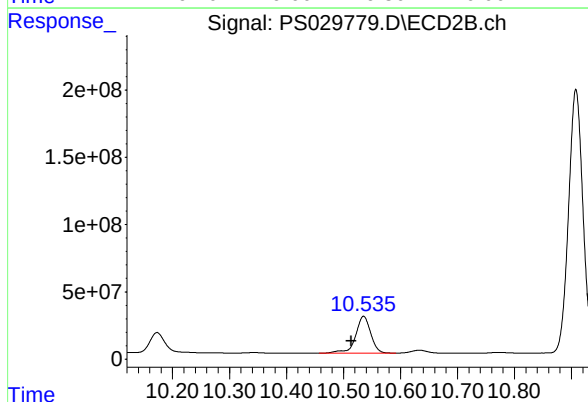
R.T.: 9.720 min
Delta R.T.: -0.009 min
Response: 1385985729
Conc: 762.90 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Manual Integrations
APPROVED

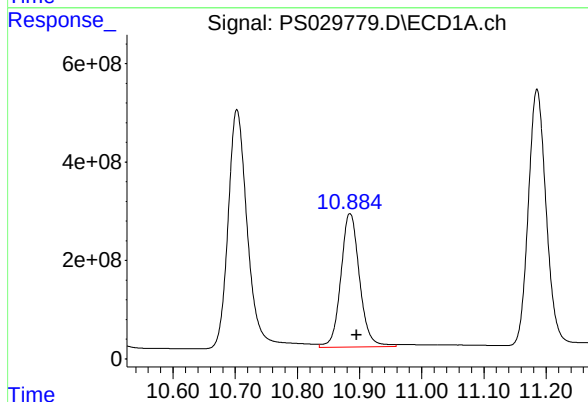
Reviewed By :Abdul
Mirza
04/10/2025

Supervised By :mohammad
ahmed
04/11/2025



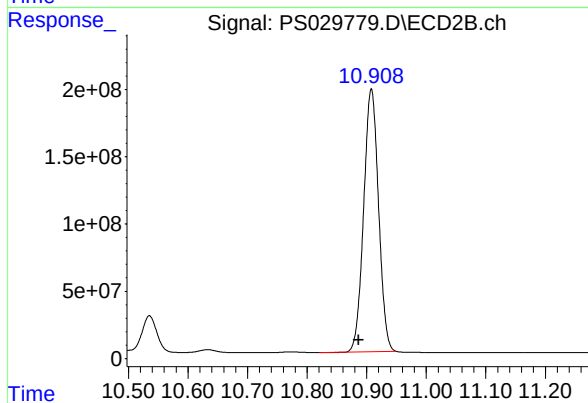
#13 2,4-DB

R.T.: 10.535 min
Delta R.T.: 0.021 min
Response: 510306408
Conc: 687.77 ng/ml



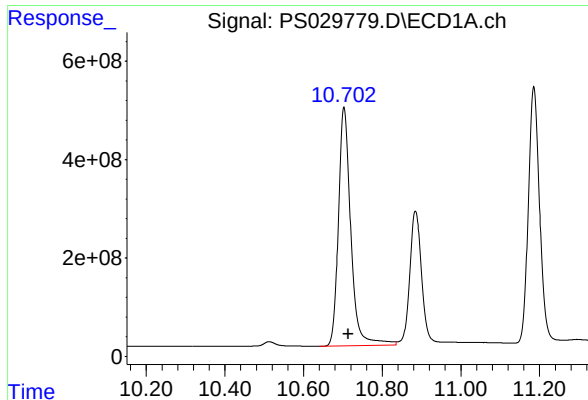
#14 DINOSEB

R.T.: 10.885 min
Delta R.T.: -0.010 min
Response: 5675572507
Conc: 672.30 ng/ml



#14 DINOSEB

R.T.: 10.908 min
Delta R.T.: 0.021 min
Response: 3393834706
Conc: 663.79 ng/ml



#15 Picloram

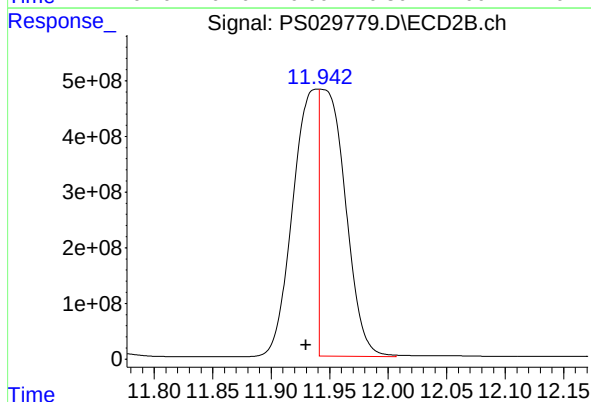
R.T.: 10.703 min
Delta R.T.: -0.010 min
Response: 10618652874
Conc: 685.06 ng/ml

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Manual Integrations
APPROVED

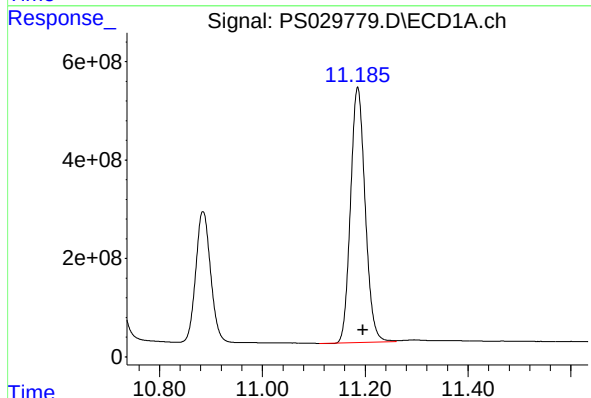
Reviewed By :Abdul
Mirza
04/10/2025

Supervised By :mohammad
ahmed
04/11/2025



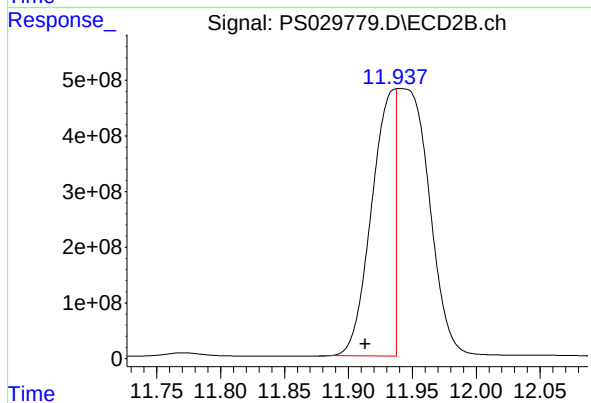
#15 Picloram

R.T.: 11.942 min
Delta R.T.: 0.012 min
Response: 7294326336
Conc: 616.89 ng/ml m



#16 DCPA

R.T.: 11.185 min
Delta R.T.: -0.010 min
Response: 10222213281
Conc: 731.93 ng/ml



#16 DCPA

R.T.: 11.937 min
Delta R.T.: 0.023 min
Response: 5955913754
Conc: 672.93 ng/ml m

Analytical Sequence

Client: Portal Partners Tri-Venture	SDG No.: Q1746
Project: Amtrak Sawtooth Bridges 2025	Instrument ID: ECD_S
GC Column: RTX-CLP	ID: 0.32 (mm) Inst. Calib. Date(s): 04/02/2025 04/02/2025

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

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DATAFILE	DCAA RT #	RT #
1.BLK	1.BLK	04/02/2025	16:44	PS029656.D	6.96	0.00
HSTDICC200	HSTDICC200	04/02/2025	17:32	PS029657.D	6.96	0.00
HSTDICC500	HSTDICC500	04/02/2025	17:56	PS029658.D	6.96	0.00
HSTDICC750	HSTDICC750	04/02/2025	18:44	PS029659.D	6.96	0.00
HSTDICC1000	HSTDICC1000	04/02/2025	19:32	PS029660.D	6.96	0.00
HSTDICC1500	HSTDICC1500	04/02/2025	20:44	PS029661.D	6.96	0.00
1.BLK	1.BLK	04/09/2025	20:10	PS029763.D	6.94	0.00
HSTDCCC750	HSTDCCC750	04/09/2025	20:34	PS029764.D	6.94	0.00
WC-LIQUID-20250404MS	Q1739-02MS	04/09/2025	21:46	PS029766.D	6.94	0.00
WC-LIQUID-20250404MSD	Q1739-02MSD	04/09/2025	22:10	PS029767.D	6.94	0.00
PB167536BL	PB167536BL	04/09/2025	22:34	PS029768.D	6.94	0.00
PB167536BS	PB167536BS	04/09/2025	22:58	PS029769.D	6.94	0.00
PB167517TB	PB167517TB	04/09/2025	23:47	PS029771.D	6.94	0.00
1.BLK	1.BLK	04/10/2025	00:10	PS029772.D	6.94	0.00
HSTDCCC750	HSTDCCC750	04/10/2025	01:46	PS029773.D	6.94	0.00
B-149-SB01	Q1746-02	04/10/2025	02:58	PS029776.D	6.96	0.00
B-149-SB02	Q1746-04	04/10/2025	03:22	PS029777.D	6.96	0.00
1.BLK	1.BLK	04/10/2025	03:46	PS029778.D	6.96	0.00
HSTDCCC750	HSTDCCC750	04/10/2025	04:10	PS029779.D	6.96	0.00

Analytical Sequence

Client: Portal Partners Tri-Venture	SDG No.: Q1746
Project: Amtrak Sawtooth Bridges 2025	Instrument ID: ECD_S
GC Column: RTX-CLP2	ID: 0.32 (mm) Inst. Calib. Date(s): 04/02/2025 04/02/2025

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

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DATAFILE	DCAA RT #	RT #
IBLK	IBLK	04/02/2025	16:44	PS029656.D	7.48	0.00
HSTDICC200	HSTDICC200	04/02/2025	17:32	PS029657.D	7.48	0.00
HSTDICC500	HSTDICC500	04/02/2025	17:56	PS029658.D	7.48	0.00
HSTDICC750	HSTDICC750	04/02/2025	18:44	PS029659.D	7.48	0.00
HSTDICC1000	HSTDICC1000	04/02/2025	19:32	PS029660.D	7.48	0.00
HSTDICC1500	HSTDICC1500	04/02/2025	20:44	PS029661.D	7.48	0.00
IBLK	IBLK	04/09/2025	20:10	PS029763.D	7.47	0.00
HSTDCCC750	HSTDCCC750	04/09/2025	20:34	PS029764.D	7.47	0.00
WC-LIQUID-20250404MS	Q1739-02MS	04/09/2025	21:46	PS029766.D	7.47	0.00
WC-LIQUID-20250404MSD	Q1739-02MSD	04/09/2025	22:10	PS029767.D	7.47	0.00
PB167536BL	PB167536BL	04/09/2025	22:34	PS029768.D	7.47	0.00
PB167536BS	PB167536BS	04/09/2025	22:58	PS029769.D	7.47	0.00
PB167517TB	PB167517TB	04/09/2025	23:47	PS029771.D	7.47	0.00
IBLK	IBLK	04/10/2025	00:10	PS029772.D	7.47	0.00
HSTDCCC750	HSTDCCC750	04/10/2025	01:46	PS029773.D	7.48	0.00
B-149-SB01	Q1746-02	04/10/2025	02:58	PS029776.D	7.50	0.00
B-149-SB02	Q1746-04	04/10/2025	03:22	PS029777.D	7.50	0.00
IBLK	IBLK	04/10/2025	03:46	PS029778.D	7.50	0.00
HSTDCCC750	HSTDCCC750	04/10/2025	04:10	PS029779.D	7.50	0.00

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

PB167536BS

Contract: PORT06

Lab Code: CHEM Case No.: Q1746

SAS No.: Q1746 SDG NO.: Q1746

Lab Sample ID: PB167536BS

Date(s) Analyzed: 04/09/2025 04/09/2025

Instrument ID (1): ECD_S

Instrument ID (2): ECD_S

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

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

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
2,4-D	1	8.02	7.97	8.07	5.70	1.8
	2	8.66	8.61	8.71	5.60	
2,4,5-TP(Silvex)	1	8.86	8.81	8.91	5.70	1.7
	2	9.54	9.49	9.59	5.80	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

WC-LIQUID-20250404MS

Contract: PORT06

Lab Code: CHEM

Case No.: Q1746

SAS No.: Q1746

SDG NO.: Q1746

Lab Sample ID: Q1739-02MS

Date(s) Analyzed: 04/09/2025

04/09/2025

Instrument ID (1): ECD_S

Instrument ID (2): ECD_S

GC Column: (1): RTX-CLP

ID: 0.32 (mm)

GC Column:(2): RTX-CLP2

ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
2,4-D	1	8.02	7.97	8.07	57.2	2.8
	2	8.66	8.61	8.71	58.8	
2,4,5-TP(Silvex)	1	8.86	8.81	8.91	51.8	15.8
	2	9.54	9.49	9.59	60.7	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

WC-LIQUID-20250404MSD

Contract: PORT06

Lab Code: CHEM Case No.: Q1746

SAS No.: Q1746 SDG NO.: Q1746

Lab Sample ID: Q1739-02MSD

Date(s) Analyzed: 04/09/2025 04/09/2025

Instrument ID (1): ECD_S

Instrument ID (2): ECD_S

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

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

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
2,4,5-TP(Silvex)	1	8.86	8.81	8.91	53.4	14.9
	2	9.54	9.49	9.59	62.0	
2,4-D	1	8.02	7.97	8.07	58.5	2.5
	2	8.66	8.61	8.71	60.0	



QC SAMPLE DATA

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	
Client Sample ID:	PB167536BL	SDG No.:	Q1746
Lab Sample ID:	PB167536BL	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
PS029768.D	1	04/09/25 12:55	04/09/25 22:34	PB167536

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	0.92	U	0.92	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.78	U	0.78	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	559		70 (39) - 130 (175)	112%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS040925\
 Data File : PS029768.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 09 Apr 2025 22:34
 Operator : AR\AJ
 Sample : PB167536BL
 Misc :
 ALS Vial : 16 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 PB167536BL

Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
 Supervised By :mohammad ahmed 04/11/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Apr 10 05:23:11 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
 Quant Title : 8080.M
 QLast Update : Wed Apr 02 23:52:55 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

 System Monitoring Compounds

4) S	2,4-DCAA	6.940	7.470	1139.5E6	367.3E6	558.888m	538.995
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Target Compounds

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS040925\
Data File : PS029768.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 09 Apr 2025 22:34
Operator : AR\AJ
Sample : PB167536BL
Misc :
ALS Vial : 16 Sample Multiplier: 1

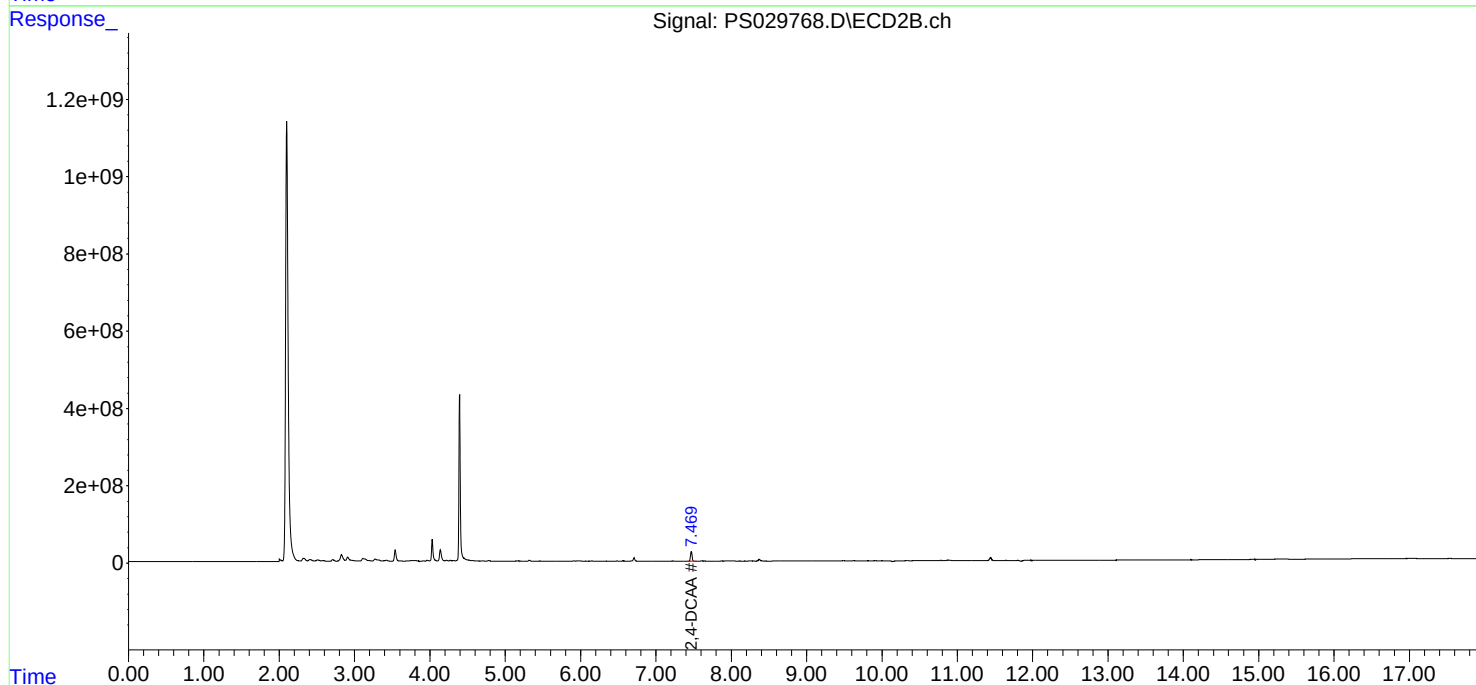
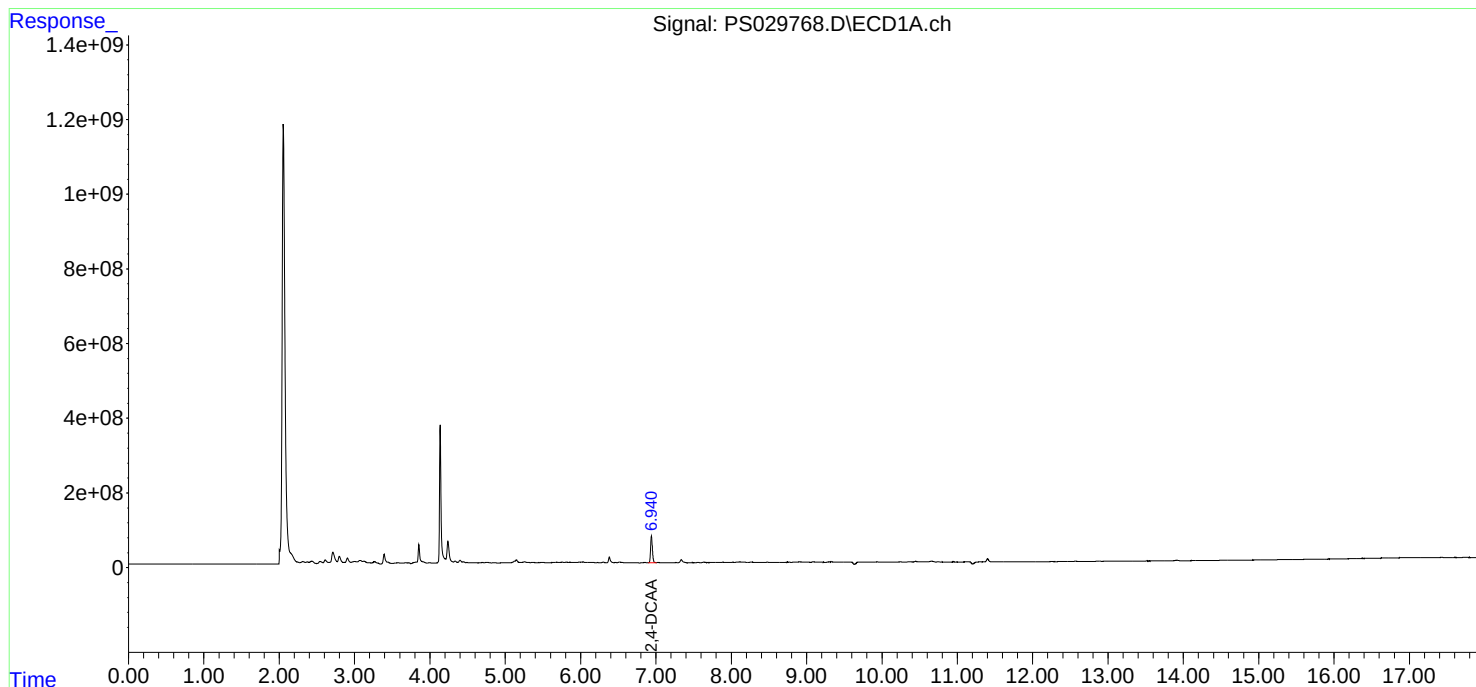
Instrument :
ECD_S
ClientSampleId :
PB167536BL

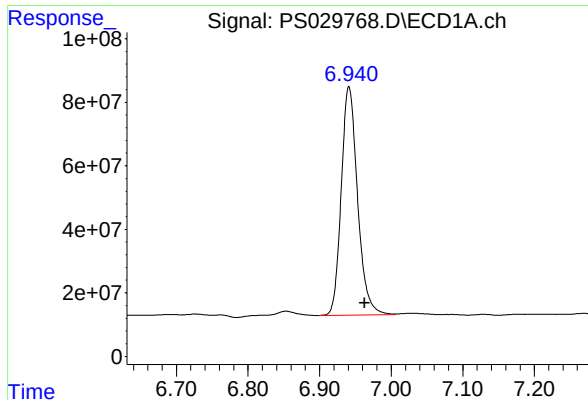
Manual Integrations
APPROVED

Reviewed By : Abdul Mirza 04/10/2025
Supervised By : mohammad ahmed 04/11/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 10 05:23:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
Quant Title : 8080.M
QLast Update : Wed Apr 02 23:52:55 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm





#4 2,4-DCAA

R.T.: 6.940 min
Delta R.T.: -0.022 min
Response: 1139477452
Conc: 558.89 ng/ml

Instrument :

ECD_S

ClientSampleId :

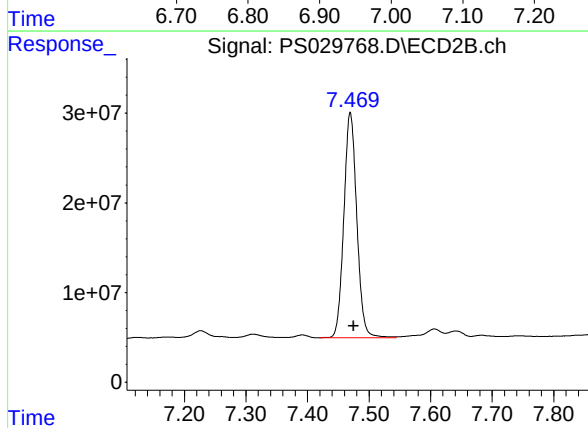
PB167536BL

Manual Integrations

APPROVED

Reviewed By :Abdul Mirza 04/10/2025

Supervised By :mohammad ahmed 04/11/2025



#4 2,4-DCAA

R.T.: 7.470 min
Delta R.T.: -0.005 min
Response: 367331942
Conc: 538.99 ng/ml

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/02/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/02/25
Client Sample ID:	PIBLK-PS029656.D	SDG No.:	Q1746
Lab Sample ID:	I.BLK-PS029656.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
PS029656.D	1		04/02/25	PS040225

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	0.92	U	0.92	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.78	U	0.78	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	485		70 (39) - 130 (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\PS040225\
Data File : PS029656.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 02 Apr 2025 16:44
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 02 22:36:25 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
Quant Title : 8080.M
QLast Update : Wed Apr 02 21:58:31 2025
Response via : Initial Calibration
Integrator: ChemStation

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

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

System Monitoring Compounds						
4) S 2,4-DCAA	6.963	7.475	971.0E6	330.4E6	476.239	484.848

Target Compounds

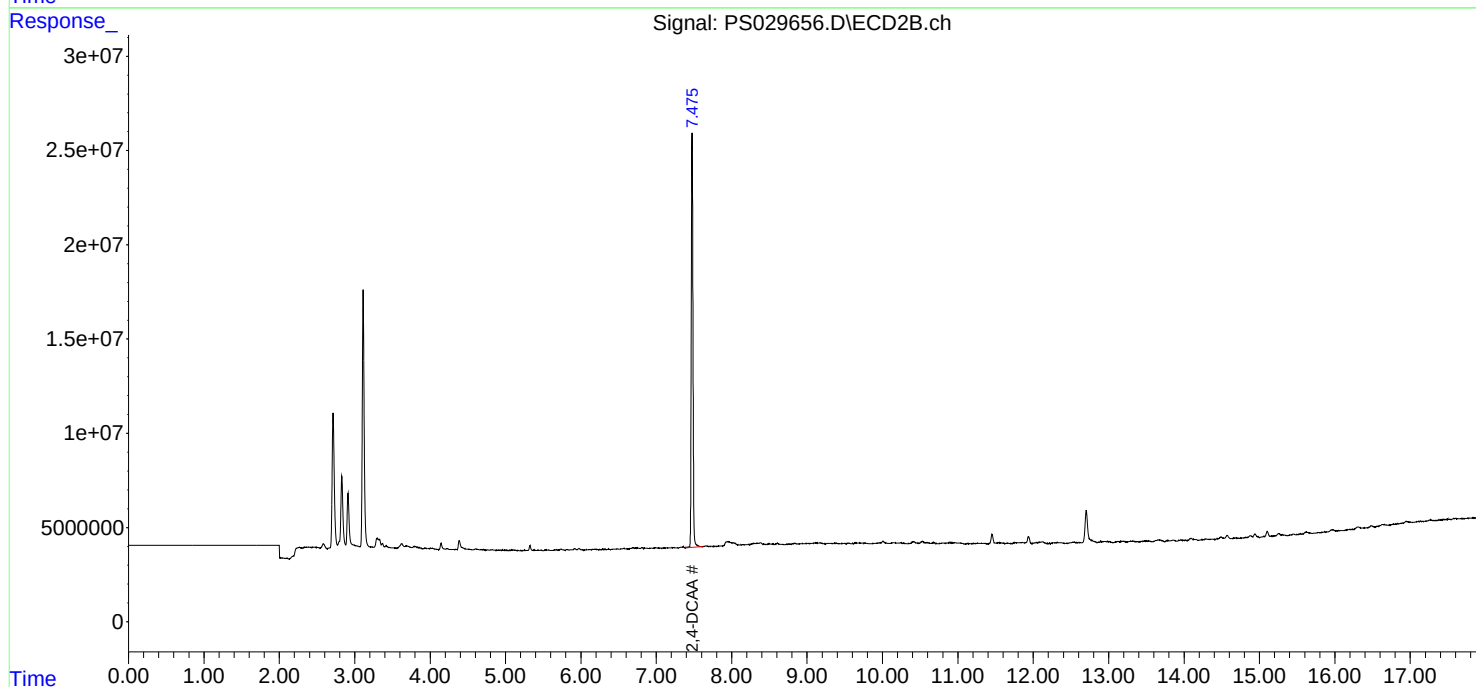
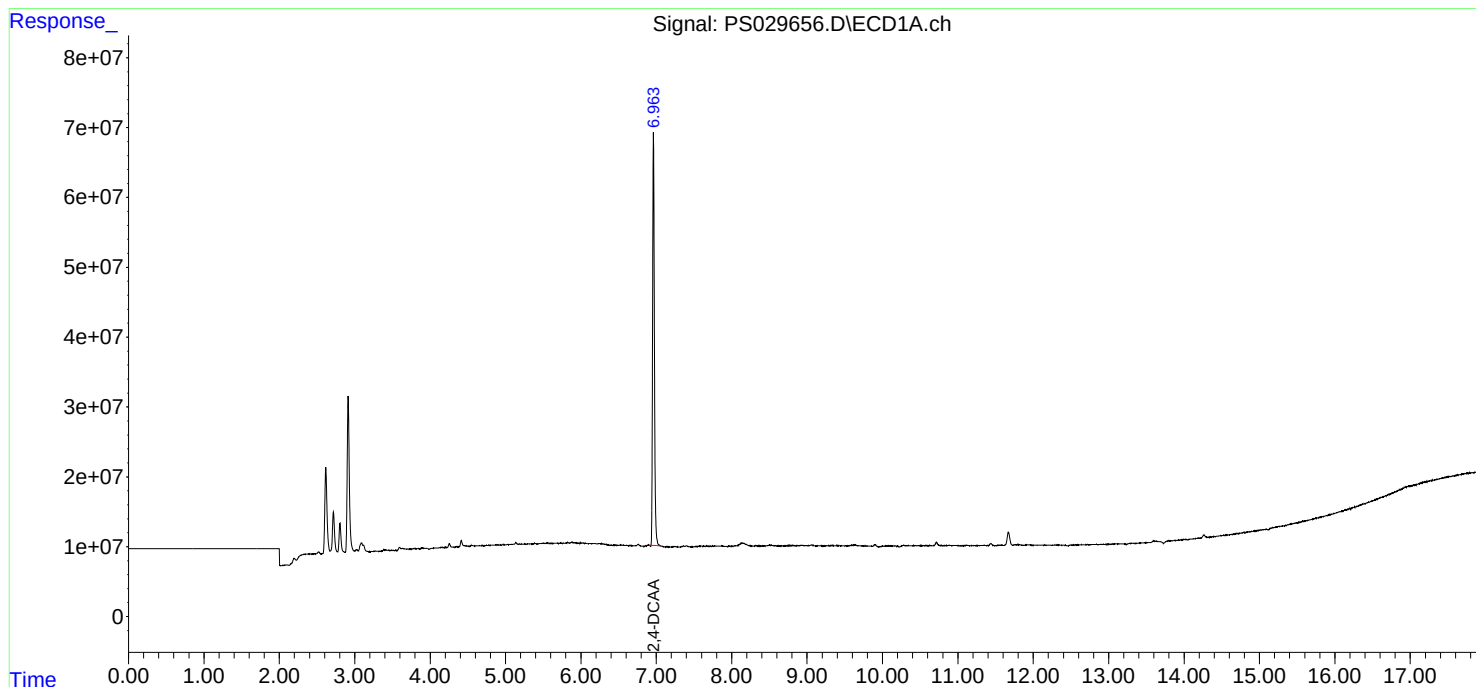
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

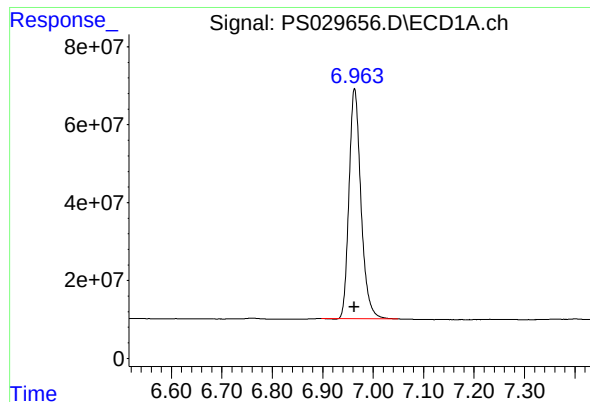
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS040225\
Data File : PS029656.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 02 Apr 2025 16:44
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 02 22:36:25 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
Quant Title : 8080.M
QLast Update : Wed Apr 02 21:58:31 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm





#4 2,4-DCAA

R.T.: 6.963 min

Delta R.T.: 0.000 min

Response: 970970961

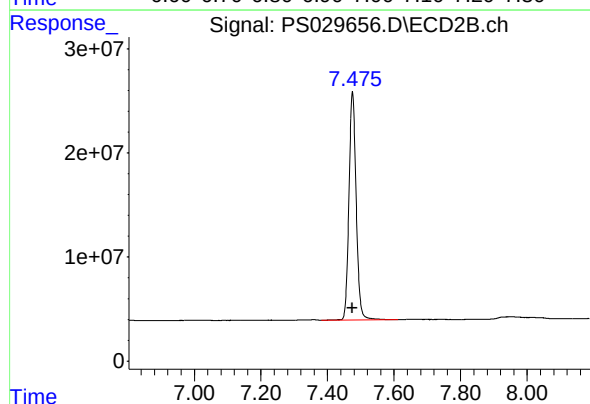
Conc: 476.24 ng/ml

Instrument :

ECD_S

ClientSampleId :

I.BLK



#4 2,4-DCAA

R.T.: 7.475 min

Delta R.T.: 0.000 min

Response: 330430379

Conc: 484.85 ng/ml

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/09/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/09/25
Client Sample ID:	PIBLK-PS029763.D	SDG No.:	Q1746
Lab Sample ID:	I.BLK-PS029763.D	Matrix:	TCLP
Analytical Method:	SW8151A	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Decanted:	
Soil Aliquot Vol:	uL	Final Vol:	10000 uL
Extraction Type:		Test:	TCLP Herbicide
GPC Factor :	1.0	Injection Volume :	
PH :			
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS029763.D	1		04/09/25	ps040925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	0.92	U	0.92	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.78	U	0.78	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	594		70 (39) - 130 (175)	119%	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\PS040925\
Data File : PS029763.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 09 Apr 2025 20:10
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: Apr 10 05:22:01 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
Quant Title : 8080.M
QLast Update : Wed Apr 02 23:52:55 2025
Response via : Initial Calibration
Integrator: ChemStation

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

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

System Monitoring Compounds

4) S	2,4-DCAA	6.944	7.467	1211.3E6	396.4E6	594.137	581.580
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Target Compounds

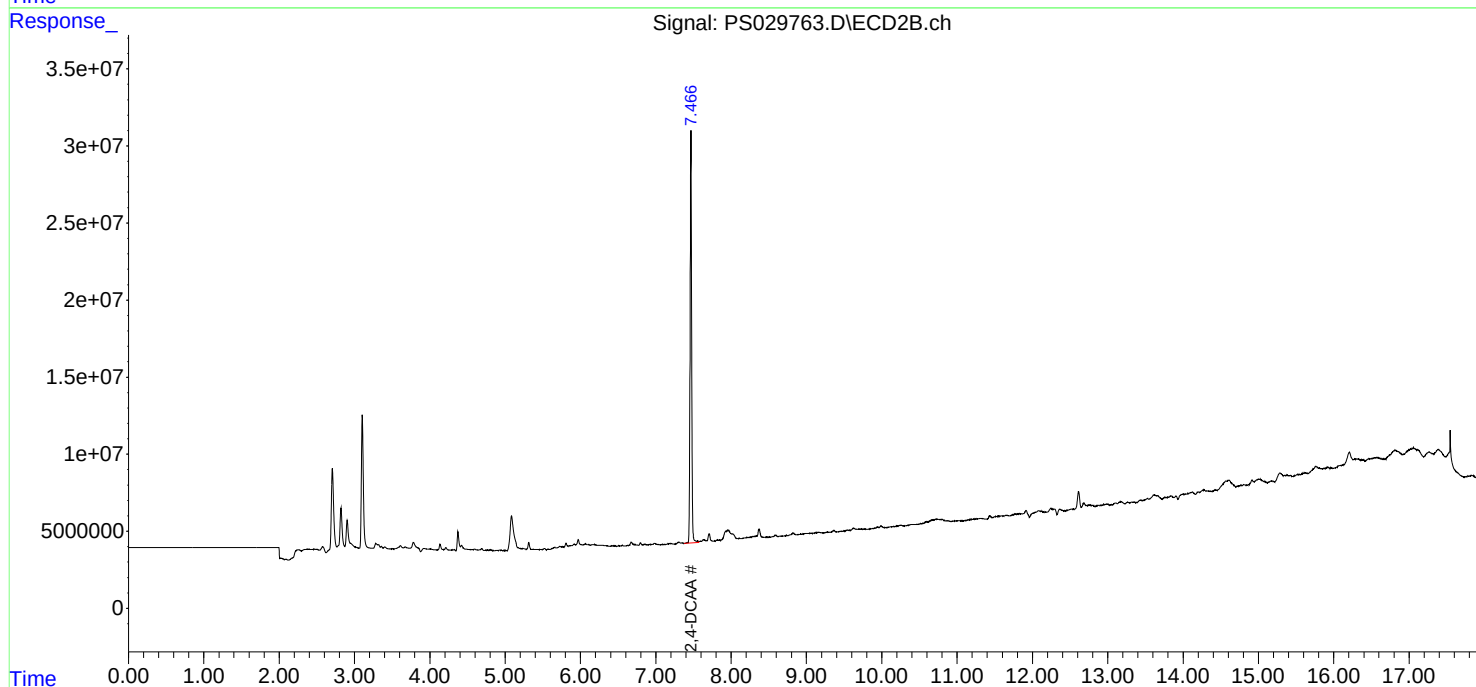
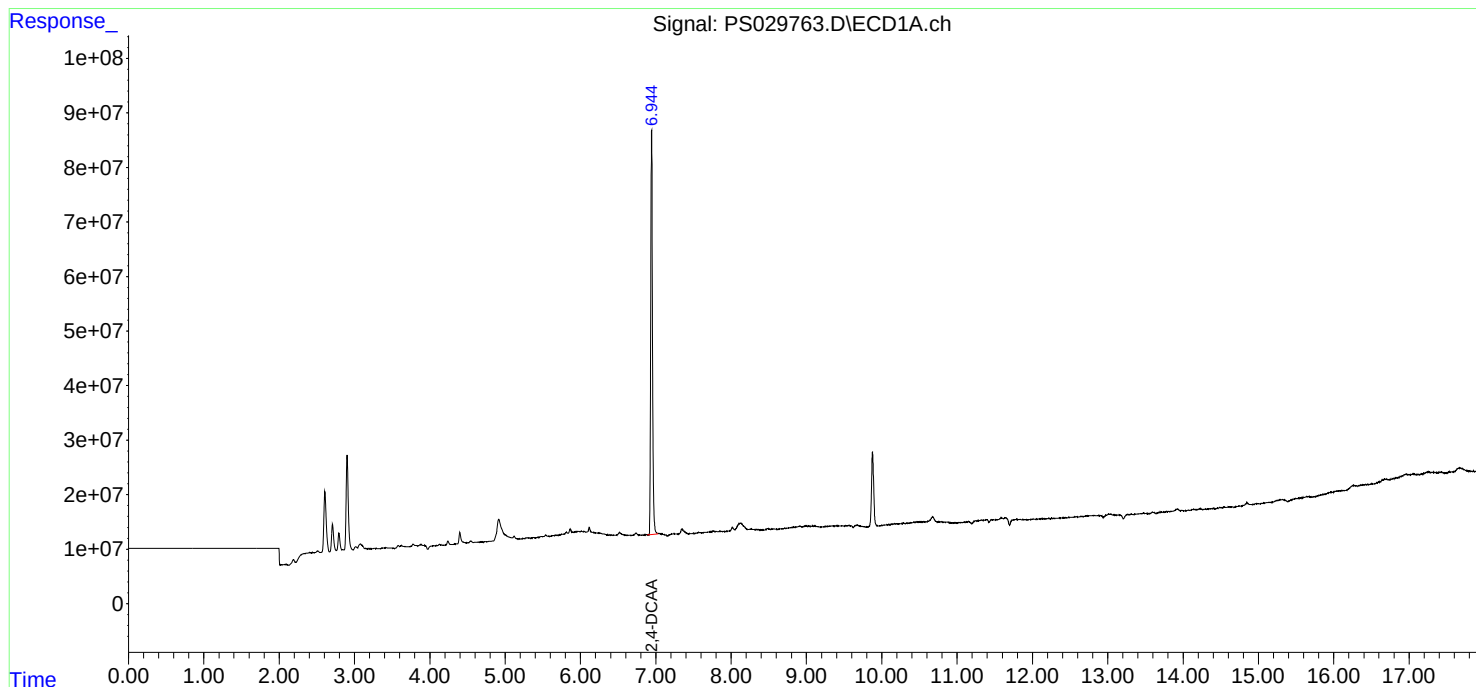
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

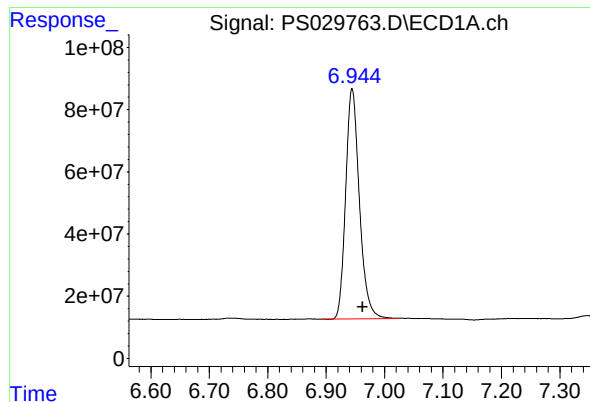
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS040925\
Data File : PS029763.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 09 Apr 2025 20:10
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 10 05:22:01 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
Quant Title : 8080.M
QLast Update : Wed Apr 02 23:52:55 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm





#4 2,4-DCAA

R.T.: 6.944 min

Delta R.T.: -0.018 min

Response: 1211344028

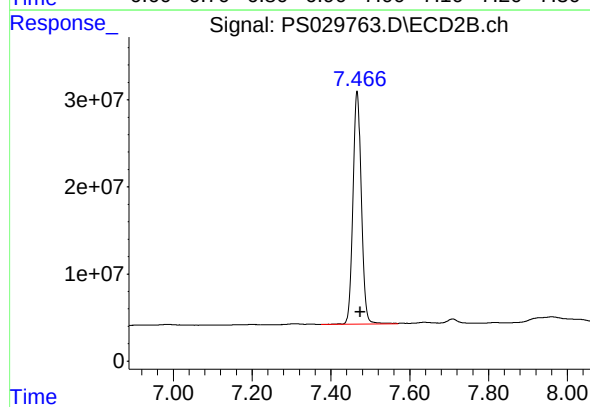
Conc: 594.14 ng/ml

Instrument :

ECD_S

ClientSampleId :

I.BLK



#4 2,4-DCAA

R.T.: 7.467 min

Delta R.T.: -0.008 min

Response: 396354417

Conc: 581.58 ng/ml

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/10/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/10/25
Client Sample ID:	PIBLK-PS029772.D	SDG No.:	Q1746
Lab Sample ID:	I.BLK-PS029772.D	Matrix:	TCLP
Analytical Method:	SW8151A	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Decanted:	
Soil Aliquot Vol:	uL	Final Vol:	10000 uL
Extraction Type:		Test:	TCLP Herbicide
GPC Factor :	1.0	Injection Volume :	
PH :			
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS029772.D	1		04/10/25	ps040925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	0.92	U	0.92	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.78	U	0.78	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	618		70 (39) - 130 (175)	124%	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\PS040925\
Data File : PS029772.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 10 Apr 2025 00:10
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: Apr 10 05:23:55 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
Quant Title : 8080.M
QLast Update : Wed Apr 02 23:52:55 2025
Response via : Initial Calibration
Integrator: ChemStation

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

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

System Monitoring Compounds

4) S	2,4-DCAA	6.939	7.474	1260.2E6	415.7E6	618.092	610.010
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Target Compounds

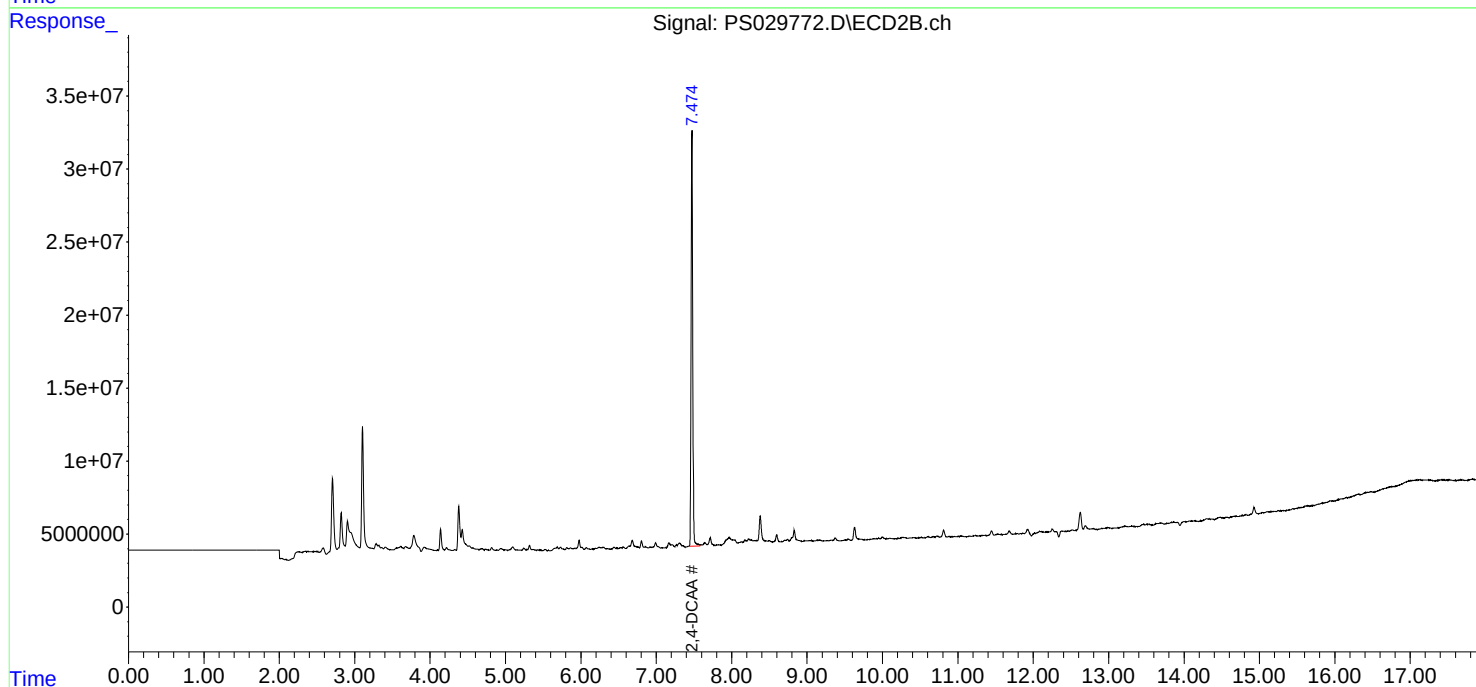
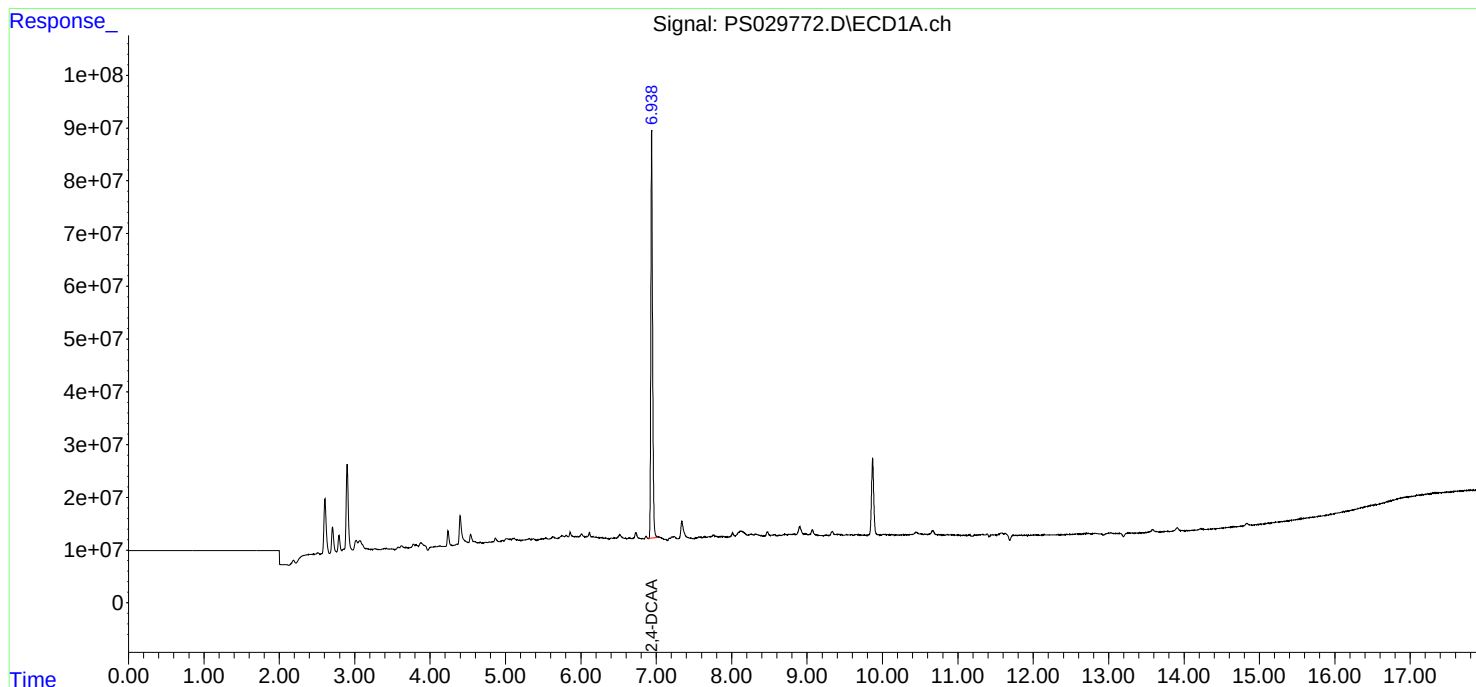
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

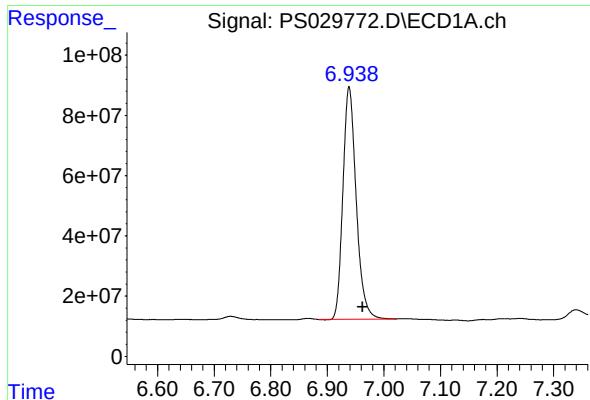
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS040925\
Data File : PS029772.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 10 Apr 2025 00:10
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 10 05:23:55 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
Quant Title : 8080.M
QLast Update : Wed Apr 02 23:52:55 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm





#4 2,4-DCAA

R.T.: 6.939 min

Delta R.T.: -0.024 min

Response: 1260185184

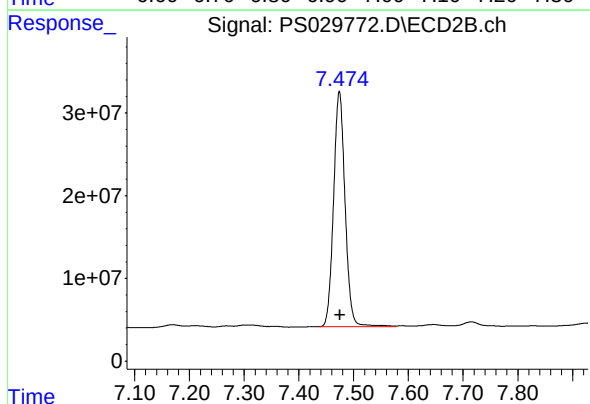
Conc: 618.09 ng/ml

Instrument :

ECD_S

ClientSampleId :

I.BLK



#4 2,4-DCAA

R.T.: 7.474 min

Delta R.T.: 0.000 min

Response: 415729410

Conc: 610.01 ng/ml

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/10/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/10/25
Client Sample ID:	PIBLK-PS029778.D	SDG No.:	Q1746
Lab Sample ID:	I.BLK-PS029778.D	Matrix:	TCLP
Analytical Method:	SW8151A	% Solid:	0
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	TCLP Herbicide
GPC Factor :	1.0	PH :	
Prep Method :	SW3510C	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS029778.D	1		04/10/25	ps040925

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	0.92	U	0.92	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.78	U	0.78	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	563		70 (39) - 130 (175)	113%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS040925\
Data File : PS029778.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 10 Apr 2025 03:46
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: Apr 10 05:25:35 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
Quant Title : 8080.M
QLast Update : Wed Apr 02 23:52:55 2025
Response via : Initial Calibration
Integrator: ChemStation

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

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

4) S	2,4-DCAA	6.956	7.496	1147.2E6	374.7E6	562.677	549.778
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Target Compounds

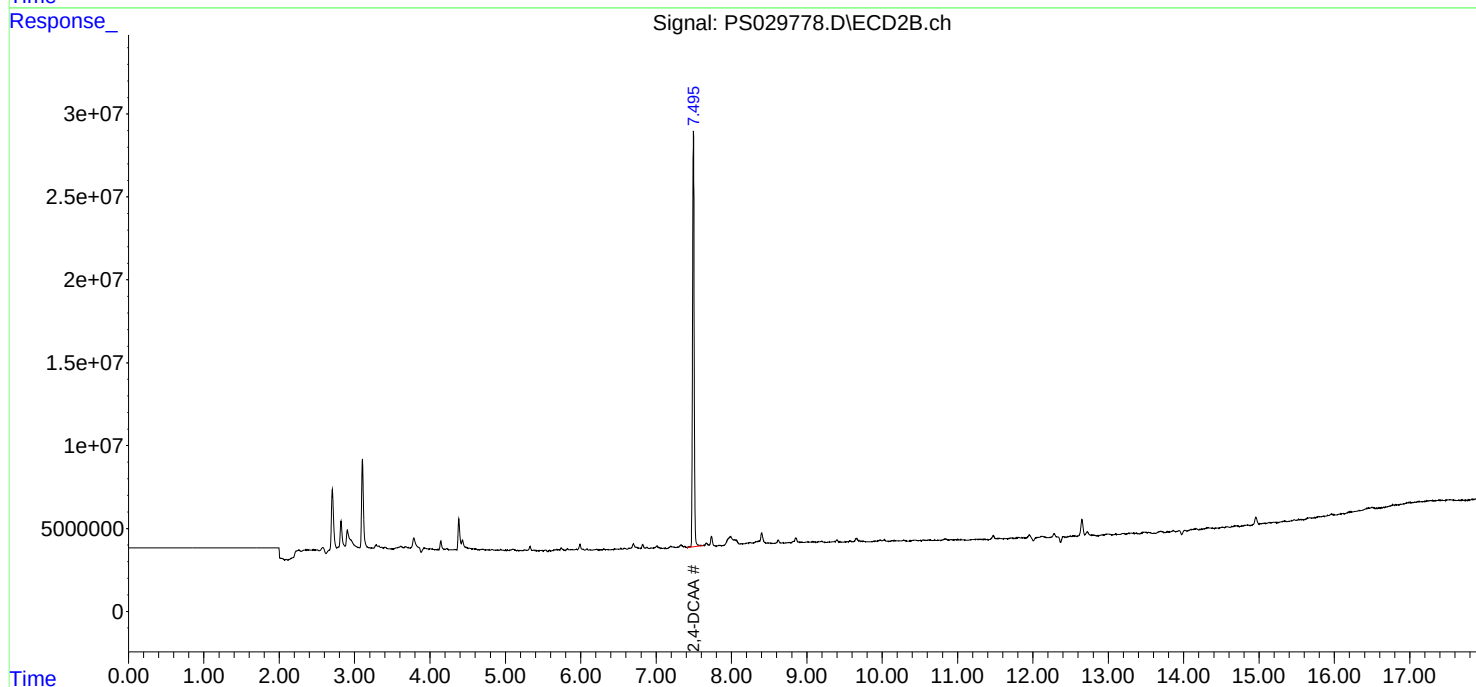
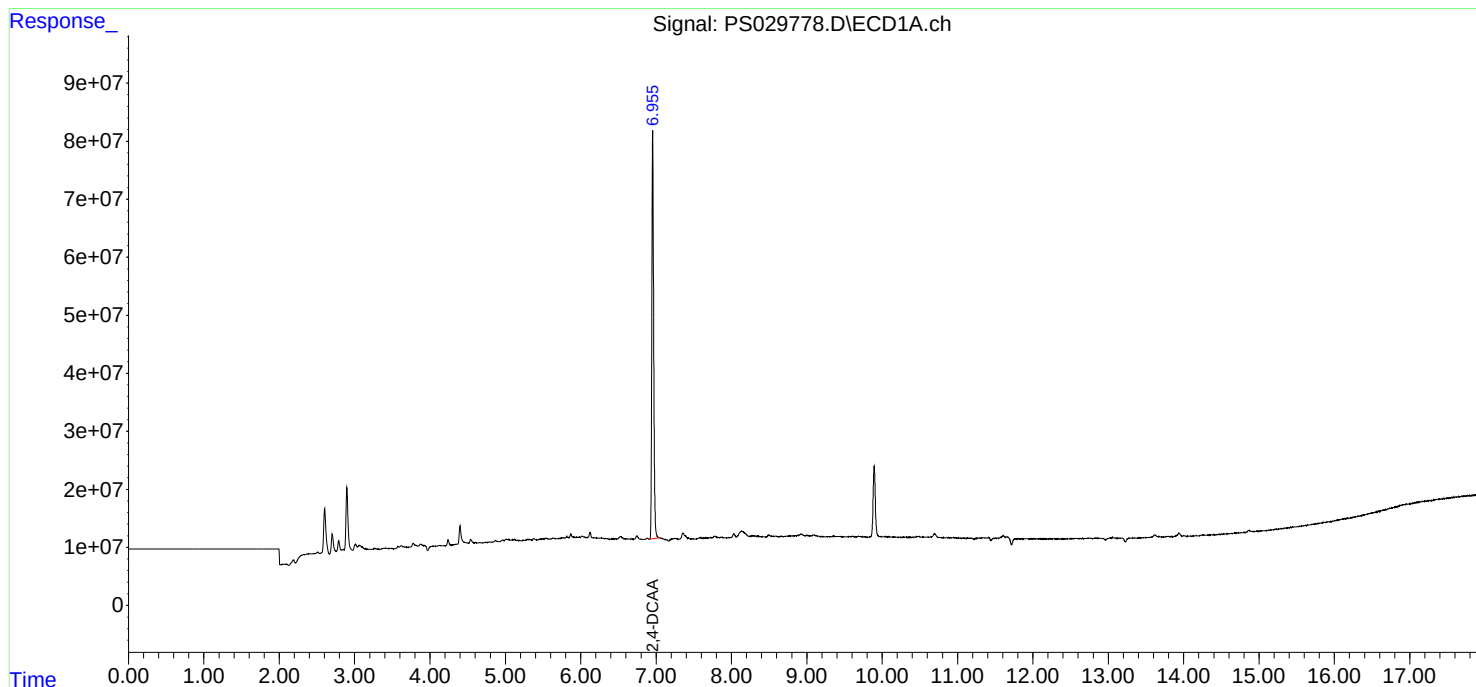
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

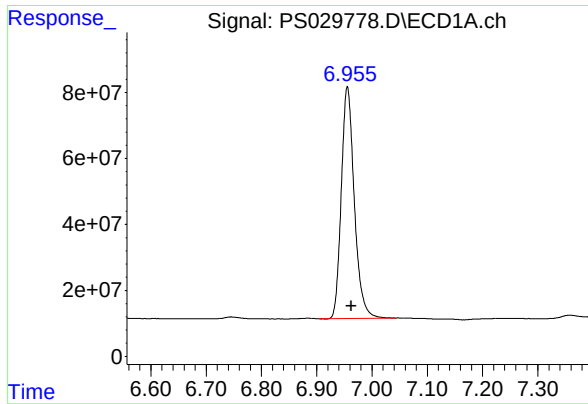
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS040925\
Data File : PS029778.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 10 Apr 2025 03:46
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 10 05:25:35 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
Quant Title : 8080.M
QLast Update : Wed Apr 02 23:52:55 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm





#4 2,4-DCAA

R.T.: 6.956 min

Delta R.T.: -0.007 min

Response: 1147203616

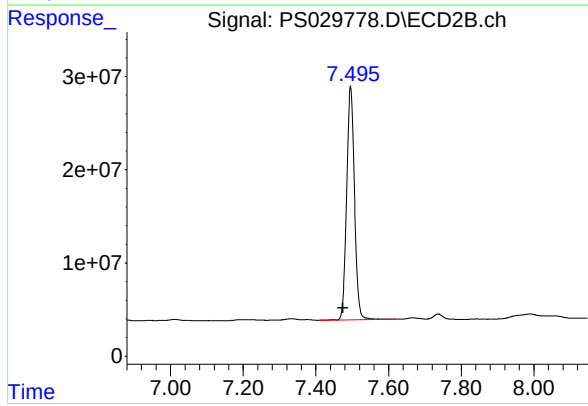
Conc: 562.68 ng/ml

Instrument :

ECD_S

ClientSampleId :

I.BLK



#4 2,4-DCAA

R.T.: 7.496 min

Delta R.T.: 0.021 min

Response: 374681129

Conc: 549.78 ng/ml

Report of Analysis

Client:	Portal Partners Tri-Venture			Date Collected:			
Project:	Amtrak Sawtooth Bridges 2025			Date Received:			
Client Sample ID:	PB167536BS			SDG No.:	Q1746		
Lab Sample ID:	PB167536BS			Matrix:	TCLP		
Analytical Method:	SW8151A			% Solid:	0		Decanted:
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	10000	uL	
Soil Aliquot Vol:				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
PS029769.D	1	04/09/25 12:55	04/09/25 22:58	PB167536

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	5.70		0.92	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	5.80		0.78	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	581		70 (39) - 130 (175)	116%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of OC 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\PS040925\
 Data File : PS029769.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 09 Apr 2025 22:58
 Operator : AR\AJ
 Sample : PB167536BS
 Misc :
 ALS Vial : 17 Sample Multiplier: 1

Instrument :

ECD_S

ClientSampleId :

PB167536BS

Manual Integrations**APPROVED**

Reviewed By :Abdul Mirza 04/10/2025

Supervised By :mohammad ahmed 04/11/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Apr 10 06:43:05 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
 Quant Title : 8080.M
 QLast Update : Wed Apr 02 23:52:55 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	6.941	7.471	1134.4E6	396.0E6	556.398	581.104
Target Compounds							
1) T	Dalapon	2.459	2.531	1730.5E6	761.5E6	510.107	479.628
2) T	3,5-DICHL...	6.147	6.467	1676.7E6	509.7E6	557.474m	527.858
3) T	4-Nitroph...	6.733	7.005	800.5E6	361.5E6	569.859	509.911
5) T	DICAMBA	7.117	7.657	4501.7E6	2033.3E6	540.944	550.533
6) T	MCP	7.294	7.763	282.7E6	84256237	52.157	49.901
7) T	MCPA	7.436	7.993	399.8E6	114.2E6	55.001m	50.180
8) T	DICHLORPROP	7.797	8.351	1212.3E6	555.7E6	551.177	575.211
9) T	2,4-D	8.017	8.664	1383.4E6	602.3E6	574.108	558.472
10) T	Pentachlo...	8.296	9.166	17317.3E6	10487.2E6	569.554	584.974
11) T	2,4,5-TP ...	8.858	9.543	6635.1E6	4158.4E6	571.236m	576.516
12) T	2,4,5-T	9.140	9.948	6569.0E6	3858.9E6	570.999	575.707
13) T	2,4-DB	9.699	10.504	995.0E6	397.6E6	547.661	535.844
14) T	DINOSEB	10.861	10.876	4617.3E6	2783.0E6	546.941	544.323
15) T	Picloram	10.678	11.913	8659.2E6	5769.7E6	558.644	487.943m
16) T	DCPA	11.160	11.906	8032.8E6	5267.1E6	575.164	595.110m

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS040925\
Data File : PS029769.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 09 Apr 2025 22:58
Operator : AR\AJ
Sample : PB167536BS
Misc :
ALS Vial : 17 Sample Multiplier: 1

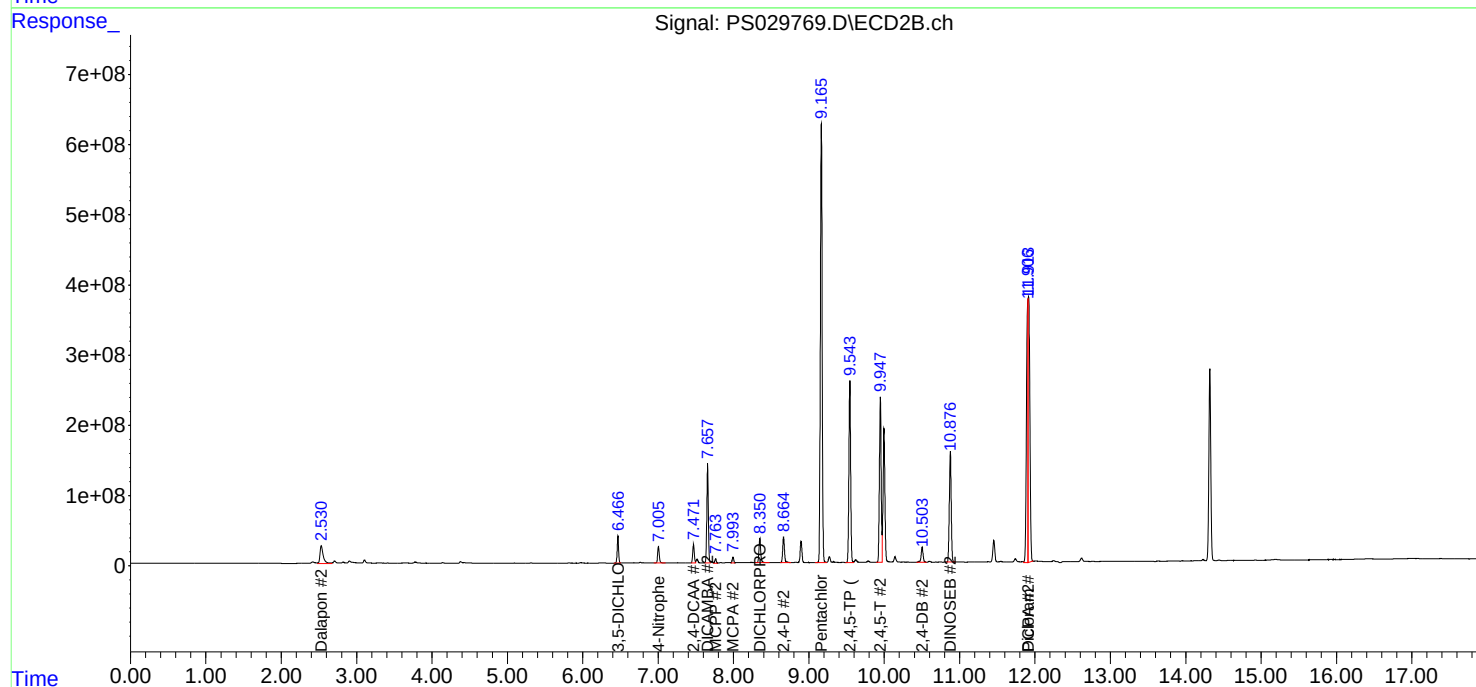
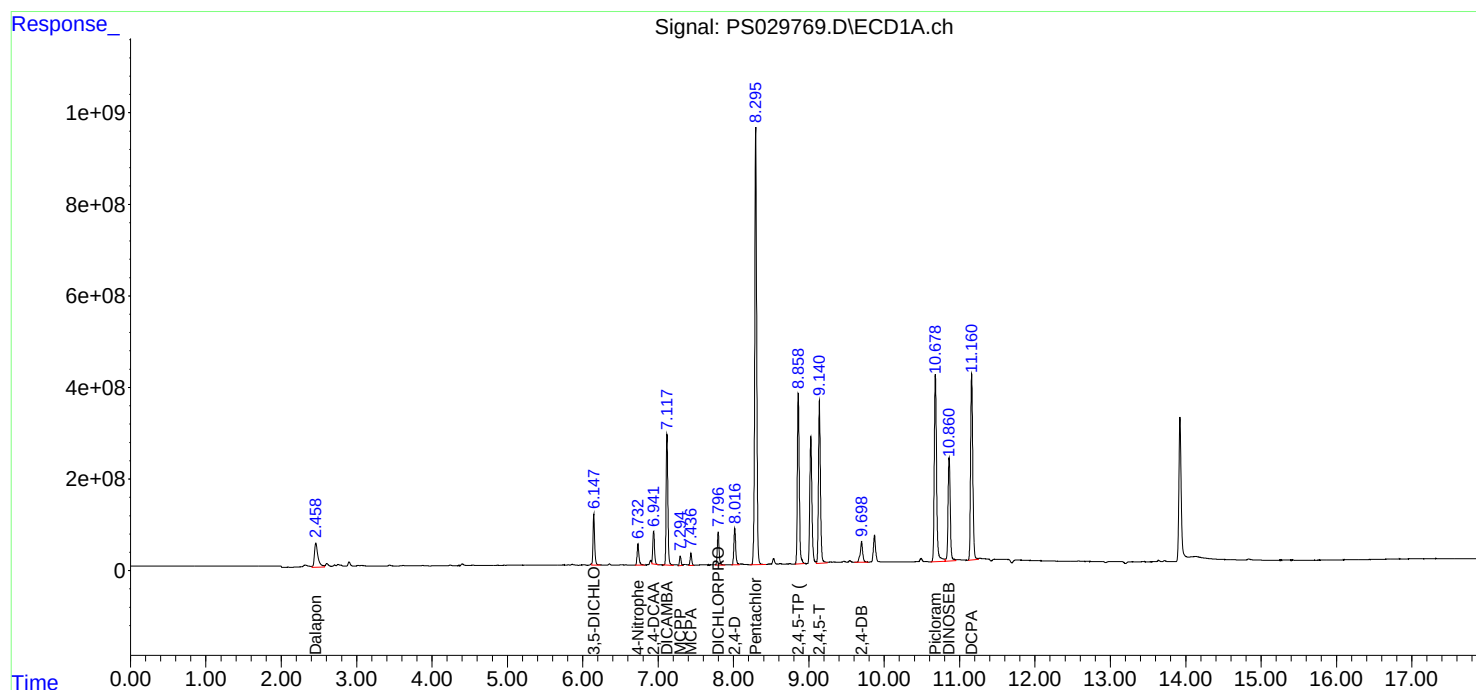
Instrument :
ECD_S
ClientSampleId :
PB167536BS

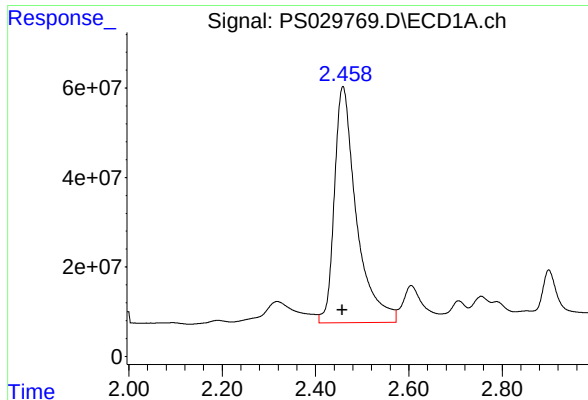
Manual Integrations
APPROVED

Reviewed By : Abdul Mirza 04/10/2025
Supervised By : mohammad ahmed 04/11/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 10 06:43:05 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
Quant Title : 8080.M
QLast Update : Wed Apr 02 23:52:55 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm





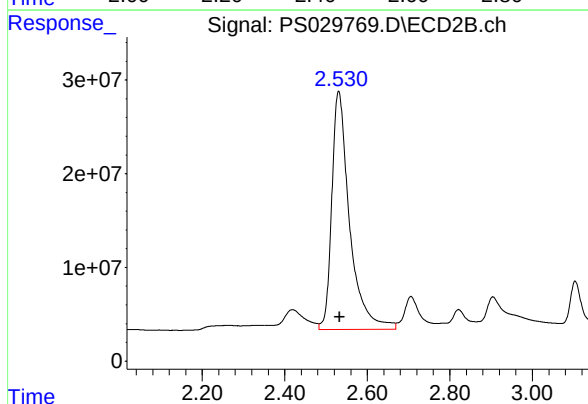
#1 Dalapon

R.T.: 2.459 min
Delta R.T.: 0.000 min
Response: 1730485219
Conc: 510.11 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB167536BS

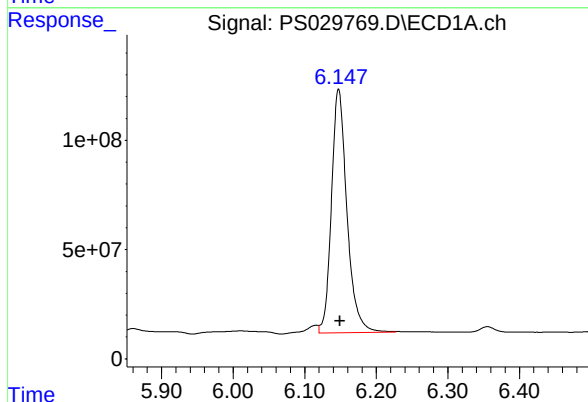
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



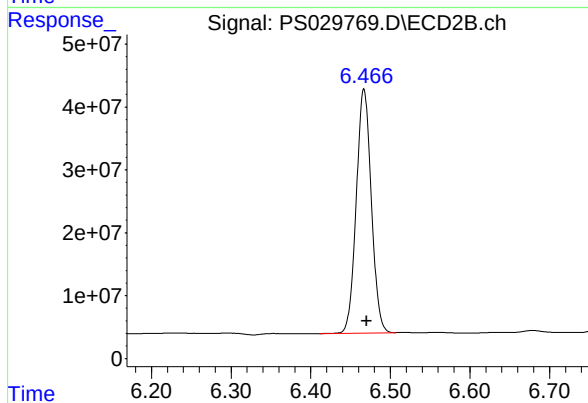
#1 Dalapon

R.T.: 2.531 min
Delta R.T.: -0.003 min
Response: 761454722
Conc: 479.63 ng/ml



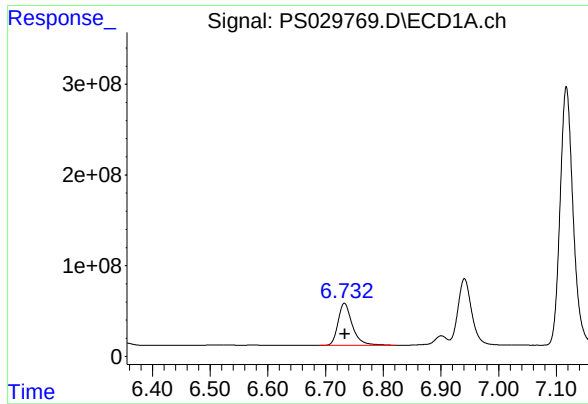
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.147 min
Delta R.T.: -0.002 min
Response: 1676749093
Conc: 557.47 ng/ml m



#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.467 min
Delta R.T.: -0.003 min
Response: 509676713
Conc: 527.86 ng/ml



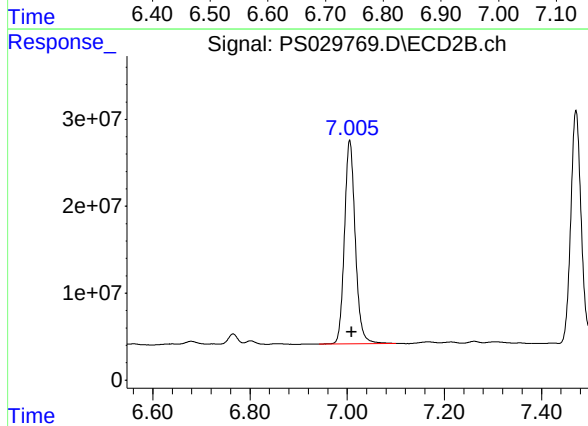
#3 4-Nitrophenol

R.T.: 6.733 min
Delta R.T.: -0.001 min
Response: 800536630
Conc: 569.86 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB167536BS

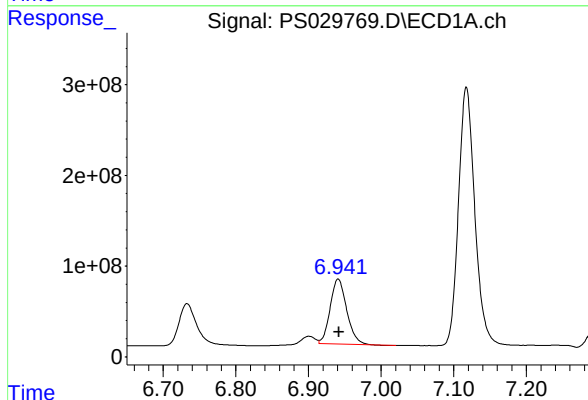
**Manual Integrations
APPROVED**

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



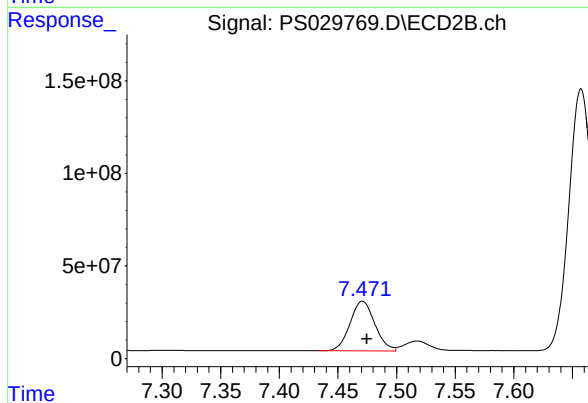
#3 4-Nitrophenol

R.T.: 7.005 min
Delta R.T.: -0.004 min
Response: 361526079
Conc: 509.91 ng/ml



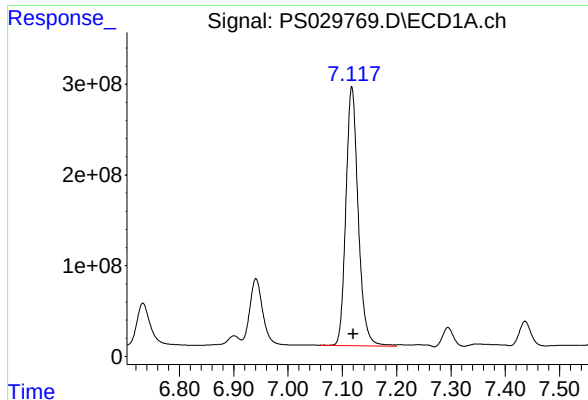
#4 2,4-DCAA

R.T.: 6.941 min
Delta R.T.: -0.001 min
Response: 1134402057
Conc: 556.40 ng/ml



#4 2,4-DCAA

R.T.: 7.471 min
Delta R.T.: -0.004 min
Response: 396029572
Conc: 581.10 ng/ml



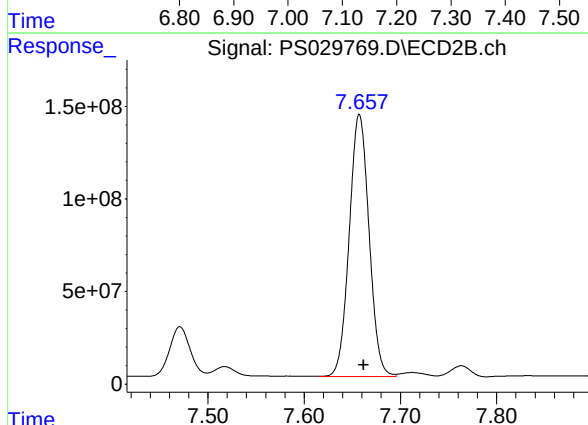
#5 DICAMBA

R.T.: 7.117 min
Delta R.T.: -0.003 min
Response: 4501704261
Conc: 540.94 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB167536BS

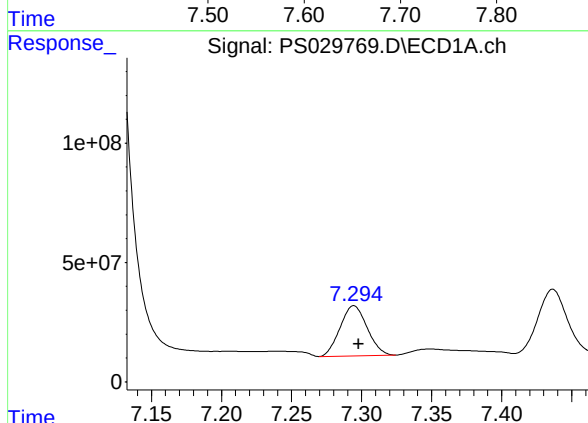
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



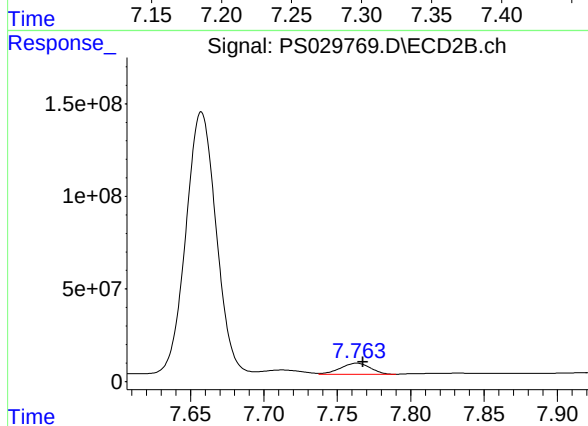
#5 DICAMBA

R.T.: 7.657 min
Delta R.T.: -0.004 min
Response: 2033320103
Conc: 550.53 ng/ml



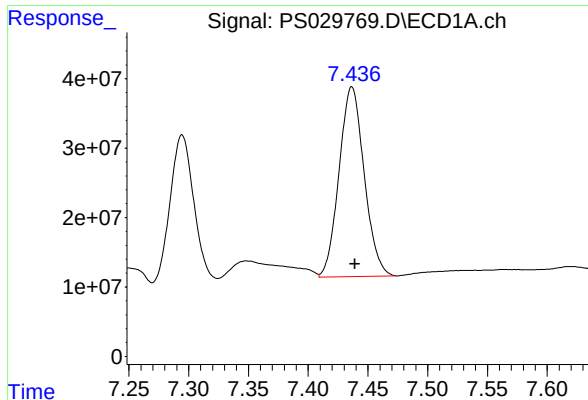
#6 MCPP

R.T.: 7.294 min
Delta R.T.: -0.004 min
Response: 282685258
Conc: 52.16 ug/ml



#6 MCPP

R.T.: 7.763 min
Delta R.T.: -0.004 min
Response: 84256237
Conc: 49.90 ug/ml



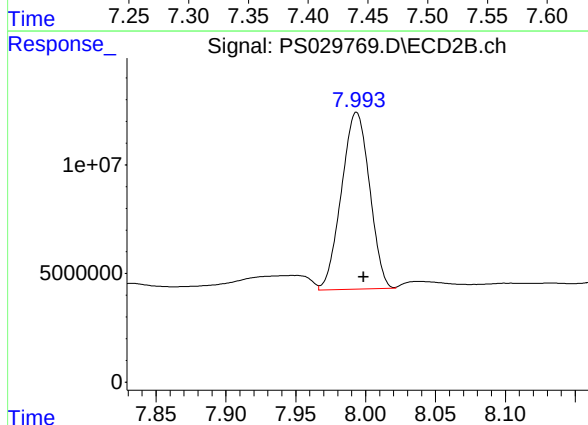
#7 MCPA

R.T.: 7.436 min
Delta R.T.: -0.003 min
Response: 399802786
Conc: 55.00 ug/ml

Instrument :
ECD_S
ClientSampleId :
PB167536BS

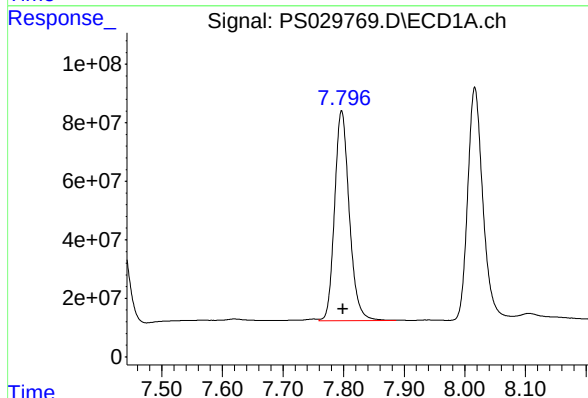
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



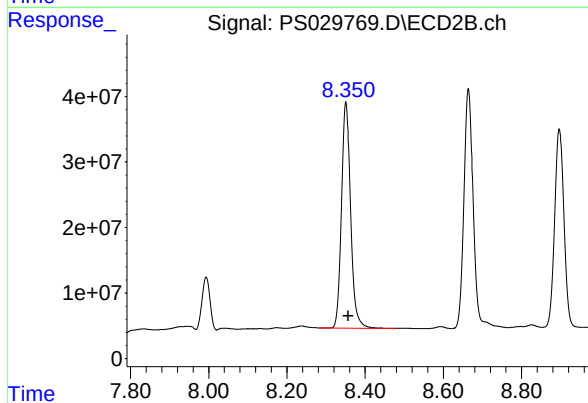
#7 MCPA

R.T.: 7.993 min
Delta R.T.: -0.005 min
Response: 114172806
Conc: 50.18 ug/ml



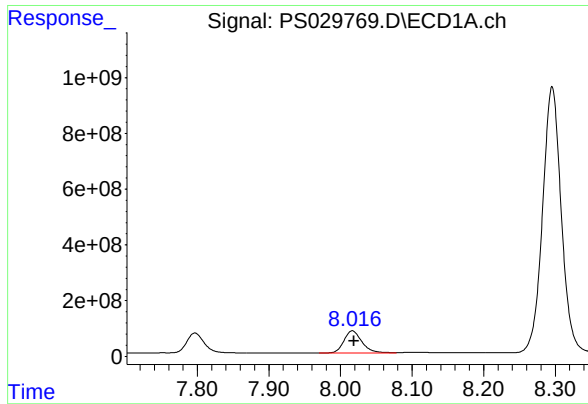
#8 DICHLORPROP

R.T.: 7.797 min
Delta R.T.: -0.002 min
Response: 1212278994
Conc: 551.18 ng/ml



#8 DICHLORPROP

R.T.: 8.351 min
Delta R.T.: -0.005 min
Response: 555741483
Conc: 575.21 ng/ml



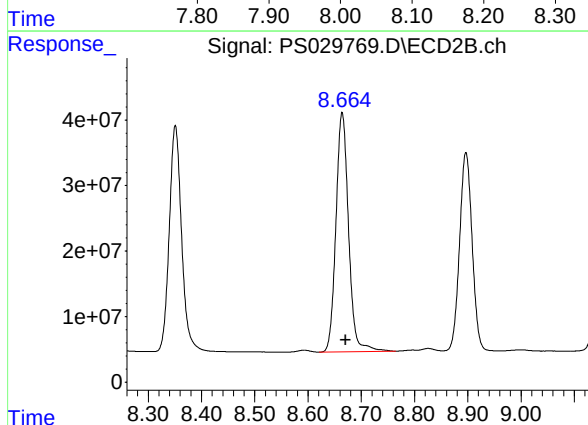
#9 2,4-D

R.T.: 8.017 min
Delta R.T.: -0.002 min
Response: 1383366161
Conc: 574.11 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB167536BS

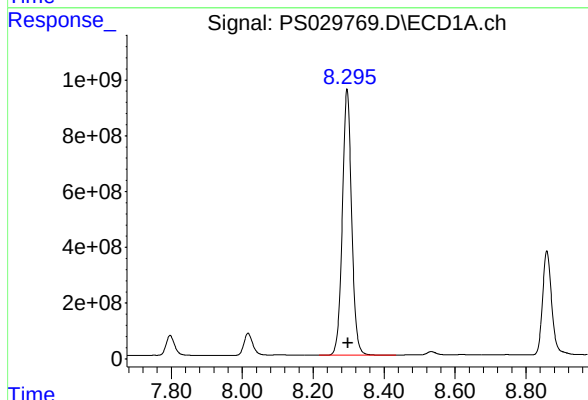
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



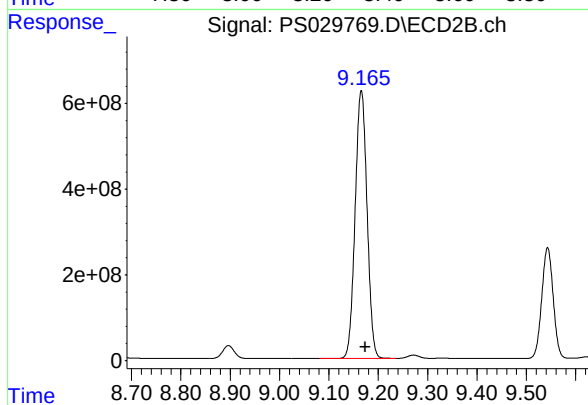
#9 2,4-D

R.T.: 8.664 min
Delta R.T.: -0.007 min
Response: 602292605
Conc: 558.47 ng/ml



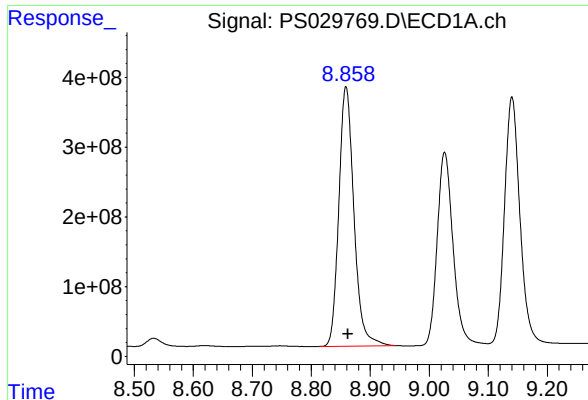
#10 Pentachlorophenol

R.T.: 8.296 min
Delta R.T.: -0.002 min
Response: 17317296783
Conc: 569.55 ng/ml



#10 Pentachlorophenol

R.T.: 9.166 min
Delta R.T.: -0.008 min
Response: 10487244142
Conc: 584.97 ng/ml



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

R.T.: 8.858 min
Delta R.T.: -0.004 min
Response: 6635107417
Conc: 571.24 ng/ml

Instrument :

ECD_S

ClientSampleId :

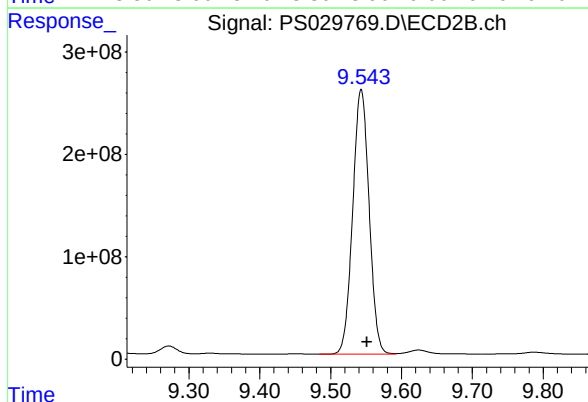
PB167536BS

Manual Integrations

APPROVED

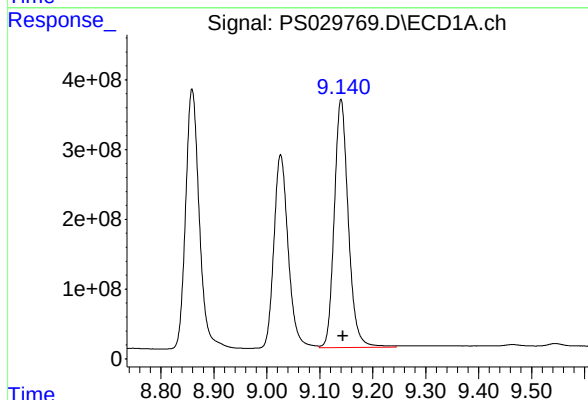
Reviewed By :Abdul Mirza 04/10/2025

Supervised By :mohammad ahmed 04/11/2025



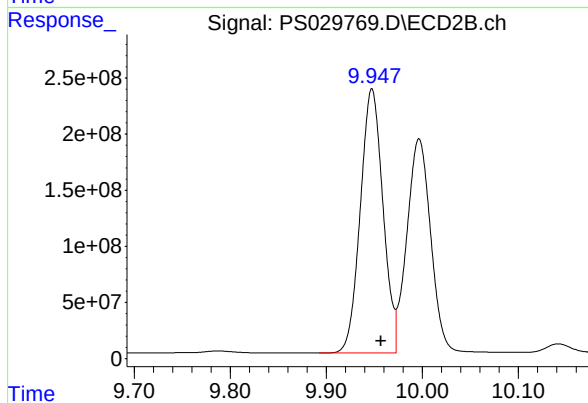
#11 2,4,5-TP (SILVEX)

R.T.: 9.543 min
Delta R.T.: -0.008 min
Response: 4158387084
Conc: 576.52 ng/ml



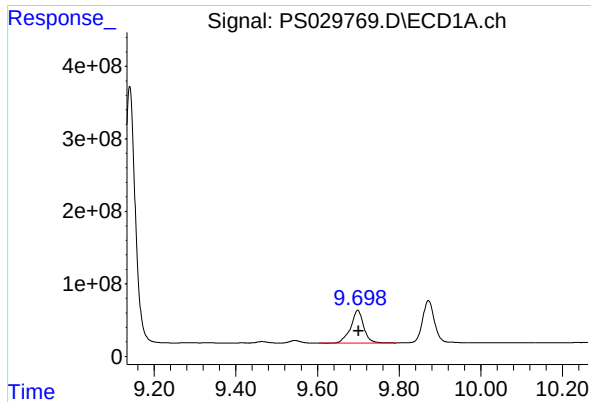
#12 2,4,5-T

R.T.: 9.140 min
Delta R.T.: -0.004 min
Response: 6569021618
Conc: 571.00 ng/ml



#12 2,4,5-T

R.T.: 9.948 min
Delta R.T.: -0.009 min
Response: 3858868086
Conc: 575.71 ng/ml



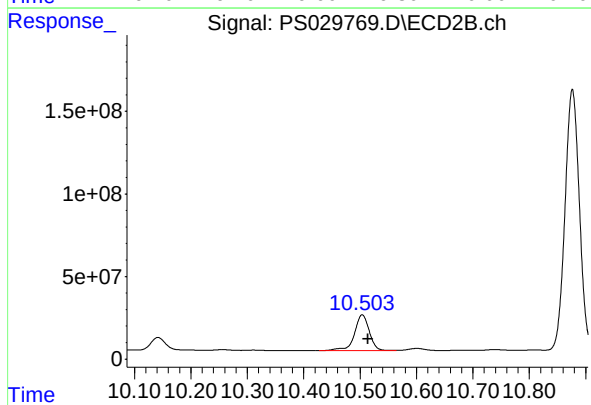
#13 2,4-DB

R.T.: 9.699 min
Delta R.T.: -0.002 min
Response: 994960393
Conc: 547.66 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB167536BS

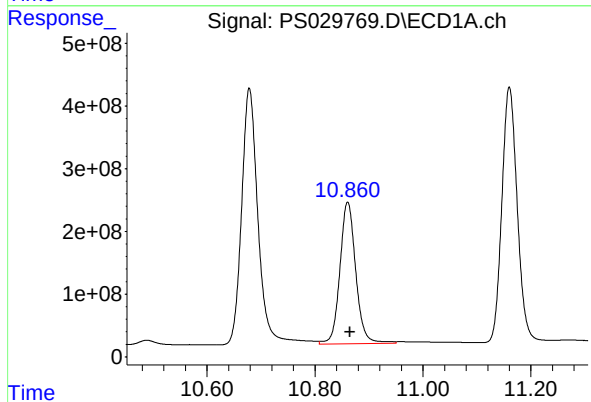
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



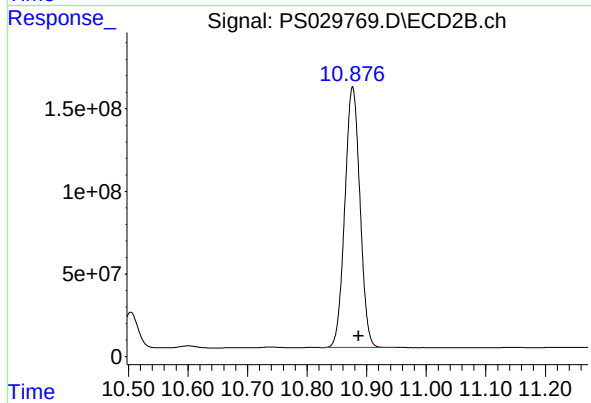
#13 2,4-DB

R.T.: 10.504 min
Delta R.T.: -0.010 min
Response: 397582821
Conc: 535.84 ng/ml



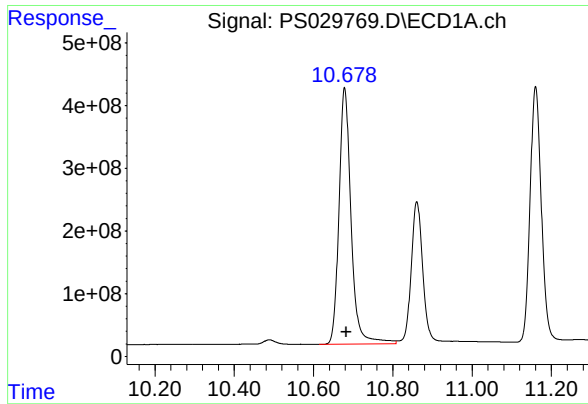
#14 DINOSEB

R.T.: 10.861 min
Delta R.T.: -0.004 min
Response: 4617294349
Conc: 546.94 ng/ml



#14 DINOSEB

R.T.: 10.876 min
Delta R.T.: -0.010 min
Response: 2783017631
Conc: 544.32 ng/ml



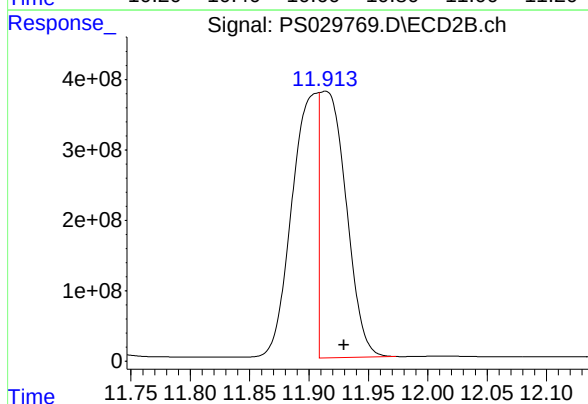
#15 Picloram

R.T.: 10.678 min
Delta R.T.: -0.005 min
Response: 8659211430
Conc: 558.64 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB167536BS

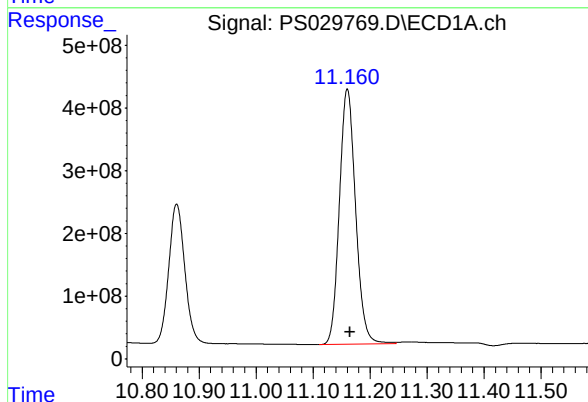
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



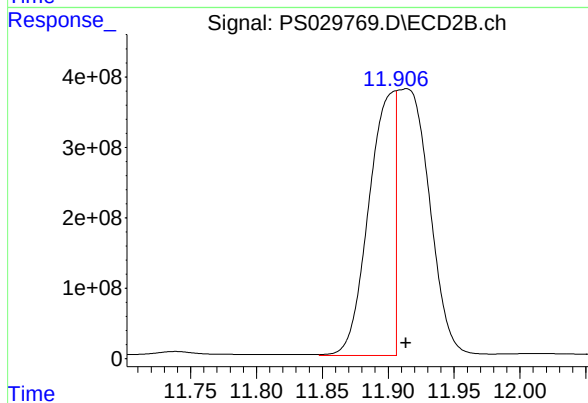
#15 Picloram

R.T.: 11.913 min
Delta R.T.: -0.016 min
Response: 5769650929
Conc: 487.94 ng/ml m



#16 DCPA

R.T.: 11.160 min
Delta R.T.: -0.005 min
Response: 8032805226
Conc: 575.16 ng/ml



#16 DCPA

R.T.: 11.906 min
Delta R.T.: -0.008 min
Response: 5267114195
Conc: 595.11 ng/ml m

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/04/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/04/25
Client Sample ID:	WC-LIQUID-20250404MS	SDG No.:	Q1746
Lab Sample ID:	Q1739-02MS	Matrix:	TCLP
Analytical Method:	SW8151A	% Solid:	0
Sample Wt/Vol:	100	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	TCLP Herbicide
GPC Factor :	1.0	PH :	
Prep Method :	SW3510C	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS029766.D	1	04/09/25 12:55	04/09/25 21:46	PB167536

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	58.8		9.20	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	60.7		7.80	20.0	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	645		70 (39) - 130 (175)	129%	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\PS040925\
 Data File : PS029766.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 09 Apr 2025 21:46
 Operator : AR\AJ
 Sample : Q1739-02MS
 Misc :
 ALS Vial : 14 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 WC-LIQUID-20250404MS

Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
 Supervised By :mohammad ahmed 04/11/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Apr 10 06:39:56 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
 Quant Title : 8080.M
 QLast Update : Wed Apr 02 23:52:55 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	6.943	7.469	1200.1E6	439.8E6	588.631	645.384
Target Compounds							
1) T	Dalapon	2.457	2.530	1791.8E6	950.6E6	528.187	598.773
2) T	3,5-DICHL...	6.149	6.465	1723.6E6	579.5E6	573.043	600.173
3) T	4-Nitroph...	6.734	7.002	754.1E6	384.6E6	536.829	542.511
5) T	DICAMBA	7.120	7.655	4299.3E6	2056.0E6	516.625	556.682
6) T	MCP	7.297	7.761	348.9E6	83841621	64.368	49.655m
7) T	MCPA	7.439	7.990	450.7E6	138.1E6	62.001m	60.694m
8) T	DICHLORPROP	7.799	8.349	1149.3E6	609.0E6	522.537	630.385
9) T	2,4-D	8.019	8.662	1378.2E6	634.3E6	571.968	588.160
10) T	Pentachlo...	8.299	9.163	15184.4E6	10303.6E6	499.404	574.731
11) T	2,4,5-TP ...	8.863	9.541	6022.4E6	4374.8E6	518.489	606.518
12) T	2,4,5-T	9.145	9.946	5691.0E6	3737.2E6	494.680	557.561
13) T	2,4-DB	9.704	10.502	754.5E6	366.4E6	415.314	493.786
14) T	DINOSEB	10.866	10.874	2867.8E6	2055.3E6	339.709	401.989
15) T	Picloram	10.684	11.907	6786.1E6	4984.8E6	437.803	421.568m
16) T	DCPA	11.167	11.900	6116.3E6	5627.7E6	437.940	635.847m#

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS040925\
Data File : PS029766.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 09 Apr 2025 21:46
Operator : AR\AJ
Sample : Q1739-02MS
Misc :
ALS Vial : 14 Sample Multiplier: 1

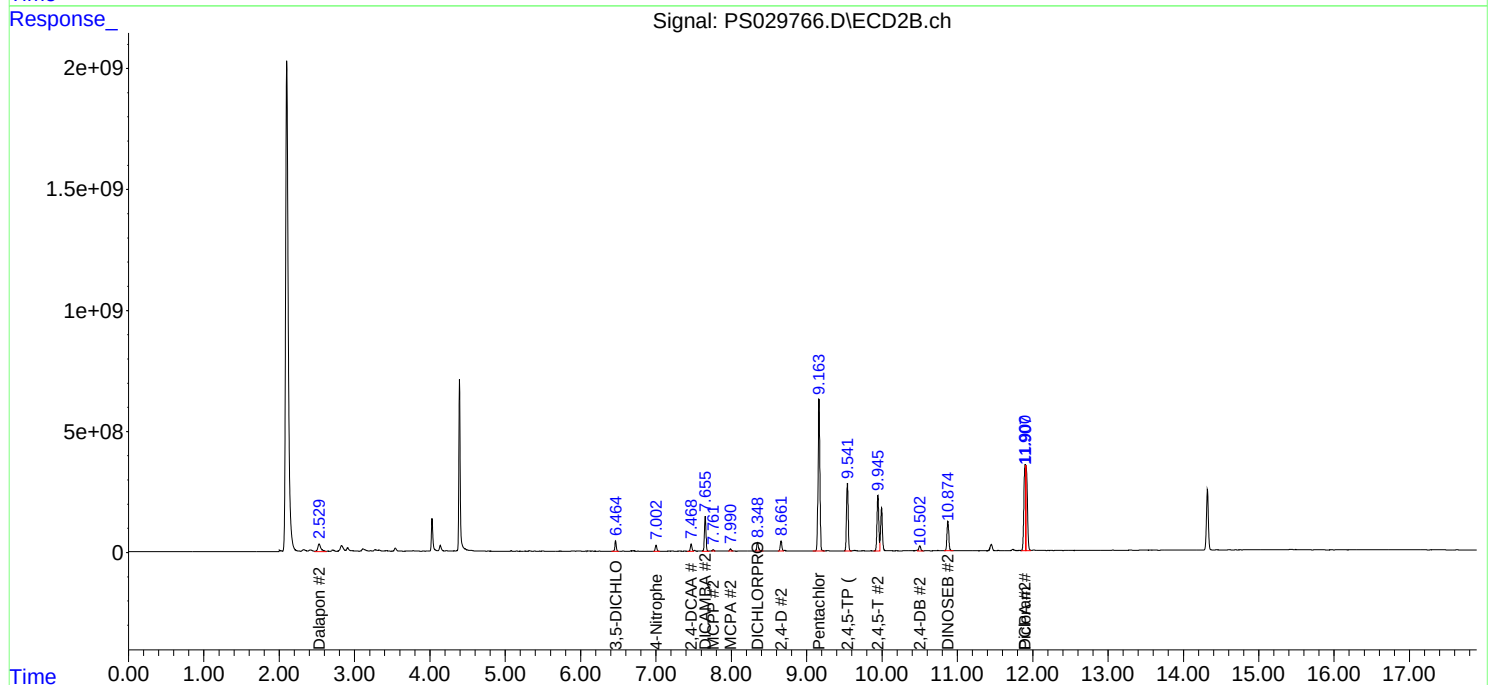
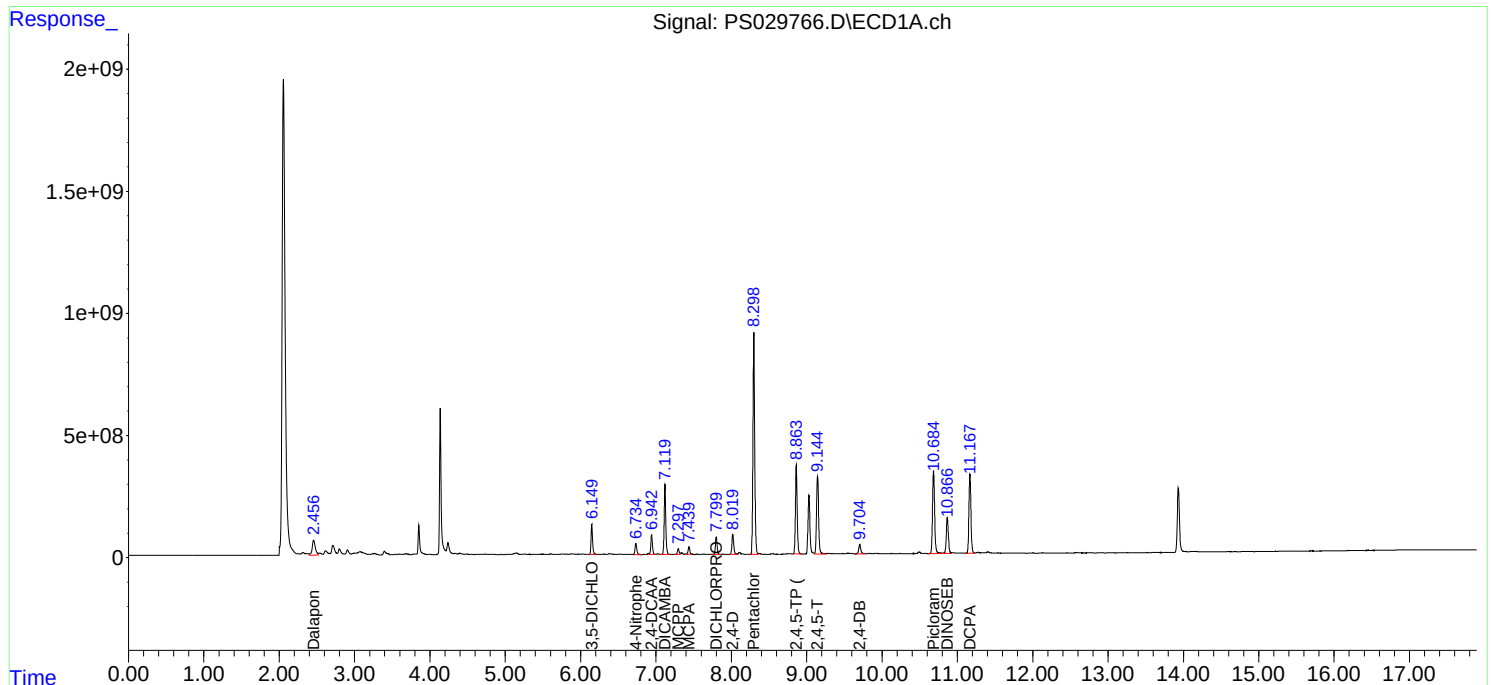
Instrument :
ECD_S
ClientSampleId :
WC-LIQUID-20250404MS

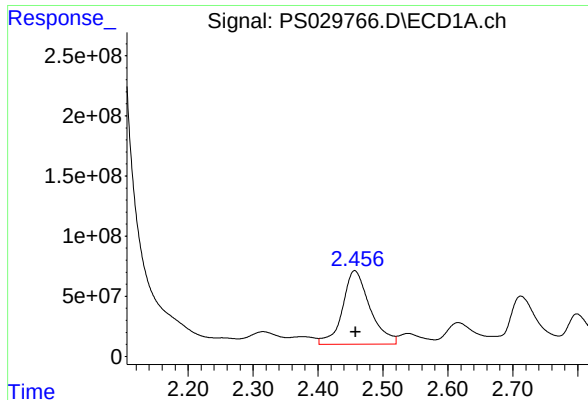
Manual Integrations
APPROVED

Reviewed By : Abdul Mirza 04/10/2025
Supervised By : mohammad ahmed 04/11/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 10 06:39:56 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
Quant Title : 8080.M
QLast Update : Wed Apr 02 23:52:55 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm





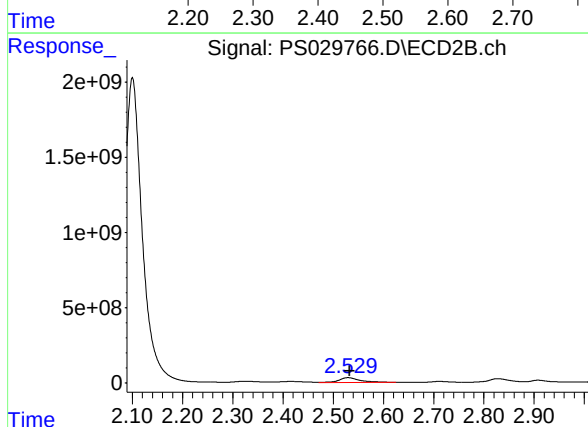
#1 Dalapon

R.T.: 2.457 min
Delta R.T.: -0.001 min
Response: 1791818822
Conc: 528.19 ng/ml

Instrument :
ECD_S
ClientSampleId :
WC-LIQUID-20250404MS

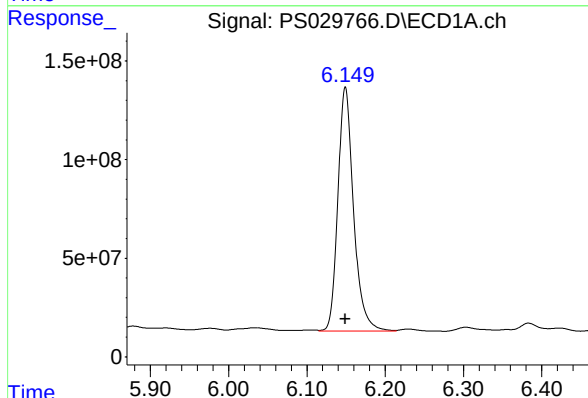
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



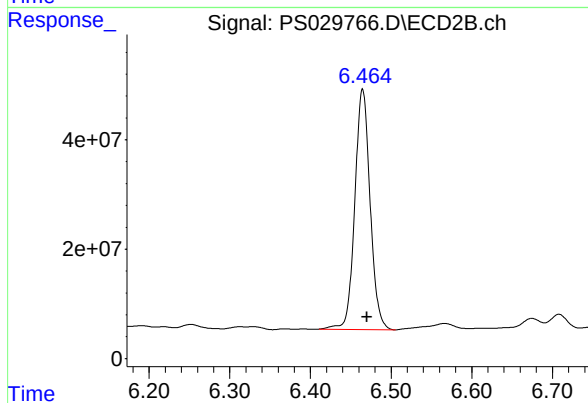
#1 Dalapon

R.T.: 2.530 min
Delta R.T.: -0.004 min
Response: 950609081
Conc: 598.77 ng/ml



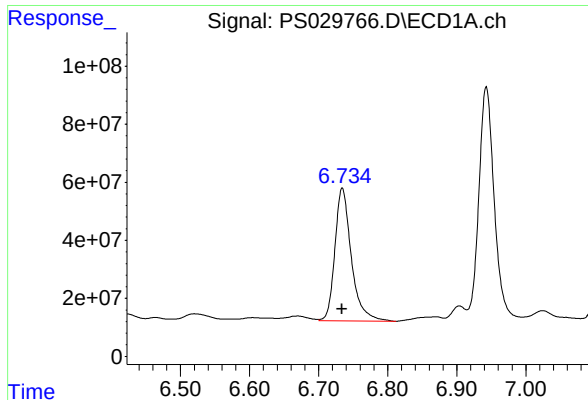
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.149 min
Delta R.T.: 0.000 min
Response: 1723574827
Conc: 573.04 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.465 min
Delta R.T.: -0.006 min
Response: 579500876
Conc: 600.17 ng/ml



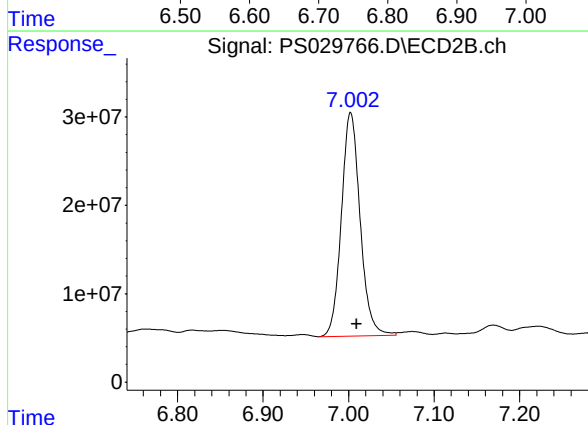
#3 4-Nitrophenol

R.T.: 6.734 min
Delta R.T.: 0.000 min
Response: 754136855
Conc: 536.83 ng/ml

Instrument :
ECD_S
ClientSampleId :
WC-LIQUID-20250404MS

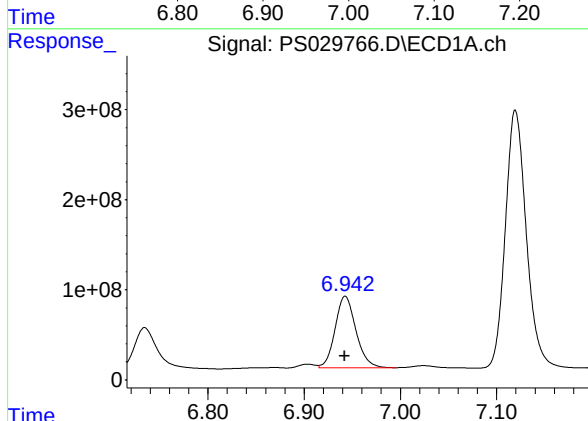
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



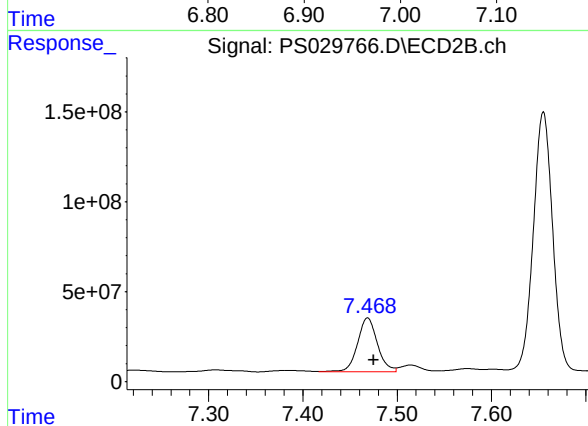
#3 4-Nitrophenol

R.T.: 7.002 min
Delta R.T.: -0.007 min
Response: 384639125
Conc: 542.51 ng/ml



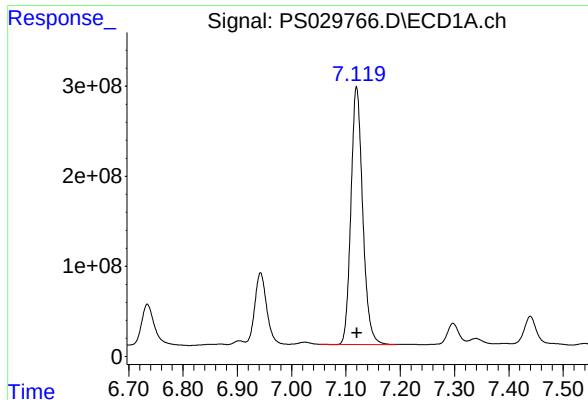
#4 2,4-DCAA

R.T.: 6.943 min
Delta R.T.: 0.000 min
Response: 1200118236
Conc: 588.63 ng/ml



#4 2,4-DCAA

R.T.: 7.469 min
Delta R.T.: -0.006 min
Response: 439837682
Conc: 645.38 ng/ml



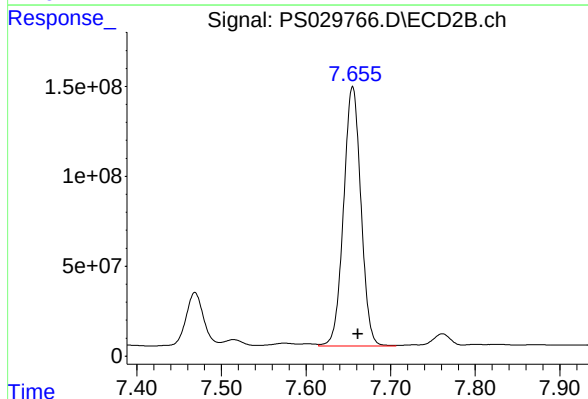
#5 DICAMBA

R.T.: 7.120 min
Delta R.T.: 0.000 min
Response: 4299320870
Conc: 516.62 ng/ml

Instrument :
ECD_S
ClientSampleId :
WC-LIQUID-20250404MS

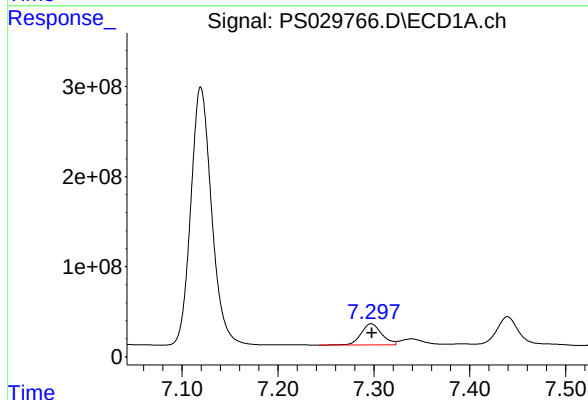
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



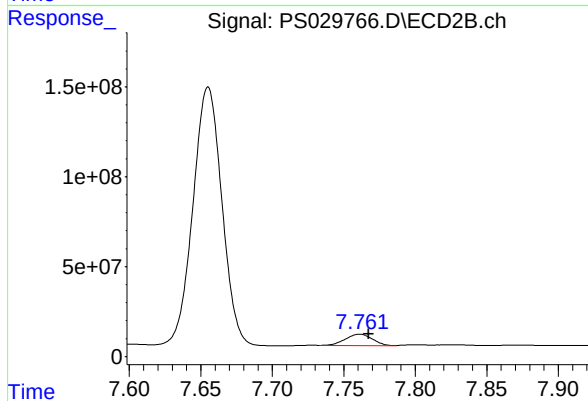
#5 DICAMBA

R.T.: 7.655 min
Delta R.T.: -0.007 min
Response: 2056032420
Conc: 556.68 ng/ml



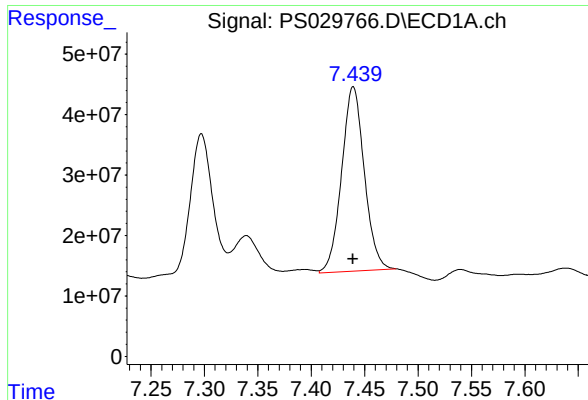
#6 MCPP

R.T.: 7.297 min
Delta R.T.: 0.000 min
Response: 348866517
Conc: 64.37 ug/ml



#6 MCPP

R.T.: 7.761 min
Delta R.T.: -0.007 min
Response: 83841621
Conc: 49.66 ug/ml m



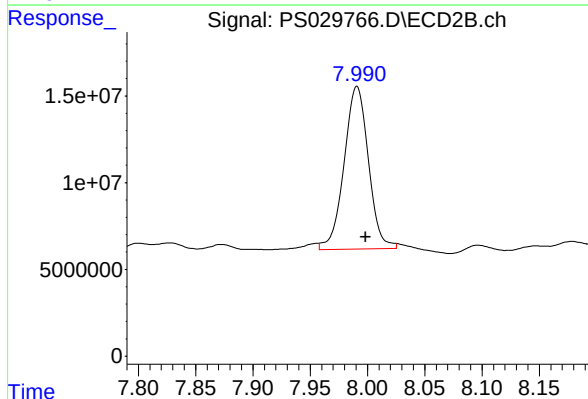
#7 MCPA

R.T.: 7.439 min
Delta R.T.: 0.000 min
Response: 450686737
Conc: 62.00 ug/ml

Instrument :
ECD_S
ClientSampleId :
WC-LIQUID-20250404MS

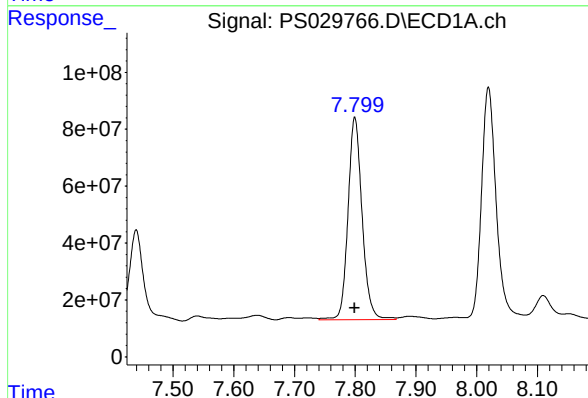
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



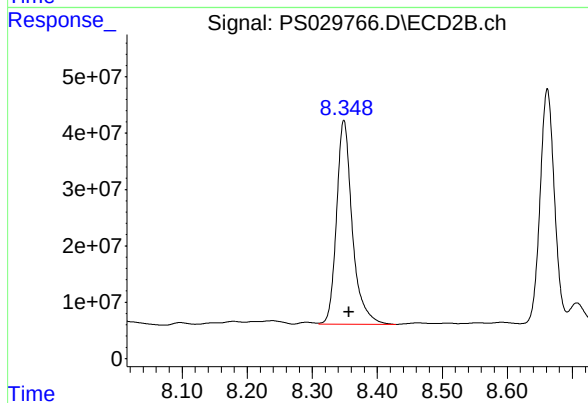
#7 MCPA

R.T.: 7.990 min
Delta R.T.: -0.008 min
Response: 138095913
Conc: 60.69 ug/ml



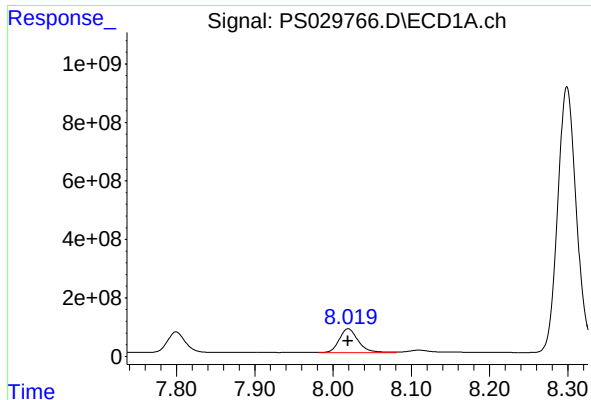
#8 DICHLORPROP

R.T.: 7.799 min
Delta R.T.: 0.000 min
Response: 1149288613
Conc: 522.54 ng/ml



#8 DICHLORPROP

R.T.: 8.349 min
Delta R.T.: -0.008 min
Response: 609047549
Conc: 630.38 ng/ml



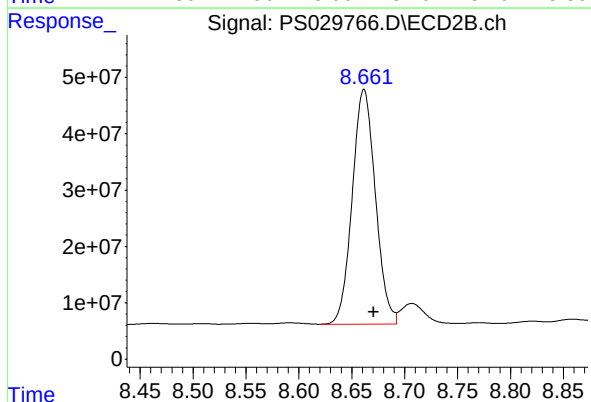
#9 2,4-D

R.T.: 8.019 min
Delta R.T.: 0.000 min
Response: 1378207897
Conc: 571.97 ng/ml

Instrument :
ECD_S
ClientSampleId :
WC-LIQUID-20250404MS

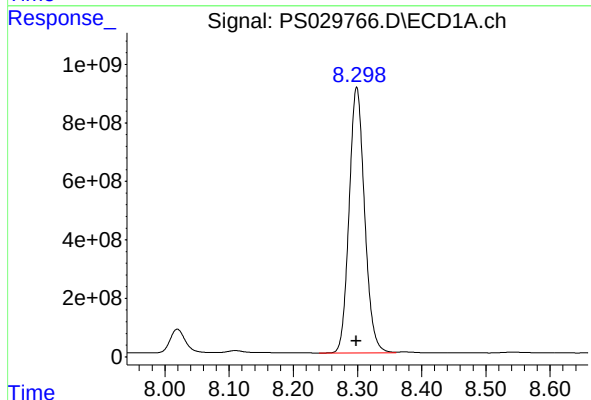
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



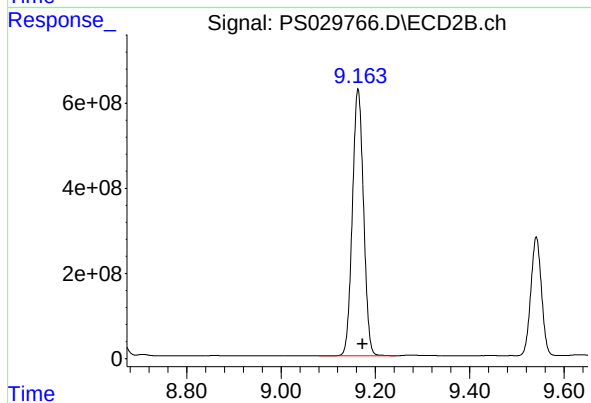
#9 2,4-D

R.T.: 8.662 min
Delta R.T.: -0.009 min
Response: 634309901
Conc: 588.16 ng/ml



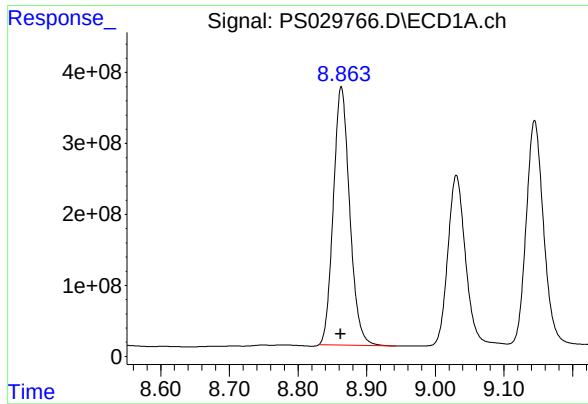
#10 Pentachlorophenol

R.T.: 8.299 min
Delta R.T.: 0.000 min
Response: 15184366248
Conc: 499.40 ng/ml



#10 Pentachlorophenol

R.T.: 9.163 min
Delta R.T.: -0.010 min
Response: 10303615830
Conc: 574.73 ng/ml



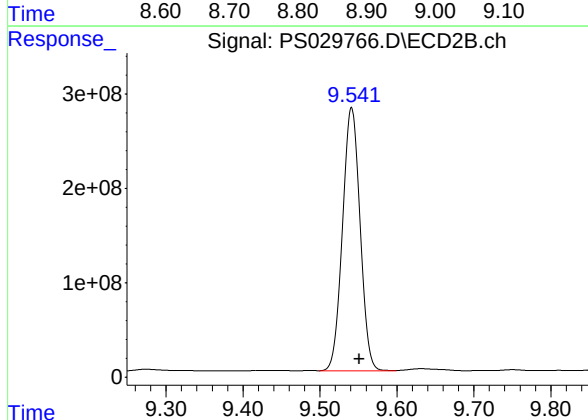
#11 2,4,5-TP (SILVEX)

R.T.: 8.863 min
Delta R.T.: 0.001 min
Response: 6022433635
Conc: 518.49 ng/ml

Instrument :
ECD_S
ClientSampleId :
WC-LIQUID-20250404MS

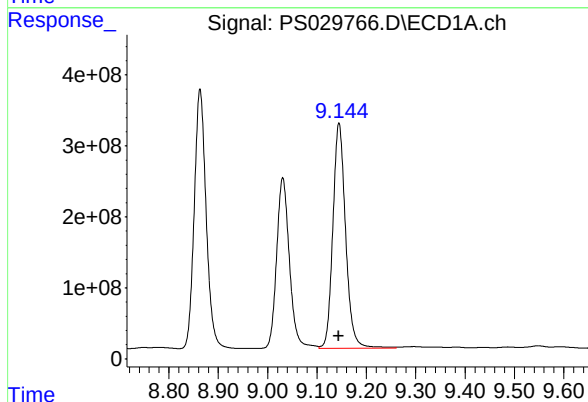
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



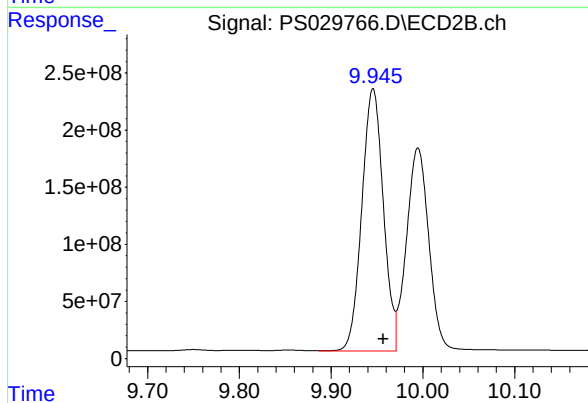
#11 2,4,5-TP (SILVEX)

R.T.: 9.541 min
Delta R.T.: -0.010 min
Response: 4374786600
Conc: 606.52 ng/ml



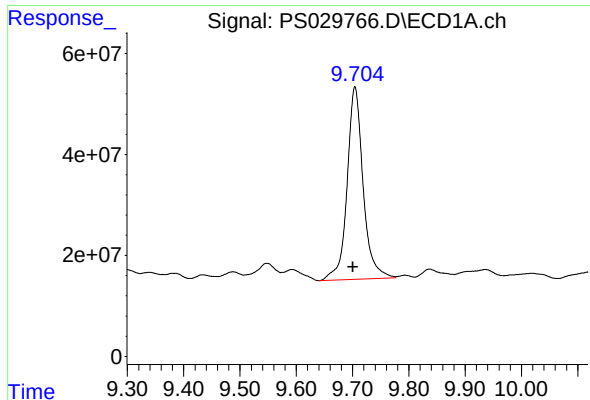
#12 2,4,5-T

R.T.: 9.145 min
Delta R.T.: 0.000 min
Response: 5691014129
Conc: 494.68 ng/ml



#12 2,4,5-T

R.T.: 9.946 min
Delta R.T.: -0.011 min
Response: 3737244168
Conc: 557.56 ng/ml



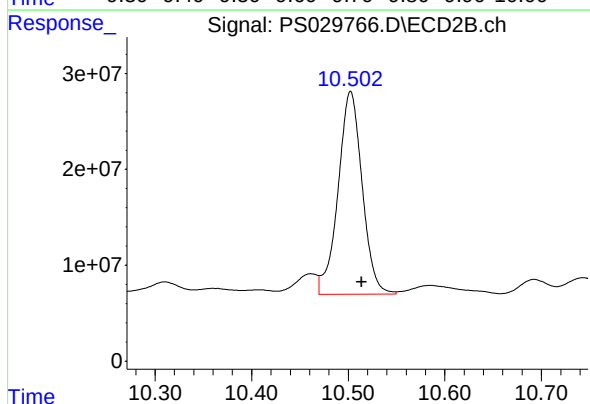
#13 2,4-DB

R.T.: 9.704 min
Delta R.T.: 0.003 min
Response: 754518798
Conc: 415.31 ng/ml

Instrument :
ECD_S
ClientSampleId :
WC-LIQUID-20250404MS

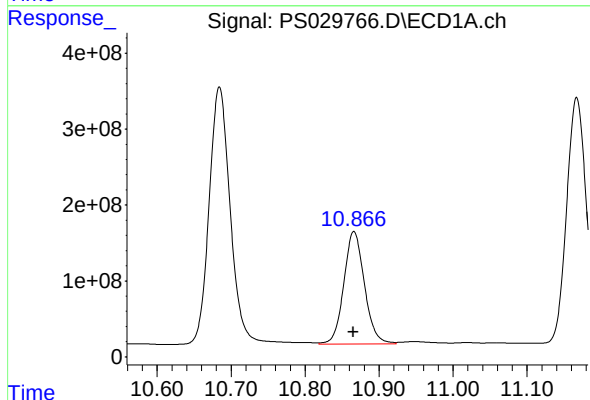
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



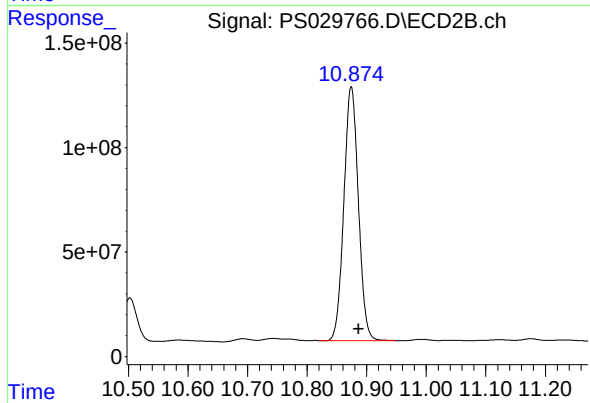
#13 2,4-DB

R.T.: 10.502 min
Delta R.T.: -0.012 min
Response: 366376780
Conc: 493.79 ng/ml



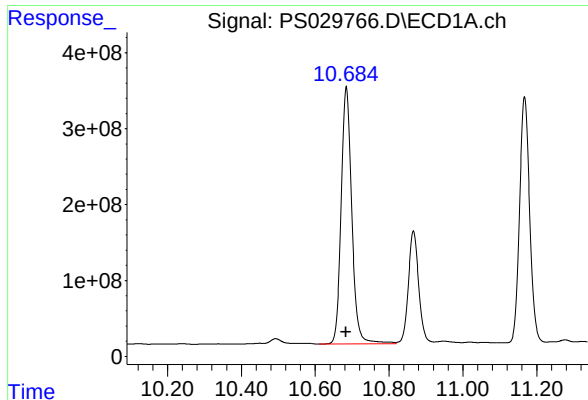
#14 DINOSEB

R.T.: 10.866 min
Delta R.T.: 0.001 min
Response: 2867840191
Conc: 339.71 ng/ml



#14 DINOSEB

R.T.: 10.874 min
Delta R.T.: -0.012 min
Response: 2055289549
Conc: 401.99 ng/ml



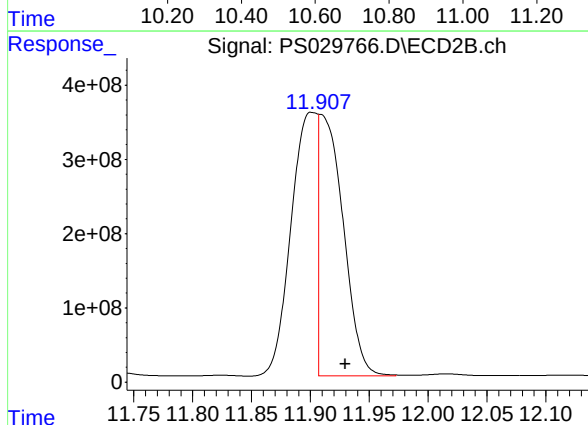
#15 Picloram

R.T.: 10.684 min
Delta R.T.: 0.001 min
Response: 6786114851
Conc: 437.80 ng/ml

Instrument :
ECD_S
ClientSampleId :
WC-LIQUID-20250404MS

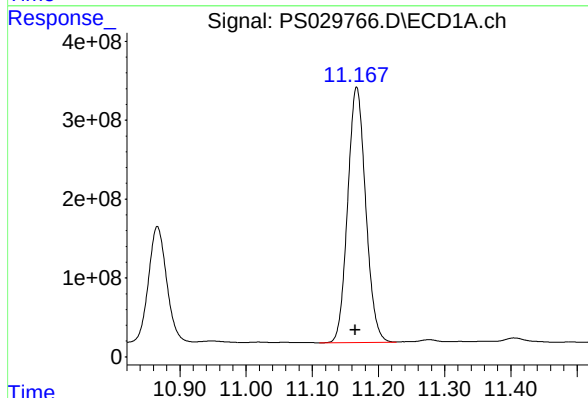
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



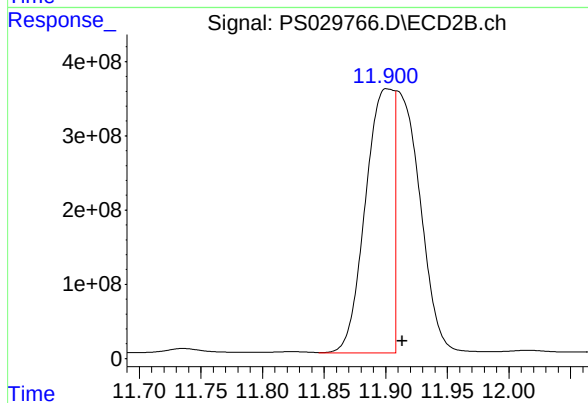
#15 Picloram

R.T.: 11.907 min
Delta R.T.: -0.023 min
Response: 4984795775
Conc: 421.57 ng/ml m



#16 DCPA

R.T.: 11.167 min
Delta R.T.: 0.002 min
Response: 6116322666
Conc: 437.94 ng/ml



#16 DCPA

R.T.: 11.900 min
Delta R.T.: -0.014 min
Response: 5627667636
Conc: 635.85 ng/ml m

Report of Analysis

Client:	Portal Partners Tri-Venture	Date Collected:	04/04/25
Project:	Amtrak Sawtooth Bridges 2025	Date Received:	04/04/25
Client Sample ID:	WC-LIQUID-20250404MSD	SDG No.:	Q1746
Lab Sample ID:	Q1739-02MSD	Matrix:	TCLP
Analytical Method:	SW8151A	% Solid:	0
Sample Wt/Vol:	100	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	TCLP Herbicide
GPC Factor :	1.0	PH :	
Prep Method :	SW3510C	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS029767.D	1	04/09/25 12:55	04/09/25 22:10	PB167536

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	60.0		9.20	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	62.0		7.80	20.0	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	656	*	70 (39) - 130 (175)	131%	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\PS040925\
 Data File : PS029767.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 09 Apr 2025 22:10
 Operator : AR\AJ
 Sample : Q1739-02MSD
 Misc :
 ALS Vial : 15 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 WC-LIQUID-20250404MSD

Manual Integrations
 APPROVED

Reviewed By :Abdul Mirza 04/10/2025
 Supervised By :mohammad ahmed 04/11/2025

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Apr 10 06:41:23 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
 Quant Title : 8080.M
 QLast Update : Wed Apr 02 23:52:55 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	6.942	7.469	1209.4E6	447.1E6	593.207	656.002
Target Compounds							
1) T	Dalapon	2.456	2.530	1811.3E6	953.9E6	533.925	600.870
2) T	3,5-DICHL...	6.148	6.465	1768.2E6	592.7E6	587.878	613.865
3) T	4-Nitroph...	6.733	7.002	769.1E6	391.1E6	547.506	551.601
5) T	DICAMBA	7.118	7.655	4339.5E6	2094.0E6	521.456	566.951
6) T	MCP	7.296	7.761	336.5E6	89759176	62.085	53.160m
7) T	MCPA	7.438	7.991	439.0E6	161.6E6	60.398m	71.038
8) T	DICHLORPROP	7.798	8.349	1167.4E6	661.9E6	530.751	685.070 #
9) T	2,4-D	8.018	8.662	1409.9E6	647.0E6	585.137	599.934
10) T	Pentachlo...	8.297	9.163	15392.3E6	10502.8E6	506.244	585.844
11) T	2,4,5-TP ...	8.861	9.541	6201.6E6	4468.7E6	533.916m	619.541
12) T	2,4,5-T	9.143	9.945	5778.0E6	3824.0E6	502.243	570.509
13) T	2,4-DB	9.702	10.502	702.5E6	374.4E6	386.667	504.600 #
14) T	DINOSEB	10.864	10.874	2841.4E6	2046.1E6	336.583	400.182
15) T	Picloram	10.682	11.907	6873.3E6	5045.5E6	443.430	426.700m
16) T	DCPA	11.164	11.900	6188.4E6	5335.8E6	443.099	602.875m#

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS040925\
Data File : PS029767.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 09 Apr 2025 22:10
Operator : AR\AJ
Sample : Q1739-02MSD
Misc :
ALS Vial : 15 Sample Multiplier: 1

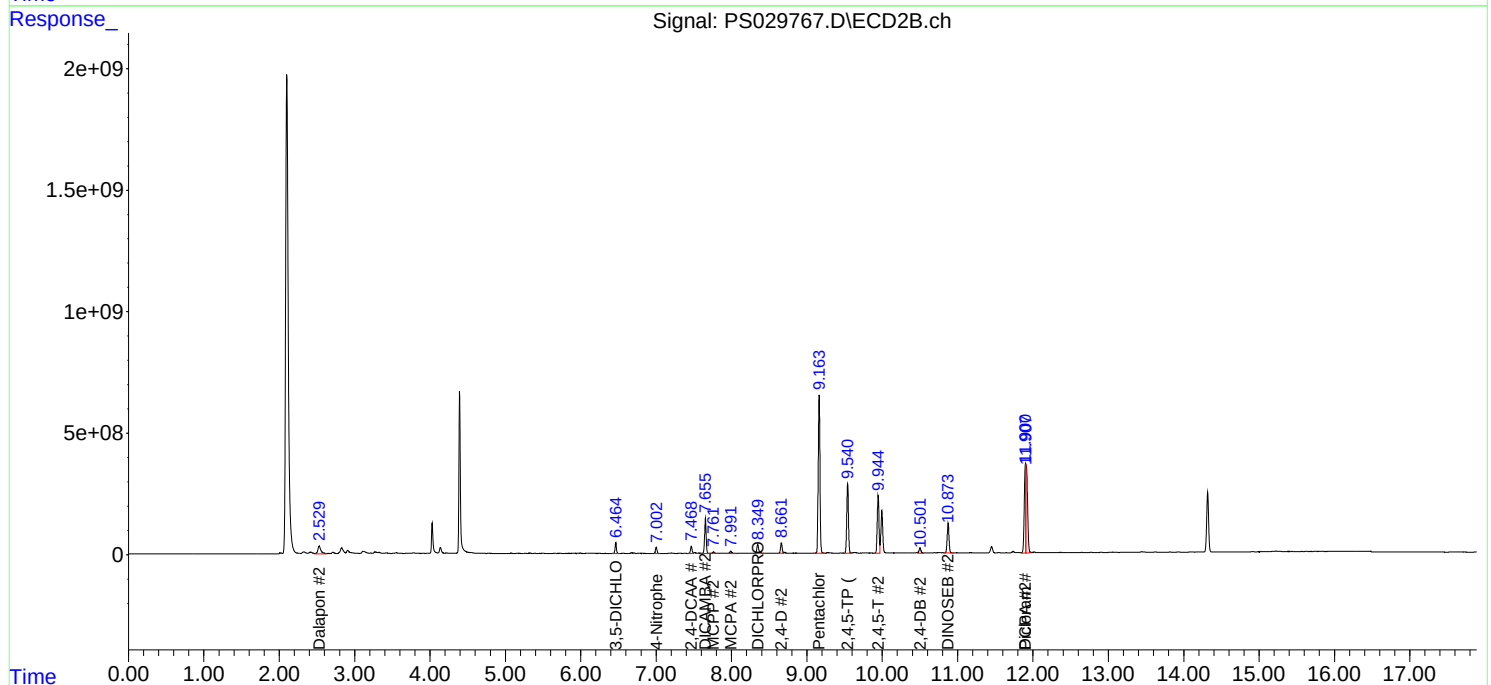
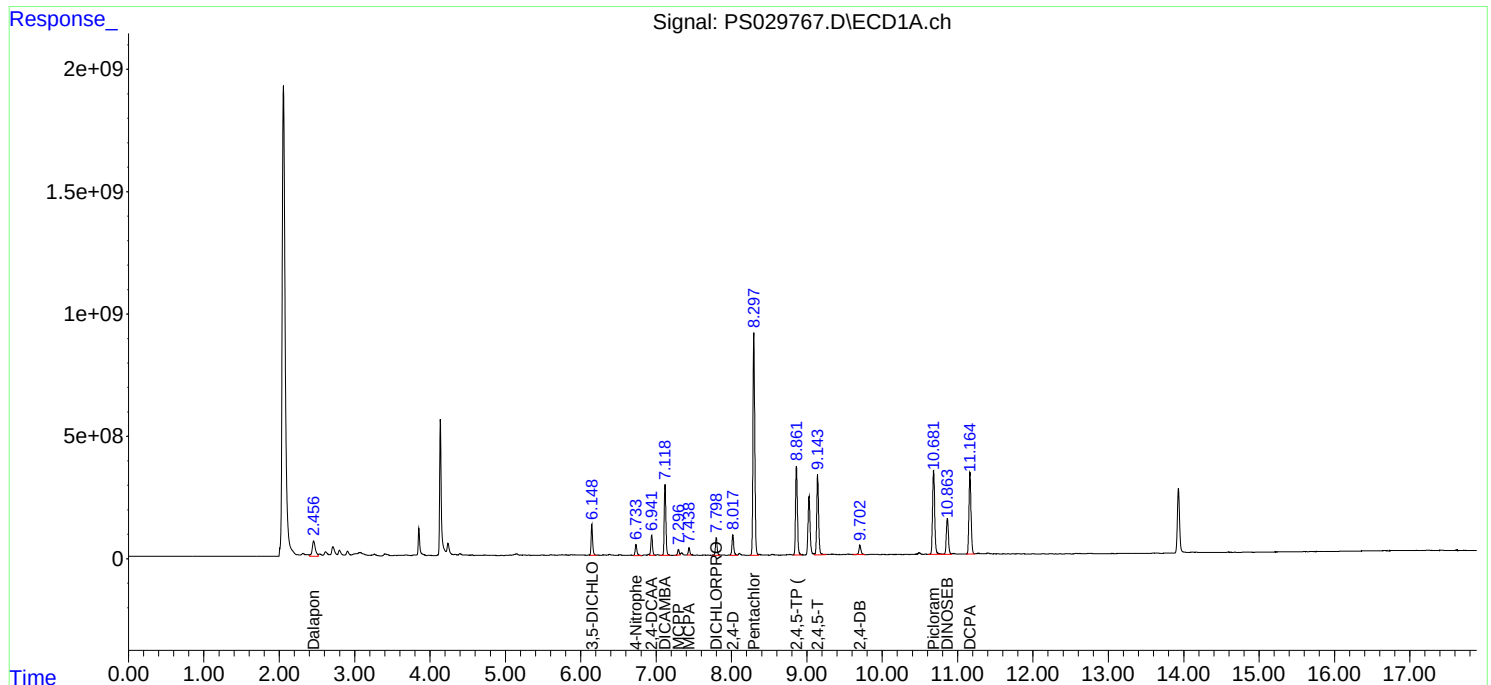
Instrument :
ECD_S
ClientSampleId :
WC-LIQUID-20250404MSD

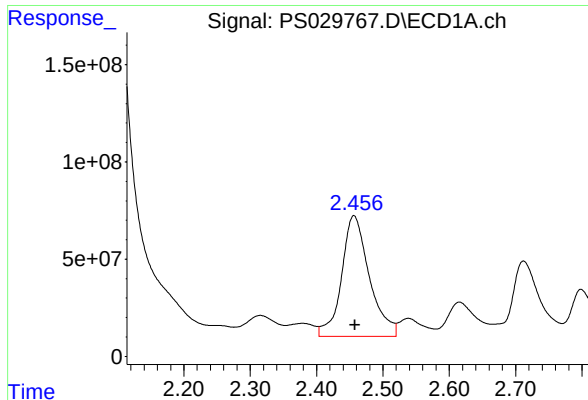
Manual Integrations
APPROVED

Reviewed By : Abdul Mirza 04/10/2025
Supervised By : mohammad ahmed 04/11/2025

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 10 06:41:23 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS040225.M
Quant Title : 8080.M
QLast Update : Wed Apr 02 23:52:55 2025
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm x 0.5 Signal #2 Info : 30M x 0.32mm x 0.25µm





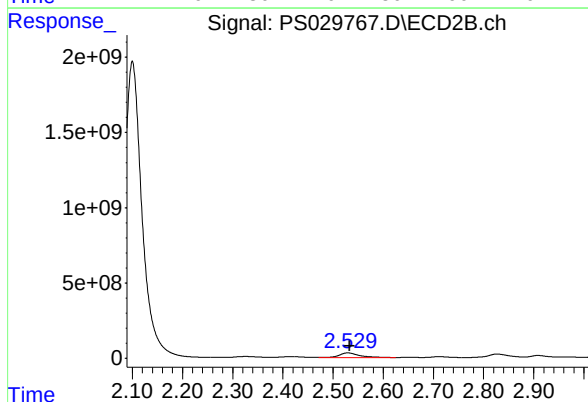
#1 Dalapon

R.T.: 2.456 min
Delta R.T.: -0.002 min
Response: 1811284774
Conc: 533.92 ng/ml

Instrument :
ECD_S
ClientSampleId :
WC-LIQUID-20250404MSD

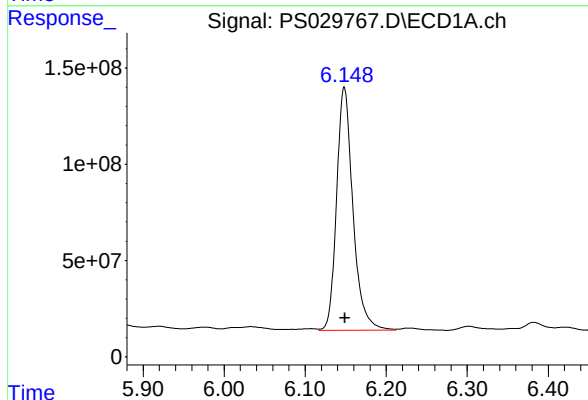
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



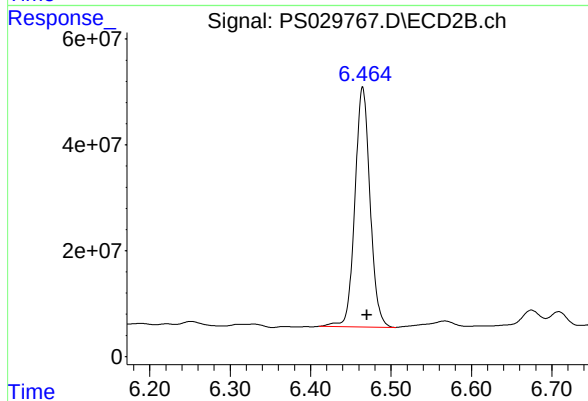
#1 Dalapon

R.T.: 2.530 min
Delta R.T.: -0.004 min
Response: 953938562
Conc: 600.87 ng/ml



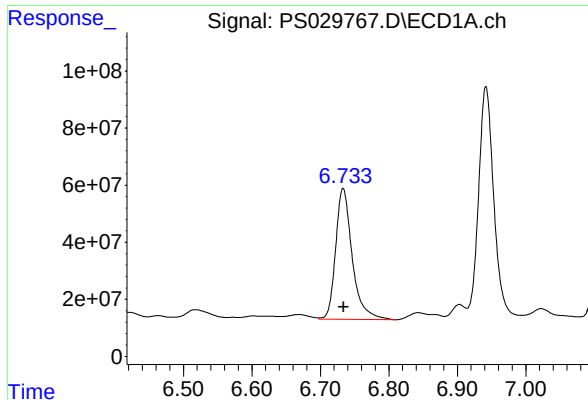
#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.148 min
Delta R.T.: 0.000 min
Response: 1768196086
Conc: 587.88 ng/ml



#2 3,5-DICHLOROBENZOIC ACID

R.T.: 6.465 min
Delta R.T.: -0.005 min
Response: 592721651
Conc: 613.86 ng/ml



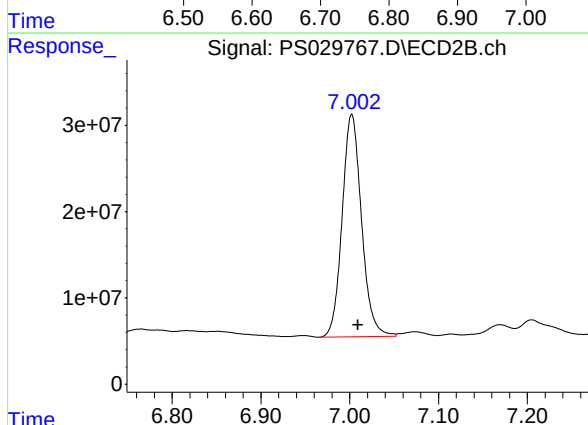
#3 4-Nitrophenol

R.T.: 6.733 min
Delta R.T.: 0.000 min
Response: 769135251
Conc: 547.51 ng/ml

Instrument :
ECD_S
ClientSampleId :
WC-LIQUID-20250404MSD

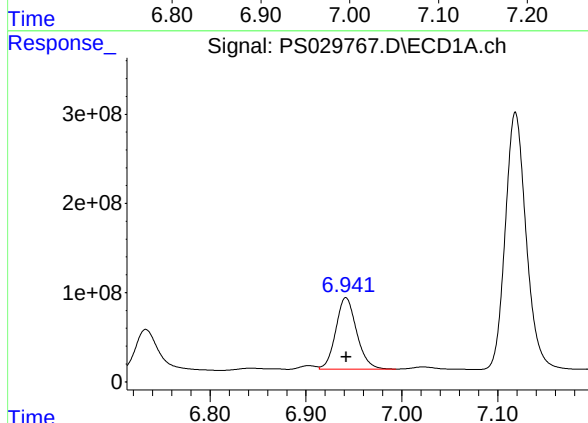
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



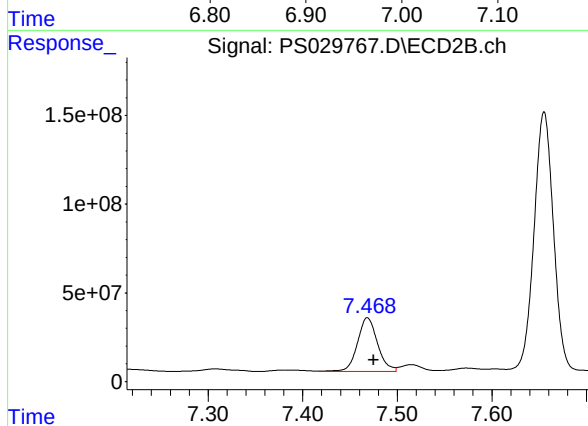
#3 4-Nitrophenol

R.T.: 7.002 min
Delta R.T.: -0.007 min
Response: 391083907
Conc: 551.60 ng/ml



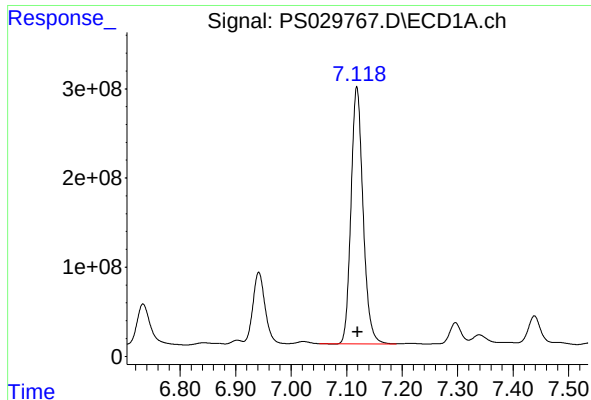
#4 2,4-DCAA

R.T.: 6.942 min
Delta R.T.: 0.000 min
Response: 1209448864
Conc: 593.21 ng/ml



#4 2,4-DCAA

R.T.: 7.469 min
Delta R.T.: -0.006 min
Response: 447073584
Conc: 656.00 ng/ml



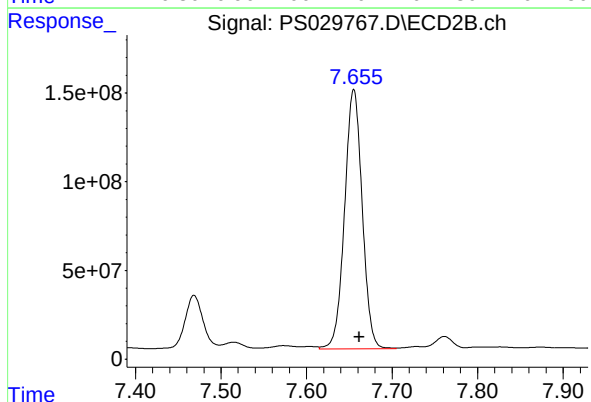
#5 DICAMBA

R.T.: 7.118 min
Delta R.T.: -0.002 min
Response: 4339524019
Conc: 521.46 ng/ml

Instrument :
ECD_S
ClientSampleId :
WC-LIQUID-20250404MSD

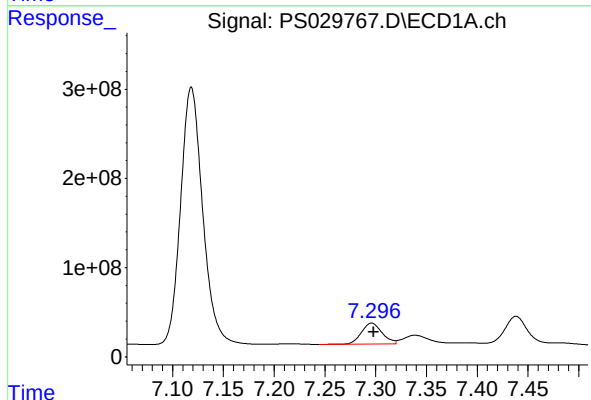
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



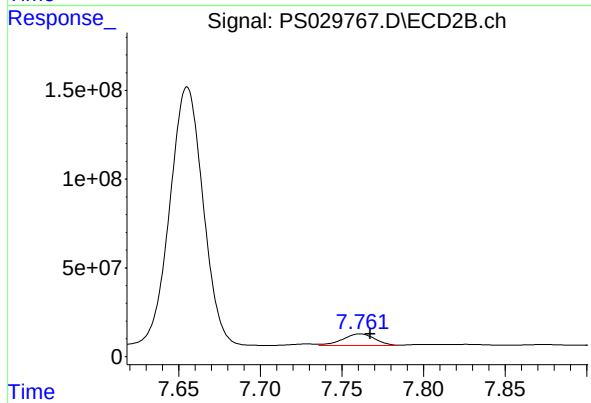
#5 DICAMBA

R.T.: 7.655 min
Delta R.T.: -0.006 min
Response: 2093959219
Conc: 566.95 ng/ml



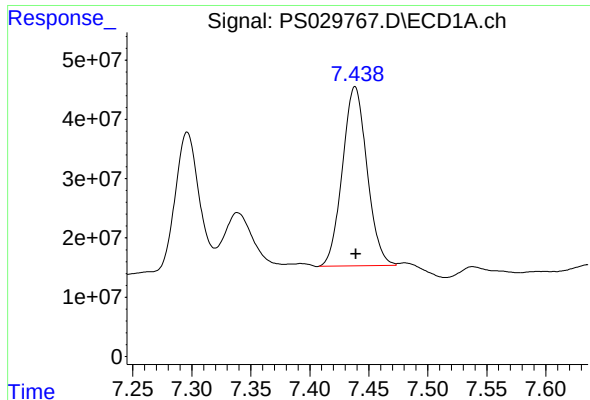
#6 MCPD

R.T.: 7.296 min
Delta R.T.: -0.002 min
Response: 336494897
Conc: 62.09 ug/ml



#6 MCPD

R.T.: 7.761 min
Delta R.T.: -0.007 min
Response: 89759176
Conc: 53.16 ug/ml m



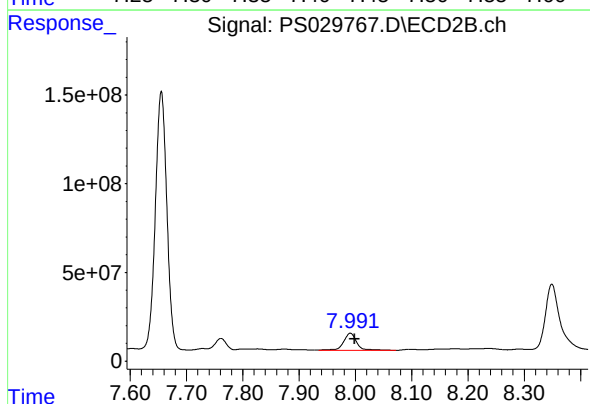
#7 MCPA

R.T.: 7.438 min
Delta R.T.: -0.001 min
Response: 439035885
Conc: 60.40 ug/ml

Instrument :
ECD_S
ClientSampleId :
WC-LIQUID-20250404MSD

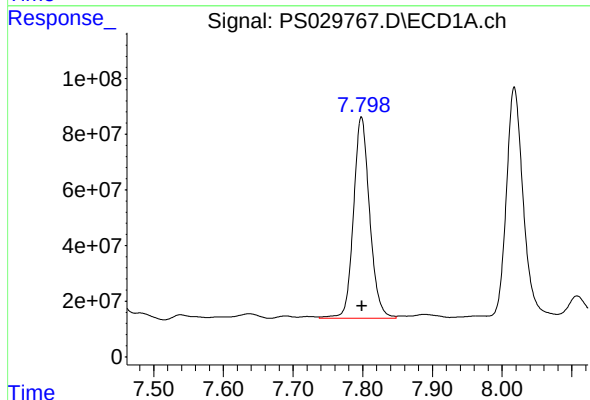
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



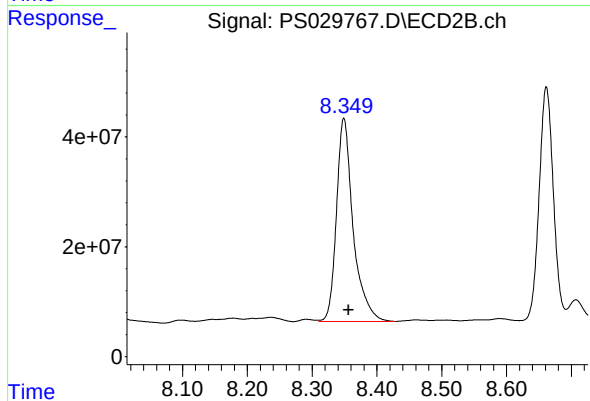
#7 MCPA

R.T.: 7.991 min
Delta R.T.: -0.008 min
Response: 161630659
Conc: 71.04 ug/ml



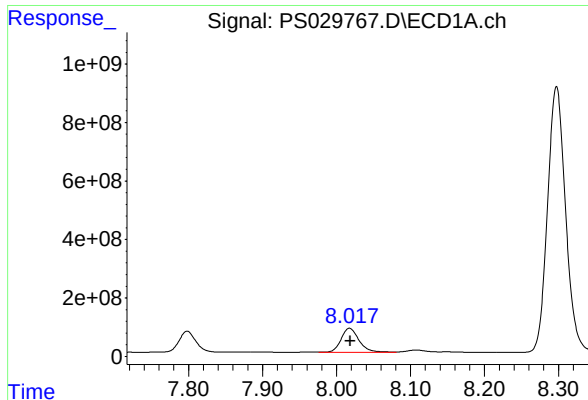
#8 DICHLORPROP

R.T.: 7.798 min
Delta R.T.: 0.000 min
Response: 1167353547
Conc: 530.75 ng/ml



#8 DICHLORPROP

R.T.: 8.349 min
Delta R.T.: -0.007 min
Response: 661882388
Conc: 685.07 ng/ml



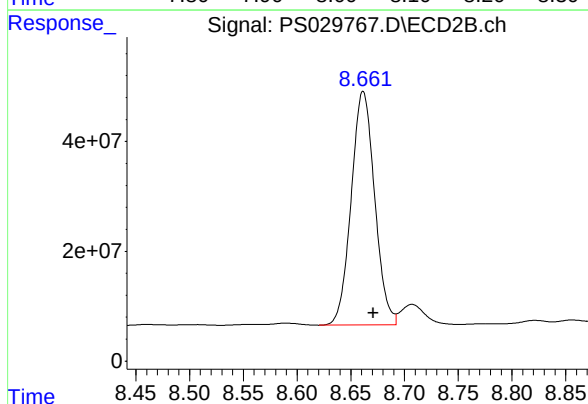
#9 2,4-D

R.T.: 8.018 min
Delta R.T.: -0.001 min
Response: 1409941199
Conc: 585.14 ng/ml

Instrument :
ECD_S
ClientSampleId :
WC-LIQUID-20250404MSD

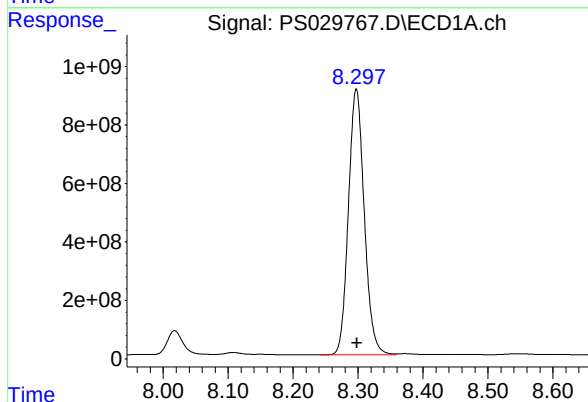
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



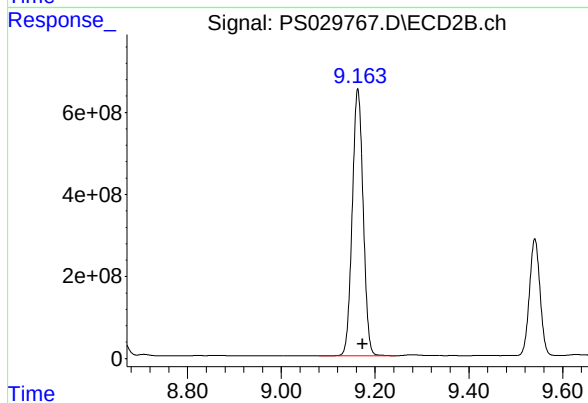
#9 2,4-D

R.T.: 8.662 min
Delta R.T.: -0.009 min
Response: 647008012
Conc: 599.93 ng/ml



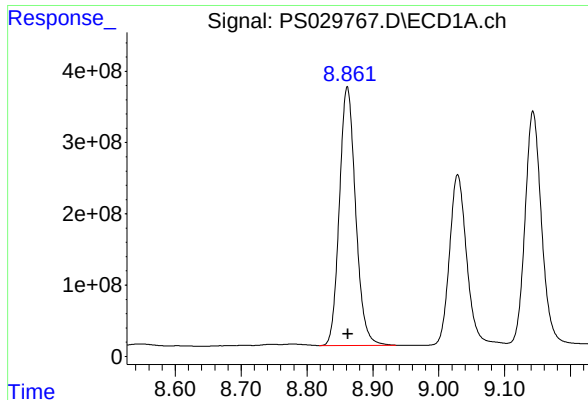
#10 Pentachlorophenol

R.T.: 8.297 min
Delta R.T.: 0.000 min
Response: 15392335796
Conc: 506.24 ng/ml



#10 Pentachlorophenol

R.T.: 9.163 min
Delta R.T.: -0.010 min
Response: 10502844741
Conc: 585.84 ng/ml



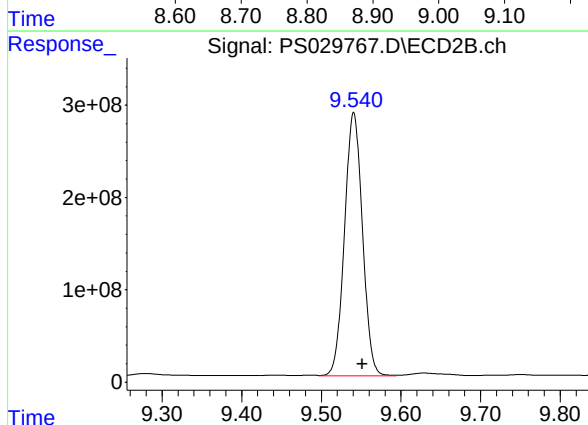
#11 2,4,5-TP (SILVEX)

R.T.: 8.861 min
Delta R.T.: -0.001 min
Response: 6201619319
Conc: 533.92 ng/ml

Instrument :
ECD_S
ClientSampleId :
WC-LIQUID-20250404MSD

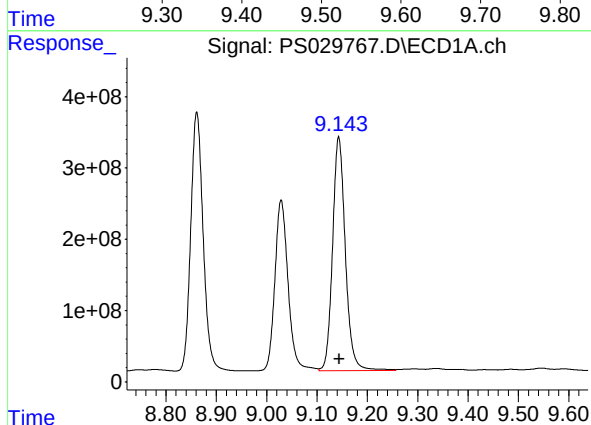
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



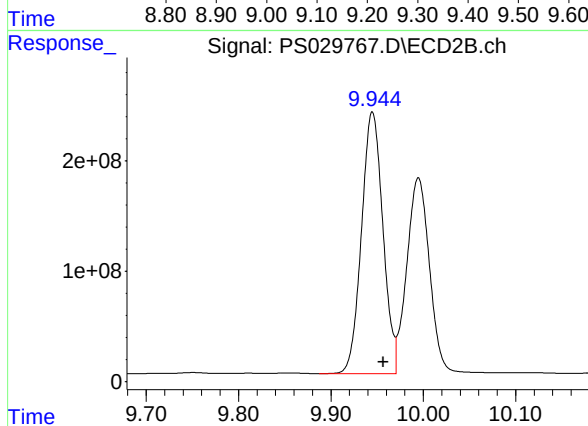
#11 2,4,5-TP (SILVEX)

R.T.: 9.541 min
Delta R.T.: -0.011 min
Response: 4468720595
Conc: 619.54 ng/ml



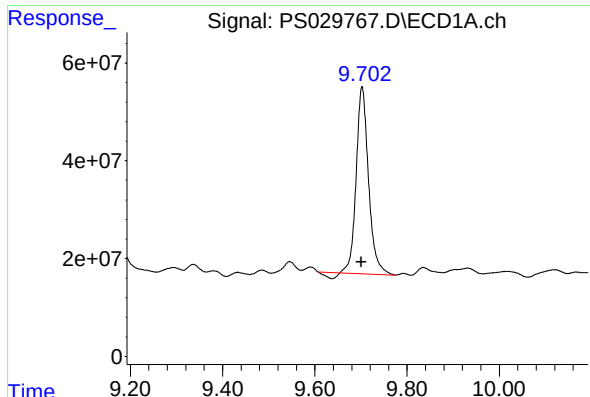
#12 2,4,5-T

R.T.: 9.143 min
Delta R.T.: 0.000 min
Response: 5778018555
Conc: 502.24 ng/ml



#12 2,4,5-T

R.T.: 9.945 min
Delta R.T.: -0.012 min
Response: 3824028337
Conc: 570.51 ng/ml



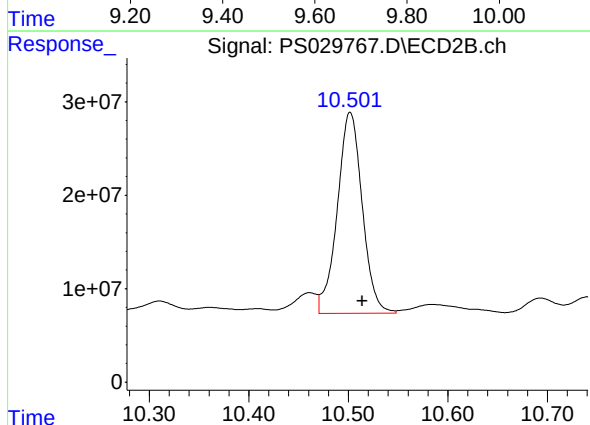
#13 2,4-DB

R.T.: 9.702 min
Delta R.T.: 0.001 min
Response: 702474537
Conc: 386.67 ng/ml

Instrument :
ECD_S
ClientSampleId :
WC-LIQUID-20250404MSD

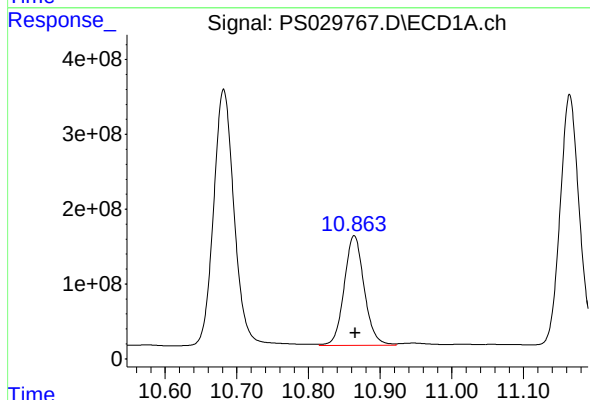
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



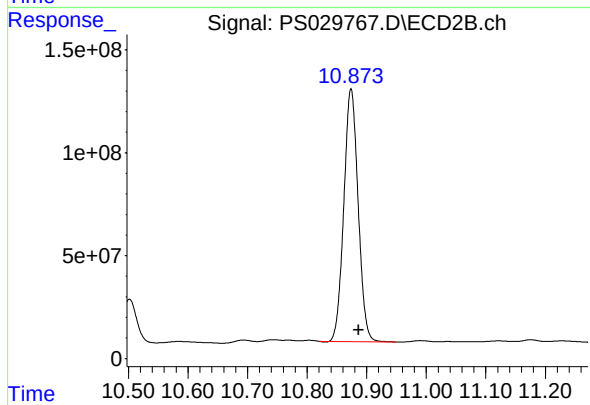
#13 2,4-DB

R.T.: 10.502 min
Delta R.T.: -0.012 min
Response: 374400550
Conc: 504.60 ng/ml



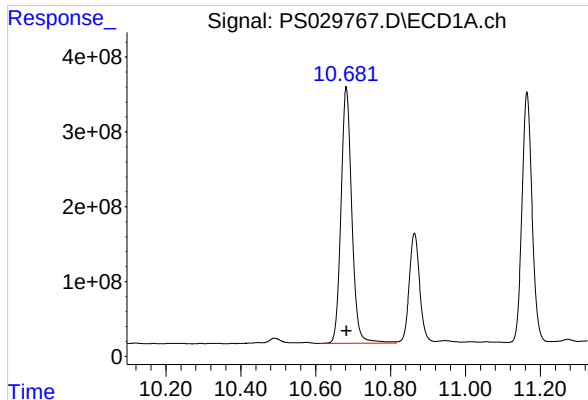
#14 DINOSEB

R.T.: 10.864 min
Delta R.T.: -0.001 min
Response: 2841443880
Conc: 336.58 ng/ml



#14 DINOSEB

R.T.: 10.874 min
Delta R.T.: -0.013 min
Response: 2046053374
Conc: 400.18 ng/ml



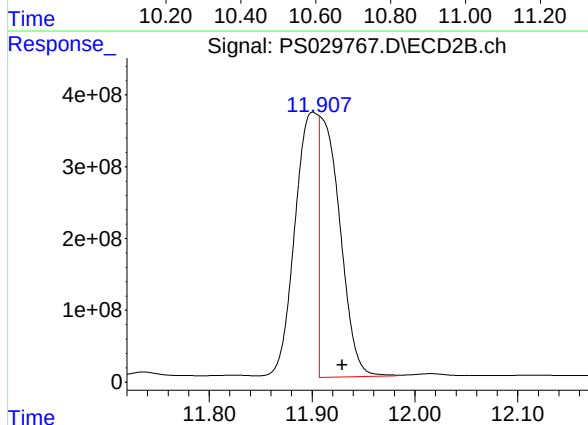
#15 Picloram

R.T.: 10.682 min
Delta R.T.: -0.001 min
Response: 6873341227
Conc: 443.43 ng/ml

Instrument :
ECD_S
ClientSampleId :
WC-LIQUID-20250404MSD

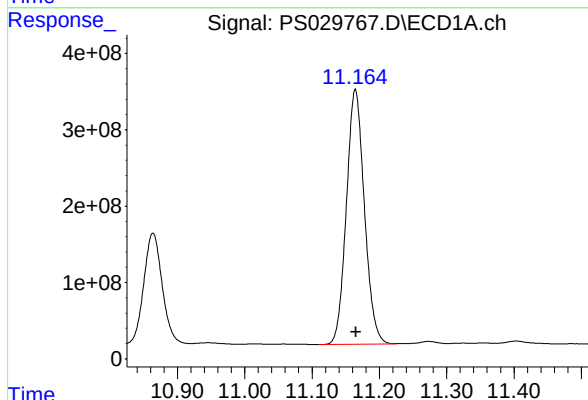
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 04/10/2025
Supervised By :mohammad ahmed 04/11/2025



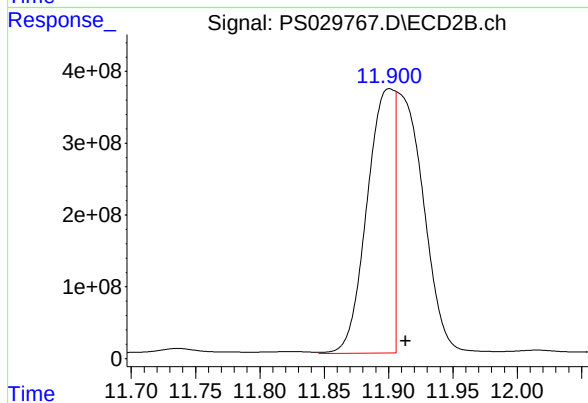
#15 Picloram

R.T.: 11.907 min
Delta R.T.: -0.023 min
Response: 5045482110
Conc: 426.70 ng/ml m



#16 DCPA

R.T.: 11.164 min
Delta R.T.: 0.000 min
Response: 6188374100
Conc: 443.10 ng/ml



#16 DCPA

R.T.: 11.900 min
Delta R.T.: -0.013 min
Response: 5335845273
Conc: 602.88 ng/ml m

Manual Integration Report

Sequence:

PS040225

Instrument

ECD_s

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
HSTDICC750	PS029659.D	DCPA #2	Abdul	4/3/2025 9:24:54 AM	mohammad	4/4/2025 7:53:55	Peak Integrated by Software
HSTDICC750	PS029659.D	Picloram #2	Abdul	4/3/2025 9:24:54 AM	mohammad	4/4/2025 7:53:55	Peak Integrated by Software
HSTDICC1000	PS029660.D	DCPA #2	Abdul	4/3/2025 9:24:59 AM	mohammad	4/4/2025 7:53:55	Peak Integrated by Software
HSTDICC1000	PS029660.D	Picloram #2	Abdul	4/3/2025 9:24:59 AM	mohammad	4/4/2025 7:53:55	Peak Integrated by Software
HSTDICC1500	PS029661.D	DCPA #2	Abdul	4/3/2025 9:25:02 AM	mohammad	4/4/2025 7:53:55	Peak Integrated by Software
HSTDICC1500	PS029661.D	Picloram #2	Abdul	4/3/2025 9:25:02 AM	mohammad	4/4/2025 7:53:55	Peak Integrated by Software
HSTDICV750	PS029662.D	DCPA #2	Abdul	4/3/2025 9:25:06 AM	mohammad	4/4/2025 7:53:55	Peak Integrated by Software
HSTDICV750	PS029662.D	Picloram #2	Abdul	4/3/2025 9:25:06 AM	mohammad	4/4/2025 7:53:55	Peak Integrated by Software

Manual Integration Report

Sequence:	ps040925	Instrument	ECD_s
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
HSTDCCC750	PS029753.D	DCPA #2	Abdul	4/10/2025 9:08:08 AM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
HSTDCCC750	PS029753.D	MCPA	Abdul	4/10/2025 9:08:08 AM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
HSTDCCC750	PS029753.D	Picloram #2	Abdul	4/10/2025 9:08:08 AM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
HSTDCCC750	PS029764.D	DCPA #2	Abdul	4/10/2025 9:07:34 AM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
HSTDCCC750	PS029764.D	MCPA	Abdul	4/10/2025 9:07:34 AM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
HSTDCCC750	PS029764.D	Picloram #2	Abdul	4/10/2025 9:07:34 AM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
Q1739-02MS	PS029766.D	DCPA #2	Abdul	4/10/2025 4:51:34 PM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
Q1739-02MS	PS029766.D	MCPA	Abdul	4/10/2025 4:51:34 PM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
Q1739-02MS	PS029766.D	MCPA #2	Abdul	4/10/2025 4:51:34 PM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
Q1739-02MS	PS029766.D	MCPP #2	Abdul	4/10/2025 4:51:34 PM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
Q1739-02MS	PS029766.D	Picloram #2	Abdul	4/10/2025 4:51:34 PM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
Q1739-02MSD	PS029767.D	2,4,5-TP (SILVEX)	Abdul	4/10/2025 9:34:24 AM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
Q1739-02MSD	PS029767.D	DCPA #2	Abdul	4/10/2025 9:34:24 AM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software

Manual Integration Report

Sequence:	ps040925	Instrument	ECD_s
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q1739-02MSD	PS029767.D	MCPA	Abdul	4/10/2025 9:34:24 AM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
Q1739-02MSD	PS029767.D	MCPP #2	Abdul	4/10/2025 9:34:24 AM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
Q1739-02MSD	PS029767.D	Picloram #2	Abdul	4/10/2025 9:34:24 AM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
PB167536BL	PS029768.D	2,4-DCAA	Abdul	4/10/2025 9:07:26 AM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
PB167536BS	PS029769.D	2,4,5-TP (SILVEX)	Abdul	4/10/2025 4:51:29 PM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
PB167536BS	PS029769.D	3,5-DICHLOROBENZOI C ACID	Abdul	4/10/2025 4:51:29 PM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
PB167536BS	PS029769.D	DCPA #2	Abdul	4/10/2025 4:51:29 PM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
PB167536BS	PS029769.D	MCPA	Abdul	4/10/2025 4:51:29 PM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
PB167536BS	PS029769.D	Picloram #2	Abdul	4/10/2025 4:51:29 PM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
HSTDCCC750	PS029773.D	2,4,5-T #2	Abdul	4/10/2025 9:07:14 AM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
HSTDCCC750	PS029773.D	2,4,5-TP (SILVEX)	Abdul	4/10/2025 9:07:14 AM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
HSTDCCC750	PS029773.D	2,4-DB	Abdul	4/10/2025 9:07:14 AM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
HSTDCCC750	PS029773.D	2,4-DCAA	Abdul	4/10/2025 9:07:14 AM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software

Manual Integration Report

Sequence:	ps040925	Instrument	ECD_s
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
HSTDCCC750	PS029773.D	4-Nitrophenol	Abdul	4/10/2025 9:07:14 AM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
HSTDCCC750	PS029773.D	DCPA #2	Abdul	4/10/2025 9:07:14 AM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
HSTDCCC750	PS029773.D	MCPA	Abdul	4/10/2025 9:07:14 AM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
HSTDCCC750	PS029773.D	Pentachlorophenol #2	Abdul	4/10/2025 9:07:14 AM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
HSTDCCC750	PS029773.D	Picloram #2	Abdul	4/10/2025 9:07:14 AM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
Q1746-02	PS029776.D	2,4-DCAA	Abdul	4/10/2025 9:07:01 AM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
Q1746-04	PS029777.D	2,4-DCAA	Abdul	4/10/2025 9:06:57 AM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
HSTDCCC750	PS029779.D	Dalapon #2	Abdul	4/10/2025 9:06:51 AM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
HSTDCCC750	PS029779.D	DCPA #2	Abdul	4/10/2025 9:06:51 AM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
HSTDCCC750	PS029779.D	MCPA #2	Abdul	4/10/2025 9:06:51 AM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software
HSTDCCC750	PS029779.D	Picloram #2	Abdul	4/10/2025 9:06:51 AM	mohammad	4/11/2025 1:23:27	Peak Integrated by Software

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS040225

Review By	Abdul	Review On	4/3/2025 9:25:38 AM
Supervise By	mohammad	Supervise On	4/4/2025 7:53:55 AM
SubDirectory	PS040225	HP Acquire Method	HP Processing Method ps040225 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24064,PP24065,PP24066,PP24067,PP24068		
CCC Internal Standard/PEM	PP24066		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24069,PP24070		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	HEXANE	PS029655.D	02 Apr 2025 16:20	AR\AJ	Ok
2	I.BLK	PS029656.D	02 Apr 2025 16:44	AR\AJ	Ok
3	HSTDICC200	PS029657.D	02 Apr 2025 17:32	AR\AJ	Ok
4	HSTDICC500	PS029658.D	02 Apr 2025 17:56	AR\AJ	Ok
5	HSTDICC750	PS029659.D	02 Apr 2025 18:44	AR\AJ	Ok,M
6	HSTDICC1000	PS029660.D	02 Apr 2025 19:32	AR\AJ	Ok,M
7	HSTDICC1500	PS029661.D	02 Apr 2025 20:44	AR\AJ	Ok,M
8	HSTDICV750	PS029662.D	02 Apr 2025 21:32	AR\AJ	Ok,M
9	I.BLK	PS029663.D	02 Apr 2025 21:56	AR\AJ	Ok

M : Manual Integration

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS040925

Review By	Abdul	Review On	4/10/2025 9:08:39 AM
Supervise By	mohammad	Supervise On	4/11/2025 1:23:27 AM
SubDirectory	PS040925	HP Acquire Method	HP Processing Method PS040225
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24064,PP24065,PP24066,PP24067,PP24068		
CCC Internal Standard/PEM	PP24066		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24069,PP24070		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	HEXANE	PS029751.D	09 Apr 2025 09:01	AR\AJ	Ok
2	I.BLK	PS029752.D	09 Apr 2025 09:25	AR\AJ	Ok
3	HSTDCCC750	PS029753.D	09 Apr 2025 11:33	AR\AJ	Ok,M
4	PB167511BS	PS029754.D	09 Apr 2025 12:38	AR\AJ	Ok,M
5	PB167527BL	PS029755.D	09 Apr 2025 16:34	AR\AJ	Ok
6	PB167527BS	PS029756.D	09 Apr 2025 16:58	AR\AJ	Ok,M
7	Q1745-01	PS029757.D	09 Apr 2025 17:46	AR\AJ	Ok,M
8	Q1745-09	PS029758.D	09 Apr 2025 18:10	AR\AJ	Ok,M
9	Q1740-01	PS029759.D	09 Apr 2025 18:34	AR\AJ	Ok
10	Q1740-01MS	PS029760.D	09 Apr 2025 18:58	AR\AJ	Ok,M
11	Q1740-01MSD	PS029761.D	09 Apr 2025 19:22	AR\AJ	Ok,M
12	Q1743-01	PS029762.D	09 Apr 2025 19:46	AR\AJ	Ok
13	I.BLK	PS029763.D	09 Apr 2025 20:10	AR\AJ	Ok
14	HSTDCCC750	PS029764.D	09 Apr 2025 20:34	AR\AJ	Ok,M
15	Q1739-02	PS029765.D	09 Apr 2025 21:22	AR\AJ	Ok,M
16	Q1739-02MS	PS029766.D	09 Apr 2025 21:46	AR\AJ	Ok,M
17	Q1739-02MSD	PS029767.D	09 Apr 2025 22:10	AR\AJ	Ok,M
18	PB167536BL	PS029768.D	09 Apr 2025 22:34	AR\AJ	Ok,M
19	PB167536BS	PS029769.D	09 Apr 2025 22:58	AR\AJ	Ok,M
20	PB167488TB	PS029770.D	09 Apr 2025 23:22	AR\AJ	Ok,M
21	PB167517TB	PS029771.D	09 Apr 2025 23:47	AR\AJ	Ok

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QCBatch ID # PS040925

Review By	Abdul	Review On	4/10/2025 9:08:39 AM
Supervise By	mohammad	Supervise On	4/11/2025 1:23:27 AM
SubDirectory	PS040925	HP Acquire Method	HP Processing Method PS040225
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24064,PP24065,PP24066,PP24067,PP24068		
CCC Internal Standard/PEM	PP24066		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24069,PP24070		

22	I.BLK	PS029772.D	10 Apr 2025 00:10	AR\AJ	Ok
23	HSTDCCC750	PS029773.D	10 Apr 2025 01:46	AR\AJ	Ok,M
24	Q1744-02	PS029774.D	10 Apr 2025 02:11	AR\AJ	Ok,M
25	Q1744-04	PS029775.D	10 Apr 2025 02:35	AR\AJ	Ok,M
26	Q1746-02	PS029776.D	10 Apr 2025 02:58	AR\AJ	Ok,M
27	Q1746-04	PS029777.D	10 Apr 2025 03:22	AR\AJ	Ok,M
28	I.BLK	PS029778.D	10 Apr 2025 03:46	AR\AJ	Ok
29	HSTDCCC750	PS029779.D	10 Apr 2025 04:10	AR\AJ	Ok,M

M : Manual Integration

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS040225

Review By	Abdul	Review On	4/3/2025 9:25:38 AM
Supervise By	mohammad	Supervise On	4/4/2025 7:53:55 AM
SubDirectory	PS040225	HP Acquire Method	HP Processing Method ps040225 8151

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

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	HEXANE	HEXANE	PS029655.D	02 Apr 2025 16:20		AR\AJ	Ok
2	I.BLK	I.BLK	PS029656.D	02 Apr 2025 16:44		AR\AJ	Ok
3	HSTDICC200	HSTDICC200	PS029657.D	02 Apr 2025 17:32		AR\AJ	Ok
4	HSTDICC500	HSTDICC500	PS029658.D	02 Apr 2025 17:56		AR\AJ	Ok
5	HSTDICC750	HSTDICC750	PS029659.D	02 Apr 2025 18:44		AR\AJ	Ok,M
6	HSTDICC1000	HSTDICC1000	PS029660.D	02 Apr 2025 19:32		AR\AJ	Ok,M
7	HSTDICC1500	HSTDICC1500	PS029661.D	02 Apr 2025 20:44		AR\AJ	Ok,M
8	HSTDICV750	ICVPS040225	PS029662.D	02 Apr 2025 21:32		AR\AJ	Ok,M
9	I.BLK	I.BLK	PS029663.D	02 Apr 2025 21:56		AR\AJ	Ok

M : Manual Integration

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS040925

Review By	Abdul	Review On	4/10/2025 9:08:39 AM
Supervise By	mohammad	Supervise On	4/11/2025 1:23:27 AM
SubDirectory	PS040925	HP Acquire Method	HP Processing Method PS040225

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

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	HEXANE	HEXANE	PS029751.D	09 Apr 2025 09:01		AR\AJ	Ok
2	I.BLK	I.BLK	PS029752.D	09 Apr 2025 09:25		AR\AJ	Ok
3	HSTDCCC750	HSTDCCC750	PS029753.D	09 Apr 2025 11:33		AR\AJ	Ok,M
4	PB167511BS	PB167511BS	PS029754.D	09 Apr 2025 12:38		AR\AJ	Ok,M
5	PB167527BL	PB167527BL	PS029755.D	09 Apr 2025 16:34		AR\AJ	Ok
6	PB167527BS	PB167527BS	PS029756.D	09 Apr 2025 16:58		AR\AJ	Ok,M
7	Q1745-01	IB-6A-WC	PS029757.D	09 Apr 2025 17:46		AR\AJ	Ok,M
8	Q1745-09	IB-6.5-WC	PS029758.D	09 Apr 2025 18:10		AR\AJ	Ok,M
9	Q1740-01	TP-20	PS029759.D	09 Apr 2025 18:34		AR\AJ	Ok
10	Q1740-01MS	TP-20MS	PS029760.D	09 Apr 2025 18:58		AR\AJ	Ok,M
11	Q1740-01MSD	TP-20MSD	PS029761.D	09 Apr 2025 19:22	Comp#10 recovery fail	AR\AJ	Ok,M
12	Q1743-01	TP-16	PS029762.D	09 Apr 2025 19:46		AR\AJ	Ok
13	I.BLK	I.BLK	PS029763.D	09 Apr 2025 20:10		AR\AJ	Ok
14	HSTDCCC750	HSTDCCC750	PS029764.D	09 Apr 2025 20:34		AR\AJ	Ok,M
15	Q1739-02	WC-LIQUID-20250404	PS029765.D	09 Apr 2025 21:22		AR\AJ	Ok,M
16	Q1739-02MS	WC-LIQUID-20250404	PS029766.D	09 Apr 2025 21:46	Comp#5,8 recovery fail	AR\AJ	Ok,M
17	Q1739-02MSD	WC-LIQUID-20250404	PS029767.D	09 Apr 2025 22:10	Comp#5,7,8 recovery fail	AR\AJ	Ok,M
18	PB167536BL	PB167536BL	PS029768.D	09 Apr 2025 22:34		AR\AJ	Ok,M

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS040925

Review By	Abdul	Review On	4/10/2025 9:08:39 AM
Supervise By	mohammad	Supervise On	4/11/2025 1:23:27 AM
SubDirectory	PS040925	HP Acquire Method	HP Processing Method PS040225
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24064,PP24065,PP24066,PP24067,PP24068		
CCC Internal Standard/PEM	PP24066		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24069,PP24070		

19	PB167536BS	PB167536BS	PS029769.D	09 Apr 2025 22:58		AR\AJ	Ok,M
20	PB167488TB	PB167488TB	PS029770.D	09 Apr 2025 23:22		AR\AJ	Ok,M
21	PB167517TB	PB167517TB	PS029771.D	09 Apr 2025 23:47		AR\AJ	Ok
22	I.BLK	I.BLK	PS029772.D	10 Apr 2025 00:10		AR\AJ	Ok
23	HSTDCCC750	HSTDCCC750	PS029773.D	10 Apr 2025 01:46	Comp#13 high in 1st column	AR\AJ	Ok,M
24	Q1744-02	B-158-SB01	PS029774.D	10 Apr 2025 02:11		AR\AJ	Ok,M
25	Q1744-04	B-158-SB02	PS029775.D	10 Apr 2025 02:35		AR\AJ	Ok,M
26	Q1746-02	B-149-SB01	PS029776.D	10 Apr 2025 02:58		AR\AJ	Ok,M
27	Q1746-04	B-149-SB02	PS029777.D	10 Apr 2025 03:22		AR\AJ	Ok,M
28	I.BLK	I.BLK	PS029778.D	10 Apr 2025 03:46		AR\AJ	Ok
29	HSTDCCC750	HSTDCCC750	PS029779.D	10 Apr 2025 04:10		AR\AJ	Ok,M

M : Manual Integration

SOP ID : M1311-TCLP-15

SDG No : N/A

Weigh By : JP

Balance ID : WC SC-7

pH Meter ID : WC PH METER-1

Extraction By : JP

Filter By : JP

Pipette ID : WC

Tumbler ID : T-1 / T-2

TCLP Filter ID : 115525

Start Prep Date : 04/08/2025 Time : 16:40

End Prep Date : 04/09/2025 Time : 11:11

Combination Ratio : 20

ZHE Cleaning Batch : ⁵⁹ N/A

Initial Room Temperature: 23 °C

Final Room Temperature: 21 °C

TCLP Technician Signature : *JP*

Supervisor By : *12*

Standard 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	WP110802
HCL-TCLP,1N	N/A	WP110803
HNO3-TCLP,1N	N/A	WP110804
pH Strips	N/A	W1931,W1934,W3171,W3172
pH Strips	W1941,W1942	W3166,W1938,W1939,W1940,
1 Liter Amber	N/A	90424-08
120ml Plastic bottle	N/A	405130101
1:1 HNO3	N/A	MP84041

Extraction Conformance/Non-Conformance Comments:

Matrix spikes are added after filtration and before preservation. Particle size reduction is not required. TUMBLER T-1 /T-2 checked,30 rpm. Q1743-04 IS USED FOR MS-MSD.

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
04/09/25 12:40	<i>JP</i> / <i>100 Room</i>	<i>JP</i> / <i>1515</i>
	Preparation Group	Analysis Group

04/09/25

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TCLP EXTRACTION LOGPAGE

PB167517

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
PB167517TB	LEB517	19	N/A	2000	N/A	N/A	N/A	4.93	1.5	T-2
Q1743-04	TP-16	01	100.02	2000	N/A	N/A	N/A	5.8	1.0	T-1
Q1744-02	B-158-SB01	02	100.03	2000	N/A	N/A	N/A	3.0	1.5	T-1
Q1744-04	B-158-SB02	03	100.04	2000	N/A	N/A	N/A	3.0	1.0	T-1
Q1745-04	IB-6A-WC	04	100.02	2000	N/A	N/A	N/A	5.6	1.5	T-1
Q1745-12	IB-6.5-WC	05	100.03	2000	N/A	N/A	N/A	5.8	1.0	T-1
Q1746-02	B-149-SB01	06	100.02	2000	N/A	N/A	N/A	5.6	1.5	T-1
Q1746-04	B-149-SB02	07	100.03	2000	N/A	N/A	N/A	5.5	1.0	T-1
Q1748-04	IB-1.5-WC	08	100.02	2000	N/A	N/A	N/A	5.6	1.5	T-1
Q1748-08	IB-2A-WC	09	100.03	2000	N/A	N/A	N/A	6.0	1.0	T-1
Q1749-04	TP-14	10	100.04	2000	N/A	N/A	N/A	5.6	1.5	T-1
Q1752-02	TP-1	11	100.02	2000	N/A	N/A	N/A	5.8	1.0	T-2
Q1752-04	TP-2	12	100.03	2000	N/A	N/A	N/A	4.0	1.5	T-2
Q1752-06	TP-3	13	100.02	2000	N/A	N/A	N/A	3.5	1.0	T-2
Q1752-08	TP-4	14	100.03	2000	N/A	N/A	N/A	3.5	1.5	T-2
Q1753-04	WC-1	15	100.02	2000	N/A	N/A	N/A	3.0	1.0	T-2
Q1753-08	WC-2	16	100.02	2000	N/A	N/A	N/A	3.5	1.5	T-2
Q1754-02	TP-1	17	100.03	2000	N/A	N/A	N/A	5.6	1.0	T-2
Q1754-04	TP-1-CONCRETE	18	100.04	2000	N/A	N/A	N/A	8.6	1.5	T-2

SampleID	ClientID	Sample Weight (g)	Filter Weight (g)	Filtrate (mL)	Filter + Solid (After 100°C)	% solids	% Dry Solids
PB167517TB	LEB517	N/A	N/A	N/A	N/A	N/A	N/A
Q1743-04	TP-16	N/A	N/A	N/A	N/A	100	N/A
Q1744-02	B-158-SB01	N/A	N/A	N/A	N/A	100	N/A
Q1744-04	B-158-SB02	N/A	N/A	N/A	N/A	100	N/A
Q1745-04	IB-6A-WC	N/A	N/A	N/A	N/A	100	N/A
Q1745-12	IB-6.5-WC	N/A	N/A	N/A	N/A	100	N/A
Q1746-02	B-149-SB01	N/A	N/A	N/A	N/A	100	N/A
Q1746-04	B-149-SB02	N/A	N/A	N/A	N/A	100	N/A
Q1748-04	IB-1.5-WC	N/A	N/A	N/A	N/A	100	N/A
Q1748-08	IB-2A-WC	N/A	N/A	N/A	N/A	100	N/A
Q1749-04	TP-14	N/A	N/A	N/A	N/A	100	N/A
Q1752-02	TP-1	N/A	N/A	N/A	N/A	100	N/A
Q1752-04	TP-2	N/A	N/A	N/A	N/A	100	N/A
Q1752-06	TP-3	N/A	N/A	N/A	N/A	100	N/A
Q1752-08	TP-4	N/A	N/A	N/A	N/A	100	N/A
Q1753-04	WC-1	N/A	N/A	N/A	N/A	100	N/A
Q1753-08	WC-2	N/A	N/A	N/A	N/A	100	N/A
Q1754-02	TP-1	N/A	N/A	N/A	N/A	100	N/A
Q1754-04	TP-1-CONCRETE	N/A	N/A	N/A	N/A	100	N/A

Hot Block ID : WC S-1 /WC S-2
Thermometer ID : FLASHPOINT

SampleID	ClientID	Sample Weight (g)	Volume DI Water (mL)	PH after 5 min stir	PH after 10 min stir	Extraction Fluid 1 or 2	pH Extraction Fluid
PB167517TB	LEB517	N/A	N/A	N/A	N/A	#1	4.93
Q1743-04	TP-16	5.02	96.5	8.2	3.0	#1	4.93
Q1744-02	B-158-SB01	5.03	96.5	6.6	2.5	#1	4.93
Q1744-04	B-158-SB02	5.02	96.5	6.4	2.5	#1	4.93
Q1745-04	IB-6A-WC	5.01	96.5	8.0	3.0	#1	4.93
Q1745-12	IB-6.5-WC	5.02	96.5	7.6	2.5	#1	4.93
Q1746-02	B-149-SB01	5.03	96.5	7.0	2.0	#1	4.93
Q1746-04	B-149-SB02	5.04	96.5	7.6	2.5	#1	4.93
Q1748-04	IB-1.5-WC	5.01	96.5	7.6	2.5	#1	4.93
Q1748-08	IB-2A-WC	5.02	96.5	8.0	3.0	#1	4.93
Q1749-04	TP-14	5.03	96.5	7.2	2.5	#1	4.93
Q1752-02	TP-1	5.02	96.5	8.0	3.0	#1	4.93
Q1752-04	TP-2	5.03	96.5	6.6	2.5	#1	4.93
Q1752-06	TP-3	5.00	96.5	5.8	2.0	#1	4.93
Q1752-08	TP-4	5.01	96.5	5.6	2.0	#1	4.93
Q1753-04	WC-1	5.02	96.5	5.5	2.0	#1	4.93
Q1753-08	WC-2	5.03	96.5	6.0	2.5	#1	4.93
Q1754-02	TP-1	5.02	96.5	7.2	2.5	#1	4.93
Q1754-04	TP-1-CONCRETE	5.03	96.5	10.5	4.0	#1	4.93

WORKLIST(Hardcopy Internal Chain)

WorkList Name : tcip q1748

WorkList ID : 188805

Department : TCLP Extraction

Date : 04-08-2025 12:17:14

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1743-04	TP-16	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	L33	04/07/2025	1311
Q1744-02	B-158-SB01	Solid	TCLP Extraction	Cool 4 deg C	PORT06	L41	04/05/2025	1311
Q1744-04	B-158-SB02	Solid	TCLP Extraction	Cool 4 deg C	PORT06	L41	04/05/2025	1311
Q1745-04	IB-6A-WC	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	L41	04/07/2025	1311
Q1745-12	IB-6.5-WC	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	L41	04/07/2025	1311
Q1746-02	B-149-SB01	Solid	TCLP Extraction	Cool 4 deg C	PORT06	L41	04/07/2025	1311
Q1746-04	B-149-SB02	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	L31	04/08/2025	1311
Q1748-04	IB-1.5-WC	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	L31	04/08/2025	1311
Q1748-08	IB-2A-WC	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	L31	04/08/2025	1311
Q1749-04	TP-14	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	L41	04/07/2025	1311
Q1752-02	TP-1	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	L41	04/08/2025	1311
Q1752-04	TP-2	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	L41	04/08/2025	1311
Q1752-06	TP-3	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	L41	04/08/2025	1311
Q1752-08	TP-4	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	L41	04/08/2025	1311
Q1753-04	WC-1	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	L41	04/08/2025	1311
Q1753-08	WC-2	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	L41	04/08/2025	1311
Q1754-02	TP-1	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	L41	04/08/2025	1311
Q1754-04	TP-1-CONCRETE	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	L41	04/08/2025	1311

Date/Time 04/08/25 16:25

Raw Sample Received by:

Raw Sample Relinquished by:

Date/Time 04/08/25 18:30

Raw Sample Received by:

SOP ID: M8151A-Herbicide-22

Clean Up SOP #: N/A

Matrix: Water

Weigh By: N/A

Balance check: N/A

Balance ID: N/A

pH Strip Lot#: E3880

Extraction By: RS

Filter By: RS

pH Meter ID: N/A

Hood ID: 4,7

Extraction Start Date: 04/09/2025

Extraction Start Time: 12:55

Extraction End Date: 04/09/2025

Extraction End Time: 18:50

Concentration By: EH

Supervisor By: RUPESH

Extraction Method: ☒ Separatory Funnel ☐ Continuous Liquid/Liquid ☐ Sonication ☐ Waste Dilution ☐ Soxhlet

Standard Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
Spike Sol 1	1.0ML	5/500 PPM	PP24218
Surrogate	1.0ML	5000 PPB	PP24424
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	E3881
Acidified Na2SO4	N/A	EP2576
NAOH 6N	N/A	EP2553
1:3 SULPHURIC ACID	N/A	EP2587
NACL	N/A	M4459
ISO OCTANE	N/A	E3554
Diazomethane	N/A	EP2603
Hexane	N/A	E3916
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
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

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

KD Bath ID: N/A

Envap ID: NEVAP-02

KD Bath Temperature: N/A

Envap Temperature: 40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
04/09/25	RP (Lab)	T-P. Pestipal
18:55	Preparation Group	Analysis Group

Analytical Method: M8151A-Herbicide-22

Concentration Date: 04/09/2025

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB167488TB	PB167488TB	TCLP Herbicide	100	6	ritesh	rajesh	10			SEP-05
PB167517TB	PB167517TB	TCLP Herbicide	100	6	ritesh	rajesh	10			6
PB167536BL	HBLK536	TCLP Herbicide	1000	6	ritesh	rajesh	10			7
PB167536BS	HLCS536	TCLP Herbicide	1000	6	ritesh	rajesh	10			8
Q1739-02	WC-LIQUID-20250404	TCLP Herbicide	100	6	ritesh	rajesh	10	A		9
Q1739-02MS	WC-LIQUID-20250404MS	TCLP Herbicide	100	6	ritesh	rajesh	10	A		10
Q1739-02MS D	WC-LIQUID-20250404MS D	TCLP Herbicide	100	6	ritesh	rajesh	10	A		11
Q1744-02	B-158-SB01	TCLP Herbicide	100	6	ritesh	rajesh	10	A		12
Q1744-04	B-158-SB02	TCLP Herbicide	100	6	ritesh	rajesh	10	A		13
Q1746-02	B-149-SB01	TCLP Herbicide	100	6	ritesh	rajesh	10	A		14
Q1746-04	B-149-SB02	TCLP Herbicide	100	6	ritesh	rajesh	10	A		15

* Extracts relinquished on the same date as received.

8
4/9/25

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
PB167467TB	LEB467	18	N/A	2000	N/A	N/A	N/A	4.94	1.0	T-2
Q1712-04	Z-05A	01	100.02	2000	N/A	N/A	N/A	7.0	1.5	T-1
Q1712-08	TT-7	02	100.03	2000	N/A	N/A	N/A	7.6	1.0	T-1
Q1719-01	TP-3-1	03	100.04	2000	N/A	N/A	N/A	5.8	1.0	T-1
Q1719-02	TP-3-2	04	100.02	2000	N/A	N/A	N/A	5.6	1.5	T-1
Q1719-03	TP-3-3	05	100.03	2000	N/A	N/A	N/A	5.6	1.0	T-1
Q1719-04	TP-3-4	06	100.02	2000	N/A	N/A	N/A	5.5	1.5	T-1
Q1719-05	TP-3-5	07	100.03	2000	N/A	N/A	N/A	5.8	1.5	T-1
Q1719-06	TP-3-6	08	100.02	2000	N/A	N/A	N/A	6.2	1.0	T-1
Q1719-07	TP-3-7	09	100.01	2000	N/A	N/A	N/A	5.8	1.5	T-1
Q1719-08	TP-3-8	10	100.02	2000	N/A	N/A	N/A	5.6	1.0	T-1
Q1719-09	TP-3-9	11	100.03	2000	N/A	N/A	N/A	5.5	1.5	T-2
Q1719-10	TP-3-10	12	100.02	2000	N/A	N/A	N/A	5.8	1.5	T-2
Q1719-11	TP-3-11	13	100.03	2000	N/A	N/A	N/A	5.6	1.0	T-2
Q1719-12	TP-3-12	14	100.02	2000	N/A	N/A	N/A	5.6	1.5	T-2
Q1732-04	TT-8	15	100.03	2000	N/A	N/A	N/A	8.6	1.0	T-2
Q1737-02	RT3069	16	100.02	2000	N/A	N/A	N/A	6.2	1.5	T-2
Q1740-04	TP-20	17	100.02	2000	N/A	N/A	N/A	3.5	1.0	T-2

04/07/25
11:00

TCLP EXTRACTION LOGPAGE

PB167488

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
PB167488TB	LEB488	N/A	N/A	N/A	N/A	N/A	N/A	4.94	1.0	N/A
Q1739-02	WC-LIQUID-20250404	N/A	N/A	N/A	N/A	N/A	N/A	6.6	1.5	N/A

04/07/25
12:30

Sample ID	ClientID	TCLP Vessel ID	Sample Wt (g)	Volume Extraction Fluid #1 (mL)	Multi phasic	Phase Miscible	Phases Combined	Final Leachate PH	Metals Leachate Adj. PH	Prep Pos
PB167517TB	LEB517	19	N/A	2000	N/A	N/A	N/A	4.93	1.5	T-2
Q1743-04	TP-16	01	100.02	2000	N/A	N/A	N/A	5.8	1.0	T-1
Q1744-02	B-158-SB01	02	100.03	2000	N/A	N/A	N/A	3.0	1.5	T-1
Q1744-04	B-158-SB02	03	100.04	2000	N/A	N/A	N/A	3.0	1.0	T-1
Q1745-04	IB-6A-WC	04	100.02	2000	N/A	N/A	N/A	5.6	1.5	T-1
Q1745-12	IB-6.5-WC	05	100.03	2000	N/A	N/A	N/A	5.8	1.0	T-1
Q1746-02	B-149-SB01	06	100.02	2000	N/A	N/A	N/A	5.6	1.5	T-1
Q1746-04	B-149-SB02	07	100.03	2000	N/A	N/A	N/A	5.5	1.0	T-1
Q1748-04	IB-1.5-WC	08	100.02	2000	N/A	N/A	N/A	5.6	1.5	T-1
Q1748-08	IB-2A-WC	09	100.03	2000	N/A	N/A	N/A	6.0	1.0	T-1
Q1749-04	TP-14	10	100.04	2000	N/A	N/A	N/A	5.6	1.5	T-1
Q1752-02	TP-1	11	100.02	2000	N/A	N/A	N/A	5.8	1.0	T-2
Q1752-04	TP-2	12	100.03	2000	N/A	N/A	N/A	4.0	1.5	T-2
Q1752-06	TP-3	13	100.02	2000	N/A	N/A	N/A	3.5	1.0	T-2
Q1752-08	TP-4	14	100.03	2000	N/A	N/A	N/A	3.5	1.5	T-2
Q1753-04	WC-1	15	100.02	2000	N/A	N/A	N/A	3.0	1.0	T-2
Q1753-08	WC-2	16	100.02	2000	N/A	N/A	N/A	3.5	1.5	T-2
Q1754-02	TP-1	17	100.03	2000	N/A	N/A	N/A	5.6	1.0	T-2
Q1754-04	TP-1-CONCRETE	18	100.04	2000	N/A	N/A	N/A	8.6	1.5	T-2

04/09/25

12140

Prep Standard - Chemical Standard Summary

Order ID : Q1746

Test : TCLP Herbicide

Prepbatch ID : PB167536,

Sequence ID/Qc Batch ID: ps040925,

Standard ID :

EP2553,EP2576,EP2587,PP24061,PP24062,PP24064,PP24065,PP24066,PP24067,PP24068,PP24069,PP24070,PP24218,PP24424,

Chemical ID :

E3370,E3551,E3657,E3826,E3876,E3881,E3902,M4459,M5173,M5178,P10549,P11180,P11181,P12619,P12629,P12686,P12708,P12709,P13514,P13515,P13529,P13530,P13531,W3112,



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3884	6 N NAOH	EP2553	10/21/2024	04/21/2025	Rajesh Parikh	Extraction_SC ALE_2 (EX-SC-2)	None	RUPESHKUMAR SHAH 10/21/2024
<u>FROM</u>	1000.00000ml of W3112 + 240.00000gram of E3657 = Final Quantity: 1000.000 ml							

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
601	Acidified Sodium Sulphate 2	EP2576	01/06/2025	06/02/2025	Rajesh Parikh	Extraction_SC ALE_2 (EX-SC-2)	None	RUPESHKUMAR SHAH 01/06/2025
<u>FROM</u>	100.00000ml of E3370 + 150.00000ml of M5173 + 3000.00000ml of E3551 = Final Quantity: 3000.000 gram							

Extractions STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1762	1:3 H2SO4 Soln	EP2587	02/10/2025	08/10/2025	Rajesh Parikh	None	None	RUPESHKUMAR SHAH 02/10/2025

FROM 250.00000ml of M5178 + 750.00000ml of W3112 = Final Quantity: 1000.000 ml

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

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1851	2/200 PPM Herb Mega Mix 2nd Source	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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1452	1500 PPB HERB MIX STD	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

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1453	1000 PPB Herb MIX STD	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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1454	750 PPB Herb MIX STD	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

Pest/Pcb STANDARD PREPARATION LOG

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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1456	200 PPB Herb MIX STD	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

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1854	1000 PPB HERB MIX ICV STD	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

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1691	750 PPB ICV HERB STD	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

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1848	5000/500000 PPB Herbicide Spike (Free Acid)	PP24218	03/05/2025	08/25/2025	Abdul Mirza	None	None	Yogesh Patel
								03/06/2025

FROM 0.50000ml of P13531 + 1.00000ml of P13529 + 1.00000ml of P13530 + 47.50000ml of E3876 = Final Quantity: 50.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
60	5000 PPB Herbicide Surg Spike (Free Acid)	PP24424	03/26/2025	09/18/2025	Abdul Mirza	None	None	Yogesh Patel
								04/02/2025

FROM 1.25000ml of P13514 + 1.25000ml of P13515 + 97.50000ml of E3902 = Final Quantity: 100.000 ml

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9244-03 / Ether, Anhydrous, Purified (cs/4x4L)	0000288039	07/17/2025	08/01/2022 / Rajesh	07/13/2022 / Rajesh	E3370

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1	313201	07/01/2025	01/03/2024 / Rajesh	07/20/2023 / Rajesh	E3551

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19510-5 / Sodium Hydroxide Pellets 2.5 Kg, Pk of 4	23B1556310	12/31/2025	12/04/2023 / Rajesh	12/01/2023 / Rajesh	E3657

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9262-03 / Hexane, Ultra-Resi (cs/4x4L)	24G1962003	05/09/2025	11/09/2024 / Rajesh	11/07/2024 / Rajesh	E3826

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H2762008	08/25/2025	02/25/2025 /	02/12/2025 / Rajesh	E3876

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC04977-3 / Ether, Anhydrous, Glass Distilled, HRGC/HPLC, 4L	242789	08/14/2025	02/14/2025 / Rajesh	01/06/2025 / Rajesh	E3881

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H2762008	09/18/2025	03/18/2025 / RUPESH	02/12/2025 / RUPESH	E3902

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)	0000281827	06/02/2025	06/01/2022 /	04/05/2022 / william	M5173

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L)	0000281827	03/29/2026	05/25/2022 / william	04/05/2022 / william	M5178

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32050 / Herbicide, 8000 series, 515 Surrogate [ester] 2,4-dichlorophenyl acetic acid methyl ester, 1mL, 200ug/mL, Hexane	A0172864	05/26/2025	11/26/2024 / Ankita	11/01/2021 / Abdul	P11181

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32062 / Herbicide Mix, 500/8000, Standard #4 [methyl ester] 200ug/mL, hexane, 1mL/ampul	A0155055	05/26/2025	11/26/2024 / Ankita	07/03/2023 / Abdul	P12619

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32055 / Herbicide Mix, 500/8000, Standard #1 [methyl ester] 200ug/mL, hexane, 1mL/ampul	A192429	05/26/2025	11/26/2024 / Ankita	07/03/2023 / Abdul	P12629

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Agilent Technologies	HBM-8151M / Chlorinated Herbicide Mixtures, Methyl Esters	0006752480	05/26/2025	11/26/2024 / Ankita	08/09/2023 / Abdul	P12709

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Agilent Technologies	HBM-8151M / Chlorinated Herbicide Mixtures, Methyl Esters	0006752480	05/26/2025	11/26/2024 / Ankita	08/09/2023 / Abdul	P12709

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32049 / Herbicide, 8000 series, 515 Surrogate [free acid] 2,4-dichlorophenyl acetic acid, 1mL, 200ug/mL, MeOH	A0212676	09/26/2025	03/26/2025 / Abdul	08/16/2024 / yogesh	P13514

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	09/26/2025	03/26/2025 / Abdul	08/16/2024 / yogesh	P13515

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Agilent Technologies	HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids	0006810955	09/05/2025	03/05/2025 / Abdul	09/03/2024 / Abdul	P13529

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Agilent Technologies	HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids	0006810955	09/05/2025	03/05/2025 / Abdul	09/03/2024 / Abdul	P13529

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Agilent Technologies	HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids	0006810955	09/05/2025	03/05/2025 / Abdul	09/03/2024 / Abdul	P13530

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Agilent Technologies	HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids	0006810955	09/05/2025	03/05/2025 / Abdul	09/03/2024 / Abdul	P13530

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Agilent Technologies	HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids	0006810955	09/05/2025	03/05/2025 / Abdul	09/03/2024 / Abdul	P13531

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Agilent Technologies	HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids	0006810955	09/05/2025	03/05/2025 / Abdul	09/03/2024 / Abdul	P13531

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

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



From M4452 to M4459

Received on : 10/30/2019

Received by : AK

Material No.: 3624-05

Batch No.: 0000237721

Manufactured Date: 2019/04/15

Retest Date: 2026/04/13

Revision No: 1

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

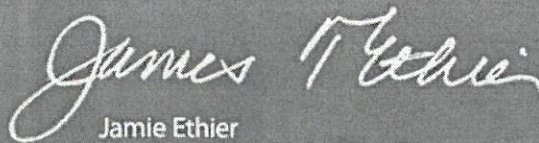
Test	Specification	Result
Assay (NaCl) (by Ag titrn)	$\geq 99.0 \%$	100.3
pH of 5% Solution at 25°C	5.0 - 9.0	6.0
ACS - Insoluble Matter	$\leq 0.005 \%$	< 0.001
Iodide (I)	$\leq 0.002 \%$	< 0.002
Bromide (Br)	$\leq 0.01 \%$	< 0.01
Chlorate and Nitrate (as NO_3)	$\leq 0.003 \%$	< 0.001
ACS - Phosphate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

For Laboratory, Research or Manufacturing Use

Meets Reagent Specifications for testing USP/NF monographs

Country of Origin: US

Packaging Site: Paris Mfg Ctr & DC


Jamie Ethier
Vice President Global Quality

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

Avantor Performance Materials, LLC

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

Ether, Anhydrous
BAKER ANALYZED® A.C.S. Reagent
Contains BHT as a Preservative
Suitable for Fat Extraction



Material No.: 9244-03
Batch No.: 0000288039
Manufactured Date: 2021/07/22
Expiration Date: 2023/07/22
Revision No: 1

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

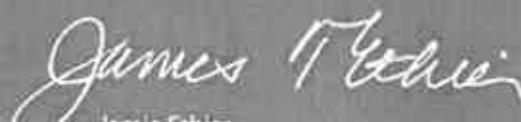
Test	Specification	Result
Assay ((C ₂ H ₅) ₂ O) (by GC, corrected for water)	>= 99.0 %	100.0
Alcohol (C ₂ H ₅ OH)	Passes Test	PT
Carbonyl Compounds (as HCHO) (by polarography)	<= 0.001 %	< 0.001
Color (APHA)	<= 10	< 5
Peroxide (as H ₂ O ₂)	<= 1 ppm	< 1
Preservative (BHT)	>= 7 ppm	9
Residue after Evaporation	<= 0.0010 %	< 0.0010
Titration 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 7/13/22

E 3370


Jamie Ethier
Vice President Global Quality

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

Avantor Performance Materials, LLC

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



**PRODUCTOS
QUÍMICOS
MONTERREY, S.A. DE C.V.**

MIRADOR 201, COL. MIRADOR
MONTERREY, N.L. MEXICO
CP 64070
TEL +52 81 13 52 57 57
www.pqm.com.mx

CERTIFICATE OF ANALYSIS

PRODUCT :	SODIUM SULFATE CRYSTALS ANHYDROUS		
QUALITY :	ACS (CODE RMB3375)	FORMULA :	Na ₂ SO ₄
SPECIFICATION NUMBER :	6399	RELEASE DATE:	ABR/21/2023
LOT NUMBER :	313201		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na ₂ SO ₄)	Min. 99.0%	99.7 %
pH of a 5% solution at 25°C	5.2 - 9.2	6.1
Insoluble matter	Max. 0.01%	0.005 %
Loss on ignition	Max. 0.5%	0.1 %
Chloride (Cl)	Max. 0.001%	<0.001 %
Nitrogen compounds (as N)	Max. 5 ppm	<5 ppm
Phosphate (PO ₄)	Max. 0.001%	<0.001 %
Heavy metals (as Pb)	Max. 5 ppm	<5 ppm
Iron (Fe)	Max. 0.001%	<0.001 %
Calcium (Ca)	Max. 0.01%	0.002 %
Magnesium (Mg)	Max. 0.005%	0.001 %
Potassium (K)	Max. 0.008%	0.003 %
Extraction-concentration suitability	Passes test	Passes test
Appearance	Passes test	Passes test
Identification	Passes test	Passes test
Solubility and foreign matter	Passes test	Passes test
Retained on US Standard No. 10 sieve	Max. 1%	0.1 %
Retained on US Standard No. 60 sieve	Min. 94%	97.3 %
Through US Standard No. 60 sieve	Max. 5%	2.5 %
Through US Standard No. 100 sieve	Max. 10%	0.1 %

COMMENTS

QC: PhC Irma Belmares

If you need further details, please call our factory or contact our local distributor.

Recd. by R3 on 7/24/23 E 3551

RC-02-01, Ed. 3



Certificate of Analysis

Sodium Hydroxide (Pellets)

Material: 0583
Grade: ACS GRADE
Batch Number: 23B1556310

Chemical Formula: NaOH
Molecular Weight: 40
CAS #: 1310-73-2
Appearance:

Manufacture Date: 12/14/2022
Expiration Date: 12/31/2025

Storage: Room Temperature

Pellets

TEST	SPECIFICATION	ANALYSIS	DISPOSITION
Calcium	$\leq 0.005 \%$	$< 0.005 \%$	PASS
Chloride	$\leq 0.005 \%$	0.002 %	PASS
Heavy Metals	$\leq 0.002 \%$	$< 0.002 \%$	PASS
Iron	$\leq 0.001 \%$	$< 0.001 \%$	PASS
Magnesium	$\leq 0.002 \%$	$< 0.002 \%$	PASS
Mercury	$\leq 0.1 \text{ ppm}$	$< 0.1 \text{ ppm}$	PASS
Nickel	$\leq 0.001 \%$	$< 0.001 \%$	PASS
Nitrogen Compounds	$\leq 0.001 \%$	$< 0.001 \%$	PASS
Phosphate	$\leq 0.001 \%$	$< 0.001 \%$	PASS
Potassium	$\leq 0.02 \%$	$< 0.02 \%$	PASS
Purity	$\geq 97.0 \%$	99.2 %	PASS
Sodium Carbonate	$\leq 1.0 \%$	0.5 %	PASS
Sulfate	$\leq 0.003 \%$	$< 0.003 \%$	PASS

Internal ID #: 710

Signature

We certify that this batch conforms to the specifications listed.

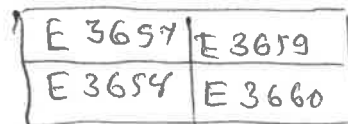
This document has been electronically produced and is valid without a signature.

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.



n-Hexane 95%
ULTRA RESI-ANALYZED
For Organic Residue Analysis



Material No.: 9262-03
Batch No.: 24G1962003
Manufactured Date: 2024-05-23
Expiration Date: 2025-08-22
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	3
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	1
ECD-Sensitive Impurities (as Ethylene Dibromide) - Single Impurity Peak (ng/mL)	≤ 5	1
Assay (Total Saturated C ₆ Isomers) (by GC, corrected for water)	$\geq 99.5 \%$	99.7 %
Assay (as n-Hexane) (by GC, corrected for water)	$\geq 95 \%$	98 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.1 ppm
Substances Darkened by H ₂ SO ₄	Passes Test	Passes Test
Water (by KF, coulometric)	$\leq 0.05 \%$	< 0.01 %

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

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

E 3826

Rec'd by RP on 11/7/24

Jamie Croak
Director Quality Operations, Bioscience Production

Certificate of Analysis

1 Reagent Lane
 Fair Lawn, NJ 07410
 201.796.7100 tel
 201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System
 Standard ISO9001:2015 by SAI Global Certificate Number CERT - 0120633

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	E199	Quality Test / Release Date	08/02/2024
Lot Number	242789	Expiration Date	Jun/2025
Description	ETHYL ETHER, PESTICIDE GRADE		
Country of Origin	Mexico		
Chemical Origin	Organic - synthetic		
BSE/TSE Comment	This product was derived from synthetic raw materials and the manufacturing process excluded contamination with any animal products.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear, colorless liquid free of suspended matter
ASSAY	%	>= 99.5	99.97
COLOR	APHA	<= 10	5
EVAPORATION RESIDUE	ppm	<= 3	0.2
GC-ECD ANALYSIS	pg/ml	<= 10	<1
OPTICAL ABS AT 218 NM	ABSORBANCE UNITS	<= 1.00	0.19
OPTICAL ABS AT 250 NM	ABSORBANCE UNITS	<= 0.08	0.05
OPTICAL ABS AT 270 NM	ABSORBANCE UNITS	<= 0.02	0.01
OPTICAL ABS AT 300 NM	ABSORBANCE UNITS	<= 0.01	0.002
OPTICAL ABS AT 350 NM	ABSORBANCE UNITS	<= 0.01	<0.001
PEROXIDE	ppm	<= 5	<1
PRESERVATIVE - ETHANOL	%	Inclusive Between 1.5 - 2.5	1.8
WATER (H2O)	%	<= 0.08	0.003

Kalyan Paruchuri

Kalyan Paruchuri - Quality Control Supervisor - Bridgewater

E 3881

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
 If there are any questions with this certificate, please call at (800) 227-6701.

*Based on suggested storage condition.

Acetone

BAKER RESI-ANALYZED® Reagent

For Organic Residue Analysis



Material No.: 9254-03

Batch No.: 24H2762008

Manufactured Date: 2024-04-18

Expiration Date: 2027-04-18

Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	>= 99.4 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.0 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titration Acid (µeq/g)	<= 0.3	0.2
Titration Base (µeq/g)	<= 0.6	<0.1
Water (H ₂ O)	<= 0.5 %	<0.1 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	1
ECD Sensitive Impurities (as Heptachlor Epoxide) 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

E3902

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

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis



Material No.: 9530-33
Batch No.: 0000281827
Manufactured Date: 2021/03/30
Retest Date: 2026/03/29
Revision No: 1

Certificate of Analysis

Test	Specification	Result
ACS – Assay (as HCl) (by acid–base titrn)	36.5 – 38.0 %	37.6
ACS – Color (APHA)	<= 10	5
ACS – Residue after Ignition	<= 3 ppm	1
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.189
ACS – Bromide (Br)	<= 0.005 %	< 0.005
ACS – Extractable Organic Substances	<= 5 ppm	< 1
ACS – Free Chlorine (as Cl ₂)	<= 0.5 ppm	< 0.5
Phosphate (PO ₄)	<= 0.05 ppm	< 0.03
Sulfate (SO ₄)	<= 0.5 ppm	< 0.3
Sulfite (SO ₃)	<= 0.8 ppm	0.3
Ammonium (NH ₄)	<= 3 ppm	< 1
Trace Impurities – Arsenic (As)	<= 0.010 ppm	< 0.003
Trace Impurities – Aluminum (Al)	<= 10.0 ppb	0.5
Arsenic and Antimony (as As)	<= 5 ppb	< 3
Trace Impurities – Barium (Ba)	<= 1.0 ppb	< 0.2
Trace Impurities – Beryllium (Be)	<= 1.0 ppb	< 0.2
Trace Impurities – Bismuth (Bi)	<= 10.0 ppb	< 1.0
Trace Impurities – Boron (B)	<= 20.0 ppb	< 5.0
Trace Impurities – Cadmium (Cd)	<= 1.0 ppb	< 0.3
Trace Impurities – Calcium (Ca)	<= 50.0 ppb	15.0
Trace Impurities – Chromium (Cr)	<= 1.0 ppb	< 0.4
Trace Impurities – Cobalt (Co)	<= 1.0 ppb	< 0.3
Trace Impurities – Copper (Cu)	<= 1.0 ppb	< 0.1
Trace Impurities – Gallium (Ga)	<= 1.0 ppb	< 0.2

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

Test	Specification	Result
Trace Impurities – Germanium (Ge)	<= 3.0 ppb	< 2.0
Trace Impurities – Gold (Au)	<= 4.0 ppb	3.0
Heavy Metals (as Pb)	<= 100 ppb	< 50
Trace Impurities – Iron (Fe)	<= 15.0 ppb	1.0
Trace Impurities – Lead (Pb)	<= 1.0 ppb	< 0.5
Trace Impurities – Lithium (Li)	<= 1.0 ppb	< 0.2
Trace Impurities – Magnesium (Mg)	<= 10.0 ppb	< 0.4
Trace Impurities – Manganese (Mn)	<= 1.0 ppb	< 0.4
Trace Impurities – Mercury (Hg)	<= 0.5 ppb	0.2
Trace Impurities – Molybdenum (Mo)	<= 10.0 ppb	< 5.0
Trace Impurities – Nickel (Ni)	<= 4.0 ppb	< 0.3
Trace Impurities – Niobium (Nb)	<= 1.0 ppb	< 0.2
Trace Impurities – Potassium (K)	<= 9.0 ppb	< 2.0
Trace Impurities – Selenium (Se), For Information Only	ppb	1.0
Trace Impurities – Silicon (Si)	<= 100.0 ppb	18.0
Trace Impurities – Silver (Ag)	<= 1.0 ppb	< 0.3
Trace Impurities – Sodium (Na)	<= 100.0 ppb	< 5.0
Trace Impurities – Strontium (Sr)	<= 1.0 ppb	< 0.2
Trace Impurities – Tantalum (Ta)	<= 1.0 ppb	< 0.9
Trace Impurities – Thallium (Tl)	<= 5.0 ppb	< 2.0
Trace Impurities – Tin (Sn)	<= 5.0 ppb	< 0.8
Trace Impurities – Titanium (Ti)	<= 1.0 ppb	< 0.2
Trace Impurities – Vanadium (V)	<= 1.0 ppb	< 0.2
Trace Impurities – Zinc (Zn)	<= 5.0 ppb	0.4
Trace Impurities – Zirconium (Zr)	<= 1.0 ppb	< 0.1

For Laboratory, Research or Manufacturing Use

Product Information (not specifications):

Appearance (clear, fuming liquid)

Meets ACS Specifications

Country of Origin: US

Packaging Site: Phillipsburg Mfg Ctr & DC


Jamie Ethier
Vice President Global Quality

Hydrochloric Acid, 36.5–38.0%
 BAKER INSTRA-ANALYZED® Reagent
 For Trace Metal Analysis



Material No.: 9530-33
 Batch No.: 0000281827
 Manufactured Date: 2021/03/30
 Retest Date: 2026/03/29
 Revision No: 1

Certificate of Analysis

Test	Specification	Result
ACS – Assay (as HCl) (by acid–base titrn)	36.5 – 38.0 %	37.6
ACS – Color (APHA)	<= 10	5
ACS – Residue after Ignition	<= 3 ppm	1
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.189
ACS – Bromide (Br)	<= 0.005 %	< 0.005
ACS – Extractable Organic Substances	<= 5 ppm	< 1
ACS – Free Chlorine (as Cl ₂)	<= 0.5 ppm	< 0.5
Phosphate (PO ₄)	<= 0.05 ppm	< 0.03
Sulfate (SO ₄)	<= 0.5 ppm	< 0.3
Sulfite (SO ₃)	<= 0.8 ppm	0.3
Ammonium (NH ₄)	<= 3 ppm	< 1
Trace Impurities – Arsenic (As)	<= 0.010 ppm	< 0.003
Trace Impurities – Aluminum (Al)	<= 10.0 ppb	0.5
Arsenic and Antimony (as As)	<= 5 ppb	< 3
Trace Impurities – Barium (Ba)	<= 1.0 ppb	< 0.2
Trace Impurities – Beryllium (Be)	<= 1.0 ppb	< 0.2
Trace Impurities – Bismuth (Bi)	<= 10.0 ppb	< 1.0
Trace Impurities – Boron (B)	<= 20.0 ppb	< 5.0
Trace Impurities – Cadmium (Cd)	<= 1.0 ppb	< 0.3
Trace Impurities – Calcium (Ca)	<= 50.0 ppb	15.0
Trace Impurities – Chromium (Cr)	<= 1.0 ppb	< 0.4
Trace Impurities – Cobalt (Co)	<= 1.0 ppb	< 0.3
Trace Impurities – Copper (Cu)	<= 1.0 ppb	< 0.1
Trace Impurities – Gallium (Ga)	<= 1.0 ppb	< 0.2

Test	Specification	Result
Trace Impurities – Germanium (Ge)	<= 3.0 ppb	< 2.0
Trace Impurities – Gold (Au)	<= 4.0 ppb	3.0
Heavy Metals (as Pb)	<= 100 ppb	< 50
Trace Impurities – Iron (Fe)	<= 15.0 ppb	1.0
Trace Impurities – Lead (Pb)	<= 1.0 ppb	< 0.5
Trace Impurities – Lithium (Li)	<= 1.0 ppb	< 0.2
Trace Impurities – Magnesium (Mg)	<= 10.0 ppb	< 0.4
Trace Impurities – Manganese (Mn)	<= 1.0 ppb	< 0.4
Trace Impurities – Mercury (Hg)	<= 0.5 ppb	0.2
Trace Impurities – Molybdenum (Mo)	<= 10.0 ppb	< 5.0
Trace Impurities – Nickel (Ni)	<= 4.0 ppb	< 0.3
Trace Impurities – Niobium (Nb)	<= 1.0 ppb	< 0.2
Trace Impurities – Potassium (K)	<= 9.0 ppb	< 2.0
Trace Impurities – Selenium (Se), For Information Only	ppb	1.0
Trace Impurities – Silicon (Si)	<= 100.0 ppb	18.0
Trace Impurities – Silver (Ag)	<= 1.0 ppb	< 0.3
Trace Impurities – Sodium (Na)	<= 100.0 ppb	< 5.0
Trace Impurities – Strontium (Sr)	<= 1.0 ppb	< 0.2
Trace Impurities – Tantalum (Ta)	<= 1.0 ppb	< 0.9
Trace Impurities – Thallium (Tl)	<= 5.0 ppb	< 2.0
Trace Impurities – Tin (Sn)	<= 5.0 ppb	< 0.8
Trace Impurities – Titanium (Ti)	<= 1.0 ppb	< 0.2
Trace Impurities – Vanadium (V)	<= 1.0 ppb	< 0.2
Trace Impurities – Zinc (Zn)	<= 5.0 ppb	0.4
Trace Impurities – Zirconium (Zr)	<= 1.0 ppb	< 0.1

For Laboratory, Research or Manufacturing Use

Product Information (not specifications):

Appearance (clear, fuming liquid)

Meets ACS Specifications

Country of Origin: US

Packaging Site: Phillipsburg Mfg Ctr & DC


Jamie Ethier
Vice President Global Quality

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:

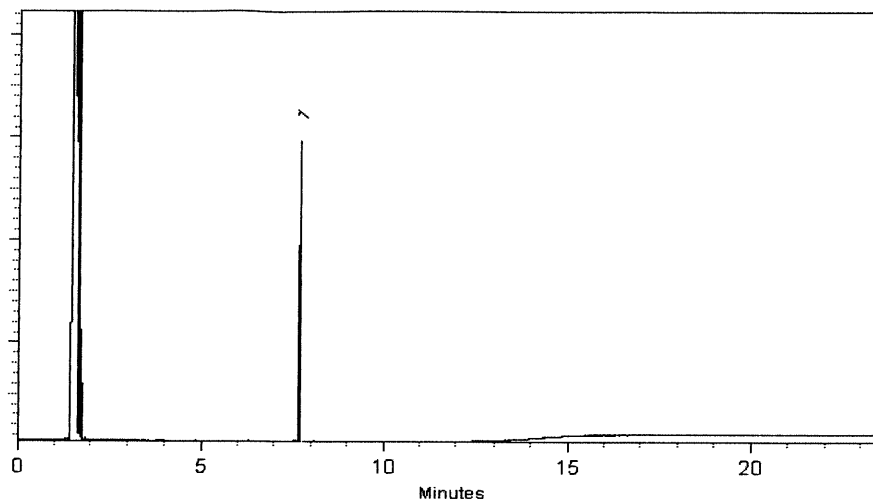
250°C

Det. Temp:

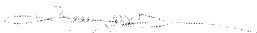
330°C

Det. Type:

FID

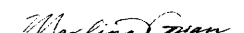


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Katelyn McGinnis - Operations Tech I

Date Mixed: 28-May-2021

Balance: B345965662


Marlene Cowan - Operations Tech I

Date Passed: 02-Jun-2021

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

1911177
70
P 111 86
AR
11/02/21



CERTIFIED REFERENCE MATERIAL

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

www.restek.com

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 32050 Lot No.: A0172864
Description : 2,4-Dichlorophenylacetic Acid Methyl Ester Standard
515 Surrogate (ester) 2, 4-dichlorophenyl Acetic Acid Methyl Ester
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%

P11177
↓
P11186
AR
01/02/21

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:

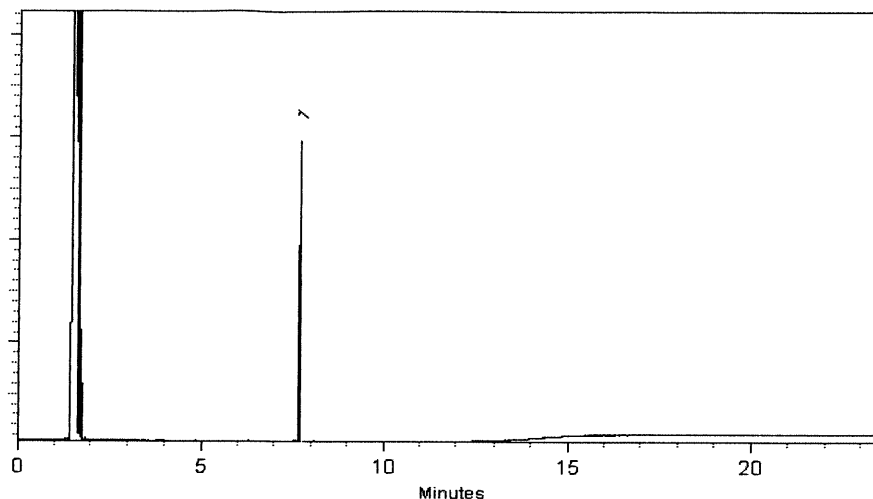
250°C

Det. Temp:

330°C

Det. Type:

FID

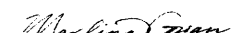


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Katelyn McGinnis - Operations Tech I

Date Mixed: 28-May-2021

Balance: B345965662


Marlene Cowan - Operations Tech I

Date Passed: 02-Jun-2021

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

1911177
70
P 111 86
AR
11/02/21



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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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%

P11177
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P11186
—
AR
01/02/21



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Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 32062 **Lot No.:** A0155055

Description : Herbicide Mix #4/ME (Methyl Ester)
Herbicide Mix #4/ME (Methyl Ester) 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

P12616 / (5)
↓
P12620
✓ *Paul* =
7/5/2023

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	3,5-Dichlorobenzoic acid methyl ester CAS # 2905-67-1 (Lot 3903900) Purity 99%	200.0 µg/mL	+/- 1.4182 µg/mL Gravimetric +/- 6.7507 µg/mL Unstressed +/- 6.7507 µg/mL Stressed
2	4-Nitroanisole CAS # 100-17-4 (Lot 24765/7) Purity 99%	200.0 µg/mL	+/- 1.4182 µg/mL Gravimetric +/- 6.7507 µg/mL Unstressed +/- 6.7507 µg/mL Stressed
3	Pentachloroanisole CAS # 1825-21-4 (Lot 7921100) Purity 99%	200.0 µg/mL	+/- 1.4182 µg/mL Gravimetric +/- 6.7507 µg/mL Unstressed +/- 6.7507 µg/mL Stressed
4	Chloramben methyl ester CAS # 7286-84-2 (Lot 6487100) Purity 98%	199.9 µg/mL	+/- 1.4176 µg/mL Gravimetric +/- 6.7480 µg/mL Unstressed +/- 6.7480 µg/mL Stressed
5	Bentazon methyl ester CAS # 61592-45-8 (Lot 817100) Purity 99%	200.0 µg/mL	+/- 1.4182 µg/mL Gravimetric +/- 6.7507 µg/mL Unstressed +/- 6.7507 µg/mL Stressed
6	Picloram methyl ester CAS # 14143-55-6 (Lot 386-21B) Purity 98%	201.9 µg/mL	+/- 1.4315 µg/mL Gravimetric +/- 6.8141 µg/mL Unstressed +/- 6.8141 µg/mL Stressed
7	DCPA methyl ester (Chlorthal-dimethyl) CAS # 1861-32-1 (Lot 8008700) Purity 99%	200.0 µg/mL	+/- 1.4182 µg/mL Gravimetric +/- 6.7507 µg/mL Unstressed +/- 6.7507 µg/mL 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:

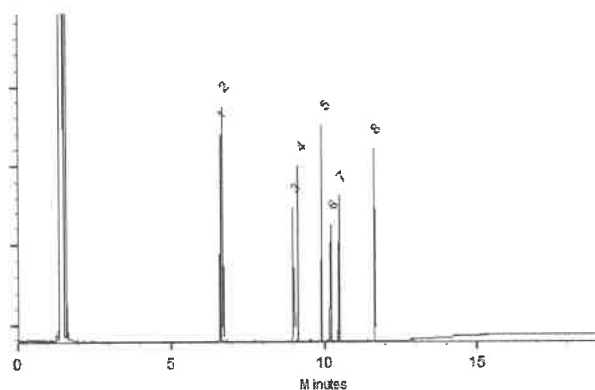
250°C

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 Maje

Date Mixed: 14-Nov-2019 **Balance:** 1128353505

Justine Albertson
Justine Albertson - Operations Tech-ARM QC

Date Passed: 18-Nov-2019

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



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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 32055 **Lot No.:** A0192429

Description : Herbicide Mix #1/ME (Methyl Ester)
Herbicide Mix #1/ME (Methyl Ester) 200 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2029 **Storage:** 10°C or colder

Handling: This product is photosensitive. **Ship:** Ambient

P12626 / 5
P12630
7/5/2023

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:

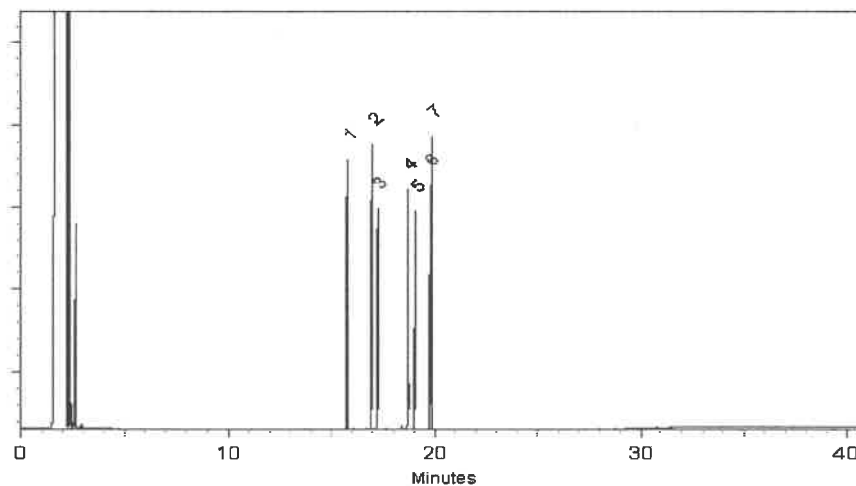
FID

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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Bellefonte, PA 16823-8812
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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 32059 **Lot No.:** A0199844

Description : Herbicide Mix #3/ME (Methyl Ester)
Herbicide Mix #3/ME (Methyl Ester) 20,000 µg/mL, Hexane, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2030 **Storage:** 10°C or colder

Handling: This product is photosensitive. **Ship:** Ambient

P 12685 / (S)
↓
P 12689
↓
RAU= 7/24/23

CERTIFIED VALUES

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

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

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

Quality Confirmation Test

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

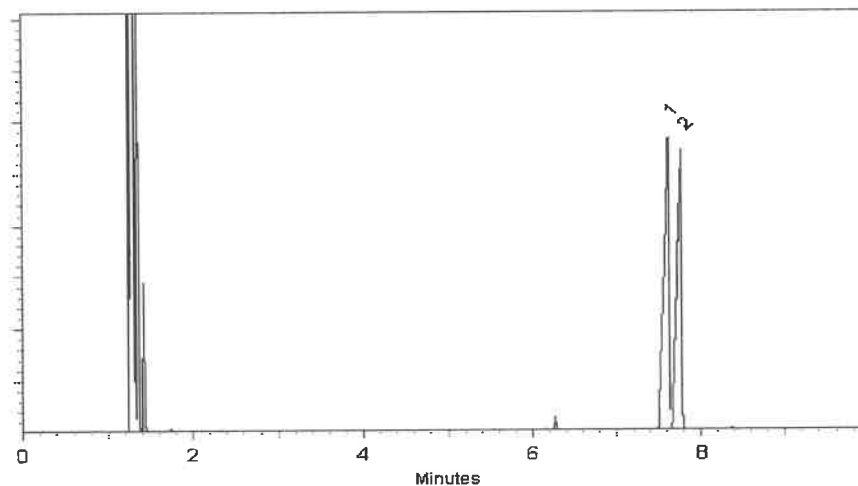
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl



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


Morgan Craighead - Mix Technician

Date Mixed: 12-Jul-2023

Balance Serial # B442140311


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 19-Jul-2023

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

P12706
↓
P12715
/ (10)
/ 1
/ 8/15/23

ISO 17034

Reference Material Certificate
Product Information Sheet

Product Name: Chlorinated Methylated Herbicides Standard

Lot Number: 0006752480

Product Number: HBM-8151M-1

Lot Issue Date: 18-Jul-2023

Storage Conditions: Store at Room Temperature (15° to 30°C).

Expiration Date: 31-Aug-2025

Component Name	Concentration	Uncertainty	CAS#	Analyte Lot
acifluorfen methyl ester	100.3 ±	0.5 µg/mL	050594-67-7	RM03058
bentazon methyl derivative	100.2 ±	0.5 µg/mL	061592-45-8	RM13829
chloramben methyl ester	100.4 ±	0.5 µg/mL	007286-84-2	RM03055
2,4-D methyl ester	100.2 ±	0.5 µg/mL	001928-38-7	RM03040
dalapon methyl ester	100.4 ±	0.5 µg/mL	017640-02-7	RM14219
2,4-DB methyl ester	100.2 ±	0.5 µg/mL	018625-12-2	RM03029
DCPA	100.2 ±	0.5 µg/mL	001861-32-1	RM13426
dicamba methyl ester	100.4 ±	0.5 µg/mL	006597-78-0	RM03039
methyl-3,5-dichlorobenzoate	100.1 ±	0.5 µg/mL	002905-67-1	RM03048
dichlorprop methyl ester	100.4 ±	0.5 µg/mL	057153-17-0	NT02086
dinoseb methyl ether	100.5 ±	0.5 µg/mL	006099-79-2	RM03051
MCPA methyl ester	10031 ±	50 µg/mL	002436-73-9	RM12863
MCPP methyl ester	10031 ±	50 µg/mL	023844-56-6	RM20060
4-nitroanisole	100.3 ±	0.5 µg/mL	000100-17-4	RM02806
pentachloroanisole	100.4 ±	0.5 µg/mL	001825-21-4	RM02457
picloram methyl ester	100.2 ±	0.5 µg/mL	014143-55-6	RM03044
silvex methyl ester	100.2 ±	0.5 µg/mL	004841-20-7	RM03799
2,4,5-T methyl ester	100.4 ±	0.5 µg/mL	001928-37-6	RM03033

Matrix: methanol (methyl alcohol)

Description:

This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

**Instructions for Use:**

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

Intended Use:

This analytical reference standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

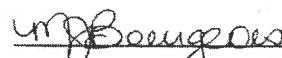
Expiration of Certification:

The certification of this analytical reference standard is valid until the expiration date specified above, provided the material is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the material is damaged, contaminated, or otherwise modified.

Maintenance of Certification:

If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:


Monica Bourgeois
QMS Representative

P12706 / (10)
↓
P12715
✓ RAUF
8.15.23



ISO 17034
Cert No. AR-1936

RM was produced in accordance with the TUV/SUD registered ISO 9001:2015 Quality Management System. Cert# 951215321

Page: 2 of 2

www.agilent.com/quality/
CSD-QA-015.2

ISO 17025
Cert No. AT-1937

P12706
↓
P12715
/ (10)
/ 1
/ 8/15/23

ISO 17034

Reference Material Certificate
Product Information Sheet

Product Name: Chlorinated Methylated Herbicides Standard

Lot Number: 0006752480

Product Number: HBM-8151M-1

Lot Issue Date: 18-Jul-2023

Storage Conditions: Store at Room Temperature (15° to 30°C).

Expiration Date: 31-Aug-2025

Component Name	Concentration	Uncertainty	CAS#	Analyte Lot
acifluorfen methyl ester	100.3 ±	0.5 µg/mL	050594-67-7	RM03058
bentazon methyl derivative	100.2 ±	0.5 µg/mL	061592-45-8	RM13829
chloramben methyl ester	100.4 ±	0.5 µg/mL	007286-84-2	RM03055
2,4-D methyl ester	100.2 ±	0.5 µg/mL	001928-38-7	RM03040
dalapon methyl ester	100.4 ±	0.5 µg/mL	017640-02-7	RM14219
2,4-DB methyl ester	100.2 ±	0.5 µg/mL	018625-12-2	RM03029
DCPA	100.2 ±	0.5 µg/mL	001861-32-1	RM13426
dicamba methyl ester	100.4 ±	0.5 µg/mL	006597-78-0	RM03039
methyl-3,5-dichlorobenzoate	100.1 ±	0.5 µg/mL	002905-67-1	RM03048
dichlorprop methyl ester	100.4 ±	0.5 µg/mL	057153-17-0	NT02086
dinoseb methyl ether	100.5 ±	0.5 µg/mL	006099-79-2	RM03051
MCPA methyl ester	10031 ±	50 µg/mL	002436-73-9	RM12863
MCPP methyl ester	10031 ±	50 µg/mL	023844-56-6	RM20060
4-nitroanisole	100.3 ±	0.5 µg/mL	000100-17-4	RM02806
pentachloroanisole	100.4 ±	0.5 µg/mL	001825-21-4	RM02457
picloram methyl ester	100.2 ±	0.5 µg/mL	014143-55-6	RM03044
silvex methyl ester	100.2 ±	0.5 µg/mL	004841-20-7	RM03799
2,4,5-T methyl ester	100.4 ±	0.5 µg/mL	001928-37-6	RM03033

Matrix: methanol (methyl alcohol)

Description:

This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

**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.

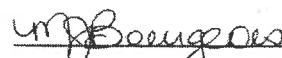
Expiration of Certification:

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

P 12706 / (10)
↓
P 12715
✓ RAUF
8.15.23



ISO 17034
Cert No. AR-1936

RM was produced in accordance with the TUV/SUD registered ISO
9001:2015 Quality Management System. Cert# 951215321

Page: 2 of 2

www.agilent.com/quality/
CSD-QA-015.2

ISO 17025
Cert No. AT-1937



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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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

P13697 } Y.P.
↓
P13515 } 08/15/24

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:

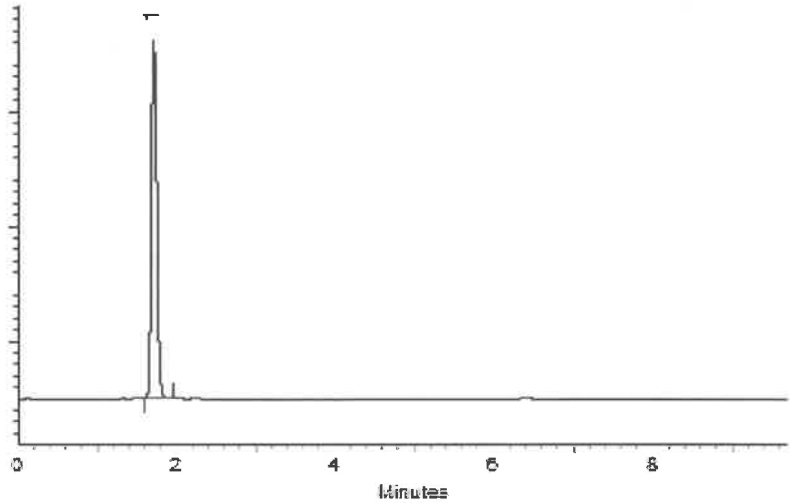
90%B Isocratic

Det. Type:

Wavelength: 220 & 254 nm

Inj. Vol

5µl

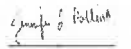


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


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/ μ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 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

P13697 } Y.P.
↓
P13515 } 08/15/24

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.

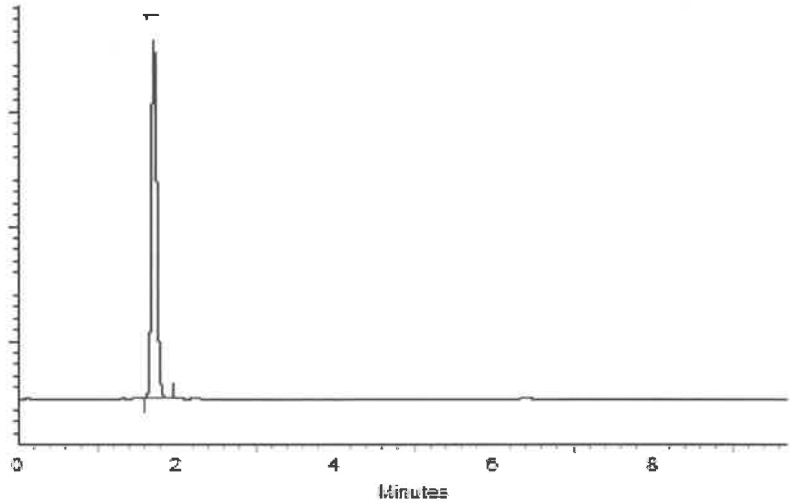
Mobile Phase A:
0.14% H₃PO₄ in water

Mobile Phase B:
acetonitrile

Mobile Phase Composition:
90%B Isocratic

Det. Type:
Wavelength: 220 & 254 nm

Inj. Vol
5µl

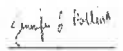


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


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.
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k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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: 0006810955
Lot Issue Date: 20-Aug-2024
Expiration Date: 30-Sep-2026

Component Name	Concentration	Uncertainty	CAS#	Analyte Lot
acifluorfen	100.2 ±	0.5 µg/mL	050594-66-6	NT02057
bentazon	100.4 ±	0.5 µg/mL	025057-89-0	RM21359
chloramben	100.3 ±	0.5 µg/mL	000133-90-4	RM02698
2,4-D	100.4 ±	0.5 µg/mL	000094-75-7	RM17172
dalapon	100.4 ±	0.5 µg/mL	000075-99-0	RM19677
2,4-DB	100.1 ±	0.5 µg/mL	000094-82-6	RM02866
tetrachloroterephthalic acid	100.4 ±	0.5 µg/mL	002136-79-0	RM15140
dicamba	100.3 ±	0.5 µg/mL	001918-00-9	RM22113
3,5-dichlorobenzoic acid	100.4 ±	0.5 µg/mL	000051-36-5	RM02768
dichlorprop	100.2 ±	0.5 µg/mL	000120-36-5	RM21688
dinoseb	100.3 ±	0.5 µg/mL	000088-85-7	RM22275
MCPA	10019 ±	50 µg/mL	000094-74-6	RM12220
MCPP (mecoprop)	10011 ±	50 µg/mL	000093-65-2	RM09273
4-nitrophenol	100.4 ±	0.5 µg/mL	000100-02-7	RM02391
pentachlorophenol	100.2 ±	0.5 µg/mL	000087-86-5	RM02474
picloram	100.4 ±	0.5 µg/mL	001918-02-1	RM20442
silvex	100.5 ±	0.5 µg/mL	000093-72-1	RM22116
2,4,5-T	100.3 ±	0.5 µg/mL	000093-76-5	RM19314

Matrix: methanol (methyl alcohol)

Description:

This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

P13520
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P13536 } (18)

BACF
9/4/2024

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).

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2,4-DB	100.1 ±	0.5 µg/mL	000094-82-6	RM02866
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dinoseb	100.3 ±	0.5 µg/mL	000088-85-7	RM22275
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MCPP (mecoprop)	10011 ±	50 µg/mL	000093-65-2	RM09273
4-nitrophenol	100.4 ±	0.5 µg/mL	000100-02-7	RM02391
pentachlorophenol	100.2 ±	0.5 µg/mL	000087-86-5	RM02474
picloram	100.4 ±	0.5 µg/mL	001918-02-1	RM20442
silvex	100.5 ±	0.5 µg/mL	000093-72-1	RM22116
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P13520
↓
P13536 } (18)

BACF
9/4/2024



SHIPPING DOCUMENTS

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Gannett Fleming
ADDRESS: 1010 Adams Ave
CITY: Audobon STATE: PA ZIP: 19405
ATTENTION: Joe Krupansky
PHONE: 610-301-8342 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Amtrak Replacement of SB
PROJECT NO.: 9500000818 LOCATION: Kearny, NJ
PROJECT MANAGER: Joe Krupansky
e-mail: QAQC@BEMSYS.COM
PHONE: 610-301-8342 FAX:

CLIENT BILLING INFORMATION

BILL TO: Alliance PO#:
ADDRESS: 284 Sheffield St
CITY: Mountainside STATE: NJ ZIP: 07093
ATTENTION: Samuela Beasy PHONE: 9087883148

ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) _____ DAYS*
HARDCOPY (DATA PACKAGE): 10 DAYS*
EDD: 10 DAYS*

*TO BE APPROVED BY CHEMTECH

STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

☐ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data)
☐ Level 2 (Results + QC) ☒ NJ Reduced ☐ US EPA CLP
☐ Level 3 (Results + QC) ☐ NYS ASP A ☐ NYS ASP B
+ Raw Data ☐ Other _____
☐ EDD FORMAT BEM EDD

1. PCBs 2. TAL Metals 3. TCL-VOC+10 4. Cr(VI) Cr(III) 5. TCL-SVOCs-BVA-2B 6. EPH 7. PCRA 8. TULP 9.

PRESERVATIVES

COMMENTS

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES										← Specify Preservatives A-HCl D-NaOH B-HNO3 E-ICE C-H2SO4 F-OTHER
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	
1.	B-158-GW01	GW		X	4/5/25	2300	8	X	X	X	X	X	X				
2.	B-149-SB01	S		X	4/5/25	2025	9	X	X	X	X	X	X	X	X		
3.	B-149-SB02	S		X	4/6/25	110	7										
4.	B-149-GW01	GW		X	4/6/25	345	8	X	X	X	X	X	X				
5.	EB																
6.	TB				NA	NA				X							
7.	EB-2025.4.7	WQ			4/7/25	830	9	X	X	X	X	X	X				
8.	TB-2025.4.7	-			-	-				X							
9.																	
10.																	

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

RELINQUISHED BY SAMPLER: <u>Natali Zoon</u>	DATE/TIME: <u>4-7-25</u> <u>1040</u>	RECEIVED BY: <u>CR</u>	Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP <u>2.1</u> °C
RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	Comments: <u>B-149-SB02 has limited volume</u>
2.		2.	<u>"Adjust factor + 1"</u>
RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:	
3.		3.	

Page ____ of ____

CLIENT: ☐ Hand Delivered ☐ Other

Shipment Complete

☐ YES ☐ NO

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1746	PORT06	Order Date : 4/7/2025 12:00:00 PM	Project Mgr :
Client Name : Portal Partners Tri-Venture		Project Name : Amtrak Sawtooth Bridges 2	Report Type : NJ Reduced
Client Contact : Joseph Krupansky		Receive DateTime : 4/7/2025 10:40:00 AM	EDD Type : EXCEL NJCLEANUP
Invoice Name : Portal Partners Tri-Venture		Purchase Order :	Hard Copy Date :
Invoice Contact : Joseph Krupansky			Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1746-01	B-149-SB01	Solid	04/05/2025	20:25					
					VOC-TCLVOA-10		8260D	10 Bus. Days	
Q1746-03	B-149-SB02	Solid	04/06/2025	01:10					
					VOC-TCLVOA-10		8260D	10 Bus. Days	
Q1746-05	B-158-GW01	Water	04/05/2025	23:00					
					VOC-TCLVOA-10		8260-Low	10 Bus. Days	
Q1746-06	B-149-GW01	Water	04/05/2025 04/06/2025	03:45					
				yg 04/06/25	VOC-TCLVOA-10		8260-Low	10 Bus. Days	
Q1746-07	EB-2025-4-7	Water	04/07/2025	08:30					
					VOC-TCLVOA-10		8260-Low	10 Bus. Days	
Q1746-08	TB-2025-4-7	Water	04/07/2025	00:00					
					VOC-TCLVOA-10		8260-Low	10 Bus. Days	

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1746	PORT06	Order Date : 4/7/2025 12:00:00 PM	Project Mgr :
Client Name : Portal Partners Tri-Venture		Project Name : Amtrak Sawtooth Bridges 2	Report Type : NJ Reduced
Client Contact : Joseph Krupansky		Receive DateTime : 4/7/2025 10:40:00 AM	EDD Type : EXCEL NJCLEANUP
Invoice Name : Portal Partners Tri-Venture		Purchase Order :	Hard Copy Date :
Invoice Contact : Joseph Krupansky			Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
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Relinquished By :

Date / Time :


4-7-25 12:55

Received By :

Date / Time :


4-7-25 12:55

Storage Area : VOA Refridgerator Room