

Cover Page

Order ID : Q1627

Project ID : DOT Harper Street Yard - North Side

Client : Tully Construction Co., Inc.

Lab Sample Number

Q1627-01

Client Sample Number

GRID-LINE-1.2-NORTH

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: 3/29/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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 #: Q1627

Completed

For thorough review, the report must have the following:

GENERAL:

Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)

✓

Check chain-of-custody for proper relinquish/return of samples

✓

Is the chain of custody signed and complete

✓

Check internal chain-of-custody for proper relinquish/return of samples /sample extracts

✓

Collect information for each project id from server. Were all requirements followed

✓

COVER PAGE:

Do numbers of samples correspond to the number of samples in the Chain of Custody on login page

✓

Do lab numbers and client Ids on cover page agree with the Chain of Custody

✓

CHAIN OF CUSTODY:

Do requested analyses on Chain of Custody agree with form I results

✓

Do requested analyses on Chain of Custody agree with the log-in page

✓

Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody

✓

Were the samples received within hold time

✓

Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: PRADIP PRAJAPATI

Date: 03/29/2025

LAB CHRONICLE

OrderID:	Q1627	OrderDate:	3/21/2025 1:34:14 PM
Client:	Tully Construction Co., Inc.	Project:	DOT Harper Street Yard - North Side
Contact:	Dean Devoe	Location:	I41

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1627-01	GRID-LINE-1.2-NORT H	TCLP			03/20/25			03/21/25
			TCLP Herbicide	8151A		03/25/25	03/28/25	
			TCLP Pesticide	8081B		03/25/25	03/25/25	



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

Hit Summary Sheet
SW-846

SDG No.: Q1627

Order ID: Q1627

Client: Tully Construction Co., Inc.

Project ID: DOT Harper Street Yard - North Side

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.: Q1627

Client: Tully Construction Co., Inc.

Analytical Method: 8151A

Lab Sample ID	Client ID	Parameter	Column	Spike	Result	Rec	Qual	Limits	
								Low	High
I.BLK-PS029557.D	PIBLK-PS029557.D	2,4-DCAA	1	500	455	91		39	175
		2,4-DCAA	2	500	523	105		39	175
I.BLK-PS029575.D	PIBLK-PS029575.D	2,4-DCAA	1	500	501	100		39	175
		2,4-DCAA	2	500	540	108		39	175
Q1609-03MS	WC-SCRN-01-CMS	2,4-DCAA	1	500	489	98		39	175
		2,4-DCAA	2	500	488	98		39	175
Q1609-03MSD	WC-SCRN-01-CMSD	2,4-DCAA	1	500	494	99		39	175
		2,4-DCAA	2	500	487	97		39	175
I.BLK-PS029587.D	PIBLK-PS029587.D	2,4-DCAA	1	500	518	104		39	175
		2,4-DCAA	2	500	541	108		39	175
Q1627-01	GRID-LINE-1.2-NORTH	2,4-DCAA	1	500	466	93		39	175
		2,4-DCAA	2	500	458	92		39	175
PB167312BL	PB167312BL	2,4-DCAA	1	500	495	99		39	175
		2,4-DCAA	2	500	483	97		39	175
I.BLK-PS029599.D	PIBLK-PS029599.D	2,4-DCAA	1	500	528	106		39	175
		2,4-DCAA	2	500	545	109		39	175
PB167312BS	PB167312BS	2,4-DCAA	1	500	545	109		39	175
		2,4-DCAA	2	500	531	106		39	175
PB167275TB	PB167275TB	2,4-DCAA	1	500	528	106		39	175
		2,4-DCAA	2	500	521	104		39	175
I.BLK-PS029611.D	PIBLK-PS029611.D	2,4-DCAA	1	500	529	106		39	175
		2,4-DCAA	2	500	554	111		39	175

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1627

Client: Tully Construction Co., Inc.

Analytical Method: 8151A

DataFile : PS029577.D

Lab Sample ID:	Parameter	Spike	Sample		Units	Rec	Rec		RPD		Limits	RPD
			Result	Result			Qual	RPD	Qual	Low	High	
Client Sample ID: Q1609-03MS	WC-SCRN-01-CMS											
	2,4-D	50	0	53.0	ug/L	106				65	135	
	2,4,5-TP(Silvex)	50	0	50.0	ug/L	100				62	139	

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1627

Client: Tully Construction Co., Inc.

Analytical Method: 8151A

DataFile : PS029578.D

Lab Sample ID:	Parameter	Spike	Sample		Units	Rec	Rec		RPD		Limits	
			Result	Result			Qual	RPD	Qual	Low	High	RPD
Client Sample ID: Q1609-03MSD	WC-SCRN-01-CMSD											
	2,4-D	50	0	53.1	ug/L	106		0		65	135	20
	2,4,5-TP(Silvex)	50	0	50.1	ug/L	100		0		62	139	20



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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1627

Client: Tully Construction Co., Inc.

Analytical Method: **8151A** **Datafile :** PS029601.D

Lab Sample ID	Parameter	Spike	Result	Units	Rec	RPD	Qual	RPD		Limits	
								Qual	Low	High	RPD
PB167312BS	2,4-D	5	5.30	ug/L	106				83	130	
	2,4,5-TP(Silvex)	5	5.10	ug/L	102				78	127	

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB167312BL

Lab Name: CHEMTECH

Contract: TULL02

Lab Code: CHEM Case No.: Q1627

SAS No.: Q1627 SDG NO.: Q1627

Lab Sample ID: PB167312BL

Lab File ID: PS029597.D

Matrix: (soil/water) water

Extraction: (Type) SEPF

Sulfur Cleanup: (Y/N) N

Date Extracted: 03/25/2025

Date Analyzed (1): 03/28/2025

Date Analyzed (2): 03/28/2025

Time Analyzed (1): 02:51

Time Analyzed (2): 02:51

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-SCRN-01-CMS	Q1609-03MS	PS029577.D	03/27/2025	03/27/2025
WC-SCRN-01-CMSD	Q1609-03MSD	PS029578.D	03/27/2025	03/27/2025
GRID-LINE-1.2-NORTH	Q1627-01	PS029592.D	03/28/2025	03/28/2025
PB167312BS	PB167312BS	PS029601.D	03/28/2025	03/28/2025
PB167275TB	PB167275TB	PS029602.D	03/28/2025	03/28/2025

COMMENTS: _____



SAMPLE DATA

Report of Analysis

Client:	Tully Construction Co., Inc.	Date Collected:	
Project:	DOT Harper Street Yard - North Side	Date Received:	03/25/25
Client Sample ID:	PB167275TB	SDG No.:	Q1627
Lab Sample ID:	PB167275TB	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
PS029602.D	1	03/25/25 12:23	03/28/25 05:15	PB167312

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	528		39 - 175	106%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
Data File : PS029602.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Mar 2025 05:15
Operator : AR\AJ
Sample : PB167275TB
Misc :
ALS Vial : 39 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
PB167275TB

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 07:23:12 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
Quant Title : 8080.M
QLast Update : Thu Mar 27 12:24:58 2025
Response via : Initial Calibration
Integrator: ChemStation

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

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

4) S	2,4-DCAA	7.115	7.534	2026.0E6	449.7E6	527.587m	520.915
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Target Compounds

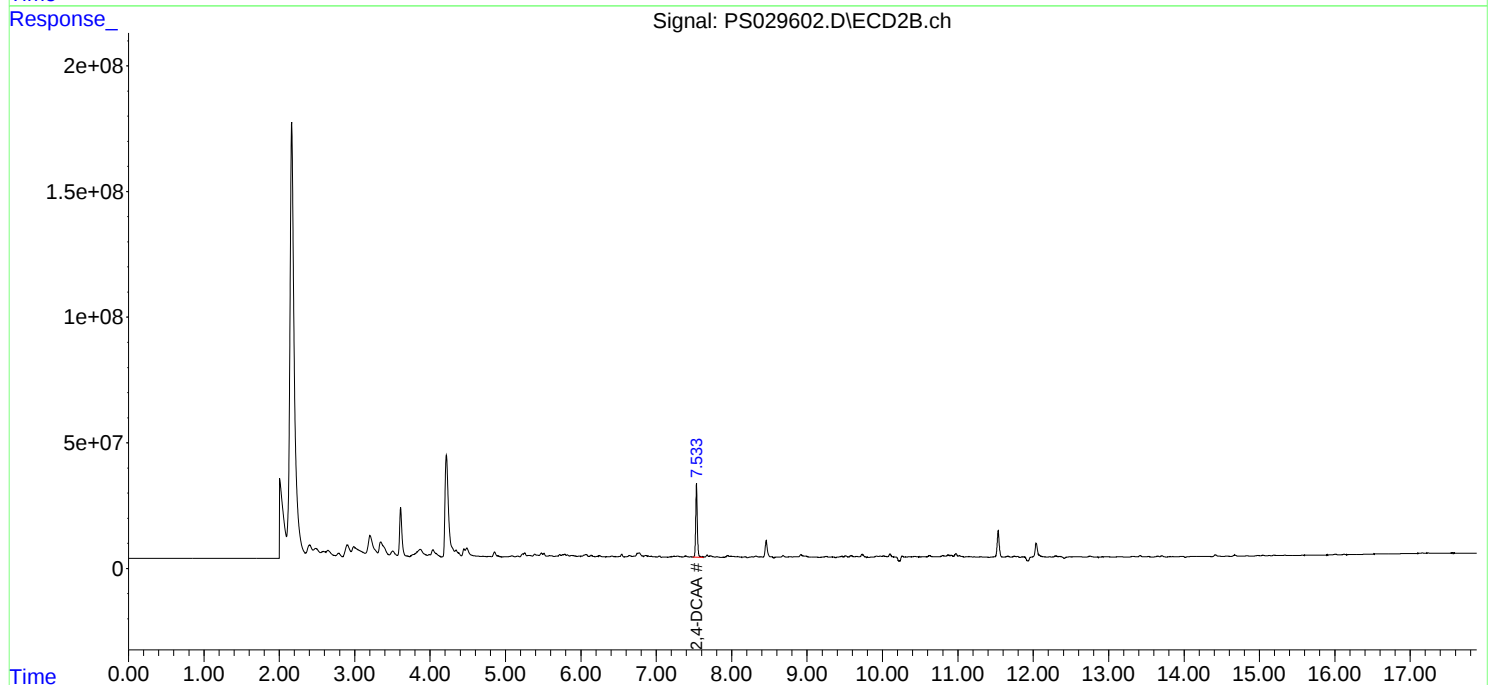
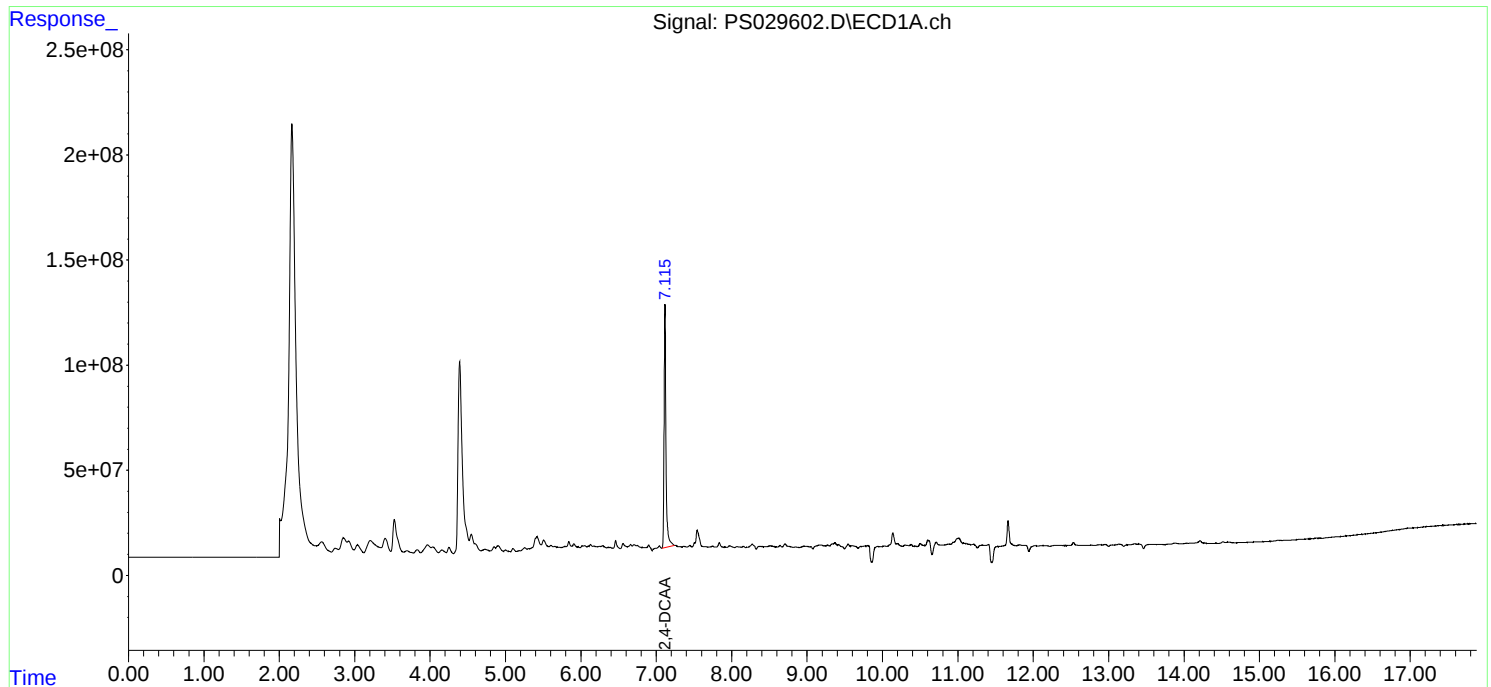
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

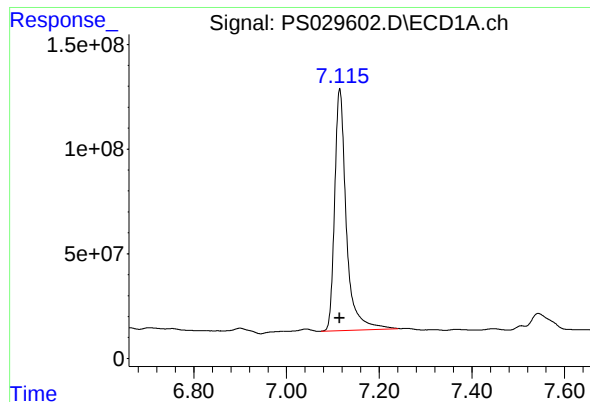
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
Data File : PS029602.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Mar 2025 05:15
Operator : AR\AJ
Sample : PB167275TB
Misc :
ALS Vial : 39 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
PB167275TB

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 07:23:12 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
Quant Title : 8080.M
QLast Update : Thu Mar 27 12:24:58 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

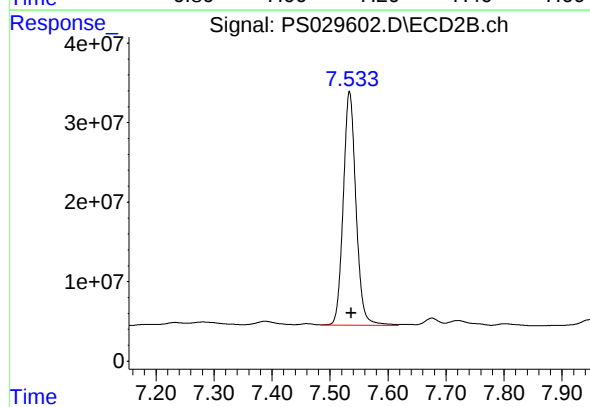




#4 2,4-DCAA

R.T.: 7.115 min
Delta R.T.: 0.000 min
Response: 2025984848
Conc: 527.59 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB167275TB



#4 2,4-DCAA

R.T.: 7.534 min
Delta R.T.: -0.003 min
Response: 449703804
Conc: 520.91 ng/ml

Report of Analysis

Client:	Tully Construction Co., Inc.	Date Collected:	03/20/25
Project:	DOT Harper Street Yard - North Side	Date Received:	03/21/25
Client Sample ID:	GRID-LINE-1.2-NORTH	SDG No.:	Q1627
Lab Sample ID:	Q1627-01	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
PS029592.D	1	03/25/25 12:23	03/28/25 00:51	PB167312

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	466		39 - 175	93%	SPK: 500

Comments:

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

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
Data File : PS029592.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Mar 2025 00:51
Operator : AR\AJ
Sample : Q1627-01
Misc :
ALS Vial : 31 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
GRID-LINE-1.2-NORTH

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 03:24:59 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
Quant Title : 8080.M
QLast Update : Thu Mar 27 12:24:58 2025
Response via : Initial Calibration
Integrator: ChemStation

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

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

System Monitoring Compounds						
4) S 2,4-DCAA	7.114	7.534	1790.2E6	395.8E6	466.191m	458.491

Target Compounds

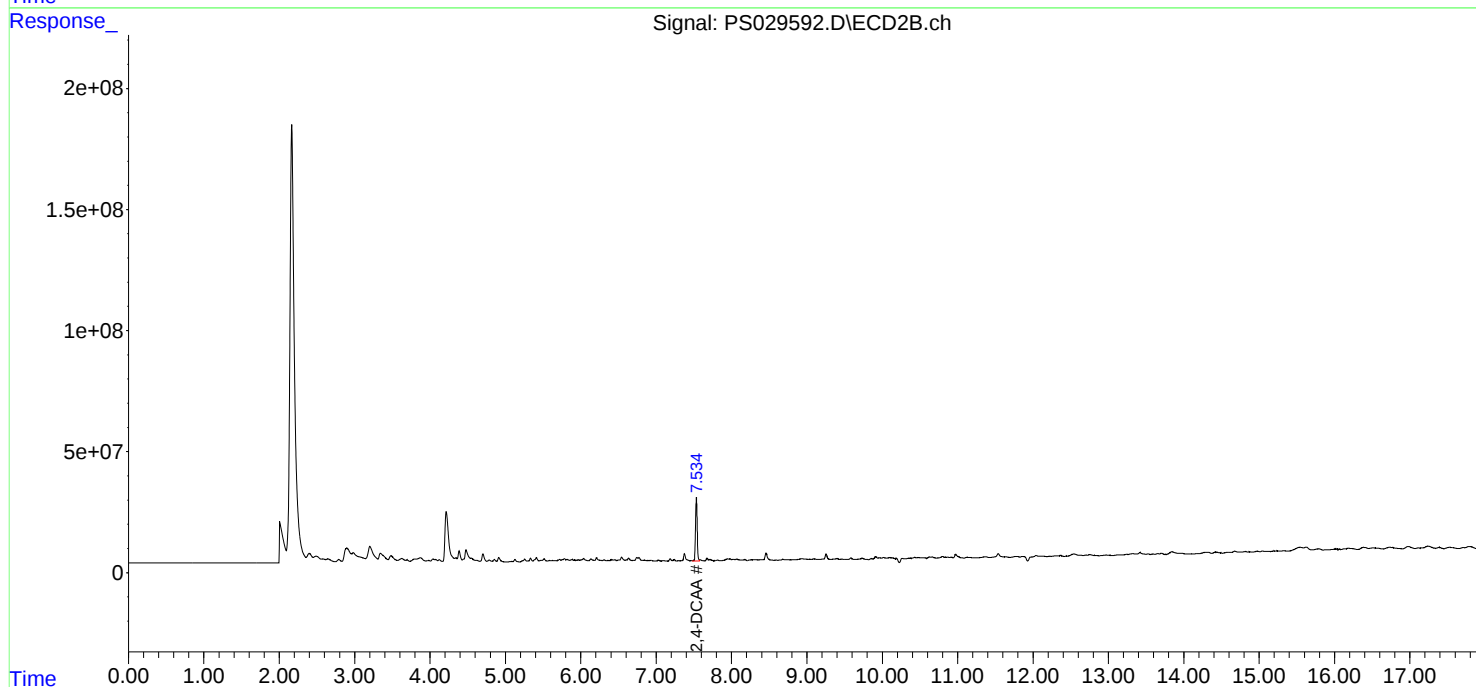
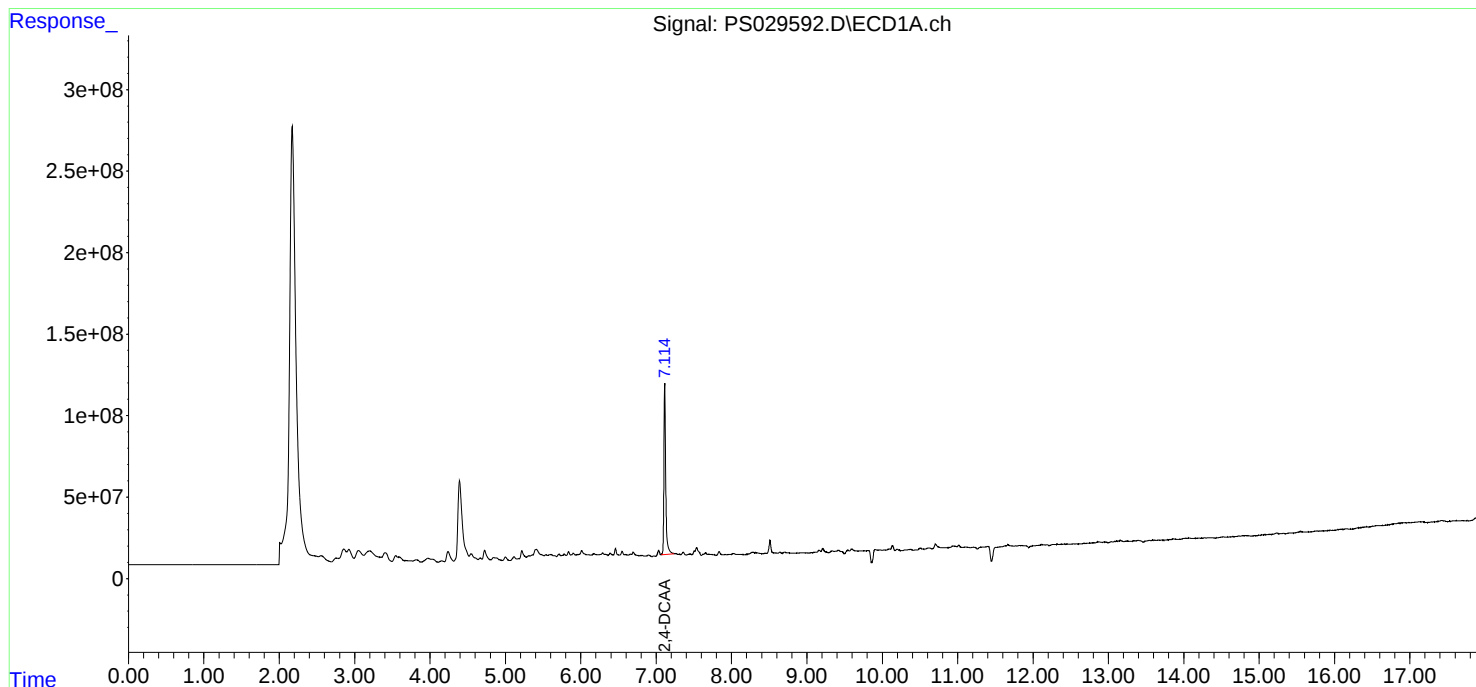
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

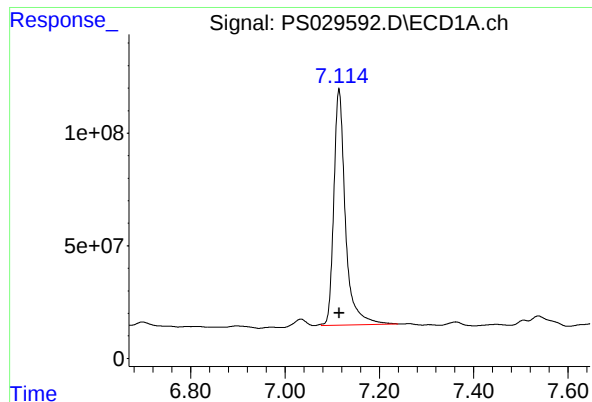
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
Data File : PS029592.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Mar 2025 00:51
Operator : AR\AJ
Sample : Q1627-01
Misc :
ALS Vial : 31 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
GRID-LINE-1.2-NORTH

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 03:24:59 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
Quant Title : 8080.M
QLast Update : Thu Mar 27 12:24:58 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

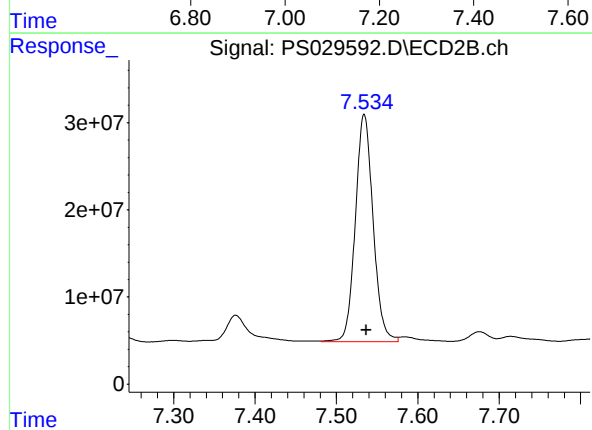




#4 2,4-DCAA

R.T.: 7.114 min
Delta R.T.: 0.000 min
Response: 1790216961
Conc: 466.19 ng/ml

Instrument :
ECD_S
ClientSampleId :
GRID-LINE-1.2-NORTH



#4 2,4-DCAA

R.T.: 7.534 min
Delta R.T.: -0.002 min
Response: 395813821
Conc: 458.49 ng/ml



CALIBRATION SUMMARY

RETENTION TIMES OF INITIAL CALIBRATION

Contract: TULL02
Lab Code: CHEM **Case No.:** Q1627 **SAS No.:** Q1627 **SDG NO.:** Q1627
Instrument ID: ECD_S **Calibration Date(s):** 03/27/2025 03/27/2025
Calibration Times: 10:13 11:49

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

LAB FILE ID:	RT 200 = <u>PS029558.D</u>	RT 500 = <u>PS029559.D</u>
	RT 750 = <u>PS029560.D</u>	RT 1000 = <u>PS029561.D</u>
		RT 1500 = <u>PS029562.D</u>

COMPOUND	RT 200	RT 500	RT 750	RT 1000	RT 1500	MEAN RT	RT WINDOW FROM TO	
2,4,5-TP(Silvex)	9.08	9.08	9.08	9.08	9.08	9.08	8.98	9.18
2,4-D	8.23	8.22	8.22	8.22	8.22	8.22	8.12	8.32
2,4-DCAA	7.12	7.12	7.12	7.11	7.11	7.12	7.02	7.22

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

[illegible]



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CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: TULL02

Lab Code: CHEM Case No.: Q1627 SAS No.: Q1627 SDG NO.: Q1627

Instrument ID: ECD_S

Calibration Date(s): 03/27/2025 03/27/2025

Calibration Times: 10:13 11:49

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

LAB FILE ID:		CF 200 =	<u>PS029558.D</u>	CF 500 =	<u>PS029559.D</u>		
CF 750 =		<u>PS029560.D</u>	CF 1000 =	<u>PS029561.D</u>	CF 1500 =	<u>PS029562.D</u>	
COMPOUND	CF 200	CF 500	CF 750	CF 1000	CF 1500	CF	% RSD
2,4,5-TP(Silvex)	25670900000	23785800000	23109900000	22602700000	21306000000	23295100000	7
2,4-D	4188820000	4008980000	4020660000	4027260000	3923150000	4033770000	2
2,4-DCAA	4381510000	3897780000	3741570000	3660350000	3519270000	3840100000	9



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Fax : 908 789 8922

CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: TULL02

Lab Code: CHEM Case No.: Q1627 SAS No.: Q1627 SDG NO.: Q1627

Instrument ID: ECD_S

Calibration Date(s): 03/27/2025 03/27/2025

Calibration Times: 10:13 11:49

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

LAB FILE ID:		CF 200 =	<u>PS029558.D</u>	CF 500 =	<u>PS029559.D</u>		
CF 750 =		<u>PS029560.D</u>	CF 1000 =	<u>PS029561.D</u>	CF 1500 =	<u>PS029562.D</u>	
COMPOUND	CF 200	CF 500	CF 750	CF 1000	CF 1500	CF	% RSD
2,4,5-TP(Silvex)	8920000000	8845090000	8871870000	8871810000	8614920000	8824740000	1
2,4-D	1444300000	1372750000	1351390000	1345360000	1316110000	1365980000	4
2,4-DCAA	924846000	863170000	848041000	848508000	831918000	863297000	4

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
 Data File : PS029558.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 27 Mar 2025 10:13
 Operator : AR\AJ
 Sample : HSTDICC200
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDICC200

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Mar 27 12:21:43 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
 Quant Title : 8080.M
 QLast Update : Thu Mar 27 12:21:09 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	7.118	7.538	876.3E6	185.0E6	234.207	218.114
Target Compounds							
1) T	Dalapon	2.595	2.611	1065.7E6	425.5E6	177.476	210.501
2) T	3,5-DICHL...	6.307	6.527	1193.3E6	239.1E6	212.421	196.529
3) T	4-Nitroph...	6.942	7.078	148.0E6	153.0E6	130.543	192.486 #
5) T	DICAMBA	7.294	7.726	3286.9E6	881.6E6	211.954	183.542
6) T	MCP	7.469	7.828	184.9E6	35780685	15.894	16.959
7) T	MCPA	7.615	8.062	237.7E6	49947037	16.239	17.281
8) T	DICHLORPROP	7.992	8.428	943.9E6	259.4E6	220.675	214.692
9) T	2,4-D	8.228	8.750	787.5E6	271.5E6	195.863	200.925
10) T	Pentachlo...	8.507	9.257	13970.3E6	4343.7E6	226.191	193.747
11) T	2,4,5-TP ...	9.082	9.634	4877.5E6	1694.8E6	211.056	191.031
12) T	2,4,5-T	9.378	10.044	3921.8E6	1521.9E6	187.167	189.783
13) T	2,4-DB	9.951	10.604	293.4E6	209.1E6	146.476	238.595 #
14) T	DINOSEB	11.126	10.974	3689.5E6	1137.8E6	210.867	192.223
15) T	Picloram	10.969	12.038	1763.6E6	2150.2E6	112.848	167.991 #
16) T	DCPA	11.424	12.000	6226.7E6	2168.1E6	217.784	191.801

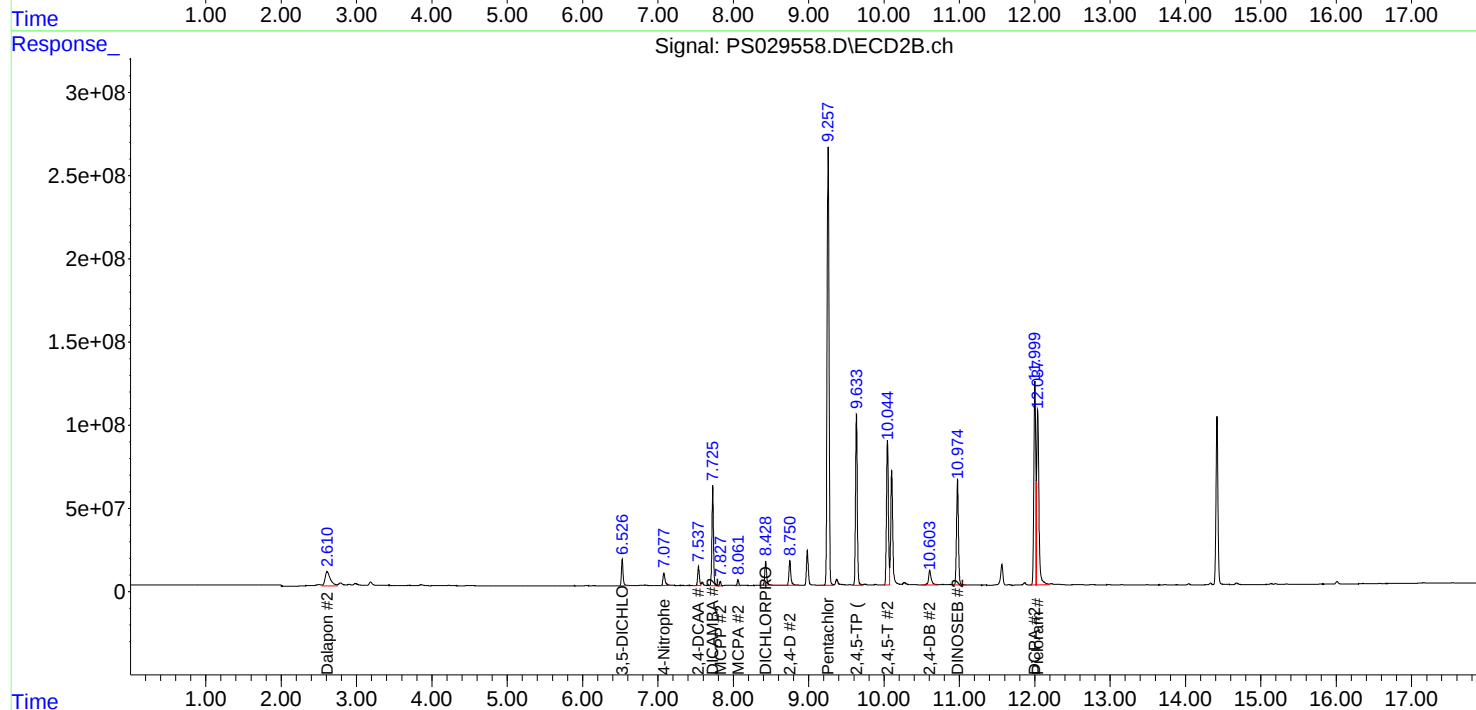
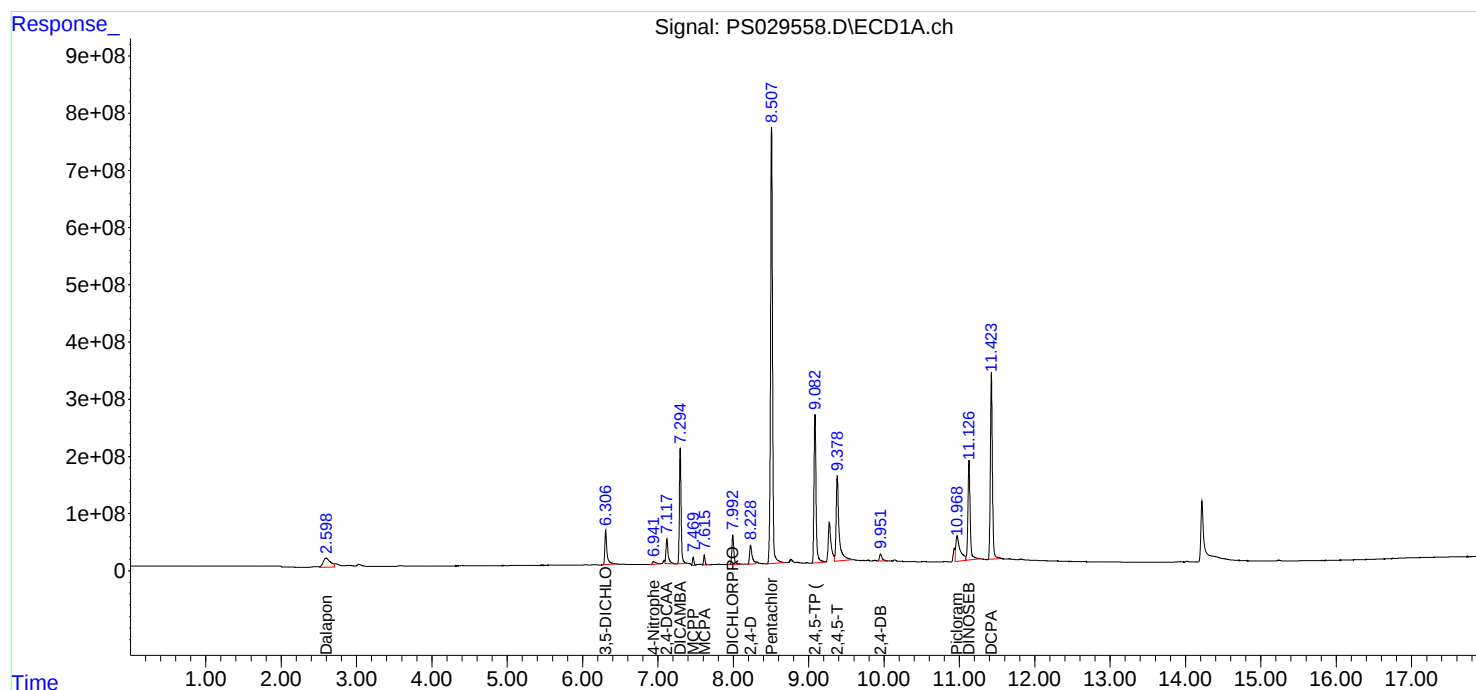
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
Data File : PS029558.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 27 Mar 2025 10:13
Operator : AR\AJ
Sample : HSTDICC200
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDICC200

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 27 12:21:43 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
Quant Title : 8080.M
QLast Update : Thu Mar 27 12:21:09 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



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
 Data File : PS029559.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 27 Mar 2025 10:37
 Operator : AR\AJ
 Sample : HSTDICC500
 Misc :
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDICC500

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Mar 27 11:07:35 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
 Quant Title : 8080.M
 QLast Update : Wed Mar 26 16:20:53 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	7.117	7.537	1948.9E6	431.6E6	469.677	458.668
Target Compounds							
1) T	Dalapon	2.595	2.610	2855.0E6	943.2E6	428.574	400.279
2) T	3,5-DICHL...	6.306	6.526	2688.4E6	581.7E6	446.414	419.280
3) T	4-Nitroph...	6.927	7.075	447.5E6	372.7E6	654.035	409.536 #
5) T	DICAMBA	7.295	7.726	7721.2E6	2213.9E6	406.952	417.128
6) T	MCPD	7.473	7.831	519.6E6	96973510	41.251	40.530
7) T	MCPA	7.619	8.066	651.4E6	134.7E6	43.102	42.555
8) T	DICHLORPROP	7.992	8.429	2079.7E6	583.4E6	474.613	467.840
9) T	2,4-D	8.224	8.749	1884.2E6	645.2E6	494.041	466.314
10) T	Pentachlo...	8.509	9.257	31680.5E6	10748.8E6	541.746	445.711
11) T	2,4,5-TP ...	9.083	9.634	11298.3E6	4201.4E6	472.608	444.291
12) T	2,4,5-T	9.375	10.044	9892.2E6	3785.6E6	502.183	434.403
13) T	2,4-DB	9.945	10.603	858.6E6	432.3E6	584.543	478.133
14) T	DINOSEB	11.127	10.975	8479.2E6	2773.9E6	471.061	429.360
15) T	Picloram	10.958	12.036	6575.2E6	5835.6E6	645.613	425.055 #
16) T	DCPA	11.424	12.001	14307.4E6	5414.4E6	484.871	440.766

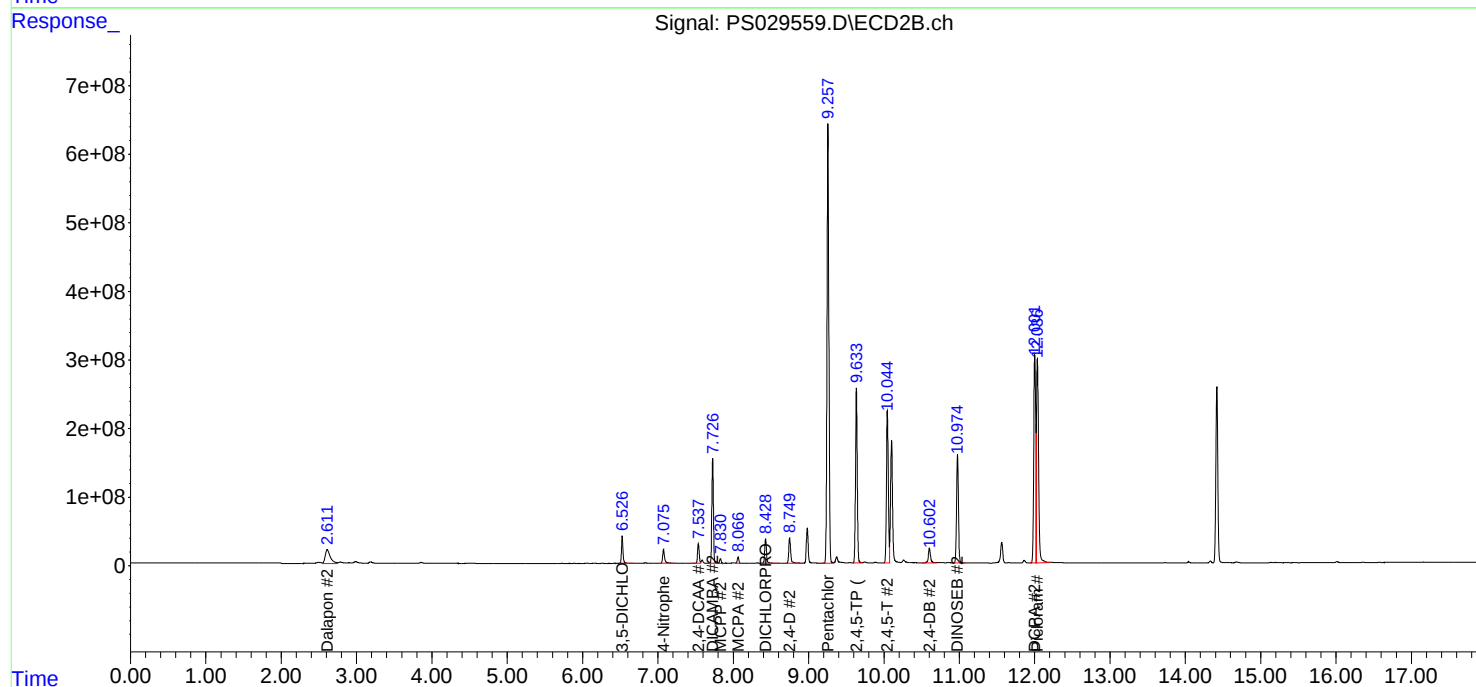
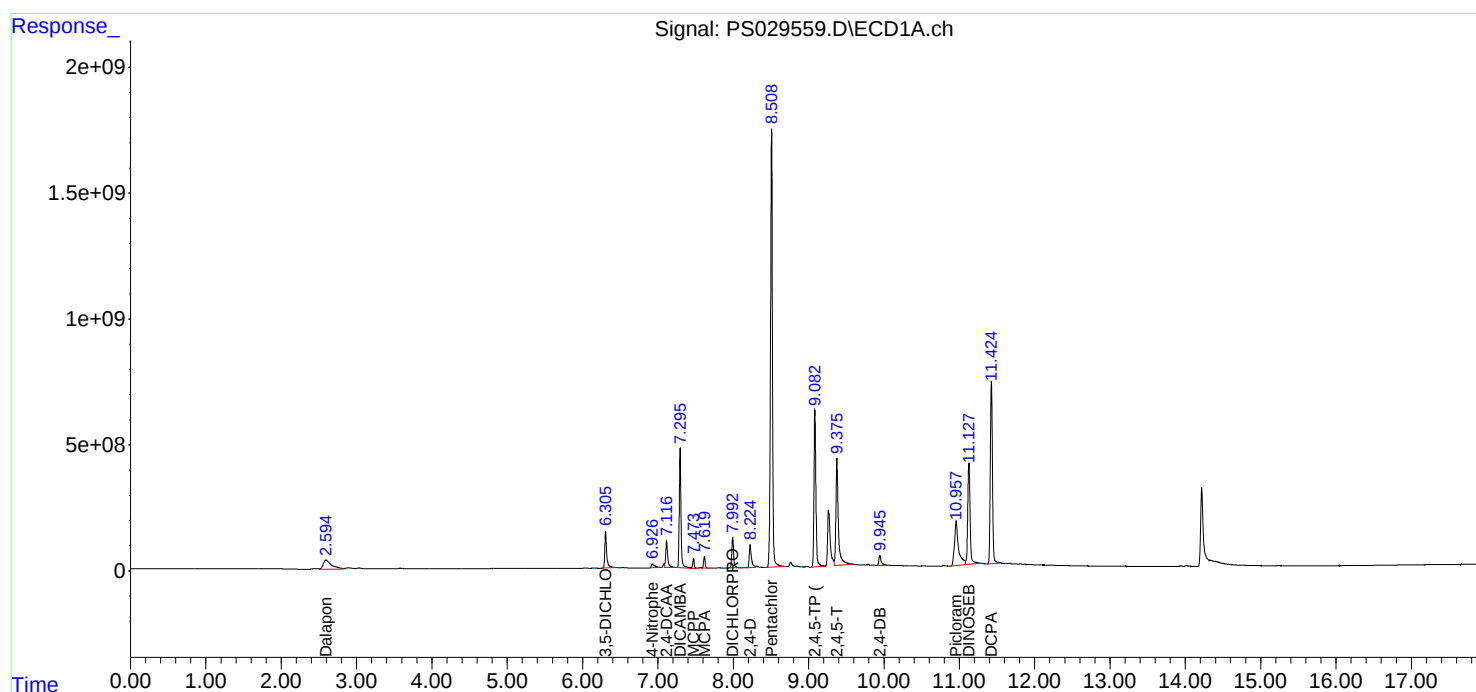
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
Data File : PS029559.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 27 Mar 2025 10:37
Operator : AR\AJ
Sample : HSTDICC500
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDICC500

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 27 11:07:35 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
Quant Title : 8080.M
QLast Update : Wed Mar 26 16:20:53 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



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
 Data File : PS029560.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 27 Mar 2025 11:01
 Operator : AR\AJ
 Sample : HSTDICC750
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDICC750

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Mar 27 12:20:52 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
 Quant Title : 8080.M
 QLast Update : Thu Mar 27 12:20:40 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	7.115	7.537	2806.2E6	636.0E6	750.000	750.000
Target Compounds							
1) T	Dalapon	2.593	2.610	4098.4E6	1379.6E6	682.500	682.500
2) T	3,5-DICHL...	6.304	6.525	3918.3E6	848.5E6	697.500	697.500
3) T	4-Nitroph...	6.921	7.073	773.8E6	542.6E6	682.500	682.500
5) T	DICAMBA	7.294	7.726	10932.8E6	3386.3E6	705.000	705.000
6) T	MCP	7.474	7.832	820.3E6	148.7E6	70.500	70.500
7) T	MCPA	7.620	8.068	1020.8E6	201.6E6	69.750	69.750
8) T	DICHLORPROP	7.991	8.428	3015.6E6	851.8E6	705.000	705.000
9) T	2,4-D	8.222	8.748	2834.6E6	952.7E6	705.000	705.000
10) T	Pentachlo...	8.511	9.257	44006.2E6	15974.1E6	712.500	712.500
11) T	2,4,5-TP ...	9.082	9.634	16465.8E6	6321.2E6	712.500	712.500
12) T	2,4,5-T	9.373	10.043	14929.4E6	5713.5E6	712.500	712.500
13) T	2,4-DB	9.943	10.602	1427.0E6	624.4E6	712.500	712.500
14) T	DINOSEB	11.126	10.974	12335.2E6	4173.2E6	705.000	705.000
15) T	Picloram	10.951	12.035	11134.9E6	9119.6E6	712.500	712.500
16) T	DCPA	11.424	12.001	20585.5E6	8138.9E6	720.000	720.000

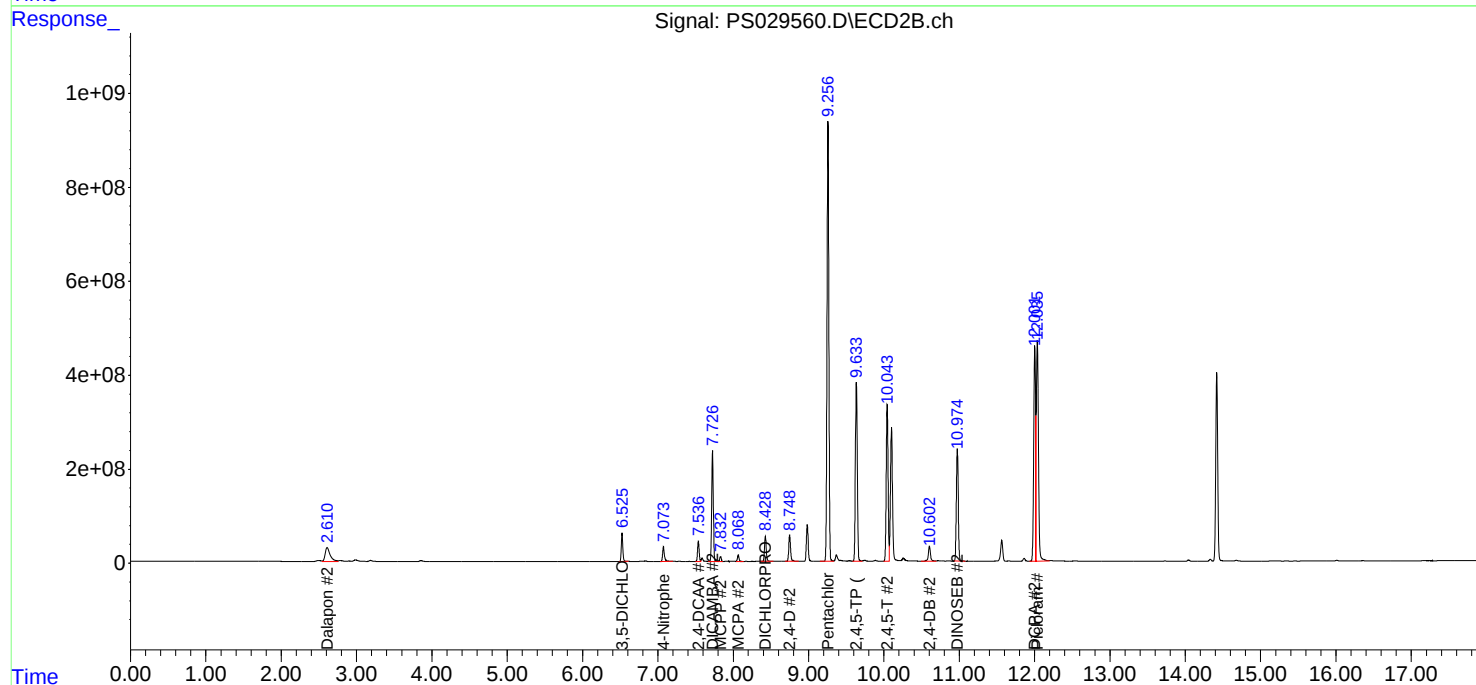
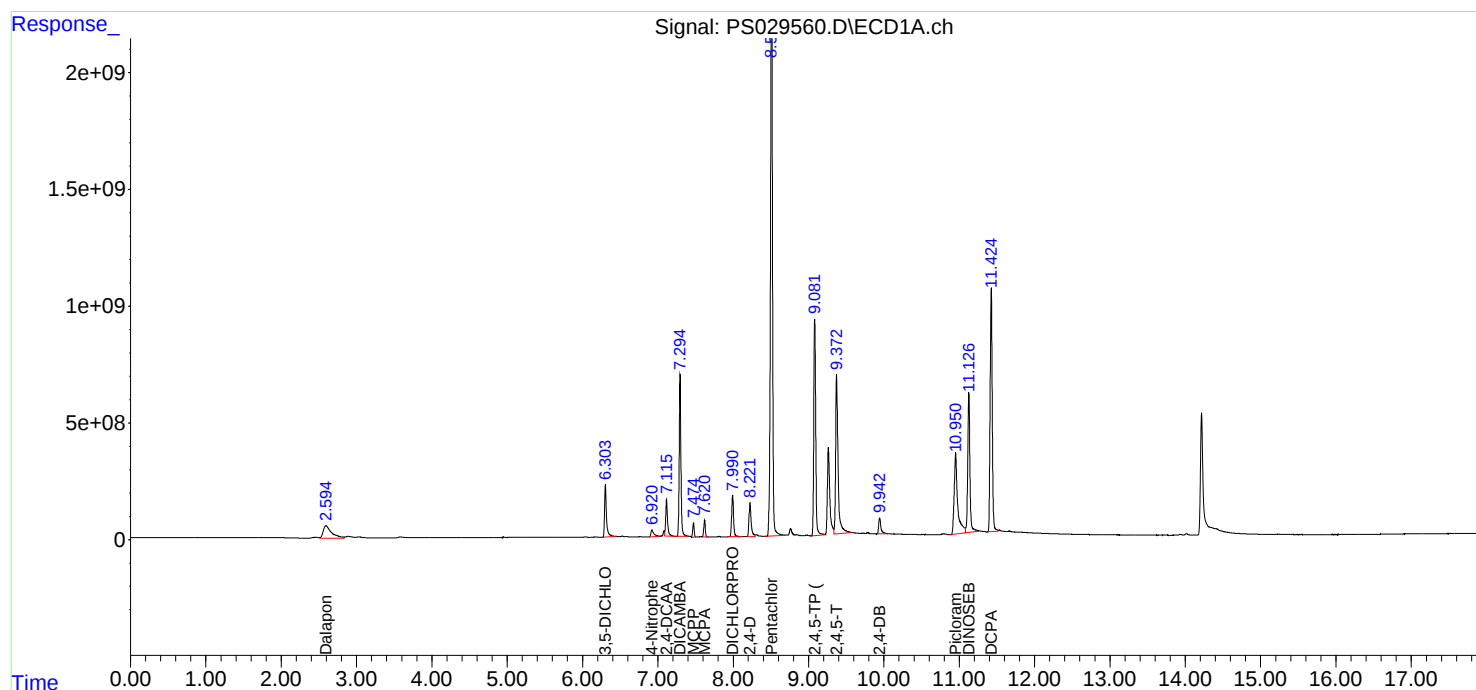
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
Data File : PS029560.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 27 Mar 2025 11:01
Operator : AR\AJ
Sample : HSTDICC750
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDICC750

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 27 12:20:52 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
Quant Title : 8080.M
QLast Update : Thu Mar 27 12:20:40 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



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
 Data File : PS029561.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 27 Mar 2025 11:25
 Operator : AR\AJ
 Sample : HSTDICC1000
 Misc :
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDICC1000

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Mar 27 12:23:12 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
 Quant Title : 8080.M
 QLast Update : Thu Mar 27 12:21:09 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	7.114	7.536	3660.4E6	848.5E6	913.500	965.656
Target Compounds							
1) T	Dalapon	2.594	2.610	5365.3E6	1824.6E6	887.535	851.014
2) T	3,5-DICHL...	6.303	6.525	5124.6E6	1131.9E6	862.992	904.824
3) T	4-Nitroph...	6.918	7.072	1082.8E6	726.0E6	1108.547	887.226
5) T	DICAMBA	7.294	7.725	14354.3E6	4576.6E6	871.383	966.681
6) T	MCP	7.476	7.834	1130.7E6	201.5E6	104.284	99.492
7) T	MCPA	7.623	8.070	1406.4E6	272.9E6	101.857	96.616
8) T	DICHLORPROP	7.990	8.427	3958.1E6	1140.5E6	865.266	893.457
9) T	2,4-D	8.219	8.747	3785.6E6	1264.6E6	929.486	910.152
10) T	Pentachlo...	8.515	9.256	50834.7E6	21011.8E6	755.021	928.210
11) T	2,4,5-TP ...	9.081	9.632	21472.5E6	8428.2E6	887.703	949.232
12) T	2,4,5-T	9.372	10.042	19721.6E6	7620.0E6	947.843	952.566
13) T	2,4-DB	9.941	10.601	1960.5E6	813.1E6	1098.475	844.926
14) T	DINOSEB	11.126	10.974	16136.2E6	5577.7E6	877.561	936.182
15) T	Picloram	10.947	12.034	15576.8E6	12447.7E6	1205.869	1025.866
16) T	DCPA	11.424	12.001	26496.8E6	10787.8E6	875.170	955.332

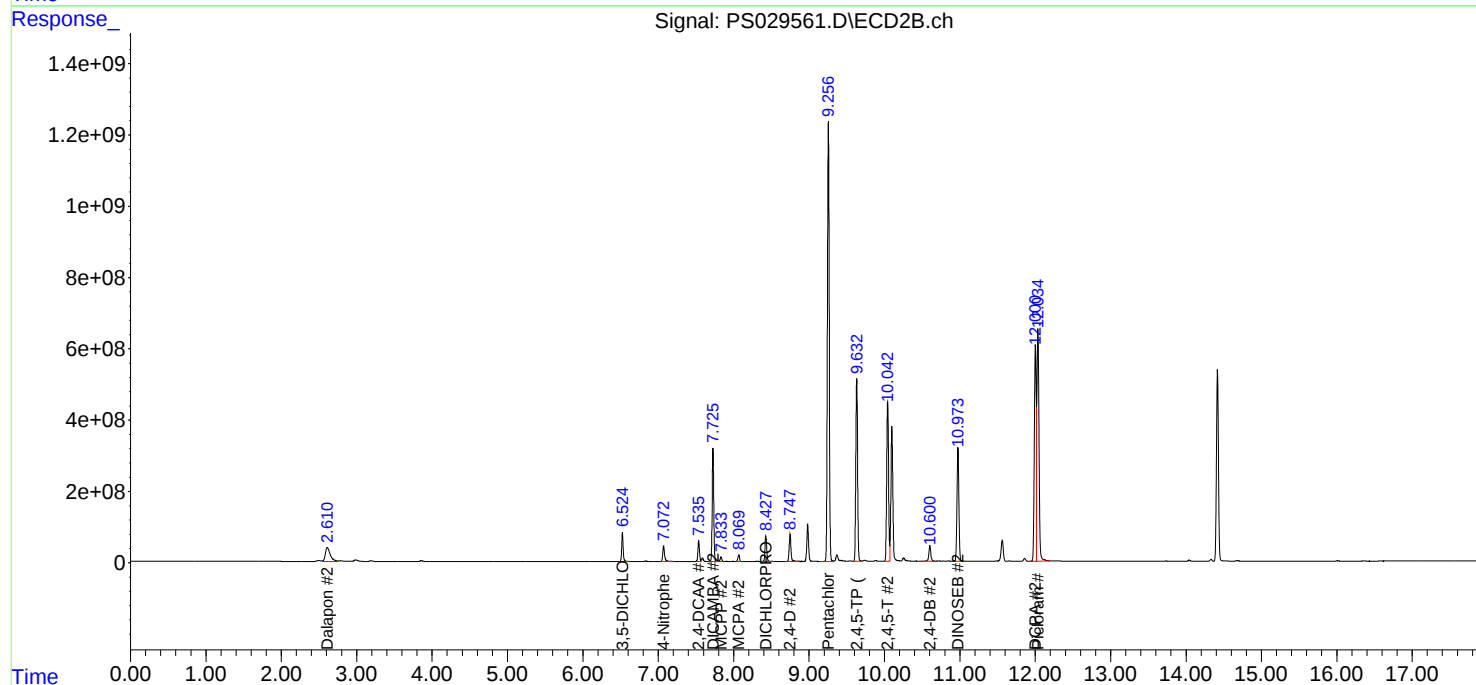
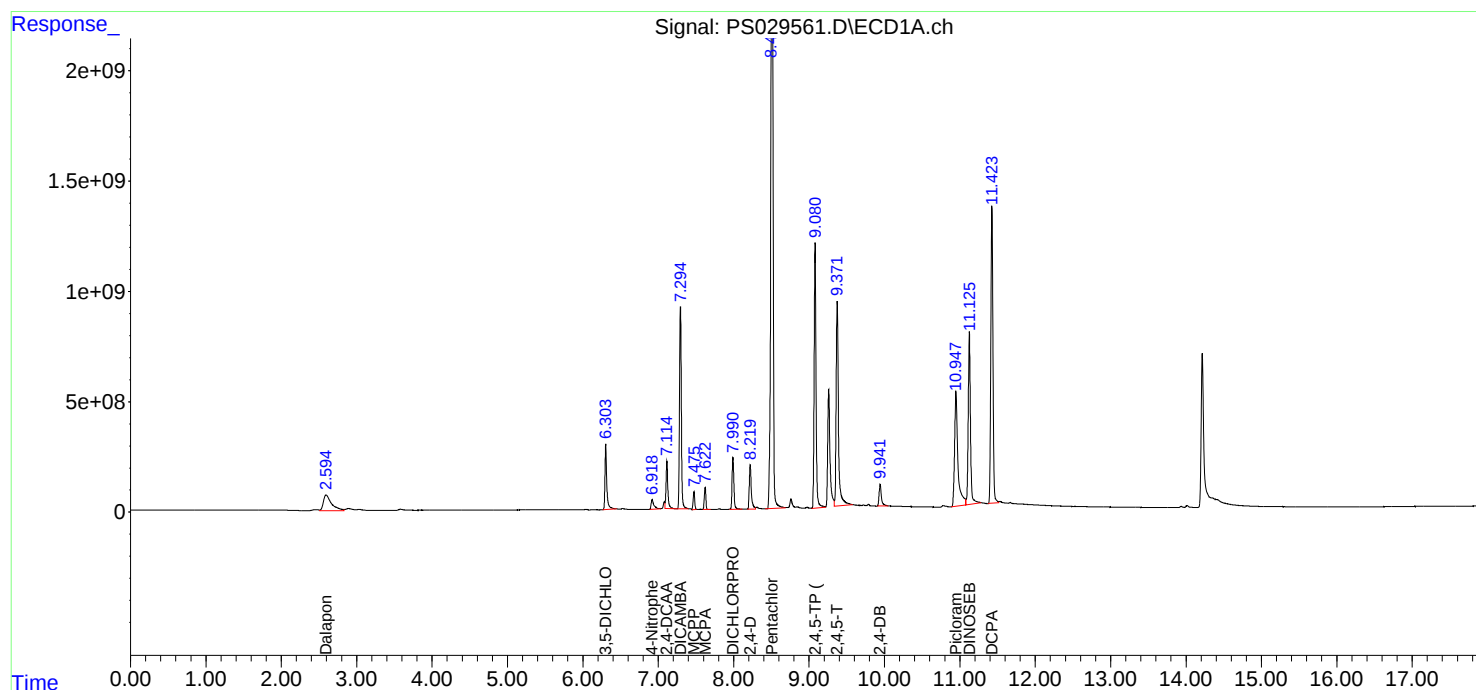
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
Data File : PS029561.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 27 Mar 2025 11:25
Operator : AR\AJ
Sample : HSTDICC1000
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 27 12:23:12 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
Quant Title : 8080.M
QLast Update : Thu Mar 27 12:21:09 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



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
 Data File : PS029562.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 27 Mar 2025 11:49
 Operator : AR\AJ
 Sample : HSTDICC1500
 Misc :
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDICC1500

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Mar 27 12:24:19 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
 Quant Title : 8080.M
 QLast Update : Thu Mar 27 12:21:09 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	7.113	7.536	5278.9E6	1247.9E6	1346.555	1432.461
Target Compounds							
1) T	Dalapon	2.595	2.611	7658.8E6	2640.4E6	1274.793	1251.821
2) T	3,5-DICHL...	6.303	6.525	7334.7E6	1661.2E6	1257.823	1337.027
3) T	4-Nitroph...	6.915	7.072	1637.4E6	1073.4E6	1589.575	1319.924
5) T	DICAMBA	7.294	7.726	20550.7E6	6813.3E6	1270.724	1428.978
6) T	MCPD	7.479	7.838	1742.4E6	300.6E6	156.417	146.282
7) T	MCPA	7.627	8.075	2143.5E6	413.4E6	151.631	144.947
8) T	DICHLORPROP	7.990	8.428	5676.5E6	1671.4E6	1266.079	1325.826
9) T	2,4-D	8.219	8.748	5531.6E6	1855.7E6	1361.993	1346.230
10) T	Pentachlo...	8.519	9.257	59284.6E6	29846.9E6	928.146	1326.112 #
11) T	2,4,5-TP ...	9.081	9.633	30361.1E6	12276.3E6	1276.088	1382.899
12) T	2,4,5-T	9.371	10.042	28231.6E6	11163.1E6	1357.616	1394.543
13) T	2,4-DB	9.940	10.601	3033.4E6	1213.8E6	1635.693	1297.208
14) T	DINOSEB	11.126	10.974	23014.1E6	8223.2E6	1272.750	1381.612
15) T	Picloram	10.946	12.035	23966.2E6	18348.9E6	1738.281	1482.604
16) T	DCPA	11.425	12.002	37044.4E6	15761.3E6	1251.188	1397.471

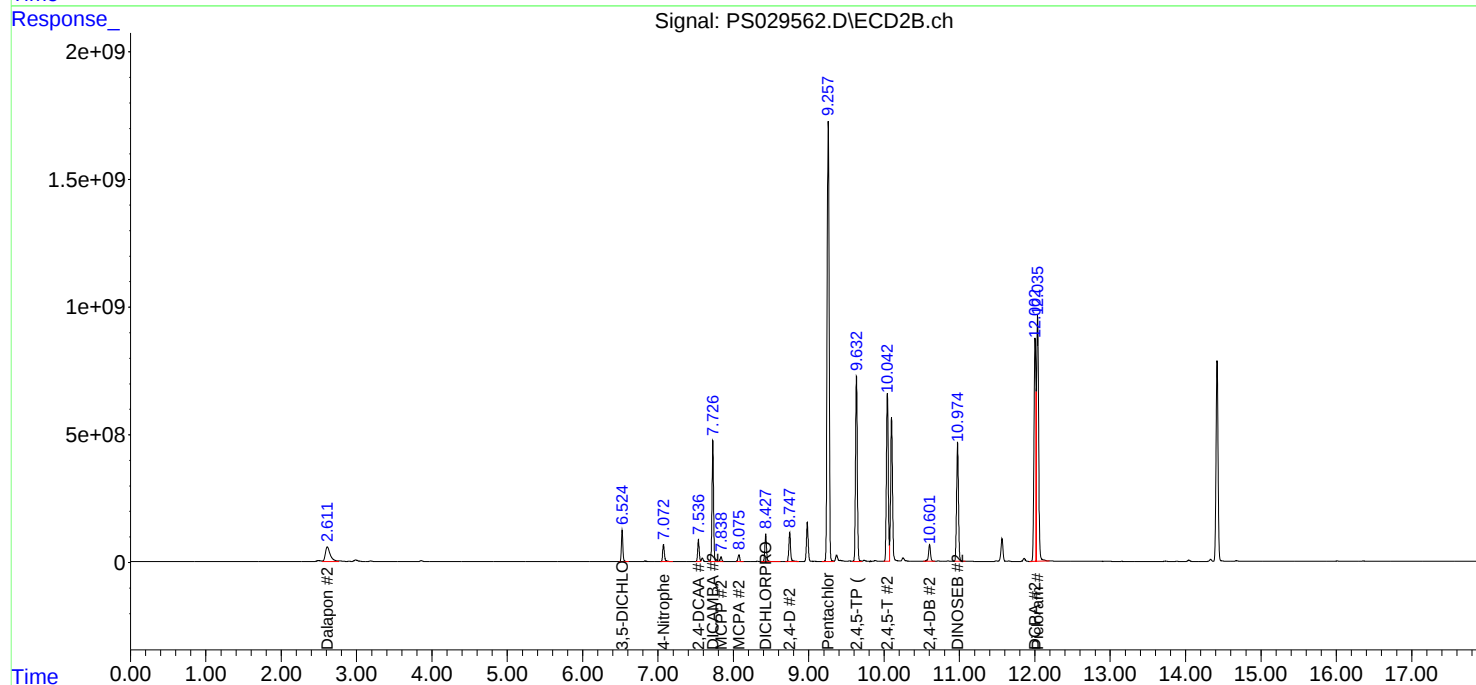
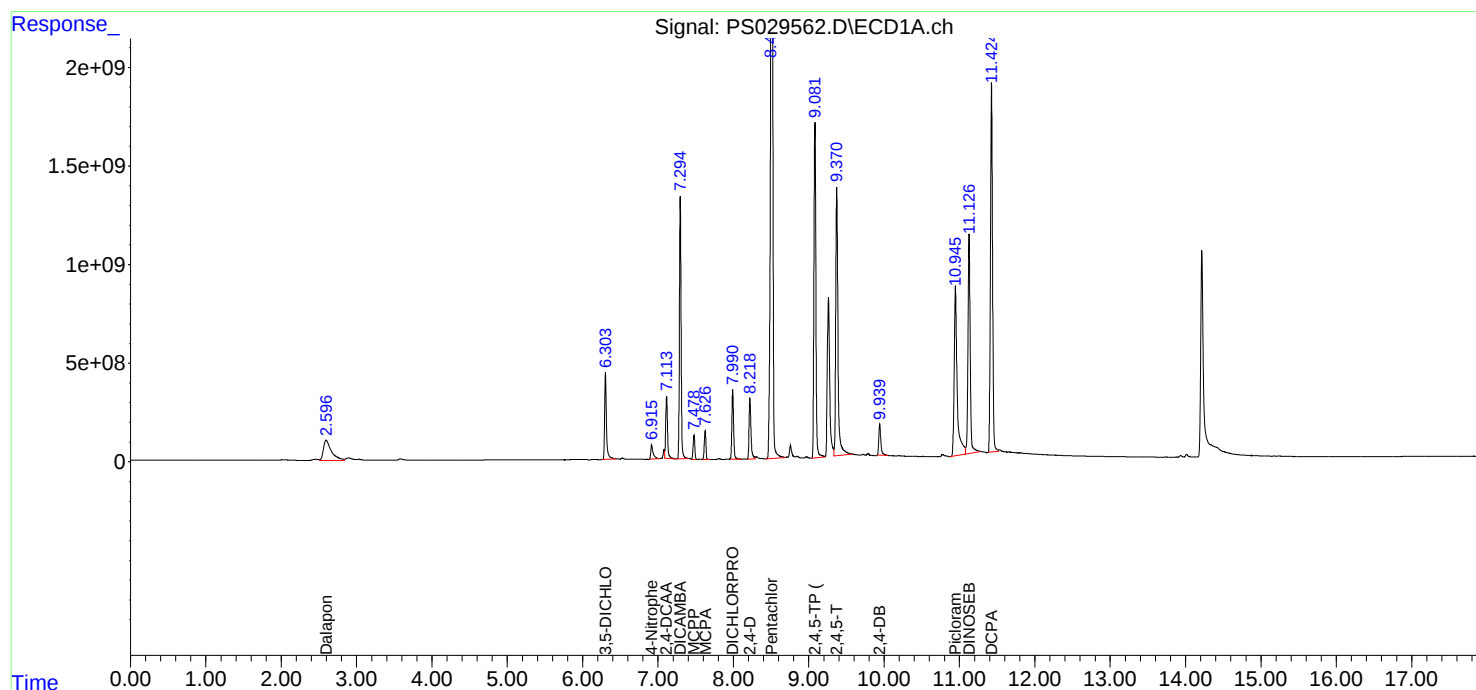
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
Data File : PS029562.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 27 Mar 2025 11:49
Operator : AR\AJ
Sample : HSTDICC1500
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 27 12:24:19 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
Quant Title : 8080.M
QLast Update : Thu Mar 27 12:21:09 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



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
 Data File : PS029563.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 27 Mar 2025 12:25
 Operator : AR\AJ
 Sample : HSTDICV750
 Misc :
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 ICVPS032825

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Mar 27 12:59:14 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
 Quant Title : 8080.M
 QLast Update : Thu Mar 27 12:24:58 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	7.117	7.532	2742.1E6	623.0E6	714.072	721.630
Target Compounds							
1) T	Dalapon	2.596	2.605	4160.9E6	1375.6E6	701.847	663.177
2) T	3,5-DICHL...	6.306	6.521	3847.1E6	835.6E6	672.971	678.194
3) T	4-Nitroph...	6.923	7.069	724.6E6	531.7E6	680.991	658.136
5) T	DICAMBA	7.297	7.722	10777.1E6	3281.4E6	679.820	686.373
6) T	MCP	7.476	7.829	794.2E6	142.0E6	69.773	68.596
7) T	MCPA	7.622	8.064	983.1E6	194.4E6	68.361	67.637
8) T	DICHLORPROP	7.994	8.424	2940.7E6	848.2E6	669.573	680.956
9) T	2,4-D	8.223	8.743	2729.6E6	928.5E6	676.687	679.718
10) T	Pentachlo...	8.514	9.253	43822.3E6	15690.2E6	737.501	706.933
11) T	2,4,5-TP ...	9.084	9.629	16181.9E6	6213.3E6	694.649	704.077
12) T	2,4,5-T	9.376	10.039	14251.0E6	5621.3E6	691.852	705.251
13) T	2,4-DB	9.946	10.597	1333.3E6	638.3E6	698.308	694.620
14) T	DINOSEB	11.130	10.971	12081.2E6	4101.0E6	681.393	691.818
15) T	Picloram	10.955	12.032	9910.6E6	8883.0E6	688.547	711.997
16) T	DCPA	11.428	11.998	20170.9E6	8056.3E6	699.629	718.558

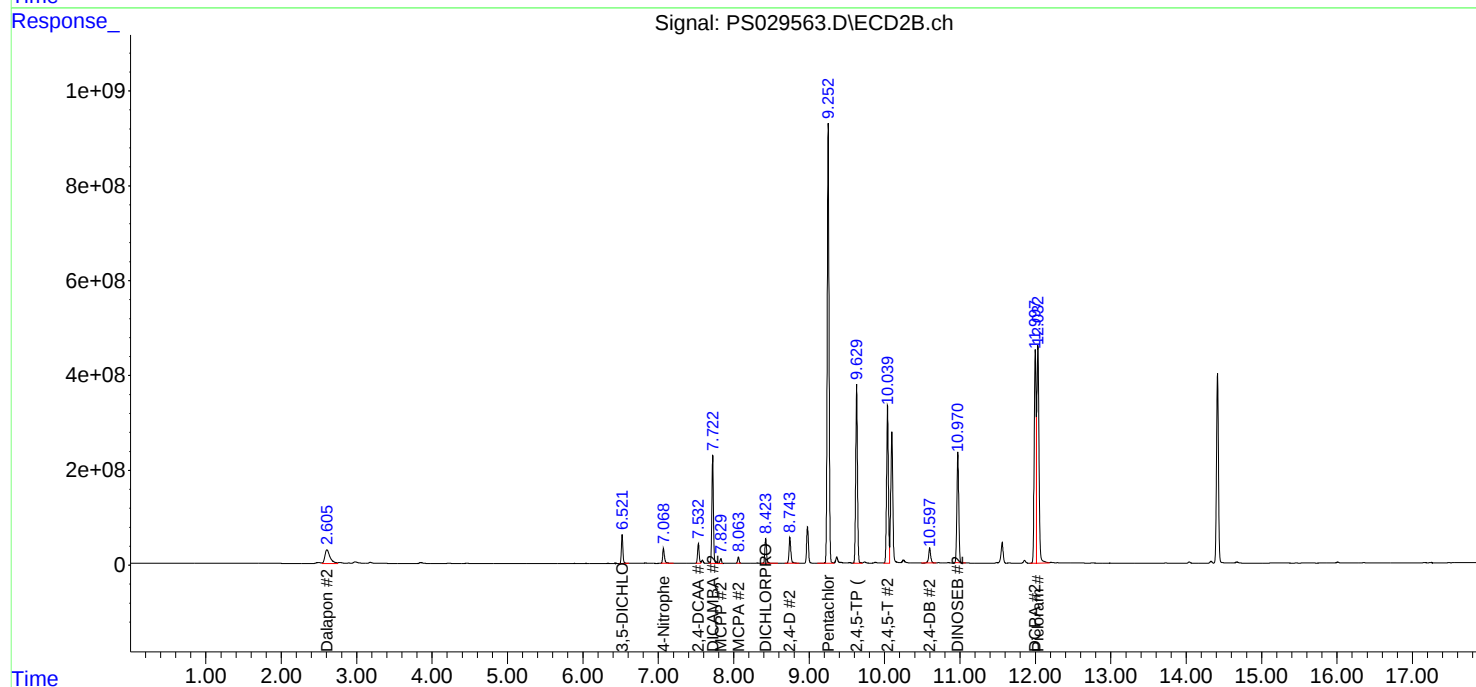
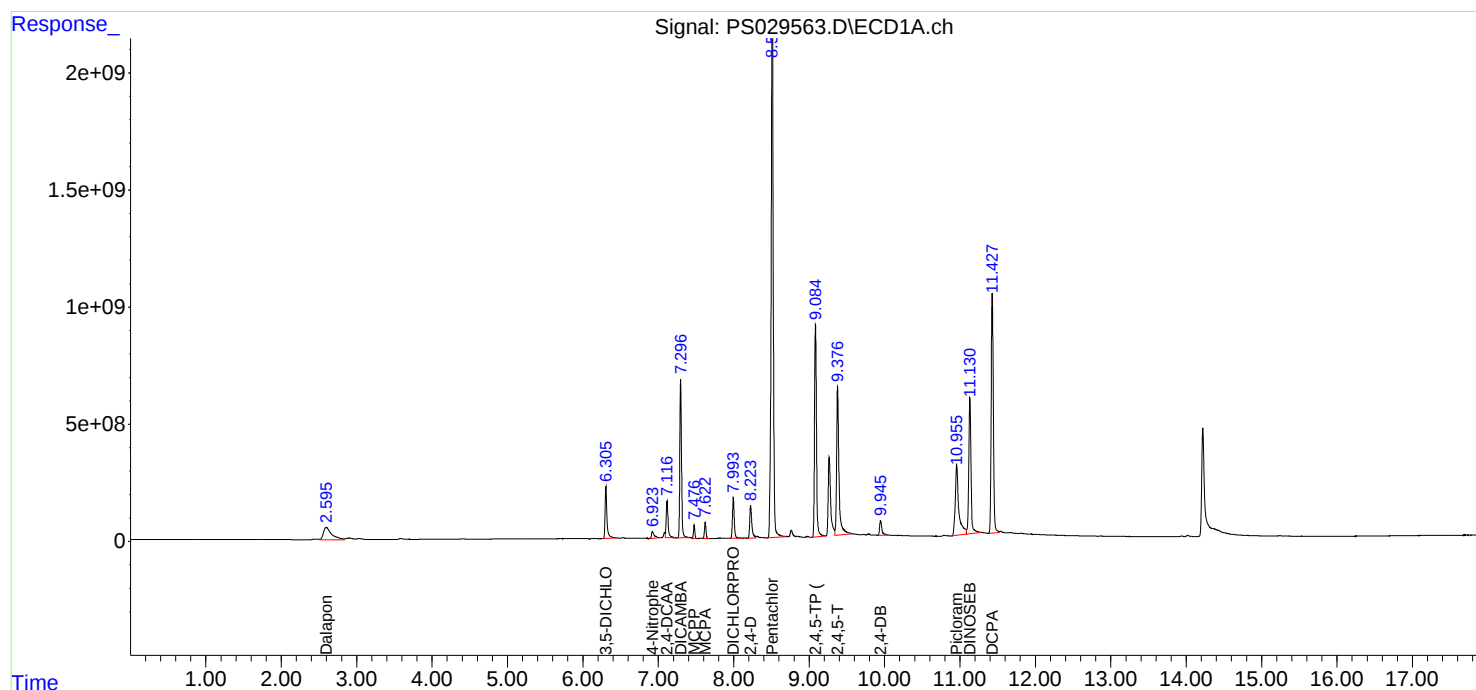
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
Data File : PS029563.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 27 Mar 2025 12:25
Operator : AR\AJ
Sample : HSTDICV750
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
ICVPS032825

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 27 12:59:14 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
Quant Title : 8080.M
QLast Update : Thu Mar 27 12:24:58 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





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Fax : 908 789 8922

CALIBRATION VERIFICATION SUMMARY

Contract: TULL02

Lab Code: CHEM Case No.: Q1627 SAS No.: Q1627 SDG NO.: Q1627

Continuing Calib Date: 03/27/2025 Initial Calibration Date(s): 03/27/2025 03/27/2025

Continuing Calib Time: 18:02 Initial Calibration Time(s): 10:13 11:49

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
2,4-DCAA	7.12	7.12	7.02	7.22	0.01
2,4-D	8.22	8.22	8.12	8.32	0.00
2,4,5-TP(Silvex)	9.08	9.08	8.98	9.18	0.00



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CALIBRATION VERIFICATION SUMMARY

Contract: TULL02

Lab Code: CHEM Case No.: Q1627 SAS No.: Q1627 SDG NO.: Q1627

Continuing Calib Date: 03/27/2025 Initial Calibration Date(s): 03/27/2025 03/27/2025

Continuing Calib Time: 18:02 Initial Calibration Time(s): 10:13 11:49

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
2,4-DCAA	7.54	7.54	7.44	7.64	0.01
2,4-D	8.75	8.75	8.65	8.85	0.00
2,4,5-TP(Silvex)	9.63	9.63	9.53	9.73	0.00



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CALIBRATION VERIFICATION SUMMARY

Contract: TULL02

Lab Code: CHEM Case No.: Q1627 SAS No.: Q1627 SDG NO.: Q1627

GC Column: RTX-CLP ID: 0.32 (mm) Initi. Calib. Date(s): 03/27/2025 03/27/2025

Client Sample No.: CCAL01 Date Analyzed: 03/27/2025

Lab Sample No.: HSTDCCC750 Data File : PS029576.D Time Analyzed: 18:02

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-TP(Silvex)	9.082	8.982	9.182	700.560	712.500	-1.7
2,4-D	8.221	8.122	8.322	712.890	705.000	1.1
2,4-DCAA	7.115	7.015	7.215	723.930	750.000	-3.5



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CALIBRATION VERIFICATION SUMMARY

Contract: TULL02

Lab Code: CHEM Case No.: Q1627 SAS No.: Q1627 SDG NO.: Q1627

GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 03/27/2025 03/27/2025

Client Sample No.: CCAL01 Date Analyzed: 03/27/2025

Lab Sample No.: HSTDCCC750 Data File : PS029576.D Time Analyzed: 18:02

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-TP(Silvex)	9.631	9.534	9.734	710.800	712.500	-0.2
2,4-D	8.746	8.648	8.848	691.910	705.000	-1.9
2,4-DCAA	7.535	7.437	7.637	732.800	750.000	-2.3

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
 Data File : PS029576.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 27 Mar 2025 18:02
 Operator : AR\AJ
 Sample : HSTDCCC750
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDCCC750

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Mar 28 03:22:00 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
 Quant Title : 8080.M
 QLast Update : Thu Mar 27 12:24:58 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	7.115	7.535	2780.0E6	632.6E6	723.930	732.798
Target Compounds							
1) T	Dalapon	2.596	2.604	4037.1E6	1368.1E6	680.963	659.559
2) T	3,5-DICHL...	6.304	6.524	3905.8E6	843.7E6	683.239	684.761
3) T	4-Nitroph...	6.920	7.072	792.2E6	544.1E6	744.550m	673.580
5) T	DICAMBA	7.295	7.725	10776.2E6	3361.8E6	679.763	703.193
6) T	MCP	7.475	7.831	802.9E6	147.4E6	70.530	71.209
7) T	MCPA	7.621	8.066	1005.7E6	199.9E6	69.926	69.535
8) T	DICHLORPROP	7.991	8.426	2986.2E6	842.5E6	679.932	676.417
9) T	2,4-D	8.221	8.746	2875.6E6	945.1E6	712.892	691.913
10) T	Pentachlo...	8.510	9.255	43716.2E6	15883.2E6	735.715	715.629
11) T	2,4,5-TP ...	9.082	9.631	16319.5E6	6272.6E6	700.556	710.799
12) T	2,4,5-T	9.373	10.041	15076.3E6	5660.8E6	731.921	710.207
13) T	2,4-DB	9.943	10.600	1506.0E6	590.4E6	788.771	642.462
14) T	DINOSEB	11.127	10.972	12212.5E6	4141.0E6	688.798	698.561m
15) T	Picloram	10.951	12.034	11780.1E6	8925.9E6	818.431	715.434
16) T	DCPA	11.425	11.999	20364.1E6	8112.5E6	706.327	723.565

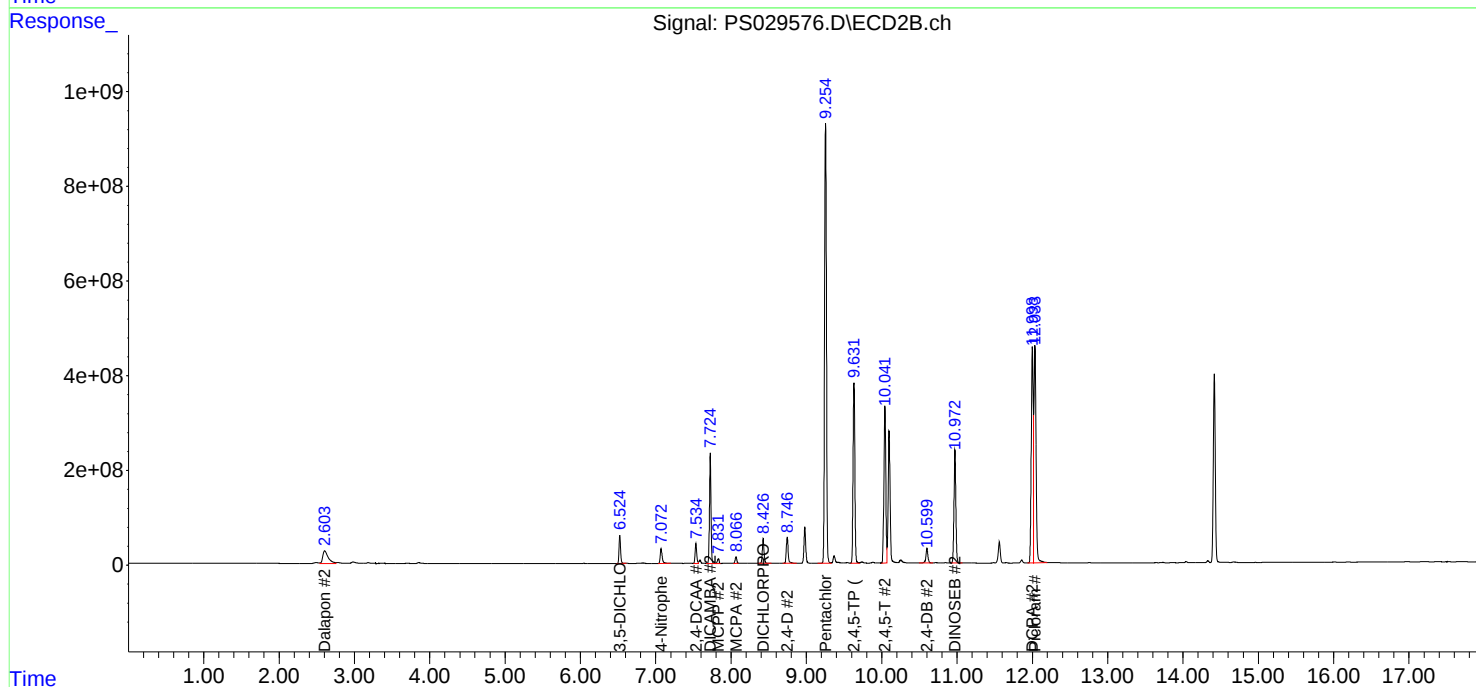
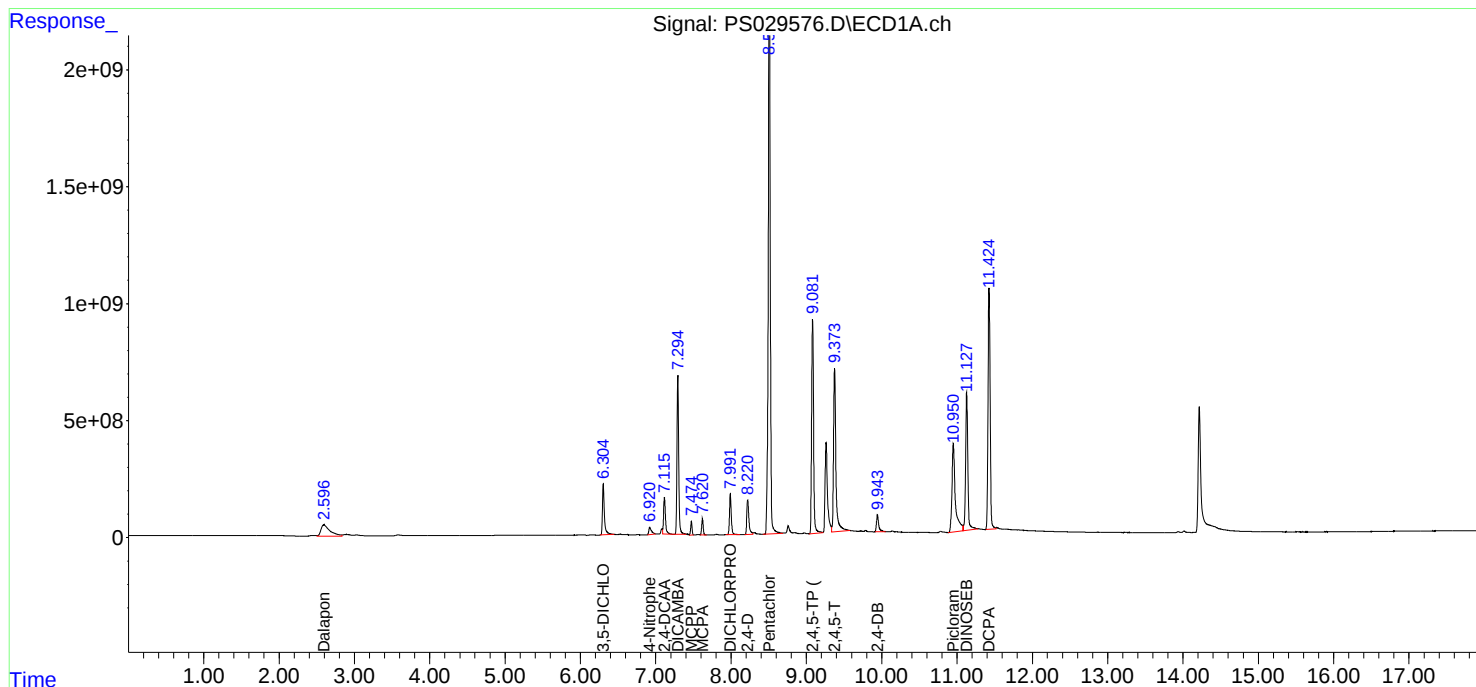
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
Data File : PS029576.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 27 Mar 2025 18:02
Operator : AR\AJ
Sample : HSTDCCC750
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 03:22:00 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
Quant Title : 8080.M
QLast Update : Thu Mar 27 12:24:58 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





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CALIBRATION VERIFICATION SUMMARY

Contract: TULL02

Lab Code: CHEM Case No.: Q1627 SAS No.: Q1627 SDG NO.: Q1627

Continuing Calib Date: 03/27/2025 Initial Calibration Date(s): 03/27/2025 03/27/2025

Continuing Calib Time: 22:51 Initial Calibration Time(s): 10:13 11:49

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
2,4-DCAA	7.11	7.12	7.02	7.22	0.01
2,4-D	8.22	8.22	8.12	8.32	0.00
2,4,5-TP(Silvex)	9.08	9.08	8.98	9.18	0.00



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CALIBRATION VERIFICATION SUMMARY

Contract: TULL02

Lab Code: CHEM Case No.: Q1627 SAS No.: Q1627 SDG NO.: Q1627

Continuing Calib Date: 03/27/2025 Initial Calibration Date(s): 03/27/2025 03/27/2025

Continuing Calib Time: 22:51 Initial Calibration Time(s): 10:13 11:49

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
2,4-DCAA	7.53	7.54	7.44	7.64	0.01
2,4-D	8.75	8.75	8.65	8.85	0.01
2,4,5-TP(Silvex)	9.63	9.63	9.53	9.73	0.00



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CALIBRATION VERIFICATION SUMMARY

Contract: TULL02

Lab Code: CHEM Case No.: Q1627 SAS No.: Q1627 SDG NO.: Q1627

GC Column: RTX-CLP ID: 0.32 (mm) Initi. Calib. Date(s): 03/27/2025 03/27/2025

Client Sample No.: CCAL02 Date Analyzed: 03/27/2025

Lab Sample No.: HSTDCCC750 Data File : PS029588.D Time Analyzed: 22:51

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-TP(Silvex)	9.080	8.982	9.182	718.400	712.500	0.8
2,4-D	8.220	8.122	8.322	741.930	705.000	5.2
2,4-DCAA	7.114	7.015	7.215	743.510	750.000	-0.9



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CALIBRATION VERIFICATION SUMMARY

Contract: TULL02

Lab Code: CHEM Case No.: Q1627 SAS No.: Q1627 SDG NO.: Q1627

GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 03/27/2025 03/27/2025

Client Sample No.: CCAL02 Date Analyzed: 03/27/2025

Lab Sample No.: HSTDCCC750 Data File : PS029588.D Time Analyzed: 22:51

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-TP(Silvex)	9.630	9.534	9.734	728.840	712.500	2.3
2,4-D	8.745	8.648	8.848	714.600	705.000	1.4
2,4-DCAA	7.534	7.437	7.637	753.070	750.000	0.4

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
 Data File : PS029588.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 27 Mar 2025 22:51
 Operator : AR\AJ
 Sample : HSTDCCC750
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDCCC750

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Mar 28 03:24:08 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
 Quant Title : 8080.M
 QLast Update : Thu Mar 27 12:24:58 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	7.114	7.534	2855.1E6	650.1E6	743.506	753.071
Target Compounds							
1) T	Dalapon	2.593	2.605	4052.5E6	1379.7E6	683.564	665.121
2) T	3,5-DICHL...	6.304	6.523	4014.6E6	868.4E6	702.275	704.799
3) T	4-Nitroph...	6.919	7.070	937.6E6	561.4E6	881.247	694.985
5) T	DICAMBA	7.293	7.724	10969.2E6	3458.0E6	691.938	723.307
6) T	MCP	7.474	7.831	822.9E6	150.4E6	72.294	72.659
7) T	MCPA	7.620	8.066	1038.4E6	202.6E6	72.201	70.495
8) T	DICHLORPROP	7.990	8.425	3043.9E6	860.5E6	693.066	690.808
9) T	2,4-D	8.220	8.745	2992.8E6	976.1E6	741.929	714.596
10) T	Pentachlo...	8.510	9.254	44453.7E6	16328.1E6	748.127	735.674
11) T	2,4,5-TP ...	9.080	9.630	16735.2E6	6431.8E6	718.403	728.837
12) T	2,4,5-T	9.371	10.040	15680.7E6	5827.1E6	761.262	731.071
13) T	2,4-DB	9.939	10.598	1543.1E6	604.2E6	808.180m	657.449
14) T	DINOSEB	11.124	10.971	12519.5E6	4192.9E6	706.115	707.317
15) T	Picloram	10.947	12.032	12846.5E6	9254.2E6	892.519	741.752
16) T	DCPA	11.422	11.997	20726.8E6	8317.5E6	718.910	741.856

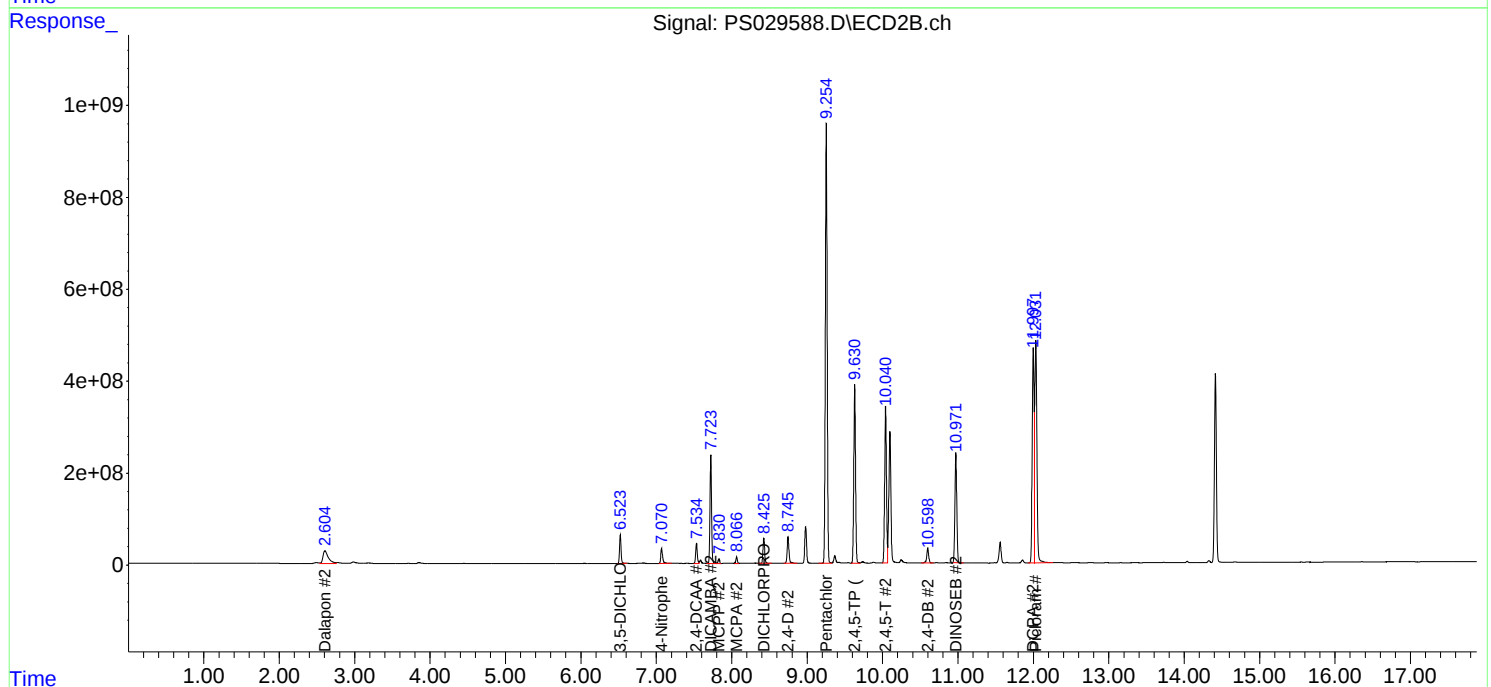
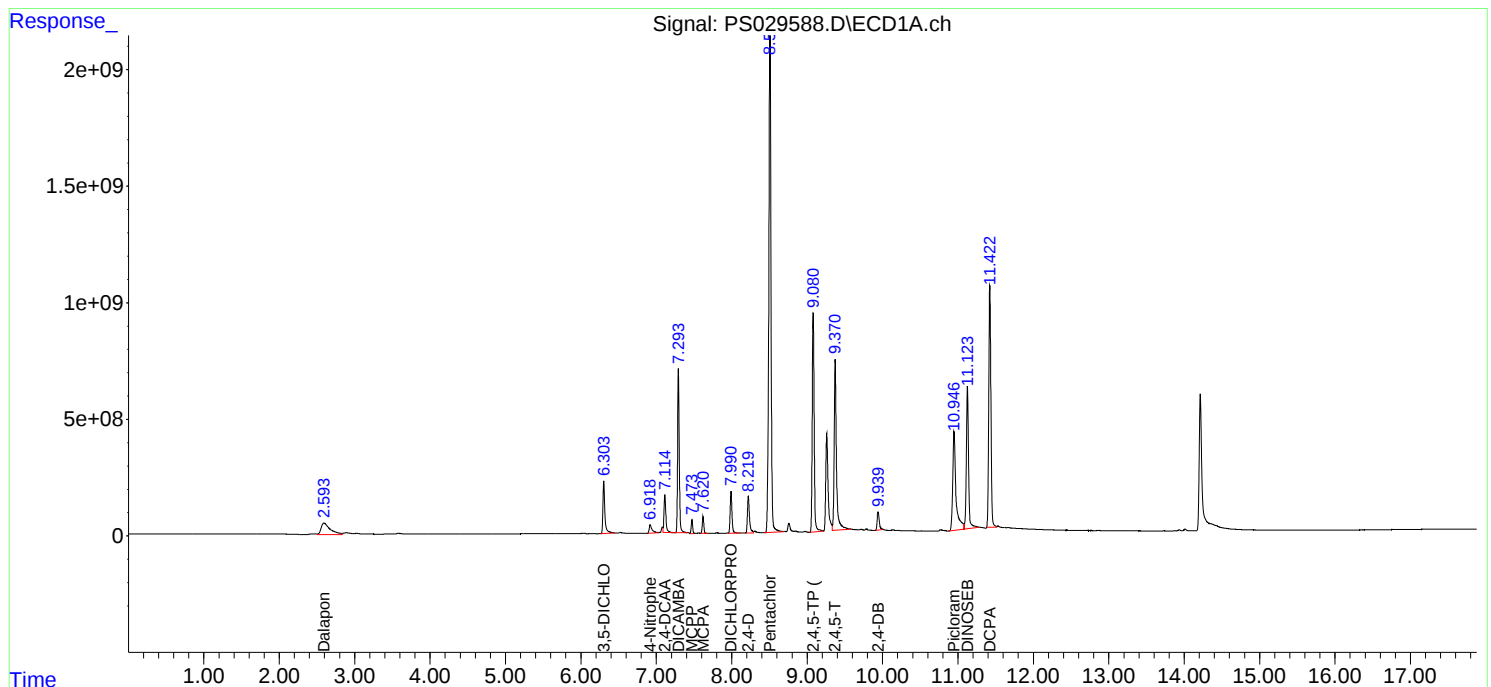
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
Data File : PS029588.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 27 Mar 2025 22:51
Operator : AR\AJ
Sample : HSTDCCC750
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 03:24:08 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
Quant Title : 8080.M
QLast Update : Thu Mar 27 12:24:58 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





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CALIBRATION VERIFICATION SUMMARY

Contract: TULL02

Lab Code: CHEM Case No.: Q1627 SAS No.: Q1627 SDG NO.: Q1627

Continuing Calib Date: 03/28/2025 Initial Calibration Date(s): 03/27/2025 03/27/2025

Continuing Calib Time: 04:27 Initial Calibration Time(s): 10:13 11:49

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
2,4-DCAA	7.12	7.12	7.02	7.22	0.00
2,4-D	8.22	8.22	8.12	8.32	0.00
2,4,5-TP(Silvex)	9.08	9.08	8.98	9.18	0.00



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CALIBRATION VERIFICATION SUMMARY

Contract: TULL02

Lab Code: CHEM Case No.: Q1627 SAS No.: Q1627 SDG NO.: Q1627

Continuing Calib Date: 03/28/2025 Initial Calibration Date(s): 03/27/2025 03/27/2025

Continuing Calib Time: 04:27 Initial Calibration Time(s): 10:13 11:49

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
2,4-DCAA	7.54	7.54	7.44	7.64	0.01
2,4-D	8.75	8.75	8.65	8.85	0.01
2,4,5-TP(Silvex)	9.63	9.63	9.53	9.73	0.00



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CALIBRATION VERIFICATION SUMMARY

Contract: TULL02

Lab Code: CHEM Case No.: Q1627 SAS No.: Q1627 SDG NO.: Q1627

GC Column: RTX-CLP ID: 0.32 (mm) Initi. Calib. Date(s): 03/27/2025 03/27/2025

Client Sample No.: CCAL03 Date Analyzed: 03/28/2025

Lab Sample No.: HSTDCCC750 Data File : PS029600.D Time Analyzed: 04:27

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-TP(Silvex)	9.082	8.982	9.182	707.180	712.500	-0.7
2,4-D	8.221	8.122	8.322	728.240	705.000	3.3
2,4-DCAA	7.116	7.015	7.215	733.820	750.000	-2.2



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CALIBRATION VERIFICATION SUMMARY

Contract: TULL02

Lab Code: CHEM Case No.: Q1627 SAS No.: Q1627 SDG NO.: Q1627

GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 03/27/2025 03/27/2025

Client Sample No.: CCAL03 Date Analyzed: 03/28/2025

Lab Sample No.: HSTDCCC750 Data File : PS029600.D Time Analyzed: 04:27

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-TP(Silvex)	9.630	9.534	9.734	710.210	712.500	-0.3
2,4-D	8.745	8.648	8.848	692.900	705.000	-1.7
2,4-DCAA	7.535	7.437	7.637	732.700	750.000	-2.3

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
 Data File : PS029600.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 28 Mar 2025 04:27
 Operator : AR\AJ
 Sample : HSTDCCC750
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDCCC750

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Mar 28 07:22:09 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
 Quant Title : 8080.M
 QLast Update : Thu Mar 27 12:24:58 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	7.116	7.535	2817.9E6	632.5E6	733.816	732.699
Target Compounds							
1) T	Dalapon	2.596	2.606	3964.5E6	1424.0E6	668.718	686.480
2) T	3,5-DICHL...	6.305	6.524	3967.2E6	844.9E6	693.978	685.704
3) T	4-Nitroph...	6.921	7.071	911.3E6	541.8E6	856.472	670.733
5) T	DICAMBA	7.295	7.724	10837.0E6	3361.6E6	683.594	703.146
6) T	MCP	7.474	7.831	808.0E6	147.3E6	70.979	71.156
7) T	MCPA	7.621	8.066	1016.0E6	197.2E6	70.641	68.608
8) T	DICHLORPROP	7.992	8.426	3018.2E6	838.0E6	687.215	672.739
9) T	2,4-D	8.221	8.745	2937.5E6	946.5E6	728.238	692.902
10) T	Pentachlo...	8.511	9.255	43727.5E6	15895.7E6	735.905	716.193
11) T	2,4,5-TP ...	9.082	9.630	16473.8E6	6267.4E6	707.179	710.212
12) T	2,4,5-T	9.373	10.040	15477.0E6	5637.7E6	751.372	707.301
13) T	2,4-DB	9.942	10.598	1563.7E6	586.0E6	818.973m	637.692
14) T	DINOSEB	11.127	10.971	11971.0E6	3997.0E6	675.180	674.273m
15) T	Picloram	10.950	12.032	12609.6E6	8858.0E6	876.059	709.990
16) T	DCPA	11.424	11.998	20384.1E6	8069.1E6	707.021	719.696

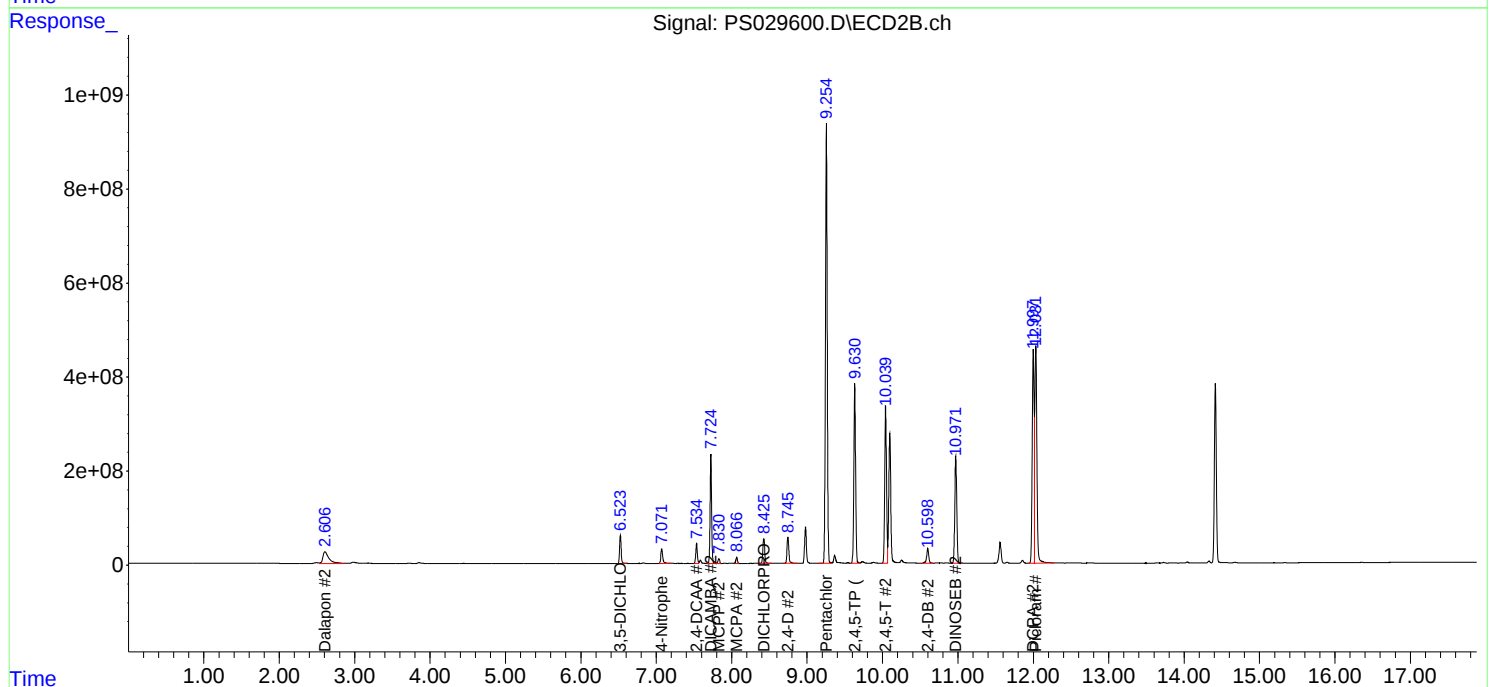
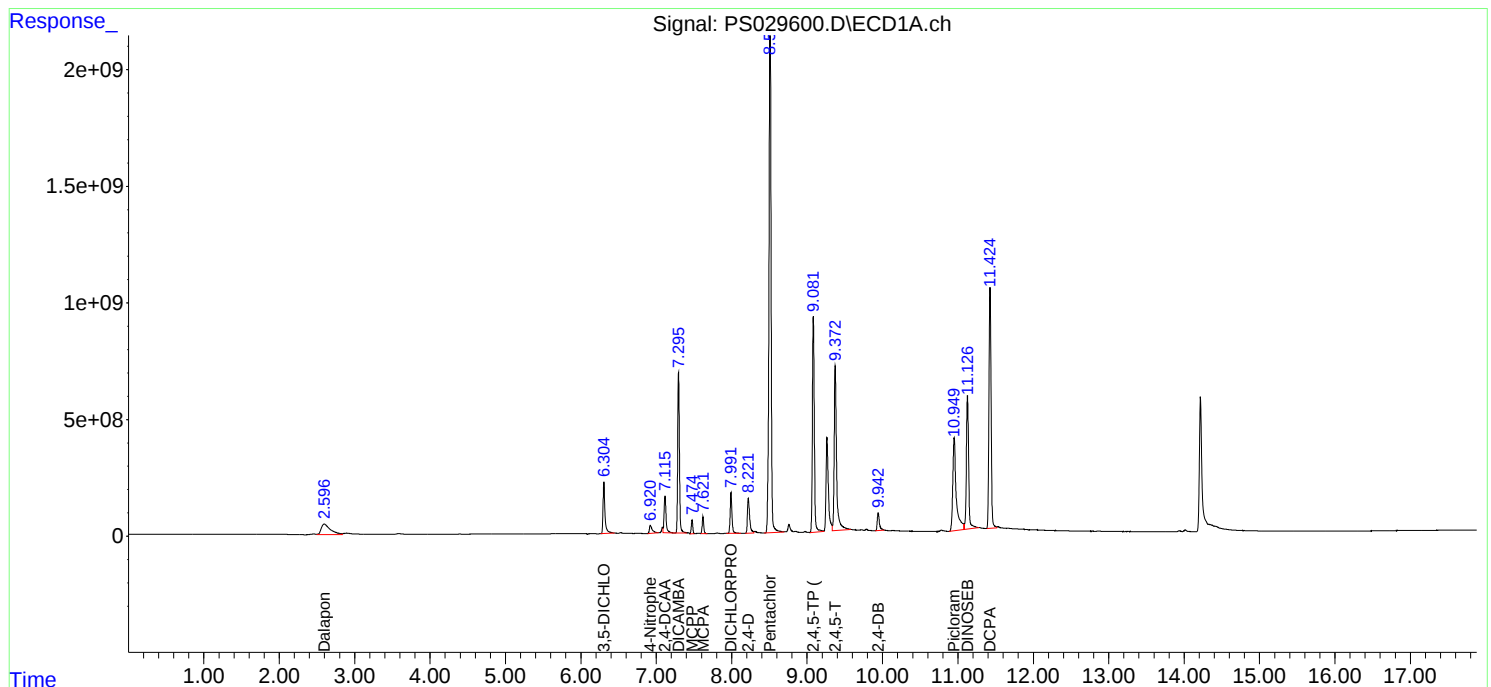
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
Data File : PS029600.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Mar 2025 04:27
Operator : AR\AJ
Sample : HSTDCCC750
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 07:22:09 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
Quant Title : 8080.M
QLast Update : Thu Mar 27 12:24:58 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





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

CALIBRATION VERIFICATION SUMMARY

Contract: TULL02

Lab Code: CHEM Case No.: Q1627 SAS No.: Q1627 SDG NO.: Q1627

Continuing Calib Date: 03/28/2025 Initial Calibration Date(s): 03/27/2025 03/27/2025

Continuing Calib Time: 09:15 Initial Calibration Time(s): 10:13 11:49

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
2,4-DCAA	7.11	7.12	7.02	7.22	0.01
2,4-D	8.22	8.22	8.12	8.32	0.00
2,4,5-TP(Silvex)	9.08	9.08	8.98	9.18	0.00



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

CALIBRATION VERIFICATION SUMMARY

Contract: TULL02

Lab Code: CHEM Case No.: Q1627 SAS No.: Q1627 SDG NO.: Q1627

Continuing Calib Date: 03/28/2025 Initial Calibration Date(s): 03/27/2025 03/27/2025

Continuing Calib Time: 09:15 Initial Calibration Time(s): 10:13 11:49

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
2,4-DCAA	7.53	7.54	7.44	7.64	0.01
2,4-D	8.74	8.75	8.65	8.85	0.01
2,4,5-TP(Silvex)	9.63	9.63	9.53	9.73	0.00



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

CALIBRATION VERIFICATION SUMMARY

Contract: TULL02

Lab Code: CHEM Case No.: Q1627 SAS No.: Q1627 SDG NO.: Q1627

GC Column: RTX-CLP ID: 0.32 (mm) Initi. Calib. Date(s): 03/27/2025 03/27/2025

Client Sample No.: CCAL04 Date Analyzed: 03/28/2025

Lab Sample No.: HSTDCCC750 Data File : PS029612.D Time Analyzed: 09:15

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-TP(Silvex)	9.081	8.982	9.182	742.110	712.500	4.2
2,4-D	8.220	8.122	8.322	764.850	705.000	8.5
2,4-DCAA	7.114	7.015	7.215	761.470	750.000	1.5



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

CALIBRATION VERIFICATION SUMMARY

Contract: TULL02

Lab Code: CHEM Case No.: Q1627 SAS No.: Q1627 SDG NO.: Q1627

GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 03/27/2025 03/27/2025

Client Sample No.: CCAL04 Date Analyzed: 03/28/2025

Lab Sample No.: HSTDCCC750 Data File : PS029612.D Time Analyzed: 09:15

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-TP(Silvex)	9.628	9.534	9.734	747.960	712.500	5.0
2,4-D	8.744	8.648	8.848	727.670	705.000	3.2
2,4-DCAA	7.533	7.437	7.637	767.240	750.000	2.3

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
 Data File : PS029612.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 28 Mar 2025 09:15
 Operator : AR\AJ
 Sample : HSTDCCC750
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDCCC750

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Mar 28 09:43:39 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
 Quant Title : 8080.M
 QLast Update : Thu Mar 27 12:24:58 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	7.114	7.533	2924.1E6	662.4E6	761.473	767.244
Target Compounds							
1) T	Dalapon	2.592	2.608	4133.8E6	1407.4E6	697.277	678.507
2) T	3,5-DICHL...	6.303	6.522	4135.7E6	889.7E6	723.463	722.096
3) T	4-Nitroph...	6.919	7.069	958.3E6	577.8E6	900.689	715.274
5) T	DICAMBA	7.293	7.722	11307.3E6	3545.6E6	713.266	741.645
6) T	MCPD	7.474	7.829	854.7E6	154.3E6	75.085	74.537
7) T	MCPA	7.620	8.065	1079.6E6	208.7E6	75.065	72.608
8) T	DICHLORPROP	7.990	8.424	3157.6E6	888.1E6	718.944	713.012
9) T	2,4-D	8.220	8.744	3085.3E6	994.0E6	764.855	727.671
10) T	Pentachlo...	8.512	9.252	45322.1E6	16723.5E6	762.741	753.490
11) T	2,4,5-TP ...	9.081	9.628	17287.4E6	6600.6E6	742.108	747.965
12) T	2,4,5-T	9.372	10.038	16183.9E6	5970.8E6	785.693	749.101
13) T	2,4-DB	9.940	10.596	1632.5E6	609.6E6	855.012m	663.414
14) T	DINOSEB	11.126	10.969	12998.8E6	4372.0E6	733.149	737.537m
15) T	Picloram	10.948	12.029	13153.6E6	9442.6E6	913.860	756.848
16) T	DCPA	11.424	11.995	21320.1E6	8497.0E6	739.487	757.865

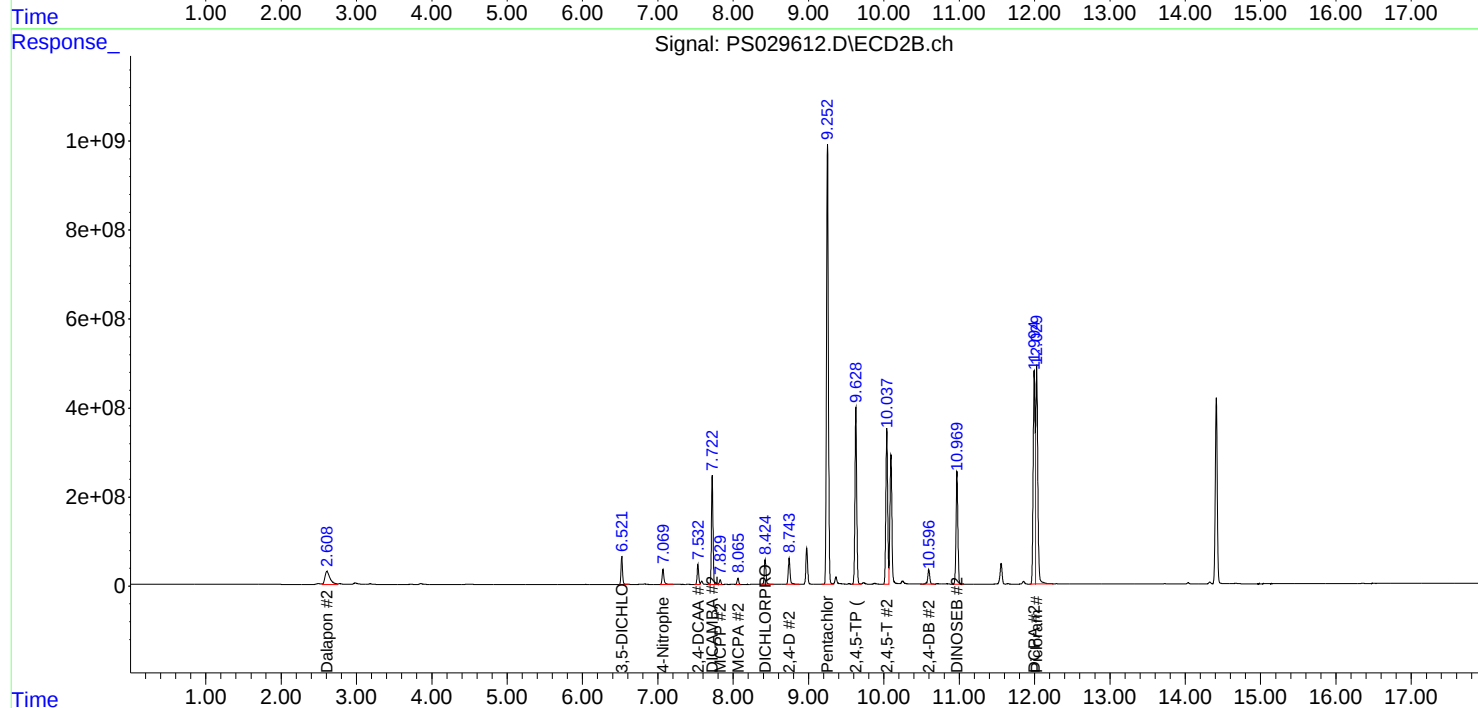
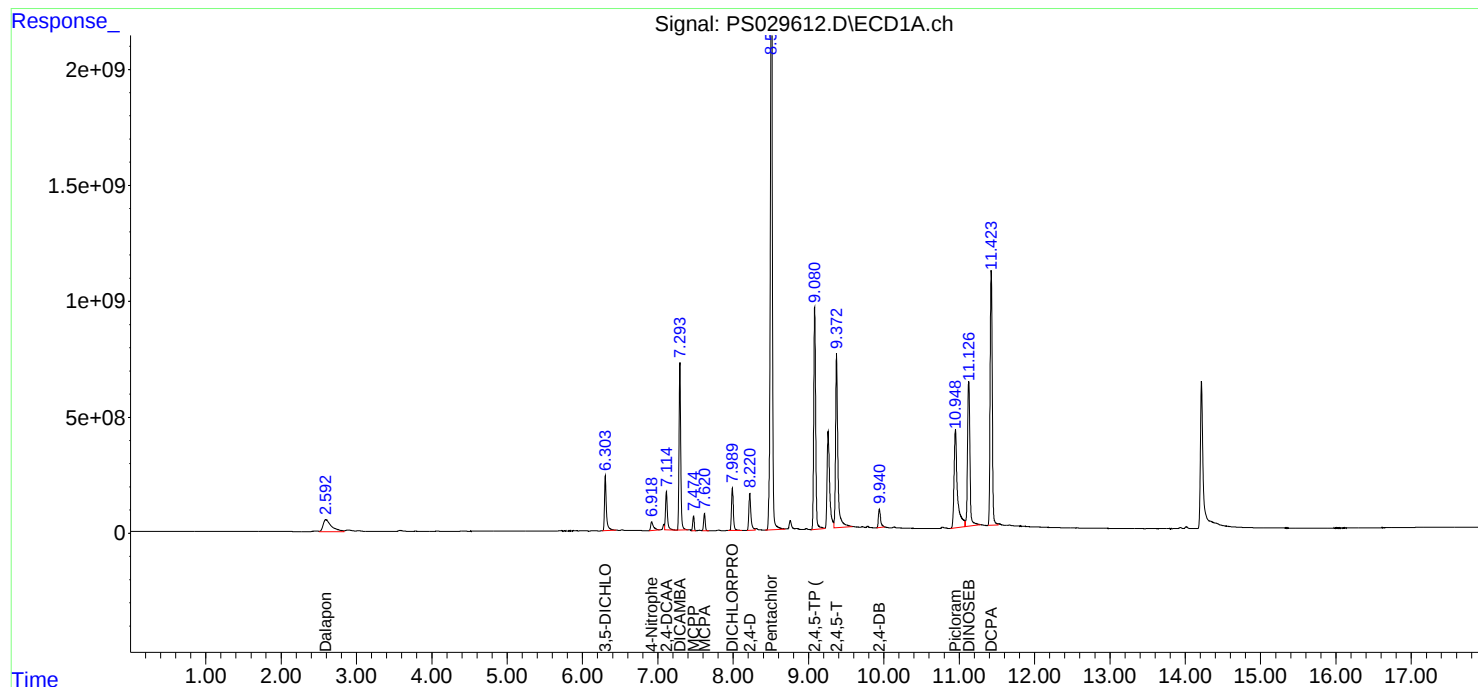
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
Data File : PS029612.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Mar 2025 09:15
Operator : AR\AJ
Sample : HSTDCCC750
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 09:43:39 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
Quant Title : 8080.M
QLast Update : Thu Mar 27 12:24:58 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



Analytical Sequence

Client: Tully Construction Co., Inc.	SDG No.: Q1627
Project: DOT Harper Street Yard - North Side	Instrument ID: ECD_S
GC Column: RTX-CLP	ID: 0.32 (mm) Inst. Calib. Date(s): 03/27/2025 03/27/2025

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	03/27/2025	09:49	PS029557.D	7.12	0.00
HSTDICC200	HSTDICC200	03/27/2025	10:13	PS029558.D	7.12	0.00
HSTDICC500	HSTDICC500	03/27/2025	10:37	PS029559.D	7.12	0.00
HSTDICC750	HSTDICC750	03/27/2025	11:01	PS029560.D	7.12	0.00
HSTDICC1000	HSTDICC1000	03/27/2025	11:25	PS029561.D	7.11	0.00
HSTDICC1500	HSTDICC1500	03/27/2025	11:49	PS029562.D	7.11	0.00
IBLK	IBLK	03/27/2025	17:14	PS029575.D	7.12	0.00
HSTDCCC750	HSTDCCC750	03/27/2025	18:02	PS029576.D	7.12	0.00
WC-SCRN-01-CMS	Q1609-03MS	03/27/2025	18:26	PS029577.D	7.11	0.00
WC-SCRN-01-CMSD	Q1609-03MSD	03/27/2025	18:50	PS029578.D	7.11	0.00
IBLK	IBLK	03/27/2025	22:26	PS029587.D	7.11	0.00
HSTDCCC750	HSTDCCC750	03/27/2025	22:51	PS029588.D	7.11	0.00
GRID-LINE-1.2-NORTH	Q1627-01	03/28/2025	00:51	PS029592.D	7.11	0.00
PB167312BL	PB167312BL	03/28/2025	02:51	PS029597.D	7.11	0.00
IBLK	IBLK	03/28/2025	03:39	PS029599.D	7.12	0.00
HSTDCCC750	HSTDCCC750	03/28/2025	04:27	PS029600.D	7.12	0.00
PB167312BS	PB167312BS	03/28/2025	04:51	PS029601.D	7.12	0.00
PB167275TB	PB167275TB	03/28/2025	05:15	PS029602.D	7.12	0.00
IBLK	IBLK	03/28/2025	08:51	PS029611.D	7.12	0.00
HSTDCCC750	HSTDCCC750	03/28/2025	09:15	PS029612.D	7.11	0.00

Analytical Sequence

Client: Tully Construction Co., Inc.	SDG No.: Q1627
Project: DOT Harper Street Yard - North Side	Instrument ID: ECD_S
GC Column: RTX-CLP2	ID: 0.32 (mm) Inst. Calib. Date(s): 03/27/2025 03/27/2025

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	03/27/2025	09:49	PS029557.D	7.54	0.00
HSTDICC200	HSTDICC200	03/27/2025	10:13	PS029558.D	7.54	0.00
HSTDICC500	HSTDICC500	03/27/2025	10:37	PS029559.D	7.54	0.00
HSTDICC750	HSTDICC750	03/27/2025	11:01	PS029560.D	7.54	0.00
HSTDICC1000	HSTDICC1000	03/27/2025	11:25	PS029561.D	7.54	0.00
HSTDICC1500	HSTDICC1500	03/27/2025	11:49	PS029562.D	7.54	0.00
IBLK	IBLK	03/27/2025	17:14	PS029575.D	7.54	0.00
HSTDCCC750	HSTDCCC750	03/27/2025	18:02	PS029576.D	7.54	0.00
WC-SCRN-01-CMS	Q1609-03MS	03/27/2025	18:26	PS029577.D	7.53	0.00
WC-SCRN-01-CMSD	Q1609-03MSD	03/27/2025	18:50	PS029578.D	7.53	0.00
IBLK	IBLK	03/27/2025	22:26	PS029587.D	7.54	0.00
HSTDCCC750	HSTDCCC750	03/27/2025	22:51	PS029588.D	7.53	0.00
GRID-LINE-1.2-NORTH	Q1627-01	03/28/2025	00:51	PS029592.D	7.53	0.00
PB167312BL	PB167312BL	03/28/2025	02:51	PS029597.D	7.53	0.00
IBLK	IBLK	03/28/2025	03:39	PS029599.D	7.54	0.00
HSTDCCC750	HSTDCCC750	03/28/2025	04:27	PS029600.D	7.54	0.00
PB167312BS	PB167312BS	03/28/2025	04:51	PS029601.D	7.54	0.00
PB167275TB	PB167275TB	03/28/2025	05:15	PS029602.D	7.53	0.00
IBLK	IBLK	03/28/2025	08:51	PS029611.D	7.53	0.00
HSTDCCC750	HSTDCCC750	03/28/2025	09:15	PS029612.D	7.53	0.00

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

PB167312BS

Contract: TULL02

Lab Code: CHEM **Case No.:** Q1627

SAS No.: Q1627

SDG NO.: Q1627

Lab Sample ID: PB167312BS

Date(s) Analyzed: 03/28/2025 03/28/2025

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	8.22	8.17	8.27	5.30	14.1
	2	8.75	8.70	8.80	4.60	
2,4,5-TP(Silvex)	1	9.08	9.03	9.13	5.10	2
	2	9.63	9.58	9.68	5.00	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

WC-SCRN-01-CMS

Contract: TULL02

Lab Code: CHEM **Case No.:** Q1627

SAS No.: Q1627 **SDG NO.:** Q1627

Lab Sample ID: Q1609-03MS

Date(s) Analyzed: 03/27/2025 03/27/2025

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	9.08	9.03	9.13	50.0	2.8
	2	9.63	9.58	9.68	48.6	
2,4-D	1	8.22	8.17	8.27	53.0	11.6
	2	8.75	8.70	8.80	47.2	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

WC-SCRN-01-CMSD

Contract: TULL02

Lab Code: CHEM

Case No.: Q1627

SAS No.: Q1627

SDG NO.: Q1627

Lab Sample ID: Q1609-03MSD

Date(s) Analyzed: 03/27/2025

03/27/2025

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	8.22	8.17	8.27	53.1	12
	2	8.75	8.70	8.80	47.1	
2,4,5-TP(Silvex)	1	9.08	9.03	9.13	50.1	2.6
	2	9.63	9.58	9.68	48.8	



QC SAMPLE DATA

Report of Analysis

Client:	Tully Construction Co., Inc.	Date Collected:	
Project:	DOT Harper Street Yard - North Side	Date Received:	
Client Sample ID:	PB167312BL	SDG No.:	Q1627
Lab Sample ID:	PB167312BL	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
PS029597.D	1	03/25/25 12:23	03/28/25 02:51	PB167312

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	495		39 - 175	99%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
 Data File : PS029597.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 28 Mar 2025 02:51
 Operator : AR\AJ
 Sample : PB167312BL
 Misc :
 ALS Vial : 36 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 PB167312BL

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Mar 28 07:20:26 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
 Quant Title : 8080.M
 QLast Update : Thu Mar 27 12:24:58 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

4) S	2,4-DCAA	7.114	7.534	1900.8E6	417.2E6	494.996m	483.248
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Target Compounds

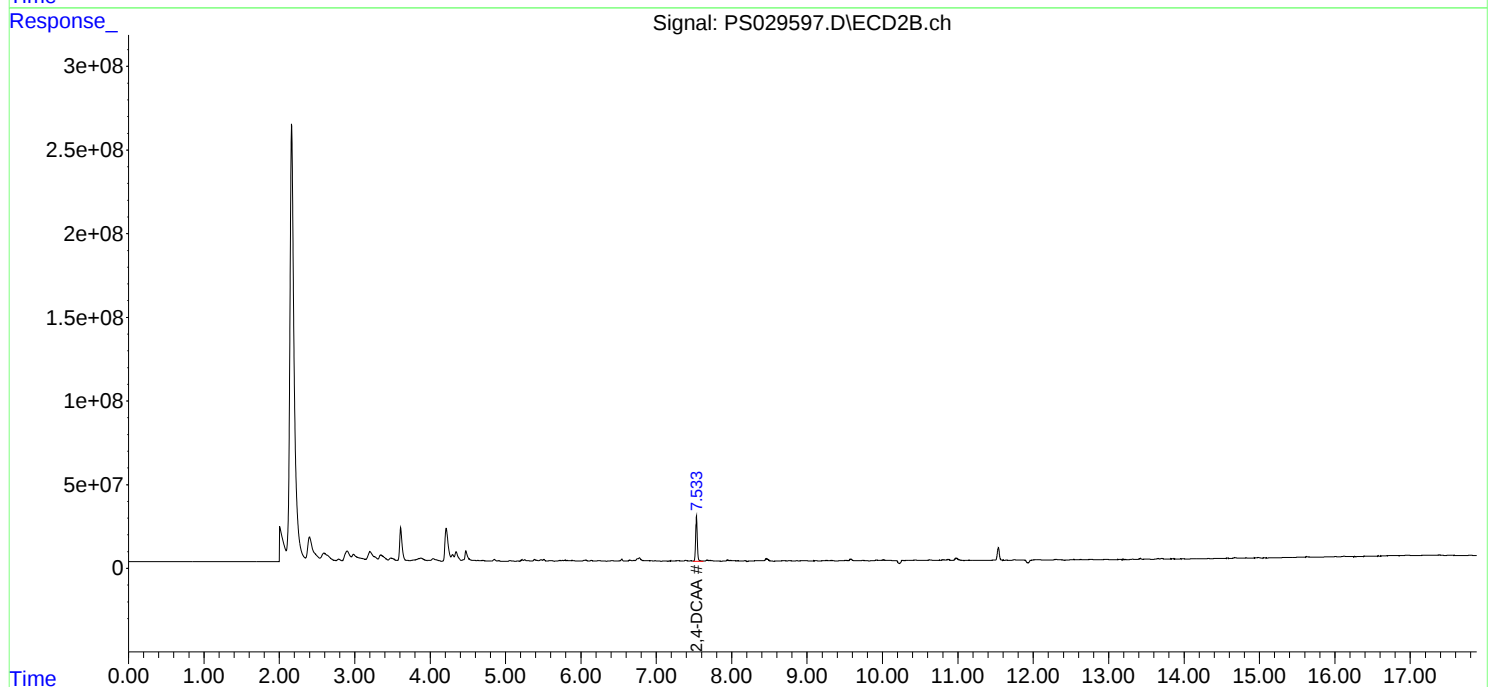
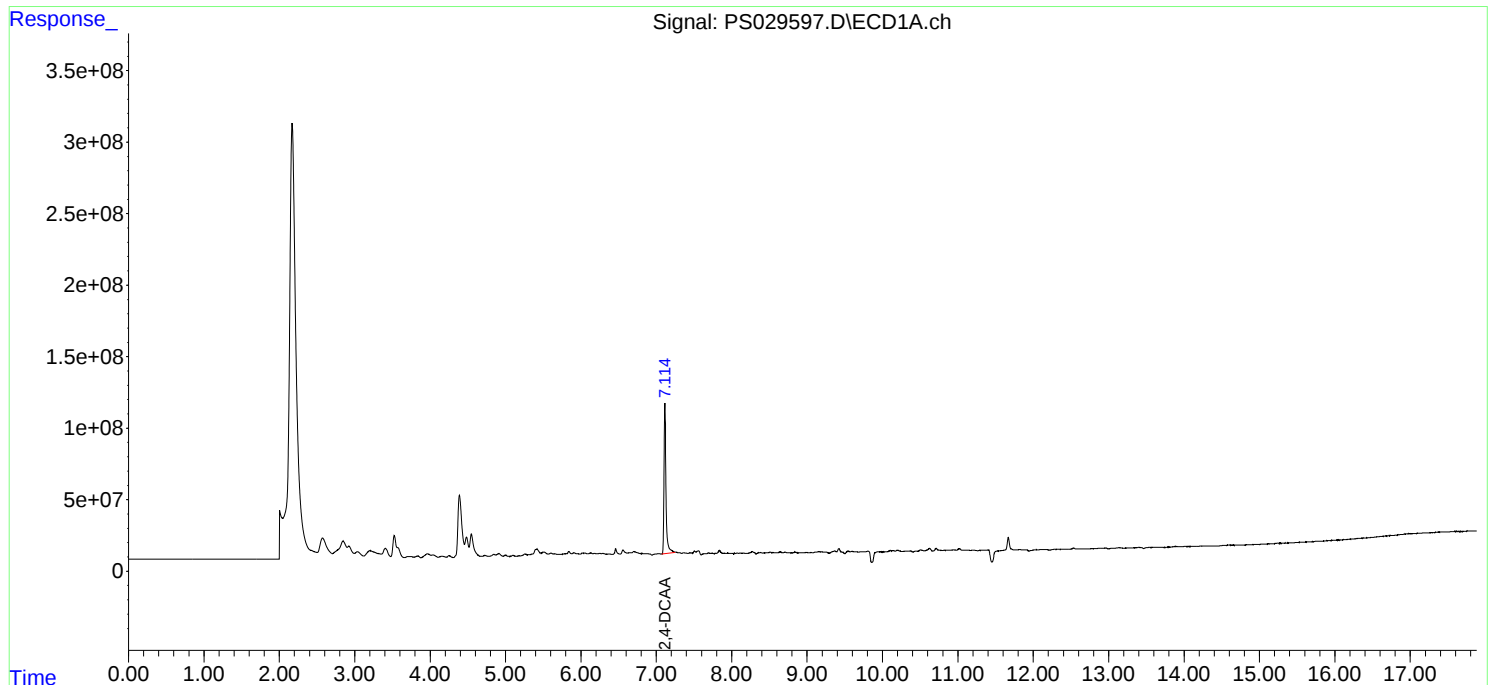
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

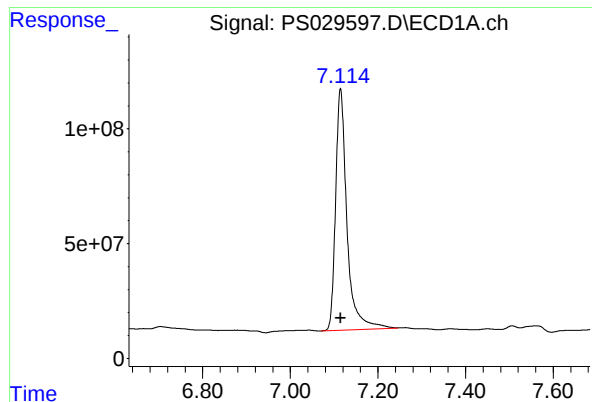
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
Data File : PS029597.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Mar 2025 02:51
Operator : AR\AJ
Sample : PB167312BL
Misc :
ALS Vial : 36 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
PB167312BL

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 07:20:26 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
Quant Title : 8080.M
QLast Update : Thu Mar 27 12:24:58 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.: 7.114 min

Delta R.T.: 0.000 min

Response: 1900832328

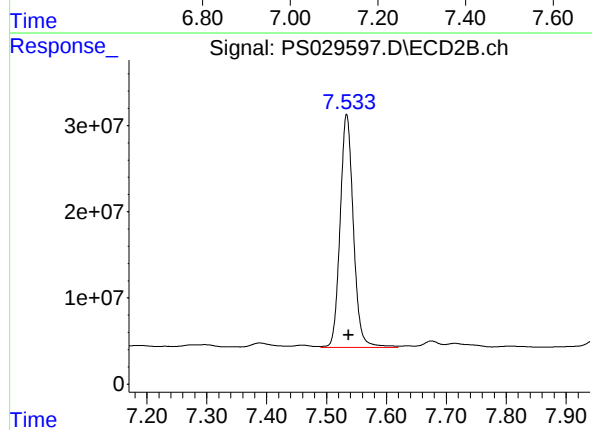
Conc: 495.00 ng/ml

Instrument :

ECD_S

ClientSampleId :

PB167312BL



#4 2,4-DCAA

R.T.: 7.534 min

Delta R.T.: -0.003 min

Response: 417186052

Conc: 483.25 ng/ml

Report of Analysis

Client:	Tully Construction Co., Inc.	Date Collected:	03/27/25
Project:	DOT Harper Street Yard - North Side	Date Received:	03/27/25
Client Sample ID:	PIBLK-PS029557.D	SDG No.:	Q1627
Lab Sample ID:	I.BLK-PS029557.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
PS029557.D	1		03/27/25	PS032825

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	523		39 - 175	105%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
Data File : PS029557.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 27 Mar 2025 09:49
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: Mar 27 13:36:30 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
Quant Title : 8080.M
QLast Update : Thu Mar 27 12:24:58 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
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System Monitoring Compounds

4) S	2,4-DCAA	7.116	7.537	1745.8E6	451.4E6	454.624	522.925
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Target Compounds

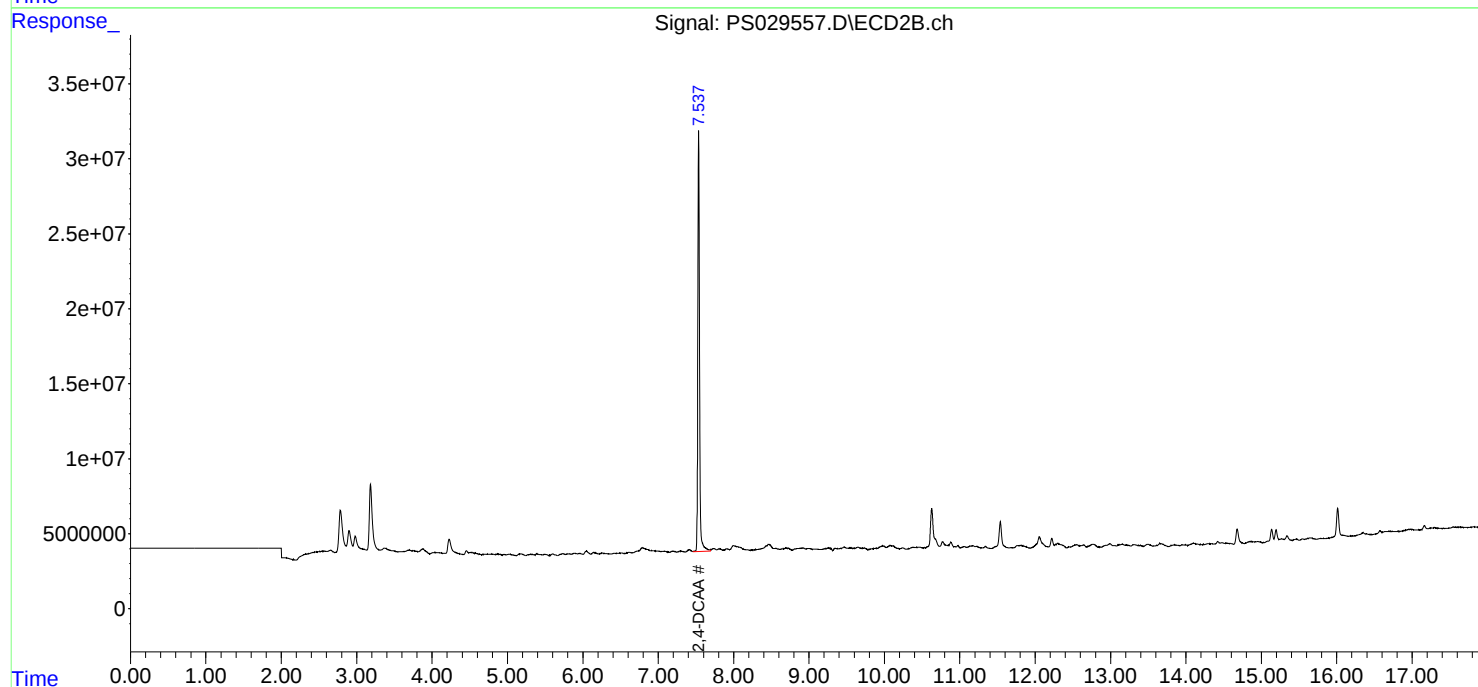
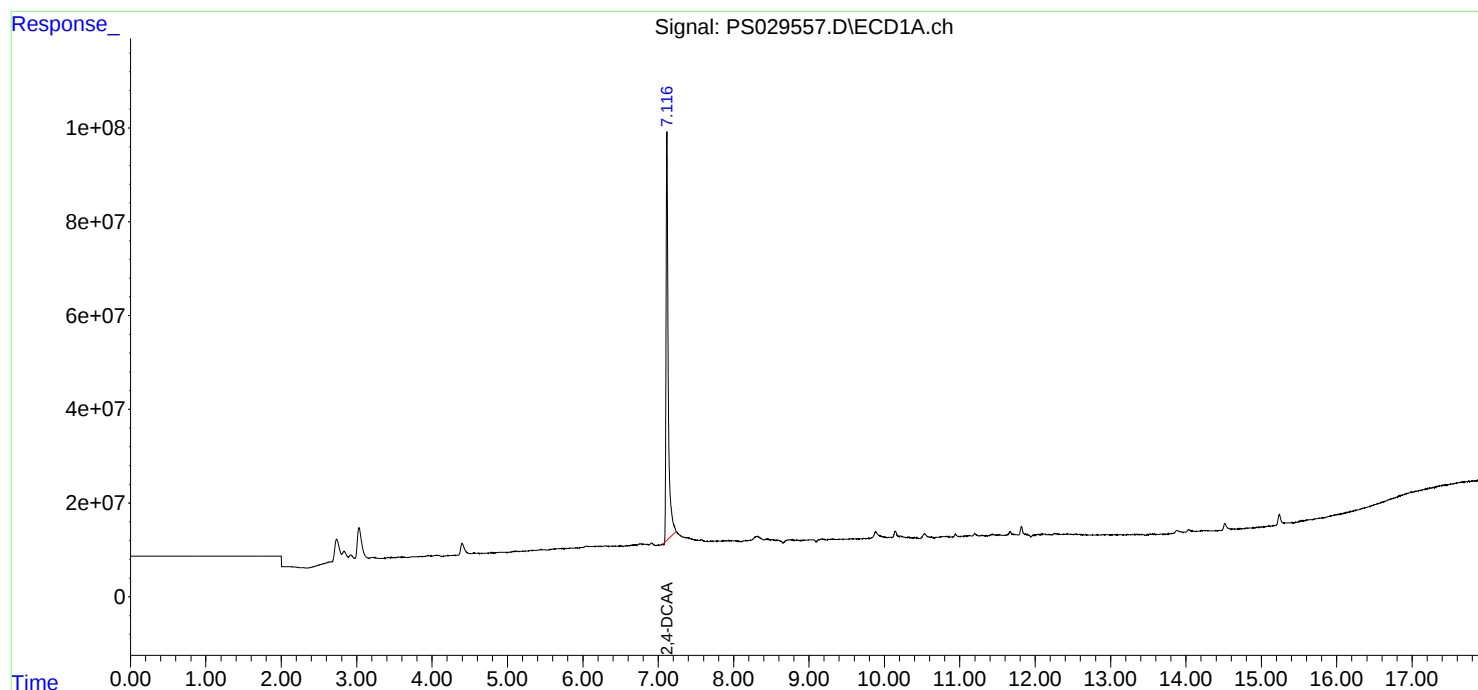
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

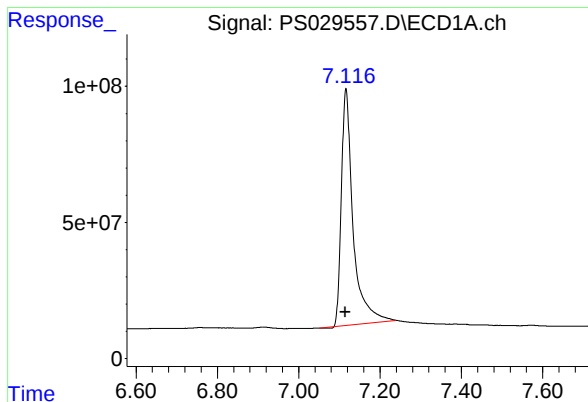
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
Data File : PS029557.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 27 Mar 2025 09:49
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 27 13:36:30 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
Quant Title : 8080.M
QLast Update : Thu Mar 27 12:24:58 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.: 7.116 min

Delta R.T.: 0.001 min

Response: 1745800608

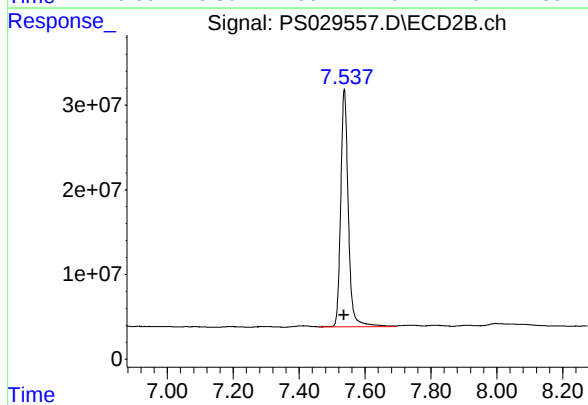
Conc: 454.62 ng/ml

Instrument :

ECD_S

ClientSampleId :

I.BLK



#4 2,4-DCAA

R.T.: 7.537 min

Delta R.T.: 0.000 min

Response: 451439583

Conc: 522.93 ng/ml

Report of Analysis

Client:	Tully Construction Co., Inc.	Date Collected:	03/27/25
Project:	DOT Harper Street Yard - North Side	Date Received:	03/27/25
Client Sample ID:	PIBLK-PS029575.D	SDG No.:	Q1627
Lab Sample ID:	I.BLK-PS029575.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 :	
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS029575.D	1		03/27/25	ps032825

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	540		39 - 175	108%	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\PS032825\
Data File : PS029575.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 27 Mar 2025 17:14
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 03:21:50 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
Quant Title : 8080.M
QLast Update : Thu Mar 27 12:24:58 2025
Response via : Initial Calibration
Integrator: ChemStation

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

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

4) S	2,4-DCAA	7.115	7.535	1922.8E6	465.9E6	500.724m	539.636
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Target Compounds

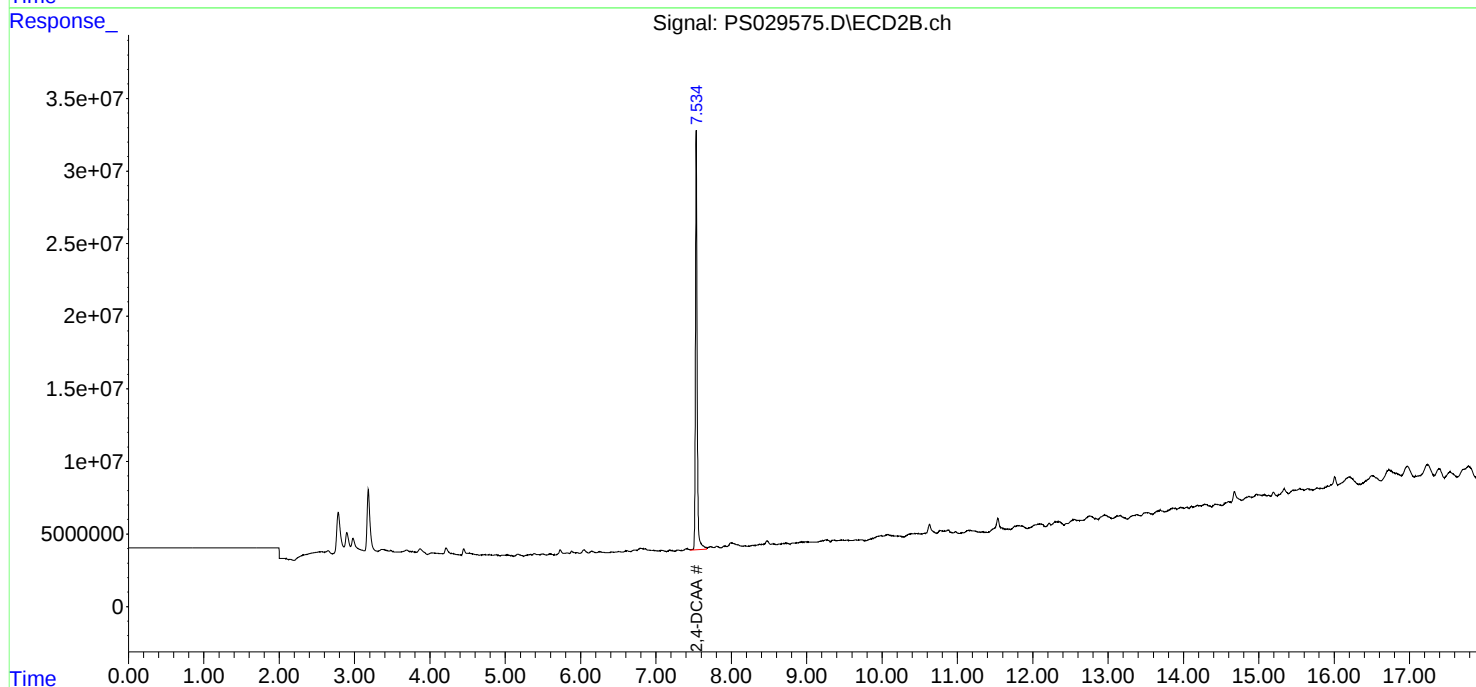
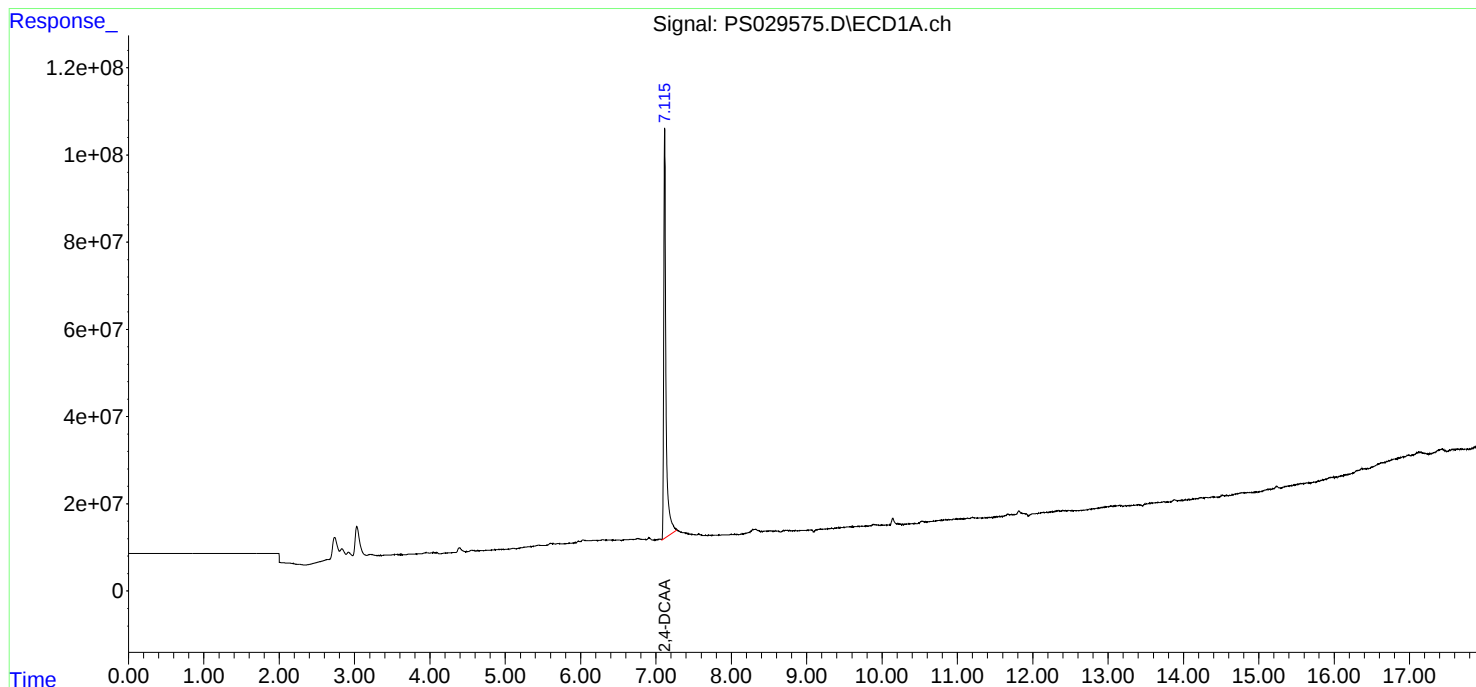
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

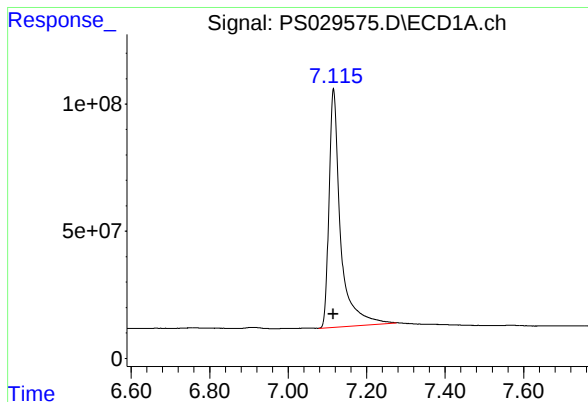
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
Data File : PS029575.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 27 Mar 2025 17:14
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 03:21:50 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
Quant Title : 8080.M
QLast Update : Thu Mar 27 12:24:58 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

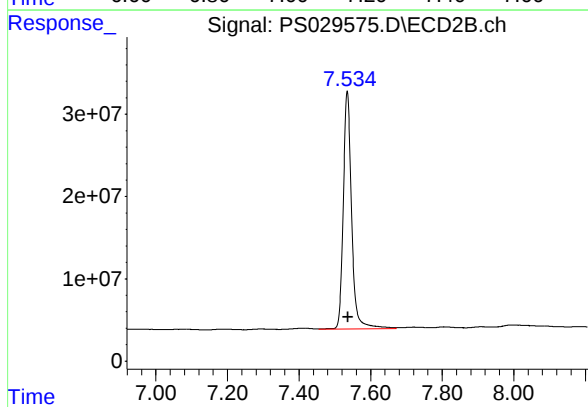




#4 2,4-DCAA

R.T.: 7.115 min
Delta R.T.: 0.000 min
Response: 1922826846
Conc: 500.72 ng/ml

Instrument :
ECD_S
ClientSampleId :
I.BLK



#4 2,4-DCAA

R.T.: 7.535 min
Delta R.T.: -0.002 min
Response: 465865528
Conc: 539.64 ng/ml

Report of Analysis

Client:	Tully Construction Co., Inc.	Date Collected:	03/27/25
Project:	DOT Harper Street Yard - North Side	Date Received:	03/27/25
Client Sample ID:	PIBLK-PS029587.D	SDG No.:	Q1627
Lab Sample ID:	I.BLK-PS029587.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
PS029587.D	1		03/27/25	ps032825

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	541		39 - 175	108%	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\PS032825\
 Data File : PS029587.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 27 Mar 2025 22:26
 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: Mar 28 03:23:57 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
 Quant Title : 8080.M
 QLast Update : Thu Mar 27 12:24:58 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

4) S	2,4-DCAA	7.114	7.535	1988.1E6	466.8E6	517.723m	540.689
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Target Compounds

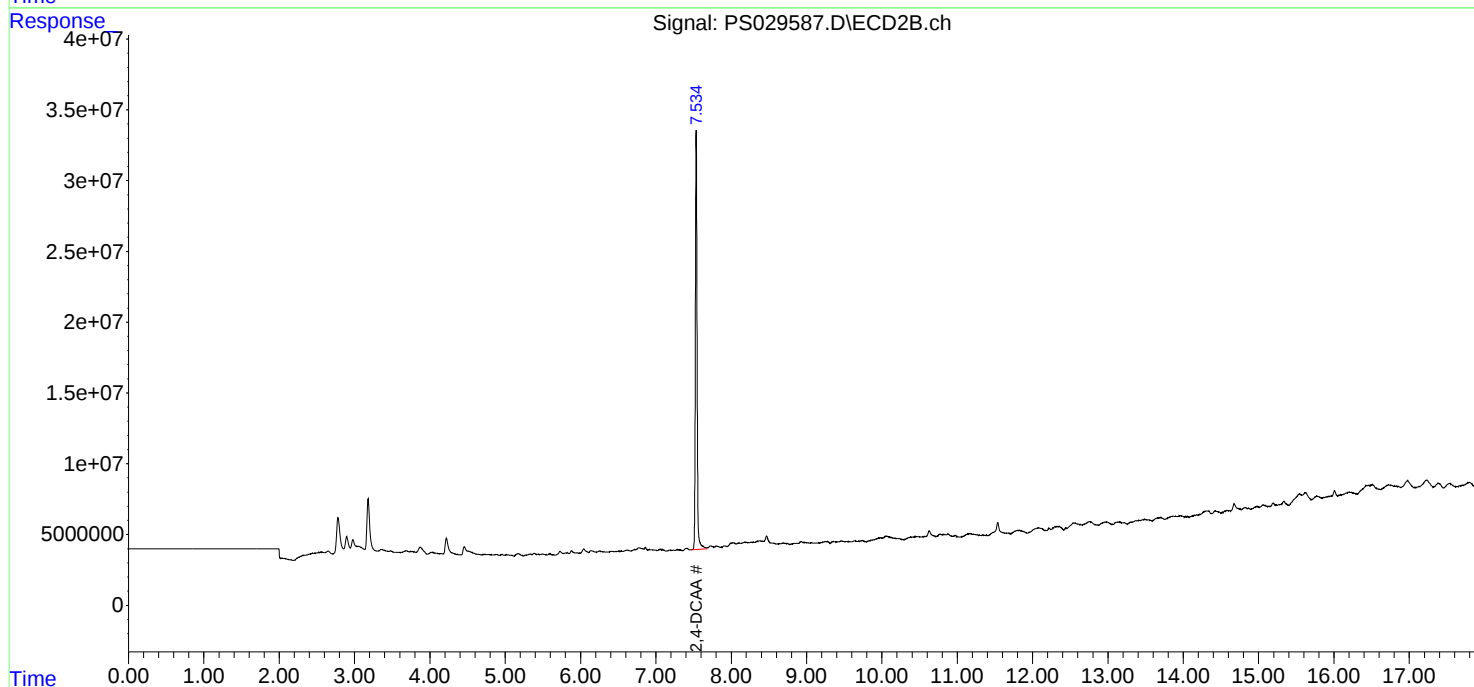
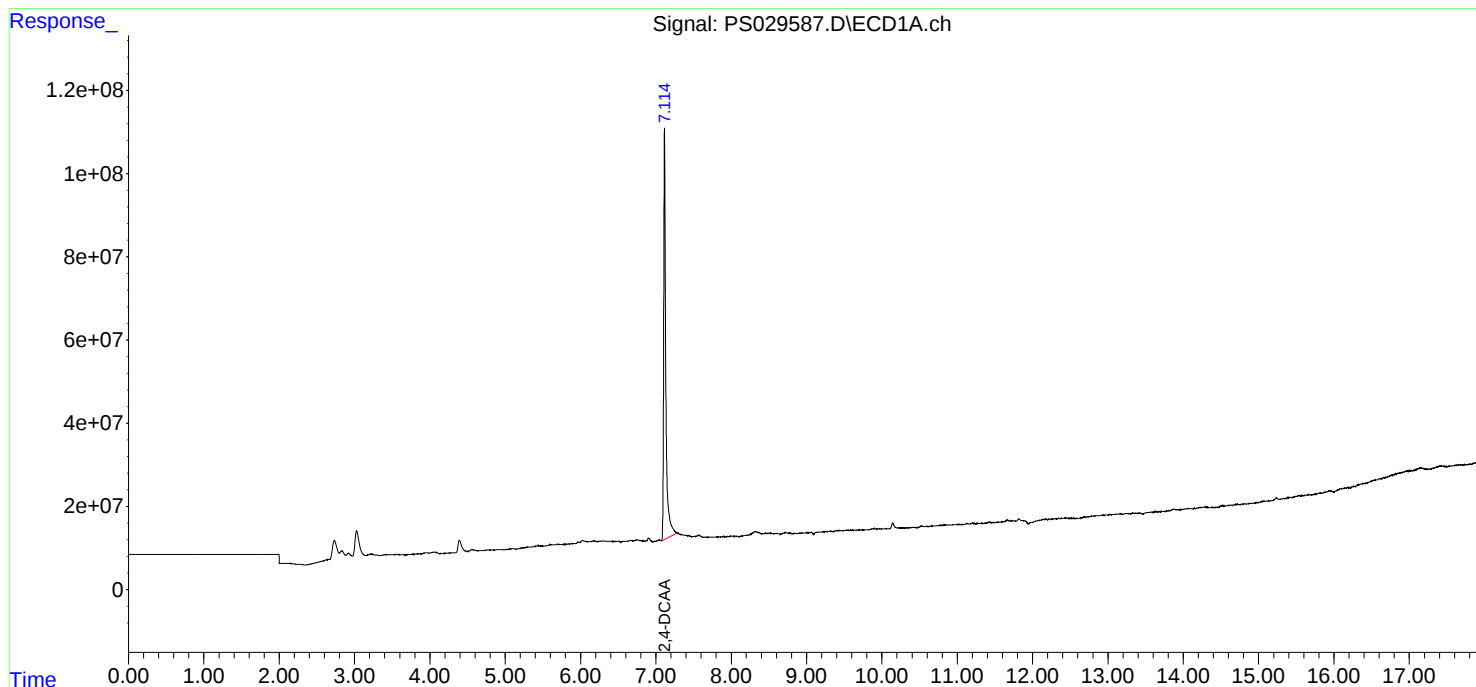
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

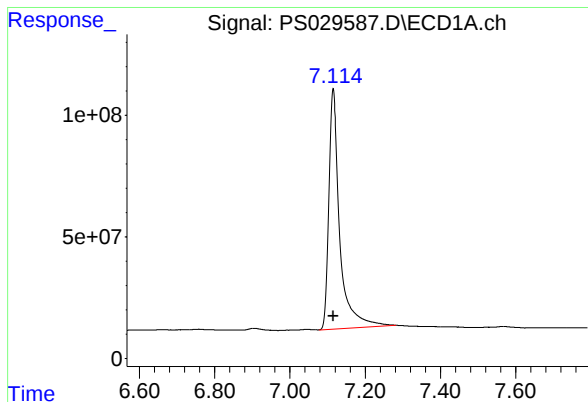
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
Data File : PS029587.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 27 Mar 2025 22:26
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 03:23:57 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
Quant Title : 8080.M
QLast Update : Thu Mar 27 12:24:58 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.: 7.114 min

Delta R.T.: 0.000 min

Response: 1988104943

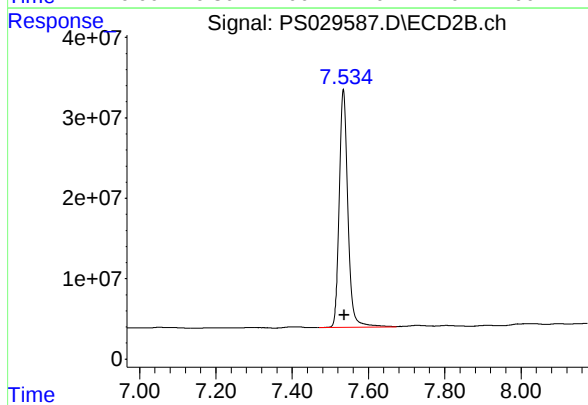
Conc: 517.72 ng/ml

Instrument :

ECD_S

ClientSampleId :

I.BLK



#4 2,4-DCAA

R.T.: 7.535 min

Delta R.T.: -0.002 min

Response: 466775063

Conc: 540.69 ng/ml

Report of Analysis

Client:	Tully Construction Co., Inc.	Date Collected:	03/28/25
Project:	DOT Harper Street Yard - North Side	Date Received:	03/28/25
Client Sample ID:	PIBLK-PS029599.D	SDG No.:	Q1627
Lab Sample ID:	I.BLK-PS029599.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
PS029599.D	1		03/28/25	ps032825

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	545		39 - 175	109%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
 Data File : PS029599.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 28 Mar 2025 03:39
 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: Mar 28 07:21:20 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
 Quant Title : 8080.M
 QLast Update : Thu Mar 27 12:24:58 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
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System Monitoring Compounds

4) S	2,4-DCAA	7.116	7.535	2028.5E6	470.8E6	528.238m	545.337
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Target Compounds

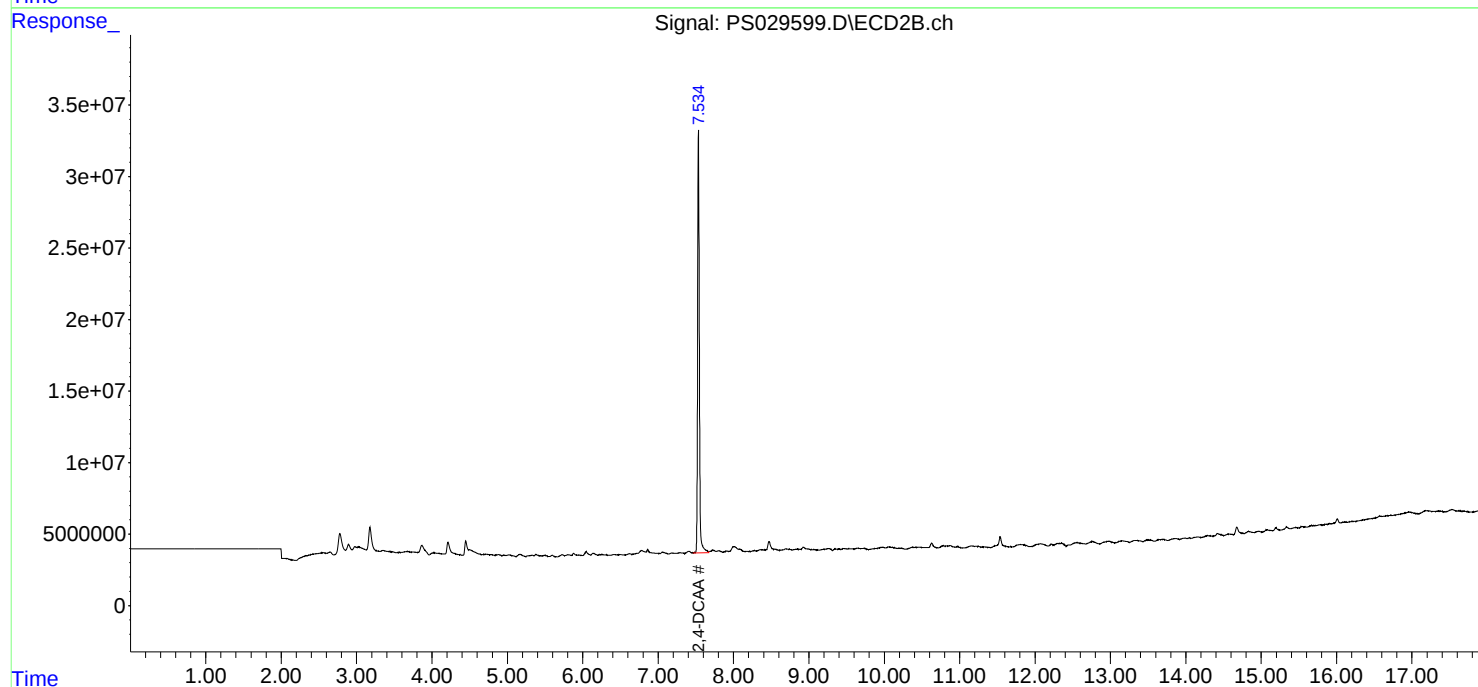
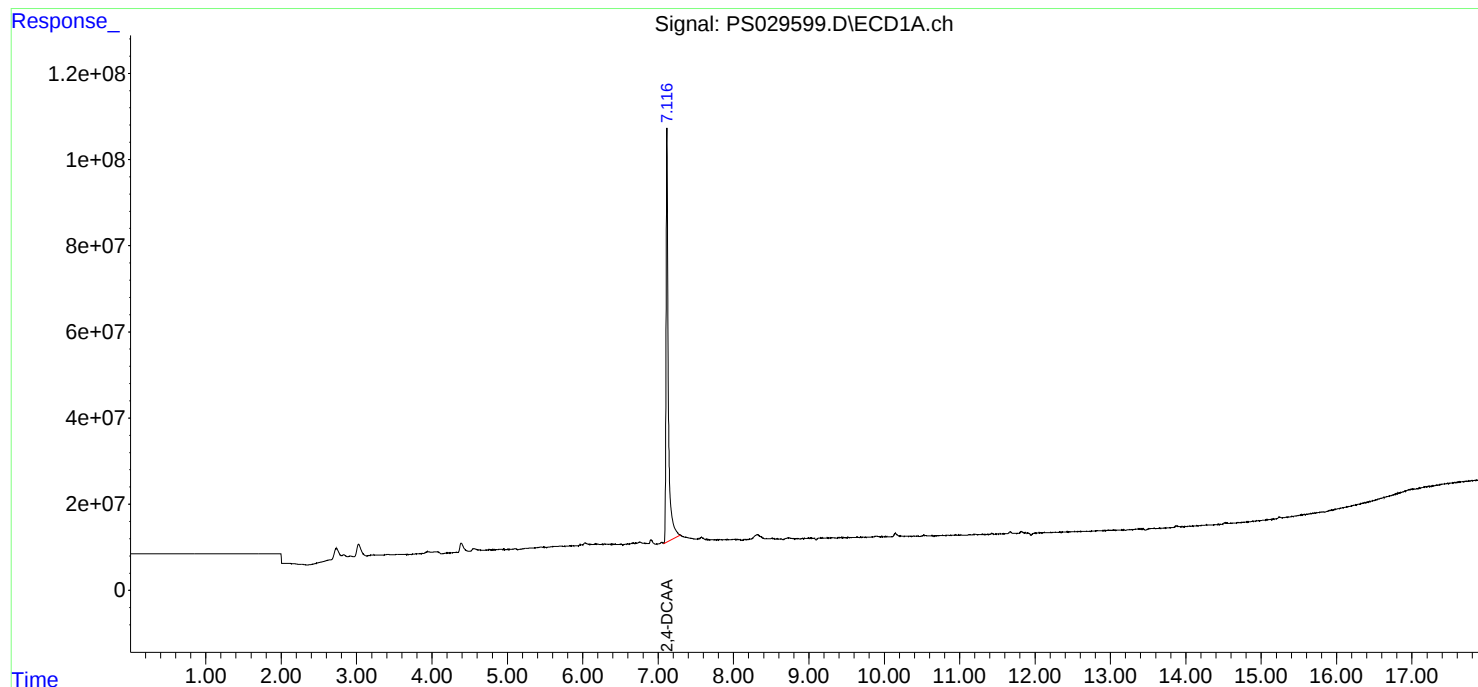
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

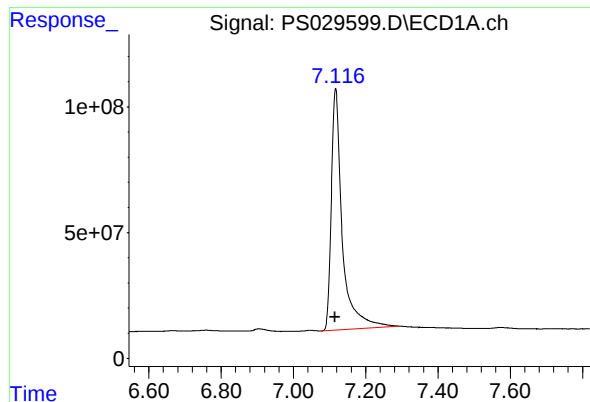
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
Data File : PS029599.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Mar 2025 03:39
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 07:21:20 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
Quant Title : 8080.M
QLast Update : Thu Mar 27 12:24:58 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.: 7.116 min

Delta R.T.: 0.001 min

Response: 2028483885

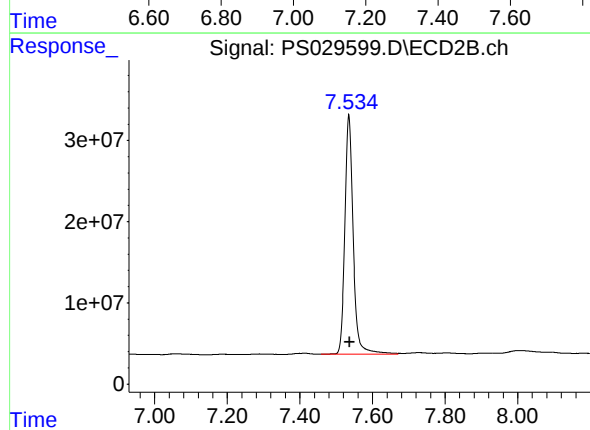
Conc: 528.24 ng/ml

Instrument :

ECD_S

ClientSampleId :

I.BLK



#4 2,4-DCAA

R.T.: 7.535 min

Delta R.T.: -0.002 min

Response: 470787809

Conc: 545.34 ng/ml

Report of Analysis

Client:	Tully Construction Co., Inc.	Date Collected:	03/28/25
Project:	DOT Harper Street Yard - North Side	Date Received:	03/28/25
Client Sample ID:	PIBLK-PS029611.D	SDG No.:	Q1627
Lab Sample ID:	I.BLK-PS029611.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
PS029611.D	1		03/28/25	ps032825

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	554		39 - 175	111%	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\PS032825\
 Data File : PS029611.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 28 Mar 2025 08:51
 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: Mar 28 09:28:16 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
 Quant Title : 8080.M
 QLast Update : Thu Mar 27 12:24:58 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

4) S	2,4-DCAA	7.116	7.533	2032.9E6	478.4E6	529.387m	554.153
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Target Compounds

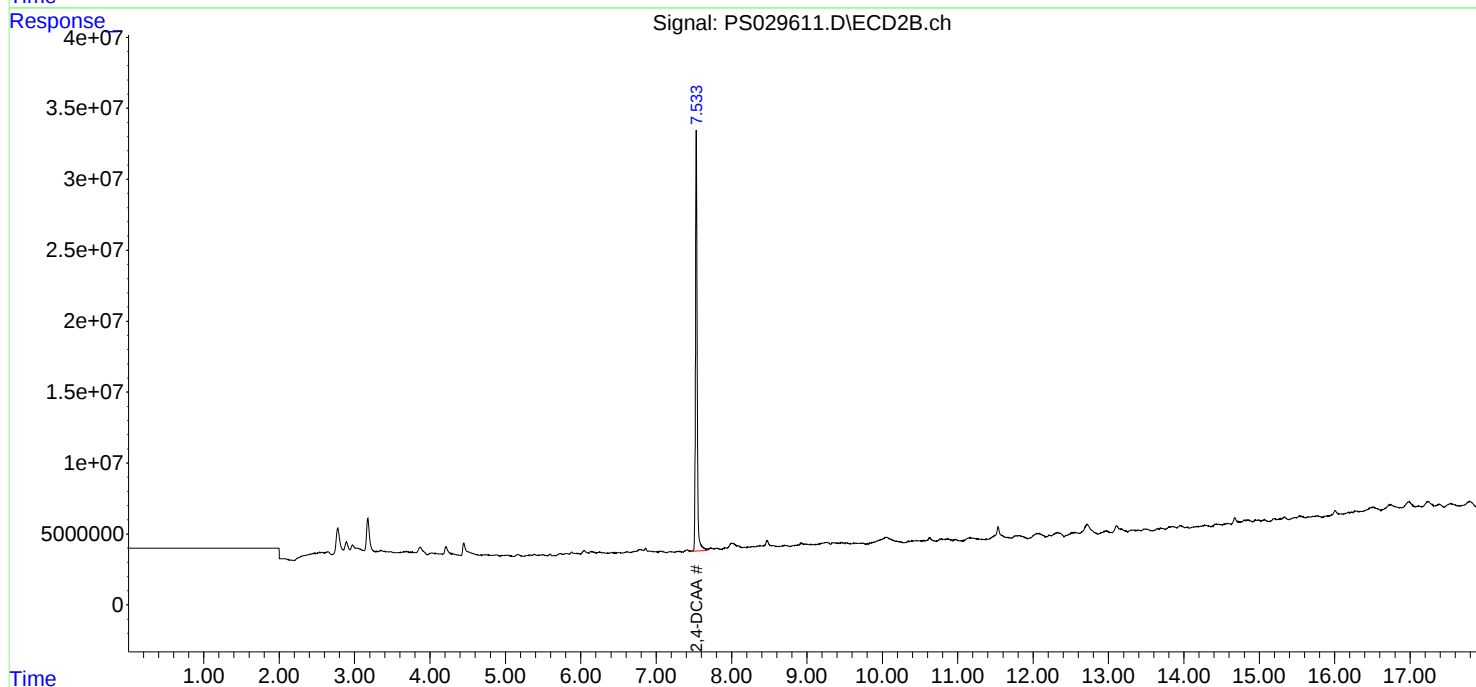
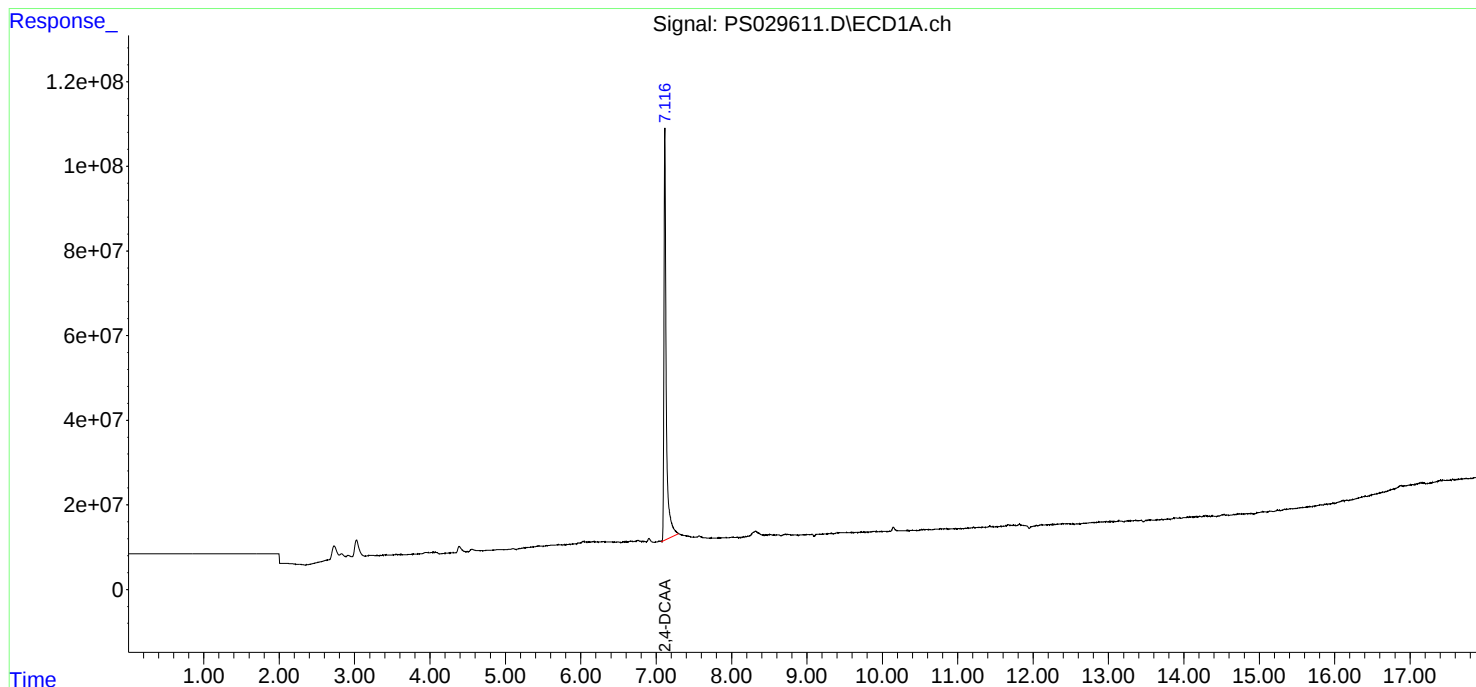
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

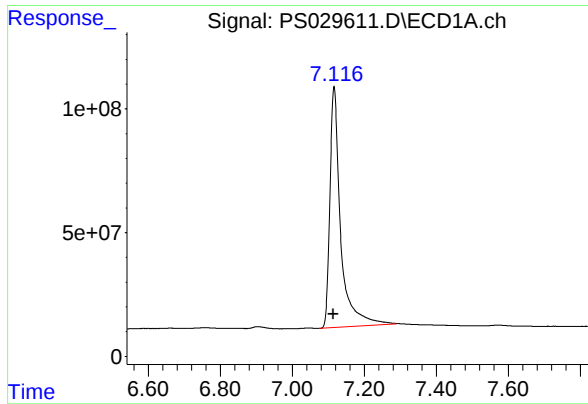
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
Data File : PS029611.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Mar 2025 08:51
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 09:28:16 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
Quant Title : 8080.M
QLast Update : Thu Mar 27 12:24:58 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.: 7.116 min

Delta R.T.: 0.000 min

Response: 2032898673

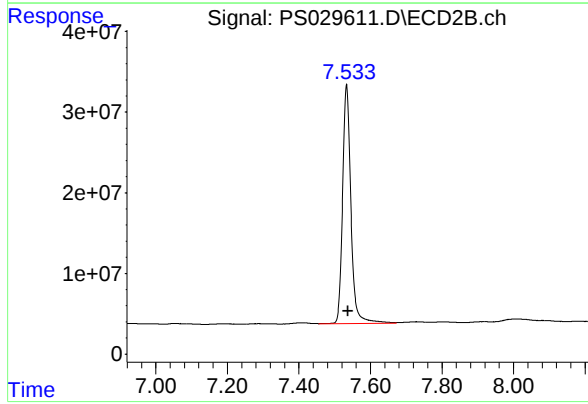
Conc: 529.39 ng/ml

Instrument :

ECD_S

ClientSampleId :

I.BLK



#4 2,4-DCAA

R.T.: 7.533 min

Delta R.T.: -0.003 min

Response: 478398340

Conc: 554.15 ng/ml

Report of Analysis

Client:	Tully Construction Co., Inc.	Date Collected:	
Project:	DOT Harper Street Yard - North Side	Date Received:	
Client Sample ID:	PB167312BS	SDG No.:	Q1627
Lab Sample ID:	PB167312BS	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
PS029601.D	1	03/25/25 12:23	03/28/25 04:51	PB167312

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	5.30		0.92	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	5.10		0.78	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	545		39 - 175	109%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
 Data File : PS029601.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 28 Mar 2025 04:51
 Operator : AR\AJ
 Sample : PB167312BS
 Misc :
 ALS Vial : 38 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 PB167312BS

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Mar 28 07:22:42 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
 Quant Title : 8080.M
 QLast Update : Thu Mar 27 12:24:58 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	7.117	7.535	2093.0E6	458.0E6	545.027	530.497
Target Compounds							
1) T	Dalapon	2.594	2.605	2904.8E6	984.7E6	489.973	474.711
2) T	3,5-DICHL...	6.306	6.524	2948.3E6	605.5E6	515.742	491.392
3) T	4-Nitroph...	6.926	7.072	583.3E6	391.8E6	548.190	484.965
5) T	DICAMBA	7.296	7.724	8530.5E6	2371.6E6	538.100	496.072
6) T	MCPD	7.473	7.828	555.1E6	126.0E6	48.763	60.864
7) T	MCPA	7.619	8.064	695.6E6	140.4E6	48.369	48.835
8) T	DICHLORPROP	7.992	8.426	2058.2E6	564.4E6	468.618	453.106
9) T	2,4-D	8.224	8.746	2142.3E6	625.8E6	531.103	458.161
10) T	Pentachlo...	8.509	9.254	32305.6E6	11415.7E6	543.681	514.342
11) T	2,4,5-TP ...	9.083	9.631	11772.7E6	4369.7E6	505.372	495.167
12) T	2,4,5-T	9.375	10.041	11300.2E6	4052.9E6	548.597	508.477
13) T	2,4-DB	9.945	10.599	1164.7E6	408.6E6	609.979	444.606m#
14) T	DINOSEB	11.127	10.971	8881.4E6	2870.4E6	500.920	484.227m
15) T	Picloram	10.956	12.032	8138.6E6	5712.3E6	565.433	457.853
16) T	DCPA	11.424	11.997	15279.8E6	5795.0E6	529.978	516.869

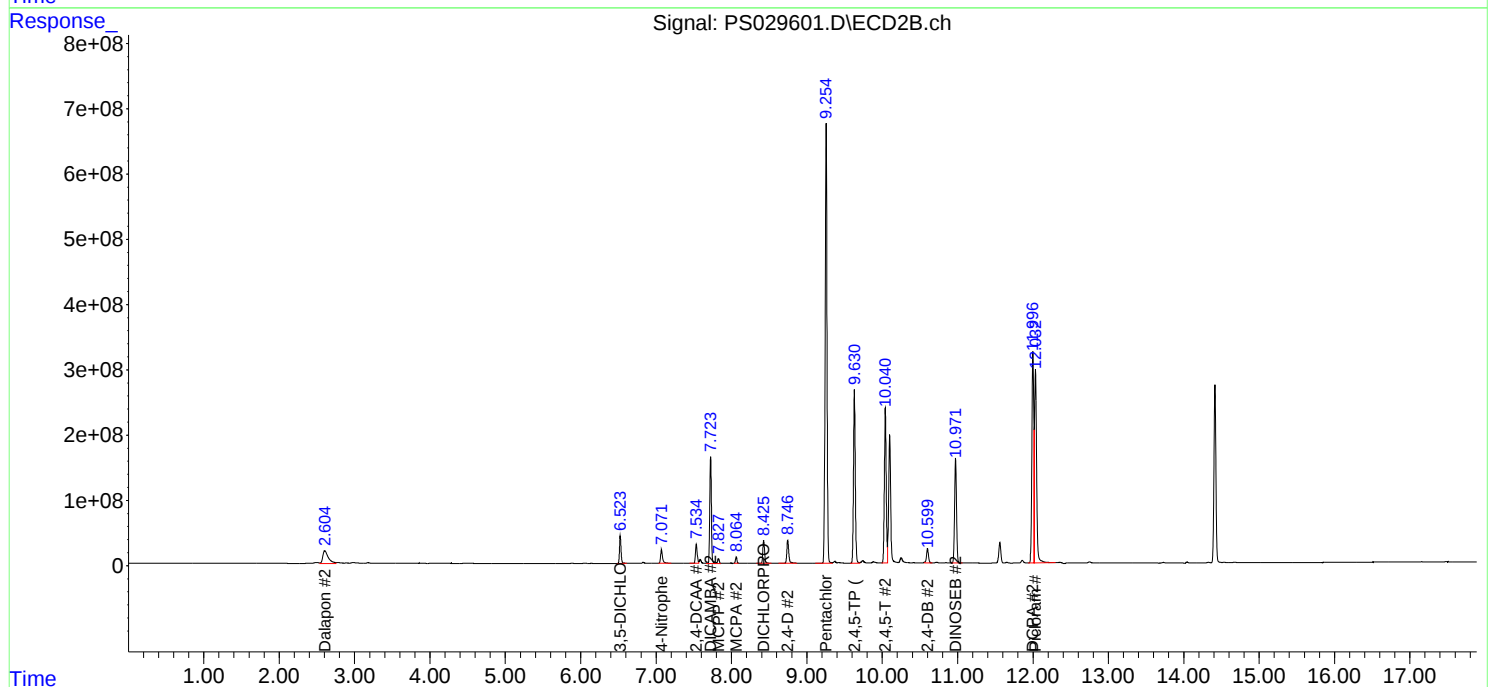
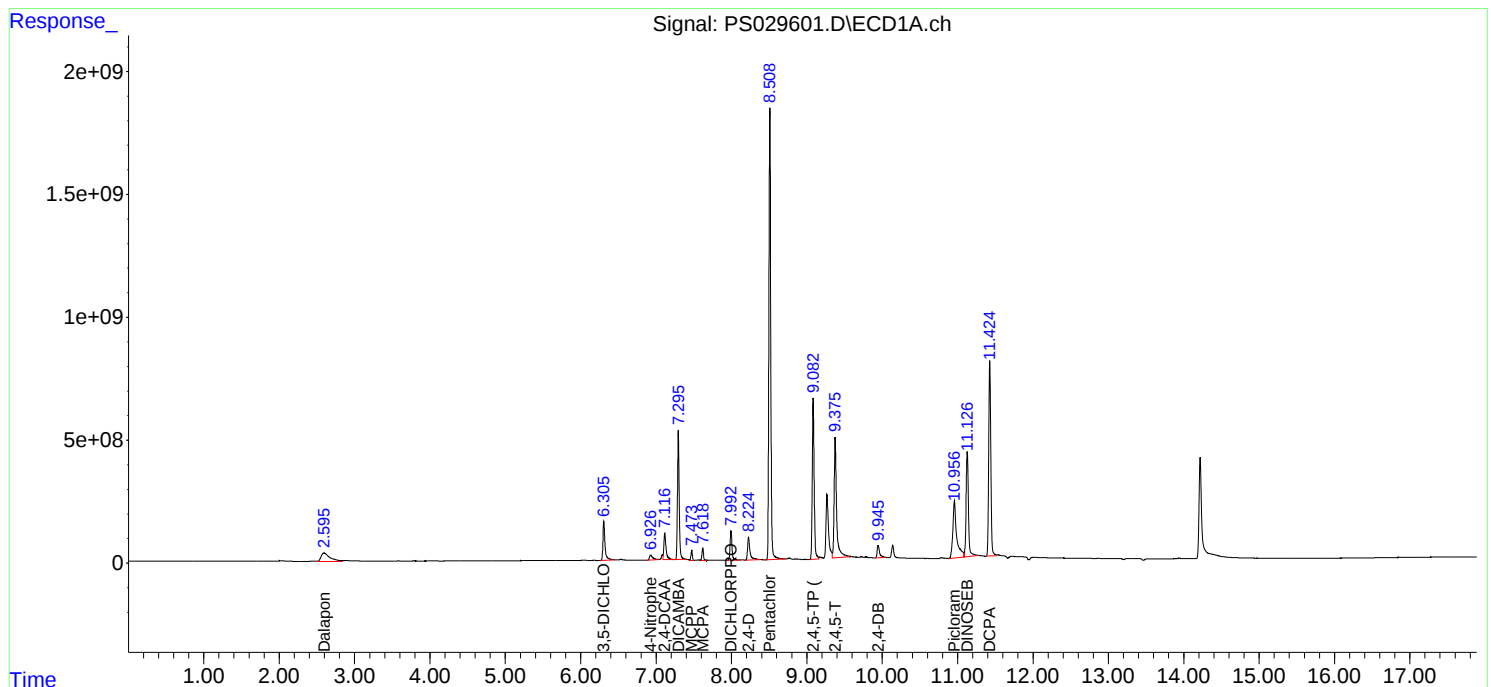
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
Data File : PS029601.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 28 Mar 2025 04:51
Operator : AR\AJ
Sample : PB167312BS
Misc :
ALS Vial : 38 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
PB167312BS

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 07:22:42 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
Quant Title : 8080.M
QLast Update : Thu Mar 27 12:24:58 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



Report of Analysis

Client:	Tully Construction Co., Inc.	Date Collected:	03/19/25
Project:	DOT Harper Street Yard - North Side	Date Received:	03/20/25
Client Sample ID:	WC-SCRN-01-CMS	SDG No.:	Q1627
Lab Sample ID:	Q1609-03MS	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
PS029577.D	1	03/25/25 12:23	03/27/25 18:26	PB167312

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	53.0		9.20	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	50.0		7.80	20.0	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	489		39 - 175	98%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
 Data File : PS029577.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 27 Mar 2025 18:26
 Operator : AR\AJ
 Sample : Q1609-03MS
 Misc :
 ALS Vial : 18 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 WC-SCRN-01-CMS

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Mar 28 03:22:11 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
 Quant Title : 8080.M
 QLast Update : Thu Mar 27 12:24:58 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	7.113	7.534	1877.5E6	421.5E6	488.919m	488.280
Target Compounds							
1) T	Dalapon	2.593	2.604	1618.3E6	783.5E6	272.964m	377.741m#
2) T	3,5-DICHL...	6.303	6.523	2786.4E6	601.6E6	487.431	488.241
3) T	4-Nitroph...	6.927	7.079	26464985	8618274	24.873	10.668m#
5) T	DICAMBA	7.293	7.723	7714.8E6	2143.7E6	486.652	448.402m
6) T	MCP	7.471	7.828	486.7E6	93915866	42.757	45.360
7) T	MCPA	7.617	8.062	631.8E6	190.8E6	43.929	66.383 #
8) T	DICHLORPROP	7.989	8.425	1986.7E6	591.1E6	452.347	474.572
9) T	2,4-D	8.220	8.745	2138.5E6	645.2E6	530.147	472.354
10) T	Pentachlo...	8.507	9.254	31636.3E6	10461.5E6	532.418	471.349
11) T	2,4,5-TP ...	9.080	9.630	11652.4E6	4292.5E6	500.208	486.413
12) T	2,4,5-T	9.370	10.040	10165.8E6	3791.7E6	493.527	475.701
13) T	2,4-DB	9.940	10.599	965.3E6	405.9E6	505.579	441.698
14) T	DINOSEB	11.125	10.970	7323.8E6	2306.6E6	413.071	389.102m
15) T	Picloram	10.948	12.032	7394.9E6	5088.7E6	513.767	407.873
16) T	DCPA	11.420	11.998	12019.7E6	5172.8E6	416.905	461.372

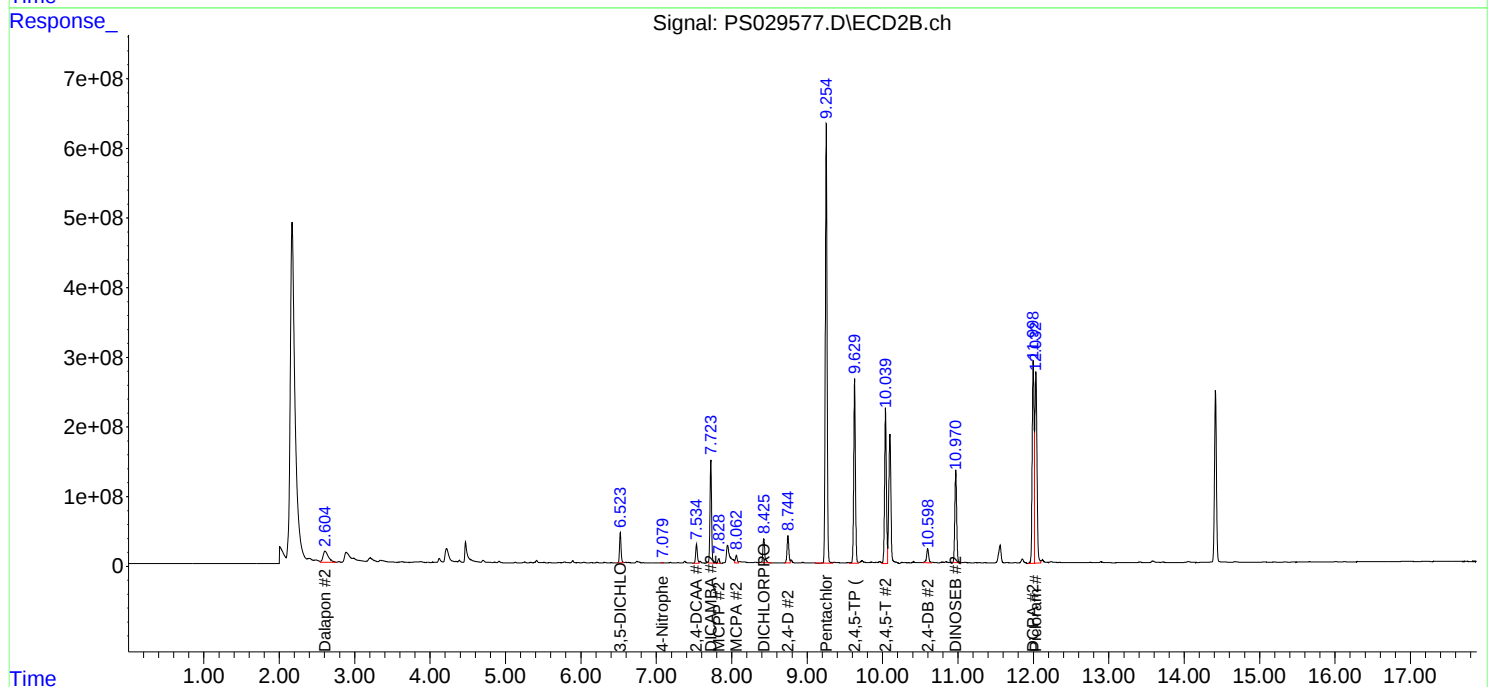
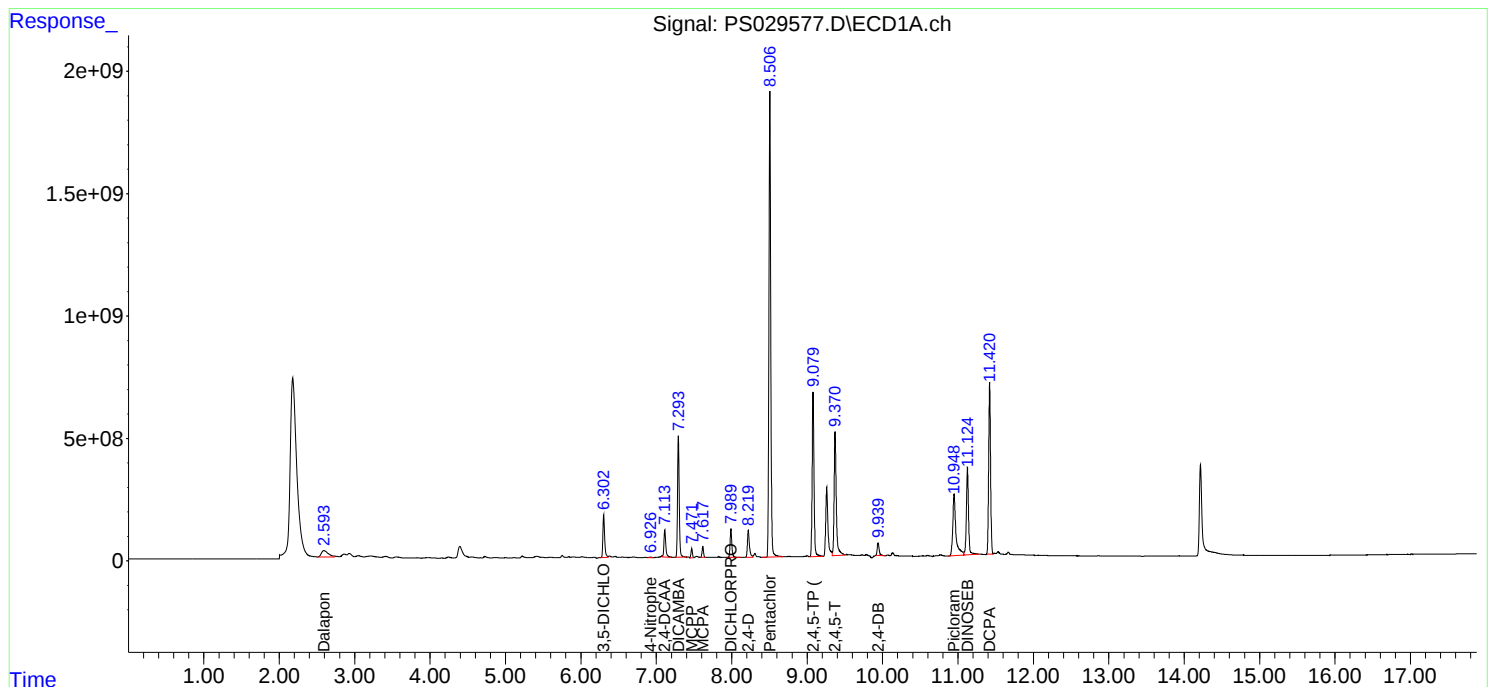
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
Data File : PS029577.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 27 Mar 2025 18:26
Operator : AR\AJ
Sample : Q1609-03MS
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
WC-SCRN-01-CMS

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 03:22:11 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
Quant Title : 8080.M
QLast Update : Thu Mar 27 12:24:58 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



Report of Analysis

Client:	Tully Construction Co., Inc.	Date Collected:	03/19/25
Project:	DOT Harper Street Yard - North Side	Date Received:	03/20/25
Client Sample ID:	WC-SCRN-01-CMSD	SDG No.:	Q1627
Lab Sample ID:	Q1609-03MSD	Matrix:	TCLP
Analytical Method:	SW8151A	% Solid:	0 Decanted:
Sample Wt/Vol:	100 Units: mL	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	TCLP Herbicide
Extraction Type:		Injection Volume :	
GPC Factor :	1.0 PH :		
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS029578.D	1	03/25/25 12:23	03/27/25 18:50	PB167312

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
94-75-7	2,4-D	53.1		9.20	20.0	ug/L
93-72-1	2,4,5-TP (Silvex)	50.1		7.80	20.0	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	494		39 - 175	99%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
 Data File : PS029578.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 27 Mar 2025 18:50
 Operator : AR\AJ
 Sample : Q1609-03MSD
 Misc :
 ALS Vial : 19 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 WC-SCRN-01-CMSD

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Mar 28 03:22:21 2025
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
 Quant Title : 8080.M
 QLast Update : Thu Mar 27 12:24:58 2025
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds						
4) S 2,4-DCAA	7.113	7.534	1897.6E6	420.8E6	494.159	487.461
Target Compounds						
1) T Dalapon	2.597	2.609	1597.8E6	828.5E6	269.505m	399.421m#
2) T 3,5-DICHL...	6.303	6.524	2785.7E6	609.7E6	487.305	494.795
3) T 4-Nitroph...	6.925	7.079	29076755	7785335	27.328m	9.637m#
5) T DICAMBA	7.294	7.724	7707.1E6	2165.7E6	486.163	452.995
6) T MCPP	7.471	7.829	485.4E6	92903486	42.643	44.871
7) T MCPA	7.617	8.063	627.6E6	164.5E6	43.638	57.219m#
8) T DICHLORPROP	7.990	8.425	1996.5E6	628.3E6	454.579	504.438
9) T 2,4-D	8.220	8.745	2142.6E6	644.0E6	531.177	471.436
10) T Pentachlo...	8.507	9.254	31547.0E6	10487.2E6	530.916	472.507
11) T 2,4,5-TP ...	9.080	9.630	11662.7E6	4308.3E6	500.651	488.205
12) T 2,4,5-T	9.371	10.040	10134.0E6	3798.9E6	491.982	476.612
13) T 2,4-DB	9.940	10.598	979.0E6	403.0E6	512.766	438.540
14) T DINOSEB	11.125	10.971	7255.9E6	2271.0E6	409.238	383.110
15) T Picloram	10.948	12.032	7427.4E6	5030.0E6	516.027	403.171
16) T DCPA	11.421	11.998	12007.9E6	5177.1E6	416.493	461.754

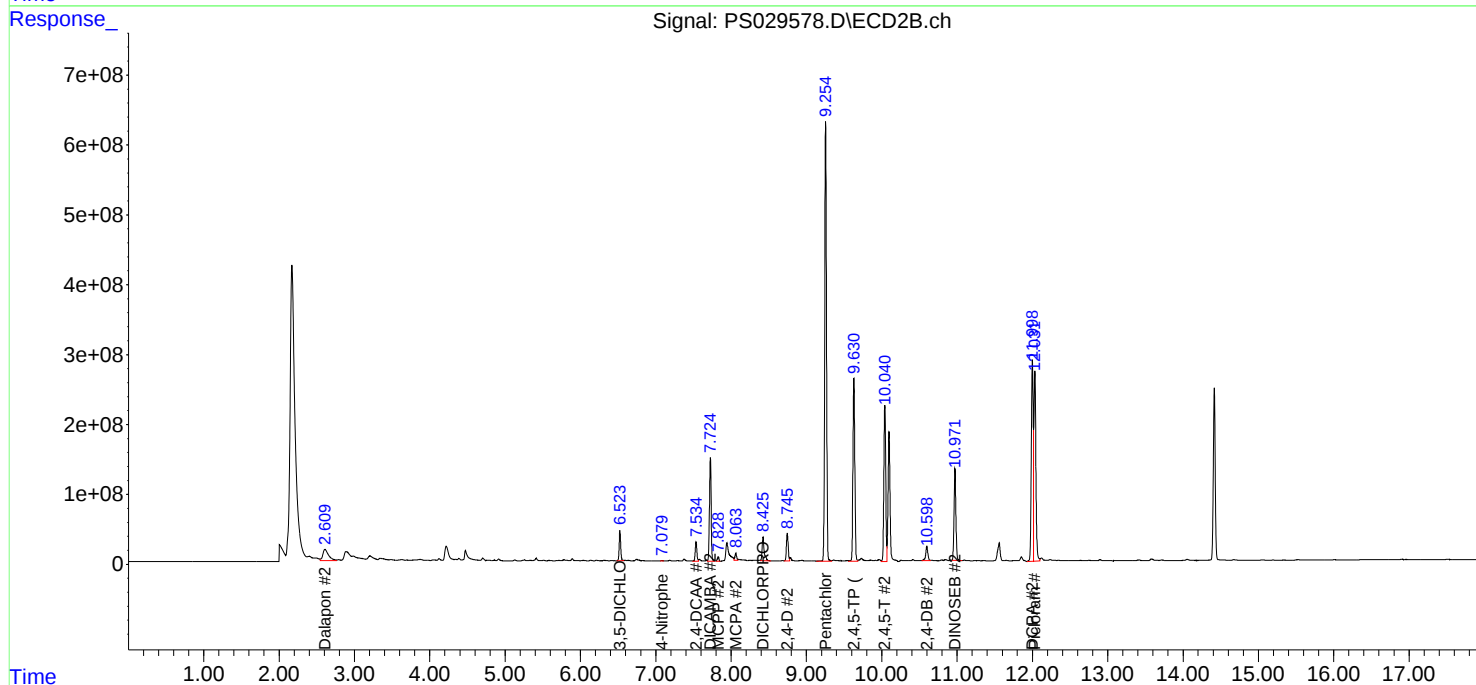
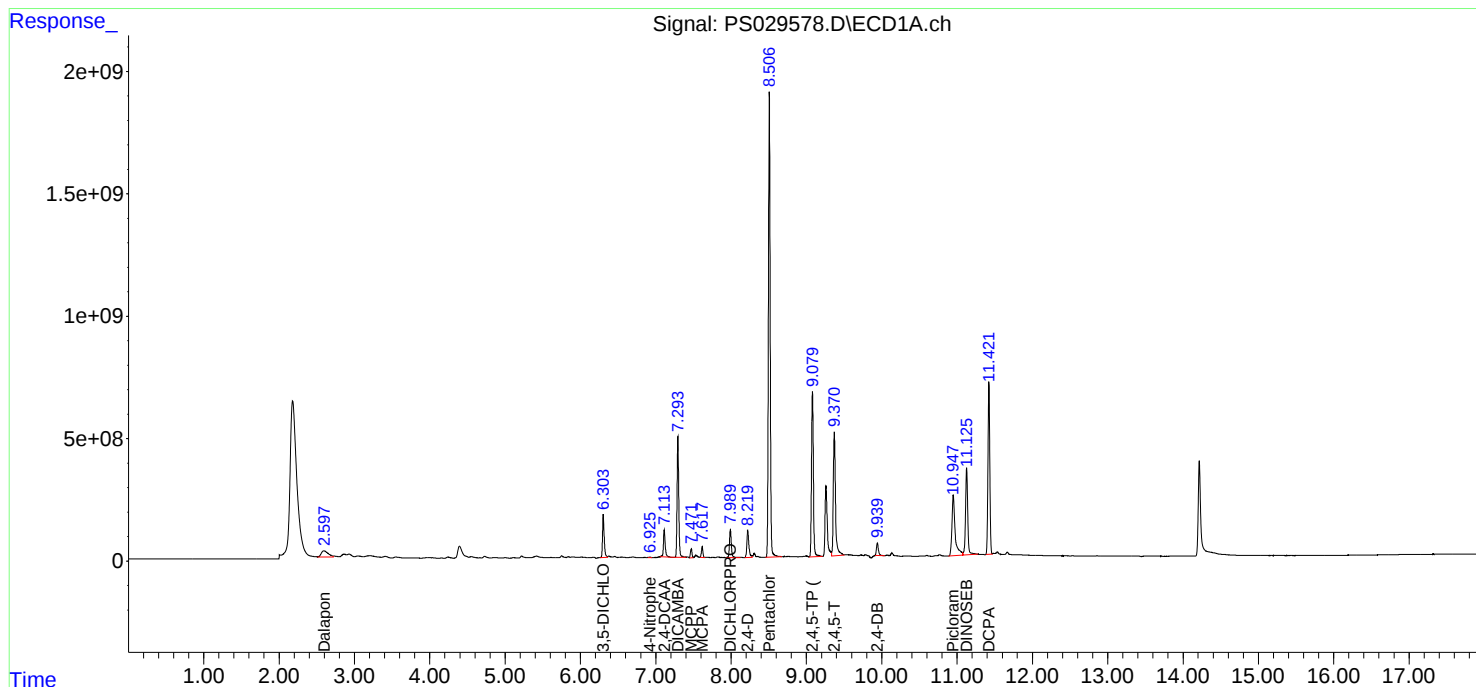
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS032825\
Data File : PS029578.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 27 Mar 2025 18:50
Operator : AR\AJ
Sample : Q1609-03MSD
Misc :
ALS Vial : 19 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
WC-SCRN-01-CMSD

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Mar 28 03:22:21 2025
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS032825.M
Quant Title : 8080.M
QLast Update : Thu Mar 27 12:24:58 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



Manual Integration Report

Sequence:	PS032825	Instrument	ECD_s
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
I.BLK	PS029575.D	2,4-DCAA	Abdul	3/28/2025 11:26:57 AM	 	 	Peak Integrated by Software
HSTDCCC750	PS029576.D	4-Nitrophenol	Abdul	3/28/2025 11:27:01 AM	 	 	Peak Integrated by Software
HSTDCCC750	PS029576.D	DINOSEB #2	Abdul	3/28/2025 11:27:01 AM	 	 	Peak Integrated by Software
Q1609-03MS	PS029577.D	2,4-DCAA	Abdul	3/28/2025 11:27:05 AM	 	 	Peak Integrated by Software
Q1609-03MS	PS029577.D	4-Nitrophenol #2	Abdul	3/28/2025 11:27:05 AM	 	 	Peak Integrated by Software
Q1609-03MS	PS029577.D	Dalapon	Abdul	3/28/2025 11:27:05 AM	 	 	Peak Integrated by Software
Q1609-03MS	PS029577.D	Dalapon #2	Abdul	3/28/2025 11:27:05 AM	 	 	Peak Integrated by Software
Q1609-03MS	PS029577.D	DICAMBA #2	Abdul	3/28/2025 11:27:05 AM	 	 	Peak Integrated by Software
Q1609-03MS	PS029577.D	DINOSEB #2	Abdul	3/28/2025 11:27:05 AM	 	 	Peak Integrated by Software
Q1609-03MSD	PS029578.D	4-Nitrophenol	Abdul	3/28/2025 11:27:16 AM	 	 	Peak Integrated by Software
Q1609-03MSD	PS029578.D	4-Nitrophenol #2	Abdul	3/28/2025 11:27:16 AM	 	 	Peak Integrated by Software
Q1609-03MSD	PS029578.D	Dalapon	Abdul	3/28/2025 11:27:16 AM	 	 	Peak Integrated by Software
Q1609-03MSD	PS029578.D	Dalapon #2	Abdul	3/28/2025 11:27:16 AM	 	 	Peak Integrated by Software

Manual Integration Report

Sequence:	PS032825	Instrument	ECD_s
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q1609-03MSD	PS029578.D	MCPA #2	Abdul	3/28/2025 11:27:16 AM	 	 	Peak Integrated by Software
I.BLK	PS029587.D	2,4-DCAA	Abdul	3/28/2025 11:24:54 AM	 	 	Peak Integrated by Software
HSTDCCC750	PS029588.D	2,4-DB	Abdul	3/28/2025 11:24:58 AM	 	 	Peak Integrated by Software
Q1627-01	PS029592.D	2,4-DCAA	Abdul	3/28/2025 11:25:15 AM	 	 	Peak Integrated by Software
PB167312BL	PS029597.D	2,4-DCAA	Abdul	3/28/2025 11:25:33 AM	 	 	Peak Integrated by Software
I.BLK	PS029599.D	2,4-DCAA	Abdul	3/28/2025 11:25:42 AM	 	 	Peak Integrated by Software
HSTDCCC750	PS029600.D	2,4-DB	Abdul	3/28/2025 11:25:49 AM	 	 	Peak Integrated by Software
HSTDCCC750	PS029600.D	DINOSEB #2	Abdul	3/28/2025 11:25:49 AM	 	 	Peak Integrated by Software
PB167275TB	PS029602.D	2,4-DCAA	Abdul	3/28/2025 11:25:57 AM	 	 	Peak Integrated by Software
I.BLK	PS029611.D	2,4-DCAA	Abdul	3/28/2025 11:26:28 AM	 	 	Peak Integrated by Software
HSTDCCC750	PS029612.D	2,4-DB	Abdul	3/28/2025 11:26:32 AM	 	 	Peak Integrated by Software
HSTDCCC750	PS029612.D	DINOSEB #2	Abdul	3/28/2025 11:26:32 AM	 	 	Peak Integrated by Software



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

Manual Integration Report

Sequence:

PS032825

Instrument

ECD_s

Sample ID

File ID

Parameter

Review By

Review On

Supervised
By

Supervised On

Reason

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS032825

Review By	Abdul	Review On	3/28/2025 8:31:32 AM
Supervise By		Supervise On	
SubDirectory	PS032825	HP Acquire Method	HP Processing Method ps032825 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	PS029556.D	27 Mar 2025 09:25	AR\AJ	Ok
2	I.BLK	PS029557.D	27 Mar 2025 09:49	AR\AJ	Ok
3	HSTDICC200	PS029558.D	27 Mar 2025 10:13	AR\AJ	Ok
4	HSTDICC500	PS029559.D	27 Mar 2025 10:37	AR\AJ	Ok
5	HSTDICC750	PS029560.D	27 Mar 2025 11:01	AR\AJ	Ok
6	HSTDICC1000	PS029561.D	27 Mar 2025 11:25	AR\AJ	Ok
7	HSTDICC1500	PS029562.D	27 Mar 2025 11:49	AR\AJ	Ok
8	HSTDICV750	PS029563.D	27 Mar 2025 12:25	AR\AJ	Ok
9	I.BLK	PS029564.D	27 Mar 2025 12:49	AR\AJ	Ok
10	HSTDCCC750	PS029565.D	27 Mar 2025 13:13	AR\AJ	Ok
11	Q1609-03	PS029566.D	27 Mar 2025 13:37	AR\AJ	Ok,NS
12	Q1625-01	PS029567.D	27 Mar 2025 14:01	AR\AJ	Ok
13	Q1632-02	PS029568.D	27 Mar 2025 14:25	AR\AJ	Ok
14	Q1630-01	PS029569.D	27 Mar 2025 14:49	AR\AJ	Ok,NS
15	Q1636-01	PS029570.D	27 Mar 2025 15:13	AR\AJ	Ok,NS
16	Q1636-05	PS029571.D	27 Mar 2025 15:38	AR\AJ	Ok,NS
17	Q1636-09	PS029572.D	27 Mar 2025 16:02	AR\AJ	Ok
18	Q1636-13	PS029573.D	27 Mar 2025 16:26	AR\AJ	Ok
19	Q1636-17	PS029574.D	27 Mar 2025 16:50	AR\AJ	Ok,NS
20	I.BLK	PS029575.D	27 Mar 2025 17:14	AR\AJ	Ok,NS
21	HSTDCCC750	PS029576.D	27 Mar 2025 18:02	AR\AJ	Ok,NS

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS032825

Review By	Abdul	Review On	3/28/2025 8:31:32 AM
Supervise By		Supervise On	
SubDirectory	PS032825	HP Acquire Method	HP Processing Method ps032825 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24064,PP24065,PP24066,PP24067,PP24068		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24066 PP24069,PP24070		

22	Q1609-03MS	PS029577.D	27 Mar 2025 18:26	AR\AJ	Ok,NS
23	Q1609-03MSD	PS029578.D	27 Mar 2025 18:50	AR\AJ	Ok,NS
24	Q1636-05MS	PS029579.D	27 Mar 2025 19:14	AR\AJ	Ok,NS
25	Q1636-05MSD	PS029580.D	27 Mar 2025 19:38	AR\AJ	Ok,NS
26	Q1648-01	PS029581.D	27 Mar 2025 20:02	AR\AJ	Ok
27	Q1648-03	PS029582.D	27 Mar 2025 20:26	AR\AJ	Ok,NS
28	Q1648-05	PS029583.D	27 Mar 2025 20:50	AR\AJ	Ok,NS
29	Q1648-07	PS029584.D	27 Mar 2025 21:14	AR\AJ	Ok,NS
30	Q1648-09	PS029585.D	27 Mar 2025 21:38	AR\AJ	Ok,NS
31	Q1648-11	PS029586.D	27 Mar 2025 22:02	AR\AJ	Ok,NS
32	I.BLK	PS029587.D	27 Mar 2025 22:26	AR\AJ	Ok,NS
33	HSTDCCC750	PS029588.D	27 Mar 2025 22:51	AR\AJ	Ok,NS
34	Q1648-13	PS029589.D	27 Mar 2025 23:39	AR\AJ	Ok,NS
35	Q1648-13MS	PS029590.D	28 Mar 2025 00:03	AR\AJ	Ok,NS
36	Q1648-13MSD	PS029591.D	28 Mar 2025 00:27	AR\AJ	Ok,NS
37	Q1627-01	PS029592.D	28 Mar 2025 00:51	AR\AJ	Ok,NS
38	Q1626-01	PS029593.D	28 Mar 2025 01:15	AR\AJ	Ok,NS
39	Q1626-01MS	PS029594.D	28 Mar 2025 01:39	AR\AJ	Ok,NS
40	Q1626-01MSD	PS029595.D	28 Mar 2025 02:03	AR\AJ	Ok,NS
41	Q1626-03	PS029596.D	28 Mar 2025 02:27	AR\AJ	Ok,NS
42	PB167312BL	PS029597.D	28 Mar 2025 02:51	AR\AJ	Ok,NS
43	PB167233TB	PS029598.D	28 Mar 2025 03:15	AR\AJ	Ok,NR
44	I.BLK	PS029599.D	28 Mar 2025 03:39	AR\AJ	Ok,NS

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QCBatch ID # PS032825

Review By	Abdul	Review On	3/28/2025 8:31:32 AM
Supervise By		Supervise On	
SubDirectory	PS032825	HP Acquire Method	HP Processing Method ps032825 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP24064,PP24065,PP24066,PP24067,PP24068		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP24066 PP24069,PP24070		

45	HSTDCCC750	PS029600.D	28 Mar 2025 04:27	AR\AJ	Ok,NS
46	PB167312BS	PS029601.D	28 Mar 2025 04:51	AR\AJ	Ok,NR
47	PB167275TB	PS029602.D	28 Mar 2025 05:15	AR\AJ	Ok,NS
48	PB167293BL	PS029603.D	28 Mar 2025 05:39	AR\AJ	Ok,NS
49	PB167293BS	PS029604.D	28 Mar 2025 06:03	AR\AJ	Not Ok
50	Q1635-01	PS029605.D	28 Mar 2025 06:27	AR\AJ	Ok,NS
51	PB167322BL	PS029606.D	28 Mar 2025 06:51	AR\AJ	Ok,NS
52	PB167322BS	PS029607.D	28 Mar 2025 07:15	AR\AJ	Ok,NS
53	Q1642-01	PS029608.D	28 Mar 2025 07:39	AR\AJ	Ok,NS
54	Q1645-01	PS029609.D	28 Mar 2025 08:03	AR\AJ	Ok,NS
55	Q1645-05	PS029610.D	28 Mar 2025 08:27	AR\AJ	Ok,NS
56	I.BLK	PS029611.D	28 Mar 2025 08:51	AR\AJ	Ok,NS
57	HSTDCCC750	PS029612.D	28 Mar 2025 09:15	AR\AJ	Ok,NS

M : Manual Integration

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS032825

Review By	Abdul	Review On	3/28/2025 8:31:32 AM
Supervise By		Supervise On	
SubDirectory	PS032825	HP Acquire Method	HP Processing Method ps032825 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	PS029556.D	27 Mar 2025 09:25		AR\AJ	Ok
2	I.BLK	I.BLK	PS029557.D	27 Mar 2025 09:49		AR\AJ	Ok
3	HSTDICC200	HSTDICC200	PS029558.D	27 Mar 2025 10:13		AR\AJ	Ok
4	HSTDICC500	HSTDICC500	PS029559.D	27 Mar 2025 10:37		AR\AJ	Ok
5	HSTDICC750	HSTDICC750	PS029560.D	27 Mar 2025 11:01	Method Fail for comp#10 and 15	AR\AJ	Ok
6	HSTDICC1000	HSTDICC1000	PS029561.D	27 Mar 2025 11:25		AR\AJ	Ok
7	HSTDICC1500	HSTDICC1500	PS029562.D	27 Mar 2025 11:49		AR\AJ	Ok
8	HSTDICV750	ICVPS032825	PS029563.D	27 Mar 2025 12:25	Method Fail for comp#10 and 15	AR\AJ	Ok
9	I.BLK	I.BLK	PS029564.D	27 Mar 2025 12:49		AR\AJ	Ok
10	HSTDCCC750	HSTDCCC750	PS029565.D	27 Mar 2025 13:13		AR\AJ	Ok
11	Q1609-03	WC-SCRN-01-C	PS029566.D	27 Mar 2025 13:37		AR\AJ	Ok,NS
12	Q1625-01	FRAC-TANK-A1291	PS029567.D	27 Mar 2025 14:01		AR\AJ	Ok
13	Q1632-02	PIER-1-2	PS029568.D	27 Mar 2025 14:25		AR\AJ	Ok
14	Q1630-01	VNJ-206	PS029569.D	27 Mar 2025 14:49		AR\AJ	Ok,NS
15	Q1636-01	WC-1	PS029570.D	27 Mar 2025 15:13		AR\AJ	Ok,NS
16	Q1636-05	WC-2	PS029571.D	27 Mar 2025 15:38		AR\AJ	Ok,NS
17	Q1636-09	WC-3	PS029572.D	27 Mar 2025 16:02		AR\AJ	Ok
18	Q1636-13	WC-4	PS029573.D	27 Mar 2025 16:26		AR\AJ	Ok

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS032825

Review By	Abdul	Review On	3/28/2025 8:31:32 AM
Supervise By		Supervise On	
SubDirectory	PS032825	HP Acquire Method	HP Processing Method ps032825 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		

19	Q1636-17	WC-5	PS029574.D	27 Mar 2025 16:50		AR\AJ	Ok,NS
20	I.BLK	I.BLK	PS029575.D	27 Mar 2025 17:14		AR\AJ	Ok,NS
21	HSTDCCC750	HSTDCCC750	PS029576.D	27 Mar 2025 18:02		AR\AJ	Ok,NS
22	Q1609-03MS	WC-SCRN-01-CMS	PS029577.D	27 Mar 2025 18:26	Comp#7 recovery fail	AR\AJ	Ok,NS
23	Q1609-03MSD	WC-SCRN-01-CMSD	PS029578.D	27 Mar 2025 18:50		AR\AJ	Ok,NS
24	Q1636-05MS	WC-2MS	PS029579.D	27 Mar 2025 19:14	Comp#6,10 recovery fail	AR\AJ	Ok,NS
25	Q1636-05MSD	WC-2MSD	PS029580.D	27 Mar 2025 19:38	Comp#3,6,10 recovery fail	AR\AJ	Ok,NS
26	Q1648-01	TP-4	PS029581.D	27 Mar 2025 20:02		AR\AJ	Ok
27	Q1648-03	TP-5	PS029582.D	27 Mar 2025 20:26		AR\AJ	Ok,NS
28	Q1648-05	TP-3	PS029583.D	27 Mar 2025 20:50		AR\AJ	Ok,NS
29	Q1648-07	TP-6	PS029584.D	27 Mar 2025 21:14		AR\AJ	Ok,NS
30	Q1648-09	TP-7	PS029585.D	27 Mar 2025 21:38		AR\AJ	Ok,NS
31	Q1648-11	TP-8	PS029586.D	27 Mar 2025 22:02		AR\AJ	Ok,NS
32	I.BLK	I.BLK	PS029587.D	27 Mar 2025 22:26		AR\AJ	Ok,NS
33	HSTDCCC750	HSTDCCC750	PS029588.D	27 Mar 2025 22:51	Comp#3,15 high in 1st column	AR\AJ	Ok,NS
34	Q1648-13	TP-2	PS029589.D	27 Mar 2025 23:39		AR\AJ	Ok,NS
35	Q1648-13MS	TP-2MS	PS029590.D	28 Mar 2025 00:03	some compound recovery fail	AR\AJ	Ok,NS
36	Q1648-13MSD	TP-2MSD	PS029591.D	28 Mar 2025 00:27	some compound recovery fail	AR\AJ	Ok,NS
37	Q1627-01	GRID-LINE-1.2-NORTH	PS029592.D	28 Mar 2025 00:51		AR\AJ	Ok,NS

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS032825

Review By	Abdul	Review On	3/28/2025 8:31:32 AM
Supervise By		Supervise On	
SubDirectory	PS032825	HP Acquire Method	HP Processing Method ps032825 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		

38	Q1626-01	CO-32-1	PS029593.D	28 Mar 2025 01:15		AR\AJ	Ok,NS
39	Q1626-01MS	CO-32-1MS	PS029594.D	28 Mar 2025 01:39	some compound recovery fail	AR\AJ	Ok,NS
40	Q1626-01MSD	CO-32-1MSD	PS029595.D	28 Mar 2025 02:03	some compound recovery fail	AR\AJ	Ok,NS
41	Q1626-03	CO-32-1	PS029596.D	28 Mar 2025 02:27		AR\AJ	Ok,NS
42	PB167312BL	PB167312BL	PS029597.D	28 Mar 2025 02:51		AR\AJ	Ok,NS
43	PB167233TB	PB167233TB	PS029598.D	28 Mar 2025 03:15		AR\AJ	Ok,NR
44	I.BLK	I.BLK	PS029599.D	28 Mar 2025 03:39		AR\AJ	Ok,NS
45	HSTDCCC750	HSTDCCC750	PS029600.D	28 Mar 2025 04:27	Comp#3,15 high in 1st column	AR\AJ	Ok,NS
46	PB167312BS	PB167312BS	PS029601.D	28 Mar 2025 04:51		AR\AJ	Ok,NR
47	PB167275TB	PB167275TB	PS029602.D	28 Mar 2025 05:15		AR\AJ	Ok,NS
48	PB167293BL	PB167293BL	PS029603.D	28 Mar 2025 05:39		AR\AJ	Ok,NS
49	PB167293BS	PB167293BS	PS029604.D	28 Mar 2025 06:03	2,4-DCAA high in both column , Almost all compound recovery fail	AR\AJ	Not Ok
50	Q1635-01	TP-2	PS029605.D	28 Mar 2025 06:27		AR\AJ	Ok,NS
51	PB167322BL	PB167322BL	PS029606.D	28 Mar 2025 06:51		AR\AJ	Ok,NS
52	PB167322BS	PB167322BS	PS029607.D	28 Mar 2025 07:15		AR\AJ	Ok,NS
53	Q1642-01	PAT-1-032525	PS029608.D	28 Mar 2025 07:39		AR\AJ	Ok,NS
54	Q1645-01	TP-4	PS029609.D	28 Mar 2025 08:03		AR\AJ	Ok,NS
55	Q1645-05	TP-1	PS029610.D	28 Mar 2025 08:27		AR\AJ	Ok,NS

Instrument ID: ECD_S

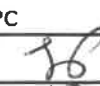
Daily Analysis Runlog For Sequence/QC Batch ID # PS032825

Review By	Abdul	Review On	3/28/2025 8:31:32 AM
Supervise By		Supervise On	
SubDirectory	PS032825	HP Acquire Method	HP Processing Method ps032825 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

56	I.BLK	I.BLK	PS029611.D	28 Mar 2025 08:51		AR\AJ	Ok,NS
57	HSTDCCC750	HSTDCCC750	PS029612.D	28 Mar 2025 09:15	Comp#3,13,15 high in 1st column	AR\AJ	Ok,NS

M : Manual Integration

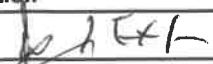
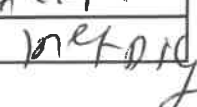
SOP ID :	M1311-TCLP-15	
SDG No :	N/A	Start Prep Date : 03/24/2025 Time : 17:00
Weigh By :	JP	End Prep Date : 03/25/2025 Time : 10:40
Balance ID :	WC SC-7	Combination Ratio : 20
pH Meter ID :	WC PH METER-1	ZHE Cleaning Batch : ⁸⁰ N/A
Extraction By :	JP	Initial Room Temperature: 23 °C
Filter By :	JP	Final Room Temperature: 22 °C
Pipette ID :	WC	TCLP Technician Signature : 
Tumbler ID :	T-1 / T-2	Supervisor By : 
TCLP Filter ID :	115525	

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	W3172.	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. q1636-20 is used for MS-MSD.

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
03/25/25 12:00	 1200 Room	5/29. 
	Preparation Group	Analysis Group 

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
PB167275TB	LEB275	13	N/A	2000	N/A	N/A	N/A	4.93	1.0	T-1
Q1626-03	CO-32-1	01	100.03	2000	N/A	N/A	N/A	5.8	1.0	T-1
Q1627-01	GRID-LINE-1.2-NORTH	02	100.02	2000	N/A	N/A	N/A	8.2	1.5	T-1
Q1630-02	VNJ-206	03	100.03	2000	N/A	N/A	N/A	5.6	1.0	T-1
Q1631-02	364	04	100.04	2000	N/A	N/A	N/A	8.2	1.5	T-1
Q1631-05	359	05	100.02	2000	N/A	N/A	N/A	10.0	1.0	T-1
Q1632-02	PIER-1-2	06	100.03	2000	N/A	N/A	N/A	9.5	1.5	T-1
Q1635-04	TP-2	07	100.02	2000	N/A	N/A	N/A	5.6	1.0	T-1
Q1636-04	WC-1	08	100.03	2000	N/A	N/A	N/A	3.5	1.5	T-1
Q1636-08	WC-2	09	100.02	2000	N/A	N/A	N/A	4.0	1.0	T-1
Q1636-12	WC-3	10	100.03	2000	N/A	N/A	N/A	3.5	1.5	T-1
Q1636-16	WC-4	11	100.04	2000	N/A	N/A	N/A	3.5	1.0	T-2
Q1636-20	WC-5	12	100.02	2000	N/A	N/A	N/A	4.0	1.5	T-2

SampleID	ClientID	Sample Weight (g)	Filter Weight (g)	Filtrate (mL)	Filter + Solid (After 100°C)	% solids	% Dry Solids
PB167275TB	LEB275	N/A	N/A	N/A	N/A	N/A	N/A
Q1626-03	CO-32-1	N/A	N/A	N/A	N/A	100	N/A
Q1627-01	GRID-LINE-1.2-NORTH	N/A	N/A	N/A	N/A	100	N/A
Q1630-02	VNJ-206	N/A	N/A	N/A	N/A	100	N/A
Q1631-02	364	N/A	N/A	N/A	N/A	100	N/A
Q1631-05	359	N/A	N/A	N/A	N/A	100	N/A
Q1632-02	PIER-1-2	N/A	N/A	N/A	N/A	100	N/A
Q1635-04	TP-2	N/A	N/A	N/A	N/A	100	N/A
Q1636-04	WC-1	N/A	N/A	N/A	N/A	100	N/A
Q1636-08	WC-2	N/A	N/A	N/A	N/A	100	N/A
Q1636-12	WC-3	N/A	N/A	N/A	N/A	100	N/A
Q1636-16	WC-4	N/A	N/A	N/A	N/A	100	N/A
Q1636-20	WC-5	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
PB167275TB	LEB275	N/A	N/A	N/A	N/A	#1	4.93
Q1626-03	CO-32-1	5.01	96.5	8.2	3.5	#1	4.93
Q1627-01	GRID-LINE-1.2-NORTH	5.01	96.5	11.0	4.5	#1	4.93
Q1630-02	VNJ-206	5.02	96.5	8.0	3.5	#1	4.93
Q1631-02	364	5.01	96.5	9.7	4.0	#1	4.93
Q1631-05	359	5.02	96.5	11.0	4.5	#1	4.93
Q1632-02	PIER-1-2	5.03	96.5	10.5	4.0	#1	4.93
Q1635-04	TP-2	5.04	96.5	8.0	3.5	#1	4.93
Q1636-04	WC-1	5.02	96.5	6.0	2.0	#1	4.93
Q1636-08	WC-2	5.03	96.5	6.6	1.5	#1	4.93
Q1636-12	WC-3	5.04	96.5	6.2	2.0	#1	4.93
Q1636-16	WC-4	5.02	96.5	6.0	2.0	#1	4.93
Q1636-20	WC-5	5.03	96.5	6.0	2.0	#1	4.93

WORKLIST(Hardcopy Internal Chain)

WorkList Name : TCLP Q1626

WorkList ID : 188483

Department : TCLP Extraction

Date : 03-24-2025 11:01:11

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1626-03	CO-32-1	Solid	TCLP Extraction	Cool 4 deg C	WALS01		03/21/2025	1311
Q1627-01	GRID-LINE-1.2-NORTH	Solid	TCLP Extraction	Cool 4 deg C	TULL02	I41	03/20/2025	1311
Q1630-02	VNJ-206	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	H31	03/24/2025	1311
Q1631-02	364	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	I41	03/24/2025	1311
Q1631-05	359	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	I41	03/24/2025	1311
Q1632-02	PIER-1-2	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	I41	03/24/2025	1311
Q1635-04	TP-2	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	I41	03/24/2025	1311
Q1636-04	WC-1	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	I41	03/24/2025	1311
Q1636-08	WC-2	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	I41	03/24/2025	1311
Q1636-12	WC-3	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	I41	03/24/2025	1311
Q1636-16	WC-4	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	I41	03/24/2025	1311
Q1636-20	WC-5	Solid	TCLP Extraction	Cool 4 deg C	PSEG03	I41	03/24/2025	1311

Date/Time 03/24/25 16:25

Raw Sample Received by: SO GDCI

Raw Sample Relinquished by: OP S

Date/Time 03/24/25 19:00

Raw Sample Received by: OP S

Raw Sample Relinquished by: SO GDCI

SOP ID: M8151A-Herbicide-22

Clean Up SOP #: N/A

Extraction Start Date : 03/25/2025

Matrix : Water

Extraction Start Time : 12:23

Weigh By: EH

Extraction By: RJ

Extraction End Date : 03/25/2025

Balance check: N/A

Filter By: RJ

Extraction End Time : 17:15

Balance ID: N/A

pH Meter ID: N/A

Concentration By: EH

pH Strip Lot#: E3880

Hood ID: 4,6,7

Supervisor By: rajesh

Extraction Method: ☒ Separatory Funnel

☐ Continous 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	PP24196
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
H2SO4 1:3	N/A	EP2587
NACL	N/A	M4459
ISO OCTANE	N/A	E3554
Diazomethane	N/A	EP2588
Hexane	N/A	E3914
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 12 N H2SO4<2 after Hydrolysis, Derivatization procedure is completed and samples are ready to Analyze,40 ML Vial lot# 03-40 BTS721.

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
03/25/25 17:20	RP (Ext Lab)	Y. P. Patel (PL)
	Preparation Group	Analysis Group

Analytical Method: M8151A-Herbicide-22

Concentration Date: 03/25/2025

Sample ID	Client Sample ID	Test	g / ml	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB167233TB	PB167233TB	TCLP Herbicide	100	6	ritesh	rajesh	10			SEP-01
PB167275TB	PB167275TB	TCLP Herbicide	100	6	ritesh	rajesh	10			2
PB167312BL	HBLK312	TCLP Herbicide	1000	6	ritesh	rajesh	10			3
PB167312BS	HLCS312	TCLP Herbicide	1000	6	ritesh	rajesh	10			4
Q1609-03	WC-SCRN-01-C	TCLP Herbicide	100	6	ritesh	rajesh	10	A		5
Q1609-03MS	WC-SCRN-01-CMS	TCLP Herbicide	100	6	ritesh	rajesh	10	A		6
Q1609-03MS D	WC-SCRN-01-CMSD	TCLP Herbicide	100	6	ritesh	rajesh	10	A		7
Q1626-03	CO-32-1	TCLP Herbicide	100	6	ritesh	rajesh	10	A		8
Q1627-01	GRID-LINE-1.2-NORTH	TCLP Herbicide	100	6	ritesh	rajesh	10	A		9
Q1632-02	PIER-1-2	TCLP Herbicide	100	6	ritesh	rajesh	10	A		10

* Extracts relinquished on the same date as received.

3/25/25

TCLP EXTRACTION LOGPAGE

PB167275

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
PB167275TB	LEB275	13	N/A	2000	N/A	N/A	N/A	4.93	1.0	T-1
Q1626-03	CO-32-1	01	100.03	2000	N/A	N/A	N/A	5.8	1.0	T-1
Q1627-01	GRID-LINE-1.2-NORTH	02	100.02	2000	N/A	N/A	N/A	8.2	1.5	T-1
Q1630-02	VNJ-206	03	100.03	2000	N/A	N/A	N/A	5.6	1.0	T-1
Q1631-02	364	04	100.04	2000	N/A	N/A	N/A	8.2	1.5	T-1
Q1631-05	359	05	100.02	2000	N/A	N/A	N/A	10.0	1.0	T-1
Q1632-02	PIER-1-2	06	100.03	2000	N/A	N/A	N/A	9.5	1.5	T-1
Q1635-04	TP-2	07	100.02	2000	N/A	N/A	N/A	5.6	1.0	T-1
Q1636-04	WC-1	08	100.03	2000	N/A	N/A	N/A	3.5	1.5	T-1
Q1636-08	WC-2	09	100.02	2000	N/A	N/A	N/A	4.0	1.0	T-1
Q1636-12	WC-3	10	100.03	2000	N/A	N/A	N/A	3.5	1.5	T-1
Q1636-16	WC-4	11	100.04	2000	N/A	N/A	N/A	3.5	1.0	T-2
Q1636-20	WC-5	12	100.02	2000	N/A	N/A	N/A	4.0	1.5	T-2

03/25/25
121.0e

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
PB167233TB	LEB233	16	N/A	2000	N/A	N/A	N/A	4.94	1.0	T-2
Q1605-02	DRUM-SOIL-CUTTING	01	100.02	2000	N/A	N/A	N/A	3.5	1.0	T-1
Q1606-02	CHRT24743	02	100.03	2000	N/A	N/A	N/A	5.5	1.5	T-1
Q1606-04	RBR251346	03	100.02	2000	N/A	N/A	N/A	5.6	1.0	T-1
Q1606-06	RT4534	04	100.01	2000	N/A	N/A	N/A	6.0	1.5	T-1
Q1606-08	RT3025	05	100.02	2000	N/A	N/A	N/A	5.8	1.0	T-1
Q1606-10	CHRT28607	06	100.03	2000	N/A	N/A	N/A	6.0	1.5	T-1
Q1609-03	WC-SCRN-01-C	07	100.02	2000	N/A	N/A	N/A	5.6	1.0	T-1
Q1610-03	SOIL-PILE	08	100.03	2000	N/A	N/A	N/A	3.5	1.5	T-1
Q1619-02	CONCRETE-1	09	100.02	2000	N/A	N/A	N/A	9.1	1.0	T-1
Q1619-04	CONCRETE-2	10	100.03	2000	N/A	N/A	N/A	7.6	1.5	T-1
Q1619-06	TP-1	11	100.02	2000	N/A	N/A	N/A	7.2	1.0	T-2
Q1619-08	TP-2	12	100.03	2000	N/A	N/A	N/A	6.2	1.5	T-2
Q1619-10	TP-3	13	100.02	2000	N/A	N/A	N/A	7.2	1.0	T-2
Q1619-12	TP-4	14	100.03	2000	N/A	N/A	N/A	7.0	1.5	T-2
Q1619-14	TP-5	15	100.04	2000	N/A	N/A	N/A	7.2	1.0	T-2

03/21/25
11:40

Prep Standard - Chemical Standard Summary

Order ID : Q1627

Test : TCLP Herbicide

Prepbatch ID : PB167312,

Sequence ID/Qc Batch ID: PS032825,

Standard ID :

EP2553,EP2576,EP2587,PP24061,PP24062,PP24064,PP24065,PP24066,PP24067,PP24068,PP24069,PP24070,PP24196,PP24218,

Chemical ID :

E3370,E3551,E3657,E3826,E3873,E3876,E3881,M4459,M5173,M5178,P10549,P11180,P11181,P12619,P12629,P12686,P12708,P12709,P13510,P13511,P13512,P13513,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



<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
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Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
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



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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9244-03 / Ether, Anhydrous, Purified (cs/4x4L)	0000288039	07/17/2025	08/01/2022 / Rajesh	07/13/2022 / Rajesh	E3370

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1	313201	07/01/2025	01/03/2024 / Rajesh	07/20/2023 / Rajesh	E3551

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19510-5 / Sodium Hydroxide Pellets 2.5 Kg, Pk of 4	23B1556310	12/31/2025	12/04/2023 / Rajesh	12/01/2023 / Rajesh	E3657

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9262-03 / Hexane, Ultra-Resi (cs/4x4L)	24G1962003	05/09/2025	11/09/2024 / Rajesh	11/07/2024 / Rajesh	E3826

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H2762008	07/29/2025	01/29/2025 / Rajesh	01/29/2025 / Rajesh	E3873

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

CHEMICAL RECEIPT LOG BOOK

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

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	08/18/2025	02/18/2025 / Abdul	08/16/2024 / yogesh	P13510

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	08/18/2025	02/18/2025 / Abdul	08/16/2024 / yogesh	P13511

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	08/18/2025	02/18/2025 / Abdul	08/16/2024 / yogesh	P13512

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	08/18/2025	02/18/2025 / Abdul	08/16/2024 / yogesh	P13513

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	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

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

CHEMICAL RECEIPT LOG BOOK

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 / lwona	07/03/2024 / lwona	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,

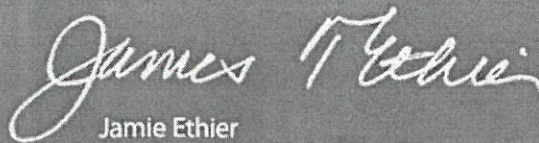
Test	Specification	Result
Assay (NaCl) (by Ag titrn)	$\geq 99.0 \%$	100.3
pH of 5% Solution at 25°C	5.0 – 9.0	6.0
ACS – Insoluble Matter	$\leq 0.005 \%$	< 0.001
Iodide (I)	$\leq 0.002 \%$	< 0.002
Bromide (Br)	$\leq 0.01 \%$	< 0.01
Chlorate and Nitrate (as NO_3)	$\leq 0.003 \%$	< 0.001
ACS – Phosphate (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,

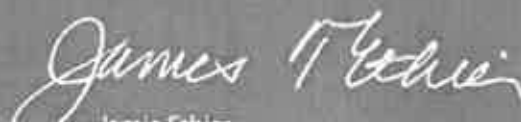
Test	Specification	Result
Assay ((C ₂ H ₅) ₂ O) (by GC, corrected for water)	>= 99.0 %	100.0
Alcohol (C ₂ H ₅ OH)	Passes Test	PT
Carbonyl Compounds (as HCHO) (by polarography)	<= 0.001 %	< 0.001
Color (APHA)	<= 10	< 5
Peroxide (as H ₂ O ₂)	<= 1 ppm	< 1
Preservative (BHT)	>= 7 ppm	9
Residue after Evaporation	<= 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.

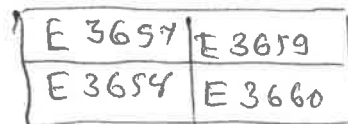
This document has been electronically produced and is valid without a signature.

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

Acetone

BAKER RESI-ANALYZED® Reagent

For Organic Residue Analysis

avantor™



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

Recd. by RP on 1/29/25

E 3873

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

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

 **avantors**™



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

Recd. by RP on 2/12/25

E 3876



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

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.

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

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

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:

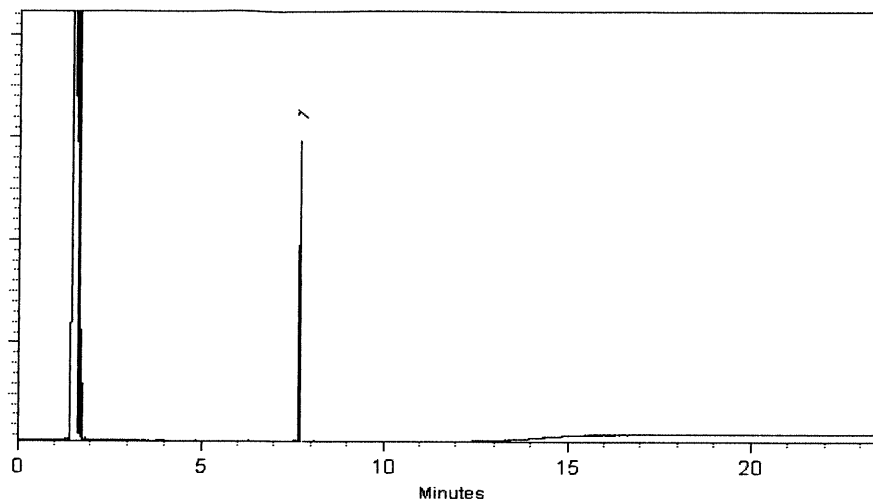
250°C

Det. Temp:

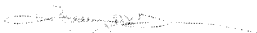
330°C

Det. Type:

FID

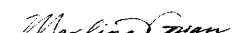


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


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:

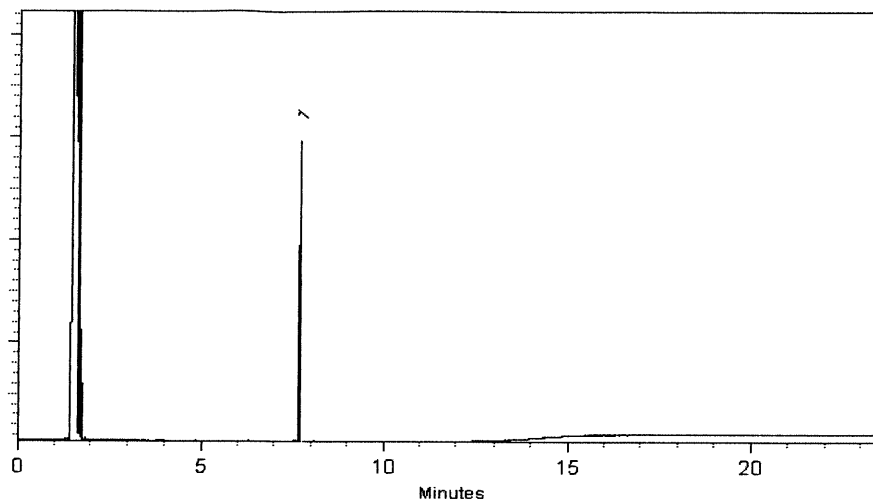
250°C

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
Katelyn McGinnis - Operations Tech I

Date Mixed: 28-May-2021

Balance: B345965662

Marlene Cowan
Marlene Cowan - Operations Tech I

Date Passed: 02-Jun-2021

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

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P 111 86
AR
11/02/21



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
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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%

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P11186
—
AR
01/02/21



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Certificate of Analysis



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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:

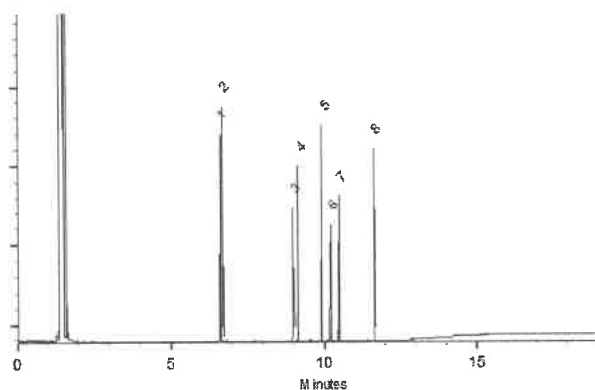
250°C

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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CERTIFIED REFERENCE MATERIAL

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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:

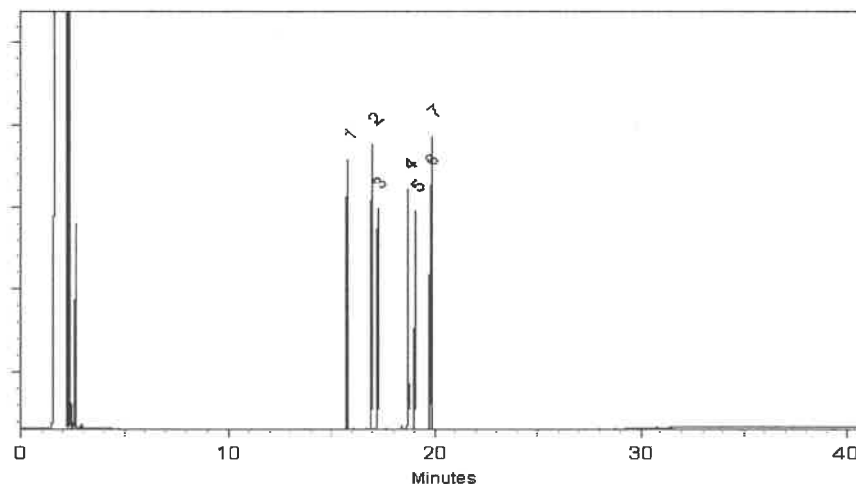
FID

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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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)
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P 12689
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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:

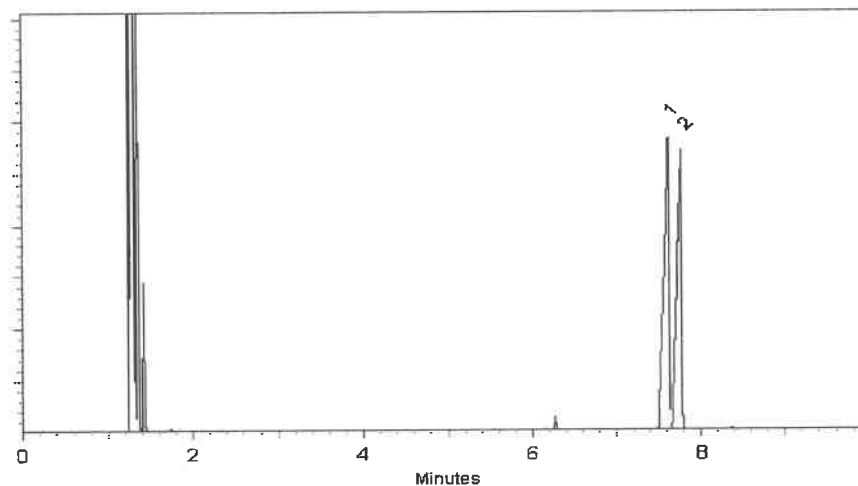
FID

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
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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.

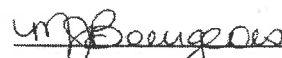
Expiration of Certification:

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
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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.

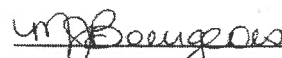
Expiration of Certification:

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



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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:

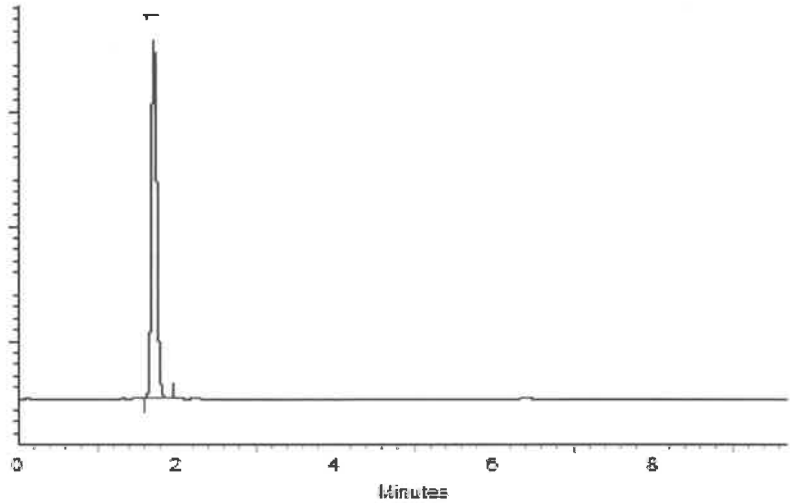
90%B Isocratic

Det. Type:

Wavelength: 220 & 254 nm

Inj. Vol

5µl

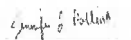


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


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.

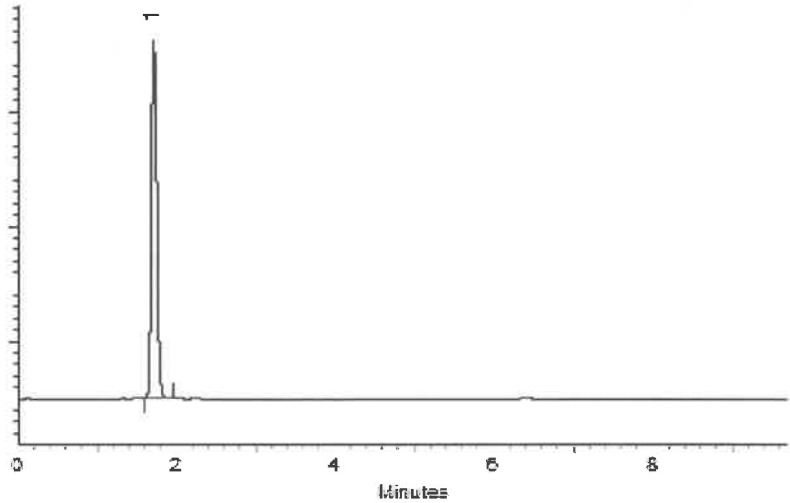
Mobile Phase A:
0.14% H₃PO₄ in water

Mobile Phase B:
acetonitrile

Mobile Phase Composition:
90%B Isocratic

Det. Type:
Wavelength: 220 & 254 nm

Inj. Vol
5µl

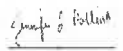


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


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/ 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.
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chromatographic plus



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Catalog No. : 32049 **Lot No.:** A0212676
Description : 2,4-Dichlorophenylacetic Acid Standard
2, 4-Dichlorophenyl Acetic Acid 200µg/mL, Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : March 31, 2027 **Storage:** 10°C or colder
Handling: This product is photosensitive. **Ship:** Ambient

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:

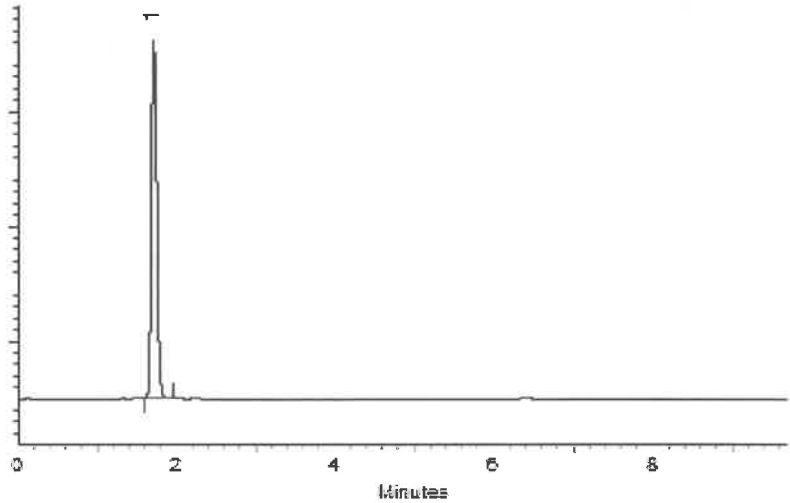
90%B Isocratic

Det. Type:

Wavelength: 220 & 254 nm

Inj. Vol

5µl

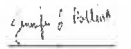


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Ethan Winiarski - Operations Tech I

Date Mixed: 11-Jun-2024

Balance Serial # B345965662


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-Jun-2024

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

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

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$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

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.
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Catalog No. : 32049 **Lot No.:** A0212676
Description : 2,4-Dichlorophenylacetic Acid Standard
2, 4-Dichlorophenyl Acetic Acid 200µg/mL, Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : March 31, 2027 **Storage:** 10°C or colder
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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:

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Quality Confirmation Test

Column:

150mm x 4.6mm
Allure C18 Cat. (#9164565)

Flow Rate:

1.0 ml/min.

Mobile Phase A:

0.14% H₃PO₄ in water

Mobile Phase B:

acetonitrile

Mobile Phase Composition:

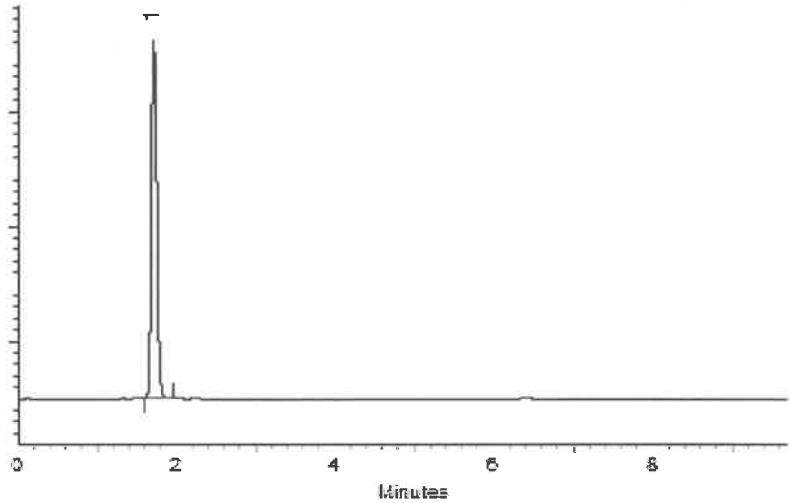
90%B Isocratic

Det. Type:

Wavelength: 220 & 254 nm

Inj. Vol

5µl

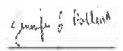


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Ethan Winiarski - Operations Tech I

Date Mixed: 11-Jun-2024

Balance Serial # B345965662


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

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Manufacturing Notes:

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- 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
↓
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).

Lot Number: 0006810955
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dichlorprop	100.2 ±	0.5 µg/mL	000120-36-5	RM21688
dinoseb	100.3 ±	0.5 µg/mL	000088-85-7	RM22275
MCPA	10019 ±	50 µg/mL	000094-74-6	RM12220
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

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P13520
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P13536
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dalapon	100.4 ±	0.5 µg/mL	000075-99-0	RM19677
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2,4,5-T	100.3 ±	0.5 µg/mL	000093-76-5	RM19314

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P13520
↓
P13536 } (18)

BACF
9/4/2024



SHIPPING DOCUMENTS



284 Sheffield Street, Mountainside, NJ 07092

(908) 789-8900 Fax: (908) 788-9222

www.chemtech.net

CHAIN OF CUSTODY RECORD

Alliance Project Number:

Q1627

COC Number:

CLIENT INFORMATION

COMPANY: Scalամandre Tully JV

ADDRESS: 57 Seaview Blvd

CITY: Pt Washington STATE: NY ZIP: 11050

ATTENTION: Dean Devoe

PHONE: 718 446 7000

FAX:

PROJECT INFORMATION

PROJECT NAME: DOT Harper Street Yard

PROJECT #: 23657

LOCATION:

PROJECT MANAGER:

E-MAIL:

PHONE:

FAX:

BILLING INFORMATION

BILL TO: Same

PO#

ADDRESS:

CITY:

STATE:

ZIP:

ATTENTION:

PHONE:

ANALYSIS

Full TCLP

RIC

1

2

3

4

5

6

7

8

9

PRESERVATIVES

COMMENTS

<-- Specify Preservatives

A-HCl B-HNO3

C-H2SO4 D-NaOH

E-ICE F-Other

CHEMTECH
SAMPLE
IDPROJECT
SAMPLE IDENTIFICATIONSAMPLE
MATRIXSAMPLE
TYPESAMPLE
COLLECTION

of Bottles

COMP

GRAB

DATE

TIME

1

2

3

4

5

6

7

8

9

1.

Grid Line 1/2 North

Soil

X

3/20/25

1230

X

X

2.

3.

4.

5.

6.

7.

8.

9.

10.

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

RELINQUISHED BY SAMPLER

DATE/TIME
March 20, 2025

RECEIVED BY

1. D Devoe

1.

Conditions of bottles or coolers at receipt:

☐ Compliant☐ Non Compliant☐ Cooler Temp

4.8°C

MeOH extraction requires an additional 4oz. Jar for percent solid

☐ Ice in Cooler?

yes

RELINQUISHED BY

DATE/TIME

3-21-25

RECEIVED BY

2.

RELINQUISHED BY

DATE/TIME

RECEIVED FOR LAB BY

3.

Page of

SHIPPED VIA: CLIENT: ☐ Hand Delivered ☐ OvernightALLIANCE: ☐ Picked Up ☐ Overnight

Shipment Complete

☐ YES ☐ NO

WHITE - ALLIANCE COPY FOR RETURN TO CLIENT

YELLOW - ALLIANCE COPY

PINK - SAMPLER COPY

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488