

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

LAB CHRONICLE

OrderID:	P4722	OrderDate:	11/5/2024 3:33:08 PM
Client:	Walsh Construction Company II, LLC	Project:	NYCDEP C547A - Shafts 17B-1 & 18B-1 Stage 2
Contact:	Kayla Timony	Location:	L23,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P4722-03	WC-1(0-6)	SOIL			11/05/24			11/05/24
			Gasoline Range Organics	8015D			11/08/24	
			Herbicide	8151A		11/07/24	11/12/24	
			PCB	8082A		11/07/24	11/07/24	
			Pesticide-TCL	8081B		11/07/24	11/07/24	
			EPH_NF	NJEPH		11/07/24	11/07/24	
			EPH_NF	NJEPH		11/07/24	11/08/24	
P4722-03DL	WC-1(0-6)DL	Solid			11/05/24			11/05/24
			EPH_NF	NJEPH		11/07/24	11/08/24	
P4722-05	WC-1(0-6)	WATER			11/05/24			11/05/24
			SPLP Pesticide	8081B		11/10/24	11/11/24	
P4722-08	WC-2(0-6)	SOIL			11/05/24			11/05/24
			Gasoline Range Organics	8015D			11/07/24	
			Herbicide	8151A		11/07/24	11/08/24	
			PCB	8082A		11/07/24	11/07/24	
			Pesticide-TCL	8081B		11/07/24	11/07/24	
			EPH_NF	NJEPH		11/07/24	11/07/24	
			EPH_NF	NJEPH		11/07/24	11/08/24	
P4722-08DL	WC-2(0-6)DL	Solid			11/05/24			11/05/24
			EPH_NF	NJEPH		11/07/24	11/08/24	
P4722-10	WC-2(0-6)	WATER			11/05/24			11/05/24
			SPLP Pesticide	8081B		11/10/24	11/11/24	
P4722-13	WC-3(0-6)	SOIL			11/05/24			11/05/24
			Gasoline Range Organics	8015D			11/08/24	
			Herbicide	8151A		11/07/24	11/12/24	
			PCB	8082A		11/07/24	11/07/24	

LAB CHRONICLE

P4722-13DL	WC-3(0-6)DL	Solid	Pesticide-TCL	8081B		11/07/24	11/07/24	11/05/24
			EPH_NF	NJEPH		11/07/24	11/07/24	
			EPH_NF	NJEPH		11/07/24	11/08/24	
			EPH_NF	NJEPH		11/07/24	11/08/24	
P4722-15	WC-3(0-6)	WATER			11/05/24			11/05/24
			SPLP Pesticide	8081B		11/10/24	11/11/24	



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

Hit Summary Sheet
SW-846

SDG No.: P4722

Order ID: P4722

Client: Walsh Construction Company II, LLC

Project ID: NYCDEP C547A - Shafts 17B-1 & 18B

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.: P4722

Client: Walsh Construction Company II, LLC

Analytical Method: 8151A

Lab Sample ID	Client ID	Parameter	Column	Spike	Result	Rec	Qual	Limits	
								Low	High
I.BLK-PS028355.D	PIBLK-PS028355.D	2,4-DCAA	1	500	501	100		39	175
		2,4-DCAA	2	500	503	101		39	175
I.BLK-PS028362.D	PIBLK-PS028362.D	2,4-DCAA	1	500	491	98		39	175
		2,4-DCAA	2	500	493	99		39	175
PB164754BL	PB164754BL	2,4-DCAA	1	500	494	99		10	141
		2,4-DCAA	2	500	469	94		10	141
PB164754BS	PB164754BS	2,4-DCAA	1	500	534	107		10	141
		2,4-DCAA	2	500	533	107		10	141
P4722-08	WC-2(0-6)	2,4-DCAA	1	500	108	22		10	141
		2,4-DCAA	2	500	88.5	18		10	141
P4739-01MS	TP-14MS	2,4-DCAA	1	500	237	47		10	141
		2,4-DCAA	2	500	199	40		10	141
P4739-01MSD	TP-14MSD	2,4-DCAA	1	500	232	46		10	141
		2,4-DCAA	2	500	196	39		10	141
I.BLK-PS028378.D	PIBLK-PS028378.D	2,4-DCAA	1	500	494	99		39	175
		2,4-DCAA	2	500	487	97		39	175
I.BLK-PS028429.D	PIBLK-PS028429.D	2,4-DCAA	1	500	508	102		39	175
		2,4-DCAA	2	500	461	92		39	175
P4722-03	WC-1(0-6)	2,4-DCAA	1	500	258	52		10	141
		2,4-DCAA	2	500	217	43		10	141
P4722-13	WC-3(0-6)	2,4-DCAA	1	500	323	65		10	141
		2,4-DCAA	2	500	270	54		10	141
I.BLK-PS028441.D	PIBLK-PS028441.D	2,4-DCAA	1	500	509	102		39	175
		2,4-DCAA	2	500	455	91		39	175

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: P4722

Client: Walsh Construction Company II, LLC

Analytical Method: 8151A

DataFile : PS028373.D

Lab Sample ID:	Parameter	Spike	Sample		Units	Rec	Rec		RPD		Limits	
			Result	Result			Qual	RPD	Qual	Low	High	RPD
Client Sample ID: P4739-01MS	TP-14MS											
	DICAMBA	187.7	0	68.5	ug/Kg	36				10	112	
	DICHLORPROP	187.7	0	40.4	ug/Kg	22				10	113	
	2,4-D	187.7	0	72.7	ug/Kg	39				10	144	
	2,4,5-TP(Silvex)	187.7	0	27.4	ug/Kg	15				10	114	
	2,4,5-T	187.7	0	37.0	ug/Kg	20				10	115	
	2,4-DB	187.7	0	27.6	ug/Kg	15				10	140	
	Dinoseb	187.7	0	14.2	ug/Kg	8	*			10	118	

Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: P4722

Client: Walsh Construction Company II, LLC

Analytical Method: 8151A

DataFile : PS028374.D

Lab Sample ID:	Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Low	Limits High	RPD
Client Sample ID: P4739-01MSD	TP-14MSD											
	DICAMBA	187.8	0	67.7	ug/Kg	36		0		10	112	20
	DICHLORPROP	187.8	0	39.6	ug/Kg	21		5		10	113	20
	2,4-D	187.8	0	71.0	ug/Kg	38		3		10	144	20
	2,4,5-TP(Silvex)	187.8	0	26.6	ug/Kg	14		7		10	114	20
	2,4,5-T	187.8	0	36.3	ug/Kg	19		5		10	115	20
	2,4-DB	187.8	0	26.9	ug/Kg	14		7		10	140	20
	Dinoseb	187.8	0	15.0	ug/Kg	8	*	0		10	118	20



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Fax : 908 789 8922

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P4722

Client: Walsh Construction Company II, LLC

Analytical Method: 8151A Datafile : PS028368.D

Lab Sample ID	Parameter	Spike	Result	Units	Rec	RPD	Qual	RPD		Limits	
								Qual	Low	High	RPD
PB164754BS	DICAMBA	166.6	170	ug/Kg	102				72	129	
	DICHLORPROP	166.6	170	ug/Kg	102				77	135	
	2,4-D	166.6	169	ug/Kg	101				65	144	
	2,4,5-TP(Silvex)	166.6	173	ug/Kg	104				74	146	
	2,4,5-T	166.6	173	ug/Kg	104				77	134	
	2,4-DB	166.6	168	ug/Kg	101				72	122	
	Dinoseb	166.6	167	ug/Kg	100				74	132	

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB164754BL

Lab Name: CHEMTECH

Contract: WALS01

Lab Code: CHEM Case No.: P4722

SAS No.: P4722 SDG NO.: P4722

Lab Sample ID: PB164754BL

Lab File ID: PS028367.D

Matrix: (soil/water) Solid

Extraction: (Type) _____

Sulfur Cleanup: (Y/N) N

Date Extracted: 11/07/2024

Date Analyzed (1): 11/08/2024

Date Analyzed (2): 11/08/2024

Time Analyzed (1): 19:46

Time Analyzed (2): 19:46

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
PB164754BS	PB164754BS	PS028368.D	11/08/2024	11/08/2024
WC-2 (0-6)	P4722-08	PS028370.D	11/08/2024	11/08/2024
TP-14MS	P4739-01MS	PS028373.D	11/08/2024	11/08/2024
TP-14MSD	P4739-01MSD	PS028374.D	11/08/2024	11/08/2024
WC-1 (0-6)	P4722-03	PS028438.D	11/12/2024	11/12/2024
WC-3 (0-6)	P4722-13	PS028439.D	11/12/2024	11/12/2024

COMMENTS: _____



SAMPLE DATA

Report of Analysis

Client:	Walsh Construction Company II, LLC	Date Collected:	11/05/24
Project:	NYCDEP C547A - Shafts 17B-1 & 18B-1 Stage 2	Date Received:	11/05/24
Client Sample ID:	WC-1(0-6)	SDG No.:	P4722
Lab Sample ID:	P4722-03	Matrix:	SOIL
Analytical Method:	SW8151A	% Solid:	93.8
Sample Wt/Vol:	30.01	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Herbicide
GPC Factor :	1.0	PH :	
Prep Method :	8151A	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS028438.D	1	11/07/24 10:33	11/12/24 05:23	PB164754

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
1918-00-9	DICAMBA	9.20	U	9.20	71.4	ug/Kg
120-36-5	DICHLORPROP	10.2	U	10.2	71.4	ug/Kg
94-75-7	2,4-D	12.9	U	12.9	71.4	ug/Kg
93-72-1	2,4,5-TP (Silvex)	10.0	U	10.0	71.4	ug/Kg
93-76-5	2,4,5-T	10.8	U	10.8	71.4	ug/Kg
94-82-6	2,4-DB	19.5	U	19.5	71.4	ug/Kg
88-85-7	DINOSEB	13.2	U	13.2	71.4	ug/Kg
SURROGATES						
19719-28-9	2,4-DCAA	258		10 - 141	52%	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\PS111124\
Data File : PS028438.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 Nov 2024 05:23
Operator : AR\AJ
Sample : P4722-03
Misc :
ALS Vial : 39 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
WC-1(0-6)

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 12 05:29:27 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
Quant Title : 8080.M
QLast Update : Fri Nov 08 17:46:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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

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

4) S	2,4-DCAA	7.243	7.748	713.5E6	345.9E6	258.448	217.093
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Target Compounds

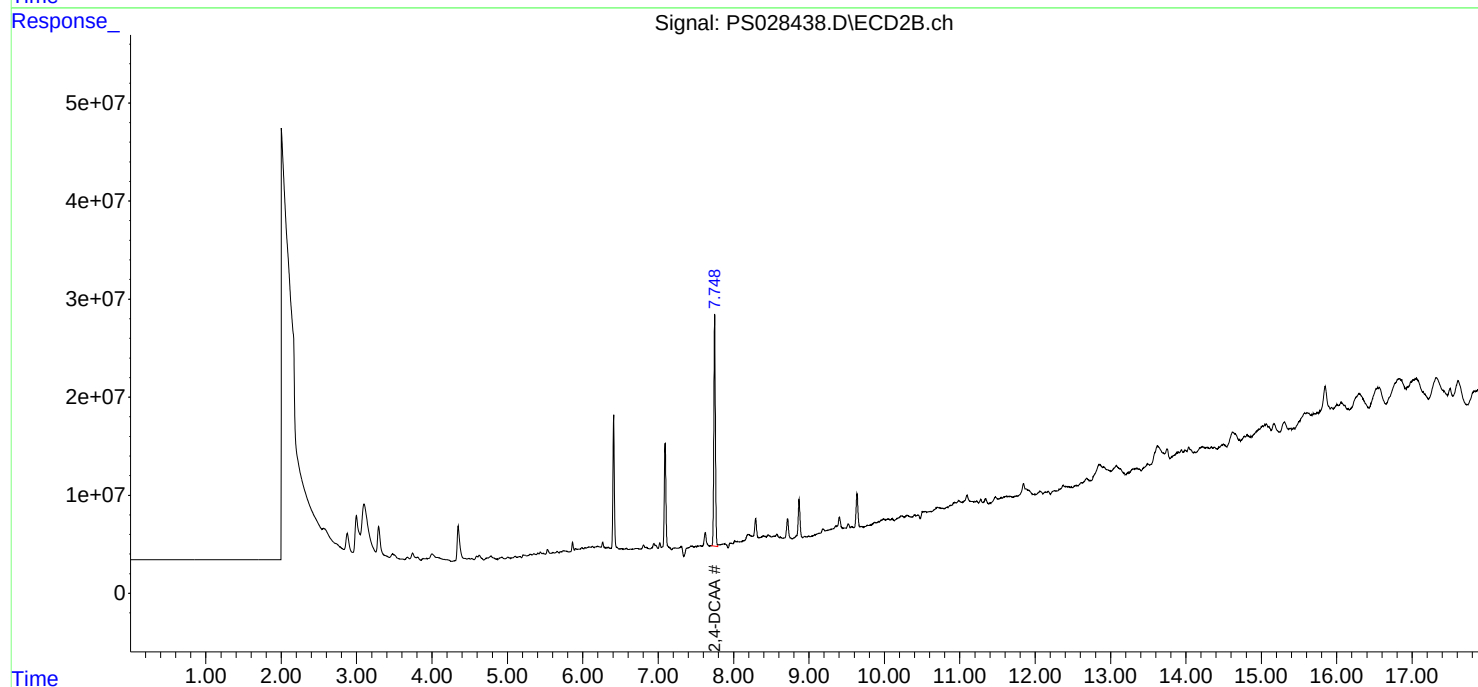
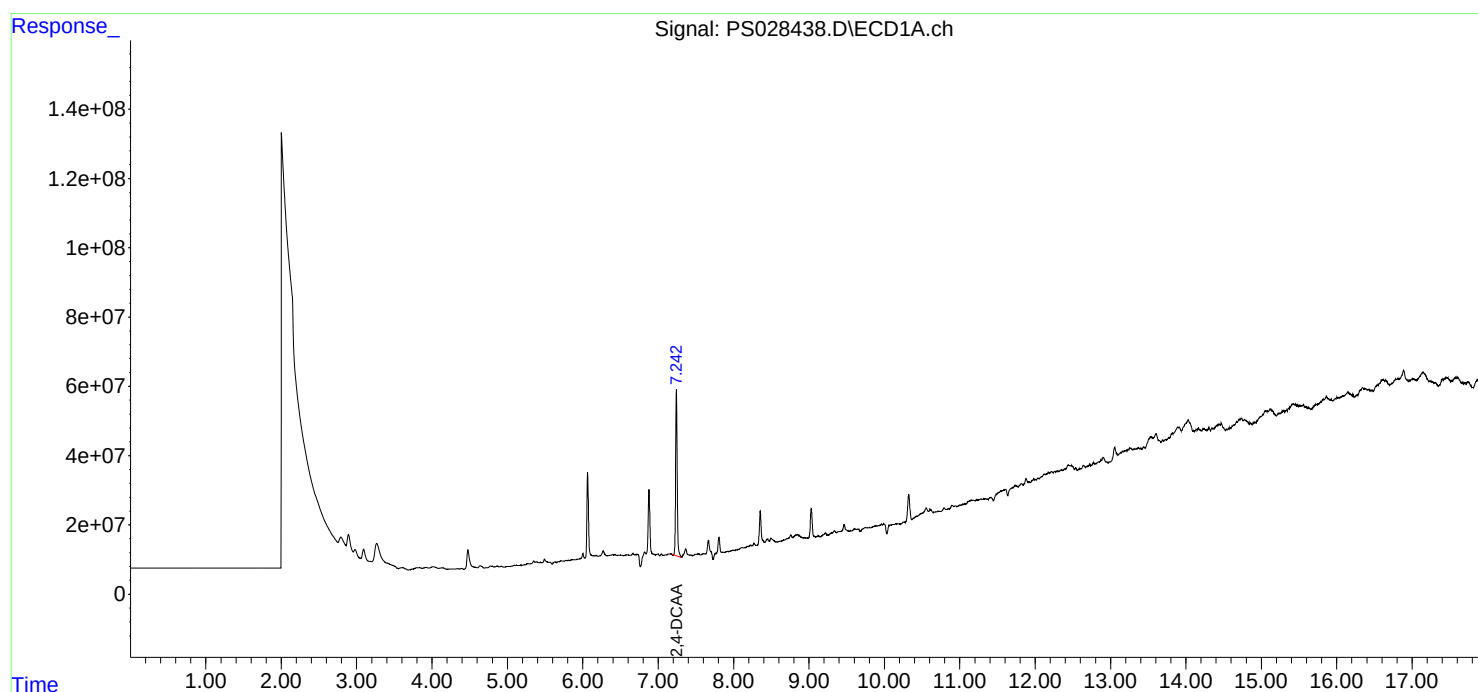
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

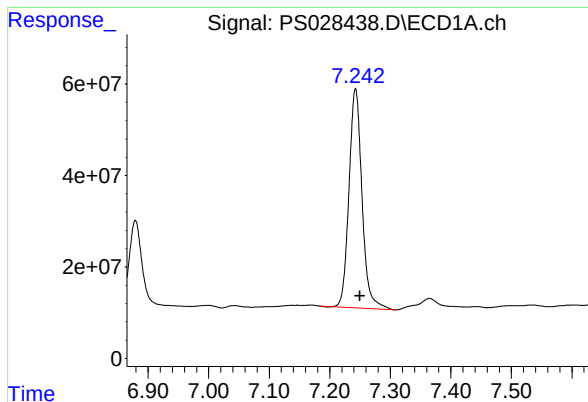
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS111124\
Data File : PS028438.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 Nov 2024 05:23
Operator : AR\AJ
Sample : P4722-03
Misc :
ALS Vial : 39 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
WC-1(0-6)

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 12 05:29:27 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
Quant Title : 8080.M
QLast Update : Fri Nov 08 17:46:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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





#4 2,4-DCAA

R.T.: 7.243 min

Delta R.T.: -0.008 min

Response: 713511696

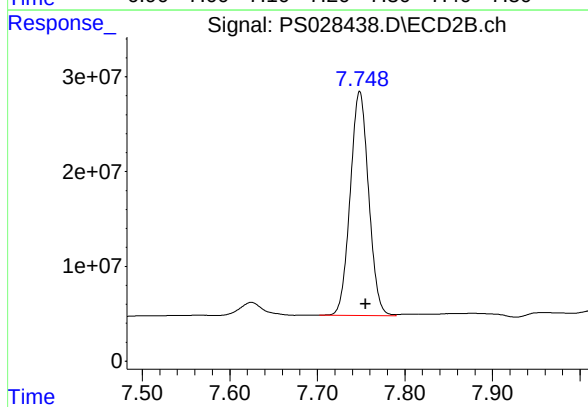
Conc: 258.45 ng/ml

Instrument :

ECD_S

ClientSampleId :

WC-1(0-6)



#4 2,4-DCAA

R.T.: 7.748 min

Delta R.T.: -0.007 min

Response: 345920007

Conc: 217.09 ng/ml

Report of Analysis

Client:	Walsh Construction Company II, LLC	Date Collected:	11/05/24
Project:	NYCDEP C547A - Shafts 17B-1 & 18B-1 Stage 2	Date Received:	11/05/24
Client Sample ID:	WC-2(0-6)	SDG No.:	P4722
Lab Sample ID:	P4722-08	Matrix:	SOIL
Analytical Method:	SW8151A	% Solid:	90.1
Sample Wt/Vol:	30.1	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Herbicide
GPC Factor :	1.0	PH :	
Prep Method :	8151A	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS028370.D	1	11/07/24 10:33	11/08/24 20:58	PB164754

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
1918-00-9	DICAMBA	9.60	U	9.60	74.1	ug/Kg
120-36-5	DICHLORPROP	10.6	U	10.6	74.1	ug/Kg
94-75-7	2,4-D	13.4	U	13.4	74.1	ug/Kg
93-72-1	2,4,5-TP (Silvex)	10.4	U	10.4	74.1	ug/Kg
93-76-5	2,4,5-T	11.2	U	11.2	74.1	ug/Kg
94-82-6	2,4-DB	20.2	U	20.2	74.1	ug/Kg
88-85-7	DINOSEB	13.7	U	13.7	74.1	ug/Kg
SURROGATES						
19719-28-9	2,4-DCAA	108		10 - 141	22%	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\PS110924\
 Data File : PS028370.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 08 Nov 2024 20:58
 Operator : AR\AJ
 Sample : P4722-08
 Misc :
 ALS Vial : 15 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 WC-2(0-6)

Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 11/11/2024
 Supervised By :Ankita Jodhani 11/12/2024

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Nov 08 21:46:18 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
 Quant Title : 8080.M
 QLast Update : Fri Nov 08 17:46:43 2024
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

4) S	2,4-DCAA	7.246	7.753	299.5E6	141.0E6	108.483m	88.515m
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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\PS110924\
Data File : PS028370.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 08 Nov 2024 20:58
Operator : AR\AJ
Sample : P4722-08
Misc :
ALS Vial : 15 Sample Multiplier: 1

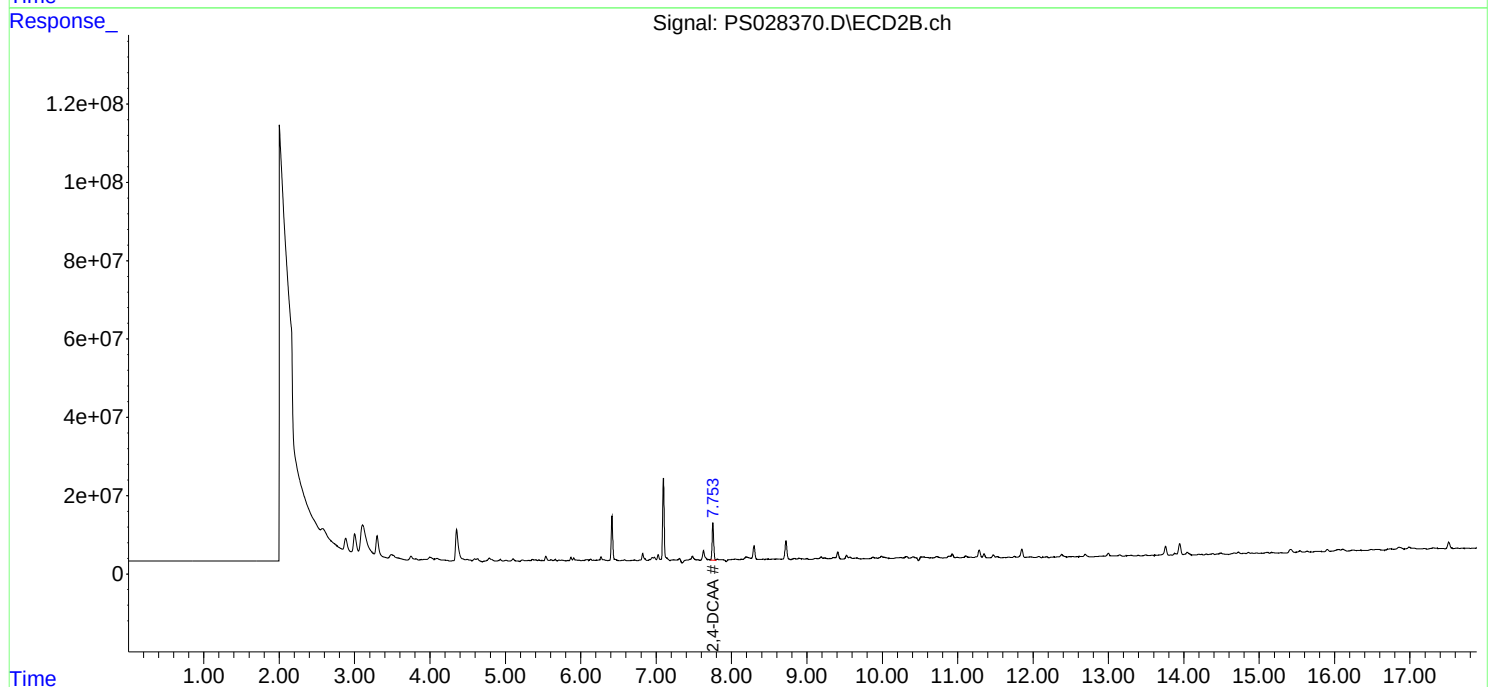
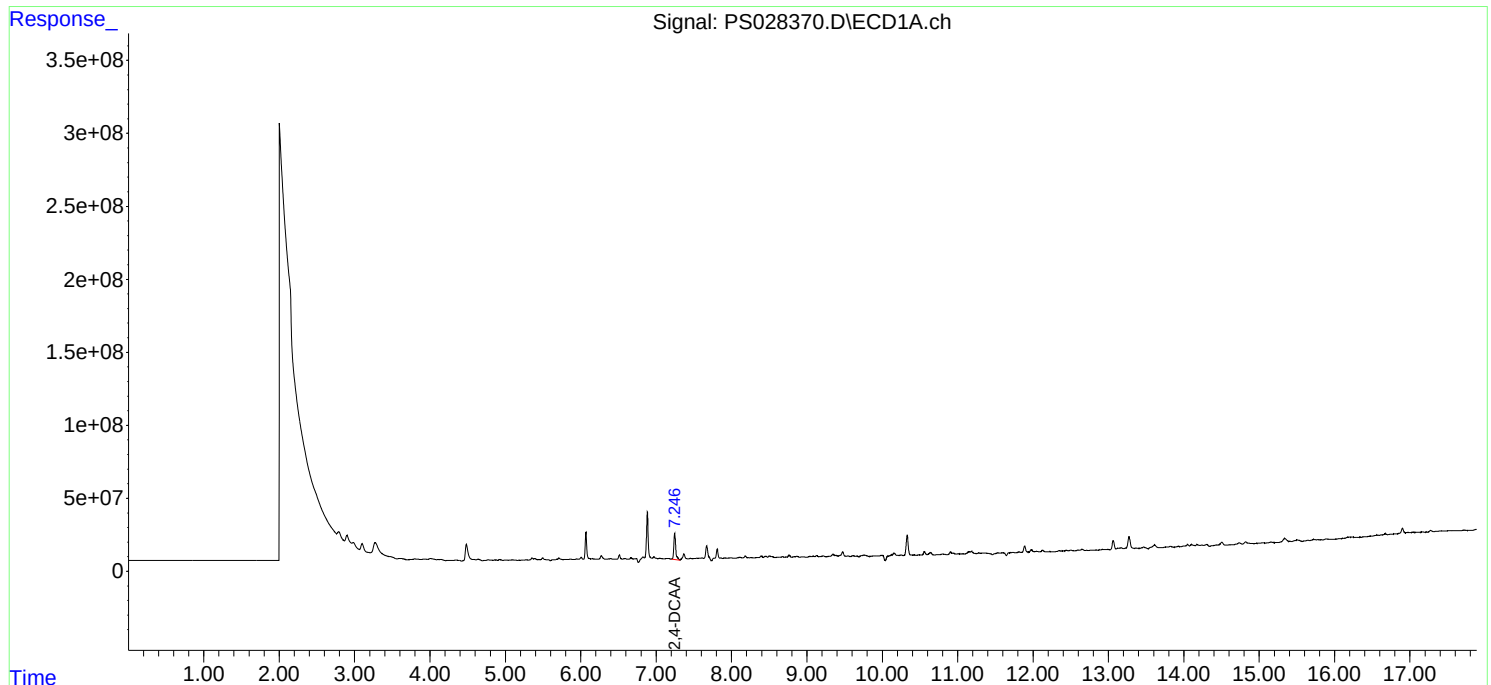
Instrument :
ECD_S
ClientSampleId :
WC-2(0-6)

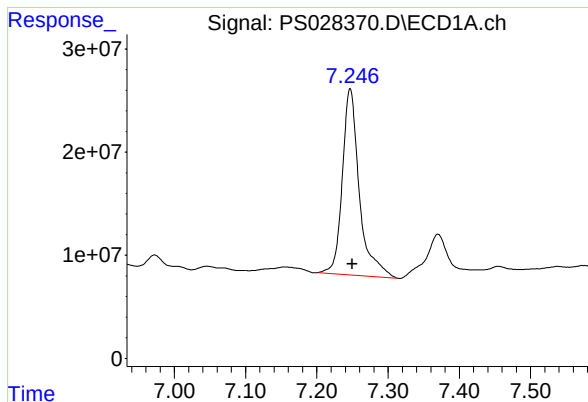
Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 11/11/2024
Supervised By :Ankita Jodhani 11/12/2024

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 08 21:46:18 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
Quant Title : 8080.M
QLast Update : Fri Nov 08 17:46:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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





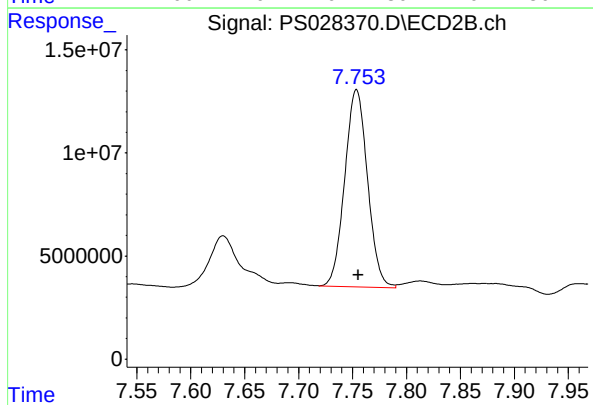
#4 2,4-DCAA

R.T.: 7.246 min
Delta R.T.: -0.004 min
Response: 299495469
Conc: 108.48 ng/ml

Instrument :
ECD_S
ClientSampleId :
WC-2(0-6)

Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 11/11/2024
Supervised By :Ankita Jodhani 11/12/2024



#4 2,4-DCAA

R.T.: 7.753 min
Delta R.T.: -0.002 min
Response: 141042364
Conc: 88.52 ng/ml

Report of Analysis

Client:	Walsh Construction Company II, LLC	Date Collected:	11/05/24
Project:	NYCDEP C547A - Shafts 17B-1 & 18B-1 Stage 2	Date Received:	11/05/24
Client Sample ID:	WC-3(0-6)	SDG No.:	P4722
Lab Sample ID:	P4722-13	Matrix:	SOIL
Analytical Method:	SW8151A	% Solid:	86.6
Sample Wt/Vol:	30.08	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Herbicide
GPC Factor :	1.0	PH :	
Prep Method :	8151A	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS028439.D	1	11/07/24 10:33	11/12/24 05:47	PB164754

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
1918-00-9	DICAMBA	10.0	U	10.0	77.2	ug/Kg
120-36-5	DICHLORPROP	11.0	U	11.0	77.2	ug/Kg
94-75-7	2,4-D	13.9	U	13.9	77.2	ug/Kg
93-72-1	2,4,5-TP (Silvex)	10.8	U	10.8	77.2	ug/Kg
93-76-5	2,4,5-T	11.6	U	11.6	77.2	ug/Kg
94-82-6	2,4-DB	21.1	U	21.1	77.2	ug/Kg
88-85-7	DINOSEB	14.3	U	14.3	77.2	ug/Kg
SURROGATES						
19719-28-9	2,4-DCAA	323		10 - 141	65%	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\PS111124\
 Data File : PS028439.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 12 Nov 2024 05:47
 Operator : AR\AJ
 Sample : P4722-13
 Misc :
 ALS Vial : 40 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 WC-3(0-6)

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Nov 12 06:54:28 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
 Quant Title : 8080.M
 QLast Update : Fri Nov 08 17:46:43 2024
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds

4) S 2,4-DCAA	7.242	7.748	891.5E6	429.6E6	322.906	269.630
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Target Compounds

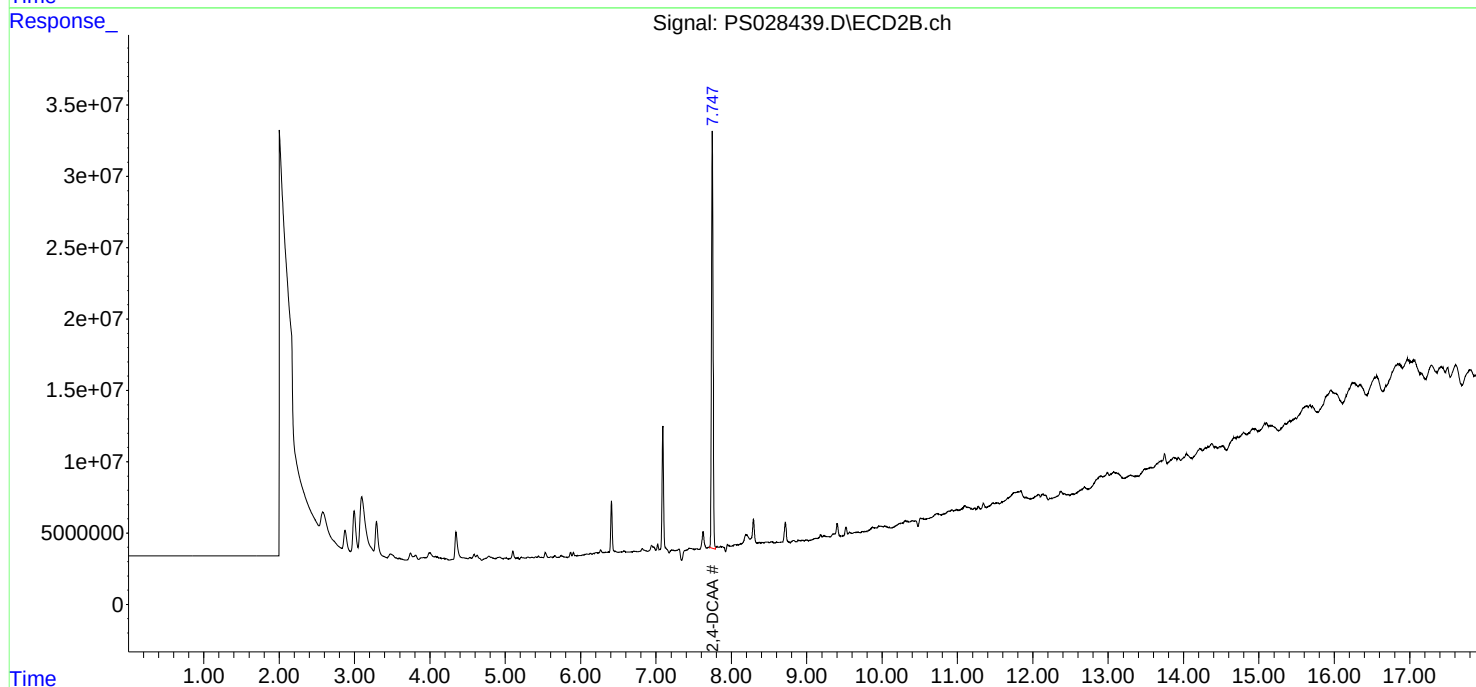
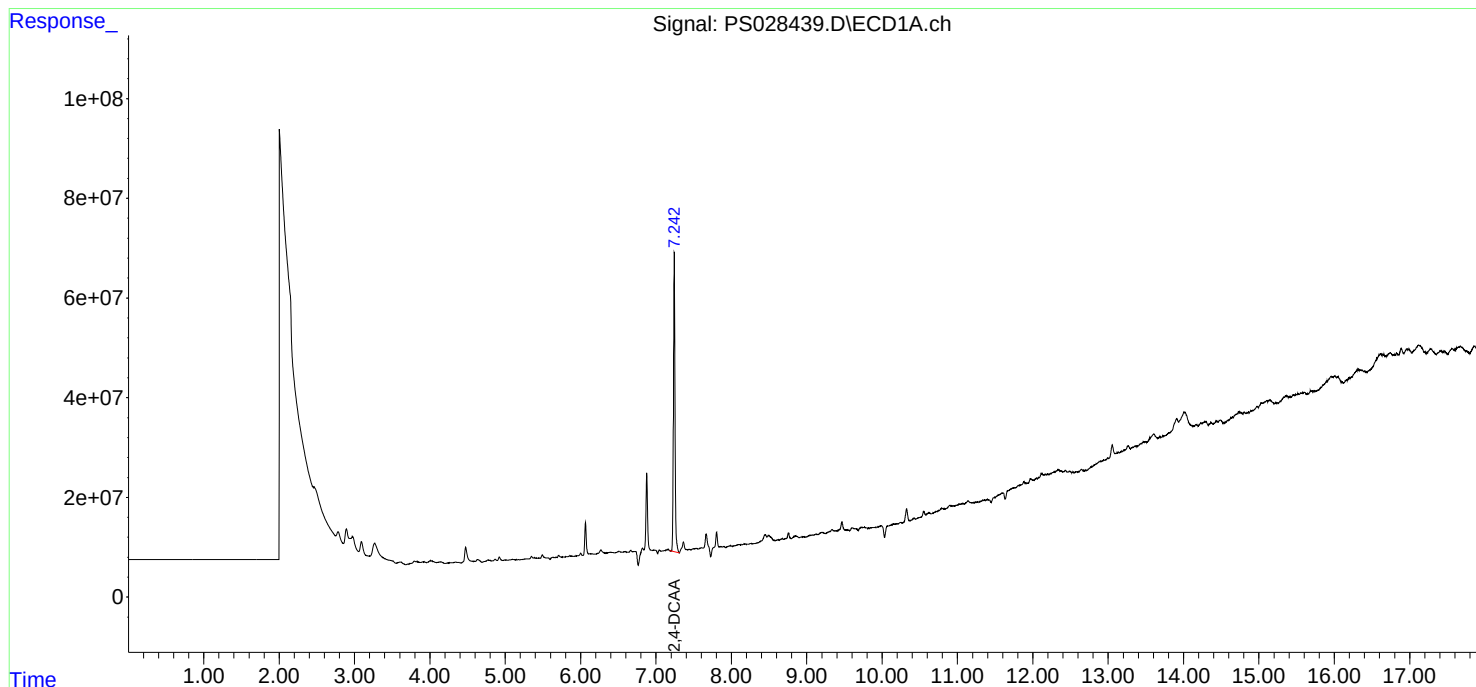
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

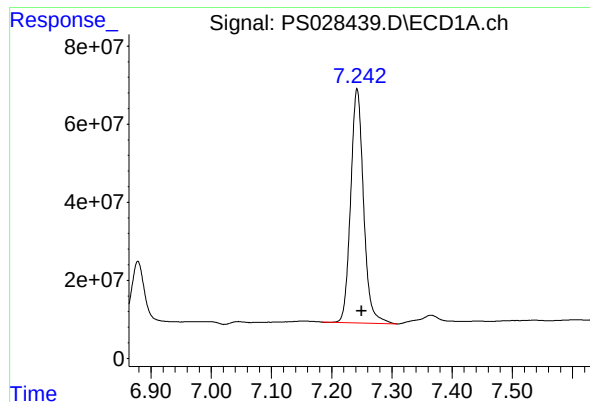
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS111124\
Data File : PS028439.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 Nov 2024 05:47
Operator : AR\AJ
Sample : P4722-13
Misc :
ALS Vial : 40 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
WC-3(0-6)

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 12 06:54:28 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
Quant Title : 8080.M
QLast Update : Fri Nov 08 17:46:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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





#4 2,4-DCAA

R.T.: 7.242 min

Delta R.T.: -0.008 min

Response: 891463791

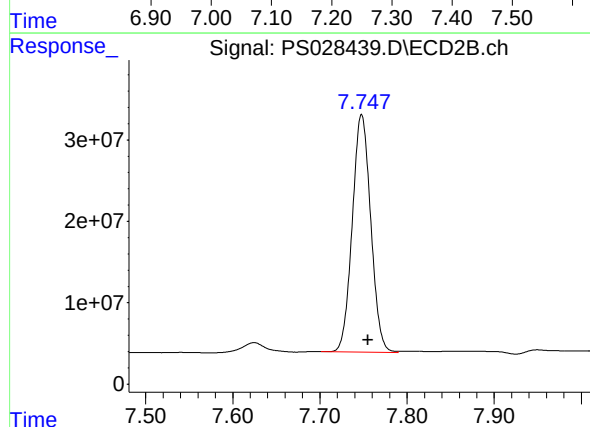
Conc: 322.91 ng/ml

Instrument :

ECD_S

ClientSampleId :

WC-3(0-6)



#4 2,4-DCAA

R.T.: 7.748 min

Delta R.T.: -0.008 min

Response: 429634882

Conc: 269.63 ng/ml



CALIBRATION SUMMARY

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

[illegible]

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

[illegible]

CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: WALS01
Lab Code: CHEM **Case No.:** P4722 **SAS No.:** P4722 **SDG NO.:** P4722
Instrument ID: ECD_S **Calibration Date(s):** 11/08/2024 11/08/2024
Calibration Times: 15:13 16:58
GC Column: RTX-CLP **ID:** 0.32 (mm)

LAB FILE ID:		CF 200 = <u>PS028356.D</u>		CF 500 = <u>PS028357.D</u>			
CF 750 = <u>PS028358.D</u>		CF 1000 = <u>PS028359.D</u>		CF 1500 = <u>PS028360.D</u>			
COMPOUND	CF 200	CF 500	CF 750	CF 1000	CF 1500	CF	% RSD
2,4,5-T	21529100000	19437000000	19525400000	18705500000	17708000000	19381000000	7
2,4,5-TP(Silvex)	21008200000	18982300000	19068100000	18267500000	17318700000	18929000000	7
2,4-D	3997770000	3571450000	3468690000	3334460000	3198650000	3514210000	9
2,4-DB	3352010000	3027230000	3093110000	3022410000	2959650000	3090880000	5
2,4-DCAA	3196830000	2740430000	2735520000	2619650000	2511350000	2760750000	9
DICAMBA	12975400000	11905100000	12166500000	11780900000	11375900000	12040700000	5
DICHLORPROP	3557350000	3056940000	3079000000	2957460000	2847450000	3099640000	9
Dinoseb	17552800000	16349100000	16308600000	15784700000	15071600000	16213400000	6

CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract: WALS01
Lab Code: CHEM **Case No.:** P4722 **SAS No.:** P4722 **SDG NO.:** P4722
Instrument ID: ECD_S **Calibration Date(s):** 11/08/2024 11/08/2024
Calibration Times: 15:13 16:58

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

LAB FILE ID:		CF 200 = <u>PS028356.D</u>		CF 500 = <u>PS028357.D</u>			
CF 750 = <u>PS028358.D</u>		CF 1000 = <u>PS028359.D</u>		CF 1500 = <u>PS028360.D</u>			
COMPOUND	CF 200	CF 500	CF 750	CF 1000	CF 1500	CF	% RSD
2,4,5-T	10782600000	10407300000	10530200000	10245600000	9914510000	10376000000	3
2,4,5-TP(Silvex)	10970300000	10612300000	10768700000	10478800000	10130800000	10592200000	3
2,4-D	2051780000	1901200000	1935300000	1900220000	1880580000	1933820000	4
2,4-DB	1351580000	1287180000	1335670000	1323760000	1328210000	1325280000	2
2,4-DCAA	1694540000	1575990000	1595150000	1561040000	1540400000	1593420000	4
DICAMBA	7032650000	7044480000	7350350000	7249840000	7170240000	7169510000	2
DICHLORPROP	1864120000	1759800000	1788540000	1754780000	1739090000	1781270000	3
Dinoseb	7376340000	7195700000	7257020000	7126590000	6931080000	7177340000	2

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS110924\
 Data File : PS028356.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 08 Nov 2024 15:13
 Operator : AR\AJ
 Sample : HSTDICC200
 Misc :
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDICC200

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Nov 08 16:44:41 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
 Quant Title : 8080.M
 QLast Update : Fri Nov 08 16:40:02 2024
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	7.250	7.755	639.4E6	338.9E6	221.163	208.958
Target Compounds							
1) T	Dalapon	2.649	2.709	639.6E6	535.0E6	180.591	187.020
2) T	3,5-DICHL...	6.419	6.707	834.2E6	459.1E6	199.534	190.228
3) T	4-Nitroph...	7.049	7.282	353.5E6	199.1E6	181.638	178.299
5) T	DICAMBA	7.438	7.956	2439.4E6	1322.1E6	197.536	185.109
6) T	MCPD	7.618	8.055	133.1E6	107.5E6	16.834	18.386
7) T	MCPA	7.767	8.299	198.7E6	158.6E6	17.768	19.466
8) T	DICHLORPROP	8.148	8.674	668.8E6	350.5E6	206.983	194.249
9) T	2,4-D	8.379	9.005	751.6E6	385.7E6	204.272	196.527
10) T	Pentachlo...	8.679	9.534	10049.1E6	5003.0E6	203.477	194.171
11) T	2,4,5-TP ...	9.260	9.911	3991.6E6	2084.4E6	202.759	193.286
12) T	2,4,5-T	9.553	10.333	4090.5E6	2048.7E6	202.864	193.761
13) T	2,4-DB	10.130	10.901	636.9E6	256.8E6	201.708	193.839
14) T	DINOSEB	11.345	11.280	3299.9E6	1386.8E6	197.166	190.583
15) T	Picloram	11.150	12.379	6290.0E6	2627.0E6	195.582	183.908
16) T	DCPA	11.638	12.326	5559.4E6	2181.1E6	199.687	191.134

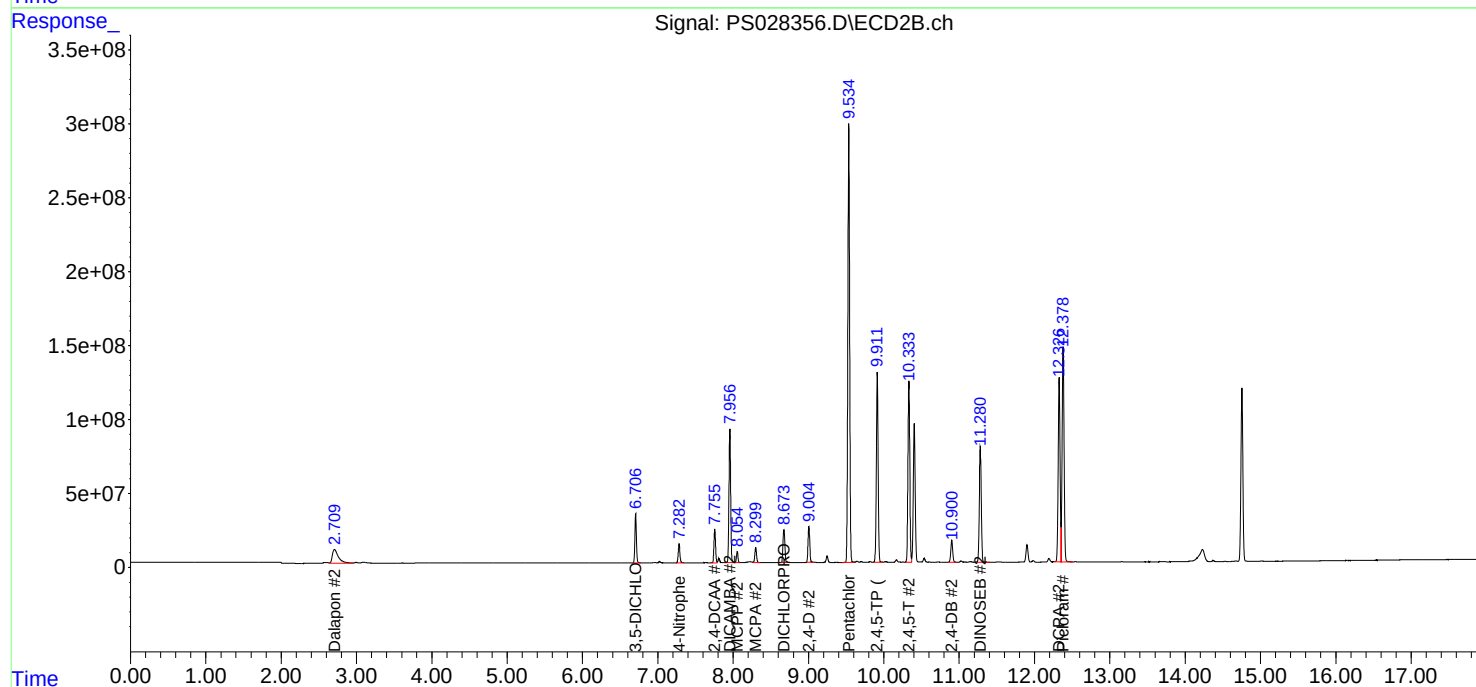
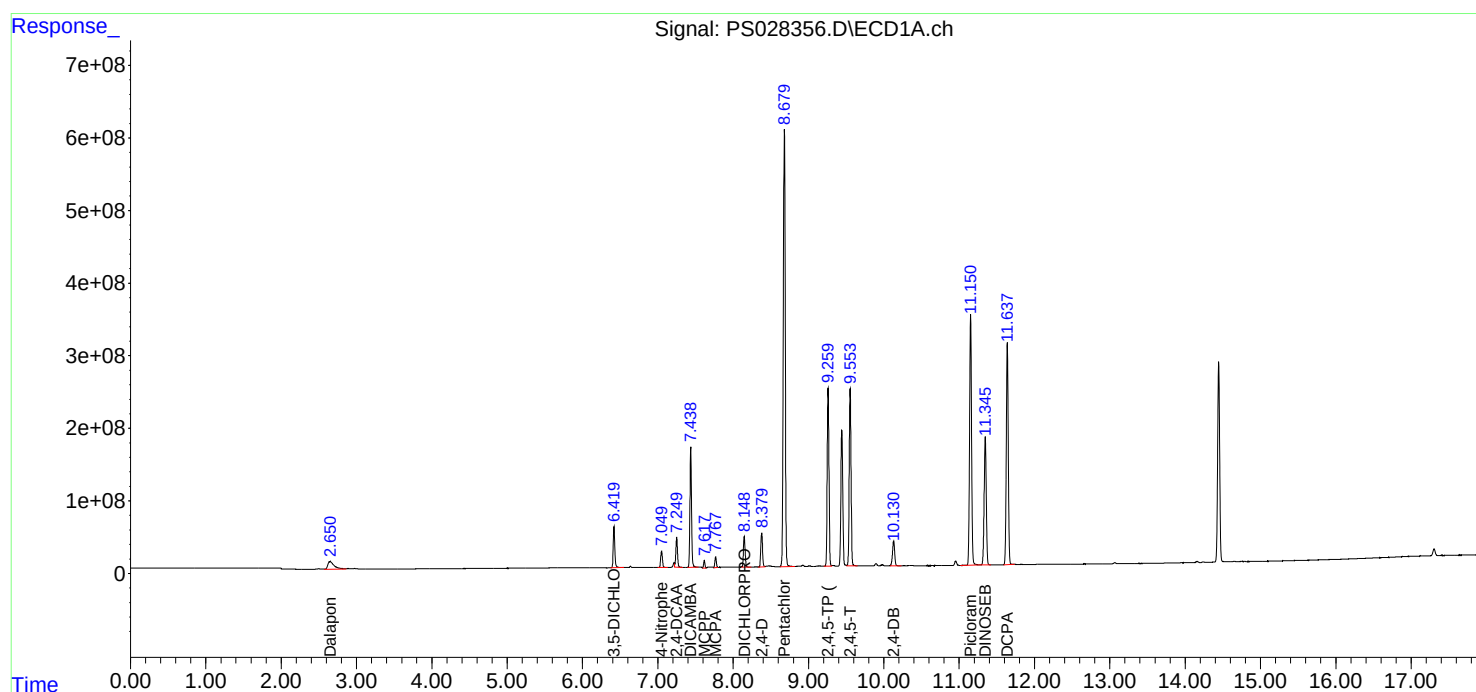
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS110924\
Data File : PS028356.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 08 Nov 2024 15:13
Operator : AR\AJ
Sample : HSTDICC200
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDICC200

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 08 16:44:41 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
Quant Title : 8080.M
QLast Update : Fri Nov 08 16:40:02 2024
Response via : Initial Calibration
Integrator: ChemStation

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



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS110924\
 Data File : PS028357.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 08 Nov 2024 15:46
 Operator : AR\AJ
 Sample : HSTDICC500
 Misc :
 ALS Vial : 4 Sample Multiplier: 1

Instrument :

ECD_S

ClientSampleId :

HSTDICC500

Manual Integrations**APPROVED**

Reviewed By :Abdul Mirza 11/11/2024

Supervised By :Ankita Jodhani 11/12/2024

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Nov 08 16:42:36 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
 Quant Title : 8080.M
 QLast Update : Fri Nov 08 16:40:02 2024
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	7.251	7.753	1370.2E6	788.0E6	498.788m	496.979
Target Compounds							
1) T	Dalapon	2.645	2.702	1582.7E6	1275.2E6	445.190	452.045
2) T	3,5-DICHL...	6.421	6.705	1902.5E6	1118.9E6	472.259	468.984
3) T	4-Nitroph...	7.051	7.280	963.6E6	569.3E6	494.651	504.695
5) T	DICAMBA	7.440	7.955	5595.4E6	3310.9E6	464.895	460.013
6) T	MCP	7.622	8.055	384.8E6	276.6E6	46.237	46.777
7) T	MCPA	7.772	8.300	536.1E6	370.5E6	46.896	46.572
8) T	DICHLORPROP	8.151	8.672	1436.8E6	827.1E6	468.310	466.194
9) T	2,4-D	8.382	9.003	1678.6E6	893.6E6	476.860	465.822
10) T	Pentachlo...	8.682	9.533	22692.1E6	12126.5E6	476.373	475.863
11) T	2,4,5-TP ...	9.264	9.910	9016.6E6	5040.9E6	473.928	471.525
12) T	2,4,5-T	9.556	10.331	9232.6E6	4943.4E6	473.922	472.211
13) T	2,4-DB	10.132	10.898	1437.9E6	611.4E6	469.887	466.218
14) T	DINOSEB	11.348	11.278	7684.1E6	3382.0E6	470.583	468.006
15) T	Picloram	11.153	12.378	14946.2E6	6738.5E6	471.666	464.296
16) T	DCPA	11.640	12.325	13258.0E6	5501.2E6	485.938	480.983

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS110924\
Data File : PS028357.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 08 Nov 2024 15:46
Operator : AR\AJ
Sample : HSTDICC500
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :

ECD_S

ClientSampleId :

HSTDICC500

Manual Integrations

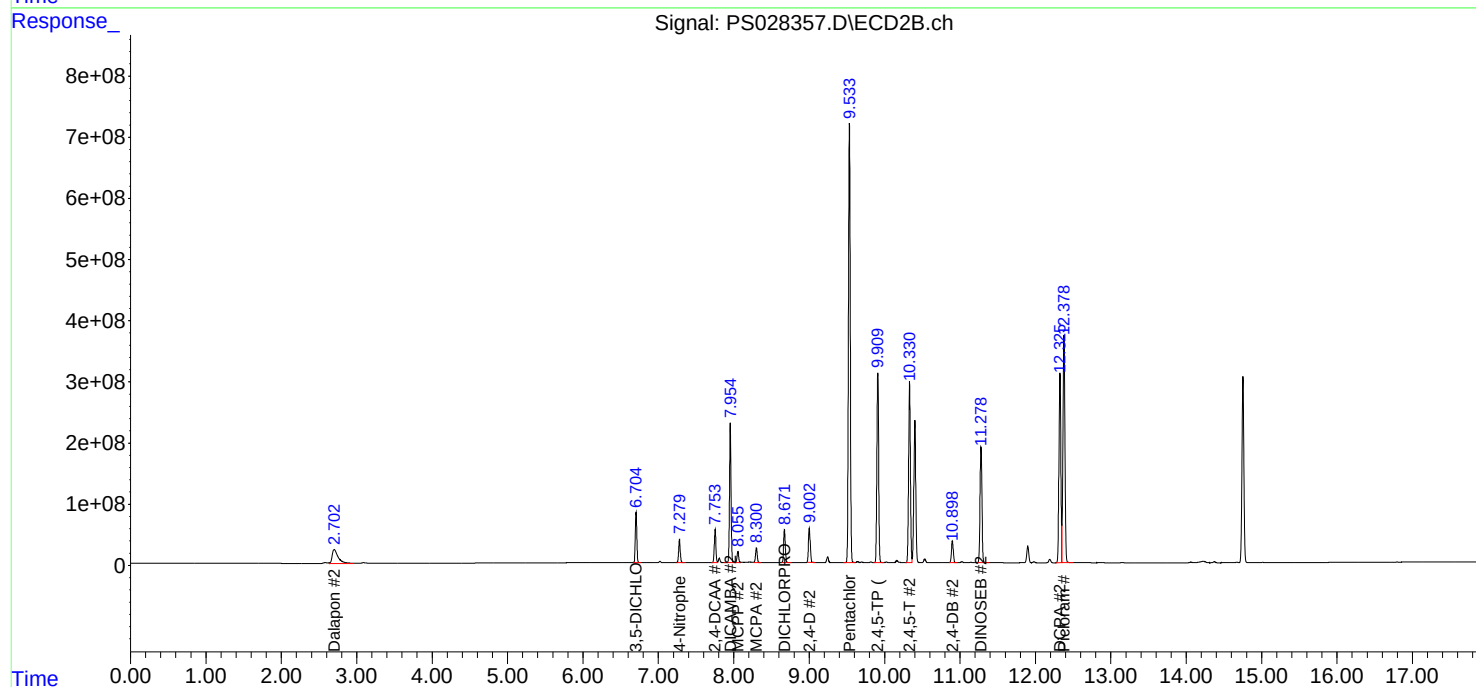
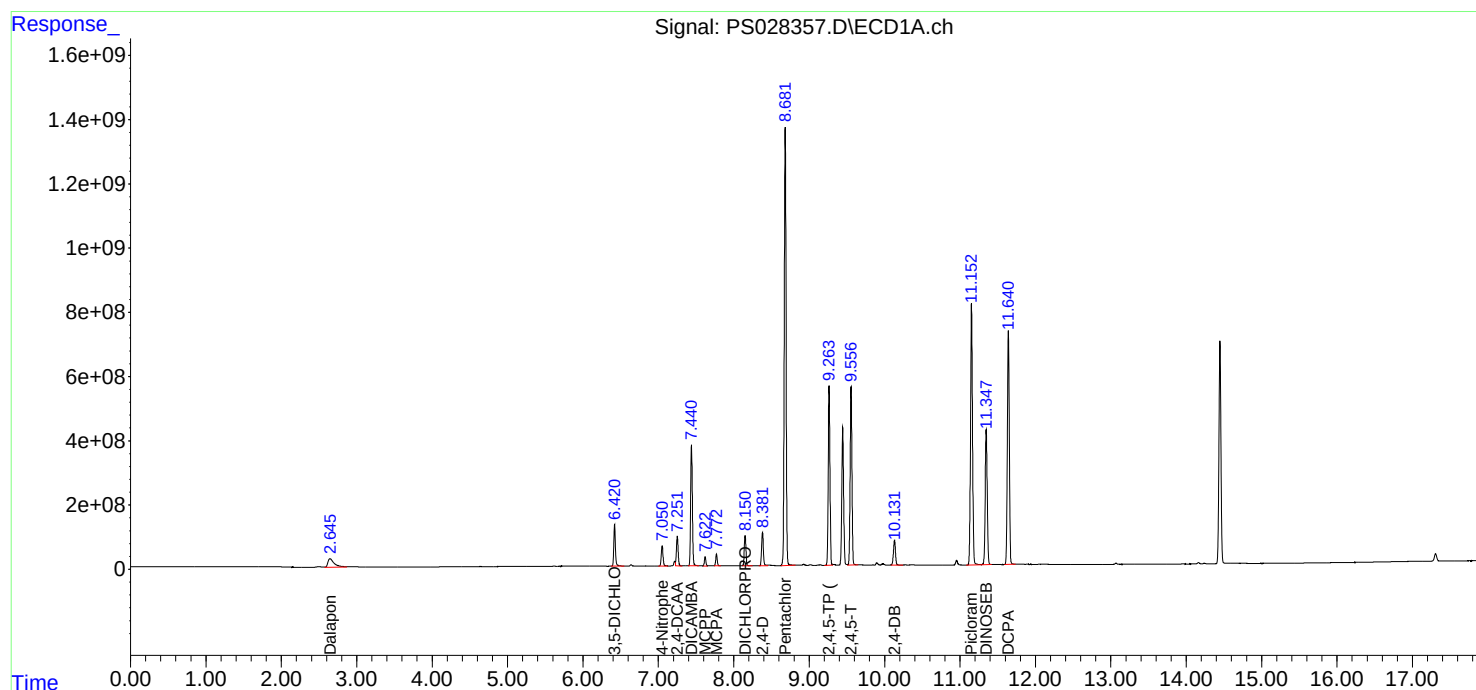
APPROVED

Reviewed By :Abdul Mirza 11/11/2024

Supervised By :Ankita Jodhani 11/12/2024

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 08 16:42:36 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
Quant Title : 8080.M
QLast Update : Fri Nov 08 16:40:02 2024
Response via : Initial Calibration
Integrator: ChemStation

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



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS110924\
 Data File : PS028358.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 08 Nov 2024 16:10
 Operator : AR\AJ
 Sample : HSTDICC750
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDICC750

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Nov 08 16:40:21 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
 Quant Title : 8080.M
 QLast Update : Fri Nov 08 16:40:02 2024
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	7.250	7.755	2051.6E6	1196.4E6	750.000	750.000
Target Compounds							
1) T	Dalapon	2.648	2.706	2478.7E6	1937.8E6	682.500	682.500
2) T	3,5-DICHL...	6.419	6.707	2766.0E6	1649.9E6	697.500	697.500
3) T	4-Nitroph...	7.049	7.281	1213.7E6	685.7E6	682.500	682.500
5) T	DICAMBA	7.438	7.956	8577.4E6	5182.0E6	705.000	705.000
6) T	MCP	7.622	8.059	596.2E6	418.8E6	70.500	70.500
7) T	MCPA	7.772	8.305	790.6E6	554.1E6	69.750	69.750
8) T	DICHLORPROP	8.148	8.673	2170.7E6	1260.9E6	705.000	705.000
9) T	2,4-D	8.379	9.005	2445.4E6	1364.4E6	705.000	705.000
10) T	Pentachlo...	8.679	9.535	33841.9E6	18123.7E6	712.500	712.500
11) T	2,4,5-TP ...	9.260	9.911	13586.0E6	7672.7E6	712.500	712.500
12) T	2,4,5-T	9.552	10.333	13911.9E6	7502.8E6	712.500	712.500
13) T	2,4-DB	10.129	10.900	2203.8E6	951.7E6	712.500	712.500
14) T	DINOSEB	11.345	11.280	11497.6E6	5116.2E6	705.000	705.000
15) T	Picloram	11.150	12.379	22736.2E6	10573.8E6	712.500	712.500
16) T	DCPA	11.637	12.326	19401.0E6	8218.0E6	720.000	720.000

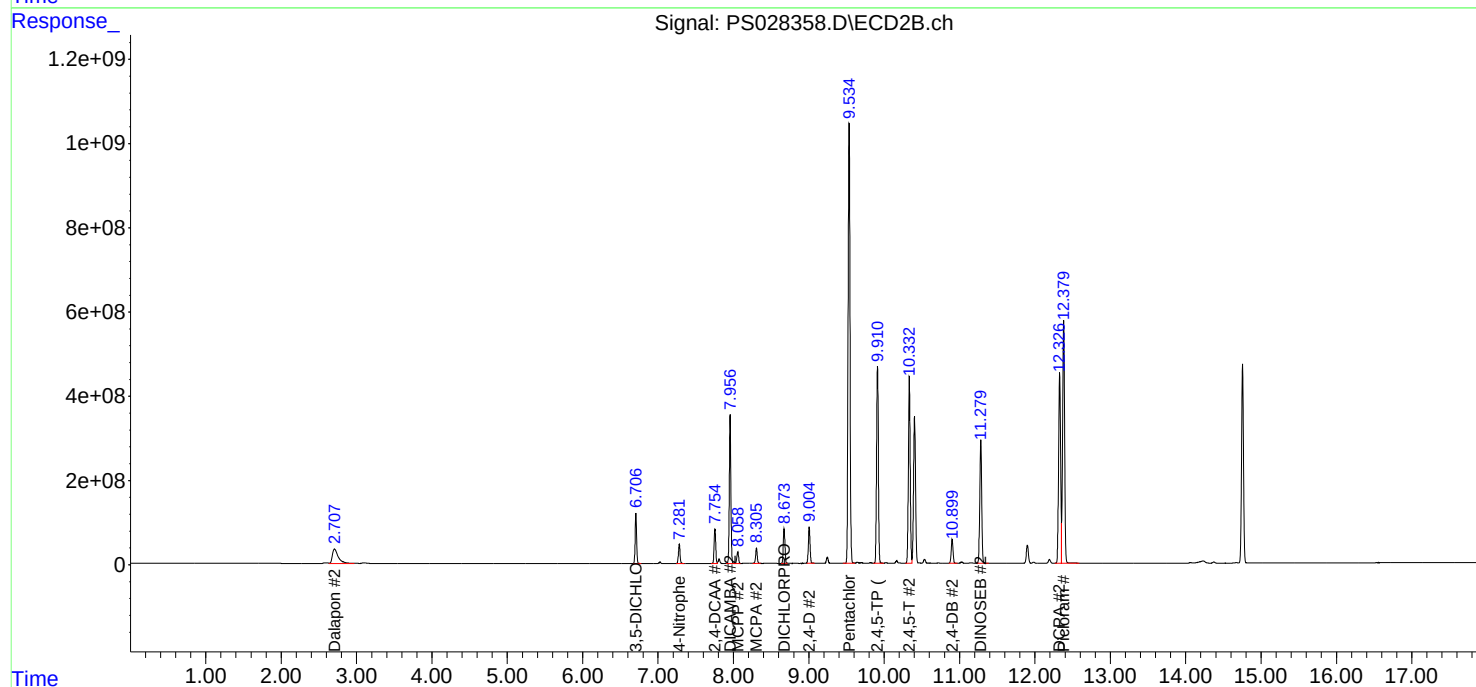
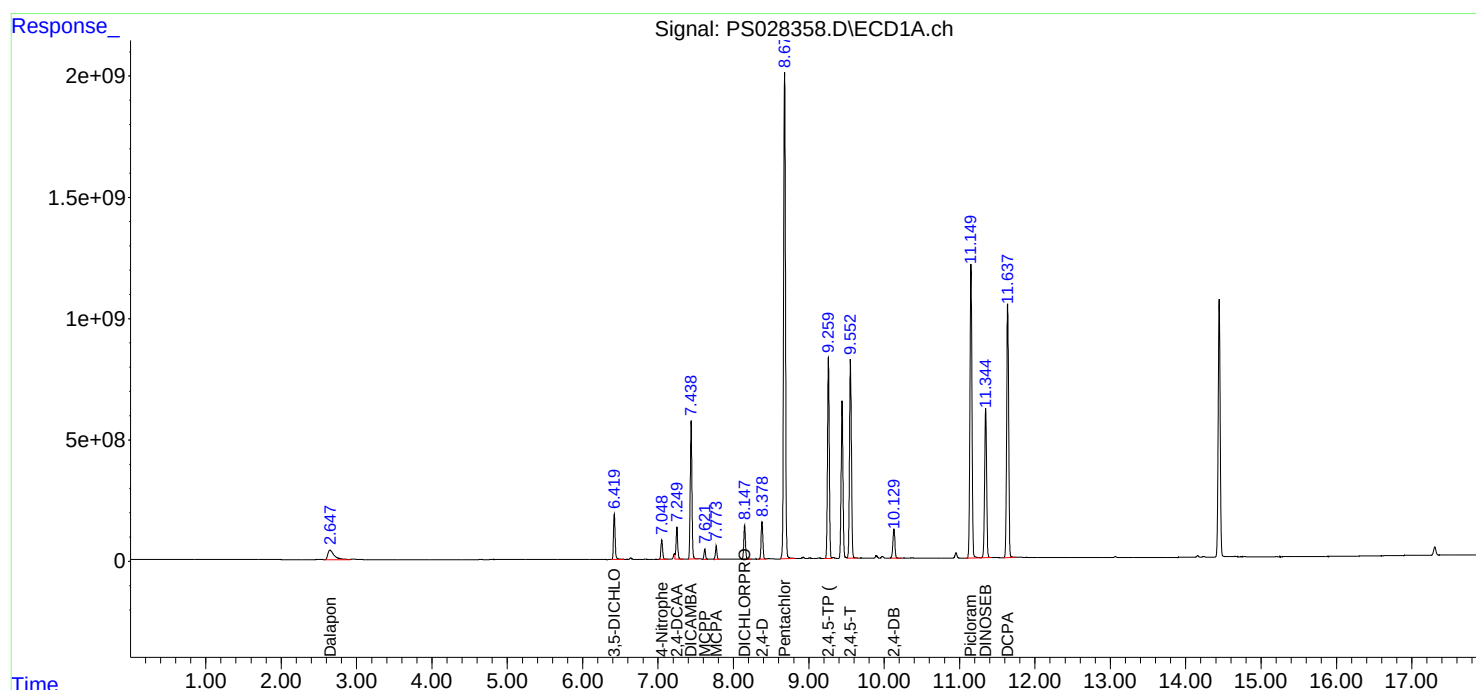
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS110924\
Data File : PS028358.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 08 Nov 2024 16:10
Operator : AR\AJ
Sample : HSTDICC750
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDICC750

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 08 16:40:21 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
Quant Title : 8080.M
QLast Update : Fri Nov 08 16:40:02 2024
Response via : Initial Calibration
Integrator: ChemStation

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



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS110924\
 Data File : PS028359.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 08 Nov 2024 16:34
 Operator : AR\AJ
 Sample : HSTDICC1000
 Misc :
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDICC1000

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Nov 08 16:51:21 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
 Quant Title : 8080.M
 QLast Update : Fri Nov 08 16:51:13 2024
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	7.250	7.756	2619.7E6	1561.0E6	927.932	971.593
Target Compounds							
1) T	Dalapon	2.648	2.707	3270.7E6	2544.1E6	920.121	894.482
2) T	3,5-DICHL...	6.419	6.707	3538.2E6	2155.4E6	865.823	902.072
3) T	4-Nitroph...	7.049	7.282	1574.2E6	890.6E6	831.961	823.047
5) T	DICAMBA	7.439	7.957	11074.0E6	6814.9E6	907.189	950.556
6) T	MCPD	7.624	8.061	799.7E6	554.7E6	99.240	94.640
7) T	MCPA	7.775	8.307	1044.3E6	728.3E6	93.295	90.284
8) T	DICHLORPROP	8.149	8.674	2780.0E6	1649.5E6	879.003	920.573
9) T	2,4-D	8.380	9.005	3134.4E6	1786.2E6	872.338	917.357
10) T	Pentachlo...	8.680	9.535	41014.3E6	23096.9E6	857.444	909.236
11) T	2,4,5-TP ...	9.260	9.912	17354.1E6	9954.9E6	897.710	929.706
12) T	2,4,5-T	9.553	10.333	17770.3E6	9733.3E6	897.521	927.738
13) T	2,4-DB	10.130	10.900	2871.3E6	1257.6E6	919.198	949.434
14) T	DINOSEB	11.345	11.280	14837.6E6	6699.0E6	899.316	925.415
15) T	Picloram	11.151	12.379	29471.0E6	13946.5E6	924.556	969.627
16) T	DCPA	11.638	12.327	24763.6E6	10644.3E6	906.118	939.422

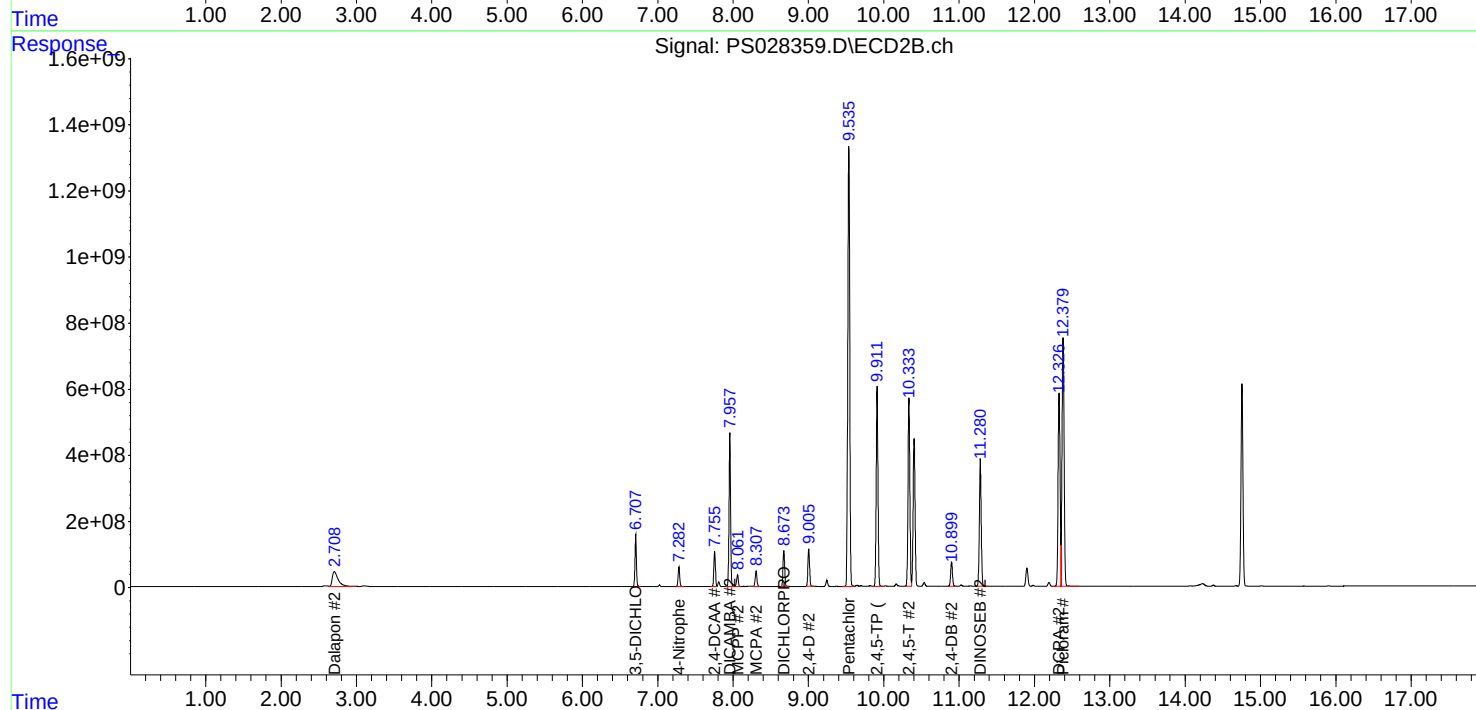
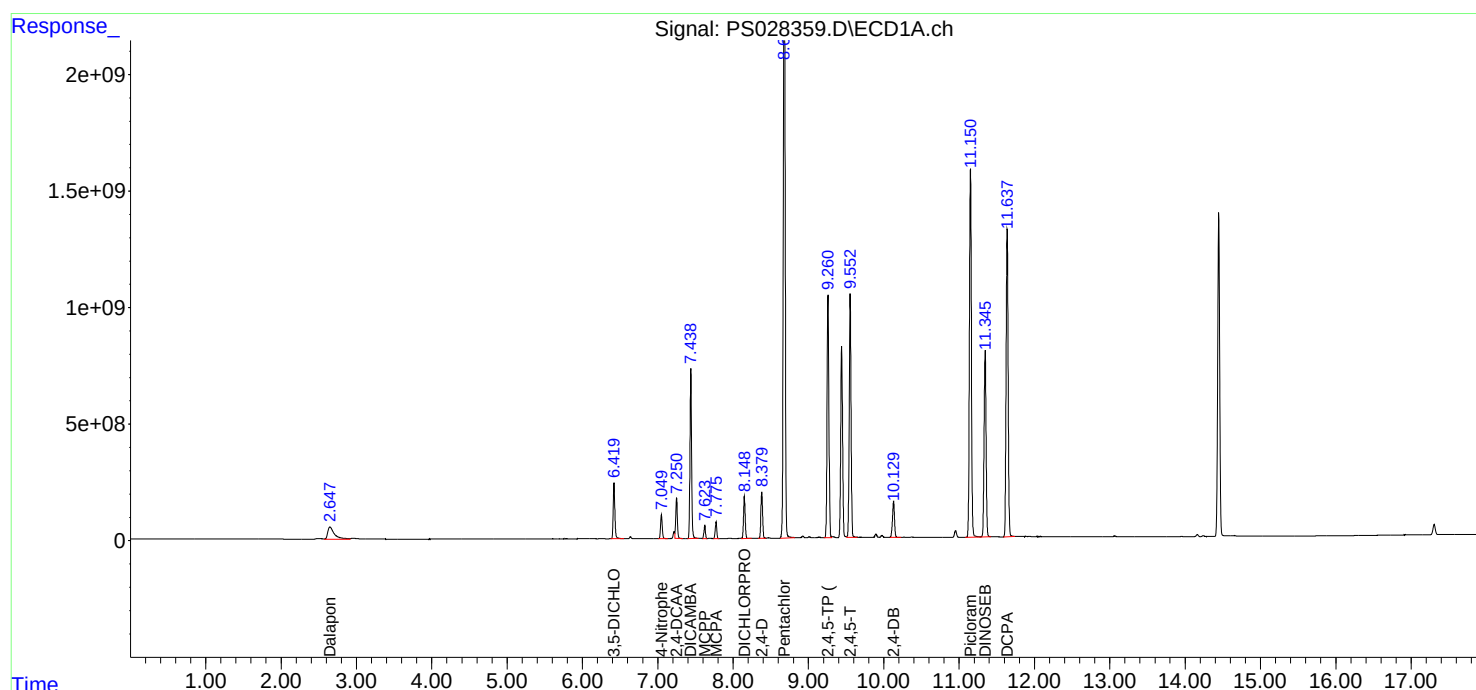
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS110924\
Data File : PS028359.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 08 Nov 2024 16:34
Operator : AR\AJ
Sample : HSTDICC1000
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDICC1000

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 08 16:51:21 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
Quant Title : 8080.M
QLast Update : Fri Nov 08 16:51:13 2024
Response via : Initial Calibration
Integrator: ChemStation

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



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS110924\
 Data File : PS028360.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 08 Nov 2024 16:58
 Operator : AR\AJ
 Sample : HSTDICC1500
 Misc :
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDICC1500

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Nov 08 17:45:49 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
 Quant Title : 8080.M
 QLast Update : Fri Nov 08 17:45:39 2024
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	7.250	7.755	3767.0E6	2310.6E6	1364.492	1450.086
Target Compounds							
1) T	Dalapon	2.650	2.707	4944.0E6	3823.9E6	1385.601	1348.490
2) T	3,5-DICHL...	6.420	6.707	5107.0E6	3191.5E6	1276.301	1347.181
3) T	4-Nitroph...	7.049	7.281	2324.2E6	1319.3E6	1253.460	1245.836
5) T	DICAMBA	7.439	7.957	16040.0E6	10110.0E6	1332.146	1410.143
6) T	MCP	7.628	8.064	1220.9E6	835.8E6	149.279	142.280
7) T	MCPA	7.779	8.312	1574.5E6	1084.0E6	140.433	135.369
8) T	DICHLORPROP	8.149	8.674	4014.9E6	2452.1E6	1295.283	1376.618
9) T	2,4-D	8.380	9.005	4510.1E6	2651.6E6	1283.392	1371.186
10) T	Pentachlo...	8.683	9.536	48275.3E6	32737.8E6	1071.782	1313.882
11) T	2,4,5-TP ...	9.261	9.912	24679.1E6	14436.4E6	1303.775	1362.929
12) T	2,4,5-T	9.553	10.334	25233.9E6	14128.2E6	1301.992	1361.617
13) T	2,4-DB	10.130	10.900	4217.5E6	1892.7E6	1364.499	1428.147
14) T	DINOSEB	11.345	11.280	21251.0E6	9772.8E6	1310.710	1361.620
15) T	Picloram	11.150	12.379	42075.2E6	20561.5E6	1339.720	1428.629
16) T	DCPA	11.638	12.326	35013.3E6	15448.5E6	1310.064	1378.083

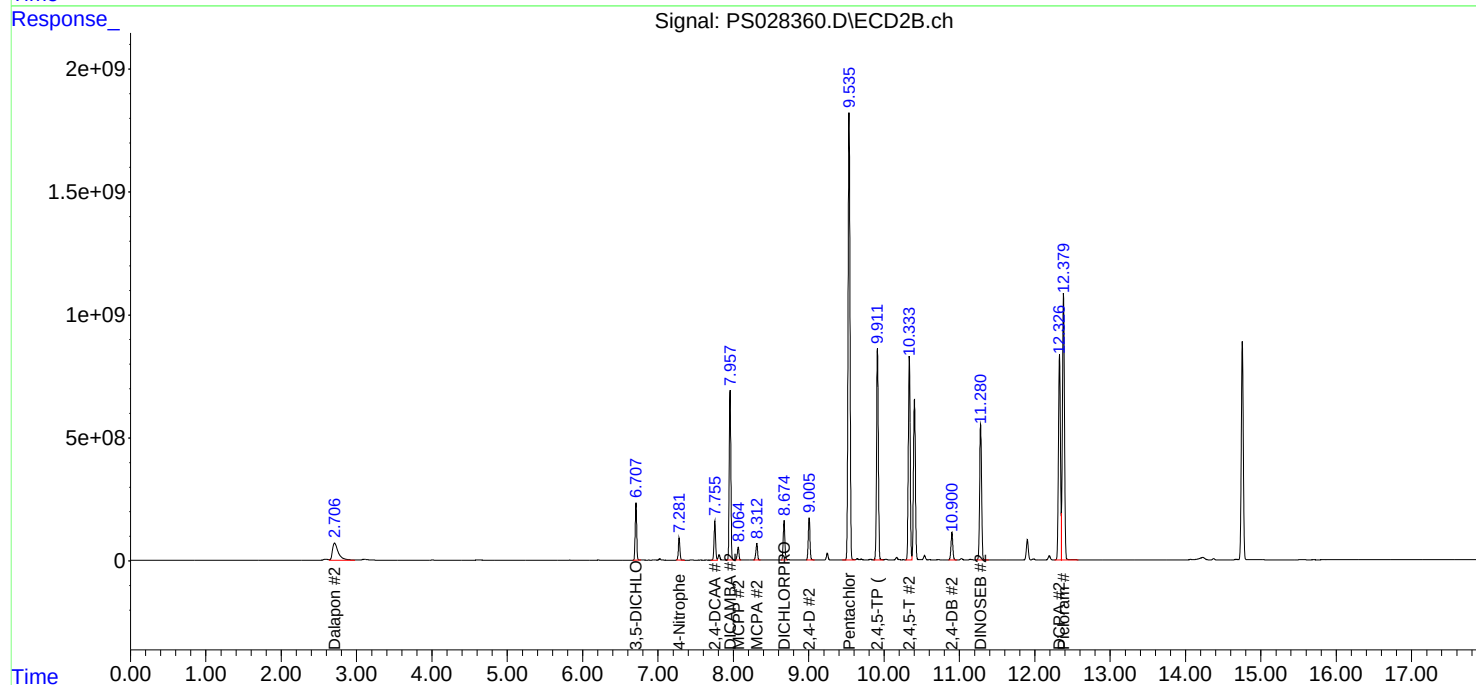
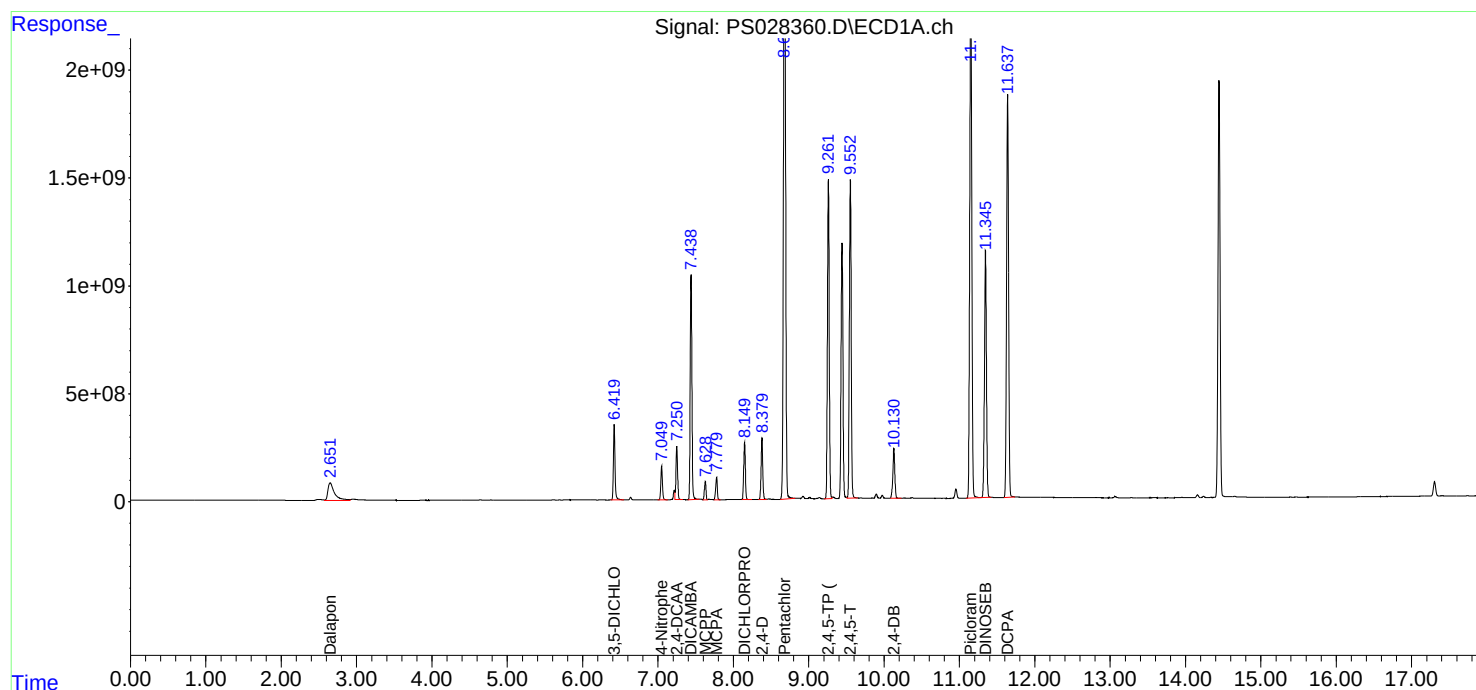
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS110924\
Data File : PS028360.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 08 Nov 2024 16:58
Operator : AR\AJ
Sample : HSTDICC1500
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDICC1500

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 08 17:45:49 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
Quant Title : 8080.M
QLast Update : Fri Nov 08 17:45:39 2024
Response via : Initial Calibration
Integrator: ChemStation

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



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS110924\
 Data File : PS028361.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 08 Nov 2024 17:22
 Operator : AR\AJ
 Sample : HSTDICV750
 Misc :
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 ICVPS110924

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Nov 08 17:51:02 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
 Quant Title : 8080.M
 QLast Update : Fri Nov 08 17:46:43 2024
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	7.250	7.755	2008.0E6	1166.4E6	727.352	732.006
Target Compounds							
1) T	Dalapon	2.648	2.710	2420.5E6	1889.2E6	678.377	666.240
2) T	3,5-DICHL...	6.419	6.707	2702.1E6	1609.9E6	675.295	679.566
3) T	4-Nitroph...	7.049	7.281	1174.4E6	662.7E6	633.348	625.805
5) T	DICAMBA	7.438	7.957	8390.9E6	5041.1E6	696.873	703.125
6) T	MCP	7.622	8.059	578.6E6	406.9E6	70.744	69.262
7) T	MCPA	7.772	8.304	766.9E6	541.7E6	68.403	67.647
8) T	DICHLORPROP	8.148	8.674	2122.7E6	1230.1E6	684.806	690.570
9) T	2,4-D	8.379	9.004	2394.4E6	1336.5E6	681.345	691.114
10) T	Pentachlo...	8.679	9.535	33172.6E6	17646.2E6	736.479	708.202
11) T	2,4,5-TP ...	9.260	9.911	13283.0E6	7469.4E6	701.729	705.181
12) T	2,4,5-T	9.553	10.332	13622.9E6	7304.6E6	702.901	703.987
13) T	2,4-DB	10.129	10.900	2161.5E6	928.2E6	699.310	700.354
14) T	DINOSEB	11.345	11.280	11126.8E6	4918.7E6	686.276	685.314
15) T	Picloram	11.150	12.378	22320.9E6	10335.0E6	710.722	718.084
16) T	DCPA	11.637	12.325	18930.3E6	7984.4E6	708.298	712.248

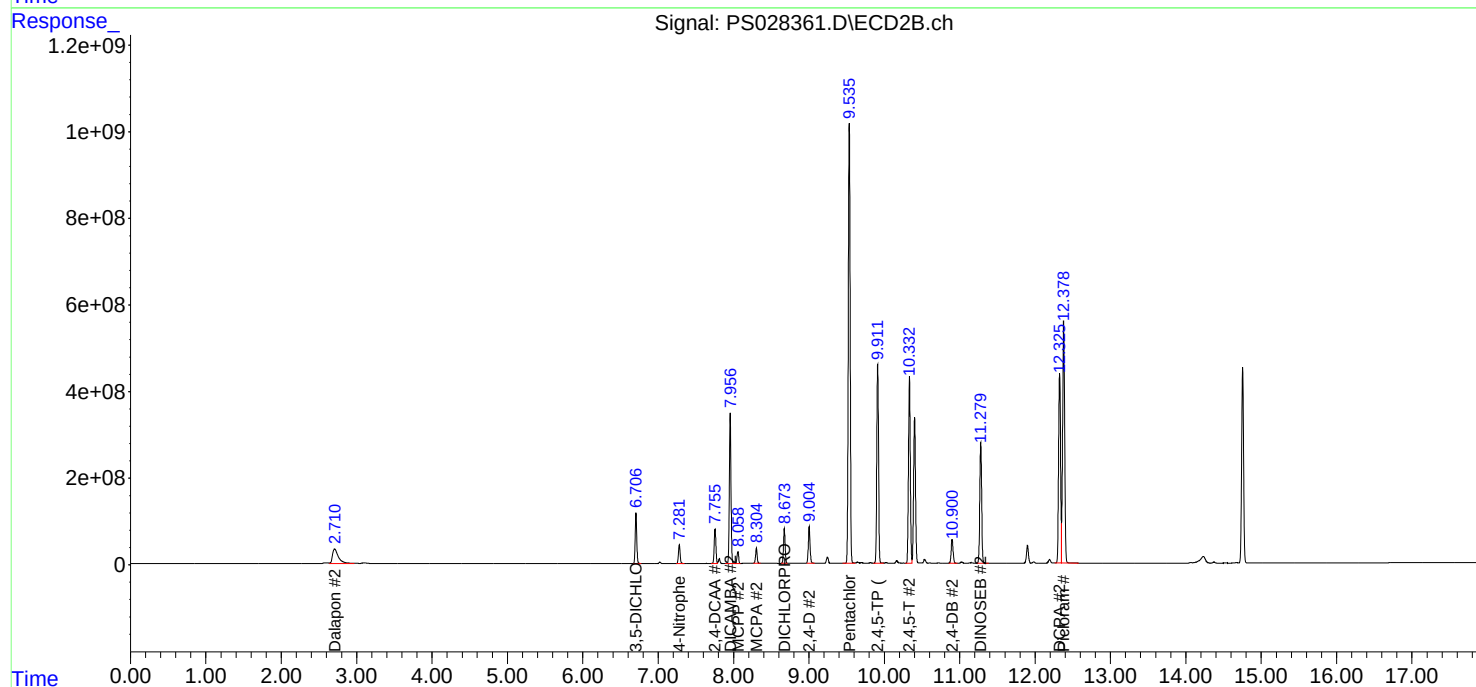
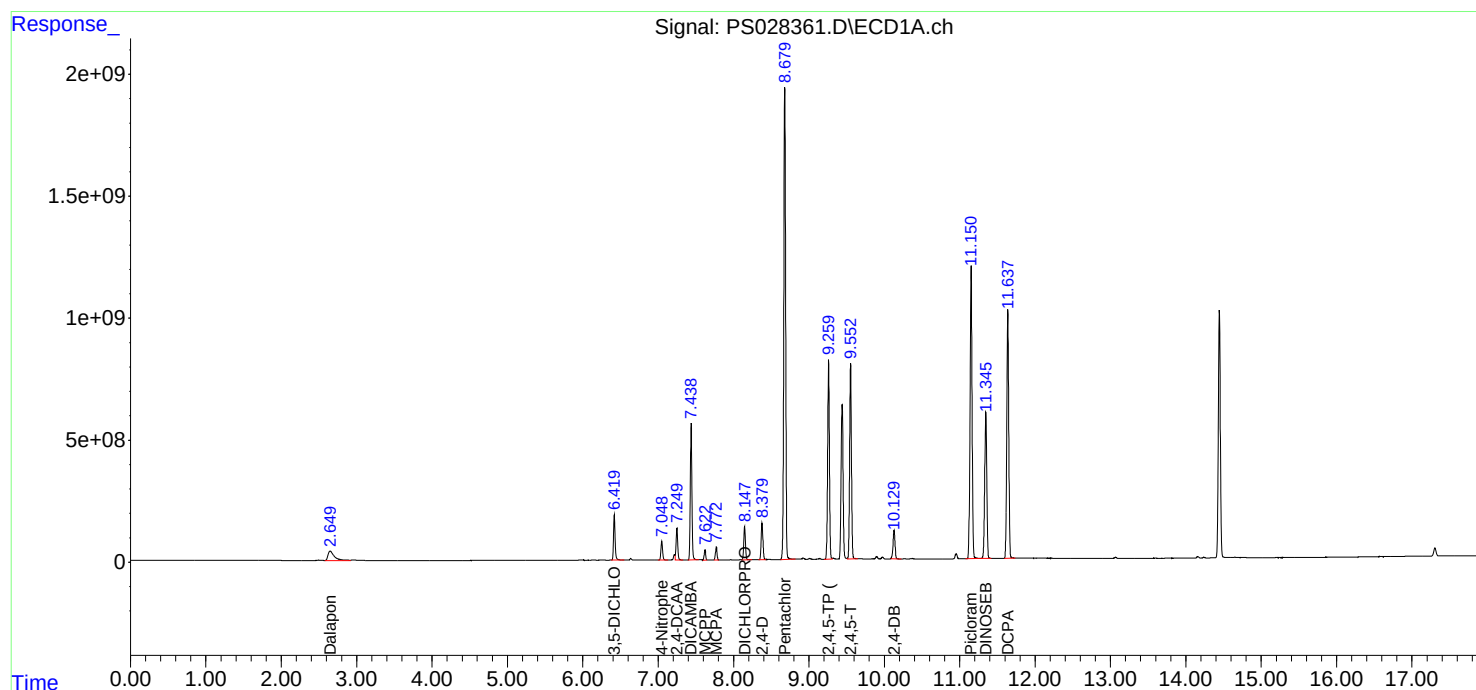
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS110924\
Data File : PS028361.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 08 Nov 2024 17:22
Operator : AR\AJ
Sample : HSTDICV750
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
ICVPS110924

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 08 17:51:02 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
Quant Title : 8080.M
QLast Update : Fri Nov 08 17:46:43 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB-MR1 Signal #2 Phase: ZB-MR2
Signal #1 Info : 30M x 0.32mm 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: WALS01

Lab Code: CHEM Case No.: P4722 SAS No.: P4722 SDG NO.: P4722

Continuing Calib Date: 11/08/2024 Initial Calibration Date(s): 11/08/2024 11/08/2024

Continuing Calib Time: 18:10 Initial Calibration Time(s): 15:13 16:58

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
DICAMBA	7.44	7.44	7.34	7.54	0.00
2,4-DCAA	7.25	7.25	7.15	7.35	0.00
DICHLORPROP	8.15	8.15	8.05	8.25	0.00
2,4-D	8.38	8.38	8.28	8.48	0.00
2,4,5-TP(Silvex)	9.26	9.26	9.16	9.36	0.00
2,4,5-T	9.55	9.55	9.45	9.65	0.00
2,4-DB	10.13	10.13	10.03	10.23	0.00
Dinoseb	11.34	11.35	11.25	11.45	0.01



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CALIBRATION VERIFICATION SUMMARY

Contract: WALS01

Lab Code: CHEM Case No.: P4722 SAS No.: P4722 SDG NO.: P4722

Continuing Calib Date: 11/08/2024 Initial Calibration Date(s): 11/08/2024 11/08/2024

Continuing Calib Time: 18:10 Initial Calibration Time(s): 15:13 16:58

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW FROM TO		DIFF RT
DICAMBA	7.96	7.96	7.86	8.06	0.01
2,4-DCAA	7.75	7.76	7.66	7.86	0.01
DICHLORPROP	8.67	8.67	8.57	8.77	0.00
2,4-D	9.00	9.01	8.91	9.11	0.01
2,4,5-TP(Silvex)	9.91	9.91	9.81	10.01	0.00
2,4,5-T	10.33	10.33	10.23	10.43	0.00
2,4-DB	10.90	10.90	10.80	11.00	0.00
Dinoseb	11.28	11.28	11.18	11.38	0.00



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CALIBRATION VERIFICATION SUMMARY

Contract: WALS01

Lab Code: CHEM Case No.: P4722 SAS No.: P4722 SDG NO.: P4722

GC Column: RTX-CLP ID: 0.32 (mm) Initi. Calib. Date(s): 11/08/2024 11/08/2024

Client Sample No.: CCAL01 Date Analyzed: 11/08/2024

Lab Sample No.: HSTDCCC750 Data File : PS028363.D Time Analyzed: 18:10

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-T	9.552	9.452	9.652	708.290	712.500	-0.6
2,4,5-TP(Silvex)	9.260	9.160	9.360	708.980	712.500	-0.5
2,4-D	8.378	8.279	8.479	688.020	705.000	-2.4
2,4-DB	10.129	10.029	10.229	704.320	712.500	-1.1
2,4-DCAA	7.249	7.150	7.350	734.280	750.000	-2.1
DICAMBA	7.438	7.338	7.538	704.230	705.000	-0.1
DICHLORPROP	8.148	8.048	8.248	693.130	705.000	-1.7
Dinoseb	11.344	11.245	11.445	685.490	705.000	-2.8



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CALIBRATION VERIFICATION SUMMARY

Contract: WALS01

Lab Code: CHEM Case No.: P4722 SAS No.: P4722 SDG NO.: P4722

GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 11/08/2024 11/08/2024

Client Sample No.: CCAL01 Date Analyzed: 11/08/2024

Lab Sample No.: HSTDCCC750 Data File : PS028363.D Time Analyzed: 18:10

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-T	10.332	10.233	10.433	707.880	712.500	-0.6
2,4,5-TP(Silvex)	9.911	9.811	10.011	707.720	712.500	-0.7
2,4-D	9.004	8.905	9.105	693.210	705.000	-1.7
2,4-DB	10.900	10.800	11.000	705.100	712.500	-1.0
2,4-DCAA	7.754	7.655	7.855	740.460	750.000	-1.3
DICAMBA	7.955	7.856	8.056	710.900	705.000	0.8
DICHLORPROP	8.672	8.573	8.773	696.240	705.000	-1.2
Dinoseb	11.279	11.180	11.380	682.790	705.000	-3.2

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS110924\
 Data File : PS028363.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 08 Nov 2024 18:10
 Operator : AR\AJ
 Sample : HSTDCCC750
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDCCC750

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Nov 08 21:40:17 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
 Quant Title : 8080.M
 QLast Update : Fri Nov 08 17:46:43 2024
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	7.249	7.754	2027.2E6	1179.9E6	734.280	740.463
Target Compounds							
1) T	Dalapon	2.650	2.710	2454.1E6	1906.4E6	687.789	672.290
2) T	3,5-DICHL...	6.419	6.706	2733.6E6	1628.0E6	683.152	687.180
3) T	4-Nitroph...	7.049	7.281	1185.4E6	666.4E6	639.277	629.239
5) T	DICAMBA	7.438	7.955	8479.5E6	5096.8E6	704.234	710.896
6) T	MCP	7.621	8.058	590.1E6	412.4E6	72.146	70.197
7) T	MCPA	7.772	8.304	781.7E6	548.1E6	69.719	68.442
8) T	DICHLORPROP	8.148	8.672	2148.4E6	1240.2E6	693.126	696.237
9) T	2,4-D	8.378	9.004	2417.9E6	1340.5E6	688.025	693.209
10) T	Pentachlo...	8.679	9.534	33448.4E6	17776.7E6	742.603	713.443
11) T	2,4,5-TP ...	9.260	9.911	13420.2E6	7496.3E6	708.977	707.718
12) T	2,4,5-T	9.552	10.332	13727.3E6	7345.0E6	708.285	707.884
13) T	2,4-DB	10.129	10.900	2177.0E6	934.5E6	704.318	705.103
14) T	DINOSEB	11.344	11.279	11114.1E6	4900.6E6	685.490	682.787
15) T	Picloram	11.149	12.379	22544.7E6	10446.1E6	717.848	725.804
16) T	DCPA	11.637	12.326	19026.1E6	8049.3E6	711.885	718.037

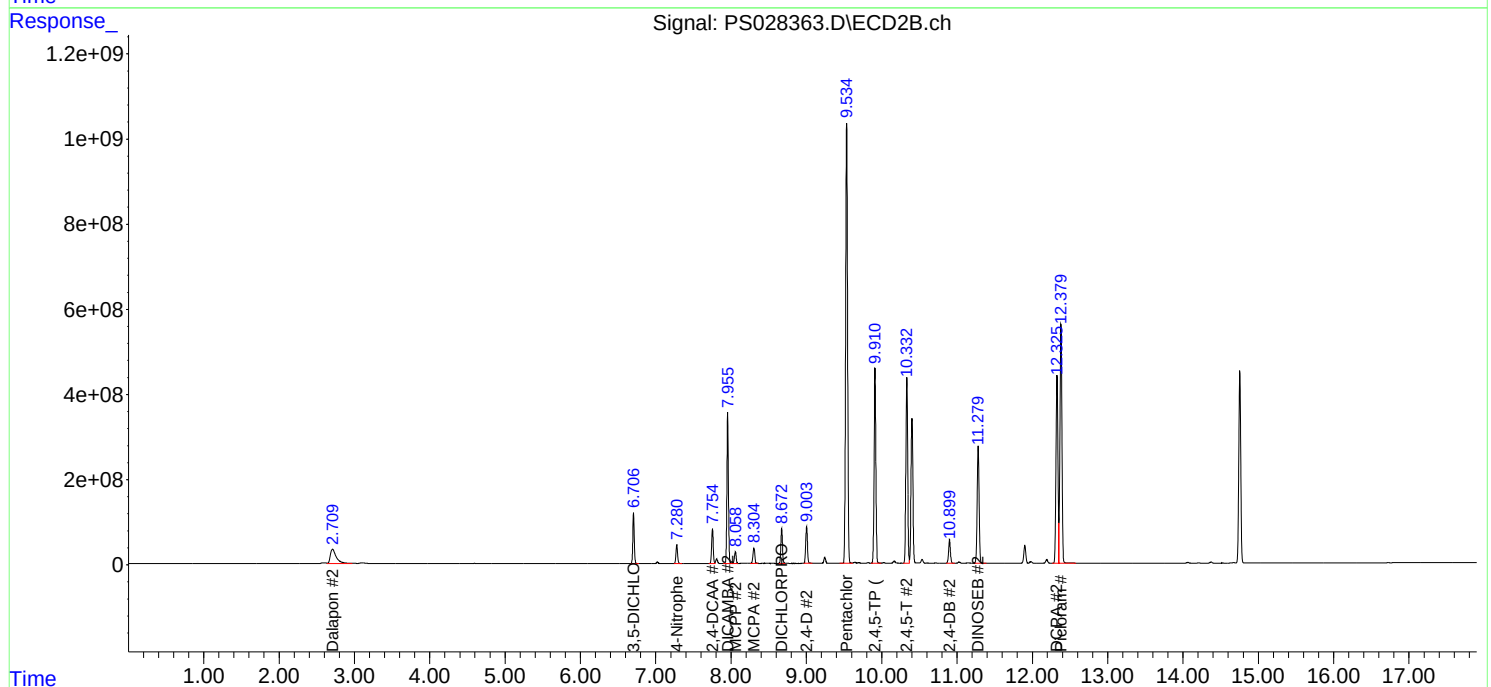
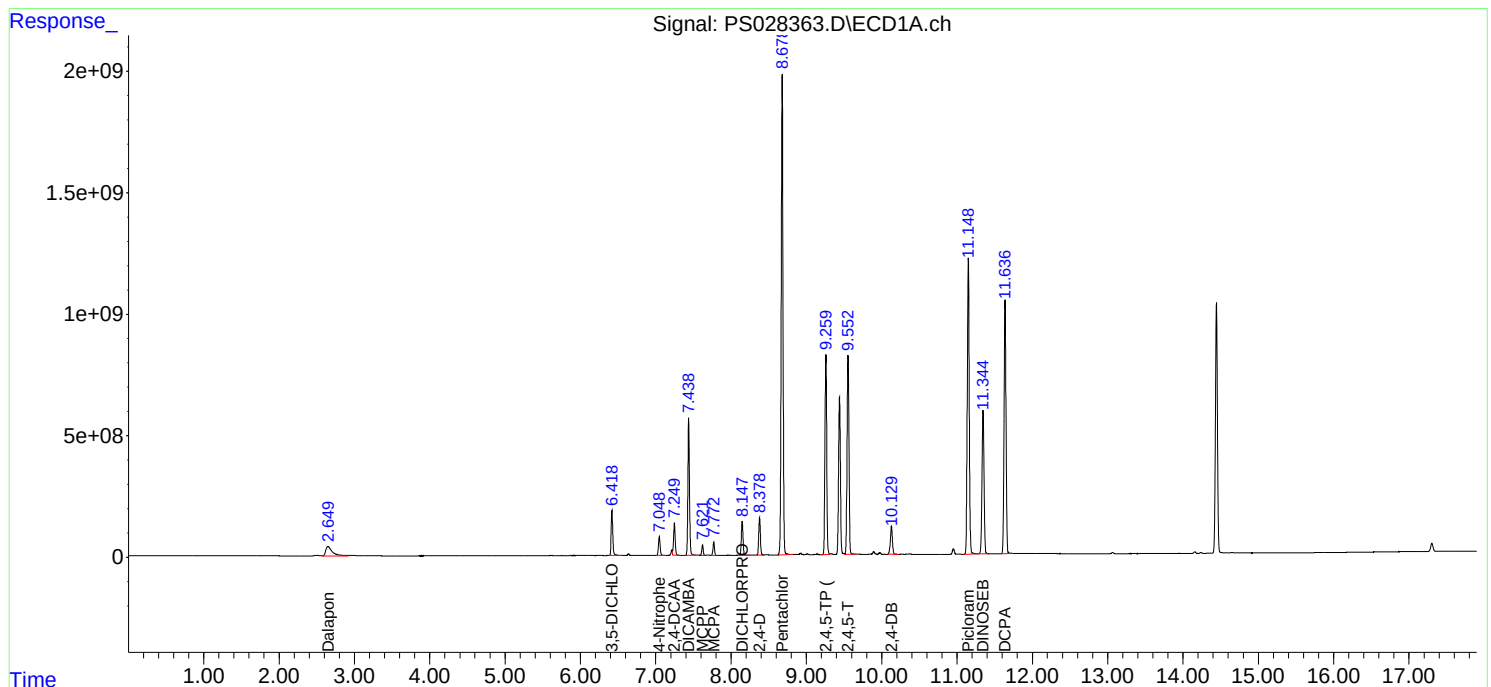
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS110924\
Data File : PS028363.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 08 Nov 2024 18:10
Operator : AR\AJ
Sample : HSTDCCC750
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 08 21:40:17 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
Quant Title : 8080.M
QLast Update : Fri Nov 08 17:46:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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





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CALIBRATION VERIFICATION SUMMARY

Contract: WALS01

Lab Code: CHEM Case No.: P4722 SAS No.: P4722 SDG NO.: P4722

Continuing Calib Date: 11/09/2024 Initial Calibration Date(s): 11/08/2024 11/08/2024

Continuing Calib Time: 00:34 Initial Calibration Time(s): 15:13 16:58

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
DICAMBA	7.44	7.44	7.34	7.54	0.00
2,4-DCAA	7.25	7.25	7.15	7.35	0.00
DICHLORPROP	8.15	8.15	8.05	8.25	0.00
2,4-D	8.38	8.38	8.28	8.48	0.00
2,4,5-TP(Silvex)	9.26	9.26	9.16	9.36	0.00
2,4,5-T	9.55	9.55	9.45	9.65	0.00
2,4-DB	10.13	10.13	10.03	10.23	0.00
Dinoseb	11.34	11.35	11.25	11.45	0.01



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Fax : 908 789 8922

CALIBRATION VERIFICATION SUMMARY

Contract: WALS01

Lab Code: CHEM Case No.: P4722 SAS No.: P4722 SDG NO.: P4722

Continuing Calib Date: 11/09/2024 Initial Calibration Date(s): 11/08/2024 11/08/2024

Continuing Calib Time: 00:34 Initial Calibration Time(s): 15:13 16:58

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
DICAMBA	7.95	7.96	7.86	8.06	0.01
2,4-DCAA	7.75	7.76	7.66	7.86	0.01
DICHLORPROP	8.67	8.67	8.57	8.77	0.00
2,4-D	9.00	9.01	8.91	9.11	0.01
2,4,5-TP(Silvex)	9.91	9.91	9.81	10.01	0.00
2,4,5-T	10.33	10.33	10.23	10.43	0.00
2,4-DB	10.90	10.90	10.80	11.00	0.00
Dinoseb	11.28	11.28	11.18	11.38	0.00



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CALIBRATION VERIFICATION SUMMARY

Contract: WALS01

Lab Code: CHEM Case No.: P4722 SAS No.: P4722 SDG NO.: P4722

GC Column: RTX-CLP ID: 0.32 (mm) Initi. Calib. Date(s): 11/08/2024 11/08/2024

Client Sample No.: CCAL02 Date Analyzed: 11/09/2024

Lab Sample No.: HSTDCCC750 Data File : PS028379.D Time Analyzed: 00:34

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-T	9.550	9.452	9.652	703.660	712.500	-1.2
2,4,5-TP(Silvex)	9.257	9.160	9.360	705.350	712.500	-1.0
2,4-D	8.376	8.279	8.479	683.840	705.000	-3.0
2,4-DB	10.126	10.029	10.229	689.080	712.500	-3.3
2,4-DCAA	7.247	7.150	7.350	729.100	750.000	-2.8
DICAMBA	7.436	7.338	7.538	700.700	705.000	-0.6
DICHLORPROP	8.145	8.048	8.248	689.680	705.000	-2.2
Dinoseb	11.341	11.245	11.445	684.820	705.000	-2.9



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CALIBRATION VERIFICATION SUMMARY

Contract: WALS01

Lab Code: CHEM Case No.: P4722 SAS No.: P4722 SDG NO.: P4722

GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 11/08/2024 11/08/2024

Client Sample No.: CCAL02 Date Analyzed: 11/09/2024

Lab Sample No.: HSTDCCC750 Data File : PS028379.D Time Analyzed: 00:34

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-T	10.329	10.233	10.433	699.380	712.500	-1.8
2,4,5-TP(Silvex)	9.909	9.811	10.011	696.990	712.500	-2.2
2,4-D	9.002	8.905	9.105	674.630	705.000	-4.3
2,4-DB	10.897	10.800	11.000	688.400	712.500	-3.4
2,4-DCAA	7.753	7.655	7.855	729.560	750.000	-2.7
DICAMBA	7.954	7.856	8.056	698.730	705.000	-0.9
DICHLORPROP	8.671	8.573	8.773	682.450	705.000	-3.2
Dinoseb	11.277	11.180	11.380	675.370	705.000	-4.2

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS110924\
 Data File : PS028379.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 09 Nov 2024 00:34
 Operator : AR\AJ
 Sample : HSTDCCC750
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 HSTDCCC750

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Nov 09 01:13:09 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
 Quant Title : 8080.M
 QLast Update : Fri Nov 08 17:46:43 2024
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	7.247	7.753	2012.9E6	1162.5E6	729.101	729.559
Target Compounds							
1) T	Dalapon	2.649	2.706	2421.9E6	1862.8E6	678.768	656.910
2) T	3,5-DICHL...	6.417	6.705	2728.9E6	1608.4E6	681.989	678.930
3) T	4-Nitroph...	7.047	7.279	1191.8E6	659.3E6	642.766	622.596
5) T	DICAMBA	7.436	7.954	8436.9E6	5009.6E6	700.695	698.735
6) T	MCP	7.619	8.057	580.3E6	401.8E6	70.956	68.398
7) T	MCPA	7.770	8.303	780.7E6	540.7E6	69.628	67.523
8) T	DICHLORPROP	8.145	8.671	2137.8E6	1215.6E6	689.680	682.452
9) T	2,4-D	8.376	9.002	2403.1E6	1304.6E6	683.839	674.628
10) T	Pentachlo...	8.676	9.532	33266.9E6	17553.3E6	738.575	704.476
11) T	2,4,5-TP ...	9.257	9.909	13351.5E6	7382.7E6	705.347	696.991
12) T	2,4,5-T	9.550	10.329	13637.6E6	7256.8E6	703.656	699.383
13) T	2,4-DB	10.126	10.897	2129.9E6	912.3E6	689.077	688.403
14) T	DINOSEB	11.341	11.277	11103.3E6	4847.4E6	684.823	675.370
15) T	Picloram	11.146	12.375	21846.1E6	9957.8E6	695.604	691.874
16) T	DCPA	11.634	12.323	18904.9E6	7896.9E6	707.348	704.447

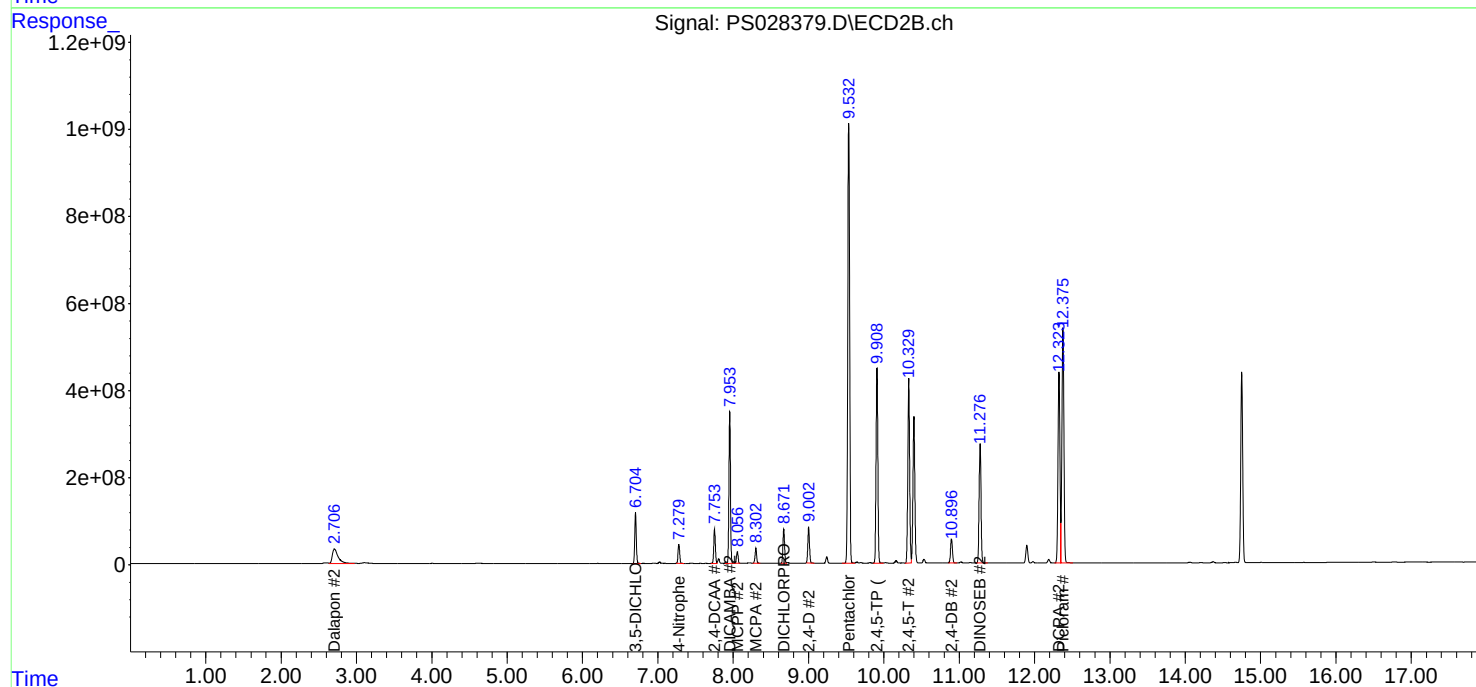
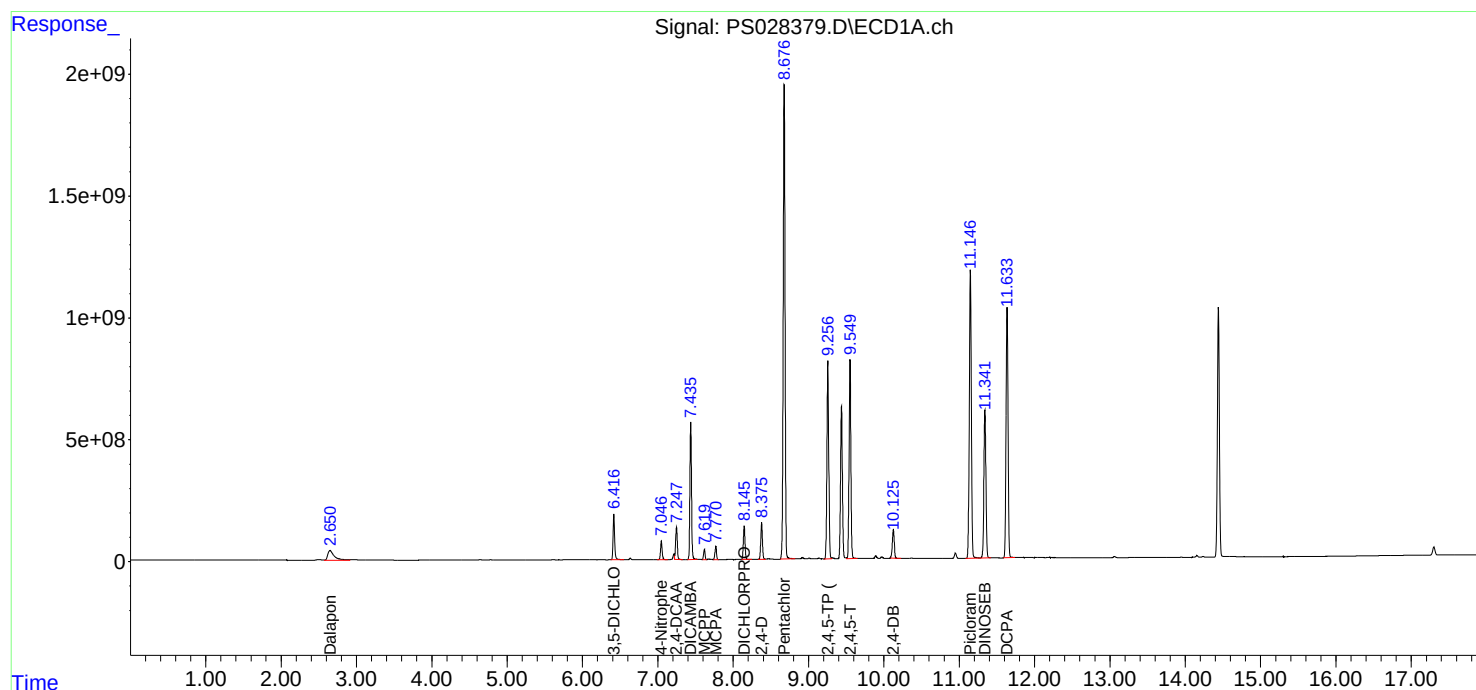
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS110924\
Data File : PS028379.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 09 Nov 2024 00:34
Operator : AR\AJ
Sample : HSTDCCC750
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
HSTDCCC750

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 09 01:13:09 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
Quant Title : 8080.M
QLast Update : Fri Nov 08 17:46:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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





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CALIBRATION VERIFICATION SUMMARY

Contract: WALS01

Lab Code: CHEM Case No.: P4722 SAS No.: P4722 SDG NO.: P4722

Continuing Calib Date: 11/12/2024 Initial Calibration Date(s): 11/08/2024 11/08/2024

Continuing Calib Time: 02:11 Initial Calibration Time(s): 15:13 16:58

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
DICAMBA	7.43	7.44	7.34	7.54	0.01
2,4-DCAA	7.24	7.25	7.15	7.35	0.01
DICHLORPROP	8.14	8.15	8.05	8.25	0.01
2,4-D	8.37	8.38	8.28	8.48	0.01
2,4,5-TP(Silvex)	9.25	9.26	9.16	9.36	0.01
2,4,5-T	9.55	9.55	9.45	9.65	0.00
2,4-DB	10.12	10.13	10.03	10.23	0.01
Dinoseb	11.34	11.35	11.25	11.45	0.01



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CALIBRATION VERIFICATION SUMMARY

Contract: WALS01

Lab Code: CHEM Case No.: P4722 SAS No.: P4722 SDG NO.: P4722

Continuing Calib Date: 11/12/2024 Initial Calibration Date(s): 11/08/2024 11/08/2024

Continuing Calib Time: 02:11 Initial Calibration Time(s): 15:13 16:58

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
DICAMBA	7.95	7.96	7.86	8.06	0.01
2,4-DCAA	7.75	7.76	7.66	7.86	0.01
DICHLORPROP	8.67	8.67	8.57	8.77	0.00
2,4-D	9.00	9.01	8.91	9.11	0.01
2,4,5-TP(Silvex)	9.91	9.91	9.81	10.01	0.00
2,4,5-T	10.33	10.33	10.23	10.43	0.00
2,4-DB	10.89	10.90	10.80	11.00	0.01
Dinoseb	11.27	11.28	11.18	11.38	0.01



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CALIBRATION VERIFICATION SUMMARY

Contract: WALS01

Lab Code: CHEM Case No.: P4722 SAS No.: P4722 SDG NO.: P4722

GC Column: RTX-CLP ID: 0.32 (mm) Initi. Calib. Date(s): 11/08/2024 11/08/2024

Client Sample No.: CCAL03 Date Analyzed: 11/12/2024

Lab Sample No.: HSTDCCC750 Data File : PS028430.D Time Analyzed: 02:11

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-T	9.545	9.452	9.652	724.840	712.500	1.7
2,4,5-TP(Silvex)	9.252	9.160	9.360	724.670	712.500	1.7
2,4-D	8.373	8.279	8.479	704.430	705.000	-0.1
2,4-DB	10.121	10.029	10.229	680.020	712.500	-4.6
2,4-DCAA	7.244	7.150	7.350	745.790	750.000	-0.6
DICAMBA	7.432	7.338	7.538	720.640	705.000	2.2
DICHLORPROP	8.141	8.048	8.248	709.240	705.000	0.6
Dinoseb	11.335	11.245	11.445	713.990	705.000	1.3



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CALIBRATION VERIFICATION SUMMARY

Contract: WALS01

Lab Code: CHEM Case No.: P4722 SAS No.: P4722 SDG NO.: P4722

GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 11/08/2024 11/08/2024

Client Sample No.: CCAL03 Date Analyzed: 11/12/2024

Lab Sample No.: HSTDCCC750 Data File : PS028430.D Time Analyzed: 02:11

COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
2,4,5-T	10.326	10.233	10.433	666.200	712.500	-6.5
2,4,5-TP(Silvex)	9.906	9.811	10.011	665.210	712.500	-6.6
2,4-D	8.999	8.905	9.105	614.680	705.000	-12.8
2,4-DB	10.894	10.800	11.000	644.510	712.500	-9.5
2,4-DCAA	7.750	7.655	7.855	684.690	750.000	-8.7
DICAMBA	7.951	7.856	8.056	662.040	705.000	-6.1
DICHLORPROP	8.668	8.573	8.773	643.140	705.000	-8.8
Dinoseb	11.274	11.180	11.380	655.310	705.000	-7.0

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS111124\
 Data File : PS028430.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 12 Nov 2024 02:11
 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: Nov 12 02:17:54 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
 Quant Title : 8080.M
 QLast Update : Fri Nov 08 17:46:43 2024
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	7.244	7.750	2059.0E6	1091.0E6	745.793	684.693
Target Compounds							
1) T	Dalapon	2.645	2.707	2474.3E6	1780.8E6	693.440	628.013
2) T	3,5-DICHL...	6.414	6.702	2797.9E6	1511.7E6	699.225	638.086
3) T	4-Nitroph...	7.043	7.276	1226.2E6	633.6E6	661.303	598.293
5) T	DICAMBA	7.432	7.951	8677.1E6	4746.5E6	720.643	662.039
6) T	MCPD	7.616	8.054	571.1E6	370.1E6	69.827	63.005
7) T	MCPA	7.766	8.299	788.3E6	495.8E6	70.308	61.913
8) T	DICHLORPROP	8.141	8.668	2198.4E6	1145.6E6	709.244	643.142
9) T	2,4-D	8.373	8.999	2475.5E6	1188.7E6	704.435	614.675
10) T	Pentachlo...	8.672	9.528	34122.4E6	16806.9E6	757.566	674.521
11) T	2,4,5-TP ...	9.252	9.906	13717.2E6	7046.0E6	724.666	665.210
12) T	2,4,5-T	9.545	10.326	14048.1E6	6912.5E6	724.837	666.204
13) T	2,4-DB	10.121	10.894	2101.9E6	854.2E6	680.022	644.507
14) T	DINOSEB	11.335	11.274	11576.3E6	4703.4E6	713.995	655.306
15) T	Picloram	11.141	12.371	22464.8E6	9640.9E6	715.304	669.854
16) T	DCPA	11.628	12.319	19371.8E6	7543.1E6	724.820	672.879

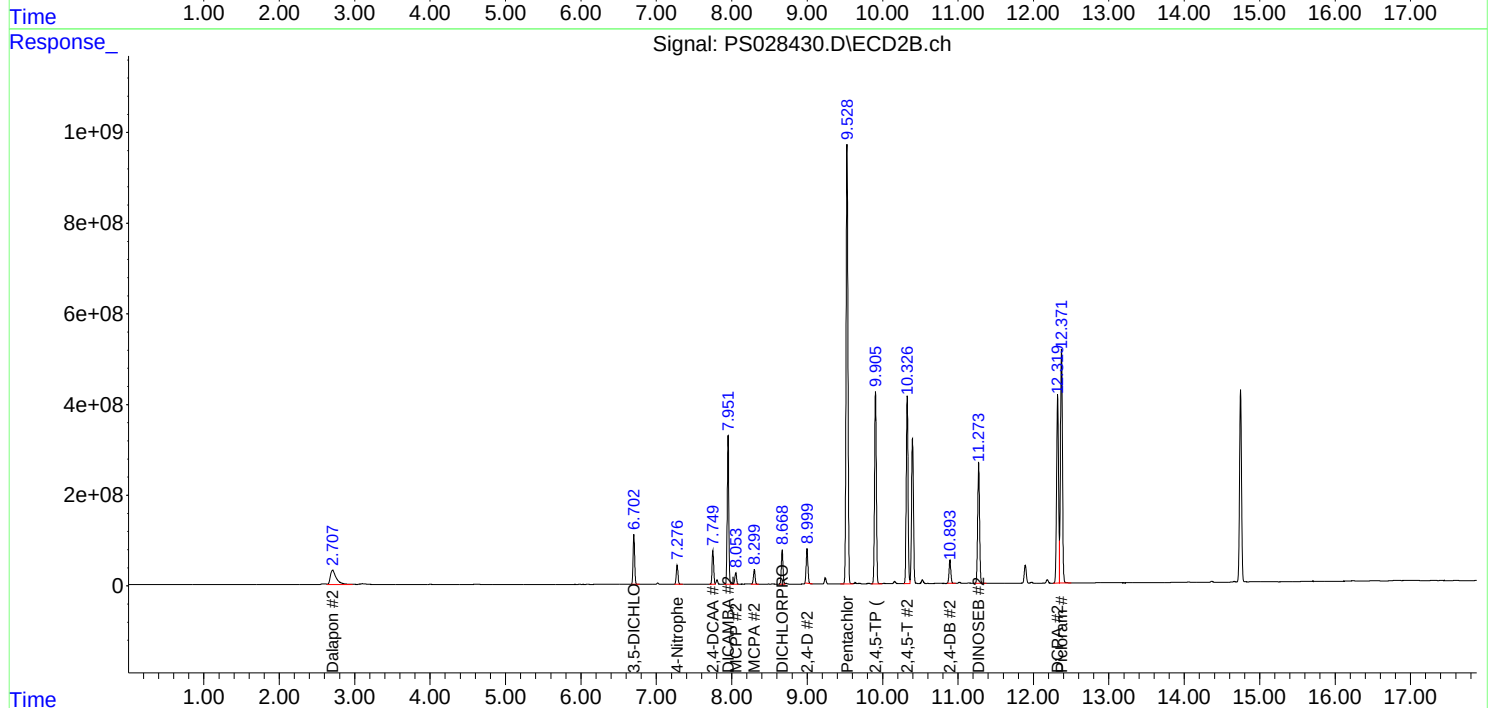
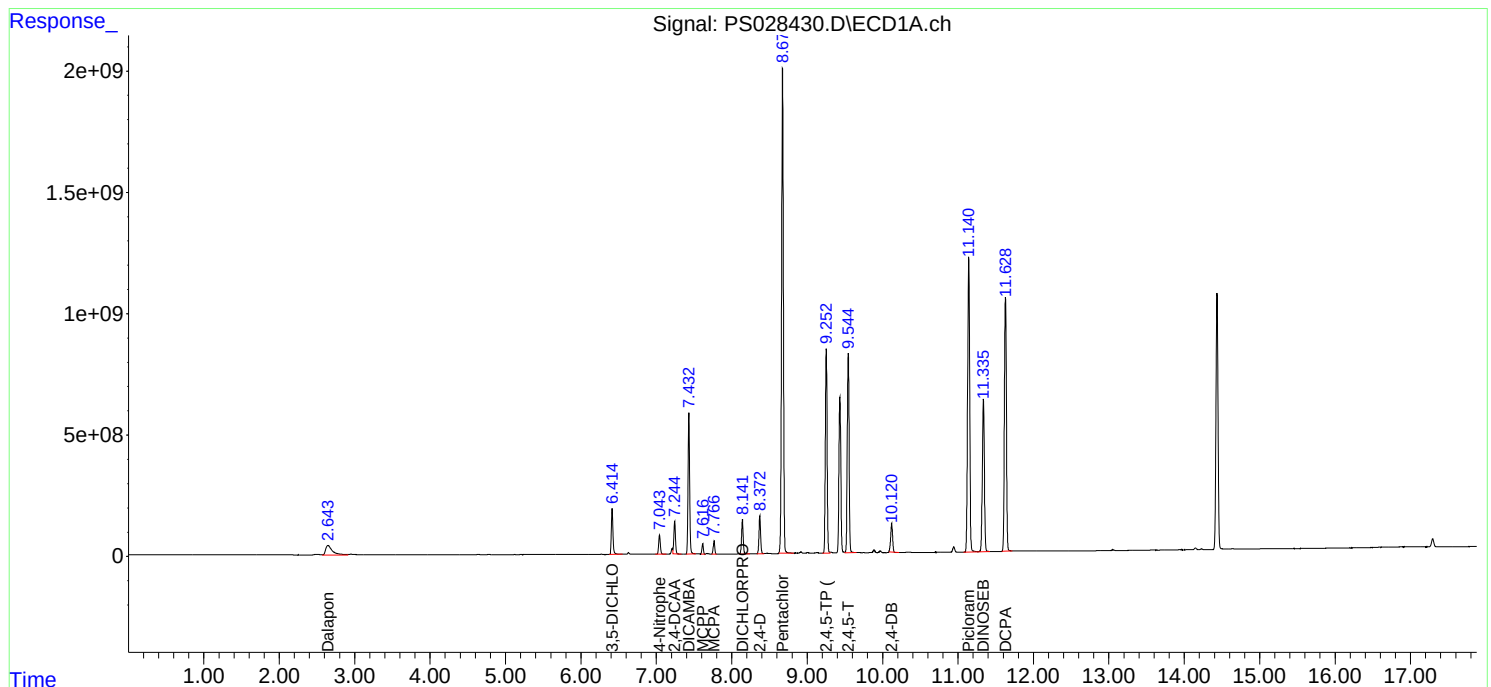
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS111124\
Data File : PS028430.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 Nov 2024 02:11
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: Nov 12 02:17:54 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
Quant Title : 8080.M
QLast Update : Fri Nov 08 17:46:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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





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CALIBRATION VERIFICATION SUMMARY

Contract: WALS01

Lab Code: CHEM Case No.: P4722 SAS No.: P4722 SDG NO.: P4722

Continuing Calib Date: 11/12/2024 Initial Calibration Date(s): 11/08/2024 11/08/2024

Continuing Calib Time: 06:59 Initial Calibration Time(s): 15:13 16:58

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
DICAMBA	7.43	7.44	7.34	7.54	0.01
2,4-DCAA	7.24	7.25	7.15	7.35	0.01
DICHLORPROP	8.14	8.15	8.05	8.25	0.01
2,4-D	8.37	8.38	8.28	8.48	0.01
2,4,5-TP(Silvex)	9.25	9.26	9.16	9.36	0.01
2,4,5-T	9.54	9.55	9.45	9.65	0.01
2,4-DB	10.12	10.13	10.03	10.23	0.01
Dinoseb	11.33	11.35	11.25	11.45	0.02



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CALIBRATION VERIFICATION SUMMARY

Contract: WALS01

Lab Code: CHEM Case No.: P4722 SAS No.: P4722 SDG NO.: P4722

Continuing Calib Date: 11/12/2024 Initial Calibration Date(s): 11/08/2024 11/08/2024

Continuing Calib Time: 06:59 Initial Calibration Time(s): 15:13 16:58

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

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
DICAMBA	7.95	7.96	7.86	8.06	0.01
2,4-DCAA	7.75	7.76	7.66	7.86	0.01
DICHLORPROP	8.67	8.67	8.57	8.77	0.01
2,4-D	9.00	9.01	8.91	9.11	0.02
2,4,5-TP(Silvex)	9.90	9.91	9.81	10.01	0.01
2,4,5-T	10.32	10.33	10.23	10.43	0.01
2,4-DB	10.89	10.90	10.80	11.00	0.01
Dinoseb	11.27	11.28	11.18	11.38	0.01



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CALIBRATION VERIFICATION SUMMARY
Contract: WALS01
Lab Code: CHEM **Case No.:** P4722 **SAS No.:** P4722 **SDG NO.:** P4722
GC Column: RTX-CLP **ID:** 0.32 (mm) **Initi. Calib. Date(s):** 11/08/2024 11/08/2024
Client Sample No.: CCAL04 **Date Analyzed:** 11/12/2024
Lab Sample No.: HSTDCCC750 **Data File :** PS028442.D **Time Analyzed:** 06:59

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-T	9.542	9.452	9.652	726.580	712.500	2.0
2,4,5-TP(Silvex)	9.249	9.160	9.360	728.750	712.500	2.3
2,4-D	8.370	8.279	8.479	705.610	705.000	0.1
2,4-DB	10.118	10.029	10.229	661.620	712.500	-7.1
2,4-DCAA	7.242	7.150	7.350	746.620	750.000	-0.5
DICAMBA	7.430	7.338	7.538	722.500	705.000	2.5
DICHLORPROP	8.139	8.048	8.248	709.750	705.000	0.7
Dinoseb	11.332	11.245	11.445	716.220	705.000	1.6



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CALIBRATION VERIFICATION SUMMARY

Contract: WALS01

Lab Code: CHEM Case No.: P4722 SAS No.: P4722 SDG NO.: P4722

GC Column: RTX-CLP2 ID: 0.32 (mm) Initi. Calib. Date(s): 11/08/2024 11/08/2024

Client Sample No.: CCAL04 Date Analyzed: 11/12/2024

Lab Sample No.: HSTDCCC750 Data File : PS028442.D Time Analyzed: 06:59

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
2,4,5-T	10.323	10.233	10.433	659.950	712.500	-7.4
2,4,5-TP(Silvex)	9.902	9.811	10.011	654.880	712.500	-8.1
2,4-D	8.995	8.905	9.105	653.430	705.000	-7.3
2,4-DB	10.890	10.800	11.000	646.400	712.500	-9.3
2,4-DCAA	7.748	7.655	7.855	679.110	750.000	-9.5
DICAMBA	7.949	7.856	8.056	655.240	705.000	-7.1
DICHLORPROP	8.665	8.573	8.773	631.600	705.000	-10.4
Dinoseb	11.270	11.180	11.380	647.110	705.000	-8.2

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS111124\
 Data File : PS028442.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 12 Nov 2024 06:59
 Operator : AR\AJ
 Sample : HSTDCCC750
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :

ECD_S

ClientSampleId :

HSTDCCC750

Manual Integrations

APPROVED

Reviewed By :Abdul Mirza 11/12/2024

Supervised By :Ankita Jodhani 11/12/2024

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Nov 12 06:56:47 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
 Quant Title : 8080.M
 QLast Update : Fri Nov 08 17:46:43 2024
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	7.242	7.748	2061.2E6	1082.1E6	746.624	679.113
Target Compounds							
1) T	Dalapon	2.642	2.702	2383.9E6	1734.7E6	668.112	611.757
2) T	3,5-DICHL...	6.413	6.700	2794.7E6	1490.8E6	698.443	629.290
3) T	4-Nitroph...	7.041	7.274	1223.7E6	631.0E6	659.959	595.862m
5) T	DICAMBA	7.430	7.949	8699.5E6	4697.7E6	722.504	655.236
6) T	MCPD	7.614	8.052	559.5E6	367.6E6	68.412	62.568
7) T	MCPA	7.765	8.296	798.0E6	494.9E6	71.172	61.809
8) T	DICHLORPROP	8.139	8.665	2200.0E6	1125.0E6	709.754	631.599
9) T	2,4-D	8.370	8.995	2479.6E6	1263.6E6	705.607	653.430m
10) T	Pentachlo...	8.670	9.525	34160.5E6	16629.5E6	758.413	667.401
11) T	2,4,5-TP ...	9.249	9.902	13794.5E6	6936.6E6	728.750	654.876
12) T	2,4,5-T	9.542	10.323	14081.8E6	6847.6E6	726.579	659.948
13) T	2,4-DB	10.118	10.890	2045.0E6	856.7E6	661.619	646.397m
14) T	DINOSEB	11.332	11.270	11612.4E6	4644.6E6	716.221	647.114
15) T	Picloram	11.137	12.367	22398.0E6	9477.2E6	713.176	658.485
16) T	DCPA	11.624	12.314	19474.2E6	7437.1E6	728.649m	663.424

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS111124\
Data File : PS028442.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 Nov 2024 06:59
Operator : AR\AJ
Sample : HSTDCCC750
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :

ECD_S

ClientSampleId :

HSTDCCC750

Manual Integrations

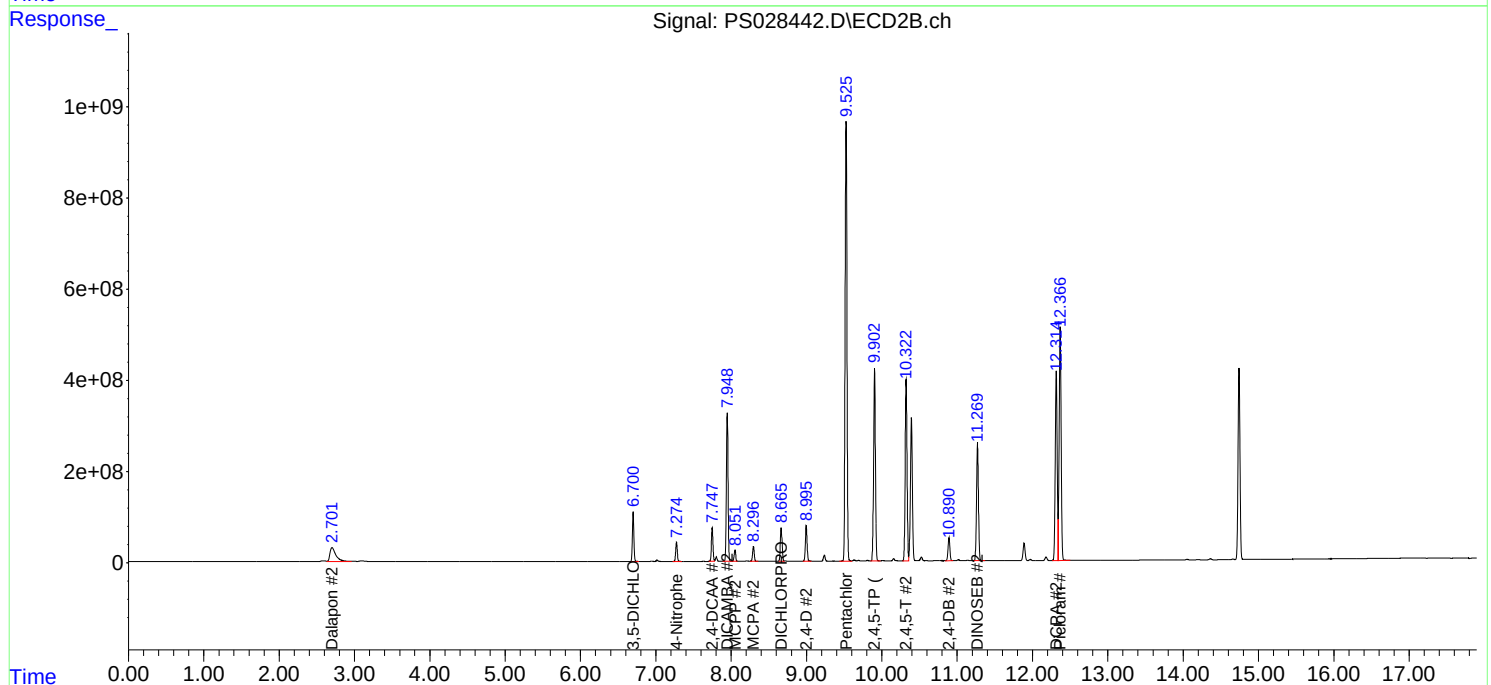
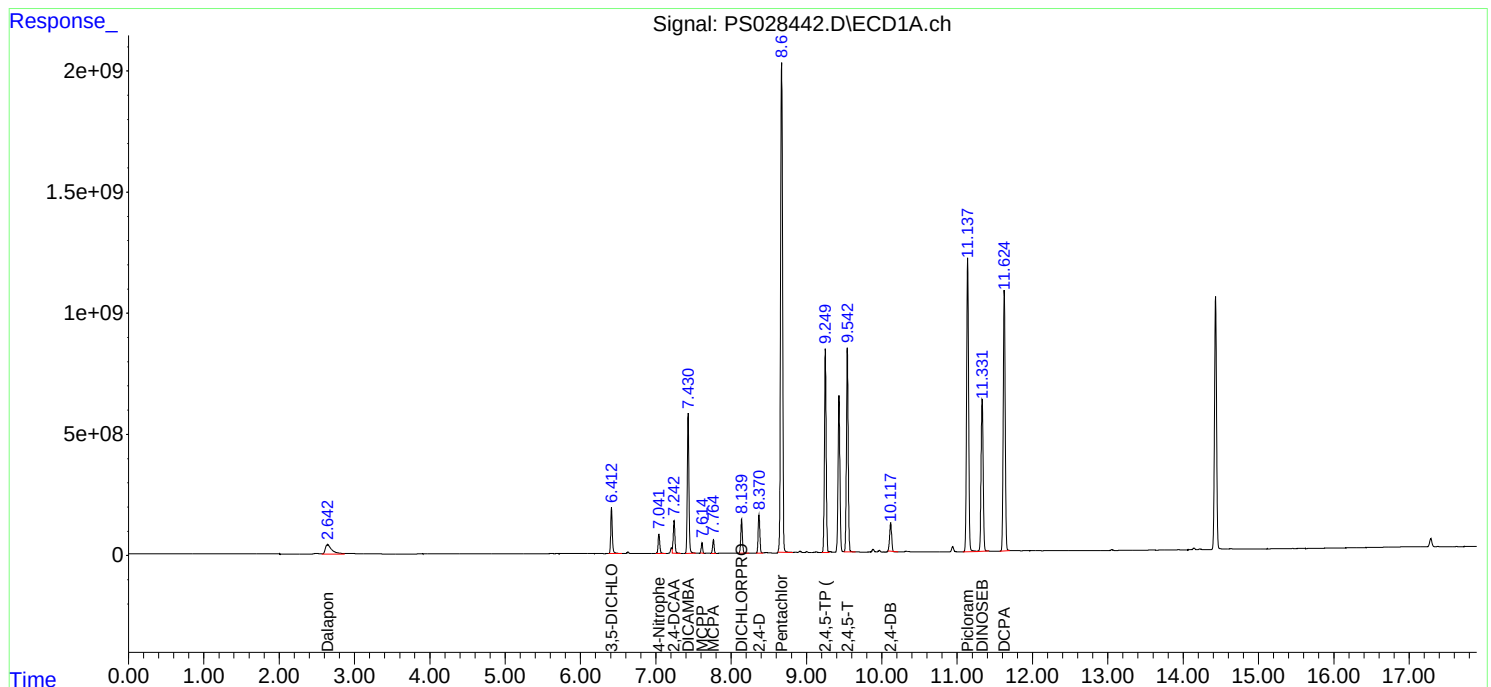
APPROVED

Reviewed By :Abdul Mirza 11/12/2024

Supervised By :Ankita Jodhani 11/12/2024

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 12 06:56:47 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
Quant Title : 8080.M
QLast Update : Fri Nov 08 17:46:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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



Analytical Sequence

Client: Walsh Construction Company II, LLC	SDG No.: P4722
Project: NYCDEP C547A - Shafts 17B-1 & 18B-1 Sta;	Instrument ID: ECD_S
GC Column: RTX-CLP	ID: 0.32 (mm) Inst. Calib. Date(s): 11/08/2024 11/08/2024

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

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DATAFILE	DCAA RT #	RT #
IBLK	IBLK	11/08/2024	14:25	PS028355.D	7.25	0.00
HSTDICC200	HSTDICC200	11/08/2024	15:13	PS028356.D	7.25	0.00
HSTDICC500	HSTDICC500	11/08/2024	15:46	PS028357.D	7.25	0.00
HSTDICC750	HSTDICC750	11/08/2024	16:10	PS028358.D	7.25	0.00
HSTDICC1000	HSTDICC1000	11/08/2024	16:34	PS028359.D	7.25	0.00
HSTDICC1500	HSTDICC1500	11/08/2024	16:58	PS028360.D	7.25	0.00
IBLK	IBLK	11/08/2024	17:46	PS028362.D	7.25	0.00
HSTDCCC750	HSTDCCC750	11/08/2024	18:10	PS028363.D	7.25	0.00
PB164754BL	PB164754BL	11/08/2024	19:46	PS028367.D	7.25	0.00
PB164754BS	PB164754BS	11/08/2024	20:10	PS028368.D	7.25	0.00
WC-2(0-6)	P4722-08	11/08/2024	20:58	PS028370.D	7.25	0.00
TP-14MS	P4739-01MS	11/08/2024	22:10	PS028373.D	7.25	0.00
TP-14MSD	P4739-01MSD	11/08/2024	22:34	PS028374.D	7.25	0.00
IBLK	IBLK	11/09/2024	00:10	PS028378.D	7.25	0.00
HSTDCCC750	HSTDCCC750	11/09/2024	00:34	PS028379.D	7.25	0.00
IBLK	IBLK	11/12/2024	01:47	PS028429.D	7.24	0.00
HSTDCCC750	HSTDCCC750	11/12/2024	02:11	PS028430.D	7.24	0.00
WC-1(0-6)	P4722-03	11/12/2024	05:23	PS028438.D	7.24	0.00
WC-3(0-6)	P4722-13	11/12/2024	05:47	PS028439.D	7.24	0.00
IBLK	IBLK	11/12/2024	06:35	PS028441.D	7.24	0.00
HSTDCCC750	HSTDCCC750	11/12/2024	06:59	PS028442.D	7.24	0.00

Analytical Sequence

Client: Walsh Construction Company II, LLC	SDG No.: P4722
Project: NYCDEP C547A - Shafts 17B-1 & 18B-1 Sta;	Instrument ID: ECD_S
GC Column: RTX-CLP2	ID: 0.32 (mm) Inst. Calib. Date(s): 11/08/2024 11/08/2024

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

EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	DATAFILE	DCAA RT #	RT #
IBLK	IBLK	11/08/2024	14:25	PS028355.D	7.76	0.00
HSTDICC200	HSTDICC200	11/08/2024	15:13	PS028356.D	7.76	0.00
HSTDICC500	HSTDICC500	11/08/2024	15:46	PS028357.D	7.75	0.00
HSTDICC750	HSTDICC750	11/08/2024	16:10	PS028358.D	7.76	0.00
HSTDICC1000	HSTDICC1000	11/08/2024	16:34	PS028359.D	7.76	0.00
HSTDICC1500	HSTDICC1500	11/08/2024	16:58	PS028360.D	7.76	0.00
IBLK	IBLK	11/08/2024	17:46	PS028362.D	7.76	0.00
HSTDCCC750	HSTDCCC750	11/08/2024	18:10	PS028363.D	7.75	0.00
PB164754BL	PB164754BL	11/08/2024	19:46	PS028367.D	7.75	0.00
PB164754BS	PB164754BS	11/08/2024	20:10	PS028368.D	7.75	0.00
WC-2(0-6)	P4722-08	11/08/2024	20:58	PS028370.D	7.75	0.00
TP-14MS	P4739-01MS	11/08/2024	22:10	PS028373.D	7.75	0.00
TP-14MSD	P4739-01MSD	11/08/2024	22:34	PS028374.D	7.75	0.00
IBLK	IBLK	11/09/2024	00:10	PS028378.D	7.75	0.00
HSTDCCC750	HSTDCCC750	11/09/2024	00:34	PS028379.D	7.75	0.00
IBLK	IBLK	11/12/2024	01:47	PS028429.D	7.75	0.00
HSTDCCC750	HSTDCCC750	11/12/2024	02:11	PS028430.D	7.75	0.00
WC-1(0-6)	P4722-03	11/12/2024	05:23	PS028438.D	7.75	0.00
WC-3(0-6)	P4722-13	11/12/2024	05:47	PS028439.D	7.75	0.00
IBLK	IBLK	11/12/2024	06:35	PS028441.D	7.75	0.00
HSTDCCC750	HSTDCCC750	11/12/2024	06:59	PS028442.D	7.75	0.00

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

PB164754BS

Contract: WALS01

Lab Code: CHEM

Case No.: P4722

SAS No.: P4722

SDG NO.: P4722

Lab Sample ID: PB164754BS

Date(s) Analyzed: 11/08/2024

11/08/2024

Instrument ID (1): ECD_S

Instrument ID (2): ECD_S

GC Column: (1): RTX-CLP

ID: 0.32 (mm)

GC Column:(2): RTX-CLP2

ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
DICHLORPROP	1	8.15	8.10	8.20	170	1.8
	2	8.67	8.62	8.72	167	
2,4-D	1	8.38	8.33	8.43	169	1.2
	2	9.00	8.95	9.05	167	
2,4,5-TP(Silvex)	1	9.26	9.21	9.31	173	1.7
	2	9.91	9.86	9.96	170	
2,4,5-T	1	9.55	9.50	9.60	173	1.7
	2	10.33	10.28	10.38	170	
2,4-DB	1	10.13	10.08	10.18	168	1.2
	2	10.90	10.85	10.95	166	
Dinoseb	1	11.34	11.29	11.39	167	1.2
	2	11.28	11.23	11.33	165	
DICAMBA	1	7.44	7.39	7.49	170	1.2
	2	7.96	7.91	8.01	168	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

TP-14MS

Contract: WALS01

Lab Code: CHEM

Case No.: P4722

SAS No.: P4722

SDG NO.: P4722

Lab Sample ID: P4739-01MS

Date(s) Analyzed: 11/08/2024

11/08/2024

Instrument ID (1): ECD_S

Instrument ID (2): ECD_S

GC Column: (1): RTX-CLP

ID: 0.32 (mm)

GC Column:(2): RTX-CLP2

ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
DICHLORPROP	1	8.15	8.10	8.20	40.4	8.2
	2	8.67	8.62	8.72	37.2	
2,4-D	1	8.38	8.33	8.43	72.7	5.2
	2	9.00	8.95	9.05	69.0	
2,4,5-TP(Silvex)	1	9.26	9.21	9.31	25.6	6.8
	2	9.91	9.86	9.96	27.4	
2,4,5-T	1	9.55	9.50	9.60	37.0	1.4
	2	10.33	10.28	10.38	36.5	
2,4-DB	1	10.13	10.08	10.18	27.6	21.2
	2	10.90	10.85	10.95	22.3	
DICAMBA	1	7.44	7.39	7.49	68.5	5.2
	2	7.95	7.90	8.00	65.0	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

TP-14MSD

Contract: WALS01

Lab Code: CHEM Case No.: P4722

SAS No.: P4722 SDG NO.: P4722

Lab Sample ID: P4739-01MSD

Date(s) Analyzed: 11/08/2024 11/08/2024

Instrument ID (1): ECD_S

Instrument ID (2): ECD_S

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

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

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
DICHLORPROP	1	8.15	8.10	8.20	39.6	8.7
	2	8.67	8.62	8.72	36.3	
2,4-D	1	8.38	8.33	8.43	71.0	4.2
	2	9.00	8.95	9.05	68.1	
2,4,5-TP(Silvex)	1	9.26	9.21	9.31	25.0	6.2
	2	9.91	9.86	9.96	26.6	
2,4,5-T	1	9.55	9.50	9.60	36.3	1.1
	2	10.33	10.28	10.38	35.9	
2,4-DB	1	10.13	10.08	10.18	26.9	18.3
	2	10.90	10.85	10.95	22.4	
DICAMBA	1	7.44	7.39	7.49	67.7	5.3
	2	7.96	7.91	8.01	64.2	



QC SAMPLE DATA

Report of Analysis

Client:	Walsh Construction Company II, LLC	Date Collected:	
Project:	NYCDEP C547A - Shafts 17B-1 & 18B-1 Stage 2	Date Received:	
Client Sample ID:	PB164754BL	SDG No.:	P4722
Lab Sample ID:	PB164754BL	Matrix:	SOIL
Analytical Method:	SW8151A	% Solid:	100 Decanted:
Sample Wt/Vol:	30.03 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	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
PS028367.D	1	11/07/24 10:33	11/08/24 19:46	PB164754

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
1918-00-9	DICAMBA	8.70	U	8.70	66.9	ug/Kg
120-36-5	DICHLORPROP	9.50	U	9.50	66.9	ug/Kg
94-75-7	2,4-D	12.1	U	12.1	66.9	ug/Kg
93-72-1	2,4,5-TP (Silvex)	9.40	U	9.40	66.9	ug/Kg
93-76-5	2,4,5-T	10.1	U	10.1	66.9	ug/Kg
94-82-6	2,4-DB	18.3	U	18.3	66.9	ug/Kg
88-85-7	DINOSEB	12.4	U	12.4	66.9	ug/Kg
SURROGATES						
19719-28-9	2,4-DCAA	494		10 - 141	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\PS110924\
Data File : PS028367.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 08 Nov 2024 19:46
Operator : AR\AJ
Sample : PB164754BL
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
PB164754BL

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 08 21:43:33 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
Quant Title : 8080.M
QLast Update : Fri Nov 08 17:46:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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

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

4) S	2,4-DCAA	7.249	7.754	1364.5E6	748.0E6	494.247	469.419
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Target Compounds

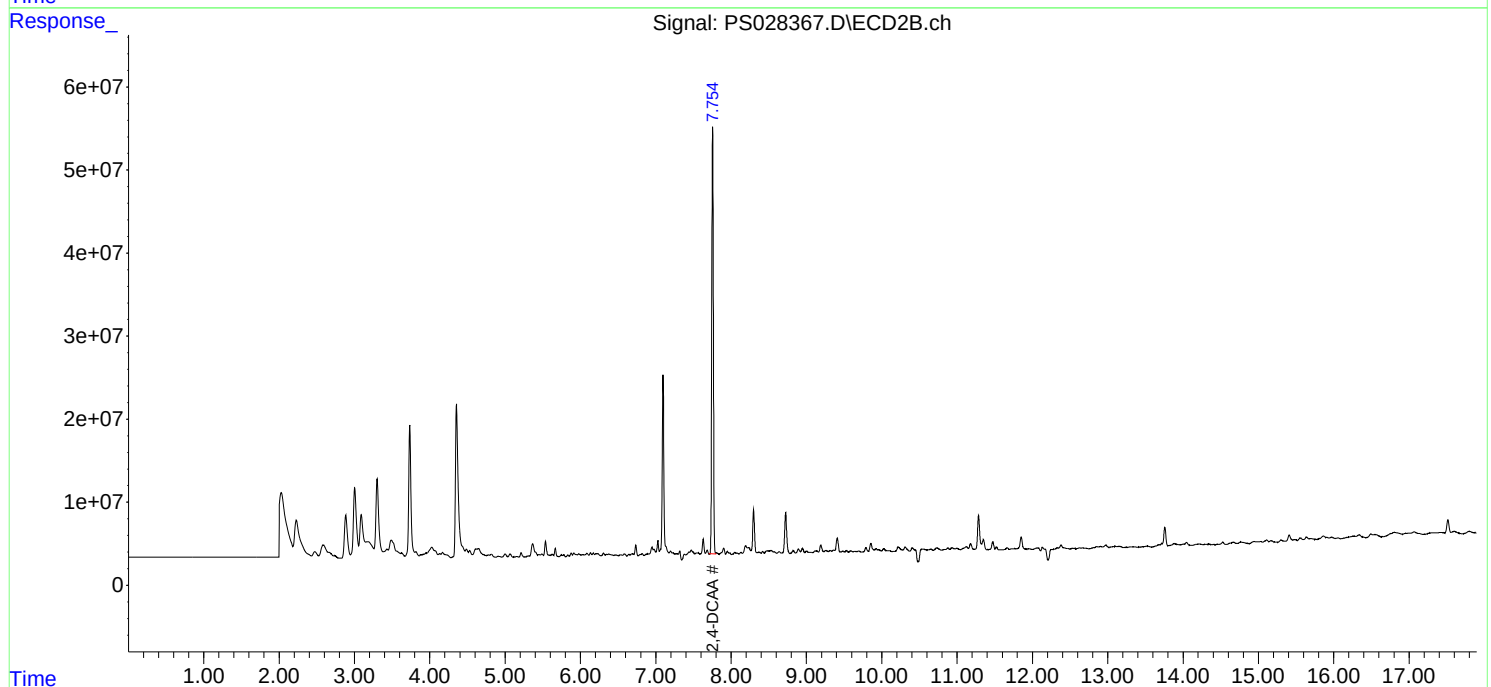
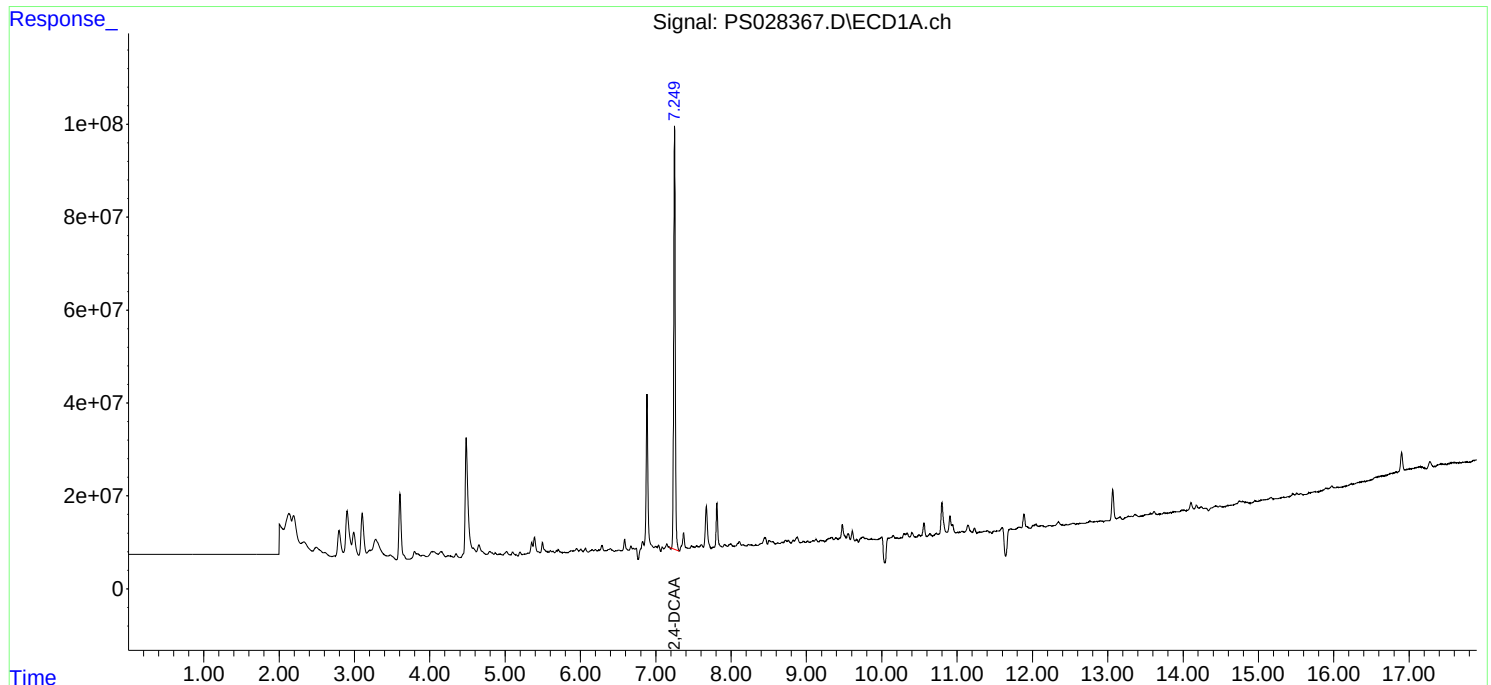
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

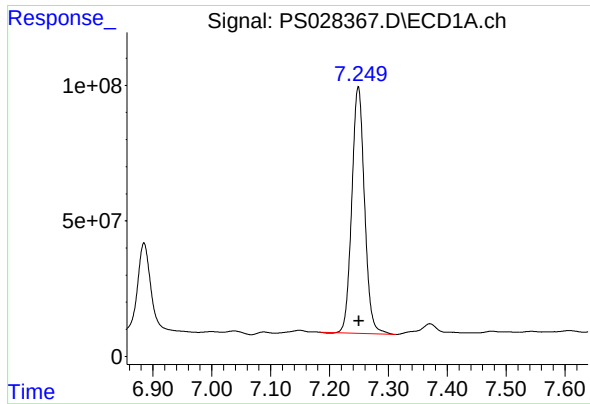
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS110924\
Data File : PS028367.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 08 Nov 2024 19:46
Operator : AR\AJ
Sample : PB164754BL
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
PB164754BL

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 08 21:43:33 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
Quant Title : 8080.M
QLast Update : Fri Nov 08 17:46:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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

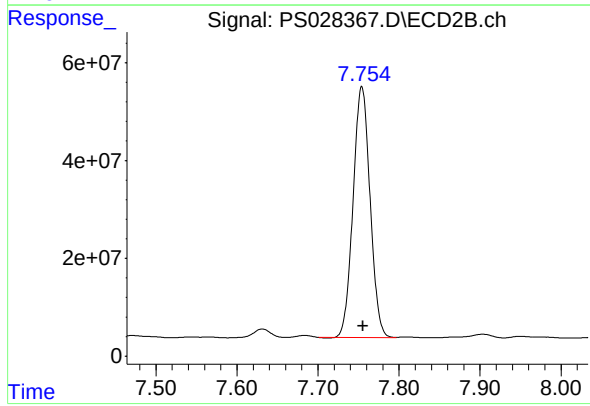




#4 2,4-DCAA

R.T.: 7.249 min
Delta R.T.: -0.001 min
Response: 1364494053
Conc: 494.25 ng/ml

Instrument :
ECD_S
ClientSampleId :
PB164754BL



#4 2,4-DCAA

R.T.: 7.754 min
Delta R.T.: -0.001 min
Response: 747982524
Conc: 469.42 ng/ml

Report of Analysis

Client:	Walsh Construction Company II, LLC	Date Collected:	11/08/24
Project:	NYCDEP C547A - Shafts 17B-1 & 18B-1 Stage 2	Date Received:	11/08/24
Client Sample ID:	PIBLK-PS028355.D	SDG No.:	P4722
Lab Sample ID:	I.BLK-PS028355.D	Matrix:	WATER
Analytical Method:	SW8151A	% Solid:	0
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Herbicide
GPC Factor :	1.0	PH :	
Prep Method :	SW3510C	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS028355.D	1		11/08/24	PS110924

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
1918-00-9	DICAMBA	0.42	U	0.42	2.00	ug/L
120-36-5	DICHLORPROP	0.43	U	0.43	2.00	ug/L
94-75-7	2,4-D	0.49	U	0.49	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.45	U	0.45	2.00	ug/L
93-76-5	2,4,5-T	0.50	U	0.50	2.00	ug/L
94-82-6	2,4-DB	0.57	U	0.57	2.00	ug/L
88-85-7	DINOSEB	0.55	U	0.55	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	503		39 - 175	101%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS110924\
Data File : PS028355.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 08 Nov 2024 14:25
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 08 17:51:55 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
Quant Title : 8080.M
QLast Update : Fri Nov 08 17:46:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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

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

4) S	2,4-DCAA	7.250	7.756	1382.7E6	801.6E6	500.845	503.062
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Target Compounds

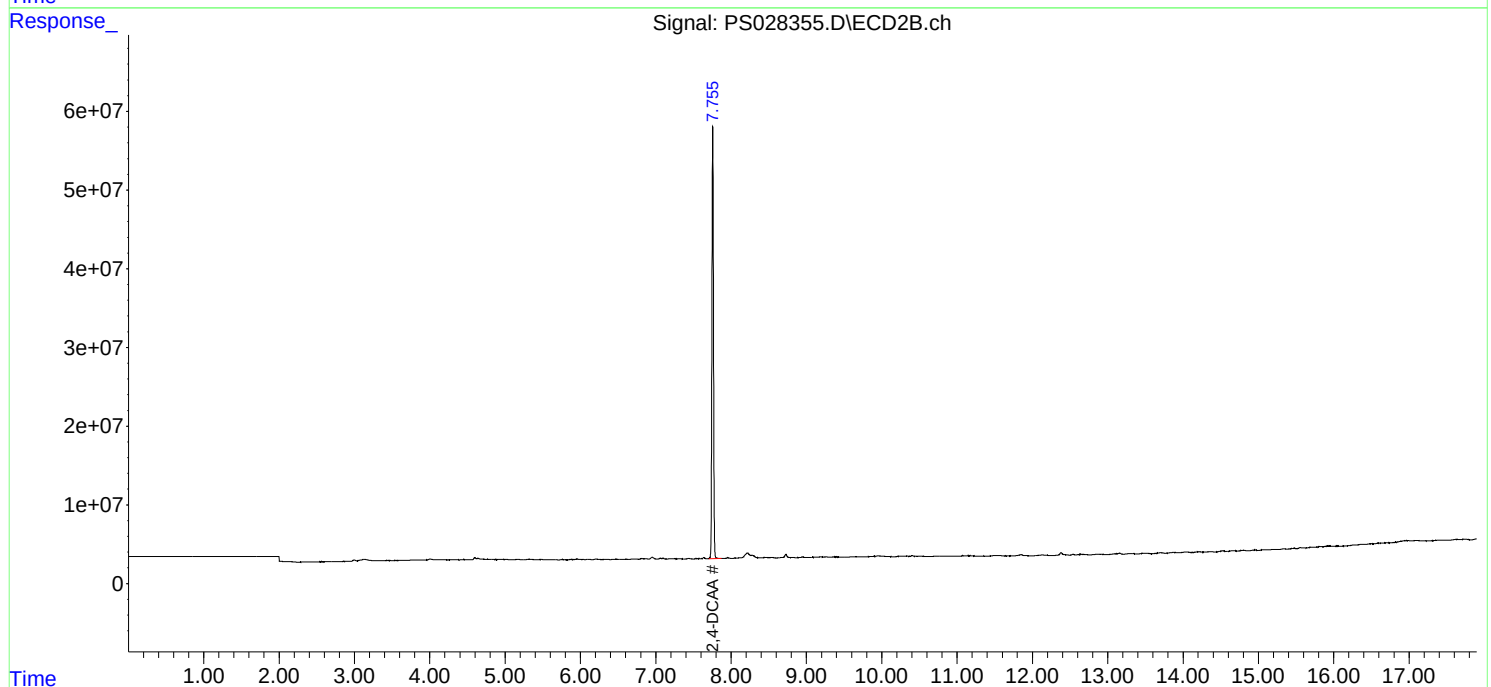
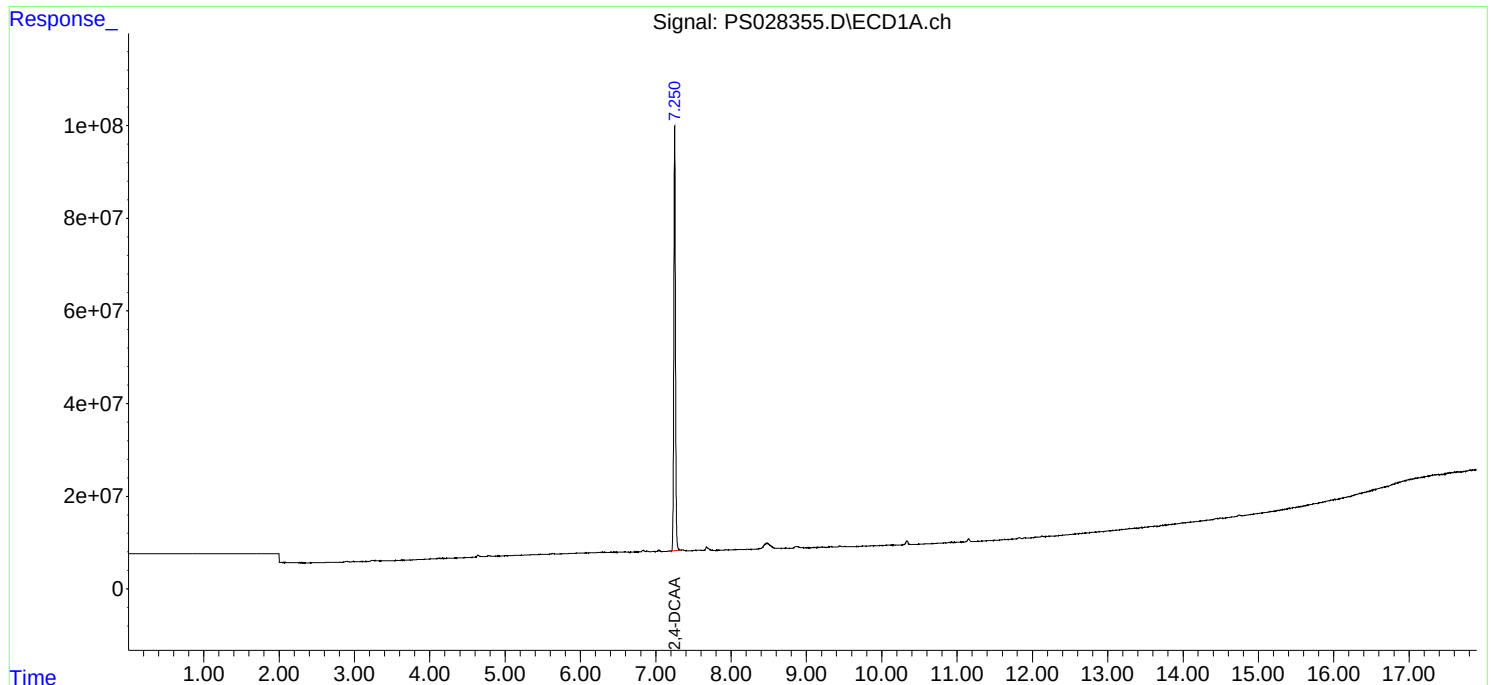
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

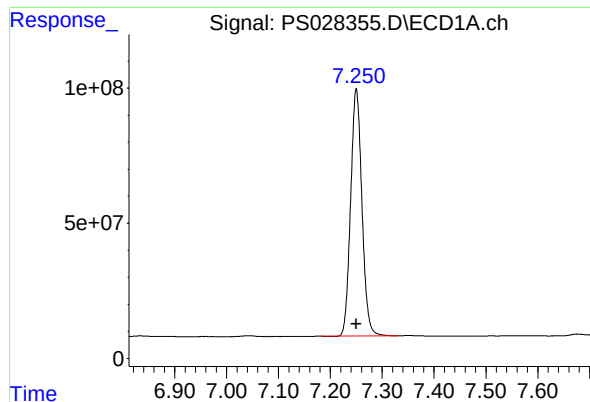
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS110924\
Data File : PS028355.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 08 Nov 2024 14:25
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 08 17:51:55 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
Quant Title : 8080.M
QLast Update : Fri Nov 08 17:46:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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





#4 2,4-DCAA

R.T.: 7.250 min

Delta R.T.: 0.000 min

Response: 1382710493

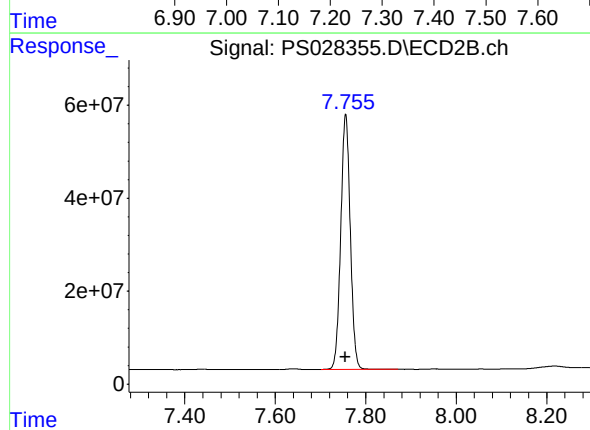
Conc: 500.85 ng/ml

Instrument :

ECD_S

ClientSampleId :

I.BLK



#4 2,4-DCAA

R.T.: 7.756 min

Delta R.T.: 0.000 min

Response: 801589716

Conc: 503.06 ng/ml

Report of Analysis

Client:	Walsh Construction Company II, LLC	Date Collected:	11/08/24
Project:	NYCDEP C547A - Shafts 17B-1 & 18B-1 Stage 2	Date Received:	11/08/24
Client Sample ID:	PIBLK-PS028362.D	SDG No.:	P4722
Lab Sample ID:	I.BLK-PS028362.D	Matrix:	WATER
Analytical Method:	SW8151A	% Solid:	0
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Herbicide
GPC Factor :	1.0	PH :	
Prep Method :	SW3510C	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS028362.D	1		11/08/24	PS110924

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
1918-00-9	DICAMBA	0.42	U	0.42	2.00	ug/L
120-36-5	DICHLORPROP	0.43	U	0.43	2.00	ug/L
94-75-7	2,4-D	0.49	U	0.49	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.45	U	0.45	2.00	ug/L
93-76-5	2,4,5-T	0.50	U	0.50	2.00	ug/L
94-82-6	2,4-DB	0.57	U	0.57	2.00	ug/L
88-85-7	DINOSEB	0.55	U	0.55	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	493		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\PS110924\
 Data File : PS028362.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 08 Nov 2024 17:46
 Operator : AR\AJ
 Sample : I.BLK
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 ECD_S
 ClientSampleId :
 I.BLK

Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 11/11/2024
 Supervised By :Ankita Jodhani 11/12/2024

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Nov 08 21:39:24 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
 Quant Title : 8080.M
 QLast Update : Fri Nov 08 17:46:43 2024
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

4) S	2,4-DCAA	7.249	7.755	1354.7E6	785.3E6	490.711m	492.829
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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\PS110924\
Data File : PS028362.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 08 Nov 2024 17:46
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

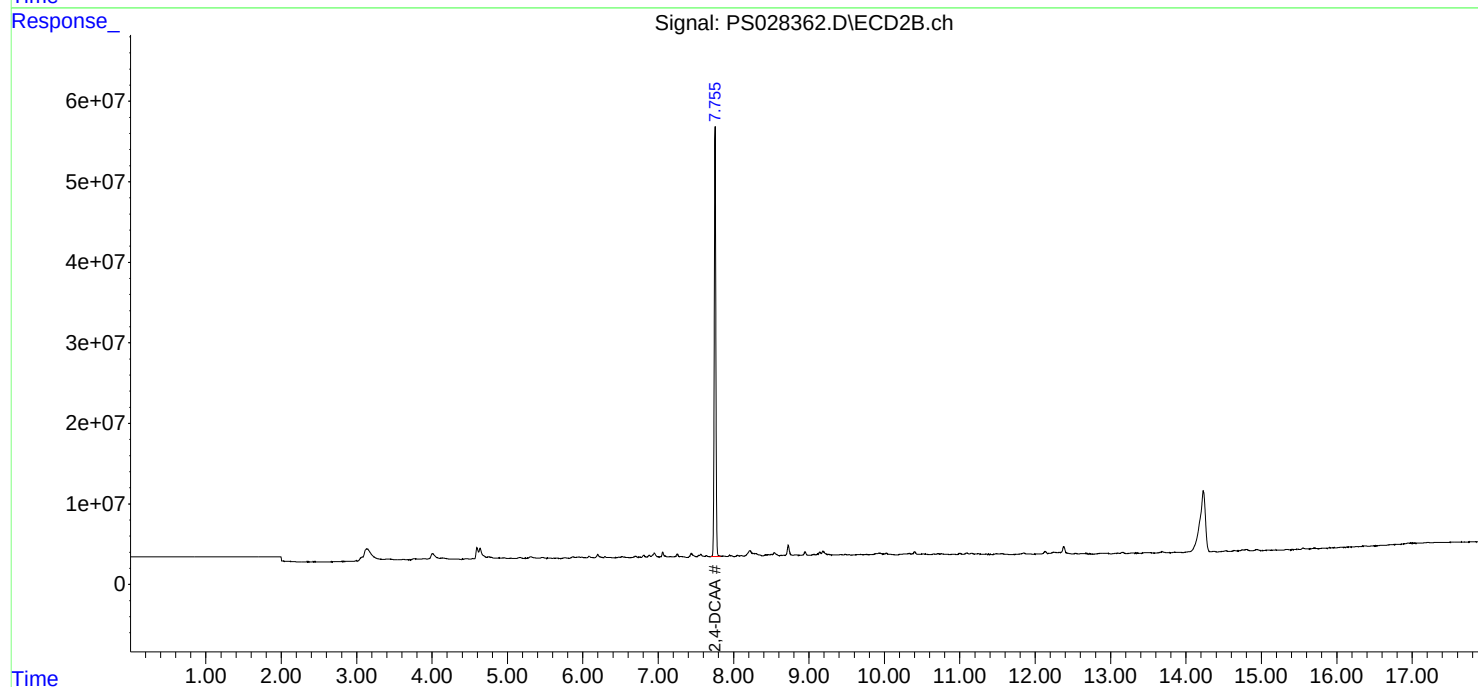
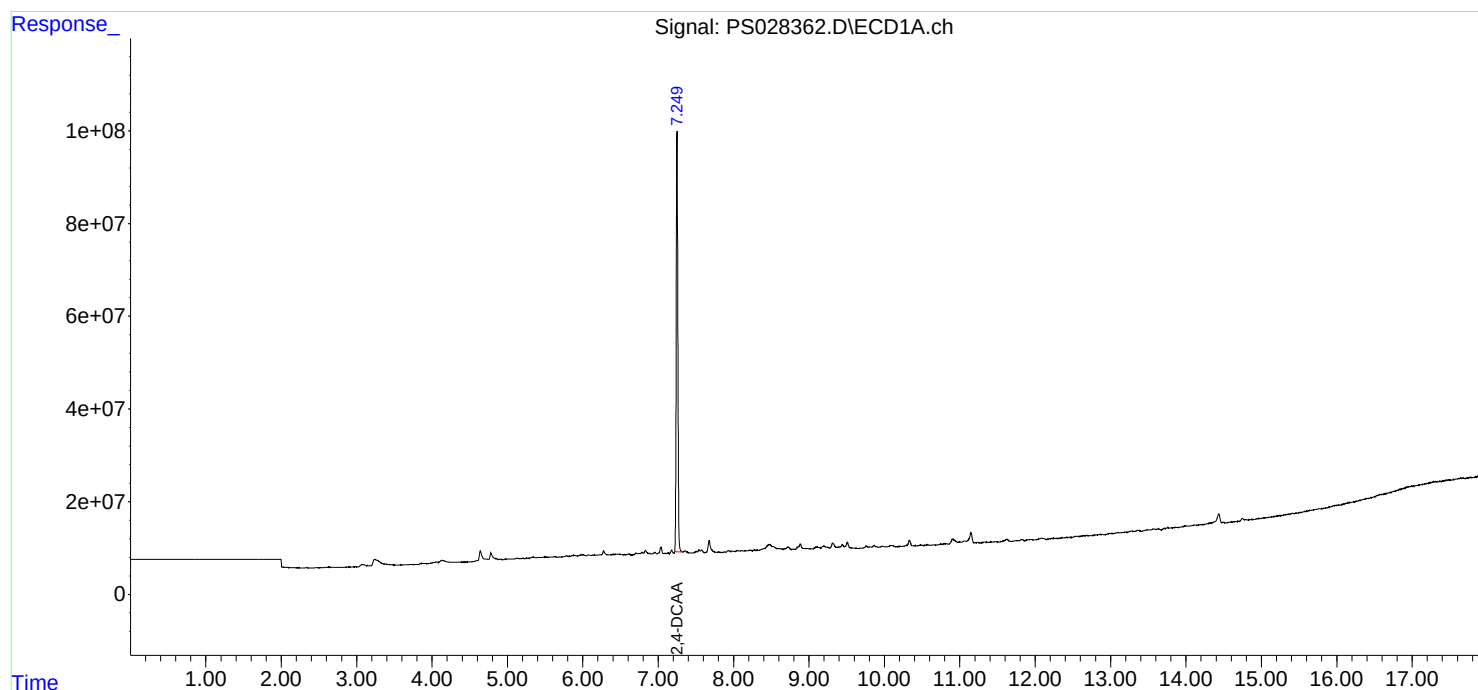
Instrument :
ECD_S
ClientSampleId :
I.BLK

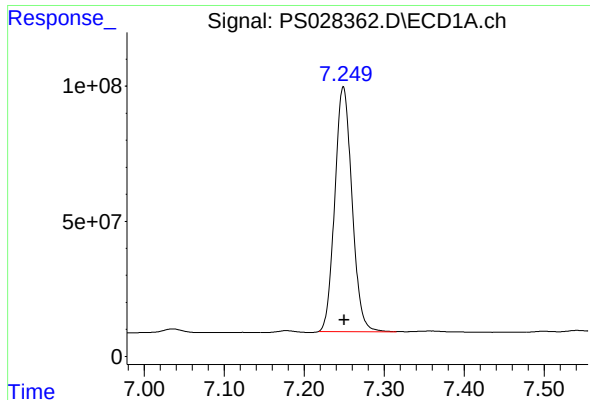
Manual Integrations
APPROVED

Reviewed By : Abdul Mirza 11/11/2024
Supervised By : Ankita Jodhani 11/12/2024

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 08 21:39:24 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
Quant Title : 8080.M
QLast Update : Fri Nov 08 17:46:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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





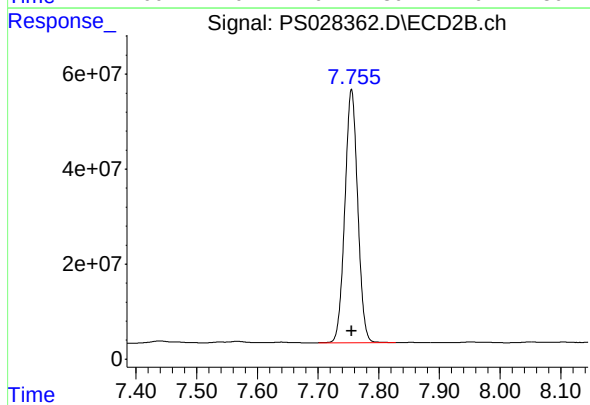
#4 2,4-DCAA

R.T.: 7.249 min
Delta R.T.: -0.002 min
Response: 1354733199
Conc: 490.71 ng/ml

Instrument :
ECD_S
ClientSampleId :
I.BLK

Manual Integrations
APPROVED

Reviewed By :Abdul Mirza 11/11/2024
Supervised By :Ankita Jodhani 11/12/2024



#4 2,4-DCAA

R.T.: 7.755 min
Delta R.T.: 0.000 min
Response: 785284113
Conc: 492.83 ng/ml

Report of Analysis

Client:	Walsh Construction Company II, LLC	Date Collected:	11/09/24
Project:	NYCDEP C547A - Shafts 17B-1 & 18B-1 Stage 2	Date Received:	11/09/24
Client Sample ID:	PIBLK-PS028378.D	SDG No.:	P4722
Lab Sample ID:	I.BLK-PS028378.D	Matrix:	WATER
Analytical Method:	SW8151A	% Solid:	0
Sample Wt/Vol:	1000	Units:	mL
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Herbicide
GPC Factor :	1.0	PH :	
Prep Method :	SW3510C	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS028378.D	1		11/09/24	PS110924

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
1918-00-9	DICAMBA	0.42	U	0.42	2.00	ug/L
120-36-5	DICHLORPROP	0.43	U	0.43	2.00	ug/L
94-75-7	2,4-D	0.49	U	0.49	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.45	U	0.45	2.00	ug/L
93-76-5	2,4,5-T	0.50	U	0.50	2.00	ug/L
94-82-6	2,4-DB	0.57	U	0.57	2.00	ug/L
88-85-7	DINOSEB	0.55	U	0.55	2.00	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\PS110924\
Data File : PS028378.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 09 Nov 2024 00:10
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 09 01:12:26 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
Quant Title : 8080.M
QLast Update : Fri Nov 08 17:46:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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

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

4) S	2,4-DCAA	7.247	7.753	1363.1E6	775.4E6	493.757	486.655
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Target Compounds

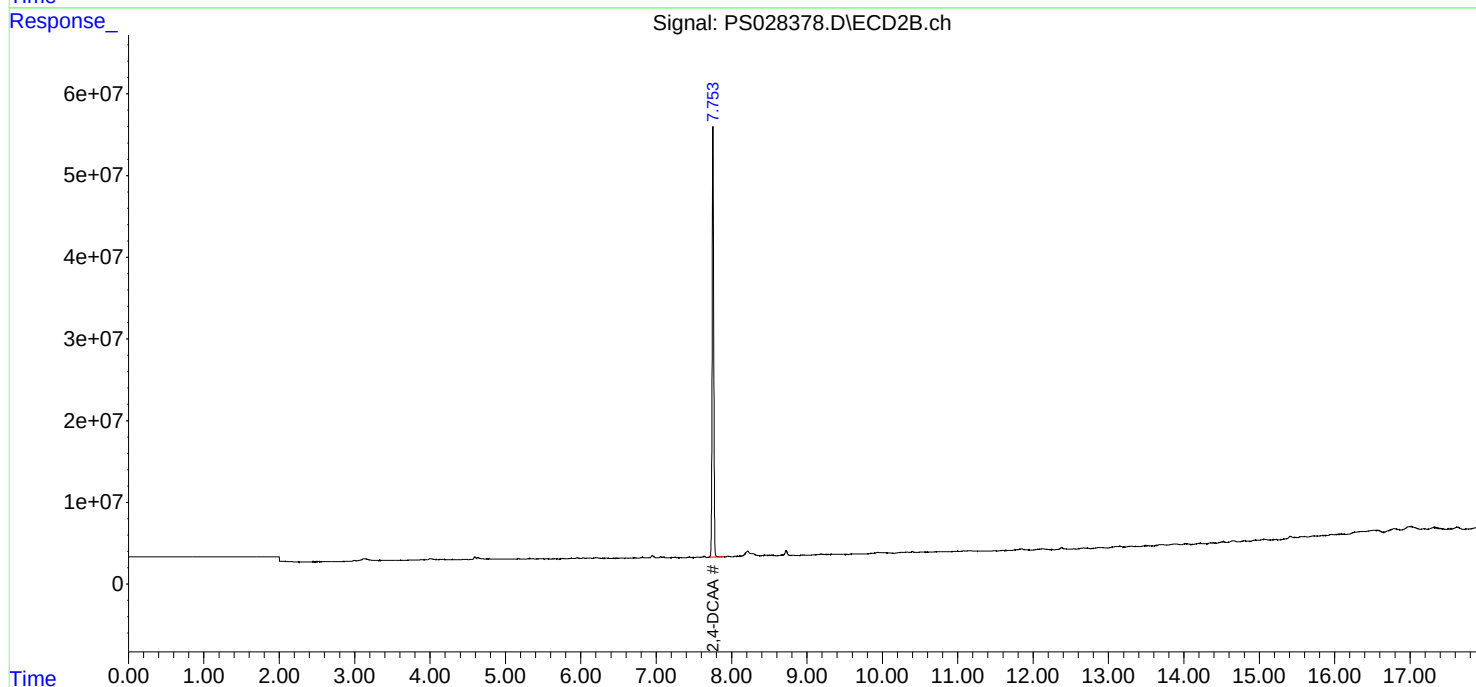
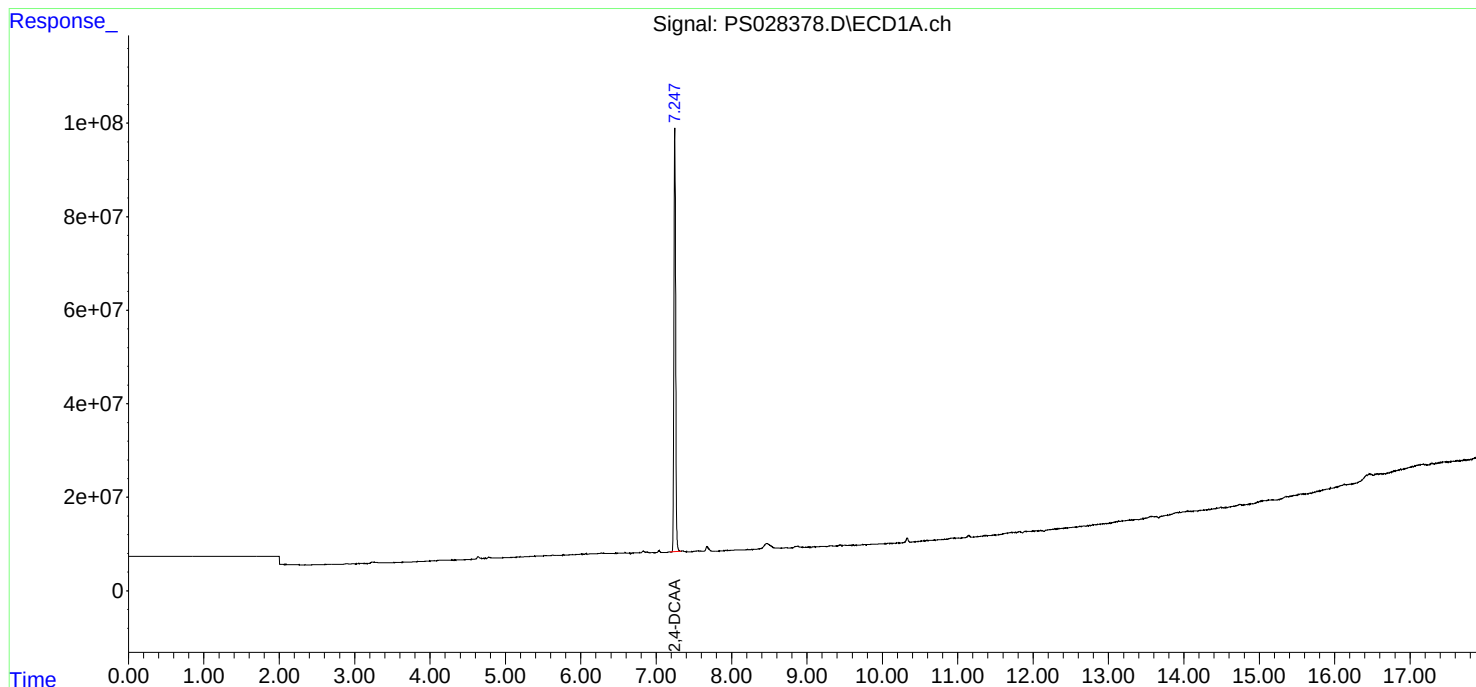
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

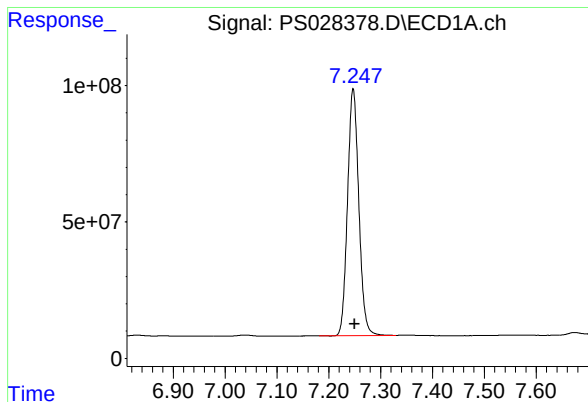
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS110924\
Data File : PS028378.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 09 Nov 2024 00:10
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 09 01:12:26 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
Quant Title : 8080.M
QLast Update : Fri Nov 08 17:46:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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





#4 2,4-DCAA

R.T.: 7.247 min

Delta R.T.: -0.003 min

Response: 1363140651

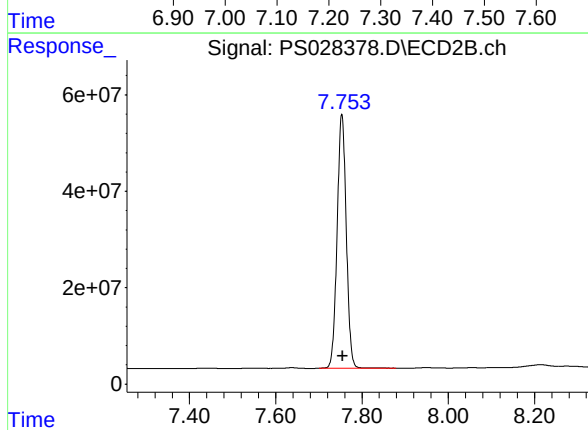
Conc: 493.76 ng/ml

Instrument :

ECD_S

ClientSampleId :

I.BLK



#4 2,4-DCAA

R.T.: 7.753 min

Delta R.T.: -0.002 min

Response: 775445925

Conc: 486.65 ng/ml

Report of Analysis

Client:	Walsh Construction Company II, LLC	Date Collected:	11/12/24
Project:	NYCDEP C547A - Shafts 17B-1 & 18B-1 Stage 2	Date Received:	11/12/24
Client Sample ID:	PIBLK-PS028429.D	SDG No.:	P4722
Lab Sample ID:	I.BLK-PS028429.D	Matrix:	WATER
Analytical Method:	SW8151A	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Decanted:	
Soil Aliquot Vol:	uL	Final Vol:	10000 uL
Extraction Type:		Test:	Herbicide
GPC Factor :	1.0	Injection Volume :	
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS028429.D	1		11/12/24	ps111124

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
1918-00-9	DICAMBA	0.42	U	0.42	2.00	ug/L
120-36-5	DICHLORPROP	0.43	U	0.43	2.00	ug/L
94-75-7	2,4-D	0.49	U	0.49	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.45	U	0.45	2.00	ug/L
93-76-5	2,4,5-T	0.50	U	0.50	2.00	ug/L
94-82-6	2,4-DB	0.57	U	0.57	2.00	ug/L
88-85-7	DINOSEB	0.55	U	0.55	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	508		39 - 175	102%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS111124\
Data File : PS028429.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 Nov 2024 01:47
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 12 02:17:06 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
Quant Title : 8080.M
QLast Update : Fri Nov 08 17:46:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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

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

4) S	2,4-DCAA	7.244	7.749	1401.6E6	735.0E6	507.701	461.293
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Target Compounds

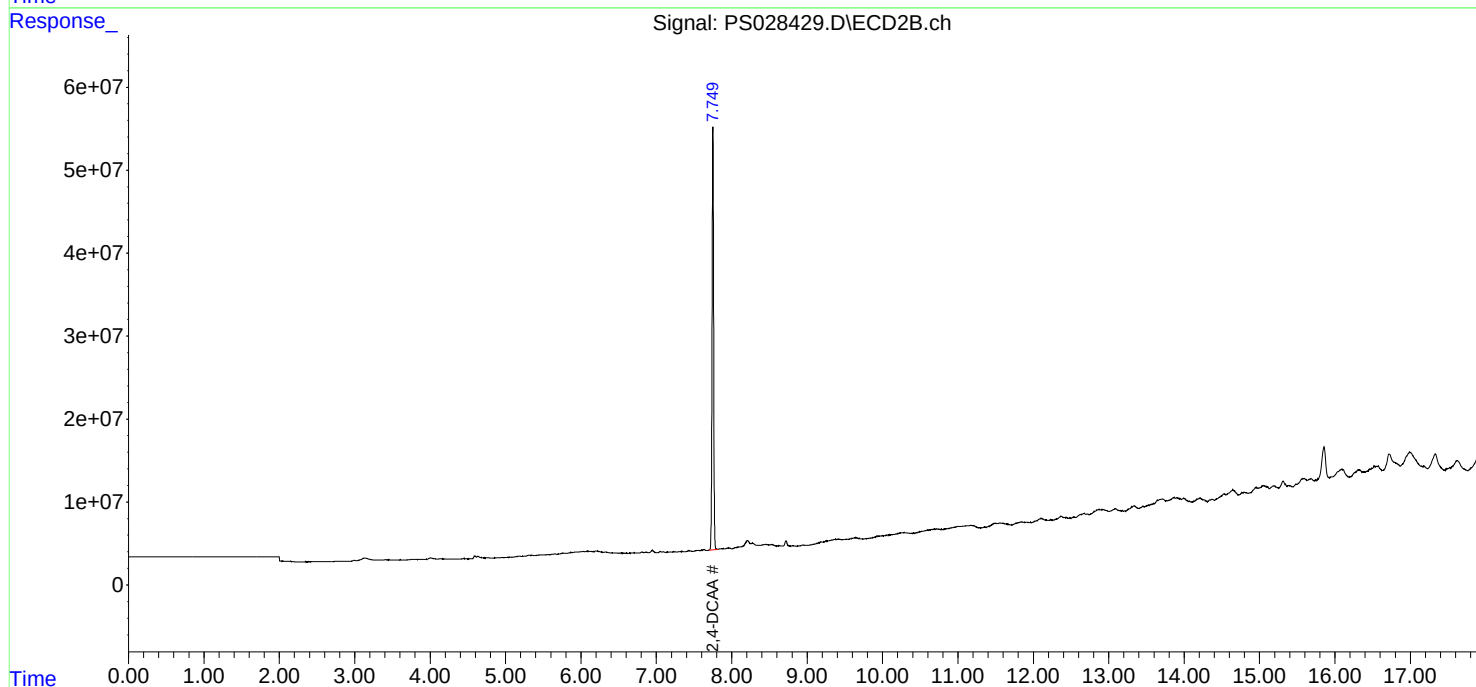
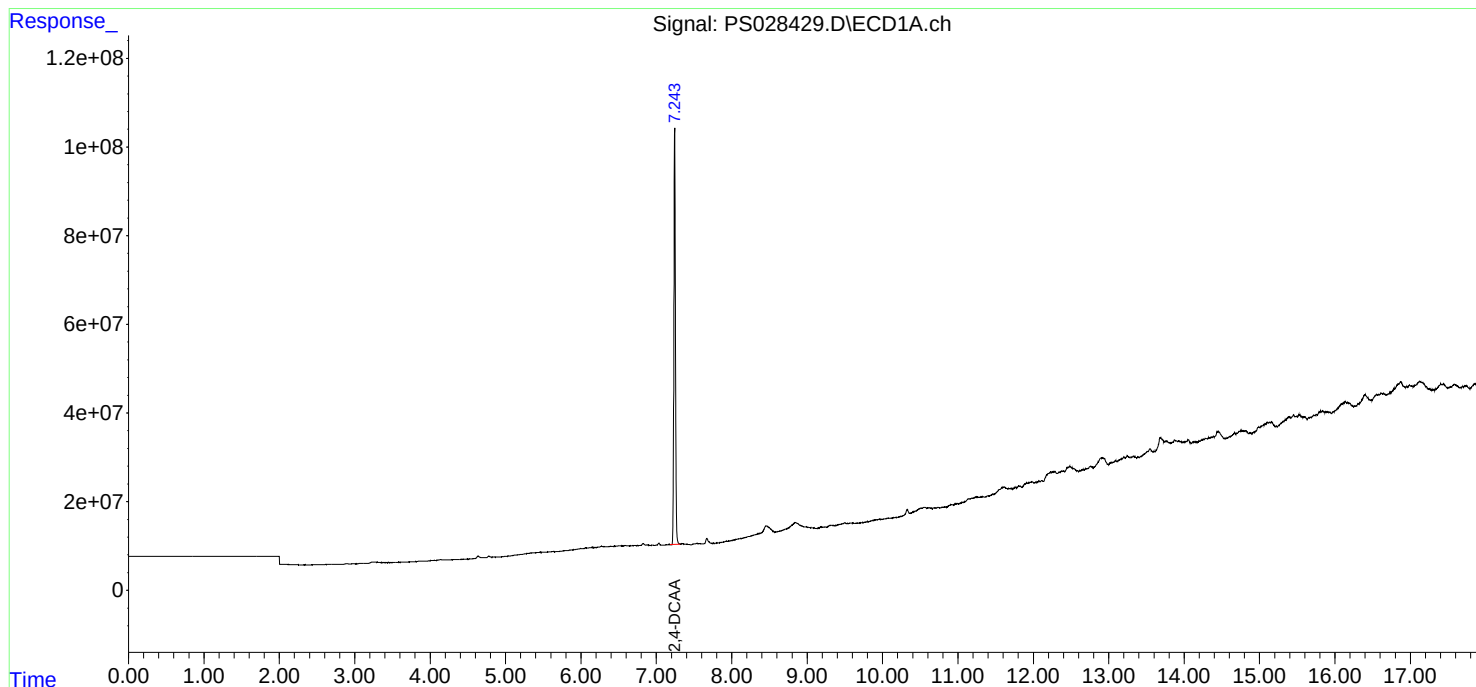
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

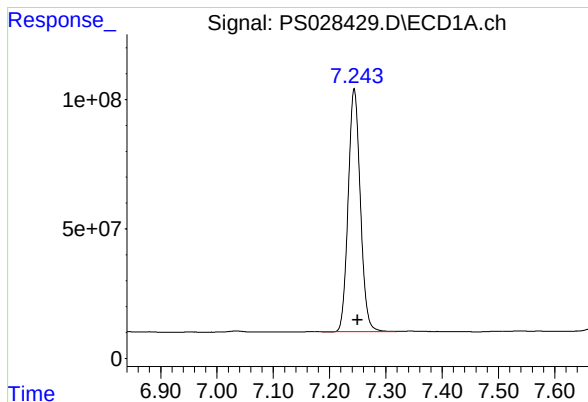
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS111124\
Data File : PS028429.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 Nov 2024 01:47
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 12 02:17:06 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
Quant Title : 8080.M
QLast Update : Fri Nov 08 17:46:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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





#4 2,4-DCAA

R.T.: 7.244 min

Delta R.T.: -0.006 min

Response: 1401637232

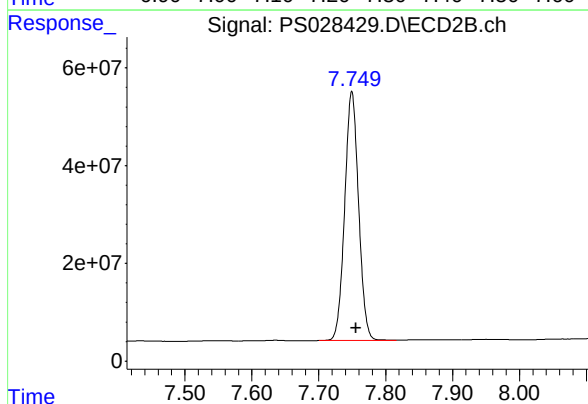
Conc: 507.70 ng/ml

Instrument :

ECD_S

ClientSampleId :

I.BLK



#4 2,4-DCAA

R.T.: 7.749 min

Delta R.T.: -0.006 min

Response: 735034310

Conc: 461.29 ng/ml

Report of Analysis

Client:	Walsh Construction Company II, LLC	Date Collected:	11/12/24
Project:	NYCDEP C547A - Shafts 17B-1 & 18B-1 Stage 2	Date Received:	11/12/24
Client Sample ID:	PIBLK-PS028441.D	SDG No.:	P4722
Lab Sample ID:	I.BLK-PS028441.D	Matrix:	WATER
Analytical Method:	SW8151A	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Decanted:	
Soil Aliquot Vol:	uL	Final Vol:	10000 uL
Extraction Type:		Test:	Herbicide
GPC Factor :	1.0	Injection Volume :	
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS028441.D	1		11/12/24	PS111124

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
1918-00-9	DICAMBA	0.42	U	0.42	2.00	ug/L
120-36-5	DICHLORPROP	0.43	U	0.43	2.00	ug/L
94-75-7	2,4-D	0.49	U	0.49	2.00	ug/L
93-72-1	2,4,5-TP (Silvex)	0.45	U	0.45	2.00	ug/L
93-76-5	2,4,5-T	0.50	U	0.50	2.00	ug/L
94-82-6	2,4-DB	0.57	U	0.57	2.00	ug/L
88-85-7	DINOSEB	0.55	U	0.55	2.00	ug/L
SURROGATES						
19719-28-9	2,4-DCAA	509		39 - 175	102%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS111124\
Data File : PS028441.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 Nov 2024 06:35
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 12 06:56:06 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
Quant Title : 8080.M
QLast Update : Fri Nov 08 17:46:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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

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

4) S	2,4-DCAA	7.242	7.748	1405.9E6	725.4E6	509.235	455.240
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Target Compounds

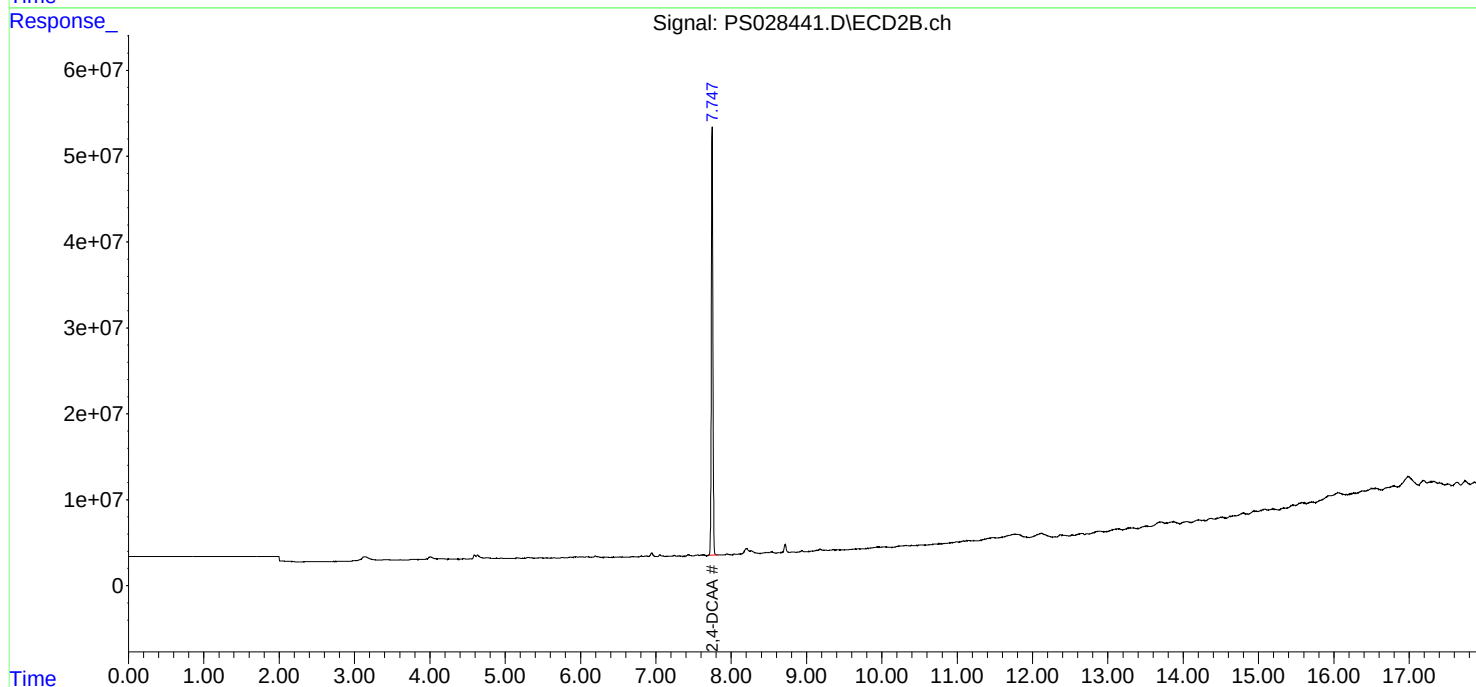
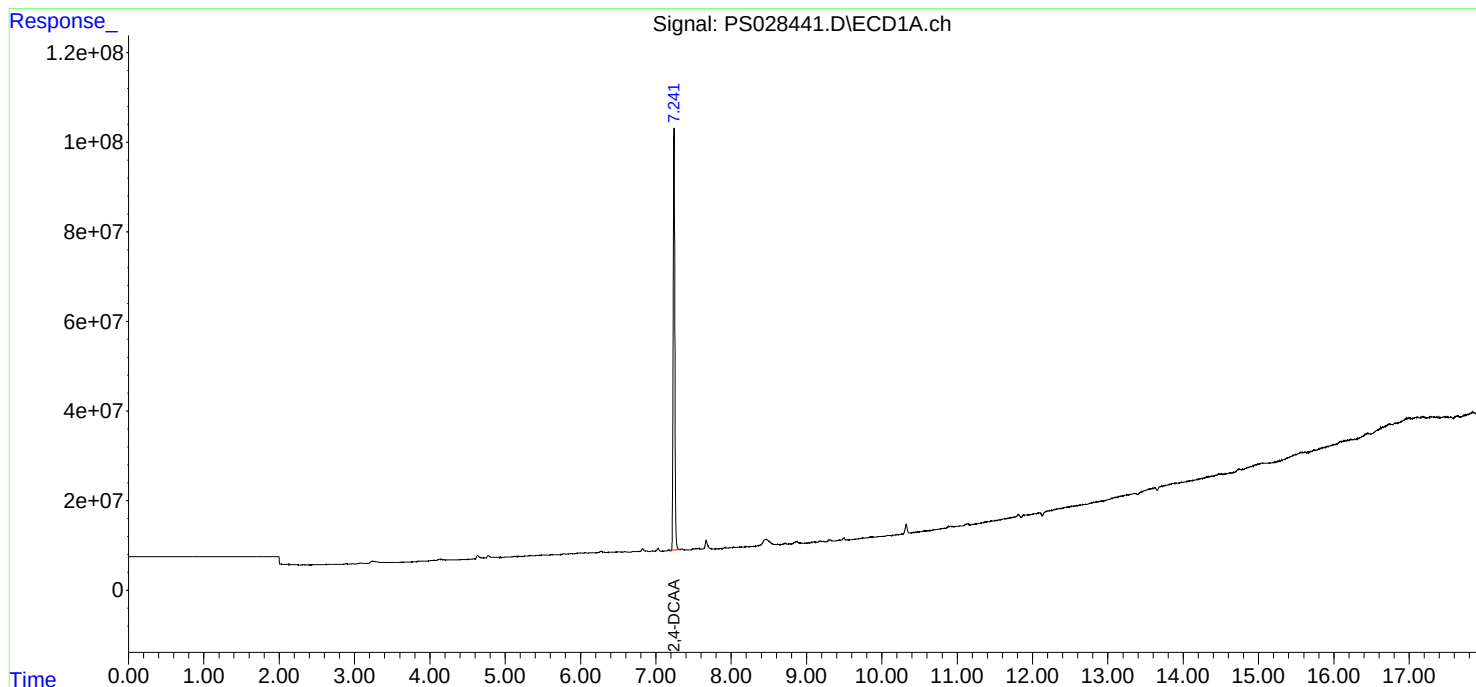
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

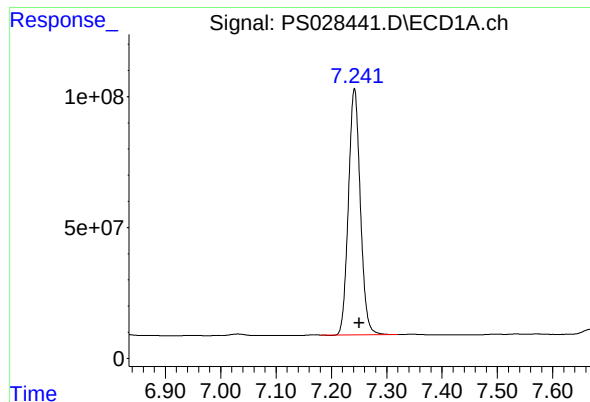
Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS111124\
Data File : PS028441.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 Nov 2024 06:35
Operator : AR\AJ
Sample : I.BLK
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_S
ClientSampleId :
I.BLK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 12 06:56:06 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
Quant Title : 8080.M
QLast Update : Fri Nov 08 17:46:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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





#4 2,4-DCAA

R.T.: 7.242 min

Delta R.T.: -0.008 min

Response: 1405871707

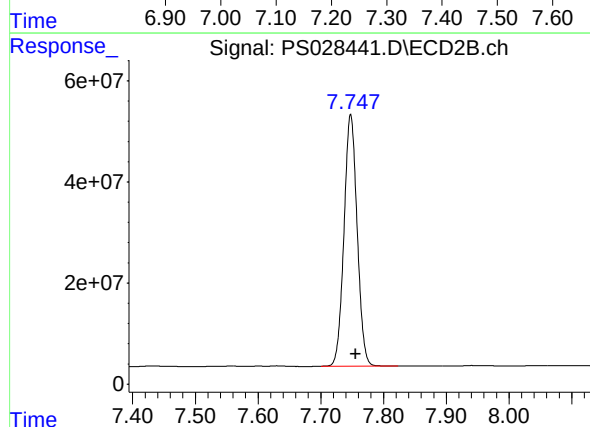
Conc: 509.23 ng/ml

Instrument :

ECD_S

ClientSampleId :

I.BLK



#4 2,4-DCAA

R.T.: 7.748 min

Delta R.T.: -0.008 min

Response: 725389010

Conc: 455.24 ng/ml

Report of Analysis

Client:	Walsh Construction Company II, LLC	Date Collected:	
Project:	NYCDEP C547A - Shafts 17B-1 & 18B-1 Stage 2	Date Received:	
Client Sample ID:	PB164754BS	SDG No.:	P4722
Lab Sample ID:	PB164754BS	Matrix:	SOIL
Analytical Method:	SW8151A	% Solid:	100 Decanted:
Sample Wt/Vol:	30.01 Units: g	Final Vol:	10000 uL
Soil Aliquot Vol:	uL	Test:	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
PS028368.D	1	11/07/24 10:33	11/08/24 20:10	PB164754

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
1918-00-9	DICAMBA	170		8.70	67.0	ug/Kg
120-36-5	DICHLORPROP	170		9.50	67.0	ug/Kg
94-75-7	2,4-D	169		12.1	67.0	ug/Kg
93-72-1	2,4,5-TP (Silvex)	173		9.40	67.0	ug/Kg
93-76-5	2,4,5-T	173		10.1	67.0	ug/Kg
94-82-6	2,4-DB	168		18.3	67.0	ug/Kg
88-85-7	DINOSEB	167		12.4	67.0	ug/Kg
SURROGATES						
19719-28-9	2,4-DCAA	534		10 - 141	107%	SPK: 500

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

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

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

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

() = Laboratory InHouse Limit

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS110924\
 Data File : PS028368.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 08 Nov 2024 20:10
 Operator : AR\AJ
 Sample : PB164754BS
 Misc :
 ALS Vial : 13 Sample Multiplier: 1

Instrument :

ECD_S

ClientSampleId :

PB164754BS

Manual Integrations

APPROVED

Reviewed By :Abdul Mirza 11/11/2024

Supervised By :Ankita Jodhani 11/12/2024

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Nov 08 21:44:29 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
 Quant Title : 8080.M
 QLast Update : Fri Nov 08 17:46:43 2024
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	7.248	7.754	1474.0E6	848.6E6	533.896m	532.543
Target Compounds							
1) T	Dalapon	2.647	2.706	1613.6E6	1290.0E6	452.223	454.932
2) T	3,5-DICHL...	6.418	6.705	2007.2E6	1164.0E6	501.629	491.337
3) T	4-Nitroph...	7.048	7.280	862.7E6	482.3E6	465.237	455.459
5) T	DICAMBA	7.437	7.955	6147.8E6	3604.0E6	510.580	502.691
6) T	MCP	7.618	8.056	408.9E6	289.5E6	49.999	49.278
7) T	MCPA	7.768	8.301	553.4E6	391.8E6	49.355	48.925
8) T	DICHLORPROP	8.147	8.672	1584.0E6	890.0E6	511.019	499.666
9) T	2,4-D	8.378	9.003	1783.0E6	966.4E6	507.383	499.724
10) T	Pentachlo...	8.678	9.534	24728.9E6	12976.8E6	549.016	520.806
11) T	2,4,5-TP ...	9.258	9.910	9840.8E6	5400.2E6	519.880	509.827
12) T	2,4,5-T	9.551	10.331	10070.7E6	5297.6E6	519.620	510.564
13) T	2,4-DB	10.127	10.898	1558.7E6	660.5E6	504.297	498.421
14) T	DINOSEB	11.343	11.279	8129.1E6	3545.6E6	501.380	494.001
15) T	Picloram	11.148	12.377	15799.5E6	7113.9E6	503.073	494.280
16) T	DCPA	11.635	12.325	13898.9E6	5780.7E6	520.045	515.663

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS110924\
Data File : PS028368.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 08 Nov 2024 20:10
Operator : AR\AJ
Sample : PB164754BS
Misc :
ALS Vial : 13 Sample Multiplier: 1

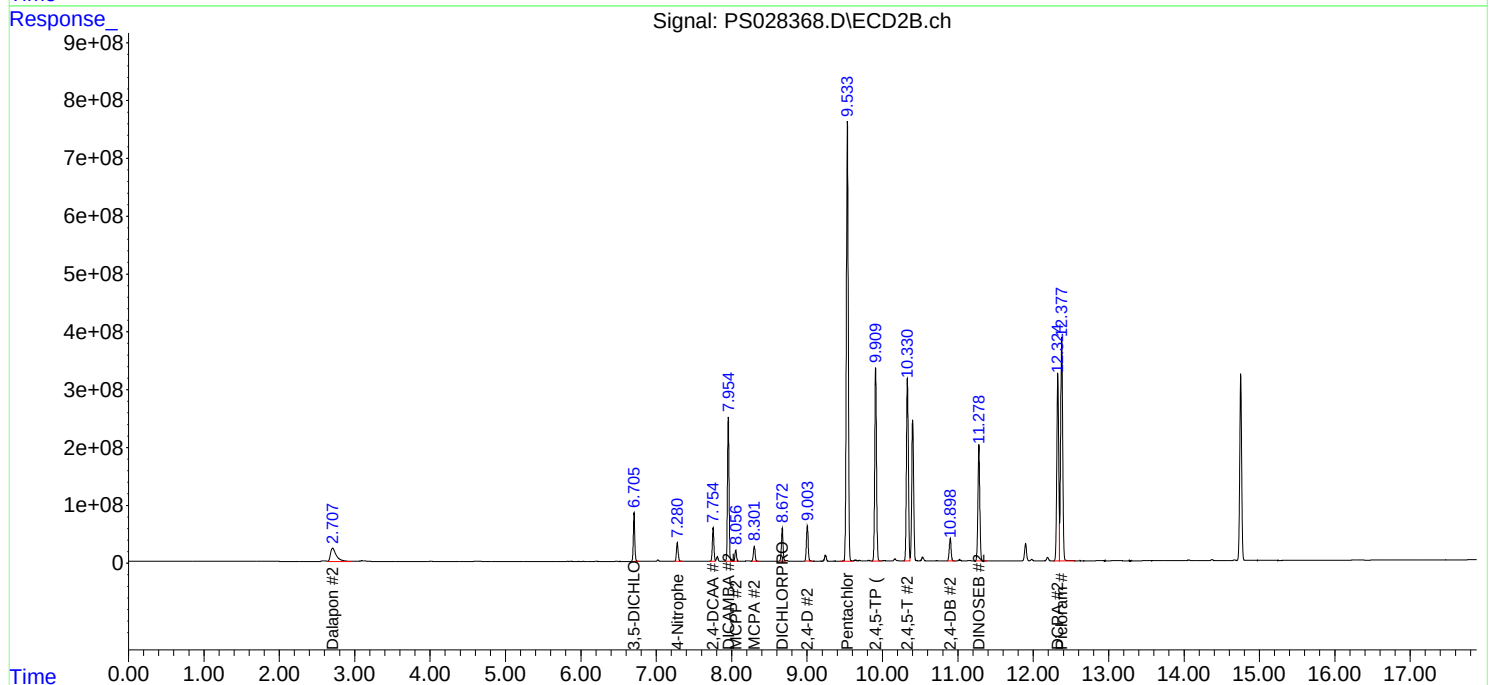
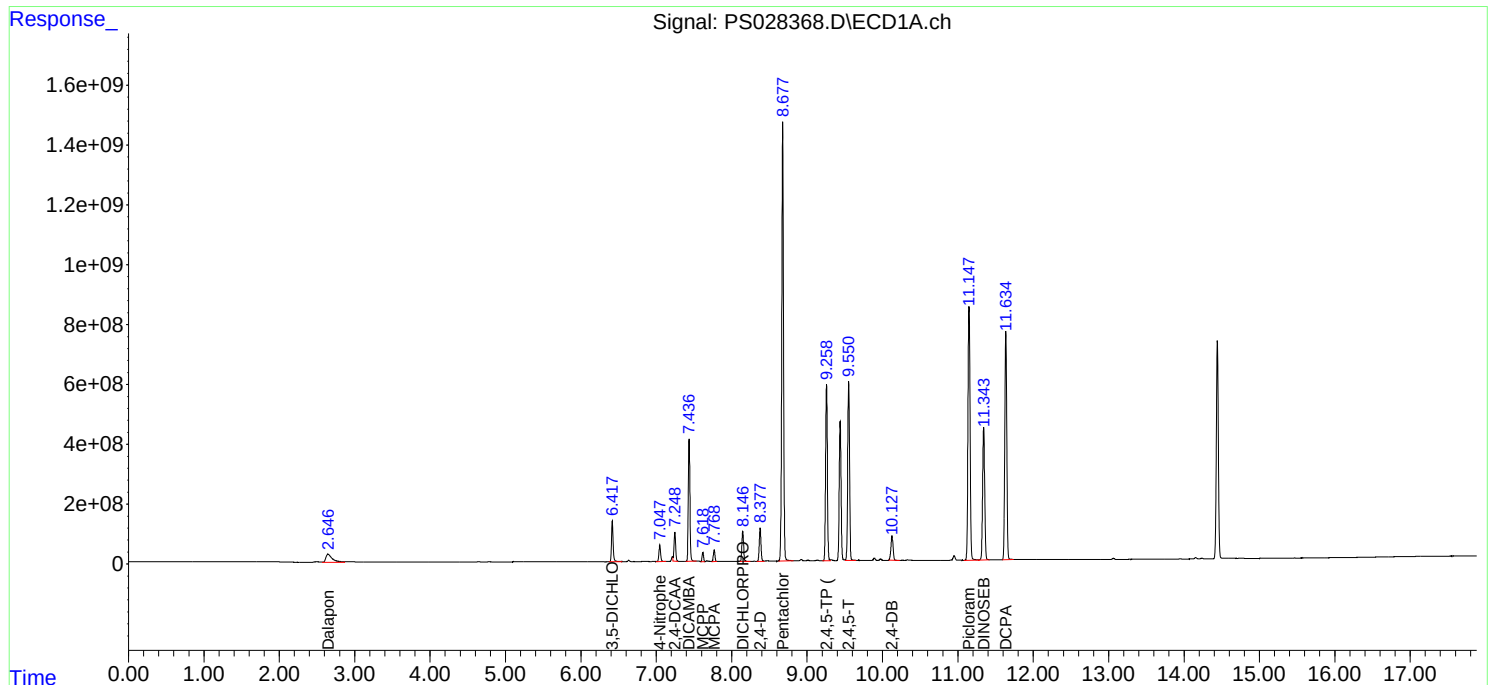
Instrument :
ECD_S
ClientSampleId :
PB164754BS

Manual Integrations
APPROVED

Reviewed By : Abdul Mirza 11/11/2024
Supervised By : Ankita Jodhani 11/12/2024

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 08 21:44:29 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
Quant Title : 8080.M
QLast Update : Fri Nov 08 17:46:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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



Report of Analysis

Client:	Walsh Construction Company II, LLC	Date Collected:	11/06/24
Project:	NYCDEP C547A - Shafts 17B-1 & 18B-1 Stage 2	Date Received:	11/06/24
Client Sample ID:	TP-14MS	SDG No.:	P4722
Lab Sample ID:	P4739-01MS	Matrix:	SOIL
Analytical Method:	SW8151A	% Solid:	88.7
Sample Wt/Vol:	30.03	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Herbicide
GPC Factor :	1.0	Injection Volume :	
Prep Method :	8151A		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS028373.D	1	11/07/24 10:33	11/08/24 22:10	PB164754

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
1918-00-9	DICAMBA	68.5	J	9.80	75.5	ug/Kg
120-36-5	DICHLORPROP	40.4	J	10.7	75.5	ug/Kg
94-75-7	2,4-D	72.7	J	13.6	75.5	ug/Kg
93-72-1	2,4,5-TP (Silvex)	27.4	J	10.6	75.5	ug/Kg
93-76-5	2,4,5-T	37.0	J	11.4	75.5	ug/Kg
94-82-6	2,4-DB	27.6	J	20.6	75.5	ug/Kg
88-85-7	DINOSEB	14.2	J	14.0	75.5	ug/Kg
SURROGATES						
19719-28-9	2,4-DCAA	237		10 - 141	47%	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\PS110924\
 Data File : PS028373.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 08 Nov 2024 22:10
 Operator : AR\AJ
 Sample : P4739-01MS
 Misc :
 ALS Vial : 18 Sample Multiplier: 1

Instrument :

ECD_S

ClientSampleId :

TP-14MS

Manual Integrations**APPROVED**

Reviewed By :Abdul Mirza 11/11/2024

Supervised By :Ankita Jodhani 11/12/2024

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Nov 09 00:05:17 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
 Quant Title : 8080.M
 QLast Update : Fri Nov 08 17:46:43 2024
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	7.248	7.753	653.6E6	317.2E6	236.730	199.050
Target Compounds							
1) T	Dalapon	2.648	2.709	602.9E6	745.9E6	168.975	263.041m#
2) T	3,5-DICHL...	6.418	6.705	508.1E6	301.1E6	126.970	127.118
3) T	4-Nitroph...	7.047	7.279	478.5E6	286.4E6	258.062	270.478
5) T	DICAMBA	7.436	7.954	2196.8E6	1240.4E6	182.450	173.010
6) T	MCP	7.614	8.052	48208951	54617825	5.895	9.297 #
7) T	MCPA	7.765	8.296	140.2E6	146.3E6	12.500	18.276m#
8) T	DICHLORPROP	8.146	8.671	333.2E6	176.5E6	107.496	99.080
9) T	2,4-D	8.377	9.002	680.5E6	355.3E6	193.647m	183.745
10) T	Pentachlo...	8.677	9.532	2286.8E6	1178.1E6	50.769	47.281
11) T	2,4,5-TP ...	9.258	9.909	1292.9E6	774.0E6	68.305	73.071
12) T	2,4,5-T	9.550	10.330	1908.4E6	1008.2E6	98.465	97.167
13) T	2,4-DB	10.127	10.897	227.3E6	78562500	73.535	59.280
14) T	DINOSEB	11.340	11.293	113.2E6	271.9E6	6.979m	37.888 #
15) T	Picloram	11.148	12.376	8016.3E6	3224.2E6	255.248	224.022
16) T	DCPA	11.634	12.324	9604.6E6	4397.4E6	359.365	392.270

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS110924\
Data File : PS028373.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 08 Nov 2024 22:10
Operator : AR\AJ
Sample : P4739-01MS
Misc :
ALS Vial : 18 Sample Multiplier: 1

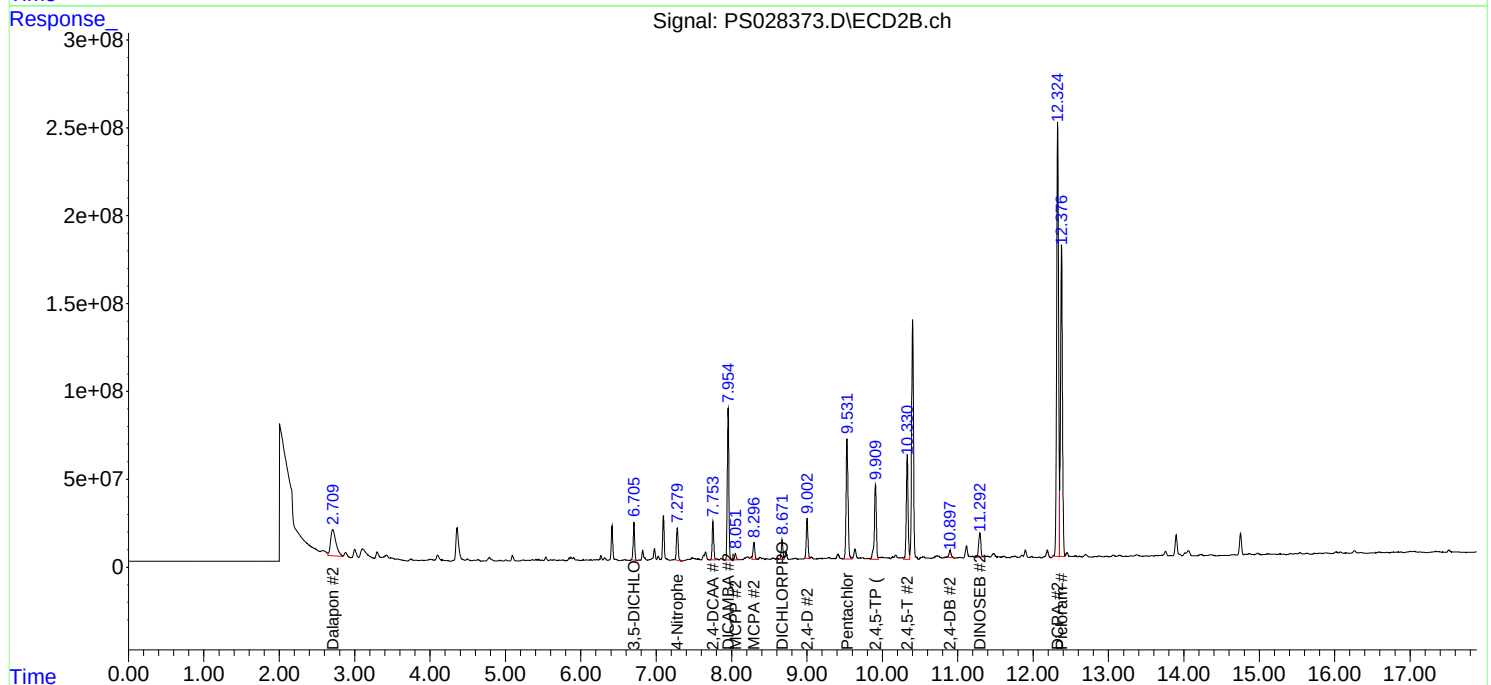
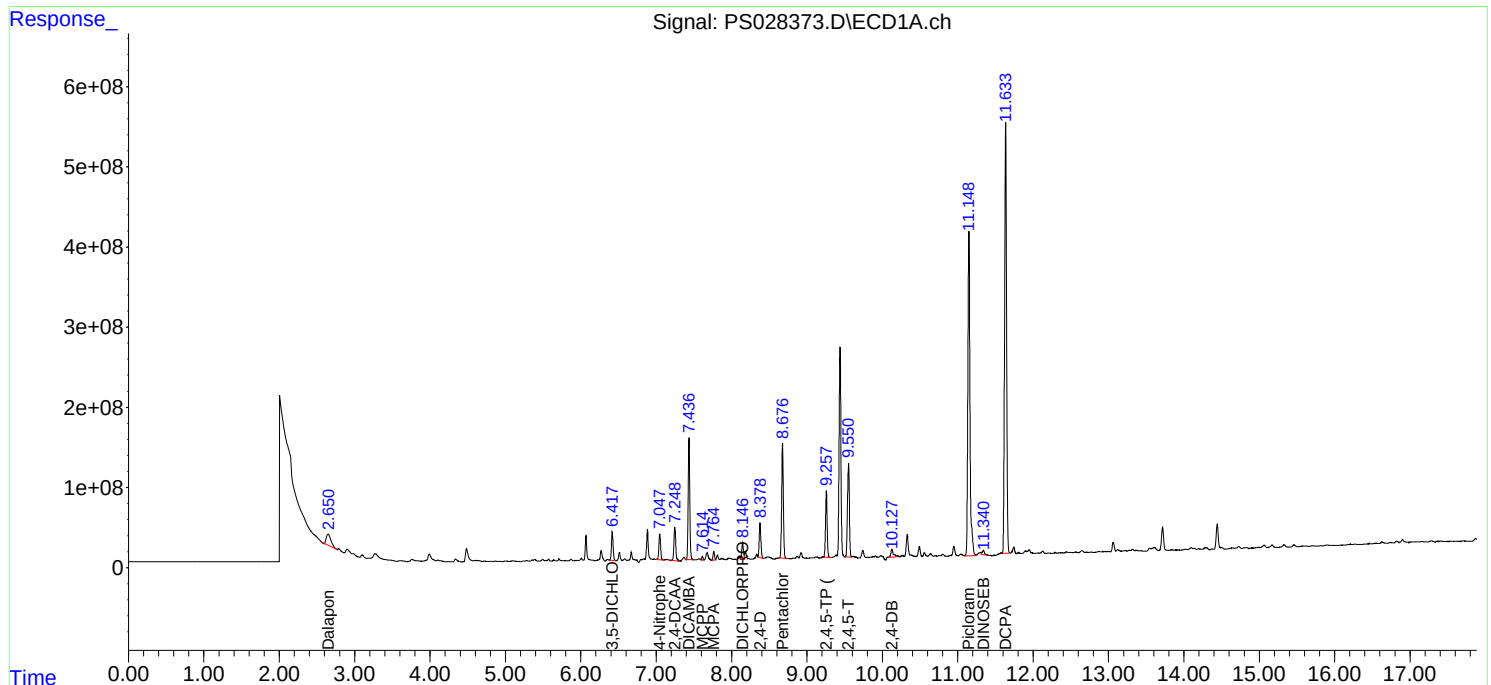
Instrument :
ECD_S
ClientSampleId :
TP-14MS

Manual Integrations
APPROVED

Reviewed By : Abdul Mirza 11/11/2024
Supervised By : Ankita Jodhani 11/12/2024

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 09 00:05:17 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
Quant Title : 8080.M
QLast Update : Fri Nov 08 17:46:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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



Report of Analysis

Client:	Walsh Construction Company II, LLC	Date Collected:	11/06/24
Project:	NYCDEP C547A - Shafts 17B-1 & 18B-1 Stage 2	Date Received:	11/06/24
Client Sample ID:	TP-14MSD	SDG No.:	P4722
Lab Sample ID:	P4739-01MSD	Matrix:	SOIL
Analytical Method:	SW8151A	% Solid:	88.7
Sample Wt/Vol:	30.02	Units:	g
Soil Aliquot Vol:			uL
Extraction Type:		Test:	Herbicide
GPC Factor :	1.0	PH :	
Prep Method :	8151A	Injection Volume :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PS028374.D	1	11/07/24 10:33	11/08/24 22:34	PB164754

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units(Dry Weight)
TARGETS						
1918-00-9	DICAMBA	67.7	J	9.80	75.5	ug/Kg
120-36-5	DICHLORPROP	39.6	J	10.7	75.5	ug/Kg
94-75-7	2,4-D	71.0	J	13.6	75.5	ug/Kg
93-72-1	2,4,5-TP (Silvex)	26.6	J	10.6	75.5	ug/Kg
93-76-5	2,4,5-T	36.3	J	11.4	75.5	ug/Kg
94-82-6	2,4-DB	26.9	J	20.6	75.5	ug/Kg
88-85-7	DINOSEB	15.0	J	14.0	75.5	ug/Kg
SURROGATES						
19719-28-9	2,4-DCAA	232		10 - 141	46%	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\PS110924\
 Data File : PS028374.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 08 Nov 2024 22:34
 Operator : AR\AJ
 Sample : P4739-01MSD
 Misc :
 ALS Vial : 19 Sample Multiplier: 1

Instrument :

ECD_S

ClientSampleId :

TP-14MSD

Manual Integrations**APPROVED**

Reviewed By :Abdul Mirza 11/11/2024

Supervised By :Ankita Jodhani 11/12/2024

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Nov 09 00:06:08 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
 Quant Title : 8080.M
 QLast Update : Fri Nov 08 17:46:43 2024
 Response via : Initial Calibration
 Integrator: ChemStation

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

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

System Monitoring Compounds							
4) S	2,4-DCAA	7.247	7.753	641.3E6	312.9E6	232.306	196.341
Target Compounds							
1) T	Dalapon	2.647	2.710	604.3E6	763.5E6	169.371	269.233m#
2) T	3,5-DICHL...	6.418	6.705	502.7E6	298.4E6	125.640	125.941
3) T	4-Nitroph...	7.047	7.280	478.5E6	284.5E6	258.074	268.635
5) T	DICAMBA	7.436	7.955	2170.9E6	1225.0E6	180.296	170.868
6) T	MCP	7.614	8.053	46410341	52230361	5.675	8.891 #
7) T	MCPA	7.764	8.297	136.5E6	135.0E6	12.178	16.860m#
8) T	DICHLORPROP	8.146	8.671	327.2E6	172.2E6	105.559	96.664
9) T	2,4-D	8.377	9.003	664.2E6	350.5E6	189.005m	181.224
10) T	Pentachlo...	8.677	9.532	2232.5E6	1144.0E6	49.564	45.913
11) T	2,4,5-TP ...	9.258	9.909	1260.4E6	749.7E6	66.585	70.778
12) T	2,4,5-T	9.550	10.330	1875.6E6	991.4E6	96.773	95.546
13) T	2,4-DB	10.127	10.898	221.3E6	79096262	71.591	59.683
14) T	DINOSEB	11.341	11.292	109.8E6	286.8E6	6.773m	39.953 #
15) T	Picloram	11.147	12.376	8001.2E6	3186.7E6	254.767	221.417
16) T	DCPA	11.633	12.323	9541.9E6	4359.7E6	357.021	388.907

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

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_S\Data\PS110924\
Data File : PS028374.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 08 Nov 2024 22:34
Operator : AR\AJ
Sample : P4739-01MSD
Misc :
ALS Vial : 19 Sample Multiplier: 1

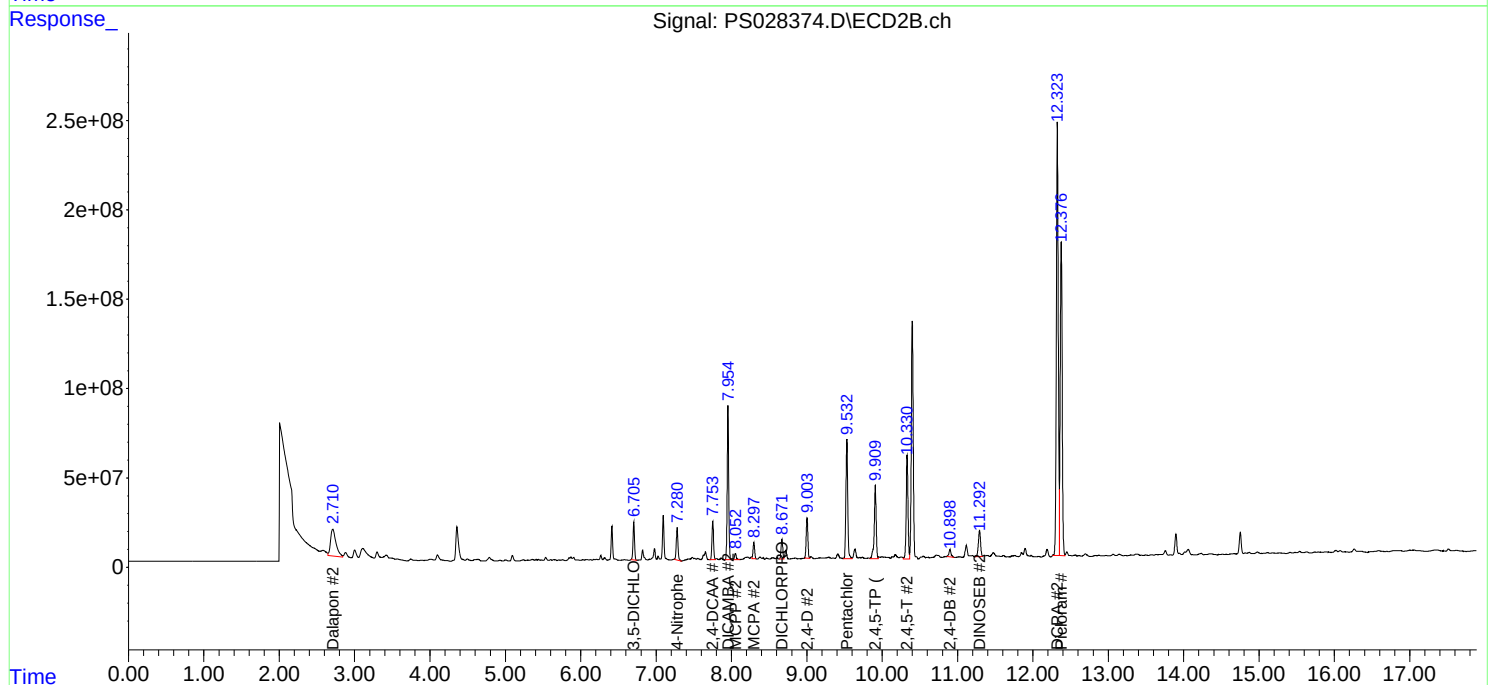
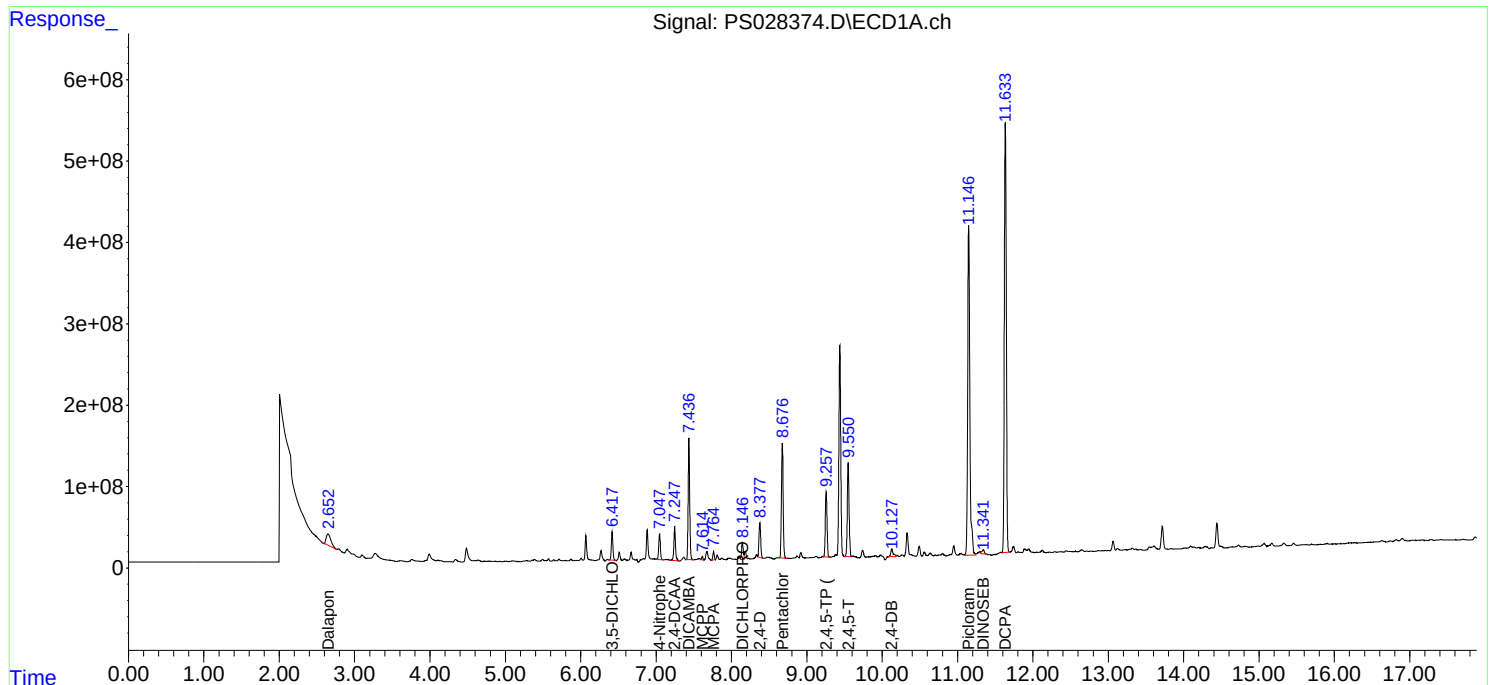
Instrument :
ECD_S
ClientSampleId :
TP-14MSD

Manual Integrations
APPROVED

Reviewed By : Abdul Mirza 11/11/2024
Supervised By : Ankita Jodhani 11/12/2024

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Nov 09 00:06:08 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_S\Method\PS110924.M
Quant Title : 8080.M
QLast Update : Fri Nov 08 17:46:43 2024
Response via : Initial Calibration
Integrator: ChemStation

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



Manual Integration Report

Sequence:	PS110924	Instrument	ECD_s
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
HSTDICC500	PS028357.D	2,4-DCAA	Abdul	11/11/2024 5:06:04 PM	Ankita	11/12/2024 8:58:43	Peak Integrated by Software
I.BLK	PS028362.D	2,4-DCAA	Abdul	11/11/2024 5:06:07 PM	Ankita	11/12/2024 8:58:45	Peak Integrated by Software
PB164754BS	PS028368.D	2,4-DCAA	Abdul	11/11/2024 5:06:18 PM	Ankita	11/12/2024 8:58:50	Peak Integrated by Software
P4722-08	PS028370.D	2,4-DCAA	Abdul	11/11/2024 5:06:25 PM	Ankita	11/12/2024 8:58:54	Peak Integrated by Software
P4722-08	PS028370.D	2,4-DCAA #2	Abdul	11/11/2024 5:06:25 PM	Ankita	11/12/2024 8:58:54	Peak Integrated by Software
P4739-01MS	PS028373.D	2,4-D	Abdul	11/11/2024 5:06:35 PM	Ankita	11/12/2024 8:58:59	Peak Integrated by Software
P4739-01MS	PS028373.D	Dalapon #2	Abdul	11/11/2024 5:06:35 PM	Ankita	11/12/2024 8:58:59	Peak Integrated by Software
P4739-01MS	PS028373.D	DINOSEB	Abdul	11/11/2024 5:06:35 PM	Ankita	11/12/2024 8:58:59	Peak Integrated by Software
P4739-01MS	PS028373.D	MCPA #2	Abdul	11/11/2024 5:06:35 PM	Ankita	11/12/2024 8:58:59	Peak Integrated by Software
P4739-01MSD	PS028374.D	2,4-D	Abdul	11/11/2024 5:06:39 PM	Ankita	11/12/2024 8:59:00	Peak Integrated by Software
P4739-01MSD	PS028374.D	Dalapon #2	Abdul	11/11/2024 5:06:39 PM	Ankita	11/12/2024 8:59:00	Peak Integrated by Software
P4739-01MSD	PS028374.D	DINOSEB	Abdul	11/11/2024 5:06:39 PM	Ankita	11/12/2024 8:59:00	Peak Integrated by Software
P4739-01MSD	PS028374.D	MCPA #2	Abdul	11/11/2024 5:06:39 PM	Ankita	11/12/2024 8:59:00	Peak Integrated by Software



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

Manual Integration Report

Sequence:

PS110924

Instrument

ECD_s

Sample ID

File ID

Parameter

Review By

Review On

Supervised
By

Supervised On

Reason

Manual Integration Report

Sequence:	ps111124	Instrument	ECD_s
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
HSTDCCC750	PS028394.D	2,4-DCAA	yogesh	11/12/2024 5:14:37 AM	Ankita	11/12/2024 9:00:00	Peak Integrated by Software
HSTDCCC750	PS028406.D	2,4-D #2	Abdul	11/12/2024 3:48:55 PM	Ankita	11/12/2024 4:00:08	Peak Integrated by Software
HSTDCCC750	PS028418.D	2,4-DB #2	Abdul	11/12/2024 3:48:58 PM	Ankita	11/12/2024 4:00:10	Peak Integrated by Software
HSTDCCC750	PS028418.D	2,4-DCAA	Abdul	11/12/2024 3:48:58 PM	Ankita	11/12/2024 4:00:10	Peak Integrated by Software
HSTDCCC750	PS028442.D	2,4-D #2	Abdul	11/12/2024 3:50:02 PM	Ankita	11/12/2024 4:00:20	Peak Integrated by Software
HSTDCCC750	PS028442.D	2,4-DB #2	Abdul	11/12/2024 3:50:02 PM	Ankita	11/12/2024 4:00:20	Peak Integrated by Software
HSTDCCC750	PS028442.D	4-Nitrophenol #2	Abdul	11/12/2024 3:50:02 PM	Ankita	11/12/2024 4:00:20	Peak Integrated by Software
HSTDCCC750	PS028442.D	DCPA	Abdul	11/12/2024 3:50:02 PM	Ankita	11/12/2024 4:00:20	Peak Integrated by Software
HSTDCCC750	PS028448.D	2,4-D #2	Abdul	11/12/2024 3:50:20 PM	Ankita	11/12/2024 4:00:24	Peak Integrated by Software
HSTDCCC750	PS028448.D	4-Nitrophenol #2	Abdul	11/12/2024 3:50:20 PM	Ankita	11/12/2024 4:00:24	Peak Integrated by Software

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS110924

Review By	Abdul	Review On	11/11/2024 5:07:36 PM
Supervise By	Ankita	Supervise On	11/12/2024 8:59:40 AM
SubDirectory	PS110924	HP Acquire Method	HP Processing Method ps110924 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	P23457,PP23458,PP23459,PP23460,PP23461,PP23462,PP23467,PP23468,PP23469		
CCC Internal Standard/PEM	PP23462		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23469		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	HEXANE	PS028354.D	08 Nov 2024 14:00	AR\AJ	Ok
2	I.BLK	PS028355.D	08 Nov 2024 14:25	AR\AJ	Ok
3	HSTDICC200	PS028356.D	08 Nov 2024 15:13	AR\AJ	Ok
4	HSTDICC500	PS028357.D	08 Nov 2024 15:46	AR\AJ	Ok,M
5	HSTDICC750	PS028358.D	08 Nov 2024 16:10	AR\AJ	Ok
6	HSTDICC1000	PS028359.D	08 Nov 2024 16:34	AR\AJ	Ok
7	HSTDICC1500	PS028360.D	08 Nov 2024 16:58	AR\AJ	Ok
8	HSTDICV750	PS028361.D	08 Nov 2024 17:22	AR\AJ	Ok
9	I.BLK	PS028362.D	08 Nov 2024 17:46	AR\AJ	Ok,M
10	HSTDCCC750	PS028363.D	08 Nov 2024 18:10	AR\AJ	Ok
11	P4700-01	PS028364.D	08 Nov 2024 18:34	AR\AJ	Ok,M
12	P4701-01	PS028365.D	08 Nov 2024 18:58	AR\AJ	Ok,M
13	P4701-05	PS028366.D	08 Nov 2024 19:22	AR\AJ	Ok
14	PB164754BL	PS028367.D	08 Nov 2024 19:46	AR\AJ	Ok
15	PB164754BS	PS028368.D	08 Nov 2024 20:10	AR\AJ	Ok,M
16	P4722-03	PS028369.D	08 Nov 2024 20:34	AR\AJ	Not Ok
17	P4722-08	PS028370.D	08 Nov 2024 20:58	AR\AJ	Ok,M
18	P4722-13	PS028371.D	08 Nov 2024 21:22	AR\AJ	Not Ok
19	P4739-01	PS028372.D	08 Nov 2024 21:46	AR\AJ	Ok,M
20	P4739-01MS	PS028373.D	08 Nov 2024 22:10	AR\AJ	Ok,M
21	P4739-01MSD	PS028374.D	08 Nov 2024 22:34	AR\AJ	Ok,M

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS110924

Review By	Abdul	Review On	11/11/2024 5:07:36 PM
Supervise By	Ankita	Supervise On	11/12/2024 8:59:40 AM
SubDirectory	PS110924	HP Acquire Method	HP Processing Method ps110924 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	P23457,PP23458,PP23459,PP23460,PP23461,PP23462,PP23467,PP23468,PP23469		
CCC	PP23462		
Internal Standard/PEM			
ICV/I.BLK	PP23469		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

22	P4739-05	PS028375.D	08 Nov 2024 22:58	AR\AJ	Ok
23	P4739-09	PS028376.D	08 Nov 2024 23:22	AR\AJ	Ok,M
24	P4739-13	PS028377.D	08 Nov 2024 23:46	AR\AJ	Ok,M
25	I.BLK	PS028378.D	09 Nov 2024 00:10	AR\AJ	Ok
26	HSTDCCC750	PS028379.D	09 Nov 2024 00:34	AR\AJ	Ok
27	P4601-24RE	PS028380.D	09 Nov 2024 00:58	AR\AJ	Not Ok
28	P4601-25RE	PS028381.D	09 Nov 2024 01:22	AR\AJ	Not Ok
29	P4601-26RE	PS028382.D	09 Nov 2024 01:46	AR\AJ	Not Ok
30	P4602-43	PS028383.D	09 Nov 2024 02:10	AR\AJ	Not Ok
31	P4602-44MS	PS028384.D	09 Nov 2024 02:34	AR\AJ	Not Ok
32	P4602-45MSD	PS028385.D	09 Nov 2024 02:58	AR\AJ	Not Ok
33	P4602-40	PS028386.D	09 Nov 2024 03:22	AR\AJ	Not Ok
34	P4602-41MS	PS028387.D	09 Nov 2024 03:46	AR\AJ	Not Ok
35	P4602-42MSD	PS028388.D	09 Nov 2024 04:10	AR\AJ	Not Ok
36	PB164393TB	PS028389.D	09 Nov 2024 04:34	AR\AJ	Not Ok
37	I.BLK	PS028390.D	09 Nov 2024 04:58	AR\AJ	Not Ok
38	HSTDCCC750	PS028391.D	09 Nov 2024 05:22	AR\AJ	Not Ok

M : Manual Integration

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS111124

Review By	yogesh	Review On	11/12/2024 5:16:17 AM
Supervise By	Ankita	Supervise On	11/12/2024 9:00:51 AM
SubDirectory	PS111124	HP Acquire Method	HP Processing Method ps110924 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	P23457,PP23458,PP23459,PP23460,PP23461,PP23462,PP23467,PP23468,PP23469		
CCC Internal Standard/PEM	PP23462		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23469		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	HEXANE	PS028392.D	11 Nov 2024 10:00	AR\AJ	Ok
2	I.BLK	PS028393.D	11 Nov 2024 10:24	AR\AJ	Ok
3	HSTDCCC750	PS028394.D	11 Nov 2024 10:48	AR\AJ	Ok,M
4	P4601-29	PS028395.D	11 Nov 2024 12:05	AR\AJ	Ok
5	P4601-30	PS028396.D	11 Nov 2024 12:29	AR\AJ	Ok
6	P4601-31	PS028397.D	11 Nov 2024 12:56	AR\AJ	Ok
7	P4601-32	PS028398.D	11 Nov 2024 13:20	AR\AJ	Ok
8	P4601-33	PS028399.D	11 Nov 2024 13:44	AR\AJ	Ok,M
9	P4601-34	PS028400.D	11 Nov 2024 14:08	AR\AJ	Ok,M
10	P4601-35	PS028401.D	11 Nov 2024 14:32	AR\AJ	Ok,M
11	P4601-36	PS028402.D	11 Nov 2024 14:57	AR\AJ	Ok,M
12	P4601-37MS	PS028403.D	11 Nov 2024 15:21	AR\AJ	Ok,M
13	P4601-38MSD	PS028404.D	11 Nov 2024 15:45	AR\AJ	Ok,M
14	I.BLK	PS028405.D	11 Nov 2024 16:09	AR\AJ	Ok
15	HSTDCCC750	PS028406.D	11 Nov 2024 16:33	AR\AJ	Ok,M
16	P4602-43	PS028407.D	11 Nov 2024 16:57	AR\AJ	Ok
17	P4602-44MS	PS028408.D	11 Nov 2024 17:21	AR\AJ	Ok,M
18	P4602-45MSD	PS028409.D	11 Nov 2024 17:45	AR\AJ	Ok,M
19	P4602-40	PS028410.D	11 Nov 2024 18:10	AR\AJ	Ok
20	P4602-41MS	PS028411.D	11 Nov 2024 18:34	AR\AJ	Ok,M
21	P4602-42MSD	PS028412.D	11 Nov 2024 18:58	AR\AJ	Ok,M

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS111124

Review By	yogesh	Review On	11/12/2024 5:16:17 AM
Supervise By	Ankita	Supervise On	11/12/2024 9:00:51 AM
SubDirectory	PS111124	HP Acquire Method	HP Processing Method ps110924 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	P23457,PP23458,PP23459,PP23460,PP23461,PP23462,PP23467,PP23468,PP23469		
CCC	PP23462		
Internal Standard/PEM			
ICV/I.BLK	PP23469		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

22	PB164393TB	PS028413.D	11 Nov 2024 19:22	AR\AJ	Ok
23	PB164725BL	PS028414.D	11 Nov 2024 19:46	AR\AJ	Ok
24	PB164725BS	PS028415.D	11 Nov 2024 20:10	AR\AJ	Ok,M
25	P4602-19	PS028416.D	11 Nov 2024 20:34	AR\AJ	Ok,M
26	I.BLK	PS028417.D	11 Nov 2024 20:58	AR\AJ	Ok
27	HSTDCCC750	PS028418.D	11 Nov 2024 21:22	AR\AJ	Ok,M
28	P4602-21	PS028419.D	11 Nov 2024 21:46	AR\AJ	Ok,M
29	P4602-22	PS028420.D	11 Nov 2024 22:10	AR\AJ	Ok,M
30	P4602-23	PS028421.D	11 Nov 2024 22:34	AR\AJ	Ok
31	P4602-24	PS028422.D	11 Nov 2024 22:58	AR\AJ	Ok,M
32	P4602-25	PS028423.D	11 Nov 2024 23:22	AR\AJ	Ok,M
33	P4602-26	PS028424.D	11 Nov 2024 23:46	AR\AJ	Ok,M
34	P4602-27	PS028425.D	12 Nov 2024 00:10	AR\AJ	Ok,M
35	P4602-28	PS028426.D	12 Nov 2024 00:34	AR\AJ	Not Ok
36	P4602-29	PS028427.D	12 Nov 2024 00:58	AR\AJ	Ok,M
37	P4602-30	PS028428.D	12 Nov 2024 01:23	AR\AJ	Ok,M
38	I.BLK	PS028429.D	12 Nov 2024 01:47	AR\AJ	Ok
39	HSTDCCC750	PS028430.D	12 Nov 2024 02:11	AR\AJ	Ok
40	P4602-33	PS028431.D	12 Nov 2024 02:35	AR\AJ	Ok,M
41	P4602-34	PS028432.D	12 Nov 2024 02:59	AR\AJ	Ok,M
42	P4602-31	PS028433.D	12 Nov 2024 03:23	AR\AJ	Ok,M
43	P4602-32	PS028434.D	12 Nov 2024 03:47	AR\AJ	Ok,M
44	P4602-37	PS028435.D	12 Nov 2024 04:11	AR\AJ	Ok,M

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QCBatch ID # PS111124

Review By	yogesh	Review On	11/12/2024 5:16:17 AM
Supervise By	Ankita	Supervise On	11/12/2024 9:00:51 AM
SubDirectory	PS111124	HP Acquire Method	HP Processing Method ps110924 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	P23457,PP23458,PP23459,PP23460,PP23461,PP23462,PP23467,PP23468,PP23469		
CCC Internal Standard/PEM	PP23462		
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23469		

45	P4602-38MS	PS028436.D	12 Nov 2024 04:35	AR\AJ	Ok,M
46	P4602-39MSD	PS028437.D	12 Nov 2024 04:59	AR\AJ	Ok,M
47	P4722-03	PS028438.D	12 Nov 2024 05:23	AR\AJ	Ok
48	P4722-13	PS028439.D	12 Nov 2024 05:47	AR\AJ	Ok
49	P4738-02	PS028440.D	12 Nov 2024 06:11	AR\AJ	Ok
50	I.BLK	PS028441.D	12 Nov 2024 06:35	AR\AJ	Ok
51	HSTDCCC750	PS028442.D	12 Nov 2024 06:59	AR\AJ	Ok,M
52	P4789-01	PS028443.D	12 Nov 2024 07:23	AR\AJ	Ok
53	P4792-03	PS028444.D	12 Nov 2024 07:47	AR\AJ	Ok
54	P4738-02	PS028445.D	12 Nov 2024 08:11	AR\AJ	Ok
55	P4602-28	PS028446.D	12 Nov 2024 09:04	AR\AJ	Ok,M
56	I.BLK	PS028447.D	12 Nov 2024 09:28	AR\AJ	Ok
57	HSTDCCC750	PS028448.D	12 Nov 2024 09:52	AR\AJ	Ok,M

M : Manual Integration

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS110924

Review By	Abdul	Review On	11/11/2024 5:07:36 PM
Supervise By	Ankita	Supervise On	11/12/2024 8:59:40 AM
SubDirectory	PS110924	HP Acquire Method	HP Processing Method ps110924 8151

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	P23457,PP23458,PP23459,PP23460,PP23461,PP23462,PP23467,PP23468,PP23469
CCC	PP23462
Internal Standard/PEM	
ICV/I.BLK	PP23469
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	HEXANE	HEXANE	PS028354.D	08 Nov 2024 14:00		AR\AJ	Ok
2	I.BLK	I.BLK	PS028355.D	08 Nov 2024 14:25		AR\AJ	Ok
3	HSTDICC200	HSTDICC200	PS028356.D	08 Nov 2024 15:13		AR\AJ	Ok
4	HSTDICC500	HSTDICC500	PS028357.D	08 Nov 2024 15:46		AR\AJ	Ok,M
5	HSTDICC750	HSTDICC750	PS028358.D	08 Nov 2024 16:10		AR\AJ	Ok
6	HSTDICC1000	HSTDICC1000	PS028359.D	08 Nov 2024 16:34		AR\AJ	Ok
7	HSTDICC1500	HSTDICC1500	PS028360.D	08 Nov 2024 16:58		AR\AJ	Ok
8	HSTDICV750	ICVPS110924	PS028361.D	08 Nov 2024 17:22		AR\AJ	Ok
9	I.BLK	I.BLK	PS028362.D	08 Nov 2024 17:46		AR\AJ	Ok,M
10	HSTDCCC750	HSTDCCC750	PS028363.D	08 Nov 2024 18:10		AR\AJ	Ok
11	P4700-01	MH-8	PS028364.D	08 Nov 2024 18:34		AR\AJ	Ok,M
12	P4701-01	BP-F3	PS028365.D	08 Nov 2024 18:58		AR\AJ	Ok,M
13	P4701-05	BP-F4	PS028366.D	08 Nov 2024 19:22		AR\AJ	Ok
14	PB164754BL	PB164754BL	PS028367.D	08 Nov 2024 19:46		AR\AJ	Ok
15	PB164754BS	PB164754BS	PS028368.D	08 Nov 2024 20:10		AR\AJ	Ok,M
16	P4722-03	WC-1(0-6)	PS028369.D	08 Nov 2024 20:34	2,4-DCAA low in both column	AR\AJ	Not Ok
17	P4722-08	WC-2(0-6)	PS028370.D	08 Nov 2024 20:58		AR\AJ	Ok,M
18	P4722-13	WC-3(0-6)	PS028371.D	08 Nov 2024 21:22	2,4-DCAA Low in both column	AR\AJ	Not Ok

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS110924

Review By	Abdul	Review On	11/11/2024 5:07:36 PM
Supervise By	Ankita	Supervise On	11/12/2024 8:59:40 AM
SubDirectory	PS110924	HP Acquire Method	HP Processing Method ps110924 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	P23457,PP23458,PP23459,PP23460,PP23461,PP23462,PP23467,PP23468,PP23469		
CCC	PP23462		
Internal Standard/PEM			
ICV/I.BLK	PP23469		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

19	P4739-01	TP-14	PS028372.D	08 Nov 2024 21:46		AR\AJ	Ok,M
20	P4739-01MS	TP-14MS	PS028373.D	08 Nov 2024 22:10	Some compound recovery fail	AR\AJ	Ok,M
21	P4739-01MSD	TP-14MSD	PS028374.D	08 Nov 2024 22:34	Some compound recovery fail	AR\AJ	Ok,M
22	P4739-05	BP-G2	PS028375.D	08 Nov 2024 22:58		AR\AJ	Ok
23	P4739-09	BP-B2	PS028376.D	08 Nov 2024 23:22		AR\AJ	Ok,M
24	P4739-13	TP-11	PS028377.D	08 Nov 2024 23:46		AR\AJ	Ok,M
25	I.BLK	I.BLK	PS028378.D	09 Nov 2024 00:10		AR\AJ	Ok
26	HSTDCCC750	HSTDCCC750	PS028379.D	09 Nov 2024 00:34		AR\AJ	Ok
27	P4601-24RE	CC0P1RE	PS028380.D	09 Nov 2024 00:58	Closing CCC fail,	AR\AJ	Not Ok
28	P4601-25RE	CC0P3RE	PS028381.D	09 Nov 2024 01:22	Closing CCC fail,	AR\AJ	Not Ok
29	P4601-26RE	CC0P5RE	PS028382.D	09 Nov 2024 01:46	Closing CCC fail,	AR\AJ	Not Ok
30	P4602-43	CC0R8	PS028383.D	09 Nov 2024 02:10	, Closing CCC fail	AR\AJ	Not Ok
31	P4602-44MS	CC0R8MS	PS028384.D	09 Nov 2024 02:34	Some compound recovery fail, Closing CCC fail	AR\AJ	Not Ok
32	P4602-45MSD	CC0R8MSD	PS028385.D	09 Nov 2024 02:58	Some compound recovery fail, Closing CCC fail	AR\AJ	Not Ok
33	P4602-40	CC0R6	PS028386.D	09 Nov 2024 03:22	Closing CCC fail	AR\AJ	Not Ok
34	P4602-41MS	CC0R6MS	PS028387.D	09 Nov 2024 03:46	Some compound recovery fail, Closing CCC fail	AR\AJ	Not Ok
35	P4602-42MSD	CC0R6MSD	PS028388.D	09 Nov 2024 04:10	Some compound recovery fail, RPD fail, Closing CCC fail	AR\AJ	Not Ok
36	PB164393TB	PB164393TB	PS028389.D	09 Nov 2024 04:34	Closing CCC fail	AR\AJ	Not Ok

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QCBatch ID # PS110924

Review By	Abdul	Review On	11/11/2024 5:07:36 PM
Supervise By	Ankita	Supervise On	11/12/2024 8:59:40 AM
SubDirectory	PS110924	HP Acquire Method	HP Processing Method ps110924 8151

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	P23457,PP23458,PP23459,PP23460,PP23461,PP23462,PP23467,PP23468,PP23469
CCC Internal Standard/PEM	PP23462
ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23469

37	I.BLK	I.BLK	PS028390.D	09 Nov 2024 04:58	Closing CCC fail	AR\AJ	Not Ok
38	HSTDCCC750	HSTDCCC750	PS028391.D	09 Nov 2024 05:22	CCC fail	AR\AJ	Not Ok

M : Manual Integration

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS111124

Review By	yogesh	Review On	11/12/2024 5:16:17 AM
Supervise By	Ankita	Supervise On	11/12/2024 9:00:51 AM
SubDirectory	PS111124	HP Acquire Method	HP Processing Method ps110924 8151

STD. NAME	STD REF.#
Tune/Reschk Initial Calibration Stds	P23457,PP23458,PP23459,PP23460,PP23461,PP23462,PP23467,PP23468,PP23469
CCC	PP23462
Internal Standard/PEM	
ICV/I.BLK	PP23469
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	HEXANE	HEXANE	PS028392.D	11 Nov 2024 10:00		AR\AJ	Ok
2	I.BLK	I.BLK	PS028393.D	11 Nov 2024 10:24		AR\AJ	Ok
3	HSTDCCC750	HSTDCCC750	PS028394.D	11 Nov 2024 10:48		AR\AJ	Ok,M
4	P4601-29	CC0Q1	PS028395.D	11 Nov 2024 12:05		AR\AJ	Ok
5	P4601-30	CC0Q6	PS028396.D	11 Nov 2024 12:29		AR\AJ	Ok
6	P4601-31	CC0Q8	PS028397.D	11 Nov 2024 12:56		AR\AJ	Ok
7	P4601-32	CC0R3	PS028398.D	11 Nov 2024 13:20		AR\AJ	Ok
8	P4601-33	CC0R4	PS028399.D	11 Nov 2024 13:44		AR\AJ	Ok,M
9	P4601-34	CC0R5	PS028400.D	11 Nov 2024 14:08		AR\AJ	Ok,M
10	P4601-35	CC0R6	PS028401.D	11 Nov 2024 14:32		AR\AJ	Ok,M
11	P4601-36	CC0R7	PS028402.D	11 Nov 2024 14:57		AR\AJ	Ok,M
12	P4601-37MS	CC0R7MS	PS028403.D	11 Nov 2024 15:21	some comp. recovery fail	AR\AJ	Ok,M
13	P4601-38MSD	CC0R7MSD	PS028404.D	11 Nov 2024 15:45	some comp. recovery fail	AR\AJ	Ok,M
14	I.BLK	I.BLK	PS028405.D	11 Nov 2024 16:09		AR\AJ	Ok
15	HSTDCCC750	HSTDCCC750	PS028406.D	11 Nov 2024 16:33		AR\AJ	Ok,M
16	P4602-43	CC0R8	PS028407.D	11 Nov 2024 16:57		AR\AJ	Ok
17	P4602-44MS	CC0R8MS	PS028408.D	11 Nov 2024 17:21		AR\AJ	Ok,M
18	P4602-45MSD	CC0R8MSD	PS028409.D	11 Nov 2024 17:45		AR\AJ	Ok,M

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS111124

Review By	yogesh	Review On	11/12/2024 5:16:17 AM
Supervise By	Ankita	Supervise On	11/12/2024 9:00:51 AM
SubDirectory	PS111124	HP Acquire Method	HP Processing Method ps110924 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	P23457,PP23458,PP23459,PP23460,PP23461,PP23462,PP23467,PP23468,PP23469		
CCC	PP23462		
Internal Standard/PEM			
ICV/I.BLK	PP23469		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

19	P4602-40	CC0R6	PS028410.D	11 Nov 2024 18:10		AR\AJ	Ok
20	P4602-41MS	CC0R6MS	PS028411.D	11 Nov 2024 18:34		AR\AJ	Ok,M
21	P4602-42MSD	CC0R6MSD	PS028412.D	11 Nov 2024 18:58		AR\AJ	Ok,M
22	PB164393TB	PB164393TB	PS028413.D	11 Nov 2024 19:22		AR\AJ	Ok
23	PB164725BL	PB164725BL	PS028414.D	11 Nov 2024 19:46		AR\AJ	Ok
24	PB164725BS	PB164725BS	PS028415.D	11 Nov 2024 20:10		AR\AJ	Ok,M
25	P4602-19	C0P17	PS028416.D	11 Nov 2024 20:34		AR\AJ	Ok,M
26	I.BLK	I.BLK	PS028417.D	11 Nov 2024 20:58		AR\AJ	Ok
27	HSTDCCC750	HSTDCCC750	PS028418.D	11 Nov 2024 21:22		AR\AJ	Ok,M
28	P4602-21	CC0P2	PS028419.D	11 Nov 2024 21:46		AR\AJ	Ok,M
29	P4602-22	CC0P4	PS028420.D	11 Nov 2024 22:10		AR\AJ	Ok,M
30	P4602-23	CC0P6	PS028421.D	11 Nov 2024 22:34		AR\AJ	Ok
31	P4602-24	CC0P8	PS028422.D	11 Nov 2024 22:58		AR\AJ	Ok,M
32	P4602-25	CC0Q0	PS028423.D	11 Nov 2024 23:22		AR\AJ	Ok,M
33	P4602-26	CC0Q2	PS028424.D	11 Nov 2024 23:46		AR\AJ	Ok,M
34	P4602-27	CC0Q3	PS028425.D	12 Nov 2024 00:10		AR\AJ	Ok,M
35	P4602-28	CC0Q4	PS028426.D	12 Nov 2024 00:34	injection error	AR\AJ	Not Ok
36	P4602-29	CC0Q5	PS028427.D	12 Nov 2024 00:58		AR\AJ	Ok,M
37	P4602-30	CC0Q7	PS028428.D	12 Nov 2024 01:23		AR\AJ	Ok,M

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS111124

Review By	yogesh	Review On	11/12/2024 5:16:17 AM
Supervise By	Ankita	Supervise On	11/12/2024 9:00:51 AM
SubDirectory	PS111124	HP Acquire Method	HP Processing Method ps110924 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	P23457,PP23458,PP23459,PP23460,PP23461,PP23462,PP23467,PP23468,PP23469		
CCC	PP23462		
Internal Standard/PEM			
ICV/I.BLK	PP23469		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

38	I.BLK	I.BLK	PS028429.D	12 Nov 2024 01:47		AR\AJ	Ok
39	HSTDCCC750	HSTDCCC750	PS028430.D	12 Nov 2024 02:11		AR\AJ	Ok
40	P4602-33	CC0R1	PS028431.D	12 Nov 2024 02:35		AR\AJ	Ok,M
41	P4602-34	CC0R2	PS028432.D	12 Nov 2024 02:59		AR\AJ	Ok,M
42	P4602-31	CC0Q9	PS028433.D	12 Nov 2024 03:23		AR\AJ	Ok,M
43	P4602-32	CC0R0	PS028434.D	12 Nov 2024 03:47		AR\AJ	Ok,M
44	P4602-37	CC0P0	PS028435.D	12 Nov 2024 04:11		AR\AJ	Ok,M
45	P4602-38MS	CC0P0MS	PS028436.D	12 Nov 2024 04:35	Some compound recovery fail	AR\AJ	Ok,M
46	P4602-39MSD	CC0P0MSD	PS028437.D	12 Nov 2024 04:59	Some compound recovery fail	AR\AJ	Ok,M
47	P4722-03	WC-1(0-6)	PS028438.D	12 Nov 2024 05:23		AR\AJ	Ok
48	P4722-13	WC-3(0-6)	PS028439.D	12 Nov 2024 05:47		AR\AJ	Ok
49	P4738-02	72-12018	PS028440.D	12 Nov 2024 06:11		AR\AJ	Ok
50	I.BLK	I.BLK	PS028441.D	12 Nov 2024 06:35		AR\AJ	Ok
51	HSTDCCC750	HSTDCCC750	PS028442.D	12 Nov 2024 06:59		AR\AJ	Ok,M
52	P4789-01	BP-F21	PS028443.D	12 Nov 2024 07:23		AR\AJ	Ok
53	P4792-03	OILY-STONE-DRUM	PS028444.D	12 Nov 2024 07:47		AR\AJ	Ok
54	P4738-02	72-12018	PS028445.D	12 Nov 2024 08:11		AR\AJ	Ok
55	P4602-28	CC0Q4	PS028446.D	12 Nov 2024 09:04		AR\AJ	Ok,M
56	I.BLK	I.BLK	PS028447.D	12 Nov 2024 09:28		AR\AJ	Ok

Instrument ID: ECD_S

Daily Analysis Runlog For Sequence/QC Batch ID # PS111124

Review By	yogesh	Review On	11/12/2024 5:16:17 AM
Supervise By	Ankita	Supervise On	11/12/2024 9:00:51 AM
SubDirectory	PS111124	HP Acquire Method	HP Processing Method ps110924 8151
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	P23457,PP23458,PP23459,PP23460,PP23461,PP23462,PP23467,PP23468,PP23469		
CCC Internal Standard/PEM	PP23462		
ICV/I.BLK Surrogate Standard	PP23469		
MS/MSD Standard LCS Standard			
57	HSTDCCC750	HSTDCCC750	PS028448.D
			12 Nov 2024 09:52
			ARIAJ
			Ok,M

M : Manual Integration

PERCENT SOLID

Supervisor: sohil
Analyst: jignesh
Date: 11/7/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 17:15
In Date: 11/06/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:15
Out Date: 11/07/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB133313

Lab ID	Client SampleID	Dish #	Dish Wt (g) (A)	Sample Wt (g)	Dish + Sample Wt (g) (B)	Dish+Dry Sample Wt (g) (C)	% Solid	Comments
P4659-01	MH-2	39	1.13	8.64	9.77	8.64	86.9	
P4662-06	102524-D	29	1.00	1.00	2.00	2.00	100.0	oil sample
P4720-01	JC-701-COMP-01	1	1.16	8.49	9.65	8.85	90.6	
P4720-02	JC-701-VOC-01	2	1.16	8.49	9.65	8.85	90.6	
P4720-03	JC-701-01	3	1.15	8.58	9.73	8.99	91.4	
P4720-04	JC-701-02	4	1.13	8.65	9.78	8.73	87.9	
P4721-01	EX-2-TPH-1	5	1.15	8.82	9.97	8.8	86.7	
P4721-02	EX-2-TPH-2	6	1.18	8.47	9.65	8.21	83.0	
P4721-03	EX-2-TPH-3	7	1.16	8.82	9.98	8.95	88.3	
P4721-04	EX-11-TPH-1	8	1.15	8.53	9.68	7.95	79.7	
P4721-05	EX-11-TPH-2	9	1.12	8.56	9.68	8.95	91.5	
P4721-06	EX-11-TPH-3	10	1.15	8.80	9.95	8.14	79.4	
P4721-07	EX-11-TPH-4	11	1.14	8.83	9.97	8.7	85.6	
P4721-08	EX-9-TPH-1	12	1.16	8.53	9.69	8.3	83.7	
P4721-09	EX-9-TPH-2	13	1.12	8.47	9.59	8.36	85.5	
P4721-10	EX-9-TPH-3	14	1.15	8.42	9.57	8.32	85.2	
P4721-11	EX-9-TPH-4	15	1.12	8.81	9.93	9.00	89.4	
P4721-12	EX-9-TPH-5	16	1.17	8.81	9.98	8.83	86.9	
P4721-13	EX-9-TPH-6	17	1.19	8.79	9.98	8.54	83.6	
P4721-14	EX-9-TPH-7	18	1.19	8.42	9.61	8.5	86.8	
P4721-15	EX-9-TPH-8	19	1.15	8.83	9.98	8.85	87.2	
P4722-01	WC-1 (5.5)	20	1.18	8.44	9.62	8.64	88.4	
P4722-03	WC-1 (0-6)	21	1.15	8.81	9.96	9.41	93.8	
P4722-06	WC-2 (2)	22	1.14	8.61	9.75	8.87	89.8	
P4722-08	WC-2 (0-6)	23	1.13	8.79	9.92	9.05	90.1	
P4722-11	WC-3 (5)	24	1.14	8.40	9.54	7.17	71.8	
P4722-13	WC-3 (0-6)	25	1.17	8.61	9.78	8.63	86.6	
P4722-17	WC-1 (3.5)	26	1.19	8.47	9.66	7.95	79.8	

PERCENT SOLID

Supervisor: sohil
Analyst: jignesh
Date: 11/7/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 17:15
In Date: 11/06/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:15
Out Date: 11/07/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB133313

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
P4722-19	WC-2 (4)	27	1.18	8.78	9.96	9.03	89.4	
P4722-21	WC-3 (3)	28	1.17	8.69	9.86	8.79	87.7	
P4731-01	NASSAU-ST-CO	30	1.00	1.00	2.00	2.00	100.0	CONCRETE sample
P4731-02	S.JEFFERSON-CO-1	31	1.00	1.00	2.00	2.00	100.0	CONCRETE sample
P4731-03	S.JEFFERSON-CO-2	32	1.00	1.00	2.00	2.00	100.0	CONCRETE sample
P4732-01	PPE-COMP	33	1.00	1.00	2.00	2.00	100.0	PPE- PLASTIC
P4732-02	PPE-COMP	34	1.00	1.00	2.00	2.00	100.0	PPE- PLASTIC
P4732-04	PPE-Grab	35	1.00	1.00	2.00	2.00	100.0	PPE- PLASTIC
P4732-05	PPE-Grab	36	1.00	1.00	2.00	2.00	100.0	PPE- PLASTIC
P4734-01	EO-03-11062024	37	1.16	8.48	9.64	9.11	93.7	
P4734-02	EO-03-11062024-E2	38	1.19	8.67	9.86	9.26	93.1	
P4737-01	TP2	40	1.15	8.35	9.5	8.78	91.4	
P4737-02	TP2-E2	41	1.16	8.67	9.83	8.94	89.7	
P4738-01	72-12018	42	1.14	8.70	9.84	2.66	17.5	GEL MARTIX
P4739-01	TP-14	43	1.14	8.71	9.85	8.87	88.7	
P4739-02	TP-14-EPH	44	1.18	8.52	9.7	8.71	88.4	
P4739-03	TP-14-VOC	45	1.13	8.73	9.86	8.75	87.3	
P4739-05	BP-G2	46	1.16	8.71	9.87	8.74	87.0	
P4739-06	BP-G2-EPH	47	1.13	8.52	9.65	8.5	86.5	
P4739-07	BP-G2-VOC	48	1.13	8.85	9.98	8.93	88.1	
P4739-09	BP-B2	49	1.15	8.62	9.77	8.68	87.4	
P4739-10	BP-B2-EPH	50	1.15	8.38	9.53	8.4	86.5	
P4739-11	BP-B2-VOC	51	1.15	8.73	9.88	8.66	86.0	
P4739-13	TP-11	52	1.16	8.37	9.53	8.85	91.9	
P4739-14	TP-11-EPH	53	1.16	8.75	9.91	9.17	91.5	
P4739-15	TP-11-VOC	54	1.12	8.74	9.86	9.11	91.4	

$$\% \text{ Solid} = \frac{(C-A) * 100}{(B-A)}$$

WORKLIST(Hardcopy Internal Chain)

133313

WorkList Name : %1-110624

WorkList ID : 185146

Department : Wet-Chemistry

Date : 11-06-2024 07:38:45

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4659-01	MH-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/31/2024	Chemtech -SO
P4662-06	102524-D	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/31/2024	Chemtech -SO
P4720-01	JC-701-COMP-01	Solid	Percent Solids	Cool 4 deg C	PSEG03	K31	11/05/2024	Chemtech -SO
P4720-02	JC-701-VOC-01	Solid	Percent Solids	Cool 4 deg C	PSEG03	K31	11/05/2024	Chemtech -SO
P4720-03	JC-701-01	Solid	Percent Solids	Cool 4 deg C	PSEG03	K31	11/05/2024	Chemtech -SO
P4720-04	JC-701-02	Solid	Percent Solids	Cool 4 deg C	PSEG03	K31	11/05/2024	Chemtech -SO
P4721-01	EX-2-TPH-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	K31	11/05/2024	Chemtech -SO
P4721-02	EX-2-TPH-2	Solid	Percent Solids	Cool 4 deg C	ENTA05	L23	11/05/2024	Chemtech -SO
P4721-03	EX-2-TPH-3	Solid	Percent Solids	Cool 4 deg C	ENTA05	L23	11/05/2024	Chemtech -SO
P4721-04	EX-11-TPH-1	Solid	Percent Solids	Cool 4 deg C	ENTA05	L23	11/05/2024	Chemtech -SO
P4721-05	EX-11-TPH-2	Solid	Percent Solids	Cool 4 deg C	ENTA05	L23	11/05/2024	Chemtech -SO
P4721-06	EX-11-TPH-3	Solid	Percent Solids	Cool 4 deg C	ENTA05	L23	11/05/2024	Chemtech -SO
P4721-07	EX-11-TPH-4	Solid	Percent Solids	Cool 4 deg C	ENTA05	L23	11/05/2024	Chemtech -SO
P4721-08	EX-9-TPH-1	Solid	Percent Solids	Cool 4 deg C	ENTA05	L23	11/05/2024	Chemtech -SO
P4721-09	EX-9-TPH-2	Solid	Percent Solids	Cool 4 deg C	ENTA05	L23	11/05/2024	Chemtech -SO
P4721-10	EX-9-TPH-3	Solid	Percent Solids	Cool 4 deg C	ENTA05	L23	11/05/2024	Chemtech -SO
P4721-11	EX-9-TPH-4	Solid	Percent Solids	Cool 4 deg C	ENTA05	L23	11/05/2024	Chemtech -SO
P4721-12	EX-9-TPH-5	Solid	Percent Solids	Cool 4 deg C	ENTA05	L23	11/05/2024	Chemtech -SO
P4721-13	EX-9-TPH-6	Solid	Percent Solids	Cool 4 deg C	ENTA05	L23	11/05/2024	Chemtech -SO
P4721-14	EX-9-TPH-7	Solid	Percent Solids	Cool 4 deg C	ENTA05	L23	11/05/2024	Chemtech -SO
P4721-15	EX-9-TPH-8	Solid	Percent Solids	Cool 4 deg C	ENTA05	L23	11/05/2024	Chemtech -SO

Date/Time 11/06/24 15:40
 Raw Sample Received by: JWC
 Raw Sample Relinquished by: JWC

Date/Time 11/06/24 17:45
 Raw Sample Received by: JWC
 Raw Sample Relinquished by: JWC

WORKLIST(Hardcopy Internal Chain)

133313

WorkList Name : %1-110624

WorkList ID : 185146

Department : Wet-Chemistry

Date : 11-06-2024 07:38:45

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4722-01	WC-1(5.5)	Solid	Percent Solids	Cool 4 deg C	WALS01	L23	11/05/2024	Chemtech -SO
P4722-03	WC-1(0-6)	Solid	Percent Solids	Cool 4 deg C	WALS01	L23	11/05/2024	Chemtech -SO
P4722-06	WC-2(2)	Solid	Percent Solids	Cool 4 deg C	WALS01	L23	11/05/2024	Chemtech -SO
P4722-08	WC-2(0-6)	Solid	Percent Solids	Cool 4 deg C	WALS01	L23	11/05/2024	Chemtech -SO
P4722-11	WC-3(5)	Solid	Percent Solids	Cool 4 deg C	WALS01	L23	11/05/2024	Chemtech -SO
P4722-13	WC-3(0-6)	Solid	Percent Solids	Cool 4 deg C	WALS01	L23	11/05/2024	Chemtech -SO
P4722-17	WC-1(3.5)	Solid	Percent Solids	Cool 4 deg C	WALS01	L23	11/05/2024	Chemtech -SO
P4722-19	WC-2(4)	Solid	Percent Solids	Cool 4 deg C	WALS01	L23	11/05/2024	Chemtech -SO
P4722-21	WC-3(3)	Solid	Percent Solids	Cool 4 deg C	WALS01	L23	11/05/2024	Chemtech -SO
P4731-01	NASSAU-ST-CO	Solid	Percent Solids	Cool 4 deg C	PSEG03	L23	10/23/2024	Chemtech -SO
P4731-02	S.JEFFERSON-CO-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	L23	10/23/2024	Chemtech -SO
P4731-03	S.JEFFERSON-CO-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L23	10/23/2024	Chemtech -SO
P4732-01	PPE-COMP	Solid	Percent Solids	Cool 4 deg C	FUR101	L11	11/06/2024	Chemtech -SO
P4732-02	PPE-COMP	Solid	Percent Solids	Cool 4 deg C	FUR101	L11	11/06/2024	Chemtech -SO
P4732-04	PPE-Grab	Solid	Percent Solids	Cool 4 deg C	FUR101	L11	11/06/2024	Chemtech -SO
P4732-05	PPE-Grab	Solid	Percent Solids	Cool 4 deg C	FUR101	L11	11/06/2024	Chemtech -SO
P4734-01	EO-03-11062024	Solid	Percent Solids	Cool 4 deg C	PSEG05	L23	11/06/2024	Chemtech -SO
P4734-02	EO-03-11062024-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	L23	11/06/2024	Chemtech -SO
P4737-01	TP2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L23	11/05/2024	Chemtech -SO
P4737-02	TP2-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L23	11/05/2024	Chemtech -SO
P4738-01	72-12018	Solid	Percent Solids	Cool 4 deg C	PSEG03	L23	11/06/2024	Chemtech -SO

Date/Time 11/06/24 15:40
Raw Sample Received by: SO (WC)
Raw Sample Relinquished by: SO (WC)

Date/Time 11/06/24
Raw Sample Received by: SO (WC)
Raw Sample Relinquished by: SO (WC)

WORKLIST(Hardcopy Internal Chain)

133313

WorkList Name : %1-110624

WorkList ID : 185146

Department : Wet-Chemistry

Date : 11-06-2024 07:38:45

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4739-01	TP-14	Solid	Percent Solids	Cool 4 deg C	PSEG03	L21	11/06/2024	Chemtech -SO
P4739-02	TP-14-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L21	11/06/2024	Chemtech -SO
P4739-03	TP-14-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L21	11/06/2024	Chemtech -SO
P4739-05	BP-G2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L21	11/06/2024	Chemtech -SO
P4739-06	BP-G2-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L21	11/06/2024	Chemtech -SO
P4739-07	BP-G2-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L21	11/06/2024	Chemtech -SO
P4739-09	BP-B2	Solid	Percent Solids	Cool 4 deg C	PSEG03	L21	11/06/2024	Chemtech -SO
P4739-10	BP-B2-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L21	11/06/2024	Chemtech -SO
P4739-11	BP-B2-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L21	11/06/2024	Chemtech -SO
P4739-13	TP-11	Solid	Percent Solids	Cool 4 deg C	PSEG03	L21	11/06/2024	Chemtech -SO
P4739-14	TP-11-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	L21	11/06/2024	Chemtech -SO
P4739-15	TP-11-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	L21	11/06/2024	Chemtech -SO

Date/Time 11/06/24 15:40

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]

Date/Time 11/06/24

Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature]

SOP ID: M8151A-Herbicide-22

Clean Up SOP #: N/A

Matrix: Solid

Weigh By: RJ

Balance check: RJ

Balance ID: EX-SC-2

pH Strip Lot#: N/A

Extraction By: RJ

Filter By: RJ

pH Meter ID: N/A

Hood ID: 3,7

Extraction Start Date: 11/07/2024

Extraction Start Time: 10:33

Extraction End Date: 11/07/2024

Extraction End Time: 18:40

Concentration By: RS

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	PP23930
Surrogate	1.0ML	5000 PPB	PP23907
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
MeCl2/Acetone/1:1	N/A	EP2538
Acidified Na2SO4	N/A	EP2503
Sand	N/A	E2865
HCL	N/A	M6111
DI WATER	N/A	N/A
37% KOH	N/A	EP2520
Methylene Chloride	N/A	E3822
1:3 SULPHURIC ACID	N/A	EP2528
Ether	N/A	E3370
ISO OCTANE	N/A	E3554
METHANOL	N/A	V14150
Diazomethane	N/A	EP2529
Hexane	N/A	E3825
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

pH adjusted with HCL <2 for soil Extraction, PH adjusted with 1:3 H2SO4 <2 after Hydrolysis, Derivatization procedure is completed and samples are ready to Analyze, 40ML Vial Lot # 03-40 BTS721.

KD Bath ID: N/A

Envap ID: NEVAP-02

KD Bath Temperature: N/A

Envap Temperature: 40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
11/7/24	RP (Ext 105)	R. Pest / Pest Lab.
18:45	Preparation Group	Analysis Group

Analytical Method: M8151A-Herbicide-22

Concentration Date: 11/07/2024

Sample ID	Client Sample ID	Test	g mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB164754BL	HBLK754	Herbicide	30.03	N/A	ritesh	RUPESH	10			U1-1
PB164754BS	HLCS754	Herbicide	30.01	N/A	ritesh	RUPESH	10			2
P4700-01	MH-8	Herbicide	30.05	N/A	ritesh	RUPESH	10	D		3
P4701-01	BP-F3	Herbicide	30.09	N/A	ritesh	RUPESH	10	D		4
P4701-05	BP-F4	Herbicide	30.02	N/A	ritesh	RUPESH	10	D		5
P4720-01	JC-701-COMP-01	Herbicide	30.06	N/A	ritesh	RUPESH	10	B		6
P4722-03	WC-1(0-6)	Herbicide	30.01	N/A	ritesh	RUPESH	10	D		U5-1
P4722-08	WC-2(0-6)	Herbicide	30.10	N/A	ritesh	RUPESH	10	D		2
P4722-13	WC-3(0-6)	Herbicide	30.08	N/A	ritesh	RUPESH	10	D		3
P4739-01	TP-14	Herbicide	30.08	N/A	ritesh	RUPESH	10	D		4
P4739-01MS	TP-14MS	Herbicide	30.03	N/A	ritesh	RUPESH	10	D		5
P4739-01MS D	TP-14MSD	Herbicide	30.02	N/A	ritesh	RUPESH	10	D		6
P4739-05	BP-G2	Herbicide	30.04	N/A	ritesh	RUPESH	10	D		U6-1
P4739-09	BP-B2	Herbicide	30.06	N/A	ritesh	RUPESH	10	D		2
P4739-13	TP-11	Herbicide	30.03	N/A	ritesh	RUPESH	10	D		3

WORKLIST(Hardcopy Internal Chain)

Worklist Name : P4739

Worklist ID : 185208

Department : Extraction

Date : 11-07-2024 10:30:59

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4700-01	MH-8	Solid	Herbicide	Cool 4 deg C	PSEG03	L21	11/04/2024	8151A
P4701-01	BP-F3	Solid	Herbicide	Cool 4 deg C	PSEG03	K23	11/04/2024	8151A
P4701-05	BP-F4	Solid	Herbicide	Cool 4 deg C	PSEG03	K23	11/04/2024	8151A
P4720-01	JC-701-COMP-01	Solid	Herbicide	Cool 4 deg C	PSEG03	K31	11/05/2024	8151A
P4722-03	WC-1(0-6)	Solid	Herbicide	Cool 4 deg C	WALS01	L23	11/05/2024	8151A
P4722-08	WC-2(0-6)	Solid	Herbicide	Cool 4 deg C	WALS01	L23	11/05/2024	8151A
P4722-13	WC-3(0-6)	Solid	Herbicide	Cool 4 deg C	WALS01	L23	11/05/2024	8151A
P4739-01	TP-14	Solid	Herbicide	Cool 4 deg C	PSEG03	L21	11/06/2024	8151A
P4739-05	BP-G2	Solid	Herbicide	Cool 4 deg C	PSEG03	L21	11/06/2024	8151A
P4739-09	BP-B2	Solid	Herbicide	Cool 4 deg C	PSEG03	L21	11/06/2024	8151A
P4739-13	TP-11	Solid	Herbicide	Cool 4 deg C	PSEG03	L21	11/06/2024	8151A

Date/Time 11/07/24 10:30
 Raw Sample Received by: [Signature]
 Raw Sample Relinquished by: [Signature]

Date/Time 11/7/24 11:05
 Raw Sample Received by: [Signature]
 Raw Sample Relinquished by: [Signature]

Prep Standard - Chemical Standard Summary

Order ID : P4722

Test : Herbicide

Prepbatch ID : PB164754,

Sequence ID/Qc Batch ID: PS110924,PS111124,

Standard ID :

EP2503,EP2538,PP23457,PP23458,PP23459,PP23460,PP23461,PP23462,PP23467,PP23468,PP23469,PP23907,PP23930,

Chemical ID :

E2865,E3370,E3551,E3754,E3793,E3794,E3815,E3818,M5037,M6111,P11179,P12618,P12661,P12707,P12784,P12785,P13498,P13499,P13500,P13501,P13517,P23457,P8828,P8901,P9004,

[illegible]

<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>
3868	METHELENE CHLORIDE+ACETONE	EP2538	09/17/2024	03/11/2025	Rajesh Parikh	None	None	RUPESHKUMAR SHAH 09/17/2024
<u>FROM</u> 8000.00000ml of E3793 + 8000.00000ml of E3794 = Final Quantity: 1600.000 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>
1321	2/200 PPM Herb Mega Mix	PP23457	06/17/2024	12/04/2024	Abdul Mirza	None	None	Ankita Jodhani 06/18/2024

FROM 0.20000ml of P8828 + 1.00000ml of P11179 + 1.00000ml of P12618 + 1.00000ml of P12661 + 1.00000ml of P8901 + 95.80000ml of E3754 = 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	PP23458	06/17/2024	12/04/2024	Abdul Mirza	None	None	Ankita Jodhani 06/18/2024

FROM 0.25000ml of E3754 + 75.00000ml of PP23457 = Final Quantity: 1.000 ml

Pest/Pcb STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1453	1000 PPB Herb MIX STD	PP23459	06/17/2024	12/04/2024	Abdul Mirza	None	None	Ankita Jodhani
								06/18/2024

FROM 0.50000ml of E3754 + 0.50000ml of PP23457 = 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>
1455	500 PPB Herb MIX STD	PP23460	06/17/2024	12/04/2024	Abdul Mirza	None	None	Ankita Jodhani
								06/18/2024

FROM 0.50000ml of E3754 + 0.50000ml of PP23459 = 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>
1456	200 PPB Herb MIX STD	PP23461	06/17/2024	12/04/2024	Abdul Mirza	None	None	Ankita Jodhani
								06/18/2024

FROM 0.80000ml of E3754 + 0.20000ml of PP23459 = 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	PP23462	06/17/2024	12/04/2024	Abdul Mirza	None	None	Ankita Jodhani
								06/18/2024

FROM 0.25000ml of E3754 + 0.75000ml of PP23459 = 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>
1851	2/200 PPM Herb Mega Mix 2nd Source	PP23467	06/17/2024	12/04/2024	Abdul Mirza	None	None	Ankita Jodhani
								06/18/2024

FROM 0.50000ml of P9004 + 1.00000ml of P12707 + 48.50000ml of E3754 = Final Quantity: 50.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1854	1000 PPB HERB MIX ICV STD	PP23468	06/17/2024	12/04/2024	Abdul Mirza	None	None	Ankita Jodhani
								06/18/2024

FROM 0.50000ml of E3754 + 0.50000ml of PP23467 = 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>
1691	750 PPB ICV HERB STD	PP23469	06/17/2024	12/04/2024	Abdul Mirza	None	None	Ankita Jodhani
								06/18/2024

FROM 0.25000ml of E3754 + 0.75000ml of PP23468 = 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>
60	5000 PPB Herbicide Surg Spike (Free Acid)	PP23907	10/21/2024	04/04/2025	Abdul Mirza	None	None	Ankita Jodhani
								10/22/2024

FROM 1.25000ml of P13498 + 1.25000ml of P13499 + 1.25000ml of P13500 + 1.25000ml of P13501 + 195.00000ml of E3815 = Final Quantity: 200.000 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>
1848	5000/500000 PPB Herbicide Spike (Free Acid)	PP23930	10/30/2024	04/23/2025	Abdul Mirza	None	None	Ankita Jodhani 10/30/2024
<u>FROM</u> 0.50000ml of P13517 + 1.00000ml of P12784 + 1.00000ml of P12785 + 47.50000ml of E3818 = Final Quantity: 50.000 ml								

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3382-05 / Sand, Purified (cs/4x2.5kg)	0000243821	12/31/2024	04/30/2020 / RAJESH	04/28/2020 / RAJESH	E2865

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9262-03 / Hexane, Ultra-Resi (cs/4x4L)	24C1862008	12/04/2024	06/04/2024 / Rajesh	05/31/2024 / Rajesh	E3754

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	9005-05 / Acetone Ultra (cs/4x4L)	24E0761004	03/11/2025	09/12/2024 / Rajesh	09/11/2024 / Rajesh	E3793

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	24G2362009	03/17/2025	09/17/2024 / Rajesh	09/03/2024 / Rajesh	E3794

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H1462005	04/04/2025	10/04/2024 / Rajesh	10/04/2024 / Rajesh	E3815

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H1462005	04/23/2025	10/23/2024 / Rajesh	10/09/2024 / Rajesh	E3818

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L)	0000250349	12/15/2024	01/06/2022 / mohan	09/18/2021 / mohan	M5037

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	22F0762009	05/09/2027	11/04/2024 / Eman	09/29/2024 / Janvi	M6111

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	12/17/2024	06/17/2024 / Abdul	11/01/2021 / Abdul	P11179

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	12/17/2024	06/17/2024 / Abdul	07/03/2023 / Abdul	P12618

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32055 / Herbicide Mix, 500/8000, Standard #1 [methyl ester] 200ug/mL, hexane, 1mL/ampul	A0199693	12/17/2024	06/17/2024 / Abdul	07/14/2023 / Ankita	P12661

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	12/17/2024	06/17/2024 / Abdul	08/09/2023 / Abdul	P12707

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	12/17/2024	06/17/2024 / Abdul	08/09/2023 / Abdul	P12707

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

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Agilent Technologies	HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids	0006750243	04/30/2025	10/30/2024 / Abdul	09/11/2023 / Abdul	P12785

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Agilent Technologies	HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids	0006750243	04/30/2025	10/30/2024 / Abdul	09/11/2023 / Abdul	P12785

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32049 / Herbicide, 8000 series, 515 Surrogate [free acid] 2,4-dichlorophenyl acetic acid, 1mL, 200ug/mL, MeOH	A0212676	04/21/2025	10/21/2024 / Abdul	08/16/2024 / yogesh	P13498

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	04/21/2025	10/21/2024 / Abdul	08/16/2024 / yogesh	P13499

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	04/21/2025	10/21/2024 / Abdul	08/16/2024 / yogesh	P13500

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	04/21/2025	10/21/2024 / Abdul	08/16/2024 / yogesh	P13501

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Agilent Technologies	HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids	0006750243	04/30/2025	10/30/2024 / Abdul	09/03/2024 / Abdul	P13517

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Agilent Technologies	HBM-8151A / Chlorinated Herbicide Mixtures, Free Acids	0006750243	04/30/2025	10/30/2024 / Abdul	09/03/2024 / Abdul	P13517

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	32254 / Dalapon Methyl Ester, 1000 ug/ml	A0148063	12/17/2024	06/17/2024 / Abdul	08/16/2019 / Stephen	P8828

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	A0152499	12/17/2024	06/17/2024 / Abdul	08/16/2019 / Stephen	P8901

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	A0152705	12/17/2024	06/17/2024 / Abdul	10/11/2019 / Stephen	P9004

Sand
Purified
Washed and Ignited



Material No.: 3382-05
Batch No.: 0000243821
Manufactured Date: 2018/04/09
Retest Date: 2025/04/07
Revision No: 1

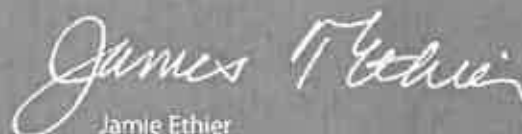
Certificate of Analysis

Test	Specification	Result
Substances Soluble in HCl	$\leq 0.16\%$	0.01

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

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

E 2865


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,

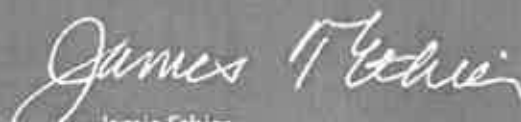
Test	Specification	Result
Assay ((C ₂ H ₅) ₂ O) (by GC, corrected for water)	>= 99.0 %	100.0
Alcohol (C ₂ H ₅ OH)	Passes Test	PT
Carbonyl Compounds (as HCHO) (by polarography)	<= 0.001 %	< 0.001
Color (APHA)	<= 10	< 5
Peroxide (as H ₂ O ₂)	<= 1 ppm	< 1
Preservative (BHT)	>= 7 ppm	9
Residue after Evaporation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

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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

Hexanes (95% n-hexane)
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis



Material No.: 9262-03
Batch No.: 24C1862008
Manufactured Date: 2024-01-30
Expiration Date: 2025-04-30
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
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
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	0.4 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

Recd. by R1 on 5/31/24

E3754

Jamie Croak
Director Quality Operations, Bioscience Production

Acetone
CMOS

avantor™



Material No.: 9005-05
Batch No.: 24E0761004
Manufactured Date: 2024-05-02
Retest Date: 2029-05-01
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	≥ 99.5 %	99.8 %
Color (APHA)	≤ 10	< 5
Residue after Evaporation	≤ 5 ppm	< 1 ppm
Titration Acid (μeq/g)	≤ 0.3	0.1
Titration Base (μeq/g)	≤ 0.5	0.1
Water (H ₂ O)	≤ 0.5 %	0.1 %
Solubility in H ₂ O	Passes Test	Passes Test
Chloride (Cl)	≤ 0.2 ppm	< 0.2 ppm
Phosphate (PO ₄)	≤ 0.05 ppm	< 0.05 ppm
Trace Impurities – Aluminum (Al)	≤ 50.0 ppb	< 5.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 5.0 ppb
Trace Impurities – Barium (Ba)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Calcium (Ca)	≤ 25.0 ppb	3.6 ppb
Trace Impurities – Chromium (Cr)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Germanium (Ge)	≤ 10.0 ppb	< 10.0 ppb
Trace Impurities – Gold (Au)	≤ 20 ppb	< 5 ppb
Trace Impurities – Iron (Fe)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Lead (Pb)	≤ 10.0 ppb	< 10.0 ppb
Trace Impurities – Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities – Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb

>>> Continued on page 2 >>>

Recd. by RP on 9/11/24

E3793

Acetone
CMOS



Material No.: 9005-05
Batch No.: 24E0761004

Test	Specification	Result
Trace Impurities – Molybdenum (Mo)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Nickel (Ni)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities – Potassium (K)	≤ 10.0 ppb	< 10.0 ppb
Trace Impurities – Silicon (Si)	≤ 50 ppb	< 10 ppb
Trace Impurities – Silver (Ag)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Sodium (Na)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Strontium (Sr)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Tantalum (Ta)	≤ 50.0 ppb	< 5.0 ppb
Trace Impurities – Thallium (Tl)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Tin (Sn)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Zinc (Zn)	≤ 20.0 ppb	7.9 ppb
Trace Impurities – Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count – 0.5 µm and greater (Rion KS42AF)	≤ 100 par/ml	8 par/ml
Particle Count – 1.0 µm and greater (Rion KS42AF)	≤ 8 par/ml	2 par/ml

>>> Continued on page 3 >>>

Acetone
CMOS



Material No.: 9005-05
Batch No.: 24E0761004

Test	Specification	Result
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For Microelectronic Use
Country of Origin: USA
Packaging Site: Paris Mfg Ctr & DC

Michelle Bales
Sr. Manager, Quality Assurance

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis



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

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	>= 99.4 %	99.8 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.2 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 %	0.2 %
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

E3815

Jamie Croak
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200, Radnor, PA, 19087, U.S.A. Phone 610.386.1700

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

avantor



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

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected forwater)	>= 99.4 %	99.8 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.2 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titration Acid (µeq/g)	<= 0.3	0.2
Titration Base (µeq/g)	<= 0.6	<0.1
Water (H ₂ O)	<= 0.5 %	0.2 %
FID-Sensitive Impurities (as 2-Octanol)Single Impurity Peak (ng/mL)	<= 5	<1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	1

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

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

Recd by RP on 10/9/24

E 3818

J. Croak

Jamie Croak
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200, Radnor, PA, 19087, U.S.A. Phone 610.386.1700

Sulfuric Acid

BAKER INSTRA-ANALYZED® Reagent

For Trace Metal Analysis

Low Selenium

avantorsTM



Material No.: 9673-33

Batch No.: 0000250349

Manufactured Date: 2019/12/17

Retest Date: 2024/12/15

Revision No: 1

Certificate of Analysis

Test	Specification	Result
ACS - Assay (H ₂ SO ₄)	95.0 - 98.0 %	96.5
Appearance	Passes Test	PT
ACS - Color (APHA)	<= 10	5
ACS - Residue after Ignition	<= 3 ppm	1
ACS - Substances Reducing Permanganate (as SO ₂)	<= 2 ppm	< 2
Ammonium (NH ₄)	<= 1 ppm	< 1
Chloride (Cl)	<= 0.1 ppm	< 0.1
Nitrate (NO ₃)	<= 0.2 ppm	< 0.1
Phosphate (PO ₄)	<= 0.5 ppm	< 0.1
Trace Impurities - Aluminum (Al)	<= 30.0 ppb	0.2
Arsenic and Antimony (as As)	<= 4 ppb	< 2
Trace Impurities - Barium (Ba)	<= 10.0 ppb	< 1.0
Trace Impurities - Beryllium (Be)	<= 10.0 ppb	< 1.0
Trace Impurities - Bismuth (Bi)	<= 10.0 ppb	< 1.0
Trace Impurities - Boron (B)	<= 10.0 ppb	< 5.0
Trace Impurities - Cadmium (Cd)	<= 2.0 ppb	< 0.3
Trace Impurities - Calcium (Ca)	<= 50.0 ppb	2.9
Trace Impurities - Chromium (Cr)	<= 6.0 ppb	< 0.4
Trace Impurities - Cobalt (Co)	<= 0.5 ppb	< 0.3
Trace Impurities - Copper (Cu)	<= 1.0 ppb	< 0.1
Trace Impurities - Gallium (Ga)	<= 10.0 ppb	< 1.0
Trace Impurities - Germanium (Ge)	<= 10.0 ppb	< 10.0
Trace Impurities - Gold (Au)	<= 10.0 ppb	< 0.2
Heavy Metals (as Pb)	<= 500 ppb	< 100

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

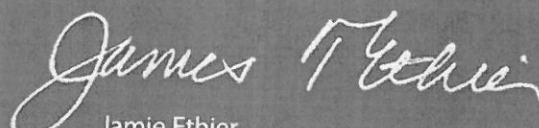
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

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

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

For Laboratory, Research or Manufacturing Use

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


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

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

Receive date
9/29/24
Met dig.

 avantor™



Material No.: 9530-33
Batch No.: 22F0762009
Manufactured Date: 2022-05-10
Retest Date: 2027-05-09
Revision No.: 0

M6109
M6110
M6111

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 ppm
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.190
ACS – Bromide (Br)	≤ 0.005 %	< 0.005 %
ACS – Extractable Organic Substances	≤ 5 ppm	< 1 ppm
ACS – Free Chlorine (as Cl ₂)	≤ 0.5 ppm	< 0.5 ppm
Phosphate (PO ₄)	≤ 0.05 ppm	< 0.03 ppm
Sulfate (SO ₄)	≤ 0.5 ppm	< 0.3 ppm
Sulfite (SO ₃)	≤ 0.8 ppm	0.3 ppm
Ammonium (NH ₄)	≤ 3 ppm	< 1 ppm
Trace Impurities – Arsenic (As)	≤ 0.010 ppm	< 0.003 ppm
Trace Impurities – Aluminum (Al)	≤ 10.0 ppb	0.8 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 3.0 ppb
Trace Impurities – Barium (Ba)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Beryllium (Be)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Bismuth (Bi)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Boron (B)	≤ 20.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	14.9 ppb
Trace Impurities – Chromium (Cr)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities – Cobalt (Co)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gallium (Ga)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Germanium (Ge)	≤ 3.0 ppb	< 2.0 ppb
Trace Impurities – Gold (Au)	≤ 4.0 ppb	0.2 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities – Iron (Fe)	≤ 15 ppb	6 ppb

>>> Continued on page 2 >>>

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis



Material No.: 9530-33
Batch No.: 22F0762009

Test	Specification	Result
Trace Impurities – Lead (Pb)	≤ 1.0 ppb	< 0.5 ppb
Trace Impurities – Lithium (Li)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Magnesium (Mg)	≤ 10.0 ppb	0.8 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	0.1 ppb
Trace Impurities – Molybdenum (Mo)	≤ 10.0 ppb	< 3.0 ppb
Trace Impurities – Nickel (Ni)	≤ 4.0 ppb	< 0.3 ppb
Trace Impurities – Niobium (Nb)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Potassium (K)	≤ 9.0 ppb	< 2.0 ppb
Trace Impurities – Selenium (Se), For Information Only		< 1.0 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	1.0 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Sodium (Na)	≤ 100.0 ppb	0.7 ppb
Trace Impurities – Strontium (Sr)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Tantalum (Ta)	≤ 1.0 ppb	< 0.9 ppb
Trace Impurities – Thallium (Tl)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Tin (Sn)	≤ 5.0 ppb	< 0.8 ppb
Trace Impurities – Titanium (Ti)	≤ 1.0 ppb	0.2 ppb
Trace Impurities – Vanadium (V)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Zinc (Zn)	≤ 5.0 ppb	0.8 ppb
Trace Impurities – Zirconium (Zr)	≤ 1.0 ppb	< 0.1 ppb

>>> Continued on page 3 >>>

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

 **avantor™**

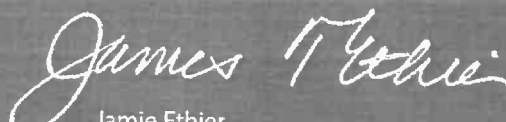


Material No.: 9530-33
Batch No.: 22F0762009

Test	Specification	Result
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For Laboratory, Research, or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications
Storage Condition: Store below 25 °C.

Country of Origin: USA
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:

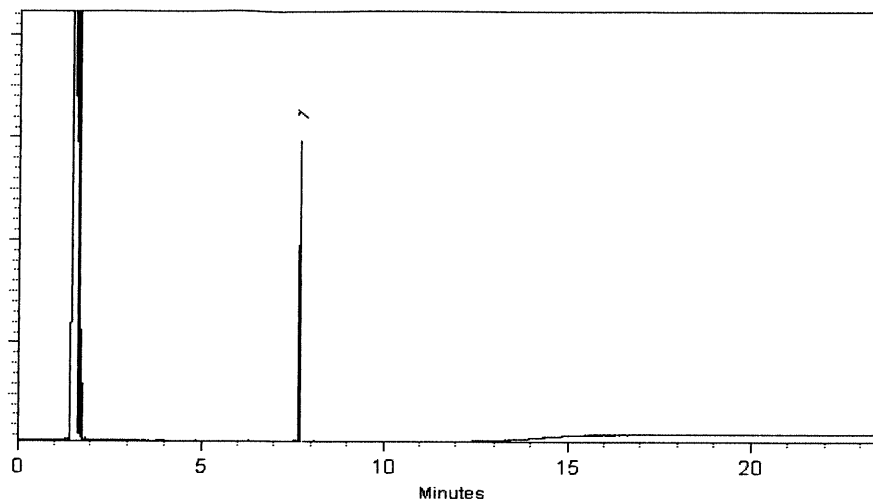
250°C

Det. Temp:

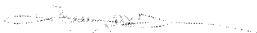
330°C

Det. Type:

FID

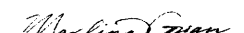


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


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



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

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 32062 **Lot No.:** A0155055

Description : Herbicide Mix #4/ME (Methyl Ester)

Herbicide Mix #4/ME (Methyl Ester) 200µg/mL,
Hexane/Methyl-tert-butyl-ether, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : November 30, 2026 **Storage:** 10°C or colder

P12616 / (5)
↓
P12620
✓ *Paul* =
7/5/2023

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)			
1	3,5-Dichlorobenzoic acid methyl ester CAS # 2905-67-1 (Lot 3903900) Purity 99%	200.0 µg/mL	+/- 1.4182	µg/mL	Gravimetric	
			+/- 6.7507	µg/mL	Unstressed	
			+/- 6.7507	µg/mL	Stressed	
2	4-Nitroanisole CAS # 100-17-4 (Lot 24765/7) Purity 99%	200.0 µg/mL	+/- 1.4182	µg/mL	Gravimetric	
			+/- 6.7507	µg/mL	Unstressed	
			+/- 6.7507	µg/mL	Stressed	
3	Pentachloroanisole CAS # 1825-21-4 (Lot 7921100) Purity 99%	200.0 µg/mL	+/- 1.4182	µg/mL	Gravimetric	
			+/- 6.7507	µg/mL	Unstressed	
			+/- 6.7507	µg/mL	Stressed	
4	Chloramben methyl ester CAS # 7286-84-2 (Lot 6487100) Purity 98%	199.9 µg/mL	+/- 1.4176	µg/mL	Gravimetric	
			+/- 6.7480	µg/mL	Unstressed	
			+/- 6.7480	µg/mL	Stressed	
5	Bentazon methyl ester CAS # 61592-45-8 (Lot 817100) Purity 99%	200.0 µg/mL	+/- 1.4182	µg/mL	Gravimetric	
			+/- 6.7507	µg/mL	Unstressed	
			+/- 6.7507	µg/mL	Stressed	
6	Picloram methyl ester CAS # 14143-55-6 (Lot 386-21B) Purity 98%	201.9 µg/mL	+/- 1.4315	µg/mL	Gravimetric	
			+/- 6.8141	µg/mL	Unstressed	
			+/- 6.8141	µg/mL	Stressed	
7	DCPA methyl ester (Chlorthal-dimethyl) CAS # 1861-32-1 (Lot 8008700) Purity 99%	200.0 µg/mL	+/- 1.4182	µg/mL	Gravimetric	
			+/- 6.7507	µg/mL	Unstressed	
			+/- 6.7507	µg/mL	Stressed	

8	Acifluorfen methyl ester	200.0 µg/mL	+/- 1.4182	µg/mL	Gravimetric
	CAS # 50594-67-7 (Lot 6282300)		+/- 6.7507	µg/mL	Unstressed
	Purity 99%		+/- 6.7507	µg/mL	Stressed

Solvent: Hexane/Methyl-tert-butyl-ether
CAS # 110-54-3/1634-04-4
Purity 99%

Column:

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

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

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

Inj. Temp:

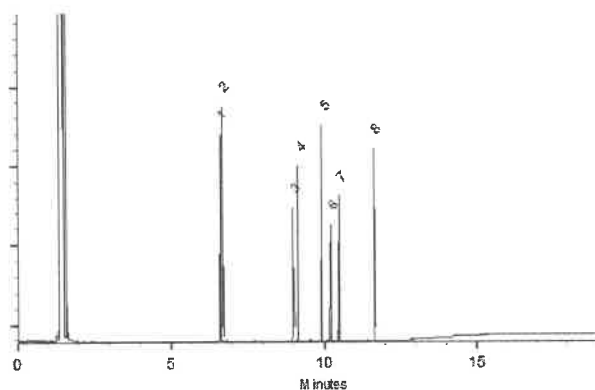
250°C

Det. Temp:

330°C

Det. Type:

FID



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

Michael Maje

Date Mixed: 14-Nov-2019 **Balance:** 1128353505

Justine Albertson
Justine Albertson - Operations Tech-ARM QC

Date Passed: 18-Nov-2019

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



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

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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. : 32055 **Lot No.:** A0199693

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 : July 31, 2030 **Storage:** 10°C or colder

Handling: This product is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty* (95% C.L.; K=2)
1	Dicamba methyl ester	6597-78-0	1813500	99%	202.0 µg/mL	+/- 3.4272
2	Dichlorprop methyl ester	57153-17-0	8578700	98%	201.9 µg/mL	+/- 3.4251
3	2,4-D methyl ester	1928-38-7	10048000	99%	202.0 µg/mL	+/- 3.4272
4	2,4,5-TP (silvex) methyl ester	4841-20-7	504400	99%	202.0 µg/mL	+/- 3.4272
5	2,4,5-T methyl ester	1928-37-6	6875800	98%	201.9 µg/mL	+/- 3.4251
6	Dinoseb methyl ether	6099-79-2	9239100	99%	202.0 µg/mL	+/- 3.4272
7	2,4-DB methyl ester	18625-12-2	6847200	99%	202.0 µg/mL	+/- 3.4272

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

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

P12660
↓
P12664

AJ
07/11/23

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:

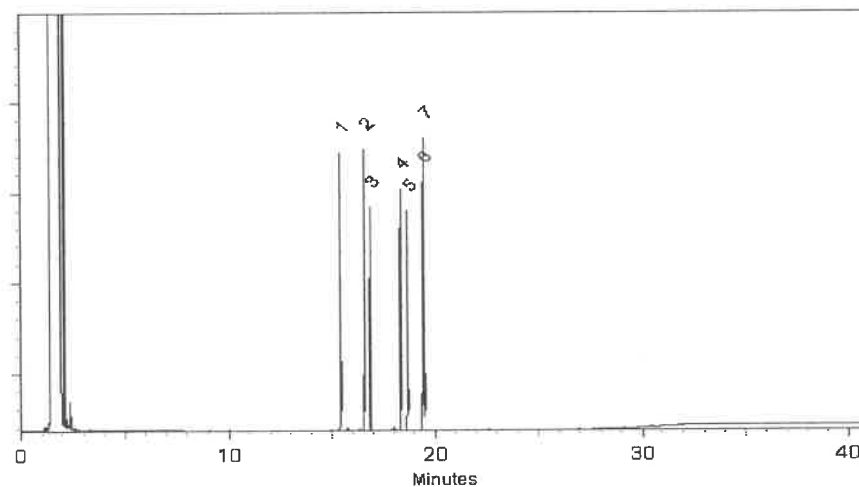
FID

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.

Nick Yaw
Nick Yaw - Operations Tech I

Date Mixed: 07-Jul-2023

Balance Serial # 1128360905

Christie Mills
Christie Mills - Operations Lead Tech - ARM QC

Date Passed: 11-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.

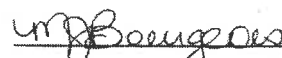
Expiration of Certification:

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

P12766
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P12785
✓
9.11.23
20

ISO 17034

Reference Material Certificate
Product Information Sheet

Product Name: Chlorinated Herbicides Standard

Lot Number: 0006750243

Product Number: HBM-8151A-1

Lot Issue Date: 07-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	100.1	± 0.5 µg/mL	050594-66-6	NT02057
bentazon	100.1	± 0.5 µg/mL	025057-89-0	RM20289
chloramben	100.4	± 0.5 µg/mL	000133-90-4	RM02698
2,4-D	100.1	± 0.5 µg/mL	000094-75-7	RM17172
dalapon	100.4	± 0.5 µg/mL	000075-99-0	RM21030
2,4-DB	100.1	± 0.5 µg/mL	000094-82-6	RM02866
tetrachloroterephthalic acid	100.3	± 0.5 µg/mL	002136-79-0	RM13887
dicamba	100.2	± 0.5 µg/mL	001918-00-9	RM20089
3,5-dichlorobenzoic acid	100.0	± 0.5 µg/mL	000051-36-5	RM02768
dichlorprop	100.0	± 0.5 µg/mL	000120-36-5	RM20896
dinoseb	100.0	± 0.5 µg/mL	000088-85-7	RM20667
MCPA	10004	± 50 µg/mL	000094-74-6	RM12220
MCPP (mecoprop)	10037	± 50 µg/mL	000093-65-2	RM09273
4-nitrophenol	100.1	± 0.5 µg/mL	000100-02-7	RM03752
pentachlorophenol	100.1	± 0.5 µg/mL	000087-86-5	RM02474
picloram	100.4	± 0.5 µg/mL	001918-02-1	RM20442
silvex	100.1	± 0.5 µg/mL	000093-72-1	RM20208
2,4,5-T	100.4	± 0.5 µg/mL	000093-76-5	NT01808

Matrix: methanol (methyl alcohol)

Description:

This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

**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

P12766 / (20)
↓
P12785 / 1

9/11/2023



ISO 17034
Cert No. AR-1936

RM was produced in accordance with the TUV/SUD registered ISO 9001:2015 Quality Management System. Cert# 951215321

Page: 2 of 2

www.agilent.com/quality/
CSD-QA-015.2

ISO 17025
Cert No. AT-1937

P12766
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P12785
✓
9.11.23
20

ISO 17034

Reference Material Certificate
Product Information Sheet

Product Name: Chlorinated Herbicides Standard

Lot Number: 0006750243

Product Number: HBM-8151A-1

Lot Issue Date: 07-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	100.1	± 0.5 µg/mL	050594-66-6	NT02057
bentazon	100.1	± 0.5 µg/mL	025057-89-0	RM20289
chloramben	100.4	± 0.5 µg/mL	000133-90-4	RM02698
2,4-D	100.1	± 0.5 µg/mL	000094-75-7	RM17172
dalapon	100.4	± 0.5 µg/mL	000075-99-0	RM21030
2,4-DB	100.1	± 0.5 µg/mL	000094-82-6	RM02866
tetrachloroterephthalic acid	100.3	± 0.5 µg/mL	002136-79-0	RM13887
dicamba	100.2	± 0.5 µg/mL	001918-00-9	RM20089
3,5-dichlorobenzoic acid	100.0	± 0.5 µg/mL	000051-36-5	RM02768
dichlorprop	100.0	± 0.5 µg/mL	000120-36-5	RM20896
dinoseb	100.0	± 0.5 µg/mL	000088-85-7	RM20667
MCPA	10004	± 50 µg/mL	000094-74-6	RM12220
MCPP (mecoprop)	10037	± 50 µg/mL	000093-65-2	RM09273
4-nitrophenol	100.1	± 0.5 µg/mL	000100-02-7	RM03752
pentachlorophenol	100.1	± 0.5 µg/mL	000087-86-5	RM02474
picloram	100.4	± 0.5 µg/mL	001918-02-1	RM20442
silvex	100.1	± 0.5 µg/mL	000093-72-1	RM20208
2,4,5-T	100.4	± 0.5 µg/mL	000093-76-5	NT01808

Matrix: methanol (methyl alcohol)

Description:

This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

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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.

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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.

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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

P12766 / (20)
↓
P12785 / 1

9/11/2023



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

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CSD-QA-015.2

ISO 17025
Cert No. AT-1937



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

P13697 } Y.P.
↓
P13515 } 08/15/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2,4-dichlorophenylacetic acid	19719-28-9	STBK3827	99%	200.0 µg/mL	+/- 2.7154

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

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Specific Reference Material Notes:

Failure to derivatize this standard will lead to incorrect quantitative results.

Quality Confirmation Test

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

Flow Rate:
1.0 ml/min.

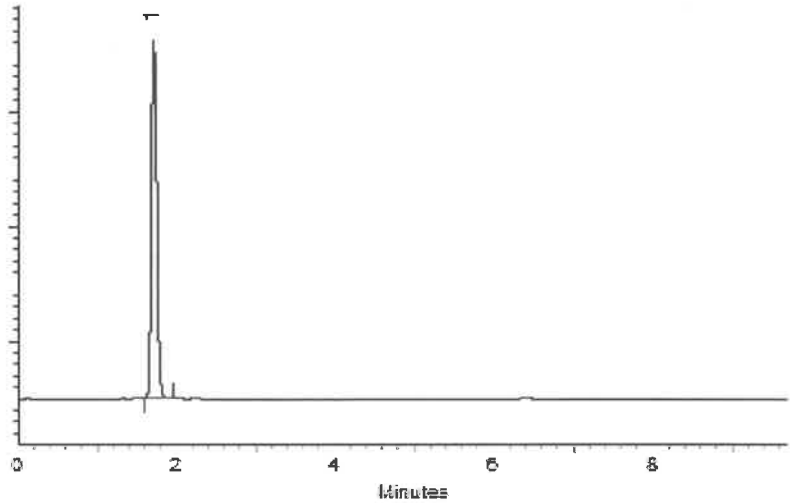
Mobile Phase A:
0.14% H₃PO₄ in water

Mobile Phase B:
acetonitrile

Mobile Phase Composition:
90%B Isocratic

Det. Type:
Wavelength: 220 & 254 nm

Inj. Vol
5µl

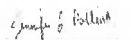


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Ethan Winiarski - Operations Tech I

Date Mixed: 11-Jun-2024

Balance Serial # B345965662


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-Jun-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- 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.



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Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

P13697 } Y.P.
↓
P13515 } 08/15/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2,4-dichlorophenylacetic acid	19719-28-9	STBK3827	99%	200.0 µg/mL	+/- 2.7154

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

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Specific Reference Material Notes:

Failure to derivatize this standard will lead to incorrect quantitative results.

Quality Confirmation Test

Column:

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

Flow Rate:

1.0 ml/min.

Mobile Phase A:

0.14% H₃PO₄ in water

Mobile Phase B:

acetonitrile

Mobile Phase Composition:

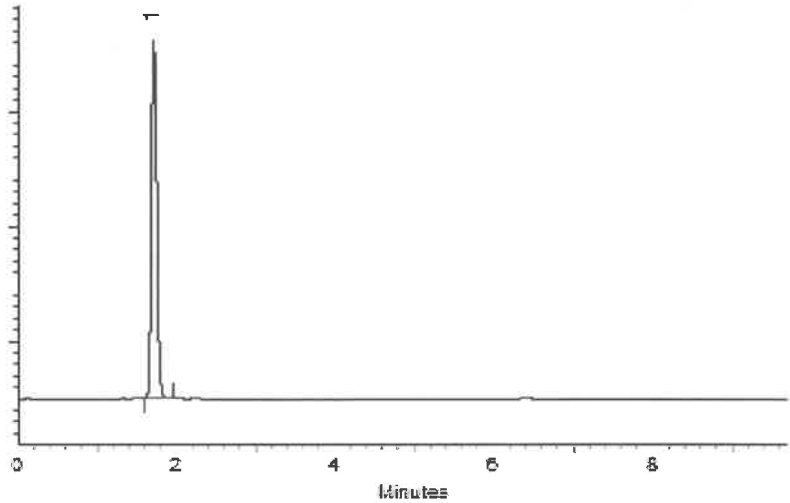
90%B Isocratic

Det. Type:

Wavelength: 220 & 254 nm

Inj. Vol

5µl

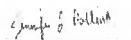


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Ethan Winiarski - Operations Tech I

Date Mixed: 11-Jun-2024

Balance Serial # B345965662


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-Jun-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- 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.



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www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

P13697 } Y.P.
↓
P13515 } 08/15/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2,4-dichlorophenylacetic acid	19719-28-9	STBK3827	99%	200.0 µg/mL	+/- 2.7154

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

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Specific Reference Material Notes:

Failure to derivatize this standard will lead to incorrect quantitative results.

Quality Confirmation Test

Column:

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

Flow Rate:

1.0 ml/min.

Mobile Phase A:

0.14% H₃PO₄ in water

Mobile Phase B:

acetonitrile

Mobile Phase Composition:

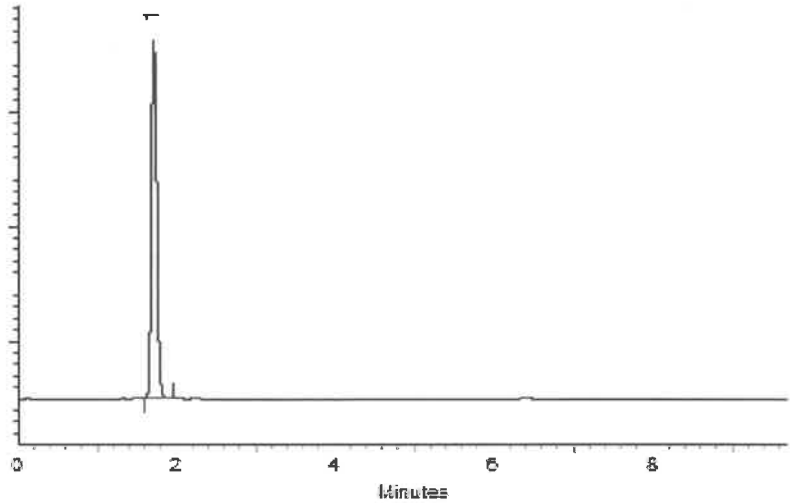
90%B Isocratic

Det. Type:

Wavelength: 220 & 254 nm

Inj. Vol

5µl

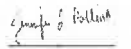


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Ethan Winiarski - Operations Tech I

Date Mixed: 11-Jun-2024

Balance Serial # B345965662


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-Jun-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
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- Purity of isomeric compounds is reported as the sum of the isomers.
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Certified Uncertainty Value Notes:

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k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

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Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

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

P13697 } Y.P.
↓
P13515 } 08/15/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2,4-dichlorophenylacetic acid	19719-28-9	STBK3827	99%	200.0 µg/mL	+/- 2.7154

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

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Specific Reference Material Notes:

Failure to derivatize this standard will lead to incorrect quantitative results.

Quality Confirmation Test

Column:

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

Flow Rate:

1.0 ml/min.

Mobile Phase A:

0.14% H₃PO₄ in water

Mobile Phase B:

acetonitrile

Mobile Phase Composition:

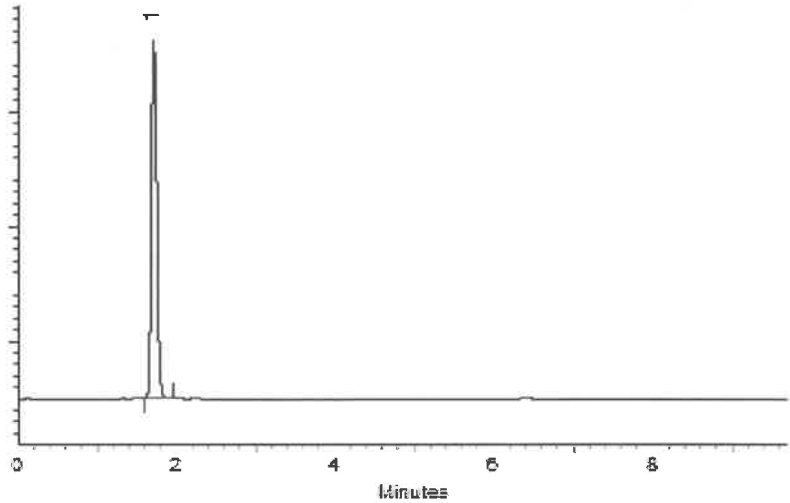
90%B Isocratic

Det. Type:

Wavelength: 220 & 254 nm

Inj. Vol

5µl

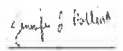


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Ethan Winiarski - Operations Tech I

Date Mixed: 11-Jun-2024

Balance Serial # B345965662


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-Jun-2024

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

General Certified Reference Material Notes

Expiration Notes:

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

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- 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.

Reference Material Certificate
Product Information Sheet

Product Name: Chlorinated Herbicides Standard

Lot Number: 0006750243

Product Number: HBM-8151A-1

Lot Issue Date: 07-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	100.1	±	0.5 µg/mL	050594-66-6	NT02057
bentazon	100.1	±	0.5 µg/mL	025057-89-0	RM20289
chloramben	100.4	±	0.5 µg/mL	000133-90-4	RM02698
2,4-D	100.1	±	0.5 µg/mL	000094-75-7	RM17172
dalapon	100.4	±	0.5 µg/mL	000075-99-0	RM21030
2,4-DB	100.1	±	0.5 µg/mL	000094-82-6	RM02866
tetrachloroterephthalic acid	100.3	±	0.5 µg/mL	002136-79-0	RM13887
dicamba	100.2	±	0.5 µg/mL	001918-00-9	RM20089
3,5-dichlorobenzoic acid	100.0	±	0.5 µg/mL	000051-36-5	RM02768
dichlorprop	100.0	±	0.5 µg/mL	000120-36-5	RM20896
dinoseb	100.0	±	0.5 µg/mL	000088-85-7	RM20667
MCPA	10004	±	50 µg/mL	000094-74-6	RM12220
MCPP (mecoprop)	10037	±	50 µg/mL	000093-65-2	RM09273
4-nitrophenol	100.1	±	0.5 µg/mL	000100-02-7	RM03752
pentachlorophenol	100.1	±	0.5 µg/mL	000087-86-5	RM02474
picloram	100.4	±	0.5 µg/mL	001918-02-1	RM20442
silvex	100.1	±	0.5 µg/mL	000093-72-1	RM20208
2,4,5-T	100.4	±	0.5 µg/mL	000093-76-5	NT01808

Matrix: methanol (methyl alcohol)

Description:

This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

P13517
P13518 } ②
✓ *RAUF*
9/4/2024



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
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Tel: (800)356-1688
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Certificate of Analysis



ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01



ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 32254 **Lot No.:** A0148063
Description : Dalapon methyl ester Standard
Dalapon methyl ester 1000µg/mL, Methanol, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : April 30, 2026 **Storage:** 10°C or colder
Handling: This product is photosensitive.

Received by
SG on 8/16/19
P8828
P8826

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Dalapon methyl ester CAS # 17640-02-7 Purity 98% (Lot 1764600)	999.6 µg/mL	+/- 10.0697 µg/mL Gravimetric +/- 34.4896 µg/mL Unstressed +/- 34.4896 µg/mL Stressed

Solvent: Methanol
CAS # 67-56-1
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:

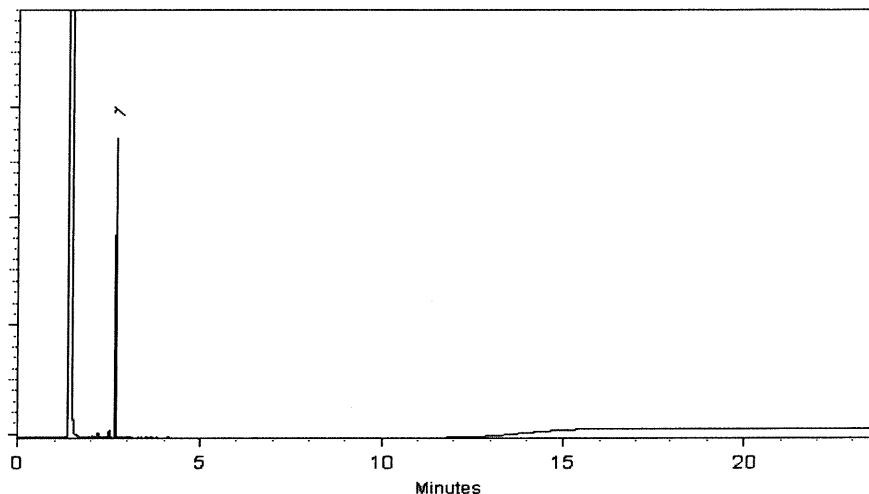
250°C

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.

Russ Bookhamer - Operations Technician I

Date Mixed: 11-Apr-2019

Balance: 1127510105

Feng-Yin Lo - QC Analyst

Date Passed: 15-Apr-2019

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



CERTIFIED REFERENCE MATERIAL

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

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Received by
SG on 9/10/19
P8892
P8896

Catalog No. : 32059 **Lot No.:** A0152499

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 : September 30, 2026 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)							
1	MCPP (Mecoprop) methyl ester		20,004.0 μg/mL	+/-	185.1208	μg/mL	Gravimetric				
	CAS #	23844-56-6 (Lot 8685200)						+/-	685.5986	μg/mL	Unstressed
	Purity	99%						+/-	685.5986	μg/mL	Stressed
2	MCPA methyl ester		20,012.0 μg/mL	+/-	185.1948	μg/mL	Gravimetric				
	CAS #	2436-73-9 (Lot 7964600)						+/-	685.8728	μg/mL	Unstressed
	Purity	99%						+/-	685.8728	μg/mL	Stressed
Solvent:	Hexane										
	CAS #	110-54-3									
	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:

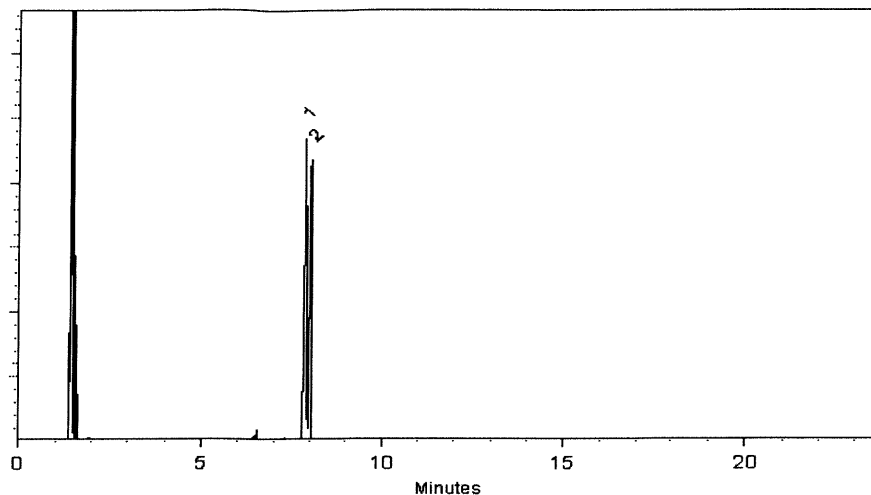
250°C

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.

Russ Bookhamer - Operations Technician I

Date Mixed: 03-Sep-2019

Balance: 1128360905

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 05-Sep-2019

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



CERTIFIED REFERENCE MATERIAL

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

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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

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

Catalog No. : 32050 Lot No.: A0152705
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 : June 30, 2026 Storage: 10°C or colder
Handling: This product is photosensitive.

Received by
SG on 10/11/19
P8999
-
P9008

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	2,4-Dichlorophenyl acetic acid methyl ester CAS # 55954-23-9 (Lot CSC42194-01) Purity 99%	200.0 µg/mL	+/- 1.4182 µg/mL Gravimetric +/- 6.7507 µg/mL Unstressed +/- 6.7507 µg/mL Stressed

Solvent: Hexane
CAS # 110-54-3
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:

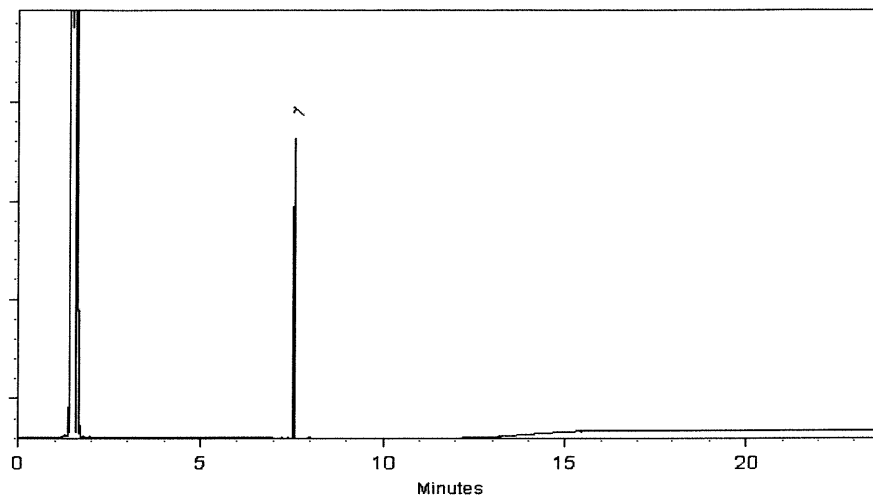
250°C

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.

Cydnei L. Crust
Cydnei L. Crust - Mix Technician

Date Mixed: 09-Sep-2019

Balance: B707717271

Fang-Yun Lo
Fang-Yun Lo - GC Analyst

Date Passed: 11-Sep-2019

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



SHIPPING DOCUMENTS

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Walsh Construction Company
ADDRESS: 150 CLOVE ROAD, 11th FLOOR
CITY LITTLE FALLS STATE: NJ ZIP: 07424
ATTENTION:
PHONE: 201-691-6800 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: C547A Construction of
PROJECT NO.: 220084 LOCATION: Shaft 18B
PROJECT MANAGER: Jesse SYLVESTRI
e-mail: JSYLVESTRI@WALSHGROUP.COM
PHONE: 201-681-9740 FAX:

CLIENT BILLING INFORMATION

BILL TO: JESSE SYLVESTRI PO#:
ADDRESS: 150 CLOVE ROAD, 11th FLOOR
CITY LITTLE FALLS STATE: NJ ZIP: 07424
ATTENTION: Jesse SYLVESTRI PHONE: 201-681-9740

DATA TURNAROUND INFORMATION

FAX (RUSH) _____ DAYS*
HARDCOPY (DATA PACKAGE): _____ DAYS*
EDD: Standard TAT DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

☐ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data)
☒ Level 2 (Results + QC) ☐ NJ Reduced ☐ US EPA CLP
☐ Level 3 (Results + QC) ☐ NYS ASP A ☐ NYS ASP B
+ Raw Data) ☐ Other _____
☐ EDD FORMAT

PRESERVATIVES

COMMENTS

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	
1.	WC-1 (5.5)	S		✓	11/5/24	1155	5	X									
2.	WC-1 (3.5)	S		✓		1225	5	X									
3.	WC-1 (0-6)	S	✓			1240	10		X	X	X	X	X	X	X	X	
4.	WC-2 (2)	S		✓		1000	5	X	1								
5.	WC-2 (4)	S		✓		1020	5	X									
6.	WC-2 (0-6)	S	✓			1045	10		X	X	X	X	X	X	X	X	
7.	WC-3 (5)	S		✓		815	5	X									
8.	WC-3 (3)	S		✓		845	5	X									
9.	WC-3 (0-6)	S	✓			910	10		X	X	X	X	X	X	X	X	
10.																	

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

RELINQUISHED BY SAMPLER: 1. <u>WJS</u>	DATE/TIME: 11/5/24 1:15pm	RECEIVED BY: 1. <u>Benie DE</u>	Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP _____ °C Comments: <u>Additional Analysis: Paint Filter 9095A Total Solids 5m 254.03</u> <u>Total Volatile Solids 5m 254.03 Ammonia + Nitrogen 350.1</u> <u>Chemical Oxygen Demand 410.4 O.I. and Grease 907.13</u> <u>Full analysis list in email from Bill Fitchett 11/5/24</u>
RELINQUISHED BY SAMPLER: 2. <u>Benie DE</u>	DATE/TIME: 11-5-24 1406	RECEIVED BY: 2. <u>[Signature]</u> 1406	
RELINQUISHED BY SAMPLER: 3. <u>[Signature]</u>	DATE/TIME: 11-5-24 1732	RECEIVED BY: 3. <u>[Signature]</u>	

Page ____ of ____

CLIENT: ☐ Hand Delivered ☐ Other

Shipment Complete

☐ YES ☐ NO



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Laboratory Certification

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : P4722	WALS01	Order Date : 11/5/2024 3:33:08 PM	Project Mgr : Yazmeen
Client Name : Walsh Construction Compai		Project Name : NYCDEP C547A - Shafts 1	Report Type : Level 2
Client Contact : Kayla Timony		Receive DateTime : 11/5/2024 5:32:00 PM	EDD Type : Excel NY
Invoice Name : Walsh Construction Compai		Purchase Order :	Hard Copy Date :
Invoice Contact : Kayla Timony			Date Signoff : 11/6/2024 11:17:21 AM

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
P4722-01	WC-1(5.5)	Solid	11/05/2024	11:55					
					VOC-TCLVOA-10		8260D		10 Bus. Days
P4722-06	WC-2(2)	Solid	11/05/2024	10:00					
					VOC-TCLVOA-10		8260D		10 Bus. Days
P4722-11	WC-3(5)	Solid	11/05/2024	08:15					
					VOC-TCLVOA-10		8260D		10 Bus. Days
P4722-17	WC-1(3.5)	Solid	11/05/2024	12:25					
					VOC-TCLVOA-10		8260D		10 Bus. Days
P4722-19	WC-2(4)	Solid	11/05/2024	10:20					
					VOC-TCLVOA-10		8260D		10 Bus. Days
P4722-21	WC-3(3)	Solid	11/05/2024	08:45					
					VOC-TCLVOA-10		8260D		10 Bus. Days

LOGIN REPORT/SAMPLE TRANSFER

Order ID : P4722	WALS01	Order Date : 11/5/2024 3:33:08 PM	Project Mgr : Yazmeen
Client Name : Walsh Construction Compai		Project Name : NYCDEP C547A - Shafts 1	Report Type : Level 2
Client Contact : Kayla Timony		Receive DateTime : 11/5/2024 5:32:00 PM	EDD Type : Excel NY
Invoice Name : Walsh Construction Compai		Purchase Order :	Hard Copy Date :
Invoice Contact : Kayla Timony			Date Signoff : 11/6/2024 11:17:21 AM

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
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Relinquished By :



Date / Time : 11/6/24 12:10

Received By :

Roma 123210

Date / Time :

11/06/24

Storage Area : VOA Refridgerator Room