

DATA PACKAGE GC SEMI-VOLATILES

PROJECT NAME : NJ WASTE WATER PT

**CHEMTECH CONSULTING GROUP
284 Sheffield St,**

**Mountainside, NJ - 07092
Phone No: 908-789-8900**

**ORDER ID : P3845
ATTENTION : QA Officer**



Laboratory Certification ID # 20012

1) VOCGC GROUP 1 Data	2
2) Signature Page	4
3) Case Narrative	5
4) Qualifier Page	7
5) Conformance/Non Conformance	8
6) QA Checklist	10
7) Chronicle	11
8) Hit Summary	12
9) QC Data Summary For VOCGC Group 1	13
9.1) LCS/LCSD Summary	14
9.2) Method Blank Summary	16
10) Sample Data	17
10.1) RR-8011-WP	18
10.2) RR-8011-WPDL	21
11) Calibration Data Summary	24
11.1) Initial Calibration Data	25
11.1.1) PR091124	25
11.2) Continued Calibration Data	45
11.2.1) PR068527.D	45
11.2.2) PR068534.D	51
11.3) Analytical Seq	57
12) Compound Detection Summary	59
13) QC Sample Data	63
13.1) Method Blank Data	64
13.2) LCS Data	67
13.3) LCSD Data	70
14) Manual Integration	73
15) Analytical Runlogs	74
16) Extraction Logs	76
16.1) PB163254.pdf	76
16.2) PB163254IC.pdf	79
17) Standard Prep Logs	80
18) Shipping Document	99
18.1) Chain Of Custody	100
18.2) Lab Certificate	102

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

Cover Page

Order ID : P3845

Project ID : NJ Waste Water PT

Client : Chemtech Consulting Group

Lab Sample Number

P3845-01
P3845-02
P3845-03
P3845-04
P3845-05
P3845-06
P3845-07
P3845-08
P3845-09
P3845-10
P3845-11
P3845-12
P3845-13
P3845-14
P3845-15
P3845-16
P3845-17
P3845-18
P3845-19
P3845-20
P3845-21
P3845-22

Client Sample Number

PT-VOA-WP
PT-VOA-WP
PT-BN-WP
PT-BN-WP
PT-BN-WP
PT-ACIDS-WP
PT-ACIDS-WP
PT-ACIDS-WP
PT-PEST-WP
PT-PEST-WP
PT-CHLR-WP
PT-CHLR-WP
PT-TXP-WP
PT-TXP-WP
PT-PCBW-WP
PT-PCBW-WP
PT-HERB-WP
RR-GAS-WP
RR-DIES-WP
RR-8011-WP
RR-PAH-WP
RR-TRIAZINE-WP

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

Signature : _____

Date: 10/24/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

CASE NARRATIVE

Chemtech Consulting Group

Project Name: NJ Waste Water PT

Project # N/A

Chemtech Project # P3845

Test Name: VOCGC Group 1

A. Number of Samples and Date of Receipt:

22 Water samples were received on 09/05/2024.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Diesel Range Organics, Gasoline Range Organics, Herbicide group1, PCB, PESTICIDE Group1, PESTICIDE Group2, PESTICIDE Group3, SVOCMS Group1, SVOCMS Group2, SVOCMS Group3, SVOCMS Group4, SVOCMS Group5, SVOCMS Group6, VOCGC Group 1 and VOCMS Group1. This data package contains results for VOCGC Group 1.

C. Analytical Techniques:

The analyses were performed on instrument GCECD_R. The front column is ZB-MR1 which is 30 meters, 0.32 mm ID, 0.5 um df, Catalogue # 7HM-G016-17. The rear column is ZB-MR2 which is 30 meters, 0.32 mm ID, 0.25 µm; Catalogue # 7HM-G017-11. The analysis of VOCGC Group 1s was based on method 8011 and extraction was done based on method 3510.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Retention Times were acceptable for all samples.

The RPD met criteria .

The Blank Spike met requirements for all samples .

The Blank Spike Duplicate met requirements for all samples .

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

The Initial Calibration met the requirements .

The Continuous Calibration met the requirements .

Sample RR-8011-WP was diluted due to high concentration.

E. Additional Comments:

F. Manual Integration Comments:

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



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

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

Signature_____

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



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

GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: P3845

MATRIX: Water

METHOD: 8011/3510

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



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

GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY (CONTINUED)

NA NO YES

ADDITIONAL COMMENTS:

Sample RR-8011-WP was diluted due to high concentration.

QA REVIEW

Date

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: P3845

Completed

For thorough review, the report must have the following:

GENERAL:

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

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

Is the chain of custody signed and complete ✓

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

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

COVER PAGE:

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

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

CHAIN OF CUSTODY:

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

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

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

Were the samples received within hold time ✓

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

ANALYTICAL:

Was method requirement followed? ✓

Was client requirement followed? ✓

Does the case narrative summarize all QC failure? ✓

All runlogs and manual integration are reviewed for requirements ✓

All manual calculations and /or hand notations verified ✓

QA Review Signature: SOHIL JODHANI

Date: 10/24/2024

LAB CHRONICLE

OrderID:	P3845	OrderDate:	9/5/2024 2:19:00 PM					
Client:	Chemtech Consulting Group	Project:	NJ Waste Water PT					
Contact:	QA Officer	Location:	QA Office, VOA Lab					
<hr/>								
LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P3845-18	RR-GAS-WP	Water			09/03/24			09/05/24
			Gasoline Range Organics	8015D			09/09/24	
			Gasoline Range Organics	8015D			09/11/24	
P3845-18RE	RR-GAS-WP	Water			09/03/24			09/05/24
			Gasoline Range Organics	8015D			09/09/24	
			Gasoline Range Organics	8015D			09/11/24	
P3845-19	RR-DIES-WP	Water			09/03/24			09/05/24
			Diesel Range Organics	8015D		09/09/24	09/10/24	
P3845-20	RR-8011-WP	WATER			09/03/24			09/05/24
			VOCGC Group 1	8011		09/11/24	09/11/24	
P3845-20DL	RR-8011-WPDL	WATER			09/03/24			09/05/24
			VOCGC Group 1	8011		09/11/24	09/11/24	

Hit Summary Sheet SW-846

SDG No.: P3845

Order ID: P3845

Client: Chemtech Consulting Group

Project ID: NJ Waste Water PT

Sample ID	Client ID	Parameter		Concentration	C	MDL	RDL	Units
Client ID : RR-8011-WP								
P3845-20	RR-8011-WP	WATER	DBCP		1.20 E	0.0070	0.025	ug/L
P3845-20	RR-8011-WP	WATER	EDB		1.00 E	0.0085	0.025	ug/L
Total Concentration:						2.200		
Client ID : RR-8011-WPDL								
P3845-20DL	RR-8011-WPDL	WATER	DBCP		1.30 D	0.028	0.10	ug/L
P3845-20DL	RR-8011-WPDL	WATER	EDB		1.20 D	0.034	0.10	ug/L
Total Concentration:						2.500		



QC SUMMARY

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P3845

Client: Chemtech Consulting Group

Analytical Method: 8011

Datafile : PR068530.D

Lab Sample ID	Parameter	Spike	Result	Units	Rec	RPD	Qual	RPD	Limits		
									Qual	Low	High
PB163254BS	DBCP	0.25	0.25	ug/L	100				70	130	
	EDB	0.25	0.25	ug/L	100				70	130	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: P3845

Client: Chemtech Consulting Group

Analytical Method: 8011

Datafile : PR068531.D

Lab Sample ID	Parameter	Spike	Result	Units	Rec	RPD	Qual	RPD	Limits		RPD
									Qual	Low	High
PB163254BSD	DBCP	0.25	0.25	ug/L	100	0			70	130	20
	EDB	0.25	0.26	ug/L	104	4			70	130	20

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB163254BL

Lab Name: CHEMTECH

Contract: CHEM02

Lab Code: CHEM Case No.: P3845

SAS No.: P3845 SDG NO.: P3845

Lab Sample ID: PB163254BL

Lab File ID: PR068529.D

Matrix: (soil/water) WATER

Extraction: (Type)

Sulfur Cleanup: (Y/N) N

Date Extracted: 09/11/2024

Date Analyzed (1): 09/11/2024

Date Analyzed (2): 09/11/2024

Time Analyzed (1): 13:43

Time Analyzed (2): 13:43

Instrument ID (1): ECD_R

Instrument ID (2): ECD_R

GC Column (1): ZB-MR1

ID: 0.32 (mm)

GC Column (2): ZB-MR2

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
PB163254BS	PB163254BS	PR068530.D	09/11/2024	09/11/2024
PB163254BSD	PB163254BSD	PR068531.D	09/11/2024	09/11/2024
RR-8011-WP	P3845-20	PR068532.D	09/11/2024	09/11/2024

COMMENTS:



SAMPLE

DATA



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

Report of Analysis

Client:	Chemtech Consulting Group			Date Collected:	09/03/24	
Project:	NJ Waste Water PT			Date Received:	09/05/24	
Client Sample ID:	RR-8011-WP			SDG No.:	P3845	
Lab Sample ID:	P3845-20			Matrix:	WATER	
Analytical Method:	8011			% Solid:	0	Decanted:
Sample Wt/Vol:	35	Units:	mL	Final Vol:	2000	uL
Soil Aliquot Vol:			uL	Test:	VOCGC Group 1	
Extraction Type:				Injection Volume :		
GPC Factor :	1.0	PH :				
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PR068532.D	1	09/11/24 09:30	09/11/24 14:12	PB163254

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
96-12-8	DBCP	1.20	E	0.0070	0.025	ug/L
106-93-4	EDB	1.00	E	0.0085	0.025	ug/L

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_R\Data\PR091124\
 Data File : PR068532.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Sep 2024 14:12
 Operator : AJ\MA
 Sample : P3845-20
 Misc :
 ALS Vial : 14 Sample Multiplier: 1

Instrument :
ECD_R
ClientSampleId :
RR-8011-WP

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 11 14:26:44 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_R\Method\PR091124-8011-504.M
 Quant Title : GC EXTRACTABLES
 QLast Update : Wed Sep 11 12:58:30 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB MR1 Signal #2 Phase: ZB MR2
 Signal #1 Info : 30Mx0.32mmx 0.5µm Signal #2 Info : 30M x 0.32mm x 0.25µm

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

Target Compounds

1) SA EDB	2.840	2.230	14536309	74050699	0.999	0.973
2) SA DBCP	6.578	5.554	31753470	160.9E6	1.189	1.163

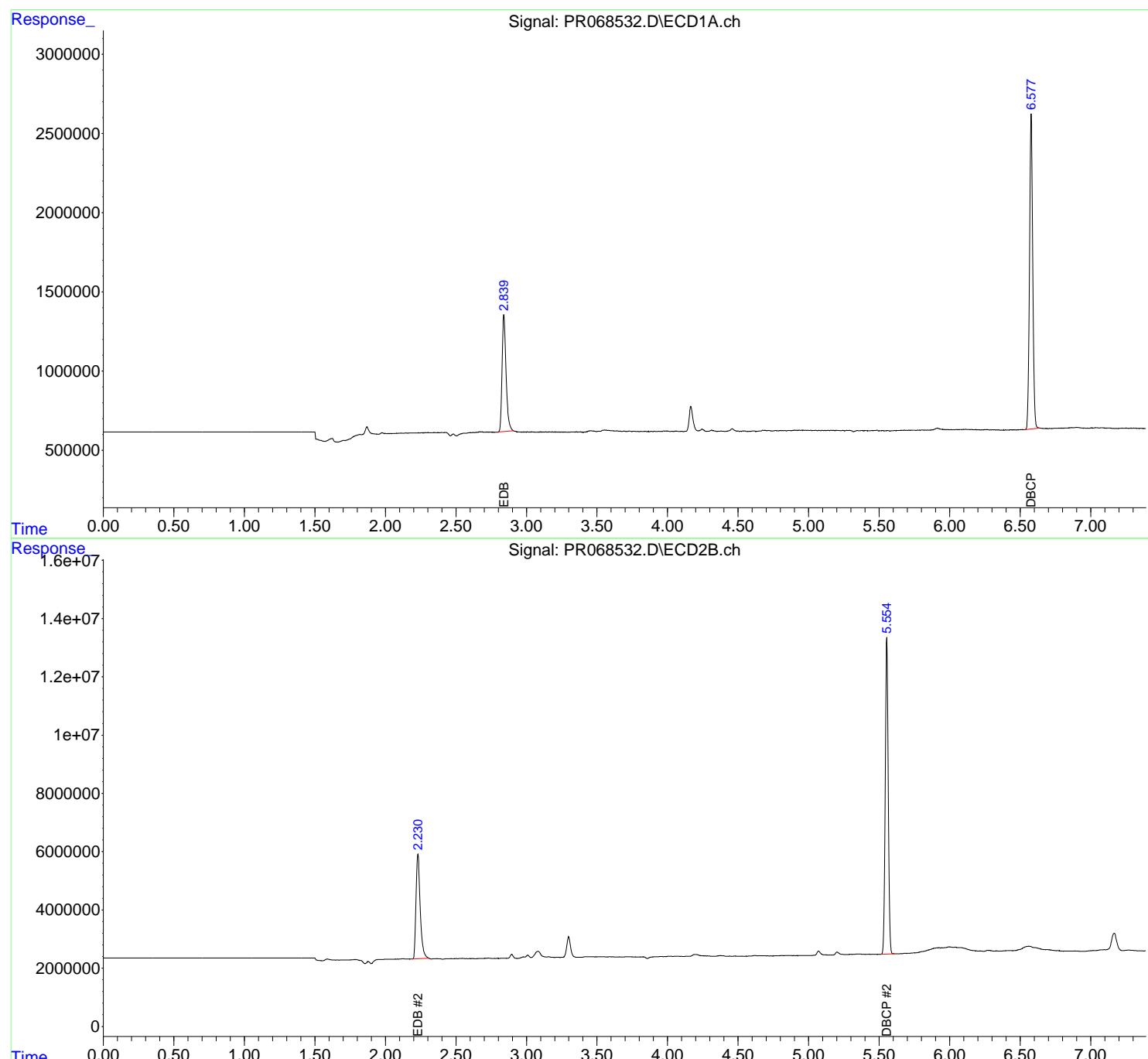
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_R\Data\PR091124\
 Data File : PR068532.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Sep 2024 14:12
 Operator : AJ\MA
 Sample : P3845-20
 Misc :
 ALS Vial : 14 Sample Multiplier: 1

Instrument :
 ECD_R
 ClientSampleId :
 RR-8011-WP

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 11 14:26:44 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_R\Method\PR091124-8011-504.M
 Quant Title : GC EXTRACTABLES
 QLast Update : Wed Sep 11 12:58:30 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 Signal #1 Phase : ZB MR1 Signal #2 Phase: ZB MR2
 Signal #1 Info : 30Mx0.32mmx 0.5 μ m Signal #2 Info : 30M x 0.32mm x 0.25 μ m





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

Report of Analysis

Client:	Chemtech Consulting Group			Date Collected:	09/03/24	
Project:	NJ Waste Water PT			Date Received:	09/05/24	
Client Sample ID:	RR-8011-WPDL			SDG No.:	P3845	
Lab Sample ID:	P3845-20DL			Matrix:	WATER	
Analytical Method:	8011			% Solid:	0	Decanted:
Sample Wt/Vol:	35	Units:	mL	Final Vol:	2000	uL
Soil Aliquot Vol:			uL	Test:	VOCGC Group 1	
Extraction Type:				Injection Volume :		
GPC Factor :	1.0	PH :				
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PR068533.D	4	09/11/24 09:30	09/11/24 14:24	PB163254

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
96-12-8	DBCP	1.30	D	0.028	0.10	ug/L
106-93-4	EDB	1.20	D	0.034	0.10	ug/L

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_R\Data\PR091124\
 Data File : PR068533.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Sep 2024 14:24
 Operator : AJ\MA
 Sample : P3845-20DL 4X
 Misc :
 ALS Vial : 15 Sample Multiplier: 1

Instrument :
ECD_R
ClientSampleId :
RR-8011-WPDL

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 11 14:26:49 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_R\Method\PR091124-8011-504.M
 Quant Title : GC EXTRACTABLES
 QLast Update : Wed Sep 11 12:58:30 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB MR1 Signal #2 Phase: ZB MR2
 Signal #1 Info : 30Mx0.32mmx 0.5µm Signal #2 Info : 30M x 0.32mm x 0.25µm

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

Target Compounds

1) SA EDB	2.839	2.230	4150824	20672251	0.285	0.272
2) SA DBCP	6.577	5.555	8454871	44422435	0.317	0.321

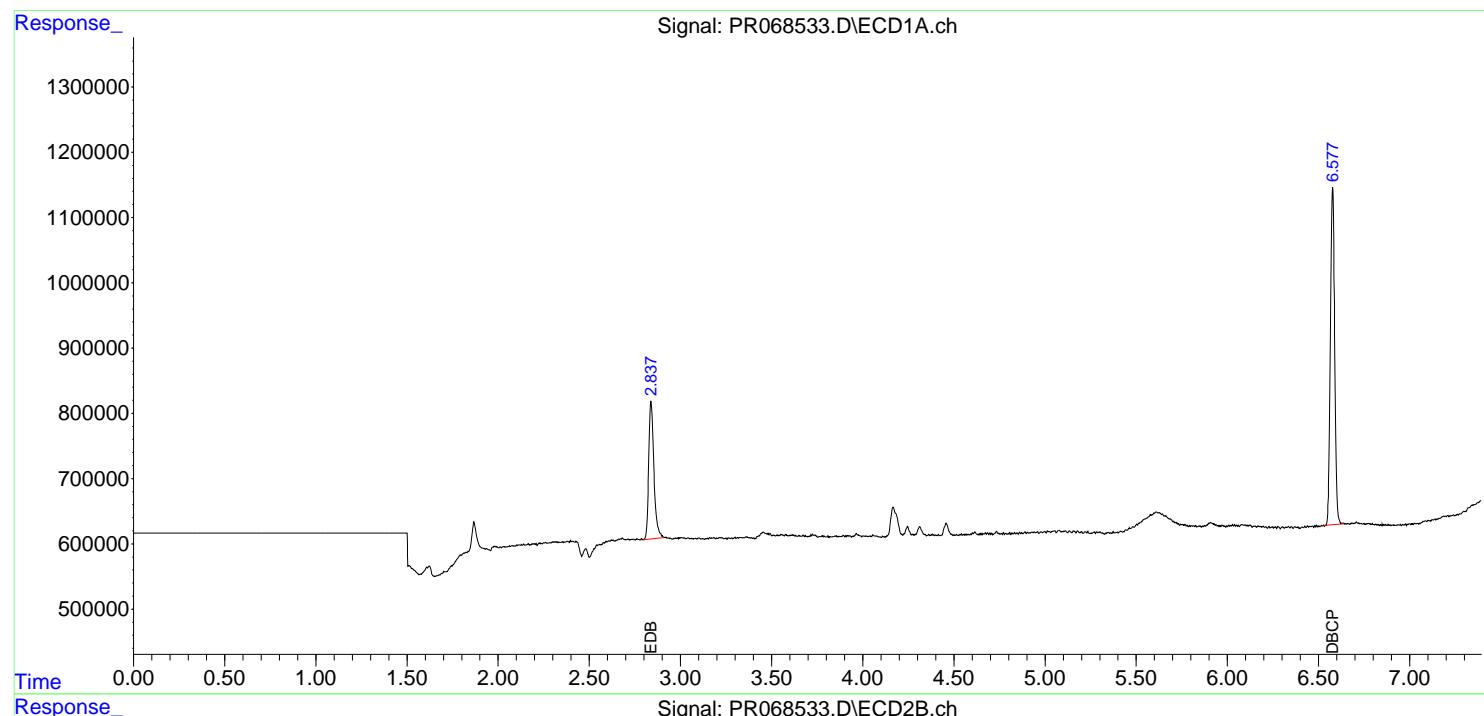
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_R\Data\PR091124\
 Data File : PR068533.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Sep 2024 14:24
 Operator : AJ\MA
 Sample : P3845-20DL 4X
 Misc :
 ALS Vial : 15 Sample Multiplier: 1

Instrument :
 ECD_R
 ClientSampleId :
 RR-8011-WPDL

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 11 14:26:49 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_R\Method\PR091124-8011-504.M
 Quant Title : GC EXTRACTABLES
 QLast Update : Wed Sep 11 12:58:30 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 Signal #1 Phase : ZB MR1 Signal #2 Phase: ZB MR2
 Signal #1 Info : 30Mx0.32mm x 0.5 μ m Signal #2 Info : 30M x 0.32mm x 0.25 μ m





CALIBRATION

SUMMARY



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

RETENTION TIMES OF INITIAL CALIBRATION

Contract:	<u>CHEM02</u>						
Lab Code:	<u>CHEM</u>		Case No.:	<u>P3845</u>	SAS No.:	<u>P3845</u>	SDG NO.:
Instrument ID:	<u>ECD_R</u>		Calibration Date(s):		<u>09/11/2024</u>	<u>09/11/2024</u>	

GC Column: ZB-MR1 ID: 0.32 (mm)

LAB FILE ID:	RT 0.5 =	<u>PR068520.D</u>	RT 0.25 =	<u>PR068521.D</u>
	RT 0.1 =	<u>PR068522.D</u>	RT 0.05 =	<u>PR068523.D</u>
			RT 0.025 =	<u>PR068524.D</u>

COMPOUND	RT 0.5	RT 0.25	RT 0.1	RT 0.05	RT 0.025	MEAN RT	RT WINDOW	
							FROM	TO
DBCP	6.58	6.58	6.58	6.58	6.58	6.58	6.48	6.68
EDB	2.84	2.84	2.84	2.84	2.84	2.84	2.74	2.94



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

RETENTION TIMES OF INITIAL CALIBRATION

Contract:	<u>CHEM02</u>						
Lab Code:	<u>CHEM</u>		Case No.:	<u>P3845</u>	SAS No.:	<u>P3845</u>	SDG NO.:
Instrument ID:	<u>ECD_R</u>		Calibration Date(s):		<u>09/11/2024</u>	<u>09/11/2024</u>	

GC Column: ZB-MR2 ID: 0.32 (mm)

LAB FILE ID:	RT 0.5 =	<u>PR068520.D</u>	RT 0.25 =	<u>PR068521.D</u>
	RT 0.1 =	<u>PR068522.D</u>	RT 0.05 =	<u>PR068523.D</u>
			RT 0.025 =	<u>PR068524.D</u>

COMPOUND	RT 0.5	RT 0.25	RT 0.1	RT 0.05	RT 0.025	MEAN RT	RT WINDOW	
							FROM	TO
DBCP	5.56	5.56	5.56	5.56	5.55	5.55	5.45	5.65
EDB	2.23	2.23	2.23	2.23	2.23	2.23	2.13	2.33



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

CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract:	CHEM02						
Lab Code:	<u>CHEM</u>	Case No.:	<u>P3845</u>	SAS No.:	<u>P3845</u>	SDG NO.:	<u>P3845</u>
Instrument ID:	<u>ECD_R</u>		Calibration Date(s):		<u>09/11/2024</u>	<u>09/11/2024</u>	
			Calibration Times:		<u>11:54</u>	<u>12:44</u>	
GC Column:	<u>ZB-MR1</u>		ID:	<u>0.32</u> (mm)			

LAB FILE ID:		CF 0.5 =	<u>PR068520.D</u>	CF 0.25 =	<u>PR068521.D</u>			
CF 0.1 =		<u>PR068522.D</u>	CF 0.05 =	<u>PR068523.D</u>	CF 0.025 =	<u>PR068524.D</u>		
COMPOUND		CF 0.5	CF 0.25	CF 0.1	CF 0.05	CF 0.025	CF	% RSD
DBCP		25120500000	25711200000	26894000000	28515800000	27298600000	26708000000	5
EDB		13761800000	14300500000	15128900000	15480900000	14083200000	14551100000	5



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

CALIBRATION FACTOR OF INITIAL CALIBRATION

Contract:	CHEM02						
Lab Code:	<u>CHEM</u>	Case No.:	<u>P3845</u>	SAS No.:	<u>P3845</u>	SDG NO.:	<u>P3845</u>
Instrument ID:	<u>ECD_R</u>		Calibration Date(s):		<u>09/11/2024</u>	<u>09/11/2024</u>	
			Calibration Times:		<u>11:54</u>	<u>12:44</u>	
GC Column:	<u>ZB-MR2</u>		ID:	<u>0.32</u> (mm)			

LAB FILE ID:		CF 0.5 =	<u>PR068520.D</u>	CF 0.25 =	<u>PR068521.D</u>		
CF 0.1 =		<u>PR068522.D</u>	CF 0.05 =	<u>PR068523.D</u>	CF 0.025 =	<u>PR068524.D</u>	
COMPOUND	CF 0.5	CF 0.25	CF 0.1	CF 0.05	CF 0.025	CF	% RSD
DBCP	130710000000	133056000000	141053000000	149210000000	137898000000	138385000000	5
EDB	70504900000	72410600000	78010100000	82568200000	77180500000	76134900000	6

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_R\Data\PR091124\
 Data File : PR068520.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Sep 2024 11:54
 Operator : AJ\MA
 Sample : M8011.504.1 0.5 PPB ICC
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_R
ClientSampleId :
M8011.504.1 0.5 PPB ICC

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 11 12:11:57 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_R\Method\PR091124-8011-504.M
 Quant Title : GC EXTRACTABLES
 QLast Update : Wed Sep 11 12:08:33 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB MR1 Signal #2 Phase: ZB MR2
 Signal #1 Info : 30Mx0.32mmx 0.5µm Signal #2 Info : 30M x 0.32mm x 0.25µm

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

Target Compounds

1) SA EDB	2.840	2.231	6880896	35252429	0.455	0.452
2) SA DBCP	6.579	5.555	12560229	65355134	0.467	0.463

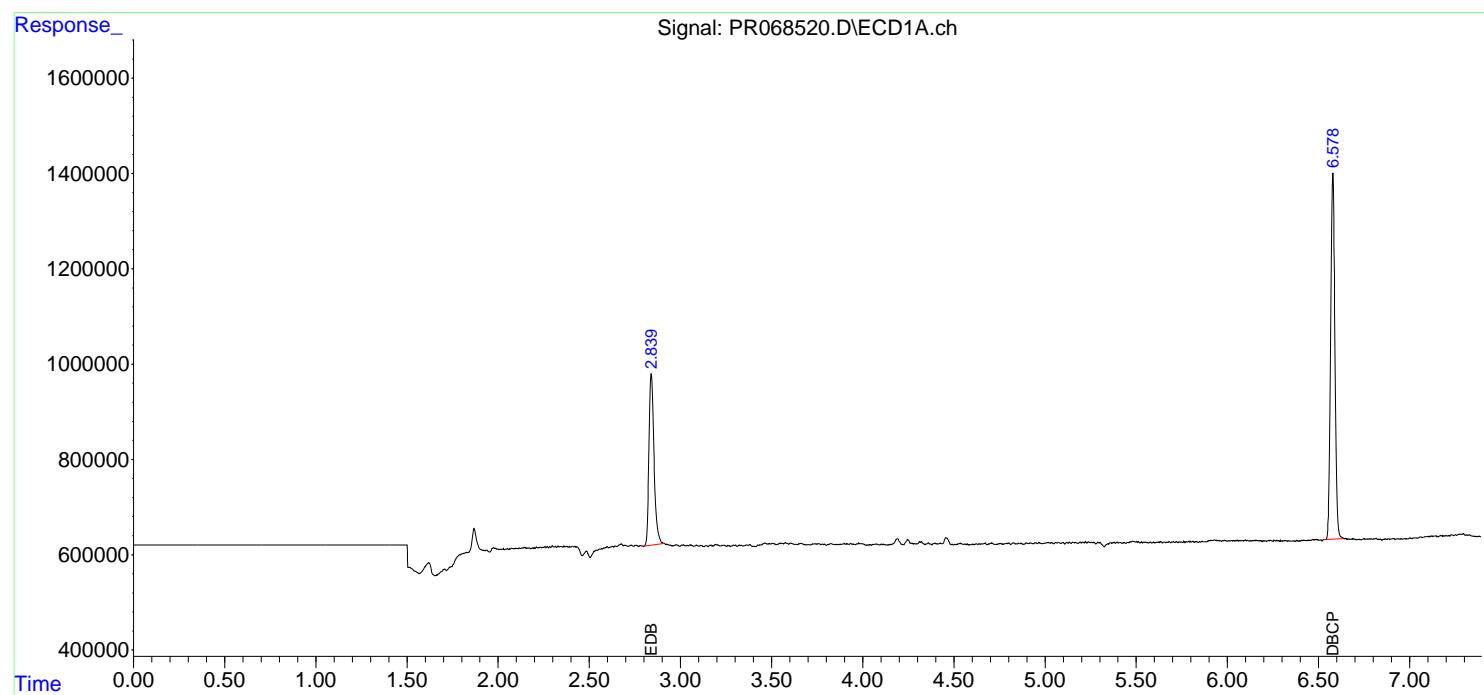
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_R\Data\PR091124\
 Data File : PR068520.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Sep 2024 11:54
 Operator : AJ\MA
 Sample : M8011.504.1 0.5 PPB ICC
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
ECD_R
ClientSampleId :
M8011.504.1 0.5 PPB ICC

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 11 12:11:57 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_R\Method\PR091124-8011-504.M
 Quant Title : GC EXTRACTABLES
 QLast Update : Wed Sep 11 12:08:33 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 Signal #1 Phase : ZB MR1 Signal #2 Phase: ZB MR2
 Signal #1 Info : 30Mx0.32mmx 0.5 μ m Signal #2 Info : 30M x 0.32mm x 0.25 μ m



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_R\Data\PR091124\
 Data File : PR068521.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Sep 2024 12:04
 Operator : AJ\MA
 Sample : M8011.504.1 0.25 PPB ICC
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
ECD_R
ClientSampleId :
M8011.504.1 0.25 PPB ICC

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 11 12:12:03 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_R\Method\PR091124-8011-504.M
 Quant Title : GC EXTRACTABLES
 QLast Update : Wed Sep 11 12:08:33 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB MR1 Signal #2 Phase: ZB MR2
 Signal #1 Info : 30Mx0.32mmx 0.5µm Signal #2 Info : 30M x 0.32mm x 0.25µm

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

Target Compounds

1) SA	EDB	2.840	2.230	3575135	18102648	0.236	0.232
2) SA	DBCP	6.579	5.555	6427799	33264121	0.239	0.236

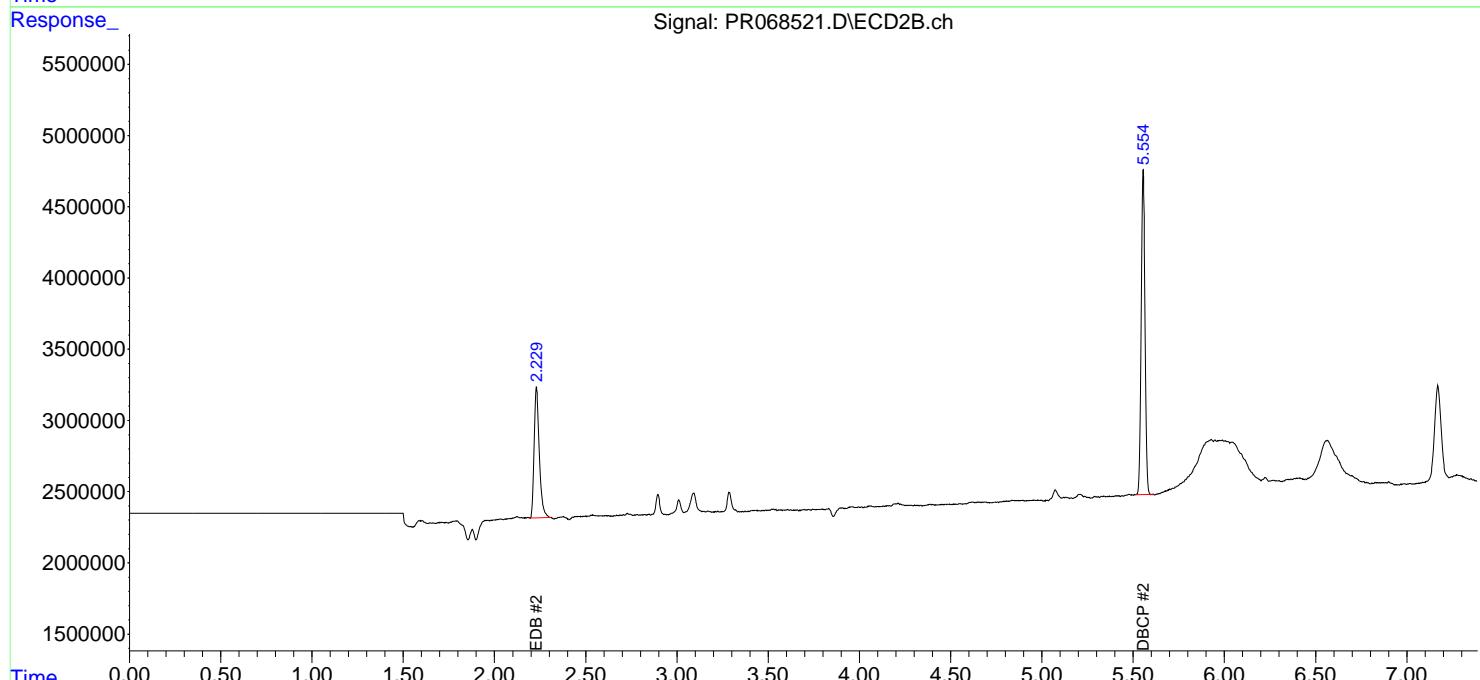
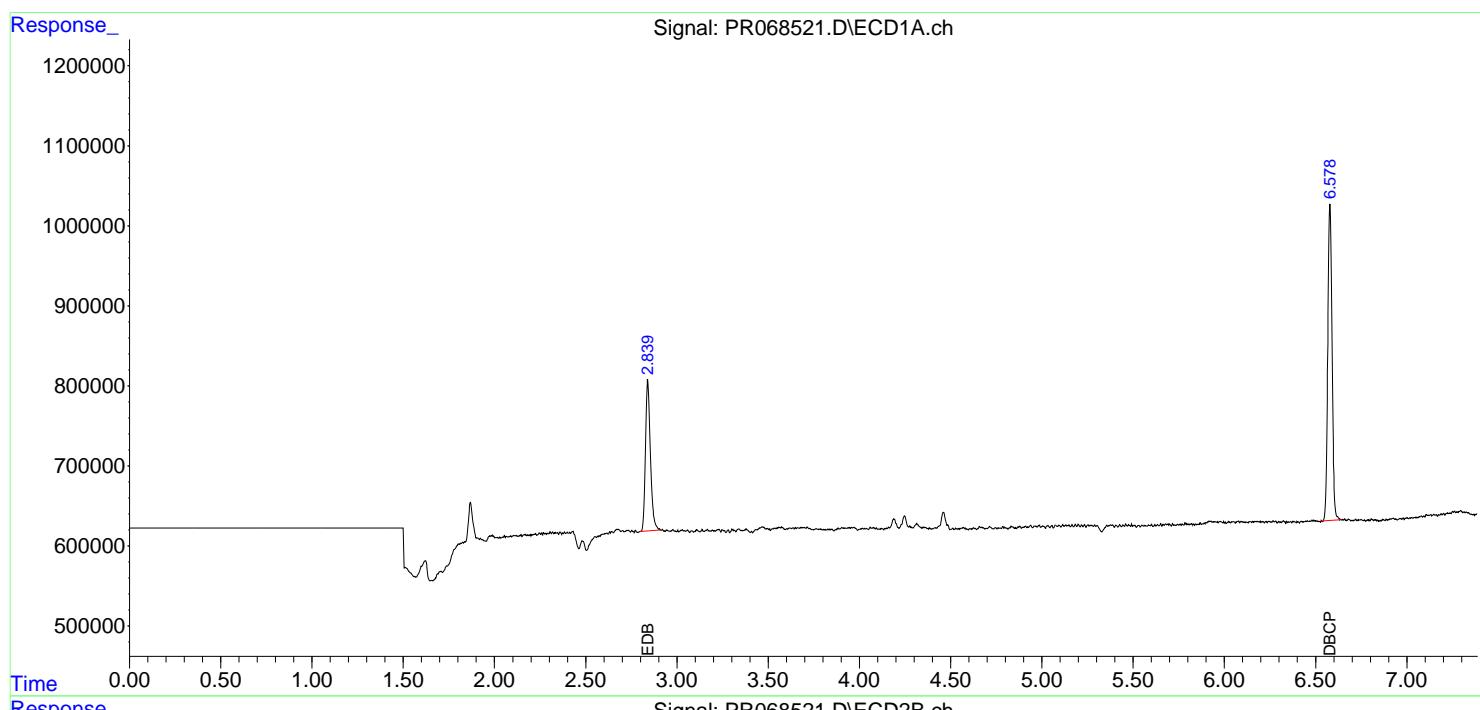
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_R\Data\PR091124\
 Data File : PR068521.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Sep 2024 12:04
 Operator : AJ\MA
 Sample : M8011.504.1 0.25 PPB ICC
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
ECD_R
ClientSampleId :
M8011.504.1 0.25 PPB ICC

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 11 12:12:03 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_R\Method\PR091124-8011-504.M
 Quant Title : GC EXTRACTABLES
 QLast Update : Wed Sep 11 12:08:33 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 Signal #1 Phase : ZB MR1 Signal #2 Phase: ZB MR2
 Signal #1 Info : 30Mx0.32mmx 0.5 μ m Signal #2 Info : 30M x 0.32mm x 0.25 μ m



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_R\Data\PR091124\
 Data File : PR068522.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Sep 2024 12:13
 Operator : AJ\MA
 Sample : M8011.504.1 0.1 PPB ICC
 Misc :
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
ECD_R
ClientSampleId :
M8011.504.1 0.1 PPB ICC

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 11 12:08:48 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_R\Method\PR091124-8011-504.M
 Quant Title : GC EXTRACTABLES
 QLast Update : Wed Sep 11 12:08:33 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB MR1 Signal #2 Phase: ZB MR2
 Signal #1 Info : 30Mx0.32mmx 0.5µm Signal #2 Info : 30M x 0.32mm x 0.25µm

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

Target Compounds

1) SA EDB	2.840	2.231	1512888	7801012	0.100	0.100
2) SA DBCP	6.579	5.555	2689396	14105274	0.100	0.100

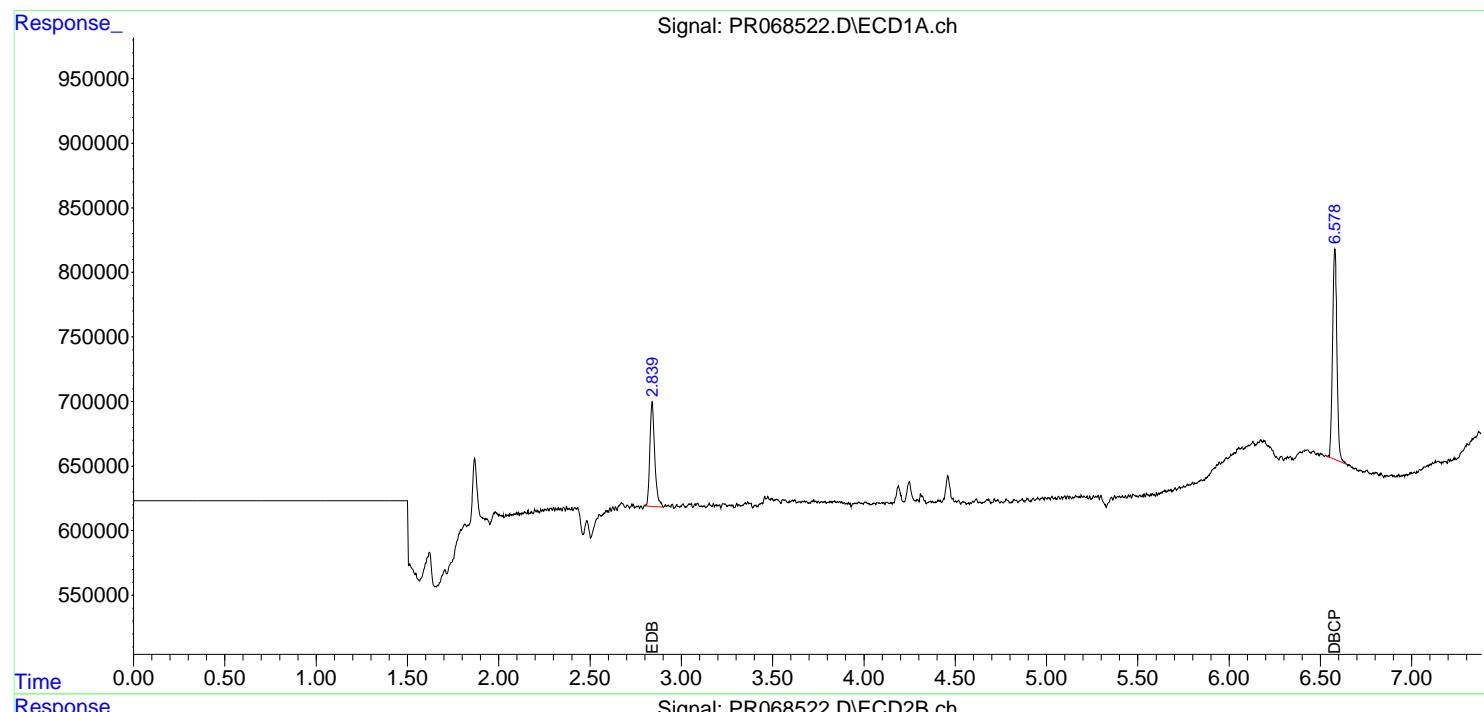
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_R\Data\PR091124\
 Data File : PR068522.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Sep 2024 12:13
 Operator : AJ\MA
 Sample : M8011.504.1 0.1 PPB ICC
 Misc :
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
ECD_R
ClientSampleId :
M8011.504.1 0.1 PPB ICC

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 11 12:08:48 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_R\Method\PR091124-8011-504.M
 Quant Title : GC EXTRACTABLES
 QLast Update : Wed Sep 11 12:08:33 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 Signal #1 Phase : ZB MR1 Signal #2 Phase: ZB MR2
 Signal #1 Info : 30Mx0.32mm x 0.5 μ m Signal #2 Info : 30M x 0.32mm x 0.25 μ m



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_R\Data\PR091124\
 Data File : PR068523.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Sep 2024 12:23
 Operator : AJ\MA
 Sample : M8011.504.1 0.05 PPB ICC
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
ECD_R
ClientSampleId :
M8011.504.1 0.05 PPB ICC

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 11 12:16:13 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_R\Method\PR091124-8011-504.M
 Quant Title : GC EXTRACTABLES
 QLast Update : Wed Sep 11 12:08:33 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB MR1 Signal #2 Phase: ZB MR2
 Signal #1 Info : 30Mx0.32mmx 0.5µm Signal #2 Info : 30M x 0.32mm x 0.25µm

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

Target Compounds

1) SA	EDB	2.840	2.230	774045	4128410	0.051	0.053
2) SA	DBCP	6.579	5.555	1425792	7460477	0.053	0.053

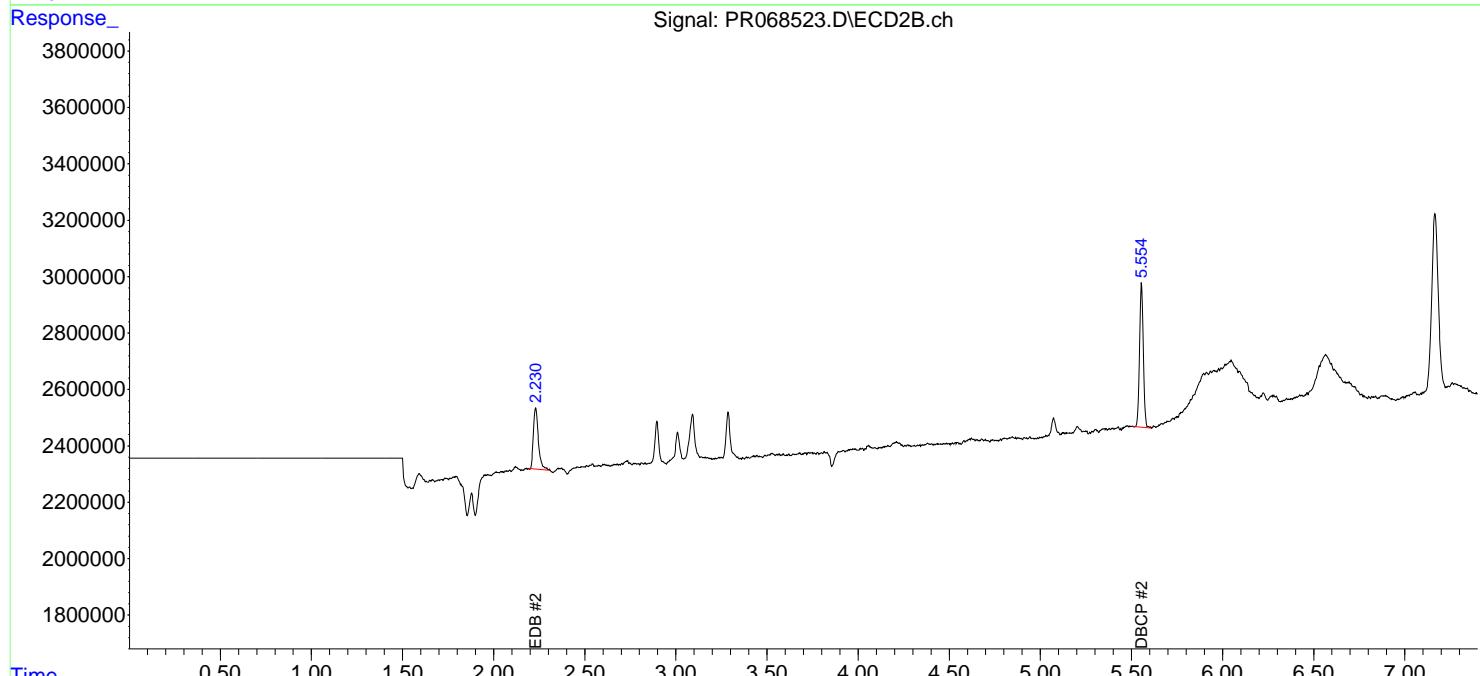
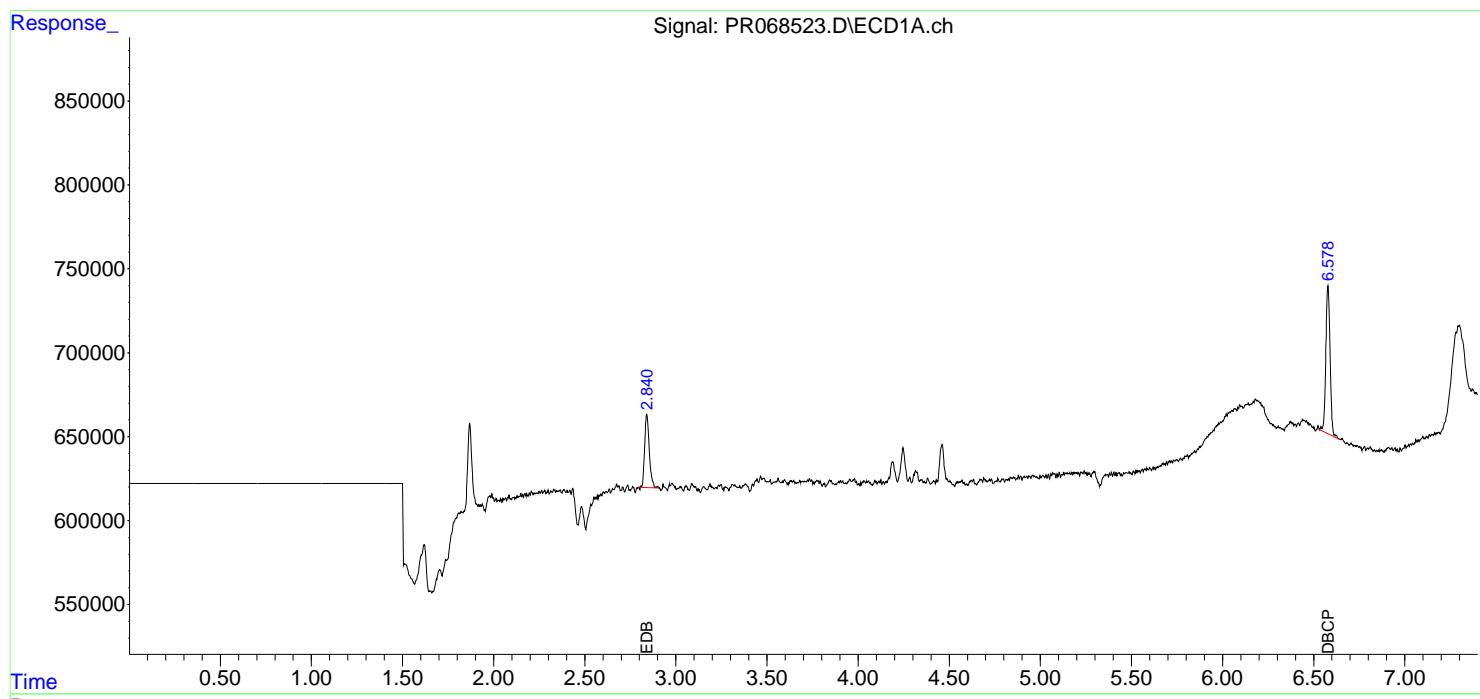
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_R\Data\PR091124\
 Data File : PR068523.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Sep 2024 12:23
 Operator : AJ\MA
 Sample : M8011.504.1 0.05 PPB ICC
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
ECD_R
ClientSampleId :
M8011.504.1 0.05 PPB ICC

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 11 12:16:13 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_R\Method\PR091124-8011-504.M
 Quant Title : GC EXTRACTABLES
 QLast Update : Wed Sep 11 12:08:33 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 Signal #1 Phase : ZB MR1 Signal #2 Phase: ZB MR2
 Signal #1 Info : 30Mx0.32mm x 0.5 μ m Signal #2 Info : 30M x 0.32mm x 0.25 μ m



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_R\Data\PR091124\
 Data File : PR068524.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Sep 2024 12:44
 Operator : AJ\MA
 Sample : M8011.504.1 0.025 PPB ICC
 Misc :
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
ECD_R
ClientSampleId :
M8011.504.1 0.025 PPB ICC

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 11 12:58:19 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_R\Method\PR091124-8011-504.M
 Quant Title : GC EXTRACTABLES
 QLast Update : Wed Sep 11 12:08:33 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB MR1 Signal #2 Phase: ZB MR2
 Signal #1 Info : 30Mx0.32mmx 0.5µm Signal #2 Info : 30M x 0.32mm x 0.25µm

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

Target Compounds

1) SA	EDB	2.841	2.229	352080	1929513	0.024	0.025
2) SA	DBCP	6.579	5.554	682465	3447454	0.026	0.025

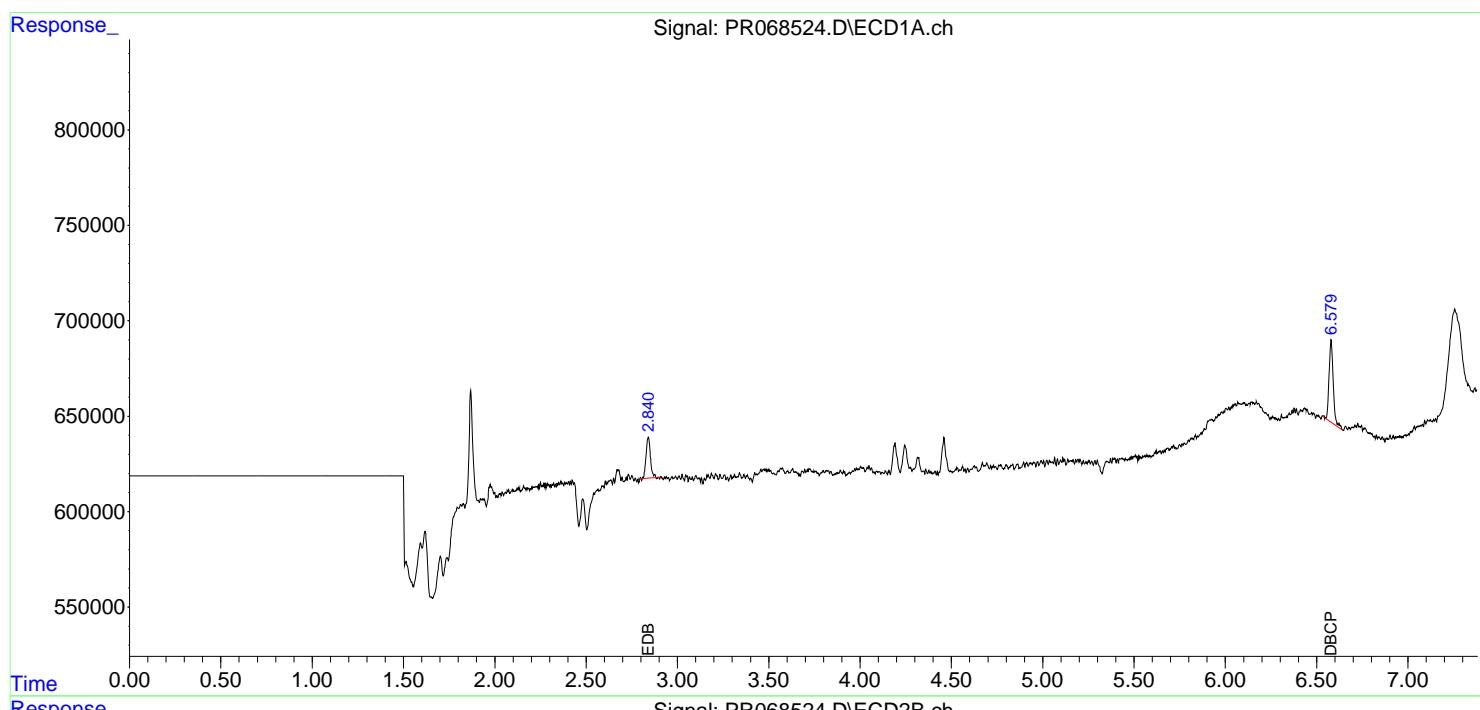
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_R\Data\PR091124\
 Data File : PR068524.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Sep 2024 12:44
 Operator : AJ\MA
 Sample : M8011.504.1 0.025 PPB ICC
 Misc :
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
ECD_R
ClientSampleId :
M8011.504.1 0.025 PPB ICC

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 11 12:58:19 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_R\Method\PR091124-8011-504.M
 Quant Title : GC EXTRACTABLES
 QLast Update : Wed Sep 11 12:08:33 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 Signal #1 Phase : ZB MR1 Signal #2 Phase: ZB MR2
 Signal #1 Info : 30Mx0.32mmx 0.5 μ m Signal #2 Info : 30M x 0.32mm x 0.25 μ m



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_R\Data\PR091124\
 Data File : PR068525.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Sep 2024 12:53
 Operator : AJ\MA
 Sample : M8011.504.1 0.1 PPB ICV
 Misc :
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
ECD_R
ClientSampleId :
ICVPR091124

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 11 12:58:52 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_R\Method\PR091124-8011-504.M
 Quant Title : GC EXTRACTABLES
 QLast Update : Wed Sep 11 12:58:30 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB MR1 Signal #2 Phase: ZB MR2
 Signal #1 Info : 30Mx0.32mmx 0.5µm Signal #2 Info : 30M x 0.32mm x 0.25µm

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

Target Compounds

1) SA EDB	2.840	2.231	1507046	7904708	0.104	0.104
2) SA DBCP	6.578	5.554	2713811	14249506	0.102	0.103

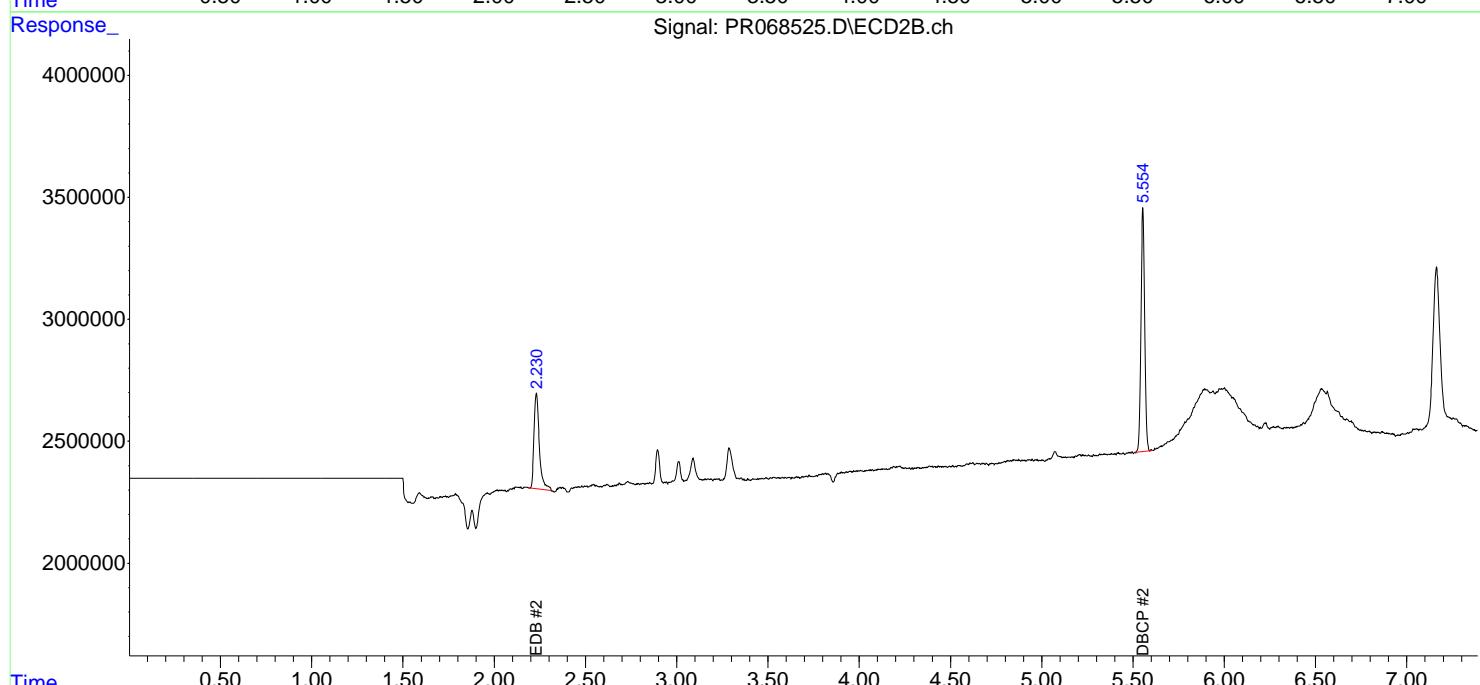
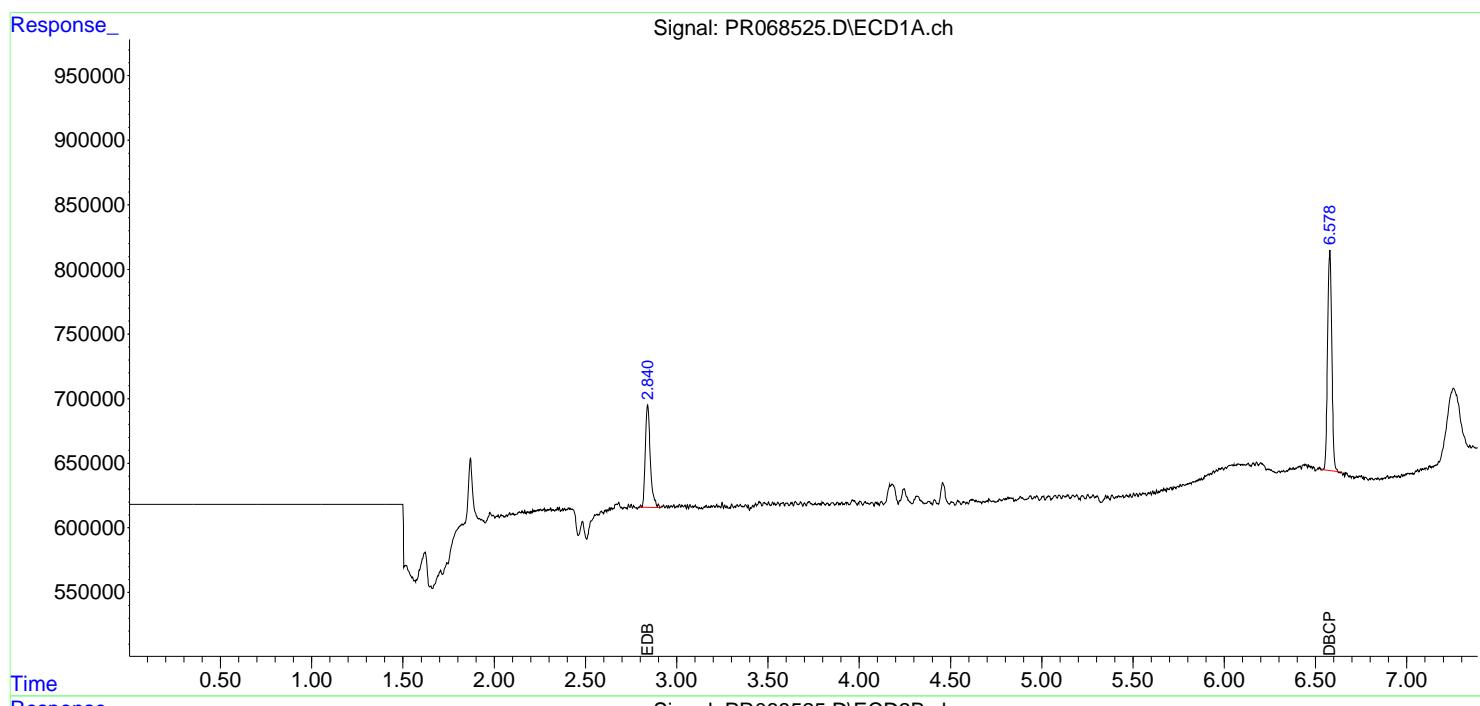
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_R\Data\PR091124\
 Data File : PR068525.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Sep 2024 12:53
 Operator : AJ\MA
 Sample : M8011.504.1 0.1 PPB ICV
 Misc :
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 ECD_R
ClientSampleId :
 ICVPR091124

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 11 12:58:52 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_R\Method\PR091124-8011-504.M
 Quant Title : GC EXTRACTABLES
 QLast Update : Wed Sep 11 12:58:30 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 Signal #1 Phase : ZB MR1 Signal #2 Phase: ZB MR2
 Signal #1 Info : 30Mx0.32mm x 0.5 μ m Signal #2 Info : 30M x 0.32mm x 0.25 μ m



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_R\Data\PR091124\
Data File : PR068526.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 11 Sep 2024 13:03
Operator : AJ\MA
Sample : RT CHECK
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
ECD_R
ClientSampleId :
RT CHECK

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 11 12:58:57 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_R\Method\PR091124-8011-504.M
Quant Title : GC EXTRACTABLES
QLast Update : Wed Sep 11 12:58:30 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB MR1 Signal #2 Phase: ZB MR2
Signal #1 Info : 30Mx0.32mmx 0.5µm Signal #2 Info : 30M x 0.32mm x 0.25µm

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

Target Compounds

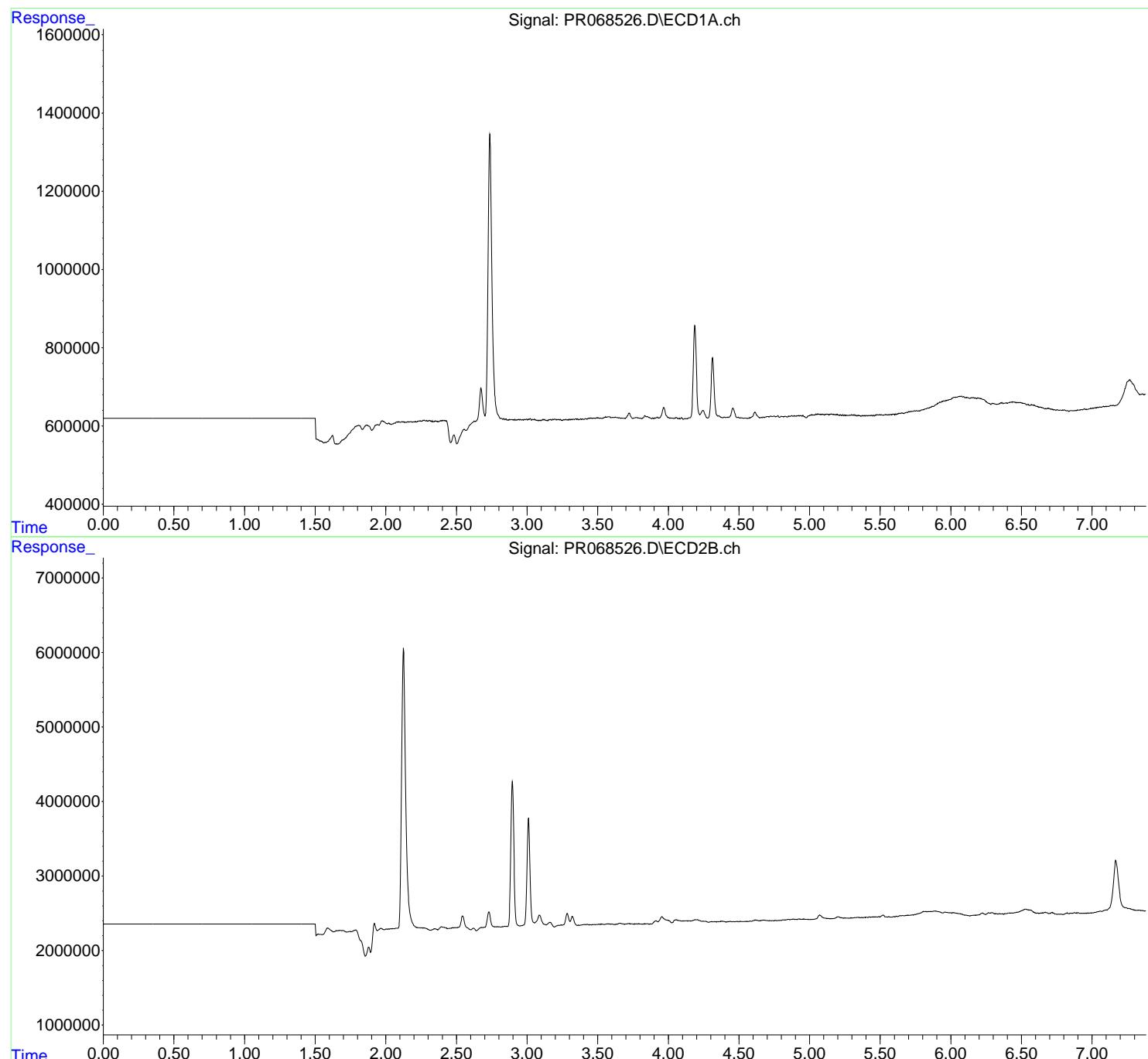
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_R\Data\PR091124\
 Data File : PR068526.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Sep 2024 13:03
 Operator : AJ\MA
 Sample : RT CHECK
 Misc :
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
ECD_R
ClientSampleId :
RT CHECK

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 11 12:58:57 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_R\Method\PR091124-8011-504.M
 Quant Title : GC EXTRACTABLES
 QLast Update : Wed Sep 11 12:58:30 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 Signal #1 Phase : ZB MR1 Signal #2 Phase: ZB MR2
 Signal #1 Info : 30Mx0.32mm x 0.5 μ m Signal #2 Info : 30M x 0.32mm x 0.25 μ m



Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_R\Data\PR091124\
 Data File : PR068528.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Sep 2024 13:32
 Operator : AJ\MA
 Sample : Low-Level LFB-MDL Check
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
ECD_R
ClientSampleId :
Low-Level LFB-MDL Check

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 11 13:50:01 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_R\Method\PR091124-8011-504.M
 Quant Title : GC EXTRACTABLES
 QLast Update : Wed Sep 11 12:58:30 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB MR1 Signal #2 Phase: ZB MR2
 Signal #1 Info : 30Mx0.32mmx 0.5µm Signal #2 Info : 30M x 0.32mm x 0.25µm

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

Target Compounds

1) SA	EDB	2.839	2.231	260126	1656899	0.018	0.022
2) SA	DBCP	6.579	5.553	548966	2731677	0.021	0.020

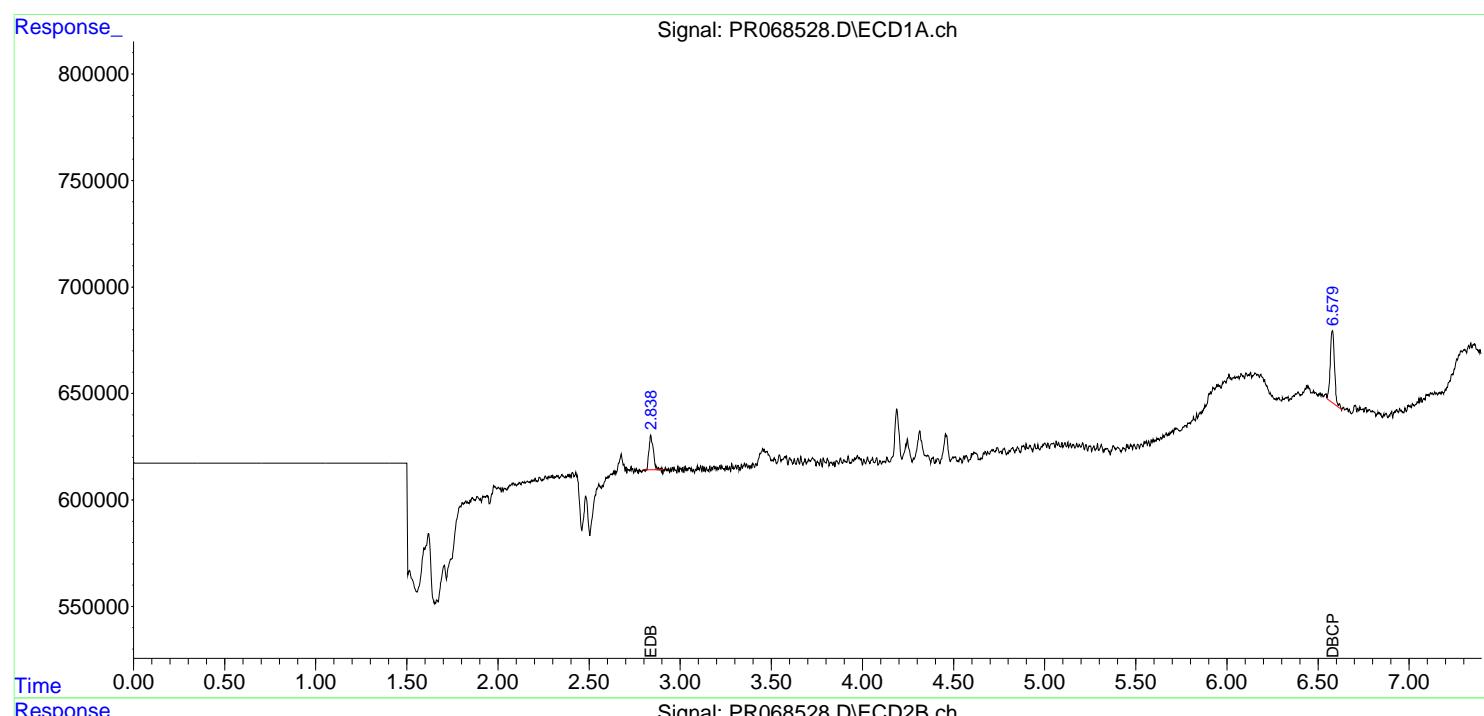
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_R\Data\PR091124\
 Data File : PR068528.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Sep 2024 13:32
 Operator : AJ\MA
 Sample : Low-Level LFB-MDL Check
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
ECD_R
ClientSampleId :
Low-Level LFB-MDL Check

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 11 13:50:01 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_R\Method\PR091124-8011-504.M
 Quant Title : GC EXTRACTABLES
 QLast Update : Wed Sep 11 12:58:30 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 Signal #1 Phase : ZB MR1 Signal #2 Phase: ZB MR2
 Signal #1 Info : 30Mx0.32mm x 0.5 μ m Signal #2 Info : 30M x 0.32mm x 0.25 μ m





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

CALIBRATION VERIFICATION SUMMARY

Contract: **CHEM02**

Lab Code: **CHEM** Case No.: **P3845** SAS No.: **P3845** SDG NO.: **P3845**

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

Continuing Calib Time: **13:12** Initial Calibration Time(s): **11:54** **12:44**

GC Column: **ZB-MR1** ID: **0.32** (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
DBCP	6.58	6.58	6.48	6.68	0.00
EDB	2.84	2.84	2.74	2.94	0.00



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

CALIBRATION VERIFICATION SUMMARY

Contract: **CHEM02**

Lab Code: **CHEM** Case No.: **P3845** SAS No.: **P3845** SDG NO.: **P3845**

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

Continuing Calib Time: **13:12** Initial Calibration Time(s): **11:54** **12:44**

GC Column: **ZB-MR2** ID: **0.32** (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
DBCP	5.55	5.56	5.46	5.66	0.01
EDB	2.23	2.23	2.13	2.33	0.00



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

CALIBRATION VERIFICATION SUMMARY

Contract: **CHEM02**

Lab Code: **CHEM** Case No.: **P3845** SAS No.: **P3845** SDG NO.: **P3845**

GC Column: **ZB-MR1** ID: **0.32** (mm) Initi. Calib. Date(s): **09/11/2024** **09/11/2024**

Client Sample No.: **CCAL01** Date Analyzed: **09/11/2024**

Lab Sample No.: **M8011-504 CCC 0.** Data File : **PR068527.D** Time Analyzed: **13:12**

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
DBCP	6.578	6.479	6.679	0.100	0.100	0.0
EDB	2.840	2.740	2.940	0.110	0.100	-0.10



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

CALIBRATION VERIFICATION SUMMARY

Contract: **CHEM02**

Lab Code: **CHEM** Case No.: **P3845** SAS No.: **P3845** SDG NO.: **P3845**

GC Column: **ZB-MR2** ID: **0.32** (mm) Initi. Calib. Date(s): **09/11/2024** **09/11/2024**

Client Sample No.: **CCAL01** Date Analyzed: **09/11/2024**

Lab Sample No.: **M8011-504 CCC 0.** Data File : **PR068527.D** Time Analyzed: **13:12**

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
DBCP	5.554	5.455	5.655	0.100	0.100	0.0
EDB	2.231	2.131	2.331	0.100	0.100	0.0

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_R\Data\PR091124\
 Data File : PR068527.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Sep 2024 13:12
 Operator : AJ\MA
 Sample : M8011-504 CCC 0.1 PPB
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
ECD_R
ClientSampleId :
M8011-504 CCC 0.1 PPB

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 11 13:04:59 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_R\Method\PR091124-8011-504.M
 Quant Title : GC EXTRACTABLES
 QLast Update : Wed Sep 11 12:58:30 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB MR1 Signal #2 Phase: ZB MR2
 Signal #1 Info : 30Mx0.32mmx 0.5µm Signal #2 Info : 30M x 0.32mm x 0.25µm

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

Target Compounds

1) SA	EDB	2.840	2.231	1539981	7654393	0.106	0.101
2) SA	DBCP	6.578	5.554	2697105	14134342	0.101	0.102

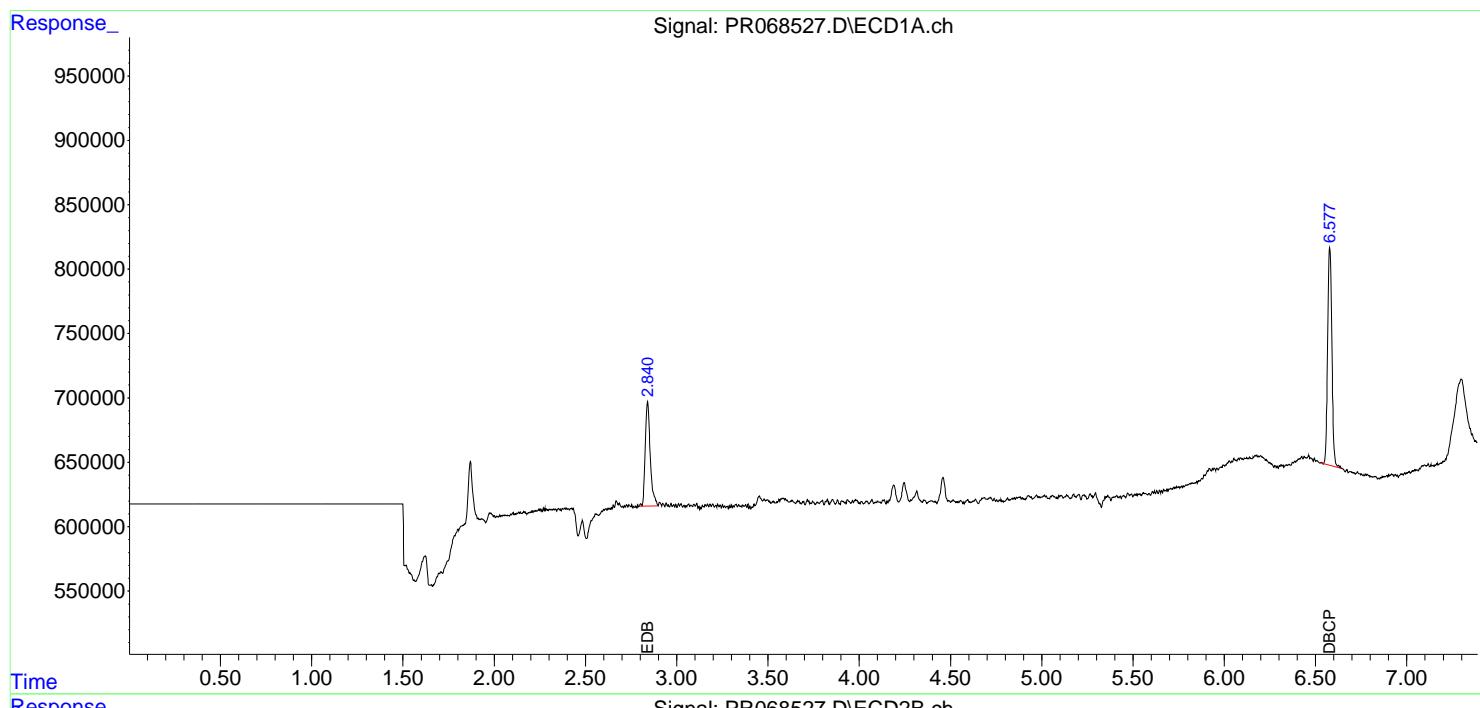
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_R\Data\PR091124\
 Data File : PR068527.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Sep 2024 13:12
 Operator : AJ\MA
 Sample : M8011-504 CCC 0.1 PPB
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
ECD_R
ClientSampleId :
M8011-504 CCC 0.1 PPB

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 11 13:04:59 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_R\Method\PR091124-8011-504.M
 Quant Title : GC EXTRACTABLES
 QLast Update : Wed Sep 11 12:58:30 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 Signal #1 Phase : ZB MR1 Signal #2 Phase: ZB MR2
 Signal #1 Info : 30Mx0.32mmx 0.5 μ m Signal #2 Info : 30M x 0.32mm x 0.25 μ m





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

CALIBRATION VERIFICATION SUMMARY

Contract: **CHEM02**

Lab Code: **CHEM** Case No.: **P3845** SAS No.: **P3845** SDG NO.: **P3845**

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

Continuing Calib Time: **14:34** Initial Calibration Time(s): **11:54** **12:44**

GC Column: **ZB-MR1** ID: **0.32** (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
DBCP	6.58	6.58	6.48	6.68	0.00
EDB	2.84	2.84	2.74	2.94	0.00



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

CALIBRATION VERIFICATION SUMMARY

Contract: **CHEM02**

Lab Code: **CHEM** Case No.: **P3845** SAS No.: **P3845** SDG NO.: **P3845**

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

Continuing Calib Time: **14:34** Initial Calibration Time(s): **11:54** **12:44**

GC Column: **ZB-MR2** ID: **0.32** (mm)

COMPOUND	CCAL RT	AVG RT	RT WINDOW		DIFF RT
			FROM	TO	
DBCP	5.55	5.56	5.46	5.66	0.01
EDB	2.23	2.23	2.13	2.33	0.00



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

CALIBRATION VERIFICATION SUMMARY

Contract: **CHEM02**

Lab Code: **CHEM** Case No.: **P3845** SAS No.: **P3845** SDG NO.: **P3845**

GC Column: **ZB-MR1** ID: **0.32** (mm) Initi. Calib. Date(s): **09/11/2024** **09/11/2024**

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

Lab Sample No.: **M8011-504 CCC 0.** Data File : **PR068534.D** Time Analyzed: **14:34**

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
DBCP	6.578	6.479	6.679	0.100	0.100	0.0
EDB	2.839	2.740	2.940	0.110	0.100	-0.10



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

CALIBRATION VERIFICATION SUMMARY

Contract: **CHEM02**

Lab Code: **CHEM** Case No.: **P3845** SAS No.: **P3845** SDG NO.: **P3845**

GC Column: **ZB-MR2** ID: **0.32** (mm) Initi. Calib. Date(s): **09/11/2024** **09/11/2024**

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

Lab Sample No.: **M8011-504 CCC 0.** Data File : **PR068534.D** Time Analyzed: **14:34**

COMPOUND	RT	RT WINDOW		CALC AMOUNT(ng)	NOM AMOUNT(ng)	%D
		FROM	TO			
DBCP	5.554	5.455	5.655	0.100	0.100	0.0
EDB	2.230	2.131	2.331	0.100	0.100	0.0

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_R\Data\PR091124\
 Data File : PR068534.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Sep 2024 14:34
 Operator : AJ\MA
 Sample : M8011-504 CCC 0.1 PPB
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 ECD_R
ClientSampleId :
 M8011-504 CCC 0.1 PPB

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 11 14:26:54 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_R\Method\PR091124-8011-504.M
 Quant Title : GC EXTRACTABLES
 QLast Update : Wed Sep 11 12:58:30 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB MR1 Signal #2 Phase: ZB MR2
 Signal #1 Info : 30Mx0.32mmx 0.5µm Signal #2 Info : 30M x 0.32mm x 0.25µm

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

Target Compounds

1) SA	EDB	2.839	2.230	1562600	7719939	0.107	0.101
2) SA	DBCP	6.578	5.554	2699585	14088324	0.101	0.102

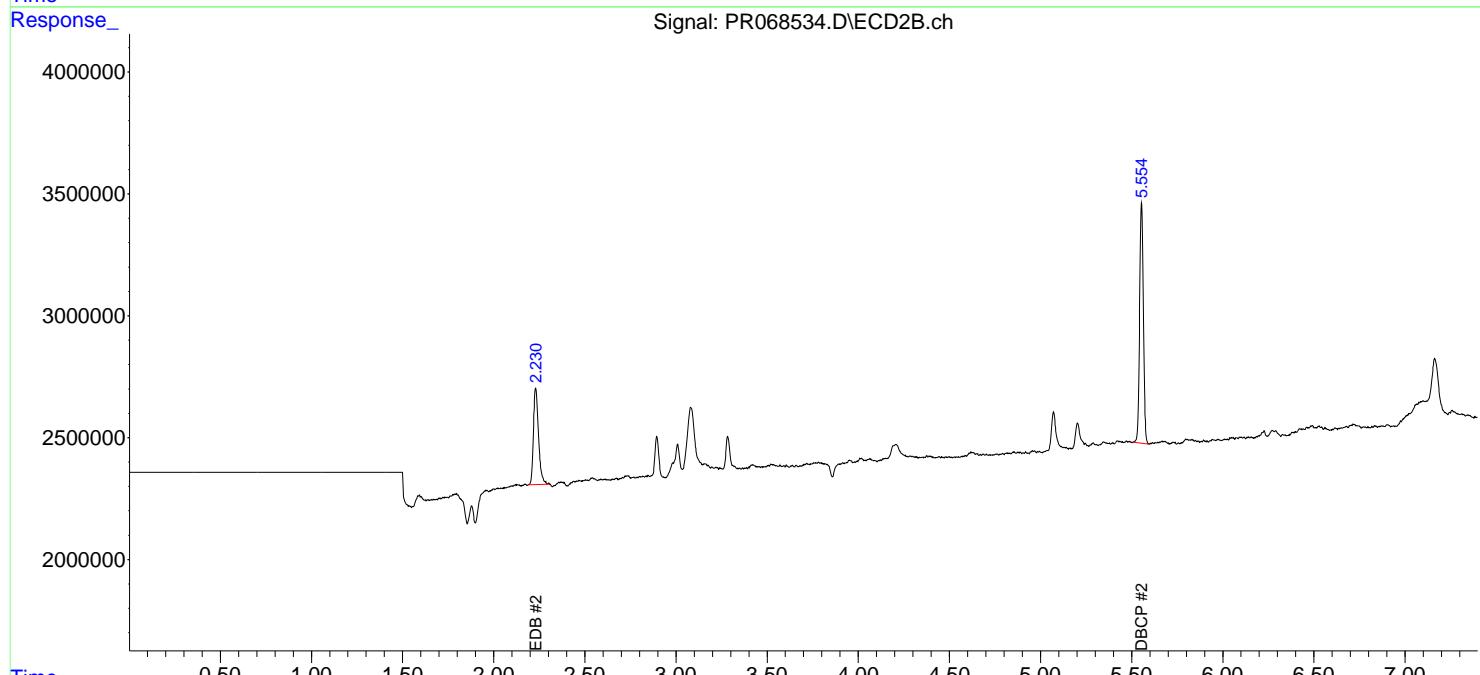
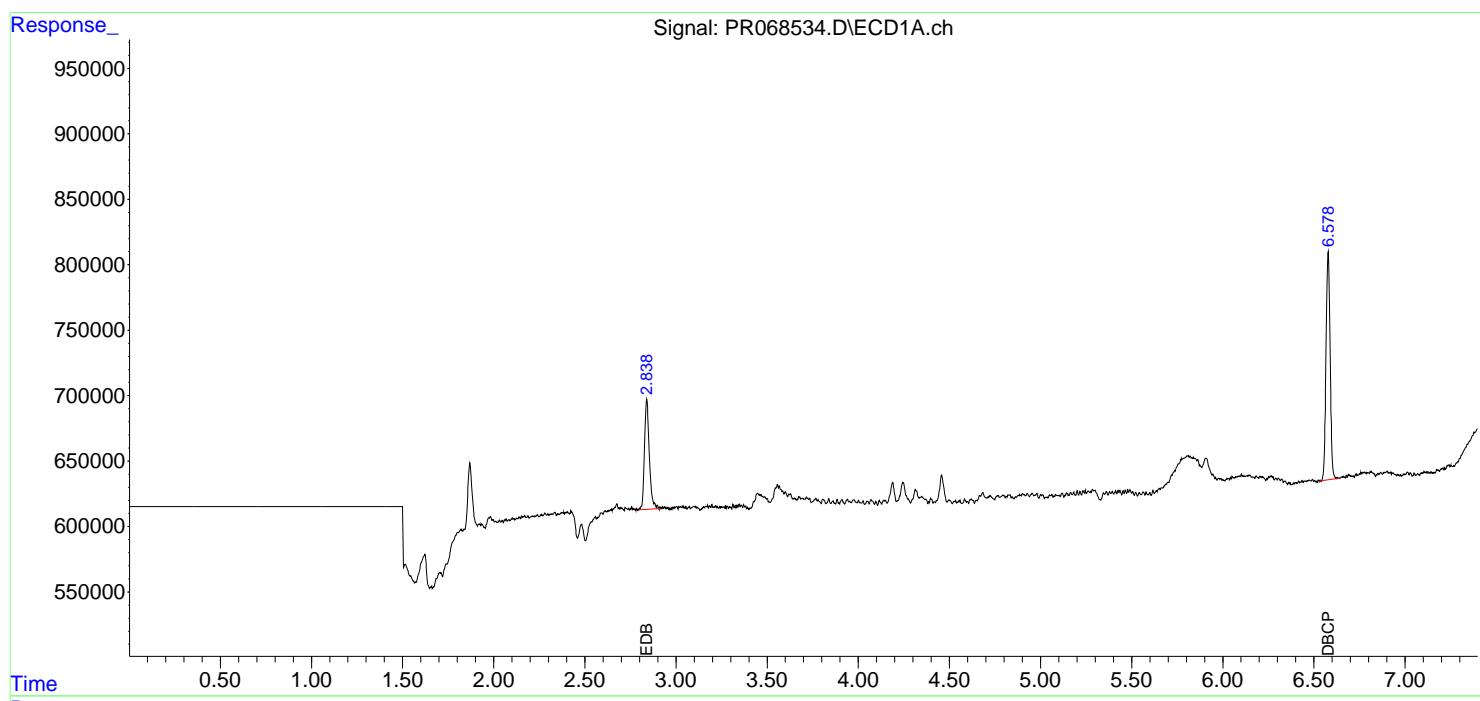
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_R\Data\PR091124\
 Data File : PR068534.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Sep 2024 14:34
 Operator : AJ\MA
 Sample : M8011-504 CCC 0.1 PPB
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
ECD_R
ClientSampleId :
M8011-504 CCC 0.1 PPB

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 11 14:26:54 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_R\Method\PR091124-8011-504.M
 Quant Title : GC EXTRACTABLES
 QLast Update : Wed Sep 11 12:58:30 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 Signal #1 Phase : ZB MR1 Signal #2 Phase: ZB MR2
 Signal #1 Info : 30Mx0.32mmx 0.5 μ m Signal #2 Info : 30M x 0.32mm x 0.25 μ m



Analytical Sequence

Client: Chemtech Consulting Group	SDG No.: P3845		
Project: NJ Waste Water PT	Instrument ID: ECD_R		
GC Column: ZB-MR1	ID: 0.32 (mm)	Inst. Calib. Date(s): 09/11/2024	09/11/2024

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	DCB RT #	TCX RT #
M8011.504.1 0.5 PPB ICC	M8011.504.1 0.5 PPB ICC	09/11/2024	11:54	PR068520.D	0.00	0.00
M8011.504.1 0.25 PPB ICC	M8011.504.1 0.25 PPB IC	09/11/2024	12:04	PR068521.D	0.00	0.00
M8011.504.1 0.1 PPB ICC	M8011.504.1 0.1 PPB ICC	09/11/2024	12:13	PR068522.D	0.00	0.00
M8011.504.1 0.05 PPB ICC	M8011.504.1 0.05 PPB IC	09/11/2024	12:23	PR068523.D	0.00	0.00
M8011.504.1 0.025 PPB ICC	M8011.504.1 0.025 PPB IC	09/11/2024	12:44	PR068524.D	0.00	0.00
M8011-504 CCC 0.1 PPB	M8011-504 CCC 0.1 PPB	09/11/2024	13:12	PR068527.D	0.00	0.00
PB163254BL	PB163254BL	09/11/2024	13:43	PR068529.D	0.00	0.00
PB163254BS	PB163254BS	09/11/2024	13:53	PR068530.D	0.00	0.00
PB163254BSD	PB163254BSD	09/11/2024	14:03	PR068531.D	0.00	0.00
RR-8011-WP	P3845-20	09/11/2024	14:12	PR068532.D	0.00	0.00
RR-8011-WPDL	P3845-20DL	09/11/2024	14:24	PR068533.D	0.00	0.00
M8011-504 CCC 0.1 PPB	M8011-504 CCC 0.1 PPB	09/11/2024	14:34	PR068534.D	0.00	0.00

Analytical Sequence

Client: Chemtech Consulting Group	SDG No.: P3845		
Project: NJ Waste Water PT	Instrument ID: ECD_R		
GC Column: ZB-MR2	ID: 0.32 (mm)	Inst. Calib. Date(s): 09/11/2024	09/11/2024

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	DCB RT #	TCX RT #
M8011.504.1 0.5 PPB ICC	M8011.504.1 0.5 PPB ICC	09/11/2024	11:54	PR068520.D	0.00	0.00
M8011.504.1 0.25 PPB ICC	M8011.504.1 0.25 PPB IC	09/11/2024	12:04	PR068521.D	0.00	0.00
M8011.504.1 0.1 PPB ICC	M8011.504.1 0.1 PPB ICC	09/11/2024	12:13	PR068522.D	0.00	0.00
M8011.504.1 0.05 PPB ICC	M8011.504.1 0.05 PPB IC	09/11/2024	12:23	PR068523.D	0.00	0.00
M8011.504.1 0.025 PPB ICC	M8011.504.1 0.025 PPB IC	09/11/2024	12:44	PR068524.D	0.00	0.00
M8011-504 CCC 0.1 PPB	M8011-504 CCC 0.1 PPB	09/11/2024	13:12	PR068527.D	0.00	0.00
PB163254BL	PB163254BL	09/11/2024	13:43	PR068529.D	0.00	0.00
PB163254BS	PB163254BS	09/11/2024	13:53	PR068530.D	0.00	0.00
PB163254BSD	PB163254BSD	09/11/2024	14:03	PR068531.D	0.00	0.00
RR-8011-WP	P3845-20	09/11/2024	14:12	PR068532.D	0.00	0.00
RR-8011-WPDL	P3845-20DL	09/11/2024	14:24	PR068533.D	0.00	0.00
M8011-504 CCC 0.1 PPB	M8011-504 CCC 0.1 PPB	09/11/2024	14:34	PR068534.D	0.00	0.00

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

PB163254BS

Contract:	CHEM02						
Lab Code:	CHEM	Case No.:	P3845	SAS No.:	P3845	SDG NO.:	P3845
Lab Sample ID:	PB163254BS			Date(s) Analyzed:	09/11/2024	09/11/2024	
Instrument ID (1):	ECD_R			Instrument ID (2):	ECD_R		
GC Column: (1):	ZB-MR1	ID:	0.32 (mm)	GC Column:(2):	ZB-MR2	ID:	0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
DBCP	1	6.58	6.53	6.63	0.24	4.1
	2	5.55	5.50	5.60	0.25	
EDB	1	2.84	2.79	2.89	0.25	4.1
	2	2.23	2.18	2.28	0.24	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

PB163254BSD

Contract:	CHEM02						
Lab Code:	CHEM	Case No.:	P3845	SAS No.:	P3845	SDG NO.:	P3845
Lab Sample ID:	PB163254BSD			Date(s) Analyzed:	09/11/2024	09/11/2024	
Instrument ID (1):	ECD_R			Instrument ID (2):	ECD_R		
GC Column: (1):	ZB-MR1	ID:	0.32 (mm)	GC Column:(2):	ZB-MR2	ID:	0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
DBCP	1	6.58	6.53	6.63	0.25	0
	2	5.55	5.50	5.60	0.25	
EDB	1	2.84	2.79	2.89	0.26	3.9
	2	2.23	2.18	2.28	0.25	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

RR-8011-WP

Contract: CHEM02

Lab Code: CHEM **Case No.:** P3845 **SAS No.:** P3845 **SDG NO.:** P3845

Lab Sample ID: P3845-20 **Date(s) Analyzed:** 09/11/2024 **09/11/2024**

Instrument ID (1): ECD_R **Instrument ID (2):** ECD_R

GC Column: (1): ZB-MR1 **ID:** 0.32 (mm) **GC Column:(2):** ZB-MR2 **ID:** 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
DBCP	1	6.58	6.53	6.63	1.20	0
	2	5.55	5.50	5.60	1.20	
EDB	1	2.84	2.79	2.89	1.00	3
	2	2.23	2.18	2.28	0.97	

COMPOUND DETECTION SUMMARY

CLIENT SAMPLE NO.

RR-8011-WPDL

Contract: CHEM02

Lab Code: CHEM **Case No.:** P3845

SAS No.: P3845 **SDG NO.:** P3845

Lab Sample ID: P3845-20DL

Date(s) Analyzed: 09/11/2024 09/11/2024

Instrument ID (1): ECD_R

Instrument ID (2): ECD_R

GC Column: (1): ZB-MR1 **ID:** 0.32 (mm) **GC Column:(2):** ZB-MR2 **ID:** 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
DBCP	1	6.58	6.53	6.63	1.30	0
	2	5.56	5.51	5.61	1.30	
EDB	1	2.84	2.79	2.89	1.20	8.7
	2	2.23	2.18	2.28	1.10	



QC SAMPLE

DATA



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

Report of Analysis

Client:	Chemtech Consulting Group			Date Collected:	
Project:	NJ Waste Water PT			Date Received:	
Client Sample ID:	PB163254BL			SDG No.:	P3845
Lab Sample ID:	PB163254BL			Matrix:	WATER
Analytical Method:	8011			% Solid:	0 Decanted:
Sample Wt/Vol:	35	Units:	mL	Final Vol:	2000 uL
Soil Aliquot Vol:			uL	Test:	VOCGC Group 1
Extraction Type:				Injection Volume :	
GPC Factor :	1.0	PH :			
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PR068529.D	1	09/11/24 09:30	09/11/24 13:43	PB163254

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
96-12-8	DBCP	0.0070	U	0.0070	0.025	ug/L
106-93-4	EDB	0.0085	U	0.0085	0.025	ug/L

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_R\Data\PR091124\
Data File : PR068529.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 11 Sep 2024 13:43
Operator : AJ\MA
Sample : PB163254BL
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
ECD_R
ClientSampleId :
PB163254BL

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 11 13:50:05 2024
Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_R\Method\PR091124-8011-504.M
Quant Title : GC EXTRACTABLES
QLast Update : Wed Sep 11 12:58:30 2024
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1 µl
Signal #1 Phase : ZB MR1 Signal #2 Phase: ZB MR2
Signal #1 Info : 30Mx0.32mmx 0.5µm Signal #2 Info : 30M x 0.32mm x 0.25µm

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

Target Compounds

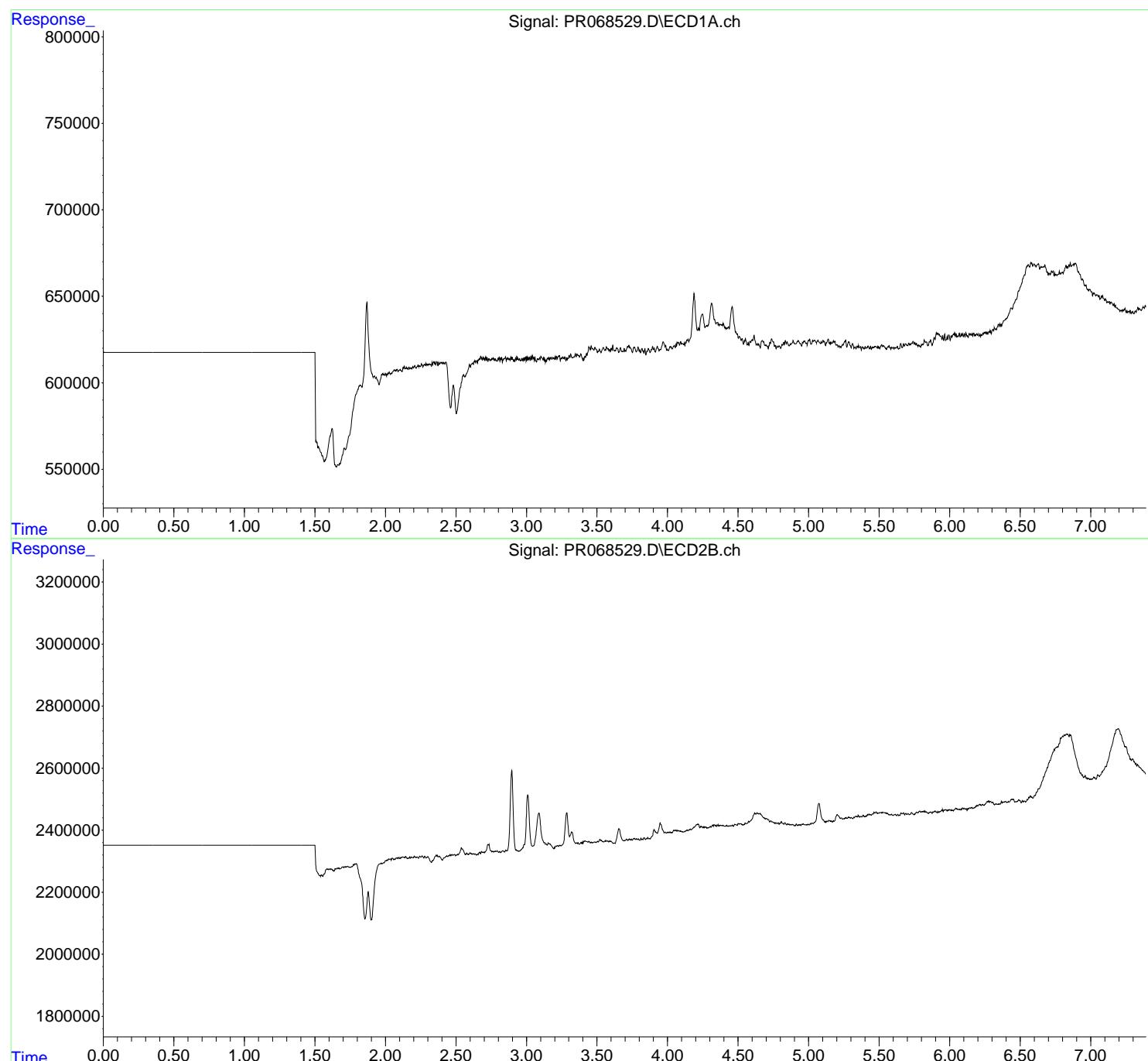
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_R\Data\PR091124\
 Data File : PR068529.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Sep 2024 13:43
 Operator : AJ\MA
 Sample : PB163254BL
 Misc :
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 ECD_R
 ClientSampleId :
 PB163254BL

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 11 13:50:05 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_R\Method\PR091124-8011-504.M
 Quant Title : GC EXTRACTABLES
 QLast Update : Wed Sep 11 12:58:30 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 Signal #1 Phase : ZB MR1 Signal #2 Phase: ZB MR2
 Signal #1 Info : 30Mx0.32mm x 0.5 μ m Signal #2 Info : 30M x 0.32mm x 0.25 μ m





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

Report of Analysis

Client:	Chemtech Consulting Group			Date Collected:	
Project:	NJ Waste Water PT			Date Received:	
Client Sample ID:	PB163254BS			SDG No.:	P3845
Lab Sample ID:	PB163254BS			Matrix:	WATER
Analytical Method:	8011			% Solid:	0 Decanted:
Sample Wt/Vol:	35	Units:	mL	Final Vol:	2000 uL
Soil Aliquot Vol:			uL	Test:	VOCGC Group 1
Extraction Type:				Injection Volume :	
GPC Factor :	1.0	PH :			
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PR068530.D	1	09/11/24 09:30	09/11/24 13:53	PB163254

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
96-12-8	DBCP	0.25		0.0070	0.025	ug/L
106-93-4	EDB	0.25		0.0085	0.025	ug/L

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_R\Data\PR091124\
 Data File : PR068530.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Sep 2024 13:53
 Operator : AJ\MA
 Sample : PB163254BS
 Misc :
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
ECD_R
ClientSampleId :
PB163254BS

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 11 13:50:11 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_R\Method\PR091124-8011-504.M
 Quant Title : GC EXTRACTABLES
 QLast Update : Wed Sep 11 12:58:30 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB MR1 Signal #2 Phase: ZB MR2
 Signal #1 Info : 30Mx0.32mmx 0.5µm Signal #2 Info : 30M x 0.32mm x 0.25µm

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

Target Compounds

1) SA	EDB	2.840	2.231	3663458	18583589	0.252	0.244
2) SA	DBCP	6.578	5.554	6511437	34148678	0.244	0.247

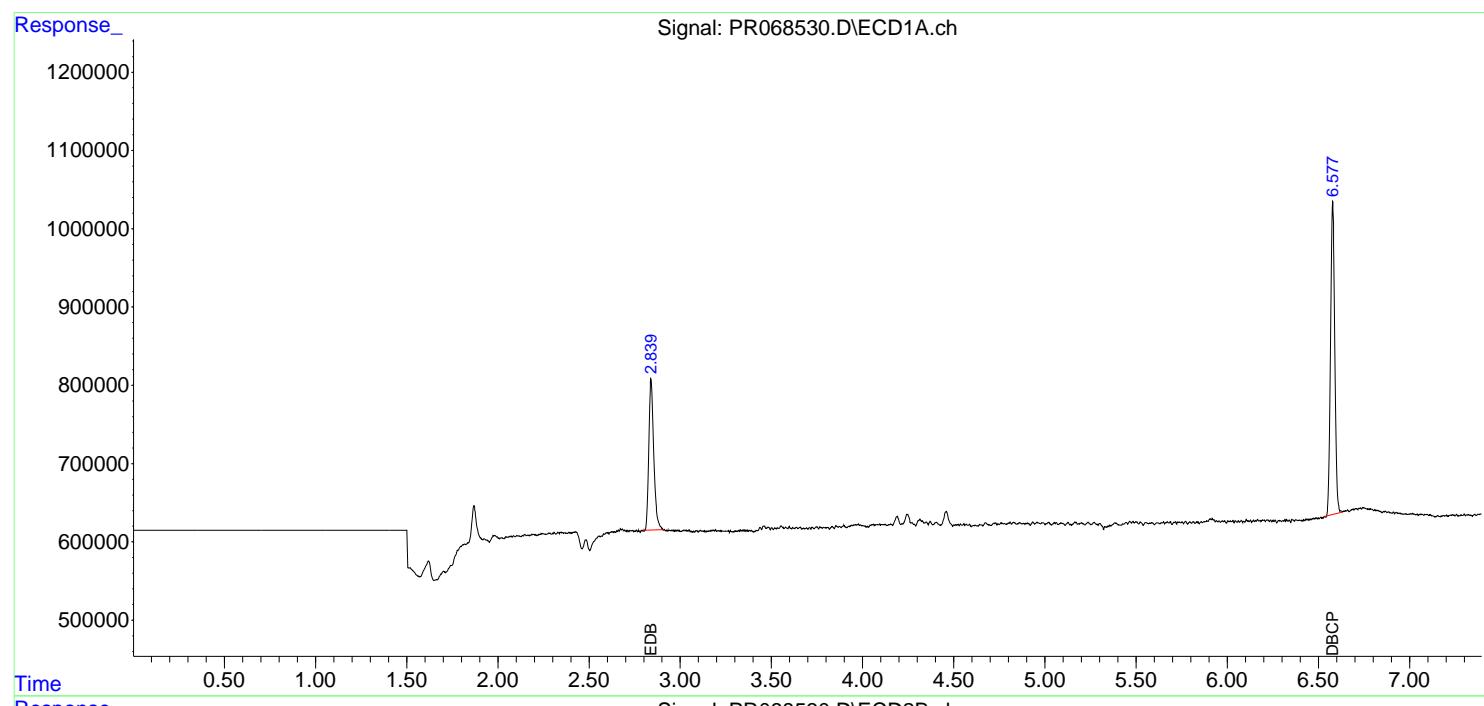
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_R\Data\PR091124\
 Data File : PR068530.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Sep 2024 13:53
 Operator : AJ\MA
 Sample : PB163254BS
 Misc :
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 ECD_R
 ClientSampleId :
 PB163254BS

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 11 13:50:11 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_R\Method\PR091124-8011-504.M
 Quant Title : GC EXTRACTABLES
 QLast Update : Wed Sep 11 12:58:30 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 Signal #1 Phase : ZB MR1 Signal #2 Phase: ZB MR2
 Signal #1 Info : 30Mx0.32mm x 0.5 μ m Signal #2 Info : 30M x 0.32mm x 0.25 μ m





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

Report of Analysis

Client:	Chemtech Consulting Group			Date Collected:	
Project:	NJ Waste Water PT			Date Received:	
Client Sample ID:	PB163254BSD			SDG No.:	P3845
Lab Sample ID:	PB163254BSD			Matrix:	WATER
Analytical Method:	8011			% Solid:	0 Decanted:
Sample Wt/Vol:	35	Units:	mL	Final Vol:	2000 uL
Soil Aliquot Vol:			uL	Test:	VOCGC Group 1
Extraction Type:				Injection Volume :	
GPC Factor :	1.0	PH :			
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
PR068531.D	1	09/11/24 09:30	09/11/24 14:03	PB163254

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
96-12-8	DBCP	0.25		0.0070	0.025	ug/L
106-93-4	EDB	0.26		0.0085	0.025	ug/L

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_R\Data\PR091124\
 Data File : PR068531.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Sep 2024 14:03
 Operator : AJ\MA
 Sample : PB163254BSD
 Misc :
 ALS Vial : 13 Sample Multiplier: 1

Instrument :
ECD_R
ClientSampleId :
PB163254BSD

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 11 14:03:06 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_R\Method\PR091124-8011-504.M
 Quant Title : GC EXTRACTABLES
 QLast Update : Wed Sep 11 12:58:30 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 µl
 Signal #1 Phase : ZB MR1 Signal #2 Phase: ZB MR2
 Signal #1 Info : 30Mx0.32mmx 0.5µm Signal #2 Info : 30M x 0.32mm x 0.25µm

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

Target Compounds

1) SA EDB	2.840	2.230	3721159	18861652	0.256	0.248
2) SA DBCP	6.578	5.554	6552713	34440276	0.245	0.249

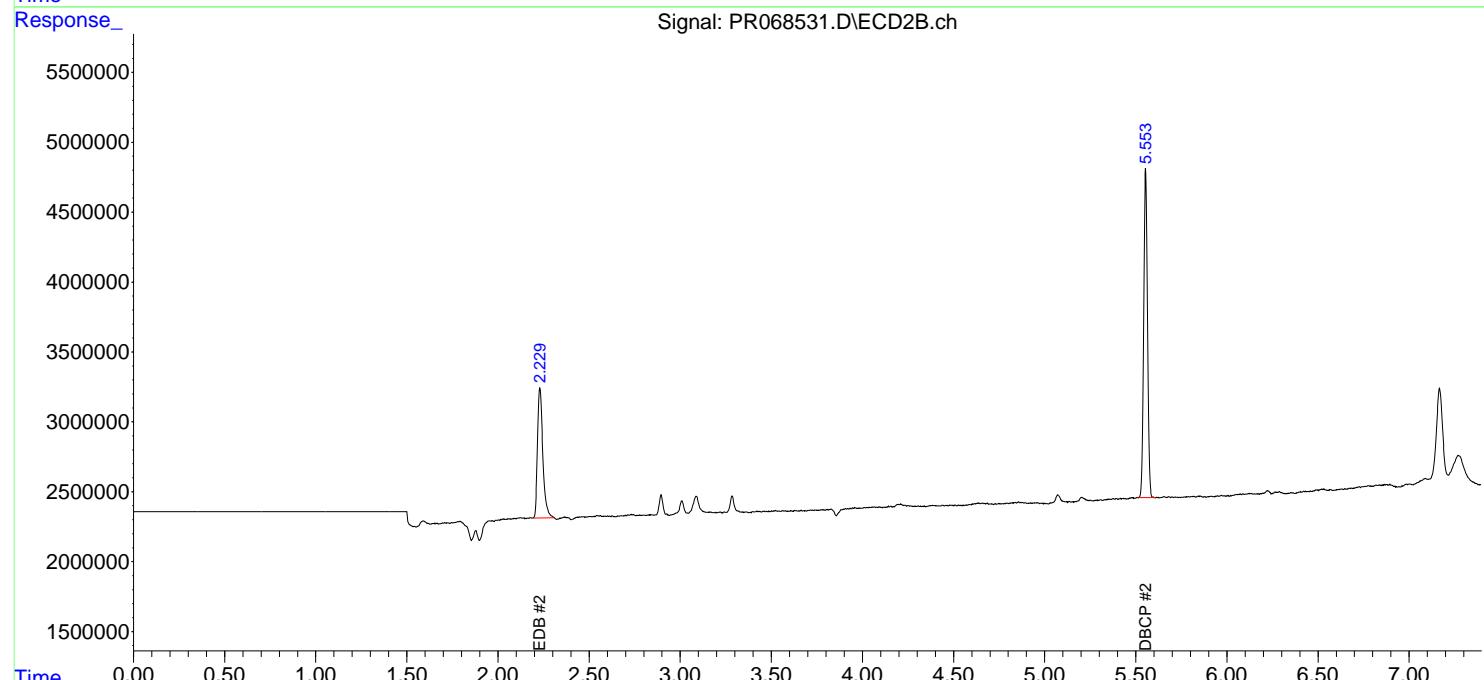
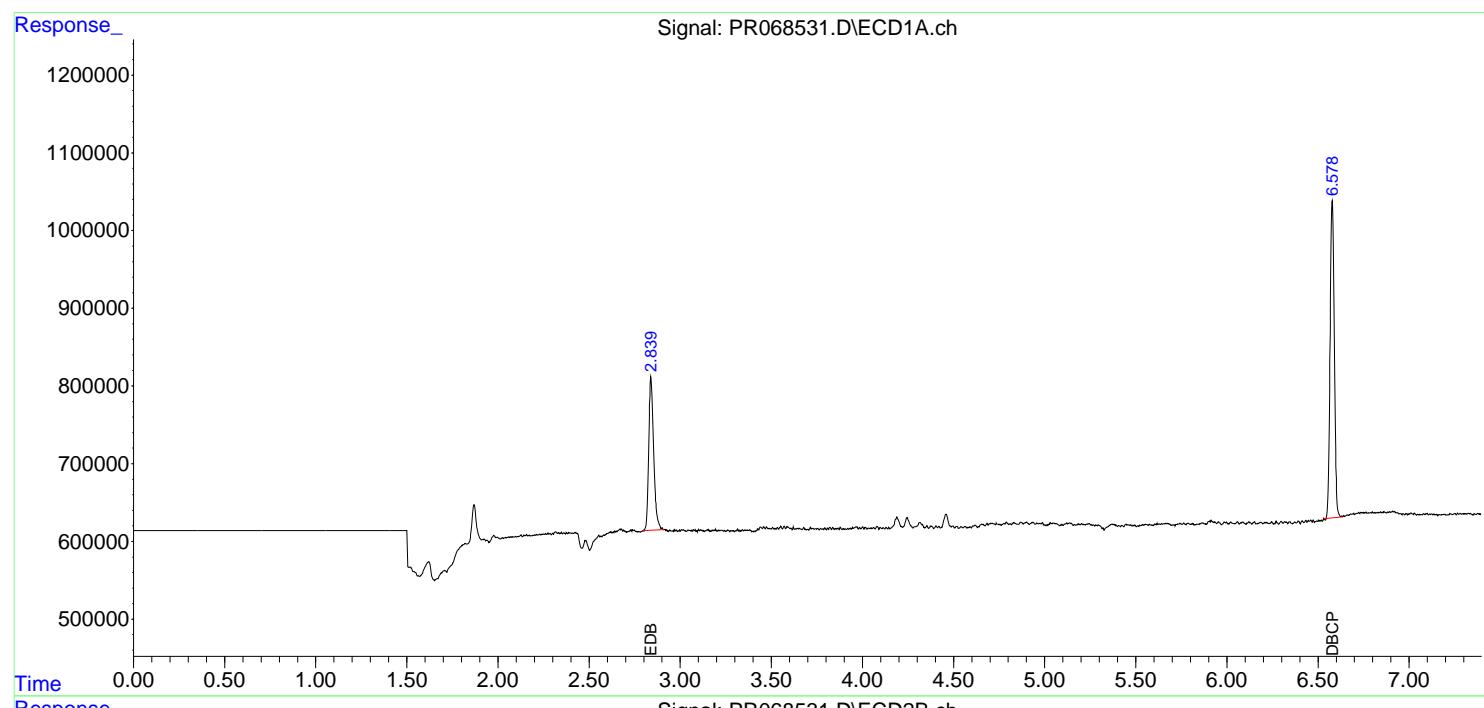
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

Data Path : Z:\pestpcbsrv\HPCHEM1\ECD_R\Data\PR091124\
 Data File : PR068531.D
 Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
 Acq On : 11 Sep 2024 14:03
 Operator : AJ\MA
 Sample : PB163254BSD
 Misc :
 ALS Vial : 13 Sample Multiplier: 1

Instrument :
 ECD_R
 ClientSampleId :
 PB163254BSD

Integration File signal 1: autoint1.e
 Integration File signal 2: autoint2.e
 Quant Time: Sep 11 14:03:06 2024
 Quant Method : Z:\pestpcbsrv\HPCHEM1\ECD_R\Method\PR091124-8011-504.M
 Quant Title : GC EXTRACTABLES
 QLast Update : Wed Sep 11 12:58:30 2024
 Response via : Initial Calibration
 Integrator: ChemStation

Volume Inj. : 1 μ l
 Signal #1 Phase : ZB MR1 Signal #2 Phase: ZB MR2
 Signal #1 Info : 30Mx0.32mmx 0.5 μ m Signal #2 Info : 30M x 0.32mm x 0.25 μ m





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

Manual Integration Report

Sequence:	PR091124	Instrument	ECD_r
-----------	----------	------------	-------

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason

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

Instrument ID: ECD_R

Daily Analysis Runlog For Sequence/QCBatch ID # PR091124

Review By	Ankita	Review On	9/11/2024 2:38:10 PM
Supervise By	Sohil	Supervise On	9/11/2024 2:41:18 PM
SubDirectory	PR091124	HP Acquire Method	HP Processing Method PR091124/8011
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23653,PP23654,PP23655,PP23656,PP23657		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23660 PP23658		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	HEXANE	PR068519.D	11 Sep 2024 11:45	AJ\MA	Ok
2	M8011.504.1 0.5 PPB ICC	PR068520.D	11 Sep 2024 11:54	AJ\MA	Ok
3	M8011.504.1 0.25 PPB ICC	PR068521.D	11 Sep 2024 12:04	AJ\MA	Ok
4	M8011.504.1 0.1 PPB ICC	PR068522.D	11 Sep 2024 12:13	AJ\MA	Ok
5	M8011.504.1 0.05 PPB ICC	PR068523.D	11 Sep 2024 12:23	AJ\MA	Ok
6	M8011.504.1 0.025 PPB ICC	PR068524.D	11 Sep 2024 12:44	AJ\MA	Ok
7	M8011.504.1 0.1 PPB ICV	PR068525.D	11 Sep 2024 12:53	AJ\MA	Ok
8	RT CHECK	PR068526.D	11 Sep 2024 13:03	AJ\MA	Ok
9	M8011-504 CCC 0.1 PPB	PR068527.D	11 Sep 2024 13:12	AJ\MA	Ok
10	Low-Level LFB-MDL Check	PR068528.D	11 Sep 2024 13:32	AJ\MA	Ok
11	PB163254BL	PR068529.D	11 Sep 2024 13:43	AJ\MA	Ok
12	PB163254BS	PR068530.D	11 Sep 2024 13:53	AJ\MA	Ok
13	PB163254BSD	PR068531.D	11 Sep 2024 14:03	AJ\MA	Ok
14	P3845-20	PR068532.D	11 Sep 2024 14:12	AJ\MA	Dilution
15	P3845-20DL	PR068533.D	11 Sep 2024 14:24	AJ\MA	Ok
16	M8011-504 CCC 0.1 PPB	PR068534.D	11 Sep 2024 14:34	AJ\MA	Ok

M : Manual Integration

Instrument ID: ECD_R

Daily Analysis Runlog For Sequence/QCBatch ID # PR091124

Review By	Ankita	Review On	9/11/2024 2:38:10 PM
Supervise By	Sohil	Supervise On	9/11/2024 2:41:18 PM
SubDirectory	PR091124	HP Acquire Method	HP Processing Method PR091124/8011
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	PP23653,PP23654,PP23655,PP23656,PP23657		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	PP23660 PP23658		

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	HEXANE	HEXANE	PR068519.D	11 Sep 2024 11:45		AJ\MA	Ok
2	M8011.504.1 0.5 PPB	M8011.504.1 0.5 PPB	PR068520.D	11 Sep 2024 11:54		AJ\MA	Ok
3	M8011.504.1 0.25 PPB	M8011.504.1 0.25 PPB	PR068521.D	11 Sep 2024 12:04		AJ\MA	Ok
4	M8011.504.1 0.1 PPB	M8011.504.1 0.1 PPB	PR068522.D	11 Sep 2024 12:13		AJ\MA	Ok
5	M8011.504.1 0.05 PPB	M8011.504.1 0.05 PPB	PR068523.D	11 Sep 2024 12:23		AJ\MA	Ok
6	M8011.504.1 0.025 PPB	M8011.504.1 0.025 PPB	PR068524.D	11 Sep 2024 12:44		AJ\MA	Ok
7	M8011.504.1 0.1 PPB	ICVPR091124	PR068525.D	11 Sep 2024 12:53		AJ\MA	Ok
8	RT CHECK	RT CHECK	PR068526.D	11 Sep 2024 13:03		AJ\MA	Ok
9	M8011-504 CCC 0.1 PP	M8011-504 CCC 0.1 PP	PR068527.D	11 Sep 2024 13:12		AJ\MA	Ok
10	Low-Level LFB-MDL Ch	Low-Level LFB-MDL Ch	PR068528.D	11 Sep 2024 13:32		AJ\MA	Ok
11	PB163254BL	PB163254BL	PR068529.D	11 Sep 2024 13:43		AJ\MA	Ok
12	PB163254BS	PB163254BS	PR068530.D	11 Sep 2024 13:53		AJ\MA	Ok
13	PB163254BSD	PB163254BSD	PR068531.D	11 Sep 2024 14:03		AJ\MA	Ok
14	P3845-20	RR-8011-WP	PR068532.D	11 Sep 2024 14:12	need 4x dilution	AJ\MA	Dilution
15	P3845-20DL	RR-8011-WPDL	PR068533.D	11 Sep 2024 14:24		AJ\MA	Ok
16	M8011-504 CCC 0.1 PP	M8011-504 CCC 0.1 PP	PR068534.D	11 Sep 2024 14:34		AJ\MA	Ok

M : Manual Integration

SOP ID:	M504.1-8011-EDB&DBCP by GC-9		
Clean Up SOP #:	N/A	Extraction Start Date :	09/11/2024
Matrix :	Water	Extraction Start Time :	09:30
Weigh By:	N/A	Extraction End Date :	09/11/2024
Balance check:	AJ	Extraction End Time :	10:00
Balance ID:	VOA-SC-1	Concentration By:	AJ
pH Strip Lot#:	N/A	Hood ID:	N/A
Extraction Method:	<input type="checkbox"/> Separatory Funnel <input type="checkbox"/> Continous Liquid/Liquid <input type="checkbox"/> Sonication <input type="checkbox"/> Waste Dilution <input checked="" type="checkbox"/> MicroExtraction		

MicroExtraction

AJ
09/11/2024

Standard Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
Spike	N/A	N/A	PP23663
Blank Spike	N/A	N/A	PP23664
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
Baked NaCl	7G	M5884
Hexane	2ML	E3789
DI WATER	35 ML	W3112
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

N/A

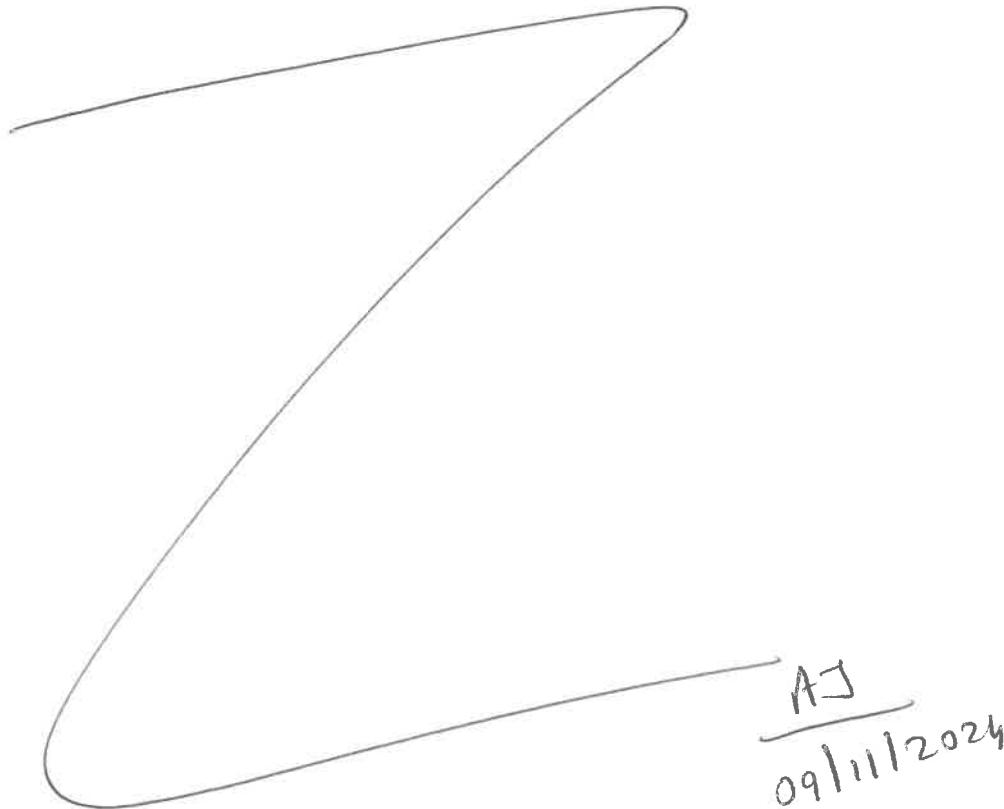
KD Bath ID: N/A Envap ID: N/A
KD Bath Temperature: N/A Envap Temperature: N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
09/11/2024 10:05	AJ PG87 PCB Lab	AJ PG87 PCB Lab
	Preparation Group	Analysis Group

Analytical Method: M504.1-8011-EDB&DBCP by GC-9

Concentration Date: 09/11/2024

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB163254BL	PB163254BL	VOCGC Group 1	35	N/A	Ankita	mohammed	2		PP23662	
PB163254BS	PB163254BS	VOCGC Group 1	35	N/A	Ankita	mohammed	2		PP23663	
PB163254BSD	PB163254BSD	VOCGC Group 1	35	N/A	Ankita	mohammed	2		PP23664	
P3845-20	RR-8011-WP	VOCGC Group 1	35	N/A	Ankita	mohammed	2			



AJ
09/11/2024

* Extracts relinquished on the same date as received.

Sample ID	Initial Vol. (mL)	pH	Spike Added	Verified By	Final Vol (mL)	Prep ID
M504.1-8011 ICC 0.50 PPB	35.0	NA	Ankita	Sohil	2	PP23653
M504.1-8011 ICC 0.25 PPB	35.0	NA	Ankita	Sohil	2	PP23654
M504.1-8011 ICC 0.1 PPB	35.0	NA	Ankita	Sohil	2	PP23655
M504.1-8011 ICC 0.05 PPB	35.0	NA	Ankita	Sohil	2	PP23656
M504.1-8011 ICC 0.025 PPB	35.0	NA	Ankita	Sohil	2	PP23657
M504.1-8011 ICV 0.1 PPB	35.0	NA	Ankita	Sohil	2	PP23658
RT Check	35.0	NA	Ankita	Sohil	2	PP23659
M504.1-8011 CCC 0.1 PPB	35.0	NA	Ankita	Sohil	2	PP23660
M504.1-8011 LFBMDL Check 0.02 PPB	35.0	NA	Ankita	Sohil	2	PP23661

AJ
09/11/2024

WORKLIST(Hardcopy Internal Chain)

WorkList Name :	p3845-8011	WorkList ID :	183329	Department :	Extraction	Date :	09-10-2024 09:05:40
Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date Method
P3845-20	RR-8011-WP	Water	VOCGC Group 1	Cool 4 deg C	CHEM02	VOA L	09/03/2024 8011

Date/Time 09/11/2024 9:15
 Raw Sample Received by: AJ
 Raw Sample Relinquished by: _____

Page 1 of 1
 Date/Time _____
 Raw Sample Received by: _____
 Raw Sample Relinquished by: _____

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

1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22

Prep Standard - Chemical Standard Summary**Order ID :** P3845**Test :** VOCGC Group 1**Prepbatch ID :** PB163254,**Sequence ID/Qc Batch ID:** PR091124,**Standard ID :**PP23549,PP23550,PP23552,PP23553,PP23653,PP23654,PP23655,PP23656,PP23657,PP23658,PP23660,PP23663,
PP23664,**Chemical ID :**

E3789,M5884,P10224,P12214,P13233,V14143,W3112,

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>
2263	EDB-DBCP 2 PPM Stock Solution	PP23549	07/30/2024	01/22/2025	Ankita Jodhani	None	None	Sohil Jodhani 07/30/2024

FROM 0.01000ml of P10224 + 0.01000ml of P13233 + 9.98000ml of V14143 = Final Quantity: 10.000 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>
2264	EDB-DBCP 2 PPM Stock Solution 2nd Source	PP23550	07/30/2024	01/22/2025	Ankita Jodhani	None	None	Sohil Jodhani 07/30/2024

FROM 0.10000ml of P12214 + 9.90000ml of V14143 = Final Quantity: 10.000 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>
2517	EDB-DBCP 100 PPB Working Solution	PP23552	07/30/2024	01/22/2025	Ankita Jodhani	None	None	Sohil Jodhani 07/30/2024

FROM 9.50000ml of V14143 + 0.50000ml of PP23549 = Final Quantity: 10.000 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>
2518	EDB-DBCP 100 PPB Working Sol. 2nd Source	PP23553	07/30/2024	01/22/2025	Ankita Jodhani	None	None	Sohil Jodhani 07/30/2024

FROM 9.50000ml of V14143 + 0.50000ml of PP23550 = Final Quantity: 10.000 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>
2269	M8011-504.1 0.5 PPB STD	PP23653	09/11/2024	10/11/2024	Ankita Jodhani	None	None	Sohil Jodhani 09/11/2024

FROM 35.00000ml of W3112 + 0.17500ml of PP23552 = Final Quantity: 35.000 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>
2270	M8011-504.1 0.25 PPB STD	PP23654	09/11/2024	10/11/2024	Ankita Jodhani	None	None	Sohil Jodhani 09/11/2024

FROM 35.00000ml of W3112 + 0.08750ml of PP23552 = Final Quantity: 35.000 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>
2271	M8011-504.1 0.1 PPB STD	PP23655	09/11/2024	10/11/2024	Ankita Jodhani	None	None	Sohil Jodhani 09/11/2024

FROM 35.00000ml of W3112 + 0.03500ml of PP23552 = Final Quantity: 35.000 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>
2272	M8011-504.1 0.05 PPB STD	PP23656	09/11/2024	10/11/2024	Ankita Jodhani	None	None	Sohil Jodhani 09/11/2024

FROM 35.00000ml of W3112 + 0.01750ml of PP23552 = Final Quantity: 35.000 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>
2273	M8011-504.1 0.025 PPB STD	PP23657	09/11/2024	10/11/2024	Ankita Jodhani	None	None	Sohil Jodhani 09/11/2024

FROM 35.00000ml of W3112 + 0.00880ml of PP23552 = Final Quantity: 35.000 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>
2274	M8011-504.1 0.1 PPB ICV STD	PP23658	09/11/2024	10/11/2024	Ankita Jodhani	None	None	Sohil Jodhani 09/11/2024

FROM 35.00000ml of W3112 + 0.03500ml of PP23553 = Final Quantity: 35.000 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>
2519	M8011-504.1 0.1 PPB CCC	PP23660	09/11/2024	09/12/2024	Ankita Jodhani	None	None	Sohil Jodhani 09/11/2024

FROM 35.00000ml of W3112 + 0.03500ml of PP23552 = Final Quantity: 35.000 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>
2275	M8011-504.1 0.25 PPB LCS STD	PP23663	09/11/2024	09/12/2024	Ankita Jodhani	None	None	Sohil Jodhani 09/11/2024

FROM 35.00000ml of W3112 + 0.08750ml of PP23553 = Final Quantity: 35.000 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>
2275	M8011-504.1 0.25 PPB LCS STD	PP23664	09/11/2024	09/12/2024	Ankita Jodhani	None	None	Sohil Jodhani 09/11/2024

FROM 35.00000ml of W3112 + 0.08750ml of PP23553 = Final Quantity: 35.000 ml

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

CHEMICAL RECEIPT LOG BOOK

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	02/13/2025	08/13/2024 / Rajesh	08/13/2024 / Rajesh	E3789
Seidler Chemical	BA-3624-05 / Sodium Chloride, Crystal (cs/4x2.5kg)	0000281938	07/06/2026	04/30/2024 / mohan	04/25/2024 / mohan	M5884
Restek	30270 / 1,2-Dibromo-3-Chloropropene Standard, 2,000 ug/ml	A0164665	01/30/2025	07/30/2024 / Ankita	01/19/2021 / Abdul	P10224
Restek	30239 / 504.1 Calibration Mix (3 components)	A0170154	01/30/2025	07/30/2024 / Ankita	11/28/2022 / Ankita	P12214
Restek	30272 / 1,2-Dibromoethane Standard, 2000 ug/ml	A0183330	01/30/2025	07/30/2024 / Ankita	02/02/2024 / Ankita	P13233
Seidler Chemical	BA9077-02 / Methanol, Purge/Trap (cs=6x1L)	22L0562016	01/22/2025	07/22/2024 / SAM	02/06/2024 / SAM	V14143

CHEMICAL RECEIPT LOG BOOK

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

Material No.: 94
Batch No.: 24C186
Manufactured Date: 20245
Expiration Date: 2025-0
Revision 6

Certificate of Analysis

Test	Specification	Result	9
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	< 1	10
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	1	11
ECD-Sensitive Impurities (as Ethylene Dibromide) – Single Impurity Peak (ng/mL)	≤ 5	1	12
Assay (Total Saturated C ₆ Isomers) (by GC, corrected for water)	≥ 99.5 %	99.7 %	13
Assay (as n-Hexane) (by GC, corrected for water)	≥ 95 %	98 %	14
Color (APHA)	≤ 10	5	15
Residue after Evaporation	≤ 1.0 ppm	0.4 ppm	16
Substances Darkened by H ₂ SO ₄	Passes Test	Passes Test	17
Water (by KF, coulometric)	≤ 0.05 %	< 0.01 %	18

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

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

Recd. by RP on 8/13/24

E 3789

J. Croak

Jamie Croak
Director Quality Operations, Bioscience Product

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

Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087, U.S.A. Phone 610.386.1700
Page 1 of 1

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

M5884
MS



Material No.: 3624-01

Batch No.: 0000281938

Manufactured Date: 2021-06-07

Retest Date: 2026-06-07

Revision No.: 1

Certificate of Analysis

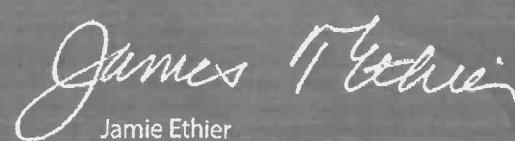
Test	Specification	Result
Assay (NaCl) (by Ag titrn)	≥ 99.0 %	100.0 %
pH of 5% Solution at 25°C	5.0 - 9.0	6.3
Insoluble Matter	≤ 0.005 %	0.003 %
Iodide (I)	≤ 0.002 %	< 0.002 %
Bromide (Br)	≤ 0.01 %	< 0.01 %
Chlorate and Nitrate (as NO ₃)	≤ 0.003 %	< 0.001 %
ACS - Phosphate (PO ₄)	≤ 5 ppm	< 5 ppm
Sulfate (SO ₄)	≤ 0.004 %	< 0.004 %
Barium (Ba)	Passes Test	Passes Test
ACS - Heavy Metals (as Pb)	≤ 5 ppm	< 5 ppm
Iron (Fe)	≤ 2 ppm	< 1 ppm
Calcium (Ca)	≤ 0.002 %	< 0.001 %
Magnesium (Mg)	≤ 0.001 %	< 0.001 %
Potassium (K)	≤ 0.005 %	0.001 %

For Laboratory, Research, or Manufacturing Use

Meets Reagent Specifications for testing USP/NF monographs

Country of Origin: USA

Packaging Site: Paris Mfg Ctr & DC


Jamie Ethier
Vice President Global Quality

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

Avantor Performance Materials, LLC

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

Methanol
ULTRA RESI-ANALYZED
For Purge and Trap Analysis



Material No.: 9077-02
Batch No.: 22L0562016
Manufactured Date: 2022-10-26
Expiration Date: 2025-10-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (CH_3OH) (by GC, corrected for water)	$\geq 99.9 \%$	100.0 %
Residue after Evaporation	$\leq 1.0 \text{ ppm}$	0.2 ppm
Titrable Acid ($\mu\text{eq/g}$)	≤ 0.3	0.2
Titrable Base ($\mu\text{eq/g}$)	≤ 0.10	0.03
Water (by KF, coulometric)	$\leq 0.08 \%$	< 0.01 %
Volatile Organic Trace Analysis – Below EPA 8260B CRQL	Conforms	Conforms

For Laboratory, Research, or Manufacturing Use
Performance Tested for Use in EPA Methods
500 Series for Drinking Water
600 Series for Wastewater
846 for Solid Waste

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

Jamie Ethier
Vice President Global Quality

RESTEK® 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. : 30270

Lot No.: A0164665

Description : 1,2-Dibromo-3-chloropropane Standard

1,2-Dibromo-3-Chloropropane 2000 μ g/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : September 30, 2025

Storage: 0°C or colder

Ship: Ambient

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dibromo-3-chloropropane CAS # 96-12-8 Purity 97%	2,009.8 μ g/mL	+/- 18.6904	μ g/mL	Gravimetric
	(Lot FBL01)		+/- 113.6299	μ g/mL	Unstressed
			+/- 116.2454	μ g/mL	Stressed

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

P10222
P10225
AR
01/19/2020

Column:

105m x 0.53mm x 3.0 μ m
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

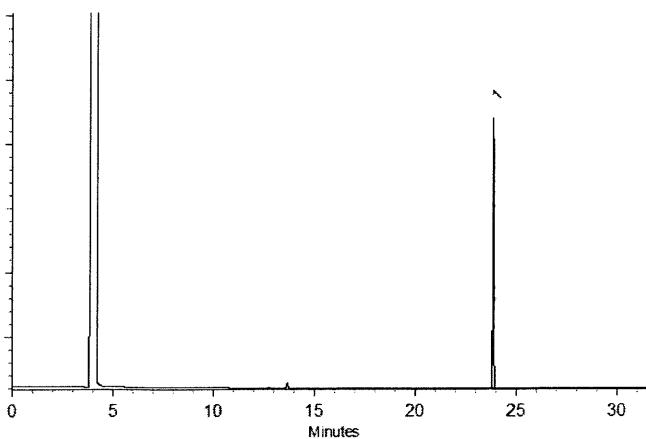
200°C

Det. Temp:

250°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.



Jeremy Johnson - Mfg. Supervisor

Date Mixed: 22-Sep-2020 Balance: B251644995



Justine Albertson - Operations Tech-ARM QC

Date Passed: 24-Sep-2020

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

RESTEK® 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. : 30239

Lot No.: A0170154

P12211

Description : 504.1 Calibration Mix

504.1 Calibration Std 200 μ g/mL, P&T Methanol, 1mL/ampul

↓

Container Size : 2 mL

Pkg Amt: > 1 mL

AJ
11/28/22

Expiration Date : March 31, 2026

Storage: 0°C or colder

P12215

Ship: Ambient

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dibromoethane (EDB) CAS # 106-93-4 Purity 99%	200.5 μ g/mL	+/- 1.4217	μ g/mL	Gravimetric
	(Lot BCBP2268V)		+/- 11.2713	μ g/mL	Unstressed
			+/- 11.5336	μ g/mL	Stressed
2	1,2,3-Trichloropropane CAS # 96-18-4 Purity 99%	200.0 μ g/mL	+/- 1.4182	μ g/mL	Gravimetric
	(Lot BCBH8722V)		+/- 11.2431	μ g/mL	Unstressed
			+/- 11.5049	μ g/mL	Stressed
3	1,2-Dibromo-3-chloropropane CAS # 96-12-8 Purity 97%	199.8 μ g/mL	+/- 1.4169	μ g/mL	Gravimetric
	(Lot FBL01)		+/- 11.2330	μ g/mL	Unstressed
			+/- 11.4945	μ g/mL	Stressed

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

Column:

105m x 0.53mm x 3.0 μ m
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

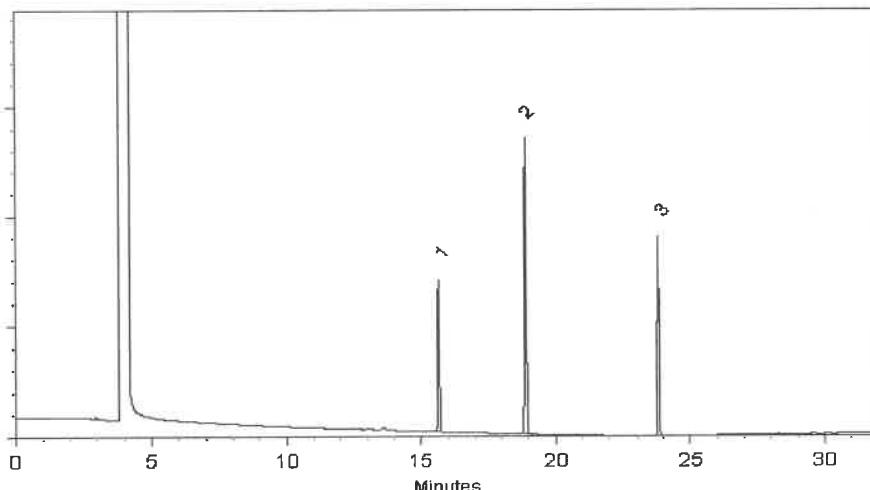
200°C

Det. Temp:

250°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.


Erik Strommer - Operations Tech I

Date Mixed: 15-Mar-2021 Balance: B251644995


Alexis Shellow - Operations Tech I

Date Passed: 16-Mar-2021

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

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. : 30272

Lot No.: A0183330

Description : 1,2-Dibromoethane Standard

1,2-Dibromoethane 2000 μ g/mL, P&T Methanol, 1mL/ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : March 31, 2027

Storage: 0°C or colder

Ship: Ambient

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,2-Dibromoethane (EDB) CAS # 106-93-4 Purity 99%	2,016.0 μ g/mL (Lot BCBZ7221)	+/- 18.7477 μ g/mL	+/- 113.9782 μ g/mL	Gravimetric Unstressed Stressed

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

p13233
↓
p13237

AJ
02/02/24

Column:
105m x 0.53mm x 3.0 μ m
Rtx-502.2 (cat.#10910)

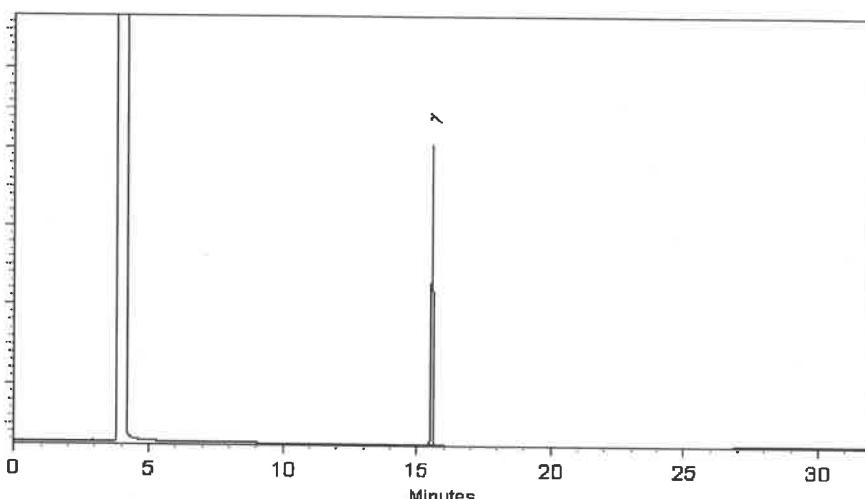
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°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.


Jess Hoy - Operations Tech I

Date Mixed: 25-Mar-2022 Balance: 1127510105


Amanda Miller - Operations Tech-ARM QC

Date Passed: 30-Mar-2022

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



SHIPPING DOCUMENTS

6390 Joyce Dr., #100
Golden, CO 80403

Tel: +1-303-940-0033
Fax: +1-303-940-0043
info@phenova.com
www.phenova.com

For terms and conditions of your order, please visit:
www.phenova.com/home/termsofsale

Packing List

Date	Order #
09/03/2024	318988



Ship To

Chemtech - NJ
ATTN: Sohil Jodhani
284 Sheffield St., #1
Mountainside, NJ 07092
USA

Received by : SJ
9/5/2024
9:50

Customer PO #	Terms	PT Acct #	Customer #	Ship Via	F.O.B.
240802-01	Net 30	ZCM-100	1500470	FedEx 2nd Day	Golden, CO

Qty Ordered	Qty Shipped	Qty Backorder	Part Number	Part Description	Study Number	Lot Number
			PT-TMSET-WP	WP Trace Metals Set : (TM1, HG and SNTI)		
1	1	0	PT-TM1-WP	WP Trace Metals 1	WP0924	8259-04
1	1	0	PT-HG-WP	WP Mercury	WP0924	8259-05
1	1	0	PT-SNTI-WP	WP Tin & Titanium	WP0924	8259-38
1	1	0	PT-CR6-WP	WP Hexavalent Chromium	WP0924	8259-06
1	1	0	PT-DEM-WP	WP Demand	WP0924	8259-07
			PT-MINSET-WP	WP Minerals Set : (MIN1, MIN2 and COND)		
1	1	0	PT-MIN1-WP	WP Minerals 1 Only	WP0924	8259-08
1	1	0	PT-MIN2-WP	WP Minerals 2 Only	WP0924	8259-102
1	1	0	PT-COND-WP	WP Conductivity Only	WP0924	8259-72
1	1	0	PT-SOL-WP	WP Solids	WP0924	8259-09
			PT-NUTSET-WP	WP Nutrients Set : (NUT1, NUT2 and NUT3)		
1	1	0	PT-NUT1-WP	WP NUT1 Simple Nutrients Only	WP0924	8259-10
1	1	0	PT-NUT2-WP	WP NUT2 - Complex Nutrients	WP0924	8259-11
1	1	0	PT-NUT3-WP	WP NUT3 - Nitrite Only	WP0924	8259-69
1	1	0	PT-OGR1L-WP	WP Oil and Grease 1L	WP0924	8259-103
1	1	0	PT-CL-WP	WP Residual Chlorine	WP0924	8259-13
1	1	0	PT-PH-WP	WP pH	WP0924	8259-15
1	1	0	PT-CN-WP	WP Cyanide	WP0924	8259-14
1	1	0	PT-PHEN-WP	WP Phenolics	WP0924	8259-16

6390 Joyce Dr., #100
Golden, CO 80403

Tel: +1-303-940-0033
Fax: +1-303-940-0043
info@phenova.com
www.phenova.com

For terms and conditions of your order, please visit:
www.phenova.com/home/termsofsale

Packing List

Date	Order #
09/03/2024	318988



Ship To

Chemtech - NJ
ATTN: Sohil Jodhani
284 Sheffield St., #1
Mountainside, NJ 07092
USA

Received by: SJ

9/5/2024

9:50

Customer PO #	Terms	PT Acct #	Customer #	Ship Via	F.O.B.
240802-01	Net 30	ZCM-100	1500470	FedEx 2nd Day	Golden, CO

Qty Ordered	Qty Shipped	Qty Backorder	Part Number	Part Description	Study Number	Lot Number
1	1	0	PT-S2-WP	WP Sulfide	WP0924	8259-22
1	1	0	PT-SSOL-WP	WP Settleable Solids	WP0924	8259-17
1	1	0	PT-VSOL-WP	WP Volatile Solids	WP0924	8259-18
1	1	0	PT-TURB-WP	WP Turbidity	WP0924	8259-20
1	1	0	PT-SIO2-WP	WP Silica	WP0924	8259-21
1	1	0	PT-COL-WP	WP Color	WP0924	8259-51
1	1	0	PT-VOA-WP	WP Volatiles	WP0924	8259-26
1	1	0	PT-BN-WP	WP Base Neutrals	WP0924	8259-27
1	1	0	PT-ACIDS-WP	WP Acids	WP0924	8259-28
1	1	0	PT-PEST-WP	WP Pesticides	WP0924	8259-29
1	1	0	PT-CHLR-WP	WP Chlordane	WP0924	8259-30
1	1	0	PT-TXP-WP	WP Toxaphene	WP0924	8259-31
1	1	0	PT-PCBW-WP	WP PCBs in Water	WP0924	8259-32
1	1	0	PT-HERB-WP	WP Herbicides	WP0924	8259-36
1	1	0	RR-TPH1L-WP	WP TPH 1L	R39151	R39151-104
1	1	0	RR-PAH-WP	WP PAH-Low Level	R39151	R39151-37
1	1	0	RR-GAS-WP	WP Gasoline Range Organics	R39151	R39151-62
1	1	0	RR-DIES-WP	WP Diesel Range Organics	R39151	R39151-63
1	1	0	RR-8011-WP	WP EDB/DBCP/TCP	R39151	R39151-98
1	1	0	RR-TRIAZINE-WP	WP Triazine Pesticides	R39151	R39151-108

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (L-A-B)	L2219
Maine	2024021
Maryland	296
New Hampshire	255423
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488